

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

Part 2. Southeastern States

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

GEOLOGICAL SURVEY WATER-SUPPLY PAPER 1127

Prepared in cooperation with the States of Alabama, Florida, Georgia, Kentucky, Maryland, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia and other agencies



This copy is PUBLIC PROPERTY and is not to be removed from the official files. **PRIVATE POSSESSION IS UNLAWFUL** (R. S. Sup. Vol. 2, pp. 380, Sec. 749)

UNITED STATES DEPARTMENT OF THE INTERIOR

Oscar L. Chapman, *Secretary*

GEOLOGICAL SURVEY

W. E. Wrather, *Director*

**For sale by the Superintendent of Documents, U. S. Government Printing Office
Washington 25, D. C. - Price 55 cents (paper cover)**

PREFACE

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

C. G. Paulsen-----Chief Hydraulic Engineer
A. N. Sayre-----Chief, Ground Water Branch
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.
R. L. Griggs--Geologist in Charge (Ground Water), Morgantown, W. Va.
S. M. Herrick-----District Geologist (Ground Water), Atlanta, Ga.
P. E. LaMoreaux--Geologist in Charge (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.
G. E. Siple-----Geologist in Charge (Ground Water), Columbia, S. C.

CONTENTS

	Page
Introduction, by A. N. Sayre and others	1
Significance of records of water level and artesian pressure	1
Annual publication of records by Geological Survey	1
Scope of present volume	2
Land-surface datum	3
Network of Federal observation wells	4
Changes in ground-water level in 1948 in the southeastern part of the United States	4
Acknowledgments	4
Alabama, by P. E. LaMoreaux and C. R. Lanphere	5
Program of work	5
Fluctuations of water level	6
Well descriptions and water-level measurements	15
Florida, by J. W. Stewart and C. F. Essig, Jr.	19
Program of work	19
Occurrence of ground water	20
Fluctuations of water level and artesian pressure	20
Well descriptions and water-level measurements	24
Georgia, by G. H. Chase, H. E. LeGrand, and S. M. Herrick	104
Program of work	104
Occurrence of ground water	105
Fluctuations of water level	106
Well descriptions and water-level measurements	109
Kentucky, by M. I. Rorabaugh and E. A. Bell	125
Program of work	125
Fluctuations of water level	126
Pumpage	129
Well-numbering system	131
Well descriptions and water-level measurements	131
Maryland, by Gerald Meyer	155
Program of work	155
Precipitation	155
Fluctuations of water level	156
Well descriptions and water-level measurements	158
North Carolina, by M. J. Mundorff and H. E. LeGrand	177
Program of work	177
Fluctuations of water level	178
Well descriptions and water-level measurements	180
South Carolina, by G. E. Siple	194
Program of work	194
Fluctuations of water level	194
Well descriptions and water-level measurements	196
Tennessee, by E. M. Cushing	199
Program of work	199
Pumpage	199
Fluctuations of water level	199
Well descriptions and water-level measurements	201
Virginia	222
Introduction	222
Northern Virginia, by Rodney Hart	222
Program of work	222
Fluctuations of water level	222
Well descriptions and water-level measurements	224
Southeastern Virginia, by Allen Sinnott	226
Program of work	226
Fluctuations of water level	227
Well descriptions and water-level measurements	229
West Virginia, by R. L. Griggs	232
Program of work	232
Fluctuations of water level	232
Well descriptions and water-level measurements	234

ILLUSTRATIONS

	Page
Figure 1. Outline map of the United States, showing sections of the country covered by the six water-supply papers on water levels and artesian pressure in observation wells in 1948	3
2. Map of Alabama showing location of observation wells, 1948	7
3. Graphs showing fluctuations of water level in three wells in Alabama	9
4. Map showing location of observation wells in Louisville area, Ky., 1948	127
5. Graphs of water levels in the downtown area and in the unpumped area southwest of Louisville	128
6. Graphs of water levels and estimated average pumpage in the west central area of Louisville	128
7. Graphs of water level and estimated pumpage in the distillery area south of Louisville	130
8. Graphs of water level and estimated average pumpage in Rubbertown area southwest of Louisville	130
9. Graphs showing pumpage, 1937 to 1948, and changes in storage, 1943 to 1948, in the Louisville area	132
10. Map showing location of observation wells in the vicinity of Memphis, Tenn.	200
11. Graphs showing fluctuations of water level in three wells in the Memphis area, Tenn.	202

WATER LEVELS AND ARTESIAN PRESSURE IN OBSERVATION WELLS IN THE UNITED STATES IN 1948

Part 2. SOUTHEASTERN STATES

INTRODUCTION

By A. N. Sayre and others

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

Significance of records of water level and artesian pressure

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

Annual publication of records by Geological Survey

The regular publication of records of water level and artesian pressure in the United States was begun by the Geological Survey in 1935 and has

continued yearly since. This series of water-supply papers is in a sense an inventory of ground-water supplies. Prior to 1940 the records were published in a single volume. Beginning with 1940 the records have been published in six volumes, covering the northeastern, southeastern, north-central, south-central, northwestern, and southwestern sections of the country. Hawaii is included in the southwestern section. (See fig. 1.) The introduction to the chapter on each State contains an outline of the general program of work and special features of the program in the current year, such as preliminary reports issued or put on file during the year or of work done in preparation for such a report. A general discussion of the fluctuations of water level and statements in regard to precipitation, pumpage, and other factors affecting water level are included. The following table gives the numbers of water-level reports from 1935 through 1948.

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

Year	North-eastern States	South-eastern States	North-central States	South-central States	North-western States	South-western States and Hawaii
1935	777	777	777	777	777	777
1936	817	817	817	817	817	817
1937	840	840	840	840	840	840
1938	845	845	845	845	845	845
1939	886	886	886	886	886	886
1940	906	907	908	909	910	911
1941	936	937	938	939	940	941
1942	944	945	946	947	948	949
1943	986	987	988	989	990	991
1944	1016	1017	1018	1019	1020	1021
1945	1023	1024	1025	1026	1027	1028
1946	1071	1072	1073	1074	1075	1076
1947	1096	1097	1098	1099	1100	1101
1948	1126	1127	1128	1129	1130	1131

Scope of present volume

The present volume covers the southeastern States and gives records of water level and artesian pressure in about 1,010 wells of the Geological Survey and cooperating agencies in Alabama, Florida, Georgia, Kentucky, Maryland, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia. Of these wells, 114 are equipped with automatic water-stage recorders. For some wells not previously reported complete records of water level are given. For wells whose previous records have been published this volume gives only the current records. If a complete description of a well has been published in a previous report, only the well number or the well number and a brief description are given in this report. This report includes about 9,200 individual determinations of water level and artesian pressure.

Land-surface datum

Before 1943, in Geological Survey reports, the water levels and artesian pressures for some wells were given in feet above or below the measuring points and for other wells in feet above or below sea level or above or below various assumed datum planes. In 1943, it was decided that

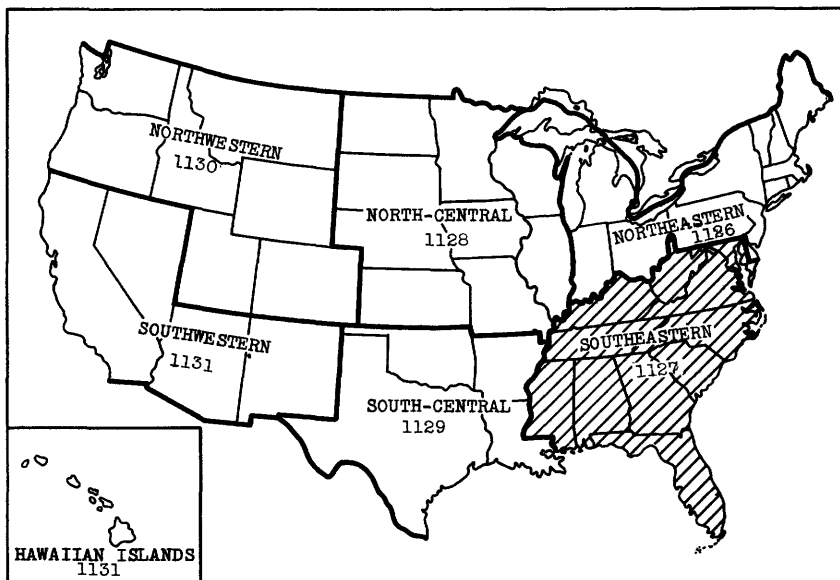


Figure 1.--Outline map of the United States, showing sections of the country covered by the six water-supply papers on water levels and artesian pressure in observation wells in 1945. The shaded section represents the part of the country covered by this volume.

uniform practice should be adopted. Accordingly, a precise datum plane was established approximating the land surface at each well. The water levels and artesian heads for all wells listed in this report are given in feet below land-surface datum unless preceded by a plus (+) sign, or otherwise indicated in the descriptive text for each State. When water levels or artesian heads are referred to land-surface datum for the first time, a conversion factor is given in the descriptive matter preceding them in order to facilitate comparison of the older and newer records.

Network of Federal observation wells

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

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

Precipitation in the southeastern States was above normal in 1948. The most remarkable rainy period ever recorded in Alabama occurred in November. In Georgia 1948 was the wettest year since 1929 and wetter than any other year during the past 60 years. The average annual precipitation in South Carolina was 59.25 inches, an excess of 11.35 inches. This is the third highest annual rainfall amount since 1887. The annual precipitation for Tennessee, 58.06 inches, was 8.26 inches above the average for the past 65 years. In Virginia 1948 was the second wettest year on record, averaging 0.91 inch less than the record year of 1937. The excess of precipitation in West Virginia was over 7 inches. The fluctuations of both water level and artesian pressure in wells, however, depend on many factors besides the amount of precipitation. In certain of the observation wells there are fluctuations caused by difference in the rate of pumping or artesian flow from other wells in the area, but most of the observation wells are not noticeably affected by pumping or artesian flow. A summary of the changes in ground-water level is given in the chapter for each State.

Acknowledgments

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

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

ALABAMA

By P. E. LaMoreaux and C. R. Lanphere

PROGRAM OF WORK

Ground-water investigations in Alabama were continued in 1948 in cooperation with the Geological Survey of Alabama. The investigations, which have been conducted since 1940, include the periodic measurement of water levels and artesian pressures in a number of key wells.

During 1948 the observation-well program was expanded to give a better cross section of water levels. Exclusive of measurements of 3 wells and 1 spring equipped with water-stage recorders, a total of 207 water-level measurements were made in 17 selected wells in 11 counties. Of these 17 wells, weekly measurements were made in 3 wells, and monthly measurements were made in 14 wells.

Automatic water-stage recorders previously installed were in operation on three wells and one spring during 1948. One of the recorders is installed at Huntsville Spring, Madison County; one on a well at Clanton, Chilton County; one at the City Water Works, Selma, Dallas County; and one in a well in the city well field in Montgomery, Montgomery County.

The recorders at Huntsville and Montgomery are operated by the superintendents of the City Water Works, the recorders at Selma and Clanton by gage readers, while a well at Scottsboro, owned by the Tennessee Valley Authority, is measured weekly by C. W. Wann, an employee of the Tennessee Valley Authority. Other measurements were made by the staff of the ground water branch monthly and periodically.

GEOLOGY OF ALABAMA

As described by Adams, ^{1/} the State of Alabama includes parts of two major physiographic divisions, the Appalachian Highlands Division and the

^{1/} Butts; Charles, Stephenson, L. W., Cooke, C. W., and Adams, G. I., Geology of Alabama: Alabama Geol. Survey Special Rept. 14, p. 25, 1926.

Coastal Plain. The boundary between these provinces is irregular and is known as the Fall Line of the Atlantic and Gulf Coast States. The Fall Line enters Alabama near Phenix City, extends across to Wetumpka, Clanton, and Tuscaloosa, then swings northwestward to the northwest corner of the State.

To the south of the Fall Line is the Coastal Plain Province. The geologic formations in this area consist mainly of unconsolidated clay, sandy clay, sand, gravel, chalk, marl, and limestone, which are divided into two major age groups, the Cretaceous and Tertiary systems. The Cretaceous formations occupy the northern half of the Coastal Plain, while the Tertiary formations occupy the southern half (see fig. 2).

The Appalachian Division in Alabama includes three major provinces, the Piedmont Province or crystalline area in east-central Alabama, the Appalachian Ridge and Valley Province, and the Appalachian Plateau Province in the northern part of the State (see fig. 2).

The formations in the Piedmont Province in east-central Alabama are metamorphic rocks, mainly crystalline schist and gneiss injected by younger igneous rocks. Only small yields, generally less than 10 gallons a minute and rarely exceeding 50 gallons a minute, are obtained from wells in the rocks of this area. To date no water-level measurements have been made in the crystalline area, but it is planned to include this area in the observation-well program.

The geologic formations of Paleozoic age, in northern Alabama, consist of shale, sandstone, limestone, and dolomite, which are important sources of ground water. Many municipal and industrial supplies in this area are derived from large springs issuing from fractures or solution channels.

FLUCTUATIONS OF WATER LEVEL

The fluctuations in water levels will be discussed by geologic provinces. The wells in the Paleozoic area in northern Alabama lie entirely within the Northern Division, as designated by the U. S. Weather Bureau. The wells in the Cretaceous area, for the most part, lie within the Middle Division, while wells in the Tertiary area generally fall in the Southern Division.

Paleozoic area

In the Paleozoic area in northern Alabama observations are made of the water levels in wells at Scottsboro, Jackson County, and the spring, at Huntsville, Madison County.

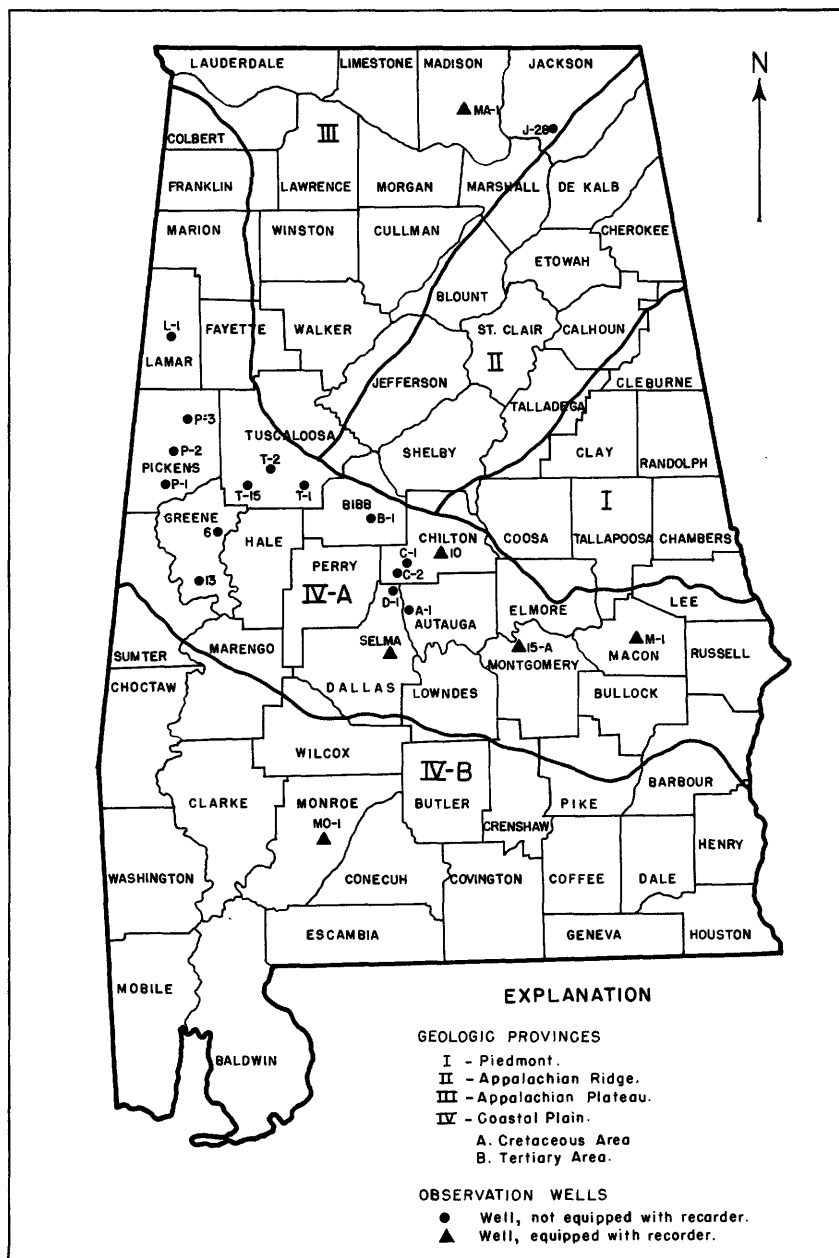


Figure 2.--Map of Alabama showing location of observation wells, 1948.

The measurements were begun in March 1945 on the Big Spring at Huntsville. Because of unusually heavy rainfall during February, March, July, and November, water levels rose to a new high. The annual precipitation for 1948 was 61.73 inches, which was 8.78 inches above normal. The water levels during 1948 were much higher than those for 1947, when rainfall was 14 inches below normal. The high for the period of observation was recorded on February 14 when the water level stood at 2.82 feet above the top of the weir, while the low for the period occurred on January 1 when the water level reached 2.25 feet above the top of the weir. Computed on the basis of the pumpage and the flow of water over the lower weir, it was found that the spring flowed 18,164 gallons a minute, or 26,156,000 gallons a day, on February 14, when the high for the period January 1 to March 31 was recorded. During November and December the records became so distorted, due to construction at the spring, that they were of no value and are not included in this report.

The Jackson County well, at Scottsboro (J-28), recorded its highest water level for 1948 of 1.90 feet below land-surface datum on November 30. During January and through April the water level fluctuated slightly, then slowly declined until September 19. Although the station at Scottsboro recorded 75.94 inches of rainfall, which was 23.29 inches above normal, rainfall during June, July, and August was below normal. Because of the close correlation between water level and precipitation, the well was dry at the time of measurement on October 3 until November 8 when a reading of 10.84 feet below land-surface datum was recorded. The water level rose sharply until November 30 when the highest reading of the year was recorded, then slowly declined. The last reading of the year, made on December 28, recorded a water level of 4.40 feet below land-surface datum (see fig. 3).

Cretaceous area

Measurements were begun on April 26 on a flowing well at Vernon, Lamar County, which is owned by J. W. Gartman. The weather station at Vernon did not have a complete year of observation, therefore no figures are available for the total precipitation. When measurements were begun on April 26 the water level stood at 9.71 feet above land-surface datum, the highest reading of the year. It declined slowly during the spring and summer to reach its lowest level of 7.71 feet above land-surface datum on September 3 then slowly rose to 8.46 feet above land-surface datum on December 30.

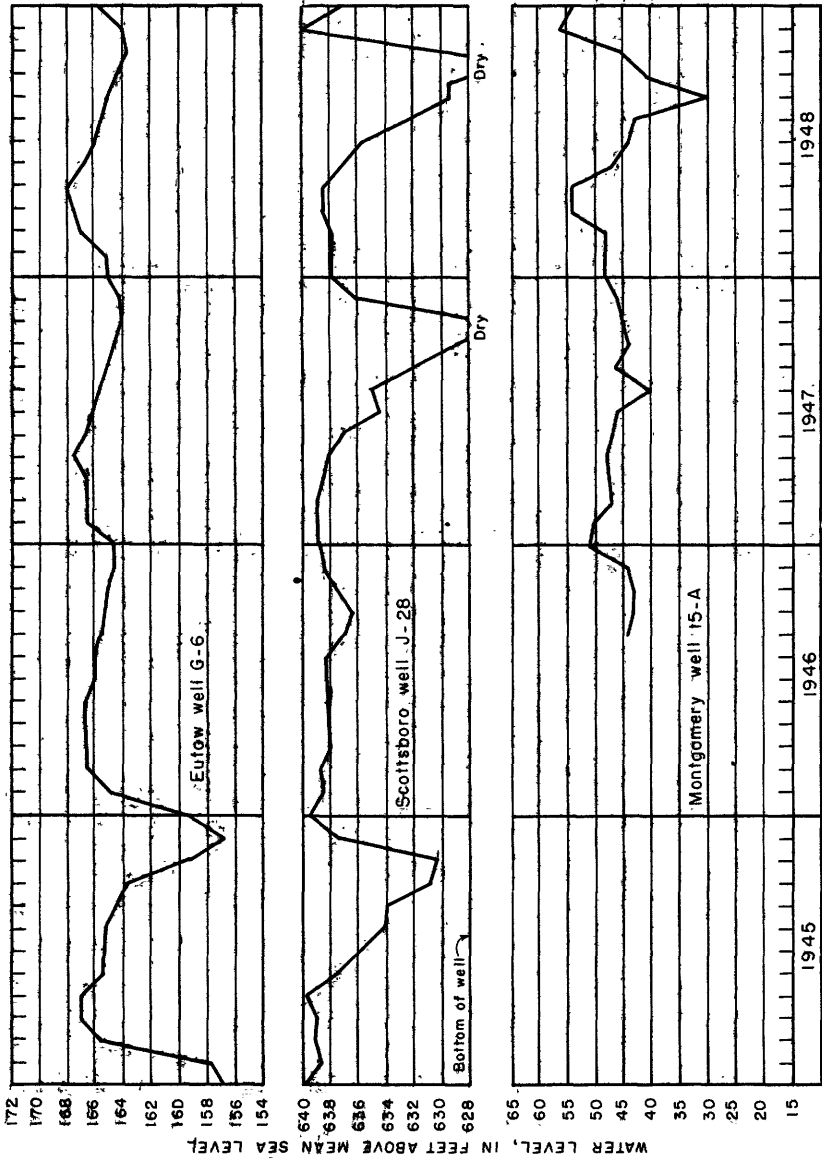


Figure 3.--Graphs showing water-level fluctuations in observation wells in Alabama.

Periodic measurements were begun April 20 on a well at the Reform Gin Company, in Pickens County. The weather station at Reform recorded 64.73 inches of rainfall during 1948. The highest water level of the year, 3.21 feet below land-surface datum, was recorded on April 20. After declining to the low level of the year, 6.46 feet below land-surface datum on November 5, the water level rose to 4.28 feet on December 30, the last reading of the year.

In Pickens County a well at Carrollton, owned by M. D. Carr, was put under periodic observation on April 20. Climatological data from the weather station at Reform was used, since there is no station at Carrollton. During 1948, 64.73 inches of rainfall was recorded. The measurement on April 20 showed the water level to be 19.19 feet below land-surface datum, the highest reading for the period of observation. The water level declined slowly and reached its lowest level of 22.73 feet below land-surface datum on November 15 then slowly rose throughout the rest of the year.

Periodic measurements were begun April 20 on a well at Aliceville, Pickens County, which is owned by H. M. Stapp. At Aliceville 58.01 inches of rainfall was recorded during 1948. When the well was put under observation the water level stood at 2.13 feet below land-surface datum, but declined slowly until it stood at 4.85 feet below land-surface datum on September 3, then rose steadily until it reached 2.78 feet below land-surface datum on December 30.

Two wells are measured monthly in Greene County, one at Boligee, and the other at Eutaw. The highest water level of the year in the Boligee well was recorded on February 3 when the water level stood at 6.42 feet above land-surface datum. Precipitation data for the well at Boligee is computed on the basis of the average for the stations at Greensboro and Livingston, inasmuch as there is no station at Boligee. The average annual precipitation was 66.93 inches, which was 15 inches above normal. Average rainfall was above normal during February, March, April, May, July, September, and November. An average of 14.34 inches of rainfall was recorded for November, which was 11.28 inches above normal. The water level fluctuated only slightly throughout the year, and when the last measurement of the year was made it stood at 5.97 feet above land-surface datum.

The Eutaw well at the Cotton Patch Restaurant, 3.8 miles north of Eutaw, recorded its highest level of the year on April 20 when the water level stood at 14.62 feet below land-surface datum, after having risen gradually since the beginning of the year. After the high reading of the year in April, the water level declined slowly until it reached the low level of the year, 18.92 feet below land-surface datum, on October 31, then slowly rose to 17.06 feet below land-surface datum on December 29. The total rainfall recorded at Eutaw was 60.78 inches. During November 15.26 inches of rainfall was recorded (see fig. 3).

Measurements on the Tuscaloosa County well (T-15), 10.5 miles southwest of Tuscaloosa, were begun on May 12, 1946, and were continued through 1948. The Tuscaloosa weather station reported 63.45 inches of precipitation for the period, which was 9.47 inches above normal. The lowest water level for the year was recorded on February 14, when the water stood at 30.86 feet below land-surface datum. The water level then rose to the high for the year on April 20, when 26.86 feet below land-surface datum was recorded. There was then a gentle decline throughout the summer and fall months and the last reading for the year, on December 30, showed the water level to be 30.05 feet below land-surface datum.

Measurements were begun April 20 on a flowing well 8.5 miles southwest of Tuscaloosa, in Tuscaloosa County. The well, which is 275 feet deep and 4 inches in diameter, is owned by C. Q. Bush. A total of 63.45 inches of rainfall, which was 9.47 inches above normal, was recorded at the Tuscaloosa weather station, the nearest station to the well. Above-normal rainfall of 6.45 inches for the months February through May was responsible for the high water level of 8.75 feet above land-surface datum when the well was put under observation. The water level slowly declined through the summer and early fall and reached its lowest level, 6.40 feet above land-surface datum, on November 5. During November 14.25 inches of rainfall, or 10.67 inches above normal, was recorded, which resulted in a high water level of 8.00 feet above land-surface datum on December 6.

Measurements were begun March 9 on a well at Duncanville, in Tuscaloosa County, owned by the Gulf, Mobile & Ohio R. R. Co. The weather station nearest Duncanville, at Tuscaloosa, recorded 62.70 inches of rainfall during 1948. When measurements were begun on March 9, the water level stood at

5.09 feet below land-surface datum, the highest level for the period of record. The water level slowly declined during the summer and fall to reach its lowest level of 8.22 feet below land-surface datum on November 4. By the last measurement of the year, on December 30, the water level had risen to 5.76 feet below land-surface datum.

Measurements were begun April 23 on a well at Centerville, Bibb County, owned by the Centerville Gin Company. The weather station at Centerville recorded 68.48 inches of rainfall during 1948, which was 12.63 inches above normal. Above-normal rainfall during February and March was apparently responsible for the high water level of 26.85 feet below land-surface datum when the well was put under observation. The water level slowly declined to reach its lowest level of 31.79 feet below land-surface datum on September 28. The measurement on December 3, 25.71 feet below land-surface datum, was the highest for the period of record.

The Chilton County well, at Clanton, did not have a complete year of measurements. When the well was measured January 23 the water level stood at 18.74 feet below land-surface datum. The weather station at Clanton recorded 70.99 inches of precipitation, which was 17.14 inches above normal. Rainfall during January, April, May, October, and December was 6.55 inches below normal, while the other 7 months had a total above-normal precipitation of 23.69 inches. After the measurement on March 9, which recorded 16.53 feet below land-surface datum, the water level slowly declined until it reached its lowest reading of the year, 21.48 feet below land-surface datum, on November 9, then rose gradually until it reached 18.00 feet below land-surface datum, the last reading of the year.

Periodic observation was begun on March 9 on a well at Maplesville, Chilton County, owned by the Stremming Veneer Company. This well is 25 feet deep, 48 inches in diameter, and reflects shallow water-table conditions in the Tuscaloosa formation in the area. The highest water level recorded during 1948 was on March 9 when it stood at 14.36 feet below land-surface datum. The water level then declined gently until the low for the year was reached on November 4 when 18.43 feet below land-surface datum was recorded. The water level then rose to 15.92 feet below land-surface datum when the last measurement for the year was taken on December 29.

Observations were begun on March 9 on a well 34 feet deep and 36 inches in diameter, at Stanton, Chilton County, belonging to P. L. Lewis. The nearest weather station at Plantersville recorded 63.85 inches of precipitation during 1948. The highest water level for the year was recorded on March 9 when the water level stood at 14.30 feet below land-surface datum. There was a decline during the summer and fall months and the low for the year was reached on November 4 when 26.24 feet below land-surface datum was recorded. This well is one of four wells used for correlative studies in cooperation with the surface water branch in the Mulberry Creek drainage basin. Wells at Maplesville, Plantersville, and Jones are also included in the program.

Observations were begun March 9 on a well at Plantersville, Dallas County, owned by J. W. Pickering. During 1948, 63.85 inches of rainfall was recorded by the Plantersville weather station. When measurements were begun on March 9, the water level stood at 13.80 feet below land-surface datum, the highest reading of the year. The water level declined gradually to 20.11 feet below land-surface datum, the lowest reading of the year. By December 29 the water level had risen to 15.89 feet below land-surface datum.

The Dallas County well, at Selma, was not measured during January, February, July, and August. Rainfall, as recorded at the Selma station, totalled 58.41 inches, or 8.16 inches above normal. Although the total rainfall was above normal, below-normal rainfall was recorded during January, February, April, May, July, August, October, and December. On the first measurement of the year on March 9 the water level stood at 19.62 feet below land-surface datum. It slowly rose until it reached its highest reading of the year of 13.93 feet below land-surface datum on March 28, then declined through April, May, and part of June. When measurements were discontinued at the end of June, the water level had risen to 17.45 feet below land-surface datum. When measurements were resumed at the end of August, the water level stood at 26.63 feet below land-surface datum. During the remainder of the year the water level rose slowly until the last measurement of the year when 18.93 feet below land-surface datum was recorded.

On March 9 observation was begun on a well 0.3 mile south of the post-office at Jones, in Autauga County, owned by J. F. Apperson. On this date the water level stood 2.07 feet below land-surface datum. The level slowly declined an average of 1.03 feet a month until it stood at 7.22 feet below land-surface datum on September 28. The well was not measured again until December 3 when the water level stood at 2.57 feet below land-surface datum, indicating a rise of 4.65 feet in a period of 35 days. However, the water level declined during the last 26 days until the level stood at 3.17 feet below land-surface datum. A total of 63.85 inches was recorded for the year, at the weather station in Plantersville, but records are not available as to whether this amount is above or below normal. The highest precipitation for the area for any one month in 1948 was recorded in November with a total of 17.86 inches. This large amount of precipitation would probably account for the sudden rise in water level prior to the measurement on December 3.

A Montgomery City well is equipped with a water-stage recorder and has a complete record for the year. The water level fluctuated during the period January through April, then rose and declined spasmodically from May through August. The low reading for the year, 134.19 feet below land-surface datum was recorded on September 3. The water level rose steadily during the rest of the year, then declined slowly. The high reading for the year, 108.39 feet below land-surface datum, was recorded on December 3. During 1948, 62.48 inches of rainfall was recorded, which was 11.09 inches above normal. Above-normal precipitation was recorded during March, July, September, and November. The unusually high rainfall during November, 20.10 inches or 16.87 inches above normal, was responsible for the above-average rainfall for the year (see fig. 3).

Weekly measurements were begun October 5 on a well in Macon County owned by Tuskegee Institute. Above-normal rainfall was recorded during January, February, March, June, July, and November. When the water level was first measured on October 5, it stood at 95.99 feet below land-surface datum. The water level fluctuated slightly during October, November, and early December, then rose sharply, due to a decrease in pumpage in the vicinity of the well, to 76.12 feet below land-surface datum on December 21, the highest reading of the year.

Tertiary area

Weekly observations were begun October 1 on a well owned by the city of Monroeville, Monroe County. A total rainfall of 62.29 inches, which was 6.71 inches above normal, was recorded at the weather station in Evergreen. The highest above-normal rainfall, 4.10 inches, was recorded during November. The highest water levels of the period of observation, 52.96 inches below land-surface datum, were recorded on November 19 and December 3, while the water level fluctuated only slightly the remainder of the observation period.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Autauga County

A-1. J. F. Apperson. At rear of house, 0.3 mile south of post office at Jones, on road leading to State Highway 22. Domestic well, diameter 36 inches, depth 14 feet. Measuring point, notch in top of well cover, 3.4 feet above land-surface datum. Water in well under water-table conditions, developed in sands of the Tuscaloosa formation. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 9	2.07	June 3	5.32	Aug. 16	6.36	Dec. 3	2.57
Apr. 23	3.83	July 22	6.52	Sept. 28	7.22	29	3.17

Bibb County

B-1. Centerville Cotton Gin. At side of gin house, 3 blocks south of court house at Centerville. Observation well, diameter 8 inches, depth 297 feet. Measuring point, mark in top of casing, 0.43 foot above land-surface datum. Water in well under artesian conditions, developed in sands of the Tuscaloosa formation. Records available: 1948.

Apr. 23	26.85	July 22	30.49	Sept. 28	31.79	Dec. 3	25.71
June 3	29.11	Aug. 16	31.18	Nov. 4	31.76	29	26.89

Chilton County

10. City of Clanton. In brick recorder house behind settling tanks, in waterworks lot, on north side of Clanton. Equipped with automatic water-stage recorder. Records available: 1941-48.

Jan. 20	18.78	Apr. 19	16.77	July 20	19.70	Nov. 9	21.48
23	18.74	26	16.93	Aug. 16	19.24	16	20.41
Mar. 9	16.53	May 3	17.62	Sept. 28	20.80	23	19.14
14	16.92	10	18.08	Oct. 5	20.62	30	18.22
21	16.87	17	18.41	12	20.74	Dec. 7	18.16
26	16.22	25	18.94	19	20.96	14	18.08
28	16.60	June 1	19.38	26	20.94	21	18.09
Apr. 4	16.38	July 9	20.49	Nov. 2	21.18	28	18.00
11	16.30	16	20.64				

C-1. Stremming Veneer Co. At side of house, 200 feet northeast of the G.M. & O. Railroad station at Maplesville, on State Highway 22. Domestic well, diameter 48 inches, depth 25 feet. Measuring point, mark in south edge of concrete well cover, 2.52 feet above land-surface datum. Water in well under water-table conditions, developed in sands of the Tuscaloosa formation. Records available: 1948.

Mar. 9	14.36	July 22	17.38	Sept. 28	17.96	Dec. 3	16.86
Apr. 23	14.62	Aug. 16	17.21	Nov. 4	18.43	29	15.92
June 3	16.14						

C-2. P. L. Lewis. At rear of store at Stanton, on State Highway 22. Domestic well, diameter 36 inches, depth 34 feet. Measuring point, notch on top of south side of curbing, 3.2 feet above land-surface datum. Water in well under water-table conditions, developed in sands of the Tuscaloosa formation. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 9	14.30	July 22	24.67	Sept. 28	24.62	Dec. 3	20.72
Apr. 23	15.23	Aug. 16	23.12	Nov. 4	26.24	29	18.97
June 3	20.72						

Dallas County

D-1. J. W. Pickering. At rear of store, 0.25 mile south of Southern Railroad station at Plantersville, on State Highway 22. Domestic well, diameter 36 inches, depth 24 feet. Measuring point, notch on top of south side of curbing, 3.0 feet above land-surface datum. Water in well under water-table conditions, developed in sands of the Tuscaloosa formation. Records available: 1948.

Mar. 9	13.80	July 22	18.86	Sept. 28	19.87	Dec. 3	15.99
Apr. 23	14.98	Aug. 16	19.02	Nov. 4	20.11	29	15.89
June 3	17.30						

City of Selma. At Selma waterworks plant. Records available: 1941, 1945-48.

Mar. 9	19.62	May 9	19.33	Sept. 13	20.93	Nov. 8	20.16
14	18.89	16	20.83	20	21.13	15	20.56
21	19.43	24	22.98	27	19.23	22	18.99
28	13.93	31	23.43	Oct. 4	21.93	29	17.73
Apr. 4	18.88	June 7	23.53	11	21.78	Dec. 6	16.93
11	18.83	14	24.93	18	21.53	13	16.95
18	21.03	21	17.45	25	21.50	20	18.60
26	22.89	Aug. 30	26.63	Nov. 1	21.26	27	18.93
May 2	22.83	Sept. 6	24.03				

Greene County

6. R. Neillon and E. Ward. NW $\frac{1}{4}$ sec. 14, T. 22 N., R. 2 E., in front of Cotton Patch restaurant, on U. S. Highway 11, 3.8 miles north of Eutaw, on hillside, in upper Eutaw sands. Records available: 1941-48.

Feb. 3	17.34	Apr. 20	14.62	July 30	16.99	Oct. 31	18.92
28	15.35	June 2	15.85	Aug. 25	17.40	Nov. 30	18.50
Mar. 27	14.80	30	16.57	Sept. 30	18.17	Dec. 29	17.06

13. In Boligee at old mill house, 200 feet northwest of Alabama Great Southern Railroad station. Records available: 1941-42, 1946-48.

Feb. 3	+6.42	June 2	+5.87	Aug. 25	+5.57	Nov. 30	+6.07
Mar. 27	+6.06	30	+5.85	Sept. 30	+5.73	Dec. 29	+5.97
Apr. 20	+5.93	July 30	+5.67	Oct. 31	+5.71		

Jackson County

J-28. Tennessee Valley Authority well TVA 28. NW $\frac{1}{4}$ sec. 29, T. 3 S., R. 5 E., 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. Records available: 1933-41, 1943-48.

Jan. 5	4.20	Feb. 9	2.94	Mar. 8	2.31	Apr. 5	3.59
13	4.11	16	2.58	16	4.08	12	3.62
19	4.28	23	3.28	21	2.87	26	3.60
27	4.07	Mar. 1	3.89	29	3.32	May 3	3.52

J-28--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 11	3.70	July 12	7.31	Sept. 12	12.72	Nov. 8	10.84
17	4.07	20	7.64	19	12.73	16	7.00
24	4.70	27	8.13	26	(a)	22	3.53
June 1	4.73	Aug. 1	9.75	Oct. 3	(a)	30	1.90
7	5.34	9	10.02	10	(a)	Dec. 7	2.57
13	5.63	16	10.72	17	(a)	13	3.50
21	5.30	23	11.34	26	(a)	20	3.42
28	6.02	30	12.55	Nov. 1	(a)	28	4.40
July 5	6.24	Sept. 5	11.83				

a Dry.

Lamar County

L-1. J. W. Gartman. At rear of house, 0.25 mile east of courthouse at Vernon. Domestic well, diameter 2 inches, depth 135 feet. Measuring point, top of discharge pipe, 2.72 feet above land-surface datum. Water in well under artesian conditions; developed in sands of the Tuscaloosa formation. Records available: 1948.

Apr. 26	+9.71	July 20	+8.46	Oct. 6	+8.71	Dec. 6	+8.71
June 2	+9.21	Sept. 3	+7.71	Nov. 5	+7.96	30	+8.46

Macon County

M-1. Tuskegee Institute. In brick house at side of school laundry, 200 feet from school power plant. Observation well, diameter 18 by 8 inches, depth 355 feet. Measuring point, mark on top of casing, 0.75 foot above land-surface datum. Water in well under artesian conditions, developed in sands of the Tuscaloosa formation. Records available: 1948.

Oct. 5	95.99	Nov. 2	95.37	Nov. 24	94.98	Dec. 14	94.53
12	96.26	9	96.32	30	94.50	21	76.12
19	95.65	16	95.05	Dec. 7	96.37	28	74.74
26	96.56						

Monroe County

Mo-1. City of Monroeville. 50 feet northeast of city water tank, 1 block west of court house at Monroeville. Observation well, diameter 10 inches, depth 120 feet. Measuring point, notch on top of casing, 0.57 foot above land-surface datum. Water in well under artesian conditions, developed in Ocala limestone. Records available: 1948.

Oct. 1	52.05	Oct. 29	52.55	Nov. 26	52.78	Dec. 17	50.87
8	52.09	Nov. 12	52.76	Dec. 3	52.96	24	51.14
15	52.37	19	52.96	10	51.48	31	51.05
22	52.49						

Montgomery County

15. City of Montgomery well 15a. Corner of Court and Chambers Streets, Montgomery. Records available: 1940-41, 1946-48.

Jan. 2	116.79	Mar. 19	111.59	June 4	117.19	Aug. 20	124.89
9	116.59	26	110.59	11	117.64	27	130.49
16	116.79	Apr. 2	110.29	18	117.09	Sept. 3	134.19
23	116.89	9	110.19	25	116.64	10	125.19
Feb. 2	116.49	16	112.69	July 2	120.69	17	123.69
6	117.09	23	110.46	9	125.04	24	123.29
13	114.49	30	110.89	16	118.89	Oct. 1	122.79
20	115.49	May 7	113.19	23	125.79	8	119.29
27	116.09	14	113.99	30	121.49	15	120.59
Mar. 5	115.59	21	114.57	Aug. 6	122.29	22	120.79
12	111.79	28	121.39	13	126.84	29	119.49

15--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 5	121.39	Nov. 26	114.79	Dec. 10	109.29	Dec. 24	110.19
12	117.09	Dec. 3	108.39	17	113.79	31	110.19
19	115.39						

Pickens County

P-1. H. M. Stapp. At rear of house, 1.5 miles northwest of Aliceville, on the old Columbus road. Domestic well, diameter 4 inches, depth 560 feet. Measuring point, notch in top of casing, 0.50 foot above land-surface datum. Water in well under artesian conditions, developed in sands of the Tuscaloosa formation. Records available: 1948.

Apr. 20	2.13	July 20	4.04	Oct. 6	4.27	Dec. 6	3.08
June 2	4.90	Sept. 3	4.85	Nov. 5	4.21	30	2.78

P-2. M. D. Carr. On back porch of house, 0.25 mile north of Carrollton, on State Highway 17. Domestic well, diameter 36 inches, depth 32.5 feet. Measuring point, notch in top of cement well cover, 8.0 feet above land-surface datum 243.257. Water in well under water-table conditions, developed in sands of the Futaw formation. Records available: 1948.

Apr. 20	19.19	July 20	21.18	Oct. 6	22.39	Dec. 6	22.15
June 2	20.32	Sept. 3	22.08	Nov. 15	22.73	30	21.66

P-3. Reform Cotton Gin. At rear of gin house, 0.25 mile east of railroad station, on U. S. Highway 82. Domestic well, diameter 4 inches, depth 90 feet. Measuring point, spout on pitcher pump, 3.62 feet above land-surface datum. Water in well under artesian conditions, developed in sands of the Tuscaloosa formation. Records available: 1948.

Apr. 20	3.21	July 20	3.81	Oct. 6	6.38	Dec. 6	4.84
June 2	3.69	Sept. 3	6.25	Nov. 5	6.46	30	4.28

Tuscaloosa County

T-1. G. M. & O. Railroad. At rear of worker's house near railroad station at Duncanville, on U. S. Highway 82. Domestic well, diameter 6 inches, depth 15 feet. Measuring point, mark in top of concrete casing, elevation 3.57 feet above land-surface datum. Water in well under water-table conditions, developed in sands of the Tuscaloosa formation. Records available: 1948.

Mar. 9	5.09	July 22	7.15	Sept. 28	8.04	Dec. 3	5.89
Apr. 23	6.34	Aug. 16	7.60	Nov. 14	8.22	30	5.76
June 3	7.24						

T-2. C. Q. Bush. At side of house, 8.5 miles southwest of Tuscaloosa, on U. S. Highway 11. Domestic well, diameter 4 inches, depth 275 feet. Measuring point, top of discharge pipe, 3.75 feet above land-surface datum. Water in well under artesian conditions, developed in sands of the Tuscaloosa formation. Records available: 1947-48.

Apr. 20	+8.75	July 20	+7.25	Oct. 6	+7.00	Dec. 6	+8.00
June 2	+8.25	Sept. 3	+7.25	Nov. 5	+6.40	30	+7.75

T-15. J. R. Thoenen. At side of house, 10.5 miles southwest of Tuscaloosa, on U. S. Highway 11. Water in well under water-table conditions, developed in sands of Tuscaloosa formation. Records available: 1946-48.

Jan. 11	30.46	Mar. 7	28.37	June 2	27.24	Nov. 5	30.23
Feb. 14	30.86	28	27.15	July 20	28.35	Dec. 6	30.65
21	29.40	Apr. 3	27.15	Sept. 3	29.28	30	30.05
29	28.98	20	26.86	Oct. 6	29.87		

FLORIDA

By J. W. Stewart and C. F. Essig, Jr.

PROGRAM OF WORK

The program of well observation in Florida was continued in 1948 in cooperation with the Florida Geological Survey and with several counties and cities of the State. The observation program is a 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. An intensive investigation in southern Florida, begun in 1939, is being made in cooperation with Dade County, and the cities of Miami, Miami Beach, and Coral Gables. Other counties and cities cooperating in ground-water investigations in 1948 include Pinellas County, and the cities of Fort Lauderdale, Dania, Delray Beach, and Pensacola.

During the year 11 additional automatic water-stage recorders were installed, and at the close of 1948, the program included 393 wells, 57 of which were equipped with automatic water-stage recorders. More than 3,900 periodic measurements were made in the State during the year.

Distribution, by counties, of observation wells in Florida, 1948

County	No. of wells at end of year	Number of tape and pressure-gage measurements	No. of wells with water-stage recorders
Bay	3	21	1
Brevard	5	4	0
Broward	10	40	4
Clay	7	42	0
Columbia	1	6	1
Dade	260	2,011	19
Duval	17	105	1
Escambia	6	314	4
Flagler	1	6	0
Gadsden	1	7	0
Gulf	1	8	1
Hendry	2	7	0
Hillsborough	1	12	1
Holmes	2	12	1
Jackson	2	11	0
Lee	2	0	2
Leon	4	793	1
Manatee	1	8	1
Marion	1	52	0
Nassau	13	76	1

Distribution, by counties, of observation wells in Florida, 1948--Continued

County	No. of wells at end of year	Number of taps and pressure-gage measurements	No. of wells with water-stage recorders
Okechoosa	13	80	0
Orange	1	12	1
Palm Beach	2	52	1
Pinellas	7	44	7
Polk	3	16	3
St. Johns	5	30	0
Santa Rosa	3	22	0
Sarasota	2	12	2
Taylor	2	16	2
Volusia	6	42	3
Wakulla	2	13	0
Walton	5	40	0
Washington	2	9	0
Totals	393	3,933	57

OCCURRENCE OF GROUND WATER

In Florida north of Lake Okeechobee, the source of water for most cities, industries, farms, citrus groves, and rural homes is obtained from a highly productive and extensive aquifer consisting of the Ocala limestone and other limestones and dolomites of Eocene, Oligocene, and Miocene ages. At most places this aquifer is overlain by a thick section of younger materials that includes relatively impervious beds which confine the water under artesian pressure. The water is under sufficient pressure to use above the land surface over roughly half the State, including a band about 20 miles wide along the east coast, all the area south of Lake Okeechobee, the Kissimmee River Valley, and other areas.

Shallow aquifers supply most of the water used in southern Florida and at some places along the east coast south of Duval County, where the artesian water is too highly mineralized for general use. They are also the principal source of supply in Escambia County. These aquifers are composed of limestone, sand, shell marl, and coquina, and range in age from Miocene to Pleistocene. Among them is the Tamiami formation in southeastern Florida, one of the most highly permeable aquifers in the world. Generally, however, the shallow aquifers are less permeable and less productive than the deeper limestone aquifer.

FLUCTUATIONS OF WATER LEVEL AND ARTESIAN PRESSURE

Water levels and pressures in Florida west of the Suwannee River rose generally during 1948. The rise in water levels and pressures was due primarily to the fact that rainfall was greater in 1948 than it was in

1947. At all precipitation stations of the U. S. Weather Bureau for which departures from the normal were reported in this area, rainfall in 1948 was greater than normal, and in only two stations was the rainfall less than the heavy precipitation during 1947.

Water levels rose slightly in all the observation wells in Escambia County, except Escambia County well 45 in which the water level continued its progressive decline. A decline of nearly 2 feet occurred in this well during 1948, owing to the pumping by the Florida Pulp and Paper Company.

The water level in Leon County well 5 reached a high of 88.3 feet below land-surface datum on April 22 and 23, the highest recorded since measurements began near the end of 1931. The high water level in this well is the result of exceptionally heavy rainfall during April, which created floods in the Suwannee River basin and other river basins in northern Florida.

In Bay, Walton, Washington, and Gadsden Counties water levels declined slightly, whereas in Holmes County they rose slightly.

The water levels rose slightly in observation wells in Taylor County, owing to local recharge from above-normal rainfall.

The artesian pressure in Nassau and Duval Counties declined slightly during 1948 chiefly because rainfall in 1948 was less than it was in 1947. The precipitation at the Jacksonville airport was 77.37 inches in 1947, whereas it was only 63.30 inches in 1948. The largest declines in artesian pressure occurred in Nassau County wells 22, 23, and 27, near Fernandina, in which the pressures are affected by the withdrawal of about 30 million gallons of water a day by Rayonier, Inc. at Fernandina.

The water level in Columbia County well 9, at Lake City, declined more than 4 feet from the beginning of record on June 5 until the end of the year.

Weekly measurements of artesian pressure in Marion County well 5 were continued during 1948 by the surface-water district office of the U. S. Geological Survey at Ocala. The pressure in this well reached a high of 13.67 feet above land-surface datum on October 9 and 23, the highest it has been since October 7, 1933. The pressure then declined to 12.43 feet at the end of the year, which was approximately the same as it was at the beginning of the year. The water level in this well does not respond rapidly to local rainfall.

Observations of water levels in Pinellas County were begun in 1946 in cooperation with the county of Pinellas as a part of an investigation of the

encroachment of sea water into the limestone aquifer. This investigation has indicated that most of the ground water in the Pinellas peninsula is derived from local rainfall. Water levels in most of the wells in the county declined during 1948, owing, in part, to the decrease in precipitation in 1948.

Water levels in Volusia, Orange, Brevard, Hillsborough, and Manatee Counties, in central Florida, declined slightly during 1948 as a result of the decrease in rainfall in the region.

In southern Florida 1948 was the second consecutive year of above-normal rainfall, and, as a result, the water levels were the highest that have been recorded, except during the severe floods of 1947. Rainfall in the first half of 1948 was, in most areas, about normal, whereas in the last half of the year it was above normal as a result of heavy rains that accompanied two hurricanes which crossed the State in late September and early October. The September hurricane crossed the State from Everglades City to Stuart, and the October hurricane crossed the Florida Keys and passed over the Miami area. The heavy rains that accompanied these two hurricanes, adding to the above-normal rainfall during the preceding months, caused floods over large areas of southern Florida.

Water levels reached their peak after the October hurricane, and areas in Miami, Miami Springs, Hialeah, and numerous small towns were inundated. However, the flood conditions were not so severe as in the preceding year, except in South Dade County where water levels were about 0.4 foot higher. In most areas the water levels averaged 0.3 foot to 2.0 feet lower than those recorded in October 1947. Water levels declined slowly during November and December but were still above the normal stage at the end of the year.

The total rainfall at Miami in 1948 was 57.04 inches, 12.13 inches less than in the previous year. Decreases in total annual rainfall at other Dade County stations, as compared with that in 1947, were as follows: Coconut Grove, 8.67 inches, Homestead, 23.50 inches; Pennsuco, 14.19 inches; and Kendal, 3.81 inches.

At Hypoluxo, near Lake Worth, Palm Beach County, the total rainfall in 1948 was 77.86 inches, 26.57 inches less than in 1947, at Fort Pierce, in St. Lucie County, 57.96 inches, 19.80 inches less; and at Fort Myers, in Le County, 47.96 inches, 32.21 inches less.

Comparative water levels and precipitation for selected wells in Dade County

Well No.	1942		1943		1944		1945		1946		1947		1948	
	1/ 2/	1/ 2/	1/ 2/	1/ 2/	1/ 2/	1/ 2/	1/ 2/	1/ 2/	1/ 2/	1/ 2/	1/ 2/	1/ 2/	1/ 2/	1/ 2/
G3	2.08	65.39	1.46	58.39	1.40	39.29	1.31	40.98	1.44	55.04	2.87	78.25	2.05	75.58
G10	4.24	65.59	3.60	58.39	3.52	39.29	2.68	40.98	3.91	55.04	4.91	78.25	4.14	75.58
G72	5.64	.....	4.70	49.73	4.88	56.52	4.01	40.24	5.09	42.93	6.31	71.60	5.68	57.41
S18	2.10	48.86	1.54	62.45	1.38	40.19	1.13	42.25	1.95	54.93	2.95	73.39	2.37	78.87
S182	4.77	.....	3.69	50.89	2.92	39.56	2.71	54.77	4.48	66.99	5.41	81.92	5.11	78.77
F179	1.90	56.80	1.70	44.82	1.58	28.66	1.58	34.54	1.93	39.04	2.53	69.17	2.41	57.05
F210	1.50	48.86	1.37	62.45	1.18	40.19	1.07	42.25	1.40	54.93	2.30	73.39	1.94	78.87

1/ Average annual water level, in feet above mean sea level.

2/ Total precipitation, in inches.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Bay County

7. City of Panama City. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, T. 3 S., R. 15 W., under a water tank at Clay and 11th Streets, in St. Andrews. Records available: 1946-48.

Week ending	High	Low	Week ending	High	Low
Jan. 24	42.89	43.88	Apr. 18	41.78	44.50
31	43.88	44.64	25	44.50	45.40
Feb. 7	44.64	45.04	May 2	44.91	45.05
21	43.88	44.82	9	45.05	45.62
Mar. 21	42.10	43.45	16	45.62	46.36
28	41.76	44.43	23	46.36	47.72
Apr. 4	43.40	43.60	30	47.72	48.34
11	41.87	43.40	June 27	47.80	49.62

8. Hunt Oil Co. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 28, T. 2 S., R. 14 W., 455 feet south of old railroad depot near Fanning Bayou, Southport. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 16	+1.67	Apr. 16	+1.20	Oct. 21	+1.55
Feb. 13	+1.52	May 18	+1.59	Dec. 3	+2.23

10. L. R. Pierson. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 10, T. 3 S., R. 14 W., at Leisure Lodge, 1.25 miles east of Lynn Haven. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 16	6.17	Apr. 16	5.93	Oct. 21	6.76
Feb. 13	6.19	May 18	7.57	Dec. 3	6.36

11. Youngstown Naval Stores. In Youngstown, in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 28, T. 1 S., R. 12 W., at old turpentine still, 25 yards west of U. S. Highway 231. Records available: 1946-48. Feb. 13, 14.62.

Brevard County

19. Mr. R. M. Wall. 9 miles west of Melbourne, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 5, T. 28 S., R. 36 E., about 40 feet north of State Highway 500, about 30 feet west of St. Johns River bridge. Records available: 1946-48. Feb. 10, +29.87.

20. Mr. Webber. 9.5 miles west of Malabar, in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 4, T. 29 S., R. 36 E., about 10 feet south of State Highway 514. Records available: 1946-48. Feb. 10, +27.8.

79. C. W. Carlisle. About 1.6 miles northeast of Scottsmoor, about 12 feet east of shell road, in edge of orange grove. Records available: 1946-48. Feb. 11, +6.4.

148. W. P. Warren. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 31, T. 24 S., R. 36 E., about 60 feet south of State Highway 520, about 100 feet west of a residence, in edge of orange grove. Records available: 1946-48. Feb. 10, +12.9.

159. H. R. Jacobsen. 3 miles north of Orsino, in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 18, T. 22 S., R. 37 E., on north side of small pit, in orange grove, about 500 feet southeast of a residence. Records available: 1946-47. No measurements made in 1948.

Broward County

F291. City of Hollywood. In Hollywood, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 51 S., R. 42 E., on northwest corner of Dewey Street and south 20th Avenue. Drilled fire well, diameter 6 inches, depth 107 feet. Measuring point, top of casing, 1.9 feet above land-surface datum and 11.06 feet above mean sea level, 1929 adjustment. Recorder installed Jan. 28, 1948. Records available: 1948.

F291--Continued.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Feb. 4	6.13	6.29	July 8	8.12	8.26
11	6.29	6.55	15	8.12	8.25
18	6.55	6.77	22	8.24	8.29
25	6.77	7.01	29	7.94	8.29
Mar. 4	6.88	7.13	Aug. 5	7.92	8.03
11	6.77	7.14	12	8.01	8.11
18	6.78	7.18	19	7.77	8.14
25	7.18	7.50	26	7.22	7.77
Apr. 1	7.50	7.66	Sept. 30	3.59	4.18
8	7.52	7.71	Oct. 7	1.90	4.66
15	7.71	7.89	14	2.71	3.78
22	7.61	7.88	21	3.78	4.06
29	6.91	7.69	28	4.06	4.50
May 6	6.91	7.36	Nov. 4	4.50	5.03
13	7.23	7.52	11	5.03	5.46
20	7.25	7.52	18	5.46	5.83
27	7.36	7.61	25	5.83	6.08
June 3	7.46	7.72	Dec. 2	6.08	6.35
10	7.39	7.54	9	6.01	6.37
17	7.51	7.59	16	6.29	6.50
24	7.53	7.89	23	6.50	6.71
July 1	7.89	8.15	30	6.71	6.92

G221. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 18, T. 50 S., R. 42 E. Records available: 1947-48.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Jan. 7	10.34	11.03	July 8	13.26	13.98
14	10.67	11.28	15	13.22	13.78
21	10.73	11.40	22	13.39	13.54
28	11.02	11.67	29	13.25	13.56
Feb. 4	11.33	11.99	Aug. 5	13.22	13.76
11	11.68	12.11	12	13.40	14.06
18	11.91	12.60	19	13.59	14.11
25	12.22	12.83	26	12.46	13.97
Mar. 4	12.41	13.13	Sept. 2	11.30	12.46
11	12.66	13.17	9	11.12	11.90
18	12.77	13.38	16	10.40	11.91
25	13.07	13.63	23	7.48	10.40
Apr. 1	13.30	13.87	30	7.58	8.89
8	12.75	13.90	Oct. 7	5.30	9.24
15	12.76	13.57	14	6.40	7.50
22	13.09	13.55	21	7.14	7.98
29	12.14	13.70	28	7.61	8.50
May 6	12.08	12.81	Nov. 4	8.15	8.81
13	12.25	12.81	11	8.81	9.94
20	12.26	12.97	18	9.61	10.54
27	12.48	13.19	25	10.29	10.67
June 3	12.79	13.30	Dec. 2	10.52	10.93
10	12.80	13.38	9	10.93	11.58
17	12.88	13.45	16	11.15	11.37
24	12.87	13.47	23	11.17	11.86
July 1	13.11	13.88	30	11.75	11.96

G512. Geol. Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 24, T. 50 S., R. 41 E. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	8.57	Mar. 15	9.80	June 16	9.76	Oct. 20	5.57
Feb. 21	9.00	Apr. 21	9.57	Aug. 17	10.15	Dec. 13	8.71

G513. Geol. Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 14, T. 50 S., R. 41 E. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	3.24	Mar. 15	4.94	June 16	4.56	Dec. 13	3.40
Feb. 21	4.80	Apr. 21	4.24	Aug. 17	5.09		

G514. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 9, T. 50 S., R. 42 E. Records available: 1947-48.

Jan. 13	3.00	Mar. 15	3.48	June 16	3.50	Oct. 20	0.93
Feb. 21	3.82	Apr. 21	3.65	Aug. 17	3.98	Dec. 13	3.18

G515. Geol. Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 12, T. 50 S., R. 41 E. Records available: 1947-48.

Jan. 13	3.44	Mar. 15	6.01	June 16	5.95	Oct. 20	1.16
Feb. 21	5.82	Apr. 21	6.25	Aug. 17	6.46	Dec. 13	4.47

G516. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 8, T. 50 S., R. 42 E. Records available: 1947-48.

Jan. 13	3.00	Mar. 15	4.45	June 16	4.40	Oct. 20	0.03
Feb. 21	4.08	Apr. 21	5.10	Aug. 17	5.42	Dec. 13	3.01

G561. Geol. Survey, U. S. Dept. of Interior. In Fort Lauderdale, in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 50 S., R. 42 E., on southeast 4th Avenue, between 20th and 21st Streets. Drilled observation well, diameter 6 inches, depth 20.3 feet. Measuring point, top of casing, 1.7 feet above land-surface datum and 9.85 feet above mean sea level, 1929 adjustment. Recorder installed Feb. 9, 1948. Records available: 1948.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Feb. 18	6.23	6.47	July 29	7.10	7.30
25	6.45	6.63	Aug. 5	7.08	7.19
Mar. 4	6.44	6.65	12	7.06	7.20
11	6.22	6.67	19	6.88	7.29
18	6.28	6.70	26	5.28	6.38
25	6.70	6.97	Sept. 2	4.77	5.74
Apr. 1	6.95	7.01	9	4.57	5.54
8	6.09	7.03	16	4.62	5.76
15	6.51	6.93	23	2.50	4.86
22	6.66	6.93	30	2.88	3.92
29	5.12	6.72	Oct. 7	.75	4.38
May 6	5.37	6.19	14	2.07	3.11
13	6.05	6.37	21	2.87	3.41
20	6.12	6.44	28	3.41	4.01
27	6.41	6.74	Nov. 4	4.01	4.57
June 3	6.45	6.82	11	4.57	5.06
10	6.44	6.71	18	5.06	5.35
17	6.80	6.80	25	5.35	5.70
24	6.68	7.70	Dec. 2	5.70	5.95
July 1	7.07	7.37	9	5.79	6.00
8	7.18	7.44	16	5.83	6.06
15	7.09	7.19	23	6.06	6.33
22	7.08	7.25	30	6.33	6.47

S329. Fort Lauderdale. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 12, T. 50 S., R. 41 E. Records available: 1940-48.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Jan. 7	3.46	3.84	Feb. 18	5.08	5.66
14	3.42	4.00	25	5.42	6.08
21	3.52	4.06	Mar. 4	5.72	6.38
28	....	....	11	5.99	6.44
Feb. 4	4.33	4.70	18	6.12	6.63
11	4.70	5.40	25	6.35	6.97

S329--Continued.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Apr. 1	6.67	7.22	Aug. 19	6.63	7.17
8	6.15	7.19	26	5.60	6.88
15	6.21	6.88	Sept. 2	4.76	5.62
22	6.48	6.92	9	4.33	5.16
29	5.20	7.03	16	3.38	5.24
May 6	5.14	6.85	23	....	3.76
13	5.48	6.09	30	1.18	2.06
20	5.49	6.01	Oct. 7	+1.10	2.32
27	5.53	6.27	14	.19	.46
June 3	6.02	6.47	21	.41	1.31
10	6.11	6.39	28	.93	2.06
17	5.84	6.66	Nov. 4	1.92	2.78
24	5.86	6.69	11	2.78	3.30
July 1	6.48	7.13	18	3.29	3.97
8	6.56	7.25	25	3.73	4.42
15	6.49	7.17	Dec. 2	4.25	4.89
22	6.80	7.30	9	4.89	5.14
29	6.48	7.31	16	4.56	5.19
Aug. 5	6.48	7.06	23	4.99	5.38
12	6.73	7.23	30	5.12	5.72

S330. Florida Power & Light Co. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 30, T. 50 S., R. 42 E.
Records available: 1944-48. Aug. 18, 2.10.

Clay County

1. Girl Scouts of America. At Camp Chownaw, about 1,000 feet south of SE corner sec. 20, T. 5 S., R. 26 E., about 2,200 feet west of south end of bridge across Black Creek, on U. S. Highway 17. Records available: 1934, 1940, 1942, 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	+41.1	Apr. 30	+41.5	Aug. 14	+40.6	Nov. 11	+42.2
Mar. 25	+44.3	July 8	+39.1	Sept. 30	+41.6		

2. Mrs. M. A. Chaulker. At Middleburg, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 13, T. 5 S., R. 24 E., at residence of owner, about 500 feet north of South Fork of Black Creek. Records available: 1934, 1940-42, 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	+45.8	Apr. 30	+48.1	Aug. 14	+45.2	Nov. 11	+45.5
Mar. 25	+46.6	July 8	+45.5	Sept. 30	+45.0		

4. T. J. Jennings. Near north line of SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 32, T. 4 S., R. 25 E., southeast side of new highway, 3.2 miles northeast of Middleburg. Records available: 1940-42, 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	+40.7	Apr. 30	+41.0	Aug. 14	+39.8	Nov. 11	+40.3
Mar. 25	+41.9	July 8	+39.5	Sept. 30	+39.9		

5. John Huntley. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 32, T. 4 S., R. 25 E., about 500 feet northwest of State Highway 68, in rear of owner's residence, 4.2 miles northeast of Middleburg. Records available: 1940-41, 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	+34.8	Apr. 30	+34.9	Aug. 14	+33.0	Nov. 11	+34.1
Mar. 25	+36.9	July 8	+33.1	Sept. 30	+33.0		

8. St. Elmo Hotel. In Green Cove Springs. Records available: 1934-35, 1940-42, 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	+19.4	Apr. 30	+20.8	Aug. 14	+17.8	Nov. 11	+18.5
Mar. 25	+20.6	July 8	+16.9	Sept. 30	+18.4		

22. U. S. Navy. At auxiliary air base, about 2.5 miles southeast of Green Cove Springs, on south side of a pump house. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	+19.9	Apr. 30	+20.4	Aug. 14	+19.1	Nov. 11	+19.3
Mar. 25	+20.9	July 8	+17.4	Sept. 30	+16.5		

Columbia County

9. City of Lake City. 1 mile south of Lake City, west of water plant on Alligator Lake, in sec. 5, T. 4 S.; R. 17 E. Unused drilled public-supply well, diameter 12 inches, depth 836 feet. Measuring point, top of 12-inch casing, at land-surface datum, and 144 feet above mean sea level. Automatic water-stage recorder installed June 4, 1948. Records available: 1948.

High and low daily water level, from recorder charts

Day	June		Day	June		Day	June	
	High	Low		High	Low		High	Low
1	.....	.....	11	79.73	79.89	21	80.19	80.26
2	.....	.....	12	79.87	79.89	22	80.25	80.34
3	.....	.....	13	79.87	79.89	23	80.35	80.41
4	.....	.....	14	79.88	79.98	24	80.31	80.40
5	79.58	79.71	15	79.86	80.04	25	80.32	80.36
6	79.68	79.80	16	80.00	80.07	26	80.35	80.38
7	79.65	79.68	17	80.01	80.08	27	80.40	80.46
8	79.61	79.70	18	80.06	80.16	28	80.46	80.48
9	79.63	79.72	19	80.11	80.23	29	80.46	80.49
10	79.69	79.84	20	80.15	80.24	30	80.47	80.53

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	80.52	80.61	81.43	81.53	82.20	82.29	82.80	82.88	82.97	83.06	83.55	83.60
2	80.58	80.66	81.47	81.59	82.21	82.30	82.70	82.84	82.92	83.05	83.46	83.60
3	80.61	80.71	81.52	81.66	82.20	82.27	82.74	82.82	82.90	82.99	83.48	83.57
4	80.66	80.74	81.57	81.68	82.20	82.25	82.64	82.80	82.94	83.00	83.53	83.59
5	80.67	80.79	81.55	81.64	82.26	82.34	82.63	82.70	82.95	83.01	83.50	83.57
6	80.61	80.75	81.58	81.65	82.30	82.33	82.66	82.72	82.98	83.07	83.53	83.58
7	80.64	80.71	81.64	81.68	82.25	82.30	82.72	82.78	83.07	83.18	83.52	83.59
8	80.69	80.85	81.64	81.67	82.28	82.30	82.75	82.80	83.10	83.20	83.47	83.54
9	80.83	80.89	81.67	81.74	82.31	82.36	82.80	82.85	83.02	83.11	83.49	83.53
10	80.85	80.90	81.74	81.76	82.33	82.40	82.80	82.88	83.01	83.20	83.63	83.63
11	80.85	80.86	81.71	81.78	82.35	82.42	82.76	82.82	83.20	83.31	83.73	83.83
12	80.85	80.90	81.70	81.76	82.39	82.45	82.80	82.89	83.21	83.29	83.70	83.78
13	80.85	80.92	81.72	81.80	82.42	82.49	82.85	82.94	83.20	83.27	83.74	83.84
14	80.90	80.95	81.80	81.85	82.45	82.50	82.84	82.93	83.20	83.30	83.75	83.85
15	80.91	81.00	81.78	81.86	82.45	82.55	82.87	82.96	83.26	83.35	83.73	83.85
16	81.00	81.08	81.80	81.85	82.55	82.65	82.93	83.01	83.23	83.31	83.73	83.82
17	81.02	81.11	81.80	81.90	82.65	82.73	82.86	83.01	83.17	83.27	83.75	83.82
18	81.04	81.13	81.86	81.95	82.59	82.70	82.83	82.93	83.20	83.27	83.62	83.81
19	81.07	81.15	81.92	82.00	82.55	82.63	82.89	82.97	83.13	83.24	83.54	83.65
20	81.07	81.17	81.93	82.00	82.52	82.60	82.94	83.02	83.14	83.28	83.64	83.79
21	81.10	81.19	81.96	82.02	82.44	82.55	83.00	83.05	83.27	83.32	83.79	83.87
22	81.11	81.18	82.01	82.08	82.28	82.44	82.99	83.05	83.20	83.27	83.83	83.89
23	81.16	81.25	82.09	82.10	82.31	82.42	82.94	83.03	83.11	83.20	83.84	83.92
24	81.23	81.28	82.08	82.10	82.42	82.57	82.93	82.99	83.09	83.26	83.85	83.94
25	81.25	81.28	82.08	82.11	82.57	82.70	82.95	83.03	83.26	83.41	83.77	84.02
26	81.29	81.36	82.11	82.19	82.70	82.75	82.94	83.01	83.26	83.41	84.02	84.22
27	81.36	81.41	82.19	82.25	82.60	82.72	82.95	83.04	83.28	83.37	84.07	84.20
28	81.40	81.45	82.22	82.29	82.60	82.75	82.94	83.04	83.25	83.37	84.02	84.14
29	81.45	81.48	82.16	82.27	82.72	82.84	82.97	83.06	83.23	83.51	83.88	84.08
30	81.45	81.51	82.10	82.20	82.76	82.85	82.99	83.07	83.48	83.58	83.85	83.99
31	81.45	81.50	82.14	82.21			82.99	83.07			83.95	84.03

Dade County

D151. Peoples Water & Gas Co. Center of sec. 16, T. 52 S., R. 42 E. Records available: 1939-47. No measurements made in 1948.

F1. City of Miami Springs. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 19, T. 53 S., R. 41 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	4.67	Apr. 29	5.58	July 29	5.85	Oct. 28	2.68
Feb. 26	5.36	May 27	6.03	Aug. 30	4.78	Nov. 29	4.21
Mar. 30	6.21	June 30	6.18	Sept. 30	2.59	Dec. 29	4.95

F2. City of Miami Springs. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 19, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 29	5.06	Apr. 29	5.89	July 29	6.18	Oct. 28	3.21
Feb. 26	5.76	May 27	6.39	Aug. 30	5.16	Nov. 29	4.73
Mar. 30	6.58	June 30	6.53	Sept. 30	3.07	Dec. 29	4.88

F3. City of Miami Springs. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 19, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 29	3.39	Apr. 29	4.16	July 29	4.48	Oct. 28	1.61
Feb. 26	4.09	May 27	4.71	Aug. 30	3.47	Nov. 29	3.06
Mar. 30	4.91	June 30	4.87	Sept. 30	1.42	Dec. 29	3.73

F4. City of Miami Springs. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 19, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 29	4.99	Apr. 29	6.01	July 29	6.36	Oct. 28	3.57
Feb. 26	5.98	May 27	6.61	Aug. 30	5.37	Nov. 29	5.01
Mar. 30	6.80	June 30	6.77	Sept. 30	3.35	Dec. 29	5.66

F5. City of Miami Springs. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 29	4.07	Apr. 29	4.68	July 29	5.03	Oct. 28	2.38
Feb. 26	4.67	May 27	5.24	Aug. 30	4.16	Nov. 29	3.76
Mar. 30	5.41	June 30	5.40	Sept. 30	2.21	Dec. 29	4.33

F6. City of Miami Springs. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 8	4.70	Apr. 29	5.54	July 29	5.93	Oct. 28	3.40
29	5.02	May 27	6.14	Aug. 30	5.10	Nov. 29	4.74
Feb. 26	5.60	June 30	6.31	Sept. 30	3.20	Dec. 29	5.27
Mar. 30	6.30						

F7. City of Miami Springs. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 29	4.45	Apr. 29	4.91	July 29	5.28	Oct. 28	2.88
Feb. 26	4.96	May 27	5.51	Aug. 30	4.55	Nov. 29	4.16
Mar. 30	5.65	June 30	5.67	Sept. 30	2.73	Dec. 29	4.63

F8. City of Miami Springs. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 8	4.13	Apr. 29	4.88	July 29	5.26	Oct. 28	2.95
29	4.49	May 27	5.46	Aug. 30	4.60	Nov. 29	4.19
Feb. 26	4.94	June 30	5.65	Sept. 30	2.83	Dec. 29	4.62
Mar. 30	5.61						

F9. City of Miami Springs. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19, T. 53 S., R. 41 E. Records available: 1939-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	2.92	Apr. 29	3.68	July 29	4.08	Oct. 28	1.68
29	3.25	May 27	4.23	Aug. 30	3.33	Nov. 29	2.96
Feb. 26	3.77	June 30	4.46	Sept. 30	1.51	Dec. 29	3.44
Mar. 30	4.44						

F10. City of Miami Springs. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 8	4.18	Apr. 29	5.00	July 29	5.42	Oct. 28	2.85
29	4.47	May 27	5.67	Aug. 30	4.50	Nov. 29	4.22
Feb. 26	5.08	June 30	5.84	Sept. 30	2.56	Dec. 29	4.32
Mar. 30	5.85						

F11. City of Miami Springs. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 29	5.24	Apr. 29	5.81	July 29	6.20	Oct. 28	3.58
Feb. 26	5.85	May 27	6.41	Aug. 30	5.31	Nov. 29	4.94
Mar. 30	6.58	June 30	6.58	Sept. 30	3.38	Dec. 29	5.51

F12. City of Miami Springs. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24, T. 53 S., R. 40 E. Records available: 1939-48.

Jan. 29	7.05	Apr. 29	8.31	July 29	8.74	Oct. 28	5.08
Feb. 26	8.10	May 27	9.13	Aug. 30	7.32	Nov. 29	6.82
Mar. 30	9.11	June 30	9.21	Sept. 30	5.09	Dec. 29	7.70

F13. City of Miami Springs. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24, T. 53 S., R. 40 E. Records available: 1944-48.

Jan. 8	6.03	Apr. 29	7.72	July 29	8.37	Oct. 28	4.12
29	6.15	May 27	8.44	Aug. 30	6.34	Nov. 29	6.05
Feb. 26	7.49	June 30	8.74	Sept. 30	4.37	Dec. 29	7.02
Mar. 30	8.42						

F14. City of Miami Springs. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24, T. 53 S., R. 40 E. Records available: 1944-48.

Jan. 8	4.66	Apr. 29	6.68	July 29	7.42	Oct. 28	2.94
29	4.66	May 27	7.43	Aug. 30	5.08	Nov. 29	4.91
Feb. 26	6.33	June 30	8.09	Sept. 30	3.39	Dec. 29	5.78
Mar. 30	7.44						

F15. City of Miami Springs. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T. 53 S., R. 40 E. Records available: 1944-48.

Jan. 8	3.96	Apr. 29	6.26	July 29	6.95	Oct. 28	2.47
29	4.11	May 27	6.93	Aug. 30	4.56	Nov. 29	4.46
Feb. 26	5.88	June 30	7.41	Sept. 30	2.99	Dec. 29	5.15
Mar. 30	7.00						

F18. City of Opa Locka. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22, T. 52 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.

F22. City of Opa Locka. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 21, T. 52 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.

F25. City of Opa Locka. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T. 52 S., R. 41 E. Records available: 1939-47. No measurements made in 1948.

F53. City of Miami. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 12, T. 53 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.

F62. City of Miami. $SE\frac{1}{4}SE\frac{1}{4}$ sec. 14, T. 53 S., R. 41 E. Records available: 1939-47. No measurements made in 1948.

F64. City of Miami. $SE\frac{1}{4}SE\frac{1}{4}$ sec. 23, T. 53 S., R. 41 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 8	9.24	May 4	9.51	Sept. 1	9.29
Mar. 4	9.86	July 15	9.96	Nov. 4	7.86

F69. City of Miami. $SE\frac{1}{4}NW\frac{1}{4}$ sec. 26, T. 53 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.

F109. City of Miami. $NE\frac{1}{4}SE\frac{1}{4}$ sec. 10, T. 53 S., R. 41 E. Records available: 1939-47. No measurements made in 1948.

F112. City of Miami. $SW\frac{1}{4}NE\frac{1}{4}$ sec. 22, T. 53 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.

F117. City of Miami. $NE\frac{1}{4}NW\frac{1}{4}$ sec. 34, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 8	4.91	May 4	5.42	Sept. 1	5.67
Mar. 4	5.59	July 19	5.64	Nov. 4	4.30

F124. City of Miami. $NW\frac{1}{4}NW\frac{1}{4}$ sec. 3, T. 54 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.

F137. City of Miami. Sec. 11, T. 54 S., R. 41 E. Records available: 1944-48.

Jan. 8	8.94	May 3	8.74	Sept. 1	8.93
Mar. 4	9.15	July 19	8.82	Nov. 3	7.66

F143. City of Miami. $NW\frac{1}{4}NE\frac{1}{4}$ sec. 15, T. 54 S., R. 41 E. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	9.71	Apr. 6	10.12	July 7	9.57	Oct. 7	5.92
Feb. 2	9.99	26	9.70	Aug. 11	9.51	Nov. 2	8.45
Mar. 2	9.82	June 3	9.33	Sept. 2	9.71	30	9.67

F146. City of Miami. $SW\frac{1}{4}SE\frac{1}{4}$ sec. 10, T. 54 S., R. 41 E. Records available: 1946-48.

Jan. 6	7.01	Apr. 6	7.78	July 6	6.84	Oct. 7	2.41
Feb. 2	7.25	26	7.37	Aug. 11	6.90	Nov. 2	5.65
Mar. 2	7.44	June 3	6.88	Sept. 1	7.16	30	7.08

F147. City of Miami. $NW\frac{1}{4}NE\frac{1}{4}$ sec. 15, T. 54 S., R. 41 E. Records available: 1946-48.

Jan. 6	8.01	Apr. 6	8.55	July 6	7.86	Oct. 7	3.51
Feb. 2	8.20	26	8.18	Aug. 11	7.31	Nov. 2	6.59
Mar. 2	8.30	June 3	7.61	Sept. 2	8.05	30	8.02

F148. City of Miami. $SW\frac{1}{4}NE\frac{1}{4}$ sec. 15, T. 54 S., R. 41 E. Records available: 1946-48.

Jan. 5	8.86	Apr. 6	9.37	July 7	8.72	Oct. 8	4.67
Feb. 2	9.07	26	8.92	Aug. 11	8.69	Nov. 2	7.52
Mar. 2	9.11	June 3	8.57	Sept. 2	8.37	30	8.86

F154. City of Miami. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 15, T. 54 S., R. 41 E. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	9.99	Apr. 6	10.63	July 6	9.87	Oct. 7	5.06
Feb. 2	10.19	26	10.41	Aug. 11	9.95	Nov. 2	8.41
Mar. 2	10.41	June 3	9.92	Sept. 2	10.08	30	10.01

F155. City of Miami. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 15, T. 54 S., R. 41 E. Records available: 1944-48.

Jan. 5	4.71	Apr. 26	4.92	Sept. 1	4.80	Oct. 19	2.49
Feb. 2	4.88	June 3	4.61	23	.63	Nov. 2	3.26
Mar. 2	5.10	July 7	4.64	Oct. 5	2.76	30	4.76
Apr. 6	5.31	Aug. 11	4.67	11	1.36		

F156. City of Miami. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 15, T. 54 S., R. 41 E. Records available: 1946-48.

Jan. 5	10.39	Apr. 6	11.09	July 7	10.61	Oct. 8	6.18
Feb. 2	10.63	26	10.87	Aug. 11	10.58	Nov. 2	8.87
Mar. 2	10.75	June 3	10.64	Sept. 1	10.70	30	10.23

F158. City of Miami. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 15, T. 54 S., R. 41 E. Records available: 1946-48.

Jan. 5	11.40	Apr. 6	11.73	July 7	11.42	Oct. 8	8.28
Feb. 2	11.64	26	11.24	Aug. 11	11.12	Nov. 2	10.26
Mar. 2	10.48	June 3	11.28	Sept. 1	11.45	30	11.39

F159. City of Miami. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 54 S., R. 41 E. Records available: 1946-48.

Jan. 5	15.51	Apr. 26	15.24	Sept. 2	15.57	Oct. 18	14.17
Feb. 3	15.61	June 3	15.33	23	13.02	Nov. 3	14.37
Mar. 3	15.56	July 7	15.43	Oct. 5	14.32	Dec. 1	15.42
Apr. 6	15.93	Aug. 12	16.08	11	13.60		

F160. City of Miami. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 54 S., R. 41 E. Records available: 1946-48.

Jan. 5	13.04	Apr. 6	13.44	July 6	12.83	Oct. 11	11.37
Feb. 3	13.05	26	12.72	Aug. 12	13.09	Nov. 3	11.76
Mar. 3	12.83	June 3	12.87	Sept. 13	12.87	30	12.59

F163. City of Miami. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 10, T. 54 S., R. 41 E. Records available: 1946-48.

Jan. 6	10.72	Apr. 6	11.50	July 6	10.61	Oct. 7	5.48
Feb. 2	10.87	26	11.17	Aug. 11	10.68	Nov. 2	9.04
Mar. 2	11.15	June 3	10.83	Sept. 1	10.86	30	10.79

F164. City of Miami. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 10, T. 54 S., R. 41 E. Records available: 1946-48.

Jan. 6	10.58	Apr. 6	11.30	July 6	10.51	Oct. 7	5.49
Feb. 2	10.75	26	10.97	Aug. 11	10.55	Nov. 2	8.95
Mar. 2	11.01	June 3	10.62	Sept. 2	10.72	30	10.63

F165. City of Miami. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 15, T. 54 S., R. 41 E. Records available: 1946-48.

Jan. 5	5.37	Apr. 6	6.08	July 6	5.40	Oct. 7	0.32
Feb. 2	5.54	26	5.70	Aug. 11	5.36	Nov. 2	3.81
Mar. 2	5.80	June 3	5.40	Sept. 2	5.51	30	5.45

F166. City of Miami. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 15, T. 54 S., R. 41 E. Records available; 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	7.59	Apr. 6	8.25	July 7	7.57	Oct. 7	2.86
Feb. 2	7.78	26	7.87	Aug. 11	7.57	Nov. 2	6.09
Mar. 2	7.97	June 3	7.55	Sept. 1	7.72	30	7.65

F168. City of Miami. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T. 54 S., R. 41 E. Records available; 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	10.86	Apr. 7	11.37	July 7	10.90	Oct. 11	8.26
Feb. 3	11.06	27	10.92	Aug. 12	10.91	Nov. 3	9.70
Mar. 3	11.08	June 5	10.70	Sept. 13	10.86	Dec. 1	10.92

F172. City of Miami. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 9, T. 54 S., R. 41 E. Records available; 1946-48. Jan. 6, 9.79; Feb. 2, 9.93. Measurements discontinued.

F173. City of Miami. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T. 54 S., R. 41 E. Records available; 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	6.96	Apr. 7	7.58	July 7	7.05	Oct. 11	3.94
Feb. 3	7.16	27	7.11	Aug. 12	7.01	Nov. 3	5.72
Mar. 3	7.26	June 5	6.92	Sept. 13	6.95	Dec. 1	6.95

F174. City of Miami. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 9, T. 54 S., R. 41 E. Records available; 1942-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	10.23	Apr. 6	11.11	July 6	10.22	Oct. 7	4.87
Feb. 2	10.41	26	10.80	Aug. 11	10.30	Nov. 2	8.51
Mar. 2	10.78	June 3	10.43	Sept. 1	11.42	30	10.35

F176. City of Miami. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 16, T. 54 S., R. 41 E. Records available; 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	7.78	Apr. 7	8.51	July 7	7.93	Oct. 11	4.10
Feb. 3	7.99	27	8.05	Aug. 12	7.87	Nov. 2	6.36
Mar. 3	8.21	June 5	7.80	Sept. 13	7.83	Dec. 1	7.89

F177. City of Miami. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T. 54 S., R. 41 E. Records available; 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	5.76	Apr. 7	4.38	July 7	3.88	Oct. 11	0.78
Feb. 3	5.97	27	3.92	Aug. 12	3.79	Nov. 3	2.54
Mar. 2	4.09	June 5	3.71	Sept. 13	3.78	Dec. 1	3.85

F178. City of Miami. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 9, T. 54 S., R. 41 E. Records available; 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	8.31	Apr. 6	9.15	July 6	8.30	Oct. 7	5.00
Feb. 2	8.46	26	8.83	Aug. 11	8.40	Nov. 2	6.58
Mar. 2	8.82	June 3	8.54	Sept. 1	8.50	30	8.39

F179. City of Miami. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 16, T. 54 S., R. 41 E. Records available; 1942-48.

High and low water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Jan. 7	6.42	6.61	Mar. 11	6.89	7.02
14	6.16	6.63	18	6.92	7.04
21	6.16	6.44	25	7.04	7.25
28	6.44	6.65	Apr. 1	7.21	7.25
Feb. 4	6.65	6.80	8	7.21	7.32
11	6.77	6.84	15	7.32	7.33
18	6.84	6.92	22	6.94	7.33
25	6.92	7.01	29	6.74	6.94
Mar. 4	6.94	6.99	May 6	6.73	6.76

F179--Continued.

High and low water level, from recorder charts					
Week ending	High level	Low level	Week ending	High level	Low level
May 13	6.54	6.84	Sept. 9	6.41	6.59
20	6.54	6.73	16	6.42	6.63
27	6.73	6.89	23	....	6.42
June 3	6.63	6.96	30	....	3.80
10	6.60	6.65	Oct. 7	....	4.13
17	6.24	6.65	14	2.03	3.74
24	6.25	6.65	21	3.11	4.15
July 1	6.65	6.96	28	3.35	4.60
8	6.60	7.04	Nov. 4	4.60	5.33
15	6.58	6.70	11	5.33	5.96
22	6.70	6.81	18	5.96	6.26
29	6.62	6.81	25	6.26	6.56
Aug. 5	6.62	6.78	Dec. 2	6.56	6.70
12	6.67	6.84	9	6.70	6.78
19	6.70	6.83	16	6.78	7.02
26	6.75	6.85	23	7.02	7.06
Sept. 2	6.59	6.88	30	7.01	7.08

F180. City of Miami. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 4, T. 54 S., R. 41 E. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	11.23	Apr. 6	12.31	July 6	11.52	Oct. 7	6.47
Feb. 2	11.52	26	11.93	Aug. 11	11.78	Nov. 2	9.88
Mar. 2	11.87	June 3	11.57	Sept. 1	11.73	30	11.31

F181. City of Miami. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 16, T. 54 S., R. 41 E. Records available: 1946-48.

Jan. 5	3.38	Apr. 7	3.96	July 7	3.56	Oct. 11	0.31
Feb. 3	3.60	27	3.52	Aug. 12	3.49	Nov. 3	2.15
Mar. 3	3.70	June 5	3.36	Sept. 13	3.43	Dec. 1	3.46

F184. City of Miami. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 4, T. 54 S., R. 41 E. Records available: 1946-48.

Jan. 6	12.92	Apr. 6	14.02	July 6	13.25	Oct. 7	8.61
Feb. 2	13.26	26	13.61	Aug. 11	13.55	Nov. 2	11.72
Mar. 2	13.52	June 3	13.22	Sept. 1	13.45	30	12.98

F186. City of Miami. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 1, T. 54 S., R. 40 E. Records available: 1939-47. No measurements made in 1948.

F188. City of Miami. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 21, T. 54 S., R. 41 E. Records available: 1946-48.

Jan. 5	16.68	Apr. 6	17.09	July 7	16.60	Oct. 11	14.56
Feb. 3	16.73	26	16.40	Aug. 11	16.67	Nov. 3	15.43
Mar. 3	16.81	June 3	16.45	Sept. 13	16.28	Dec. 1	16.48

F191. City of Miami. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T. 54 S., R. 41 E. Records available: 1946-48.

Jan. 5	11.97	Apr. 7	12.55	July 7	13.10	Oct. 11	9.36
Feb. 3	12.20	27	12.08	Aug. 12	12.09	Nov. 3	10.83
Mar. 3	12.23	June 5	11.87	Sept. 13	12.02	Dec. 1	12.07

F192. City of Miami. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 54 S., R. 41 E. Records available: 1946-48.

Jan. 5	9.29	Apr. 6	9.69	July 7	9.33	Oct. 8	5.96
Feb. 2	9.55	26	9.21	Aug. 11	9.36	Nov. 2	7.70
Mar. 2	9.42	June 3	9.27	Sept. 1	9.47	30	8.93

F198. City of Miami. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 15, T. 54 S., R. 41 E. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	9.96	Apr. 6	10.48	July 7	10.06	Oct. 8	7.80
Feb. 2	10.16	26	9.86	Aug. 11	9.90	Nov. 2	8.87
Mar. 2	10.00	June 3	9.86	Sept. 2	10.08	30	9.98

F199. City of Miami. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 15, T. 54 S., R. 41 E. Records available: 1946-48.

Jan. 5	16.94	Apr. 6	17.35	July 7	16.94	Oct. 8	14.93
Feb. 2	17.12	26	16.72	Aug. 11	16.89	Nov. 2	15.97
Mar. 2	16.95	June 3	16.86	Sept. 1	17.01	30	16.97

F202. City of Miami. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 21, T. 54 S., R. 41 E. Records available: 1946-48.

Jan. 5	13.80	Apr. 6	14.23	July 7	13.74	Oct. 11	11.93
Feb. 3	13.85	26	13.49	Aug. 12	13.82	Nov. 3	12.60
Mar. 3	13.79	June 3	13.57	Sept. 13	13.60	Dec. 1	13.65

F210. City of Miami. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 53 S., R. 41 E. Records available: 1943-48.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Jan. 7	6.77	6.96	July 8	7.50	7.72
14	6.70	7.09	15	7.50	7.61
21	6.72	6.98	22	7.61	7.68
28	6.98	7.18	29	7.34	7.68
Feb. 4	7.18	7.29	Aug. 5	7.34	7.52
11	7.28	7.38	12	7.51	7.59
18	7.37	7.47	19	7.48	7.64
25	7.47	7.56	26	7.23	7.48
Mar. 4	7.49	7.54	Sept. 2	6.56	7.23
11	7.49	7.56	9	6.32	6.63
18	7.54	7.64	16	6.37	6.84
25	7.64	7.81	23	2.93	6.41
Apr. 1	7.74	7.81	30	3.07	4.05
8	7.50	7.80	Oct. 7	1.40	4.78
15	7.64	7.79	14	2.30	3.84
22	....	7.79	21	3.84	4.49
29	7.05	7.28	28	4.20	5.12
May 6	7.07	7.24	Nov. 4	5.12	5.79
13	6.91	7.33	11	5.79	6.28
20	6.90	7.12	18	6.28	6.69
27	7.11	7.36	Dec. 2	6.92	7.05
June 3	6.88	7.41	9	7.00	7.16
10	6.85	7.06	16	7.16	7.36
17	7.04	7.14	23	7.36	7.46
24	7.12	7.44	30	7.44	7.50
July 1	7.44	7.67			

F212. City of Miami. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 32, T. 52 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.

F213. City of Miami. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 15, T. 54 S., R. 41 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	14.83	Apr. 6	15.21	July 7	14.89	Oct. 8	13.02
Feb. 2	14.88	26	14.53	Aug. 11	14.80	Nov. 2	14.53
Mar. 2	14.64	June 3	14.75	Sept. 2	15.15	30	14.70

F214. City of Miami. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 53 S., R. 41 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 8	9.29	May 4	9.46	Sept. 1	9.26
Mar. 4	9.83	July 14	9.93	Nov. 4	7.86

F218. City of Miami. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 18, T. 53 S., R. 42 E. Records available: 1944-48.

Jan. 8	8.97	May 4	9.16	Sept. 1	8.97
Mar. 4	9.50	July 14	9.61	Nov. 4	7.64

F225. City of Miami. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 7, T. 53 S., R. 42 E. Records available: 1944-48. Jan. 9, 7.13; July 14, 7.73.

F226. City of Miami. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 18, T. 53 S., R. 42 E. Records available: 1944-47. No measurements made in 1948.

F228. City of Miami. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 31, T. 52 S., R. 42 E. Records available: 1944-48. Jan. 8, 11.19; July 13, 11.74.

F233. City of Miami. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 33, T. 53 S., R. 41 E. Records available: 1939-48. Jan. 9, 8.84; July 20, 9.27.

F234. City of Miami. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 27, T. 53 S., R. 41 E. Records available: 1942-48. Jan. 9, 6.14; July 19, 7.12.

F235. City of Hialeah. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 20, T. 53 S., R. 41 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	5.05	May 27	5.93	Aug. 30	5.12	Nov. 29	4.74
Feb. 26	5.53	June 30	6.05	Sept. 30	3.52	Dec. 10	5.00
Mar. 30	6.04	July 29	5.67	Oct. 28	3.39	29	5.17
Apr. 29	5.47						

F236. City of Hialeah. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 20, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 29	5.68	Apr. 29	6.19	July 29	6.55	Oct. 28	3.89
Feb. 26	6.19	May 27	6.66	Aug. 30	5.74	Nov. 29	5.36
Mar. 30	6.82	June 30	6.82	Sept. 30	3.83	Dec. 29	5.98

F237. City of Hialeah. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 20, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 29	5.05	Apr. 29	5.64	July 29	5.97	Oct. 28	3.21
Feb. 26	5.62	May 27	6.07	Aug. 30	5.10	Nov. 29	4.75
Mar. 30	6.27	June 30	6.26	Sept. 30	3.05	Dec. 29	5.31

F238. City of Hialeah. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 17, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 29	5.99	Apr. 29	6.78	July 29	7.04	Oct. 28	3.98
Feb. 26	6.68	May 27	7.12	Aug. 30	5.95	Nov. 29	5.71
Mar. 30	7.34	June 30	7.31	Sept. 30	3.52	Dec. 29	6.35

F239. City of Hialeah. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 17, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 29	7.39	Apr. 29	8.19	July 29	8.45	Oct. 28	5.36
Feb. 26	8.07	May 27	8.65	Aug. 30	7.35	Nov. 29	7.13
Mar. 30	8.74	June 30	8.54	Sept. 30	4.87	Dec. 29	7.76

F240. City of Hialeah. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 8, T. 53 S., R. 41 E. Records available: 1939-47. No measurements made in 1948.

F243. City of Hialeah. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 31, T. 52 S., R. 41 E. Records available: 1942-47. No measurements made in 1948.

F245. City of Hialeah. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 32, T. 52 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.

F246. City of Hialeah. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 5, T. 53 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.

F253. City of Hialeah. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 12, T. 53 S., R. 40 E. Records available: 1942-47. No measurements made in 1948.

F257. City of Hialeah. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 7, T. 53 S., R. 41 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	1.38	Apr. 29	2.92	July 29	3.38	Oct. 28	+0.35
Feb. 26	2.14	May 27	3.32	Aug. 30	1.99	Nov. 29	.86
Mar. 30	3.21	June 30	3.50	Sept. 30	.17	Dec. 29	1.54

F260. City of Hialeah. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 7, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 29	6.11	Apr. 29	7.23	July 29	7.58	Oct. 28	4.15
Feb. 26	6.88	May 27	7.57	Aug. 30	6.24	Nov. 29	5.80
Mar. 30	7.67	June 30	7.73	Sept. 30	3.96	Dec. 29	6.46

F261. City of Hialeah. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 29	5.28	Apr. 29	6.12	July 29	6.41	Oct. 28	3.31
Feb. 26	5.99	May 27	6.53	Aug. 30	5.34	Nov. 29	5.00
Mar. 30	6.72	June 30	6.70	Sept. 30	3.01	Dec. 29	5.65

F263. City of Hialeah. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 29	5.75	Apr. 29	6.61	July 29	6.90	Oct. 28	3.83
Feb. 26	6.45	May 27	7.04	Aug. 30	5.85	Nov. 29	5.45
Mar. 30	7.19	June 30	7.20	Sept. 30	3.54	Dec. 29	6.11

F264. City of Hialeah. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 29	5.55	Apr. 29	6.42	July 29	6.70	Oct. 28	3.51
Feb. 26	6.26	May 27	6.79	Aug. 30	5.58	Nov. 29	5.24
Mar. 30	7.00	June 30	6.98	Sept. 30	3.21	Dec. 29	5.92

F265. City of Hialeah. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 29	5.20	Apr. 29	6.09	July 29	6.36	Oct. 28	3.16
Feb. 26	5.92	May 27	6.45	Aug. 30	5.18	Nov. 29	4.90
Mar. 30	6.64	June 30	6.62	Sept. 30	3.29	Dec. 29	5.58

F266. City of Hialeah. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 29	6.07	Apr. 29	6.98	July 29	7.23	Oct. 28	4.03
Feb. 26	6.80	May 27	7.30	Aug. 30	5.94	Nov. 29	5.79
Mar. 30	7.49	June 30	7.46	Sept. 30	3.62	Dec. 29	6.35

F268. City of Hialeah. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T. 53 S., R. 41 E. Records available: 1939-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	3.68	Apr. 29	4.59	July 29	4.88	Oct. 28	1.75
Feb. 26	4.41	May 27	5.02	Aug. 30	3.81	Nov. 29	3.37
Mar. 30	5.21	June 30	5.19	Sept. 30	1.54	Dec. 29	4.06

F270. City of Hialeah. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 18, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 29	4.68	Apr. 29	5.80	July 29	6.04	Oct. 28	2.58
Feb. 26	5.49	May 27	6.17	Aug. 30	4.82	Nov. 29	4.24
Mar. 30	6.37	June 30	6.36	Sept. 30	2.47	Dec. 29	5.02

F271. City of Hialeah. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 29	5.77	Apr. 29	6.85	July 29	7.09	Oct. 28	3.70
Feb. 26	6.57	May 27	7.22	Aug. 30	5.78	Nov. 29	5.42
Mar. 30	7.41	June 30	7.39	Sept. 30	3.52	Dec. 29	6.12

F273. Town of North Miami. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 29, T. 52 S., R. 42 E. Records available: 1942-47. No measurements made in 1948.

F279. Town of North Miami. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 30, T. 52 S., R. 42 E. Records available: 1944-48. Jan. 8, 6.02; July 13, 6.74.

F281. Town of North Miami. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 30, T. 52 S., R. 42 E. Records available: 1944-47. No measurements made in 1948.

F283. Town of North Miami. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 18, T. 52 S., R. 42 E. Records available: 1944-47. No measurements made in 1948.

F284. Town of North Miami. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 26, T. 52 S., R. 41 E. Records available: 1939-48. Jan. 8, 8.92; July 13, 9.89.

F288. Town of North Miami Beach. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 7, T. 52 S., R. 42 E. Records available: 1939-47. No measurements made in 1948.

F296. Town of North Miami Beach. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T. 52 S., R. 42 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 8	8.06	May 4	8.12	Sept. 1	6.75
Mar. 4	8.32	July 13	8.43	Nov. 4	7.41

F297. Town of North Miami. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 29, T. 52 S., R. 42 E. Records available: 1944-48. Jan. 8, 7.33; July 13, 8.03.

F299. Village of Biscayne Park. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 30, T. 52 S., R. 42 E. Records available: 1944-48. Jan. 16, 5.95; July 13, 6.91.

F300. Town of North Miami Beach. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 9, T. 52 S., R. 42 E. Records available: 1944-48. Jan. 8, 8.39; July 13, 9.86.

F302. City of Coral Gables. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 17, T. 54 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.

F307. City of Coral Gables. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 20, T. 54 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.

F309. City of Coral Gables. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T. 54 S., R. 41 E. Records available: 1942-47. Well plugged, no measurements made in 1948.

F310. City of Coral Gables. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 7, T. 54 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.

F317. City of Coral Gables. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, T. 54 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.

F319. Town of South Miami. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 25, T. 54 S., R. 40 E. Records available: 1944-48.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Jan. 7	8.56	8.80	July 8	9.44	9.65
14	8.30	8.86	15	9.32	9.44
21	8.30	8.57	22	9.34	9.43
28	8.57	8.80	29	9.10	9.43
Feb. 4	8.80	8.99	Aug. 5	9.03	9.11
11	8.99	9.14	12	9.04	9.14
18	9.14	9.32	19	9.04	9.15
25	9.32	9.48	26	8.93	9.04
Mar. 4	9.40	9.51	Sept. 2	8.83	9.04
11	9.40	9.54	9	8.49	8.83
18	9.41	9.58	16	8.29	8.85
25	9.58	9.86	23	3.70	8.29
Apr. 1	9.84	9.88	30	....	5.88
8	9.86	9.96	Oct. 7	3.95	6.63
15	9.96	10.00	14	4.76	5.95
22	9.61	10.00	21	5.95	6.65
29	9.43	9.61	28	6.65	7.19
May 6	9.45	9.52	Nov. 4	7.19	7.69
13	9.42	9.61	11	7.69	8.18
20	9.42	9.52	18	8.18	8.38
27	9.50	9.62	25	8.38	8.63
June 3	9.54	9.67	Dec. 2	8.63	8.72
10	9.42	9.54	9	8.70	8.77
17	9.20	9.42	16	8.77	8.94
24	9.20	9.40	23	8.94	9.00
July 1	9.40	9.61	30	8.96	9.02

F322. Town of South Miami. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 25, T. 54 S., R. 40 E. Records available: 1944-47. No measurements made in 1948.

F331. Town of South Miami. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 35, T. 54 S., R. 40 E. Records available: 1942-47. No measurements made in 1948.

F332. City of Hialeah. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 18, T. 53 S., R. 41 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	3.39	Apr. 29	4.89	July 29	5.11	Oct. 28	1.25
Feb. 26	4.31	May 27	5.25	Aug. 30	3.81	Nov. 29	2.81
Mar. 30	5.48	June 30	5.54	Sept. 30	1.44	Dec. 29	3.79

F334. Town of Homestead. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 7, T. 57 S., R. 39 E. Records available: 1944-47. No measurements made in 1948.

F358. Town of Homestead. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 57 S., R. 38 E. Records available: 1940-48.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Jan. 7	4.56	4.81	Mar. 11	5.85	6.06
14	3.95	4.94	18	6.06	6.27
21	3.92	4.25	25	6.27	6.54
28	4.25	4.54	Apr. 1	6.54	6.71
Feb. 4	4.54	4.88	8	6.53	6.78
11	4.88	5.17	15	6.64	6.87
18	5.17	5.34	22	6.68	6.88
25	5.34	5.60	29	6.57	6.84
Mar. 4	5.60	5.85	May 6	6.59	6.84

F358--Continued.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
May 13	6.21	6.90	Sept. 9	2.70	3.62
20	5.85	6.21	16	1.72	3.42
27	5.81	6.00	23	....	2.00
June 3	5.34	6.11	30	.70	1.72
10	5.35	5.70	Oct. 7	+ .35	2.17
17	5.14	5.78	14	.79	1.97
24	4.95	5.26	21	1.89	2.63
July 1	5.26	5.80	28	2.63	3.25
8	5.10	5.92	Nov. 4	3.25	3.73
15	5.00	5.34	11	3.73	4.17
22	4.78	5.42	18	4.17	4.55
29	4.64	4.78	25	4.55	4.85
Aug. 5	4.02	4.72	Dec. 2	4.85	5.08
12	3.84	4.36	9	4.95	5.14
19	3.56	4.09	16	5.14	5.30
26	3.41	3.86	23	5.30	5.41
Sept. 2	2.70	3.57	30	5.32	5.41

F364. Town of Homestead. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 12, T. 57 S., R. 38 E. Records available: 1944-47. No measurements made in 1948.

F378. Town of Florida City. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24, T. 57 S., R. 38 E. Records available: 1944-48.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Jan. 7	4.17	4.42	July 8	4.31	5.38
14	3.63	4.52	15	4.28	4.85
21	3.63	4.00	22	4.25	4.92
28	3.93	4.22	29	4.03	4.30
Feb. 4	4.22	4.52	Aug. 5	3.42	4.22
11	4.52	4.77	12	3.42	4.00
18	4.77	4.87	19	3.12	3.82
25	4.87	5.10	26	2.89	3.54
Mar. 4	5.10	5.34	Sept. 2	2.65	3.32
11	5.34	5.53	9	2.67	3.40
18	5.53	5.72	16	1.21	3.05
25	5.72	5.99	23	.50	1.92
Apr. 1	5.99	6.10	30	.70	1.91
8	5.71	6.15	Oct. 7	.30	2.28
15	5.92	6.20	14	.96	2.06
22	5.87	6.20	21	1.80	2.54
29	5.68	6.08	28	2.54	3.04
May 6	5.84	6.18	Nov. 4	3.04	3.45
13	5.38	6.23	11	3.45	3.87
20	5.05	5.45	18	3.87	4.24
27	5.05	5.35	25	4.24	4.53
June 3	4.38	5.48	Dec. 2	4.53	4.69
10	4.53	5.09	9	4.41	4.74
17	4.16	5.18	16	4.67	4.84
24	3.93	4.75	23	4.75	4.95
July 1	4.75	5.30	30	4.76	4.89

F379. Town of Naranja. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 34, T. 56 S., R. 39 E. Records available: 1944-48. Jan. 7, 6.11; July 12, 6.09.

F380. Town of Princeton. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 26, T. 56 S., R. 39 E. Records available: 1944-48. Jan. 6, 7.47; July 12, 7.29.

F381. J. D. DeBucharanne. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T. 56 S., R. 39 E. Records available: 1944-47. No measurements made in 1948.

F384. Bjorkman. $SW\frac{1}{4}$ sec. 10, T. 56 S., R. 39 E. Records available: 1944-47. No measurements made in 1948.

F385. Town of Goulds. $SE\frac{1}{4}NW\frac{1}{4}$ sec. 13, T. 56 S., R. 39 E. Records available: 1944-48. Jan. 6, 7.05. Well plugged.

F387. State of Florida. $NW\frac{1}{4}SE\frac{1}{4}$ sec. 15, T. 58 S., R. 37 E. Records available: 1944-47. No measurements made in 1948.

F393. City of Miami Springs. $NW\frac{1}{4}NE\frac{1}{4}$ sec. 19, T. 53 S., R. 41 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	3.34	Apr. 29	4.23	July 29	4.53	Oct. 28	1.54
Feb. 26	4.13	May 27	4.82	Aug. 30	3.44	Nov. 29	3.04
Mar. 30	5.02	June 30	4.95	Sept. 30	1.36	Dec. 29	3.78

F394. City of Miami Springs. $SE\frac{1}{4}NE\frac{1}{4}$ sec. 19, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 29	3.78	Apr. 29	4.59	July 29	4.90	Oct. 28	1.98
Feb. 26	4.46	May 27	5.07	Aug. 30	3.92	Nov. 29	3.48
Mar. 30	5.25	June 30	5.23	Sept. 30	1.80	Dec. 29	3.58

F396. City of Miami Springs. $NW\frac{1}{4}SW\frac{1}{4}$ sec. 24, T. 53 S., R. 40 E. Records available: 1944-48.

Jan. 29	1.29	Apr. 29	3.36	July 29	3.91	Oct. 28	+0.40
Feb. 26	2.47	May 27	3.91	Aug. 30	2.09	Nov. 29	.92
Mar. 30	3.92	June 30	4.17	Sept. 30	.18	Dec. 29	1.81

F397. City of Miami Springs. $SW\frac{1}{4}SW\frac{1}{4}$ sec. 24, T. 53 S., R. 40 E. Records available: 1944-48.

Jan. 29	2.24	Apr. 29	4.28	July 29	4.85	Oct. 28	0.61
Feb. 26	3.33	May 27	4.90	Aug. 30	3.25	Nov. 29	1.88
Mar. 30	4.80	June 30	5.11	Sept. 30	1.34	Dec. 29	2.73

F398. City of Miami Springs. $SW\frac{1}{4}SW\frac{1}{4}$ sec. 24, T. 53 S., R. 40 E. Records available: 1944-48.

Jan. 29	2.85	Apr. 29	4.87	July 29	5.45	Oct. 28	1.25
Feb. 26	3.95	May 27	5.49	Aug. 30	3.82	Nov. 29	2.54
Mar. 30	5.42	June 30	5.72	Sept. 30	1.92	Dec. 29	3.41

F399. City of Miami Springs. $SE\frac{1}{4}SW\frac{1}{4}$ sec. 24, T. 53 S., R. 40 E. Records available: 1944-48.

Jan. 29	3.26	Apr. 29	5.32	July 29	5.86	Oct. 28	1.67
Feb. 26	4.44	May 27	5.92	Aug. 30	4.16	Nov. 29	3.00
Mar. 30	5.88	June 30	6.16	Sept. 30	3.29	Dec. 29	3.85

F408. City of Miami Springs. $SW\frac{1}{4}NW\frac{1}{4}$ sec. 24, T. 53 S., R. 40 E. Records available: 1945-48.

Jan. 29	3.45	Apr. 29	5.50	July 29	6.03	Oct. 28	1.70
Feb. 26	4.52	May 27	6.11	Aug. 30	4.40	Nov. 29	2.95
Mar. 30	6.00	June 30	6.31	Sept. 30	2.41	Dec. 29	3.85

F409. City of Miami Springs. $NW\frac{1}{4}SW\frac{1}{4}$ sec. 24, T. 53 S., R. 40 E. Records available: 1945-48.

Jan. 29	5.76	Apr. 29	4.80	July 29	5.86	Oct. 28	1.07
Feb. 26	3.34	May 27	5.43	Aug. 30	3.76	Nov. 29	2.33
Mar. 30	5.33	June 30	5.63	Sept. 30	1.82	Dec. 29	3.22

F410. City of Miami Springs. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T. 53 S., R. 40 E.
Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 26	4.05	May 27	5.57	Aug. 30	3.82	Nov. 29	2.61
Mar. 30	5.56	June 30	6.13	Sept. 30	1.94	Dec. 29	3.46
Apr. 29	5.00	July 29	5.55	Oct. 28	1.32		

F411. City of Miami Springs. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T. 53 S., R. 40 E.
Records available: 1945-48.

Jan. 29	2.95	Apr. 29	5.03	July 29	5.61	Oct. 28	1.29
Feb. 26	4.21	May 27	5.61	Aug. 30	3.68	Nov. 29	2.68
Mar. 30	5.65	June 30	5.92	Sept. 30	1.82	Dec. 29	3.57

F412. City of Miami Springs. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T. 53 S., R. 40 E.
Records available: 1945-48.

Jan. 29	3.13	Apr. 29	5.24	July 29	5.89	Oct. 28	1.50
Feb. 26	4.43	May 27	5.85	Aug. 30	3.88	Nov. 29	2.93
Mar. 30	5.87	June 30	6.18	Sept. 30	2.05	Dec. 29	3.79

F413. City of Miami Springs. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T. 53 S., R. 40 E.
Records available: 1945-48.

Jan. 29	4.01	Apr. 29	5.95	July 29	6.56	Oct. 28	2.39
Feb. 26	5.41	May 27	6.59	Aug. 30	4.57	Nov. 29	3.99
Mar. 30	6.61	June 30	6.92	Sept. 30	2.73	Dec. 29	4.81

F414. City of Miami Springs. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24, T. 53 S., R. 40 E.
Records available: 1945-48.

Jan. 29	3.86	Apr. 29	5.21	July 29	5.87	Oct. 28	2.25
Feb. 26	5.29	May 27	6.08	Aug. 30	4.13	Nov. 29	4.02
Mar. 30	6.12	June 30	6.59	Sept. 30	1.41	Dec. 29	4.94

F415. City of Miami Springs. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19, T. 53 S., R. 41 E.
Records available: 1945-48.

Jan. 8	3.82	Apr. 29	4.75	July 29	5.13	Oct. 28	2.45
29	4.13	May 27	5.36	Aug. 30	4.20	Nov. 29	3.83
Feb. 26	4.77	June 30	5.51	Sept. 30	2.23	Dec. 29	4.44
Mar. 30	5.53						

F416. City of Miami Springs. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 18, T. 53 S., R. 41 E.
Records available: 1945-48.

Jan. 29	3.64	Apr. 29	5.15	July 29	5.21	Oct. 28	1.56
Feb. 26	4.60	May 26	5.50	Aug. 30	3.96	Nov. 29	3.03
Mar. 30	5.72	June 30	5.82	Sept. 30	1.95	Dec. 29	4.02

G2. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 53 S., R. 40 E. Records available: 1944-48.

Jan. 29	0.85	Apr. 29	3.60	July 29	4.37	Nov. 29	0.20
Feb. 26	1.94	May 27	3.93	Aug. 30	1.92	Dec. 29	1.04
Mar. 30	3.34	June 30	3.90	Sept. 30	4.08		

G3. Geol. Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 13, T. 53 S., R. 40 E. Records available: 1942-48.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Jan. 7	0.84	1.34	Feb. 4	2.07	2.24
14	.82	1.40	11	2.11	2.49
21	1.26	1.44	18	2.49	2.81
28	1.44	2.08	25	2.79	2.96

G3--Continued.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Mar. 4	2.96	3.53	Aug. 5	4.01	4.68
11	3.44	3.76	12	....	4.35
18	3.76	4.11	19	3.66	3.99
25	4.11	4.62	26	3.43	4.08
Apr. 1	4.53	4.70	Sept. 2	2.23	3.45
8	4.34	4.81	9	2.93	3.13
15	4.56	4.85	16	2.93	3.13
22	....	4.56	23	.23	2.93
29	3.91	4.17	30	.28	.87
May 6	3.96	4.52	Oct. 7	+.78	.94
13	4.01	4.58	14	+.74	+.28
20	4.02	4.16	21	+.30	+.04
27	4.00	4.79	28	+.29	.22
June 3	3.48	4.96	Nov. 4	.21	.43
10	3.47	3.85	11	.42	.68
17	3.45	3.79	18	.63	1.02
24	3.61	4.23	25	.99	1.34
July 1	4.23	4.53	Dec. 2	1.31	1.60
8	4.40	4.95	9	1.33	1.68
15	4.59	4.93	16	1.67	1.85
22	4.41	4.87	23	1.81	2.31
29	4.52	4.74	30	2.15	2.35

G5. Geol. Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 13, T. 53 S., R. 40 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	1.36	Apr. 29	3.32	July 29	3.82	Oct. 28	+0.51
Feb. 26	2.28	May 27	3.95	Aug. 30	2.13	Nov. 29	.69
Mar. 30	3.80	June 30	4.10	Sept. 30	.21	Dec. 29	1.49

G6. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 53 S., R. 40 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	4.79	Apr. 29	6.30	July 29	6.97	Oct. 28	2.13
Feb. 26	5.60	May 27	6.83	Aug. 30	4.57	Nov. 29	3.62
Mar. 30	7.01	June 30	7.25	Sept. 30	2.60	Dec. 29	4.82

G7. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 19, T. 53 S., R. 41 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	6.86	May 27	8.55	Aug. 30	6.92	Nov. 29	6.80
Feb. 26	7.78	June 30	8.74	Sept. 30	4.78	Dec. 29	7.53
Apr. 29	7.60	July 29	8.22	Oct. 28	5.25		

G8. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T. 53 S., R. 40 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	5.41	Apr. 29	6.82	July 29	7.45	Oct. 28	3.80
Feb. 26	6.70	May 27	7.59	Aug. 30	5.65	Nov. 29	5.39
Mar. 30	7.66	June 30	7.87	Sept. 30	3.67	Dec. 29	6.20

G9. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 3, T. 54 S., R. 40 E. Records available: 1944-47. No measurements made in 1948.

G10. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 4, T. 54 S., R. 40 E. Records available: 1943-48.

G10--Continued.

High and low weekly water level, from recorder charts					
Week ending	High level	Low level	Week ending	High level	Low level
Jan. 7	0.12	0.38	July 8	3.05	3.42
14	.04	.49	15	2.95	3.14
21	.17	.49	22	....	3.20
28	.45	.75	29	1.80	2.70
Feb. 4	.73	1.12	Aug. 5	.75	2.13
11	1.12	1.43	12	1.65	2.24
18	1.27	1.67	19	1.61	2.19
25	1.67	1.93	26	1.85	2.26
Mar. 4	1.88	2.25	Sept. 2	.37	1.95
11	2.01	2.31	9	.56	1.69
18	2.31	2.65	16	.95	1.66
25	2.65	2.96	23	+.70	1.07
Apr. 1	2.95	3.14	30	+.64	+.47
8	2.81	3.20	Oct. 7	+1.10	+.33
15	2.91	3.20	14	+1.07	+1.00
22	2.84	3.02	21	+1.01	+.96
29	1.66	3.19	28	+.99	+.71
May 6	2.38	3.09	Nov. 4	+.71	+.46
13	2.15	3.20	11	+.46	+.27
20	2.46	3.01	18	+.27	+.09
27	3.01	3.37	25	+.09	.16
June 3	1.51	3.46	Dec. 2	.16	.42
10	1.90	2.70	9	.15	.43
17	1.97	2.40	16	.37	.68
24	2.40	2.93	23	.88	.92
July 1	2.93	3.36	30	.92	1.14

G11. G661. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 5, T. 54 S., R. 40 E. Records available: 1944-47. No measurements made in 1948.

G12. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 23, T. 53 S., R. 40 E. Records available: 1944-47. No measurements made in 1948.

G15. Geol. Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 25, T. 53 S., R. 40 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	3.72	Apr. 29	4.29	July 29	4.90	Nov. 29	3.56
Feb. 26	4.48	May 27	5.10	Aug. 30	3.80	Dec. 29	4.19
Mar. 30	5.23	June 30	5.30	Sept. 30	1.86		

G18. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 7, T. 57 S., R. 40 E. Records available: 1944-47. No measurements made in 1948.

G23. Geol. Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 25, T. 55 S., R. 38 E. Records available: 1944-47. No measurements made in 1948.

G24. Geol. Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 55 S., R. 38 E. Records available: 1944-47. No measurements made in 1948.

G25. Geol. Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 1, T. 55 S., R. 38 E. Records available: 1944-47. No measurements made in 1948.

G28. Geol. Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 34, T. 55 S., R. 38 E. Records available: 1944-47. No measurements made in 1948.

G36. Geol. Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 19,
T. 54 S., R. 40 E. Records available: 1944-47. No measurements made in
1948.

G38. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1,
T. 57 S., R. 39 E. Records available: 1944-48. Jan. 6, 2.72; July 8,
2.18; Sept. 7, 1.70; Nov. 8, 2.27.

G39. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22,
T. 54 S., R. 40 E. Records available: 1944-47. No measurements made in
1948.

G66. Geol. Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 29,
T. 57 S., R. 38 E. Records available: 1944-47. No measurements made in
1948.

G67. Geol. Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19,
T. 55 S., R. 40 E. Records available: 1944-47. No measurements made in
1948.

G69. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 11,
T. 52 S., R. 39 E. Records available: 1944-47. No measurements made in
1948.

G70. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 10,
T. 52 S., R. 39 E. Records available: 1944-47. No measurements made in
1948.

G71. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 3,
T. 52 S., R. 39 E. Records available: 1944-47. No measurements made in
1948.

G72. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 3,
T. 52 S., R. 39 E. Records available: 1944-48.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Jan. 7	+2.05	+1.88	July 8	1.20	3.25
14	+1.88	+1.79	15	1.21	2.18
21	+1.82	+1.66	22	1.05	2.40
28	+1.68	+1.59	29	1.17	1.74
Feb. 4	+1.59	+1.42	Aug. 5	1.22	1.80
11	+1.42	+1.23	12	1.30	2.25
18	+1.23	+1.01	19	2.12	2.43
25	+1.01	+ .82	26	1.86	2.55
Mar. 4	+ .86	+ .58	Sept. 2	.83	1.89
11	+ .63	+ .38	9	.30	.83
18	+ .38	+ .01	16	.03	.30
25	+ .01	.24	23	+ .85	.02
Apr. 1	.24	.65	30	+1.06	+ .85
8	.65	1.05	Oct. 7	+2.22	+1.06
15	1.05	1.64	14	+2.25	+2.10
22	1.21	1.69	21	+2.26	+2.23
29	1.07	1.99	28	+2.25	+2.17
May 6	1.59	2.20	Nov. 4	+2.17	+2.11
13	1.66	2.39	11	+2.11	+2.01
20	1.87	2.34	18	+2.01	+1.91
27	2.29	2.88	25	+1.91	+1.82
June 3	1.55	2.97	Dec. 2	+1.82	+1.67
10	1.19	2.43	9	+1.71	+1.60
17	1.85	...	16	+1.61	+1.52
24	1.55	2.40	23	+1.52	+1.42
July 1	2.40	3.11	30	+1.42	+1.28

G82. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 15,
T. 52 S., R. 41 E. Records available: 1944-47. No measurements made in
1948.

- G83. Geol. Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 28, T. 52 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.
- G105. Geol. Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 29, T. 52 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.
- G107. Geol. Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 18, T. 53 S., R. 42 E. Records available: 1944-47. No measurements made in 1948.
- G108. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T. 53 S., R. 42 E. Records available: 1944-47. No measurements made in 1948.
- G109. Geol. Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 53 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.
- G110. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 21, T. 53 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.
- G112. Geol. Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T. 53 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.
- G113. Geol. Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T. 53 S., R. 41 E. Records available: 1942-47. No measurements made in 1948.
- G114. Geol. Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 25, T. 53 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.
- G115. Geol. Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 36, T. 53 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.
- G117. Geol. Survey, U. S. Dept. of Interior. North area of sec. 38, T. 54 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.
- G118. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 53 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.
- G119. Geol. Survey, U. S. Dept. of Interior. Sec. 36, T. 53 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.
- G120. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 31, T. 53 S., R. 42 E. Records available: 1944-47. No measurements made in 1948.
- G121. Geol. Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 35, T. 53 S., R. 41 E. Records available: 1942-47. No measurements made in 1948.
- G122. Geol. Survey, U. S. Dept. of Interior. Sec. 38, T. 54 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.
- G123. Geol. Survey, U. S. Dept. of Interior. Sec. 38, T. 54 S., R. 41 E. Records available: 1942-47. No measurements made in 1948.
- G158A. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 15, T. 54 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.

G165. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 12, T. 53 S., R. 40 E. Records available: 1944-47. No measurements made in 1948.

G193. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 29, T. 53 S., R. 41 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	4.41	Apr. 29	4.62	July 29	4.83	Nov. 29	3.70
Feb. 26	4.48	May 27	5.00	Aug. 30	4.39	Dec. 29	4.02
Mar. 30	5.12	June 30	5.11	Oct. 28	2.25		

G195. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 20, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 29	3.14	Apr. 29	3.75	July 29	4.09	Oct. 28	1.40
Feb. 26	3.70	May 27	4.27	Aug. 30	3.29	Nov. 29	2.80
Mar. 30	4.42	June 30	4.43	Sept. 30	1.39	Dec. 29	3.36

G197. Geol. Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 20, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 29	4.76	Apr. 29	5.00	July 29	5.25	Oct. 28	2.82
Feb. 26	4.95	May 27	5.43	Aug. 30	4.77	Nov. 29	4.09
Mar. 30	5.51	June 30	5.52	Sept. 30	3.40	Dec. 29	4.58

G199. Geol. Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 20, T. 53 S., R. 41 E. Measuring point raised 0.7 foot above land-surface datum on Nov. 29, 1948. Records available: 1944-48.

Jan. 29	2.82	Apr. 29	3.19	July 29	3.52	Nov. 29	1.73
Feb. 26	3.15	May 27	3.70	Aug. 30	2.00	Dec. 10	2.07
Mar. 30	3.80	June 30	3.84	Sept. 30	.13	29	2.20

G218. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 18, T. 53 S., R. 40 E. Records available: 1945-48.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Jan. 7	+1.40	+1.23	July 15	1.17	1.86
14	+1.23	+1.09	22	1.35	2.01
21	+1.09	+.97	29	1.25	1.56
28	+.97	+.85	Aug. 5	.59	1.49
Feb. 4	+.85	+.73	12	.27	1.22
11	+.73	+.59	19	.35	.85
18	+.59	+.46	26	.20	.88
25	+.46	+.31	Sept. 2	+.38	.20
Mar. 4	+.31	+.17	9	+.38	+.13
11	+.19	+.12	16	+.29	+.15
18	+.12	.13	23	+1.09	+.18
25	.13	.58	30	+1.25	+1.09
Apr. 1	.58	.94	Oct. 7	+2.16	+1.21
8	.94	1.17	16	+2.23	+2.07
15	.68	1.45	21	+2.11	+2.04
22	.68	1.29	28	+2.05	+1.90
29	.72	1.60	Nov. 4	+1.90	+1.77
May 6	.99	1.73	11	+1.77	+1.61
13	.88	1.85	18	+1.61	+1.49
20	1.06	1.64	25	+1.50	+1.36
27	1.64	2.17	Dec. 2	+1.36	+1.21
June 3	.60	2.28	9	+1.30	....
10	.36	1.10			

G231. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 7, T. 55 S., R. 41 E. Records available: 1944-47. No measurements made in 1948.

G232. Geol. Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13,
T. 55 S., R. 40 E. Records available: 1944-47. No measurements made in
1948.

G238. Geol. Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 11,
T. 55 S., R. 40 E. Records available: 1944-47. No measurements made in
1948.

G238. Geol. Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 15,
T. 55 S., R. 40 E. Records available: 1944-47. No measurements made in
1948.

G239. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 16,
T. 55 S., R. 40 E. Records available: 1944-47. No measurements made in
1948.

G254. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 32,
T. 54 S., R. 41 E. Records available: 1944-47. No measurements made in
1948.

G272. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 22,
T. 55 S., R. 40 E. Records available: 1944-47. No measurements made in
1948.

G273. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 28,
T. 55 S., R. 40 E. Records available: 1944-47. No measurements made in
1948.

G275. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 31,
T. 55 S., R. 40 E. Records available: 1944-47. No measurements made in
1948.

G276. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 33,
T. 55 S., R. 39 E. Records available: 1944-47. No measurements made in
1948.

G277. Geol. Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 9,
T. 56 S., R. 40 E. Records available: 1944-47. No measurements made in
1948.

G282. Geol. Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 5,
T. 56 S., R. 49 E. Records available: 1944-47. No measurements made in
1948.

G283. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 17,
T. 56 S., R. 40 E. Records available: 1944-47. No measurements made in
1948.

G285. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 9,
T. 57 S., R. 38 E. Records available: 1944-47. No measurements made in
1948.

G348. Geol. Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 24,
T. 53 S., R. 40 E. Measuring point raised 3 feet above land-surface datum
on Mar. 30, 1948. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	1.85	Apr. 29	4.47	July 29	4.98	Oct. 28	0.73
Feb. 26	2.93	May 27	5.00	Aug. 30	2.85	Nov. 29	2.29
Mar. 30	5.19	June 30	5.29	Sept. 30	.92	Dec. 29	3.32

G349. Geol. Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 24,
T. 53 S., R. 40 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	3.01	Apr. 29	4.87	July 29	5.40	Oct. 28	0.94
Feb. 26	4.13	May 27	5.41	Aug. 30	3.27	Nov. 29	2.40
Mar. 30	5.50	June 30	5.68	Sept. 30	1.36	Dec. 29	3.34

G350. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 14,
T. 54 S., R. 40 E. Records available: 1944-48.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Jan. 7	2.89	3.16	July 8	5.47	5.61
14	2.71	3.27	15	5.55	5.47
21	2.97	3.51	22	5.25	6.53
28	3.31	3.54	29	4.92	5.26
Feb. 4	3.54	3.81	Aug. 5	4.76	4.98
11	3.81	4.07	12	4.67	5.01
18	4.03	4.34	19	4.67	4.97
25	4.34	4.51	26	4.97	4.98
Mar. 4	4.43	4.74	Sept. 2	4.40	4.98
11	4.66	4.78	9	4.20	4.52
18	4.77	5.10	16	4.09	4.58
25	5.10	5.34	23	1.86	4.09
Apr. 1	5.29	5.44	30	1.77	2.49
8	5.33	5.55	Oct. 7	.64	2.85
15	5.36	5.51	14	.90	1.53
22	5.13	5.47	21	1.16	1.59
29	4.84	5.37	28	1.41	1.80
May 6	4.88	5.25	Nov. 4	1.80	2.05
13	4.86	5.34	11	2.05	2.32
20	4.88	5.19	18	2.32	2.52
27	5.16	5.48	25	2.52	2.71
June 3	4.69	5.55	Dec. 2	2.71	2.95
10	4.67	4.98	9	2.72	2.98
17	4.45	4.78	16	2.98	3.25
24	4.72	5.19	23	3.25	3.49
July 1	5.19	5.53	30	3.49	3.71

G351. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 28,
T. 53 S., R. 41 E. Records available: 1944-48. Jan. 29, 4.68; Feb. 26,
4.88; Mar. 30, 5.38. Well plugged in April. Measurements discontinued.

G352. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 28,
T. 53 S., R. 41 E. Records available: 1944-47. No measurements made in
1948.

G353. Geol. Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 29,
T. 53 S., R. 41 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	4.05	Apr. 29	4.11	July 29	4.31	Oct. 28	2.22
Feb. 26	4.04	May 27	4.48	Aug. 30	3.93	Nov. 29	3.29
Mar. 30	4.68	June 30	4.63	Sept. 30	2.81	Dec. 29	3.55

G354. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 20,
T. 53 S., R. 41 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	4.54	Apr. 29	4.84	July 29	5.20	Oct. 28	2.90
Feb. 26	4.90	May 27	5.39	Aug. 30	4.61	Nov. 29	4.13
Mar. 30	5.51	June 30	5.53	Sept. 30	2.93	Dec. 29	4.58

G355. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 20,
T. 53 S., R. 41 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	2.40	Apr. 29	2.80	July 29	3.15	Oct. 28	0.74
Feb. 26	2.80	May 27	3.34	Aug. 30	2.48	Nov. 29	2.00
Mar. 30	3.46	June 30	3.49	Sept. 30	.90	Dec. 29	2.47

G356. Geol. Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 20, T. 53 S., R. 41 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	4.27	Apr. 29	4.71	July 29	5.01	Oct. 28	2.67
Feb. 26	4.64	May 27	5.16	Aug. 30	4.46	Nov. 29	3.94
Mar. 30	5.28	June 30	5.32	Sept. 30	2.69	Dec. 29	4.23

G357. Geol. Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 24, T. 53 S., R. 40 E. Records available: 1945-48.

Jan. 29	2.45	Apr. 29	3.95	July 29	4.30	Oct. 28	0.35
Feb. 26	3.45	May 27	4.43	Aug. 30	2.66	Nov. 29	1.86
Mar. 30	4.70	June 30	4.72	Sept. 30	.63	Dec. 29	2.87

G431. Geol. Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 20, T. 54 S., R. 41 E. Records available: 1947-48.

Jan. 5	10.64	Mar. 29	11.23	June 28	11.10	Oct. 11	8.40
26	10.82	May 3	10.78	Aug. 9	10.94	Nov. 4	9.80
Feb. 24	11.10	June 1	11.00	Sept. 2	10.95	Dec. 2	11.15

G432. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 19, T. 54 S., R. 41 E. Records available: 1947-48.

Jan. 5	9.69	Mar. 29	10.60	June 28	10.54	Oct. 11	7.43
26	9.88	May 3	10.23	Aug. 9	10.30	Nov. 4	8.98
Feb. 24	10.30	June 1	10.47	Sept. 2	10.18	Dec. 2	10.10

G434. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 18, T. 53 S., R. 41 E. Records available; 1946-48. Jan. 29, 2.76; Feb. 26, 3.73; well destroyed in March. Measurements discontinued.

G435. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 53 S., R. 40 E. Records available: 1946-48.

Jan. 29	3.56	Apr. 29	5.37	July 29	5.82	Oct. 28	1.90
Feb. 26	4.42	May 27	5.79	Aug. 30	4.45	Nov. 29	3.09
Mar. 30	5.68	June 30	6.01	Sept. 30	2.54	Dec. 29	3.81

G436. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 53 S., R. 40 E. Records available: 1946-48.

Jan. 29	3.63	Apr. 29	5.55	July 29	6.00	Oct. 28	1.96
Feb. 26	4.53	May 27	5.95	Aug. 30	4.62	Nov. 29	3.15
Mar. 30	5.89	June 30	6.20	Sept. 30	2.62	Dec. 29	3.94

G437. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 13, T. 53 S., R. 40 E. Records available: 1946-48.

Jan. 29	1.08	Apr. 29	3.10	July 29	3.60	Oct. 28	+0.55
Feb. 26	2.05	May 27	3.67	Aug. 30	2.36	Nov. 29	.59
Mar. 30	3.50	June 30	3.90	Sept. 30	.22	Dec. 29	1.44

G438. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 13, T. 53 S., R. 40 E. Records available: 1946-48.

Jan. 29	2.01	Apr. 29	4.05	July 29	4.54	Oct. 29	0.66
Feb. 26	2.46	May 27	4.62	Aug. 30	3.17	Nov. 29	1.55
Mar. 30	4.46	June 30	4.80	Sept. 30	1.27	Dec. 29	2.28

G439. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 13, T. 53 S., R. 40 E. Records available: 1946-48.

Jan. 29	2.97	Apr. 29	4.69	July 29	5.04	Oct. 29	0.67
Feb. 26	3.82	May 27	5.49	Aug. 30	3.15	Nov. 29	2.14
Mar. 30	5.18	June 30	5.45	Sept. 30	1.22	Dec. 29	2.77

G440. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 13,
T. 53 S., R. 40 E. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	3.34	Apr. 29	5.36	July 29	5.83	Oct. 29	1.55
Feb. 26	4.32	May 27	6.03	Aug. 30	4.19	Nov. 29	2.75
Mar. 30	5.81	June 30	6.17	Sept. 30	2.19	Dec. 29	3.57

G441. Geol. Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 24,
T. 53 S., R. 40 E. Records available: 1946-48.

Jan. 29	5.74	Apr. 29	7.25	July 29	7.71	Oct. 28	3.73
Feb. 26	6.91	May 27	7.91	Aug. 30	5.90	Nov. 29	5.46
Mar. 30	8.00	June 30	8.14	Sept. 30	3.87	Dec. 29	6.41

G447. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 11,
T. 55 S., R. 39 E. Records available: 1947-48.

Jan. 7	3.67	Apr. 5	5.71	June 29	5.22	Oct. 12	1.65
27	3.37	27	6.24	Aug. 10	3.69	Nov. 10	2.83
Feb. 25	4.65	June 2	5.97	Sept. 7	3.68	Dec. 2	3.60

G448. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 18,
T. 55 S., R. 40 E. Records available: 1947-48.

Jan. 7	1.30	Apr. 5	3.80	June 29	2.61	Oct. 11	+1.39
27	.89	27	4.18	Aug. 10	1.07	Nov. 10	.15
Feb. 25	2.53	June 2	3.71	Sept. 7	.61	Dec. 2	1.25

G449. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22,
T. 55 S., R. 40 E. Records available: 1947-48.

Jan. 7	8.13	Apr. 5	10.52	June 29	9.10	Oct. 11	4.89
27	7.31	27	10.75	Aug. 10	8.55	Nov. 10	6.80
Feb. 25	9.57	June 2	10.11	Sept. 7	7.20	Dec. 2	8.27

G450. Geol. Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 27,
T. 55 S., R. 40 E. Records available: 1947-48.

Jan. 6	4.27	Apr. 5	6.47	June 29	5.25	Oct. 11	1.34
27	3.96	27	6.71	Aug. 10	4.87	Nov. 10	3.09
Feb. 25	5.57	June 2	6.13	Sept. 7	3.60	Dec. 2	4.47

G475. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 10,
T. 56 S., R. 40 E. Records available: 1947-48.

Jan. 7	1.40	Apr. 5	2.33	June 29	2.12	Oct. 11	+0.33
27	1.20	27	1.42	Aug. 10	1.40	Nov. 10	.95
Feb. 25	1.92	June 2	1.75	Sept. 7	.88	Dec. 3	1.42

G476. Geol. Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 35,
T. 55 S., R. 40 E. Records available: 1947-48.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Jan. 7	10.05	10.68	Apr. 1	10.79	11.35
14	9.91	10.70	8	10.62	11.41
21	10.20	10.72	15	10.75	11.34
28	.....	10.98	22	10.17	11.22
Feb. 4	10.39	10.97	29	10.13	10.86
11	10.48	11.00	May 6	10.46	10.82
18	10.48	11.09	13	10.52	10.95
25	10.33	11.19	20	10.36	10.93
Mar. 4	10.33	11.06	27	10.31	10.88
11	10.27	11.09	June 3	10.43	10.93
18	10.40	11.30	10	10.42	10.88
25	10.93	11.45	17	10.18	10.74

G476--Continued.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
June 24	10.27	10.88	Sept. 30	8.08	10.63
July 1	10.59	11.02	Oct. 7	7.04	8.97
8	10.44	11.08	14	7.90	8.80
15	10.33	10.77	21	8.41	8.93
22	10.38	10.95	28	8.49	9.11
29	10.43	10.90	Nov. 4	8.72	9.57
Aug. 5	10.38	11.01	11	9.31	10.08
12	10.40	10.92	18	9.82	10.28
19	10.47	11.04	25	9.90	10.65
26	10.59	10.75	Dec. 2	10.20	10.72
Sept. 2	10.15	10.71	9	10.28	10.91
9	9.75	10.45	16	10.53	11.11
16	9.83	10.52	23	10.59	11.16
23	8.60	10.03	30	10.38	11.11

G490. Geol. Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 29, T. 53 S., R. 41 E. Records available: 1947-48.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Jan. 7	2.89	3.35	July 8	3.98	4.75
14	2.54	3.38	15	4.03	4.45
21	3.07	3.49	22	4.14	4.50
28	....	3.75	29	3.65	4.44
Feb. 4	3.43	3.80	Aug. 5	3.94	4.49
11	3.51	3.86	12	3.96	4.48
18	3.61	4.08	19	4.07	4.48
25	3.78	4.13	26	3.97	4.49
Mar. 4	3.46	4.09	Sept. 2	3.19	4.25
11	3.71	4.11	9	3.15	....
18	3.83	4.42	16	3.28	4.05
25	4.20	4.61	23	.04	3.54
Apr. 1	4.15	4.58	30	1.75	2.53
8	4.25	4.64	Oct. 7	+3.30	2.84
15	4.26	4.69	14	1.18	2.16
22	....	4.85	21	1.49	2.20
29	3.51	4.21	28	1.75	2.29
May 6	3.75	4.17	Nov. 4	1.99	2.66
13	3.80	4.41	11	2.43	3.06
20	4.00	4.37	18	2.85	3.16
27	3.99	4.48	25	2.85	3.40
June 3	3.43	4.46	Dec. 2	3.09	3.47
10	3.51	4.14	9	3.08	3.56
17	3.71	4.17	16	3.43	3.85
24	3.87	....	23	3.48	3.89
July 1	4.38	4.69	30	3.48	3.89

G518. Geol. Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 30, T. 56 S., R. 40 E., southwest corner of south Allapattah Road and Coconut Palm Drive. Drilled observation well, diameter 4 inches, depth 75 feet. Measuring point, top of casing, at land-surfaces datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level
Oct. 7, 1947	1.10	May 3, 1948	4.30	Sept. 7, 1948	2.56
Mar. 18, 1948	4.53	June 29	4.22	Nov. 8	3.50

G551. City of Miami. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 36, T. 54 S., R. 39 E., 5.3 miles west of U. S. Highway 1 and 0.3 mile north of North Kandal Drive extended. Drilled test well, diameter 24 to 18 inches, depth 80 feet. Measuring point, top of casing, 0.6 foot above land-surface datum and 8.64 feet above mean sea level, 1929 adjustment. Recorder installed Dec. 15, 1947. Records available: 1947-48.

Week ending	High level	Low level	Week ending	High level	Low level
Dec. 23, 1947	0.56	0.82	July 1, 1948	2.99	3.44
30	.77	1.19	8	2.90	3.58
Jan. 7, 1948	1.24	1.49	15	2.67	3.01
14	.40	1.60	22	1.70	3.18
21	.60	1.21	29	1.07	2.44
28	1.21	1.53	Aug. 5	.79	1.71
Feb. 4	1.53	1.87	12	1.49	1.97
11	1.87	2.19	19	1.61	1.90
18	2.19	2.40	26	1.37	1.93
25	2.40	2.62	Sept. 2	1.44	2.00
Mar. 4	2.60	2.93	9	1.59	1.94
11	2.71	2.96	16	.77	1.96
18	2.84	3.14	23	+.58	.77
25	3.14	3.42	30	+.49	+.26
Apr. 1	3.42	3.65	Oct. 7	+.73	+.09
8	3.63	3.72	14	+.57	+.39
15	3.70	3.82	21	+.39	+.22
22	3.82	3.93	28	+.22	.04
29	3.67	4.06	Nov. 4	.04	.31
May 6	3.64	3.87	11	.31	.40
13	3.47	3.96	18	.40	.87
20	3.47	3.68	25	.82	1.13
27	3.68	3.94	Dec. 2	1.13	1.38
June 3	3.79	4.04	9	.48	1.39
10	2.74	3.82	16	1.08	1.65
17	2.38	2.82	23	1.55	1.76
24	2.50	2.89	30	1.72	1.96

G553. City of Miami. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T. 55 S., R. 40 E., 0.5 mile west of U. S. Highway 1, on south side of Motu Drive. Drilled test well, diameter 24 to 18 inches, depth 91 feet. Measuring point, top of casing, 0.3 foot above land-surface datum and 12.41 feet above mean sea level, 1929 adjustment. Recorder installed July 23, 1947. Records available: 1947-48.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
July 29, 1947	3.64	3.91	Dec. 23, 1947	5.09	5.40
Aug. 5	3.91	4.35	30	5.13	5.55
12	4.07	4.60	Jan. 7, 1948	5.61	6.04
19	4.34	4.95	14	5.36	6.24
26	4.30	4.62	21	5.28	5.45
Sept. 2	4.62	5.01	28	5.45	5.77
9	5.01	5.13	Feb. 4	5.77	6.19
16	5.08	5.26	11	6.19	6.62
23	3.94	5.24	18	6.62	6.99
30	3.68	4.15	25	6.99	7.34
Oct. 7	3.40	4.03	Mar. 4	7.34	7.73
14	1.57	3.72	11	7.73	7.88
21	2.82	3.43	18	7.86	8.11
28	3.43	3.70	25	8.11	8.39
Nov. 4	3.70	4.06	Apr. 1	8.39	8.64
11	4.06	4.40	8	8.64	8.77
18	4.40	4.69	15	8.77	8.93
25	4.55	4.77	22	8.91	8.96
Dec. 2	....	4.79	29	8.66	9.03
9	4.52	4.88	May 6	8.61	8.69
16	4.88	5.28	13	8.03	8.78

G553--Continued.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
May 20	7.91	8.03	Sept. 16	5.34	5.62
27	7.93	8.26	23	1.29	5.34
June 3	8.26	8.38	30	2.15	2.97
10	7.20	8.45	Oct. 7	1.05	3.33
17	6.51	7.20	14	2.43	3.10
24	6.51	6.88	21	3.10	3.44
July 1	6.88	7.45	28	3.44	3.91
8	7.45	7.58	Nov. 4	3.91	4.37
15	7.17	7.50	11	4.37	4.83
22	7.20	7.27	18	4.83	5.27
29	6.80	7.28	25	5.27	5.65
Aug. 5	6.52	6.80	Dec. 2	5.65	6.03
12	5.76	6.59	9	5.87	6.06
19	5.87	6.20	16	5.98	6.31
26	6.17	6.24	23	6.31	6.63
Sept. 2	6.09	6.25	30	6.63	6.90
9	5.21	6.25			

S1A. City of Miami. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 19, T. 53 S., R. 41 E. Records available: 1941-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	6.12	Apr. 29	6.73	July 29	6.84	Oct. 28	4.27
Feb. 26	6.95	May 27	7.58	Aug. 30	5.80	Nov. 29	5.93
Mar. 30	8.14	June 30	7.50	Sept. 30	3.34	Dec. 29	6.81

S2A. City of Miami. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 19, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 29	6.84	Apr. 29	7.60	July 29	7.98	Oct. 28	4.96
Feb. 26	7.71	May 27	8.60	Aug. 30	6.74	Nov. 29	6.69
Mar. 30	8.86	June 30	8.82	Sept. 30	4.39	Dec. 29	7.43

S3A. City of Miami. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24, T. 53 S., R. 40 E. Records available: 1944-48.

Jan. 29	6.96	Apr. 29	7.92	July 29	8.33	Oct. 28	5.70
Feb. 26	7.98	May 27	9.48	Aug. 30	7.78	Nov. 29	7.55
Mar. 30	8.98	June 30	9.03	Sept. 30	5.36	Dec. 29	8.53

S4A. City of Miami. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 19, T. 53 S., R. 41 E. Records available: 1944-48.

Jan. 29	6.20	Apr. 29	7.20	July 29	7.66	Oct. 28	4.38
Feb. 26	7.15	May 27	8.16	Aug. 30	6.42	Nov. 29	6.08
Mar. 30	8.20	June 30	8.06	Sept. 30	4.00	Dec. 29	6.95

S5A. City of Miami. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24, T. 53 S., R. 40 E. Records available: 1944-48.

Jan. 29	6.53	Apr. 29	7.84	July 29	8.68	Oct. 28	4.34
Feb. 26	7.88	May 27	8.83	Aug. 30	6.88	Nov. 29	6.56
Mar. 30	8.36	June 30	9.40	Sept. 30	4.67	Dec. 29	7.58

S6A. City of Miami. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24, T. 53 S., R. 40 E. Records available: 1944-48.

Jan. 29	6.14	Apr. 29	7.98	July 29	8.83	Oct. 28	4.36
Feb. 26	7.72	May 27	8.88	Aug. 30	6.53	Nov. 29	6.77
Mar. 30	8.77	June 30	10.01	Sept. 30	4.60	Dec. 29	7.78

S7A. City of Miami. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24, T. 53 S., R. 40 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	5.70	Apr. 29	8.30	July 29	9.06	Oct. 28	4.07
Feb. 26	8.04	May 27	8.80	Aug. 30	5.98	Nov. 29	6.64
Mar. 30	9.05	June 30	9.56	Sept. 30	4.86	Dec. 29	7.10

S8A. City of Miami. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24, T. 53 S., R. 40 E. Records available: 1944-48.

Jan. 29	5.89	Apr. 29	6.37	July 29	7.33	Oct. 28	3.43
Feb. 26	6.63	May 27	7.48	Aug. 30	5.27	Nov. 29	5.20
Mar. 30	7.20	June 30	8.13	Sept. 30	3.04	Dec. 29	6.28

S14A. City of Miami. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 53 S., R. 40 E. Records available: 1944-48.

Jan. 29	4.87	Apr. 29	6.69	July 29	7.05	Oct. 28	3.12
Feb. 26	5.76	May 27	6.95	Aug. 30	6.70	Nov. 29	4.39
Mar. 30	7.55	June 30	7.73	Sept. 30	3.60	Dec. 29	5.45

S15A. City of Miami. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 53 S., R. 40 E. Records available: 1944-48.

Jan. 29	3.25	Apr. 29	6.24	July 29	6.46	Oct. 28	1.67
Feb. 26	4.39	May 27	6.05	Aug. 30	4.25	Nov. 29	2.98
Mar. 30	5.68	June 30	5.84	Sept. 30	2.30	Dec. 29	4.11

S16A. City of Miami. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 53 S., R. 40 E. Records available: 1944-48.

Jan. 29	4.20	Apr. 29	6.01	July 29	6.58	Oct. 28	1.48
Feb. 26	5.12	May 27	6.62	Aug. 30	4.29	Nov. 29	3.27
Mar. 30	6.46	June 30	6.88	Sept. 30	2.43	Dec. 29	4.28

S17A. City of Miami. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 53 S., R. 40 E. Records available: 1944-48.

Jan. 29	4.26	Apr. 29	5.94	July 29	6.57	Oct. 28	1.88
Feb. 26	5.09	May 27	6.10	Aug. 30	4.09	Nov. 29	3.03
Mar. 30	6.55	June 30	6.81	Sept. 30	2.14	Dec. 29	4.47

S18. Model Dairy. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 15, T. 52 S., R. 41 E. Records available: 1939-48.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Jan. 7	5.85	6.08	May 20	7.32	7.59
14	5.69	6.18	27	7.42	7.67
21	5.69	6.11	June 3	7.28	7.74
28	6.11	6.32	10	7.24	7.49
Feb. 4	6.32	6.49	17	7.49	7.58
11	6.49	6.67	24	7.54	7.83
18	6.67	6.85	July 1	7.83	8.08
25	6.85	7.00	8	7.60	8.13
Mar. 4	6.92	7.09	15	7.63	7.90
11	7.05	7.12	22	7.55	7.96
18	7.12	7.31	29	7.68	7.78
25	7.31	7.53	Aug. 5	7.74	7.89
Apr. 1	7.52	7.66	12	7.65	7.93
8	7.59	7.75	19	7.70	7.96
15	7.75	7.88	26	7.83	7.94
22	7.53	7.88	Sept. 2	6.33	7.83
29	7.53	7.62	9	6.24	6.62
May 6	7.56	7.69	16	5.89	6.68
13	7.26	7.79	23	3.60	5.95

S18--Continued.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Oct. 7	2.45	5.11	Nov. 25	6.06	6.30
14	3.33	4.32	Dec. 2	6.30	6.48
21	3.75	4.57	9	6.47	6.57
28	4.57	5.18	16	6.53	6.69
Nov. 4	5.18	5.54	23	6.69	6.82
11	5.84	5.88	30	6.82	6.94
18	5.88	6.11			

S18A. City of Miami. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 13, T. 53 S., R. 40 E., 6 feet west of pump house, at city of Miami supply well 18. Driven observation well, diameter 2 inches, depth 12.0 feet. Measuring point, top of casing, 2.5 feet above land-surface datum and 8.35 feet above mean sea level, 1929 adjustment. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level
Feb. 28, 1946	5.17	Jan. 29, 1947	6.18	Jan. 29, 1948	4.04
Mar. 28	5.90	Feb. 26	5.47	Feb. 26	5.03
Apr. 30	6.51	Mar. 31	5.78	Mar. 30	6.40
May 29	5.95	Apr. 29	6.39	Apr. 29	5.80
June 27	5.86	May 29	6.06	May 27	6.55
July 31	4.94	June 30	4.17	June 30	6.58
Aug. 3	5.88	July 30	3.62	July 29	6.20
31	5.17	Aug. 29	3.95	Aug. 30	4.16
Sept. 30	4.26	Sept. 30	.81	Sept. 30	2.35
Oct. 30	4.42	Oct. 30	+1.01	Oct. 28	1.53
Nov. 29	4.72	Nov. 28	.44	Nov. 29	3.13
Dec. 30	5.41	Dec. 31	2.46	Dec. 29	3.85

S19 NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T. 53 S., R. 40 E. Records available: 1939-48

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Jan. 7	4.14	4.41	July 8	6.94	7.36
14	3.88	4.63	15	6.85	7.10
21	3.61	4.37	22	6.86	7.21
28	4.37	4.60	29	6.60	7.02
Feb. 4	4.59	4.95	Aug. 5	6.41	6.84
11	4.95	5.44	12	5.90	6.71
18	5.44	5.71	19	5.96	6.55
25	5.69	6.02	26	6.36	6.64
Mar. 4	5.90	6.04	Sept. 2	4.66	6.36
11	5.94	6.15	9	4.74	5.61
18	6.14	6.58	16	5.04	5.53
25	6.58	7.03	23	1.13	5.23
Apr. 1	6.90	7.06	30	1.91	2.97
8	6.78	7.04	Oct. 7	+0.06	3.45
15	6.92	7.16	14	1.35	2.42
22	6.70	7.23	21	2.07	2.67
29	6.08	6.70	28	2.50	2.98
May 6	6.07	6.63	Nov. 4	2.98	3.54
13	6.11	6.82	11	3.54	3.78
20	6.04	6.39	18	3.78	4.28
27	6.39	6.91	25	4.28	4.50
June 3	5.46	7.04	Dec. 2	4.40	4.77
10	5.42	5.82	9	4.68	5.83
17	5.63	5.80	16	4.80	5.08
24	5.80	6.57	23	5.08	5.31
July 1	6.57	7.22	30	5.27	5.49

S19A. City of Miami. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 13, T. 53 S., R. 40 E., 6 feet west of pump house, at city of Miami supply well 19. Driven observation well, diameter 2 inches, depth 12.1 feet. Measuring point, top of casing, 2.5 feet above land-surface datum and 8.39 feet above mean sea level, 1929 adjustment. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level
Apr. 30, 1946	6.20	Mar. 31, 1947	5.59	Feb. 26, 1948	4.49
May 29	5.79	Apr. 29	6.10	Mar. 30	6.17
June 27	5.74	May 29	5.48	Apr. 29	5.37
Aug. 3	5.56	June 30	4.26	May 27	6.32
31	5.03	July 30	3.64	June 30	6.12
Sept. 30	3.87	Aug. 29	3.28	July 29	5.99
Oct. 30	4.30	Sept. 30	1.38	Aug. 30	1.40
Nov. 29	3.86	Oct. 30	+ .99	Sept. 30	2.00
Dec. 30	5.20	Nov. 28	.33	Oct. 28	1.51
Jan. 29, 1947	5.92	Dec. 31	2.09	Nov. 29	2.77
Feb. 26	5.29	Jan. 29, 1948	3.78	Dec. 29	3.57

S20A. City of Miami. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 53 S., R. 40 E., 6 feet west of pump house, at city of Miami supply well 20. Driven observation well, diameter 2 inches, depth 11.9 feet. Measuring point, top of casing, 1.8 feet above land-surface datum and 8.45 feet above mean sea level, 1929 adjustment. Records available: 1946-48.

Feb. 28, 1946	6.76	Feb. 26, 1947	6.46	Feb. 26, 1948	6.28
Mar. 28	7.30	Mar. 31	6.70	Mar. 30	7.61
Apr. 30	7.71	Apr. 29	7.23	Apr. 29	6.97
May 29	7.08	May 29	7.45	May 27	7.56
June 27	7.10	June 30	5.33	June 30	7.41
Aug. 3	6.85	July 30	4.53	July 29	7.63
31	6.55	Aug. 29	5.40	Aug. 30	5.20
Sept. 30	5.41	Sept. 30	2.09	Sept. 30	3.36
Oct. 30	5.70	Oct. 30	+ .21	Oct. 28	2.76
Nov. 29	6.45	Nov. 28	1.84	Nov. 29	4.82
Dec. 30	6.52	Dec. 31	4.02	Dec. 29	5.35
Jan. 29, 1947	7.46	Jan. 29, 1948	5.51		

S21A. City of Miami. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 13, T. 53 S., R. 40 E., 6 feet west of pump house, at city of Miami supply well 21. Driven observation well, diameter 2 inches, depth 11.5 feet. Measuring point, top of casing, 2.2 feet above land-surface datum and 8.40 feet above mean sea level, 1929 adjustment. Records available: 1946-48.

Feb. 28, 1946	5.77	Feb. 26, 1947	6.18	Feb. 26	5.82
Mar. 28	6.94	Mar. 31	6.14	Mar. 30	7.24
Apr. 30	7.00	Apr. 29	6.36	Apr. 29	6.43
May 29	6.70	May 29	6.27	May 27	6.35
June 27	6.00	June 30	4.46	June 30	6.40
July 31	5.44	July 30	4.19	July 29	6.93
Aug. 3	5.83	Aug. 29	4.07	Aug. 30	4.41
31	5.70	Sept. 30	1.45	Sept. 30	2.87
Sept. 30	5.00	Oct. 30	+ .66	Oct. 28	2.23
Oct. 30	4.97	Nov. 28	1.06	Nov. 29	3.70
Nov. 29	5.25	Dec. 31	3.35	Dec. 29	4.50
Dec. 30	5.62	Jan. 29, 1948	4.94		

S63. Graham's Dairy. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 30, T. 52 S., R. 40 E. Records available: 1944-47. No measurements made in 1948.

S68. City of Miami. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 19, T. 53 S., R. 41 E. Records available: 1944-48.

S68--Continued.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Jan. 7	4.26	4.78	July 8	6.50	7.36
14	3.96	5.05	15	6.32	7.02
21	3.81	4.91	22	6.37	7.05
28	4.27	4.98	29	6.00	6.68
Feb. 4	4.70	5.24	Aug. 5	6.16	6.70
11	4.96	5.62	12	5.63	6.76
18	5.31	6.02	19	5.70	6.47
25	5.37	6.26	26	5.74	6.55
Mar. 4	5.64	6.28	Sept. 2	4.38	5.94
11	5.62	6.38	9	4.18	5.74
18	6.28	6.75	16	4.85	5.67
25	6.70	7.29	23	.64	4.85
Apr. 1	6.61	7.34	30	1.80	2.86
8	6.55	7.07	Oct. 7	+1.11	3.47
15	6.90	7.45	14	1.38	2.32
22	6.18	7.41	21	2.04	2.70
29	5.69	6.63	28	2.31	3.21
May 6	5.62	6.36	Nov. 4	3.10	3.59
13	5.53	6.44	11	3.59	4.38
20	5.52	6.58	18	4.03	4.45
27	6.28	7.00	25	4.36	4.58
June 3	5.40	6.99	Dec. 2	4.56	4.98
10	5.22	6.00	9	4.80	5.00
17	5.42	5.83	16	4.87	5.24
24	5.64	6.52	23	5.24	5.50
July 1	6.45	6.99	30	5.33	5.68

S84. Coca Cola Bottling Co. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 25, T. 53 S., R. 41 E. Records available: 1944-48. July 15, 14.75.

S171. City of Miami. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 20, T. 54 S., R. 41 E. Records available: 1942-47. No measurements made in 1948.

S182. International Fruit Co. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 5, T. 56 S., R. 40 E. Records available: 1942-48.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Jan. 7	5.44	5.81	July 8	5.40	7.11
14	5.11	6.00	15	5.22	6.15
21	5.06	5.19	22	6.15	6.61
28	5.19	5.48	29	5.75	6.64
Feb. 4	5.48	5.88	Aug. 5	5.39	5.75
11	5.88	6.28	12	5.55	5.87
18	6.28	6.61	19	5.71	6.03
25	6.61	6.97	26	5.42	5.71
Mar. 4	6.97	7.35	Sept. 2	3.98	5.42
11	7.35	7.57	9	3.95	4.75
18	7.57	7.81	16	3.58	4.79
25	7.81	8.07	23	1.49	3.63
Apr. 1	8.07	8.30	30	1.98	2.62
8	8.15	8.35	Oct. 7	1.08	2.96
15	8.20	8.43	14	1.73	2.63
22	8.42	8.47	21	2.63	3.11
29	8.00	8.56	28	3.11	3.56
May 6	7.97	8.16	Nov. 4	3.56	4.12
13	7.34	8.28	11	4.12	4.70
20	7.27	7.43	18	4.70	5.19
27	7.27	7.67	25	5.19	5.59
June 3	7.19	7.84	Dec. 2	5.59	5.94
10	5.98	7.32	9	5.63	5.97
17	5.85	6.01	16	5.83	6.18
24	5.89	6.34	23	6.18	6.43
July 1	6.34	6.97	30	6.37	6.69

S183. E. L. Cotton. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 4, T. 55 S., R. 40 E. Records available: 1944-47. No measurements made in 1948.

S185. Judge Price. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 1, T. 56 S., R. 39 E. Records available: 1944-47. No measurements made in 1948.

S186. Mr. Wellbourn. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 56 S., R. 38 E. Records available: 1944-47. No measurements made in 1948.

S187. E. Enquist. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 34, T. 56 S., R. 38 E. Records available: 1944-47. No measurements made in 1948.

S188. E. C. Byars. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 2, T. 57 S., R. 38 E. Records available: 1944-47. No measurements made in 1948.

S189. Dr. C. F. Robinson. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 31, T. 56 S., R. 39 E. Records available: 1944-47. No measurements made in 1948.

S191. A. H. Singleton. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 19, T. 56 S., R. 39 E. Records available: 1942-47. No measurements made in 1948.

S196. University of Florida Experiment Station. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 35, T. 56 S., R. 38 E. Records available: 1940-48.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.32	6.40	7.67	9.12	8.93	8.00	7.70	6.58	5.28	3.26	5.07	6.67
2	6.37	6.46	7.72	9.14	8.94	7.92	7.78	6.54	5.17	3.50	5.14	6.70
3	6.42	6.53	7.75	9.22	8.97	7.80	7.85	5.80	4.66	3.70	5.21	6.73
4	6.44	6.57	7.79	9.22	9.00	7.70	7.92	5.78	4.78	3.70	5.27	6.76
5	6.48	6.63	7.93	9.22	9.03	7.67	7.78	5.87	4.91	.80	5.34	6.78
6	6.53	6.68	7.87	9.22	9.08	7.67	7.70	5.97	5.04	1.50	5.42	6.78
7	6.57	6.73	7.91	9.28	9.13	7.70	7.50	6.06	5.16	2.10	5.48	6.80
8	6.63	6.78	7.95	9.24	9.18	7.72	7.40	6.03	5.22	2.25	5.53	6.82
9	6.66	6.82	7.97	9.26	9.14	7.72	7.28	5.94	5.18	2.50	5.60	6.85
10	6.71	6.87	8.00	9.44	9.05	7.72	7.12	5.92	5.17	2.75	5.65	6.89
11	6.73	6.92	8.03	9.52	8.94	7.75	7.08	5.72	5.21	3.00	5.73	6.92
12	6.53	6.97	8.05	9.55	8.84	7.80	7.10	5.52	4.93	3.32	3.80	6.95
13	6.40	7.01	8.42	9.63	8.65	7.77	7.14	5.59	5.08	3.40	5.86	6.97
14	5.52	7.06	8.42	9.62	8.50	7.60	7.20	5.69	5.00	3.36	3.92	6.98
15	5.47	7.11	8.45	9.62	8.38	7.46	7.24	5.60	4.82	3.54	5.96	7.00
16	5.52	7.14	8.47	9.58	8.33	7.38	7.30	5.65	4.11	3.68	6.02	7.04
17	5.59	7.17	8.51	9.67	8.30	7.29	7.36	5.67	....	3.73	6.07	7.09
18	5.65	7.21	8.54	9.68	8.24	7.23	7.37	5.22	3.00	3.84	6.13	7.11
19	5.73	7.25	8.61	9.72	8.18	7.26	7.30	5.22	3.22	3.94	6.18	7.18
20	5.79	7.27	8.64	9.72	8.10	7.13	7.03	5.32	3.25	4.02	6.23	7.17
21	5.85	7.31	8.67	9.73	8.02	7.11	6.75	5.46	1.60	4.12	6.27	7.20
22	5.91	7.36	8.72	9.12	7.98	7.08	6.64	5.53	1.10	4.23	6.32	7.23
23	5.97	7.40	8.75	9.14	7.96	7.14	6.64	5.50	1.80	4.33	6.35	7.21
24	6.02	7.45	8.81	9.17	7.97	7.20	6.59	5.49	2.22	4.42	6.40	7.18
25	6.04	7.49	8.84	9.19	8.00	7.26	6.55	5.53	2.50	4.50	6.44	7.18
26	6.08	7.52	8.93	9.21	8.02	7.33	6.55	5.45	2.15	4.60	6.46	7.20
27	6.12	7.56	8.95	9.20	8.06	7.40	6.57	5.07	2.35	4.70	6.50	7.23
28	6.18	7.57	8.97	9.08	8.11	7.46	6.63	4.91	2.70	4.77	6.54	7.23
29	6.24	7.62	9.02	....	8.15	7.54	6.63	4.94	2.82	4.85	6.57	7.25
30	6.30	....	9.08	8.95	8.18	7.61	6.63	5.04	3.10	4.92	6.61	7.27
31	6.35	....	9.09	....	8.06	....	6.58	5.16	....	4.98	....	7.30

S290. J. C. Kersey. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 3, T. 52 S., R. 41 E. Records available: 1942-47. No measurements made in 1948.

S539. U. S. Dept. of Agriculture. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 24, T. 55 S., R. 40 E. Records available: 1945-48.

S539--Continued.

High and low daily water level, from recorder charts												
Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	15.59	16.14	16.14	16.49	16.01	16.50	16.25	16.72	15.87	16.32	16.01	16.49
2	15.72	16.23	16.14	16.50	15.98	16.50	16.40	16.91	15.85	16.32	15.83	16.43
3	15.83	16.27	16.04	16.48	16.10	16.54	16.42	16.92	15.87	16.32	15.81	16.35
4	15.85	16.27	15.87	16.40	16.22	16.58	16.10	16.60	15.97	16.37	15.81	16.37
5	15.86	16.28	16.01	16.36	15.89	16.64	16.09	16.58	15.92	16.44	15.80	16.40
6	15.81	16.29	16.06	16.43	15.74	16.13	16.36	16.81	15.84	16.39	15.85	16.48
7	15.78	16.31	16.00	16.49	15.74	16.18	16.40	16.88	15.87	16.48	15.75	16.53
8	15.89	16.16	15.99	16.42	15.79	16.42	16.36	16.88	15.91	16.50	15.82	16.46
9	15.65	16.19	16.01	16.46	15.79	16.25	16.38	16.93	15.97	16.54	15.92	16.54
10	15.75	16.22	15.99	16.50	15.93	16.39	16.31	16.90	15.80	16.34	15.99	16.49
11	15.27	16.24	15.92	16.41	15.95	16.45	16.18	16.72	15.81	16.45	15.93	16.43
12	.....	.....	15.94	16.40	16.02	16.56	16.19	16.85	15.81	16.41	15.89	16.44
13	.....	.....	15.90	16.38	16.12	16.60	16.50	16.87	15.95	16.54	15.81	16.38
14	.....	.....	15.96	16.50	15.84	16.40	16.54	16.89	16.10	16.62	15.75	16.31
15	.....	.....	16.08	16.48	15.78	16.33	16.35	16.84	16.14	16.60	15.76	16.34
16	15.97	16.32	16.02	16.48	15.81	16.52	16.23	16.82	16.05	16.50	15.86	16.42
17	15.80	16.18	16.17	16.58	16.14	16.68	16.11	16.70	15.95	16.48	15.91	16.43
18	15.89	16.29	16.33	16.63	16.41	16.79	15.88	16.56	15.94	16.49	15.92	16.49
19	16.08	16.34	16.31	16.64	16.36	16.79	15.70	16.32	15.74	16.46	15.99	16.51
20	15.99	16.34	16.34	16.68	16.52	16.83	.....	.....	15.78	16.40	16.05	16.50
21	15.98	16.33	16.22	16.69	16.46	16.89	.....	.....	15.73	16.38	16.06	16.54
22	15.97	16.35	16.13	16.65	16.39	16.87	.....	.....	15.80	16.43	16.12	16.61
23	15.93	16.36	16.04	16.60	16.37	16.85	15.54	16.25	15.88	16.46	16.12	16.63
24	15.89	16.30	15.83	16.53	16.33	16.87	15.53	16.20	15.90	16.51	16.17	16.70
25	16.08	16.41	15.78	16.38	16.27	16.86	15.53	16.28	15.95	16.55	16.24	16.73
26	16.02	16.44	15.77	16.36	16.21	16.80	15.88	16.38	15.97	16.53	16.28	16.72
27	15.98	16.40	15.77	16.36	16.10	16.71	15.76	16.14	16.01	16.52	16.24	16.70
28	15.86	16.42	15.80	16.42	16.14	16.81	15.82	16.48	16.00	16.56	16.24	16.65
29	15.88	16.34	15.98	16.51	16.36	16.86	15.99	16.47	16.06	16.56	16.18	16.62
30	15.89	16.36	.....	.....	16.28	16.77	15.89	16.36	16.10	16.52	16.25	16.68
31	15.96	16.45	.....	.....	16.21	16.74	.....	.....	16.01	16.50	.....	.....

High and low daily water level, from recorder charts												
Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	16.28	16.72	15.89	16.43	15.79	16.35	14.31	14.82	14.91	15.58	15.79	16.39
2	16.31	16.77	16.06	16.52	15.41	16.30	14.43	14.92	14.98	15.64	15.77	16.37
3	16.18	16.72	16.10	16.64	15.33	15.98	14.47	14.98	15.05	15.68	15.78	16.37
4	16.00	16.60	16.06	16.66	15.20	15.86	14.50	15.02	15.26	15.79	.....	.....
5	16.02	16.55	16.04	16.64	15.22	15.87	13.50	15.07	15.34	15.87	.....	.....
6	16.01	16.59	15.97	16.61	15.30	15.90	13.88	14.25	15.52	15.98	.....	.....
7	15.91	16.54	15.96	16.54	15.31	15.90	13.91	14.40	15.70	16.07	.....	.....
8	15.90	16.50	15.80	16.48	15.36	15.94	14.07	14.56	15.75	16.08	.....	.....
9	15.84	16.44	15.71	16.34	15.53	16.04	14.33	14.65	15.69	16.07	.....	.....
10	15.83	16.41	15.79	16.39	15.74	16.16	14.26	14.67	15.75	16.10	16.29	.....
11	15.81	16.41	15.88	16.40	15.88	16.25	14.07	14.42	15.83	16.19	16.13	16.56
12	15.86	16.40	15.98	16.47	15.84	16.28	14.33	14.64	15.72	16.17	16.14	16.52
13	15.90	16.44	16.09	16.53	15.85	16.28	14.43	14.74	15.69	16.14	16.25	16.63
14	15.89	16.39	16.20	16.61	15.57	16.21	14.53	14.84	15.70	16.19	16.24	16.68
15	15.94	16.44	16.04	16.64	15.33	15.90	14.48	14.84	15.64	16.20	16.20	16.68
16	15.90	16.45	16.04	16.49	15.14	15.77	14.39	14.82	15.53	16.14	16.20	16.68
17	15.82	16.31	15.92	16.41	14.88	15.53	14.38	14.84	15.56	16.14	16.19	16.68
18	15.96	16.46	15.88	16.37	14.48	15.18	14.52	14.97	15.53	16.15	16.15	16.70
19	16.04	16.56	15.92	16.40	14.32	15.01	14.55	15.01	15.54	16.11	16.15	16.64
20	16.09	16.59	15.77	16.33	14.32	14.83	14.56	15.08	15.76	16.26	15.98	16.59
21	16.09	16.62	15.71	16.21	12.74	14.47	14.55	15.04	15.91	16.34	16.02	16.53
22	16.08	16.58	15.68	16.18	12.62	13.55	14.58	15.13	15.83	16.32	16.13	16.61
23	16.01	16.49	15.84	16.32	13.55	14.15	14.80	15.25	15.93	16.37	16.20	16.66
24	16.04	16.52	15.97	16.39	14.01	14.40	14.98	15.38	15.88	16.37	16.16	16.66
25	16.09	16.52	16.01	16.41	14.18	14.54	14.88	15.29	15.89	16.36	16.09	16.62
26	16.07	16.51	16.00	16.40	14.31	14.60	14.84	15.28	15.80	16.36	15.98	16.65
27	16.06	16.51	15.96	16.36	14.20	14.52	14.66	15.29	15.75	16.32	15.99	16.50
28	15.96	16.41	15.96	16.35	14.22	14.60	14.67	15.27	15.69	16.35	15.77	16.57

S539--Continued.

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
29	16.00	16.42	15.99	16.40	14.23	14.60	14.73	15.34	15.76	16.32	15.73	16.32
30	16.00	16.45	15.91	16.39	14.23	14.71	14.90	15.48	15.78	16.40	15.90	16.62
31	15.96	16.44	16.85	16.39			14.83	15.52			16.28	16.63

Duval County

12. Jacksonville Motor Transit Co. About 200 feet east of Riverside Avenue, about 75 feet south of McCoy Street, Jacksonville. Records available: 1938, 1940-42, 1944, 1946-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 29	+30.0	Apr. 30	+29.3	Aug. 14	+26.4
Mar. 23	+28.1	July 8	+28.9	Sept. 30	+26.9

18. C. J. Price. In Jacksonville, about 400 feet east of Riverside Avenue, about 50 feet north of Lomax Street. Records available: 1938, 1940-41, 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	+41.5	Apr. 30	+38.1	Aug. 14	+38.2	Nov. 9	+39.2
Mar. 23	+40.3	July 8	+36.3	Sept. 30	+39.5		

89. C. F. Tresca. At nursery, north of Atlantic Boulevard, in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T. 2 S., R. 28 E. Records available: 1939-41, 1946-48.

Jan. 29	+14.7	Apr. 30	+14.1	July 8	+12.7	Sept. 30	+14.3
Mar. 24	+13.8	June 3	+14.0	Aug. 13	+13.5	Nov. 9	+13.0

102. V. A. Stevens. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 24, T. 2 S., R. 27 E., about 240 feet north of Atlantic Boulevard, in rear of residence of owner. Records available: 1930-31, 1934, 1939-42, 1946-48.

Jan. 29	1.30	Apr. 30	3.17	Aug. 13	3.76	Nov. 9	2.25
Mar. 24	1.08	July 8	4.21	Sept. 30	2.22		

115. City of Jacksonville. In Ortega, 5 miles southwest of Jacksonville, at east side of pump house, east of intersection of Baltic Street and Oxford Avenue. Records available: 1930-31, 1938-42, 1944-48.

Jan. 31	+35.6	Apr. 30	+35.3	Aug. 14	+32.9	Nov. 9	+33.1
Mar. 25	+35.4	July 8	+31.4	Sept. 30	+32.0		

118. City of Jacksonville. At southwest side of pump house, on west corner of intersection of Post and Dancy Streets, Jacksonville. Records available: 1939-48.

Jan. 31	+32.7	Apr. 30	+32.3	Aug. 14	+31.0	Nov. 9	+31.8
Mar. 25	+32.4	July 8	+30.2	Sept. 30	+31.3		

122. City of Jacksonville. About 20 feet north of 63d Street between Russell and Eastland Streets, Jacksonville. Records available: 1930, 1938-42, 1944-48.

Jan. 30	+42.8	Apr. 30	+43.1	Aug. 13	+40.8	Nov. 9	+41.7
Mar. 24	+42.7	July 9	+41.5	Oct. 1	+41.3		

123. City of Jacksonville. West of pump house, on west side of Huron Street, about 150 feet north of Beaver Street, Woodstock Park, Jacksonville. Records available: 1930, 1931, 1938-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 30	+34.7	July 8	+32.3	Nov. 9	+33.3
Mar. 23	+34.7	Oct. 1	+33.7		

129. Jim Merrill. In Ortega, 5.2 miles southwest of Jacksonville, on east side of Ortega Boulevard, between First and Palmetto Streets. Records available: 1940-42, 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	+40.5	Apr. 30	+36.5	Aug. 14	+38.0	Nov. 9	+38.2
Mar. 25	+39.8	July 8	+36.2	Sept. 30	+38.9		

131. G. C. Cole. SW $\frac{1}{4}$ sec. 10, T. 1 S., R. 26 E., on south side of residence of owner, east side of Lem Turner Road, 0.7 mile north of Trout River, 7.0 miles north of Jacksonville. Records available: 1934-38, 1940-42, 1944-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 30	+40.0	Aug. 13	+36.5	Nov. 9	+34.4
July 9	+33.5	Oct. 1	+34.5		

145. Duval County School Board. In rear of Oceanway School, 0.5 mile north of Broward, 10 miles north of Jacksonville. Records available: 1940-42, 1944-48.

Jan. 30	+22.1	May 1	+21.8	Nov. 9	+21.7
Mar. 24	+21.9	Aug. 13	+21.0		

147. V. C. Johnson. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 32, T. 1 N., R. 26 E. Records available: 1940-42, 1944-48.

Jan. 30	+34.1	July 9	+29.6	Oct. 1	+29.6
Mar. 24	+30.3	Aug. 13	+30.6	Nov. 9	+28.2

149. W. M. Bostwick. On north side of mouth of Drummond Creek, 1.2 miles southwest of Eastport, 6 miles northeast of Jacksonville. Records available: 1940, 1941, 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	+27.2	Apr. 30	+27.8	Aug. 13	+24.0	Nov. 9	+27.0
Mar. 24	+27.0	July 9	+23.5	Oct. 1	+26.0		

154. J. M. Shield. SW $\frac{1}{4}$ sec. 22, T. 3 S., R. 27 E., between Florida East Coast Railroad and U. S. Highway 1, 1.2 miles north of Sunbeam. Records available: 1940-42, 1944, 1946-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 29	+28.0	Apr. 29	+27.0	Sept. 30	+26.5
Mar. 24	+29.3	July 8	+25.5	Nov. 9	+26.9

160. City of Neptune Beach. About 400 feet from Atlantic Ocean, on southeast corner of intersection of First Street and Florida Avenue, Neptune Beach. Records available: 1934, 1940-42, 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	+39.0	Apr. 30	+37.1	July 8	+32.9	Sept. 30	+ 37.0
Mar. 24	+39.6	June 3	+37.5	Aug. 13	+34.5	Nov. 9	+37.0

164. Ribault Club. In pump house, Ribault Club, Fort George Island. Records available: 1930-31, 1940, 1941, 1944-48. Jan. 30, +40.1; Mar. 24, +39.8; Apr. 30, +39.5.

206. John Harrell. 1 mile west of Blanding Road, and 0.2 mile north of 103d Street, in a field, in SW 1/4 sec. 12, T. 3 S., R. 25 E. Unused drilled oil well, diameter 10 inches, cased to 1,000 feet, depth about 1,700 feet. Measuring point in 1941 and 1942, top of 10-inch gate valve, 1.7 feet above land-surface datum. Measuring point on and since June 4, 1948, top of 10-inch casing, 1.00 foot above land-surface datum. Automatic water-stage recorder installed June 4, 1948. Records available: 1941-42, 1948. Apr. 16, 1941, 2.8; Sept. 19, 1942, 3.6.

High and low daily water level, from recorder charts

Day	June		Day	June		Day	June		Day	June	
	High	Low		High	Low		High	Low		High	Low
1	....	....	9	2.24	2.26	17	2.73	2.83	24	2.84	2.89
2	....	....	10	2.36	2.53	18	2.77	2.85	25	2.83	2.88
3	....	....	11	2.53	2.62	19	2.72	2.85	26	2.85	2.87
4	....	....	12	2.62	2.63	20	2.68	2.81	27	2.87	2.88
5	2.07	2.22	13	....	....	21	2.69	2.78	28	2.87	2.90
6	2.20	2.33	14	2.60	2.66	22	2.72	2.83	29	2.89	2.92
7	2.17	2.31	15	2.65	2.74	23	2.82	2.89	30	2.90	2.97
8	2.19	2.28	16	2.72	2.80						

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	2.96	3.05	2.95	3.07	....	....	2.84	2.96	2.61	2.71	3.01	3.07
2	3.02	3.08	2.95	3.07	....	....	2.74	2.92	2.58	2.70	2.90	3.07
3	3.01	3.10	2.96	3.08	....	....	2.80	2.86	2.57	2.68	2.91	3.01
4	2.98	3.08	2.95	3.06	3.04	3.08	2.67	2.84	2.63	2.71	2.95	3.02
5	2.93	3.07	2.94	3.05	3.05	3.10	2.65	2.74	2.68	2.76	2.91	3.00
6	2.84	2.98	2.96	3.04	3.00	3.08	2.68	2.72	2.72	2.81	2.92	2.96
7	2.86	2.98	2.98	3.04	2.92	3.01	2.72	2.76	2.81	2.91	2.89	2.97
8	2.96	3.10	2.96	3.00	2.91	2.95	2.69	2.76	2.85	2.92	2.87	2.93
9	3.08	3.16	2.97	3.00	2.93	2.97	2.74	2.81	2.74	2.85	2.86	3.00
10	3.02	3.08	3.00	3.04	2.91	2.99	2.73	2.81	2.72	2.91	3.00	3.20
11	2.94	3.02	2.99	3.03	2.95	3.00	2.66	2.74	2.91	3.05	3.11	3.16
12	2.90	2.94	2.95	3.01	2.95	3.01	2.70	2.80	2.94	3.03	3.02	3.12
13	2.89	2.94	2.97	3.05	2.94	3.01	2.76	2.86	2.90	3.00	3.03	3.08
14	2.89	2.94	3.01	3.08	2.93	3.00	2.74	2.84	2.90	3.03	3.02	3.15
15	2.90	2.99	3.00	3.08	2.91	3.02	2.78	2.87	2.96	3.06	3.01	3.15
16	2.95	3.05	2.95	3.05	2.99	3.13	2.83	2.90	2.93	3.06	3.01	3.08
17	2.99	3.07	2.95	3.05	3.05	3.13	2.72	2.90	2.88	3.01	3.02	3.09
18	2.98	3.07	2.96	3.06	2.97	3.07	2.66	2.76	2.93	3.01	2.87	3.09
19	2.99	3.07	2.98	3.06	2.90	3.01	2.70	2.78	2.87	3.00	2.79	2.92
20	3.00	3.07	2.96	3.05	2.86	2.93	2.73	2.81	2.95	3.05	2.88	3.00
21	3.00	3.07	2.99	3.05	2.78	2.90	2.77	2.82	2.98	3.05	3.00	3.04
22	3.00	3.06	3.03	3.06	2.60	2.78	2.75	2.82	2.88	2.98	2.98	3.05
23	3.03	3.10	3.05	3.07	2.62	2.76	2.67	2.78	2.75	2.88	2.98	3.05
24	3.04	3.08	3.02	3.06	2.76	2.86	2.64	2.69	2.74	2.88	2.95	3.06
25	3.02	3.05	3.03	3.05	....	....	2.63	2.70	2.88	3.02	2.81	3.07
26	3.02	3.08	....	....	....	....	2.61	2.68	2.84	3.00	3.07	3.21
27	....	....	....	....	....	....	2.61	2.70	2.83	2.92	2.98	3.20
28	....	....	....	....	....	....	2.60	2.69	2.73	2.90	2.88	3.01
29	....	....	....	....	....	....	2.62	2.71	2.71	3.03	2.73	2.94
30	....	....	2.95	3.06	....	....	2.64	2.74	2.96	3.07	2.67	2.83
31	3.00	3.11	3.01	3.10			2.64	2.74			2.74	2.85

Escambia County

45. Geol. Survey, U. S. Dept. of Interior. About 1,150 feet southwest of Louisville & Nashville Railroad, about 1,600 feet northeast of Gulf, Florida & Alabama Railroad, 0.5 mile south of Cantonment. Records available: 1940-48.

High and low daily water level, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	87.97	88.27	88.38	88.50	89.21	89.32	89.60	89.95	90.25	90.31	90.61	90.67
2	88.27	88.49	88.41	88.52	89.19	89.31	89.65	90.21	90.30	90.39	90.58	90.77
3	88.49	88.64	88.43	88.54	89.19	89.31	90.16	90.30	90.37	90.46	90.62	90.73
4	88.60	88.71	88.41	88.48	89.30	89.49	90.18	90.27	90.39	90.45	90.65	90.70
5	88.71	88.82	88.48	88.58	89.44	89.50	90.02	90.16	90.40	90.50	90.70	90.87
6	88.68	88.79	88.57	88.74	89.18	89.44	89.82	90.02	88.61	90.40	90.87	90.99
7	88.70	88.83	88.68	88.77	89.26	89.45	89.74	89.82	88.41	88.50	90.78	90.90
8	88.67	88.76	88.69	88.76	89.32	89.48	89.79	89.87	86.87	87.72	90.71	90.80
9	88.25	88.68	88.65	88.87	89.16	89.32	89.81	89.90	87.72	88.80	90.74	90.82
10	88.59	88.84	88.87	88.99	89.20	89.32	89.84	89.92	88.80	89.31	90.79	90.92
11	88.80	88.89	88.85	88.92	89.26	89.60	89.83	89.94	89.82	89.57	90.92	91.02
12	88.56	88.82	88.26	88.80	89.60	89.80	89.95	90.09	89.59	89.78	90.88	91.00
13	.....	.....	88.38	88.59	89.78	89.87	89.67	90.18	89.78	89.99	90.89	90.94
14	.....	.....	88.57	89.13	89.63	89.79	89.92	90.14	89.99	90.11	90.92	90.97
15	88.85	89.02	89.10	89.22	89.27	89.62	90.12	90.18	90.04	90.14	90.96	91.04
16	88.69	88.89	88.95	89.10	89.41	89.53	90.13	90.19	90.00	90.11	91.01	91.10
17	88.60	88.69	88.94	89.00	89.52	89.67	90.17	90.27	90.04	90.19	90.98	91.07
18	88.62	88.78	88.83	88.97	89.62	89.69	90.26	90.39	90.19	90.30	91.04	91.11
19	88.57	88.82	88.78	88.84	89.65	89.79	90.39	90.51	90.30	90.40	91.10	92.20
20	88.39	88.66	88.78	88.88	89.79	89.88	90.39	90.50	90.23	90.45	91.09	92.17
21	88.38	88.73	88.78	88.89	89.74	89.85	90.30	90.41	90.15	90.28	91.09	92.19
22	88.36	88.72	88.83	89.05	89.62	89.74	90.30	90.39	90.06	90.19	91.09	92.21
23	88.35	88.73	89.05	89.29	89.60	89.80	90.34	90.42	90.12	90.19	91.17	92.26
24	88.39	88.79	88.48	89.33	89.80	89.92	90.29	90.40	90.19	90.34	91.16	92.22
25	88.20	88.88	89.15	89.27	89.88	89.97	90.14	90.29	90.33	90.41	91.11	92.20
26	87.80	88.43	89.09	89.24	89.71	89.88	89.86	90.14	90.37	90.47	91.14	92.21
27	88.00	88.46	89.02	89.09	89.55	89.75	90.02	90.19	90.46	90.54	91.20	92.29
28	87.58	88.40	89.02	89.22	89.75	90.08	90.12	90.17	90.47	90.53	91.20	92.28
29	87.97	88.15	89.22	89.32	90.02	90.12	90.16	90.25	90.44	90.53	91.18	92.24
30	88.08	88.14			89.68	90.02	90.20	90.28	90.45	90.54	91.18	92.27
31	88.14	88.44			89.58	89.67			90.52	90.62		

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	91.22	91.31	91.22	91.39	91.59	91.67	91.68	91.77	91.30	91.44	89.74	89.96
2	91.29	91.34	91.39	91.47	91.64	91.70	91.71	91.80	91.18	91.30	89.78	90.54
3	91.32	91.37	91.51	91.62	91.54	91.64	91.70	91.79	91.19	91.27	90.53	90.84
4	91.34	91.36	91.63	91.71	91.33	91.50	91.60	91.70	91.21	91.30	90.84	90.97
5	91.30	91.37	91.65	91.70	91.46	91.68	91.60	91.68	91.20	91.30	90.91	90.98
6	91.26	91.34	91.68	91.74	89.13	91.74	91.58	91.64	91.31	91.57	90.98	91.18
7	91.25	91.29	91.64	91.72	88.50	89.13	91.62	91.70	91.42	91.57	90.89	91.11
8	91.27	91.37	91.62	91.65	89.45	90.18	91.72	91.80	91.10	91.42	90.73	90.88
9	91.10	91.37	91.62	91.67	89.64	90.28	91.79	91.84	90.98	91.10	90.73	90.90
10	91.37	91.39	91.64	91.69	90.88	90.71	91.73	91.82	90.98	91.47	90.88	91.04
11	91.38	91.44	91.64	91.69	90.71	90.98	91.60	91.78	91.47	91.60	90.71	90.88
12	91.40	91.49	91.58	91.64	90.98	91.18	91.82	91.97	91.50	91.53	90.57	90.71
13	91.45	91.50	91.58	91.65	91.18	91.34	91.80	91.95	91.48	91.55	90.58	90.68
14	91.46	91.50	91.59	91.67	91.34	91.45	91.65	91.80	91.49	91.56	90.55	90.67
15	91.47	91.59	91.57	91.65	91.45	91.57	91.63	91.70	91.50	91.60	90.40	90.55
16	91.59	91.63	91.54	91.60	91.57	91.74	91.70	91.80	91.37	91.50	90.10	90.44
17	91.62	91.70	91.56	91.64	91.74	91.79	91.70	91.82	91.37	91.43	89.95	90.12
18	91.67	91.69	91.61	91.68	91.62	91.77	91.79	91.90	91.23	91.41	89.62	89.95
19	91.67	91.67	91.63	91.69	91.52	91.62	91.74	91.82	91.14	91.40	89.58	89.66
20	91.52	91.67	91.60	91.65	91.52	91.59	91.75	91.84	91.40	91.53	88.97	89.71
21	91.53	91.60	91.59	91.64	91.44	91.54	91.76	91.83	91.39	91.51	88.75	89.37
22	91.52	91.58	91.62	91.69	91.30	91.42	91.77	91.83	91.32	91.39	87.37	89.58
23	91.55	91.64	91.64	91.73	91.31	91.41	91.67	91.83	91.27	91.36	89.58	89.73

45--Continued.

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
24	91.52	91.60	91.55	91.65	91.41	91.57	91.54	91.66	91.34	91.47	87.07	89.72
25	91.43	91.56	91.50	91.58	91.57	91.71	91.50	91.59	91.47	91.56	85.92	87.07
26	91.45	91.52	91.50	91.55	91.68	91.77	91.44	91.50	91.32	91.51	85.71	87.74
27	91.49	91.54	91.55	91.64	91.59	91.75	91.35	91.47	91.30	91.42	87.74	88.52
28	91.50	91.55	91.63	91.69	91.56	91.72	91.34	91.41	91.30	91.35	88.52	88.72
29	91.50	91.57	91.60	91.67	91.70	91.76	91.39	91.45	90.51	91.32	88.70	89.00
30	91.24	91.53	91.54	91.62	91.77	91.83	91.45	91.50	89.96	90.51	89.00	90.03
31	91.00	91.24	91.55	91.61			91.42	91.49			90.03	90.44

46. 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 crossroad. Records available: 1940-48.

High and low daily water level, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	60.87	60.96	61.02	61.08	61.09	61.13	58.55	58.56	58.31	58.36	59.07	59.14
2	60.91	61.02	61.08	61.09	61.02	61.09	58.56	58.32	58.35	58.40	59.14	59.20
3	61.02	61.07	61.01	61.08	60.97	61.04	58.82	58.37	58.40	58.43	59.17	59.22
4	61.05	61.10	60.94	61.00	61.04	61.19	58.77	58.33	58.41	58.43	59.17	59.20
5	61.10	61.14	60.93	60.95	61.16	61.20	58.64	58.77	58.44	58.47	59.18	59.27
6	61.17	61.21	60.92	60.96	60.89	61.17	58.59	58.64	58.42	58.45	59.27	59.34
7	61.18	61.22	60.92	60.96	60.75	60.88	58.58	58.60	58.43	58.52	59.27	59.32
8	61.13	61.17	60.91	60.93	60.50	60.74	58.58	58.61	58.50	58.60	59.26	59.29
9	61.06	61.14	60.88	61.00	60.17	60.49	58.61	58.62	58.58	58.62	59.26	59.27
10	61.08	61.17	61.00	61.12	60.06	60.20	58.50	58.60	58.60	58.63	59.27	59.37
11	61.15	61.22	61.12	61.16	59.99	60.06	58.44	58.50	58.60	58.64	59.38	59.46
12	.....	.....	61.02	61.13	60.02	60.08	58.44	58.45	58.62	58.65	59.45	59.47
13	.....	.....	60.87	61.02	59.93	60.07	58.45	58.47	58.64	58.68	59.45	59.47
14	.....	.....	60.87	61.24	59.73	59.93	58.45	58.46	58.63	58.72	59.47	59.54
15	61.18	61.27	61.24	61.32	59.47	60.71	58.44	58.46	58.71	58.74	59.54	59.61
16	61.08	61.18	61.21	61.27	59.39	59.47	58.43	58.44	58.73	58.76	59.61	59.66
17	60.94	61.08	61.17	61.20	59.39	59.41	58.43	58.44	58.72	58.75	59.57	59.62
18	60.97	61.07	61.09	61.17	59.29	59.39	58.43	58.48	58.72	58.76	59.58	59.67
19	61.07	61.10	61.04	61.09	59.24	59.28	58.48	58.52	58.79	58.84	59.61	59.70
20	60.90	61.07	61.03	61.06	59.22	59.24	58.47	58.52	58.82	58.88	59.67	59.72
21	60.82	60.90	60.96	61.05	59.08	59.22	58.44	58.47	58.76	58.84	59.64	59.72
22	60.73	60.82	60.99	61.08	58.90	59.08	58.42	58.44	58.76	58.79	59.67	59.74
23	60.69	60.77	61.07	61.22	58.83	58.92	58.42	58.46	58.79	58.83	59.76	59.82
24	60.69	60.99	61.22	61.33	58.94	59.00	58.42	58.46	58.83	58.89	59.77	59.82
25	61.00	61.15	61.24	61.32	58.88	59.01	58.34	58.43	58.83	58.91	59.76	59.80
26	61.09	61.17	61.13	61.25	58.76	58.89	58.28	58.34	58.09	58.95	59.78	59.80
27	60.94	61.09	61.01	61.13	58.67	58.76	58.30	58.37	58.92	59.02	59.80	59.84
28	60.97	61.02	61.01	61.06	58.71	58.83	58.30	58.34	58.82	58.94	59.82	59.85
29	60.94	61.02	61.06	61.13	58.79	58.84	58.31	58.35	58.84	58.92	59.83	59.84
30	60.86	60.94			58.62	58.79	58.31	58.36	58.92	58.99	59.80	59.87
31	60.86	61.02			58.55	58.61			58.99	59.07		

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	59.82	59.89	58.55	58.60	57.79	57.83	56.66	56.67	.....	.....	.....	.....
2	59.88	59.94	58.44	58.55	57.77	57.85	56.65	56.67	.....	.....	.....	.....
3	59.91	59.97	58.42	58.45	57.66	57.79	56.65	56.67	.....	.....	.....	.....
4	59.95	59.98	58.31	58.42	57.40	57.66	56.57	56.55	.....	.....	.....	.....
5	59.96	60.00	58.23	58.32	57.44	57.52	56.54	56.57	57.11	57.16	.....	.....
6	59.92	59.97	58.22	58.24	57.47	57.53	56.54	56.55	57.16	57.42	.....	.....
7	59.90	59.92	58.20	58.22	57.42	57.47	56.54	56.58	.....	.....	.....	.....
8	59.88	59.98	58.09	58.20	57.39	57.43	56.58	56.64	.....	.....	.....	.....
9	59.77	59.88	58.03	58.09	57.37	57.40	56.64	56.69	.....	.....	.....	.....
10	59.77	59.80	57.98	58.02	57.37	57.39	56.60	56.68	.....	.....	.....	.....
11	59.62	59.77	57.98	57.98	57.36	57.37	56.54	56.63	57.52	57.62	.....	.....
12	59.56	59.62	57.88	57.94	57.35	57.36	56.64	56.77	57.57	57.59	.....	.....

46--Continued.

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
13	59.47	59.56	57.87	57.89	57.34	57.35	56.77	56.82	57.57	57.61	.....	.....
14	59.38	59.47	57.86	57.89	.....	.....	56.74	56.79	57.61	57.67	.....	.....
15	59.34	59.38	57.82	57.87	.....	.....	56.76	56.81	.....	.....	57.60	57.65
16	59.33	59.37	57.76	57.82	.....	.....	56.80	56.85	.....	.....	57.59	57.60
17	59.29	59.34	57.77	57.83	57.07	57.10	56.84	56.88	57.59	57.62	57.59	57.62
18	59.20	59.29	57.82	57.85	56.92	57.06	.....	.....	57.52	57.62	57.44	57.60
19	59.13	59.20	57.82	57.86	56.82	56.91	.....	.....	.....	.....	57.40	57.44
20	59.09	59.14	57.80	57.84	56.73	56.82	.....	.....	.....	.....	57.45	57.53
21	59.02	59.10	57.80	57.82	56.60	56.73	.....	.....	.....	.....	57.53	57.57
22	58.95	59.03	57.80	57.85	56.48	56.62	.....	.....	.....	.....	57.62	57.66
23	58.97	59.02	57.85	57.88	56.45	56.48	.....	.....	.....	.....	57.64	57.71
24	58.95	59.02	57.84	57.87	56.46	56.60	.....	.....	.....	.....	57.69	57.70
25	58.91	59.02	57.81	57.84	56.60	56.69	.....	.....	.....	.....	57.62	57.82
26	58.89	58.92	57.82	57.84	56.69	56.72	.....	.....	.....	.....	57.81	57.92
27	58.87	58.91	57.85	57.89	56.59	56.72	.....	.....	.....	.....	57.80	57.89
28	58.82	58.92	57.88	57.91	56.58	56.62	.....	.....	.....	.....	57.72	57.80
29	58.78	58.82	57.84	57.89	56.61	56.66	.....	.....	.....	.....	57.58	57.69
30	58.67	58.78	57.79	57.84	56.64	56.68	.....	.....	.....	.....	57.65	57.78
31	58.60	58.69	57.74	57.82	.....	.....	.....	.....	.....	.....	57.77	57.79

60. Geol. Survey, U. S. Dept. of Interior. In Pensacola, at foot of H Street. Records available: 1940-48.

High and low daily water level, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	8.34	8.41	9.10	9.34	9.61	9.69	8.68	8.86	9.37	9.41	10.47	10.55
2	8.35	8.52	9.09	9.10	9.51	9.62	8.68	8.75	9.37	9.40	10.55	10.59
3	8.52	8.72	9.10	9.21	9.39	9.51	8.75	8.84	9.36	9.37	10.57	10.72
4	8.72	8.79	9.22	9.27	9.40	9.43	8.72	8.79	9.35	9.37	10.72	10.81
5	8.79	8.80	9.25	9.29	9.42	9.45	8.58	8.72	9.35	9.36	10.80	10.83
6	8.82	8.90	9.25	9.29	9.22	9.43	8.57	8.58	9.35	9.35	10.80	10.83
7	8.90	8.95	9.02	9.30	8.87	9.22	8.57	8.58	9.35	9.37	10.78	10.83
8	8.95	8.97	8.72	9.02	8.65	8.87	8.58	8.62	9.37	9.39	10.82	10.92
9	8.97	8.99	8.68	8.73	8.62	8.65	8.62	8.68	9.33	9.37	10.92	10.98
10	8.99	9.03	8.73	9.21	8.60	8.64	8.68	8.73	9.20	9.33	10.96	10.99
11	.....	.....	9.21	9.31	8.63	8.65	8.62	8.73	9.20	9.25	10.97	11.00
12	.....	.....	9.32	9.40	8.65	8.71	8.53	8.62	9.25	9.38	10.80	10.98
13	.....	.....	9.37	9.42	8.71	8.75	8.54	8.58	9.38	9.50	10.27	10.80
14	.....	.....	9.31	9.37	8.53	8.75	8.58	8.70	9.50	9.64	10.23	11.25
15	9.60	9.67	9.05	9.31	8.17	9.53	8.70	8.82	9.64	9.74	10.25	11.35
16	9.64	9.67	8.98	9.05	8.02	8.17	8.82	8.89	9.74	9.77	10.36	10.47
17	9.24	9.64	9.02	9.22	8.02	8.07	8.89	8.92	9.77	9.79	10.45	10.47
18	8.98	9.24	9.22	9.40	8.10	8.15	8.91	8.95	9.79	9.83	10.41	10.47
19	8.98	9.01	9.42	9.56	8.13	8.19	8.90	8.91	9.83	9.85	10.37	10.42
20	9.01	9.14	9.56	9.70	8.17	8.22	8.90	8.95	9.86	9.90	9.54	10.37
21	9.14	9.21	9.70	9.85	8.22	8.28	8.95	9.00	9.90	9.95	9.20	9.54
22	9.22	9.38	9.49	9.73	8.24	8.28	9.00	9.04	9.95	9.96	9.23	9.46
23	9.39	9.62	9.40	9.49	8.28	8.42	9.04	9.06	9.74	9.95	9.46	9.75
24	9.62	9.78	9.49	9.75	8.42	8.56	9.06	9.08	9.52	9.74	9.75	9.98
25	9.47	9.73	9.75	10.00	8.59	8.62	8.98	9.09	9.57	9.83	9.98	10.23
26	9.38	9.54	10.09	10.20	8.62	8.63	8.88	8.98	9.83	10.00	10.23	10.38
27	9.54	9.62	10.20	10.22	8.63	8.66	8.88	8.90	10.01	10.24	10.22	10.40
28	9.60	9.72	10.04	10.22	8.66	8.69	8.90	9.00	10.24	10.32	10.11	10.22
29	9.64	9.72	9.69	10.04	8.69	8.72	9.05	9.25	10.25	10.31	10.12	10.25
30	9.44	9.64	.....	.....	8.72	8.86	9.25	9.37	10.33	10.35	10.25	10.40
31	9.34	9.44	.....	.....	8.85	8.88	.....	.....	10.32	10.47	.....	.....

60--Continued.

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	10.38	10.53	9.00	9.08	9.55	9.68	9.02	9.09	8.89	8.95	7.40	7.44
2	10.53	10.70	8.87	9.00	9.70	9.76	9.09	9.15	8.90	8.94	7.41	7.43
3	10.70	10.71	8.88	8.94	9.76	9.76	9.13	9.15	8.76	8.89	7.42	7.44
4	10.10	10.70	8.94	9.02	9.31	9.76	9.14	9.17	8.55	8.76	7.44	7.44
5	9.76	10.10	9.03	9.18	8.73	9.28	9.18	9.27	8.35	8.51	7.40	7.44
6	9.79	9.88	9.18	9.33	8.55	8.71	9.27	9.38	8.22	8.35	7.39	7.40
7	9.88	9.98	9.33	9.42	8.55	8.63	9.38	9.48	8.16	8.22	7.39	7.40
8	9.90	10.04	9.26	9.43	8.63	8.73	9.48	9.50	8.07	8.16	7.40	7.40
9	10.00	10.08	9.15	9.25	8.74	8.90	9.50	9.53	8.06	8.09	7.30	7.30
10	9.80	10.00	9.15	9.22	8.90	9.05	9.26	9.53	8.04	8.06	7.30	7.32
11	9.30	9.80	9.22	9.31	9.05	9.19	9.12	9.26	8.01	8.03	7.32	7.33
12	9.16	9.30	9.33	9.41	9.14	9.20	9.11	9.13	7.92	8.01	7.27	7.32
13	9.13	9.16	9.41	9.48	9.01	9.14	9.11	9.15	7.80	7.92	7.26	7.27
14	9.11	9.20	9.48	9.56	9.00	9.01	9.15	9.21	7.67	7.80	7.26	7.27
15	9.20	9.27	9.40	9.56	.....	.....	9.21	9.28	7.62	7.67	7.27	7.30
16	9.25	9.29	9.16	9.39	.....	.....	9.28	9.32	7.62	7.65	7.29	7.30
17	9.20	9.28	9.18	9.27	.....	.....	9.20	9.30	7.65	7.71	7.30	7.34
18	8.66	9.20	9.27	9.34	.....	.....	9.20	9.24	7.71	7.75	7.33	7.34
19	8.46	8.66	9.35	9.42	.....	.....	9.24	9.30	7.75	7.75	7.30	7.33
20	8.50	8.58	9.42	9.45	.....	.....	9.30	9.35	7.75	7.78	7.30	7.30
21	8.58	8.70	9.45	9.47	8.53	8.55	9.35	9.40	7.65	7.77	7.30	7.34
22	8.70	8.82	9.35	9.46	8.55	8.71	9.28	9.38	7.57	7.65	7.34	7.40
23	8.82	8.93	9.30	9.35	8.71	8.90	9.18	9.28	7.56	7.57	7.50	7.55
24	8.93	8.99	9.30	9.37	8.90	9.12	9.02	9.15	7.56	7.56	7.55	7.56
25	8.82	8.98	9.37	9.50	9.12	9.22	9.02	9.02	7.49	7.58	7.47	7.55
26	8.75	8.82	9.52	9.60	9.07	9.22	8.95	9.03	7.46	7.49	7.45	7.47
27	8.76	8.88	9.59	9.65	8.92	9.07	9.03	9.10	7.42	7.46	7.44	7.45
28	8.88	9.02	9.57	9.65	8.94	8.97	9.10	9.12	7.38	7.42	7.44	7.50
29	9.03	9.11	9.40	9.57	8.97	9.00	9.12	9.12	7.39	7.39	7.50	7.51
30	9.10	9.12	9.28	9.40	9.00	9.02	9.08	9.10	7.39	7.40	7.51	7.61
31	9.08	9.12	9.35	9.55	.....	.....	8.95	9.08	.....	.....	7.61	7.80

60-A. Geol. Survey, U. S. Dept. of Interior. In Pensacola, at foot of H Street. Records available: 1940-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	5.41	Apr. 14	4.51	July 14	4.34	Oct. 11	4.91
21	5.45	21	5.00	21	4.81	16	5.33
28	5.39	28	4.93	28	5.18	23	5.32
Feb. 4	5.37	May 5	5.23	Aug. 4	4.53	29	4.28
11	5.32	12	5.41	11	5.05	Nov. 4	5.18
18	5.47	19	5.75	18	4.92	10	5.15
25	5.45	26	5.74	25	5.27	17	5.40
Mar. 3	4.73	June 2	5.54	Sept. 1	5.21	24	4.56
10	3.34	9	5.51	8	4.56	Dec. 1	5.02
17	4.16	16	5.69	15	3.77	8	4.94
24	4.57	23	5.48	20	4.25	15	5.15
31	4.71	30	5.71	27	4.68	22	5.22
Apr. 7	4.23	July 7	5.36	Oct. 4	5.03	29	5.34

62. Geol. Survey, U. S. Dept. of Interior. In Peterson 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. Records available: 1940-48.

High and low daily water level, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	12.59	12.85	12.87	13.01	11.55	11.57	.....	.....	12.90	12.97
2	12.54	12.59	12.87	12.87	11.57	11.65	.....	.....	12.87	12.97
3	12.55	12.63	12.83	12.87	11.50	11.68	.....	.....	12.82	12.87
4	12.63	12.70	12.83	12.88	11.47	11.50	.....	.....	12.82	12.83

62--Continued.

High and low daily water level, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
5	12.70	12.73	12.88	12.92	11.38	11.47	.....	.....	12.74	12.82
6	12.73	12.82	12.88	12.94	11.38	11.40	12.10	12.12	12.69	12.74
7	12.82	12.86	12.55	12.98	11.37	11.39	12.12	12.16	12.61	12.69
8	12.68	12.80	12.19	12.55	11.38	11.46	12.15	12.16	12.50	12.61
9	12.67	12.68	.....	.....	11.46	11.52	12.10	12.15	12.48	12.52
10	12.67	12.77	.....	.....	11.50	11.55	12.02	12.10	12.50	12.51
11	12.77	12.81	11.95	11.99	11.40	11.50	12.04	12.08	12.46	12.50
12	12.83	12.90	11.95	11.96	.....	.....	12.08	12.18	12.32	12.46
13	12.90	12.92	11.96	11.97	.....	.....	12.18	12.28	12.06	12.32
14	12.81	12.91	11.79	11.96	11.38	11.49	12.28	12.38	11.98	12.06
15	12.63	12.81	11.52	11.79	11.49	11.61	.....	.....	11.97	11.98
16	12.58	12.64	11.45	11.52	11.61	11.65	.....	.....	11.98	12.00
17	12.64	12.76	11.45	11.47	11.63	11.65	.....	.....	11.97	12.00
18	12.76	12.89	11.44	11.45	11.56	11.63	.....	.....	11.92	11.97
19	12.88	13.00	11.43	11.45	11.52	11.56	.....	.....	11.91	11.93
20	13.00	13.12	11.33	11.43	11.53	11.63	12.65	12.67	11.80	11.93
21	13.12	13.20	11.15	11.33	.....	.....	12.67	12.71	11.70	11.80
22	12.67	12.72	13.20	13.22	11.13	11.15	11.73	11.80	12.69	12.73	11.77	12.08
23	12.72	12.92	.....	.....	11.13	11.15	11.80	11.84	12.50	12.69	12.08	12.32
24	12.92	13.04	.....	.....	11.15	11.18	11.84	11.85	12.34	12.50	12.32	12.57
25	11.25	11.28	11.75	11.85	12.34	12.45	12.57	12.69
26	13.49	13.58	11.26	11.28	11.72	11.75	12.45	12.55	12.69	12.78
27	13.58	13.59	11.21	11.26	11.73	11.77	12.55	12.69	12.78	12.85
28	13.36	13.59	11.20	11.21	11.77	11.85	12.65	12.71	12.82	12.85
29	12.99	13.00	13.01	13.36	.....	.....	11.84	11.97	12.63	12.77	12.82	12.88
30	12.85	12.99	.....	.....	.....	.....	.....	.....	12.67	12.77	12.88	13.00
31	12.64	12.90	.....	.....

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	12.97	13.15	11.72	11.85	12.62	12.69	.....	.....	12.08	12.10	.....	.....
2	13.15	13.30	11.62	11.72	12.70	12.71	.....	.....	11.94	12.13	10.87	10.91
3	13.27	13.31	11.63	11.72	12.65	12.73	.....	.....	11.56	11.94	10.90	10.94
4	12.96	13.27	.....	.....	12.25	12.65	.....	.....	11.35	11.56	10.94	10.98
5	12.77	12.96	11.85	12.03	11.92	12.25	11.87	12.03	11.19	11.30	.....	.....
6	12.72	12.77	12.03	12.16	11.63	11.92	12.03	12.25	11.15	11.19	.....	.....
7	12.74	12.81	12.16	12.19	11.59	11.63	12.25	12.43	11.10	11.15	.....	.....
8	12.79	12.89	12.11	12.18	.....	.....	.....	.....	11.05	11.10	10.90	10.98
9	12.85	12.89	12.05	12.11	11.63	11.77	12.27	12.36	11.05	11.07	10.98	11.05
10	12.71	12.85	12.05	12.07	11.77	12.00	12.05	12.27	11.00	11.07	11.05	11.19
11	12.44	12.71	12.07	12.15	12.00	12.14	11.87	12.05	10.99	11.01	11.05	11.20
12	12.03	12.44	12.15	12.22	12.10	12.14	11.83	11.83	11.00	11.01	.....	.....
13	12.05	12.08	12.22	12.27	11.91	12.10	11.83	11.88	11.00	11.00	.....	.....
14	12.03	12.05	12.27	12.32	.....	.....	11.88	11.96	10.95	11.02	.....	.....
15	12.04	12.06	12.20	12.32	.....	.....	11.96	12.04	10.95	10.97	.....	.....
16	12.03	12.06	11.96	12.20	11.77	11.79	12.04	12.09	10.97	11.06	10.83	10.90
17	11.95	12.03	11.96	12.03	11.76	11.78	12.03	12.09	11.06	11.15	10.90	11.03
18	11.70	11.95	12.03	12.12	11.71	11.76	12.03	12.04	11.15	11.20	11.03	11.12
19	11.44	11.70	12.13	12.27	.....	.....	12.04	12.09	11.18	11.20	11.08	11.10
20	11.39	11.44	12.27	12.36	.....	.....	12.09	12.13	11.11	11.18	11.05	11.10
21	11.40	11.41	12.35	12.38	11.47	11.50	12.13	12.16	10.92	11.11	11.10	11.18
22	11.42	11.51	12.29	12.35	11.47	11.53	12.16	12.17	10.89	10.91	11.18	11.23
23	11.51	11.61	12.24	12.29	11.53	11.60	12.07	12.17	.....	.....	11.21	11.25
24	11.61	11.65	12.24	12.29	.....	.....	11.98	12.09	.....	.....	11.18	11.25
25	11.61	11.65	12.29	12.43	.....	.....	11.94	11.98	.....	.....	10.95	11.18
26	11.52	11.61	12.43	12.54	.....	.....	11.94	12.04	.....	.....	10.88	10.95
27	11.55	11.65	12.54	12.59	.....	.....	12.01	12.14	10.40	10.57	10.87	10.96
28	11.65	11.80	12.58	12.60	11.65	11.65	11.91	12.01	.....	.....	10.96	11.06
29	11.80	11.90	12.53	12.58	11.66	11.69	12.00	12.11	.....	.....	11.06	11.10
30	11.90	11.93	12.48	12.53	11.69	11.72	12.11	12.19	.....	.....	11.07	11.22
31	11.85	11.93	12.52	12.62	.....	.....	12.10	12.18	.....	.....	11.22	11.34

62-A. 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. Records available: 1940-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	11.35	Apr. 14	9.97	July 14	11.23	Oct. 11	10.33
21	11.64	21	10.14	21	10.98	16	10.45
28	11.87	28	10.30	28	11.71	23	11.37
Feb. 4	11.94	May 5	10.46	Aug. 4	10.72	29	11.33
11	11.84	12	10.55	11	10.73	Nov. 4	11.41
18	11.95	19	10.74	18	10.84	10	11.26
25	11.90	26	11.02	25	10.89	17	11.35
Mar. 3	12.04	June 2	11.11	Sept. 1	11.30	24	11.22
10	9.63	9	11.65	8	10.96	Dec. 1	11.05
16	9.44	16	11.57	15	10.20	8	11.15
24	9.87	23	11.90	20	10.20	15	11.27
31	10.12	30	11.87	27	10.01	22	11.48
Apr. 7	9.98	July 7	11.43	Oct. 4	10.30	29	11.43

Flagler County

5. George Brunner. In rear of residence, 2.5 miles north of Flagler Beach, on west side of U. S. Highway 1A1A, in sec. 35, T. 11 S., R. 31 E. Records available: 1934, 1947-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 29	+11.6	Apr. 29	+10.9	Aug. 13	+9.4
Mar. 27	+12.3	June 3	+10.9	Sept. 30	+10.3

Gadsden County

6. State of Florida. 1 mile south of Quincy, at Florida Experimental Station, 2 feet west of pump house, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 18, T. 2 N., R. 3 W. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	136.85	Apr. 12	136.73	June 25	137.72	Nov. 30	136.96
Feb. 9	137.00	May 21	140.76	Oct. 19	136.9		

Gulf County

30. Apalachicola Northern Railroad. In Port St. Joe, at footings of old water tank north of depot, in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 1, T. 7 S., R. 11 W. Records available: 1946-48.

High and low daily water level, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	20.81	21.83	23.69	24.11	24.23	24.86	.....	25.29	23.37	23.99	26.19	27.00
2	21.13	22.13	23.52	24.17	24.30	25.00	.....	25.45	23.40	24.38	26.42	26.92
3	21.78	22.43	23.80	24.33	24.40	24.83	.....	25.65	24.03	25.06	26.33	26.92
4	21.90	22.30	23.70	24.19	24.18	24.88	.....	25.41	24.99	25.57	26.30	26.95
5	21.85	22.80	23.55	24.19	24.42	25.20	24.67	25.54	25.02	25.68	26.38	27.12
6	22.07	22.60	23.55	24.29	24.40	25.10	24.98	25.40	25.00	25.92	26.62	27.16
7	.....	.....	23.80	24.62	24.10	24.96	.....	.....	25.41	26.19	26.55	27.15
8	.....	.....	24.02	24.65	24.05	24.82	.....	.....	25.65	26.46	26.52	27.16
9	.....	.....	23.81	24.50	23.93	24.42	.....	.....	25.73	26.25	26.57	26.94
10	.....	.....	24.09	24.87	23.88	24.77	.....	.....	25.51	26.13	26.35	26.82
11	.....	.....	23.98	24.64	24.10	24.89	.....	.....	25.70	26.53	26.17	26.85
12	.....	.....	23.98	24.74	24.40	25.10	.....	.....	26.04	26.45	26.37	27.03

30--Continued.

High and low daily water level, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
13	.....	.....	24.02	24.75	24.47	25.25	.....	.....	25.89	26.39	26.47	27.12
14	.....	.....	23.99	25.05	24.13	24.98	.....	.....	25.78	26.21	26.68	27.27
15	.....	.....	24.07	24.96	25.79	24.49	.....	.....	25.70	26.25	27.22	27.35
16	.....	.....	23.70	24.40	23.57	24.08	.....	.....	25.80	26.37	26.75	27.18
17	22.27	23.05	23.85	24.64	23.70	24.51	15.66	16.24	25.86	26.50	26.52	27.31
18	22.42	22.97	24.20	24.97	23.87	24.62	15.43	15.88	25.91	26.55	26.67	27.43
19	22.20	22.68	24.33	24.85	24.09	24.77	14.95	15.70	25.93	26.75	26.83	27.50
20	22.11	22.89	24.12	24.82	24.11	24.92	14.90	16.53	26.08	27.03	26.95	27.51
21	22.42	22.75	23.91	24.50	24.30	25.08	16.38	18.02	26.34	26.98	26.97	27.60
22	22.43	23.30	.....	24.12	24.32	25.04	17.67	.....	26.17	26.62	27.05	27.69
23	23.00	23.87	.....	.....	24.26	25.06	.....	.....	25.92	26.50	27.42	27.77
24	23.33	24.18	.....	.....	.....	25.32	20.02	21.27	25.85	26.44	27.17	27.75
25	23.75	24.35	.....	24.53	.....	25.26	20.72	21.68	25.92	26.51	27.42	27.91
26	23.55	24.28	23.82	24.53	.....	25.25	21.18	22.15	26.01	26.77	27.45	28.07
27	23.79	24.33	23.95	24.79	24.43	25.06	21.52	22.69	26.27	26.89	28.07	28.29
28	23.33	24.02	24.02	24.88	.....	.....	22.15	23.08	26.35	26.86	28.28	28.37
29	23.08	23.71	24.27	24.84	.....	25.33	22.68	23.52	26.15	26.69	28.00	28.32
30	23.19	23.63	.....	.....	24.80	25.34	22.98	23.84	25.95	26.64	28.00	28.12
31	23.18	24.08	.....	.....	.....	25.28	.....	.....	25.97	26.70	.....	.....

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	28.12	28.33	26.80	26.95	26.05	26.76	24.95	25.48	24.58	25.45	24.39	25.12
2	28.21	28.37	.....	.....	25.95	26.05	24.75	25.42	24.64	25.41	24.42	25.03
3	28.23	28.41	.....	.....	25.55	26.01	24.77	25.42	24.51	25.41	24.46	25.17
4	27.00	28.41	.....	.....	25.47	25.90	24.42	25.13	24.53	25.47	24.55	25.42
5	26.27	27.00	.....	.....	25.28	25.90	24.38	25.18	24.65	25.56	24.59	25.28
6	26.31	26.65	.....	.....	24.50	25.40	24.15	25.04	24.58	25.65	24.45	25.24
7	26.65	27.07	.....	.....	22.25	24.50	24.31	25.19	24.81	25.45	24.50	25.10
8	27.03	27.28	.....	.....	21.43	22.25	24.32	25.22	24.67	25.50	24.47	25.12
9	26.60	27.32	.....	.....	20.43	21.43	24.30	25.26	24.55	25.25	24.42	25.09
10	26.23	27.10	.....	.....	20.56	22.00	24.48	25.36	24.26	24.86	24.68	25.37
11	26.95	27.27	25.95	.....	21.54	22.63	24.40	25.22	24.42	25.02	24.82	25.40
12	26.47	27.01	25.37	26.01	22.05	23.27	24.39	25.28	24.44	25.22	24.67	25.15
13	26.40	27.01	25.44	26.18	22.15	23.70	24.58	25.38	24.41	25.06	24.62	25.25
14	26.19	26.98	25.53	26.33	23.22	24.12	24.74	25.55	24.54	25.32	24.70	25.49
15	26.21	26.98	26.12	26.35	23.42	24.10	24.90	25.60	24.63	25.26	24.62	25.30
16	26.98	27.39	25.27	26.00	23.45	24.25	24.80	25.68	24.67	25.43	24.45	25.29
17	27.21	27.44	25.53	26.02	23.75	24.51	24.83	25.51	24.71	25.32	24.54	25.25
18	.....	.....	26.02	26.45	23.87	24.50	24.72	25.44	24.62	25.40	24.52	25.30
19	.....	.....	25.82	26.44	23.64	24.47	24.60	25.37	24.55	25.17	24.50	25.16
20	.....	.....	26.10	26.64	23.81	24.46	24.66	25.17	24.34	25.37	24.60	25.37
21	.....	.....	26.64	26.85	23.75	24.60	24.50	25.41	24.51	25.30	24.65	25.35
22	.....	.....	26.06	26.57	24.03	24.87	24.55	25.31	24.39	25.03	24.58	25.10
23	.....	.....	26.00	26.54	24.10	25.17	24.43	25.27	24.30	25.30	24.60	25.16
24	.....	.....	25.90	26.56	24.53	25.47	24.46	25.34	24.57	25.15	24.26	25.15
25	.....	.....	26.01	26.66	24.87	25.62	24.52	25.47	24.62	25.40	22.35	24.26
26	.....	.....	26.66	26.95	24.83	25.45	24.63	25.55	24.55	25.04	20.98	22.35
27	.....	.....	25.91	26.72	24.61	25.24	24.60	25.21	24.51	25.25	19.74	20.95
28	.....	.....	25.93	26.68	24.45	25.23	24.38	25.35	24.55	25.18	18.74	19.74
29	.....	.....	25.80	26.55	24.53	25.54	24.68	25.45	24.55	25.35	17.81	18.74
30	.....	.....	25.80	26.62	24.97	25.68	24.70	25.49	24.52	25.02	17.38	17.93
31	26.46	27.17	26.20	26.75	.....	.....	24.73	25.30	.....	.....	17.93	19.02

Hendry County

GL38. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 12,
T. 48 S., R. 32 E. Records available: 1943-47. No measurements made in
1948.

G299. Geol. Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22,
T. 44 S., R. 32 E. Records available: 1943-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 21	2.89	Mar. 31	4.90	June 8	5.05	Dec. 7	3.95
Feb. 26	4.01	May 4	5.41	July 14	3.56		

Hillsborough County

13. City of St. Petersburg. About 5 miles northeast of Citrus Park,
in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 21, T. 27 S., R. 18 E. Records available: 1930-34,
1944-48.

High and low daily water level, from recorder charts

Day	February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low
1	....	....	....	....	7.13	7.23	7.72	7.78	8.62	8.69
2	....	....	....	....	7.21	7.39	7.70	7.81	8.64	8.70
3	....	....	....	....	7.38	7.45	7.73	7.78	8.66	8.73
4	....	....	....	....	7.41	7.48	7.74	7.80	8.68	8.75
5	....	....	....	....	7.40	7.49	7.78	7.86	8.73	8.84
6	....	....	....	....	7.39	7.49	7.80	7.86	8.81	8.91
7	....	....	....	....	7.41	7.50	7.80	8.04	8.83	8.91
8	....	....	....	....	7.46	7.52	....	....	8.83	8.92
9	....	....	....	....	....	....	....	....	8.87	8.98
10	....	....	....	....	7.52	7.60	....	....	8.90	9.05
11	....	....	....	....	7.49	7.55	....	....	8.98	9.06
12	....	....	....	....	7.53	7.61	8.00	8.10	9.04	9.06
13	....	....	....	....	7.53	7.64	8.09	8.17	9.03	9.07
14	6.18	6.43	....	....	7.60	7.64	8.10	8.20	9.05	9.10
15	6.42	6.45	....	....	7.47	7.62	8.19	8.25	9.06	9.14
16	....	....	....	....	7.45	7.59	8.23	8.28	9.05	9.12
17	....	....	6.60	6.68	7.46	7.56	8.29	8.33	9.05	9.11
18	6.40	6.46	6.66	6.72	7.56	7.65	8.31	8.38	9.08	9.16
19	6.41	6.50	6.68	6.80	7.58	7.69	8.36	8.46	9.11	9.20
20	6.45	6.56	6.70	6.85	7.59	7.69	....	....	9.13	9.23
21	6.48	6.60	6.79	6.88	7.62	7.71	8.45	8.54	9.12	9.25
22	6.51	6.65	6.80	6.90	7.66	7.79	8.47	8.56	9.10	9.20
23	....	....	6.85	6.93	7.75	7.88	8.54	8.63	9.16	9.22
24	....	....	6.89	7.01	7.82	7.90	8.60	8.68	9.19	9.25
25	....	....	6.90	7.06	7.83	7.89	8.65	8.70	9.21	9.25
26	....	....	7.04	7.11	7.86	7.93	8.66	8.74	9.24	9.28
27	....	....	7.03	7.10	7.75	7.94	8.73	8.80	9.27	9.35
28	....	....	7.03	7.15	7.61	7.75	8.80	8.84	9.25	9.29
29	....	....	7.13	7.22	7.61	7.65	8.73	8.84	9.20	9.27
30	....	....	7.19	7.22	7.63	7.73	8.66	8.73	9.02	9.19
31	....	....	7.13	7.19	....	....	8.63	8.68	....	....

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	8.86	9.01	7.22	7.32	6.16	6.23	6.50	6.57	7.13	7.19	....	....
2	8.70	8.90	7.19	7.30	6.19	6.28	6.41	6.50	7.12	7.21	....	....
3	8.57	8.73	7.14	7.25	6.20	6.28	6.33	6.41	7.15	7.20	....	....
4	8.47	8.60	7.15	7.25	6.20	6.27	6.21	6.33	7.19	7.24	....	....
5	8.36	8.50	7.15	7.23	6.24	6.34	6.14	6.21	7.21	7.28	....	....
6	8.25	8.39	7.17	7.20	6.30	6.36	6.07	6.14	7.28	7.35	....	....
7	8.23	8.32	7.13	7.16	6.33	6.36	6.07	6.13	7.35	7.44	....	....
8	8.25	8.32	7.15	7.20	6.34	6.37	6.10	6.20	7.40	7.46	....	....
9	8.25	8.34	7.20	7.24	6.37	6.42	6.15	6.20	7.40	7.44	....	....
10	8.13	8.20	6.87	7.20	6.41	6.47	6.18	6.23	7.40	7.51	....	....
11	8.06	8.13	6.73	6.87	6.45	6.50	6.20	6.25	7.51	7.63	....	....
12	8.04	8.07	6.65	6.83	6.48	6.54	6.18	6.25	7.57	7.65	....	....
13	8.01	8.07	6.60	6.68	6.54	6.60	6.20	6.26	7.58	7.65	....	....
14	7.96	8.05	6.57	6.65	6.57	6.65	6.23	6.32	7.59	7.67	7.53	7.61
15	7.95	8.01	6.56	6.63	6.58	6.67	6.28	6.40	7.62	7.69	7.53	7.61

13--Continued.

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
16	7.93	8.02	6.52	6.66	6.60	6.73	6.36	6.47	7.60	7.69	7.55	7.65
17	7.90	7.97	....	....	6.67	6.73	6.40	6.47	7.60	7.67	7.58	7.65
18	7.89	7.98	....	....	6.66	6.72	6.40	6.52	7.60	7.69	7.56	7.65
19	7.25	7.95	....	....	6.67	6.72	6.48	6.59	7.65	7.71	7.54	7.60
20	7.82	7.93	....	....	6.59	6.74	6.58	6.67	7.69	7.73	7.60	7.72
21	7.81	7.89	....	....	6.64	6.74	6.67	6.72	....	....	7.72	7.77
22	7.83	7.90	....	....	6.50	6.64	6.70	6.75	....	....	7.76	7.79
23	7.88	7.94	....	....	6.53	6.66	6.71	6.76	....	....	7.78	7.83
24	7.91	7.96	....	....	6.65	6.76	6.75	6.81	....	....	7.78	7.85
25	7.77	7.94	5.96	5.98	6.76	6.86	6.80	6.86	....	....	7.77	7.87
26	7.75	7.78	5.96	6.00	6.82	6.90	6.84	6.90	....	....	7.87	7.99
27	7.71	7.75	5.98	6.03	6.65	6.82	6.87	6.94	....	....	7.88	7.97
28	7.70	7.75	6.00	6.07	6.60	6.68	6.90	6.99	....	....	7.85	7.94
29	7.64	7.75	6.01	6.09	6.60	6.70	6.96	7.08	....	....	7.81	7.93
30	7.38	7.65	6.03	6.10	6.57	6.68	7.05	7.14	....	....	7.79	7.87
31	7.28	7.41	6.07	6.20	....	....	7.10	7.16	....	....	7.83	7.91

Holmes County

4. Mrs. D. Hughes. At Ponce de Leon, south of railroad and east of depot on west side of a pump house. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 12	+4.85	May 21	+4.75	Sept. 17	+4.84
Feb. 9	+4.52	June 25	+3.90	Nov. 30	+5.72

7. Charles McAllister. In Wynnum, on south side of Louisville & Nashville Railroad tracks, in a field. Records available: 1947-48.
Jan. 12, 9.41; Feb. 10, 9.43.

High and low daily water level, from recorder charts

Day	February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low
1	....	....	9.35	9.35	8.48	8.63	9.00	9.06	9.46	9.49
2	....	....	9.30	9.35	8.49	8.67	9.06	9.12	9.47	9.51
3	....	....	9.20	9.30	8.67	8.70	9.11	9.14	9.44	9.50
4	....	....	9.22	9.26	8.66	8.69	9.11	9.15	9.44	9.49
5	....	....	9.24	9.28	8.62	8.68	9.14	9.19	9.47	9.55
6	....	....	8.96	9.24	8.58	8.64	9.09	9.20	9.53	9.61
7	....	....	8.88	8.96	8.59	8.62	9.15	9.23	9.48	9.60
8	....	....	8.87	8.92	8.60	8.67	9.21	9.27	9.51	9.58
9	....	....	8.73	8.88	8.61	8.67	9.24	9.28	9.53	9.58
10	....	....	8.73	8.77	8.59	8.65	9.22	9.29	9.55	9.60
11	9.39	9.48	8.72	8.81	8.58	8.60	9.23	9.26	9.61	9.67
12	9.29	9.39	8.81	8.87	8.60	8.65	9.23	9.26	9.64	9.65
13	9.18	9.29	8.85	8.88	8.65	8.68	9.26	9.29	9.64	9.65
14	9.18	9.43	8.80	8.85	8.66	8.68	9.30	9.34	9.64	9.70
15	9.43	9.46	8.75	8.80	8.66	8.67	9.34	9.37	9.70	9.75
16	9.37	9.43	8.74	8.76	8.64	8.47	9.37	9.40	9.70	9.81
17	9.35	9.37	8.74	8.79	8.47	8.70	9.37	9.41	9.73	9.80
18	9.33	9.36	8.78	8.79	8.70	8.81	9.41	9.45	9.79	9.85
19	9.30	9.34	8.75	8.80	8.80	8.84	9.46	9.51	9.82	9.88
20	9.31	9.37	8.78	8.81	8.78	8.85	9.47	9.55	9.81	9.86
21	9.28	9.37	8.75	8.81	8.76	8.83	9.44	9.52	9.82	9.88
22	9.27	9.36	8.69	8.78	8.79	8.85	9.47	9.53	9.85	9.90
23	9.33	9.44	8.66	8.81	8.84	8.91	9.51	9.58	9.89	9.94
24	9.40	9.45	8.79	8.83	8.87	8.93	9.56	9.63	9.91	9.94
25	9.34	9.45	8.79	8.84	8.85	8.89	9.60	9.64	9.92	9.94
26	9.29	9.36	8.76	8.82	8.85	8.88	9.62	9.66	9.95	9.98
27	9.24	9.29	8.71	8.76	8.88	8.94	9.66	9.71	9.98	10.02
28	9.24	9.29	8.78	8.80	8.91	8.91	9.61	9.71	10.02	10.05
29	9.29	9.35	8.89	8.92	8.91	8.95	9.51	9.61	10.05	10.07
30	....	....	8.81	8.90	8.95	9.00	9.49	9.50	10.07	10.09
31	....	....	8.63	8.82	....	....	9.47	9.50	....	....

7--Continued.

High and low daily water level, from recorder charts												
Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	10.09	10.15	9.05	9.13	9.40	9.48	9.65	9.72	9.57	9.60	9.07	9.12
2	10.09	10.14	9.05	9.10	9.41	9.49	9.65	9.69	9.50	9.60	9.01	9.10
3	10.08	10.15	9.00	9.08	9.38	9.45	9.64	9.69	9.52	9.57	9.00	9.06
4	10.08	10.13	8.95	9.03	9.25	9.39	9.51	9.65	9.56	9.58	9.00	9.06
5	10.07	10.15	8.95	9.00	9.29	9.35	9.46	9.53	9.57	9.59	8.97	9.01
6	10.05	10.12	8.98	9.04	9.31	9.35	9.45	9.49	9.55	9.61	8.97	9.02
7	10.07	10.12	9.00	9.04	9.29	9.31	9.45	9.47	9.59	9.64	8.88	9.01
8	10.12	10.20	9.02	9.03	9.29	9.30	9.47	9.50	9.51	9.59	8.71	8.87
9	9.78	10.19	9.03	9.05	9.20	9.35	9.49	9.53	9.43	9.51	8.71	8.81
10	9.58	9.78	9.03	9.05	9.35	9.37	9.48	9.52	9.42	9.56	8.81	8.90
11	9.46	9.58	9.00	9.03	9.37	9.38	9.35	9.48	9.55	9.62	8.81	8.88
12	9.41	9.45	8.95	8.99	9.37	9.43	9.40	9.44	9.52	9.57	8.79	8.83
13	9.30	9.40	8.95	9.00	9.41	9.46	9.36	9.43	9.50	9.55	8.82	8.86
14	9.21	9.30	9.00	9.04	9.41	9.45	9.32	9.38	9.52	9.57	8.80	8.85
15	9.20	9.22	9.02	9.07	9.40	9.47	9.34	9.39	9.54	9.59	8.77	8.85
16	9.15	9.20	8.99	9.04	9.47	9.54	9.37	9.42	9.50	9.58	8.76	8.80
17	9.12	9.18	9.02	9.08	9.52	9.56	9.33	9.42	9.48	9.63	8.79	8.81
18	9.10	9.15	9.08	9.13	9.49	9.55	9.35	9.40	9.46	9.63	8.70	8.80
19	9.05	9.13	9.09	9.13	9.47	9.50	9.37	9.40	9.33	9.47	8.68	8.72
20	9.05	9.10	9.10	9.14	9.49	9.52	9.41	9.45	9.38	9.44	8.73	8.76
21	9.05	9.10	9.13	9.16	9.46	9.50	9.44	9.45	9.26	9.40	8.76	8.78
22	9.05	9.10	9.16	9.20	9.43	9.47	9.45	9.47	9.09	9.26	8.78	8.80
23	9.07	9.11	9.21	9.25	9.45	9.55	9.45	9.47	9.00	9.09	8.78	8.83
24	9.10	9.15	9.24	9.25	9.55	9.66	9.45	9.48	9.00	9.06	8.78	8.83
25	9.10	9.10	9.25	9.25	9.66	9.75	9.48	9.51	9.06	9.10	8.76	8.90
26	9.10	9.12	9.26	9.35	9.75	9.80	9.47	9.51	9.06	9.08	8.90	8.95
27	9.11	9.15	9.36	9.40	9.65	9.79	9.49	9.55	8.97	9.01	8.84	8.91
28	9.14	9.15	9.41	9.45	9.64	9.70	9.50	9.55	8.90	8.99	8.78	8.86
29	9.13	9.17	9.40	9.45	9.70	9.75	9.52	9.58	8.99	9.12	8.67	8.79
30	9.10	9.14	9.40	9.45	9.70	9.76	9.55	9.60	9.07	9.12	8.71	8.76
31	9.10	9.13	9.40	9.48			9.55	9.60			8.70	8.76

Jackson County

11. Mose Speight. Formerly owned by Aycock Lumber Co. 3 miles west of Ottondale, on west side of U. S. Highway 90, in a field, in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 34, T. 5 N., R. 12 W. Records available: 1946-48. Jan. 12, 27.30; Feb. 9, 27.92; Apr. 12, 28.86.

14. W. C. McRae. Formerly owned by First National Bank of Dothan. 0.5 mile north of Campbellton, on east side of U. S. Highway 23, in a pump house, 75 feet north of a farm house, in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 2, T. 6 N., R. 12 W. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	21.15	Apr. 12	19.16	June 25	35.98	Oct. 19	23.74
Feb. 9	20.88	May 21	24.00	Sept. 17	22.76	Nov. 30	21.55

Lee County

246. Geol. Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 20, T. 44 S., R. 25 E. Records available: 1945-48.

High and low weekly water level, from recorder charts					
Week ending	High level	Low level	Week ending	High level	Low level
Jan. 7	5.28	6.27	Feb. 11	4.38	7.21
14	5.28	6.70	18	4.72	6.40
21	5.62	5.59	25	5.61	6.67
28	5.62	5.59	Apr. 29	5.65	7.67
Feb. 4	4.04	6.43	May 6	5.79	7.67

246--Continued.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
May 13	5.69	5.86	Sept. 2	0.40	1.30
20	5.59	5.69	9	.50	1.40
27	5.40	5.59	16	.56	1.36
June 3	5.35	5.40	23	.01	1.61
10	5.38	5.40	30	.22	.70
17	4.95	5.39	Oct. 7	.23	.79
24	4.42	4.95	14	.43	1.15
July 1	3.90	4.46	21	1.10	1.84
8	3.05	3.90	28	1.84	2.61
15	2.46	3.66	Nov. 4	2.61	3.05
22	2.66	3.13	11	3.05	....
29	1.83	2.99	Dec. 2	4.65	5.06
Aug. 5	.62	2.37	9	5.06	5.39
12	.97	1.86	16	5.39	5.53
19	1.22	2.09	23	5.53	....
26	.41	2.10			

418. U. S. Army. Sec. 9, T. 44 S., R. 26 E. Recorder removed on June 23. Records available: 1946-48.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Jan. 7	4.12	7.74	Apr. 1	5.14	6.58
14	3.76	7.24	8	5.32	6.53
21	3.40	7.64	15	4.75	6.54
28	3.00	5.41	22	4.89	5.89
Feb. 4	3.46	5.85	29	5.21	6.04
11	3.94	7.30	May 6	5.54	6.84
18	4.27	6.54	13	5.30	7.02
25	4.39	6.67	20	5.09	6.32
Mar. 4	4.58	7.12	27	4.92	8.54
11	4.78	8.72	June 3	4.99	6.27
18	5.08	6.93	10	5.31	6.53
25	5.04	6.54			

Leon County

5. City of Tallahassee. At Gadsden and Gaines Streets, in a pump house, in NE 1/4 sec. 1, T. 1 S., R. 1 W. Measurements supplied by city of Tallahassee. Records available: 1931-48.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	94.8	95.4	95.4	91.1	89.5	91.4	93.2	91.3	89.7	90.3	91.5	92.8
2	94.8	95.4	95.4	90.7	89.6	91.6	93.2	91.2	89.7	90.3	91.6	92.9
3	94.8	95.3	95.4	90.6	89.7	91.7	93.4	91.2	89.7	90.3	91.6	92.9
4	94.8	95.3	95.4	90.2	89.7	91.7	93.4	91.0	89.7	90.3	91.6	93.0
5	94.8	95.2	95.3	89.7	89.7	91.7	93.4	90.7	89.7	90.3	91.7	93.1
6	95.0	95.2	95.3	89.4	89.7	91.8	93.4	90.5	89.7	90.4	91.7	93.1
7	95.1	95.2	95.2	89.3	89.9	91.9	93.4	90.2	89.7	90.4	91.7	93.2
8	95.2	95.2	95.2	89.3	89.9	91.9	93.6	90.0	89.6	90.5	91.7	93.2
9	95.2	95.2	94.8	89.3	90.0	92.0	93.7	89.8	89.6	90.7	91.8	93.2
10	95.2	95.2	94.4	89.3	90.0	92.1	93.7	89.7	89.7	90.7	91.3	93.2
11	95.2	95.2	94.2	89.3	90.0	92.2	93.6	89.7	89.7	90.7	91.8	93.0
12	95.2	95.1	94.1	89.3	90.1	92.2	92.8	89.3	89.7	90.7	91.8	92.8
13	95.3	95.1	93.9	89.3	90.1	92.3	92.8	89.3	89.7	90.8	92.1	92.5
14	95.3	95.0	93.6	89.3	90.2	92.4	92.7	89.3	89.8	90.8	92.1	92.3
15	95.4	95.0	93.2	89.3	90.2	92.5	92.4	89.4	89.8	90.9	92.2	92.0
16	95.5	95.0	93.0	89.3	90.2	92.5	92.3	89.4	89.9	90.9	92.2	91.6
17	95.5	95.1	92.9	89.3	90.2	92.6	92.2	89.4	89.9	91.0	92.3	91.2
18	95.5	95.1	92.7	89.3	90.3	92.7	92.1	89.3	89.1	91.0	92.3	91.0
19	95.5	95.1	92.6	89.3	90.4	92.7	92.1	89.3	90.0	91.1	92.4	90.8

5--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
20	95.2	95.2	92.4	89.3	90.5	92.7	92.0	89.3	90.0	91.1	92.4	90.7
21	95.2	95.2	92.4	89.3	90.6	92.8	91.8	89.3	90.0	91.2	92.5	90.7
22	95.2	95.1	92.3	88.3	90.6	92.9	91.8	89.3	90.0	91.2	92.5	90.8
23	95.2	95.2	92.3	88.3	90.7	92.9	91.7	89.6	90.1	91.2	92.6	90.8
24	95.2	95.2	92.2	88.9	90.7	93.0	91.7	89.5	90.1	91.2	92.6	90.9
25	95.2	95.3	92.1	89.1	90.8	93.1	91.7	89.4	90.2	91.2	92.7	90.9
26	95.3	95.4	92.0	89.1	90.9	93.2	91.7	89.5	90.2	91.2	92.7	90.9
27	95.4	95.4	91.9	88.7	91.0	93.2	91.8	89.6	90.2	91.3	92.7	90.7
28	95.5	95.3	91.9	89.2	91.0	93.2	91.8	89.6	90.2	91.3	92.7	90.7
29	95.5	95.3	91.9	89.3	91.1	93.2	91.7	89.6	90.3	91.4	92.7	90.7
30	95.5		91.8	89.5	91.3	93.2	91.7	89.6	90.4	91.4	92.8	90.7
31	95.4		91.4		91.4		91.3	89.7		91.5		90.6

7. City of Tallahassee. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 36, T. 1 N., R. 1 W., in Lafayette Park, at Gadsden and Williams Streets, in a pump house. Records available: 1945-48.

High and low daily water level, from recorder charts

Day	January		February		March		April	
	High	Low	High	Low	High	Low	High	Low
1	154.79	154.89	155.18	155.26	155.36	155.42	151.07	152.67
2	154.84	156.28	155.13	155.23	.....	.....	150.97	152.42
3	155.00	155.07	155.06	155.17	.....	.....	150.48	150.87
4	154.92	155.08	155.00	155.10	.....	.....	150.14	150.48
5	155.06	155.15	154.98	155.17	155.33	155.45	149.88	150.14
6	155.06	155.16	154.96	155.05	155.18	155.18	149.68	151.14
7	155.10	155.19	154.95	155.05	155.00	155.20	149.55	149.68
8	155.11	155.22	154.92	155.02	154.88	155.03	149.48	149.58
9	155.10	155.19	154.88	155.32	154.68	156.05	149.40	150.86
10	155.14	155.27	155.09	155.20	154.50	154.70	149.28	149.45
11	155.25	155.36	155.10	155.24	154.30	154.50	149.24	149.34
12	155.22	156.62	155.01	156.43	154.06	154.30	149.23	149.33
13	155.12	155.25	154.90	155.02	153.76	155.30	149.25	149.33
14	155.23	155.37	154.90	155.22	153.43	153.75	149.15	149.28
15	155.33	155.43	155.18	155.28	153.20	153.43	149.05	149.16
16	155.28	155.40	155.10	155.21	153.06	153.22	149.00	149.09
17	155.17	155.28	155.00	156.42	152.92	153.06	149.01	149.07
18	.....	.....	155.00	155.09	152.74	152.94	149.05	149.15
19	.....	.....	155.00	155.08	152.18	152.74	149.02	149.13
20	155.28	156.68	155.03	155.12	152.50	152.62	148.93	149.07
21	155.15	155.28	155.02	155.13	152.32	152.48	148.89	149.00
22	155.22	155.32	155.01	155.18	152.18	152.32	148.88	148.98
23	155.16	156.68	155.17	155.30	152.10	152.22	148.95	149.05
24	155.13	155.52	155.30	155.40	152.11	152.23	148.91	149.02
25	155.47	155.58	155.28	156.67	152.07	152.17	148.85	148.93
26	155.46	155.35	155.20	155.30	151.95	152.09	148.84	148.92
27	155.39	155.50	155.20	155.30	151.80	151.96	148.89	148.98
28	155.30	155.43	155.21	155.31	151.87	151.97	148.87	148.94
29	155.16	156.58	155.30	155.40	151.90	152.00	148.93	149.00
30	155.05	155.18			151.78	153.26	148.98	149.08
31	155.07	155.22			151.52	153.04		

High and low daily water level, from recorder charts

Day	May		June		July		August	
	High	Low	High	Low	High	Low	High	Low
1	149.05	149.15	150.86	151.01	152.98	153.10	.....	.....
2	149.10	149.20	150.98	151.08	153.07	153.99	.....	.....
3	149.15	149.25	151.03	152.53	153.12	153.20	.....	.....
4	149.23	149.32	151.07	152.63	153.15	153.23	150.71	150.95
5	149.25	149.36	151.20	152.75	153.20	153.32	150.47	150.71
6	149.30	150.74	151.32	152.80	153.23	153.32	150.30	150.48
7	149.34	150.85	151.43	152.80	153.26	153.36	150.10	150.31
8	149.46	149.57	151.38	151.52	153.35	153.50	149.93	150.10
9	149.53	149.61	151.45	152.88	153.36	153.51	149.80	150.05
10	149.58	149.65	151.54	151.70	153.07	153.36	149.68	149.81
11	149.75	150.98	151.70	151.78	152.67	153.07	149.53	149.68

7--Continued.

High and low daily water level, from recorder charts

Day	May		June		July		August	
	High	Low	High	Low	High	Low	High	Low
12	149.57	149.66	151.76	153.22	152.49	152.67	149.47	149.71
13	149.65	149.72	151.82	153.20	152.34	152.49	149.40	149.49
14	149.70	151.19	.....	.....	152.22	152.34	149.36	149.64
15	149.76	151.26	152.01	153.60	152.10	152.23	149.30	149.40
16	149.80	149.86	152.09	153.55	152.00	152.14	149.25	149.33
17	149.84	151.47	152.11	152.25	151.90	152.02	.....	.....
18	149.89	151.43	152.20	153.65	151.85	151.94	149.18	149.30
19	149.96	151.48	152.30	152.42	151.85	151.94	149.18	149.28
20	150.01	150.09	152.33	152.42	151.74	151.87	149.17	149.44
21	150.03	151.52	152.38	152.53	151.47	151.78	149.14	149.25
22	150.06	150.15	152.49	152.63	.....	.....	149.18	149.22
23	149.90	151.68	.....	.....	.....	.....	149.20	149.45
24	150.00	151.72	.....	.....	.....	.....	149.19	149.27
25	150.35	150.48	.....	.....	.....	.....	149.17	149.25
26	150.43	151.97	.....	.....	.....	.....	149.20	149.50
27	150.02	151.95	.....	.....	151.58	151.65	149.28	149.40
28	150.63	150.72	.....	.....	151.56	151.63	149.30	149.58
29	150.61	150.68	.....	.....	151.53	151.62	149.28	149.35
30	150.67	150.78	152.92	153.02	151.42	151.54	149.27	149.35
31	150.77	150.88	.....	.....	151.30	151.41	149.30	149.59

High and low daily water level, from recorder charts

Day	September		October		November		December	
	High	Low	High	Low	High	Low	High	Low
1	149.37	149.50	150.15	150.26	151.19	151.31	152.66	152.69
2	149.44	149.55	150.12	151.58	151.22	151.30	152.65	154.04
3	149.45	149.55	150.17	150.27	151.23	152.65	152.67	152.78
4	149.46	149.73	150.14	150.25	151.26	151.36	152.69	152.84
5	149.49	149.56	.....	.....	151.30	151.38	152.74	152.81
6	149.46	149.55	150.17	151.58	151.37	151.51	152.76	154.18
7	.....	.....	150.23	150.31	151.50	151.58	152.82	152.88
8	149.41	149.50	150.28	150.38	151.55	152.91	152.81	154.13
9	149.45	149.51	150.35	150.42	151.50	151.59	152.68	154.06
10	149.46	149.72	150.36	150.42	151.52	151.77	152.53	152.66
11	149.45	149.53	150.32	150.42	151.76	153.17	152.28	152.53
12	149.48	149.56	150.35	151.78	151.75	151.85	152.15	152.28
13	149.48	149.57	150.37	150.45	151.77	151.88	152.11	153.52
14	149.49	149.77	150.38	151.72	151.87	151.95	152.05	152.31
15	149.50	149.63	150.40	150.54	151.93	153.34	151.93	152.05
16	.....	.....	150.48	150.59	151.96	152.03	151.91	153.31
17	.....	.....	150.47	150.56	151.93	152.06	151.88	152.17
18	.....	.....	150.57	151.93	152.03	153.45	151.75	151.91
19	.....	.....	150.55	150.65	152.02	152.15	151.68	153.05
20	.....	.....	150.62	150.72	152.16	152.26	.....	.....
21	149.63	149.72	150.70	150.79	152.20	152.38	151.86	151.95
22	149.60	149.86	150.74	152.13	152.18	153.57	151.87	153.24
23	149.63	149.77	150.76	150.83	152.19	152.26	151.86	153.14
24	149.78	149.93	150.78	150.89	152.22	152.38	151.85	151.92
25	149.92	150.04	150.74	150.93	152.36	153.77	151.81	153.20
26	150.00	150.05	150.88	152.30	152.33	152.45	151.93	152.29
27	149.93	150.04	150.92	151.03	152.37	152.48	152.01	152.98
28	149.94	150.11	150.99	152.40	152.38	152.47	151.97	153.40
29	150.08	150.18	151.03	151.16	152.46	153.92	151.95	152.25
30	150.11	150.24	151.11	151.22	152.61	152.70	151.91	152.11
31	.....	.....	151.16	151.25	.....	.....	152.05	153.42

36, Dawkins Pond Church. Near line of S $\frac{1}{2}$ SW $\frac{1}{4}$ 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. Records available: 1935-37, 1942-44, 1947-48.

36--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	5.50	May 3	1.42	Aug. 3	0.86	Nov. 1	1.38
Mar. 4	6.24	28	2.59	31	.47	29	1.38
31	2.92	June 30	3.27	Oct. 4	+.12		

66. Bureau of Prisons. U. S. Dept. of Justice. At Federal Correctional Institution, 4 miles east of Tallahassee. Measurements supplied by Mr. Alfred E. Ogram, warden. Records available: 1946-48.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	135.4	135.5	135.2	131.9	128.6	130.1	132.3	131.5	129.0	130.3	131.1	132.9
2	135.3	135.4	135.2	131.9	128.7	130.2	132.5	131.4	129.1	130.2	131.2	132.7
3	135.3	135.3	135.1	131.9	128.8	130.2	132.5	131.3	129.1	130.2	131.3	132.7
4	135.3	135.3	135.1	131.9	128.8	130.2	132.6	131.2	129.1	130.2	131.4	132.9
5	135.4	135.3	135.1	131.9	128.7	130.2	132.8	131.1	129.1	130.2	131.5	132.9
6	135.4	135.3	135.1	131.9	128.6	130.2	132.9	130.6	129.1	130.2	131.6	132.9
7	135.5	135.3	135.1	131.8	128.6	130.2	132.9	130.4	129.1	130.2	131.6	132.9
8	135.5	135.3	135.2	131.9	128.6	130.3	132.9	130.2	129.2	130.3	131.6	132.9
9	135.5	135.2	135.1	131.8	128.8	130.3	132.8	130.1	129.2	130.3	131.6	132.9
10	135.5	135.2	135.0	131.7	128.8	130.3	132.7	130.0	129.2	130.4	131.6	133.0
11	135.5	135.2	135.0	130.1	128.8	130.4	132.7	130.0	129.2	130.4	131.6	132.6
12	135.5	135.2	135.0	129.2	128.8	130.7	132.7	129.7	129.2	130.4	131.7	132.4
13	135.5	135.2	135.0	129.2	128.8	131.1	132.6	129.5	129.2	130.4	131.8	132.4
14	135.5	135.2	133.9	129.1	128.8	131.3	132.5	129.4	129.3	130.4	131.8	132.3
15	135.5	135.2	133.9	129.1	128.8	131.3	132.4	129.3	129.2	130.4	131.8	132.2
16	135.5	135.2	133.8	129.1	128.9	131.4	132.4	129.3	129.2	130.4	131.8	132.2
17	135.5	135.2	133.3	129.1	128.9	131.6	132.4	129.2	129.1	130.5	131.9	132.1
18	135.5	135.2	133.2	129.1	128.9	131.7	132.3	129.2	129.2	130.6	132.0	132.0
19	135.5	135.2	133.2	129.0	128.9	131.7	132.2	129.1	129.3	130.6	132.1	131.9
20	135.5	135.2	133.2	128.8	129.1	131.7	132.0	129.1	129.4	130.7	132.2	132.0
21	135.3	135.2	132.4	128.8	129.2	131.8	132.0	129.1	129.4	130.7	132.3	132.1
22	135.3	135.2	132.3	128.8	129.2	131.8	131.9	129.1	129.4	130.7	132.3	132.0
23	135.3	135.2	132.3	128.7	129.3	131.9	131.8	129.1	129.4	130.8	132.3	131.9
24	135.3	135.2	132.1	128.7	129.3	132.0	131.8	129.1	129.4	131.0	132.5	132.0
25	135.3	135.2	132.1	128.6	129.6	132.1	131.8	129.1	129.6	131.1	132.5	131.8
26	135.4	135.2	132.1	128.6	129.6	132.1	131.7	129.1	129.7	131.1	132.5	131.8
27	135.5	135.2	132.0	128.6	129.8	132.2	131.7	129.1	129.8	131.1	132.5	132.1
28	135.5	135.2	132.0	128.6	129.9	132.3	131.7	129.1	.....	131.1	132.6	132.0
29	135.5	135.2	132.0	128.6	130.1	132.3	131.7	129.1	130.2	131.0	132.7	131.9
30	135.5		131.9	128.6	130.1	132.3	131.6	129.0	130.2	131.0	132.8	132.0
31	135.5		131.9		130.1		131.6	129.0		131.0		132.0

Manatee County

92. Ray E. Anderson. In Waterbury, in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 9, T. 35 S., R. 20 E., on west side of State Highway 161. Records available: 1941-48.

High and low daily water level, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	36.76	36.86	36.91	37.01	37.18	37.21	37.40	37.52	37.55	37.63	37.75	37.83
2	36.76	36.84	36.94	37.00	37.19	37.24	37.47	37.67	37.59	37.65	37.78	37.88
3	36.84	36.91	36.91	36.96	37.19	37.30	37.65	37.78	37.60	37.67	37.84	37.93
4	36.88	36.93	36.87	36.94	37.27	37.42	37.72	37.82	37.59	37.66	37.86	37.93
5	36.90	37.02	36.85	36.92	37.40	38.04	37.74	37.83	37.57	37.66	37.90	38.00
6	36.96	37.04	36.83	36.91	37.43	38.03	37.72	37.82	37.53	37.63	37.97	38.08
7	36.98	37.08	36.82	36.91	37.39	37.51	37.74	37.82	37.49	37.61	37.97	38.07
8	36.98	37.08	36.80	36.88	37.39	37.47	37.78	37.87	.....	.....	37.97	38.04
9	36.97	37.07	36.77	36.86	37.29	37.45	37.80	37.87	.....	.....	37.97	38.05
10	37.00	37.12	36.86	37.03	37.32	37.43	37.76	37.87	.....	.....	38.00	38.08
11	37.09	37.17	36.99	37.04	37.40	37.49	37.72	37.80	.....	.....	38.08	38.16
12	37.13	37.17	36.92	37.03	37.47	37.54	37.76	37.83	.....	.....	38.14	38.17
13	36.90	37.12	36.83	36.93	37.52	37.62	37.79	37.85	.....	.....	38.15	38.19
14	37.00	37.29	36.85	37.01	37.57	37.64	37.76	37.82	.....	.....	38.18	38.27

92--Continued.

High and low daily water level, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
15	37.28	37.35	37.02	37.10	37.53	37.59	37.69	37.75	.....	.....	38.26	38.35
16	37.17	37.30	37.03	37.10	37.51	37.53	37.65	37.69	.....	.....	38.31	38.38
17	36.96	37.17	36.98	37.03	37.51	37.55	37.67	37.77	.....	.....	38.31	38.40
18	36.96	37.18	36.94	37.00	37.50	37.55	37.73	37.87	.....	.....	38.35	38.46
19	37.15	37.20	36.92	36.98	37.50	37.60	37.78	37.89	.....	.....	38.40	38.51
20	37.02	37.16	36.92	37.00	37.52	37.60	37.75	37.89	.....	.....	38.43	38.53
21	36.90	37.02	36.88	36.99	37.45	37.60	37.72	37.84	.....	.....	38.43	38.53
22	36.89	36.97	36.87	37.00	37.40	37.54	37.73	37.84	.....	.....	38.47	38.57
23	36.83	36.97	36.94	37.06	37.38	37.49	37.76	37.89	.....	.....	38.56	38.65
24	36.75	37.04	37.11	37.25	37.40	37.49	37.75	37.86	37.63	37.72	38.57	38.65
25	37.00	37.15	37.15	37.25	37.42	37.52	37.66	37.78	37.65	37.71	38.55	38.60
26	37.02	37.15	37.10	37.22	37.41	37.52	37.65	37.70	37.67	37.73	38.55	38.58
27	36.95	37.10	37.09	37.14	37.35	37.45	37.59	37.65	37.70	37.77	38.57	38.62
28	36.92	37.00	37.09	37.15	37.34	37.45	37.50	37.59	37.76	37.78	38.58	38.62
29	36.91	36.96	37.14	36.18	37.44	37.55	37.47	37.52	37.73	37.76	38.55	38.62
30	36.84	36.93			37.49	37.55	37.50	37.57	37.71	37.75	38.52	38.58
31	36.83	36.90			37.42	37.50			37.72	37.78		

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	38.48	38.60	37.72	37.83	37.34	37.46	37.24	37.35	37.45	37.56	38.09	38.17
2	38.51	38.60	37.73	37.84	37.33	37.45	37.22	37.32	37.45	37.56	38.07	38.15
3	38.47	38.57	37.74	37.86	37.30	37.40	37.22	37.33	37.48	37.56	38.05	38.14
4	38.38	38.54	37.73	37.85	37.29	37.39	37.09	37.30	37.52	37.61	38.02	38.10
5	38.40	38.52	37.72	37.80	37.35	37.42	36.99	37.13	37.57	37.65	37.98	38.06
6	38.33	38.45	37.71	37.79	37.36	37.42	37.04	37.10	37.65	37.69	37.99	38.01
7	38.32	38.40	37.65	37.76	37.29	37.39	37.10	37.13	37.69	37.77	37.95	38.02
8	38.35	38.45	37.67	37.70	37.30	37.33	37.10	37.14	37.74	37.81	37.90	37.97
9	38.40	38.45	37.68	37.69	37.33	37.37	37.13	37.19	37.70	37.79	37.86	37.94
10	38.33	38.40	37.65	37.70	37.36	37.40	37.10	37.18	37.75	37.89	37.93	38.09
11	38.26	38.33	37.57	37.65	37.32	37.40	37.09	37.15	37.89	37.99	37.98	38.07
12	38.26	38.30	37.57	37.63	37.30	37.39	37.12	37.19	37.94	38.01	37.96	38.03
13	38.25	38.30	37.55	37.62	37.31	37.40	37.10	37.19	37.94	38.01	37.98	38.06
14	38.20	38.28	37.55	37.62	37.32	37.41	37.08	37.16	37.98	38.09	37.96	38.06
15	38.20	38.26	37.48	37.60	37.33	37.42	37.10	37.19	38.05	38.13	37.95	38.06
16	38.17	38.27	37.45	37.54	37.40	37.50	37.14	37.22	38.04	38.13	.....	.....
17	38.15	38.23	37.43	37.53	37.45	37.55	37.06	37.22	38.00	38.10	37.90	37.96
18	38.10	38.20	37.43	37.57	37.40	37.52	37.01	37.12	38.02	38.09	37.85	37.90
19	38.08	38.19	37.46	37.55	37.36	37.46	37.03	37.13	38.03	38.10	37.75	37.80
20	38.07	38.18	37.41	37.53	37.31	37.42	37.00	37.19	38.07	38.10	37.76	37.83
21	37.99	38.10	37.42	37.49	37.08	37.35	37.16	37.22	38.09	38.15	37.88	37.97
22	37.90	38.05	37.45	37.51	36.92	37.05	37.17	37.23	38.07	38.14	37.97	38.00
23	37.93	38.02	37.46	37.55	37.05	37.16	37.15	37.20	38.02	38.09	37.94	38.00
24	37.93	38.02	37.38	37.51	37.15	37.24	37.15	37.20	38.00	38.09	37.93	38.01
25	37.91	37.96	37.42	37.44	37.24	37.32	37.18	37.25	38.09	38.20	37.92	38.00
26	37.91	37.96	.....	.....	37.29	37.36	37.19	37.27	38.08	38.20	38.00	38.19
27	37.93	37.96	37.45	37.50	37.16	37.32	37.20	37.30	38.07	38.16	38.08	38.19
28	37.92	37.95	37.43	37.54	37.20	37.28	37.23	37.35	38.03	38.16	38.05	38.16
29	37.89	37.95	37.40	37.50	37.23	37.34	37.29	37.42	37.97	38.17	38.00	38.15
30	37.82	37.90	37.33	37.43	37.24	37.35	37.37	37.47	38.08	38.17	37.98	38.10
31	37.77	37.86	37.35	37.44			37.42	37.52			38.05	38.14

Marion County

5. SE¹/₄ sec. 15, 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. Records available: 1933-48.

5--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	+12.37	Apr. 3	+12.66	July 18	+10.69	Oct. 9	+13.67
10	+12.21	10	+12.80	24	+10.89	16	+13.65
17	+12.16	17	+12.74	31	+11.25	23	+13.67
24	+12.13	24	+12.62	Aug. 7	+11.61	30	+13.47
31	+12.33	May 1	+12.42	14	+12.07	Nov. 6	+13.41
Feb. 7	+12.49	8	+12.18	21	+12.87	13	+13.15
14	+12.49	15	+12.07	28	+13.37	20	+13.09
21	+12.45	29	+11.71	Sept. 4	+13.56	27	+12.89
28	+12.43	June 5	+11.54	11	+13.65	Dec. 4	+12.79
Mar. 6	+12.33	12	+11.36	18	+13.57	11	+12.57
13	+12.31	19	+11.13	25	+13.51	18	+12.55
20	+12.65	July 3	+10.87	Oct. 2	+13.51	25	+12.43
27	+12.94	10	+10.75				

Nassau County

2. G. G. Gerbing. In Amelia City, 5.5 miles south of Fernandina, at owner's residence, in southeast corner of pump house. Records available: 1939-40, 1944-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 30	+38.0	May 5	+37.5	Oct. 1	+35.7
Mar. 24	+38.3	Aug. 13	+35.3	Nov. 10	+35.8

8. Charles Pelot. Near SE. corner of NE $\frac{1}{4}$ sec. 1, T. 1 N., R. 28 E., 1.1 miles south of Franklinton, 8.9 miles south of Fernandina. Records available: 1939-40, 1944-48. Nov. 10, +36.2.

12. J. W. Sheffield. 1,600 feet east of NW. corner sec. 4, T. 2 N., R. 28 E., about 400 feet east of U. S. Highway 13. Records available: 1939, 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	+21.5	May 1	+20.2	Aug. 13	+13.5	Nov. 9	+16.4
Mar. 24	+20.0	July 9	+17.5	Oct. 1	+14.8		

22. Jack Woodward. Northeast of Fernandina and about 1,000 feet east of road to Fort Clinch. Records available: 1939-41, 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	2.72	May 1	2.64	Aug. 13	7.43	Nov. 10	+0.21
Mar. 24	1.91	July 9	7.99	Oct. 1	4.88		

23. 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. Records available: 1939-42, 1944, 1946-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 30	+26.5	July 9	+25.3	Nov. 10	+28.0
Mar. 24	+27.4	Aug. 13	+25.8		

27. Judge Fishler and others. In Fernandina, 200 feet north of Atlantic Boulevard, on east side of North 17th Street. Records available: 1939-41, 1944-48. Jan. 30, +5.38; Mar. 24, +4.98; May 1, +5.46; Nov. 10, +5.69.

34. W. L. Hardee. At Hardee Dock, about 150 feet east of Amelia River, and 0.3 mile southwest of Fernandina. Records available: 1939-41, 1944-48.

34--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	+4.35	May 1	+4.90	Aug. 13	+1.47	Nov. 10	+15.0
Mar. 24	+4.71	July 9	+4.87	Oct. 1	+6.63		

44. Seaboard Air Line Railroad Company. At Yulee, at Seaboard Air Line Railroad station, south of pump house near elevated tank. Records available: 1934, 1938, 1940, 1944-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 30	+17.6	May 1	+18.8	Oct. 1	+17.7
Mar. 24	+17.7	Aug. 13	+17.3	Nov. 10	+18.2

50. C. J. McKendree. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 4, T. 2 N., R. 26 E., about 100 feet south of Seaboard Air Line Railroad, in rear of owner's residence, 0.6 mile east of Italia. Records available: 1940-41, 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	+34.7	May 1	+35.9	Aug. 13	+33.6	Nov. 10	+33.9
Mar. 24	+34.7	July 9	+33.9	Oct. 1	+33.8		

51. H. D. Blosser. In Callahan, near SW. corner NW $\frac{1}{4}$ sec. 29, T. 2 N., R. 25 E. Records available: 1940-42, 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	+41.5	May 1	+42.0	Aug. 13	+39.4	Nov. 10	+39.8
Mar. 24	+41.5	July 9	+39.7	Oct. 1	+39.7		

52. Charles Norris. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 15, T. 3 N., R. 24 E., on site of former Civil Conservation Corps camp, about 500 feet east of U. S. Highway 1, 1.4 miles southeast of Hilliard. Records available: 1938, 1940-42, 1944-48.

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	....	....	0.23	0.23	0.42	0.42	...	...	0.34	0.35	0.53	0.57
2	....	....	.23	.24	.42	.42	0.43	0.43	.32	.34	.57	.60
3	....	....	.25	.29	.42	.42	.42	.43	.29	.32	.60	.60
4	....	....	.29	.29	.42	.42	.40	.42	.27	.29	.61	.62
5	....	....	.29	.29	.42	.42	.38	.40	.27	.27	.62	.62
6	....	....	.29	.29	.42	.42	.37	.38	.27	.27	.62	.62
7	....	....	.29	.29	.42	.42	.36	.37	.25	.30	.62	.63
8	....	....	.29	.29	.41	.42	.37	.37	.30	.32	.63	.63
9	....	....	.29	.29	.41	.41	.37	.37	.32	.33	.62	.63
10	+ .05	+ .04	.29	.29	.41	.41	.37	.37	...	...	.62	.63
11	+ .04	+ .03	.29	.29	.41	.41	.37	.37	.34	.39	.63	.63
12	+ .03	+ .03	.29	.29	.41	.41	.37	.37	.39	.42	.63	.70
13	+ .03	+ .03	...	...	.41	.41	.37	.37	.42	.44	.70	.71
14	+ .03	+ .03	.29	.29	.42	.42	.38	.38	.44	.47	.71	.72
15	+ .03	+ .03	.29	.29	.42	.42	.38	.38	.47	.49	.72	.72
16	+ .03	+ .01	.30	.30	.42	.46	.39	.41	.49	.49	.72	.72
17	+ .01	+ .00	.30	.30	.46	.47	.41	.41	.49	.49	.72	.72
18	+ .00	.03	.30	.30	.47	.49	.41	.41	.49	.50	.71	.72
19	.03	.04	.30	.30	.49	.49	.41	.41	.50	.50	.66	.71
20	.04	.04	.31	.31	.47	.49	.40	.40	.50	.50	.65	.66
21	.04	.05	.31	.31	.45	.47	.40	.40	.50	.51	.65	.65
22	.05	.06	.31	.31	.38	.45	.42	.42	.51	.51	.65	.67
23	.06	.07	.31	.31	.32	.38	.42	.42	.51	.51	.67	.67
24	.07	.08	.31	.37	.32	.32	.42	.42	.48	.51	.67	.67
25	.08	.09	.37	.37	.32	.32	.42	.42	.48	.48	.67	.67
26	.09	.11	.37	.37	.32	.37	.40	.42	.49	.51	.67	.71
27	.11	.14	.38	.41	.37	.37	.39	.40	.52	.52	.71	.72
28	.14	.15	.41	.43	.37	.37	.37	.39	.52	.52	.72	.72
29	.17	.20	.43	.44	.37	.40	.37	.37	.50	.52	.71	.72
30	.21	.22	.43	.44	.40	.42	.36	.37	.50	.53	.68	.71
31	.23	.23	.42	.43			.35	.36			.65	.68

55. L. R. Church. About 500 feet southeast of NE, corner sec. 27, T. 2 N., R. 28 E.; between Seaboard Railway and State Highway 13, at residence of owner, in O'Neill. Records available: 1940, 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	+30.5	May 1	+29.8	Aug. 13	+28.0	Nov. 10	+30.1
Mar. 24	+30.4	July 9	+28.3	Oct. 1	+28.7		

64. Mrs. D. C. Henderson. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 8, T. 3 N., R. 24 E., on south side of a dirt street; about 500 feet west of a brick schoolhouse, in Hilliard. Records available: 1944-47. No measurements made in 1948.

Okaloosa County

3. Okaloosa County. In Fort Walton; in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 13, T. 2 S., R. 24 W., behind new schoolhouse, 20 feet east of pump house. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 15	+13.9	Apr. 13	+19.3	Sept. 16	+14.8	Dec. 1	+17.5
Feb. 11	+19.2	June 22	+11.6	Oct. 20	+13.1		

10. Forest Service, U. S. Dept. of Agriculture. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 6, T. 1 S., R. 22 W., 0.75 mile west of Niceville, on east side of State Highway 285, in a pump house. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	14.70	Apr. 15	12.94	June 22	20.14	Oct. 20	16.82
Feb. 12	12.95	May 19	17.50	Sept. 16	17.44	Dec. 1	14.30

18. U. S. Army. At Eglin main field under a water tank on corner of Avenue D and Third Street. Records available: 1946-47. Measurements discontinued.

19. U. S. Army. At Eglin main field; in building 110 at fire station near hanger. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	17.5	Apr. 14	18.7	Oct. 20	23.9		
Feb. 11	19.5	Sept. 16	26.5	Dec. 1	19.5		

23. U. S. Army. At Eglin Auxiliary Field 2, 8 miles north of Valparaiso, in a pump house. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	92.8	Apr. 14	92.3	June 22	96.5	Oct. 20	98.6
Feb. 11	93.1	May 19	93.3	Sept. 16	96.7		

24. U. S. Army. At Eglin Auxiliary Field 3, in building 3102, in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T. 2 N., R. 23 W. Used drilled public-supply well, diameter 10 inches, cased to 610 feet; depth 795 feet. Measuring point, top of 1/4-inch tee, 0.75 foot above land-surface datum. Records available: 1948. Sept. 16, 140.2; Oct. 20, 178.7.

25. U. S. Army. At Eglin Auxiliary Field 3, in building 3204, in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 27, T. 2 N., R. 23 W. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	107.6	Apr. 14	106.8	Sept. 16	108.2	Dec. 1	108.8
Feb. 11	107.6	June 22	107.7	Oct. 20	108.4		

26. U. S. Army. At Eglin Auxiliary Field 4, in building 4102, NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 18, T. 1 S., R. 23 W. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	30.0	Apr. 14	24.1	June 22	32.2	Oct. 20	26.4
Feb. 11	19.7	May 19	19.3	Sept. 16	26.5	Dec. 1	27.4

27. U. S. Army. At Eglin Auxiliary Field 4, in building 4204, in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 7, T. 1 S., R. 23 W. Used drilled public-supply well, diameter 10 inches, cased to 422 feet, depth 591 feet. Measuring point, top of 1/4-inch tee, 1.30 feet above land-surface datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	25.0	May 19	31.2	Sept. 16	26.7	Dec. 1	28.0
Apr. 14	24.0	June 22	37.0	Oct. 20	30.4		

28. U. S. Army. At Eglin Auxiliary Field 5, in building 5102, in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 1 N., R. 24 W. Used drilled public-supply well, diameter 10 inches, cased to 558 feet, depth 680 feet. Measuring point, top of 1/4-inch tee, 0.75 foot above land-surface datum, and 212.75 feet above mean sea level. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	100.2	Apr. 14	105.2	Sept. 16	98.2	Dec. 1	98.2
Feb. 11	99.2	May 19	99.2	Oct. 20	99.2		

29. U. S. Army. At Eglin Auxiliary Field 5, in building 5204, in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 1 N., R. 24 W. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	101.0	Apr. 14	101.6	June 22	105.0	Dec. 1	102.7
Feb. 11	101.7	May 19	102.3	Sept. 16	105.0		

31. U. S. Army. At Eglin Auxiliary Field 6, in building 6204, in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 33, T. 2 N., R. 25 W. Used drilled public-supply well, diameter 10 inches, cased to 527 feet, depth 690 feet. Measuring point, top of 1/4-inch tee, 1.35 feet above land-surface datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	47.7	Apr. 14	46.8	June 22	47.2	Oct. 20	47.9
Feb. 11	48.0	May 19	46.8	Sept. 16	47.8	Dec. 1	48.2

32. U. S. Army. At Eglin Auxiliary Field 9, in building 9052, 21 miles south of Milton, in E $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 2 S., R. 25 W. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 15	+32.2	Apr. 13	+31.7	June 22	+31.7	Oct. 20	+31.3
Feb. 11	+32.9	May 19	+32.7	Sept. 16	+31.6	Dec. 1	+31.9

34. U. S. Army. At Eglin main field at Postle Point, near recreation center of Weekly Bayou, in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 19, T. 1 S., R. 22 W. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 11	+29.2	June 22	+20.7	Oct. 20	+26.4		
Apr. 14	+30.1	Sept. 16	+24.6	Dec. 1	+28.4		

Orange County

47. Orange County. Near SE. corner NE $\frac{1}{4}$ NE $\frac{1}{4}$ 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. Records available: 1930-32, 1943-48.

High and low daily water level, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	+0.06	+0.03	+2.20	+2.10	+0.29	+0.25	0.19	0.26	1.50	1.60	2.90	2.95
2	+0.05	.03	+2.10	+1.93	+.25	+.21	.26	.40	1.60	1.62	2.93	3.20
3	.03	.10	+1.93	+1.81	+.21	+.15	.40	.50	1.60	1.69	3.20	3.31
4	.07	.12	+1.81	+1.69	+2.70	+.13	.47	.53	1.65	1.72	3.30	3.38
5	.12	.20	+1.69	+1.55	.....	.....	.50	.56	1.70	1.79	3.39	3.41
6	.20	.25	+1.55	+1.41	.....	.....	.53	.63	1.74	1.81	3.40	3.41
7	.23	.30	+1.41	+1.30	.....	.....	.60	.70	1.80	1.90	3.40	3.45
8	.28	.34	+1.30	+1.22	.....	.....	.67	.79	1.90	1.98	3.45	3.53
9	.30	.35	+1.22	+1.18	.....	.....	.71	.81	1.93	1.99	3.53	3.62
10	.34	.42	+1.18	+1.10	.....	.....	.77	.86	1.95	1.99	3.61	3.69
11	.42	.47	+1.10	+1.04	.....	.....	.80	.82	1.97	2.05	3.60	3.65
12	.44	.47	+1.04	+1.01	.....	.....	.82	.96	2.06	2.10	3.60	3.61
13	.16	.45	+1.01	+.99	.....	.....	.91	1.00	2.10	2.18	3.58	3.78
14	.10	.23	+1.00	+.80	.....	.....	.95	1.01	2.19	2.26	3.61	3.74
15	.23	.31	+.80	+.70	.....	.....	.91	1.02	2.22	2.26	3.63	3.73
16	.31	.34	+1.50	+.68	.....	.....	.91	.95	2.26	2.36	3.66	3.77
17	+.39	.33	+2.21	+1.50	.....	.....	.92	1.01	2.32	2.48	3.70	3.79
18	+1.11	+.59	+2.09	+1.69	.....	.....	1.01	1.10	2.38	2.58	3.71	3.80
19	+.98	+.64	+1.69	+1.40	.....	.....	1.08	1.16	2.45	2.61	3.73	3.81
20	+1.25	+.54	+1.40	+1.21	.....	.....	1.11	1.18	2.48	2.70	3.72	3.80
21	+1.90	+1.25	+1.21	+1.09	.....	.....	1.13	1.20	2.51	2.70	3.80	3.84
22	+1.83	+1.41	+1.09	+.91	.....	.....	1.20	1.27	2.55	2.60	3.81	3.92
23	+1.41	+1.15	+.91	+.71	.....	.....	1.27	1.34	2.59	2.79	3.89	4.00
24	+3.73	+1.15	+.71	+.63	.....	.....	1.31	1.37	2.66	2.82	3.91	3.93
25	+4.00	+3.87	+.63	+.59	.....	.....	1.35	1.38	2.72	2.90	3.92	3.94
26	+4.00	+3.95	+.59	+.51	.....	.....	1.36	1.43	2.80	2.99	3.95	3.95
27	+3.96	+3.65	+.51	+.44	+.08	.00	1.36	1.45	2.85	3.03	3.92	3.96
28	+3.65	+2.80	+.44	+.35	+.04	.05	1.30	1.36	2.78	2.85	3.95	3.96
29	+2.80	+2.40	+.35	+.29	.05	.13	1.32	1.40	2.78	2.80	3.96	3.97
30	+2.40	+2.50			.13	.17	1.40	1.50	2.80	2.85	3.97	3.99
31	+2.30	+2.20			.13	.19			2.83	2.90		

47--Continued.

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	3.98	4.00	2.82	3.00	0.00	0.17	+6.00	+5.90	+0.80	+0.70	0.85	0.90
2	3.97	4.00	2.99	3.10	.17	.30	+5.90	+5.80	+7.70	+6.63	.88	.88
3	3.95	3.97	3.08	3.11	.30	.44	+5.82	+5.77	+6.63	+5.55	.87	.90
4	3.94	3.98	3.01	3.10	.44	.60	+6.01	+5.77	+5.55	+4.47	.90	.91
5	3.94	3.95	3.01	3.09	.23	.70	+6.20	+6.00	+4.47	+3.36	.91	.94
6	....	....	3.06	3.10	.19	.23	+6.80	+6.18	+3.36	+2.25	.95	1.00
7	3.92	3.98	2.89	3.10	.22	.43	+6.80	+6.10	+2.25	+1.14	.99	1.01
8	4.00	4.07	2.87	2.95	.20	.46	+6.10	+5.93	+1.14	+1.10	1.00	1.03
9	4.06	4.10	2.96	3.00	.18	.32	+5.93	+5.82	+1.10	+1.06	.98	1.05
10	3.91	4.05	1.47	3.00	....	....	+5.32	+5.72	+1.06	.06	....	....
11	3.90	3.91	.39	1.47	.54	.68	+5.72	+5.58	.06	.19	1.05	1.10
12	3.91	3.91	....	....	.52	.61	+5.58	+5.45	.19	.23	1.09	1.12
13	3.91	3.91	+1.20	+1.05	.60	.71	+5.45	+5.27	.20	.29	1.12	1.18
14	3.90	3.92	+1.04	+1.60	.71	.86	+5.27	+5.04	.28	.31	1.15	1.20
15	3.89	3.92	.86	.06	.86	.97	+5.04	+4.66	.32	.39	1.16	1.20
16	3.90	3.92	.06	.69	.97	1.09	+4.66	+3.80	.38	.40	1.19	1.23
17	3.94	3.96	.69	.90	.90	1.00	+3.80	+3.10	.38	.41	1.20	1.25
18	3.81	3.98	+2.68	.90	.90	.97	+3.10	+2.70	.40	.45	1.20	1.24
19	3.75	3.81	+2.73	+2.68	.96	1.04	+2.70	+2.50	.43	.45	1.19	1.22
20	3.73	3.75	+2.71	+2.20	1.03	1.12	+2.50	+2.29	.46	.48	1.22	1.31
21	3.72	3.73	+2.11	+1.98	1.01	1.12	+2.29	+2.16	.48	.50	1.31	1.38
22	....	....	+1.57	+1.00	+2.75	1.02	+2.16	+2.08	.49	.50	1.38	1.39
23	3.59	3.79	+1.72	+1.60	+4.45	+2.75	+1.98	+1.90	.48	.50	1.40	1.42
24	2.88	3.60	+1.64	+1.26	+4.67	+4.45	+1.90	+1.80	.48	.55	1.40	1.45
25	2.88	3.25	+1.26	+1.06	+4.67	+4.60	+1.70	+1.65	.55	.63	1.40	1.50
26	1.22	3.30	+1.07	+1.01	+4.60	+4.50	+1.65	+1.55	.60	.65	1.50	1.60
27	1.21	2.33	+1.01	+1.81	+5.00	+4.62	....	....	.63	.70	1.55	1.60
28	2.33	2.88	+1.81	+1.58	....	....	+1.40	+1.27	.68	.70	1.55	1.59
29	2.88	2.99	+1.58	+1.35	+6.07	+5.99	+1.27	+1.11	.70	.81	1.55	1.61
30	2.70	3.00	+1.35	+1.16	+6.07	+6.00	+1.19	+1.96	.80	.85	1.52	1.58
31	2.69	2.83	+0.16	.00	....	....	+1.96	+1.80	....	....	1.60	1.65

47B. Geol. Survey, U. S. Dept. of Interior. Near SE. corner NE $\frac{1}{4}$ NE $\frac{1}{4}$ 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, 10 feet south of well 47. Used drilled test well, diameter 6 inches, depth 16.9 feet, cased to 16.9 feet. Measuring point, top of 6-inch casing, 9.8 feet above land-surface datum. Automatic water-stage recorder installed Sept. 11, 1948.

High and low daily water level, from recorder charts

Day	September		October		November		December	
	High	Low	High	Low	High	Low	High	Low
1	....	....	+3.33	+3.26	+4.07	+4.03	+2.85	+2.82
2	....	....	+3.45	+3.33	+4.03	+4.00	+2.82	+2.81
3	....	....	+3.52	+3.45	+4.00	+3.95	+2.81	+2.78
4	....	....	+3.75	+3.52	+3.95	+3.92	+2.78	+2.74
5	....	....	+3.83	+3.75	+3.92	+3.88	+2.74	+2.70
6	....	....	+3.90	+3.83	+3.88	+3.84	+2.70	+2.65
7	....	....	+3.95	+3.90	+3.84	+3.78	+2.65	+2.63
8	....	....	+4.00	+3.95	+3.78	+3.74	+2.63	+2.59
9	....	....	+4.08	+4.00	+3.74	+3.70	+2.65	+2.55
10	....	....	+4.12	+4.08	+3.70	+3.65	+2.65	+2.58
11	....	....	+4.16	+4.12	+3.65	+3.49	+2.58	+2.50
12	+1.75	+1.75	+4.22	+4.16	+3.55	+3.54	+2.50	+2.48
13	+1.75	+1.71	+4.25	+4.22	+3.54	+3.52	+2.48	+2.43
14	+1.71	+1.68	+4.28	+4.25	+3.52	+3.47	+2.43	+2.38
15	+1.68	+1.64	+4.30	+4.28	+3.47	+3.42	+2.38	+2.35
16	+1.64	+1.63	+4.31	+4.30	+3.42	+3.37	+2.35	+2.31
17	+1.64	+1.63	+4.35	+4.31	+3.37	+3.34	+2.31	+2.27
18	+1.63	+1.58	+4.36	+4.35	+3.34	+3.30	+2.27	+2.22
19	+1.58	+1.54	+4.36	+4.36	+3.30	+3.28	+2.22	+2.18
20	+1.54	+1.50	+4.36	+4.36	+3.28	+3.26	+2.18	+2.14
21	+1.55	+1.50	+4.36	+4.36	+3.26	+3.25	+2.14	+2.08
22	+2.28	+1.55	+4.36	+4.36	+3.25	+3.25	+2.08	+2.02

47B--Continued.

High and low daily water level, from recorder charts

Day	September		October		November		December	
	High	Low	High	Low	High	Low	High	Low
23	+2.43	+2.28	+4.35	+4.35	+3.24	+3.15	+2.02	+1.96
24	+2.52	+2.42	+4.34	+4.31	+3.15	+3.12	+1.95	+1.92
25	+2.60	+2.52	+4.31	+4.27	+3.10	+3.06	+1.92	+1.86
26	+2.75	+2.60	+4.27	+4.25	+3.06	+3.02	+1.86	+1.79
27	+3.02	+2.75	+4.25	+4.21	+3.02	+2.99	+1.79	+1.75
28	+3.12	+3.02	+4.21	+4.18	+2.99	+2.95	+1.75	+1.71
29	+3.19	+3.12	+4.18	+4.15	+2.95	+2.91	+1.71	+1.67
30	+3.26	+3.19	+4.15	+4.12	+2.91	+2.85	+1.67	+1.62
31			+4.12	+4.07			+1.62	+1.55

47-C. Geol. Survey, U. S. Dept. of Interior. About 50 feet north of State Highway 50 and 10 feet west of State Highway 413, in the edge of an orange grove, 1 mile northwest of Orlo Vista, in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 26, T. 22 S., R. 28 E. Used drilled test well, diameter 6 inches, depth 46.4 feet, cased to 46.4 feet. Measuring point, top of 6-inch casing, 3.8 feet above land-surface datum. Automatic water-stage recorder installed Sept. 10, 1948. Nov. 11, 29.58.

High and low daily water level, from recorder charts

Day	September		October		Day	September		October	
	High	Low	High	Low		High	Low	High	Low
1	.....	.....	31.41	31.45	17	31.87	31.90	30.28	30.37
2	.....	.....	31.35	31.41	18	31.84	31.87	30.22	30.28
3	.....	.....	31.30	31.35	19	31.81	31.84	30.23	30.30
4	.....	.....	31.24	31.30	20	31.78	31.81	30.39	30.35
5	.....	.....	31.18	31.24	21	31.74	31.78	30.35	30.39
6	.....	.....	31.13	31.18	22	31.70	31.74	30.39	30.44
7	.....	.....	31.08	31.13	23	31.67	31.70	30.44	30.49
8	.....	.....	31.02	31.08	24	31.65	31.67	30.49	30.54
9	.....	.....	30.95	31.02	25	31.63	31.65	30.54	30.58
10	.....	.....	30.88	30.95	26	31.59	31.63	30.58	30.61
11	32.01	32.02	30.80	30.88	27	31.55	31.59	.....	.....
12	32.02	32.02	30.72	30.88	28	31.50	31.55	.....	.....
13	31.99	32.02	30.63	30.72	29	31.47	31.50	.....	.....
14	31.96	31.99	30.53	30.63	30	31.45	31.47	.....	.....
15	31.92	31.96	30.45	30.53	31			.....	.....
16	31.90	31.92	30.37	30.45					

Palm Beach County

88. Geol. Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 28, T. 44 S., R. 43 E. Records available: 1944-48.

High and low weekly water level, from recorder charts

Week ending	High level		Low level		Week ending	High level		Low level	
Jan. 7	3.07		3.37		May 13	6.14		6.40	
14	2.63		3.59		20	5.87		6.56	
21	2.93		3.37		27	5.94		6.32	
28	3.01		3.44		June 3	6.16		6.58	
Feb. 4	3.01		3.43		10	6.12		6.59	
11	3.43		3.76		17	5.84		6.31	
18	3.76		4.06		24	5.97		6.29	
25	4.06		4.37		July 1	6.29		6.61	
Mar. 4	4.37		4.73		8	5.74		6.77	
11	4.70		4.84		15	5.95		6.34	
18	4.84		5.09		22	6.34		6.67	
25	5.09		5.36		29	6.67		6.87	
Apr. 1	5.36		5.57		Aug. 5	6.87		7.03	
8	5.36		5.73		12	6.70		7.08	
15	5.73		5.94		19	6.44		6.70	
22	5.90		6.20		26	5.79		6.60	
29	5.74		6.34		Sept. 2	5.22		5.81	
May 6	5.74		6.14		9	5.29		5.37	

88--Continued.

High and low weekly water level, from recorder charts

Week ending	High level	Low level	Week ending	High level	Low level
Sept. 16	4.62	5.50	Nov. 11	2.97	3.31
23	2.42	4.62	18	3.31	3.55
30	1.98	2.73	25	3.55	3.92
Oct. 7	+1.03	2.67	Dec. 2	3.92	4.23
14	.89	1.67	9	4.23	4.49
21	1.64	2.24	16	4.49	4.75
28	2.24	2.59	23	4.75	5.03
Nov. 4	2.59	2.97	30	5.03	5.31

G300. Geol. Survey, U. S. Dept. of Interior. Sec. 32, T. 43 S., R. 41 E. Records available: 1943-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	1.18	Apr. 2	4.02	July 3	4.75	Oct. 2	2.46
10	1.16	10	3.44	15	4.10	9	1.92
17	+.22	17	3.02	17	4.12	16	1.22
24	+.28	24	2.82	24	4.02	23	1.70
31	.50	May 1	2.98	31	3.34	30	1.74
Feb. 7	3.34	8	3.00	Aug. 7	2.10	Nov. 6	2.14
14	3.24	15	2.46	14	2.50	13	3.32
21	2.92	22	2.30	21	2.12	20	.66
28	4.05	29	4.66	28	1.92	27	1.02
Mar. 6	4.10	June 5	3.92	Sept. 4	2.30	Dec. 4	.92
13	3.36	12	3.34	11	2.52	11	1.82
20	3.46	19	3.32	18	1.84	18	4.12
27	2.92	26	4.67	25	2.72	25	3.18

Pinellas County

5. City of Clearwater. In Clearwater, 200 feet north of Cleveland Street, between Lady Mary Drive and Evergreen Avenue, 10 feet east of Stevenson Creek, in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 15, T. 29 S., R. 15 E. Records available: 1930, 1947-48.

High and low daily water level, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	6.54	8.10	6.61	7.56	7.17	9.60	6.75	9.41	7.20	10.00	8.45	11.22
2	5.96	7.70	6.66	8.62	7.31	9.50	6.80	8.76	7.19	9.17	8.51	11.32
3	6.23	8.11	7.10	8.74	7.19	9.61	7.10	9.11	6.34	10.05	8.85	11.57
4	6.47	8.09	7.07	8.81	7.27	9.73	7.14	8.89	7.28	10.13	9.12	11.69
5	6.49	8.86	6.94	8.60	7.09	8.27	7.10	10.11	7.28	10.40	9.06	11.55
6	5.98	8.91	6.92	8.73	6.56	8.03	7.33	10.38	7.64	10.36	9.33	10.95
7	7.00	9.05	6.58	8.74	6.28	7.73	7.58	10.44	7.46	10.11	8.80	11.75
8	7.03	9.00	6.45	8.55	5.71	7.60	7.42	10.49	7.44	10.50	9.67	11.90
9	7.02	9.20	6.67	8.52	6.16	7.42	7.58	10.50	6.70	9.56	8.54	12.01
10	6.78	8.97	6.56	7.44	6.06	7.31	7.72	10.16	6.74	7.35	9.66	11.94
11	7.87	8.62	6.56	8.27	5.74	7.79	7.21	8.55	6.05	9.25	9.57	12.53
12	7.01	8.87	6.42	8.45	5.93	8.10	6.80	9.52	7.11	10.02	9.60	11.70
13	5.92	7.93	6.34	7.85	6.59	7.78	7.20	10.00	7.36	10.27	8.15	10.27
14	6.14	7.55	6.53	7.60	6.78	8.35	7.30	10.18	8.18	10.54	8.80	10.22
15	6.24	8.71	6.77	8.61	6.62	8.79	6.80	9.18	8.15	10.49	8.15	11.18
16	6.32	9.07	7.10	9.11	6.88	9.01	6.74	7.86	8.10	10.01	8.74	11.73
17	5.90	8.70	6.78	8.86	6.54	9.30	6.85	9.30	7.88	10.92	9.14	12.06
18	5.67	7.99	6.77	9.22	6.62	9.18	7.16	8.96	9.03	10.39	9.77	12.21
19	5.89	8.51	7.19	9.18	6.73	9.33	7.14	10.10	7.91	10.63	10.09	11.93
20	5.96	7.62	6.78	9.29	6.74	9.29	7.22	10.22	7.81	10.11	8.71	11.31
21	5.57	7.77	6.81	9.00	6.61	9.01	7.41	10.28	7.90	9.82	9.59	11.29
22	5.50	8.36	6.46	8.74	6.67	9.64	7.41	10.14	8.00	9.76	8.07	10.73
23	5.60	7.85	6.34	8.95	6.72	9.58	7.34	10.29	7.90	10.00	8.65	11.39
24	5.30	8.17	7.09	8.99	6.72	9.90	7.58	10.04	8.02	10.66	9.00	11.64
25	5.55	7.85	7.14	9.60	7.17	10.11	7.23	9.55	8.61	10.84	9.53	11.61

5--Continued.

High and low daily water level, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
26	6.75	8.59	7.07	9.70	7.28	10.32	7.09	10.37	8.51	11.20	8.77	10.70
27	6.82	8.37	7.37	9.65	7.59	9.73	6.24	9.50	8.74	11.01	9.13	10.77
28	6.34	8.80	7.55	9.40	7.02	8.46	6.57	7.47	8.54	11.12	7.95	10.92
29	6.21	8.53	7.20	8.90	7.00	9.49	6.63	8.93	8.65	10.66	9.20	10.35
30	6.29	8.42			7.25	9.90	6.84	9.93	7.49	9.72	7.95	10.23
31	6.23	8.25			7.19	8.80			8.02	10.95		

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	8.12	10.15	5.85	7.32	6.05	8.18	5.90	6.40	7.13	10.22	7.13	8.60
2	7.95	9.66	6.14	7.35	5.92	7.44	5.91	7.28	6.78	10.01	6.80	8.60
3	8.49	10.20	6.17	7.37	5.79	8.36	5.50	6.17	7.24	10.04	6.82	8.85
4	8.91	10.09	6.02	7.32	5.69	6.71	5.50	5.98	7.20	10.08	6.86	9.10
5	9.01	9.95	6.19	7.33	5.55	6.16	5.41	6.12	7.26	10.16	6.63	7.95
6	8.72	10.73	6.34	7.95	5.44	8.34	5.61	6.47	7.01	9.88	7.00	8.70
7	8.82	10.86	6.52	8.23	5.59	8.94	5.80	8.36	7.08	9.67	7.22	9.24
8	8.92	10.82	6.15	7.95	6.28	9.28	5.84	7.75	7.49	10.47	7.00	8.08
9	7.43	10.72	6.56	9.46	6.75	9.56	5.98	8.32	7.51	10.48	6.73	8.17
10	7.66	9.34	6.95	9.52	7.02	9.50	6.09	8.01	8.02	10.59	6.62	8.92
11	7.75	9.71	5.99	7.73	6.66	9.39	6.14	8.02	8.16	10.85	7.00	8.58
12	7.43	9.56	5.69	7.76	6.40	7.52	5.79	7.20	8.00	10.86	6.82	8.40
13	7.83	9.85	6.01	7.25	6.02	7.49	5.85	8.04	8.14	10.69	7.19	9.39
14	7.57	9.85	5.95	8.15	6.02	7.83	6.12	8.22	7.59	9.97	....	....
15	7.80	9.83	6.30	8.29	6.20	8.25	6.20	9.00	7.91	10.70	6.86	8.86
16	7.18	9.74	6.30	8.87	6.48	9.01	6.30	8.94	8.14	10.90	6.85	8.60
17	7.20	9.55	6.12	8.38	6.62	7.87	6.20	8.58	8.13	10.80	6.90	8.55
18	7.46	9.61	5.99	7.49	6.69	8.22	6.27	8.50	7.68	10.96	6.88	8.46
19	6.89	8.07	6.28	7.50	6.35	8.06	6.50	9.29	8.03	10.52	6.70	7.73
20	6.94	8.07	6.25	7.39	6.23	8.89	6.77	9.68	7.33	8.33	6.69	8.30
21	6.84	8.80	6.26	7.50	6.20	8.76	7.11	9.91	7.39	8.53	6.95	8.61
22	6.96	9.49	6.38	7.54	6.21	7.15	7.09	9.76	7.14	8.62	7.20	8.80
23	7.28	9.70	6.20	7.55	6.00	8.07	7.18	9.67	7.11	8.76	7.10	8.70
24	7.07	8.90	6.41	8.60	6.41	9.04	6.97	10.00	6.62	7.93	7.40	9.21
25	6.67	8.91	6.21	7.77	6.63	9.19	7.19	10.28	6.60	8.05	6.60	8.30
26	6.58	8.16	6.22	7.34	6.40	8.46	7.52	10.39	6.70	8.35	7.10	8.41
27	6.76	9.13	6.23	7.34	6.06	6.74	7.67	10.20	6.62	8.01	7.55	9.85
28	6.83	8.97	6.25	7.67	5.76	6.48	7.48	10.11	6.58	8.06	7.55	9.95
29	6.81	8.69	6.20	8.27	5.80	7.31	6.97	10.08	6.50	8.22	7.60	9.95
30	6.39	7.62	6.38	8.97	5.90	6.52	7.22	9.94	7.00	8.38	6.73	8.60
31	6.22	7.30	6.11	8.83			6.61	9.27			6.92	8.61

9. City of Clearwater. In a shed at south side of Drew Street between Myrtle Avenue and Seaboard Air Line Railway, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 15, T. 29 S., R. 15 E. Records available: 1945-48.

High and low daily water level, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	25.40	25.85	26.04	26.34	25.99	26.42	25.65	25.90	26.13	26.38	26.54	27.89
2	25.35	25.80	26.01	26.47	25.93	26.45	25.91	26.06	25.98	26.35	26.69	28.01
3	25.72	26.06	26.06	26.33	26.02	26.29	26.03	26.35	25.78	26.13	26.62	28.00
4	25.71	26.13	25.76	26.28	26.05	26.35	26.21	26.41	26.02	26.31	26.56	28.08
5	25.93	26.38	25.80	26.18	26.05	26.39	26.28	26.53	26.05	26.41	26.64	28.14
6	26.00	26.32	25.82	26.18	25.48	26.22	26.42	26.64	26.09	26.49	26.48	27.32
7	25.94	26.30	25.88	26.30	25.29	25.72	26.42	26.75	26.02	26.60	26.33	28.09
8	25.91	26.28	25.78	26.14	25.14	25.65	26.37	26.78	26.24	27.83	26.73	28.18
9	25.90	26.28	25.70	26.05	25.01	25.40	26.43	26.95	26.09	27.12	26.68	28.12
10	25.91	26.28	25.64	26.23	24.98	25.40	26.39	26.91	25.41	26.11	26.72	28.21
11	25.93	26.47	25.90	26.28	25.17	25.68	25.81	26.72	25.32	26.17	27.03	28.23
12	25.77	26.31	25.86	26.15	25.42	26.44	25.70	26.36	25.80	26.53	26.97	28.05
13	25.29	25.92	25.72	26.04	25.64	26.08	25.82	26.49	26.02	26.64	25.98	27.44
14	25.25	26.16	25.51	26.17	25.72	26.12	25.96	26.53	26.18	26.72	25.74	26.24
15	26.06	26.39	26.18	26.49	25.52	26.09	25.79	26.57	26.34	26.74	25.99	27.45

9--Continued.

High and low daily water level, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
16	26.00	26.46	26.18	26.50	25.57	25.95	25.56	26.13	26.20	26.77	26.32	27.97
17	25.56	26.27	26.20	26.47	25.78	26.15	25.90	26.22	26.26	26.61	26.63	28.23
18	25.46	26.20	26.30	26.48	25.77	26.23	26.11	26.36	26.55	27.55	26.82	28.40
19	26.00	26.50	26.15	26.46	25.80	26.05	26.20	26.50	26.42	26.80	27.05	28.50
20	25.52	26.11	26.19	26.50	25.88	26.17	26.36	26.66	26.12	26.61	26.76	27.65
21	25.42	25.70	25.98	26.51	25.68	26.13	26.20	26.62	26.09	26.66	26.80	27.43
22	25.49	25.88	25.81	26.30	25.68	26.09	26.04	26.56	26.02	26.69	25.96	26.85
23	25.38	25.91	25.84	26.43	25.73	26.21	26.01	26.66	25.89	26.60	26.32	27.92
24	25.29	25.78	26.14	26.62	25.84	26.54	25.93	26.55	26.23	27.90	26.61	28.08
25	25.45	26.08	26.16	26.69	26.18	26.68	25.65	26.46	26.63	27.95	26.94	28.29
26	25.89	26.49	26.19	26.68	26.20	26.75	25.68	26.40	26.73	28.14	26.94	28.28
27	25.95	26.40	26.12	26.58	25.92	26.68	25.41	26.40	26.92	28.08	26.50	27.25
28	25.80	26.27	26.10	26.58	25.90	26.30	25.25	25.82	26.94	28.03	26.19	26.61
29	25.80	26.17	26.05	26.55	26.15	26.60	25.51	25.93	26.40	27.41	26.20	26.59
30	25.75	26.13			26.11	26.65	25.91	26.55	26.19	26.72	26.04	26.45
31	25.68	26.10			25.57	26.48			26.16	27.72		

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	25.98	27.27	24.98	25.58	25.20	26.26	24.79	25.20	25.74	27.26	25.28	25.90
2	25.73	26.38	25.02	25.58	25.12	25.60	24.79	25.29	25.93	27.30	25.36	25.77
3	25.71	26.10	25.03	25.05	25.07	25.43	24.87	25.31	25.70	27.15	25.28	25.75
4	25.40	25.86	24.88	25.48	24.73	25.20	24.71	25.25	25.82	27.35	25.45	25.97
5	25.27	25.78	24.91	25.55	24.86	25.16	24.62	25.06	25.86	27.30	25.42	25.79
6	25.18	25.95	25.13	25.77	24.89	25.37	24.70	25.11	25.84	27.08	25.22	25.59
7	25.15	25.95	25.42	26.00	25.02	25.61	24.68	25.09	25.88	26.28	25.25	25.65
8	25.22	26.13	25.55	26.09	25.30	25.87	24.72	25.22	25.90	27.48	25.44	25.62
9	25.65	26.21	25.79	26.28	25.48	26.10	24.96	25.55	26.11	27.51	25.34	25.58
10	25.79	26.33	25.85	26.28	25.65	26.06	25.22	25.65	26.15	27.62	25.54	26.15
11	25.83	26.26	25.44	26.52	25.55	26.02	25.11	25.50	26.44	27.55	25.64	26.06
12	26.00	26.28	25.08	25.56	25.30	25.60	25.10	25.33	26.45	27.81	25.32	26.80
13	25.87	26.23	25.14	25.50	25.20	25.55	25.05	25.45	26.45	26.86	25.32	26.82
14	25.80	26.28	25.05	25.54	25.22	25.59	25.33	25.63	26.30	26.56	.....	.....
15	25.69	26.28	25.15	25.78	25.30	25.81	25.47	25.90	26.30	27.70	25.44	26.86
16	25.86	27.37	25.34	26.05	25.56	25.88	25.62	25.98	26.47	27.69	25.61	26.78
17	25.90	26.46	25.22	26.00	25.40	25.78	25.47	25.80	26.36	27.49	25.57	26.11
18	25.63	26.38	25.00	25.55	25.43	25.86	25.42	25.70	26.24	27.66	25.50	26.63
19	25.32	26.01	25.07	25.56	25.34	25.70	25.46	25.99	26.17	27.46	25.33	25.82
20	25.30	25.87	25.07	25.55	25.35	25.62	25.75	26.25	25.76	26.17	25.35	25.83
21	25.32	26.00	25.01	25.53	25.35	25.60	26.00	26.42	25.57	25.90	25.58	26.09
22	25.47	26.17	25.11	25.56	25.35	25.65	25.97	26.31	25.40	25.77	25.75	26.20
23	25.71	26.33	25.28	25.61	25.20	25.82	25.82	26.21	25.34	25.69	25.68	26.20
24	25.65	26.33	25.40	25.68	25.38	25.91	25.82	26.26	25.17	25.51	.....	.....
25	25.54	25.95	25.34	25.68	25.52	26.01	25.91	27.23	25.11	25.35	.....	.....
26	25.72	26.05	25.30	25.49	25.62	26.01	25.95	26.45	24.96	25.30	.....	.....
27	25.72	26.05	25.20	25.45	25.10	25.77	25.84	27.25	24.96	25.25	.....	.....
28	25.68	26.00	25.23	25.43	24.81	25.25	25.76	27.09	24.79	25.28	.....	.....
29	25.58	26.00	25.15	25.73	24.85	25.44	25.70	27.20	24.77	25.29	.....	.....
30	25.32	25.67	25.30	26.97	24.89	25.31	26.06	27.37	25.11	25.67	.....	.....
31	25.17	25.61	25.35	26.60			25.82	26.20			.....	.....

19. City of Clearwater. On east side of Garden Avenue, 200 feet south of Marshall Street, in NE $\frac{1}{4}$ sec. 9, T. 29 S., R. 15 E. Records available: 1946-48.

High and low daily water level, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	24.70	25.10	25.52	25.83	25.03	25.41	24.80	25.21	25.30	25.57	25.69	26.10
2	24.63	25.19	25.50	25.87	24.92	25.37	25.02	25.55	25.12	25.46	25.81	26.17
3	25.05	25.40	25.44	25.78	24.92	25.27	25.56	25.62	25.17	25.31	25.83	26.20
4	25.15	25.45	25.17	25.68	24.98	25.35	25.63	25.85	25.12	25.39	25.72	26.25
5	25.43	25.62	25.18	25.58	25.33	25.52	25.55	25.79	25.20	25.50	25.75	26.30

19--Continued.

High and low daily water level, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
6	25.33	25.72	25.18	25.53	24.98	25.58	25.45	25.78	25.18	25.55	25.69	26.17
7	25.33	25.70	25.01	25.53	24.62	25.15	25.45	25.77	25.15	25.60	25.49	26.28
8	25.27	25.68	24.95	25.42	24.60	25.00	25.45	25.86	25.41	25.93	25.63	26.40
9	25.13	25.62	24.85	25.35	24.40	24.86	25.51	26.02	25.39	25.78	25.66	26.50
10	25.15	25.58	24.82	25.50	24.40	24.78	25.52	25.98	25.22	25.80	25.73	26.50
11	25.32	25.82	25.20	25.55	24.52	24.93	25.16	25.63	25.16	25.79	25.95	26.64
12	25.10	25.67	25.11	25.45	24.68	25.23	25.09	25.61	25.32	25.90	26.01	26.62
13	24.77	25.29	24.95	25.32	25.00	25.65	25.14	25.66	25.41	25.95	25.63	26.37
14	24.76	25.90	24.82	25.09	25.20	25.59	25.20	25.70	25.51	25.93	25.59	25.95
15	25.82	26.18	25.49	25.83	24.85	25.29	25.15	25.67	25.57	25.92	25.73	26.13
16	25.73	26.10	25.29	25.77	24.69	25.11	25.17	25.58	25.51	25.92	25.83	26.38
17	25.13	25.69	25.21	25.58	24.78	25.20	25.36	25.59	25.57	25.87	25.95	26.52
18	25.04	25.77	25.31	25.58	24.87	25.27	25.55	25.82	25.65	25.98	26.05	26.70
19	25.55	25.80	25.18	25.54	24.87	25.30	25.63	25.92	25.68	26.07	26.13	26.72
20	25.13	25.78	25.20	25.62	25.02	25.35	25.62	25.93	25.66	26.07	26.06	26.44
21	25.02	25.38	25.08	25.63	24.87	25.44	25.43	25.83	25.53	25.97	25.94	26.57
22	25.07	25.49	24.95	25.53	24.82	25.30	25.27	25.73	25.40	25.92	25.90	26.45
23	24.87	25.50	25.05	25.55	24.90	25.25	25.18	25.71	25.36	25.85	25.92	26.57
24	24.90	25.28	25.27	25.78	24.95	25.51	25.19	25.66	25.38	26.03	26.00	26.57
25	25.10	25.75	25.32	25.81	25.19	25.60	24.99	25.43	25.56	26.08	26.10	26.63
26	25.25	25.90	25.23	25.68	25.30	25.76	24.95	25.53	25.59	26.13	26.13	26.63
27	25.86	25.77	25.13	25.56	25.11	25.51	24.96	25.40	25.71	26.15	25.92	26.46
28	25.15	25.69	25.03	25.48	25.05	25.64	24.99	25.35	25.69	26.12	25.85	25.23
29	25.17	25.62	25.06	25.44	25.45	25.88	25.18	25.50	25.59	26.07	25.82	26.13
30	25.13	25.55			25.33	25.87	25.32	25.56	25.53	25.87	25.73	26.04
31	25.05	25.61			24.89	25.63			25.60	25.96		

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	25.65	26.06	24.91	25.31	25.15	25.74	.....	.....	25.14	25.60	.....	.....
2	25.85	26.00	24.87	25.45	25.11	25.65	.....	.....	25.17	25.65	.....	.....
3	25.65	26.02	24.85	25.37	25.05	25.52	.....	.....	25.12	25.54	.....	.....
4	25.55	25.98	24.86	25.47	24.85	25.53	.....	.....	25.11	25.52	.....	.....
5	25.38	25.88	24.86	25.47	24.88	25.25	.....	.....	25.14	25.52	.....	.....
6	25.27	25.82	24.98	25.52	24.95	25.38	.....	.....	25.15	25.50	.....	.....
7	25.19	25.82	25.08	25.53	25.00	25.40	.....	.....	25.23	25.79	.....	.....
8	25.17	25.85	25.15	25.51	25.01	25.41	.....	.....	25.49	25.82	.....	.....
9	25.24	25.82	25.20	25.58	25.08	25.43	.....	.....	25.55	25.82	.....	.....
10	25.27	25.83	25.25	25.57	25.12	25.47	.....	.....	25.54	25.86	.....	.....
11	25.25	25.70	25.15	25.50	25.17	25.45	.....	.....	25.86	26.08	.....	.....
12	25.30	25.63	25.05	25.37	25.16	25.43	.....	.....	25.95	26.15	.....	.....
13	25.28	25.60	25.03	25.40	25.15	25.52	.....	.....	25.91	26.18	.....	.....
14	25.25	25.54	25.08	25.49	25.22	25.59	.....	.....	25.76	26.19	.....	.....
15	25.15	25.52	25.13	25.51	25.31	25.72	.....	.....	25.76	26.13	25.52	26.08
16	25.24	25.64	25.10	25.52	25.39	25.73	25.12	25.40	25.85	26.26	25.49	26.04
17	25.27	25.72	25.02	25.48	25.41	25.70	25.06	25.47	25.76	26.22	.....	.....
18	25.21	25.60	25.01	25.46	25.40	25.71	25.07	25.41	25.76	26.19	.....	.....
19	25.13	25.60	25.08	25.52	25.16	25.59	25.14	25.55	25.72	26.10	.....	.....
20	25.15	25.61	25.08	25.51	25.08	25.41	25.27	25.72	25.57	26.08	.....	.....
21	25.09	25.55	25.09	25.52	25.08	25.43	25.45	25.88	25.55	25.99	.....	.....
22	25.08	25.58	25.13	25.53	25.25	25.65	25.41	25.82	.....	.....	.....	.....
23	25.17	25.67	25.23	25.57	25.25	25.56	25.35	25.74	.....	.....	.....	.....
24	25.28	25.72	25.23	25.58	25.18	25.51	25.34	25.77	.....	.....	.....	.....
25	25.20	25.72	25.28	25.56	25.20	25.53	25.50	25.86	.....	.....	.....	.....
26	25.30	25.58	25.23	25.58	25.20	25.59	25.50	25.83	.....	.....	.....	.....
27	25.33	25.56	25.19	25.53	24.82	25.31	25.43	25.70	.....	.....	.....	.....
28	25.27	25.50	25.26	25.56	.....	.....	25.26	25.55	.....	.....	.....	.....
29	25.17	25.47	25.18	25.57	.....	.....	25.15	25.55	.....	.....	.....	.....
30	25.05	25.35	25.17	25.65	.....	.....	25.21	25.60	.....	.....	.....	.....
31	24.96	25.34	25.16	25.69	.....	.....	25.13	25.62	.....	.....	.....	.....

303. R. Duguid. About 0.8 mile southeast of Palm Harbor; 0.52 mile east of county road 1, 0.2 mile north of State Highway 584, in an orange grove northeast of owner's residence, in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 12, T. 28 S., R. 15 E. Records available: 1947-48.

High and low daily water level, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	63.95	64.30	64.80	64.97	64.26	64.60	64.29	65.06	64.59	64.86	65.30	66.37
2	64.00	64.41	64.83	65.04	64.14	64.53	64.35	65.30	64.49	64.74	65.38	66.35
3	64.36	64.52	64.80	65.00	64.31	64.87	64.90	65.15	64.50	64.67	65.38	67.23
4	64.40	64.59	64.64	64.97	64.33	64.94	64.94	65.18	64.51	64.74	65.23	67.13
5	64.45	64.75	64.60	64.94	64.45	64.76	64.93	66.27	64.51	64.86	65.21	66.58
6	64.52	64.82	64.58	64.90	64.21	64.79	64.90	66.26	64.50	64.87	64.92	65.66
7	64.50	64.85	64.40	64.87	63.93	64.41	64.88	66.42	64.50	65.39	64.92	66.37
8	64.46	64.85	64.35	64.75	63.92	64.33	64.90	66.80	64.80	65.49	65.00	66.21
9	64.33	64.80	64.25	64.67	63.82	64.16	65.25	66.90	64.54	65.10	64.98	66.07
10	64.32	64.78	64.17	64.78	63.74	64.10	65.14	66.83	64.59	65.14	65.00	66.30
11	64.53	65.01	64.51	64.79	63.85	64.21	64.56	65.20	64.86	65.37	65.20	66.54
12	64.35	64.88	64.45	64.67	63.99	64.40	64.72	65.44	65.02	65.68	65.12	65.93
13	64.22	64.57	64.28	64.56	64.24	64.66	64.76	66.00	64.93	65.78	64.77	65.33
14	64.13	65.01	64.17	64.78	64.40	64.66	64.83	65.74	65.13	66.12	64.83	65.85
15	64.97	65.25	64.70	64.96	64.09	64.65	64.59	65.46	65.07	65.90	65.01	66.70
16	64.99	65.24	64.49	64.87	63.94	64.36	64.85	65.00	64.95	65.71	65.17	66.40
17	64.62	65.10	64.45	64.64	64.04	64.30	64.83	65.10	65.03	66.07	65.14	66.90
18	64.63	65.10	64.53	64.75	64.12	64.36	64.95	65.17	65.26	67.00	65.50	66.82
19	64.99	65.12	64.44	64.75	64.10	64.47	64.95	65.24	65.36	67.00	65.33	66.48
20	64.67	65.14	64.40	64.78	64.17	64.51	64.88	65.23	65.39	66.41	65.00	65.50
21	64.60	64.79	64.29	64.80	64.04	64.60	64.80	65.08	65.42	66.26	65.17	66.56
22	64.60	64.94	64.23	64.74	64.03	64.49	64.52	64.90	64.93	65.63	65.37	66.49
23	64.33	64.92	64.21	64.77	64.00	64.47	64.47	64.96	64.67	65.33	65.38	66.46
24	64.32	64.69	64.50	64.65	64.09	64.65	64.41	64.89	64.92	65.88	65.37	66.49
25	64.44	64.80	64.58	64.93	64.34	65.38	64.20	64.80	65.20	65.84	65.36	66.51
26	64.50	64.99	64.46	64.78	64.61	65.43	64.52	65.62	65.25	65.89	65.26	66.62
27	64.49	64.87	64.35	64.68	64.34	65.09	64.25	65.14	65.29	66.11	64.95	65.52
28	64.43	64.84	64.27	64.65	64.35	64.84	64.37	64.75	65.27	66.48	65.02	65.22
29	64.48	64.79	64.33	64.62	64.72	65.28	64.56	64.84	65.12	66.90	64.97	65.78
30	64.49	64.74			64.60	65.09	64.64	64.86	65.12	65.68	64.91	65.16
31	64.46	64.78			64.35	65.16			65.18	67.02		

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	64.80	65.08	64.26	64.65	64.50	64.95	63.98	64.31	64.30	64.75	64.90	65.44
2	64.77	65.13	64.20	64.71	64.45	64.87	63.85	64.20	64.26	64.79	64.89	65.32
3	64.81	65.19	64.12	64.63	64.41	64.82	63.90	64.22	64.20	64.68	64.70	65.15
4	64.74	65.22	64.12	64.68	64.20	64.79	63.82	64.18	64.17	64.91	64.75	65.23
5	64.61	65.15	64.15	64.67	64.27	64.58	63.87	64.10	64.19	65.27	64.86	65.16
6	64.49	65.08	64.21	64.67	64.38	64.69	63.81	64.11	64.20	65.23	64.70	65.04
7	64.41	65.07	64.34	64.69	64.37	64.69	63.76	64.09	64.40	65.19	64.75	64.95
8	64.40	65.03	64.46	64.89	64.31	64.64	63.76	64.05	64.57	65.90	64.75	64.90
9	64.43	65.03	64.50	64.70	64.35	64.63	63.86	64.15	64.70	66.11	64.69	64.84
10	64.44	64.92	64.50	64.71	64.37	64.63	63.95	64.11	64.77	66.40	64.76	65.24
11	64.51	64.87	64.39	64.61	64.32	64.65	63.85	64.00	64.99	67.01	65.02	65.32
12	64.60	64.84	64.28	64.51	64.47	64.70	63.88	64.06	65.20	66.44	64.76	65.19
13	64.59	64.82	64.29	64.55	64.48	64.77	63.92	64.15	65.07	66.45	64.76	65.10
14	64.55	64.81	64.31	64.60	64.52	64.80	64.05	64.28	64.92	65.32	.....	.....
15	64.43	64.79	64.41	64.69	64.58	64.91	64.12	64.30	64.89	66.47	64.70	65.29
16	64.53	64.88	64.45	64.74	64.63	64.89	64.17	64.45	65.00	66.40	64.70	65.25
17	64.50	64.94	64.38	64.75	64.64	64.91	64.28	64.53	64.92	66.08	64.65	65.23
18	64.43	64.86	64.42	64.76	64.65	64.92	64.28	64.57	64.90	66.55	64.68	65.21
19	64.41	64.89	64.51	64.83	64.50	64.81	64.35	64.70	64.88	67.00	64.60	65.00
20	64.42	64.90	64.51	64.83	64.40	64.68	64.49	64.84	64.82	66.48	64.60	65.06
21	64.38	64.88	64.51	64.87	64.41	64.74	64.63	64.97	64.88	65.25	64.85	65.16
22	64.34	64.83	64.65	64.88	64.63	64.97	64.61	64.93	64.70	65.70	64.91	65.15
23	64.41	64.87	64.72	65.09	64.56	64.85	64.60	64.88	64.78	65.62	64.96	65.14
24	64.52	64.87	64.74	65.09	64.51	64.79	64.65	64.93	64.60	64.91	64.95	65.20
25	64.57	64.90	.....	.....	64.55	64.80	64.82	65.02	64.83	65.08	64.75	65.14
26	64.67	64.90	64.77	65.00	64.57	64.86	64.81	65.00	64.68	65.52	64.81	65.48

303--Continued.

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
27	64.68	64.89	64.75	64.95	64.30	64.74	64.70	64.90	64.65	65.37	65.14	65.61
28	64.65	64.82	64.80	64.94	64.02	64.51	64.64	64.71	64.33	64.99	64.89	65.56
29	64.52	64.73	64.76	64.98	64.17	64.50	64.39	64.65	64.30	64.91	64.46	65.52
30	64.43	64.68	64.72	65.00	64.07	64.41	64.40	64.70	64.80	65.29	64.38	65.08
31	64.34	64.64	64.60	64.96			64.35	64.70			64.88	65.50

467. Coachman Packing Co. About 0.28 mile northeast of Coachman, about 600 feet northwest of State Highway 590, and 50 feet north of a small residence, in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 7, T. 29 S., R. 16 E. Records available: 1947-48.

High and low daily water level, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	42.40	42.58	42.87	43.07	42.90	42.94	42.93	43.05	43.33	43.43	43.91	44.33
2	42.40	42.53	43.05	43.15	42.82	42.93	42.92	43.12	43.25	43.38	44.10	44.40
3	42.53	42.70	43.05	43.15	42.84	42.88	43.12	43.35	43.25	43.30	44.23	44.51
4	42.69	42.79	42.96	43.10	42.85	42.93	43.33	43.45	43.25	43.34	44.25	44.50
5	42.75	42.93	42.90	43.01	42.93	43.05	43.38	43.47	43.29	43.43	44.30	44.47
6	42.90	43.01	42.85	42.98	42.86	43.05	43.36	43.46	43.35	43.52	44.25	44.39
7	42.91	43.02	42.83	42.95	42.63	42.88	43.36	43.48	43.42	43.60	44.16	44.37
8	42.90	43.00	42.75	42.85	42.52	42.63	43.41	43.52	43.56	43.68	44.20	44.48
9	42.87	42.95	42.68	42.78	42.34	42.57	.....	.....	43.54	43.67	44.25	44.70
10	42.81	42.95	42.66	42.90	42.26	42.39	43.57	43.65	43.46	43.58	44.35	44.88
11	42.92	43.07	42.83	42.90	42.33	42.45	43.37	43.60	43.45	43.55	44.45	45.03
12	42.95	43.07	42.74	42.82	42.41	42.55	43.31	43.40	43.54	43.64	44.49	44.73
13	42.68	42.95	42.63	42.74	42.55	42.83	43.32	43.38	43.64	43.69	44.16	44.48
14	42.70	43.20	42.58	42.84	42.83	42.90	43.38	43.43	43.69	43.77	44.15	44.70
15	43.20	43.32	42.84	43.04	42.70	42.84	43.21	43.47	43.77	43.80	44.30	44.91
16	43.32	43.35	42.92	43.04	42.57	42.70	43.27	43.34	43.68	43.80	44.45	44.96
17	43.01	43.32	42.88	42.94	42.57	42.63	43.27	43.40	43.67	44.07	44.55	45.08
18	43.00	43.20	42.88	42.99	42.57	42.66	43.39	43.50	43.88	44.28	44.69	45.12
19	43.20	43.27	42.84	43.02	42.61	42.74	43.49	43.61	44.05	44.38	44.77	45.10
20	43.10	43.27	.....	.....	42.66	42.79	43.55	43.65	44.05	44.30	44.51	44.82
21	42.98	43.10	42.85	42.97	42.69	42.80	43.55	43.65	.....	.....	44.50	44.88
22	42.93	43.06	42.78	42.89	42.61	42.72	43.51	43.60	43.81	44.10	44.65	45.01
23	.....	.....	42.77	43.01	42.64	42.77	43.50	43.60	43.67	43.85	44.70	45.18
24	42.70	42.90	42.96	43.12	42.70	42.96	43.40	43.56	43.72	43.95	44.73	45.20
25	42.85	43.02	43.05	43.12	42.93	43.11	43.23	43.44	43.79	44.05	44.73	45.20
26	42.91	43.03	42.97	43.10	43.06	43.15	43.26	43.33	43.87	44.10	44.69	45.14
27	42.90	43.03	42.92	43.00	43.03	43.16	43.18	43.33	43.94	44.15	44.40	44.70
28	42.85	42.95	42.91	42.95	43.02	43.08	43.12	43.20	43.96	44.19	44.40	44.85
29	42.86	42.94	42.90	42.95	43.08	43.30	43.13	43.27	43.87	44.15	44.29	44.43
30	42.80	42.90			43.26	43.37	43.24	43.35	43.78	43.87	44.20	44.28
31	42.76	42.87			43.05	43.26			43.75	44.10		

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	44.10	44.20	42.96	43.12	43.18	43.31	42.68	42.85	43.12	43.23	43.63	43.82
2	44.04	44.17	42.95	43.10	43.15	43.29	42.62	42.75	43.10	43.22	43.70	43.81
3	43.97	44.10	42.95	43.10	43.11	43.25	42.60	42.69	43.08	43.20	43.66	43.79
4	43.88	44.03	42.93	43.06	43.00	43.16	42.50	42.63	43.05	43.18	43.65	43.71
5	43.75	43.95	42.95	43.06	42.95	43.04	42.39	42.60	43.08	43.22	43.65	43.71
6	43.64	44.85	43.00	43.10	42.97	43.02	42.47	42.62	43.12	43.22	43.55	43.65
7	43.59	43.75	43.05	43.12	42.97	43.03	42.50	42.64	43.20	43.37	43.54	43.62
8	43.59	43.69	43.10	43.15	42.99	43.07	42.50	42.58	43.35	43.47	43.49	43.55
9	43.55	43.66	43.14	43.21	43.05	43.12	42.55	42.71	43.37	43.48	43.43	43.51
10	43.50	43.60	43.21	43.24	43.07	43.17	42.65	42.71	43.43	43.55	43.50	43.80
11	43.50	43.54	43.12	43.22	43.08	43.18	42.56	42.68	43.55	43.64	43.78	43.87
12	43.50	43.51	43.08	43.17	43.09	43.21	42.59	42.65	43.70	43.82	43.70	43.81
13	43.50	43.53	43.05	43.14	43.10	43.25	.....	.....	43.75	43.83	43.64	43.71
14	43.45	43.51	43.05	43.18	43.15	43.29	42.70	42.84	43.76	43.84	.....	.....
15	43.44	43.51	43.05	43.17	43.25	43.37	42.81	42.90	43.72	43.90	43.64	43.70

467--Continued.

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
16	43.40	43.52	43.04	43.16	43.30	43.39	42.85	42.97	43.84	44.06	43.60	43.73
17	43.44	43.56	43.04	43.15	43.30	43.39	42.87	42.97	43.89	44.19	43.59	43.69
18	43.39	43.55	43.05	43.15	43.30	43.39	42.85	42.98	43.94	44.21	43.54	43.70
19	43.37	43.50	43.05	43.15	43.20	43.35	42.94	43.06	43.93	44.18	43.41	43.56
20	43.37	43.49	43.06	43.17	43.13	43.25	43.04	43.20	43.90	44.05	43.46	43.65
21	43.34	43.48	43.09	43.18	43.05	43.15	43.17	43.28	43.76	43.92	43.65	43.71
22	43.34	43.43	43.15	43.20	43.06	43.31	43.21	43.28	43.65	43.76	43.70	43.75
23	43.37	43.44	43.20	43.24	43.26	43.31	43.20	43.26	43.51	43.67	43.70	43.80
24	43.39	43.48	43.20	43.23	43.25	43.31	43.20	43.31	43.45	43.56	43.75	43.85
25	43.42	43.49	.....	.....	43.25	43.32	43.30	43.43	43.54	43.65	43.70	44.00
26	43.41	43.46	43.22	43.27	43.25	43.32	43.33	43.43	43.55	43.64	43.95	44.09
27	43.39	43.44	43.25	43.29	43.05	43.31	43.30	43.38	43.50	43.56	43.95	44.05
28	43.35	43.40	43.22	43.29	42.85	43.06	43.17	43.32	43.32	43.50	43.82	44.01
29	43.28	43.35	43.15	43.29	42.80	42.97	43.15	43.27	43.26	43.50	43.62	44.80
30	43.18	43.28	43.15	43.29	42.74	42.91	43.17	43.25	43.50	43.68	43.75	44.00
31	43.06	43.40	43.17	43.31	.....	.....	43.16	43.24	.....	.....	43.99	44.08

488. City of St. Petersburg. About 2.6 miles northeast of Pinellas Park, about 1.0 mile northeast of intersection of 74th Avenue N. with State Highway 600, about 700 feet south of State Highway 600. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 26, T. 30 S., R. 16 E. Records available: 1947-48.

High and low daily water level, from recorder charts

Day	January		February		April		May		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	1.24	1.55	1.87	2.30	.....	.....	1.63	1.90	.....	.....	1.60	1.86	2.02	2.40
2	1.27	1.59	2.12	2.40	.....	.....	1.58	1.79	.....	.....	1.55	1.87	2.00	2.31
3	1.59	1.81	2.00	2.32	.....	.....	1.55	1.74	.....	.....	1.45	1.79	1.80	2.15
4	1.79	1.90	1.80	2.29	.....	.....	1.54	1.70	.....	.....	1.41	1.75	1.83	2.16
5	1.79	2.10	1.73	2.08	.....	.....	1.56	1.72	.....	.....	1.44	1.77	1.92	2.15
6	1.95	2.20	1.70	2.04	.....	.....	1.53	1.74	.....	.....	1.48	1.80	1.80	2.05
7	1.88	2.16	.....	.....	.....	.....	1.57	1.92	.....	.....	1.75	2.15	1.80	2.01
8	1.85	2.14	.....	.....	.....	.....	1.80	2.10	.....	.....	2.02	2.25	1.78	1.91
9	1.78	2.01	.....	.....	.....	.....	1.75	2.02	.....	.....	1.97	2.21	1.72	1.85
10	1.66	2.00	.....	.....	2.05	2.35	1.72	2.04	.....	.....	1.91	2.15	1.82	2.45
11	1.89	2.26	.....	.....	1.83	2.28	1.64	2.05	.....	.....	2.06	2.40	2.40	2.55
12	1.90	2.20	.....	.....	1.70	2.03	.....	.....	.....	.....	2.32	2.45	2.15	2.30
13	1.50	1.93	.....	.....	1.68	2.00	.....	.....	.....	.....	2.28	2.44	1.92	2.20
14	1.50	2.45	.....	.....	1.69	2.00	.....	.....	.....	.....	2.26	2.48	.....	.....
15	2.49	2.65	.....	.....	1.68	1.99	.....	.....	1.55	1.72	2.17	2.44	1.95	2.26
16	2.35	2.59	.....	.....	1.68	2.03	.....	.....	1.54	1.70	2.24	2.45	1.85	2.21
17	1.68	2.35	.....	.....	1.75	2.18	.....	.....	1.60	1.77	2.10	2.37	1.83	2.20
18	1.68	2.10	.....	.....	1.94	2.26	.....	.....	1.51	1.73	1.98	2.34	1.85	2.15
19	2.10	2.22	.....	.....	2.14	2.40	2.03	2.20	1.55	1.82	1.93	2.27	1.65	1.95
20	1.69	2.14	.....	.....	2.13	2.34	2.10	2.30	1.73	2.01	1.85	2.21	1.75	2.10
21	1.57	1.69	.....	.....	1.90	2.26	1.88	2.24	1.89	2.18	1.95	2.23	2.00	2.25
22	1.51	1.90	.....	.....	1.72	2.07	1.77	2.08	1.85	2.13	1.82	2.15	2.10	2.25
23	.....	.....	.....	.....	1.66	1.99	1.74	2.08	1.80	2.04	1.74	1.98	2.11	2.25
24	1.16	1.73	.....	.....	1.60	1.97	1.76	2.12	1.85	2.16	1.57	1.89	2.17	2.34
25	1.64	2.13	.....	.....	1.44	1.87	1.83	2.13	2.04	2.29	1.85	2.11	2.05	2.26
26	1.85	2.30	.....	.....	1.40	1.75	1.88	2.15	2.00	2.21	1.94	2.08	2.00	2.74
27	1.85	2.25	.....	.....	1.33	1.73	.....	.....	1.89	2.16	1.70	1.87	2.50	2.80
28	1.74	2.07	.....	.....	1.47	1.73	.....	.....	1.67	2.02	1.64	1.85	2.30	2.60
29	1.80	2.01	.....	.....	1.54	1.83	.....	.....	1.65	1.91	1.58	1.99	1.95	2.35
30	1.74	1.96	.....	.....	1.65	1.90	.....	.....	1.70	1.90	1.89	2.23	1.60	2.24
31	1.70	1.88	.....	.....	.....	.....	.....	.....	1.65	1.86	.....	.....	2.15	2.65

555. Geol. Survey, U. S. Dept. of Interior. 0.6 mile southeast of Tarpon Springs, on south edge of city dump, near SE corner SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 27 S., R. 15 E. Records available: 1947-48.

555--Continued.

High and low daily water level, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	8.60	9.59	9.76	10.20	8.87	9.50	8.09	9.57	8.64	9.45	8.72	9.70
2	8.65	9.51	9.75	10.32	8.79	9.46	8.77	9.49	8.69	9.37	8.76	9.75
3	8.88	9.53	9.84	10.40	8.88	9.43	8.90	9.51	8.54	9.40	8.55	9.80
4	8.95	9.45	9.61	10.47	8.75	9.51	8.90	9.36	8.54	9.45	8.40	9.94
5	9.02	9.60	9.53	10.26	8.91	9.51	8.77	9.36	8.47	9.55	8.33	10.03
6	8.98	9.50	9.39	10.08	8.72	9.41	8.60	9.56	8.35	9.67	8.30	10.18
7	8.93	9.53	9.18	9.88	8.55	9.41	8.55	9.61	8.42	9.80	8.22	10.15
8	8.84	9.80	9.12	9.71	8.58	9.57	8.65	9.66	8.45	9.79	8.18	10.10
9	8.74	9.66	8.94	9.88	8.56	9.43	8.63	9.72	8.36	9.90	8.12	10.03
10	8.74	9.73	8.92	9.79	8.50	9.44	8.61	9.76	8.35	9.95	8.15	10.08
11	8.95	9.64	9.00	9.43	8.60	9.38	8.36	9.81	8.29	10.01	8.24	10.08
12	8.72	9.70	8.96	9.38	8.59	9.30	8.33	9.88	8.37	9.97	8.34	10.05
13	8.65	9.75	8.95	9.38	8.69	9.20	8.30	9.85	8.47	9.93	8.40	9.95
14	8.50	9.79	8.93	9.48	8.78	9.13	8.34	9.80	8.59	9.85	8.60	9.80
15	9.27	9.77	9.01	9.39	8.60	9.15	8.43	9.80	8.70	9.86	8.56	9.73
16	9.47	10.01	9.00	9.32	8.52	9.25	8.65	9.67	8.82	9.87	8.50	9.84
17	9.27	10.00	8.95	9.34	8.65	9.29	8.77	9.70	8.80	9.78	8.54	9.84
18	9.29	10.10	9.00	9.35	8.64	9.29	8.89	9.57	8.72	9.73	8.46	10.03
19	9.74	10.14	9.00	9.37	8.55	9.33	8.82	9.60	8.85	9.88	8.50	10.09
20	9.37	10.30	8.91	9.41	8.60	9.43	8.67	9.62	8.74	9.94	8.51	10.16
21	9.41	9.98	8.85	9.50	8.46	9.40	8.47	9.72	8.55	10.05	8.49	10.18
22	9.36	10.01	8.73	9.54	8.35	9.49	8.31	9.85	8.40	10.15	8.41	10.15
23	9.21	9.89	8.91	9.60	8.40	9.50	8.28	9.91	8.38	10.17	8.36	10.10
24	9.03	9.61	9.02	9.51	8.40	9.47	8.21	9.93	8.40	10.18	8.40	10.09
25	8.84	9.44	8.97	9.46	8.58	9.40	8.10	9.85	8.46	10.15	8.50	10.13
26	8.87	9.73	8.92	9.49	8.59	9.45	8.06	9.75	8.49	10.08	8.64	10.13
27	8.87	9.75	8.83	9.54	8.38	9.56	8.09	9.81	8.51	10.01	8.63	10.04
28	8.89	9.83	8.80	9.56	8.44	9.60	8.32	9.51	8.54	10.00	8.86	9.98
29	9.08	9.89	8.90	9.54	8.74	9.39	8.48	9.54	8.59	9.84	8.90	9.84
30	9.29	9.95			8.61	9.53	8.61	9.47	8.89	9.84	8.85	9.61
31	9.35	10.10			8.14	9.57			8.85	9.76		

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	8.74	9.69	8.32	8.85	8.84	9.51	8.17	8.76	8.61	9.46	8.80	9.55
2	8.71	9.76	8.17	8.81	8.83	9.26	8.00	8.55	8.48	9.47	8.55	9.57
3	8.75	9.66	7.92	8.71	8.79	9.20	7.91	8.47	8.49	9.50	8.57	9.80
4	8.66	9.71	7.98	8.60	8.60	9.17	7.85	8.33	8.46	9.52	8.65	9.73
5	8.36	9.70	7.96	8.49	8.66	9.19	7.80	8.21	8.46	9.50	8.80	9.60
6	8.27	9.67	8.00	8.42	8.67	9.20	7.80	8.05	8.46	9.44	8.73	9.60
7	8.15	9.67	8.06	8.40	8.68	9.19	7.78	8.01	8.69	9.45	8.80	9.55
8	8.08	9.64	8.10	8.28	8.68	9.10	7.75	7.95	8.79	9.27	8.90	9.45
9	8.10	9.52	8.10	8.30	8.67	9.06	7.79	7.94	8.78	9.14	8.69	9.41
10	8.20	9.38	8.10	8.32	8.70	9.01	7.75	7.86	8.75	9.20	8.96	9.48
11	8.34	9.32	7.80	8.26	8.70	9.00	7.64	7.83	8.85	9.20	8.96	9.37
12	8.38	9.21	7.68	7.87	8.71	9.04	7.70	7.86	8.80	9.20	8.83	9.37
13	8.34	9.16	7.55	7.80	8.73	9.07	7.68	7.87	8.80	9.36	....	....
14	8.33	9.11	7.52	8.01	8.74	9.11	7.75	7.98	8.80	9.41	8.85	9.54
15	8.24	9.29	7.88	8.76	8.75	9.20	7.72	8.40	8.81	9.49	8.73	9.54
16	8.46	9.26	8.35	8.99	8.74	9.16	8.35	8.91	8.67	9.51	8.67	9.60
17	8.48	9.35	8.37	9.16	8.72	9.12	8.55	9.06	8.58	9.57	8.67	9.65
18	8.36	9.35	8.53	9.30	8.73	9.07	8.76	9.29	8.54	9.64	8.68	9.66
19	8.37	9.37	8.73	9.46	8.71	9.96	8.90	9.50	8.49	9.65	8.61	9.67
20	8.39	9.39	8.83	9.60	8.68	9.00	9.03	9.69	8.49	9.72	8.70	9.66
21	8.35	9.33	8.98	9.73	8.72	9.14	9.20	9.88	8.73	9.60	8.92	9.60
22	8.31	9.38	9.10	9.77	8.72	9.10	9.20	9.66	8.65	9.58	8.95	9.53
23	8.39	9.40	9.20	9.80	8.76	9.10	9.23	9.97	8.75	9.45	8.98	9.46
24	8.59	9.25	9.35	9.88	8.75	9.04	9.27	10.05	8.60	9.45	8.98	9.50
25	8.55	9.21	9.45	9.98	8.78	9.05	9.52	10.13	8.82	9.47	8.84	9.55
26	8.64	9.75	9.43	10.07	8.78	9.16	9.33	9.75	8.67	9.36	9.11	9.81
27	8.61	9.05	9.38	10.01	8.73	8.94	9.03	9.55	8.65	9.45	9.05	9.49
28	8.60	9.03	9.49	10.07	8.40	9.25	8.85	9.28	8.49	9.60	8.75	9.60
29	8.60	9.06	9.34	9.95	8.53	9.20	8.77	9.24	8.71	9.76	8.30	9.85
30	8.55	9.10	9.18	9.53	8.35	9.04	8.75	9.30	8.84	9.61	8.15	9.97
31	8.44	9.02	8.92	9.40			8.67	9.41			8.17	9.85

Polk County

44. P. E. Williams. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 28, T. 26 S., R. 27 E., 2.5 miles northwest of Davenport and 1.5 miles west of U. S. Highway 17, in a pasture on the south side of a drainage ditch. Records available: 1946-48.

High and low daily water level, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	1.48	1.50	0.87	0.92	1.47	1.50	1.48	1.56	1.91	1.97	....	....
2	1.50	1.56	.90	.94	1.48	1.55	1.55	1.63	1.95	2.00	2.76	2.83
3	1.55	1.59	.92	.96	1.50	1.58	1.58	1.62	1.98	2.05	2.80	2.85
4	1.55	1.59	.94	.99	1.25	1.58	1.57	1.62	2.02	2.08	2.82	2.88
5	1.59	1.65	.97	1.02	1.10	1.25	1.58	1.65	2.05	2.11	2.86	2.91
6	1.62	1.66	.98	1.05	1.05	1.11	1.61	1.66	2.09	2.14	2.87	2.92
7	1.63	1.68	1.02	1.06	.97	1.08	1.65	1.70	2.10	2.20	2.86	2.90
8	1.65	1.70	1.02	1.06	.95	1.00	1.69	1.73	2.18	2.24	2.90	2.94
9	1.65	1.70	1.04	1.06	.90	.98	1.71	1.76	2.20	2.25	2.91	2.96
10	1.87	1.73	1.06	1.14	.95	1.05	1.72	1.76	2.20	2.22	2.96	3.01
11	1.70	1.74	1.10	1.14	1.04	1.10	1.74	1.79	2.20	2.24	2.99	3.00
12	1.70	1.74	1.09	1.12	1.09	1.13	1.78	1.82	2.23	2.29	3.00	3.01
13	1.49	1.74	1.10	1.12	1.11	1.16	1.83	1.85	2.29	2.31	2.79	3.00
14	1.50	1.57	1.12	1.23	1.15	1.16	1.85	1.85	2.30	2.35	2.77	2.80
15	1.53	1.57	1.21	1.23	1.16	1.20	1.78	1.85	2.34	2.38	2.80	2.85
16	1.52	1.53	1.19	1.21	1.20	1.24	1.74	1.80	2.35	2.39	2.83	2.87
17	1.33	1.52	1.18	1.21	1.24	1.30	1.79	1.87	2.38	2.43	2.86	2.90
18	1.32	1.35	1.21	1.25	1.27	1.32	1.85	1.89	2.40	2.46	2.89	2.94
19	1.33	1.35	1.22	1.28	1.30	1.38	1.85	1.93	2.43	2.48	2.92	2.96
20	1.20	1.35	1.25	1.32	1.35	1.40	1.89	1.95	2.41	2.45	2.94	2.99
21	1.05	1.20	1.26	1.32	1.35	1.40	1.90	1.95	2.42	2.45	2.98	3.03
22	1.09	1.15	1.28	1.35	1.37	1.45	1.93	1.99	2.45	2.50	3.03	3.09
23	1.03	1.15	1.32	1.42	1.41	1.47	1.97	2.01	2.50	2.54	3.07	3.12
24	.80	1.03	....	....	1.44	1.54	2.00	2.02	2.53	2.56	3.10	3.15
25	.77	.84	1.37	1.42	1.50	1.55	1.99	2.02	2.55	2.58	3.13	3.20
26	.78	.83	1.38	1.40	1.52	1.56	2.01	2.06	2.59	2.64	3.17	3.20
27	.76	.80	1.39	1.41	1.50	1.55	....	....	2.63	2.67	3.20	3.20
28	.78	.82	1.41	1.45	1.41	1.51	1.75	1.80	2.65	2.68	3.19	3.22
29	.80	.85	1.45	1.46	1.42	1.47	1.78	1.85	2.65	2.68	3.17	3.20
30	.82	.85	....	....	1.46	1.48	1.85	1.93	2.65	2.67	3.20	3.25
31	.82	.87	....	....	1.45	1.51	....	....	2.67	2.72	....	....

High and low daily water level, from recorder charts

Day	July		August		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low
1	3.05	3.25	1.26	1.40	....	....	0.72	0.80	1.25	1.80
2	2.98	3.06	1.18	1.28	....	....	.75	.78	1.20	1.29
3	2.96	3.00	1.17	1.20	....	....	.76	.81	1.23	1.26
4	2.68	2.98	1.16	1.21	....	....	.80	.85	1.25	1.29
5	2.57	2.68	1.19	1.25	....	....	.83	.87	1.26	1.29
6	2.54	2.58	1.10	1.23	....	....	.85	.87	1.30	1.35
7	2.55	2.60	1.07	1.12	....	....	.87	.90	1.32	1.37
8	2.60	2.65	1.08	1.14	....	....	.89	.91	1.35	1.39
9	2.35	2.60	1.14	1.18	....	....	.89	.92	1.12	1.39
10	2.13	2.36	.95	1.20	....	....	.92	.99	1.12	1.15
11	1.97	2.13	.88	.95	....	....	.99	1.01	1.12	1.16
12	1.94	1.97	....	....	....	....	.98	1.04	1.13	1.16
13	1.95	1.98	....	....	....	....	.99	1.05	1.15	1.22
14	1.96	2.01	....	....	....	....	1.00	1.05	1.20	1.25
15	2.00	2.06	....	....	....	....	1.02	1.09	1.22	1.27
16	2.05	2.10	....	....	....	....	1.05	1.09	1.24	1.32
17	2.10	2.14	....	....	....	....	1.05	1.11	....	....
18	2.03	2.14	....	....	....	....	1.10	1.12	1.30	1.35
19	1.99	2.03	....	....	....	....	1.10	1.12	1.30	1.36
20	2.00	2.05	....	....	....	....	1.10	1.13	1.35	1.42
21	1.96	2.07	....	....	....	....	1.10	1.13	1.42	1.45
22	1.93	1.96	....	....	....	....	1.12	1.15	1.43	1.45
23	1.73	1.96	....	....	....	....	1.13	1.18	1.44	1.48
24	1.55	1.73	....	....	....	....	1.15	1.22	1.44	1.48
25	1.55	1.57	....	....	....	....	1.21	1.25	1.44	1.52

44--Continued.

High and low daily water level, from recorder charts										
Day	July		August		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low
26	1.55	1.60	....	....	....	....	1.20	1.25	1.52	1.57
27	1.59	1.60	....	....	....	....	1.22	1.29	1.51	1.56
28	1.60	1.61	....	....	0.62	0.68	1.20	1.25	1.52	1.58
29	1.54	1.61	....	....	.65	.72	1.20	1.30	1.53	1.57
30	1.38	1.55	....	....	.68	.74	1.25	1.31	1.51	1.59
31	1.35	1.38	....	....	.70	.75			1.55	1.61

45. Claude Hardin. At Sand Gully, 3.6 miles south of Lakeland. Unused drilled industrial well, diameter 18 to 12 inches, cased to 325 feet, depth 768 feet. Measuring point, top of 18-inch casing, 0.5 foot above land-surface datum. Automatic water-stage recorder installed Apr. 24, 1948. Records available: 1948.

High and low daily water level, from recorder charts										
Day	April		May		June		July		August	
	High	Low	High	Low	High	Low	High	Low	High	Low
1	63.89	63.95	64.92	65.01	65.82	66.08	64.10	64.20
2	63.75	63.91	64.95	65.01	65.93	66.04	63.96	64.15
3	63.65	63.75	64.97	65.05	65.87	65.97	63.96	64.09
4	63.66	63.73	65.00	65.07	65.71	65.88	63.93	64.04
5	63.70	63.80	65.06	65.18	65.47	65.72	63.86	63.97
6	63.75	63.85	65.04	65.26	65.27	65.47	63.83	63.90
7	63.77	63.95	65.13	65.24	65.20	65.30	63.77	63.86
8	63.95	64.10	65.13	65.21	65.22	65.30	63.75	63.80
9	64.07	64.15	65.17	65.27	65.25	65.28	63.71	63.76
10	64.06	64.15	65.28	65.45	65.21	65.25	63.62	63.71
11	64.03	64.10	65.44	65.54	65.15	65.21	63.56	63.62
12	64.07	64.15	65.50	65.55	65.10	65.16	63.49	63.59
13	64.15	64.26	65.48	65.53	65.09	65.14	63.46	63.54
14	64.25	64.39	65.39	65.48	65.00	65.10	63.45	63.50
15	64.37	64.51	65.30	65.41	64.90	65.01	63.38	63.46
16	64.45	64.50	65.25	65.33	64.80	64.93	63.30	63.40
17	64.45	64.59	65.17	65.29	64.81	64.89	63.20	63.34
18	64.52	64.75	65.15	65.26	64.80	64.90	63.20	63.30
19	64.64	64.86	65.12	65.24	64.73	64.86	63.09	63.25
20	64.75	64.85	65.08	65.17	64.70	64.80	62.99	63.11
21	64.24	64.91	65.08	65.15	64.65	64.75	62.94	63.04
22	64.78	64.95	65.12	65.20	64.65	64.73	64.85	62.94
23	64.86	65.01	65.17	65.25	64.55	64.73	62.75	62.89
24	64.93	65.15	65.20	65.25	64.49	64.60	62.56	62.75
25	65.00	65.28	65.23	65.29	64.48	64.50	62.39	62.55
26	65.09	65.40	65.27	65.38	64.43	64.49	62.19	62.40
27	65.20	65.40	65.38	65.42	64.37	64.43	62.06	62.21
28	65.27	65.50	65.41	65.62	64.33	64.39	61.90	62.06
29	63.80	63.85	65.26	65.43	65.56	65.80	64.26	64.36	61.74	61.90
30	63.85	63.95	65.08	65.26	65.71	65.95	64.23	64.28	61.56	61.75
31			65.00	65.09			64.18	64.25	61.50	61.62

High and low daily water level, from recorder charts								
Day	September		October		November		December	
	High	Low	High	Low	High	Low	High	Low
1	61.50	61.60	59.61	59.76	59.84	59.95	.....	.....
2	61.45	61.55	59.54	59.66	59.82	59.91	.....	.....
3	61.34	61.49	59.41	59.60	59.89	60.03	.....	.....
4	61.30	61.39	59.15	59.45	60.03	60.20	.....	.....
5	61.25	61.39	59.00	59.15	60.20	60.36	.....	.....
6	61.06	61.26	59.00	59.06	60.36	60.51	.....	.....
7	60.85	61.06	59.05	59.10	60.51	60.63	.....	.....
8	60.80	60.85	59.16	59.10	60.55	60.65	.....	.....
9	60.85	60.90	59.12	59.21	60.50	60.61	.....	.....
10	60.86	60.94	59.15	59.22	60.59	60.85	.....	Low
11	60.90	60.94	59.04	59.15	60.80	60.90	.....	.....
12	60.85	60.90	58.96	59.05	60.85	60.94	.....	.....
13	60.75	60.90	58.96	59.05	60.90	61.04	.....	.....

45--Continued.

High and low daily water level, from recorder charts

Day	September		October		November		December	
	High	Low	High	Low	High	Low	High	Low
14	60.71	60.77	58.92	59.00	60.99	61.10	.....	.....
15	60.71	60.75	58.89	58.95	60.93	61.06	.....	.....
16	60.73	60.85	58.94	59.06	.....	.....	.....	.....
17	60.80	60.90	58.90	59.06	.....	.....	.....	.....
18	60.80	60.86	58.75	58.94	.....	.....	61.94	61.99
19	60.69	60.84	58.76	58.86	.....	.....	61.89	61.96
20	60.50	60.71	58.85	58.99	.....	.....	60.90	61.97
21	60.35	60.50	58.99	59.09	.....	.....	61.96	62.10
22	60.14	60.35	59.09	59.10	.....	.....	62.10	62.16
23	60.19	60.20	59.12	59.20	.....	.....	62.15	62.25
24	60.19	60.21	59.20	59.26	.....	.....	62.21	62.30
25	60.21	60.25	59.21	59.29	.....	.....	62.07	62.27
26	60.11	60.25	59.22	59.39	.....	.....	61.95	62.09
27	59.84	60.11	59.35	59.43	.....	.....	61.68	61.95
28	59.80	59.85	59.40	59.56	.....	.....	61.56	61.70
29	59.75	59.85	59.53	59.71	.....	.....	61.54	61.70
30	59.67	59.80	59.63	59.88	.....	.....	61.51	61.64
31			59.84	59.95			61.59	61.67

45-A. Claude Hardin. At Sand Gully, 3.6 miles south of Lakeland. Used drilled test well, diameter 6 inches, depth 26.2 feet, cased to 17.3 feet. Measuring point, top of 6-inch casing, 3.0 feet above land-surface datum. Automatic water-stage recorder installed Aug. 27, 1948. Records available: 1948.

High and low daily water level, from recorder charts

Day	September		October		November		December	
	High	Low	High	Low	High	Low	High	Low
1	.....	.....	0.80	0.85	2.07	2.08	2.40	2.42
2	.....	.....	.85	.92	2.08	2.08	2.42	2.43
3	.....	.....	.92	.98	2.08	2.09	2.43	2.44
4	.....	.....	.90	.99	2.09	2.11	2.44	2.45
5	.....	.....	.88	.90	2.11	2.14	2.45	2.46
6	.....	.....	.88	.96	2.14	2.15	2.46	2.47
7	.....	.....	.96	1.03	2.15	2.19	2.47	2.49
8	.....	.....	1.03	1.10	2.19	2.20	2.49	2.49
9	1.43	1.50	1.10	1.17	2.20	2.20	2.25	2.49
10	1.50	1.56	1.17	1.23	2.20	2.25	2.25	2.25
11	1.52	1.57	1.23	1.27	2.25	2.26	2.24	2.25
12	1.49	1.52	1.27	1.30	2.26	2.26	2.25	2.25
13	1.49	1.52	1.29	1.30	2.26	2.26	2.25	2.25
14	1.52	1.59	1.29	1.35	2.26	2.29	2.25	2.27
15	1.59	1.65	1.35	1.43	2.29	2.31	2.27	2.28
16	1.65	1.69	1.43	1.50	2.31	2.32	2.28	2.29
17	1.55	1.69	1.50	1.51	2.32	2.32	2.29	2.44
18	1.53	1.55	1.51	1.55	2.32	2.32	2.40	2.40
19	1.53	1.56	1.55	1.62	2.27	2.32	2.38	2.40
20	1.56	1.60	1.62	1.70	2.27	2.27	2.38	2.40
21	1.48	1.60	1.70	1.75	2.27	2.27	2.40	2.45
22	1.08	1.48	1.75	1.79	2.27	2.27	2.45	2.46
23	1.07	1.08	1.79	1.80	2.27	2.27	2.46	2.47
24	1.07	1.14	1.80	1.85	2.27	2.30	2.46	2.49
25	1.14	1.21	1.85	1.88	2.30	2.33	2.49	2.49
26	1.16	1.23	1.88	1.99	2.33	2.35	2.50	2.55
27	.92	1.16	1.91	2.07	2.35	2.35	2.55	2.55
28	.77	.92	2.00	2.00	2.35	2.35	2.55	2.55
29	.77	.77	2.00	2.02	2.35	2.38	2.55	2.56
30	.77	.80	2.02	2.05	2.38	2.40	2.55	2.56
31			2.05	2.07			2.55	2.57

St. Johns County

2. 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. Records available: 1934, 1940-42, 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	+29.9	June 3	+28.5	Aug. 13	+28.7	Nov. 11	+28.8
Apr. 29	+28.7	July 8	+27.5	Sept. 30	+27.7		

3. 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. Records available: 1934, 1940-41, 1944-48.

Jan. 29	+30.4	June 3	+31.3	Aug. 13	+30.0	Nov. 11	+29.5
Apr. 29	+30.7	July 8	+29.1	Sept. 30	+29.6		

5. 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. Records available: 1934, 1940, 1944-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 29	+40.4	July 8	+40.2	Nov. 9	+46.2
Apr. 29	+39.0	Sept. 30	+45.2		

8. Parish Bros. Near SW. corner NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 4, T. 5 S., R. 28 E., 0.5 mile southwest of Florida East Coast Railway, 2.5 miles southeast of Bayard. Records available: 1934, 1940-42, 1944-48.

Jan. 29	+32.4	July 8	+33.8	Nov. 9	+34.5
Apr. 29	+32.7	Sept. 30	+35.3		

9. Ponce de Leon Hotel. In St. Augustine, in block north of Ponce de Leon Hotel. Records available: 1930, 1940, 1946-48.

Jan. 29	+30.8	July 8	+29.6	Sept. 30	+31.3
June 3	+29.8	Aug. 14	+30.5	Nov. 11	+31.0

35. City of St. Augustine well 6. In St. Augustine, in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 26, T. 7 S., R. 29 E., on west side of Holmes Boulevard, 4,070 feet south of Florida East Coast Railroad. Records available: 1944-47. Measurements discontinued.

Santa Rosa County

8. P. L. Coleman. On north side of East River, near NE. corner SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 6, T. 2 S., R. 26 W. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 15	+58.4	Apr. 13	+60.5	June 22	+61.8	Oct. 20	+57.8
Feb. 11	+60.0	May 19	+55.2	Sept. 16	+61.3	Dec. 1	+60.2

10. U. S. Army. At Eglin Auxiliary Field 7, in building 7204, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 1, T. 1 S., R. 26 W. Records available: 1947-48.

Jan. 13	84.5	Apr. 14	83.5	June 22	81.6	Dec. 1	82.4
Feb. 11	82.1	May 19	80.1	Sept. 16	81.9		

11. U. S. Army. At Eglin Auxiliary Field 7, in building 7102, in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 1, T. 1 S., R. 26 W. Used drilled public-supply well, diameter 16 to 10 inches, cased to 129 feet, depth 209 feet. Measuring point, top of 1/4-inch tee, 1.30 feet above land-surface datum. Records available: 1948.

Jan. 13	108.7	May 19	106.7	Sept. 16	101.7	Dec. 1	110.7
Apr. 14	111.2	June 22	106.7	Oct. 20	109.7		

Sarasota County

5. R. M. Canty. ~~SE 1/4~~ sec. 19, T. 36 S., R. 20 E., about 300 feet south of State Highway 18, about 12 miles east of Sarasota. Measuring point from Apr. 3, 1946, to Sept. 8, 1948, top of 8-inch vitrified clay pipe, 43.36 feet above mean sea level and 2.96 feet above land-surface datum; on and since Sept. 8, 1948, top of 8-inch casing at land-surface datum, and 43.60 feet above mean sea level. Records obtained through courtesy of J. G. Kimmel, Palmer Corporation, Sarasota. Records available: 1941-48.

High and low daily water level, from recorder charts

Date	October		November		December	
	High	Low	High	Low	High	Low
1	4.63	4.70	5.07	5.10
2	4.65	4.70	5.05	5.10
3	4.67	4.69	5.05	5.10
4	4.69	4.72	5.03	5.07
5	4.72	4.75	5.00	5.04
6	4.75	4.79	5.00	5.01
7	4.78	4.86	5.00	5.02
8	4.86	4.88	4.97	5.00
9	4.83	4.86	4.97	5.00
10	4.84	4.95	5.00	5.12
11	4.95	5.04	5.06	5.12
12	5.03	5.07	5.07	5.12
13	5.04	5.10	5.09	5.13
14	5.07	5.14	5.08	5.15
15	5.13	5.17	5.08	5.15
16	5.12	5.17	5.10	5.18
17	5.08	5.14	5.14	5.18
18	5.10	5.13	5.10	5.17
19	5.11	5.13	5.06	5.10
20	5.13	5.13	5.06	5.14
21	5.13	5.16	5.14	5.20
22	5.10	5.13	5.20	5.21
23	5.08	5.10	5.21	5.22
24	5.04	5.08	5.19	5.24
25	5.08	5.16	5.19	5.23
26	5.09	5.15	5.23	5.40
27	4.41	4.50	5.08	5.11	5.33	5.40
28	4.45	4.52	5.03	5.12	5.31	5.37
29	4.50	4.59	4.99	5.11	5.28	5.37
30	4.57	4.65	5.06	5.12	5.26	5.33
31	4.62	4.69			5.33	5.36

9. Palmer Corporation. At Palmer Farms, near SE corner SW ~~SE 1/4~~ sec. 20, T. 36 S., R. 19 E., about 7 miles east of Sarasota. Record obtained through the courtesy of J. G. Kimmel of the Palmer Corporation, Sarasota. Records available: 1930-37, 1941-48.

High and low daily water level, from recorder charts

Date	September		November		December	
	High	Low	High	Low	High	Low
1	....	....	....	....	....	....
2	....	....	....	....	....	....
3	....	....	....	....	....	....
4	....	....	1.89	2.09	....	....
5	....	....	1.94	2.08	....	....
6	....	....	1.95	2.16	....	....
7	....	....	1.83	2.19	....	....
8	....	....	1.66	1.83	1.60	1.46
9	+0.09	0.12	....	....	1.58	1.35
10	+1.13	+0.09	1.80	1.95	1.06	1.01
11	+1.13	+0.08	1.95	2.27	1.13	1.06
12	+1.20	+0.08	2.11	2.30	1.14	1.09
13	+1.21	+1.14	2.00	2.31	1.34	1.22
14	+1.18	+0.05	1.91	2.31	....	....
15	+1.10	+0.01	1.80	1.94	....	....
16	....	....	....	....	2.12	2.05
17	....	....	1.96	2.20	2.05	2.00
18	....	....	1.88	2.22	2.32	2.14
19	....	....	1.54	1.88	2.12	2.00

9--Continued.

High and low daily water level, from recorder charts

Day	September		November		December	
	High	Low	High	Low	High	Low
20	1.20	1.55	1.93	1.62
21	1.10	1.23	1.55	1.45
22	1.23	1.43	....	....
23
24	1.10	1.37	....	....
25	1.03	1.15	....	....
26	1.13	1.25	....	....
27	1.10	1.20	....	....
28	1.00	1.14	....	....
2981	1.00	....	....
30
31

Taylor County

35. Brooks Scanlon Corporation. About 1 mile southeast of Foley, in NE $\frac{1}{4}$ sec. 10, T. 5 S., R. 8 E. Records available: 1946-48.

High and low daily water level, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	0.74	0.80	0.45	0.52	....	....	at 0.68	0.32	1.14	1.23	2.38	2.51
2	.69	.77	.40	.46	....	....	at .69	at .40	1.19	1.28	2.47	2.57
3	.67	.69	.37	.42	....	....	at .42	at .25	1.25	1.33	2.52	2.61
4	.67	.73	.34	.39	....	....	at .28	at .15	1.28	1.37	2.58	2.67
5	.70	.78	.29	.37	....	....	at .19	at .07	1.27	1.37	2.65	2.75
6	.73	.79	.25	.35	....	....	at .18	at .05	1.09	1.30	2.72	2.80
7	.77	.84	.25	.30	....	....	at .10	.07	1.02	1.18	2.78	2.84
8	.80	.86	.21	.30	....	....	.03	.16	1.15	1.31	2.81	2.88
9	.81	.87	.30	.48	....	....	.10	.23	1.27	1.38	2.86	2.95
10	.83	.93	.25	.35	....	....	.18	.28	1.35	1.43	2.82	2.93
11	.88	.93	.23	.29	....	....	.20	.31	1.41	1.47	2.82	2.86
12	.89	.92	.23	.28	....	....	.30	.38	1.44	1.51	2.86	2.93
13	.41	.91	.23	.27	....	....	.38	.45	1.50	1.56	2.73	2.95
14	.50	.63	.18	.31	....	....	.42	.51	1.54	1.70	2.72	2.82
15	.62	.63	....	....	....	....	.19	.42	1.61	1.70	2.79	2.89
16	....	....	....	....	....	....	.25	.41	1.66	1.76	2.60	2.90
17	.37	.63	....	....	....	....	.39	.53	1.72	1.82	2.55	2.61
18	.37	.50	.15	.18	....	....	.50	.64	1.78	1.87	2.51	2.60
19	.50	.57	.10	.16	....	....	.57	.65	1.82	1.95	2.57	2.71
20	.21	.55	.06	.14	....	....	.63	.66	1.90	1.98	2.62	2.67
21	.25	.38	.03	.12	....	....	.65	.72	1.93	2.05	2.59	2.71
22	.35	.47	.07	.21	....	....	.68	.80	1.99	2.12	2.70	2.92
23	.25	.48	.08	.19	.18	.32	.74	.83	2.07	2.17	2.83	3.05
24	.16	.42	.02	.14	.27	.39	.79	.85	2.15	2.23	2.91	3.13
25	.38	.50	.02	.10	.35	.46	.82	.87	2.17	2.30	2.60	3.08
26	.23	.45	at .02	.07	.40	.47	.87	.94	2.28	2.35	2.52	2.60
27	.23	.28	at .02	.03	.06	.49	.94	.95	2.35	2.40	2.54	2.60
28	.27	.60	at .03	.13	.13	.34	.94	1.05	2.37	2.45	2.55	2.61
29	.52	.57	....	....	.34	.42	1.05	1.11	2.19	2.36	2.60	2.69
30	.52	.65	....	....	.41	.45	1.11	1.17	2.21	2.32	2.67	2.76
31	.52	.67	....	....	.22	.44	....	....	2.28	2.40	....	....

a Probably low owing to slight flow through curb around well.

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	2.67	2.75	....	....	....	....	0.27	0.39	....	....	1.22	1.31
2	2.60	2.73	....	....	0.58	0.65	at .20	.35	....	....	1.24	1.31
3	2.57	2.65	....	....	.65	.67	at .25	.00	....	....	1.25	1.35
4	2.62	2.75	....	....	.67	.70	at .44	at .25	....	....	1.32	1.37
5	2.72	2.81	....	....	.23	.70	at .32	at .16	....	....	1.35	1.39
6	2.72	2.83	....	....	.30	.42	at .16	at .03	....	....	1.38	1.41

35--Continued.

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
7	2.79	2.87	....	....	....	....	at 0.03	at 0.07	....	....	1.12	1.43
8	2.66	2.96	....	....	....	....	.07	.17	....	....	1.00	1.12
9	2.05	2.66	....	....	....	....	.17	.28	1.34	1.40	1.04	1.13
10	1.03	2.05	at 0.36	at 0.07	....	....	.27	.34	1.38	1.47	1.12	1.22
11	.95	1.06	at .35	at .23	....	....	.25	.36	1.45	1.51	1.18	1.25
12	at .23	at .07	....	....	.28	.42	1.45	1.53	1.20	1.30
13	at .07	.06	....	....	.41	.51	1.45	1.54	1.25	1.32
1406	.17	....	....	.48	.58	1.49	1.59	1.27	1.35
1506	.17	....	....	.55	.66	1.53	1.62	1.30	1.38
1616	.23	....	....	.62	.73	1.57	1.62	1.22	1.38
1700	.23	....	....	.67	.72	1.52	1.64	1.17	1.26
1801	.18	....	....	....	....	1.60	1.66	1.20	1.26
1917	.30	....	....	....	....	1.40	1.65	.97	1.26
2027	.37	....	....	....	....	1.40	1.48	1.02	1.10
2120	.41	....	....	....	....	1.27	1.48	1.10	1.15
2223	.40	....	....	....	....	1.25	1.29	1.05	1.17
2340	.50	....	....	....	....	1.03	1.29	1.05	1.12
2447	.57	....	....	....	....	1.01	1.15	1.08	1.15
2554	.63	....	....	....	....	1.14	1.24	1.09	1.20
2652	.62	....	....	....	....	1.18	1.26	1.18	1.26
2760	.65	....	....	....	....	1.18	1.27	1.20	1.27
28	0.47	0.59	....	....	1.13	1.25	1.20	1.30
2925	.60	....	....	1.02	1.21	.97	1.29
3021	.44	....	....	1.15	1.25	.78	.97
3188	.98

a Probably low owing to slight flow through curb around well.

36. Brooks-Scanlon Corporation. At Foley, behind commissary, in NW 1/4 sec. 9, T. 5 S., R. 8 E. Records available: 1947-48.

High and low daily water level, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	5.56	5.58	....	....	6.17	6.21	2.71	3.86	5.10	5.18	7.01	7.08
2	5.58	5.65	....	....	6.17	6.26	2.65	2.76	5.15	5.28	7.08	7.13
3	5.65	5.71	5.34	5.37	6.23	6.26	2.76	2.93	5.17	5.35	7.13	7.20
4	5.71	5.72	5.37	5.40	5.95	6.25	2.93	3.00	5.35	5.40	7.20	7.25
5	5.72	5.80	5.40	5.44	5.78	5.95	2.94	3.09	5.40	5.44	7.25	7.32
6	5.80	5.82	5.44	5.49	5.68	5.73	3.06	3.14	5.28	5.45	7.32	7.38
7	5.82	5.90	5.49	5.53	5.35	5.68	3.10	3.27	5.20	5.32	7.38	7.45
8	5.90	5.92	5.53	5.56	5.23	5.35	3.25	3.38	5.25	5.47	7.45	7.53
9	5.92	5.97	5.50	5.58	3.55	5.23	3.34	3.50	5.47	5.53	7.53	7.57
10	5.97	6.00	5.53	5.60	3.40	3.55	3.45	3.57	5.53	5.58	7.57	7.60
11	6.00	6.06	5.60	5.62	3.25	3.40	3.47	3.57	5.51	5.65	7.60	7.64
12	6.06	6.10	5.62	5.66	3.18	3.25	3.57	3.73	5.65	5.71	7.64	7.70
13	5.99	6.10	5.65	5.68	3.19	3.23	3.68	3.79	5.67	5.80	7.77	7.78
14	5.99	6.00	5.67	5.74	3.23	3.30	3.75	3.85	5.80	5.86	7.78	7.86
15	6.00	6.01	5.74	5.77	3.30	3.40	3.69	3.78	5.86	5.94	7.86	7.93
16	6.01	6.13	5.77	5.79	3.40	3.50	3.75	3.86	5.94	5.99	7.92	7.97
17	6.13	6.17	5.77	5.81	3.40	3.53	3.86	3.98	5.99	6.08	7.92	7.95
18	6.12	6.13	5.81	5.90	3.44	3.52	3.98	4.10	6.08	6.15	7.91	7.94
19	6.08	6.12	5.87	5.90	3.52	3.60	4.08	4.19	6.15	6.23	7.93	7.97
20	5.88	6.08	5.90	5.93	3.60	3.70	4.15	4.30	6.23	6.29	....	....
21	5.79	5.88	5.93	6.03	3.70	3.77	4.30	4.47	6.29	6.36	7.96	7.99
22	5.72	5.79	6.01	6.03	3.77	3.82	4.37	4.48	6.36	6.44	7.99	8.05
23	5.70	5.72	6.01	6.05	3.81	3.90	4.48	4.54	6.44	6.50	8.05	8.07
24	5.67	5.70	6.00	6.03	3.90	3.99	4.48	4.62	6.50	6.58	8.07	8.13
25	5.67	5.67	6.03	6.05	3.99	4.07	4.55	4.68	6.58	6.66	8.01	8.18
26	5.65	5.67	6.05	6.14	4.07	4.15	4.66	4.75	6.66	6.75	8.14	8.18
27	5.66	5.68	6.10	6.16	3.92	4.24	4.68	4.83	6.75	6.80	8.18	8.20
28	5.51	5.67	6.10	6.16	3.93	4.09	4.83	4.94	6.71	6.88	8.20	8.25
29	5.44	5.51	6.16	6.18	4.09	4.14	4.94	5.00	6.88	6.91	8.25	8.28
30	5.36	5.44	....	....	4.13	4.20	4.99	5.10	6.91	6.95	8.28	8.33
31	5.34	5.36	....	....	3.85	4.21	....	....	6.95	7.01	....	....

36--Continued.

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	8.33	8.37	5.60	5.76	4.44	4.72	4.68	4.76	5.65	5.70	6.42	6.48
2	8.37	8.41	5.45	5.60	4.53	4.66	4.15	4.68	5.67	5.72	6.48	6.51
3	8.41	8.45	5.04	5.45	4.66	4.74	3.92	4.15	5.71	5.75	6.51	6.56
4	8.45	8.46	4.68	5.04	4.74	4.82	3.65	3.92	5.72	5.78	6.56	6.60
5	8.43	8.46	4.44	4.68	4.35	4.82	3.65	3.68	5.78	5.83	6.59	6.61
6	8.46	8.52	4.37	4.45	4.32	4.35	3.68	3.80	5.83	5.89	6.61	6.66
7	8.52	8.55	4.45	4.50	4.34	4.46	3.80	3.91	5.89	5.94	6.65	6.70
8	8.55	8.58	4.50	4.60	4.46	4.59	3.91	4.02	5.94	6.01	6.63	6.65
9	8.32	8.55	4.15	4.65	4.59	4.72	4.02	4.13	6.01	6.05	6.64	6.65
10	7.55	8.32	3.81	4.15	4.72	4.88	4.13	4.21	6.05	6.13	6.65	6.70
11	7.07	7.55	3.60	3.81	4.86	4.94	4.19	4.30	6.11	6.17	6.70	6.71
12	6.95	7.07	3.60	3.65	4.94	4.98	4.24	4.32	6.17	6.21	6.71	6.74
13	6.87	6.95	3.65	3.70	4.98	5.05	4.32	4.41	6.21	6.25	6.74	6.77
14	6.66	6.87	3.70	3.84	5.05	5.15	4.41	4.50	6.25	6.30	6.77	6.85
15	6.55	6.66	3.72	3.73	5.10	5.20	4.50	4.58	6.30	6.36	6.85	6.88
16	6.50	6.55	3.74	3.85	5.15	5.32	4.58	4.67	6.36	6.45	6.88	6.90
17	6.48	6.50	3.68	3.85	5.31	5.38	4.67	4.72	6.45	6.50	6.90	6.91
18	6.47	6.48	3.68	3.75	5.37	5.40	4.72	4.84	6.50	6.55	6.90	6.92
19	6.47	6.50	3.75	3.85	5.40	5.47	4.81	4.88	6.50	6.58	6.97	6.92
20	6.49	6.51	3.85	3.97	5.47	5.58	4.88	4.96	6.50	6.53	6.79	6.87
21	6.49	6.50	3.70	4.03	5.58	5.65	4.96	5.01	6.42	6.55	6.73	6.79
22	6.50	6.53	3.69	3.75	5.65	5.73	5.01	5.13	6.38	6.42	6.74	6.83
23	6.53	6.57	3.75	3.88	5.73	5.79	5.13	5.18	6.28	6.38	6.78	6.80
24	6.40	6.55	3.88	3.99	5.79	5.87	5.18	5.25	6.23	6.28	....	....
25	6.30	6.40	3.99	4.10	5.87	5.95	5.25	5.33	6.23	6.24	6.80	6.82
26	6.25	6.30	4.10	4.17	5.95	6.00	5.33	5.38	6.24	6.28	6.82	6.86
27	6.24	6.26	4.18	4.28	5.52	6.06	5.38	5.42	6.28	6.31	6.86	6.90
28	6.25	6.30	4.28	4.38	5.21	5.52	5.40	5.45	6.31	6.35	6.90	6.93
29	6.24	6.31	4.38	4.50	4.97	5.21	5.45	5.53	6.33	6.37	6.93	7.00
30	5.95	6.24	4.49	4.60	4.76	4.97	5.50	5.60	6.37	6.42	6.77	6.95
31	5.76	5.95	4.59	4.71			5.60	5.65			6.73	6.77

Volusia County

6. Robert Steinhauser. At Oak Hill, in rear of hotel on east side of U. S. Highway 1. Unused drilled domestic well, diameter 2 inches, depth 140 feet. Measuring point, top of 2-inch ell, 1.1 feet above land-surface datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	+3.66	Apr. 29	+3.40	July 6	+2.51	Sept. 28	+3.97
Mar. 26	+3.60	June 2	+2.91	Aug. 12	+2.95	Nov. 12	+3.75

23. City of Daytona Beach. In Daytona Beach, on west side of Halifax River, east side of Beach Street, on projection of Live Oak Avenue. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	+1.90	June 2	+1.80	Aug. 10	+2.39	Oct. 29	+2.52
Mar. 27	+1.55	July 6	+1.48	Sept. 29	+2.68	Nov. 12	+2.18
Apr. 29	+1.97						

24. City of New Smyrna. About 2 miles southwest of New Smyrna, in city well field. Unused drilled public-supply well, diameter 6 inches, cased to 78 feet. Measuring point, top of 6-inch casing, at land-surface datum and 17.70 feet above mean sea level. Automatic water-stage recorder installed Jan. 27, 1948. Records available: 1948.

24--Continued.

High and low daily water level, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	4.22	6.65	4.63	9.00	5.50	9.00	7.12	11.65	8.02	12.35
2	4.45	7.19	4.66	8.86	5.82	8.59	7.28	11.43	6.12	11.99
3	4.23	6.88	4.62	9.00	6.12	9.34	7.00	12.00	8.50	12.04
4	4.56	6.79	4.31	7.86	5.48	8.61	8.62	11.83	8.19	12.18
5	4.56	7.07	4.86	7.31	5.75	10.91	8.09	11.88	8.00	12.25
6	4.50	7.37	4.39	7.04	6.18	10.78	7.57	11.97	6.97	11.91
7	4.43	7.61	4.10	6.43	6.52	12.65	7.20	12.08	8.63	12.29
8	4.45	6.92	4.07	7.40	6.78	10.99	8.57	12.09	7.70	12.00
9	4.40	8.62	4.10	8.06	7.29	11.10	8.18	11.53	6.85	12.05
10	4.75	7.00	4.09	8.57	6.95	10.58	7.76	12.03	7.65	12.23
11	4.68	7.01	4.50	7.94	7.78	9.81	6.00	9.15	7.12	9.47
12	4.44	8.35	4.85	7.93	6.60	11.62	5.32	11.88	6.41	9.59
13	4.45	8.06	4.94	7.25	6.97	11.66	6.90	11.88	6.35	8.72
14	4.50	6.88	4.13	7.13	6.98	11.76	7.02	12.07	5.95	10.06
15	4.29	7.27	4.40	7.35	6.00	10.10	6.89	12.02	6.23	10.29
16	4.26	7.78	4.40	7.80	5.22	9.32	8.11	10.31	6.26	10.50
17	4.67	7.82	4.85	7.67	5.45	9.85	7.06	12.03	6.43	10.10
18	4.33	8.12	5.15	7.85	6.40	8.63	7.50	12.13	6.90	10.89
19	5.12	8.38	5.32	8.98	5.92	9.62	7.12	12.04	6.00	9.07
20	4.77	8.59	5.88	8.98	5.92	10.23	8.65	12.38	5.85	9.52
21	4.41	8.45	5.27	7.85	6.45	11.48	7.92	12.35	6.18	9.33
22	4.15	8.30	5.38	10.40	7.48	11.35	8.22	12.45	6.49	12.02
23	4.58	8.58	6.42	9.25	6.68	11.29	6.98	12.36	6.91	11.90
24	4.07	8.48	5.35	9.20	6.09	11.30	6.91	12.31	7.01	12.10
25	4.28	8.61	6.29	9.95	6.83	10.87	7.95	12.46	6.79	12.20
26	4.02	8.56	6.42	9.83	6.63	11.50	7.60	12.51	7.05	12.23
27	4.32	8.23	5.90	9.18	6.30	11.58	6.51	12.25	7.90	10.48
28	4.42	6.99	5.14	8.38	5.53	8.47	6.10	11.62	8.20	12.54	6.92	12.41
29	4.20	6.71	4.79	7.65	4.90	8.88	6.78	11.55	6.62	10.30	8.50	14.00
30	4.02	7.18			5.60	9.28	7.02	11.50	6.12	9.53	7.67	12.47
31	4.28	6.64			6.15	8.18			7.15	12.20		

High and low daily water level, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	7.63	12.56	6.28	8.13	5.86	8.08	5.71	7.70	5.48	7.98	6.40	8.61
2	7.12	12.58	5.83	9.32	6.08	8.88	5.44	7.33	5.40	7.99	6.13	8.80
3	8.00	12.63	6.37	9.16	6.00	8.00	5.27	6.87	6.08	8.03	5.98	8.63
4	7.24	12.57	6.40	9.12	5.80	8.30	4.89	7.60	6.06	8.10	6.03	8.25
5	6.80	8.80	5.12	9.22	6.12	7.54	5.24	7.26	5.89	8.00	5.97	7.70
6	6.62	10.28	6.45	9.30	4.69	7.80	4.86	7.56	6.11	8.11	6.33	8.68
7	6.95	10.35	6.11	9.28	5.81	8.52	4.34	6.70	5.94	7.40	6.29	8.52
8	7.12	10.27	5.58	7.69	6.29	8.27	4.40	6.18	5.97	8.13	6.45	8.51
9	7.61	10.16	5.75	9.24	6.06	8.31	4.16	6.81	5.19	7.95	6.37	8.78
10	5.53	8.78	6.68	9.36	5.71	8.21	4.95	6.10	4.85	7.54	6.15	8.28
11	5.88	7.80	6.34	9.18	6.11	8.04	5.15	7.78	5.80	6.80	6.15	7.79
12	6.46	9.16	6.52	9.16	5.67	7.45	5.28	7.65	6.02	8.40	5.98	8.30
13	5.82	9.45	6.34	9.20	5.57	8.22	5.61	7.64	5.96	7.76	6.48	9.10
14	6.20	8.88	5.98	8.68	5.68	8.58	5.68	7.63	5.99	7.50	6.42	9.19
15	6.70	8.85	5.65	8.27	5.70	8.10	5.75	8.10	6.08	8.19	6.43	8.80
16	6.71	10.10	5.30	9.48	5.57	8.35	6.30	8.39	6.20	8.00	6.65	9.20
17	7.17	9.91	6.34	8.83	5.42	8.25	5.40	7.04	6.12	8.50	6.46	8.90
18	6.54	8.91	6.40	9.21	5.77	9.40	5.12	8.06	5.80	7.80	6.34	8.85
19	5.97	11.33	8.10	11.01	5.55	7.33	4.83	8.47	5.82	9.05	6.24	8.44
20	6.62	9.49	6.90	9.26	5.56	8.50	5.90	7.83	6.25	7.77	6.06	8.27
21	6.97	9.35	6.42	9.19	5.54	8.20	5.90	8.43	6.10	6.88	6.14	8.58
22	5.83	9.55	6.10	9.02	4.05	7.70	5.12	9.15	6.03	8.22	6.20	8.05
23	6.32	9.19	6.02	9.09	4.93	7.72	5.98	7.77	5.93	8.71	6.63	8.10
24	6.64	9.23	5.80	9.04	5.82	7.86	5.60	7.33	5.90	8.05	6.40	8.00
25	6.25	8.78	6.09	9.13	5.31	7.94	5.23	8.01	6.36	7.45	5.95	6.82
26	6.61	9.56	6.09	9.08	5.49	7.03	5.10	8.24	6.05	8.49	5.98	6.90
27	5.81	8.79	5.61	9.10	5.68	7.92	4.62	8.04	6.05	8.10	6.00	8.42
28	6.14	8.86	5.75	9.02	5.20	7.81	5.45	8.28	6.30	8.46	6.10	8.43
29	5.73	8.52	5.63	9.07	4.16	7.51	4.91	7.89	5.95	8.70	6.03	8.16
30	5.82	8.28	5.80	9.01	5.65	7.80	5.89	7.98	6.20	8.86	5.96	8.45
31	5.48	9.27	6.60	9.21			5.83	7.40			5.93	8.90

25. City of Daytona Beach. In Daytona Beach, in city park, on south side of walk of north bridge to beach and east of Beach Street. Unused drilled public-supply well, diameter 6 inches, cased to 86 feet. Measuring point, top of 6-inch casing, 3.75 feet above land-surface datum, and 11.46 feet above mean sea level. Automatic water-stage recorder installed Aug. 11, 1948. Records available: 1948.

High and low daily water level, from recorder charts

Day	August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low
1	.....	.....	+2.14	+1.53	+2.79	+2.19	+2.66	+2.19	+2.73	+2.30
2	.....	.....	+2.36	+1.81	+2.77	+2.44	+2.50	+1.97	+2.68	+2.27
3	.....	.....	+2.45	+1.77	+3.10	+2.65	+2.35	+2.02	+2.60	+2.23
4	.....	.....	+2.40	+1.76	+3.10	+2.69	+2.42	+1.94	+2.73	+1.50
5	.....	.....	+2.55	+2.30	+3.10	+2.57	+2.34	+1.88	+2.70	+1.75
6	.....	.....	+2.55	+2.18	+3.03	+2.65	+2.30	+1.88	+2.77	+1.38
7	.....	.....	+2.45	+2.08	+3.08	+2.61	+2.43	+2.06	+2.34	+1.20
8	.....	.....	+2.53	+2.11	+3.03	+2.59	+2.67	+1.90	+2.34	+1.21
9	.....	.....	+2.52	+2.03	+2.99	+2.65	+2.43	+1.09	+2.34	+1.21
10	.....	.....	+2.43	+2.08	+2.95	+2.73	+2.42	+1.55	+2.48	+1.60
11	.....	.....	+2.50	+2.15	+3.15	+2.55	+2.48	+1.27	+2.48	+1.63
12	+2.68	+2.35	+2.83	+2.37	+2.95	+2.29	+1.95	.00	+2.64	+1.97
13	+2.73	+2.43	+3.00	+2.32	+2.96	+2.41	+1.84	+1.16	+2.75	+1.49
14	+2.71	+2.45	+2.87	+2.26	+2.95	+2.59	+2.16	+1.75	+2.49	+1.30
15	+2.74	+2.55	+2.70	+2.15	+2.93	+2.59	+2.48	+1.16	+2.35	+1.10
16	+2.85	+2.46	+2.74	+2.37	+2.89	+2.51	+2.13	+1.70	+2.25	+1.05
17	+2.78	+2.46	+2.71	+1.46	+2.98	+2.66	+2.31	+1.84	+2.18	+1.13
18	+2.74	+2.50	+2.43	+1.61	+3.00	+2.53	+2.27	+1.89	+2.36	+1.32
19	+2.77	+2.37	+2.60	+2.30	+3.01	+2.48	+2.41	+1.96	+2.60	+1.95
20	+2.75	+2.35	+2.68	+2.15	+2.77	+2.43	+2.43	+1.12	+2.70	+1.53
21	+2.61	+2.23	+2.49	+2.20	+2.75	+2.38	+2.55	+1.75	+2.43	+1.41
22	+2.62	+2.42	+2.74	+1.00	+2.74	+2.42	+2.73	+2.16	+2.44	+1.30
23	+2.70	+2.28	+2.25	+1.53	+2.73	+2.44	+2.60	+1.02	+2.40	+1.32
24	+2.52	+2.10	+2.44	+1.50	+2.73	+2.48	+2.34	+1.14	+2.48	+1.53
25	+2.42	+2.15	+2.68	+2.15	+2.82	+2.39	+2.57	+1.68	+2.58	+1.82
26	+2.51	+2.25	+2.95	+2.59	+2.78	+2.38	+2.87	+1.35	+2.90	+2.54
27	+2.55	+1.90	+3.10	+2.42	+2.83	+2.43	+2.57	+1.45	+2.95	+1.64
28	+2.37	+2.03	+2.98	+2.41	+2.86	+2.20	+2.54	+1.66	+2.58	+1.60
29	+2.56	+2.25	+2.94	+2.32	+2.82	+2.20	+2.67	+1.34	+2.54	+1.57
30	+2.73	+2.27	+2.92	+1.60	+2.70	+2.27	+2.54	+1.68	+2.45	+1.31
31	+2.48	+1.95			+2.75	+2.43			+2.32	+1.69

Wakulla County

2. O. P. Shields. At St. Marks, about 75 feet north of Shields' Restaurant. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 16	1.22	May 17	1.90	Sept. 14	1.09	Dec. 3	1.26
Feb. 23	.86	June 21	1.42	Oct. 21	1.53		

11. U. S. Dept. of Interior. 3 miles southwest of Panacea, at fire tower, on Ochlocknee Bay. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 16	7.34	May 17	7.75	Oct. 21	6.85
Feb. 13	6.88	June 21	8.16	Dec. 3	6.62

Walton County

10. Town of Freeport. At Freeport, near SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 15, T. 1 N., R. 19 W. Records available: 1947-48.

10--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 16	+8.5	Apr. 13	+10.0	June 24	+8.2	Oct. 21	+8.4
Feb. 10	+9.0	May 18	+8.9	Sept. 14	+9.0	Dec. 3	+8.8

13. O. H. Saltsman. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 35, T. 1 S., R. 19 W., at Point Washington, 10 feet south of a pump house. Records available: 1946-48.

Jan. 16	+14.5	Apr. 16	+16.0	June 21	+14.5	Oct. 21	+15.8
Feb. 13	+14.2	May 18	+14.3	Sept. 14	+16.0	Dec. 3	+15.8

14. Walton County. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 35, T. 1 S., R. 19 W., at former schoolhouse in Point Washington. Records available: 1946-48.

Jan. 16	+10.8	Apr. 16	+12.2	June 2	+11.9	Oct. 21	+11.5
Feb. 13	+10.9	May 18	+11.8	Sept. 14	+11.6	Dec. 3	+12.6

17. Citizens Oil Co. East of Freeport, on the northern tip of LaGrange Bayou, in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 1 N., R. 19 W. Records available: 1947-48.

Jan. 16	+30.3	Apr. 13	+31.1	June 24	+30.2	Oct. 21	+31.1
Feb. 10	+30.1	May 18	+30.7	Sept. 14	+31.0	Dec. 3	+31.1

19. U. S. Army. At Eglin Auxiliary Field 1, in Building 1204, on corner of Avenue "A" and 1st Street, in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 16, T. 2 N., R. 21 W. Records available: 1947-48.

Jan. 12	128.6	Apr. 15	148.4	Sept. 17	159.2	Dec. 3	141.5
Feb. 12	126.6	June 23	126.2	Oct. 20	136.6		

Washington County

4. Town of Carryville. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 2, T. 4 N., R. 16 W., 50 feet north of Louisville & Nashville Railroad, in a pump house. Records available: 1946-48.

Jan. 12	10.39	Apr. 12	9.06	June 25	14.90	Oct. 19	10.84
Feb. 9	12.48	May 21	13.73	Sept. 17	11.09	Nov. 30	8.58

5. Town of Vernon. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 35, T. 3 N., R. 15 W., at Vernon, in a pump house under a water tank. Records available: 1946-48. Feb. 10, 14.45.

GEORGIA

By G. H. Chase, H. E. LeGrand, and S. M. Herrick

PROGRAM OF WORK

Measurements of water level and artesian pressure in selected wells in Georgia, begun in 1938 in cooperation with the Georgia Department of Mines, Mining, and Geology, were continued in 1948. Since 1938, when the program embraced wells in only three counties--Chatham, Dougherty, and Glynn--the observation-well program steadily expanded until, in 1943, it included 231 wells in 29 counties, of which 7 counties were in the northern part of the State. From 1944 through 1946 the observation-well program was maintained on virtually the same level as in 1943. Beginning with 1947 and continuing through 1948 wells have had to be dropped from the program. Causes contributory to discontinuance of measurements include failure of well through caving, general depreciation of well fixtures, change of ownership with subsequent permanent abandonment of well, installation of pumps, which prohibit water-level measurements, etc. In 1948 automatic water-stage recorders were maintained on 5 wells during the entire year and 194 individual measurements of water level and artesian pressure were made on wells not equipped with water-stage recorders. Measurements on well 25, Baker County, were made by the Emory University Field Station, 11 miles southwest of Newton; they form part of the hydrologic data collected by that station in connection with its research on malaria control. These measurements are given in this report.

The observation-well program in the northern counties was begun in 1943 and consisted of 42 drilled and 2 dug wells. Since that time, for various reasons, measurements on some of these wells have had to be discontinued, the program in 1948 including 35 wells, which are divided among the counties as follows: Clayton, 3; Cobb, 12; DeKalb, 6; Fulton, 12; Henry, 1; Spalding, 1.

The following table lists all counties in Georgia for which records of water-level measurements are given in this report.

Distribution by counties of observation wells in Georgia, 1948		
County	Number of wells at end of 1948	Tape measurements and pressure readings
Appling	1	
Baker	1	
Brantley	2	4
Bryan	18	14
Camden	10	6
Charlton	1	1
Chatham	40	78
Clayton	3	4
Cobb	12	23
DeKalb	6	11
Effingham	3	3
Evans	1	2
Fulton	12	14
Glynn	12	8
Henry	1	7
Liberty	8	8
Long	1	
McIntosh	11	7
Mitchell	1	
Montgomery	1	
Pierce	2	2
Screven	2	
Spalding	1	
Ware	1	
Wayne	3	2
	154	194

OCCURRENCE OF GROUND WATER

The geologic map of Georgia shows the State divided into three major geologic provinces, namely, the Paleozoic area, the Crystalline area, and the Coastal Plain. The Paleozoic area, which is in the northwestern part of the State, is the smallest of the three, and no observation wells have yet been established in it. The Crystalline area is considerably larger than the Paleozoic and lies south and east of it. Observation wells have been established and maintained in six counties that lie in the Crystalline area, but most of the wells are in the four counties in which the city of Atlanta and its environs are situated. The Coastal Plain is the largest of the three provinces and larger than the other two combined. It covers an area of about 35,000 square miles, or about 60 percent of the entire State. It embraces all that part of the State lying south of the Fall Line, which passes approximately through Columbus, Macon, Milledgeville, and Augusta, and marks the northern limit of the sedimentary rocks, which overlie the older crystalline rocks. More than 77 percent of the

observation wells in Georgia are in this province. The Coastal Plain is underlain by water-bearing formations that range in age from upper Cretaceous to Recent.

The observation wells in the Crystalline area of Georgia and in igneous and metamorphic rocks or surficial material weathered from them. Most of the observation wells in the Coastal Plain, for which there are records, end in limestones of Oligocene or upper Eocene age, which, as a unit, is the principal artesian aquifer in southeast Georgia. Chatham County well 343, a shallow well 12 miles southwest of Savannah, ends in deposits of Recent age and therefore serves to illustrate the fluctuation of the water table in formations of that age in this area.

FLUCTUATIONS OF WATER LEVEL

In wells in the Crystalline area water levels fluctuate from season to season with the precipitation. The water table, therefore, stands highest with respect to the surface of the ground during the months of April and May, when the precipitation is generally greatest, and lowest in December and January, when precipitation is usually least. The fluctuations also differ from well to well, the proximity of the well to a main drainage channel and its position in relation to the topography of the surrounding country determining, in large measure, the fluctuations of its water level. Other factors responsible for differences in fluctuation from well to well are depth and method of construction. Dug wells seem to respond much more sharply to seasonal precipitation than do drilled wells.

In the Coastal Plain water levels in wells ending in the principal limestone aquifer at the close of 1948 were slightly higher in Effingham, Evans, Chatham, Bryan, and Liberty Counties, but lower south of Liberty County, as compared with those during the previous December. In the Savannah area, which includes the industrial area northeast of the city proper, artesian water levels averaged 0.4 foot lower during 1948 as compared with 1947. This condition is believed to be due to increased industrial pumpage. Accordingly, in 1948 the total metered pumpage in the Savannah area, which is the combined pumpage of the Savannah municipal waterworks and the Union Bag and Paper Corporation, increased by 587,250,817 gallons over that of 1947. December water levels in Chatham County as a whole, excluding the industrial area, showed an average

increase of 0.41 foot over those recorded during December 1947. On Wilmington and Tybee Islands the average year-end increase during 1948 amounted to 0.51 foot. In the southern part of Chatham County December water levels showed an average increase of 0.5 foot. However, in the northern and northwestern parts of the county, year-end water levels had declined 0.35 and 0.08 foot, respectively, as compared with those of December 1947.

In Bryan and Liberty Counties year-end water levels averaged 0.25 and 0.30 foot, respectively, higher in 1948 as compared with 1947. However, in McIntosh, Glynn, and Camden Counties, average year-end water levels showed decreases of 0.39 foot, 1.0 foot, and 1.44 feet, respectively, as compared with those of 1947. Water levels decreased about 1.0 foot in the Brunswick area in spite of a sizable decrease in industrial pumpage. Accordingly, the total metered pumpage in Brunswick, which is the combined pumpage of the Peoples Water Service Company, Brunswick Pulp and Paper Company, and the Hercules Powder Company, decreased by 2,340,906,000 gallons during 1948 as compared with 1947. Because of similar declines in areas, that are situated up-dip from Brunswick and therefore not affected by local pumpage, this situation is thought to be due to natural causes affecting the recharge area supplying the Brunswick area. December water levels in well 18, at St. Marys, were down 3.92 feet as compared with previous year-end levels. In the St. Marys area the total metered pumpage of the St. Marys Kraft Corporation increased by 675,000,000 gallons during 1948 as compared with 1947. It is possible that well 18 is affected by both local industrial pumpage and industrial pumpage in nearby Fernandina, Florida. Additional factors to be considered in the St. Marys area are the effects due to natural causes, that is, recharge conditions in up-dip areas, and tidal effects. Periodic measurements of well 18, therefore, would not necessarily represent true water-level conditions in this area. It is felt that well 18 is not yet affected by local industrial pumpage. Further, continuous water-level records from well 18 would probably reveal a year-end decline during 1948 approximating that in up-dip wells--about 1.44 feet. In Brantley, Charlton, Pierce, and Wayne Counties year-end water levels were from 0.47 foot to 1.18 feet lower in 1948 as compared with 1947.

The decrease in water levels--approximately 0.4 foot--in the Savannah area is attributed to increased pumpage during 1948 as compared with 1947. Year-end water levels in the remainder of coastal Georgia during 1948 are thought to be due to natural causes.

Well 343, Chatham County, is at the U. S. Plant Introduction Station, 12 miles southeast of Savannah. This is a dug well, 14.5 feet deep, and shows the effect of precipitation. Water levels recorded in this well represent levels of the water table and not artesian water levels as noted in the data given above. The average daily water level for this well during December 1948 was 3.18 feet lower than that of the previous December. This is thought to be due to year-end precipitation during the 2 years. The annual daily average water level for this well, however, was 0.5 foot higher during 1948 than during the previous year in spite of a slight decrease in total precipitation during 1948. Because of unusually heavy precipitation during 1947 and early 1948 the water table in this area was built up to the highest level so far recorded for this well. Part of the high water levels recorded in this well during 1948 resulted from the high precipitation of 1947. Precipitation in 1948, though slightly lower than that of the previous year, was sufficient to maintain a high water table in this area during the entire year. Continued decrease in precipitation during 1949 would result in progressive lowering of water levels in this well.

As in well 343, Chatham County, all wells in North Georgia reflect water-table conditions and consequently also reflect the effect of precipitation. Because of high precipitation during 1947 and 1948, year-end water levels in North Georgia were uniformly higher. These increases ranged from 0.34 foot to 4.58 feet. The annual daily average for well 26, Fulton County, during 1948 showed an increase of 2.59 feet as compared with 1947.

Well 12, Spalding County, is at the Georgia State Experiment Station, Experiment. This is a dug well, 30.5 feet deep, and shows the effect of precipitation. Average water levels in this well during 1948 were up approximately 1 foot as compared with 1947. This area received almost exactly the same amount of rainfall during 1948 as that recorded during the

previous year. Here again, as in well 343, Chatham County, the water table has been progressively built up over a period of two successive years because of unusually high amounts of precipitation during 1947 and 1948.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Appling County

3. 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. Records available: 1941-43, 1945-47. No measurements made in 1948.

Baker County

1. Emory University Field Station well 1. Fred Cross. About 1.1 miles east of Baker-Miller County line; 0.5 mile north of State Highway 91, about 0.25 mile northwest of Nochaway Church, 30 feet southwest of pond. Records available: 1941-47. Measurements discontinued.

5. Emory University Field Station well 5. D. G. Jones. About 1.8 miles north of Elmodel, 170 feet east of county road, about 0.25 mile east of State Highway 37. Records available: 1941-47. Measurements discontinued.

9. Emory University Field Station well 9. Mathew Clias. About 5.2 miles north of Elmodel, 170 feet east of county road, about 0.25 mile east of State Highway 37. Records available: 1941-47. Measurements discontinued.

12. Emory University Field Station well 12. Alton Kidd. 0.14 mile north of Milford, 75 feet east of county road. Records available: 1941-47. Measurements discontinued.

15. 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. Records available: 1941-47. Measurements discontinued.

25. 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, about 0.6 mile north of Pine Grove Church. Records available: 1941-48.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.08	4.36	4.66	0.91	6.52	8.55	13.99	6.65	11.45	14.09	11.76	6.43
2	4.23	4.39	4.71	1.31	6.65	8.63	14.03	6.58	11.56	14.13	11.88	6.34
3	4.37	4.51	4.73	1.68	6.78	8.69	14.15	6.50	11.64	14.18	11.98	6.35
4	4.51	4.61	2.34	1.94	6.88	8.78	14.28	6.48	11.75	14.10	12.09	6.46
5	4.71	4.73	2.49	2.18	6.89	8.89	14.44	6.49	11.81	11.55	12.19	6.58
6	4.87	4.83	1.72	2.39	6.94	...	14.61	6.68	11.86	10.56	12.29	6.74
7	5.04	4.95	.82	2.59	6.96	...	14.78	6.88	11.89	10.09	12.38	6.87
8	5.20	5.06	1.34	2.81	7.01	...	14.92	7.16	11.93	9.87	12.47	2.36
9	5.34	5.15	.52	3.02	7.05	9.38	15.03	7.44	11.99	9.78	12.55	1.52
10	5.51	5.34	1.02	3.21	7.11	9.54	14.78	7.71	12.07	9.77	12.61	1.76
11	5.68	5.39	.73	3.33	7.15	9.73	13.88	7.92	12.16	9.78	12.71	1.93
12	5.77	4.96	1.29	3.50	7.19	9.93	13.54	8.19	12.24	9.79	12.81	2.08
13	5.83	4.52	1.56	3.69	7.25	10.10	13.04	8.48	12.33	9.74	12.91	2.23
14	5.79	4.60	1.74	3.86	7.31	10.24	12.61	8.80	12.42	9.57	12.98	2.38
15	5.73	4.69	1.89	4.00	7.38	10.45	12.04	9.10	12.54	9.40	13.07	2.51
16	5.77	4.76	2.03	4.17	7.44	10.63	11.73	9.34	12.63	9.32	13.14	2.65
17	5.83	4.84	1.68	4.34	7.52	10.83	.....	9.54	12.73	9.31	13.23	2.81
18	5.94	4.89	2.08	4.54	7.59	11.09	11.17	9.71	12.84	9.36	13.29	2.96
19	6.02	4.93	2.24	4.72	7.70	11.34	11.21	9.88	12.94	9.48	13.35	2.96
20	....	5.02	2.41	4.88	7.78	11.60	11.27	10.03	13.04	9.66	13.34	2.78
21	5.93	5.13	2.58	5.07	7.84	11.78	11.44	10.18	13.14	9.86	13.29	3.01
22	5.60	4.26	2.74	5.24	7.94	12.02	11.61	10.33	13.25	10.05	13.23	3.20

25--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
23	5.41	3.76	2.91	5.42	8.02	12.32	11.73	10.46	13.34	10.24	12.42	3.36
24	5.26	3.92	3.06	5.35	8.10	12.74	11.96	10.56	13.46	10.42	11.34	3.51
25	4.56	4.07	3.24	5.69	8.19	13.04	12.03	10.69	13.58	10.62	10.52	3.66
26	4.58	4.18	3.43	5.83	8.28	13.24	12.18	10.81	13.70	10.81	9.94	3.77
27	4.66	4.30	3.60	5.98	8.36	13.41	12.37	10.92	13.82	10.99	9.38	3.86
28	4.79	4.40	3.77	6.09	8.41	13.59	12.46	11.04	13.91	11.16	9.94	3.99
29	4.87	4.54	3.96	6.24	8.41	13.76	11.64	11.14	13.98	11.32	8.33	4.14
30	4.93		4.13	6.39	8.43	13.92	7.94	11.23	14.03	11.48	6.82	3.50
31	4.70		4.21		8.48		6.86	11.33		11.62		3.51

29. 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. Records available: 1941-47. Measurements discontinued.

Brantley County

1. N. S. McVeigh. At Waynesville, on north side State Highway 50. Records available: 1939-43. No measurements made in 1948.

9. U. S. Government. About 1.4 miles north of Atlantic Coast Line Railroad, at Waynesville, about 0.1 mile east of country road from Waynesville to Browntown, at site of abandoned Civilian Conservation Corps camp. Records available: 1941-43, 1945-48. Sept. 29, 1.99; Oct. 29, 1.91; Nov. 29, 2.07; Dec. 29, 2.04.

Bryan County

50. U. S. Dept. of the Army. At Clyde, about 100 feet southwest of intersection of State Highway 63 with county road. Records available: 1943. No measurements made in 1948.

51. U. S. Dept. of the Army. At Clyde, about 600 feet southwest of former site of schoolhouse. Records available: 1939-43. No measurements made in 1948.

52. U. S. Dept. of the Army. At Clyde, a short distance northeast of site of former schoolhouse. Records available: 1939-48. Nov. 30, +5.70.

55. U. S. Dept. of the Army. At Clyde, a short distance east of former site of old Bryan County courthouse. Records available: 1939-48. Nov. 30, 2.14.

63. U. S. Dept. of the Army. 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. Records available: 1939-41. No measurements made in 1948.

71. U. S. Dept. of the Army. On south side of River Road, 5.5 miles west of State Highway 63. Records available: 1939-41. No measurements made in 1948.

85. Henry Ford. About 0.1 mile southwest of Belfast Road, about 150 feet southeast of Seaboard Air Line Railway. Records available: 1939-43, 1945-47. Measurements discontinued.

87. Henry Ford. At Richmond Hill, about 500 feet west of intersection of U. S. Highway 17 and Bryan Neck Road. Records available: 1939-48. Nov. 30, +0.94.

87a. Henry Ford. At Richmond Hill, about 500 feet west of intersection of U. S. Highway 17, and Bryan Neck Road. Records available: 1942-48. Sept. 29, 0.0; Oct. 29, 0.1; Nov. 30, +0.05.

96. J. W. Harden. About 1.7 miles south of Keller, about 300 feet east of Bryan Neck Road. Water level affected by tide. Records available: 1939-48. Oct. 30, +8.08.

112. U. S. Dept. of the Army. Along River Road, 12 miles west of State Highway 63, on south side of road. Records available: 1939-41. Measurements discontinued.

119. Henry Ford. At Kilkenny, about 4.5 miles southeast of Keller. Water level affected by tide. Records available: 1939-47. No measurements made in 1948.

144. U. Butler. At Eldora, about 200 feet east of county road on north side of two-story brick store. Records available: 1942-48. Nov. 29, 19.85.

145. Henry Ford. About 0.3 mile southeast of U. S. Highway 17, on east side of Belfast Road, north side of turpentine still. Records available: 1942-45. Measurements discontinued.

146. L. W. Smith. About 2.25 miles northeast of Lanier, on south side of State Highway 30, at site of abandoned Civilian Conservation Corps camp. Records available: 1941-48. Aug. 4, 20.59; Nov. 28, 20.47.

148. Henry Ford. In Keller, about 80 feet west of Bryan Neck Road and about 200 feet north of Belfast Road. Records available: 1940-48. Nov. 30, +5.48.

149. Henry Ford. About 5.5 miles southeast of Richmond Hill at the Jack Griswold Place. Records available: 1940-47. No measurements made in 1948.

150. Henry Ford. In Richmond Hill, 1 mile north of U. S. Highway 17, about 200 feet east of State Highway 63. Records available: 1940-48. Nov. 30, +9.89.

151. Henry Ford. About 0.9 mile west of Keller, on west bluff of Tivoli River, north side of Belfast Road. Records available: 1941-48. Nov. 30, +6.54.

161. Henry Ford. At Kilkenny, about 4.5 miles southeast of Keller, and about 300 feet north of club house, near edge of marsh at oyster house. Water level affected by tide. Records available: 1941-47. No measurements made in 1948.

171. Deal & Purvis. In Belfast, about 110 feet east of Bluff, near center of nearly right-angled bend in Belfast River. Water level affected by tide. Records available: 1942-48. Nov. 30, +7.50.

Camden County

3. Town of St. Marys. On east side of State Highway 40, 0.25 mile north of Riverview Hotel, in St. Marys. Records available: 1938-43. Measurements discontinued.

8. M. L. Hill. At residence in Kingsland. Records available: 1938-48. Dec. 2, +23.71.

12. Mr. J. J. Godley. In Kingsland, about 300 feet north of St. Marys road, on west side of U. S. Highway 17. Records available: 1938-48. Dec. 2, +23.34.

18. L. O. Harris. In St. Marys, about 0.8 mile north of Riverview Hotel, on east side of State Highway 40. Records available: 1938-48. Dec. 2, +29.02.

19. Camden Training School. In St. Marys, 1 mile north of Riverview Hotel, on east side of State Highway 40. Records available: 1938-42. Measurements discontinued.

39. Southern Fertilizer & Chemical Co. In St. Marys, about 1.5 miles north of Riverview Hotel, near west bank of North River. Records available: 1939-42. Measurements discontinued.

59. Zack Colson. About 3.5 miles southeast of Woodbine, 0.6 mile south of Satilla River. Records available: 1939-46. No measurements made in 1948.

61. Camden Properties. In Billysville, 2 miles east of Coleburg, at west end of tenant quarters. Records available: 1939-47. No measurements made in 1948.

68. Kings Bay Club. At Kings Bay, about 10 miles east of Kingsland and about 4 miles north of St. Marys. Records available: 1939-47. No measurements made in 1948.

78. White Oak public school. In White Oak, on west side of Seaboard Air Line Railway, at schoolhouse. Records available: 1939-46. No measurements made in 1948.

92a. Camden Race Track. About 2.2 miles southeast of Kingsland, on north side of St. Marys road, at race track. Records available: 1939-48. Dec. 2, +32.77.

118. Oscar Silcox. About 9.5 miles west of Kingsland, on old Folkston Road, about 0.1 mile south of road. Records available: 1939-48. Dec. 2, +39.05.

144. T. C. Haygood. In Woodbine, on east side of U. S. Highway 17, 0.5 mile south of road to Folkston. Records available: 1939-43, 1945-48. Dec. 2, +34.10.

Charlton County

7. State of Georgia. One mile southwest of Folkston, at State convict camp. Records available: 1941-43, 1945-48. Dec. 2, 13.48.

Chatham County

8. 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. Records available: 1939-48. Aug. 4, 67.84.

28. Reliance Fertilizer Co. In Savannah, about 200 feet south of Louisville road, 2 miles west of West Broad Street. Records available: 1937-44. No measurements made in 1948.

29. Port Wentworth Corporation. In Port Wentworth, about 300 feet east of U. S. Highway 17, near elevated steel tank. Records available: 1939-43. No measurements made in 1948.

30. 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. Records available: 1943-48. Aug. 3, 63.80; Nov. 29, 59.07, pumping.

43. 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 Savannah city hall. Records available: 1940-48. Aug. 3, 77.45; Nov. 29, 72.84.

46. Union Bag and Paper Corporation well 5. About 800 feet southwest of Savannah River, 2.4 miles northwest of Savannah city hall. Well used more or less continuously. Measurements furnished through courtesy of Union Bag and Paper Corporation. Records available: 1939-41; 1943-47.

46--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	137.6	May 6	120.6	Aug. 19	129.6	Oct. 21	129.6
15	148.6	20	141.6	26	127.6	26	127.6
29	148.6	June 10	139.6	Sept. 3	127.6	Nov. 11	127.6
Feb. 12	139.6	17	134.6	16	123.6	18	125.6
Mar. 11	144.6	July 1	139.6	23	125.6	Dec. 2	127.6
25	174.6	15	127.6	30	127.6	18	127.6
Apr. 8	162.6	29	127.6	Oct. 14	127.6	30	127.6
22	144.6	Aug. 1	127.6				

47. 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. Records available: 1939, 1943. No measurements made in 1948.

48. U. S. Government. Savannah Army Service Forces Depot. West bank of Savannah River, 3.8 miles northwest of Savannah city hall. Records available: 1940-41; 1943. No measurements made in 1948.

63. Colonial Ice Co. In Savannah, 5 feet northwest of McGuire Street and about 105 feet northeast of Indian Street. Records available: 1939-48. Aug. 3, 78.49; Nov. 29, 68.28.

76. Pierpont Manufacturing Co. About 600 feet southwest of Savannah River, 2.1 miles northwest of Savannah city hall. Records available: 1939-48. Aug. 3, 86.32; Nov. 29, 79.59.

79. Benton Transfer Co. In Savannah, about 25 feet west of center line of Whitaker Street extended, about 55 feet south of Victory Drive. Water level affected by pumpage, in Savannah area. Records available: 1939-47. Measurements discontinued.

81. Gordon Saussy. Near west bank of Savannah River, 5.3 miles northwest of Savannah city hall, a short distance south of Savannah sugar refinery. Records available: 1940-48. Aug. 3, 48.34; Nov. 29, 45.65.

84. Standard Oil Co. About 150 feet south of Savannah River, 2.9 miles east of Savannah city hall. Records available: 1940-48. Aug. 3, 35.33; Nov. 29, 31.18.

86. Southern Cotton Oil Co. well 2150. In Savannah, about 180 feet north of Lathrop Avenue property line, about 1,050 feet south of Savannah River, 1.8 miles northwest of Savannah city hall. Records available: 1940-47. No measurements made in 1948.

100. Producers Cooperative Association. In Savannah, about 1.1 miles east-southeast of Savannah city hall, 1,000 feet south of Savannah River, about 100 feet north of west end of main building. Records available: 1944-48. Aug. 3, 43.19; Nov. 29, 36.42.

109. Georgia State Highway Department. South of west abutment of Savannah River bridge on U. S. Highway 17, 7 miles northwest of Savannah. Records available: 1938-48. Aug. 3, 20.87; Nov. 29, 19.23.

112. Mrs. L. O. Givern. In Bloomingdale, about 200 feet north of Central of Georgia Railway station, about 90 feet west of Town Street. Records available: 1938-41, 1945-48. Aug. 3, 3.16; Nov. 29, 2.82.

117. U. S. Dept. of the Army. At Fort Screven, on Tybee Island, about 300 feet south of old lighthouse. Records available: 1939-43. No measurements made in 1948.

121. Robert Schneider. About 50 feet north of Tybee Road, in northwestern part of Tybee Island. Records available: 1938-48. Aug. 3, 7.93; Nov. 30, 3.69.

122. Georgia State Highway Department. Near southwest end of steel truss bridge over Bull River on Tybee road, 7 miles east of Savannah. Records available: 1938-48. Aug. 3, 15.38; Nov. 30, 13.04.

123. Henry Walthour Estate. On Wilmington Island, on southwest side of dirt road, about 0.5 mile south of Tybee road. Records available: 1938-48. Aug. 3, 12.62; Nov. 30, 10.48.

128. Southeastern Medical Center. On Oatland Island, about 4 miles southeast of Savannah, on east side of main building. Well abandoned by owner. Records available: 1942-47. Measurements discontinued.

128a. Southeastern Medical Center. On Oatland Island, about 4 miles southeast of Savannah, 200 yards east of main building. Records available: 1947. No measurements made in 1948.

131. C. E. Oliver. On east side of State Highway 21, 0.8 mile northwest of crossing of Atlantic Coast Line Railroad at Monteith. Records available: 1938-48. Aug. 3, 13.13; Nov. 29, 10.15.

134. J. C. Sheffield. Four miles south of Savannah, about 100 feet southwest of intersection of Waters Avenue and Montgomery Road. Records available: 1938-48. Nov. 29, 30.45.

137. C. P. Rowland. In Montgomery, in northern part, on east side of Ferguson Avenue. Records available: 1938-47. No measurements made in 1948.

143. M. B. Lane. In Anderson, about 600 feet north of Seaboard Air Line Railway. Records available: 1938-43. Measurements discontinued.

145. A. G. Gillespie. On north side of U. S. Highway 17, 0.25 mile east of Little Ogeechee River. Records available: 1938-48. Nov. 30, 0.52.

169. L. J. Carter. On north side of Pine Barren Road, 2.75 miles east of Ogeechee River. Records available: 1938-48. Nov. 29, 4.42.

174. Mrs. Eda W. Sapp. About 750 feet north of Pine Barren Road, 0.5 mile east of Ogeechee River. Records available: 1938-48. Nov. 29, +6.80.

194. Mrs. W. W. Keller, Sr. At Drakie's Bluff, on west bank of Savannah River, about 8 miles northwest of Savannah. Records available: 1938-48. Nov. 29, 21.65.

213. J. L. Budreau. At intersection of Burroughs Road and U. S. Highway 17. Records available: 1939-48. Nov. 30, 0.91.

242. J. L. Budreau. On east side of Burroughs Road, 0.9 mile south of U. S. Highway 17. Records available: 1940-44, 1946-47. Measurements discontinued.

265. Mrs. S. B. Macon. In Pooler, near southeast end of bridge on U. S. Highway 80 over Central of Georgia Railroad. Records available: 1939-44. Measurements discontinued.

266. J. F. Chisholm. 1 mile east of Augusta Road, 3.5 miles north of Monteith. Records available: 1939-48. Aug. 3, 7.49; Nov. 29, 7.06.

269. J. W. Pierpont Estate. Isle of Hope. Water level affected by tide. Records available: 1939-48.

Date	Elevation of tide in Skidaway River, in feet below measuring point	Water level in well, in feet below land-surface datum
Aug. 3	9.53	18.24
Nov. 29	17.20	17.38

273. C. A. Gross. On west side of Isle of Hope road, 1.5 miles north of Isle of Hope. Records available: 1939-48. Aug. 3, 25.36; Nov. 29, 23.33. Water level affected by tide.

279. J. B. Pound Hotel Corporation. On Wilmington Island, at General Oglethorpe Hotel. Records available: 1939-48. Aug. 3, 24.30; Nov. 30, 21.14.

314. J. M. Breckenridge. About 600 feet west of White Bluff Road, 0.3 mile north of Buckhalter Road. Records available: 1940-48. Aug. 3, 33.83; Nov. 29, 32.36.

321. R. C. Hinley. About 8.25 miles south of Savannah city hall, 100 feet north of Vernonburg Avenue, 0.1 mile east of White Bluff Road. Records available: 1940-48. Aug. 3, 13.79; Nov. 29, 13.16.

328. U. S. Dept. of the Army. At Fort Screven, on Tybee Island. Records available: 1940-48. Aug. 3, 11.84; Nov. 30, 8.62.

330. State Highway Department. On southeast side of U. S. Highway 17, 6 miles southwest of Savannah. Records available: 1941-47. No measurements made in 1948.

331. 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. Records available: 1942-48. Aug. 3, 12.60; Nov. 29, 12.42.

332. Louis Lucas. In Bloomingdale, about 50 feet north of U. S. Highway 80, 0.3 mile east of Bloomingdale crossroads. Records available: 1942-48. Aug. 3, 3.69.

343. U. S. Dept. of Agriculture. At Barbour Lathrop Plant Introduction Station, about 12 miles southwest of Savannah, about 200 feet northeast of Fort Argyle road. Records available: 1942-48.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2.31	1.87	3.46	0.12	3.71	3.19	5.76	3.46	5.70	5.38	6.11	5.51
2	2.05	2.09	3.49	.36	3.81	3.34	5.82	3.63	5.74	5.28	6.16	5.49
3	2.29	2.22	3.33	.86	3.87	3.48	5.88	3.75	5.81	5.03	6.20	5.45
4	2.39	2.32	1.88	1.28	3.96	3.50	5.96	3.80	5.77	4.87	6.26	5.42
5	2.50	2.42	2.19	1.52	1.96	1.62	6.04	1.62	5.72	4.53	6.31	5.39
6	2.57	2.49	2.29	1.24	3.88	3.75	6.13	3.62	5.68	4.32	6.36	5.37
7	2.64	2.58	.80	1.43	3.43	3.87	6.21	3.77	4.05	....	6.40	5.37
8	2.71	2.64	1.38	1.83	3.43	3.99	6.33	3.88	4.00	4.36	6.41	5.38
9	2.77	2.36	.16	1.92	3.72	4.22	6.24	4.00	4.08	4.47	6.41	5.25
10	2.83	2.33	.53	2.18	3.86	4.24	5.90	4.11	4.19	4.56	6.44	4.85
11	2.92	2.49	.87	2.28	3.99	4.34	5.40	4.21	....	4.60	6.53	4.61
12	2.98	2.52	.71	2.40	3.53	4.44	4.85	4.31	....	4.67	6.55	4.55
13	2.99	2.60	1.30	2.52	3.34	4.54	4.56	4.51	5.41	4.74	6.57	4.54
14	2.96	2.68	1.62	2.63	3.50	4.66	4.49	4.51	5.49	4.82	6.62	4.56
15	3.08	2.81	1.81	1.98	3.66	4.77	4.01	4.60	5.59	4.91	6.68	4.58
16	3.13	2.87	1.97	1.81	3.82	4.86	4.03	4.69	5.70	5.02	6.71	4.63
17	3.17	2.91	1.89	1.95	3.85	4.96	4.15	5.81	5.81	5.07	6.74	4.68
18	3.00	2.97	2.10	2.26	4.01	5.02	3.35	5.89	5.89	5.18	6.80	4.70
19	3.11	3.04	2.20	2.45	4.11	4.96	3.49	4.88	5.92	5.26	6.81	4.23
20	2.74	3.10	2.31	2.57	4.19	4.97	3.45	4.93	5.07	5.33	6.85	3.90
21	2.28	3.16	2.41	2.69	4.29	....	3.31	4.88	5.14	5.42	6.80	3.90
22	2.41	3.18	2.52	2.81	4.39	....	3.32	4.93	5.23	5.48	6.70	3.93
23	2.55	3.08	2.37	2.92	4.49	....	3.30	5.33	5.33	5.53	6.65	3.99
24	1.99	3.19	1.66	3.02	4.58	5.23	3.48	5.06	5.44	5.68	6.25	4.02
25	2.24	3.22	2.04	3.11	....	5.29	2.80	5.12	5.55	5.68	6.05	4.05
26	2.38	3.24	2.22	3.21	....	5.37	2.97	5.20	5.62	5.73	5.84	4.18
27	2.46	3.30	2.23	3.30	3.31	5.45	3.12	5.28	5.70	5.81	5.71	4.20
28	2.39	3.35	2.47	3.38	3.39	5.55	3.28	5.35	5.71	5.87	5.60	4.24
29	2.43	....	2.59	3.51	3.51	5.64	3.43	5.42	5.65	5.94	5.52	....
30	2.52	....	2.68	3.61	3.09	5.73	3.52	....	5.48	5.99	5.50	....
31	1.47	....	2.10	....	....	....	3.28	....	....	6.05	....	4.86

Clayton County

7. H. P. Lieuppo. At Forest Park, about 0.5 mile south of highway bridge over Central of Georgia Railway and 43 feet west of center of U. S. Highway 41. Records available: 1943-48. Aug. 24, 29.03; Dec. 23, 25.04.

14. John E. Dawson. At Mountain View, 0.6 mile east of U. S. Highway 41 and about 100 feet south of east-west road. Records available: 1943-47. Measurements discontinued.

15. W. M. Lyle. At Mountain View, 0.6 mile east of U. S. Highway 41, and about 100 feet south of east-west road. Records available: 1943-47. Measurements discontinued.

26. 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. Records available: 1943-48. Aug. 24, 24.16.

27. J. L. Paul. In vicinity of city of Forest Park about 4.0 miles south of Fulton-Clayton County line, along U. S. Highway 41 and 150 feet east of center of highway. Records available: 1943-48. Dec. 23, 55.17.

Cobb County

5. City of Smyrna. At Smyrna, about 340 feet west of center of Whitfield Street, in open field. Records available: 1943-48. Aug. 25, 11.45; Dec. 22, 10.46.

6. City of Smyrna. At Smyrna, at junction of Old Roswell, New Roswell, and Highland Roads. Records available: 1943-48. Aug. 25, 13.77; Dec. 22, 13.37.

11. Mrs. J. H. Carmichael. At Oakdale, about 0.8 mile northwest of Log Cabin Drive underpass under Georgia Power Co. electrical railway and 102 feet east of center of Log Cabin Drive. Records available: 1943-48. Aug. 25, 30.38; Dec. 22, 24.75.

14. 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. Records available: 1943-48. Aug. 25, 40.3; Dec. 22, 41.22.

21. 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. Records available: 1943-48. Aug. 25, 30.77; Dec. 22, 31.75.

25. J. T. Cox. At Oakdale, on Log Cabin Drive, about 0.34 mile northwest of underpass under Georgia Power Co. electric railway, and 300 feet west of center of Log Cabin Drive. Records available: 1943-48. Dec. 22, 14.10.

27. R. D. Webb. At Oakdale, on Log Cabin Drive, about 0.45 mile northwest of underpass under Georgia Power Co. electric railway approximately 150 feet north of center of Log Cabin Drive. Records available: 1943-48. Aug. 25, 20.84; Dec. 22, 20.65.

52. H. C. Johnson. At Oakdale, about 0.2 mile north of Southern Railway along Oakdale Road and 100 feet west of center of road. Records available: 1943-48. Aug. 25, 14.52; Dec. 22, 13.77.

71. D. W. Cook. At Oakdale, about 0.1 mile east of Camp Highland Road and approximately 27 feet northeast of northeast corner of dwelling. Records available: 1943-48. Aug. 25, 53.63; Dec. 22, 53.47.

74. A. E. 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. Records available: 1943-48. Aug. 25, 44.67; Dec. 22, 45.31.

83. National Park Service, U. S. Dept. of Interior. At Kennesaw Mountain Park, about 0.55 mile west of U. S. Highway 41, and 250 feet north of center of east-west road. Records available: 1943-48. Aug. 25, 4.30; Dec. 22, 3.48.

85. D. C. Hames. Near Kennesaw Mountain National Park, on U. S. Highway 41, about 0.4 mile northwest of highway bridge over Nashville, Chattanooga & St. Louis Railway, 45 feet east of center of highway. Records available: 1943-48. Aug. 25, 47.42; Dec. 22, 46.80.

DeKalb County

17. Mrs. J. H. Anderson. In Atlanta, on U. S. Highway 42, about 0.55 mile south of highway bridge over Southern Railway, 98 feet east of center of highway bridge. Records available: 1943-48. Dec. 23, 33.11.

29. Mrs. A. H. Daniel. In Decatur, about 0.75 mile north of intersection of Glenwood Road and Columbia Drive, about 75 feet east of center of Columbia Drive and 85 feet west of private dwelling. Records available: 1944-48. Aug. 24, 37.38; Dec. 22, 37.17.

34. 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. Records available: 1944-48. Aug. 24, 48.46; Dec. 22, 50.52.

39. 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. Records available: 1944-48. Aug. 24, 36.28; Dec. 22, 37.06.

40. 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. Records available: 1944-48. Aug. 24, 6.49; Dec. 22, 1.90.

50. Miss A. M. Lyle. In Atlanta, about 2.43 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. Records available: 1944-48. Aug. 24, 34.40; Dec. 23, 33.42.

Early County

2. Emory University Field Station well 19. Flez Douglas. About 2.4 miles northeast of Damascus, 1.4 miles east of Seaboard Air Line Railway, and 60 feet south of county road. Records available: 1941-47. Measurements discontinued.

6. Emory University Field Station well 23. P. F. Chandler. About 1.3 miles north of Douglasville, 2.7 miles east of Seaboard Air Line Railway, 50 feet west of T-junction of county roads. Records available: 1941-47. Measurements discontinued.

18. 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. Records available: 1941-47. Measurements discontinued.

Effingham County

6. W. B. Butler. In 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. Records available: 1939-48. Aug. 3, 1.70; Nov. 29, 1.61.

7. Central of Georgia Railway. In Meldrim, between Central of Georgia Railway and Seaboard Air Line Railway, about 200 feet west of station. Records available: 1939-44. No measurements made in 1948.

18. Steel Bridge Club. Four miles southwest of Guyton, near east side of steel bridge over Ogeechee River, on Springfield-Statesboro road, on South side of road. Records available: 1939-44, 1946. Well caved, measurements discontinued.

20. J. D. Hagin. In Pineora, 3 miles south of Guyton, 0.2 mile west of Central of Georgia Railway. Records available: 1939-48. Nov. 29, 38.39.

Evans County

3. City of Claxton. At Claxton, at city water-works plant, about 300 feet south of Seaboard Air Line Railway. Records available: 1939-48. Aug. 4, 110.39; Nov. 2, 111.21.

Fulton County

7. City of College Park. In College Park, at base of west side of large steel filter tank, at city water works. Records available: 1943-48. Aug. 24, 32.77; Dec. 23, 35.16.

8. City of College Park. At College Park, about 30 feet north of Oglethorpe Street extended. Records available: 1943-48. Aug. 24, 24.40.

20. City of East Point. At East Point on Plant Street, about 0.1 mile south of Taylor Avenue, 38 feet east of center of street. Records available: 1943-48. Aug. 24, 24.52; Dec. 23, 23.82.

26. O'Neill Bros. At East Point, about 98 feet east of Central of Georgia Railway and 6 feet west of O'Neill Bros. warehouse. Records available: 1943-48.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	16.96	16.96	15.45	13.50	13.68	14.55	15.50	14.71	14.96	15.82	.....	.....
2	17.04	16.95	15.34	13.61	13.77	14.60	15.56	14.63	15.03	15.83	16.75	.....
3	17.07	16.91	15.19	13.62	13.85	14.56	15.59	14.64	15.04	15.87	16.70	.....
4	.....	16.83	15.19	13.55	13.86	14.55	15.57	14.65	15.06	15.85	16.67	.....
5	.....	13.86	15.26	13.47	13.93	14.62	15.63	14.66	15.00	15.86	16.65	.....
6	.....	16.87	15.09	13.26	.....	14.74	15.82	14.71	14.91	15.88	16.67	14.07
7	.....	16.83	14.78	13.06	.....	14.72	15.73	14.65	14.90	15.94	16.68	.....
8	.....	16.61	14.76	12.98	.....	14.71	.....	14.58	14.93	15.98	16.65	.....
9	.....	16.23	14.62	13.03	.....	14.90	.....	14.42	14.98	16.05	.....	.....
10	17.07	16.32	14.61	12.98	14.19	14.92	.....	14.88	15.06	16.05	.....	.....
11	17.03	16.23	14.57	12.85	14.19	14.99	.....	14.12	.....	16.05	.....	.....
12	16.93	16.01	14.66	12.97	14.21	14.99	.....	14.15	.....	16.13	.....	.....
13	17.04	15.75	14.67	13.02	14.26	14.98	14.95	14.16	15.25	16.17	.....	14.07
14	17.05	15.88	14.58	13.01	14.32	15.04	14.93	.....	15.25	16.17	.....	14.09
15	17.15	15.79	14.52	13.03	14.38	15.09	14.61	.....	15.31	16.25	.....	14.08
16	17.15	15.65	14.49	13.05	14.36	15.12	14.60	14.41	15.40	16.30	.....	14.03
17	17.07	15.60	14.51	13.09	14.40	15.15	14.56	14.46	15.46	16.27	.....	14.09
18	.....	15.55	14.42	13.25	14.51	15.20	14.48	14.52	15.44	16.32	.....	14.12
19	17.09	15.48	14.35	13.29	14.60	15.22	14.48	14.53	15.42	16.36	.....	13.93
20	17.02	15.48	14.36	13.29	14.59	15.21	14.54	14.57	15.46	16.40	.....	13.98
21	16.90	15.46	14.30	13.25	14.53	15.22	14.54	14.62	15.45	16.48	.....	14.11
22	16.91	15.45	14.25	13.33	14.60	15.25	14.54	14.67	15.42	16.49	.....	14.10
23	17.03	15.56	13.98	13.42	14.69	15.28	14.60	14.73	15.49	16.49	.....	14.17
24	17.06	15.61	13.91	13.43	14.73	15.28	14.62	14.75	15.61	16.51	.....	14.15
25	17.13	15.50	13.87	13.40	14.77	15.29	14.65	14.76	15.72	16.56	.....	14.11
26	17.16	15.40	13.80	13.44	14.81	15.33	14.67	14.82	15.77	16.58	.....	14.30
27	17.08	15.36	13.67	13.51	14.89	15.36	14.69	14.89	15.74	.....	.....	14.15
28	17.14	15.38	13.81	13.48	14.88	15.39	14.71	14.92	15.69	.....	.....	14.08
29	17.07	15.45	13.82	13.57	14.52	15.42	14.68	14.89	15.75	.....	.....	14.00
30	17.01	.....	13.77	13.66	14.38	15.45	14.67	14.86	15.76	.....	.....	13.83
31	16.98	.....	13.64	.....	.....	.....	14.67	14.84	.....	.....	.....	13.80

31. 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. Records available: 1943-48. Aug. 24, 11.63; Dec. 23, 11.23.

32. 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. Records available: 1943-48. Aug. 24, 30.03; Dec. 23, 30.43.

43. American Agriculture & Chemical Co. At East Point, about 130 feet northeast of center of Central Street and 28 feet east of fertilizer shed. Records available: 1943-48. Dec. 23, 18.36.

75. 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. Records available: 1943-48. Aug. 25, 30.52; Dec. 22, 30.95.

76. 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. Filled with debris. Records available: 1943-47. Measurements discontinued.

77. Mrs. Cory C. Helms. At Bolton, about 0.1 mile north of intersection of Bolton Road and U. S. Highway 78, 95 feet east of center of Bolton Road. Records available: 1943-48. Aug. 24, 23.68; Dec. 22, 21.87.

Glynn County

1. Atlantic Refining Co. well 1. In Arco, northwest of Brunswick, about 1,000 feet west of U. S. Highway 17, about 1,400 feet northwest of office of Atlantic Refining Co. Records available: 1940-42. No measurements made in 1948.

3. Atlantic Refining Co. well 3. At Arco, about 1 mile north of Brunswick, about 1,100 feet southwest of office of Atlantic Refining Co. Records available: 1939-48.

High and low water levels, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	29.5	28.1	27.7	27.3	25.7	25.1	26.2	25.4	28.1	26.2	26.7	25.8
2	28.3	27.5	27.7	27.3	26.5	25.7	25.7	24.7	27.3	26.1	27.5	25.7
3	27.7	27.2	27.7	27.2	27.7	25.7	25.3	24.7	27.2	26.2	26.9	25.7
4	27.9	27.3	28.6	27.5	27.7	25.2	25.7	24.7	26.9	26.4	26.7	25.7
5	27.4	26.7	28.7	27.7	29.9	24.7	25.8	24.8	26.8	26.3	26.8	25.9
6	27.3	26.5	28.7	27.7	25.3	24.7	25.7	25.2	26.7	26.3	26.7	26.2
7	27.4	26.7	28.3	27.7	25.7	25.2	26.2	25.3	26.7	26.4	26.9	26.2
8	27.6	26.7	28.7	27.7	25.7	25.9	26.0	25.5	26.7	25.7	26.7	25.7
9	27.6	26.6	28.2	27.7	25.7	24.7	26.0	25.7	....	....	26.7	25.5
10	26.9	26.5	27.7	27.4	25.5	25.3	25.7	25.3	26.7	25.7	26.7	25.7
11	26.8	26.6	27.8	27.5	25.7	25.2	26.5	25.7	26.7	25.9	26.5	25.4
12	27.1	26.7	28.4	27.5	25.7	25.2	26.1	25.7	26.7	26.2	26.7	25.4
13	27.1	26.7	28.9	27.0	25.2	24.7	26.1	25.5	26.7	25.7	26.7	25.7
14	26.7	26.4	27.0	25.7	24.7	24.2	26.3	25.6	26.7	25.7	26.7	25.7
15	26.7	26.5	25.7	24.7	26.0	25.9	25.9	25.5	26.9	25.7	26.7	25.7
16	27.5	27.1	26.5	24.7	26.0	25.5	25.7	24.9	27.0	25.7	26.7	25.7
17	27.7	27.0	26.6	25.7	26.1	25.7	25.9	24.7	....	....	26.3	25.7
18	27.7	27.2	26.5	25.6	25.7	25.2	25.7	24.7	....	....	26.1	25.4
19	27.7	27.0	26.3	25.5	25.7	24.9	25.7	24.7	....	....	25.9	25.5
20	27.7	27.2	26.1	25.5	25.7	24.9	26.0	24.7	27.4	26.2	26.3	25.7
21	27.7	27.5	25.7	25.3	25.9	24.9	26.1	24.5	....	....	26.5	25.7
22	28.1	27.5	26.0	25.2	25.8	25.6	26.9	25.3	....	....	26.7	25.8
23	28.5	27.7	25.7	25.2	25.9	25.6	26.3	25.7	27.1	26.7	26.5	26.1
24	28.5	27.3	25.6	24.7	25.8	25.4	26.7	25.7	26.9	26.4	26.7	25.8
25	27.7	27.2	25.7	24.7	25.7	24.7	26.7	25.7	26.9	25.9	26.5	25.7
26	27.7	27.2	26.5	25.2	25.9	24.9	27.0	26.0	27.3	26.7	26.5	25.6
27	27.7	27.0	26.2	25.2	26.4	25.7	26.9	25.7	26.9	26.1	26.7	25.7
28	27.7	27.2	26.0	25.2	26.1	24.7	27.4	26.0	26.7	25.7	26.5	25.7
29	27.7	27.1	26.5	25.7	25.5	24.7	27.7	25.9	26.7	25.7	26.5	25.7
30	27.7	27.2			25.7	24.7	28.2	27.7	26.9	25.5	26.4	25.7
31	27.7	27.3			25.7	25.5			26.7	25.7		

3--Continued.

High and low water levels, from recorder charts												
Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	26.3	25.4	26.0	25.0	26.1	24.5	25.2	25.0	25.3	24.6	24.4	23.8
2	26.1	25.4	25.8	25.0	26.0	25.0	25.4	24.7	25.4	24.6	24.6	24.3
3	26.3	25.5	25.3	24.9	25.9	25.0	25.5	25.0	25.0	23.8	25.1	24.1
4	26.7	25.2	25.2	24.9	26.0	25.0	25.8	24.9	25.3	23.8	24.6	23.8
5	26.5	25.5	25.2	24.8	25.9	25.2	26.0	25.2	25.2	23.8	24.8	23.8
6	26.7	25.7	25.2	24.5	25.8	25.3	26.2	25.5	25.2	24.5	24.2	23.9
7	26.7	25.7	25.2	24.5	26.0	25.2	26.1	25.3	25.0	24.1	....	....
8	26.6	25.6	25.7	24.8	26.2	25.3	25.8	25.3	25.0	24.1	24.8	24.3
9	26.2	25.5	25.8	24.9	26.4	25.3	26.0	25.3	25.3	24.5	25.0	23.9
10	26.7	25.1	25.6	24.7	26.0	25.1	26.3	25.6	25.2	24.1	24.0	23.6
11	25.7	25.4	25.4	25.0	25.8	25.0	26.0	25.7	24.3	23.8	23.8	23.6
12	....	....	25.8	25.0	26.0	25.3	26.0	24.4	24.6	24.2	24.7	23.8
13	26.7	25.7	26.0	25.0	25.9	25.0	25.0	24.0	24.8	24.3	24.8	24.2
14	26.1	25.7	26.0	25.0	28.1	25.1	24.5	23.7	25.1	24.2	24.7	24.6
15	25.9	25.3	26.0	25.0	29.0	28.0	24.1	23.3	24.8	24.1	24.8	23.8
16	25.9	25.4	26.0	25.0	29.0	28.4	24.1	23.4	24.8	23.9	24.5	24.1
17	26.7	25.7	25.7	25.0	29.0	28.3	24.0	23.2	24.9	24.4	24.6	24.3
18	26.7	25.7	25.5	25.0	29.0	27.0	24.8	23.6	25.1	24.1	24.4	24.1
19	26.2	25.7	25.5	25.0	26.5	26.2	26.0	24.7	25.3	24.8	24.3	24.0
20	26.2	25.7	25.5	25.0	26.3	25.4	26.4	25.8	24.7	24.2	24.3	23.9
21	26.7	25.7	25.8	25.0	26.5	25.5	26.9	26.2	24.9	23.9	24.5	23.9
22	26.7	25.7	25.7	24.9	26.6	25.7	27.0	26.5	25.2	24.3	24.5	23.8
23	26.3	25.7	25.6	25.0	26.0	25.2	27.4	26.7	25.2	24.6	24.2	23.8
24	26.1	25.1	25.4	24.7	25.5	25.0	27.8	27.1	24.9	23.9	28.2	24.1
25	26.0	24.6	25.8	25.0	25.5	25.0	27.6	26.4	24.8	23.9	28.8	28.1
26	26.1	25.1	25.7	24.8	25.6	25.1	26.4	25.4	24.9	23.8	29.0	27.3
27	26.0	25.1	25.5	24.7	25.2	25.0	25.7	25.1	24.9	24.4	27.3	25.7
28	25.9	25.1	25.8	24.7	26.1	25.1	25.5	24.8	25.0	24.4	25.8	25.3
29	25.8	25.0	26.0	24.8	25.8	25.0	25.3	24.9	24.8	24.3	25.6	24.9
30	25.7	24.8	25.6	25.0	25.4	25.1	25.2	24.3	24.5	23.8	25.3	24.5
31	25.9	24.9	26.0	25.0			25.8	25.3			24.6	24.4

13. U. S. Dept. of Commerce. On St. Simon Island, at lighthouse. Water level affected by tide. Records available: 1938, 1940-48. Dec. 1, +31.97.

37. F. G. Horne. On St. Simon Island, about 0.25 mile south of Fort Frederica. Records available: 1939-48. Dec. 1, +30.02.

44. Sea Island Co. On St. Simon Island, on north side Sea Island road, 0.5 mile west of Cloister Hotel at Gun Club. Water level affected by tide. Records available: 1939-48.

Date	Water level in Black Bank River, in feet above mean sea level	Water level in well
Dec. 1	1.7	+35.37

45. City of Brunswick. In northeastern part of city, in H. E. Coffin Park. Records available: 1939-43. No measurements made in 1948.

63. 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. Records available: 1939, 1942-48. Dec. 1, +15.75.

100. 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. Records available: 1939-48. Dec. 1, +20.42.

128. A. C. Harrison. In Thalman, about 0.1 mile south of crossing of Seaboard Air Line Railway and Atlanta, Birmingham & Coast Railroad. Records available: 1939, 1941-48. Dec. 1, +33.28.

138. G. F. Cowman. About 300 feet south of marsh edge of South Brunswick River, on east side of U. S. Highway 17. Records available: 1939-48. Dec. 2, +33.23.

143. F. J. McKee. On St. Simon Island, about 0.5 mile east of Frederica Road, 0.4 mile north of Sea Island road, at Black Banks. Records available: 1939-48. No measurements made in 1948.

192. Edgar Rittenhouse. In Brunswick, 0.25 mile north of Palmetto Cemetery, about 400 feet east of old canal. Records available: 1939-48. Dec. 1; +18.13.

Henry County

11. D. J. Arnold. At Hampton, about 70 feet west of center of U. S. Highway 41 and 8 feet south of wooden shed. Records available: 1943-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 28	24.82	Sept. 13	24.62	Sept. 27	25.92	Dec. 7	25.6
June 11	25.02	22	25.7	Oct. 21	26.25		

Liberty County

19. Atlantic Coast Line Railroad. In McIntosh, about 300 feet southwest of crossing of railroad and State Highway 38, about 10 feet northwest of railroad. Records available: 1939-48. Nov. 30, +3.18.

28. Midway Church. In Midway, in front of Midway Church at northeast corner of intersection of U. S. Highway 17 and road to Colonels Island. Records available: 1940-48. Dec. 1, +8.88.

38. Dana Stevens. About 0.4 mile south of Dorchester Village schoolhouse. Records available: 1939-48. Measurements discontinued.

43. C. H. Ricks. About 2 miles southeast of Dorchester Village, on north side of road to Colonels Island. Records available: 1939-47. Measurements discontinued.

45. E. P. Way. In Sanbury, 0.3 mile north of Fort Morris. Records available: 1939-47. Measurements discontinued.

53. F. F. Branan. About 2.5 miles south of Midway, on west side of U. S. Highway 17. Records available: 1939-48. Dec. 1, +26.81.

75. Mrs. E. P. Way. About 3.7 miles south of Riceboro, along U. S. Highway 17, about 100 feet east of highway. Records available: 1939, 1941-48. Dec. 1, +22.80.

95. W. M. S. Howard. On Colonels Island, in northwestern part, near marsh. Records available: 1939, 1941-48. Dec. 1, +16.63.

137. H. A. Bacon. In Hinesville, about 0.5 mile northeast of Liberty County courthouse, along State Highway 38, on north side of highway. Records available: 1939-48. Nov. 30, +0.36.

170. J. H. Woodall. On north side of U. S. Highway 17, 0.3 mile northeast of Freedman's Grove. Records available: 1941-48. Nov. 30, +14.49.

177. P. E. Youmans. In northeastern part of Colonels Island, about 20 feet north of owner's residence. Records available: 1942-48. Dec. 1, +12.30.

Long County

8. Town of Ludowici. About 100 feet northwest of Atlantic Coast Line Railroad. Records available: 1940-47. No measurements made in 1948.

McIntosh County

11. C. A. Stebbins. In Darien, southeast of State Highway 131, northeast of city park, about 25 feet west of swimming pool. Records available: 1938-47. Measurements discontinued.

14. C. H. Stebbins. In South Newport, northeast of intersection of U. S. Highway 17 and Harris Neck road. Records available: 1939, 1941-48. Dec. 1, +20.14.

22. D. E. McDonald. In Eulonia, on west side of U. S. Highway 17, about 0.25 mile south of road to Townsend. Records available: 1939, 1941-47. No measurements made in 1948.

25. A. D. Burns. In Crescent, on south side of State Highway 131, a short distance southeast of post office. Records available: 1939-46. Measurements discontinued.

27. C. B. Mallard. On east side of State Highway 131, about 0.4 mile south of right-angled bend in road near Crescent, near bluff on south branch of Sapelo River. Records available: 1939-48. Dec. 1, +6.65.

43. Shellman Bluff public well. In Shellman Bluff, between houses of Mallard Jones and Doby Hamons. Records available: 1939, 1941-43, 1945-47. No measurements made in 1948.

45. New Masonic Lodge. Half a mile south of Shellman Bluff. Records available: 1939, 1941-43, 1945-47. No measurements made in 1948.

53. Townsend Band Mill. In Townsend, about 300 feet east of Seaboard Air Line Railway, north of Townsend, on Eulonia road. Records available: 1939-47. Measurements discontinued.

85. R. C. Collins. About 0.7 mile west of Crescent on south side of State Highway 131. Records available: 1939-48. Dec. 1, 3.68.

103. A. M. Durant. In Valona, on east side of owner's residence. Records available: 1939-41, 1943, 1945-48. Dec. 1, +23.03.

130. James O'Brien Estate. In Ridgeville, on east side of State Highway 131, half a mile south of road to dock. Records available: 1939-48. Dec. 1, +16.30.

141. Sam Gardner. About 6 miles southeast of Townsend, on east side of Briardam road. Records available: 1939-47. No measurements made in 1948.

144. Col. Talbot Smith. About 1.5 miles northeast of Darien, about 0.25 mile east of State Highway 131, near marsh. Records available: 1939-48. Dec. 1, +19.45.

180. D. C. Cowart. In Eulonia, about 75 feet west of center line of U. S. Highway 17, and about 50 feet south of center line of State Highway 131, extended. Records available: 1942-48. Dec. 1, +22.07.

Mitchell County

9. City of Camilla. In Camilla, at water works plant, about 80 feet east of center line of Ellis Street and about 50 feet north of center line of Twitty Street. Records available: 1943-46. No measurements made in 1948.

Montgomery County

1. H. V. Thompson. In Ailey, about 0.25 mile southeast of Seaboard Air Line Railway station, about 200 feet south of railway. Records available: 1942-43, 1945-46. No measurements made in 1948.

Pierce County

2. City of Blackshear. In northeastern part of town, about 25 feet northwest of elevated concrete municipal water tank. Records available: 1939-43, 1945-48. Dec. 2, 59.00.

5. Town of Patterson. In Patterson, about 140 feet east of Atlantic Coast Line Railroad station. Records available: 1941-43, 1945-48. Dec. 2, 32.10.

Screven County

3. City of Sylvania. In Sylvania, 0.1 mile west of State Highway 21, at water-works plant. Records available: 1939, 1943, 1945-47. No measurements made in 1948.

8. W. W. Yant. In Dover, on southwest side of Central of Georgia Railway. Records available: 1939, 1943, 1945-46. No measurements made in 1948.

Spalding County

12. Georgia State Experiment Station. At Experiment, about 240 feet west of Central of Georgia Railway and 15 feet northeast of northeast corner of Flynt Building. Records available: 1943-48.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
1	12.65	12.66	10.48	9.07	10.09	12.53	14.31	13.90	15.27	16.31	17.03
2	12.78	12.49	10.43	9.23	10.22	12.61	14.41	13.94	15.30	16.35	17.03
3	12.97	12.35	10.43	9.15	10.29	12.62	14.44	13.97	15.32	16.38	17.01
4	12.72	12.26	10.55	9.06	10.35	12.63	14.46	13.98	15.43	16.37	17.07
5	12.96	12.17	10.67	8.96	10.47	12.76	14.53	14.01	15.48	16.38	17.08
6	12.91	12.20	10.48	8.91	10.46	12.84	14.53	14.08	15.53	16.40	17.09
7	12.92	12.11	9.70	8.69	.....	12.83	14.57	14.09	15.54	16.44	17.21
8	.....	11.91	9.20	8.43	10.66	12.85	14.71	14.11	15.57	16.47	17.20
9	.....	11.45	9.00	8.40	10.76	12.95	14.78	14.18	15.62	16.53	17.10
10	12.86	11.12	8.85	8.36	10.82	13.08	14.73	14.22	15.66	16.53	17.06
11	12.94	10.85	8.76	8.26	10.87	13.15	14.70	14.23	15.68	16.50	17.26
12	12.83	10.45	8.93	8.38	.....	13.18	14.65	14.26	15.74	16.59	17.23
13	12.73	9.85	8.90	8.57	.....	13.20	14.60	14.32	15.77	16.63	17.19
14	12.87	9.68	8.90	8.60	.....	13.29	14.54	14.36	15.78	16.62	17.22
15	13.01	9.67	8.87	8.72	11.28	13.38	14.47	14.42	15.84	16.67	17.25
16	12.95	9.49	8.90	8.80	11.35	13.41	14.42	14.46	15.93	16.71	17.24
17	13.02	9.38	8.70	8.93	11.36	13.50	14.33	14.54	15.95	16.79	17.22
18	13.01	9.46	8.38	9.16	11.49	13.56	14.20	14.59	15.93	16.71	17.25
19	13.17	9.47	8.26	9.16	11.63	13.59	14.10	14.63	15.89	16.73	17.17
20	13.18	9.57	8.39	9.26	11.64	13.61	14.02	14.68	15.93	16.77	17.27
21	13.02	9.72	8.48	9.25	11.64	13.65	13.97	14.74	15.93	16.83	17.31
22	12.96	9.74	8.50	9.39	11.69	13.74	13.90	.....	15.90	16.82	17.18
23	13.08	9.92	8.51	9.54	11.84	13.80	13.88	14.87	15.96	16.82	17.05
24	13.18	10.12	8.73	9.59	11.91	13.85	13.87	14.89	16.07	16.84	.....
25	13.00	10.06	8.73	9.57	11.98	13.87	13.86	14.92	16.17	16.87	.....
26	12.91	.....	8.74	9.63	12.06	14.04	13.85	15.00	16.21	16.88	.....
27	12.86	.....	8.60	9.73	12.17	14.12	13.85	15.06	16.20	16.93	.....
28	12.90	10.17	.....	9.73	12.20	14.14	13.85	15.07	16.15	16.93	.....
29	12.80	10.40	.....	9.85	12.28	14.20	13.87	15.07	16.26	16.97	.....
30	12.80	.....	.....	9.99	12.36	14.21	13.89	15.08	16.27	17.00	.....
31	12.80	.....	.....	.....	12.46	.....	13.87	15.11	.....	17.01	.....

Ware County

6. 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. Records available: 1941-43, 1945-46. No measurements made in 1948.

Wayne County

1. City of Jesup. In Jesup, west of crossing of Southern Railway and Atlantic Coast Line Railroad. Records available: 1939-44. No measurements made in 1948.

3. A. W. Hurn. In Gardi, at northwest side of owner's residence, about 200 feet southwest of Southern Railway. Records available: 1939-43, 1945-48. Dec: 2, 3.15.

4. State Highway Department. On southeast side of State Highway 25, 0.3 mile southeast of Mt. Pleasant. Records available: 1939-43, 1945-47. No measurements made in 1948.

10. Town of Screven. In Screven, about 600 feet west of Atlantic Coast Line Railroad station. Records available: 1940-43, 1945-48. Dec. 2, 55.90.

928579

KENTUCKY

By M. I. Rorabaugh and E. A. Bell

PROGRAM OF WORK

Investigation of the ground-water resources of the Louisville area was continued in 1948 in cooperation with Jefferson County and the city of Louisville. This investigation, which was begun in 1943 because of a critical shortage of ground water for industrial use, has been continued so that records of pumpage and water level will be available in order to foresee and prevent a recurrence of a critical shortage.

The investigation of the ground-water supplies in the area northeast of Louisville, begun in 1945 in cooperation with the Louisville Water Company, was completed during the year. This investigation included detailed studies of the supplies available by induced infiltration from the Ohio River.

The 3-year program, begun in 1945, to investigate the ground-water supplies in Bourbon, Fayette, Jessamine, and Scott Counties, in central Kentucky, was completed in 1948. This program was in cooperation with the Geological Division of the State Department of Mines and Minerals.

A reconnaissance survey of ground-water problems of the State, begun in 1946 in cooperation with the Geological Division of the State Department of Mines and Minerals, was discontinued in 1948.

Mimeographed reports and maps released during the year are listed below:

"Ground-water resources of the northeastern part of the Louisville area, Kentucky" by M. I. Rorabaugh, July 1948.

County maps prepared by D. K. Hamilton, E. M. O'Connell, and L. F. Boland.

Bourbon County.-Ground-water map;
geologic map; and structural map.

Scott County.-Ground-water map;
geologic map; and structural map.

Fayette County.-Ground-water map,
geologic map; and structural map.

Jessamine County.-Ground-water map.

"Ground-water supplies of the Campbellsville area,
Kentucky" by E. G. Otton, January 1948.

"Ground-water resources of the Elizabethtown area,
Kentucky" by E. G. Otton, June 1948.

"Geology and ground-water resources of the London
area, Kentucky" by E. G. Otton, June 1948.

As part of the work in the Louisville area, water-level measurements were made in 132 wells. Observations were made in all wells at 6-week intervals and more frequently during river floods. Automatic water-stage recorders were maintained on 6 wells during the entire year and on 5 wells during part of the year. A total of 94 months of automatic record and 1,590 water-level measurements were obtained during the year.

An observation well was established at Murray, Calloway County, and seven measurements were made on this well during the year.

FLUCTUATIONS OF WATER LEVEL

Jefferson County

In the Louisville area as a whole, water levels rose an average of 0.46 foot during the year, representing an average gain in storage of about 1.9 million gallons a day. In areas along the Ohio River, water levels rose as much as 4.5 feet, reflecting the spring flood of the river; while in heavily pumped areas away from the river, water levels declined as much as 2.3 feet.

In the downtown area, north of parallel 38°13' N. and east of meridian 85°46' W. (see fig. 4), continued pumpage for air conditioning and other industries lowered the water levels about 1.5 feet during the year. The hydrograph for well 45-14-1 shown on figure 5 is representative of the area. The loss was somewhat less than usual because of the effects of recharge gained from the Ohio River spring flood. Shown also on figure is a hydrograph for well 50-10-2, in the unpumped area south of the city. Water levels in this area, which reflect recharge from rainfall, rose about 0.3 foot during the year.

In the industrial area of the city, west of meridian 85°46' W. and north of parallel 38°13' N. (see fig. 4), water levels declined an average of almost a foot during the year. Figure 6 shows the hydrograph

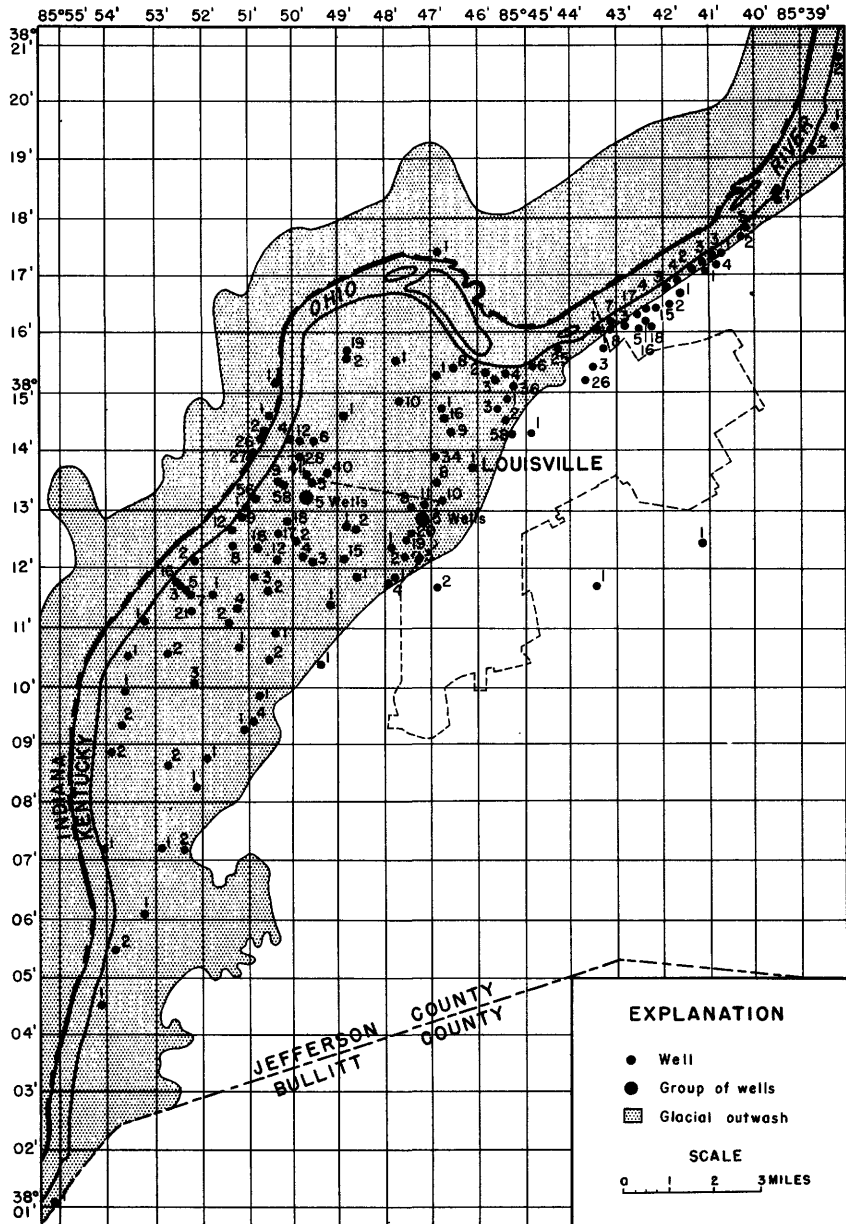


Figure 4.--Map showing location of observation wells in the Louisville area.

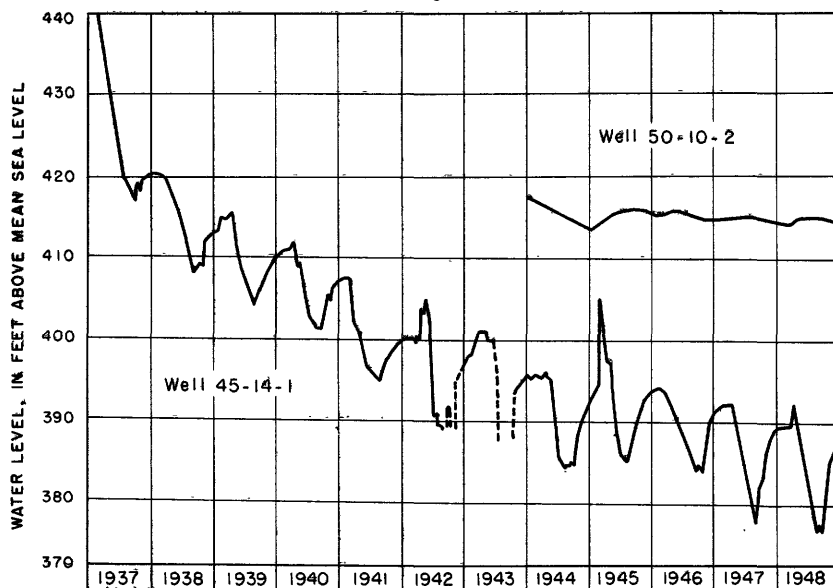


Figure 5.--Graphs of water level in the downtown area and in the unpumped area southwest of Louisville.

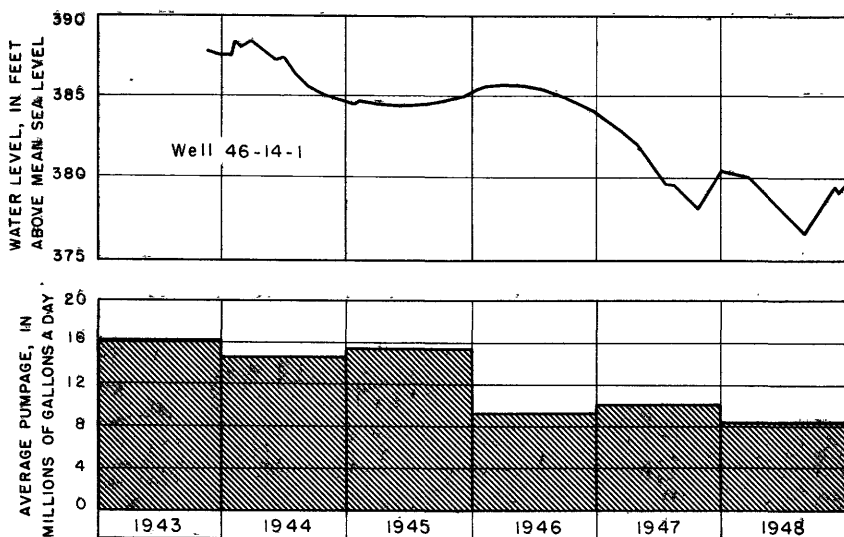


Figure 6.--Graphs of water level and estimated average pumpage in the west central area of Louisville.

of water levels in well 46-14-1 and a graph of average pumpage for this area. About two-thirds of the 1948 pumpage in this area was from wells penetrating the limestone underlying the glacial-outwash deposits.

In the distillery area south of Louisville, the change in water levels ranged from an average decline of 0.9 foot in the southern part to an average rise of 2.0 feet in the northern part of the area (see fig. 7). The pumpage graph shows that the 1948 pumpage for the area was about a third of that during 1942 and 1943.

In the "Rubbertown" area, a strip about 2 miles wide extending 3 miles southwest along the river from the southwestern boundary of the city, an average rise of about 2 feet in the water table continued the general recovery trend begun early in 1945. Pumpage in this area was practically the same as in 1947, and about half of the 1944 war-time peak (see fig. 8).

PUMPAGE

The following table shows the distribution of pumpage by industries in the Louisville area for the period 1937-48.

Estimated average daily net withdrawals of ground water
in the Louisville area, by industries^{a/}
(million gallons a day)

Industrial plants	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948
Distilleries	6.2	6.1	6.5	10.5	14.9	16.7	17.2	8.9	9.2	4.6	6.1	3.9
Rubber and chemical	...	...	...	...	.2	4.6	17.0	19.9	11.4	9.7	7.1	7.7
Metal working	2.2	2.2	2.3	2.4	4.1	4.3	4.3	3.7	3.5	3.5	4.4	3.8
Oil refineries	4.9	4.9	4.9	4.7	4.6	4.6	3.9	4.2	3.0	3.4	3.2	2.9
Breweries	5.3	5.6	5.3	5.2	4.1	4.1	3.8	3.6	3.2	3.2	3.2	3.5
Air conditioning	3.9	3.9	3.8	3.8	3.7	3.6	3.4	3.7	3.7	3.5	3.3	3.2
Ice	4.1	4.1	4.1	4.2	3.6	3.2	2.9	2.9	2.6	2.9	2.0	1.4
Meat packing	2.4	2.4	2.3	2.2	2.6	2.5	2.4	2.1	2.0	1.8	1.2	1.1
Miscellaneous	1.4	1.4	1.4	1.7	2.0	1.9	1.8	1.9	1.9	.8	.9	.9
Tobacco	2.5	2.6	2.5	2.2	1.9	1.7	1.2	.9	.9	.5	1.3	1.4
Gas and electric	.8	.9	.8	.8	.8	.8	.9	.8	.8	.9	.9	.9
Food manufacturing	.7	1.0	1.5	1.3	1.1	.9	.6	.7	.6	.6	.5	.5
Dairies and creameries	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.2	1.8	1.5	1.3
Total	36.6	37.3	37.6	41.2	45.8	51.2	61.7	55.5	45.0	37.2	35.6	32.5
Change in storage, estimated from contour maps							-20+	-14.4	+12.5	-.7	-1.5	+1.9
Estimated natural recharge							42+	41.1	57.5	36.5	34.1	34.4

a Artificial recharge has been deducted from total pumpage.

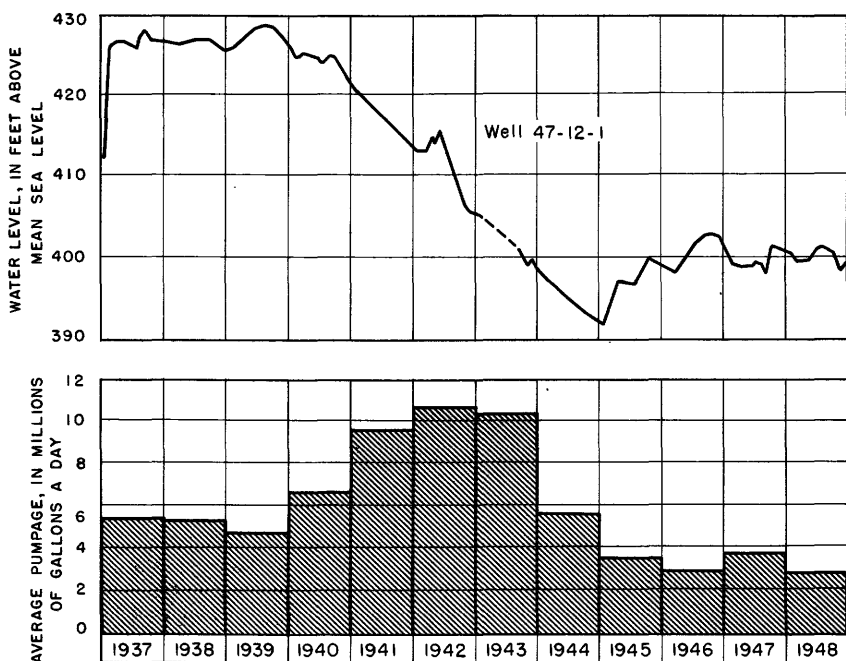


Figure 7.--Graphs of water level and estimated pumpage in distillery area, south of Louisville.

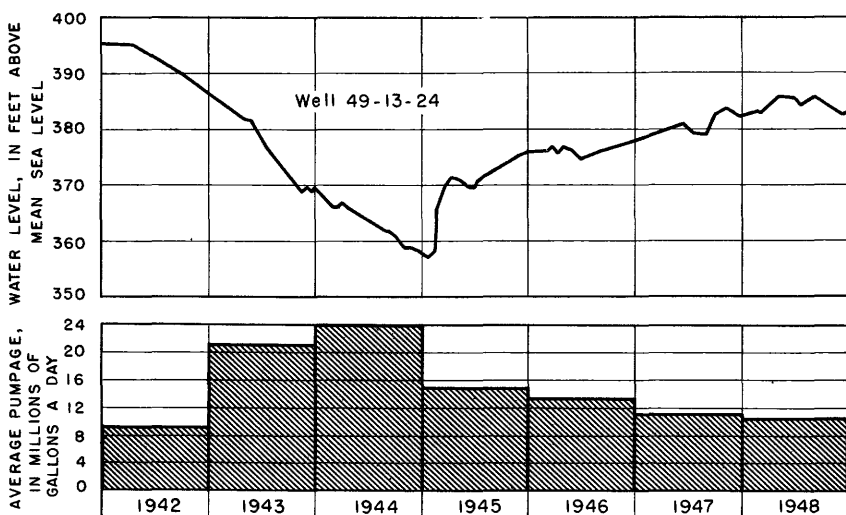


Figure 8.-- Graphs of water level and estimated average pumpage in Rubber-town area southwest of Louisville.

The war-time peak total pumpage of 61.5 million gallons a day occurred in 1943; decreases in 1944 and 1945 resulted from conservation measures. Pumpage since 1945 reflects decreases caused by cut-backs in production at the end of the war, continuation of war-time conservation measures, and additional conservation measures since 1947 encouraged by the adoption of a sewer program which requires rental payment for use of sewers.

Figure 9 shows estimated pumpage from rock wells and from sand and gravel wells for the period 1937-48. Also shown for the period 1943-48 is the extent of artificial recharge and the estimated gains and losses in storage for the area. The gain in 1945 was a result of extensive recharge from the river during the major flood (second highest of record); the flood in the spring of 1948 accounted for most of the excess of recharge over pumpage in the year.

WELL-NUMBERING SYSTEM

Records for six wells in the Louisville area, in Indiana, are published in Water-Supply Paper 1126.

The Louisville area lies between latitude 35° and 36° north and longitude 88° and 89° 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 5. 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 the second well inventoried in the 1-minute quadrangle west of 85°45' W., longitude and north of 38°15' N. latitude. (See figure 5 for well locations.) A similar numbering system based on 5-minute quadrangles is used in Kentucky outside of the Louisville area.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Calloway County

8815-3635-6. Joe Parks. In Murray, about 200 feet southeast of intersection of 15th and Main Streets. Abandoned drilled public supply well, diameter 12 inches, depth 300+ feet. Measuring point, top of concrete, 1.1 feet above land-surface datum. Measurements by I. H. Key. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 24	126.7	July 3	127.17	Sept. 5	127.00	Dec. 4	126.75
June 3	127.04	Aug. 5	127.30	Oct. 5	126.90		

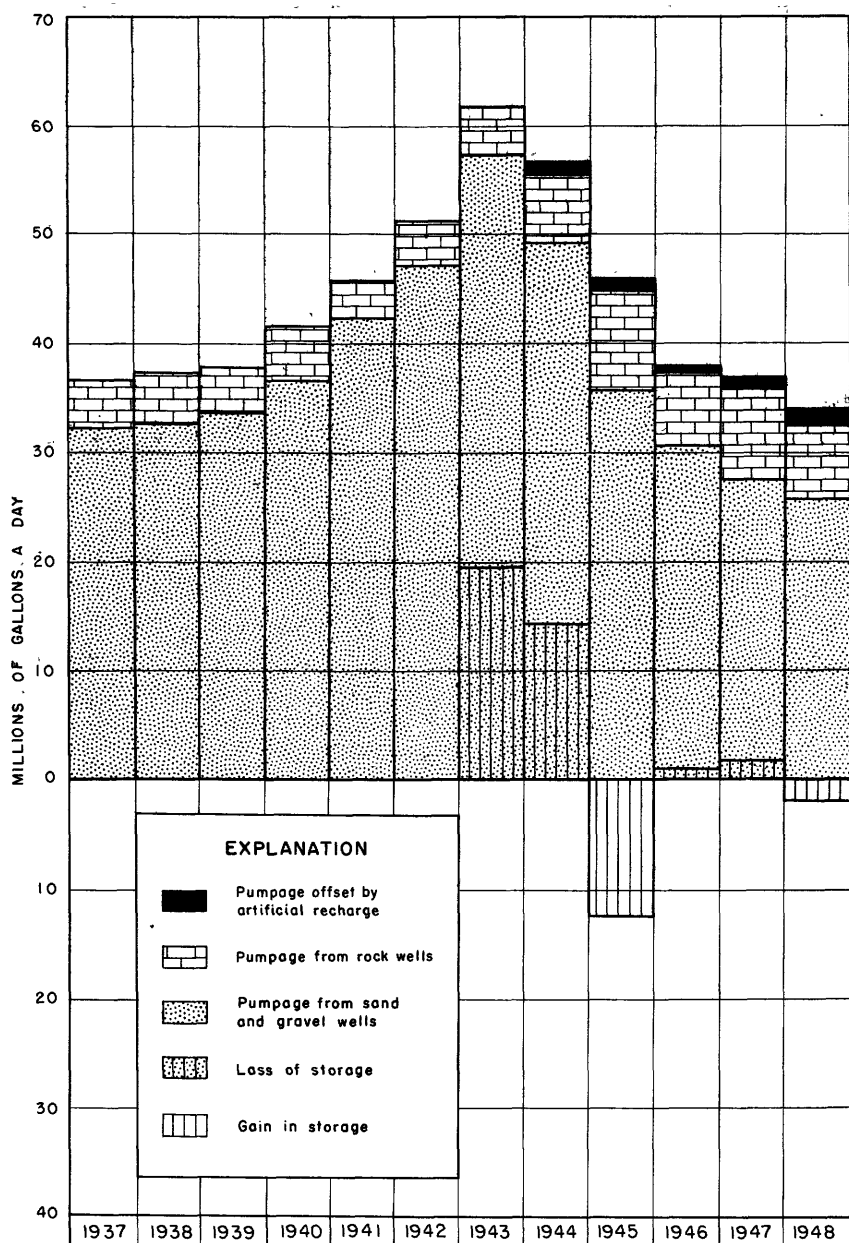


Figure 9.--Graphs showing pumpage, 1937 to 1948, and changes in storage, 1943 to 1948, in the Louisville area.

Jefferson County

38-19-1. Harrods Creek. 0.2 mile southwest of Harrods Creek Baptist Church. Records available: 1943-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3	20.42	Feb. 27	15.02	May 3	17.03	Oct. 5	19.27
18	7.99	Mar. 30	6.21	22	17.70	Nov. 19	18.35
21	4.92	Apr. 3	12.66	July 27	18.90	Dec. 22	13.76
24	13.62	9	15.55	Aug. 27	19.20		

36-19-2. Louisville Water Co. well WC-27. On River Road, northeast of bridge over Goose Creek. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3	20.97	Mar. 30	5.23	Apr. 27	16.69	Aug. 27	18.91
18	3.97	Apr. 3	14.41	May 3	17.76	Oct. 5	18.86
21	4.75	9	16.18	22	17.95	Nov. 19	18.10
24	15.50	24	4.96	July 27	18.41	Dec. 22	12.44
27	16.33						

38-20-2. W. W. Liter. 1.5 miles north of Harrods Creek. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3	21.17	Mar. 30	6.05	May 22	16.95	Oct. 5	18.74
18	6.62	Apr. 3	13.53	July 27	18.27	Nov. 19	18.65
24	15.33	9	15.46	Aug. 27	18.40	Dec. 22	12.43
27	16.35	May 3	16.73				

39-18-1. Louisville Water Co. well WC-26. On River Road, opposite River Valley Club. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3	38.53	Mar. 30	25.95	Apr. 27	32.80	Aug. 27	36.38
18	28.05	Apr. 3	30.16	May 3	35.38	Oct. 5	36.35
21	23.67	9	34.21	22	35.58	Nov. 19	36.09
24	31.36	24	20.43	July 27	36.05	Dec. 22	31.61
27	33.81						

40-17-1. Union Park Club 89. On River Road, northeast of Indian Hills Trail. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3	25.59	Mar. 30	15.41	Apr. 27	17.66	Aug. 27	23.73
18	19.15	Apr. 3	17.03	May 3	21.84	Oct. 5	23.66
21	15.16	9	21.23	22	22.71	Nov. 19	23.29
24	18.28	24	7.96	July 28	23.18	Dec. 22	20.14
27	20.69						

40-17-2. Louisville Trust Co. Blankenbaker Lane, south of River Road. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3	19.31	Mar. 30	5.96	Apr. 27	14.48	Aug. 27	16.80
18	8.78	Apr. 3	12.65	May 3	15.98	Oct. 5	16.84
21	5.68	9	14.94	22	16.03	Nov. 19	16.43
24	13.78	24	2.60	July 27	16.35	Dec. 22	12.07
27	14.95						

40-17-3. Louisville Water Co. well WC-11. River Road and Indian Hills Trail. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3	16.46	Mar. 29	4.41	Apr. 27	11.25	Aug. 27	13.93
18	6.07	30	3.55	May 3	12.98	Oct. 5	13.94
21	3.86	Apr. 3	9.99	22	13.16	Nov. 19	13.55
24	10.98	9	12.12	July 28	13.40	Dec. 22	9.44
27	12.01	24	+0.07				

40-17-4. Louisville Water Co. well WC-12. On Indian Hills Trail, 1,500 feet southeast of River Road. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	j 14.88	Feb. 18	10.74	Apr. 3	9.30	July 28	14.85
2	j 14.81	21	6.82	9	12.74	Aug. 27	15.37
3	j 15.08	24	10.50	24	.14	Oct. 5	15.46
4	j 15.12	27	12.22	27	9.92	Nov. 19	14.84
5	j 15.12	Mar. 29	8.42	May 3	13.26	Dec. 22	11.94
Feb. 3	j 17.14	30	7.02	22	14.25		

j Daily noon water level, from recorder charts.

40-17-5. Louisville Water Co. well WC-13. On River Road, 300 feet northeast of Blankenbaker Lane. Records available: 1946-48.

Feb. 3	21.84	Mar. 30	8.39	Apr. 27	17.53	Aug. 27	19.31
18	11.01	Apr. 3	15.59	May 3	18.66	Oct. 5	19.31
21	7.93	9	17.52	22	18.59	Nov. 19	18.91
24	16.64	24	5.46	July 27	18.79	Dec. 22	14.43
27	17.62						

41-12-1. Lighthouse Lake. On Gardiner Avenue, between Newburg and Bardstown Roads. Records available: 1943-48. Feb. 19, 0.54; Apr. 1, 0.41. Measurements discontinued on Apr. 1.

41-16-1. Attila Cox. 0.2 mile southeast of point at River Road and Wagner Beach road sign. Records available: 1944-48.

Feb. 3	16.54	Feb. 27	10.75	May 3	11.35	Oct. 5	15.07
18	12.77	Mar. 30	8.70	22	13.40	Nov. 22	14.62
21	8.02	Apr. 3	8.60	July 28	14.53	Dec. 22	12.70
24	9.34	9	11.60	Aug. 27	14.94		

41-16-2. Louisville Water Co. well WC-3. On Zorn Avenue, 1,000 feet southeast of River Road. Records available: 1946-48.

Feb. 3	11.28	Feb. 9	11.67	Apr. 3	3.10	July 29	8.77
4	j 11.39	16	9.89	9	5.78	Aug. 27	9.32
5	j 11.58	18	(f)	27	1.88	Oct. 5	9.46
6	j 11.63	24	3.54	May 3	5.25	Nov. 22	8.96
7	j 11.45	27	4.83	22	7.37	Dec. 21	6.06
8	j 11.30						

j Daily noon water level, from recorder charts.

f Flooded.

41-16-3. Louisville Water Co. well WC-4. River Road and Zorn Avenue. Records available: 1946-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	16.71	18.33	13.13	8.44	12.09	15.39	16.13	16.15	16.66	16.76a	16.70	16.23
2	16.65	18.46	13.05	9.16	12.45	15.32	16.19	16.15	16.58	16.78	16.64	16.10
3	16.77	18.58	13.24	10.56	12.77	15.40	16.19	16.19	16.63	16.78	16.63	16.09
4	16.83	18.77	13.52	11.63	12.97	15.45	16.19	.....	16.75	16.75	16.64	16.15
5	16.91	19.00	13.61	12.09	13.24	15.56	16.18	.....	16.77	16.71	16.59	16.04
6	16.92	18.90	13.73	12.58	13.29	15.56	16.20	16.37	16.79	16.69	16.44	16.22
7	16.95	18.68	13.81	12.88	13.46	15.66	16.20	16.29	16.75	16.71	16.47	16.23
8	16.89	18.54	14.09	12.96	13.48	15.70	16.19	16.25	16.75	16.71	16.45	16.30
9	16.76	19.13	14.16	13.24	13.57	15.72	16.24	16.23	16.71	16.72	16.42	16.26
10	16.78	18.92	14.28	13.26	13.65	15.73	16.27	16.37	16.78	16.70	16.50	16.38
11	16.76	18.72	14.33	13.20	13.68	15.74	16.27	16.24	16.79	16.67	16.44	16.30
12	16.80	19.36	14.50	12.21	13.77	15.75	16.32	16.22	16.78	16.71	16.32	16.19
13	16.88	19.57	14.59a	10.14	13.94	15.77	16.36	16.44	16.75	16.75	16.51	16.31
14	16.88	19.03	14.62	.....	13.97	15.82	16.36	16.49	16.73	16.76	16.52	16.42
15	16.89	17.99	14.75	.....	14.12	16.00	16.40	16.43	16.78	16.81	16.55	16.28
16	16.98	16.64	14.64	.....	14.21	16.01	16.45	16.38	16.78	16.79	16.46	16.25
17	17.03	14.89	14.76	.....	14.30	15.93	16.45	16.39	16.79	16.79	16.51	16.12

a Tape measurement at another hour.

41-16-3--Continued.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
18	17.07	12.56	14.76	.....	14.37	15.86	16.32	16.46	16.80	16.86	16.43	15.83
19	17.18	9.96	14.75	.....	14.51	15.92	16.33	16.46	16.81	16.82	16.19	15.48
20	17.19	8.34	14.77	.....	14.80	16.04	16.28	16.47a	16.77	16.81	16.21	14.84
21	17.25	7.92	14.72	.....	14.69	16.05	16.22	16.48	16.77	16.81	16.16	14.38
22	17.29	8.41	14.77	.....	14.77	16.03	16.17	16.48	16.87	16.77	16.25	14.08
23	17.35	9.67	14.74a	1.21	14.79	16.01	16.10a	16.42	16.87	16.73	16.34	14.07
24	17.37a	11.12	14.79a	1.23	14.84	15.91	16.23	16.41	16.87	16.74	16.18	14.44
25	17.57	11.71	14.74	.....	14.89	15.91	16.28	16.50	16.92	16.70	.....	14.89
26	17.67	12.08	14.55a	8.47	14.99	16.08	16.24	16.54	16.84	16.69	.....	.....
27	17.70	12.39	13.84	.....	15.05	16.08	16.15	16.55	16.79	16.68	.....a	15.32
28	17.83	12.63	12.31	.....	15.20	16.07	16.10	16.64	16.78	16.70	.....	15.43
29	18.05	12.96	10.45	.....	15.24	16.06	16.05	16.71	16.74	16.69a	16.14	15.44
30	18.21		9.24a	11.81	15.29	16.07	16.06	16.71	16.75	16.71	16.16	15.51
31	18.25		8.47		15.35		16.10	16.64		16.70		15.57

a Tape measurement at another hour.

41-16-4. Louisville Water Co. well WC-9. On River Road, at entrance to Wagners Beach. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3	20.11	Mar. 29	12.72	Apr. 27	11.92	Aug. 27	18.44
19	15.19	30	11.49	May 3	16.71	Oct. 5	18.54
21	10.99	Apr. 3	12.53	22	17.01	Nov. 22	18.24
24	13.29	9	15.30	July 28	18.04	Dec. 22	15.96
27	14.55	24	3.01				

41-17-1. Sam J. Hamrick. 500 feet south of River Road, 1.0 mile northeast of Zorn Avenue. Records available: 1943-48.

Feb. 3	25.99	Mar. 30	16.70	Apr. 27	17.77	Aug. 27	24.17
18	20.09	Apr. 3	17.72	May 3	21.91	Oct. 5	24.21
21	16.26	9	21.56	22	23.11	Nov. 19	23.82
24	18.83	24	8.50	July 28	23.67	Dec. 22	21.05
27	20.93						

41-17-2. Louisville Water Co. well WC-8. At Wagners Beach. Records available: 1946-48.

Feb. 3	10.25	Feb. 27	5.64	Apr. 27	4.63	Aug. 27	7.85
18	(f)	Mar. 30	(f)	May 3	6.01	Oct. 5	7.82
21	(f)	Apr. 3	2.13	22	6.90	Nov. 19	7.53
24	4.97	9	5.53	July 28	7.37	Dec. 22	3.79

f Flooded.

41-17-3. Louisville Water Co. well WC-10. 25 feet from river edge, 1,750 feet upstream from Wagners Beach. Records available: 1946-48.

Feb. 3	18.81	Apr. 3	13.31	May 22	15.39	Oct. 5	16.14
24	14.08	9	14.62	July 28	15.74	Nov. 19	15.80
27	14.56	27	14.56	Aug. 27	16.10	Dec. 22	11.50
Mar. 30	5.40	May 3	15.37				

42-16-3. Louisville Gas & Electric Co. At Beargrass plant. Records available: 1944-48.

Feb. 3	12.58	Feb. 27	4.65	Apr. 27	3.84	Aug. 27	8.36
18	(f)	Mar. 30	(f)	May 4	4.66	Oct. 5	8.16
21	(f)	Apr. 3	4.02	20	5.79	Nov. 23	7.85
24	3.79	9	5.43	July 31	7.84	Dec. 21	4.17

f Flooded.

42-16-4. Louisville Gas & Electric Co. 93 feet from river edge, 0.5 mile northeast of Beargrass plant. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3	10.90	Feb. 27	4.97	May 20	6.94	Oct. 5	8.76
18	(f)	Apr. 3	3.71	July 30	8.37	Nov. 23	8.52
21	(f)	9	5.85	Aug. 27	8.80	Dec. 21	5.10
24	3.79	27	4.47				

f Flooded.

42-16-5. Henry Chambers. 600 feet south of River Road, opposite Louisville Gas & Electric Co. power plant. Records available: 1944-48.

Feb. 3	19.00	Feb. 27	8.57	May 4	7.96	Oct. 5	14.08
18	(f)	Apr. 3	7.27	20	10.69	Nov. 23	13.74
21	(f)	9	10.36	July 31	13.75	Dec. 21	12.24
24	6.83	27	4.89	Aug. 27	14.36		

f Flooded.

42-16-15. Louisville Water Co. well WC-5. 160 feet from river edge, 300 feet downstream from Louisville Water Co. pumping station. Records available: 1946-48.

Feb. 3	18.34	Mar. 30	4.84	Apr. 27	13.32	Aug. 27	15.82
18	4.86	Apr. 3	12.53	May 3	14.40	Oct. 5	15.79
21	4.25	9	14.01	22	14.67	Nov. 15	15.52
24	12.96	24	2.57	July 29	15.13	Dec. 20	12.07
27	13.66						

42-16-16. Louisville Water Co. well WC-6. 1,400 feet northeast of Louisville Gas & Electric Co. Beargrass plant, 600 feet northwest of River Road. Records available: 1946-48.

Feb. 3	15.04	Feb. 27	7.10	Apr. 27	5.19	Aug. 27	11.57
18	(f)	Mar. 28	5.59	May 3	7.51	Oct. 5	11.40
21	(f)	Apr. 3	5.97	20	9.09	Nov. 23	11.17
24	5.71	9	8.35	July 30	11.01	Dec. 21	8.65

f Flooded.

42-16-17. Louisville Water Co. well WC-7. 1,500 feet northeast of Louisville Gas & Electric Co. Beargrass plant, 1,600 feet northwest of River Road, 20 feet from river edge. Records available: 1946-48.

Feb. 5	7.29	Apr. 3	+0.07	May 4	2.15	Aug. 27	3.88
18	(f)	9	2.10	20	2.69	Oct. 5	3.72
21	(f)	27	1.75	July 30	3.47	Nov. 23	3.76
Mar. 30	(f)						

f Flooded.

42-16-18. Louisville Water Co. well WC-14. 800 feet southeast of River Road, northeast of Frys Avenue. Records available: 1946-48.

Feb. 3	20.63	Mar. 28	12.15	Apr. 27	9.61	Aug. 27	17.19
18	12.17	30	8.70	May 4	12.27	Oct. 5	17.10
21	6.87	Apr. 3	10.94	20	14.37	Nov. 23	16.69
24	10.74	9	13.53	July 31	16.65	Dec. 21	14.82
27	12.17						

43-11-1. L. Cave. At 1324 Morgan Street. Records available: 1943-48.

Feb. 19	11.16	May 24	13.46	Aug. 26	13.54	Nov. 23	13.35
Apr. 1	9.52	June 28	13.51	Oct. 7	13.19	Dec. 21	12.85

43-15-1. City of Louisville well M-1. At Beargrass sewerage pumping station on Letterle Avenue. Records available: 1937-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3	37.13	Apr. 24	13.98	Aug. 3	j 33.39	Sept. 20	34.52
18	29.43	28	23.27	4	j 33.30	27	34.32
21	25.28	May 3	26.00	8	j 33.09	Oct. 4	34.68
24	28.14	10	27.50	9	j 33.20	11	33.48
27	29.54	17	29.04	16	33.50	18	33.55
Mar. 30	25.73	19	29.55	23	33.80	25	33.44
Apr. 2	26.90	31	30.67	24	j 33.96	Nov. 1	33.40
9	29.60	June 14	31.83	25	j 34.04	15	33.10
16	15.22	July 27	33.11	29	j 33.97	26	33.64
18	7.72	28	33.27	30	j 34.01	Dec. 6	33.46
19	6.73	29	j 33.21	Sept. 7	j 34.25	13	33.64
20	6.39	30	j 33.15	13	34.30	21	31.94
21	7.14	Aug. 1	j 33.01	14	j 34.41	27	32.61
23	10.75	2	j 32.90	15	j 34.48		

j Daily noon water level, from recorder charts.

43-15-3. E. H. Koch. At 1415 Quincy Avenue. Records available: 1946-48.

Feb. 18	35.02	Apr. 16	27.24	May 10	24.50	July 31	32.33
24	31.68	18	(f)	17	26.15	Aug. 30	33.23
27	31.57	20	(f)	19	26.60	Oct. 6	33.79
Mar. 30	30.97	24	14.66	31	28.32	Nov. 19	33.28
Apr. 2	30.10	28	19.20	June 14	29.77	Dec. 21	32.86
9	30.50	May 4	22.48				

f Flooded.

43-15-26. C. F. Vissman & Co. At 117 Bickel Avenue. Records available: 1946-48.

Feb. 18	52.80	Apr. 16	45.73	Apr. 28	36.07	June 14	44.45
24	50.20	18	42.16	May 4	37.83	July 31	49.80
27	50.05	19	40.65	10	39.45	Aug. 30	50.15
Mar. 30	48.76	20	39.34	17	40.92	Oct. 6	51.84
Apr. 2	48.58	21	38.04	19	41.54	Nov. 19	50.27
9	47.97	23	35.30	31	42.52	Dec. 21	49.70

43-16-1. City of Louisville. 150 feet east of Municipal Boat Harbor. Records available: 1944-48.

Feb. 3	12.86	Feb. 27	4.05	Apr. 28	4.33	July 27	8.20
18	(f)	Mar. 30	(f)	May 4	5.36	Aug. 26	8.98
21	(f)	Apr. 3	.40	10	5.68	Oct. 6	8.99
24	.90	9	2.96	19	6.76	Nov. 22	9.12

f Flooded.

43-16-7. Louisville Water Co. well WC-2. 50 feet from river edge, 1,200 feet upstream from mouth of Beargrass Creek. Records available: 1946-48.

Feb. 3	11.84	Mar. 30	(f)	May 20	g +1.34	Oct. 5	6.91
18	(f)	Apr. 3	g +3.57	July 31	6.28	Nov. 22	6.92
21	(f)	9	g +2.26	Aug. 27	6.51	Dec. 20	4.78
Feb. 27	g +3.18						

f Flooded.

g Silted.

43-16-8. Louisville Water Co. well WC-1. 115 feet northwest of River Road, 1,100 feet northeast of Beargrass Creek Bridge. Records available: 1946-48.

43-16-8--Continued.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	25.23	27.53	18.89	13.91	16.38	20.96	22.42	22.92	23.51	23.64	23.42	23.02
2	25.12	27.62	19.05	14.76	16.67	20.98	22.53	22.87	23.47	23.56	23.38	22.94
3	25.50	27.70	19.3	15.99	16.97	21.02	22.52	22.95	23.58	23.46	23.35	23.00
4	25.49	27.77	19.5	17.00	17.21	21.14	22.63	23.00	23.63	23.44	23.30	23.18
5	25.73	27.78	19.66	17.55	17.47	21.33	22.50	22.87	23.66	23.37	23.21	23.10
6	25.91	27.58	19.8	18.27	17.69	21.40	22.60	22.94	23.64	23.40	22.93	23.23
7	25.83	27.46	19.81	18.76	17.88	21.53	22.70	22.88	23.54	23.44	22.94	23.27
8	25.88	27.21	20.20	19.03	17.94	21.66	22.67	22.66	23.63	23.42	23.05	23.41
9	25.53	27.30	20.29	19.35	18.10	21.77	22.75	22.61	23.59	23.38	23.07	23.38
10	25.33	27.51	.....	19.52	18.29	21.87	22.86	22.82	23.62	23.25	23.23	23.33
11	25.25	27.48	.....	19.59	18.44	21.84	22.72	22.86	23.61	23.19	23.27	23.11
12	25.23	27.77	.....	19.00	18.62	21.92	22.73	22.82	23.51	23.33	23.17	23.11
13	25.12	27.89	.....	16.97	18.84	21.91	22.83	22.95	23.43	23.41	23.21	23.26
14	25.15	27.52	.....	.....	18.98	21.96	22.87	23.00	23.43	23.59	23.15	23.42
15	25.33	26.97	21.07	.....	19.11	22.09	22.86	22.88	23.50	23.72	23.22	23.24
16	25.14	25.59	21.03	.....	19.21	22.17	22.98	22.83	23.49	23.77	23.22	23.27
17	25.45	.....	21.11	.....	19.27	22.19	.....	22.92	23.68	23.66	23.13	23.33
18	25.70	.....	21.20	.....	19.46	22.12	.....	23.04	23.71	23.60	23.05	22.99
19	25.97	.....	21.29	.....	19.64	22.07	22.64	23.03	23.72	23.52	22.87	22.67
20	26.14	.....	21.29	.....	19.92	22.08	.....	23.08	23.68	23.53	22.82	22.08
21	26.29	.....	21.37	.....	19.90	22.09	.....	23.12	23.63	23.64	22.78	21.49
22	26.42	.....	21.41	.....	20.00	22.18	.....	23.02	23.70	23.60	22.88	21.12
23	26.53	.....	21.42	1.95	20.01	22.23	.....	22.99	23.70	23.57	23.04	21.00
24	26.59	15.92	21.53	5.34	20.09	22.22	.....	23.13	23.59	23.50	22.98	21.22
25	26.74	.....	21.58	8.80	20.17	22.22	.....	23.17	23.72	23.44	22.95	21.53
26	26.87	.....	21.36	11.95	20.26	22.31	22.53	23.32	23.56	23.48	22.94	21.77
27	26.93	17.91	20.72	13.62	20.41	22.32	22.48	23.42	23.52	23.48	23.07	21.91
28	27.03	18.17	19.26	14.64	20.60	22.25	22.66	23.54	23.48	23.52	22.96	22.07
29	27.23	.....	16.59	15.39	20.66	22.27	22.69	23.54	23.46	23.52	22.91	22.14
30	27.36	.....	14.69	16.01	20.69	22.32	22.82	23.58	23.59	23.59	22.94	22.20
31	27.44	.....	13.66	.....	20.82	.....	22.87	23.47	.....	23.44	.....	22.25

a Tape measurement at another hour.

i Interpolated.

44-14-1. Southeastern Greyhound Lines. Formerly owned by Duffy Ice Co. Between Floyd and Caldwell Streets, in bus parking lot at rear of garage. Records available: 1943-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 18	68.53	Apr. 24	68.42	May 19	68.16	Oct. 7	68.83
Apr. 1	68.30	26	68.28	July 26	67.67	Nov. 23	68.81
18	68.62	28	68.20	Aug. 26	67.65	Dec. 21	69.61
21	68.67	May 10	67.98				

44-15-6. Ohio River Sand Co. At 129 River Road. Records available: 1945-48.

Feb. 3	38.65	Mar. 30	33.35	May 10	32.74	July 26	35.25
18	35.14	Apr. 2	34.15	17	33.05	Aug. 26	36.13
19	34.54	9	35.46	20	33.19	Oct. 6	36.96
21	34.14	28	31.95	31	33.52	Nov. 18	37.20
24	35.95	May 4	32.40	June 14	34.65	Dec. 20	36.64
27	36.16						

44-15-25. New York Central System. Directly under New York Central bridge over Ohio River. Records available: 1944-48.

Feb. 3	18.04	Mar. 30	(f)	May 10	10.88	Aug. 27	14.16
18	(f)	Apr. 2	10.31	19	11.91	Oct. 5	14.53
21	(f)	9	13.53	31	12.15	Nov. 23	14.88
24	12.77	28	8.94	July 27	13.62	Dec. 21	12.53
27	13.58	May 4	10.44				

f Flooded.

45-14-1. City of Louisville well A-2. In Lincoln Park, on South 4th Street at Guthrie Street. Records available: 1937-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	73.10	.....	71.55	71.46	.....	75.28	79.51	82.13	83.32	81.43	77.82	75.89
2	73.10	72.14	71.47	71.42	.....	75.49	79.54	82.10	83.26	81.35	77.78	75.82
3	73.08	72.13	71.49	71.46	71.75	75.65	79.71	82.32	83.31	81.19	77.79	75.76
4	73.03	72.08	71.55	71.38	71.60	75.85	79.61	82.36	83.35	80.93	77.77	75.74
5	73.00	72.07	71.54	71.33	71.66	76.03	79.40	82.24	83.24	80.69	77.77	75.66
6	72.98	72.05	71.47	71.41	71.58	76.06	79.59	82.20	82.94	80.50	77.79	75.65
7	72.95	72.04	71.46	71.51	71.65	76.14	79.88	82.12	82.89	80.35	77.68	75.60
8	72.89	72.03	71.43	71.65	71.58	76.32	80.07	81.97	83.15	80.20	77.58	75.58
9	72.88	71.99	71.41	71.73	71.58	76.46	80.23	81.93	83.30	80.03	77.46	75.53
10	72.88	71.98	71.41	71.62	71.68	76.59	80.38	82.10	83.14	79.91	77.36	75.51
11	72.83	71.96	71.41	71.48	72.22	76.79	80.33	82.28	83.06	79.76	77.27	75.42
12	72.75	71.93	71.41	71.47	72.59	76.93	80.35	82.42	82.96	79.61	77.18	75.37
13	72.75	71.84	71.37	71.44	72.97	76.95	80.63	82.53	82.85	79.48	77.09	75.34
14	72.74	71.83	71.32	71.49	73.14	77.11	80.84	82.62	82.91	79.37	76.96	75.38
15	72.70	71.83	71.29	71.39	73.24	77.28	81.01	82.62	82.99	79.27	76.88	75.44
16	72.70	71.79	.....	70.76	73.34	77.48	.....	82.35	82.97	79.25	76.80	75.61
17	72.65	71.75	.....	69.87	73.42	77.64	.....	82.57	83.01	79.18	76.74	75.45
18	72.60	71.74	.....	a69.05	73.67	77.77	.....	82.63	83.12	79.01	76.68	75.32
19	a72.55	71.66	.....	68.50	73.84	77.93	a81.25	82.72	83.05	78.83	76.63	75.21
20	72.54	71.62	.....	68.50	73.96	77.91	81.36	82.78	83.06	78.71	76.65	a75.17
21	72.47	71.57	.....	68.23	74.16	78.05	81.47	82.80	83.28	78.59	76.57	75.13
22	72.45	71.56	a71.64	68.28	74.32	78.32	81.64	82.64	83.41	78.48	76.50	75.11
23	72.42	71.55	71.57	68.67	74.35	78.49	81.74	82.68	83.23	78.40	76.40	75.09
24	72.39	71.55	71.56	69.18	74.46	78.70	81.75	82.89	82.89	78.32	76.31	75.05
25	a72.4	71.53	71.56	.....	74.64	78.86	81.54	83.00	82.64	78.18	76.23	75.00
26	a72.33	71.53	71.54	a69.93	74.66	79.03	81.59	83.13	82.33	78.10	76.14	74.94
27	72.32	71.52	71.57	.....	74.80	78.96	81.83	83.25	82.11	78.03	76.11	74.89
28	72.31	71.52	71.55	71.15	74.99	78.99	81.96	83.35	81.90	77.92	76.03	74.82
29	72.26	71.55	71.39	71.08	75.17	79.22	82.06	83.17	81.69	77.93	75.99	74.79
30	.....	.....	71.38	71.12	75.21	79.41	82.17	83.18	81.55	77.93	75.93	74.75
31	.....	.....	71.37	.....	75.14	.....	82.33	83.35	.....	77.85	.....	74.71

a Tape measurement at another hour.

i Interpolated.

45-14-2. City of Louisville well A-1. About 40 feet east of South 4th Street, on northeast corner of intersection of South 4th and York Streets. Records available: 1937-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	a65.43	65.22	65.06	66.76	69.07	70.88	71.93	72.50	71.05	69.60
2	a66.00	65.43	65.24	65.09	66.80	69.13	70.93	71.97	72.46	70.99	69.54
3	65.43	65.25	65.17	66.86	69.21	70.96	72.0	72.44	70.92	69.51
4	65.43	65.25	65.17	66.90	69.29	71.01	72.1	72.36	70.86	69.47
5	a66.64	.....	65.43	65.22	65.19	67.00	69.36	71.05	72.1	72.35	70.80	69.40
6	65.43	65.23	65.22	67.10	69.41	71.07	72.2	72.30	70.76	69.35
7	65.41	65.23	65.25	67.19	69.46	71.08	72.21	72.26	70.71	69.32
8	65.38	65.24	65.26	67.25	69.51	71.08	72.25	72.22	70.67	69.29
9	a65.84	65.39	65.28	65.29	67.34	69.58	71.10	72.27	72.18	70.61	69.25
10	65.39	65.28	65.34	67.43	69.65	71.12	72.31	72.13	70.57	69.23
11	65.39	65.26	65.35	67.48	69.71	71.13	72.31	72.03	70.54	69.20
12	a66.45	.....	65.39	65.26	65.40	67.56	69.80	71.18	72.33	72.00	70.48	69.15
13	65.38	65.26	65.46	67.65	69.86	71.18	72.36	71.96	70.42	69.11
14	65.37	65.25	65.57	67.75	69.90	71.21	72.37	71.91	70.37	69.07
15	65.33	65.25	65.64	67.77	69.97	71.26	72.37	71.86	70.32	69.03
16	65.28	65.23	65.69	67.86	70.04	71.29	72.39	71.85	70.26	69.02
17	a65.70	65.28	65.23	65.78	67.92	70.10	71.32	72.40	71.83	70.20	69.02
18	65.28	65.17	65.80	67.99	70.16	71.35	72.43	71.80	70.15	69.02
19	a66.30	a65.65	65.26	65.11	65.82	68.07	70.25	71.38	72.49	71.78	70.07	68.98
20	65.25	65.07	65.88	68.20	70.27	71.42	72.54	71.74	70.05	68.96
21	65.25	65.05	65.92	68.28	70.31	71.45	72.56	71.71	70.00	68.95
22	65.25	65.00	66.00	68.33	70.40	71.51	72.59	71.65	69.96	68.93

a Tape measurement at another hour.

i Interpolated.

45-14-2--Continued.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
23	65.25	64.96	66.10	68.39	70.45	71.55	72.61	71.60	69.92	68.92	
24	65.58	65.75	64.93	66.21	68.5	70.49	71.57	72.62	71.56	69.87	68.89
25	65.25	64.91	66.29	68.6	70.54	71.61	72.62	71.48	69.83	68.87	
26	65.25	64.90	66.37	68.7	70.62	71.66	72.62	71.46	69.79	68.85	
27	64.24	64.90	66.45	68.8	70.67	71.71	72.58	71.41	69.76	68.79	
28	65.24	64.94	66.50	69.85	70.69	71.75	72.58	71.36	69.70	68.74	
29	65.23	64.99	66.57	68.90	70.75	71.78	72.55	71.30	69.66	68.70	
30	65.23	65.04	66.65	68.98	70.81	71.88	72.53	71.23	69.62	68.69	
31	65.22		66.71		70.84	71.90		71.16		68.66	

a Tape measurement at another hour.

1 Interpolated.

45-14-3. Thompson's Restaurant. At 668 South 4th Street. Records available: 1943-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 19	68.07	Apr. 28	67.78	Aug. 10	78.40	Nov. 1	75.44
Apr. 1	68.01	May 4	68.15	30	79.70	23	73.45
20	67.36	10	68.60	Sept. 14	79.97	Dec. 6	72.75
21	67.27	19	70.01	Oct. 7	78.09	21	72.25
25	67.19	July 21	78.23	18	77.03		

45-14-4. Blue Boar Cafeteria. At 644 South 4th Street. Records available: 1943-47. No measurements made in 1948.

45-14-58. Kentucky Dairies. At 981 South Third Street. Records available: 1945-48.

Feb. 18	66.18	Apr. 25	65.54	May 19	65.32	Oct. 7	67.78
Apr. 1	65.80	28	65.52	July 26	66.38	Nov. 23	67.73
18	65.68	May 4	65.41	Aug. 26	67.15	Dec. 21	67.51
21	65.68	10	65.36				

45-15-2. City of Louisville well B-2. In sidewalk at southwest corner of South 9th and Congress Streets. Records available: 1937-48.

Feb. 19	64.85	Apr. 21	63.78	May 10	63.08	Aug. 26	66.90
Apr. 1	64.15	23	63.65	17	63.14	Oct. 7	68.11
16	64.01	25	63.51	20	63.16	Nov. 23	67.84
18	63.90	28	63.38	June 1	63.40	Dec. 21	67.44
19	63.86	May 4	63.15	July 19	65.23		

45-15-3. City of Louisville well B-3. In sidewalk at southwest corner of South 8th and Cedar Streets. Records available: 1937-48.

Feb. 19	70.91	Apr. 21	70.59	May 10	70.18	Aug. 26	75.18
Apr. 1	70.85	23	70.49	17	70.29	Oct. 7	76.15
16	70.80	25	70.40	20	70.35	Nov. 24	75.20
18	70.69	28	70.29	June 1	70.74	Dec. 21	74.54
19	70.66	May 4	70.16	July 19	73.39		

45-15-4. City of Louisville well A-3. In southeast corner of Jefferson County courthouse yard. Records available: 1937-48.

Jan. 6	72.65	Mar. 1	70.92	May 10	69.47	Aug. 26	71.24
12	72.41	8	70.91	17	69.72	Sept. 14	73.56
19	72.27	22	70.61	20	69.81	Oct. 7	75.30
Feb. 2	71.88	29	70.58	31	70.27	18	75.54
9	71.73	30	70.55	June 14	71.09	Nov. 1	75.62
17	71.54	Apr. 2	70.62	July 21	73.36	19	75.34
19	71.45	5	71.20	Aug. 10	69.25	Dec. 6	75.06
24	71.10	May 7	69.54	16	70.02	21	74.74
27	70.97						

45-15-36. Kentucky Hotel. On southeast corner of Fifth and Walnut Streets, in engine room. Abandoned drilled industrial well, diameter 10 inches, depth 104 feet. Measuring point, top of casing, 23.2 feet below land-surface datum and 436.8 feet above mean sea level. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 14	81.67	Oct. 18	77.45	Nov. 23	75.05	Dec. 21	73.80
Oct. 8	78.79	Nov. 1	76.50	Dec. 6	73.95		

46-11-2. Rubber Reserve Co. well RR-25. On northeast corner of intersection of Taylor Boulevard and Hathaway Street. Records available: 1945-48.

Feb. 10	49.78	May 13	49.26	Aug. 18	48.73	Nov. 9	49.15
Mar. 26	49.85	July 7	48.80	Oct. 1	48.94	Dec. 16	49.45

46-13-1. Merchant's Ice & Cold Storage Co. At corner of South 7th and Magnolia Streets. Records available: 1943-48.

Feb. 11	77.20	May 19	76.88	Aug. 11	78.63	Nov. 18	78.0
Apr. 6	77.10	July 13	(r)	24	77.73	Dec. 21	77.52

r Recharging.

46-13-8. Brown & Williamson Tobacco Corporation well 4. At 1600 West Hill Street. Records available: 1943-48.

Date	Water level	Date	Water level	Date	Water level
Feb. 11	81.44	May 24	81.08	Aug. 24	81.08
Mar. 31	81.54	Aug. 7	80.77	Oct. 1	81.08

46-13-10. Joseph E. Seagram & Sons Co. test well 4. At intersection of Bernheim Lane and 7th Street Road. Records available: 1943-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 19	59.31	May 14	59.55	Aug. 18	59.04	Nov. 12	59.01
Mar. 26	59.74	July 8	58.77	Oct. 1	58.94	Dec. 16	58.88

46-13-34. Tobacco By-Products & Chemical Corporation. At 1350 South 17th Street, in well house at rear of plant. Abandoned drilled industrial well, diameter 16 inches, depth 85 feet. Measuring point, top of steel plate, 1.13 feet above land-surface datum and 459.89 feet above mean sea level. Records available: 1948.

Apr. 2	78.42	July 20	78.62	Oct. 6	79.17	Dec. 17	79.51
May 18	78.30	Aug. 25	78.92	Nov. 18	79.39		

46-14-1. American Tobacco Co. At intersection of 17th Street and Broadway. Records available: 1943-48.

Feb. 19	73.38	May 18	74.46	Aug. 25	77.25	Nov. 16	74.82
Mar. 31	73.54	July 20	76.33	Oct. 6	75.69	Dec. 17	75.23

46-14-9. Kentucky Public Elevator Co. At intersection of Gallagher and South 15th Streets. Records available: 1944-47. Well destroyed, measurements discontinued.

46-14-16. Bernheim Distilling Co. At 1701 West Breckinridge Street, in No. 2 distillery. Abandoned drilled industrial well, diameter 12 inches, depth 115 feet. Measuring point, top of grating, at land-surface datum, and 450.64 feet above mean sea level. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level
Apr. 6	71.42	Aug. 25	72.03	Nov. 18	73.10
July 20	72.26	Oct. 6	72.48	Dec. 17	71.86

46-15-1. Merchants Ice & Cold Storage Co. On southwest corner of 19th and Walnut Streets in north end of engine room. Abandoned drilled industrial well, diameter 30 to 18 inches, depth 97 feet. Measuring point, top of steel plate, 0.5 foot above land-surface datum and 448.3 feet above mean sea level. Records available: 1948. July 1, 71.48; Aug. 7, 71.83; Aug. 25, 72.00; Oct. 6, 72.24.

46-15-8. Hirsch Bros. & Co. At 1400 Cedar Street, in manhole at west side of truck loading platform in south end of plant. Abandoned drilled industrial well, diameter 6 inches, depth 132.6 feet. Measuring point, top of plug, 4.50 feet below land-surface datum and 455.5 feet above mean sea level. Records available: 1948. Oct. 18, 79.48; Nov. 24, 79.76; Dec. 21, 79.83.

47-11-1. Enterprise Coal & Ice Co. At 1847 Berry Boulevard. Records available: 1943-47. Well destroyed, measurements discontinued.

47-11-4. Rubber Reserve Co. well RR-42. West side of Manslick Road, 0.1 mile south of Berry Boulevard. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	45.99	May 13	45.24	Aug. 18	44.98	Nov. 5	45.45
Mar. 26	46.13	July 7	44.91	Oct. 1	45.22	Dec. 16	45.85

47-12-1. City of Louisville well C-5. On Dixie Highway at Frankfort Distillers. Records available: 1935-48.

Feb. 19	62.37	May 14	63.28	Aug. 19	62.30	Nov. 12	64.15
Mar. 25	63.28	July 9	62.12	Oct. 1	62.63	Dec. 16	63.77

47-12-2. City of Louisville well C-6. On Seventh Street Road at George's Tavern, 0.5 mile south of Arcade Avenue. Records available: 1935-48.

Feb. 13	51.69	May 14	52.44	Aug. 19	52.00	Nov. 5	52.97
Mar. 26	52.53	July 8	51.94	Oct. 1	52.23	Dec. 16	53.22

47-12-3. City of Louisville well C-7. At end of Weyler Avenue. Records available: 1935-48.

Feb. 10	45.96	May 13	45.88	Aug. 18	45.65	Nov. 12	46.29
Mar. 26	46.23	July 7	45.72	Oct. 1	45.90	Dec. 16	46.53

47-12-4. Joseph E. Seagram & Sons Co. test well 2. In Seagram parking lot in southwestern corner of intersection of Wathens Lane and 7th Street Road. Records available: 1943-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	62.37	63.42	65.71	67.90	68.17	66.67	69.07	71.39	68.02	67.34	66.88	62.93
2	63.10	63.82	65.95	68.13	66.04	67.46	68.94	71.53	67.76	67.26	66.77	62.80
3	62.55	64.59	65.15	68.60	67.33	67.67	68.84	72.27	69.04	66.38	67.40	62.70
4	62.32	63.77	65.94	65.90	68.17	67.92	67.37	72.52	69.33	66.25	67.55	62.60
5	63.38	63.87	67.03	66.20	68.28	67.86	67.52	71.88	67.69	67.38	67.57	62.45
6	64.06	64.27	66.77	67.18	68.35	66.40	68.03	72.52	67.64	67.63	67.51	62.43
7	63.51	64.87	64.82	67.66	69.05	66.37	68.92	72.18	68.07	67.51	66.89	62.33
8	63.80	63.60	65.01	68.08	69.10	67.48	69.37	70.44	68.96	67.70	66.58	62.28
9	63.75	64.45	65.34	67.80	66.57	67.88	69.28	70.97	69.64	67.72	67.11	62.23
10	63.17	64.96	65.93	68.32	67.47	67.72	69.35	71.62	69.82	65.92	67.30	62.19
11	62.86	65.66	66.14	66.10	67.71	67.68	69.18	72.07	69.98	66.70	67.52	62.10
12	63.81	66.11	66.31	66.55	67.99	67.95	69.85	70.32	68.32	67.22	67.42	62.01
13	64.52	66.17	66.16	67.35	67.70	66.56	70.90	71.50	69.01	67.35	66.80	61.94
14	63.22	66.48	64.62	68.17	67.31	67.17	71.37	71.68	68.96	67.44	66.22	61.89
15	63.75	65.23	64.99	68.48	67.57	67.48	71.61	68.30	68.72	67.62	65.91	61.82
16	64.05	65.51	65.91	68.43	65.92	68.92	71.67	67.15	68.34	67.39	66.76	61.81
17	63.17	66.12	66.66	68.88	66.78	68.47	72.04	66.40	67.92	66.28	66.47	61.77
18	62.77	65.60	65.92	66.34	66.87	68.48	69.35	65.87	67.98	66.88	66.94	61.70
19	63.92	64.85	66.17	67.39	66.71	69.14	70.11	65.49	67.28	67.29	66.84	61.64

47-12-4--Continued.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
20	64.51	65.95	66.82	67.65	65.92	66.42	71.31	65.15	67.83	67.16	67.30	61.58
21	63.49	66.41	64.97	68.05	66.45	67.31	71.67	64.86	67.76	67.14	65.92	61.57
22	63.71	64.91	65.62	67.89	66.40	68.76	73.22	64.60	67.95	67.74	64.93	61.57
23	63.86	65.72	66.49	68.45	65.35	70.45	73.65	64.38	67.95	67.17	64.41	61.52
24	63.08	66.07	66.87	69.00	66.14	71.63	74.30	64.18	67.56	66.09	64.05	61.47
25	62.86	65.81	67.40	66.25	66.82	73.04	71.49	64.92	67.80	66.70	63.80	61.48
26	63.91	65.09	67.39	67.67	66.92	73.55	71.34	65.59	66.54	66.91	63.56	61.44
27	64.30	65.55	67.76	68.01	66.94	68.99	71.96	66.29	67.03	67.08	63.42	61.38
28	63.77	66.23	65.67	67.99	67.44	69.98	72.26	67.10	67.54	66.77	63.24	61.32
29	63.73	65.19	66.51	68.35	67.62	71.20	72.58	67.57	67.75	67.36	63.16	61.28
30	64.10		67.02	68.22	65.73	70.69	74.32	68.27	67.47	67.53	63.03	61.29
31	63.13		67.72		65.04		74.93	68.04		66.44		61.25

47-12-6. Joseph E. Seagram & Sons Co. In brick pumphouse, near center of Seagram's parking lot, at intersection of 7th Street Road and Wathens Lane. Records available: 1942-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 13	69.23	July 8	73.14	Oct. 1	68.78	Dec. 21	61.84
May 14	69.96	Aug. 24	64.44	Nov. 5	69.55		

n Not pumping.

47-12-14. National Distillers Products Corporation test well 2. At Old Grand Dad distillery on Bernheim Lane. Records available: 1941-48.

Feb. 19	59.30	May 14	60.37	Aug. 24	60.58	Nov. 17	60.76
Mar. 26	59.87	July 8	60.86	Oct. 1	60.58	Dec. 21	58.26

47-12-15. National Distillers Products Corporation test well 4. At Old Grand Dad distillery on Bernheim Lane. Records available: 1942-48.

Feb. 19	60.74	May 14	59.66	Aug. 24	60.10	Nov. 17	59.80
Mar. 26	60.12	July 8	59.68	Oct. 1	59.98	Dec. 21	58.96

47-12-16. National Distillers Products Corporation test well 1. At Old Grand Dad distillery on Bernheim Lane. Records available: 1941-48.

Feb. 19	58.86	May 14	59.55	Aug. 24	60.35	Nov. 17	59.80
Mar. 26	59.25	July 8	59.92	Oct. 1	59.99	Dec. 21	58.53

47-12-19. Brown-Forman Distillers Corporation well 1. At Early Times distillery on Dixie Highway. Records available: 1947-48.

Feb. 19	57.51	May 14	57.62	Aug. 24	58.79	Nov. 12	59.37
Mar. 26	57.50	July 9	56.59	Oct. 1	58.62	Dec. 21	58.63

47-12-20. Brown-Forman Distillers Corporation test well 1. At Early Times distillery on Dixie Highway. Records available: 1944-48. Feb. 19, 53.55; Mar. 26, 53.83; May 14, 53.86; July 9, 53.19.

47-13-8. National Distillers Products Corporation test well 3. At Old Grand Dad distillery on Bernheim Lane. Records available: 1941-48.

Feb. 19	59.22	May 14	60.04	Aug. 24	59.59	Nov. 17	59.39
Mar. 26	60.12	July 8	59.06	Oct. 1	59.43	Dec. 21	59.00

47-13-11. Joseph E. Seagram & Sons Co. test well 3. On Seagram's property at 7th Street Road and Wathens Lane. Records available: 1944-48.

Feb. 13	65.90	May 14	65.65	Aug. 24	64.97	Nov. 12	64.76
Mar. 26	65.67	July 8	65.30	Oct. 1	64.86	Dec. 21	64.63

47-14-10. National Distillers Products Corporation. At Old Sunnybrook Distillery at 28th Street and Broadway. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 19	72.53	May 18	72.64	Aug. 25	72.88	Nov. 18	72.72
Mar. 31	72.26	July 19	72.90	Oct. 6	73.10	Dec. 17	72.34

47-15-1. City of Louisville well M-3. On southwest corner of 28th and Jefferson Streets. Records available: 1939-48.

Date	Water level	Date	Water level	Date	Water level
Feb. 19	40.68	May 19	40.63	Aug. 25	(d)
Apr. 1	t 40.7 $\frac{1}{2}$	July 20	40.25		

t Mud at this depth.

d Dry.

48-11-1. Charles Matheis. On Matheis Lane, 0.5 mile west of Dixie Highway. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	52.64	May 13	51.03	Aug. 18	51.25	Nov. 9	51.81
Mar. 24	52.77	July 12	51.01	Sept. 29	51.54	Dec. 16	52.14

48-12-1. City of Louisville well C-2. 0.25 mile north of Glencoe Distillery, east of Cane Run Road. Records available: 1935-48.

Feb. 19	60.83	May 14	60.44	Aug. 19	60.75	Nov. 9	61.02
Mar. 25	60.74	July 9	60.36	Sept. 30	60.95	Dec. 16	61.20

48-12-2. City of Louisville well C-3. 0.2 mile north of Stitzel-Weller Distillery and 0.1 mile east of Tucker Lane. Records available: 1935-48.

Feb. 19	72.51	May 14	71.88	Aug. 19	72.15	Nov. 9	72.52
Mar. 25	72.27	July 9	71.91	Sept. 30	72.32	Dec. 16	72.75

48-12-15. Rubber Reserve Co. well RR-41. On northside of Farnsley Road right-of-way, 0.6 mile west of Dixie Highway. Records available: 1945-48.

Feb. 10	50.59	May 13	48.79	Aug. 18	49.05	Nov. 9	49.62
Mar. 24	50.67	July 12	48.78	Sept. 29	49.27	Dec. 16	49.92

48-14-1. City of Louisville well M-4. At 38th Street and Greenwood Avenue. Records available: 1939-48.

Feb. 19	57.29	Apr. 22	57.40	Aug. 25	56.70	Nov. 16	56.78
Mar. 31	57.57	May 18	57.13	Oct. 6	56.72	Dec. 17	56.65
Apr. 20	57.47	July 19	56.66				

48-15-2. Klarer Provision Co. well 1. At 210 Amy Avenue, in northeast corner of engine room. Abandoned drilled industrial well, diameter 6 inches, depth 80 feet. Measuring point, top of casing, at land-surface datum and 454.75 feet above mean sea level. Records available: 1948.

Mar. 31	48.22	July 20	47.31	Oct. 6	47.35	Dec. 17	47.60
May 19	47.57	Aug. 25	47.34	Nov. 16	47.42		

48-15-19. Klarer Provision Co. 210 Amy Avenue. Records available: 1946-47. Well destroyed, measurements discontinued.

49-10-1. T. W. Blackwell. On east side of Dixie Highway, at Rockford Lane. Records available: 1944-48.

Feb. 10	38.94	May 12	37.58	Aug. 17	37.78	Nov. 5	38.62
Mar. 24	39.05	July 1	37.50	Sept. 29	38.04	Dec. 15	38.55

49-11-1. Rubber Reserve Co. well RR-32. On property of Louis Risinger, Garrs Lane, 0.6 mile west of Dixie Highway. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	43.53	May 12	42.39	Aug. 18	41.72	Nov. 5	42.70
Mar. 24	43.66	July 1	42.04	Sept. 29	42.48	Dec. 16	42.97

49-12-2. Henry Vogt. 0.25 mile west of Cane Run Road and 0.25 mile north of Kramers Lane. Records available: 1944-48.

Feb. 10	51.11	May 13	50.67	Aug. 18	49.13	Nov. 9	49.17
Mar. 24	51.13	July 12	49.42	Sept. 29	49.08	Dec. 16	49.66

49-12-3. Mrs. Ridley. East of white house 0.35 mile south of intersection of Cane Run Road and Ridley's Court. Records available: 1944-48.

Feb. 10	45.48	May 13	45.09	Aug. 18	45.39	Nov. 9	45.67
Mar. 24	45.50	July 12	45.37	Sept. 29	45.55	Dec. 16	45.79

49-12-4. Rubber Reserve Co. well RR-40. On southeast corner of intersection of Cane Run and Farnsley Roads. Records available: 1945-48.

Feb. 10	51.52	Apr. 21	51.50	Aug. 18	50.03	Nov. 9	49.85
Mar. 24	51.63	May 13	51.27	Sept. 29	49.82	Dec. 16	50.23
Apr. 17	51.53	July 7	50.46				

49-13-5. Synthetic Rubber Co. test well 10. On Illinois Central Railroad property between Algonquin Parkway and Bells Lane, west of main switch to Bond Bros. Tie Plant. Records available: 1945-48.

Feb. 12	76.13	Mar. 25	75.61	Apr. 26	74.52	Aug. 24	72.01
17	76.12	Apr. 17	74.92	May 3	74.16	Sept. 30	73.69
20	76.26	19	74.94	17	73.40	Nov. 17	73.23
Mar. 1	76.11	21	75.02	July 15	72.32	Dec. 17	p 76.22

p Pumping.

49-13-22. Bond Bros. On tie plant property on Bells Lane. Records available: 1933-48.

Feb. 12	65.68	Mar. 25	65.41	Apr. 26	64.30	Aug. 24	62.60
17	65.64	Apr. 17	64.82	May 3	64.15	Sept. 30	62.80
20	65.68	19	64.66	17	63.92	Nov. 17	63.50
Mar. 1	65.52	21	64.81	July 14	63.08	Dec. 16	63.89

49-13-24. B. F. Goodrich Co. well 17. On koroseal plant property on Bells Lane. Records available: 1943-48.

Feb. 12	71.47	Apr. 17	70.09	Apr. 26	69.21	Aug. 24	68.15
17	71.49	19	69.97	May 3	68.54	Sept. 30	67.89
20	71.56	21	69.91	17	67.56	Nov. 10	68.80
Mar. 1	71.49	23	69.53	July 15	67.61	Dec. 17	69.69
25	70.82						

49-13-25. B. F. Goodrich Co. test well 2. On koroseal plant property on Bells Lane. Records available: 1947-48.

Feb. 12	68.37	Apr. 17	p 68.51	May 3	64.36	Aug. 24	65.16
17	68.23	19	69.03	17 p	64.35	Sept. 30	p 67.77
20	68.21	21	68.90	July 15	64.25	Nov. 10	66.18
Mar. 1	67.98	23	p 68.39	Aug. 9	p 66.23	Dec. 17	66.97
25	67.26						

p Well 4 pumping.

49-13-26. B. F. Goodrich Co. test well 14. On koroseal plant property on Bells Lane. Records available: 1943-48.

49-13-26--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 12	68.49	Mar. 25	68.03	Apr. 23	66.59	Aug. 24	65.52
17	68.43	Apr. 17	67.11	May 3	66.07	Sept. 30	65.47
20	68.42	19	66.91	17	65.48	Nov. 10	66.49
Mar. 1	68.75	21	66.91	July 15	65.41	Dec. 17	66.90

49-13-27. B. F. Goodrich Co. test well 15. On koroseal plant property, on Bells Lane. Records available: 1943-48.

Feb. 12	65.26	Mar. 25	64.85	Apr. 23	63.33	Aug. 24	62.24
17	65.24	Apr. 17	63.96	May 3	62.90	Sept. 30	62.26
20	65.28	19	63.62	17	62.32	Nov. 10	63.30
Mar. 1	65.56	21	63.61	July 15	62.22	Dec. 17	63.68

49-13-28. Fish & Wildlife Service, U. S. Dept. of Interior. At Gibson Lane and Western Parkway. Records available: 1943-48.

Feb. 17	n 77.36	Apr. 17	73.24	Apr. 26	69.99	Aug. 19	72.84
20	77.13	19	72.06	May 3	69.03	Sept. 30	72.70
Mar. 1	n 75.58	21	71.37	18	n 68.25	Nov. 12	72.95
31	n 73.94	23	71.14	July 16	72.59	Dec. 17	73.07

n Not pumping.

49-13-34. B. F. Goodrich Co. pump well 4. On koroseal plant property, on Bells Lane. Records available: 1944-47. No measurements made in 1948.

49-13-40. Rubber Reserve Co. well RR-26. On southeast corner of intersection of 39th Street and Algonquin Parkway. Records available: 1945-48.

Feb. 12	66.65	Mar. 25	66.73	Apr. 26	66.22	Aug. 19	64.64
17	66.72	Apr. 17	66.42	May 3	66.11	Sept. 30	64.58
20	66.73	19	66.37	13	65.93	Nov. 12	64.89
Mar. 1	66.72	21	66.43	July 15	64.98	Dec. 16	65.20

49-13-41. Synthetic Rubber Co. test well 12. On Illinois Central Railroad property, south of Algonquin Parkway and west of main switch to Bond Bros. Tie Plant. Records available: 1945-48.

Feb. 12	66.56	Apr. 17	65.44	May 3	64.54	Sept. 30	61.96
17	66.57	19	65.36	17	63.47	Nov. 10	63.07
20	66.62	21	65.40	July 15	62.04	17	62.12
Mar. 1	66.53	26	65.01	Aug. 19	61.64	Dec. 17	64.02
25	66.04						

49-14-6. Tube Turns. Kentucky State Fairgrounds. Records available: 1943-48.

Feb. 19	64.43	Apr. 22	63.59	Aug. 25	61.17	Nov. 16	61.60
Mar. 31	64.12	May 18	62.74	Oct. 6	61.09	Dec. 17	61.96
Apr. 20	63.68	July 19	61.31				

49-14-12. Louisville Refining Co. 1300 South Western Parkway. Affected by pumping of nearby well. Records available: 1944-48.

Feb. 19	95.84	May 18	89.70	Aug. 19	96.00	Nov. 18	98.40
Mar. 31	96.06	July 16	95.97	Sept. 30	96.57	Dec. 17	97.80

50-9-1. William Genenwein. On private road west of Upper Hunters Trace, 0.7 mile west of Dixie Highway. Records available: 1943-48.

Feb. 10	46.81	May 12	46.07	Aug. 17	45.25	Nov. 3	45.65
Mar. 24	46.97	July 1	45.63	Sept. 28	45.49	Dec. 15	45.87

50-9-4. Rubber Reserve Co. well RR-37. On southwest corner of intersection of Lower Hunters Trace and Upper Hunters Trace. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	35.47	Apr. 19	35.24	July 1	34.47	Nov. 3	34.81
Mar. 24	35.64	21	35.20	Aug. 17	34.50	Dec. 15	34.99
Apr. 17	35.30	May 12	34.79	Sept. 28	34.66		

50-10-1. Robert Lee. On Luckert Avenue, about 0.3 mile east of August Avenue. Records available: 1944-48.

Feb. 10	26.49	Apr. 21	26.21	Aug. 18	25.52	Nov. 9	25.79
Mar. 24	26.61	May 12	25.88	Sept. 29	25.64	Dec. 15	25.85
Apr. 17	26.27	July 2	25.52				

50-10-2. Rubber Reserve Co. well RR-30. On south side of Rockford Lane, 0.95 mile west of Dixie Highway. Records available: 1945-48.

Daily noon water level, from recorder charts

Day	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	29.67	29.53	28.82	28.59	28.51	28.53	28.66	28.79	28.92	29.06
2	.....	29.64	29.51	28.81	28.58	28.47	28.53	28.66	28.79	28.92	29.05
3	.....	29.68	29.49	28.80	28.57	28.47	28.52	28.67	28.79	28.93	29.06
4	.....	29.70	29.45	28.77	28.57	28.47	28.52	28.67	28.80	28.93	29.07
5	.....	29.64	29.46	28.79	28.58	28.47	28.53	28.66	28.80	28.92	29.03
6	.....	29.65	29.45	28.78	28.57	28.46	28.54	28.67	28.81	28.96	29.09
7	.....	29.66	29.44	28.79	28.56	28.47	28.54	28.68	28.81	28.96	29.08
8	.....	29.68	29.48	28.77	28.55	28.47	28.54	28.68	28.82	28.95	29.11
9	.....	29.67	29.44	28.75	28.56	28.47	28.54	28.69	28.83	28.95	29.11
10	a29.52	29.68	29.37	28.74	28.56	28.46	28.54	28.69	28.83	28.97	29.12
11	.....	29.74	29.40	28.72	28.55	28.47	28.54	28.70	28.84	28.98	29.10
12	.....	29.70	29.44	28.73	28.54	28.48	28.55	28.71	28.85	28.98	29.12
13	.....	29.69	29.33	28.72	28.55	28.48	28.55	28.71	28.85	28.99	29.13
14	.....	29.68	29.33	28.71	28.54	28.48	28.56	28.72	28.87	28.98	29.13
15	.....	29.70	29.22	28.64	28.53	28.48	28.56	28.72	28.87	29.00	29.11
16	.....	29.74	29.21	28.68	28.54	28.50	28.57	28.73	28.87	28.99	29.17
17	.....	29.72	29.20	28.71	28.53	28.49	28.58	28.73	28.88	29.01	29.14
18	.....	29.66	29.15	28.69	28.53	28.49	28.58	28.73	28.88	29.00	29.11
19	.....	29.61	29.14	28.67	28.53	28.49	28.59	28.73	28.89	28.94	29.16
20	.....	29.67	29.10	28.65	28.52	28.50	28.60	28.72	28.89	29.02	29.15
21	.....	29.65	29.08	28.66	28.53	28.49	28.60	28.73	28.90	29.02	29.17
22	.....	29.67	29.01	28.65	28.53	28.49	28.60	28.73	28.89	29.03	29.16
23	.....	29.69	28.99	28.64	28.53	28.51	28.62	28.74	28.90	29.02	29.16
24	a29.68	29.68	28.95	28.65	28.53	28.51	28.62	28.74	28.89	29.02	29.15
25	29.67	29.63	28.91	28.64	28.52	28.50	28.63	28.75	28.90	29.03	29.18
26	29.68	29.59	28.90	28.63	28.52	28.53	28.63	28.76	28.90	29.03	.....
27	29.62	29.71	28.87	28.62	28.52	28.52	28.64	28.76	28.90	29.06	29.15
28	29.77	29.60	28.88	28.62	28.53	28.52	28.64	28.77	28.91	29.02	29.14
29	29.70	29.51	28.85	28.61	28.51	28.52	28.64	28.77	28.91	29.08	29.20
30		29.53	28.82	28.61	28.50	28.52	28.65	28.78	28.92	29.06	29.18
31		29.54		28.61		28.55	28.66		28.92		29.16

a Tape measurement at another hour.

50-11-2. Rubber Reserve Co. well RR-33. On southeast corner of intersection of Crums Lane and Cane Run Road. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	39.51	Apr. 21	39.63	May 12	39.38	Sept. 29	37.90
Mar. 24	39.75	24	39.54	July 2	38.73	Nov. 5	37.94
Apr. 17	39.65	26	39.56	Aug. 18	38.16	Dec. 16	38.41
19	39.61	May 3	39.48				

50-11-3. Rubber Reserve Co. well RR-39. On north side of Schencks Lane, 0.5 mile west of Cane Run Road. Records available: 1945-48.

50-11-3--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	49.84	Apr. 21	49.80	May 12	49.25	Sept. 29	47.69
Mar. 24	50.11	24	49.73	July 2	47.84	Nov. 5	47.98
Apr. 17	49.87	26	49.70	Aug. 18	47.45	Dec. 16	48.61
19	49.83	May 3	49.51				

50-12-12. Patrick Whelan. On Kramers Lane, 0.2 mile west of Cane Run Road. Records available: 1943-48.

Date	Water level	Date	Water level	Date	Water level
Feb. 10	49.64	May 17	49.43	Aug. 18	48.00
Mar. 25	49.78	July 7	48.52	Sept. 29	47.84

50-12-16. Rubber Reserve Co. well RR-27. On south side of Kramers Lane, 245 feet east of Camp Ground Road. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	56.83	Apr. 17	55.64	Apr. 26	55.31	Aug. 18	52.97
17	56.97	19	55.63	May 3	54.82	Sept. 29	54.04
20	57.05	21	55.59	17	53.78	Nov. 5	54.74
Mar. 1	57.04	24	55.43	July 7	53.07	Dec. 15	55.88
24	56.48						

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. Records available: 1945-48.

Feb. 12	58.10	Apr. 17	57.67	Apr. 26	57.39	Aug. 24	55.45
17	58.08	19	57.66	May 3	57.11	Sept. 30	55.93
20	58.11	21	57.63	17	56.31	Nov. 10	56.49
Mar. 1	58.17	23	57.47	July 13	55.25	Dec. 16	57.41
25	57.95						

50-12-18. Rubber Reserve Co. well RR-35. On Bond Bros. property north side of Camp Ground Road, 0.3 mile east of Ralph Avenue. Records available: 1945-48.

Feb. 12	65.92	Apr. 17	64.94	Apr. 26	64.49	Aug. 19	62.96
17	65.89	19	64.84	May 3	63.91	Sept. 30	63.54
20	65.88	21	64.83	17	62.97	Nov. 17	64.20
Mar. 1	65.80	23	64.66	July 14	62.37	Dec. 16	64.50
25	65.41						

50-13-9. National Carbide Corporation pump well 10. On company property on Bells Lane. Records available: 1945-48.

Feb. 12	67.53	Mar. 25	65.67	Apr. 23	61.04	July 15	62.38
17	67.47	Apr. 17	63.54	26	59.05	Aug. 19	64.00
20	67.38	19	63.11	May 3	57.82	Nov. 10	66.95
Mar. 1	66.14	21	62.38	17	56.70	Dec. 17	67.57

50-13-56. Rubber Reserve Co. well RR-24. In E. I. du Pont de Nemours upper field, on south bank of Lower Paddy Run, about 200 feet east of Ohio River bank. Records available: 1945-48.

Feb. 12	4E.44	Apr. 19	(f)	May 3	29.31	Sept. 30	43.14
Mar. 1	26.90	21	(f)	17	28.62	Nov. 17	42.70
25	28.17	23	(f)	July 14	41.36	Dec. 17	34.86
Apr. 17	(f)	26	13.81	Aug. 24	42.14		

f Flooded.

50-13-58. National Carbide Corporation test well. In pump house 10, on Company property on Bells Lane. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 12	68.03	Apr. 17	63.38	May 3	57.73	Aug. 19	63.90
17	68.04	19	62.90	17	58.17	Sept. 30	65.52
20	67.92	21	62.23	July 15	62.28	Nov. 10	66.80
Mar. 1	66.80	23	60.98	Aug. 9	62.97	Dec. 17	67.42
25	65.51	26	58.96				

50-14-4. Rubber Reserve Co. well RR-23. On Louisville Refining Co. property at 1300 S. Western Parkway. Records available: 1945-48.

Feb. 19	75.55	Apr. 17	69.52	Apr. 26	62.41	Aug. 19	71.73
20	75.22	19	65.79	May 3	66.13	Sept. 30	72.27
Mar. 1	73.90	21	62.50	18	68.12	Nov. 18	72.29
31	76.10	23	60.74	July 16	70.60	Dec. 17	72.45

51-8-1. Mrs. Ethel Waller. In yard of house on private drive, 0.25 mile north of Greenwood School. Records available: 1943-48.

Feb. 5	46.03	May 11	45.79	Aug. 17	45.23	Nov. 2	45.30
17	46.07	June 30	45.49	Sept. 28	45.20	Dec. 15	45.46
Mar. 23	46.27						

51-9-1. George Nagel. 0.1 mile west of intersection of Lower Hunters Trace and Upper Hunters Trace. Records available: 1943-48.

Feb. 10	45.95	May 12	45.30	Aug. 17	45.00	Nov. 3	45.32
Mar. 24	46.12	July 1	45.02	Sept. 28	45.16	Dec. 15	45.44

51-10-1. Rubber Reserve Co. well RR-29. South side of Rockford Lane, 0.3 mile east of Cane Run Road. Records available: 1945-48.

Feb. 10	35.26	Apr. 21	34.99	May 12	34.37	Sept. 29	33.82
Mar. 24	35.29	24	34.90	July 2	33.67	Nov. 5	34.00
Apr. 17	35.08	26	34.87	Aug. 17	35.66	Dec. 15	34.23
19	35.05	May 3	34.66				

51-11-1. Thieneman Bros. On Camp Ground Road, 0.2 mile north of Lees Lane. Records available: 1944-48.

Feb. 10	54.89	Apr. 17	53.95	Apr. 26	53.51	Aug. 18	51.48
17	54.93	19	53.84	May 3	53.02	Sept. 28	52.23
20	54.98	21	53.80	12	52.18	Nov. 5	52.65
Mar. 1	54.85	23	53.64	July 2	50.70	Dec. 15	53.32
24	54.55						

51-11-2. Kaufman Bros. On Cane Run Road, 0.1 mile south of Lees Lane. Records available: 1944-48.

Feb. 10	48.91	Apr. 21	48.31	May 12	47.01	Sept. 28	46.41
Mar. 24	48.63	26	48.10	July 1	45.96	Nov. 5	46.84
Apr. 17	48.40	May 3	47.63	Aug. 17	46.07	Dec. 15	47.28
19	48.36						

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 Rockford Lane. Records available: 1945-48.

Feb. 10	42.07	Apr. 21	41.86	Aug. 18	39.78	Nov. 9	40.25
Mar. 24	42.09	May 12	41.38	Sept. 29	39.95	Dec. 15	40.55
Apr. 17	41.91	July 2	40.04				

51-12-8. Lake Dreamland Country Club. On Lake Dreamland Road, 0.5 mile west of Camp Ground Road. Records available: 1943-48.

51-12-8--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	52.32	Mar. 24	40.52	Apr. 23	(g)	Sept. 29	51.22
17	49.13	Apr. 17	(f)	July 7	49.01	Nov. 5	52.28
20	44.85	19	(f)	Aug. 18	49.26	Dec. 15	46.85
Mar. 1	40.37	21	(f)				

f Flooded.

g Silted.

51-12-9. E. W. Owen. At end of Fern Leaf Road, 0.7 mile northwest of Camp Ground Road. Records available: 1944-48.

Feb. 12	57.27	Apr. 17	1.19	Apr. 26	8.92	Aug. 19	53.99
17	34.03	19	-.40	May 3	32.02	Sept. 30	56.50
20	37.36	21	.66	17	38.89	Nov. 10	55.78
Mar. 1	6.15	23	1.17	July 12	54.59	Dec. 16	17.75
25	3.15						

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. Records available: 1945-48.

Feb. 10	d 65.9	Mar. 24	51.39	May 12	47.21	Sept. 29	d 65.2
17	54.02	Apr. 26	35.73	July 7	64.49	Nov. 10	65.3
20	47.94	May 3	53.62	Aug. 18	57.90	Dec. 15	60.75
Mar. 1	50.31						

d Dry at this depth.

51-13-1. Rubber Reserve Co. well RR-21. On property of Carbide & Carbon Chemical Corporation, Camp Ground Road. Records available: 1945-48.

Feb. 12	56.32	Apr. 17	25.99	Apr. 26	29.51	Aug. 24	56.44
17	43.21	19	23.48	May 3	45.23	Sept. 30	57.04
20	37.11	21	22.66	17	43.40	Nov. 17	56.30
Mar. 1	40.61	23	23.41	July 14	56.23	Dec. 17	45.87
25	41.25	24	25.06				

52-7-1. Lanson Beahl. On Johnstown Road, 1.5 mile west of Dixie Highway. Records available: 1943-48.

Feb. 5	40.25	Mar. 23	40.22	May 11	38.41	Sept. 28	38.66
17	40.65	Apr. 24	38.88	June 29	37.71	Nov. 2	38.98
20	40.71	26	38.79	Aug. 17	38.05	Dec. 15	39.12
Mar. 1	40.63	May 3	38.71				

52-7-2. Rubber Reserve Co. well RR-47. On south side of Johnstown Road, 0.84 mile west of Dixie Highway. Records available: 1945-48.

Feb. 5	40.72	Apr. 17	40.79	May 3	40.31	Sept. 28	39.46
17	40.79	19	40.73	11	40.16	Nov. 1	39.65
Mar. 1	40.85	21	40.69	June 29	39.52	Dec. 15	39.96
23	41.01	24	40.54	Aug. 17	39.35		

52-8-1. Mrs. Anna Dohn. On private road, 0.45 mile south of Greenwood School. Records available: 1943-48.

Feb. 5	47.08	Apr. 17	47.26	June 30	46.59	Nov. 2	46.17
17	47.10	21	47.26	Aug. 17	46.32	Dec. 15	46.46
Mar. 23	47.30	May 11	46.99	Sept. 28	46.27		

52-8-2. Rubber Reserve Co. well RR-38. On south side of Greenwood Road, 500 feet east of Sylvania Road. Records available: 1945-48.

Feb. 5	42.26	Apr. 17	42.20	Apr. 26	41.93	Aug. 17	40.42
17	42.34	19	42.14	May 3	41.78	Sept. 28	40.65
20	42.37	21	42.06	11	41.61	Nov. 2	40.96
Mar. 1	42.37	24	41.94	June 30	40.53	Dec. 15	41.34
23	42.46						

52-10-2. H. F. Roggenkamp. On Lower River Road, 0.2 mile east of Lower Hunters Trace. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	47.60	Apr. 17	44.58	Apr. 26	42.43	Aug. 17	43.76
17	47.59	19	44.19	May 3	41.65	Sept. 28	44.79
20	47.48	21	43.84	12	41.38	Nov. 3	45.56
Mar. 1	46.64	24	42.93	July 1	42.43	Dec. 15	46.17
24	46.19						

52-10-3. Rubber Reserve Co. well RR-36. On northeast corner of Murrays Lane and Lower Hunters Trace. Records available: 1945. No measurements made in 1948.

52-11-3. Rubber Reserve Co. well P-1. On Ohio River bank, north of Lees Lane. Records available: 1944-48.

Feb. 10	37.71	Apr. 17	(f)	Apr. 26	14.74	Aug. 17	34.23
17	30.26	19	(f)	May 3	24.21	Sept. 28	35.80
20	27.87	21	(f)	12	23.69	Nov. 29	36.15
Mar. 1	29.04	24	(f)	July 6	32.63	Dec. 15	34.68
24	28.81						

f Flooded.

52-11-5. Rubber Reserve Co. well E-2. Near church at west end of Lees Lane. Records available: 1944-48.

Feb. 10	59.10	Mar. 24	51.39	May 12	45.66	Sept. 28	57.12
17	54.23	Apr. 24	39.84	July 6	53.94	Nov. 10	57.71
20	52.20	26	41.71	Aug. 17	55.73	Dec. 15	56.00
Mar. 1	51.91	May 3	46.38				

52-11-7. Rubber Reserve Co. well E-4. Near church at west end of Lees Lane. Records available: 1945-48.

Feb. 10	58.34	Mar. 24	52.54	May 12	46.15	Sept. 28	56.17
17	56.55	Apr. 24	42.54	July 6	52.77	Nov. 29	57.13
20	55.03	26	43.14	Aug. 17	54.63	Dec. 15	56.15
Mar. 1	53.38	May 3	46.04				

52-11-16. Rubber Reserve Co. well W-1. On Ohio River bank north of Lees Lane. Records available: 1944-48.

Feb. 10	18.76	Mar. 24	8.84	Apr. 24	(f)	Aug. 17	15.54
17	(f)	Apr. 17	(f)	26	(f)	Sept. 28	18.00
20	(f)	19	(f)	May 12	2.43	Nov. 29	18.45
Mar. 1	(f)	21	(f)	July 6	12.85	Dec. 15	15.83

f Flooded.

52-11-21. Rubber Reserve Co. well RR-28. At Lees Lane and Camp Ground Road. Records available: 1945-48.

Feb. 10	37.87	Apr. 17	(f)	Apr. 26	34.49	Aug. 17	33.84
17	37.90	19	(f)	May 3	33.44	Sept. 28	34.90
20	37.96	21	(f)	12	32.32	Nov. 3	35.68
Mar. 1	37.48	24	34.77	July 2	32.41	Dec. 15	36.30
24	36.91						

f Flooded.

52-12-2. Rubber Reserve Co. well RR-22. On property of Americus Petrall, on Ohio River bank, 0.1 mile south of Bramers Lane. Records available: 1945-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	47.44	.....	35.87	29.70	.....	43.46	45.23	45.46	47.01	47.29	47.57	44.31
2	46.40	48.00	35.40	29.88	.....	43.52	45.34	45.62	46.97	47.47	47.56	43.12

a Tape measurement at another hour.

52-12-2--Continued.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
3	45.30	48.02	35.35	30.45a	36.31	43.67	45.31	45.82	47.02	47.37	47.63	42.06
4	44.65	48.12	35.40	31.10	35.96	43.79	45.27	46.00	47.14	47.50	47.57	41.42
5	45.99	48.25	35.36	31.90	35.71	43.96	45.42	46.02	47.15	47.40	47.57	41.16
6	43.48	48.62	35.43	32.57	34.83	44.10	45.52	45.92	47.20	47.47	46.84	41.39
7	43.02	48.62	35.78	32.75	33.91	44.24	45.57	45.80	47.14	47.49	46.62	41.26
8	42.75	48.59	36.20	32.53	32.99	44.30	45.59	45.68	47.12	47.46	46.84	41.12
9	42.78	47.81	36.45	32.25	32.35	44.42	45.66	45.09	47.21	47.50	47.07	40.94
10	42.94	48.25	36.80	31.66	31.98	44.40	45.73	44.50	47.22	47.47	46.99	41.16
11	43.32	47.55	37.19	31.21	31.67	44.12	45.77	44.87	47.15	47.35	47.17	41.37
12	43.99	46.80	37.43	30.79	31.52	44.02	45.85	45.67	47.26	47.42	47.01	42.02
13	44.48	46.39	37.75	29.24	31.72	44.00	45.94	45.91	47.17	47.52	47.22	42.73
14	44.40	44.74	38.14a	27.82	32.24	44.06	46.06	46.09	47.24	47.52	47.23	44.22
15	44.10	42.80	38.83	.....	.....	44.42	45.99	45.76	47.25	47.40	47.25	43.67
16	43.92	41.03	38.80	.....	.....	44.37	45.86	46.00	47.28	47.52	47.23	41.57
17	43.74a	39.36	38.30	.....	35.28	44.31	45.82	46.22	47.23	47.51	47.36	39.94
18	43.91	38.19	37.60	.....	35.92	44.26	45.74	46.48	47.39	47.48	47.31	38.52
19	44.33	37.00	37.06	.....	36.50	44.47	45.67	46.39	47.36	47.46	47.19	37.43
20	45.45	36.14	36.68	.....	37.22	44.77	45.81	46.54	47.26	47.47	47.13	36.44
21	45.86	35.37	36.14	.....	37.97	44.72	45.65	46.64	47.12	47.50	47.04	35.77
22	46.31	35.16	36.07	.....	38.38	44.67	45.76	46.59	47.09	47.39	46.94	35.22
23	46.47	35.28	35.88	.....	38.59	44.38	45.61	46.63	47.24	47.44	47.07	34.94
24	46.41	35.55	35.72a	21.49	38.89	44.09	45.31	46.68	47.28	47.56	46.81	35.04
25	46.49	35.89	35.08	.....	39.50	44.08	45.20	46.71	47.37	47.47	46.56	35.67
26	46.94	36.20	34.61	24.28	40.23	44.89	44.38	46.84	47.25	47.53	46.93	36.32
27	47.20	36.25	33.92	27.56	41.43	44.95	45.52	46.85	47.41	47.49	46.91	36.96
28	47.35	36.48	32.61	31.13	42.48	44.79	42.91	46.99	47.32	47.57	46.42	37.78
29	47.53	36.38	30.97	34.03	42.72	44.89	42.94	46.99	47.32	47.58	46.16	39.68
30	47.67	.....	30.19	.....	43.07	45.06	44.32	47.00	47.42	47.63	45.13	40.95
31	.....	.....	29.63	.....	43.32	.....	45.22	46.95	.....	47.62	.....	41.33

a Tape measurement at another hour.

53-5-2. Mr. Weather. On residential property, on Lower River Road, 0.35 mile north of Orell Road. Records available: 1943-47. No measurements made in 1948.

53-6-1. Rubber Reserve Co. well RR-46. On south side of Bethany Lane, 0.27 mile east of Lower River Road. Records available: 1945-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	33.83	.....	33.85	32.62	30.15	29.34	30.09	30.96	31.68	32.30	32.84	33.29
2	34.23a	34.15	33.40	32.74	30.04	29.32	30.11	30.99	31.68	32.33	32.84	33.21
3	34.15	34.16	33.79	32.68	30.18	29.29	30.12	31.00	31.70	32.35	32.83	33.20
4	34.11	34.17	34.05	32.32	29.87	29.27	30.14	31.03	31.73	32.36	32.86	33.26
5	34.16	34.20	33.76	32.19	30.00	29.33	30.17	31.07	31.74	32.37	32.87	33.05
6	34.15	34.23	33.36	32.18	29.75	29.37	30.18	31.10	31.76	32.39	32.93	33.30
7	34.10	34.14	33.28	32.08	29.81	29.36	30.22	31.11	31.79	32.40	32.98	33.21
8	34.07	34.30	33.55	32.31	29.84	29.35	30.26	31.13	31.82	32.43	32.95	33.29
9	34.20	34.20	33.42	32.45	29.72	29.45	30.29	31.16	31.84	32.46	32.92	33.29
10	34.20	34.26	33.42	31.95	29.70	29.49	30.32	31.18	31.87	32.46	32.98	33.33
11	34.07	34.25	33.53	31.58	29.63	29.50	30.33	31.19	31.88	32.48	33.02	33.17
12	34.07	34.28	33.52	31.99	29.58	29.48	30.37	31.22	31.91	32.51	33.00	33.13
13	34.15	34.08	33.32	31.94	29.56	29.53	30.41	31.24	31.94	32.51	33.02	33.24
14	34.16	34.62	33.07	31.88	29.54	29.56	30.43	31.27	31.95	32.54	33.02	33.22
15	34.01	34.43	32.98a	31.86	29.44	29.58	30.48	31.30	31.98	32.56	33.05	33.10
16	34.20	34.14	33.11	.....	29.42	29.63	30.51	31.31	32.01	32.56	33.03	33.20
17	34.12a	34.19	33.41	.....	29.41	29.66	30.54	31.34	32.03	32.59	33.07	33.35
18	34.13	34.15	33.09	.....	29.45	29.65	30.57	31.34	32.03	32.63	33.07	33.04
19	34.06	34.09	32.60	.....	29.44	29.69	30.59	31.39	32.03	32.61	32.93	32.93
20	34.02	34.37	33.02	.....	29.33	29.75	30.62	31.41	32.06	32.66	33.12	33.06
21	34.01	34.13	32.86	.....	29.22	29.75	30.63	31.43	32.07	32.66	33.18	33.14
22	34.09	34.12	32.88	.....	29.33	29.77	30.66	31.46	32.10	32.66	33.11	33.26
23	34.23	34.17	32.72a	31.43	29.29	29.81	30.71	31.49	32.13	32.68	33.14	33.11
24	34.10	34.12	33.03a	30.82	29.30	29.83	30.76	31.50	32.17	32.72	33.13	32.99

a Tape measurement at another hour.

53-6-1--Continued.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
25	34.16	33.97	32.78	30.72	29.31	29.87	30.77	31.52	32.20	32.73	33.17	33.09
26	34.13	33.83	32.47	30.62	29.29	29.90	30.78	31.55	32.22	32.74	33.15	32.95
27	34.14	33.64	32.51	30.56	29.25	29.93	30.82	31.58	32.22	32.75	33.25	32.94
28	.....	33.81	32.88	30.51	29.26	29.95	30.85	31.60	32.24	32.77	33.07	32.89
29	.....	34.19	32.48	30.41	29.26	29.98	30.88	31.61	32.25	32.79	33.26	32.68
30	.....		32.48	30.28	29.31	30.02	30.90	31.61	32.28	32.80	33.30	32.96
31	.....		32.14		29.34		30.93	31.64		32.81		32.94

53-8-2. Rubber Reserve Co. well RR-45. On Greenwood Road, 0.2 mile west of Lower River Road. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	39.21	Apr. 17	(f)	Apr. 26	22.59	Aug. 17	37.20
17	37.14	19	(f)	May 3	27.54	Sept. 28	38.44
20	34.78	21	(f)	11	27.21	Nov. 2	38.87
Mar. 1	32.60	24	21.14	June 30	35.50	Dec. 15	37.08
23	32.13						

f Flooded.

53-9-1. Henry Hufflage. At Arrowhead Farms, on Lower River Road between Lower Hunters Trace and Greenwood Road. Records available: 1943-48.

Feb. 5	57.74	Apr. 17	49.50	May 3	47.83	Sept. 28	55.90
20	56.70	19	48.29	11	48.32	Nov. 3	56.62
Mar. 1	54.20	21	47.37	June 30	52.73	Dec. 15	55.99
23	53.28	26	46.21	Aug. 17	54.56		

53-9-2. Mrs. A. J. Seibert. At Alvanna Farms, on Lower River Road about 0.5 mile north of Greenwood Road. Records available: 1944-48.

Feb. 5	47.15	Apr. 17	41.82	Apr. 26	38.67	Aug. 17	44.24
17	46.85	19	41.06	May 3	38.68	Sept. 28	45.49
20	47.09	21	40.28	11	39.09	Nov. 3	46.21
Mar. 1	44.97	24	39.17	June 30	42.23	Dec. 15	45.83
23	44.05						

53-10-1. W. E. Miller. In Miller's Orchard, on Lower River Road, about 0.5 mile west of Lower Hunters Trace. Records available: 1943-48.

Feb. 5	46.42	Apr. 17	31.48	Apr. 26	29.17	Aug. 17	43.36
17	44.04	19	22.14	May 3	33.58	Sept. 28	44.88
20	41.71	21	29.00	11	33.41	Nov. 3	45.47
Mar. 1	39.69	24	28.44	June 30	41.43	Dec. 15	43.30
24	38.76						

y Water trickling into dug well.

53-11-1. Rubber Reserve Co. well RR-43. On property of A. J. Miller, on Lower River Road, about 0.15 mile west of Lower Hunters Trace. Records available: 1945-48.

Feb. 5	43.23	Apr. 17	(f)	Apr. 26	16.16	Aug. 17	40.82
17	31.32	19	(f)	May 3	28.84	Sept. 28	41.46
20	27.81	21	(f)	12	24.86	Nov. 3	41.79
Mar. 1	29.27	24	11.35	June 30	39.02	Dec. 15	37.57
24	29.52						

f Flooded.

54-4-1. Rodney Williams. Formerly owned by W. E. Augustus. On Lower River Road, about 0.9 mile north of Watson Lane. Records available: 1944-48.

54-4-1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 20	53.21	Apr. 21	31.35	May 10	41.48	Sept. 28	d 57+
Mar. 23	46.52	23	30.41	June 29	52.73	Nov. 2	i 57+
Apr. 17	35.65	26	32.45	Aug. 17	54.63	Dec. 15	52.24
19	32.88	May 3	40.79				

d Dry at this depth.

54-7-1. Rubber Reserve Co. well RR-44. On Mike Linnig's property, west of Lower River Road and 0.2 mile north of Johnstontown Road. Records available: 1945-48.

Feb. 5	34.38	Apr. 17	(f)	May 3	21.59	Sept. 28	32.16
17	19.93	19	(f)	11	19.45	Nov. 1	32.46
Mar. 7	20.69	21	(f)	June 29	29.50	Dec. 15	30.26
23	22.66	26	13.94	Aug. 17	31.37		

f Flooded.

55-1-1. W. R. Baker. At Dixie View Dairy, on Dixie Highway, about 1.8 miles north of West Point. Records available: 1943-48. May 10, 41.89; June 29, 42.85. Measurements discontinued Aug. 17, well destroyed.

MARYLAND

By Gerald Meyer

PROGRAM OF WORK

The measurement of water levels in observation wells in Maryland was continued during 1948 as a part of the investigation of the ground-water resources of the State, in cooperation with the Maryland Department of Geology, Mines and Water Resources. Nine observation wells were added during the year; two in Anne Arundel County, four in Prince Georges County, and one each in Charles, Carroll, and Montgomery Counties.

During the year 957 tape measurements of water levels were made, and 3,617 daily water-level readings were determined for this report from continuous records obtained by the use of automatic water-stage recorders on nine wells. At the end of the year the observation-well program included 178 wells.

PRECIPITATION^{1/}

The year was characterized by heavy precipitation and near normal temperatures in Maryland. The precipitation was above normal at all stations and the average departure from normal for the entire State was about 12 inches. The central and southern parts of the Eastern Shore of Maryland and the counties in southern Maryland bordering Chesapeake Bay received the greatest total precipitation. There were no prolonged dry periods during the year in any part of the State. A brief summary of the precipitation at selected stations in Maryland for 1948 is given in the following table:

Precipitation, in inches, in Maryland, 1948					
County	Station	Precipitation	Departure from normal	Wettest month	Driest month
Wicomico	Salisbury	72.59	+28.68	August	February
	Baltimore	54.71	+12.05	June	February
Prince Georges	Cheiltenham	57.64	+14.26	August	February
Washington	Hancock	40.22	+4.02	December	July
Allegany	Cumberland	46.82	+12.82	April	February
Garrett	Oakland	61.23	+14.47	May	October

^{1/} Summarized from records of the U. S. Weather Bureau.

155

FLUCTUATIONS OF WATER LEVEL

Fluctuations of ground-water levels in the Baltimore industrial area, the area of greatest concentrated ground-water consumption in Maryland, were measured in 22 observation wells during the year. Most of these wells are unavoidably near or within localities of heavy pumpage and the major water-level fluctuations are caused chiefly by changes in the rates of pumpage of ground water.

Only a small percentage of the ground water consumed in the Baltimore industrial area is metered, consequently changes in the rates of pumpage cannot be determined accurately. The total pumpage may be estimated, however, by comparing the water-level measurements obtained during 1948 with those obtained in 1945, a year for which more complete pumpage data are available. The total ground-water pumpage in the Baltimore industrial area in 1945 is estimated to have been about 35 million gallons a day; the pumpage in 1948 may have been as much as 40 million gallons a day.

The water levels in most of the observation wells in the Baltimore industrial area fluctuate widely as a result of daily pumpage changes and it is difficult, therefore, to determine the annual net change of the artesian head. For this reason the following values of change in artesian head for the two major aquifers should be considered as approximate:

Patuxent formation

Sparrows Point district	Rise of 4 to 13 feet
Dundalk-Canton district	No change to a decline of 5 feet
Highlandtown district	Decline of 6 feet
Harbor district	Decline of 2 feet
Fairfield district	Decline of 4 to 16 feet
Curtis Bay district	Rise of 4 feet

Patapsco formation

Sparrows Point district	Decline of 1 to 12 feet
Curtis Bay district	Rise of 1 foot.

Most of the water-level measurements obtained on the Eastern Shore of Maryland are from wells in the Salisbury area, established in connection with a detailed ground-water investigation in that area. These measurements show, with one exception, a net rise for the year ranging from a fraction of a foot to about 4.5 feet. The only well showing a decrease for the year was the Salisbury Municipal Airport well Wi-Cf 3 which showed a net decline of about 2 feet. An automatic water-stage recorder was maintained on well Wi-Ce 13 in Salisbury. This is the only well in the

Eastern Shore area for which a record for the entire year is available; its record shows a net rise for the year of about 4.5 feet. This net rise in water level, indicating a large increase in ground-water storage, was caused chiefly by the abnormally high precipitation during the year. Outside of the Salisbury area, water-level measurements were obtained from two wells, in Dorchester and Kent Counties, on the Eastern Shore; their periods of record are too brief, however, to indicate water-level trends.

Practically all of the wells measured in southern Maryland during the year indicate a rise in the water levels of both water table and artesian aquifers, with net increases ranging from about 0.5 foot in well AA-Bb 18 to 6.25 feet in well AA-Ce 24. Two wells show a decline, well AA-Ef 3 and well AA-Ce 49, each with a net decrease of about 0.5 foot.

Water-level measurements in observation wells in central Maryland do not indicate a uniform or consistent trend of water levels for the year. Measurements in 10 observation wells indicate that the net annual change of water levels in wells, situated relatively close to one another, differ markedly. For example, well Fr-Ee 1 and well Fr-Fc 1, in Frederick County, show a net rise for the year of approximately 4 feet and 2.5 feet, respectively. Conversely, well Fr-Bd 1 and well Fr-Cg 1, also in Frederick County, show a net decline for the year of approximately 19 feet and 1 foot, respectively. An average of the net changes recorded in 10 observation wells in this area indicates a net rise of about 0.8 feet. Automatic water-stage recorders were operated on two wells in this area during the year; one at Gaithersburg, well Mont-De 1, and the other at Colesville, well Mont-Eg 1. The well at Colesville has been measured either periodically or continuously by means of an automatic water-stage recorder since 1932.

In the westernmost part of the State--Allegany, Washington, and Garrett Counties--the annual net change in all but one of the observation wells ranged from essentially no change in well All-Ag 1 to a rise of approximately 12 feet in well Wa-Eh 3 near Hagerstown. The only well showing a decrease for the year is at Westernport, All-Da 1, with a net decline of about 0.5 foot.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Baltimore City

4N2W-9. Baltimore Country Club. Falls and Harvest Roads. Records available: 1943-48.

Date	Water level	Date	Water level	Date	Water level
Feb. 19	10.67	Mar. 4	10.33	Apr. 1	9.54
26	10.65	11	9.90	Oct. 15	11.23

1S3E-12. Kimball Tyler Co. In Baltimore, at Haven and Gough Streets. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 19	115.92	Mar. 22	114.75	Apr. 30	119.23	June 22	119.88
26	115.32	Apr. 1	118.70	May 8	119.10	July 1	120.10
Mar. 4	115.36	8	119.05	14	118.96	Aug. 12	120.89
11	115.91	23	119.43	21	118.53	Oct. 15	122.53

2S1E-16. Buck Glass Co. In Baltimore, at Lawrence and Fort Avenues. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 19	47.16	Apr. 8	50.99	May 15	50.81	July 1	50.57
26	50.81	23	51.16	21	60.67	Aug. 12	49.06
Mar. 4	50.88	30	49.73	June 22	49.87	Oct. 15	49.47
22	51.15	May 8	46.34				

2S3E-11. J. S. Young Co. In Baltimore, at Boston and Luzerne Streets. Records available: 1943-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 19	33.43	Apr. 1	34.03	May 8	34.25	July 1	35.04
26	34.25	8	34.73	15	34.62	Aug. 12	34.72
Mar. 4	34.33	23	34.80	21	34.69	Oct. 15	35.34
22	34.24	30	34.35	June 22	34.32		

2S5E-1. U. S. Army. In Baltimore, on Holabird Avenue at Pumphrey Street. Records available: 1943-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 26	97.77	Apr. 8	98.92	May 7	97.10	June 1	92.97
Mar. 4	94.39	23	98.25	14	99.92	22	97.78
Apr. 1	97.92	30	97.68	21	99.50	Oct. 15	103.70

2S5E-4. U. S. Army. In Baltimore, on Holabird Avenue at Pumphrey Street. Records available: 1943-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 19	86.79	Apr. 1	87.12	May 7	86.80	June 22	88.10
26	87.93	8	87.39	14	87.85	July 1	88.20
Mar. 4	87.02	23	87.62	21	87.98	Aug. 12	88.45
22	88.13	30	87.72	June 1	88.03	Oct. 15	90.02

3S5E-3. Federal Yeast Co. Records available: 1943-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 19	43.26	Apr. 1	42.74	May 7	43.15	June 22	42.93
26	42.54	8	43.02	14	43.14	July 1	43.03
Mar. 4	42.71	23	43.30	21	43.31	Aug. 12	43.32
11	42.44	30	43.32	June 1	43.25	Oct. 15	45.01
22	42.39						

4S2E-4. Weyerhaeuser Lumber Co. Records available: 1945-47. No measurements made in 1948.

4S3E-3. Virginia-Carolina Chemical Co. Records available: 1947-48.

From recorder charts											
January		February		March		April		May		June	
Day	High Low	High Low	High Low	High Low	High Low	High Low	High Low	High Low	High Low	High Low	High Low
1	58.14 59.97	61.81 62.70	62.05 62.54	64.16 64.87	64.68 65.54	60.34 61.10					
2	57.87 58.49	60.78 61.81	62.29 63.26	64.87 65.15	63.10 64.77	60.46 61.16					
3	57.85 58.83	61.11 61.89	63.26 64.54	65.75 65.97	60.97 63.10	60.82 62.57					
4	56.74 57.85	61.89 62.37	64.54 65.40	64.86 65.90	61.42 61.97	62.19 62.62					

4S3E-3--Continued.

Day	From recorder charts											
	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
5	56.59	57.85	62.50	63.13	65.16	65.85	64.03	64.86	61.53	64.07	.....	.....
6	57.35	58.78	62.67	63.21	64.26	65.16	64.37	65.38	64.05	65.11	61.60	62.62
7	58.78	60.76	62.21	63.03	62.56	64.26	65.13	65.51	64.59	65.95	60.45	61.68
8	60.76	61.22	61.68	63.23	62.50	63.00	64.99	65.51	65.90	66.66	60.63	62.07
9	60.84	61.50	61.88	62.18	62.97	63.64	65.05	66.54	64.39	66.63	61.85	62.86
10	61.50	62.13	62.15	63.50	63.56	64.19	65.62	66.59	63.20	64.55	62.67	63.51
11	60.18	61.75	63.51	63.72	63.96	65.10	63.74	65.62	63.60	64.74	63.28	63.90
12	59.14	60.18	63.51	64.04	65.10	65.85	63.05	64.13	63.61	64.77	63.01	64.05
13	59.25	59.71	63.95	64.32	65.14	65.75	63.94	64.92	63.47	64.14	61.82	63.01
14	59.69	60.12	63.82	64.68	63.82	65.18	64.75	65.23	63.80	64.53	60.80	61.82
15	60.06	60.60	62.99	64.28	63.16	63.82	65.17	65.75	63.69	64.32	60.98	62.27
16	60.07	60.50	62.08	62.98	63.71	64.30	65.37	65.92	62.13	64.01	62.10	63.50
17	60.46	60.81	62.11	62.60	64.80	66.17	64.96	65.73	61.80	62.62	63.03	63.73
18	60.11	60.93	62.57	63.33	66.00	66.50	62.77	64.96	62.30	63.36	63.63	64.08
19	58.56	60.11	63.33	63.90	66.11	66.66	61.76	62.77	63.52	64.27	63.53	64.06
20	58.50	59.55	63.81	64.79	66.10	66.83	62.15	62.91	.....	.....	62.20	63.69
21	59.55	60.06	62.58	64.94	63.95	66.10	63.11	65.68	64.18	64.76	61.02	62.20
22	59.42	60.05	61.46	62.57	63.10	63.95	65.45	66.22	64.57	65.27	60.88	62.70
23	60.05	61.07	60.81	61.47	63.52	64.30	65.73	66.46	62.53	64.67	62.72	63.20
24	60.58	61.13	61.47	62.86	63.96	64.73	65.57	66.60	61.47	62.77	63.17	63.89
25	59.76	60.58	62.86	64.01	64.54	65.33	64.19	65.85	62.53	63.85	63.84	65.21
26	59.59	59.99	64.01	64.72	65.20	65.75	63.55	64.42	63.65	64.00	64.35	65.44
27	59.95	60.36	64.35	65.03	65.47	65.83	63.50	64.30	64.02	64.65	62.35	64.44
28	60.86	62.20	63.52	64.52	65.14	65.93	64.10	65.00	64.16	64.87	61.66	62.51
29	61.85	62.60	62.53	63.53	63.28	65.14	64.45	65.19	63.35	64.63	61.75	62.55
30	62.33	63.52			63.29	64.38	64.95	65.55	61.85	63.44	62.26	63.14
31	62.70	63.58			64.30	64.73			61.08	61.85		

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	62.95	63.70	57.80	59.85	69.03	69.69	67.35	68.06	64.75	65.50	62.42	64.06
2	63.54	63.87	57.09	58.54	69.25	70.49	67.34	68.22	65.50	66.38	64.06	64.77
3	63.15	63.57	58.64	60.52	70.04	70.49	65.78	67.43	66.38	67.53	64.58	65.11
4	62.44	63.44	60.49	61.86	69.38	70.57	64.39	65.78	67.24	67.84	64.06	65.29
5	60.87	62.44	61.86	63.37	67.17	69.39	64.47	64.90	67.75	68.76	61.57	64.06
6	60.38	61.65	63.87	64.84	65.42	67.17	64.75	65.63	67.13	68.43	60.71	61.57
7	61.48	62.77	64.55	65.00	64.37	65.42	65.31	66.00	66.72	67.26	61.06	62.52
8	62.30	63.37	63.26	64.73	64.37	65.83	65.38	66.72	66.18	66.72	62.52	64.49
9	63.37	64.30	62.82	63.34	65.64	66.92	66.23	67.04	66.14	66.98	64.49	65.07
10	64.30	65.03	62.89	63.82	66.59	67.84	64.88	66.23	66.37	67.01	64.98	65.65
11	64.14	64.83	63.55	64.08	66.85	67.78	63.94	64.89	67.01	67.65	63.98	65.72
12	64.04	64.48	64.00	65.65	66.00	66.85	64.54	66.44	67.12	67.50	61.80	63.98
13	64.30	65.28	65.54	66.64	65.41	66.00	66.43	67.71	66.78	67.43	60.85	61.80
14	65.13	66.93	66.05	66.54	65.64	66.89	67.71	69.21	66.17	66.96	61.66	63.23
15	66.69	67.58	64.50	66.05	66.50	66.94	69.21	69.51	65.80	66.24	63.23	63.75
16	66.90	67.29	63.51	64.50	66.73	67.76	68.83	69.54	65.93	66.30	63.58	64.02
17	66.69	67.37	63.61	65.07	67.60	67.94	67.03	68.87	66.14	66.78	63.71	64.29
18	65.50	67.36	64.63	65.42	67.71	68.11	67.10	67.78	66.78	67.94	63.55	64.48
19	64.62	65.50	65.42	66.74	65.74	67.72	67.22	67.78	67.21	67.74	61.52	63.55
20	64.32	64.91	66.74	67.33	64.79	65.74	67.48	69.22	65.58	67.27	60.71	61.52
21	64.66	65.46	67.58	67.65	64.92	66.01	69.22	69.85	63.46	65.58	61.05	62.11
22	65.34	66.17	66.29	67.60	65.82	66.40	69.15	69.63	62.63	63.45	62.11	63.66
23	65.52	66.25	65.96	66.49	66.10	66.72	68.31	69.25	62.63	64.41	63.58	64.12
24	63.25	65.74	66.45	67.08	66.68	67.20	66.64	68.31	64.41	65.73	62.70	64.28
25	61.01	63.25	67.08	67.78	66.37	66.90	65.93	66.74	65.35	65.80	60.24	62.70
26	60.06	61.01	67.55	68.33	64.99	66.37	65.90	66.82	64.50	65.42	58.45	60.73
27	60.96	61.94	68.10	68.81	64.90	65.13	66.63	67.61	63.75	64.70	57.22	58.45
28	61.55	61.38	68.50	69.34	64.78	66.05	67.27	68.21	61.14	63.75	58.23	59.56
29	61.57	62.42	68.44	69.35	65.92	67.35	67.77	68.30	60.52	61.59	59.66	61.35
30	62.12	62.41	68.13	68.58	67.08	67.66	67.23	68.32	61.59	62.42	61.35	63.18
31	59.85	62.14	68.12	69.29			65.29	67.30			63.18	64.33

4S3E-3--Continued

<u>Tape measurements</u>							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 19	63.49	Apr. 8	65.12	May 15	63.95	July 1	63.34
26	64.72	23	66.01	21	64.36	29	61.67
Mar. 4	64.77	30	65.12	June 12	63.64	Sept. 3	70.45
Apr. 1	64.30	May 8	66.10	22	61.57	Oct. 18	67.60
2	65.20						

5S3E-15. U. S. Industrial Chemical Co. well 1701. Records available: 1945-48.-

Feb. 19	129.69	Apr. 2	127.73	May 8	119.86	July 1	114.25
26	127.16	8	123.90	15	113.89	Aug. 12	123.68
Mar. 4	138.95	23	132.84	21	131.14	Oct. 15	138.93
22	125.84	30	119.75	June 22	116.43		

5S3E-16. U. S. Industrial Chemical Co. well 1702. Records available: 1945-48.

Feb. 19	107.04	Apr. 8	109.40	May 15	108.64	July 1	109.32
26	109.68	23	112.86	21	110.26	Aug. 12	108.14
Mar. 22	107.53	30	109.91	June 22	113.42	Oct. 15	123.45
Apr. 2	110.02	May 8	111.50				

6S2E-6. U. S. Industrial Alcohol Co. Records available: 1943-48.

Feb. 19	106.68	Mar. 22	110.27	May 15	115.60	July 1	100.38
26	104.70	Apr. 30	107.42	21	109.34	Oct. 15	102.10
Mar. 4	109.66	May 8	108.35	June 22	95.36		

6S2E-9. U. S. Industrial Alcohol Co. Records available: 1945-46. No measurements made in 1948.

Allegheny County

All-Ag 1. Methodist Church. At Flintstone. Records available: 1946-48.

Jan. 6	1.54	Apr. 8	2.16	June 4	3.74	Nov. 7	1.69
Feb. 5	5.14	May 8	1.02	Aug. 9	5.01	Dec. 8	1.48
Mar. 8	1.22						

All-Bd 2. Cumberland Brewing Co. In Cumberland. Records available: 1946-48.

Jan. 6	11.08	Mar. 4	11.00	June 1	11.39	Nov. 3	11.64
Feb. 3	11.41	Apr. 6	11.67	Aug. 9	12.62	Dec. 2	10.88

All-Da 1. Cumberland & Pennsylvania Railroad Co. At Westernport. Records available: 1946-48.

Jan. 5	2.85	Apr. 7	3.17	June 2	2.38	Nov. 4	1.62
Feb. 4	4.34	May 7	2.49	Aug. 10	5.00	Dec. 3	3.20
Mar. 9	1.93						

Anne Arundel County

AA-Ad 10. U. S. Army Ordnance Depot's well 3. Records available: 1946-48.

Feb. 19	33.90	Apr. 8	33.70	May 8	33.59	July 1	33.08
26	33.38	23	33.79	15	33.62	Nov. 18	33.17
Mar. 4	34.37	30	33.54	June 22	33.20		

AA-Ad 24. Seth Linthicum. Records available: 1946-48. Nov. 5, 95.28.

AA-Ad 27. S. S. Tracey. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 1	20.27	June 29	20.14	July 20	20.03	Aug. 10	20.07
8	20.17	July 6	19.32	27	20.23	Nov. 18	20.11
15	20.19	13	20.16	Aug. 3	20.22	Dec. 9	20.17

AA-Ad 29. Anne Arundel Sanitary Commission. In Glen Burnie, about 1,500 feet north-northeast of Sanitary Commission office and 2 blocks west of old Route 301. Concrete block house 4 feet square and 25 feet high. Unused drilled public-supply well, diameter 3 inches, depth 530 feet. Records available: 1948.

From recorder charts

Day	August		September		October		November	
	High	Low	High	Low	High	Low	High	Low
1	.....	.....	+11.68	+11.58	+11.53	+11.47	+11.50	+11.45
2	.....	.....	+11.63	+11.58	+11.50	+11.44	+11.45	+11.40
3	.....	.....	+11.63	+11.59	+11.44	+11.33	+11.51	+11.38
4	.....	.....	+11.62	+11.57	+11.37	+11.32	+11.57	+11.50
5	.....	.....	+11.58	+11.52	+11.65	+11.55	+11.56	+11.52
6	.....	.....	+11.58	+11.52	+11.60	+11.55	+11.65	+11.54
7	.....	.....	+11.63	+11.55	+11.58	+11.54	+11.64	+11.47
8	.....	.....	+11.67	+11.60	+11.67	+11.55	+11.47	+11.37
9	.....	.....	+11.69	+11.60	+11.63	+11.60	+11.53	+11.43
10	+11.46	+11.45	+11.65	+11.57	+11.62	+11.55	+11.64	+11.51
11	+11.61	+11.45	+11.63	+11.58	+11.63	+11.57	+11.51	+11.40
12	+11.67	+11.61	+11.59	+11.64	+11.62	+11.57	+11.45	+11.35
13	+11.69	+11.65	+11.58	+11.53	+11.63	+11.57	+11.59	+11.45
14	+11.66	+11.62	+11.58	+11.54	+11.62	+11.53	+11.48	+11.42
15	+11.65	+11.59	+11.54	+11.44	+11.55	+11.48	+11.47	+11.38
16	+11.65	+11.60	+11.45	+11.38	+11.51	+11.45	.....	.....
17	+11.64	+11.59	+11.43	+11.35	+11.64	+11.49	.....	.....
18	+11.67	+11.60	+11.56	+11.41	+11.60	+11.53	.....	.....
19	+11.71	+11.67	+11.59	+11.53	+11.61	+11.50	.....	.....
20	+11.71	+11.68	+11.62	+11.55	+11.52	+11.41	.....	.....
21	+11.70	+11.65	+11.63	+11.53	+11.40	+11.30	.....	.....
22	+11.73	+11.64	+11.60	+11.53	+11.36	+11.30	.....	.....
23	+11.71	+11.69	+11.60	+11.57	+11.50	+11.33	.....	.....
24	+11.74	+11.68	+11.59	+11.49	+11.55	+11.45	.....	.....
25	+11.77	+11.71	+11.49	+11.40	+11.56	+11.51	.....	.....
26	+11.77	+11.71	+11.40	+11.33	+11.55	+11.49	.....	.....
27	+11.73	+11.65	+11.39	+11.31	+11.52	+11.45	.....	.....
28	+11.72	+11.64	+11.42	+11.36	+11.47	+11.43	.....	.....
29	+11.79	+11.68	+11.42	+11.38	+11.47	+11.43	.....	.....
30	+11.78	+11.72	+11.53	+11.40	+11.45	+11.40	.....	.....
31	+11.75	+11.68			+11.48	+11.40		

Tape measurements

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 4	+10.93	June 30	+11.17	Aug. 17	+11.61	Oct. 22	+11.33
7	+10.96	July 14	+11.31	Sept. 1	+11.63	Nov. 5	+11.55
10	+10.88	19	+11.34	16	+11.38	16	+11.39
11	+10.91	26	+11.30	Oct. 1	+11.52	19	+11.59
14	+10.89	Aug. 2	+11.39	8	+11.66	Dec. 9	+11.62
17	+11.00	3	+11.41	14	+11.62	20	+12.00
22	+11.01	10	+11.45	19	+11.57		

AA-Ad 30. Anne Arundel Sanitary Commission. About 1,500 feet north-northeast of Sanitary Commission office and 2 blocks west of old Route 301. Concrete block house 4 feet square and 25 feet high. Unused augered well, diameter 4 inches, depth 15 feet. Records available: 1948.

AA-Ad 30--Continued.

From recorder charts												
Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	....	....	9.07	9.13	9.66	9.68	10.08	10.17	10.14	10.13	9.37	9.53
2	....	....	....	....	9.64	9.71	10.11	10.17	10.15	10.13	9.28	9.37
3	....	....	9.63	9.68	9.65	9.73	10.13	10.18	10.15	10.13	9.23	9.28
4	....	....	9.63	9.68	9.67	9.76	10.14	10.19	10.14	10.20	9.15	9.23
5	....	....	9.60	9.70	9.70	9.77	10.10	10.19	10.11	10.13	9.08	9.15
6	9.18	9.20	9.56	9.63	9.72	9.80	10.03	10.10	10.10	10.16	9.03	9.08
7	9.17	9.21	9.53	9.59	9.75	9.80	9.98	10.03	10.07	10.16	9.00	9.03
8	9.19	9.28	....	....	9.77	9.81	9.98	10.04	10.03	10.08	8.95	9.00
9	9.24	9.31	....	....	9.78	9.83	10.01	10.05	10.02	10.07	....	....
10	9.27	9.33	9.77	9.84	9.81	9.84	10.02	10.05	9.99	10.04	....	....
11	9.31	9.35	9.77	9.84	9.78	9.93	10.02	10.07	9.98	10.03	....	....
12	9.33	9.39	9.66	9.77	....	....	10.04	10.10	10.02	10.06	....	....
13	9.39	9.41	9.61	9.66	....	....	10.05	10.12	10.02	10.08	....	....
14	9.40	9.41	9.60	9.64	....	....	10.03	10.11	10.00	10.06	....	....
15	9.40	9.42	9.61	9.64	....	....	10.05	10.09	9.99	10.02	....	....
16	9.41	9.46	9.61	9.67	9.96	9.99	10.05	10.10	10.01	10.07	....	....
17	9.43	9.48	9.64	9.69	9.94	10.01	10.06	10.10	10.01	10.07	....	....
18	9.45	9.50	....	....	9.96	10.02	10.05	10.09	10.00	10.05	....	....
19	9.48	9.52	....	....	10.00	10.03	10.06	10.11	10.00	10.05	....	....
20	9.43	9.53	9.59	9.66	10.00	10.06	10.07	10.12	10.00	10.05	....	....
21	9.39	9.44	9.61	9.67	10.02	10.07	10.09	10.14	10.02	10.05	....	....
22	9.35	9.40	9.59	9.67	10.02	10.08	10.11	10.15	10.01	10.05	....	....
23	9.32	9.37	9.54	9.59	10.04	10.09	10.10	10.15	9.99	10.05	....	....
24	9.30	9.34	9.54	9.58	10.09	10.11	10.05	10.10	9.99	10.03	....	....
25	9.28	9.32	9.53	9.58	10.06	10.12	10.04	10.09	9.98	10.03	....	....
26	9.24	9.30	9.53	9.59	10.08	10.13	10.04	10.11	9.96	9.98	....	....
27	9.20	9.25	9.56	9.62	10.10	10.15	10.05	10.11	9.93	9.97	....	....
28	9.17	9.24	....	....	10.11	10.16	10.06	10.10	9.89	9.95	....	....
29	9.15	9.19	....	....	10.11	10.16	10.07	10.12	9.76	9.89	....	....
30	9.10	9.15	....	....	10.10	10.16	10.11	10.17	9.53	9.76	....	....
31	9.07	9.10	9.62	9.68	....	....	10.13	10.17	....	....	....	....

Tape measurements

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 6	9.19	Aug. 10	9.77	Sept. 24	10.11	Oct. 29	10.10
13	9.39	17	9.66	Oct. 1	10.08	Nov. 5	10.11
20	9.46	20	9.59	8	10.04	16	10.01
27	9.22	24	9.54	14	10.03	30	9.60
Aug. 3	9.68	31	9.62	22	10.11	Dec. 9	8.92
5	9.64	Sept. 16	9.96				

AA-Ae 4. U. S. Coast Guard Yard. On Arundel Cove. Records available: 1946-48.

Mar. 4	21.68	Apr. 23	22.62	June 22	20.98	Aug. 12	20.67
22	21.96	May 8	21.27	July 1	21.29	Nov. 18	21.03
Apr. 8	20.92	15	21.29				

AA-Bb 17. Annapolis Junction school. At Fort George G. Meade Junction. Records available: 1946-47. No measurements made in 1948.

AA-Bb 18. William J. Harris. At Fort George G. Meade Junction. Records available: 1946-48.

Feb. 3	23.82	June 15	24.04	July 13	23.03	Aug. 10	23.33
Apr. 8	23.91	22	23.50	20	23.18	Nov. 18	24.47
June 1	24.03	29	23.20	27	23.14	Dec. 9	23.31
8	24.11	July 6	23.12	Aug. 3	23.26		

AA-Be 13. R. Le Moine. At Riviera Beach. Records available: 1946-48.

AA-Be 13--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 5	20.90	June 15	17.91	July 13	18.63	Aug. 10	18.54
26	19.35	22	18.32	20	19.00	Nov. 16	18.82
June 1	17.88	29	18.01	27	18.76	Dec. 9	18.91
8	17.86	July 6	18.47	Aug. 3	18.67		

AA-Be 29. Wolfe's Tavern. At Lipins Corner. Records available: 1946-47. No measurements made in 1948.

AA-Be 40. Harold E. West. Records available: 1946-47. No measurements made in 1948.

AA-Be 54. R. Le Moine. At Riviera Beach. Records available: 1946-48.

Feb. 21	13.66	June 8	11.41	July 6	12.82	Aug. 3	13.91
Mar. 5	12.50	15	11.89	13	13.63	10	12.73
26	11.74	22	12.23	20	13.92	Nov. 18	12.83
June 1	11.75	29	12.48	27	13.87	Dec. 9	12.67

AA-Cc 1. U. S. Naval Academy dairy. At Gambrills. Records available: 1946-47. No measurements made in 1948.

AA-Cc 2. U. S. Naval Academy dairy. At Gambrills. Records available: 1946-47. No measurements made in 1948.

AA-Cd 8. Crownsville State Hospital. At Crownsville. Records available: 1946-48.

Feb. 19	88.46	Apr. 8	87.87	June 17	89.75	June 29	87.81
Mar. 1	87.45	June 14	87.38	23	87.79	July 13	87.60

AA-Cd 21. Mrs. Richard Whittall. Records available: 1946-48.

Feb. 20	47.62	June 8	45.65	July 6	46.15	Aug. 3	44.96
Mar. 25	47.72	15	44.74	13	46.26	10	45.28
Apr. 8	47.34	22	45.30	20	46.49	Nov. 17	44.99
June 1	45.52	29	45.19	27	45.60	Dec. 9	45.11

AA-Ce 24. Mrs. Alfred Thompson. At Round Bay. Records available: 1946-48.

Feb. 23	75.51	June 29	68.97	July 20	69.22	Aug. 10	68.80
June 1	68.36	July 6	69.20	27	68.84	Nov. 18	69.11
8	68.59	13	69.00	Aug. 3	68.76	Dec. 9	69.02
15	68.81						

AA-Ce 49. G. G. Ridgley. At Dreams Landing. Records available: 1946-48.

Mar. 25	30.98	July 6	30.96	Aug. 6	31.17	Aug. 31	31.33
Apr. 8	31.08	13	31.37	10	31.05	Sept. 16	31.10
June 8	31.17	20	31.32	17	31.01	Nov. 18	31.32
15	31.30	27	31.51	25	30.97	Dec. 9	31.51
29	31.62						

AA-Cg 2. State of Maryland. At Sandy Point Ferry landing. Records available: 1946-47. No measurements made in 1948.

AA-Df 14. U. S. Naval Academy well Rifle Range 1. Near Carrs Point. Records available: 1946-48. Feb. 19, 70.85; Apr. 9, 73.01; Nov. 16, 67.77.

AA-Df 17. U. S. Naval Academy well High Power Radio Station 1. On Opossum Point. Records available: 1946-48.

AA-Df 17--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 23	14.12	June 1	13.52	July 6	13.76	Aug. 6	13.57
Mar. 1	13.80	8	13.73	13	13.61	Nov. 16	14.02
26	13.90	15	13.87	20	13.73	Dec. 9	13.85
Apr. 8	13.95	29	13.83	27	13.81		

AA-Df 18. U. S. Naval Academy well High Power Radio Station 2. On Opossum Point. Records available: 1946-47. No measurements made in 1948.

AA-Ee 14. A. B. Smith. Near Selby Beach. Records available: 1946-48.

Feb. 23	23.01	June 15	22.27	July 13	24.11	Aug. 17	22.84
Apr. 8	22.30	22	22.36	27	24.14	Sept. 23	21.33
June 1	22.47	29	23.02	Aug. 3	23.83	Nov. 18	21.18
8	22.59	July 6	23.34	10	23.94	Dec. 9	22.05

AA-Ef 3. C. L. Meredith. At Arundel on the Bay. Records available: 1946-48.

Feb. 27	5.88	June 15	5.14	July 20	6.26	Aug. 17	5.93
Mar. 25	5.91	22	5.32	27	6.59	Sept. 23	6.01
Apr. 8	5.00	29	5.61	Aug. 3	5.86	Nov. 18	6.07
June 1	5.41	July 6	6.43	10	5.91	Dec. 9	6.14
8	5.03	13	6.03				

Baltimore County

Bal-Ef 16. Water hole. On King Avenue. Records available: 1944-48.

Feb. 19	3.91	Apr. 23	4.06	May 21	4.04	July 1	3.96
Mar. 11	4.96	30	4.04	June 1	4.02	Aug. 10	3.82
Mar. 20	4.01	May 7	3.19	22	4.03	Oct. 15	5.88
Apr. 8	4.05	14	3.99				

Bal-Ef 19. United Clay Products Co. At Poplar. Records available: 1944-48.

Feb. 19	58.61	Apr. 1	58.22	May 7	57.95	June 20	58.35
26	58.21	8	58.43	14	58.29	July 1	58.24
Mar. 4	58.74	23	58.67	21	58.84	Aug. 12	57.87
10	58.44	30	58.07	June 1	58.45	Oct. 15	58.16
20	58.51						

Bal-Fe 19. Paul Jones distillery. At Dundalk. Records available: 1944-48.

Day	From recorder charts ¹																	
	January		February		March		April		May									
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	85.65	86.76	88.36	88.94	93.23	94.03	91.82	93.34	88.42	90.33								
2	85.27	86.26	88.33	89.73	93.85	94.48	89.15	91.82	90.33	92.25								
3	86.22	86.70	89.73	90.64	92.70	94.14	88.89	90.44	92.25	93.77								
4	85.20	86.26	90.64	90.80	90.16	92.70	90.44	92.25	93.68	94.58								
5	85.40	86.15	90.80	91.07	89.93	91.68	92.17	93.42	92.87	94.16								
6	86.15	86.31	90.80	91.03	91.68	93.58	93.25	94.20	90.03	92.87								
7	86.22	86.75	90.02	90.80	93.29	94.53	93.47	94.07	89.52	90.44								
8	86.75	87.27	89.32	90.02	94.13	94.88	92.05	93.55	90.44	92.14								
9	86.60	87.20	89.84	91.13	94.53	95.09	89.13	92.05	92.01	93.13								
10	85.82	86.60	91.13	91.92	92.67	94.75	88.97	90.72	92.84	93.71								
11	84.54	85.82	91.85	92.65	89.47	92.67	90.72	92.86	93.43	93.92								
12	84.53	85.64	92.13	93.17	89.10	91.05	92.86	94.20	91.70	93.43								
13	85.44	85.74	93.17	94.15	91.05	93.29	94.04	95.05	88.96	91.70								
14	85.74	86.33	90.40	93.64	93.08	94.22	94.50	95.34	88.65	90.20								
15	86.27	86.39	88.73	90.40	93.63	94.42	92.83	94.50	90.20	91.87								
16	85.87	86.37	88.71	89.74	93.24	94.08	90.25	92.83	91.87	92.90								
17	85.07	85.87	89.74	91.02	91.60	93.24	90.00	91.70	92.81	93.91								
18	84.22	85.13	91.02	91.88	89.07	91.60	91.70	93.50	93.90	94.51								

Bal-Fe 19--Continued.

From recorder charts

Day	January		February		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low
19	84.22	85.37	91.41	91.72	88.62	90.30	93.50	94.55	92.05	93.90
20	85.37	85.75	.....	.....	90.30	92.53	94.50	95.43	88.50	92.05
21	85.56	85.77	.....	.....	92.40	93.43	93.84	95.21	88.14	90.81
22	85.50	86.43	.....	.....	93.13	94.25	92.14	93.84	90.81	93.04
23	86.43	87.39	.....	.....	93.78	94.29	89.35	92.14	92.99	93.73
24	86.51	87.38	.....	.....	92.41	93.78	89.00	90.56	93.44	94.15
25	86.50	87.52	.....	.....	89.57	92.41	90.56	92.65	94.14	95.08
26	87.52	88.86	.....	.....	89.44	91.00	92.50	93.67	93.50	94.99
27	88.86	89.42	.....	.....	91.00	92.75	93.25	93.87	90.88	93.50
28	89.39	89.75	.....	.....	92.70	93.60	93.64	94.17	90.64	91.71
29	89.73	90.10	.....	.....	93.41	94.20	91.70	93.64	91.71	92.97
30	90.10	90.42	.....	.....	93.34	94.21	88.70	91.70	92.80	93.40
31	88.94	90.17	.....	.....	.....	.....	88.42	88.75	.....	.....

From recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	93.24	93.82	84.65	86.35	95.49	96.35	95.80	96.38	90.16	92.17	90.18	91.29
2	93.22	94.01	84.61	87.80	96.24	96.62	94.65	96.38	92.17	94.07	91.17	91.74
3	92.13	93.22	87.80	90.65	96.40	96.73	91.10	94.65	94.04	94.85	91.17	91.93
4	88.72	92.13	90.65	92.17	94.12	96.50	90.60	92.83	94.72	95.26	88.73	91.17
5	88.50	88.72	92.04	93.06	90.75	94.12	92.83	94.80	94.96	95.34	85.42	88.73
6	88.38	90.64	92.98	94.11	90.45	90.98	94.80	95.63	93.05	94.96	85.19	87.65
7	90.62	92.12	93.49	93.97	90.75	93.11	95.51	96.03	90.09	93.05	87.65	89.62
8	91.96	93.31	90.64	93.49	93.11	94.43	95.88	96.10	89.94	92.27	89.59	90.89
9	93.51	94.49	90.57	92.91	94.54	95.07	94.50	95.88	92.27	93.82	90.68	91.52
10	94.09	94.33	92.91	94.47	94.85	95.26	91.03	94.50	93.52	93.78	91.30	91.66
11	90.77	94.09	94.44	95.41	94.43	94.98	90.63	93.03	93.57	94.30	89.24	91.50
12	90.72	93.00	95.14	95.99	91.10	94.43	93.03	94.80	93.91	94.25	85.89	89.24
13	93.00	94.29	95.76	96.15	90.92	93.11	94.62	95.56	91.55	93.91	85.55	87.97
14	94.29	95.24	94.79	95.76	93.11	94.67	95.34	96.35	88.16	91.55	87.97	90.24
15	95.15	95.94	91.79	94.79	94.56	95.49	96.26	96.73	87.81	90.21	90.12	90.69
16	95.67	96.12	91.68	94.29	95.34	95.72	94.22	96.26	90.21	91.89	90.51	91.11
17	93.62	96.12	94.29	95.70	95.63	95.81	91.04	94.22	91.65	92.62	91.10	91.93
18	89.89	93.62	95.66	96.36	94.92	95.71	90.79	93.30	92.44	93.17	88.70	91.63
19	89.58	89.89	96.18	96.70	90.93	94.92	93.30	94.83	92.73	93.20	85.53	88.70
20	89.10	90.09	96.57	96.80	90.61	93.07	94.73	95.93	90.15	92.77	85.38	87.87
21	89.91	90.61	95.79	96.38	93.06	94.47	95.76	96.51	86.99	90.15	87.87	90.03
22	89.96	90.24	93.00	95.79	93.46	94.30	96.50	96.82	86.87	89.84	90.03	91.25
23	89.33	90.40	92.87	94.80	94.04	94.82	94.46	96.57	89.84	91.43	91.18	92.00
24	88.24	89.33	94.80	96.38	94.81	95.57	91.34	94.46	91.42	92.32	91.59	91.99
25	87.42	88.24	96.32	97.08	94.75	95.36	91.23	93.69	91.15	92.51	88.40	91.59
26	87.28	87.97	96.47	96.84	91.32	94.75	93.69	95.09	90.38	91.15	85.84	88.40
27	87.51	88.02	96.00	96.87	91.00	92.95	94.95	95.75	89.17	90.99	85.60	88.55
28	87.51	88.41	94.80	96.00	92.95	95.07	95.51	96.13	86.20	89.17	88.55	91.32
29	88.41	89.67	91.80	94.80	94.93	95.80	95.91	96.93	85.87	88.37	91.31	92.62
30	88.64	90.22	91.65	93.44	95.35	95.97	94.47	96.45	88.57	90.24	92.62	92.96
31	86.35	88.64	93.44	95.55	.....	.....	90.57	94.47	.....	.....	92.73	93.18

Tape measurements

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 19	91.41	Apr. 1	93.23	May 14	95.36	June 28	91.25
26	92.07	8	94.65	21	95.21	July 29	89.28
Mar. 4	90.99	23	94.27	June 1	89.64	Sept. 3	96.70
11	87.85	30	94.17	12	93.01	Oct. 15	96.72
26	95.02	May 7	93.95	19	93.52	.....	.....

Bal-Fr 1. City of Baltimore. At Back River Sewage Disposal Plant. Records available: 1943-48.

Feb. 19	44.32	Apr. 1	43.96	May 7	43.80	June 22	43.86
Mar. 4	44.79	8	45.00	14	44.88	July 1	43.26
11	44.04	23	44.50	21	44.25	Aug. 12	43.25
20	44.51	30	44.24	June 1	44.35	Oct. 15	44.17

Bal-Gf 79--Continued.

Tape measurements							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 20	31.98	Apr. 19	30.46	May 21	32.05	July 29	54.54
22	31.74	23	30.26	June 1	48.61	Aug. 12	52.24
26	31.71	30	29.89	12	51.59	20	52.63
Apr. 1	31.38	May 7	29.18	19	52.57	Sept. 3	51.70
8	31.69	14	31.48	28	51.95	Oct. 15	44.00

No measurements made in 1948 for the following wells:

Bal-Gf 89, Bal-Gf 93, Bal-Gf 100, Bal-Gf 107, Bal-Gf 108, and Bal-Gf 131.

Bal-Gf 136. Bethlehem Steel Co. Records available: 1943-48.

Mar. 11	100.91	Apr. 8	100.46	May 7	100.00	June 1	93.90
22	99.58	23	101.69	14	101.77	22	91.27
Apr. 1	98.80	30	96.29	21	98.74	July 1	87.40

No measurements made in 1948 for the following wells:

Bal-Gf 138, Bal-Gf 139, Bal-Gf 140, Bal-Gf 165, Bal-Gf 166, and Bal-Gf 167.

Bal-Gf 168. Bethlehem Steel Co. Records available: 1943-48.

Mar. 22	59.33	Apr. 23	55.43	May 14	58.94	June 22	72.39
Apr. 1	54.97	30	53.50	21	56.09	July 1	74.80
8	58.32	May 7	64.49	June 1	69.19		

Bal-Gf 169. Bethlehem Steel Co. Records available: 1943-48.

Mar. 22	33.30	Apr. 23	30.06	May 14	33.56	June 22	55.93
Apr. 1	31.78	30	29.50	21	32.69	July 1	47.15
8	32.19	May 7	29.45	June 1	43.21		

No measurements made in 1948 for the following wells:

Bal-Gf 170, Bal-Gf 171, Bal-Gf 172, Bal-Gf 173, Bal-Gf 174, Bal-Gf 175, and Bal-Gf 176.

Bal-Gf 177. Bay Shore Park. Records available: 1943-48.

Feb. 19	50.74	Apr. 1	50.62	May 7	49.92	July 29	44.82
26	50.76	8	51.44	14	50.96	Aug. 12	44.25
Mar. 4	50.88	19	51.40	21	51.19	Sept. 3	45.93
11	50.99	30	50.55	June 29	45.41	Oct. 15	46.60
20	51.16						

Bal-Gf 178. Bay Shore Park. Records available: 1947-48.

Feb. 19	18.54	Apr. 1	16.95	June 1	19.14	July 29	24.32
26	18.35	8	13.60	22	22.85	Aug. 12	23.53
Mar. 11	17.74	30	16.26	29	22.19	Oct. 15	23.39
20	13.59	May 7	15.37				

Bal-Gf 183. Chesapeake Terrace School. Lodge Forest. Records available: 1944-48.

Feb. 19	31.70	Apr. 23	30.84	May 21	29.79	July 1	38.50
26	31.70	30	30.19	June 1	31.24	Aug. 12	41.51
Mar. 4	31.70	May 14	29.80	22	38.42	Oct. 15	40.34
11	31.70						

No measurements made in 1948 for the following wells:

Bal-Gf 191, Bal-Gf 192, Bal-Gf 200, Bal-Gf 201, and Bal-Gf 202.

Calvert County

Cal-Bb 1. Gorman Lyons. In Dunkirk. Records available: 1947-48. June 1, 25.37; June 28, 27.96.

Cal-Dc 6. Frank Mister. Records available: 1947. No measurements made in 1948.

Cal-Dc 18. A. Goldstein. In Prince Frederick. Records available: 1947-48. June 1, 18.45; June 28, 18.70.

Cal-Ec 4. W. W. Ross. Records available: 1947-48. June 1, 41.11; June 28, 41.30.

Cal-Ec 5. Benjamin Parran. Records available: 1947-48. June 1, 32.01; June 28, 35.45.

Cal-Fd 12. Ambassador Neilson. Records available: 1947. No measurements made in 1948.

Cal-Fd 14. W. B. Glascock. Records available: 1947-48. June 1, 6.64; June 28, 7.17.

Cal-Gd 4. U. S. Navy Amphibious Training Base. Records available: 1947-48. June 1, 27.40; June 28, 26.49.

Cal-Gd 20. G. F. Beavan. Records available: 1947-48. June 1, 12.74; June 28, 12.83.

Cal-Gd 22. Standard Oil Co. of New Jersey. Records available: 1947-48. June 1, 14.93; June 27, 17.84.

Carroll County

Car-Bb 1. Mrs. Joe Elliott. At Taneytown. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 18	1.52	May 5	1.23	July 11	3.58	Oct. 26	3.66
Mar. 24	1.90	June 9	3.05	Oct. 6	6.04		

Car-Bf 1. Town of Hampstead well 1. Records available: 1946-47. No measurements made in 1948.

Car-Ce 2. Koontz Creamery. In Westminster, on northwest side of Western Maryland Railway tracks and 1,000 feet northeast of U. S. Highway 140. Unused drilled industrial well, diameter 10 inches, depth 166 feet. Records available: 1948.

Day	From recorder charts					
	May		June		August	
	High	Low	High	Low	High	Low
1
2
3	67.91	73.85
4	65.28	71.06
5	64.43	70.19
6	65.34	70.09
7	61.65	68.41
8
9
10
11
12	75.32	76.40	.....	.....
13	70.40	74.34	72.55	79.22	.....	.....
14	70.67	75.58	74.20	78.52	.....	.....
15	74.24	78.52	.....	.....
16	75.06	79.12	.....	.....

Car-Ce 2--Continued.

From recorder charts							
Day	May		June		August		
	High	Low	High	Low	High	Low	
17	79.12	80.05	.....	.....
18	76.83	80.42	.....	.....
19	75.68	79.63	.....	.....
20	74.65	78.59	63.87	68.52	
21	64.50	69.57	
22	63.20	68.60	
23	62.34	67.83	
24	64.52	69.16	
25	62.51	69.17	
26	65.81	70.60	
27	63.98	70.65	
28	66.95	72.08	
29	64.93	70.77	
30	63.19	70.18	
31	67.37	72.80	

Day	September		October		November		December		
	High	Low	High	Low	High	Low	High	Low	
1	68.72	75.11	.....	.....	.....	.....	64.21	70.72	
2	72.44	76.10	.....	.....	.....	.....	63.59	68.86	
3	.....	.....	.....	.....	.....	.....	62.17	67.31	
4	73.86	79.71	.....	.....	.....	.....	60.98	67.11	
5	71.36	77.29	.....	.....	.....	.....	60.76	66.96	
6	68.93	75.00	.....	.....	.....	.....	60.77	66.42	
7	68.19	73.57	.....	.....	.....	.....	61.21	66.86	
8	65.78	70.77	.....	.....	.....	.....	61.65	68.39	
9	64.28	70.62	.....	.....	.....	.....	62.24	67.55	
10	66.76	71.79	.....	.....	.....	.....	61.70	67.13	
11	65.38	71.66	.....	.....	67.09	74.07	60.25	66.66	
12	64.59	70.26	63.06	69.81	72.29	76.61	59.96	65.57	
13	64.92	69.92	65.52	71.17	71.02	76.16	60.17	65.97	
14	63.17	69.05	65.51	71.58	71.00	76.07	60.62	65.19	
15	63.44	69.88	64.43	70.55	70.38	76.18	59.64	65.78	
16	65.46	70.61	65.79	71.33	68.52	75.04	58.99	65.26	
17	63.32	69.12	64.36	70.30	72.01	77.25	61.64	66.18	
18	62.73	68.52	63.87	70.37	70.04	75.54	61.27	67.27	
19	65.02	70.47	63.82	70.28	71.02	75.87	59.51	65.81	
20	66.84	72.19	63.44	69.69	70.00	74.77	59.52	66.85	
21	66.75	72.93	63.35	69.51	68.96	74.34	63.35	69.07	
22	66.69	72.11	64.35	69.56	69.60	75.22	63.40	69.41	
23	68.29	73.70	63.99	69.71	68.19	73.94	61.96	67.42	
24	68.79	75.11	66.43	71.54	68.82	74.30	60.63	66.16	
25	66.83	72.41	64.80	71.09	69.63	74.87	.....	.....
26	66.88	73.02	64.60	70.33	68.81	74.97	.....	.....
27	72.01	75.65	63.93	69.95	66.96	72.87	57.04	62.57	
28	.....	.....	65.40	70.72	66.89	73.11	57.24	63.96	
29	.....	.....	63.99	68.51	65.54	71.59	60.26	66.26	
30	.....	.....	.....	.....	64.28	70.76	59.24	65.09	
31	.....	.....	.....	.....	.....	.....	58.07	64.38	

Tape measurements							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 10	40.92	July 6	71.05	Sept. 27	75.55	Oct. 11	68.17
10	43.44	30	72.99	28	73.82	29	68.51
12	44.50	Aug. 3	73.27	29	72.04	Nov. 11	72.54
27	58.45	13	67.64	Oct. 4	71.83	15	75.06
May 4	72.81	20	68.52	5	70.37	24	72.15
12	73.68	24	67.20	8	72.56	Dec. 13	64.94
14	73.15	Sept. 3	77.36	9	73.05	31	59.76
June 5	75.63						

Charles County

No measurements made in 1948 for the following wells.

Ch-Bc 10, Ch-Bd 5, Ch-Bf 2, Ch-Bf 22, Ch-Cg 1, Ch-Cg 2, and Ch-Db 1.

Ch-Dc 2. Bernard C. Juhle. Latitude 38° 27' 24", longitude 77° 09' 28". On secondary road 2.4 miles south of Ironsides. Used dug agricultural well, diameter 48 inches, depth 38 feet. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	20.27	Apr. 12	17.52	July 12	18.53	Oct. 12	18.43
Feb. 12	20.04	May 12	17.78	Aug. 12	18.00	Nov. 12	18.94
Mar. 12	19.01	June 12	18.03	Sept. 14	18.38	Dec. 12	16.66

No measurements made in 1948 for the following wells:

Ch-Dd 6, Ch-Df 1, Ch-Ee 15, Ch-Ee 16, Ch-Ee 32, and Ch-Ff 24.

Dorchester County

Dor-Ce 11. Dorchester Water Co. In Cambridge. Records available: 1946-48. Jan. 14, 58.84; Jan. 23, 61.01; Jan. 30, 62.02.

Frederick County

Fr-Bd 1. Town of Thurmont. At High Run. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level
Feb. 19	11.39	June 9	10.61	Oct. 7	30.44
May 5	8.13	July 12	12.19		

Fr-Cg 1. Jesse N. Nicodemus. At Johnsville. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	35.57	Apr. 5	35.32	July 12	37.88	Oct. 11	38.88
12	36.47	19	34.50	19	37.75	18	38.90
19	37.04	26	35.08	Aug. 2	37.96	25	39.03
26	37.47	May 3	35.60	9	38.15	Nov. 1	39.17
Feb. 2	37.75	10	34.45	16	38.30	8	39.04
9	37.96	17	35.00	23	38.23	15	39.09
16	36.70	24	35.70	30	38.40	22	38.88
23	36.20	31	36.10	Sept. 6	38.60	29	38.40
Mar. 1	36.05	June 7	36.60	13	38.65	Dec. 6	37.05
8	34.39	14	37.00	20	38.75	13	37.47
15	34.98	28	36.30	27	38.87	20	35.67
22	35.48	July 5	37.56	Oct. 4	39.00	27	36.35
29	35.26						

Fr-Ee 1. Mrs. Roy Putnam. Records available: 1946-48.

Feb. 19	54.19	May 6	50.40	July 14	52.80	Oct. 27	50.11
Mar. 18	53.17	June 11	49.26	Oct. 8	51.60		

Fr-Fc 1. Montgomery Orrison. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level
Apr. 7	9.20	June 4	11.25	Sept. 2	11.67
May 6	9.33	28	13.92	Dec. 8	6.75

Fr-Fd 3. Thomas & Co. At Adamstown. Records available: 1946-47. No measurements made in 1948.

Garrett County

Gar-Ag 1. Town of Frostburg. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3	8.54	Apr. 6	8.18	Aug. 17	7.95	Dec. 8	7.76
Mar. 8	7.70	June 4	5.72	Nov. 7	8.04		

Gar-Bb 1. R. O. McCullough. At Friendsville. Records available: 1946-48. Water level may be affected by surface water running into well.

Mar. 7	6.10	May 6	10.90	Aug. 18	25.00	Dec. 6	4.50
Apr. 6	19.49	June 4	23.85	Nov. 6	25.07		

Gar-Db 7. City of Oakland well 2. Records available: 1946-47. No measurements made in 1948.

Harford County

No measurements made in 1948.

Howard County

How-Bd 1. S. D. Slack. Records available: 1946-48.

Feb. 16	45.94	May 3	43.50	July 6	41.29	Oct. 25	40.64
Mar. 24	45.22	June 11	41.10	Oct. 4	41.25		

How-Bd 2. Street. Records available: 1947. No measurements made in 1948.

How-Bf 1. Maryland Water Works Co. well Old 1. Records available: 1946-47. No measurements made in 1948.

Kent County

Ken-Dc 1. Catherine Overbeck. Records available: 1947-48. April 4, 8.50; May 16, 8.45.

Montgomery County

Mont-De 1. Washington Suburban Sanitary Commission. In Gaithersburg, in pump house, 1 block south of Baltimore & Ohio Railroad and 2 blocks west of U. S. Highway 240. Unused public-supply well, diameter 6 inches, depth 81 feet. Records available: 1948.

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	47.76	50.32	49.14	51.32	40.82	42.70	38.79	40.84	38.48	40.34
2	47.09	50.06	48.05	50.15	41.05	43.07	39.30	40.76	38.52	40.49
3	47.10	49.00	46.96	50.80	41.17	42.97	38.67	40.90	38.85	40.43
4	46.86	49.47	48.06	50.96	41.50	42.93	39.30	40.83	38.40	40.49
5	46.51	49.30	48.34	51.06	41.21	42.73	38.73	40.57	38.96	40.95
6	46.06	49.31	48.45	51.06	40.84	42.51	38.58	40.28	39.50	41.02
7	46.79	49.45	47.89	50.61	40.69	42.30	38.15	39.96	39.19	41.10
8	46.58	49.66	48.52	50.90	40.40	41.91	38.01	40.20	40.40	44.38
9	46.67	50.04	47.81	50.40	39.96	41.91	38.44	39.70	41.88	46.93
10	47.54	50.05	47.51	50.10	40.11	42.06	37.94	40.12	44.30	48.68
11	46.74	49.60	47.39	49.75	40.56	42.36	38.53	40.40	48.68	51.90
12	46.64	49.50	47.20	49.50	41.03	42.15	38.60	40.62	51.59	53.70
13	46.38	49.30	.....	.....	40.20	42.14	38.95	40.74	53.70	55.54
14	46.24	49.94	.....	.....	40.04	41.51	38.92	40.74	54.18	55.64
15	47.46	49.60	.....	.....	39.46	41.32	38.94	40.66	52.07	55.47
16	46.68	49.77	.....	.....	39.38	40.84	38.76	40.51	50.10	53.66
17	47.15	49.25	.....	.....	39.06	41.21	38.59	40.37	45.58	50.10
18	48.00	50.21	.....	.....	39.51	41.46	38.48	40.33	42.55	45.93
19	47.25	50.11	.....	.....	39.69	40.94	38.49	40.68	43.29	48.13
20	47.45	49.66	.....	.....	39.00	40.94	39.22	40.96	44.85	47.64

Mont-De 1--Continued.

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
21	48.87	51.60	47.50	50.77	.....	.....	39.24	40.97	39.40	40.86	43.54	46.27
22	48.09	51.26	48.92	51.54	43.89	44.85	39.03	41.01	39.09	41.00	40.42	44.12
23	48.05	51.26	48.73	51.41	42.94	44.92	39.26	41.10	39.40	39.98	41.58	43.80
24	48.10	51.25	48.76	51.35	43.58	45.08	39.34	40.96	39.14	40.77	42.14	44.57
25	48.20	51.12	48.61	51.27	43.21	45.25	38.99	40.95	38.91	40.66	42.23	45.82
26	48.02	50.86	48.54	51.06	42.50	44.15	39.22	41.12	38.81	40.61	42.39	46.23
27	47.67	50.76	48.00	50.80	41.46	43.13	39.74	41.31	38.81	40.54	42.47	45.31
28	47.83	50.75	48.00	50.96	41.26	43.20	39.35	41.17	38.61	40.50	40.54	44.10
29	47.75	50.70	48.36	50.41	41.68	43.08	39.34	41.10	39.11	41.07	49.63	51.10
30	47.72	50.70			41.14	42.86	39.29	40.85	39.30	40.71	49.35	53.24
31	47.71	50.71			41.00	42.70			38.53	40.34		

Day	July		August		September		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low
1	51.54	54.30	52.01	54.03	.....	.....	.....	.....	43.82	48.18
2	53.16	54.76	49.91	52.60	.....	.....	.....	.....	45.22	47.78
3	53.22	54.65	50.77	53.32	.....	.....	.....	.....	43.85	48.00
4	51.60	54.75	50.48	54.12	.....	.....	.....	.....	45.00	46.95
5	48.90	51.74	51.79	54.12	.....	.....	.....	.....	43.05	45.55
6	46.94	49.12	51.02	53.15	.....	.....	.....	.....	42.05	46.58
7	46.83	49.00	52.17	54.51	.....	.....	.....	.....	43.72	45.75
8	46.50	49.27	.....	.....	.....	.....	.....	.....	42.15	45.60
9	47.95	51.09	.....	.....	.....	.....	.....	.....	42.72	45.18
10	48.49	50.85	.....	.....	.....	.....	.....	.....	42.37	45.75
11	48.42	51.06	.....	.....	.....	.....	.....	.....	42.70	44.85
12	46.37	50.65	.....	.....	.....	.....	.....	.....	41.30	42.68
13	47.74	51.19	53.04	55.00	48.10	50.27	.....	.....	40.40	43.83
14	50.30	51.17	54.21	55.85	47.48	49.96	.....	.....	41.15	44.67
15	.....	.....	54.15	56.09	47.67	49.80	.....	.....	41.80	44.80
16	.....	.....	51.29	54.22	.....	.....	.....	.....	42.02	45.37
17	51.49	52.87	52.72	55.26	.....	.....	.....	.....	43.55	45.37
18	48.17	52.86	53.32	55.26	.....	.....	.....	.....	42.30	45.60
19	49.89	53.16	54.84	56.00	.....	.....	.....	.....	42.05	44.60
20	53.60	54.32	.....	.....	.....	.....	.....	.....	40.92	43.80
21	51.49	54.20	.....	.....	.....	.....	.....	.....	41.12	43.50
22	51.30	53.93	.....	.....	.....	.....	.....	.....	39.92	43.02
23	51.70	53.05	.....	.....	.....	.....	.....	.....	40.45	42.78
24	.....	.....	.....	.....	.....	.....	.....	.....	39.47	42.85
25	.....	.....	.....	.....	.....	.....	46.62	48.39	40.30	42.00
26	.....	.....	.....	.....	.....	.....	44.75	49.37	38.97	40.48
27	.....	.....	.....	.....	.....	.....	46.17	49.07	37.75	42.03
28	52.60	53.52	.....	.....	.....	.....	44.29	46.32	39.32	41.53
29	52.17	53.98	.....	.....	.....	.....	43.77	47.73	38.33	40.97
30	51.72	53.49	.....	.....	.....	.....	44.59	47.33	37.92	40.33
31	51.57	53.95	.....	.....	.....	.....	.....	.....	37.48	41.17

Tape measurements							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	51.40	Mar. 29	42.67	June 7	40.32	Aug. 25	57.00
21	49.82	Apr. 5	42.27	14	55.00	Sept. 1	55.70
28	48.92	12	41.66	21	45.96	9	54.25
Feb. 4	48.10	19	40.31	29	50.50	16	48.24
11	47.94	26	40.30	July 6	48.10	Dec. 2	47.77
18	48.85	May 3	40.10	13	50.27	9	44.30
25	50.20	10	39.32	28	52.60	17	42.25
Mar. 2	48.55	17	39.80	Aug. 4	53.00	22	41.45
3	49.00	24	40.18	11	54.45	24	41.40
10	47.80	31	39.65	18	54.08	31	40.25
22	43.89						

Mont-Ef 9. City of Rockville. Records available: 1946-47. No measurements made in 1948.

Mont-Eg 1. (Formerly reported as Mont-Ef 1). Walter M. Brown. Records available: 1932-48.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	14.57	13.49	12.69	12.13	14.36	13.13	13.92	15.35	15.31	16.38	16.45	14.68
2	13.92	13.57	12.52	11.87	14.38	13.15	14.00	15.09	15.38	16.41	16.47	.....
3	13.90	13.85	12.37	12.04	14.37	13.19	14.04	15.11	15.43	16.44	16.48	.....
4	13.88	13.54	12.55	12.09	.....	13.18	14.09	15.16	15.50	16.45	16.48	.....
5	13.88	13.56	12.73	11.98	.....	13.21	14.15	14.97	15.57	16.35	16.50	.....
6	13.88	13.63	12.68	11.92	.....	13.33	14.20	14.85	15.62	16.08	16.50	.....
7	13.89	13.66	12.08	12.00	.....	13.35	14.27	14.93	15.70	16.14	16.14	.....
8	13.89	13.65	11.66	12.02	.....	13.40	14.37	14.99	15.72	16.17	16.13	.....
9	13.81	13.71	11.81	11.99	.....	13.57	14.43	15.03	15.77	16.14	16.10	.....
10	13.81	13.75	11.69	12.10	.....	13.69	14.48	15.09	15.81	16.18	16.06	.....
11	13.83	13.77	11.68	12.01	.....	13.76	14.52	15.15	15.83	16.21	16.07	.....
12	13.79	13.76	11.86	12.14	.....	13.81	14.57	15.17	15.87	16.24	16.07	.....
13	13.57	13.74	11.89	12.43	.....	13.86	14.62	14.92	15.90	16.25	16.04	.....
14	13.17	13.37	11.93	12.41	.....	13.92	14.67	14.91	15.94	16.28	16.04	.....
15	13.25	13.06	11.96	12.36	.....	13.99	14.72	14.98	15.98	16.31	16.03	.....
16	13.33	12.84	12.03	12.56	.....	13.99	14.80	15.04	16.02	16.34	16.04	.....
17	13.36	12.66	12.15	12.89	.....	13.95	14.85	15.09	16.06	16.34	16.03	.....
18	13.43	12.56	12.30	13.13	.....	14.02	14.90	15.08	16.07	16.33	16.05	.....
19	13.46	12.54	12.25	13.28	.....	14.03	14.96	14.90	16.10	16.33	16.05	.....
20	13.46	12.61	12.23	13.37	.....	13.79	15.01	14.66	16.13	16.33	16.01	.....
21	13.15	12.73	12.25	13.50	.....	13.75	15.05	14.56	16.16	.....	16.02	.....
22	12.70	12.76	12.27	13.67	.....	13.77	15.11	14.48	16.16	.....	16.00	.....
23	12.79	12.88	12.33	13.70	.....	13.81	15.16	14.44	16.19	.....	15.97	.....
24	12.93	12.95	11.90	13.84	.....	13.84	15.23	14.35	16.23	.....	15.96	.....
25	13.11	12.86	11.90	13.93	.....	13.74	15.29	14.40	16.27	.....	15.80	.....
26	13.25	12.65	11.95	14.02	.....	13.74	15.34	14.62	16.30	.....	15.75	.....
27	13.30	12.56	11.90	14.09	.....	13.79	15.39	14.79	16.31	.....	15.63	.....
28	13.40	12.44	12.08	14.15	.....	13.85	15.42	14.94	16.33	.....	15.48	.....
29	13.39	12.53	12.25	14.22	.....	13.90	15.48	15.05	16.35	.....	14.78	.....
30	13.42	.....	12.34	14.28	.....	13.92	15.52	15.14	16.36	16.43	14.66	.....
31	13.45	.....	12.41	.....	.....	.....	15.55	15.22	.....	16.44	.....	.....

Tape measurements

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	13.90	Mar. 31	12.43	July 1	13.93	Oct. 4	16.46
Feb. 2	13.56	May 3	14.36	Aug. 2	15.11	Nov. 4	16.48
Mar. 1	12.73	June 1	13.13	30	15.13	Dec. 1	14.68

Prince Georges County

PG-Cc 3. Southern Oxygen Co., Inc. Half a mile south of Bladensburg. On west side of River Road, in pump house, at northwest corner of plant area. Abandoned drilled industrial well, diameter 8 inches, depth 162 feet. Records available: 1948. Dec. 6, 9.50; Dec. 15, 9.33; Dec. 24, 9.34; Dec. 31, 9.05.

PG-Dc 1. C. L. Jenkins & Sons. Half a mile northwest of Suitland. At north end of main greenhouse, by quadrupod. Abandoned drilled industrial well, diameter 6 inches, depth 365 feet. Records available: 1948. Dec. 6, 200.00; Dec. 14, 200.20; Dec. 24, 200.23; Dec. 31, 200.00.

PG-Df 2. Dr. Bowie. On Route 301, 2.1 miles south of Central Avenue, on east side of road, in small pump house at southwest corner of residence. Abandoned dug domestic well, diameter 4 feet, measured depth 81.5 feet. Records available: 1948. Nov. 30, 73.51; Dec. 13, 73.20; Dec. 24, 73.55; Dec. 31, 73.05.

PG-Eb 2. Washington Suburban Sanitary Commission. In Forest Heights, on west side of Indian Head Road (East Capitol Street S.E. extended), 0.5 mile south of District of Columbia boundary line, in pump house by Oxon Run. Drilled public-supply auxiliary well, diameter 10 to 8 inches, depth 605 feet. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 10	111.21	Nov. 29	106.12	Dec. 14	105.32	Dec. 31	105.10
19	110.55	Dec. 6	105.72	24	105.55		

PG-Ef 1. Fairgrounds. In Upper Marlboro. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level
Nov. 22	+3.62	Dec. 13	+3.51	Dec. 31	+4.06
30	+3.93	24	+4.08		

PG-Ef 2. Wyvill Esso Station. Records available: 1947-48.
Nov. 22, 34.45.

St. Marys County

No measurements made in 1948.

Washington County

Wa-Ac 1. Susan Creager. At Hancock. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	51.40	Apr. 8	51.97	June 5	52.63	Nov. 7	52.73
Feb. 5	53.59	May 9	46.34	Aug. 4	53.46	Dec. 8	49.50
Mar. 8	49.98						

Wa-Be 1. A. L. Dayhoff. At Indian Springs. Records available: 1946-47. No measurements made in 1948.

Wa-Bh 3. Mel Sword. Records available: 1946-48.

Jan. 7	32.10	Mar. 9	18.68	June 6	20.25	Nov. 7	39.11
Feb. 6	37.31	Apr. 9	18.69	Aug. 5	27.46	Dec. 9	20.02

Wa-Dh 1. John Murphy. At Sharpsburg. Records available: 1946-48.

Feb. 5	25.55	May 5	24.28	July 14	27.49	Nov. 11	25.43
Mar. 2	24.45	June 2	25.39	Aug. 31	25.52	Dec. 6	23.98
Apr. 6	25.36						

Wicomico County

Wi-Bf 2. W. T. Holland. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 16	2.08	Mar. 31	0.51	Aug. 10	+1.00
Feb. 13	1.08	May 28	+1.00	Sept. 30	1.43

Wi-Ce 13. City of Salisbury. Records available: 1947-48.

From recorder charts												
Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	4.60	6.71	4.32	6.28	7.47	9.83	3.19	5.67
2	4.74	6.71	4.10	6.65	7.78	9.72	3.59	5.83
3	4.67	6.77	4.54	6.44	7.58	9.78	3.85	6.11
4	4.69	5.00	3.92	4.54	7.64	9.62	4.12	5.81
5	4.52	5.00	3.79	6.28	7.39	9.72	3.57	6.04

W1-Ce 13--Continued.

Day	From recorder charts											
	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
6	.....	.....	.....	.....	4.79	6.72	4.24	6.53	7.37	9.37	3.72	5.30
7	.....	.....	.....	.....	4.04	4.87	4.46	6.28	7.43	9.51	3.37	5.84
8	.....	.....	.....	.....	3.94	6.43	4.19	6.45	7.53	9.39	3.83	5.97
9	.....	.....	.....	.....	4.45	6.74	4.44	6.72	7.71	9.76	3.84	6.10
10	.....	.....	9.31	9.42	5.04	7.14	4.66	6.62	7.42	9.68	3.97	6.18
11	.....	.....	8.57	9.54	5.41	7.28	3.96	4.92	7.31	9.37	4.11	6.30
12	.....	.....	7.32	8.57	5.60	7.36	3.88	6.16	7.02	8.93	4.32	6.44
13	.....	.....	6.37	7.32	5.66	7.57	4.14	6.28	6.98	8.63	3.90	5.24
14	.....	.....	5.80	6.37	5.07	6.63	4.13	6.15	7.02	8.97	3.79	6.26
15	8.23	8.59	5.37	5.80	4.77	7.07	4.04	6.50	7.04	8.86	4.40	6.56
16	7.41	8.23	5.24	7.45	5.06	6.86	4.56	6.80	8.13	9.00	4.50	6.58
17	6.79	7.41	6.04	7.72	5.39	6.93	5.52	6.86	8.86	9.50	3.79	5.84
18	6.30	6.79	6.43	7.89	4.99	6.92	5.52	6.66	8.62	9.67	3.83	6.18
19	5.94	6.30	6.60	7.97	4.53	6.74	5.58	7.03	8.53	9.47	4.29	6.21
20	5.61	5.94	6.65	7.99	4.38	5.17	5.77	7.25	8.02	9.43	3.13	4.58
21	5.56	7.93	6.19	7.70	4.20	6.14	6.11	7.42	7.92	9.10	2.97	5.32
22	7.93	8.49	5.45	6.19	4.25	6.58	6.17	7.96	.....	.....	3.61	5.88
23	8.49	8.90	5.03	5.45	4.67	6.62	6.72	8.49	.....	.....	3.76	6.03
24	8.90	9.23	4.92	6.65	4.54	6.58	6.69	8.51	.....	.....	3.93	6.14
25	9.23	9.52	5.09	7.21	4.47	5.72	7.55	9.16	.....	.....	4.13	6.19
26	9.52	9.73	5.51	7.30	4.54	6.50	7.15	9.36	.....	.....	4.18	6.18
27	9.73	9.90	5.57	7.25	4.52	6.47	7.03	8.94	.....	.....	4.03	5.88
28	9.54	9.98	5.34	7.06	4.39	6.35	7.16	8.94	4.63	6.28	3.69	6.12
29	.....	.....	4.72	5.49	4.24	5.93	7.17	9.26	4.18	6.17	4.21	6.24
30	.....	.....	.....	.....	4.09	6.71	8.75	9.73	3.67	4.30	4.72	6.46
31	.....	.....	.....	.....	4.84	6.56	.....	.....	3.38	5.18	.....	.....

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	4.41	6.43	3.57	7.13	4.17	6.26	3.75	5.53	3.25	5.54	2.73	4.89
2	4.70	6.10	3.18	5.82	4.63	6.42	3.38	5.38	3.69	5.68	2.96	5.04
3	.....	.....	3.03	6.33	4.89	6.43	3.35	5.02	3.64	5.69	3.04	4.88
4	.....	.....	2.37	3.47	4.40	6.32	3.26	5.46	3.62	5.82	2.62	4.44
5	.....	.....	1.07	2.70	4.25	5.82	3.43	5.24	3.93	5.99	.....	.....
6	.....	.....	.....	.....	4.19	6.33	3.27	4.83	3.78	5.62	.....	.....
7	.....	.....	.....	.....	4.45	6.25	3.04	5.11	3.18	3.78	.....	.....
8	5.80	6.68	.....	.....	4.13	6.70	3.27	5.17	3.18	5.36	.....	.....
9	3.95	6.73	.....	.....	4.59	6.44	3.59	5.12	3.42	5.58	.....	.....
10	3.69	6.48	3.23	5.09	4.63	6.49	3.70	3.94	3.59	5.51	.....	.....
11	3.12	6.02	3.00	5.23	4.49	6.33	3.70	5.64	3.53	5.66	.....	.....
12	2.86	6.31	3.15	5.33	4.14	6.03	4.47	5.78	3.57	5.67	.....	.....
13	3.51	6.50	3.27	5.55	3.89	6.24	4.03	5.86	3.56	5.40	.....	.....
14	3.60	6.35	3.58	5.67	4.33	6.73	4.02	5.88	3.18	4.60	.....	.....
15	3.08	5.87	3.14	5.91	4.45	6.34	4.07	5.99	3.08	5.24	.....	.....
16	2.98	6.20	3.05	5.40	4.24	6.33	4.15	5.91	3.29	5.50	.....	.....
17	3.73	6.14	3.58	5.62	4.27	6.44	3.52	4.20	3.49	5.61	.....	.....
18	2.79	5.61	3.50	5.70	4.33	6.05	3.45	5.34	3.65	5.50	.....	.....
19	2.59	6.12	3.78	5.83	3.60	4.65	3.49	5.61	3.36	5.32	.....	.....
20	3.45	6.36	4.07	5.80	3.47	5.74	3.78	5.88	3.18	5.28	.....	.....
21	3.39	6.22	3.80	5.82	3.79	6.00	3.99	5.84	3.14	4.68	.....	.....
22	3.18	6.42	3.37	5.39	4.03	6.16	3.77	5.86	3.05	4.93	.....	.....
23	3.68	6.60	3.20	5.37	4.11	6.02	3.70	5.80	3.04	5.28	.....	.....
24	4.28	6.74	3.30	5.32	3.98	5.98	3.38	4.34	3.35	5.43	.....	.....
25	3.11	5.85	3.59	5.82	3.84	6.07	.....	.....	2.95	4.14	.....	.....
26	2.87	6.29	3.88	5.70	3.53	4.64	.....	.....	2.88	4.78	.....	.....
27	3.60	6.57	4.18	5.84	.....	.....	.....	.....	2.83	4.95	.....	.....
28	4.31	6.85	4.24	6.25	.....	.....	.....	.....	2.72	3.32	.....	.....
29	4.35	6.94	3.86	6.28	4.46	5.83	.....	.....	2.62	4.58	.....	.....
30	5.65	7.05	3.70	5.87	3.89	5.83	3.58	5.50	2.69	4.55	.....	.....
31	5.55	7.08	3.86	6.03	.....	.....	3.31	3.63	.....	.....	2.74	4.52

W1-Ce 13--Continued.

Tape measurements					
Date	Water level	Date	Water level	Date	Water level
Jan. 15	8.59	Mar. 3	6.33	Aug. 10	4.97
28	9.83	Apr. 14	5.51	Sept. 2	6.11
Feb. 11	9.52	May 28	5.91	29	5.59
12	7.97	July 8	6.58		
				Sept. 30	5.63
				Oct. 29	5.55
				Dec. 31	4.19

W1-Ce 16. City of Salisbury. Records available: 1947. No measurements made in 1948.

W1-Ce 17. City of Salisbury. Records available: 1947-48. Jan. 15, 3.36.

W1-Ce 21. State Game Farm. Records available: 1947. No measurements made in 1948.

W1-Ce 24. Lowe Bros. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 6	8.30	Apr. 2	5.05	Aug. 10	1.83
Mar. 4	6.43	May 28	3.14	Oct. 1	3.85

W1-Ce 72. Pine Bluff Sanatorium. 2.5 miles southwest of Salisbury, at rear of resident physician's building. Driven domestic well, diameter $1\frac{1}{2}$ inches, depth 44 feet. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 8	22.45	June 19	22.14	Aug. 20	21.54	Oct. 25	21.98
22	22.78	28	21.76	31	21.59	31	21.94
29	22.65	July 3	21.76	Sept. 13	21.93	Nov. 17	22.09
May 8	22.57	10	22.30	19	22.04	24	21.95
14	22.65	24	22.38	25	22.82	Dec. 1	21.67
22	22.84	31	22.59	30	22.16	15	21.56
31	22.32	Aug. 7	21.87	Oct. 9	21.83	23	21.59
June 14	22.34	14	21.44	19	21.95	31	21.82

W1-Cf 1. City of Salisbury. Records available: 1947. No measurements made in 1948.

W1-Cf 2. City of Salisbury. Records available: 1947-48.

Feb. 11	1.81	Mar. 11	1.70	Mar. 23	1.76	Mar. 30	1.73
Mar. 3	1.70	17	1.71	25	1.75	Apr. 22	1.77

W1-Cf 3. Salisbury Airport. Records available: 1947-48.

Jan. 16	4.46	Mar. 24	5.56	Apr. 24	6.18	Aug. 10	3.65
Feb. 13	5.91	25	5.71	May 28	5.10	Sept. 30	6.75
Mar. 4	4.83	30	5.70	July 9	5.84		

NORTH CAROLINA

By M. J. Mundorff and H. E. LeGrand

PROGRAM OF WORK

The program of water-level measurements, begun in 1931, was continued in 1948 in cooperation with the North Carolina Department of Conservation and Development. The systematic survey of the ground-water resources of the State, begun in 1941, was also continued. The observation-well program in North Carolina includes 60 wells of which 7 are measured daily.

FLUCTUATIONS OF WATER LEVEL

In North Carolina the fluctuations of the water level correlate with precipitation, but the correlation is usually modified by several other factors. Because the water table is generally closer to the surface and the surficial deposits are more permeable in the Coastal Plain, water table wells in that section generally respond much more quickly to rainfall than wells in the Piedmont.

With normal precipitation, the cycle of water-level fluctuations begin with a gradual rise starting, usually, sometime between November and January. The level generally continues to rise until April or May after which it begins to decline. The decline continues, interrupted only by rises of short duration caused by summer rainstorms, until the following December or January.

The ground-water level rises in late winter and spring because very little water is lost by evaporation or is used by vegetation, so that a relatively large proportion of precipitation reaches the water table. Although the amount of rainfall is larger during the summer months, the amount used by vegetation and evaporation is so large that generally little or no rainfall reaches the water table.

In 1948 the average rainfall at all U. S. Weather Bureau stations in the State was 59.22 inches, 9.59 inches above normal. Precipitation was below normal in 5 months, and was above normal in the other 7 months.

Fluctuations of the water level in most wells show a reasonably close correlation with rainfall, although the amount of the fluctuation for a given amount of rainfall varies greatly from season to season, as was noted above. In most wells the rise in water level occurs within a few hours to a few days after the rainfall, but in some wells there may be a time lag of several weeks to several months.

Of the 39 wells measured at the end of both 1947 and 1948, 25 showed a net gain and 13 a net loss. The usual decline in water levels occurred in August, September, and October, but unusually heavy rains during the latter part of November resulted in a general water-level rise near the end of the year.

The following table gives the highest and lowest level reached in some of the wells, the range in fluctuation, and the net gain or loss for the year.

Summary of water-level fluctuations, in feet below land-surface datum, in North Carolina, 1948

County	Well No.	Highest level	Date	Lowest level	Date	Range	Net gain or loss
Alamance	1	15.40	Feb. 15	24.05	Sept. 26	8.85	+1.81
Cherokee	1	39.03	May 7	42.70	Jan. 11	3.63	+1.09
Columbus	1	1.35	Nov. 30	10.28	Oct. 5	8.93	+7.75
Craven	81	10.40	Feb. 25	12.03	July 1	1.63	-.22
	102a	7.94	Dec. 31	15.82	Aug. 27	7.88	+1.49
Davie	1	15.39	Apr. 9	21.12	Nov. 18	5.73	+2.23
Edgecombe	23	4.40	Nov. 30	8.41	Aug. 3	4.01	-2.46
	59	29.16	Nov. 30	29.75	Sept. 29	.59	+4.40
	59a	12.25	Feb. 25	27.60	Sept. 29	15.35	-7.24
	70	38.17	May 31	38.74	Sept. 29	.57	+1.14
Forsyth	19	41.63	Nov. 29	43.74	Mar. 3	2.11	+1.27
Gates	22	27.88	June 29	29.69	Mar. 3	1.81	+1.61
Guilford	2	24.03	Apr. 20	27.66	Nov. 29	3.63	-.16
	4	27.88	June 29	30.43	Jan. 2	2.55	+5.79
	7	20.40	Nov. 29	22.59	Oct. 28	2.19	-.20
	8	21.87	Nov. 29	27.76	Oct. 28	5.89	+8.7
	12	28.12	May 3	31.77	Sept. 28	3.65	-.78
	14	11.14	Apr. 2	15.59	Sept. 28	4.45	-1.47
Halifax	1	3.37	Mar. 10	7.95	Sept. 30	4.58	+3.45
Hertford	14	26.60	Dec. 30	27.24	Feb. 25	.84	+1.84
	13	27.07	Dec. 30	29.62	Feb. 25	2.55	+2.55
Jones	1	.5	Feb. 13	8.6	July 16	8.1	.0
Lenoir	27	36.94	Dec. 31	38.84	Aug. 4	1.90	+1.0
	31	+3.96	Feb. 26	+1.15	Aug. 27	3.81	+3.22
	6	8.45	Dec. 31	13.78	Sept. 30	5.33	+1.31
	6a	5.93	Dec. 31	9.78	Aug. 27	3.85	+4.40
Nash	1	.55	Dec. 4	13.45	Sept. 25	12.95	+2.17
Orange	1	39.88	May 3	42.95	Jan. 12	3.07	+1.08
Pasquotank	31T	.28	Dec. 30	3.63	June 30	3.35	+3.1
	33T	1.96	Dec. 30	9.17	Sept. 30	7.21	+5.4

Summary of water-level fluctuations, in feet below land-surface datum, in North Carolina, 1948--Continued

County	Well No.	Highest level	Date	Lowest level	Date	Range	Net gain or loss
Pasquotank	201	21.92	Nov. 30	32.58	Aug. 26	10.66	-14.63
Randolph	20	21.49	May 26	23.92	Oct. 28	2.43	-.33
	25	24.35	May 3	27.88	Oct. 28	3.53	+1.46
Transylvania	1	29.10	May 22	33.61	Nov. 26	4.51	+1.21
Wake	1	5.20	Feb. 14	15.22	Sept. 18	10.02	+1.94
Washington	1	10.01	Feb. 15	16.35	Sept. 26	6.35	-.36
Wayne	1	.00	Mar. 6	4.48	Sept. 25	4.48	-1.64
Wilson	149	19.32	June 2	20.21	Aug. 27	.89	-.15
	151	4.24	Aug. 27	5.23	Dec. 1	.94	+.31

Observation wells in the Piedmont section of North Carolina are all dug wells and obtain their water from the subsoil formed by weathering of rocks such as granite, gneiss, schist, and slate. The fluctuation of water in the wells reflects fluctuation of the water table. Despite already high water levels in these wells at the beginning of the year, the water levels rose generally during the first 5 to 6 months of the year. Of the 15 wells listed above in the Piedmont section, 6 reached their highest level in May, 2 in February, and 2 in April. The three reaching the highest level in November were attended by heavy November rains. The water level declined in most wells from June until November, at which time, because of heavy rainfall, most wells began a pronounced recovery.

Wells in the Coastal Plain include both shallow dug wells in which the water level is a part of the water table, and deeper wells entering artesian aquifers, the water levels of which are points on the piezometric surface. The shallow wells usually respond quickly to precipitation, generally showing a rise after every rainfall of consequence. The wells in artesian aquifers, being some distance from the areas of recharge, generally do not show a correlation with individual rainfalls, but do show a seasonal trend.

The range in water level in artesian aquifers is generally slight except near areas of recharge and near areas where water is pumped from the same aquifer. Well 14, Hertford County, for example, is remotely spaced from pumping and from recharge to the aquifer which it penetrates and, consequently, expresses a water level which fluctuated only 0.84 foot in 1948.

Most of the artesian wells reached their highest levels for the year during December, January, and February. Most of them reached their lowest levels during August and September.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Alamance County

1. Governor Holt well. J. W. Thompson. On south side of Haw River-Graham highway, 0.25 mile west of Haw River. Records available: 1935-48.

Mean daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	21.21	20.15	18.24	18.10	.....	.....	.....	21.58	.....	.....	.....	.....
2	21.22	20.10	18.35	17.72	.....	.....	21.25	.....	.....	.....	.....	.....
3	21.30	20.08	18.23	17.63	.....	20.09	.....	.....	.....	23.90	.....	.....
4	21.38	20.05	18.2	17.64	.....	.....	.....	.....	.....	.....	.....	17.28
5	21.43	19.80	18.14	17.63	.....	.....	.....	.....	23.14	.....	.....	.....
6	21.50	.....	18.24	17.60	17.58	.....	.....	.....	.....	.....	.....	.....
7	21.53	.....	18.80	17.51	.....	.....	.....	21.99	.....	.....	22.88	.....
8	21.59	.....	17.02	17.45	.....	.....	.....	.....	.....	.....	.....	.....
9	21.60	.....	16.82	17.40	.....	20.38	21.92	.....	.....	.....	.....	.....
10	21.64	.....	16.65	17.37	.....	.....	.....	.....	.....	22.94	.....	.....
11	21.69	.....	16.47	17.42	.....	.....	.....	.....	.....	.....	.....	.....
12	21.74	.....	16.48	17.42	.....	.....	.....	.....	22.40	.....	.....	18.66
13	21.30	16.37	16.65	17.42	.....	.....	.....	.....	.....	.....	.....	.....
14	20.24	15.50	16.84	17.49	.....	.....	.....	.....	.....	.....	22.64	.....
15	19.99	15.40	16.98	17.53	.....	.....	.....	22.34	.....	.....	.....	.....
16	19.90	15.65	17.08	17.30	.....	.....	21.06	.....	.....	.....	.....	.....
17	19.89	15.74	17.22	17.11	.....	.....	.....	.....	.....	22.96	.....	.....
18	19.92	16.25	17.35	17.04	.....	.....	.....	.....	.....	.....	.....	19.40
19	20.05	16.45	17.54	17.10	.....	21.00	.....	.....	23.67	.....	.....	.....
20	20.15	16.75	17.59	17.15	19.64	.....	.....	.....	.....	.....	.....	.....
21	20.19	17.08	17.70	17.19	.....	.....	.....	.....	.....	.....	22.08	.....
22	20.20	17.30	17.78	17.23	.....	.....	.....	.....	.....	.....	.....	.....
23	20.25	17.52	17.83	.....	.....	.....	.....	.....	.....	.....	.....	.....
24	20.34	17.75	17.87	.....	.....	.....	21.92	.....	.....	23.40	.....	.....
25	20.43	17.79	18.00	.....	.....	21.25	.....	.....	.....	.....	.....	.....
26	20.53	17.85	18.07	.....	.....	.....	.....	.....	24.05	.....	.....	.....
27	20.60	17.94	18.09	.....	.....	.....	.....	.....	.....	.....	.....	.....
28	20.62	17.93	18.08	.....	20.16	.....	.....	.....	.....	.....	.....	.....
29	20.56	18.06	18.17	.....	.....	.....	.....	22.70	.....	.....	.....	.....
30	20.45	.....	18.24	17.99	.....	.....	.....	.....	.....	.....	.....	.....
31	20.30	.....	18.26	.....	.....	.....	.....	.....	.....	23.39	.....	.....

Beaufort County

11. City of Washington. At Washington, about 200 yards north and 78° west of round concrete reservoir. Layne gravel well 2. Diameter 8 inches, depth 129 feet, yield 250 gallons a minute. Abandoned because water contains iron. Measuring point, top of 8-inch casing, at land-surface. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 12	9.64	Aug. 4	9.57	Sept. 30	9.98	Dec. 1	8.19
June 2	9.62	27	10.83	Oct. 27	9.56	31	8.35
July 1	9.85						

Cherokee County

1. At Murphy, in rear of First Baptist Church. Records available: 1943-48.

Mean daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	42.63	42.55	40.83	39.79	39.05	39.44	40.16	40.74	41.17	41.73	42.39	42.26
2	42.61	42.54	40.77	39.79	39.06	39.47	40.17	40.76	41.20	41.76	42.40	42.28
3	42.64	42.51	40.75	39.81	39.06	39.48	40.22	40.78	41.21	41.79	42.42	42.28
4	42.65	42.48	40.74	39.79	39.06	39.48	40.23	40.77	41.22	41.80	42.43	42.27

1--Continued.

Mean daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	42.66	42.47	40.73	39.75	39.06	39.51	40.24	40.78	41.23	41.80	42.45	42.21
6	42.67	42.44	40.71	39.68	39.04	39.55	40.26	40.82	41.25	41.81	42.46	42.20
7	42.68	42.41	40.49	39.63	39.03	39.57	40.26	40.83	41.27	41.84	42.49	42.18
8	42.67	42.34	40.47	39.61	39.07	39.56	40.29	40.83	41.29	41.85	42.52	42.18
9	42.68	42.27	40.48	39.55	39.09	39.59	40.34	40.85	41.31	41.87	42.53	42.18
10	42.68	42.22	40.46	39.55	39.11	39.64	40.36	40.87	41.34	41.89	42.53	42.18
11	42.70	42.19	40.44	39.49	39.11	39.68	40.36	40.88	41.36	41.91	42.57	42.18
12	42.70	42.00	40.43	39.45	39.11	39.71	40.38	40.88	41.38	41.94	42.59	42.17
13	42.66	41.62	40.43	39.44	39.10	39.73	40.41	40.88	41.41	41.87	42.60	42.14
14	42.64	41.49	40.40	39.41	39.11	39.74	40.42	40.89	41.42	42.00	42.61	42.13
15	....	41.51	40.36	39.38	39.13	39.78	40.44	40.91	41.43	42.02	42.63	42.10
16	....	41.50	40.31	39.35	39.15	39.80	40.47	40.92	41.46	42.05	42.63	42.08
17	....	41.42	40.29	39.32	39.15	39.83	40.50	40.93	41.49	42.07	42.64	42.06
18	....	41.37	40.27	39.32	39.16	39.87	40.51	40.96	41.50	42.09	42.66	42.05
19	....	41.32	40.25	39.30	39.21	39.89	40.51	40.97	41.50	42.11	42.65	41.98
20	....	41.27	40.22	39.27	39.20	39.91	40.54	40.98	41.51	42.14	42.57	41.94
21	42.59	41.23	40.20	39.22	39.19	39.94	40.54	40.99	41.51	42.17	42.60	41.95
22	42.58	41.16	40.16	39.20	39.19	39.97	40.55	41.03	41.51	42.19	42.62	41.94
23	42.58	41.13	40.06	39.18	39.22	40.01	40.57	41.05	41.51	42.22	42.61	41.92
24	42.60	41.11	40.04	39.17	39.25	40.01	40.60	41.07	41.56	42.23	42.61	41.90
25	42.63	41.06	40.06	39.14	39.27	40.03	40.62	41.08	41.60	42.25	42.63	41.76
26	42.64	40.99	40.03	39.11	39.30	40.04	40.64	41.09	41.63	42.27	42.65	41.69
27	42.64	40.93	39.92	39.08	39.32	40.07	40.65	41.11	41.66	42.30	42.64	41.71
28	42.63	40.87	39.88	39.06	39.35	40.10	40.67	41.14	41.66	42.32	42.50	41.69
29	42.62	40.85	39.91	39.05	39.35	40.11	40.70	41.14	41.68	42.32	42.19	41.64
30	42.60	....	39.89	39.05	39.37	40.13	40.71	41.14	41.71	42.34	42.20	41.56
31	42.55	....	39.83	....	39.41	....	40.72	41.13	....	42.37	....	41.54

Columbus County

1. Mrs. C. W. Maulsby. In Whiteville. Records available: 1944-48.

Mean daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	3.82	2.82	4.16	4.27	6.47	4.16	7.06	8.82	9.65	(a)	8.34	1.71
2	3.20	3.26	4.22	3.52	6.56	4.38	7.12	8.82	9.68	(a)	8.34	2.03
3	3.35	3.30	3.99	3.54	6.64	4.61	7.18	8.90	9.70	(a)	8.34	1.95
4	3.66	3.00	3.84	3.81	6.72	4.82	7.22	8.93	9.73	(a)	8.34	1.83
5	3.92	1.74	3.94	4.03	6.79	5.02	7.27	8.95	9.75	10.28	8.34	1.96
6	4.10	1.65	4.08	4.22	6.87	5.22	7.33	8.97	9.77	10.23	8.33	2.23
7	4.28	1.84	3.78	3.92	6.96	5.37	7.38	9.00	9.79	10.08	8.33	2.45
8	4.44	1.70	2.96	3.18	7.02	5.52	7.44	9.02	9.82	9.89	8.32	2.35
9	4.54	....	3.14	3.42	7.08	5.69	7.51	9.05	9.85	9.76	8.29	....
10	4.69	....	3.00	3.82	7.15	5.88	7.57	9.07	9.88	8.83	8.25	....
11	4.83	....	3.00	4.03	7.21	6.07	7.63	9.10	9.91	9.50	8.23	....
12	4.92	....	2.88	4.20	7.26	6.22	7.70	9.13	9.93	9.39	8.20	....
13	4.99	....	3.22	4.34	7.34	6.34	7.77	9.15	9.96	9.29	8.18	....
14	5.09	....	3.53	4.48	7.39	6.43	7.84	9.18	10.00	9.19	8.14	....
15	5.19	....	3.75	4.62	7.45	6.53	7.90	9.21	10.04	9.11	8.11	2.26
16	5.28	....	3.93	4.74	7.51	6.60	7.97	9.23	10.08	9.03	8.09	2.40
17	5.32	2.33	3.34	4.88	7.56	6.66	8.04	9.27	10.13	8.94	8.09	2.55
18	5.40	2.66	2.99	5.02	7.61	6.74	8.11	9.30	10.18	8.88	8.07	2.66
19	5.46	2.94	3.28	5.13	7.66	6.80	8.17	9.33	10.22	8.81	8.06	2.71
20	5.49	3.15	3.58	5.24	7.72	6.86	8.24	9.36	10.23	8.75	7.64	2.40
21	5.39	3.39	3.82	5.34	7.76	6.92	8.30	9.39a	10.24	8.69	6.58	2.54
22	5.17	3.16	3.99	5.45	7.81	6.90	8.36	9.41a	10.25	8.64	5.48	2.81
23	5.14	2.93	4.21	5.56	7.86	6.85	8.42	9.44a	10.25	8.59	4.79	2.96
24	5.12	3.20	4.35	5.66	7.92	6.80	8.47	9.46a	10.26	8.54	3.06	3.10
25	4.82	3.39	4.48	5.77	7.97	6.78	8.50	9.49a	10.26	8.50	2.81	3.23
26	4.69	3.51	4.56	5.90	8.00	6.78	8.55	9.52a	10.26	8.46	2.94	3.07
27	4.69	3.68	4.63	6.04	7.80	6.83	8.59	9.54a	10.26	8.41	3.02	....
28	4.57	3.81	4.33	6.17	5.69	6.88	8.64	9.57	(a)	8.40	2.85	....
29	4.37	3.99	4.12	6.29	3.95	6.95	8.68	9.59	(a)	8.38	1.35	....
30	4.40	....	4.18	6.38	3.82	7.02	8.73	9.62	(a)	8.36	1.35	....
31	4.50	....	4.30	....	3.97	....	8.77	9.64	....	8.35	....	....

a Dry.

11. Town of Whiteville. At water plant outside pump house, near railroad. Measuring point, top of 4-inch casing, 0.6 foot below land-surface datum. Records available: 1948. May 13, 1.23.

Craven County

81. City of New Bern. At New Bern, on Glenburnie tract of old city wells, at old pump station 2. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 25	10.40	July 1	12.03	Sept. 30	11.35	Dec. 1	10.55
May 11	11.57	Aug. 4	11.35	Oct. 27	11.10	31	10.62
June 2	11.43	27	11.71				

102a. City of New Bern. North side of U. S. Highway 70, northwest of New Bern, about 0.1 mile northwest of new pumping station and reservoir, 29 feet east of pump house of city well 2. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 26	9.43	July 1	16.42	Sept. 30	15.65	Dec. 1	12.24
May 11	12.65	Aug. 4	15.23	Oct. 27	14.37	31	7.94
June 2	12.18	27	15.82				

108. City of New Bern. At New Bern, on Glenburnie tract of old city wells, 100 feet west of pump house, in brick pit 4.1 feet deep. Measuring point, hole in cap on 8-inch casing, 0.68 foot above land surface. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level
Dec. 31, 1947	4.97	July 1, 1948	6.08	Oct. 27, 1948	5.27
Feb. 25, 1948	4.26	Aug. 4	6.12	Dec. 1	4.57
May 11	5.67	27	5.79	31	4.37
June 2	5.85	Sept. 30	5.41		

Davie County

1. Kurfee well. At Mocksville, 1 block south of courthouse, on U. S. Highways 64 and 601. Records available: 1935-48.

Mean daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	20.37	18.95	17.03	15.67	16.48	16.55	17.63	18.88	19.38	20.44	20.90	20.06
2	20.33	18.81	16.82	15.64	16.55	16.56	17.69	18.94	19.59	.....	20.93	20.01
3	20.42	18.56	16.89	15.70	16.59	16.60	17.70	18.97	19.61	.....	20.79	19.56
4	20.43	18.38	16.99	15.77	16.64	16.63	17.73	18.83	19.64	.....	20.89	19.52
5	20.45	18.19	17.09	15.82	16.67	16.69	17.76	18.87	19.70	.....	20.94	19.54
6	20.47	17.56	17.03	15.86	16.68	16.78	17.77	18.91	19.71	.....	20.96	19.44
7	20.47	17.77	16.48	15.83	16.47	16.79	17.80	18.94	19.72	.....	20.98	19.43
8	20.48	17.73	16.52	15.54	16.75	16.79	17.90	18.94	19.76	.....	21.02	19.37
9	20.48	17.73	16.53	15.39	16.86	16.87	17.96	18.96	19.78	.....	21.02	19.36
10	20.52	17.69	16.52	15.40	16.90	16.96	17.97	18.99	19.79	.....	21.00	19.36
11	20.50	17.67	16.52	15.40	16.94	17.01	17.99	19.00	19.84	.....	21.03	19.36
12	20.59	16.76	16.59	15.46	16.43	17.03	18.02	19.01	19.87	.....	21.07	19.32
13	19.85	16.40	16.62	15.53	15.19	17.05	18.05	19.01	19.90	.....	21.06	19.29
14	20.20	15.88	16.62	15.60	15.82	17.10	18.09	19.03	19.92	.....	21.06	19.28
15	20.36	16.40	16.63	15.72	15.96	17.14	18.15	19.08	19.97	.....	21.08	19.25
16	20.37	16.40	16.53	15.79	16.02	17.15	18.20	19.10	20.02	.....	21.10	19.22
17	20.33	16.33	16.36	15.85	16.06	17.21	18.24	19.13	20.08	.....	21.10	19.22
18	20.29	16.32	16.50	15.86	16.20	17.25	18.27	19.15	20.10	.....	21.12	19.23
19	20.31	16.38	16.50	16.00	16.30	17.27	18.31	19.17	20.08	.....	21.10	18.96
20	20.21	16.49	16.48	16.01	16.37	17.30	18.35	19.22	20.09	.....	21.06	19.06
21	19.99	16.64	16.48	16.02	16.38	17.35	18.40	19.23	20.12	.....	21.12	19.10
22	19.99	16.65	16.48	16.09	16.43	17.23	18.42	19.25	20.16	.....	21.04	19.10
23	20.08	16.79	16.41	16.18	16.55	17.30	18.48	19.29	20.18	.....	21.00	19.10
24	20.13	16.90	16.52	16.20	16.59	17.39	18.53	19.30	20.25	.....	20.72	19.10
25	20.14	16.89	16.59	16.21	16.63	17.41	18.57	19.32	20.33	.....	20.95	18.79

1--Continued.

Mean daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	20.14	16.86	16.60	16.25	16.69	17.45	18.60	19.35	20.37	.....	20.96	18.95
27	19.90	16.87	16.31	16.29	16.76	17.50	18.65	19.38	20.38	20.83	20.64	18.96
28	19.71	16.87	16.32	16.32	16.78	17.54	18.69	19.41	20.39	20.85	19.91	18.89
29	19.55	16.94	16.37	16.40	16.83	17.58	18.74	19.42	20.39	20.86	19.88	18.71
30	19.03		16.38	16.45	16.73	17.60	18.79	19.46	20.42	20.87	20.07	17.85
31	18.92		16.00		16.54		18.83	19.48		.....		18.14

Edgecombe County

23. John Lane. At Speed, 8 miles northeast of Tarboro. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 25	4.95	June 30	7.71	Sept. 29	5.95	Nov. 30	4.40
Apr. 27	5.75	Aug. 3	8.41	Oct. 25	6.09	Dec. 30	7.41
May 31	6.21	26	7.89				

59. I. W. Calhoun. About 9 miles east of Rocky Mount. Records available: 1946-48.

Feb. 25	29.56	June 30	29.64	Aug. 26	29.59	Oct. 25	29.42
Apr. 27	29.48	Aug. 3	29.65	Sept. 29	29.75	Nov. 30	29.16
May 31	29.47						

59a. I. W. Calhoun. About 9 miles east of Rocky Mount. Records available: 1946-48.

Feb. 25	12.25	June 30	24.86	Sept. 29	27.60	Nov. 30	21.65
Apr. 27	19.69	Aug. 3	24.90	Oct. 25	26.45	Dec. 30	19.49
May 31	24.36	26	27.31				

70. W. Z. Wilson. At Coakley, about 7 miles northeast of Tarboro. Records available: 1946-48.

Feb. 25	38.45	June 30	38.41	Sept. 29	38.74	Nov. 30	38.42
Apr. 27	38.24	Aug. 3	38.45	Oct. 25	38.59	Dec. 30	38.31
May 31	38.17	26	38.42				

Forsyth County

19. W. C. Michael. On High Point-Kernersville highway, 1 mile south of Kernersville, 40 feet west of highway. Records available: 1935-48.

Mar. 3	43.74	May 26	42.88	Aug. 31	42.27	Nov. 29	41.63
Apr. 2	43.52	June 29	42.56	Sept. 28	42.27	Dec. 29	42.47
May 3	43.12	July 30	42.38	Oct. 28	42.35		

21. Geo. G. Hedgecock. High Point (Kernersville). Measuring point, top of 21-inch terra cotta pipe, 1.60 feet above land surface. Records available: 1948.

June 8	26.29	July 30	27.08	Sept. 28	27.65	Nov. 29	24.33
29	26.54	Aug. 31	27.33	Oct. 28	28.00	Dec. 29	27.70

Gates County

22. C. E. Land. About 3 miles northeast of Gatesville, 0.3 mile northeast of prison camp. Records available: 1946-48.

Mar. 3	29.69	May 26	28.08	Aug. 31	28.45	Nov. 29	28.63
Apr. 2	29.14	June 29	27.88	Sept. 28	28.75	Dec. 29	29.08
May 3	28.43	July 30	28.09	Oct. 28	29.17		

Guilford County

2. Lindale Dairy Corporation. About 1.5 miles northwest of High Point city limits and 0.5 mile north of U. S. Highway 70. Records available: 1935-48.

Mean daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	26.63	25.41	24.44	24.20	.....	25.65	26.25	.....	.....	.....	.....
2	26.91	26.63	25.42	24.50	24.30	.....	25.71	26.30	.....	.....	.....	.....
3	27.02	26.61	25.28	24.51	24.32	.....	25.70	26.32	.....	.....	.....	.....
4	27.00	26.54	25.38	24.44	24.36	.....	25.72	26.31	.....	.....	.....	.....
5	26.96	26.50	25.50	24.28	24.42	.....	25.74	26.30	.....	.....	.....	.....
6	27.02	26.47	25.35	24.22	24.38	.....	25.69	26.37	.....	.....	.....	.....
7	27.00	26.44	25.10	24.20	24.38	.....	25.70	26.40	.....	.....	.....	.....
8	27.00	26.33	25.06	24.19	24.55	.....	25.83	26.40	.....	.....	.....	.....
9	26.94	26.36	25.05	24.30	24.60	.....	25.87	26.42	.....	.....	.....	.....
10	26.96	26.29	24.97	24.25	24.60	.....	25.86	26.45	.....	.....	.....	.....
11	27.07	26.33	24.94	24.14	24.60	.....	25.83	26.46	.....	.....	.....	.....
12	27.02	26.18	24.98	24.21	24.57	.....	25.84	26.43	.....	.....	.....	.....
13	26.92	26.06	24.99	24.23	24.55	.....	.....	26.40	.....	.....	.....	.....
14	26.86	25.68	24.93	24.19	24.58	.....	.....	26.44	.....	.....	.....	.....
15	26.97	26.07	24.81	24.17	24.67	.....	.....	26.47	.....	.....	.....	.....
16	26.93	26.00	24.77	24.14	24.66	.....	.....	26.50	.....	.....	.....	.....
17	26.86	25.77	24.80	24.25	24.62	.....	.....	26.51	.....	.....	.....	.....
18	26.85	25.72	24.85	24.20	24.71	.....	.....	26.53	.....	.....	.....	.....
19	26.90	25.67	24.75	24.13	24.77	.....	.....	26.53	.....	.....	.....	.....
20	26.85	25.61	24.73	24.03	24.75	.....	.....	26.55	.....	.....	.....	.....
21	26.72	25.66	24.67	24.08	24.62	.....	.....	26.58	.....	.....	.....	.....
22	26.66	25.64	24.64	24.18	24.65	.....	.....	26.61	.....	.....	.....	.....
23	26.77	25.63	24.60	24.15	24.82	.....	.....	26.65	.....	.....	.....	.....
24	26.78	25.74	24.68	24.06	24.83	.....	.....	26.65	.....	.....	.....	.....
25	26.84	25.65	24.78	24.05	24.85	.....	.....	26.65	.....	.....	.....	.....
26	26.85	25.41	24.67	24.06	24.86	.....	.....	26.68	.....	.....	.....	.....
27	26.80	25.35	24.49	24.02	24.92	.....	.....	26.72	.....	.....	.....	.....
28	26.78	25.36	24.61	24.05	24.94	.....	.....	26.73	27.23	27.70	.....	.....
29	26.69	25.28	24.70	24.11	.....	25.61	.....	26.70	.....	.....	27.66	27.13
30	26.68	.....	24.66	24.14	.....	25.61	26.23	26.69	.....	.....	.....	.....
31	26.66	.....	24.51	.....	.....	.....	.....	26.69	.....	.....	.....	.....

4. W. O. Atkins. About 0.3 mile west of Colfax, 300 feet south of U. S. Highway 421. Records available: 1935-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	30.43	May 3	28.43	July 30	28.09	Oct. 28	29.17
30	30.18	26	28.08	Aug. 31	28.45	Nov. 29	28.63
Mar. 3	29.69	June 29	27.88	Sept. 28	28.75	Dec. 29	29.08
Apr. 2	29.14						

7. E. J. Welch. At 1403 E. Lexington Avenue, High Point, 80 feet north of street. Records available: 1935-48.

Mar. 3	21.09	May 26	21.80	Aug. 31	22.34	Nov. 29	20.40
Apr. 2	20.83	June 29	21.99	Sept. 28	22.48	Dec. 29	21.29
May 3	21.49	July 30	22.07	Oct. 28	22.59		

8. Welch Place. At 1301 E. Lexington Avenue, High Point, about 800 feet west of well 7. Records available: 1935-48.

Mar. 3	24.44	May 26	24.15	Aug. 31	26.60	Nov. 29	21.87
Apr. 2	22.03	June 29	25.37	Sept. 28	27.28	Dec. 29	23.57
May 3	22.75	July 30	26.15	Oct. 28	27.76		

12. John Blair Estate. 1113 S. Tate Street, South High Point, 80 feet northeast of street. Records available: 1935-48.

Mar. 3	28.95	May 26	28.81	Aug. 31	30.88	Nov. 29	31.32
Apr. 2	28.44	June 29	29.72	Sept. 28	31.77	Dec. 29	29.73
May 3	28.12	July 30	30.66	Oct. 28	32.05		

14. Clodfelter Dairy. At southeastern corner of High Point, 0.5 mile east of U. S. Highway 311, near Springfield Church. Records available: 1935-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 3	12.11	May 26	12.61	Aug. 31	15.04	Nov. 29	13.53
Apr. 2	11.14	June 29	13.78	Sept. 28	15.59	Dec. 29	13.58
May 3	11.59	July 30	14.59	Oct. 28	16.01		

15. C. C. Robbins. About 0.3 mile south of High Point corporation limits, 110 feet west of U. S. Highway 311. Records available: 1935-43. No measurements made in 1948.

I-5. H. C. Hedgecock. High Point. Measuring point, top of concrete cover, 5.00 feet above land surface. Records available: 1948.

May 27	23.77	July 30	25.45	Sept. 28	27.12	Nov. 29	29.10
June 29	24.47	Aug. 31	26.14	Oct. 28	28.00	Dec. 29	26.72

I-8. J. A. Bolejack. High Point. Measuring point, top of concrete lid, 3.15 feet above land surface. Records available: 1948.

May 27	29.67	July 30	29.51	Sept. 28	29.91	Nov. 29	30.29
June 29	29.55	Aug. 31	29.67	Oct. 28	30.17	Dec. 29	30.47

I-11. Mrs. A. C. Robinson. High Point. Measuring point, top of 24-inch terra cotta pipe, 3.65 feet above land surface. Records available: 1948.

May 27	37.73	July 30	36.95	Sept. 28	37.24	Nov. 29	37.95
June 29	37.25	Aug. 31	37.07	Oct. 28	37.97	Dec. 29	38.11

I-16. S. C. Idol. High Point. Measuring point, top of wood cover, 2.30 feet above land surface. Records available: 1948.

June 8	18.58	July 30	20.07	Sept. 28	20.57	Nov. 29	20.20
29	19.32	Aug. 31	20.01	Oct. 28	20.85	Dec. 29	19.16

I-17. Fred Todd. High Point. Measuring point, top of wood cover (not lid), 2.40 feet above land surface. Records available: 1948.

June 8	6.25	Aug. 31	7.51	Oct. 28	8.28	Dec. 29	6.39
July 30	6.76	Sept. 28	8.21	Nov. 29	6.99		

I-23. E. W. Callaway. Kernersville. Measuring point, top of concrete pipe, 1.40 feet above land surface. Records available: 1948.

June 8	34.77	Aug. 31	34.73	Oct. 28	35.10	Dec. 29	35.20
July 30	34.65	Sept. 28	34.77	Nov. 29	35.15		

I-30. Mrs. J. W. Knight, Sr. (J. W. Knight, Jr.). Kernersville. Measuring point, inner lip of terra cotta pipe, 2.50 feet above land surface. Records available: 1948.

June 8	29.82	Aug. 31	30.70	Oct. 28	31.36	Dec. 29	30.88
July 30	30.43	Sept. 28	31.09	Nov. 29	31.27		

I-42. R. J. Holmes. High Point. Measuring point, top of concrete tile, 1.30 feet above land surface. Records available: 1948.

June 10	14.92	July 30	18.58	Sept. 28	20.48	Nov. 29	3.50
29	16.79	Aug. 31	18.84	Oct. 28	20.98	Dec. 29	9.07

I-46. Virtle Charles. High Point. Measuring point, inner rim of terra cotta pipe, 3.00 feet above land surface. Records available: 1948.

June 10	12.01	July 30	13.35	Sept. 28	13.60	Nov. 29	12.50
29	12.42	Aug. 31	12.73	Oct. 28	14.22	Dec. 29	12.12

I-52. M. H. Sloan. High Point. Measuring point, top of concrete pipe, 0.80 foot above land surface. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 10	13.68	July 30	16.28	Sept. 28	18.28	Nov. 29	14.30
29	14.72	Aug. 31	17.01	Oct. 28	18.87	Dec.	(a)

a Filled in.

I-60. Buck Idol. High Point. Measuring point, top edge of concrete pipe, 1.60 feet above land surface. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 10	36.39	July 30	38.64	Sept. 28	41.34	Nov. 29	39.99
29	37.73	Aug. 31	40.22	Oct. 28	41.63	Dec. 29	38.90

Halifax County

1. Frueler well. At Roanoke Rapids, 500 feet north of U. S. Highway 158, and 0.5 mile west of Seaboard Railway station. Records available: 1935-48.

Mean daily water level, from recorder charts

Jan. 30	6.65	Feb. 17	3.71	Feb. 28	4.32	Mar. 9	4.05
31	6.65	18	3.89	29	4.60	10	3.37
Feb. 1	6.74	19	3.97	30	4.82	28	4.85
2	6.78	20	4.10	Mar. 1	4.82	Apr. 30	5.59
3	6.78	21	4.41	2	4.45	May 30	4.98
4	6.68	22	4.02	3	4.21	June 28	6.50
5	6.48	23	4.29	4	4.40	July 30	7.06
12	5.70	24	4.40	5	4.71	Aug. 31	7.40
13	4.85	25	4.28	6	4.61	Sept. 30	7.95
14	3.70	26	4.21	7	4.05	Oct. 30	7.55
15	3.71	27	4.45	8	4.00	Nov. 29	4.05
16	3.71						

Hertford County

13. Town of Winton. At Winton, 150 feet southeast of tank. Diameter 8 inches, depth 314 feet. Measuring point, top of 8-inch casing, 2.00 feet above land surface. Records available: 1948.

Feb. 25	29.62	Aug. 3	28.82	Sept. 28	27.96	Nov. 30	27.36
Apr. 27	29.04	26	27.67	Oct. 25	27.45	Dec. 30	27.07
May 31	29.58						

14. Town of Winton. At Winton. 100 feet east of State Highway 97 and 750 feet south of intersection with U. S. Highway 158. Records available: 1946-48.

Feb. 25	27.24	Aug. 3	26.89	Sept. 28	26.90	Nov. 30	26.94
Apr. 27	26.86	26	26.86	Oct. 25	26.91	Dec. 30	26.60
May 31	26.87						

Jones County

1. George E. Weeks. At southeastern edge of Maysville. Records available: 1942-48.

Jan. 2	1.8	Feb. 13	0.5	Mar. 12	1.7	Apr. 16	5.1
6	2.2	17	1.2	16	1.5	20	5.7
8	2.4	20	1.5	19	1.7	23	6.1
20	1.6	24	1.5	23	2.5	27	5.9
23	1.8	27	1.7	26	2.8	30	6.2
Feb. 3	.9	Mar. 2	2.4	30	3.5	May 4	6.6
6	.6	5	2.6	Apr. 2	3.8	7	6.9
10	1.0	9	2.1	13	4.9	11	6.5

1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 14	6.1	July 13	8.4	Sept. 7	7.2	Nov. 2	7.0
18	6.2	16	8.6	10	7.6	5	1.7
21	6.5	20	6.2	14	7.5	9	5.9
25	6.5	23	6.3	17	7.9	12	1.7
28	6.9	27	4.5	21	7.9	16	1.6
June 1	4.8	30	4.8	24	8.2	19	1.5
4	4.2	Aug. 2	5.1	28	8.5	23	1.5
8	4.0	6	1.8	Oct. 1	7.2	26	.9
11	4.2	10	5.0	5	.6	30	1.1
15	5.5	13	5.4	8	1.4	Dec. 3	1.5
18	5.9	17	5.4	12	2.4	7	1.6
22	6.4	20	5.7	15	3.1	10	1.0
25	6.2	24	6.0	19	5.4	14	1.5
29	6.4	27	6.4	22	5.7	17	.7
July 2	6.7	31	6.8	26	6.7	21	1.5
6	7.0	Sept. 3	7.1	29	7.0	24	1.8
9	7.3						

Lenoir County

4. City of Kinston well 1. At water and light plant, 0.7 mile west of center of town, on southeast corner of lot, about 20 feet west of fence, in red brick pump house. Records available: 1947. No measurements made in 1948.

4a. City of Kinston well 2. At water and light plant, 0.7 mile west of center of town, on southwest corner of lot near river, about 300 feet west of well 1, in galvanized-sheet iron pump house. Records available: 1947-48. May 11, 30.31; June 2, 29.99.

6. Ernest L. Johnson. About 4 miles northwest of Kinston, 0.75 mile southwest of airport, about 75 feet east of barn, in square concrete-block shelter with wood and metal cover. Records available: 1947-48.

Feb. 26	9.76	July 2	11.98	Sept. 30	13.78	Dec. 1	12.08
May 11	10.67	Aug. 4	12.74	Oct. 27	13.25	31	8.45
June 2	11.14	27	13.25				

6a. Ernest L. Johnson. About 75 feet west of well 6, about 40 feet west of barn, on edge of terrace. Records available: 1947-48.

Feb. 26	6.33	July 2	8.90	Sept. 30	9.51	Dec. 1	6.33
May 11	8.50	Aug. 4	9.29	Oct. 27	8.64	31	5.93
June 2	8.62	27	9.78				

27. Caswell Training School. 2 miles west of intersection of Routes 70 and 258, 0.1 mile north on east side of road (Bull Road), 30 feet south of round concrete reservoir, in square red brick pump house. Records available: 1947-48.

Feb. 26	37.94	July 2	38.45	Sept. 30	38.30	Dec. 1	37.14
May 11	38.53	Aug. 4	38.84	Oct. 27	38.35	31	36.94
June 2	37.73	27	37.81				

131. City of Kinston. On south side of Route 70, about 0.7 mile west of Caswell Training School and 500 feet east of city's red brick pump house, on shoulder of highway, with concrete slab around well. Records available: 1947-48.

Feb. 26	+3.96	July 2	+0.65	Sept. 30	+0.60	Dec. 1	+0.51
May 11	+1.35	Aug. 4	+0.60	Oct. 27	+0.53	31	+0.74
June 2	+0.95	27	+0.15				

Martin County

2c. Town of Williamston. At Williamston, 20 feet southeast of round concrete reservoir at power plant. Records available: 1946-48. June 1, 46.67; June 25, 46.92; Oct. 27, 51.79.

Moore County

1. Pure Oil Station. In Pinebluff. Records available: 1944-48.

Mean daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	36.97	35.02	33.56	33.35	33.19	33.09	33.33	33.47	.....	35.20	37.57	33.45
2	36.96	34.40	33.61	.....	33.19	33.10	33.37	33.50	.....	35.27	37.62	33.58
3	37.01	34.02	33.53	.....	33.19	33.09	33.38	33.50	.....	35.35	37.68	33.61
4	37.05	33.86	33.57	.....	33.19	33.09	33.40	33.51	.....	35.45	37.72	33.36
5	37.07	33.83	33.62	.....	33.18	33.11	33.41	33.55	.....	35.48	37.78	33.40
6	37.11	33.66	33.62	.....	33.18	33.13	33.40	33.57	.....	35.55	37.82	33.49
7	37.15	33.29	33.56	32.55	33.16	33.12	33.43	33.58	.....	35.64	37.87	33.62
8	37.17	33.33	33.37	32.56	33.18	33.10	33.46	33.59	.....	35.71	37.95	33.68
9	37.18	33.46	33.04	32.71	33.18	33.12	33.46	33.60	.....	35.80	38.00	33.78
10	37.20	33.47	33.10	32.88	33.16	33.15	33.47	33.62	.....	35.89	38.03	33.87
11	37.28	33.57	33.18	32.92	33.16	33.15	33.47	33.62	.....	35.98	38.09	33.94
12	37.33	33.55	33.19	32.99	33.14	33.15	33.47	33.62	.....	36.06	38.15	33.98
13	37.34	32.71	33.24	33.04	33.13	33.18	33.47	33.64	.....	36.14	38.19	34.09
14	37.35	32.46	33.30	33.06	33.13	33.18	33.47	33.65	.....	36.21	38.24	34.18
15	37.30	32.56	33.31	33.10	33.14	33.18	33.46	33.66	34.05	36.30	38.29	34.30
16	36.66	32.76	33.31	33.12	33.12	33.17	33.47	33.67	34.11	36.40	38.34	34.39
17	36.14	32.84	33.33	33.16	33.11	33.19	33.49	33.68	34.18	36.47	38.38	34.53
18	35.78	33.00	33.36	33.20	33.13	33.20	33.51	33.69	34.23	36.55	38.43	34.68
19	35.61	33.12	33.41	33.18	33.13	33.20	33.51	33.70	34.26	36.63	38.47	34.81
20	35.50	33.17	33.40	33.17	33.11	33.22	33.50	33.71	34.33	36.70	38.51	34.95
21	35.40	33.29	33.40	33.17	33.10	33.22	33.50	33.72	34.43	36.80	38.56	35.15
22	35.34	33.34	33.41	33.22	33.12	33.24	33.51	33.73	34.49	36.88	38.42	35.33
23	35.38	33.40	33.40	33.21	33.12	33.25	33.51	33.75	34.56	36.96	38.22	35.52
24	35.46	33.47	33.40	33.19	33.11	33.26	33.52	33.76	34.67	37.03	38.10	35.70
25	35.57	33.48	33.43	33.19	33.09	33.28	33.46	33.77	34.80	37.10	37.86	35.86
26	35.68	33.44	33.45	33.20	33.09	33.29	33.36	.....	34.91	37.16	37.38	36.03
27	35.76	33.44	33.42	33.19	33.09	33.31	33.44	.....	35.03	37.22	36.83	35.38
28	35.84	33.49	33.39	33.19	33.09	33.32	33.48	.....	35.08	37.32	36.41	34.53
29	35.91	33.48	33.43	33.20	33.08	33.32	33.50	.....	35.11	37.39	33.89	34.08
30	35.94	.....	33.45	33.20	33.08	33.33	33.46	.....	35.16	37.45	33.25	33.88
31	35.60	.....	33.39	.....	33.08	.....	33.44	.....	.....	37.51	.....	33.42

Nash County

1. Alston well. About 0.5 mile north of Tar River, 100 yards east of State Highway 58, and 8 miles south of Nashville. Records available: 1935-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	5.98	Mar. 13	1.53	June 21	10.90	Sept. 25	13.45
7	6.54	20	2.83	26	11.12	Oct. 2	10.34
10	6.92	27	4.02	July 3	12.36	9	11.29
14	5.88	Apr. 3	4.92	10	11.73	16	7.27
17	5.10	10	6.28	17	12.00	23	8.37
21	2.84	17	7.05	24	12.13	20	8.22
24	2.78	24	7.75	31	12.35	Nov. 7	1.20
28	3.27	May 2	8.32	Aug. 7	12.47	13	2.75
31	3.53	8	8.72	14	11.65	20	2.75
Feb. 21	1.90	15	9.13	21	12.74	27	1.29
25	1.67	23	9.49	28	12.93	Dec. 4	.55
28	1.90	31	9.81	Sept. 4	13.07	11	1.88
Mar. 3	2.04	June 5	10.05	11	13.20	18	2.82
4	2.11	12	10.40	18	13.35	25	2.82
10	1.64	.....	.....	.....	.....	.....	.....

Northampton County

40. Mrs. R. L. Gattis. At Conway, about 0.25 mile west of State Highway 35, and 100 feet south of U. S. Highway 158, next to side porch of house. Records available: 1946-48. Feb. 25, 32.49.

60. Seaboard Air Line Railway Co. At Fotecasí. Drilled well, diameter $4\frac{1}{2}$ inches, depth 145 feet. No screen. Measuring point, edge of concrete reservoir at point where water flows in reservoir, 1.00 foot above land surface. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level
Aug. 6	+1.58	Oct. 25	+1.59	Dec. 30	+1.73
Sept. 28	+1.49	Nov. 30	+1.80		

Onslow County

1. New River well. Balus J. Holleman. At Jacksonville, in front of Riverview Hotel, 40 feet south of U. S. Highway 17 and 400 feet east of New River. Records available: 1942-43. No measurements made in 1948.

Orange County

1. McCauley well. At Chapel Hill, on west side of Chi Psi fraternity house on Cameron Street. Records available: 1938-48.

Mean daily water level, from recorder charts

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	42.77	Feb. 4	42.77	Mar. 2	41.49	June 21	40.10
2	42.73	5	42.72	3	41.44	28	40.20
3	42.82	6	42.70	4	41.44	July 5	40.31
4	42.82	7	42.61	5	41.50	12	40.45
5	42.85	8	42.53	6	41.51	19	39.56
6	42.86	9	42.52	7	41.38	26	40.72
7	42.85	10	42.48	8	41.24	Aug. 2	40.87
8	42.87	11	42.50	9	41.23	9	40.98
9	42.85	12	42.44	10	41.16	16	41.12
10	42.85	13	42.33	11	41.13	23	41.31
11	42.93	14	42.14	12	41.10	30	41.44
12	42.95	15	42.09	13	41.16	Sept. 6	41.67
13	42.88	16	42.03	14	41.10	13	41.88
14	42.81	17	41.94	15	41.01	20	42.06
15	42.86	18	41.90	16	40.95	27	42.31
16	42.87	19	41.85	17	40.92	Oct. 4	42.45
17	42.86	20	41.80	22	40.77	11	42.47
18	42.82	21	41.80	29	40.71	18	42.60
19	42.87	22	41.76	Apr. 5	40.44	25	42.72
26	42.88	23	41.74	12	40.22	Nov. 1	42.83
27	42.85	24	41.74	19	40.14	15	42.89
28	42.84	25	41.67	26	39.97	22	42.86
29	42.81	26	41.59	May 3	39.88	29	42.55
30	42.79	27	41.57	10	39.94	Dec. 6	42.10
31	42.80	28	41.53	24	39.94	13	41.90
Feb. 1	42.77	29	41.50	31	39.90	20	41.75
2	42.80	Mar. 1	41.57	June 14	39.99	27	41.69
3	42.79						

Pasquotank County

31T. 3 miles west of Elizabeth City and 1,000 feet north of city well fields. Records available: 1936-48.

Feb. 25	0.59	June 30	3.63	Sept. 30	0.75	Nov. 30	0.45
Apr. 28	.55	Aug. 3	.65	Oct. 25	1.87	Dec. 30	.28
May 31	.77	26	2.14				

33T. 3 miles west of Elizabeth City, in city well field, about 20 feet west of pump house. Records available: 1938-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 25	2.50	June 30	8.59	Sept. 30	9.17	Nov. 30	2.20
Apr. 28	7.64	Aug. 3	7.75	Oct. 25	8.86	Dec. 30	1.96
May 31	8.75	26	7.58				

201. City of Elizabeth City. At water plant, 150 feet east of treatment plant. Records available: 1946-48.

Feb. 25	28.37	June 30	25.46	Sept. 30	32.55	Nov. 30	21.92
Apr. 28	26.79	Aug. 3	23.30	Oct. 25	27.60	Dec. 30	31.30
May 31	26.31	26	32.58				

Perquimans County

2. Naval Auxiliary Air Station well 2. In Harvey Point. Records available: 1944-48. Apr. 28, 4.88; Aug. 4, 5.93; Sept. 9, 8.19; Dec. 30, 8.23.

Randolph County

9. W. C. Warner. About 2 miles southwest of Climax. Records available: 1936-43. No measurements made in 1948.

9B. W. C. Warner. Location same as well 9. Records available: 1936-43. No measurements made in 1948.

10. W. F. Beason. Near Cedar Square Church, 6 miles northwest of Randleman. Records available: 1935-43. No measurements made in 1948.

11. Emery Taylor. Near Coletranes Mill, about 7 miles northwest of Randleman. Records available: 1935-43. No measurements made in 1948.

20. Dr. Bush. At Archdale, 100 feet east of paved road to High Point, and 480 feet north of State Highway 62. Records available: 1935-48.

Mar. 3	22.75	May 26	21.49	Aug. 31	22.88	Nov. 29	23.82
Apr. 2	22.08	June 29	21.76	Sept. 28	23.47	Dec. 29	23.08
May 3	21.52	July 30	22.39	Oct. 28	23.92		

21. J. W. Young. About 2 miles west of Randleman and 1 mile north of U. S. Highway 311. Records available: 1935-43. No measurements made in 1948.

23. Mrs. Lonnie Pugh. At New Salem, 40 feet north of road. Records available: 1935-43. No measurements made in 1948.

25. J. W. White. 1 mile southwest of Trinity and 120 feet southeast of State Highway 62. Records available: 1935-48.

Mar. 3	25.11	May 26	25.04	Aug. 31	26.93	Nov. 29	24.69
29	24.41	June 29	25.78	Sept. 28	27.54	Dec. 29	26.57
May 3	24.35	July 30	26.50	Oct. 28	27.88		

Robeson County

21. Town of Lumberton. Behind water plant, on river bank. Measuring point, top of 2-inch elbow, 1.0 foot above land-surface datum. Records available: 1948. May 13, +1.65.

Surry County

1. 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. Records available: 1938-47. No measurements made in 1948.

Transylvania County

1. Baldwin well. At Blantyre. Records available: 1935-48.

Mean daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	33.38	32.59	31.88	30.60	29.43	29.29	30.25	31.40	32.06	32.60	33.29	33.41
2	33.35	32.56	31.82	30.59	29.39	29.35	30.30	31.43	32.09	32.61	33.31	33.43
3	33.32	32.55	31.80	30.58	29.37	29.35	30.33	31.42	32.10	32.63	33.32	33.40
4	33.29	32.51	31.79	30.57	29.35	29.38	30.35	31.45	32.11	32.65	33.35	33.40
5	33.28	32.49	31.78	30.52	29.31	29.42	30.41	31.49	32.12	32.66	33.36	33.38
6	33.24	32.48	31.75	30.45	29.26	29.42	30.43	31.53	32.14	32.68	33.37	33.35
7	33.22	32.46	31.70	30.41	29.24	29.45	30.44	31.56	32.15	32.69	33.40	33.32
8	33.19	32.44	31.61	30.36	29.25	29.49	30.50	31.59	32.16	32.72	33.43	33.29
9	33.15	32.42	31.53	30.33	29.25	29.52	30.57	31.62	32.19	32.76	33.44	33.26
10	33.13	32.40	31.49	30.30	29.24	29.56	30.60	31.65	32.21	32.77	33.49	33.25
11	33.11	32.38	31.46	30.27	29.22	29.63	30.63	31.67	32.23	32.79	33.50	33.20
12	33.09	32.26	31.46	30.22	29.18	29.65	30.67	31.70	32.25	32.81	33.51	33.17
13	33.05	32.12	31.44	30.18	29.15	29.69	30.69	31.72	32.27	32.84	33.52	33.13
14	33.03	32.04	31.41	30.14	29.14	29.71	30.73	31.76	32.30	32.86	33.53	33.07
15	32.99	32.13	31.36	30.11	29.14	29.73	30.75	31.78	32.31	32.91	33.55	33.02
16	32.97	32.13	31.33	30.05	29.14	29.76	30.80	31.80	32.33	32.93	33.57	32.98
17	32.95	32.12	31.30	30.02	29.14	29.81	30.85	31.82	32.35	32.93	33.57	32.96
18	32.91	32.12	31.27	29.98	29.14	29.83	30.90	31.83	32.36	32.94	33.57	32.86
19	32.91	32.11	31.20	29.91	29.13	29.84	30.95	31.86	32.37	32.96	33.57	32.79
20	32.88	32.09	31.18	29.87	29.13	29.85	30.99	31.88	32.37	32.99	33.56	32.75
21	32.83	32.08	31.15	29.84	29.12	29.88	31.00	31.90	32.39	33.02	33.58	32.71
22	32.81	32.05	31.10	29.81	29.10	29.95	31.02	31.92	32.40	33.06	33.59	32.67
23	32.78	32.05	31.05	29.77	29.10	29.99	31.05	31.94	32.42	33.08	33.58	32.63
24	32.75	32.03	31.01	29.72	29.15	30.02	31.12	31.96	32.44	33.09	33.58	32.59
25	32.75	32.02	30.99	29.68	29.17	30.05	31.15	31.98	32.46	33.12	33.60	32.51
26	32.71	31.96	30.90	29.61	29.18	30.05	31.20	31.99	32.48	33.15	33.61	32.49
27	32.68	31.94	30.87	29.58	29.11	30.10	31.22	32.01	32.50	33.18	33.59	32.43
28	32.66	31.91	30.67	29.54	29.15	30.14	31.25	32.01	32.52	33.20	33.52	32.38
29	32.63	31.89	30.66	29.49	29.18	30.17	31.30	32.02	32.54	33.21	33.55	32.31
30	32.62		30.66	29.46	29.23	30.20	31.33	32.03	32.56	33.25	33.40	32.22
31	32.61		30.65		29.26		31.35	32.03		33.27		32.17

Wake County

1. 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. Records available: 1935-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	8.96	Apr. 19	7.44	July 18	13.06	Oct. 17	11.44
11	9.98	24	7.05	26	12.89	22	11.87
18	9.95	30	8.44	31	13.18	Nov. 1	12.21
25	8.96	May 6	8.22	Aug. 7	13.28	6	11.12
30	7.20	15	10.36	14	13.22	13	10.05
Feb. 6	7.94	23	10.42	22	13.53	21	9.10
14	5.20	29	11.52	28	13.52	29	6.78
21	7.94	June 6	10.55	Sept. 4	13.68	Dec. 4	6.62
27	6.95	12	10.45	11	14.62	11	8.05
Mar. 14	7.94	20	10.44	18	15.22	18	7.43
20	8.94	27	12.46	25	14.20	24	8.28
Apr. 5	7.22	July 3	12.72	30	13.83	31	6.86
10	7.38	12	13.14	Oct. 10	11.48		

2. Baptist parsonage. At Garner, about 300 feet south of Southern Railway.

Mean daily water level, from recorder charts

Jan.	1	24.97	Jan.	5	25.06	Jan.	9	25.10	Jan.	13	25.14
	2	24.96		6	25.08		10	25.15		14	25.06
	3	25.04		7	25.09		11	25.21		15	25.08
	4	25.03		8	25.11		12	25.20		16	25.09

2--Continued.

Mean daily water level, from recorder charts

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	25.08	Feb. 10	24.49	Mar. 4	23.78	Mar. 27	23.53
18	25.09	11	24.46	5	23.85	28	23.56
19	25.15	12	24.34	6	23.80	29	23.62
20	25.14	13	24.19	7	23.69	30	23.61
21	25.04	14	23.92	8	23.65	31	23.60
22	25.00	15	24.12	9	23.63	Apr. 1	23.57
23	25.03	16	24.04	10	23.59	2	23.60
24	25.05	17	23.98	11	23.55	3	23.65
25	25.08	18	23.98	12	23.56	4	23.67
26	25.10	19	23.96	13	23.56	5	23.64
27	25.05	20	23.94	14	23.55	6	23.59
28	25.03	21	23.99	15	23.53	7	23.58
29	24.99	22	23.96	16	23.51	8	23.57
30	24.95	23	23.99	17	23.52	8	23.59
31	24.93	24	23.97	18	23.56	10	23.64
Feb. 1	24.90	25	23.92	18	23.54	11	23.60
2	24.90	26	23.86	20	23.53	12	23.58
3	24.88	27	23.87	21	23.52	July 2	26.02
4	24.84	28	23.83	22	23.51	Aug. 5	25.74
5	24.76	29	23.88	23	23.51	28	26.19
6	24.60	Mar. 1	23.93	24	23.53	Oct. 9	26.39
7	24.55	2	23.84	25	23.60	Nov. 1	26.60
8	24.50	3	23.77	26	23.57	Dec. 31	25.05
9	24.50						

Washington County

1. R. H. Lucas. About 1.5 miles west of Plymouth and 50 yards south of U. S. Highway 64. Records available: 1942-48.

Mean daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	11.77	10.70	11.14	12.26	13.53	.....	14.27	15.08	.....	.....	.....	12.25
2	11.57	.....	11.02	12.36	13.58	.....	14.24	15.11	.....	.....	.....	12.27
3	11.65	.....	11.06	12.50	13.80	.....	14.37	15.11	.....	.....	.....	12.05
4	11.63	.....	11.15	12.57	13.87	.....	14.41	15.12	15.98	.....	.....	11.88
5	11.67	.....	11.35	12.58	13.89	.....	.....	15.16	16.00	.....	.....	11.93
6	11.79	.....	11.36	12.59	13.85	.....	.....	15.19	16.02	.....	.....	11.96
7	11.87	.....	11.03	12.63	13.95	.....	.....	15.22	16.04	.....	14.53	12.04
8	11.95	.....	10.86	12.65	14.03	.....	14.55	15.24	16.06	.....	14.53	12.06
9	11.95	.....	10.88	12.70	14.07	.....	14.59	15.29	16.08	.....	.....	14.49
10	12.12	.....	10.57	12.81	.....	.....	14.63	15.32	16.09	15.54	14.44	.....
11	12.34	.....	10.58	12.82	.....	.....	14.67	15.35	16.02	15.54	14.32	.....
12	12.27	.....	10.70	12.85	14.05	.....	14.70	15.38	16.00	15.31	14.30	11.99
13	12.19	.....	10.82	12.91	14.06	13.35	14.73	15.39	.....	15.10	14.15	12.06
14	11.65	.....	10.92	12.97	14.04	13.39	14.78	15.42	.....	15.08	13.95	12.13
15	11.38	10.01	10.99	12.88	14.07	13.45	14.83	15.45	.....	15.09	13.95	12.17
16	11.38	10.07	11.06	.....	14.10	13.46	14.91	15.48	.....	15.10	13.99	12.21
17	11.37	10.11	11.14	.....	14.09	13.53	14.91	15.50	.....	15.15	13.75	12.30
18	11.31	10.32	11.33	.....	14.01	13.60	14.93	15.53	.....	15.16	13.50	12.35
19	11.33	10.46	11.34	12.99	14.00	13.64	14.96	15.57	.....	15.17	13.30	12.01
20	11.31	10.64	11.41	13.01	14.03	13.70	14.97	15.60	.....	15.19	13.08	.....
21	10.95	10.79	11.47	13.04	14.04	.....	14.92	15.63	16.28	15.21	.....	11.89
22	10.91	10.43	11.55	13.13	14.11	.....	14.93	15.65	16.29	15.22	.....	11.89
23	11.10	.....	11.60	13.18	14.18	.....	14.98	15.67	16.30	15.23	13.10	11.92
24	11.02	.....	11.70	13.21	14.20	.....	15.00	15.69	16.31	15.23	.....	12.00
25	11.04	10.46	11.89	13.24	14.26	.....	14.91	15.72	16.34	15.26	.....	12.11
26	11.05	10.48	11.93	13.32	14.30	.....	14.90	15.74	16.35	15.29	.....	12.11
27	11.05	10.71	11.90	13.34	14.17	.....	14.93	15.77	16.35	15.32	.....	12.14
28	10.93	10.74	11.99	13.37	.....	14.15	14.96	15.80	16.35	15.35	.....	12.13
29	10.87	11.01	12.17	13.42	.....	14.19	14.99	15.84	.....	15.38	.....	.....
30	10.96	.....	12.22	13.47	.....	14.21	15.01	15.86	.....	15.41	.....	.....
31	10.99	.....	12.25	.....	13.49	.....	15.05	15.87	.....	15.43	.....	.....

Wayne County

1. Borden Brick & Tile Co. Brick pit well. About 3.5 miles south of Goldsboro, 200 feet east of U. S. Highway 117 and Neuse River. Records available: 1935-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	2.12	Apr. 24	1.34	July 24	3.10	Oct. 9	4.16
10	2.24	May 1	1.32	31	3.18	16	4.06
17	2.20	8	1.54	Aug. 7	3.38	23	4.10
Feb. 2	1.72	22	2.00	14	3.58	30	4.14
7	1.50	29	2.20	21	3.68	Nov. 6	4.10
28	.00	June 5	2.34	28	3.82	13	4.00
Mar. 6	.00	14	2.58	Sept. 4	4.20	20	3.66
13	.00	19	2.24	11	4.12	27	2.94
27	.44	26	2.13	18	4.34	Dec. 4	2.38
Apr. 3	.62	July 3	2.48	25	4.48	18	.52
11	.82	10	2.70	Oct. 2	4.30	25	.60
17	.92	17	2.90				

Wilson County

122. M. P. Whitley. About 0.7 mile southeast of junction of U. S. Highways 58 and 264, 3 miles east of Wilson, about 100 yards southwest of U. S. Highway 58. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level
Feb. 26	12.31	June 2	17.27	Aug. 4	18.73
May 11	13.75	July 2	16.40		

149. Town of Stantonburg. In Stantonburg inside tool shed immediately southeast of elevated water tank. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 26	19.35	Aug. 4	20.12	Sept. 30	19.99	Dec. 1	19.36
May 11	19.76	27	20.21	Oct. 27	20.17	31	19.50
June 2	19.32						

151. W. R. Rogers. Half a mile southwest of Stantonburg about 100 yards east of State Highway 222 and 200 yards southwest of Contentnea Creek, in mile lot, 30 feet north of barn. Records available: 1947-48.

Feb. 26	+5.15	July 2	+4.49	Sept. 30	+4.54	Dec. 1	+5.23
May 11	+4.68	Aug. 4	+4.33	Oct. 27	+4.38	31	+4.84
June 2	+5.01	27	+4.24				

SOUTH CAROLINA

By George E. Siple

PROGRAM OF WORK

The observation-well program, begun in 1946, was continued through 1948 in cooperation with the South Carolina Research, Planning and Development Board. Before this cooperative program was in effect there were intermittent measurements of observation wells from the period 1932 to 1945. An observation-well program in the Tiger River area (see Water-Supply Papers 777, 817, 840, 845, 886, 907, 937, 945, and 987) was begun in 1932 in cooperation with the Soil Conservation Service, U. S. Dept. of Agriculture. This was discontinued in 1942. Measurements were begun on an observation well in Poinsett State Park in September 1942 and were made until May 1944. Records on this well were continued after 1946.

Measurements of water level were made on 17 observation wells in the Coastal Plain region during 1948, 3 water-table wells and 14 artissian. Of the 14 artesian wells, 6 reflected piezometric surface above land surface and 8 below land surface. Measurements were made monthly in most wells, intermittently in others. On the flowing artesian wells, measurements were made with a pressure gage. On the other wells, the water level was ascertained either by the wetted-tape or air-line columns. Five wells measured in 1947 were discontinued in 1948. Six wells were added during the year to the number of wells observed regularly.

FLUCTUATIONS OF WATER LEVEL

Geologically, the State is divided almost exclusively into two areas, the Piedmont, or crystalline area, composed of deeply altered and weathered metamorphic rocks intersected by igneous intrusion, and the Coastal Plain province, consisting of gently dipping unconsolidated sands, clays, and marls. A small area in the extreme northwestern edge of the State lies within the Blue Ridge province. All of the wells measured during 1948 were within the Coastal Plain region.

Wells in the Piedmont derive their water either from the decomposed soil or saprolite of the crystalline rocks or from cracks, crevices, joints, and fault surfaces in these rocks. Water-table conditions prevail almost exclusively throughout the entire area and recharge to the ground-water storage is effected through rainfall. Fluctuations of the water table are affected by various factors, such as topographic location of the well with respect to surface drainage, lithology of the aquifer, evaporation, transpiration, runoff, and precipitation.

Wells in the Coastal Plain section utilize the sands, gravels, and limestones of Upper Cretaceous and Tertiary sediments as aquifers. These sediments crop out in a belt almost southwest-northeast across the lower two-thirds of the State and have a gentle south, southeastern dip. Water is added to the aquifer in the intake area by means of precipitation or influent stream action and moves down the permeable layers of the aquifer to build up a hydrostatic head down the dip of the formation. Fluctuations in the water-level or piezometric surfaces of wells in artesian aquifers in the Coastal Plain are generally of a much smaller magnitude than those of wells in the Piedmont or of water-table wells in the outcrop area of the Coastal Plain. From the data obtained, there does not appear to be a very close correlation of water levels with precipitation except on a general and time-lapse basis. The increase in storage due to increased precipitation is reflected in a correlative change of piezometric level only under certain conditions. This correlation can be affected so much by various factors--such as the amount of water already held in storage, the rate of discharge or withdrawal from storage at that particular time, the evaporation and transpiration rate due to seasonal temperatures and vegetation, the intake and catchment area supplying the well with water, and the amount of influent surface water being added to storage--that the possibilities of any or all of these factors being of constant value over a period of change in precipitation are rather haphazard. In some instances a rather close correlation does appear for a time and it may be that the factors named above are nearly constant for that period of time. Thus, the piezometric surface of well 4, Sumter County, has a rather close correlation between its fluctuations and the accumulative rainfall departures incident to its catchment area around Columbia.

The water levels in well 1, Berkeley County, likewise have some correlation with rainfall departures in the outcrop area but the high increment of rainfall in May is not indicated in the water-level measurement, while that of November and December does reflect a correlative rise within a very short time.

The water level in well 1, Dorchester County, appears to reflect fairly well the corresponding rainfall increments in the intake areas of the Tuscaloosa formation around Columbia.

The water-table well at Wedgefield has a fairly constant correspondence with the amount of precipitation in the area when transpiration and evaporation are taken into consideration. Normally the precipitation is greatest during July and August but the ground-water levels might be higher in winter or early spring because of the fact that evaporation and transpiration are taking a greater proportion of the precipitation during the summer months.

The average annual precipitation over the entire State for 1948 was 59.25 inches, an excess of 11.35 inches over the 61-year average. This is the third highest annual rainfall since 1887. November was the wettest month of the year and the wettest November since 1887 when climatological records began. This is the second year in succession when rainfall in November set a new record.

The mean annual temperature was about normal or 63.1°.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Allendale County

1. Mr. Easton. Temperature of water, 70½°F. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level
Apr. 14	+37.7	June 17	+36.3	Nov. 30	+37.8
May 28	+37.4	July 28	+37.1		

Barnwell County

1. Barnwell. On town property, 30 feet northeast of elevated tank. Drilled well, diameter, 6 inches, depth 145 feet, ending in sand of Upper Cretaceous age. Elevation, about 208 feet. Measuring point, top of casing, 0.3 foot above land-surface datum. Records available: 1948. June 4, 46.18.

Berkeley County

1. Santee River Hardwood Co., St. Stephens. Drilled well, diameter 6 inches, depth 900 feet, ending in sand of Peedee-Black Creek age. Elevation 67.1 feet. Measuring point, vertical face of 6-inch elbow, 2.7 feet above land-surface datum. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 15	15.48	June 23	15.76	Sept. 29	16.35	Nov. 30	15.94
May 29	15.53	July 30	16.10	Oct. 27	16.31	Dec. 30	15.6

Colleton County

1. City of Walterboro. On old U. S. Air Force Base at Walterboro, across street from chapel. Drilled well diameter, 10 inches, depth 638 feet, ending in sands of Upper Cretaceous (?) age. Elevation, about 75 feet. Measuring point, top of air-line vent, 1.0 foot above land-surface datum. Records available: 1948. May 29, 28.0; Sept. 29, 24.0; Oct. 27, 25.0; Nov. 30, 24.5.

Darlington County

1. City of Hartsville. Measured by pressure gage. Records available: 1947-48. May 1, +9.6; Sept. 30, +9.4.

Dorchester County

1. Town of Summerville. On town lot 15 feet west of town hall on Main Street. Drilled well, diameter 8 inches, depth 925 feet, ending in Upper Cretaceous sands. Elevation 70 feet. Measuring point, top of casing, 0.3 foot above land-surface datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level
May 29	24.17	Sept. 29	28.20	Nov. 30	26.63
July 29	26.30	Oct. 27	28.69		

Horry County

1. Measurements by pressure gage. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 21	+9.5	July 31	+8.5	Nov. 23	+9.2	Nov. 19	+9.5
June 24	+9.5	Sept. 30	+9.5	Oct. 28	+9.5		

2. K. C. Ellsworth. Securing water from Peedee Black Creek sands. Records available: 1947-48. May 21, +10.1; July 31, +9.3, considerable leakage in casing; Nov. 23, +10.4.

3. City of Myrtle Beach. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 16	7.30	July 31	10.50	Oct. 28	11.87	Nov. 23	12.49
May 21	9.43	Sept. 30	12.20	Nov. 19	12.68	Dec. 15	10.10
June 24	11.48						

Orangenburg County

1. Town of North. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 14	36.09	June 23	36.11	Nov. 30	35.71	Oct. 26	38.10
May 28	35.60	July 28	36.53	Sept. 29	37.00		

Sumter County

1. Poinsett Wedgefield Park. Records available: 1943, 1946-48.

Date	Water level	Date	Water level	Date	Water level
Mar. 23	7.10	July 24	12.65	Oct. 28	10.73
May 14	9.89	Sept. 13	13.40		

2. City of Sumter. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 29	16.91	June 2	19.20	Sept. 24	22.54	Oct. 28	22.99
May 9	17.55	9	19.48	Oct. 7	22.74	Nov. 30	22.51
14	18.10						

3. 2 miles south 54° west of Sumter, diameter 2 3/4 inches, depth 150 feet, ending in sands of Tuscaloosa formation. Measuring point, top of 2-inch discharge elbow, 1.5 feet above land-surface datum. Temperature of water, 66½°F. Records available: 1947-48. Mar. 29, 13.0; July 24, 11.8.

4. City of Sumter. Measuring point, top of 3/4-inch air line, 1.0 foot above land-surface datum. Records available: 1947-48.

May 14	36.50	June 9	36.61	Oct. 7	38.63	Nov. 30	36.11
June 2	36.54	Sept. 24	40.77	28	37.88		

5. City of Sumter. On municipal lot, 2,000 feet northwest of pump house. Diameter 18 inches, depth 625 feet. Aquifer is sand of Tuscaloosa formation. Measuring point, top of cut-out on side wall of pump, 15 feet above land-surface datum. Records available: 1948. May 9, 31.22; May 14, 37.90, affected by pumping of well 400 feet away; June 2, 36.38, affected by pumping of well 400 feet away; Nov. 30, 39.80, affected by pumping of well 400 feet away.

6. Beulah Methodist Church. About 6½ miles northeast of Sumter on State highway 76. Diameter, 2 inches, depth 250+ feet. Measuring point, 1¼-inch discharge pipe, 1.5 feet above land-surface datum. Temperature of water, 66°F. Records available: 1948. May 21, +7.5; Nov. 18, +7.3.

7. City of Sumter. On municipal grounds, 600 feet west of pumphouse. Diameter 24 inches, depth 65 feet. Aquifer Black Mingo (?) formation. Measuring point, top of concrete casing, 1.7 feet above land-surface datum. Records available: 1948. June 9, 16.48; Sept. 24, 19.23.

TENNESSEE

By E. M. Cushing

PROGRAM OF WORK

The program of water-level measurements in selected observation wells in Memphis and in Shelby County was continued during 1948. This program is being carried on as a part of the investigation of the ground-water resources of the Memphis area in cooperation with the Memphis Light, Gas and Water Division.

During the year water-level measurements were made periodically in 42 wells. About 984 tape measurements were made in 24 of the wells. For the remaining 18 wells, which were equipped with water-stage recorders, 151 tape measurements and 5,164 lowest daily water levels, as determined from recorder charts, were tabulated. A total of 6,299 measurements is included in this report. Two observation wells were added to the program and the measurements in one well were discontinued.

PUMPAGE

It is estimated that the average daily quantity of water pumped during the year from the so-called "500-foot" sand was about 100 million gallons. This amount is about 10 million gallons a day more than the average daily withdrawals in 1947.

The average daily withdrawals from the "1,400-foot" sand are estimated to be about 11 million gallons, about 1 million gallons a day more than the average daily pumpage in 1947.

FLUCTUATIONS OF WATER LEVEL

In general, water levels in wells screened in the "500-foot" and "1,400-foot" sands continued to decline during 1948. Water levels in 21 observation wells, screened in the "500-foot" sand and located within the city, ranged from 2.07 feet higher to 8.96 feet lower than the lowest levels during 1947. The average lowering, based on measurements made in these wells, was about 4 feet. In only one well did the measurements show no decline below the low of 1947.

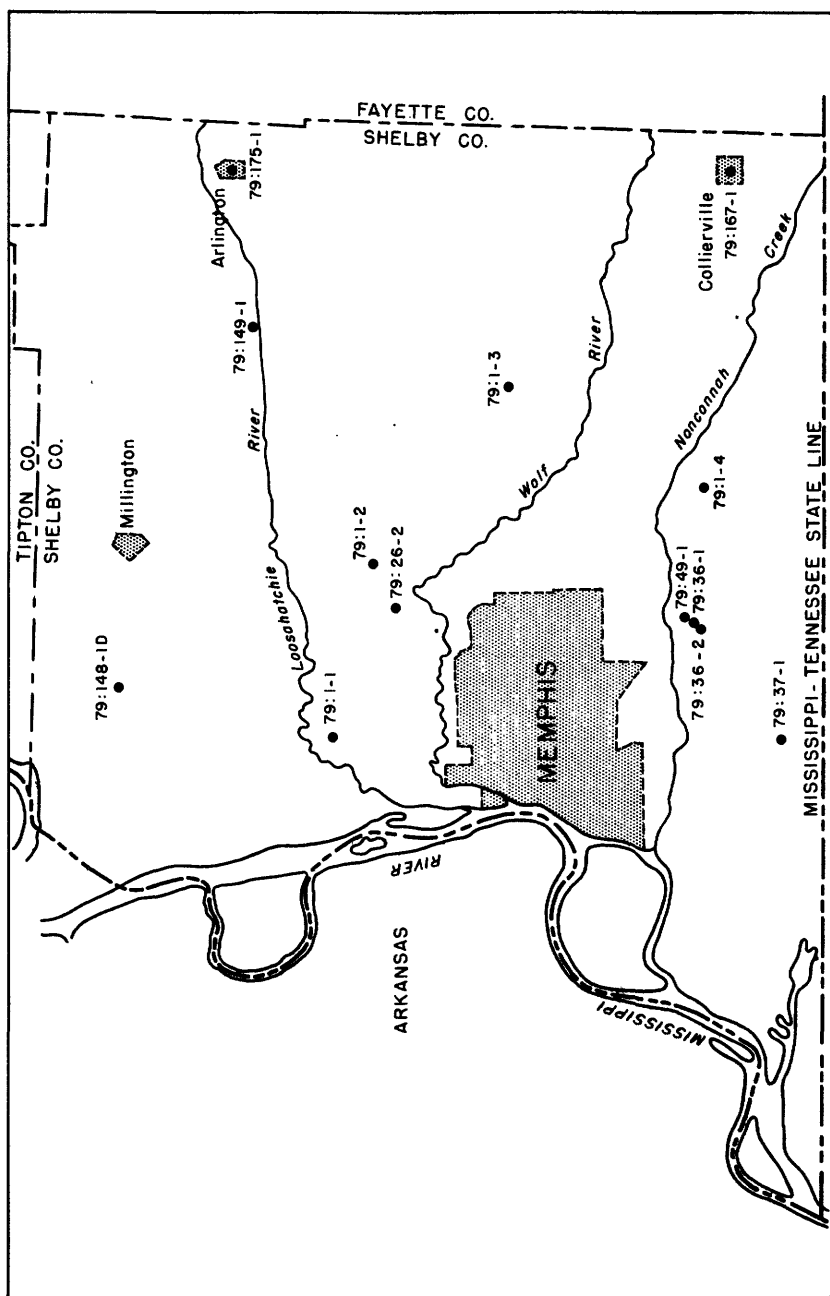


Figure 10.--Map showing location of observation wells in the vicinity of Memphis, Tenn., 1948.

In five observation wells, screened in the same sand outside of the city and away from the areas of heavy pumping, the water levels ranged from 0.75 foot to 2.84 feet lower than the lowest levels of 1947. The average decline of the water level in these wells was nearly 2 feet.

Of 29 observation wells screened in the "500-foot" sand, the water level in only five did not decline below the previous low on record.

Water levels in the three observation wells, screened in the "1,400-foot" sand, ranged from 1.70 feet to 7.58 feet lower than the lowest levels of 1947. The average lowering of the water level within the city, based on measurements made in two wells, was about 7 feet. The water level in observation well 79:148-1D, outside of the city, reached a level 1.7 feet below the low of 1947.

Figure 11 shows the hydrographs of water-level fluctuations in three wells screened in the "500-foot" sand. The water levels in well 79:1-3, east of Memphis, and well 79:1-1, north of Memphis, probably reflect the effect of all the pumping in the area from the "500-foot" sand. (See fig. 11.) Well 79:7-17 is in the Parkway well field of the Memphis Light, Gas and Water Division.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Shelby County

79:1-1. Memphis Light, Gas and Water Division. On O. K. Robertson Road, 2.24 miles north of Frayser. Records available: 1940-48.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	23.80	25.11	22.07	19.89	20.40	24.41	25.79	26.19	27.66	28.62	28.44	26.66
2	23.85	25.15	21.71	19.83	20.61	24.50	25.74	26.15	27.66	28.72	28.34	26.60
3	23.80	25.14	21.68	19.83	20.81	24.61	25.71	26.10	27.66	28.74	28.27	26.51
4	23.99	25.07	21.78	19.69	21.10	24.74	25.69	26.18	27.68	28.72	28.28	26.50
5	23.98	25.11	21.87	19.45	21.43	24.93	25.64	26.30	27.63	28.58	28.28	26.35
6	23.87	25.10	21.80	19.22	21.66	25.06	25.52	26.41	27.63	28.47	28.46	26.33
7	23.81	25.15	21.63	19.03	21.83	25.14	25.34	26.50	27.55	28.48	28.47	26.16
8	23.67	25.36	21.52	18.98	22.01	25.17	25.38	26.57	27.46	28.58	28.39	26.09
9	23.70	25.40	21.41	19.07	22.21	25.33	25.49	26.58	27.50	28.62	28.31	26.12
10	23.75	25.40	21.28	19.07	22.52	25.50	25.56	26.57	27.58	28.62	28.23	26.18
11	23.76	25.34	21.32	19.17	22.42	25.62	25.63	26.60	27.65	28.60	28.23	26.10
12	23.67	25.19	21.37	19.34	22.52	25.72	25.68	26.66	27.72	28.59	28.15	26.06
13	23.69	24.84	21.40	19.42	22.66	25.84	25.68	.....	27.77	28.54	28.12	26.10
14	23.73	24.36	21.37	19.56	22.73	25.89	25.80	.....	27.78	28.52	28.09	26.11
15	23.72	24.71	21.41	19.65	22.79	25.93	25.95	.....	.....	28.55	28.00	26.09
16	23.86	24.96	21.65	19.88	22.85	25.99	26.14a	26.76	.....	28.58	27.84	26.21
17	23.94	24.96	21.83	20.01	22.91	26.05	26.32	26.78	.....	28.66	27.69	26.25
18	.....	24.75	21.84	20.06	22.94	26.08	26.39	26.82	.....	28.66	27.61	26.20
19	.....	24.35	22.08	20.09	22.99	26.14	26.36	26.80	.....	28.58	27.37	26.26
20a	24.02	24.17	22.17	20.09	23.02	26.18	26.34	27.00a	28.09	28.56	.....	26.28
21	24.03	25.93	22.18	20.11	23.02	26.19	26.38	27.12	28.12	28.59	.....	26.18
22	24.17	23.62	22.12	20.15	23.17	26.18	26.43	27.24	28.16	28.64	.....	26.13
23	24.30	23.38	21.82	20.21	23.29	26.22	26.54	27.28	28.29	28.68	27.38	26.07
24	24.47	23.22	21.74	20.28	23.36	26.19	26.60	27.29	28.45	28.70	27.27	25.91

a Tape measurement.

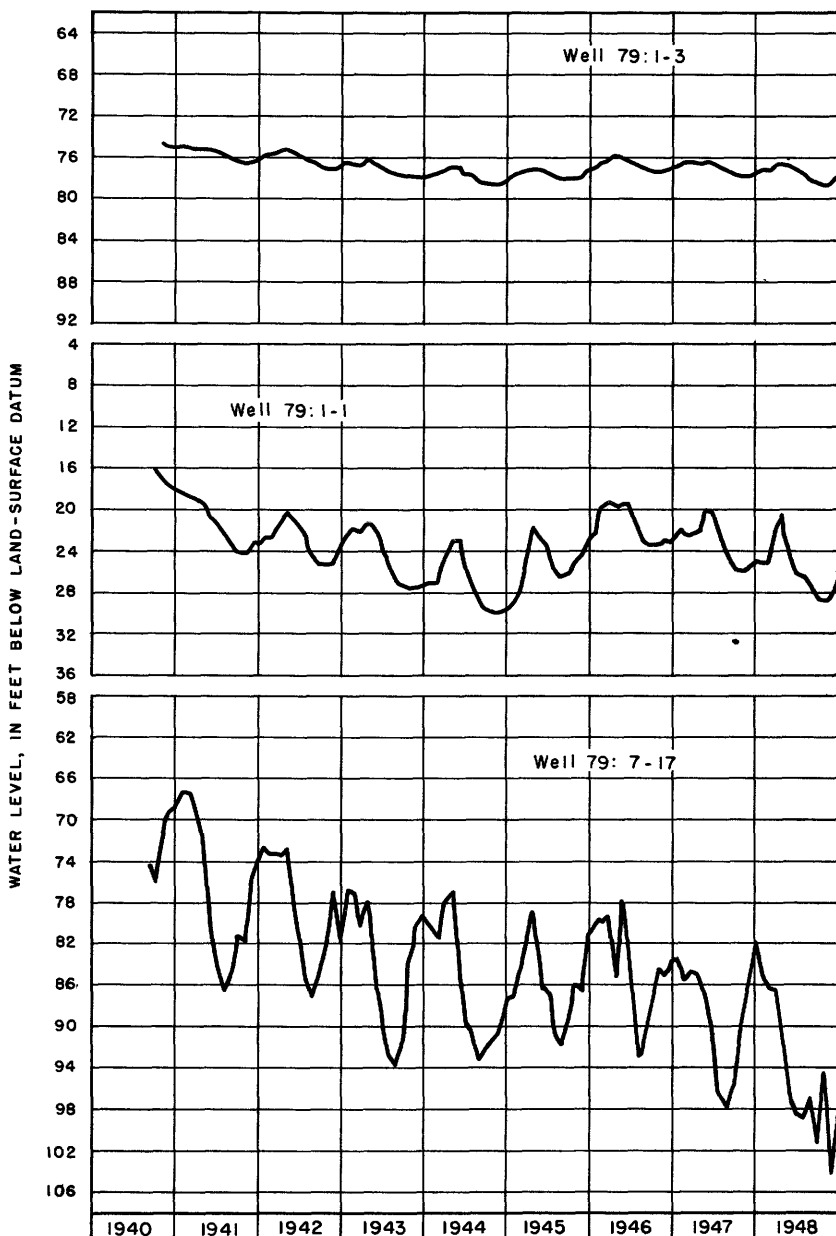


Figure 11.--Graphs showing fluctuations of water level in typical observation wells in Memphis area, Tenn.

79:1-1--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
25	24.61	22.99	21.55	20.29	23.41	26.21	26.61	27.31	28.59	28.66	27.15	25.77
26	24.62	22.61	21.50	20.21	23.51	26.25	26.58	27.41	28.65	28.55	27.01	25.75
27	24.72	22.24	21.28	20.21	23.65	26.24	26.47	27.51	28.66	28.45	26.94	25.39
28	.....	22.01	21.25	20.22	23.80	26.18	26.36	27.68	28.53	28.46	26.79	25.08
29a	24.75	22.09	21.03	20.24	23.99	25.99	26.32	27.63	28.49	28.48	26.79	24.84
30	24.82		20.66	20.27	24.18	25.85	26.28	27.63	28.54	28.51	26.73	24.84
31	25.01		20.03	24.33		26.23	27.63		28.50		24.83	

a Tape measurement.

79:1-2. Memphis Light, Gas and Water Division. On Scheibler Road, 1.4 miles northwest of Bartlett. Records available; 1940-48.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	74.36	74.89	74.69	73.87	73.93	75.39	76.32	.....	77.29	77.86	78.11	77.39
2	74.38	74.92	74.58	73.94	74.00	75.44	76.33a	76.68	77.31	77.94	77.98	77.36
3	74.38	74.91	74.58	73.97	74.04	75.48	76.32	76.72	77.33	77.97	77.88	77.33
4	74.46	74.88	74.61	73.94	74.03	75.50	76.31	76.79	77.34a	77.92	77.88	77.33
5	74.47	74.90	74.59	73.84	74.05	75.57	76.29	76.84	77.23	.....	77.87	77.21
6	74.50	74.92	74.49	73.75	74.03	75.61	76.21	76.86	77.23	77.89	77.95	77.23
7	74.48	74.90	74.40	73.66	74.09	75.64	76.13	76.86	77.23	.....	77.98	77.23
8	74.45	75.03	74.38	73.65	74.12	75.64	76.07	76.87	77.22	.....	77.94	77.24
9	74.59	75.10a	74.29	73.68	74.15	75.73	76.03	76.86	77.23	.....	77.92	77.34
10	74.68	75.11	74.29	73.60	74.24	75.83	75.99	76.85	77.24	.....	78.09	77.40
11	74.68	75.13	74.36	73.43	74.29	75.89	75.96	76.83	77.21a	77.87	78.17	77.34
12	74.59	75.06	74.39	73.53	74.34	75.94	75.96	76.84	77.20	77.94	78.18	77.24
13	74.61	74.87	74.36	73.55	74.42	76.01	75.94	76.85	77.20	77.93	78.25	77.27
14	74.64	74.81	74.28	73.58	74.46	76.07	75.91	76.82	77.22	77.92	78.25	77.28
15	74.60	74.79	74.15	73.55	74.48	76.10	75.98	76.83	77.29	77.93	78.14	77.26
16	74.58	74.78	74.17	73.51	74.52	76.13	76.09	76.82	77.39	77.95	78.09	77.21
17	74.59	74.97	74.22	73.58	74.58	76.15	76.19	76.86	77.44	77.99	77.95	77.22
18	74.61	75.02	74.20	73.62	74.68	76.15	76.23	76.86	77.45a	77.95	77.88	77.15
19	74.60	75.16	74.18	73.71	74.74	76.17	76.25	76.90	77.46	.....	77.60	76.96
20a	74.52	75.26	74.22	73.76	74.78	76.20	76.29	76.92	77.47	.....	77.57	76.97
21	74.50	75.26	74.22	73.80	74.75	76.21	76.35	76.95	77.47	.....	77.57	77.03
22	74.52	75.23	74.17	73.82	74.81	76.24	76.40	76.99	77.48	.....	77.44	77.12
23	74.60	75.25	74.05	73.84	74.86	76.28	76.52	77.02	77.55	.....	77.35	77.14
24	74.68	75.26	74.06	73.88	74.91	76.30	76.58	77.03	77.64	.....	77.42	77.14
25	74.77	75.24	74.02	73.87	74.94	76.30	76.61	77.04	77.73a	78.08	77.46	77.23
26	74.77	75.08	73.96	73.86	74.98	76.32a	76.63	77.09	77.77	.....	77.47	77.24
27	74.77	74.85	74.11	73.91	75.02	76.34	.....	77.14	77.76	.....	77.51	77.13
28	.....	74.63	74.16	73.94	75.06	76.33	.....	77.19	77.70	.....	77.40	77.00
29a	74.69	74.70	74.13	73.95	75.13	.....	.....	77.22	77.70	.....	77.42	76.87
30	74.68		74.05	73.93	75.24	.....	.....	77.21	77.78	.....	77.41	76.88
31	74.83		73.83	75.32		.....	.....	77.25	.....	.....		76.89

a Tape measurement.

79:1-3. Memphis Light, Gas and Water Division. On Macon Road, 4.5 miles north of Germantown. Records available; 1940-48.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	77.27	77.28	76.34	76.34	76.29	76.92	77.35	77.55	77.98	78.13	78.29	77.77
2	77.39	77.27	76.16	76.52	76.40	76.91	77.36	77.56	78.08	78.23	78.23	77.70
3	77.42	77.25	76.29	76.56	76.45	76.89	77.36	77.54	77.97	78.26	78.20	77.61
4	77.44	77.13	76.42	76.48	76.43	76.86	77.37	77.57	77.96	78.24	78.21	77.62
5a	77.38	77.14	76.42	76.35	76.47	76.87	77.38	.....	77.88	78.14	78.23	77.52
6	77.35	77.17	76.29	76.27	76.42	76.91	77.39	.....	77.92	78.13	78.42	77.59
7	77.33	77.13	76.17	76.24	76.49a	76.96	77.39	.....	77.94	78.14	78.46	77.55
8	77.21	77.12	76.20	76.38	76.46	76.95	77.45	.....	77.95	78.22	78.39	77.59
9	77.24	77.12a	76.15	76.49	76.42	77.02	77.50a	77.65	78.01	78.26	78.26	77.74
10	.....	77.08	76.19	76.43	76.44	77.06	77.50	77.69	78.04	78.23	78.28	77.81
11	.....	77.03	76.40	76.21	76.42	77.09	77.45	77.68	78.02	78.30	78.34	77.72
12a	77.08	76.90	76.51	76.22	76.39	77.09	77.44	77.71	78.02	78.34	78.27	77.63
13	77.23	76.67	76.50	76.31	76.43	77.09	77.45	77.70	78.08	78.32	78.26	77.68

a Tape measurement.

79:1-3--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
14	77.29	76.60	76.41	76.39	76.45	77.10	77.42	77.66	78.13	78.34	78.25	77.68
15	77.29	76.61	76.23	76.37	76.41	77.13	77.45	77.68	78.07	78.34	78.22	77.65
16	77.23	76.52	76.30	76.26	76.39	77.15	77.49	77.68	78.14	78.31	78.17	77.73
17	77.26	76.53	76.43	76.23	76.46	77.14	77.51	77.73	78.16	78.42	78.15	77.75
18	.....	76.53	76.43	76.20	76.53	77.12	77.49	77.73	78.13	78.51	78.10	77.71
19	.....	76.44	76.34	76.17	76.59	77.13	77.47	77.76	78.06	78.42	77.94	77.54
20a	77.11	76.61	76.39	76.19	76.58	77.14	77.44	77.77	78.06	78.36	78.04	77.55
21	77.07	76.62	76.40	76.20	76.50	77.12	77.45	77.84	78.06	78.33	78.05	77.58
22	77.05	76.60	76.35	76.20	76.51	77.13	77.45	77.85	78.00	78.32	77.88	77.69
23	77.21	76.68	76.38	76.21	76.55	77.18	77.51	77.87	78.11	78.34	77.78	77.70
24	77.27	78.74	76.44	76.25	76.61	77.20	77.54	77.87	78.18	78.37	77.71	77.66
25	77.34	76.76	76.41	76.23	76.64	77.18	77.52	77.89	78.27	78.37	77.68	77.82
26	77.34	76.65	76.29	76.22	76.67	77.18	77.48	77.90	78.28	78.34	77.63	77.83
27	77.29	76.47	76.37	76.31	76.71	77.19	77.47	77.99	78.28	78.14	77.70	77.76
28	.....	76.23	76.46	76.36	76.70	77.20	77.48	78.03	78.14	78.34	77.70	77.64
29a	77.16	76.35	76.41	76.36	76.76	77.21	77.51	77.97	78.10	78.36	77.80	77.62
30	77.11		76.29	76.33	76.83	77.28	77.54	77.89	78.15	78.34	77.81	77.71
31	77.18		76.12		76.88		77.51	77.96		78.31		77.71

a Tape measurement.

79:1-4. Memphis Light, Gas and Water Division. On Winchester Road, about 4 miles southwest of Germantown. Records available: 1940, 1946-48.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	81.77	82.06	81.77	81.58	81.50	81.84	82.26	82.43	82.68	82.80	82.76	82.84
2	81.94	82.10	81.65	81.80	81.51	81.85	82.29	82.46	82.69	82.84	82.73	82.80
3	82.00	82.10	81.78	81.88	81.55	81.84	82.30	82.46	82.67	82.88	82.63	82.70
4	82.06	82.00	81.93	81.88	81.55	81.78	82.29	82.47	82.66	82.89	82.64	82.70
5	82.10	81.94	81.95	81.80	81.58	81.76	82.30	82.52	82.61	82.81	82.59	82.65
6	82.11	82.00	81.90	81.69	81.56	81.80	82.28	82.54	82.60	82.72	82.75	82.63
7	82.11	82.01	81.75	81.62	81.61	81.83	82.24	82.52	82.63	82.68	82.88	82.62
8	82.06	82.04	81.75	81.64	81.63	81.82	82.25	82.49	82.64	82.74	82.88	82.64
9	81.99	82.07a	81.70	81.76	81.60	81.88	82.29	82.46	82.69	82.79	82.81	82.71
10	82.11	82.10	81.68	81.77	81.62	81.94	82.31	82.46	82.73	82.78	82.79	82.85
11	82.13	82.09	81.81	81.59	81.62	81.98	82.30	82.45	82.74	82.78	82.87	82.84
12	82.03	81.98	81.93	81.51	81.62	81.98	82.30	82.45	82.74	82.85	82.87	82.70
13	82.04	81.78	81.95	81.57	81.64	81.98	82.29	82.46	82.74	82.86	82.84	82.69
14	82.10	81.93	81.89	81.70	81.66	82.01	82.25	82.47	82.76	82.83	82.84	82.71
15	82.10	82.04	81.70	81.73	81.64	82.04	82.30	82.48	82.74	82.83	82.82	82.69
16	.....	82.04	81.58	81.71	81.60	82.07	82.34	82.48	82.78	82.82	82.79	82.66
17	.....	81.94	81.73	81.69	81.61	82.09	82.37	82.51	82.82	82.92	82.70	82.76
18	.....	81.94	81.74	81.69	81.67	82.05	82.39	82.52	82.80	82.94	82.69	82.77
19	.....	81.81	81.64	81.66	81.71	82.07	82.37	82.53	82.74	82.91	82.51	82.62
20a	81.95	81.90	81.68	81.67	81.71	82.09	82.36	82.54	82.70	82.85	82.67	82.63
21	81.92	81.90	81.68	81.65	81.65	82.07	82.34	82.55	82.67	82.84	82.74	82.64
22	81.79	81.89	81.66	81.63	81.58	82.07	82.33	82.58	82.62	82.84	82.74	82.76
23	81.92	81.92	81.63	81.58	81.60	82.11	82.37	82.61	82.63	82.86	82.74	82.82
24	81.98	81.96	81.72	81.59	81.63	82.15	82.41	82.62	82.74	82.88	82.70	82.82
25	82.10	81.97	81.73	81.57	81.66	82.15	82.42	82.61	82.85	82.88	82.65	82.87
26	82.15	81.82	81.67	81.51	81.69	82.11	82.40	82.61	82.91	82.85	82.62	82.95
27	.....	81.76	81.62	81.56	81.68	82.14	82.39	82.66	82.91	82.81	82.64	82.95
28	.....	81.65	81.75	81.60	81.68	82.14	82.38	82.70	82.83	82.81	82.64	82.83
29a	82.05	81.77	81.75	81.60	81.68	82.15	82.40	82.71	82.71	82.82	82.76	82.62
30	82.00		81.65	81.57	81.74	82.20	82.43	82.63	82.76	82.82	82.82	82.75
31	81.97		81.38		81.81		82.39	82.64		82.81		82.79

a Tape measurement.

79:3-A. Memphis Light, Gas and Water Division. On southwest corner of intersection of Sycamore Avenue and Fifth Street. Records available: 1936-48.

79:3-A--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	51.5	46.1	44.8	50.1	54.5	57.5	57.4	....	....	56.2	50.2
2	....	51.3	45.5	44.9	50.1	55.3	57.5	56.8	....	....	56.0	50.3
3	a51.64	51.1	46.0	44.9	49.5	55.9	57.5	56.5	....	....	56.2	50.5
4	....	51.3	46.6	44.6	49.4	56.6	57.4	56.9	....	a57.90	56.3	50.5
5	....	51.4	46.7	44.0	49.9	57.1	56.9	57.1	....	57.7	56.5	50.3
6	....	51.4	46.7	43.6	50.6	57.1	56.3	57.1	a58.28	57.5	56.5	50.1
7	....	51.4	46.5	44.0	51.0	56.5	56.5	57.1	57.7	57.6	56.4	49.8
8	....	51.4	45.9	44.8	51.2	56.5	57.2	....	57.7	57.7	55.7	49.9
9	a48.97	51.0	45.4	45.2	51.2	56.8	57.8	a56.32	58.1	57.7	55.2	50.0
10	49.4	50.8	45.4	45.2	50.8	57.2	58.0	56.5	58.4	57.6	55.0	50.1
11	49.4	50.9	45.6	45.2	51.9	57.6	57.9	56.7	58.4	57.1	54.9	50.0
12	49.0	51.0	45.7	45.0	52.7	57.9	57.5	56.9	58.4	56.6	54.7	49.9
13	48.7	51.0	46.0	45.2	53.0	58.0	57.5	57.1	a57.98	56.6	54.6	49.7
14	48.9	51.1	45.9	45.5	53.1	57.7	57.8	57.2	....	56.9	54.4	49.8
15	49.1	51.1	45.5	45.7	53.1	58.1	....	57.2	....	57.3	53.9	50.2
16	49.4	50.6	45.7	46.1	53.0	58.5	....	56.7	a58.76	57.7	53.5	50.6
17	49.5	50.1	46.5	46.5	52.6	58.6	....	56.7	59.4	57.7	....	50.7
18	49.5	49.8	47.1	46.5	52.7	58.6	....	57.1	59.6	57.5	....	50.7
19	49.3	49.5	47.5	46.1	52.9	58.4	a58.33	57.6	59.6	56.9	53.3	50.6
20	49.5	49.5	....	46.6	53.2	58.3	58.3	58.1	59.3	56.8	53.3	50.1
21	49.7	49.3	....	47.4	53.7	57.7	58.6	58.4	59.4	56.8	53.2	49.7
22	50.1	48.9	....	48.2	54.1	58.0	58.7	58.4	59.7	56.9	52.7	49.7
23	50.4	48.4	46.8	49.1	54.1	58.3	59.0	58.0	60.2	56.9	52.2	49.7
24	50.7	47.9	46.5	49.5	53.7	58.5	59.0	58.3	60.6	56.9	52.0	49.5
25	50.7	47.6	46.5	49.6	53.9	58.5	58.8	58.7	60.6	56.5	51.8	49.2
26	50.6	47.2	46.5	49.1	53.9	58.6	58.1	59.1	60.5	55.9	51.6	48.7
27	50.7	46.7	46.6	49.1	54.0	58.6	57.6	59.4	59.8	55.8	51.3	47.7
28	50.9	46.5	46.4	49.4	54.3	58.0	57.4	59.5	....	55.9	50.9	47.3
29	51.1	46.5	45.5	49.7	54.5	57.6	57.4	59.5	....	56.2	50.6	47.3
30	51.3	....	44.7	49.8	54.5	57.5	57.4	a58.92	....	56.5	50.3	47.7
31	51.5	....	44.6	....	54.2	....	57.4	59.0	....	56.5	....	48.0

a Tape measurement.

79:5-193. Memphis Light, Gas and Water Division. Near Central Avenue and Tanglewood Street. Records available: 1936-48.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	91.8	....	93.1	93.5	96.8	99.5	....	....	100.4	100.9	99.3	97.2
2	92.0	....	93.2	93.7	96.7	99.7	....	....	100.4	100.8	99.4	97.3
3	92.0	a94.12	93.3	93.7	96.5	100.0	....	....	100.4	100.6	99.6	97.3
4	91.9	94.5	93.4	93.4	96.7	100.2	100.5	....	100.4	100.2	99.7	....
5	92.1	94.9	93.5	92.5	96.8	100.3	99.8	....	99.9a	100.05	99.8	....
6	92.4	95.2	93.4	92.8	97.0	100.3	98.9	....	99.6	....	....	....
7	92.6	95.1	92.7	93.0	97.2	100.0	98.7	....	99.3	....	....	a95.62
8	92.8	94.6	91.9	93.6	97.1	100.2	98.9	....	99.7	....	....	....
9	93.1	94.0	92.2	93.9	97.0	....	98.9	100.4	100.0	....	a98.90	....
10	93.1	94.4	92.6	93.9	97.2	....	98.8	100.5	100.0	....	....	....
11	92.7	94.5	93.1	93.6	97.4	....	98.6	....	100.0	....	....	....
12	92.0	94.6	93.5	93.4	97.6	....	99.1	....	99.7a	99.70	....	....
13	92.4	94.6	93.5	93.8	97.8	....	99.6	....	99.6a	100.48	....	....
14	92.8	94.8	93.4	94.2	98.0	....	99.9	....	99.8	100.7	....	a96.92
15	93.0	94.6	93.2	94.4	97.9	....	100.3	100.2	100.0	100.7	....	....
16	93.2	94.2	93.7	94.5	97.7	....	....	100.1	100.4	100.8	a98.12	....
17	93.3	94.3	94.0	94.6	97.7	....	....	100.4	100.5	100.7	....	....
18	93.2	94.2	94.1	94.6	98.0	....	....	....	100.4	....	....	....
19	92.9	94.0	94.3	94.5	98.2	....	....	....	100.2a	100.30	....	....
20	93.3	94.2	94.3	94.9	98.3	....	....	....	100.3	100.4	....	....
21	93.4	94.1	93.8	95.5	98.6	....	....	....	100.6	100.5	....	a96.69
22	93.8	93.8	93.3	95.8	98.9	....	....	....	100.8	100.5	97.8	97.1
23	94.1	93.1	93.7	96.2	98.9	....	....	....	101.1	100.4	97.8	97.2
24	94.1	93.4	93.9	96.2	98.8	....	....	....	101.3	....	....	97.2
25	93.8	93.4	93.9	95.9	99.1	....	....	....	101.4	....	....	96.7
26	93.2	93.6	93.9	95.9	99.3	....	....	....	101.2	a99.62	....	96.1
27	93.7	93.6	94.0	96.2	99.5	....	....	100.3	100.9	99.7	....	95.4

a Tape measurement.

79:5-193--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
28	93.5	93.9	96.4	99.6	....	....	100.4	100.9	99.8	....	a95.30
29	93.4	93.5	96.7	99.6	....	....	100.2	100.9	99.7	....	....
30	93.3	96.8	99.4	....	....	100.2	100.8	99.7a	96.75	....
31	93.3	....	99.1	....	....	100.3	....	99.6	....	....

a Tape measurement.

79:7-17. Memphis Light, Gas and Water Division. On North Parkway at end of North Garland Street. Records available: 1940-48.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	79.4	84.4	80.6	83.6	91.5	96.7	95.2	94.7	95.2	....	....	95.5
2	79.0	84.1	81.3	84.7	90.0	97.5	94.6	94.8	94.7	....	a100.48	96.9
3	78.9	84.2	82.5	84.7	89.1	98.3	94.7	96.2	93.8	....	....	97.5
4	79.1	84.8	82.6	83.6	89.5	98.7	93.1	96.5	93.6	a90.39	....	96.5
5	79.3	86.2	82.1	81.9	89.1	98.3	91.4	96.4	92.6	....	....	96.4
6	79.5	85.2	81.7	81.9	92.0	96.2	93.6	96.7	89.3	....	....	95.8
7	79.5	83.4	80.3	84.4	92.2	95.2	94.8	96.4	90.3	....	....	98.0
8	80.2	82.4	78.6	86.4	92.7	95.5	95.7	91.8	91.6	....	a98.90	98.4
9	80.8	83.7	79.0	....	91.0	95.4	95.9	90.9	92.6	....	....	96.2
10	80.9	85.2	79.4	84.9	93.1	96.6	95.5	91.3	92.8	....	....	96.2
11	79.9	86.2	82.5	83.5	94.2	97.3	93.5	91.6	92.5	....	....	96.3
12	78.2	86.4	83.2	84.6	90.4	96.1	94.4	91.8	92.3	....	....	96.0
13	79.0	84.4	83.5	85.0	91.7	93.4	95.0	92.3	91.7	....	....	95.1
14	79.4	84.1	83.1	85.6	91.8	96.0	96.1	92.1	92.5	....	....	95.6
15	79.9	83.6	83.3	85.8	91.9	97.2	97.8	90.0	93.1	....	a96.65	97.6
16	80.4	82.4	84.8	86.4	90.1	97.6	98.0	90.3	95.0	....	....	98.1
17	80.5	82.6	85.5	86.6	90.4	96.8	97.9	91.3	96.2	....	....	98.1
18	79.8	84.0	86.2	85.9	91.7	96.0	97.2	92.1	96.0	a92.95	....	96.1
19	80.0	84.1	86.5	86.5	91.9	96.0	95.8	93.0	95.6	....	....	....
20	80.7	83.6	....	88.2	95.1	93.5	97.0	93.5	94.8	....	....	a94.15
21	83.3	83.6	....	88.9	96.9	96.6	96.8	93.7	96.6	....	....	95.2
22	84.3	82.4	....	90.2	97.4	97.7	99.2	91.7	100.3	....	....	96.0
23	84.7	81.7	84.1	90.0	95.1	98.0	98.2	92.3	101.4	....	97.8	96.5
24	84.7	82.5	84.9	89.8	95.2	98.3	97.8	93.2	....	....	97.1	95.8
25	84.1	82.5	86.7	88.3	97.3	97.9	94.0	93.7	....	a94.43	96.7	95.3
26	83.1	81.8	86.8	88.1	97.2	98.0	94.3	96.2	....	....	96.4	93.2
27	84.1	82.1	85.5	89.2	97.0	96.4	94.7	97.0	a96.61	....	95.4	91.9
28	84.6	82.2	83.4	90.5	96.9	95.4	95.1	97.1	....	....	95.3	92.4
29	85.0	82.1	82.3	92.5	96.5	94.8	95.3	94.3	....	....	a94.10	96.7
30	85.2	....	80.9	91.3	94.5	94.6	95.7	93.2	....	....	95.1	98.8
31	85.2	....	81.6	....	95.2	....	96.0	94.5	....	....	....	99.5

a Tape measurement.

79:7-26. Memphis Light, Gas and Water Division. On the grounds of the North Parkway pumping station, about 125 feet east of North Dunlap Street, and about 1,000 feet south of North Parkway. Records available: 1945-48.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	63.5	65.4	61.2	66.4	58.7	64.1	62.8	71.9	83.5	65.8	a61.78	68.8
2	63.5	66.2	61.1	66.5	58.8	64.8	73.8	a71.29	83.8	65.7	61.3	....
3	63.5	65.3	60.9	63.9	61.2	65.1	62.9	....	83.5	65.8	62.0	....
4	....	68.2	62.3	63.0	60.1	67.3	62.9	....	83.3	65.7	62.5	....
5a	63.03	65.5	62.6	62.5	58.9	67.7	62.7	....	82.2	65.4	64.7	....
6	....	65.5	62.7	62.6	58.4	64.9	....	....	81.5	65.3	65.6	a66.90
7	....	65.0	62.8	62.8	58.4	64.3	....	....	81.3	64.7	66.0	66.6
8	....	63.0	63.1	61.9	62.5	64.6	....	....	81.6	64.9	66.1	66.4
9	....	67.8	63.4	61.6	63.6	65.0	....	a69.39	82.5	65.0	66.1	66.5
10	....	68.8	63.5	61.4	58.8	65.2	77.0	....	71.7	....	66.4	66.7
11	....	68.9	63.3	61.0	64.3	65.5	77.0	....	....	a64.65	66.8	66.6
12a	62.28	68.6	62.7	61.0	64.9	65.7	77.3	....	82.2	63.7	67.0	66.6
13	62.4	68.4	62.0	60.4	65.5	65.8	77.8	....	82.4	63.4	67.5	66.6
14	62.6	68.8	61.6	60.1	65.6	65.0	78.1	....	82.0	63.2	67.8	66.6

a Tape measurement.

79:7-26--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
15	62.6	66.0	61.0	60.0	65.6	64.9	....	....	82.2	62.8	67.9	....
16	62.7	65.6	61.0	59.8	65.5	64.8	78.6	a80.94	82.1	....	68.2	....
17	62.7	65.6	61.2	59.7	65.7	....	77.3	a72.40	81.4	....	68.3	....
18	62.8	66.7	61.1	59.6	65.8	....	78.1	....	....	a62.62	68.2	....
19	65.7	66.6	60.5	61.3	65.7	....	74.3	....	....	62.3	69.8	....
20	66.7	65.1	60.5	61.8	65.7	....	86.2	....	a80.60	62.3	70.4	a68.29
21	66.9	64.5	60.4	61.9	66.0	a72.48	85.2	....	80.8	62.7	70.5	68.0
22	67.4	64.1	60.0	61.3	66.1	74.0	....	....	....	63.1	70.3	....
23	....	63.8	61.8	61.4	64.8	74.6	....	a80.38	....	63.3	69.7	....
24	....	66.1	64.8	62.1	64.8	63.7	....	80.3	....	63.5	69.9	....
25	65.0	66.1	65.3	62.3	65.4	73.9	....	....	....	63.6	68.9	67.8
26	64.8	63.7	65.3	62.5	65.5	74.3	a82.96	....	....	63.0	68.5	....
27	64.9	61.1	65.5	62.7	65.7	62.8	83.4	....	a71.02	62.5	68.5	a66.85
28	65.0	61.2	65.5	63.5	65.2	75.8	83.3	....	70.9	62.4	68.5	67.0
29	68.0	61.2	65.5	60.5	65.0	64.4	83.2	....	70.6	62.2	68.7	67.2
30	68.5	....	65.5	59.3	64.8	62.8	83.3	a83.20	66.6	62.1	68.8	67.6
31	68.6	....	67.2	....	64.7	....	83.8	83.4	....	....	....	67.7

a Tape measurement.

79:7-34. Memphis Light, Gas and Water Division. In lot between Leath and Dunlap Streets, about 250 feet north of North Parkway. Records available; 1944-48.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	94.8	....	91.1	90.4	103.2	107.9
2	94.5	a94.86	94.8	92.0	102.4	109.4
3	....	95.5	96.4	92.1	99.6	109.6
4	....	98.0	96.7	90.2	101.5	111.0
5	a93.80	96.6	96.1	89.3	102.4	109.7
6	94.4	96.6	95.3	93.2	103.5	104.8
7	94.0	96.5	93.0	95.6	104.0	101.2
8	95.3	94.1	92.4	96.7	104.0	106.7
9	95.9	a93.20	93.1	96.6	100.6	106.6
10	95.9	....	93.9	96.2	100.9	106.6
11	94.7	....	95.9	94.1	103.4	108.8
12	93.1	....	95.2	93.9	103.5	108.8
13	94.3	....	95.4	94.6	103.4	108.6
14	94.3	....	94.2	95.2	....	109.6
15	93.4	....	94.2	95.5	....	110.8
16	94.1	a94.62	95.5	96.3	....	110.3
17	94.0	96.5	96.8	96.4	a100.39	109.0
18	....	96.5	96.8	95.6	102.9	108.4
19	95.5	97.4	95.4	95.4	....	107.0
20	96.9	97.7	94.7	96.8	....	....
21	97.2	97.4	93.6	101.4	....	108.9
22	98.1	95.4	91.7	102.7	....	107.9
23	98.6	94.9	91.3	103.2	....	....
24	98.5	95.4	92.4	103.2	a103.16	....
25	95.8	93.8	91.1	102.8	103.8	....
26	a96.25	94.8	91.1	99.9	101.8	....
27	....	95.0	90.8	102.4	103.2	....
28	....	93.3	87.4	104.3	103.2	a105.90
29	....	93.1	89.4	103.4	101.4	105.2
30	....	....	89.4	103.2	101.2	103.2
31	....	....	90.9	....	104.8	....

Lowest daily water level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	103.8	....	103.6	104.6	101.7	93.2
2	101.7	a 96.97	103.9	104.3	102.8	93.8
3	103.3	102.0	104.1	102.4	102.7	94.0
4	102.9	....	104.0	102.3	101.7	93.9
5	101.1	....	101.8	102.5	102.0	93.0

a Tape measurement.

79:7-34--Continued.

Lowest daily water level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	103.2	a100.72	97.7	102.5	99.8	92.9
7	105.6	100.2	99.7	104.8	....	93.4
8	109.2	98.7	101.6	105.0	a96.10	93.5
9	109.2	99.2	102.0	104.9	98.3	93.5
10	106.8	98.0	100.7	102.7	98.2	93.3
11	102.6	98.4	100.6	102.7	97.7	93.7
12	107.1	98.6	100.8	104.1	97.4	92.6
13	107.2	101.9	100.6	104.9	97.2	92.6
14	107.5	101.3	102.1	105.5	96.4	....
15	108.8	97.4	102.8	106.1	95.2	....
16	.....	99.7	.....	106.3	95.6	....
17	.....	99.5	.....	105.5	95.6	....
18	.....	99.5	.....	102.6	95.7	....
19	a102.35	103.0	.....	103.3	95.0	....
20	.....	104.0	a101.90	103.3	93.0	a90.44
21	.....	103.9	106.1	103.8	91.8	93.1
22	.....	102.1	110.4	104.0	91.2	93.4
23	.....	102.5	111.3	104.0	91.8	93.4
24	.....	103.7	108.9	102.7	92.0	93.1
25	.....	104.8	105.7	99.3	92.7	91.6
26	a113.57	105.4	101.3	99.8	90.8	86.4
27	115.8	105.8	100.7	100.4	90.1	88.5
28	.....	104.4	101.1	102.1	89.5	89.0
29	.....	104.5	103.4	103.9	89.5	90.4
30	.....	102.8	104.2	103.9	90.6	93.0
31	.....	103.5	.....	102.0	.....	93.8

a Tape measurement.

79:8-56. Memphis Light, Gas and Water Division. On the grounds of the Sheahan pumping station, about 50 feet east of Normal Street, and about 0.5 miles south of Central Avenue. Records available: 1945-48.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	86.0	....	86.7	93.7	90.9	92.0
2	81.9	....	86.8	94.0	91.0	92.0
3	85.6	....	86.6	94.1	91.1	91.9
4	86.4	a92.20	86.6	93.8	91.0	91.8
5	86.7	92.2	87.6	93.5	91.2	91.9
6	87.0	92.1	87.7	93.5	91.4	92.0
7	87.0	92.0	88.0	93.2	91.4	92.1
8	87.0	92.1	88.1	93.3	91.5	92.6
9	86.9	92.0	88.2	92.1	91.8	92.8
10	87.0	84.2	88.4	91.6	92.0	93.2
11	86.9	85.1	88.4	88.8	92.1	93.4
12	86.6	85.5	88.4	90.3	91.9	93.4
13	86.7	85.6	88.1	90.6	92.1	93.6
14	86.7	83.1	87.7	90.5	89.4	94.3
15	86.6	82.9	87.1	90.5	89.1	94.7
16	86.6	85.1	....	90.6	88.9	94.8
17	86.6	85.9	a86.90	90.6	90.8	94.9
18	86.5	86.0	86.8	90.6	91.2	94.9
19	86.4	86.2	86.4	90.5	91.4	94.9
20	....	90.4	86.3	89.6	92.7	94.9
21	89.3	90.8	86.2	89.5	92.9	94.9
22	90.2	90.7	86.1	89.5	91.4	93.3
23	90.6	90.5	86.0	89.5	91.4	96.3
24	91.0	87.7	91.8	89.5	91.3	96.8
25	91.4	87.3	92.9	90.6	91.4	97.1
26	91.5	87.1	93.4	90.7	91.3	97.6
27	91.8	86.8	93.8	90.5	91.5	97.8
28	....	86.8	94.0	90.7	91.8	98.0
29	....	86.8	93.9	90.9	91.7	95.0
30	....	....	93.7	91.0	91.8	94.4
31	....	....	93.1	....	91.9	....

a Tape measurement.

79:8-56--Continued.

Lowest daily water level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	95.0	101.5	102.6	100.5	98.5	99.0
2	94.4	101.5	.....	100.4	99.1	99.0
3	94.4	102.8	.....	100.3	99.4	99.0
4	94.4	102.9	.....	103.3	97.5	99.0
5	93.6	101.8	.....	100.1	97.1	98.6
6	92.4	102.7	.....	100.1	97.4	98.9
7	89.6	103.2	a102.29	100.0	97.7	99.0
8	90.3	103.5	102.5	100.0	97.8	99.0
9	89.8	103.7	102.5	100.3	94.4	99.9
10	88.6	103.3	101.9	99.6	96.8	99.2
11	88.5	103.6	101.5	99.6	97.5	99.1
12	94.8	103.7	101.3	99.8	97.6	99.0
13	96.4	103.7	101.1	100.0	94.2	99.1
14	97.2	103.6	101.0	99.8	94.1	99.0
15	97.7	103.9	101.2	99.8	94.1	98.3
16	97.9	104.0	101.3	99.7	96.5	98.3
17	98.1	103.4	101.3	99.6	96.9	98.3
18	98.3	103.4	101.0	99.5	96.8	98.3
19	98.4	102.7	100.9	99.2	97.0	98.3
20	98.6	101.8	100.8	99.1	97.2	98.3
21	99.0	101.9	100.5	99.1	97.5	95.4
22	99.4	101.9	100.4	98.9	97.8	94.7
23	100.1	101.9	100.6	98.9	98.0	94.6
24	100.5	101.9	100.8	98.9	100.2	94.4
25	100.6	101.9	101.2	98.9	100.4	94.3
26	100.4	102.0	101.1	99.0	100.9	94.1
27	100.0	102.1	100.8	99.1	100.8	93.7
28	100.3	102.2	100.7	98.5	101.2	93.1
29	101.0	101.9	100.5	98.7	101.3	92.7
30	101.8	102.0	100.5	98.6	98.8	88.5
31	101.7	102.1	.....	98.4	.....	87.6

a Tape measurement.

79:8-73. Memphis Light, Gas and Water Division. About 300 feet north of Central Avenue, and about 800 feet east of Normal Street. Records available: 1946-48.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	111.3	.....	112.6	108.8	111.7	116.5
2	111.5	.....	112.5	111.1	111.4	116.8
3	110.6	.....	112.7	111.2	111.4	117.0
4	111.4	a113.05	112.9	111.0	111.2	117.0
5	111.7	113.5	112.9	110.6	111.7	117.2
6	.....	113.7	112.3	110.5	112.2	116.1
7	a111.76	112.9	112.0	110.6	112.0	115.6
8	.....	112.7	112.2	111.0	111.8	115.9
9	.....	112.6	112.3	111.3	111.8	114.3
10	.....	109.8	112.5	111.1	111.1	114.5
11	.....	111.2	112.8	109.7	111.8	114.7
12	.....	110.1	112.8	110.8	112.1	114.7
13	.....	113.4	111.8	111.3	112.8	114.8
14	a111.70	113.7	111.7	111.4	113.0	115.1
15	111.8	112.8	112.2	111.4	113.0	115.2
16	112.0	112.4	112.5	111.5	113.0	115.3
17	112.3	110.5	112.7	111.6	113.0	115.3
18	112.4	113.5	112.7	111.6	113.0	115.3
19	112.7	114.1	112.1	111.5	113.5	114.7
20	112.8	114.4	112.1	111.6	116.3	114.6
21	112.8	113.1	112.0	111.8	116.4	117.9
22	113.2	111.6	111.8	111.8	113.4	118.1
23	113.6	112.4	112.2	111.9	113.4	118.2
24	113.6	112.7	112.3	111.9	115.7	116.2
25	113.2	112.7	109.1	111.9	115.8	116.2
26	112.2	112.6	108.7	112.0	116.4	115.4

a Tape measurement.

79:8-73--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
27	112.6	112.5	108.8	112.2	116.5	115.5
28	112.5	109.0	112.2	115.8	118.4
29	112.7	108.8	112.4	113.4	118.4
30		108.9	112.4	113.7	118.2
31		109.2		113.5	

Lowest daily water level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	117.8	117.8	120.6	.....	115.7	122.4
2	117.9	117.6	120.6	.....	118.2	122.3
3	117.0	117.7	120.2	.....	120.2	122.4
4	116.8	118.0	120.2	.....	120.2	122.3
5	116.6	118.1	120.2	a117.93	120.2	122.4
6	116.3	116.2	.....	118.2	120.3	122.4
7	116.5	115.6	118.0	118.1	120.5	122.3
8	116.5	115.7	118.1	115.6	.....	122.3
9	117.0	117.3	120.0	115.7	a121.22	122.3
10	116.8	117.4	119.7	116.2	121.4	119.8
11	116.6	118.2	119.5	116.0	121.0	119.6
12	116.6	118.7	119.4	117.4	122.5	119.4
13	115.7	117.8	119.3	117.7	122.5	119.4
14	116.5	117.8	119.5	117.8	122.6	118.3
15	116.9	.....	118.3	117.9	122.5	118.1
16	117.0	.....	118.7	118.1	122.3	118.4
17	116.2	117.8	118.8	117.8	122.1	118.4
18	116.2	118.1	118.0	117.8	121.9	118.3
19	116.2	117.4	117.8	117.2	122.0	118.1
20	117.0	117.5	117.7	117.2	122.1	118.4
21	116.8	117.3	116.5	117.2	122.2	118.7
22	116.9	117.5	116.7	117.0	121.4	119.4
23	113.5	117.9	117.8	117.1	121.3	119.6
24	112.4	118.6	118.6	117.0	121.3	119.6
25	112.0	120.4	118.8	119.7	121.2	119.7
26	117.0	120.6	118.8	120.1	121.8	119.6
27	117.5	120.3	118.7	121.5	121.8	118.6
28	117.3	120.0	a117.80	121.7	121.8	118.2
29	115.7	120.2	.....	119.2	121.6	118.7
30	117.3	120.3	.....	115.4	122.2	110.2
31	118.1	120.6		115.3		102.3

a Tape measurement.

79:8-863. Memphis Light, Gas and Water Division. About 225 feet south of Willow Road, and about 1,400 feet east of Getwell Road. Drilled observation well, diameter 6 inches, depth 91 feet. Measuring point, top of 6-inch coupling, 1.2 feet above land-surface datum. Equipped with water-stage recorder on Aug. 12. Records available: 1948.

Lowest daily water level, from recorder charts

Day	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	27.31	28.15	27.38	27.19
2	.....	27.85	28.42	27.54	27.08
3	.....	27.58	27.86	27.71	27.15
4	.....	27.74	27.65	27.46	27.10
5	.....	27.86	27.52	27.50	27.10
6	.....	27.41	27.59	27.58	27.12
7	.....	27.35	27.70	27.56	27.10
8	.....	a27.36	27.76	27.36	27.10
9	.....	.....	27.76	27.36	27.25
10	.....	.....	27.68	27.41	27.29
11	.....	.....	27.67	27.43	27.00
12	a27.09	.....	27.79	27.28	26.99
13	26.95	a27.70	27.79	27.34	27.10
14	26.94	27.78	27.31	27.27	27.12
15	26.88	27.88	27.82	27.34	27.07
16	26.98	27.96	27.91	27.42	27.30

a Tape measurement.

79:8-86S--Continued.

Lowest daily water level, from recorder charts					
Day	Aug.	Sept.	Oct.	Nov.	Dec.
17	27.12	28.04	27.64	27.43	27.30
18	27.20	27.70	27.73	27.29	26.94
19	27.22	27.64	27.71	27.36	26.96
20	27.23	27.64	27.86	27.48	26.91
21	27.26	27.79	27.59	27.40	26.91
22	27.33	28.07	27.50	27.24	27.00
23	27.34	28.24	27.48	27.22	26.93
24	27.39	28.55	27.47	27.26	26.78
25	27.44	28.00	27.43	27.20	27.05
26	27.53	27.68	27.48	27.38	27.03
27	27.68	27.70	27.67	27.35	26.73
28	27.74	27.76	27.88	27.38	26.64
29	27.75	27.91	27.76	27.35	27.10
30	27.69	27.29	27.67	27.22	27.33
31	27.78		27.54		27.35

79:9-110. Memphis Light, Gas and Water Division. On Pine Hills golf course, about 175 feet west of Mississippi Boulevard, and about 500 feet south of Alice Avenue. Drilled observation well, diameter 4 inches, depth 322 feet. Measuring point, top of 4-inch coupling, 1.5 feet above land-surface datum. Equipped with water-stage recorder on June 24. Records available: 1948.

Lowest daily water level, from recorder charts							
Day	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	54.8	....	56.1	53.4	51.9
2	54.3	....	....	53.6	52.0
3	54.6	....	55.7	53.9	52.0
4	55.2	54.0	52.0
5	55.5	54.1	51.7
6	a52.57	....	55.2	55.6	54.2	51.2
7	52.6	....	54.9	55.8	53.8	51.5
8	52.5	....	55.2	55.9	53.2	51.5
9	52.6	54.2	....	55.9	53.5	51.8
10	52.6	54.5	....	55.3	53.8	51.8
11	52.5	....	....	54.8	53.8	51.8
12	52.6	....	55.1	55.0	53.8	51.5
13	53.0	....	54.8	55.1	53.8	51.1
14	53.2	....	55.2	55.3	53.6	51.4
15	53.5	....	....	55.3	53.2	51.7
16	53.8	54.2	....	55.2	53.0	51.9
17	53.8	54.5	....	55.1	53.2	51.9
18	53.6	54.8	....	54.9	53.2	51.9
19	53.7	55.0	....	55.0	53.2	51.4
20	54.2	55.1	55.2	55.0	53.2	51.0
21	54.4	55.1	....	55.0	53.0	51.2
22	55.0	....	55.1	52.4	51.4
23	54.6	....	55.1	52.6	51.4
24	a54.00	....	54.8	....	54.5	52.7	51.3
25	54.4	54.9	....	53.9	52.7	50.7
26	54.0	55.2	....	54.2	52.1	....
27	54.4	....	a55.65	54.4	51.9	a49.28
28	56.0	54.5	51.5	49.7
29	a53.76	....	....	56.0	54.5	51.3	50.0
30	55.1	55.1	....	54.4	51.6	50.3
31	55.0	....	....	54.0	....	50.4

a Tape measurement.

79:11-1. Forest Products Chemical Co. In engine room of plant, about 300 feet south of Chelsea Avenue, and about 1,200 feet east of Fairfax Street. Records available: 1944-48.

79:11-1--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	66.4	....	76.3	78.1	....	....	....	82.1	....	79.2	78.0
2	67.4	....	76.9	76.8	....	76.8	....	81.8	....	79.7	77.9
3	66.6	a72.12	76.3	78.2	....	....	a77.26	....	....	80.1	78.3
4	66.6	72.6	76.0	80.2	....	....	....	....	....	80.1	78.3
5	66.3	72.2	76.5	79.2	....	74.8	....	80.5	a81.85	....	78.2
6	66.0	72.4	....	77.8	....	74.1	....	80.5	....	....	77.4
7	66.3	72.0	78.1	....	....	74.0	....	80.3	....	....	77.7
8	65.5	73.8	76.8	....	....	74.0	....	80.3	....	79.7	78.2
9	65.4	73.8	76.0	....	....	75.0	....	80.5	....	80.0	79.0
10	65.1	73.3	75.5	....	a80.46	75.0	a79.70	80.6	....	80.3	79.0
11	66.7	....	75.0	....	....	74.4	81.3	80.6	....	80.1	79.0
12	67.6	....	74.7	....	....	....	81.4	80.4	a79.28	80.0	78.5
13	66.6	....	74.2	a73.86	....	77.6	81.6	....	....	79.3	78.2
14	66.0	....	73.5	75.2	....	....	82.2	80.5	....	78.5	78.7
15	65.5	....	74.1	76.1	a79.35	....	81.7	81.0	....	78.2	78.6
16	65.1	....	74.4	75.6	....	....	81.5	....	....	78.0	77.9
17	65.2	a74.14	74.6	74.7	....	....	81.9	....	....	77.1	78.2
18	65.8	72.9	74.2	75.6	....	....	82.1	....	....	77.8	78.2
19	67.0	72.8	74.9	76.8	....	....	82.3	....	a79.42	78.2	77.3
20	66.5	72.0	77.1	75.4	80.0	a78.25	....	....	....	78.3	77.5
21	66.3	72.9	79.1	74.9	....	....	....	a78.94	....	77.8	78.2
22	66.4	74.5	78.7	74.5	a78.74	....	....	81.4	....	77.4	78.6
23	65.6	74.9	77.9	74.0	....	....	82.1	....	....	77.9	79.0
24	67.0	74.2	77.0	73.9	....	....	a77.65	81.9	81.2	78.3	78.4
25	67.9	73.9	76.2	74.0	....	....	....	....	79.7	78.3	75.6
26	67.2	73.4	76.4	76.1	77.0	....	....	....	79.5	77.6	76.2
27	64.1	75.9	76.0	....	76.3	....	....	....	79.8	78.0	76.4
28	....	76.8	77.5	....	76.8	....	....	a82.10	80.3	77.4	77.5
29	....	76.1	78.2	....	76.8	....	....	....	79.3	77.2	78.3
30	....	....	79.2	....	76.4	....	....	....	79.4	77.6	78.3
31	....	....	78.7	....	....	....	a81.55	....	77.6	....	78.3

a Tape measurement.

79:16-1. Layne & Bowler, Inc. In well house on University Street, about 250 feet south of Chelsea Avenue. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	62.00	Apr. 13	62.45	July 13	70.71	Oct. 12	71.89
13	61.67	20	66.92	20	73.33	19	71.92
21	61.02	27	68.12	28	73.27	26	72.33
Feb. 4	65.98	May 4	68.29	Aug. 3	73.48	Nov. 2	70.69
10	65.47	11	69.73	10	72.21	9	70.14
17	66.41	18	70.72	17	72.61	16	71.21
24	64.36	25	72.29	24	72.73	23	69.48
Mar. 2	63.60	June 1	72.73	31	73.65	30	66.84
10	62.52	7	74.11	Sept. 7	72.22	Dec. 7	66.31
16	64.98	15	73.78	14	72.40	14	65.85
23	64.12	22	73.39	21	73.31	21	61.39
30	63.61	29	72.38	28	73.62	28	60.95
Apr. 6	62.41	July 6	68.48	Oct. 5	72.91		

79:19-1. Oliver Finnie Co. In basement of plant, about 50 feet south of Vance Avenue, and about 450 feet west of South Front Street. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	100.34	Mar. 16	98.85	May 18	109.19	July 20	118.11
13	101.26	23	98.70	25	110.92	28	116.28
21	101.23	30	98.42	June 1	113.30	Aug. 3	115.97
Feb. 4	103.31	Apr. 6	98.42	7	113.25	10	115.12
10	100.19	13	99.40	15	116.01	17	116.23
17	100.87	20	101.93	22	115.45	24	116.46
24	99.31	27	105.75	29	115.45	31	117.20
Mar. 2	98.88	May 4	105.82	July 6	114.70	Sept. 7	114.10
10	98.56	11	109.47	13	116.45	14	115.12

79:19-1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 21	116.87	Oct. 19	116.21	Nov. 16	109.08	Dec. 14	108.45
28	116.96	26	107.37	23	108.34	21	106.58
Oct. 5	116.63	Nov. 2	109.72	30	108.70	28	105.79
12	115.82	9	109.00	Dec. 7	108.83		

79:20-4. Memphis Generating Co. East of Fourth Street, and about 500 feet north of Iowa Avenue. Records available: 1943-48.

Jan. 6	101.32	Apr. 13	97.36	July 13	111.46	Oct. 12	109.50
13	100.66	20	102.46	20	115.84	19	108.52
21	100.40	27	104.41	28	113.06	26	106.94
Feb. 4	99.64	May 4	103.78	Aug. 3	112.04	Nov. 2	107.84
10	101.30	11	107.50	10	114.68	9	107.00
17	98.98	18	109.08	17	114.62	16	107.51
24	100.56	25	109.87	24	116.63	23	105.02
Mar. 2	99.32	June 1	113.08	31	115.97	30	101.23
10	98.21	7	112.00	Sept. 7	112.68	Dec. 7	101.12
16	101.96	15	114.72	14	113.40	14	100.61
23	100.34	22	114.18	21	113.72	21	99.87
30	100.21	29	112.74	28	114.01	28	99.07
Apr. 6	97.10	July 6	113.57	Oct. 5	113.47		

79:22-1. The Liquid Carbonic Corporation. About 375 feet north of McLemore Avenue, and about 400 feet west of Florida Street. Records available: 1945-48.

Jan. 6	108.86	Apr. 13	102.93	July 13	117.29	Oct. 12	125.75
13	108.24	20	111.70	20	125.56	19	126.51
21	108.03	27	114.17	28	126.16	26	125.55
Feb. 4	116.09	May 4	112.99	Aug. 3	128.10	Nov. 2	124.77
10	112.34	11	116.59	10	124.74	9	123.49
17	114.73	18	117.00	17	125.31	16	122.12
24	112.99	25	112.69	24	125.01	23	120.63
Mar. 2	105.68	June 1	120.45	31	128.28	30	121.11
10	105.41	8	121.86	Sept. 7	125.40	Dec. 7	120.80
16	106.07	15	118.38	14	126.44	14	122.12
23	112.25	22	123.25	21	126.27	21	122.41
30	112.34	29	124.04	28	126.40	28	122.96
Apr. 6	102.87	July 6	123.69	Oct. 5	126.06		

79:23-1. Memphis Park Commission. At south end of lake in Riverside Park. Records available: 1944-48.

Jan. 6	97.65	Mar. 23	94.42	July 20	108.72	Nov. 2	106.71
13	97.87	30	94.08	28	109.01	9	102.89
22	98.01	Apr. 6	91.04	Aug. 31	105.19	16	103.27
Feb. 4	102.70	13	90.87	Sept. 7	107.91	23	102.81
10	102.00	20	92.38	28	106.18	30	102.67
17	100.10	May 11	99.43	Oct. 5	105.77	Dec. 7	102.19
24	100.28	June 8	102.84	12	105.12	14	100.47
Mar. 2	98.34	22	102.97	19	104.71	21	98.50
10	93.87	29	102.85	26	106.48	28	99.16
16	99.29	July 6	103.78				

79:25-1. Apex Laundry Co. In lot between Rozelle and Kyle Streets, 225 feet south of Lamar Avenue. Records available: 1944-48.

Jan. 8	100.27	Feb. 5	100.91	Feb. 25	101.92	Mar. 10	106.28
15	100.32	11	101.21	Mar. 3	105.61	17	96.87
22	100.64	19	101.48				

79:26-2. C. S. Chapman. On Raleigh-Millington road, about 0.7 mile north of Raleigh. Records available: 1944-48.

79:26-2--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	78.12	Apr. 5	78.42	July 5	81.21	Oct. 4	81.57
12	78.43	12	77.84	12	80.39	11	80.13
20	78.45	19	77.97	19	80.53	18	79.33
29	78.76	26	78.47	Aug. 2	80.71	25	78.71
Feb. 2	78.61	May 3	78.56	9	80.99	Nov. 1	78.30
9	79.32	10	78.87	16	80.93	8	77.01
16	78.89	17	79.06	23	81.12	15	75.57
23	79.02	24	79.19	30	82.28	29	75.50
Mar. 1	77.91	31	79.52	Sept. 6	82.23	Dec. 6	77.03
9	78.61	June 7	80.83	13	82.24	13	77.92
15	78.84	14	81.61	20	82.35	20	78.16
24	78.79	21	81.93	27	82.41	27	78.39
29	78.85	28	81.33				

79:28-2. Virginia Carolina Chemical Co. About 375 feet east of Collins Street, and about 700 feet north of Poplar Avenue. Nearby well pumping at time of each measurement. Records available: 1944-48.

Jan. 6	39.08	May 11	43.38	Aug. 3	41.73	Oct. 19	44.16
13	38.99	18	43.44	10	42.21	26	44.56
21	44.00	25	43.20	17	41.50	Nov. 2	44.23
Feb. 4	38.59	June 1	43.18	24	41.78	9	43.40
10	39.30	7	42.78	31	41.92	16	43.63
17	43.09	15	42.85	Sept. 7	42.16	23	43.31
24	39.78	22	42.68	14	42.27	30	42.60
Mar. 10	44.64	29	42.36	21	42.50	Dec. 7	42.41
16	43.52	July 6	42.20	28	42.61	14	41.80
Apr. 20	43.53	13	42.12	Oct. 5	42.12	21	39.60
27	43.80	20	42.17	12	43.05	28	39.43
May 4	44.00	28	42.29				

79:32-4. Bannon Ice & Fuel Co. About 150 feet south of Auction Avenue, and about 150 feet east of North Seventh Street. Records available: 1943-48.

Jan. 5	59.15	Apr. 12	56.68	July 5	66.48	Oct. 4	68.75
12	57.35	19	58.30	12	69.13	11	66.83
21	61.39	26	61.05	26	68.97	18	66.08
26	62.52	May 3	61.21	Aug. 2	67.73	25	66.95
Feb. 2	61.80	10	63.39	9	67.33	Nov. 1	65.17
9	58.69	17	64.25	16	66.92	8	64.85
16	60.31	24	66.51	23	69.60	15	64.69
Mar. 1	56.33	31	66.33	30	70.24	29	63.68
8	55.83	June 7	67.55	Sept. 6	66.99	Dec. 6	64.97
15	56.43	14	69.32	13	67.15	13	65.41
24	58.68	21	69.59	20	70.49	20	66.66
29	54.64	28	68.76	27	69.00	27	66.41
Apr. 5	53.34						

79:33-2. Memphis State College. In pump house, about 600 feet south of Norriswood Avenue, and about 700 feet east of Patterson Street. Records available: 1945-47. No measurements made in 1948.

79:34-1. H. Blockman & Co. About 250 feet south of Mallory Avenue, about 600 feet east of South Third Street. Records available: 1944-47. No measurements made in 1948.

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. Records available: 1945-48.

Jan. 7	61.51	Feb. 25	61.60	Apr. 21	61.11	June 16	67.70
14	62.65	Mar. 3	65.26	28	61.20	23	63.59
22	61.55	11	61.44	May 19	61.56	30	63.80
Feb. 5	61.69	25	61.23	26	61.78	July 7	64.07
11	61.85	31	61.27	June 2	62.30	14	63.97
19	63.88	Apr. 14	62.00	8	67.64	21	64.66

79:36-1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 28	64.52	Aug. 31	70.80	Oct. 11	64.40	Nov. 15	61.60
Aug. 4	67.44	Sept. 6	65.17	18	64.00	29	58.87
11	64.53	13	66.32	25	64.47	Dec. 6	60.07
18	66.66	27	67.76	Nov. 1	62.30	13	61.31
24	66.63	Oct. 4	66.51	8	62.05	27	61.33

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. Records available: 1945-48.

Jan. 7	54.98	June 16	60.45	Sept. 6	60.14	Nov. 1	71.70
Mar. 17	57.07	30	61.69	27	75.55	8	70.19
31	55.42	July 14	65.52	Oct. 4	74.70	29	66.52
Apr. 7	60.60	Aug. 4	73.56	11	71.57	Dec. 6	61.36
21	58.84	24	69.38	18	69.56	13	59.12
May 5	57.10	31	73.39	25	71.50	27	62.90
June 2	58.19						

79:37-1. Whitehaven High School. About 250 feet west of U. S. Highway 51, and about 0.35 mile south of Capleville-Whitehaven Road. Records available: 1944-48.

Jan. 7	43.19	Apr. 14	38.78	July 14	38.97	Oct. 12	42.02
14	43.24	21	38.31	21	39.31	19	41.20
22	43.26	28	37.80	28	39.57	26	43.06
Feb. 5	43.02	May 5	37.52	Aug. 4	39.83	Nov. 2	42.69
11	42.99	12	37.30	11	38.43	9	41.43
19	42.81	20	37.06	18	40.32	16	42.17
25	42.45	26	36.90	24	40.53	23	41.09
Mar. 3	42.14	June 2	37.07	31	41.04	30	38.97
11	41.44	8	37.23	Sept. 7	41.00	Dec. 7	38.53
17	40.94	16	37.57	14	40.95	14	38.27
25	40.40	23	37.91	21	41.46	21	37.53
31	39.80	30	38.26	28	41.68	28	37.27
Apr. 7	39.29	July 7	38.67	Oct. 5	41.35		

79:38-3. American Finishing Co. In Memphis, about 150 feet east of Lauderdale Street, and about 275 feet south of Bodley Avenue. Records available: 1945-48.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	78.7	....	76.2	74.8	....	81.0	89.9	87.2	90.9	92.0	80.3	79.6
2	74.0	....	76.5	74.9	....	81.4	90.4	88.4	91.8	91.4	81.0	80.5
3	73.6	a77.70	76.9	74.9	....	82.0	88.2	89.5	92.0	86.2	82.4	80.0
4	73.3	78.4	76.9	74.4	a79.80	82.2	80.8	89.9	91.2	....	82.5	80.0
5	80.6	79.0	77.1	79.2	a80.28	81.7	79.6	90.0	88.9	....	81.9	78.8
6	81.9	81.1	76.8	79.7	82.8	78.2	79.0	90.0	85.0	....	80.8	77.6
7	81.9	79.3	73.8	....	82.3	80.9	78.7	89.4	89.0	....	76.3	79.1
8	81.4	77.8	74.9	....	81.7	81.7	78.5	87.2	90.2	....	79.7	79.1
9	82.2	....	75.4	....	76.9	82.8	78.7	88.2	90.3	....	82.2	79.9
10	81.2	79.0	....	....	78.1	83.5	78.9	89.8	90.8	....	82.7	79.9
11	74.7	79.5	....	....	77.9	83.5	78.8	89.7	90.5	....	82.4	79.5
12	75.8	79.4	....	....	78.3	83.3	82.2	89.6	85.0	....	81.6	76.8
13	76.7	79.2	....	a74.40	78.6	80.0	83.0	90.2	88.5	....	80.9	76.3
14	76.5	....	....	....	78.8	82.8	84.3	89.9	89.6	....	79.1	79.8
15	77.3	78.0	....	....	78.6	83.7	84.8	87.5	90.0	....	79.6	79.9
16	77.8	78.1	a74.90	....	76.1	84.0	84.5	87.9	90.6	....	81.0	79.6
17	77.8	81.2	75.8	....	82.8	84.4	84.3	89.6	90.6	....	81.0	78.7
18	76.7	82.6	75.7	....	84.8	84.4	81.1	90.2	90.0	....	81.7	77.4
19	76.9	83.1	75.8	....	84.8	84.3	83.5	90.6	85.0	84.0	81.4	76.0
20	77.4	83.3	75.8	a75.25	80.4	80.8	85.1	90.4	88.7	84.1	81.1	77.5
21	77.4	82.8	75.5	80.6	80.1	84.1	85.5	89.8	90.5	83.9	77.8	78.9
22	77.1	77.2	74.7	80.5	80.0	87.7	85.6	88.8	91.2	83.2	79.1	79.0
23	77.5	80.3	75.4	77.0	77.0	88.7	85.1	87.9	91.7	83.3	80.2	77.6
24	77.5	81.1	75.6	76.7	78.9	89.6	85.0	88.7	91.2	78.3	80.4	75.8

a Tape measurement.

79:38-3--Continued.

Lowest daily water level, from recorder charts											
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
25	76.9	81.6	75.6	75.9	80.0	90.0	81.8	89.6	91.2	80.6	79.7
26	76.4	81.1	75.6	74.5	80.4	89.1	83.7	89.9	89.5	82.3	....
27	77.1	78.5	75.6	75.44	81.5	83.9	88.3	90.7	89.8	82.9	....
28	....	77.6	74.9	....	81.8	83.4	89.3	89.6	90.9	83.6	....
29	....	76.0	74.1	....	81.6	87.7	90.6	87.6	90.6	82.8	....
30	....	....	74.6	....	78.5	89.1	90.6	88.9	91.1	82.4	77.90
31	....	....	74.6	....	79.4	....	89.5	90.5	....	75.6	78.4

a Tape measurement.

79:38-4. American Finishing Co. In center of east reservoir, about 275 feet east of McMillan Street, and about 350 feet south of Bodley Avenue. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	58.69	Feb. 24	60.78	Mar. 30	60.22	May 4	58.52
13	58.82	Mar. 2	59.20	Apr. 6	58.30	11	64.10
22	59.23	9	58.03	13	55.22	18	61.97
Feb. 4	64.58	16	61.58	20	59.77	25	66.14
10	64.82	23	61.03	27	61.79	June 1	67.20
17	61.61						

79:49-1. Jack Callie, Oakville. About 20 feet northwest of Getwell Road, and about 400 feet northeast of U. S. Highway 78. Records available: 1945-48.

Jan. 7	38.28	Apr. 14	34.56	July 14	34.63	Oct. 4	35.59
14	36.03	21	34.18	21	35.75	11	33.81
22	35.60	28	34.08	28	35.18	18	33.09
Feb. 5	37.18	May 5	34.03	Aug. 4	37.08	25	36.27
11	35.80	12	33.92	11	35.12	Nov. 1	37.26
19	35.62	19	33.95	18	35.23	8	35.89
25	35.23	26	33.83	24	35.35	15	35.62
Mar. 3	35.48	June 2	34.02	31	35.34	29	37.66
11	35.39	8	36.20	Sept. 6	36.52	Dec. 6	37.01
17	37.53	16	35.13	13	35.58	13	36.66
25	34.95	23	34.37	20	35.36	20	36.10
31	35.29	30	34.49	27	35.81	27	33.69
Apr. 7	34.46	July 7	34.47				

79:53-1. Anderson-Tully Co. About 150 feet east of North Second Street, and about 800 feet north of Marble Avenue. Records available: 1946-48. Measurements discontinued after Aug. 23.

Jan. 5	65.84	Mar. 15	65.54	May 10	71.32	July 5	73.07
12	66.32	24	69.77	17	72.03	12	76.93
21	71.33	29	63.99	24	74.32	19	77.12
Feb. 2	72.43	Apr. 5	62.04	June 3	77.18	Aug. 2	77.31
9	71.18	12	63.21	7	75.72	9	76.36
16	71.34	19	66.75	14	77.12	16	76.32
23	70.85	26	68.37	21	77.50	23	78.01
Mar. 9	65.48	May 3	68.79	28	75.26		

79:54-1. Banner Laundry-Cleaner. About 75 feet south of Beale Avenue, and about 140 feet east of Hernando Street. Records available: 1945-48.

Jan. 6	70.42	Mar. 16	70.65	May 18	82.18	July 20	90.02
13	71.09	23	70.14	25	83.57	28	88.08
21	67.30	30	70.03	June 1	81.75	Aug. 3	87.04
Feb. 4	75.83	Apr. 6	68.31	7	85.64	10	87.08
10	73.92	13	69.21	15	87.89	17	87.19
17	72.66	20	74.09	22	88.33	24	87.27
24	70.12	27	77.85	29	87.40	31	89.14
Mar. 2	69.40	May 4	77.32	July 6	86.66	Sept. 7	90.84
10	72.01	11	82.10	13	88.60	14	91.95

79:54-1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 21	92.22	Oct. 19	90.99	Nov. 16	82.84	Dec. 14	83.47
28	92.05	26	88.31	23	82.55	21	82.20
Oct. 5	91.10	Nov. 2	87.90	30	83.21	28	81.61
12	90.63	9	87.30	Dec. 7	83.87		

79:61-1. Chickasaw Cooperage Co. In sub-basement of plant, about 50 feet north of Pershing Avenue, and about 300 feet west of Scott Street. Records available: 1944-48.

Jan. 13	80.24	May 18	88.29	Aug. 10	85.64	Oct. 26	84.07
21	80.26	25	91.72	17	87.98	Nov. 2	82.68
Feb. 10	78.02	June 1	90.11	24	87.91	9	81.99
24	78.65	7	91.07	31	87.94	16	82.27
Mar. 2	79.57	15	89.52	Sept. 7	87.01	23	80.99
16	79.71	22	89.41	14	89.03	30	77.65
23	79.63	29	88.41	21	89.28	Dec. 7	76.37
Apr. 6	82.94	July 13	83.97	28	89.40	14	76.01
20	87.76	20	89.93	Oct. 5	88.70	21	76.32
May 4	87.98	28	90.31	12	85.63	28	75.76
11	86.66	Aug. 3	90.50	19	86.11		

79:65-1. Clover Farm Dairy. About 85 feet east of Manassas Street, and about 125 feet north of Beale Avenue. Records available: 1945-48.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	110.0	.....	107.5	.....	115.4	122.3
2	110.2	.....	108.4	a107.60	114.6	123.5
3	109.8	a110.83	109.3	107.6	114.0	124.4
4	109.0	112.4	110.1	106.2	114.8	124.9
5	109.8	112.3	109.8	106.7	115.8	123.8
6	110.4	112.0	108.5	107.5	116.5	122.0
7	110.2	111.3	106.8	109.0	116.2	121.8
8	110.6	110.0	106.9	110.2	115.9	123.0
9	110.8	110.1	107.7	110.4	114.8	123.7
10	110.8	111.4	.....	109.3	116.0	124.2
11	109.6	111.9	.....	108.1	117.8	124.8
12	109.7	112.4	a108.25	109.3	118.3	124.4
13	110.3	111.9	108.0	110.2	118.2	123.5
14	110.2	111.6	107.1	110.6	118.0	123.8
15	110.2	109.9	107.7	110.8	117.1	125.5
16	110.1	110.1	109.0	111.0	116.0	125.8
17	109.3	110.1	110.0	111.0	117.2	125.6
18	108.4	110.2	110.4	110.2	118.5	125.1
19	109.0	110.4	110.6	109.9	118.8	124.3
20	110.0	110.3	110.0	112.2	118.6	123.2
21	.....	109.3	108.6	113.4	119.6	123.6
22	a111.03	107.4	108.5	114.8	119.5	124.7
23	111.3	108.1	108.7	115.3	118.6	a125.11
24	110.8	108.3	109.2	114.6	118.8	128.3
25	110.1	108.6	108.9	114.1	119.5	128.3
26	110.8	108.4	108.9	114.0	119.0	127.4
27	111.6	108.4	108.1	114.7	120.3	125.1
28	112.0	107.8	106.3	115.5	122.0	126.7
29	112.1	106.7	105.9	115.7	121.4	126.7
30	.....	.....	106.3	115.9	119.2	126.9
31	.....	.....	.....	.....	121.1	.....

a Tape measurement

Lowest daily water level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	127.2	124.5	128.6	126.0	120.6	.....
2	127.0	125.1	128.6	125.4	a117.58	.....
3	126.2	126.3	128.4	123.4	121.2	a112.72
4	124.3	126.9	127.4	123.7	121.4	112.2
5	123.2	126.8	123.2	123.7	121.8	110.9

a Tape measurement.

79:65-1--Continued.

Lowest daily water level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	125.4	126.3	122.5	123.9	120.9	111.8
7	126.9	125.2	124.1	124.3	117.7	112.2
8	128.0	121.3	125.7	124.3	118.7	112.4
9	128.6	124.2	126.6	124.1	119.5	112.3
10	127.3	124.6	126.5	123.1	119.5	114.9
11	124.9	125.0	125.2	121.4	119.4	113.0
12	126.2	125.0	123.7	122.3	118.7	110.8
13	127.5	125.1	125.5	122.9	115.9	113.9
14	127.6	124.4	126.5	123.7	115.5	113.0
15	128.5	122.5	127.2	123.9	117.1	116.0
16	129.1	124.1	127.8	123.9	117.7	114.0
17	128.5	124.9	128.4	121.7	117.7	113.6
18	127.0	125.5	127.6	.....	116.0	112.7
19	127.6	126.1	124.6	121.8	117.5	110.7
20	128.5	126.9	127.3	.....	116.7	112.9
21	129.0	126.4	128.0	121.9	112.4	all 11.02
22	129.3	123.0	129.2	.....	.....	112.2
23	.....	126.4	130.4	.....	all 12.80	112.0
24	.....	127.3	130.1	118.6	115.5	111.1
25	.....	127.4	128.6	119.4	113.2	109.3
26	.....	128.2	127.3	119.9	114.2	107.2
27	.....	128.8	124.9	120.4	113.4	108.3
28	.....	128.5	124.8	120.6	.....	108.8
29	127.8	124.9	124.9	121.6	.....	109.8
30	128.0	127.6	125.3	121.5	all 10.80	110.8
31	127.0	128.2	.....	119.1	.....	111.3

a Tape measurement.

79:87-2. Illinois Central System. About 200 feet west of Barton Street, and about 400 feet south of Gilbert Avenue. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	89.08	Apr. 13	82.92	July 13	92.52	Oct. 12	96.75
13	89.38	20	86.19	20	102.97	19	96.27
21	85.51	27	84.88	28	103.23	26	94.60
Feb. 4	94.55	May 4	86.11	Aug. 3	103.26	Nov. 2	92.41
10	93.28	11	88.36	10	96.75	9	92.17
17	89.12	18	91.10	17	95.68	16	90.55
24	82.40	25	93.50	24	95.19	23	89.77
Mar. 2	84.28	June 1	96.39	31	99.20	30	86.91
10	85.35	8	97.22	Sept. 7	99.28	Dec. 7	86.03
16	85.58	15	95.72	14	100.43	14	85.14
23	84.54	22	97.29	21	100.79	21	83.26
30	84.27	29	97.34	28	101.00	28	80.53
Apr. 6	81.84	July 6	93.1	Oct. 5	100.68		

79:105-1. Memphis Light, Gas and Water Division. In engine room, about 125 feet east of Kansas Street and about 250 feet south of McLemore Avenue. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	107.43	Apr. 13	102.99	July 13	115.75	Oct. 12	115.97
13	107.99	20	106.68	20	119.19	19	117.35
21	107.54	27	108.10	28	119.22	26	115.35
Feb. 4	110.80	May 4	108.87	Aug. 3	118.60	Nov. 2	116.36
10	100.02	11	111.72	10	118.48	9	114.33
17	109.30	18	112.20	17	119.01	16	114.10
24	107.73	25	111.75	24	118.54	23	113.56
Mar. 2	105.49	June 1	115.23	31	120.94	30	108.19
10	105.05	8	116.06	Sept. 7	119.55	Dec. 7	108.86
16	105.68	14	115.83	14	119.98	14	107.73
23	107.06	22	117.62	21	120.03	21	106.69
30	107.08	29	117.93	28	120.36	28	105.92
Apr. 6	102.17	July 6	117.50	Oct. 5	119.78		

79:122-1. Reed Bros. Dairy. About 125 feet north of Beechwood Avenue, and about 150 feet west of Bellevue Boulevard. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	120.87	Mar. 31	120.15	June 30	130.35	Oct. 11	129.23
15	120.91	Apr. 7	120.00	July 7	131.42	18	128.86
22	119.98	14	121.66	14	132.01	25	129.97
Feb. 5	122.30	21	122.75	21	126.64	Nov. 1	130.66
11	121.78	28	124.46	Aug. 11	139.62	8	131.09
19	119.64	May 5	124.58	18	139.69	15	129.90
25	120.32	12	125.95	24	139.28	29	129.11
Mar. 3	120.06	20	126.69	Sept. 6	132.08	Dec. 6	129.91
10	119.37	26	128.38	13	131.95	13	130.75
17	120.72	June 2	131.07	20	133.68	20	129.96
25	120.42	8	135.13	Oct. 4	131.14	27	128.72

79:142-1. Welsh Lumber Co. About 500 feet west of Florida Street, and about 1,000 feet south of Bodley Avenue. Records available: 1946-48.

Jan. 6	28.21	Apr. 13	23.42	July 13	33.98	Oct. 12	35.92
13	28.62	20	24.30	20	34.61	19	35.68
22	28.84	27	24.86	28	34.69	26	34.79
Feb. 4	29.90	May 4	26.29	Aug. 3	35.36	Nov. 2	34.24
10	30.19	11	28.55	10	34.62	9	33.37
17	28.62	18	29.03	17	35.54	16	33.01
24	27.62	25	30.37	24	35.69	23	32.43
Mar. 2	26.23	June 1	31.43	31	36.71	30	31.61
10	25.36	8	32.62	Sept. 7	36.15	Dec. 7	31.86
16	25.70	15	33.90	14	36.31	14	31.66
23	25.86	22	34.43	21	37.52	21	31.17
30	25.85	29	34.33	28	37.81	28	30.66
Apr. 6	23.45	July 6	33.98	Oct. 5	37.55		

79:148-1D. Hamilton Co., Inc. Formerly owned by War Assets Administration. At Sloanville, about 3 miles west of Millington, and about 75 feet south of Shelby Road. Equipped with water-stage recorder on Mar. 29. Records available: 1947-48.

Lowest daily water level, from recorder charts										
Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	36.2	35.8	37.1	37.6	38.4	40.0	40.5	40.2	....
2	36.3	35.9	37.1	37.6	38.4	40.0	40.6	40.1	a40.05
3	36.3	35.9	37.1	37.6	38.4	40.0	40.6	40.0	40.1
4	36.2	35.9	37.1	37.6	38.6	40.0	40.6	40.0	40.1
5	36.0	36.0	37.1	37.7	38.6	40.0	40.5	39.9	40.0
6	35.8	36.1	37.2	37.7	38.7	40.0	40.4	40.1	40.1
7	35.7	36.2	37.2	37.7	38.7	40.1	40.4	40.2	....
8	35.8	36.3	37.1	37.7	38.8	40.1	40.4	40.1	....
9	35.9	36.4	37.2	37.8	38.8	40.2	40.5	39.9	....
10	35.8	36.5	37.3	37.8	38.9	40.2	40.4	40.0	....
11	35.5	36.6	37.3	37.8	39.0	40.2	40.4	40.1	....
12	35.6	36.7	37.3	37.8	39.0	40.3	40.5	....	....
13	35.8	36.7	37.3	37.8	39.1	40.3	40.5	....	....
14	35.9	36.8	37.3	37.8	39.1	40.4	40.5	....	....
15	35.9	36.7	37.4	37.9	39.2	40.4	40.5	....	....
16	35.9	36.7	37.4	....	39.2	....	40.5	....	....
17	36.0	36.8	37.4	....	39.3	....	40.6	....	....
18	36.0	36.8	37.4	....	39.4	....	40.6	....	....
19	a36.47	36.0	36.9	37.4	38.1	....	....	40.5	....	....
20	36.0	36.8	37.4	38.1	....	....	40.5	....	....
21	36.0	36.7	37.4	38.1	....	....	a40.4a	....	....
22	36.0	36.7	37.4	38.1	....	....	40.4	....	....
23	36.0	36.7	37.5	38.2	....	....	40.4	....	....
24	36.0	36.7	37.5	38.3	....	....	40.4	....	....
25	35.9	36.8	37.5	....	....	....	40.4	....	....
26	35.8	36.8	37.5	....	....	....	40.4	....	....
27	35.9	36.8	37.5	....	a39.88	....	40.3	....	....

a Tape measurement.

79:148-1D--Continued.

Lowest daily water level, from recorder charts										
Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
28	....	35.9	36.8	37.5	....	39.9	....	40.3	....	....
29	a36.36	35.9	36.8	37.5	....	40.0	....	40.3	....	....
30	36.3	35.8	36.9	37.5	a38.31	39.9	a40.40	40.3	....	40.3
31	36.1	....	37.0	....	38.4	40.0	....	40.2	....	40.3

a Tape measurement.

79:149-1. National Fireworks Inc. About 125 feet west of Brunswick Road, about 1.3 miles north of Brunswick, on U. S. Navy proving range. Records available: 1945-47. No measurements made in 1948.

79:167-1. City of Collierville. In engine room of waterworks, about 75 feet east of Main Street, and about 750 feet south of State Highway 57. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 23	98.88	Apr. 30	99.02	July 23	99.38	Oct. 13	101.43
Feb. 5	99.51	May 14	98.66	Aug. 6	99.37	27	102.00
19	98.11	27	99.13	20	99.69	Nov. 10	100.70
Mar. 4	98.50	June 9	99.24	Sept. 1	99.43	24	100.47
19	101.71	24	99.41	15	99.77	Dec. 8	100.47
Apr. 1	98.28	July 9	98.49	29	99.91	22	100.05
15	99.36						

79:174-1. J. O. Goshorn Co. About 250 feet south of Bodley Avenue, and about 500 feet east of South Third Street. Records available: 1946-48.

Lowest daily water level, from recorder charts												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	24.0	....	21.2	20.6	21.1	22.9	22.9	23.1	24.2	24.9	25.2	23.0
2	23.4	....	20.8	20.7	21.2	22.9	22.9	23.2	24.2	25.0	25.1	23.0
3	23.4	a23.44	20.0	20.8	21.2	23.0	23.0	23.3	24.2	25.1	24.7	23.0
4	23.6	23.3	20.1	20.7	20.7	23.0	23.1	23.4	24.3	25.1	24.7	23.0
5	23.6	22.7	20.1	20.8	20.7	23.0	23.2	23.5	24.2	25.1	24.7	23.0
6	23.7	22.5	21.0	20.8	20.7	23.1	23.2	23.5	24.1	25.1	23.9	23.1
7	23.7	22.4	20.9	20.8	21.1	23.1	23.3	23.6	24.1	25.1	....	23.0
8	23.7	22.5	20.9	20.8	21.2	23.1	23.4	23.6	24.2	25.2	....	23.0
9	23.8	22.6	21.0	20.7	21.4	23.1	23.4	23.6	24.2	25.2	a24.05	23.1
10	23.9	a22.67	21.1	20.7	21.5	23.1	23.4	23.7	24.3	25.2	24.0	23.2
11	23.9	22.7	21.1	20.6	21.6	23.2	23.5	23.7	24.3	25.3	24.1	23.2
12	23.8	21.9	21.3	20.8	21.6	23.2	23.6	23.8	24.4	25.3	24.0	23.2
13	23.8	20.6	21.3	20.8	21.7	23.3	23.6	23.8	24.4	25.3	24.0	23.3
14	23.7	21.7	21.2	20.5	21.7	23.3	23.3	23.5	24.5	25.4	24.1	23.4
15	23.7	21.9	21.2	20.4	21.8	23.3	23.3	23.3	24.5	25.4	24.3	23.4
16	23.7	22.0	21.1	20.6	21.8	23.3	23.4	23.3	24.6	25.4	24.1	23.3
17	23.8	22.1	21.1	20.6	21.9	23.2	23.5	23.4	24.6	25.4	23.8	22.8
18	23.8	22.1	21.4	20.6	22.0	22.9	23.5	23.4	24.6	25.3	23.7	22.8
19	23.8	21.9	21.5	20.8	22.1	22.4	23.6	23.5	24.6	25.3	22.5	22.8
20	23.8	21.5	21.7	20.8	22.1	23.3	23.6	23.6	....	25.3	22.8	....
21	23.6	21.3	21.7	21.0	22.1	22.4	23.7	23.6	a24.79	25.4	23.0	a22.96
22	23.3	20.9	21.7	21.0	22.2	22.5	23.7	23.8	a24.8	25.4	23.0	23.0
23	23.3	20.6	20.7	21.0	22.3	22.6	23.6	23.8	24.9	25.4	23.0	23.0
24	23.3	21.1	20.5	21.0	22.4	22.7	23.7	23.9	25.0	25.5	23.0	23.0
25	23.4	21.4	20.3	21.0	22.4	22.7	23.7	23.9	25.0	25.5	23.1	22.9
26	23.4	21.0	20.1	21.0	22.5	22.8	23.8	23.8	25.1	25.5	23.2	22.9
27	....	20.7	19.8	21.0	22.5	22.9	23.7	23.9	25.1	25.5	23.2	22.9
28	....	20.8	21.0	21.0	22.6	23.0	23.4	23.9	25.0	25.6	23.1	22.8
29	....	20.9	21.0	21.0	22.6	22.9	23.5	24.0	24.8	25.6	22.9	22.7
30	....	....	20.9	21.1	22.7	22.8	23.6	24.0	24.9	25.6	22.9	....
31	....	....	20.4	....	22.8	....	23.3	24.1	....	25.6	....	....

a Tape measurement.

79:175-1. C. W. Bond. In Arlington, about 150 feet west of Chester Street, and about 0.45 mile south of railroad depot. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 23	61.02	Apr. 30	60.16	July 23	60.62	Oct. 13	66.31
Feb. 6	60.27	May 14	60.29	Aug. 6	60.87	27	60.51
20	60.19	28	60.41	20	60.93	Nov. 10	61.00
Mar. 5	59.60	June 9	60.46	Sept. 1	61.08	24	62.51
19	59.84	25	60.54	15	61.21	Dec. 8	61.60
Apr. 2	59.51	July 9	60.68	29	61.02	22	61.11
16	59.38						

79:176-1. Gulf Refining Co. About 750 feet south of Mallory Avenue and about 925 feet west of Fisher Street. Records available: 1947-48.

Jan. 7	41.58	Feb. 24	41.01	Apr. 6	35.48	May 18	44.83
13	41.89	Mar. 2	37.92	13	34.52	25	44.80
22	42.02	10	37.52	20	36.30	June 1	46.18
Feb. 4	42.25	16	39.39	27	37.09	8	46.79
10	43.34	23	38.70	May 4	40.52	15	47.83
17	41.17	30	38.30	11	43.93	July 13	50.51

VIRGINIA

INTRODUCTION

The two programs of water-level measurements, begun in June 1928 in cooperation with the Virginia Geological Survey, were continued in 1948. 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. A total of about 312 individual measurements of water level was made during 1948 by the wetted-tape method.

In addition to the six observation wells maintained in northern Virginia there are also two recording rain gages maintained in the area near Fairfax, near the headwaters of Difficult Run. These were serviced weekly and the charts were mailed to the U. S. Weather Bureau office at Albany for publication.¹

At the request of the present owner of the property on which the Bell well is situated, a new well was augered 15 feet east of the old well and measurements were taken weekly in the new Bell well, beginning on March 29. The last measurement in the old well was made on March 22.

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

¹ Hydrologic Bulletin (hourly and daily precipitation) North Atlantic District: U. S. Dept. of Commerce, Weather Bureau, in cooperation with the War Department, Corps of Engineers, U. S. Army.
222

levels are greatly affected by precipitation. The precipitation and departure from normal at Washington, D. C., in 1948, 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, 1948
(From Monthly Climatological Summary, U. S. Weather Bureau)

Month	Recorded precipitation	Normal precipitation	Departure from normal	Accumulated departure from normal
January	4.99	3.55	+1.44	+1.44
February	2.05	3.37	-1.32	+.12
March	5.31	3.75	+1.56	+1.68
April	2.44	3.27	-.83	+.85
May	8.59	3.70	+4.89	+5.74
June	3.98	4.13	-.15	+5.59
July	3.60	4.71	-1.11	+4.48
August	8.00	4.01	+3.99	+8.47
September	3.63	3.24	+.39	+8.86
October	3.11	2.84	+.27	+9.13
November	5.78	2.37	+3.41	+12.54
December	4.93	3.32	+1.61	+14.15
Year	56.41	42.26	+14.15	+14.15

It will be seen from the preceding table that the precipitation was 14.15 inches above normal in 1948 in contrast to the 1.77 inches below normal precipitation recorded in 1947. This increase in precipitation is reflected in a substantial net rise in water levels in most of the wells in the northern Virginia area. The last comparable increase in precipitation and net rise in water levels occurred in 1942 at which time the precipitation was 9.87 inches above normal.

The following table has been compiled from data for 1948 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 1948

Well	Water level Jan. 5	Water level Dec. 27	Net Change	Highest level	Lowest level	Range in level
Ross	23.67	19.48	+4.18	18.87	23.67	4.80
Halls Hill	28.40	21.08	+7.32	20.43	28.40	7.97
Jefferson	24.58	20.38	+4.20	20.38	24.58	4.20
Bell	2.40	.75	+1.65	.02	3.88	3.86
Swart	1.25	.89	+.36	.26	2.15	1.89
Bacon	a 16.23	b 11.55	+4.68	11.55	16.30	4.75

a Jan. 1.
b Dec. 31.

As indicated by this summary, the greatest rise in water level occurred in the Halls Hill well, in Arlington, where the water level was 7.32 feet

higher at the end of the year than at the beginning. The greatest range in fluctuation also occurred in this well where the difference between the highest and lowest stages was 7.97 feet. The average net rise for the four deepest wells, the Bacon, Halls Hill, Jefferson, and Ross wells, was 5.095 feet which indicates a substantial increase in ground-water storage since December 1947. The highest water levels recorded during 1948 occurred at the end of November in the Bell, Halls Hill, and Swart wells, at the end of the year in the Bacon and Jefferson wells, and during the second week of June in the Ross well. With the exception of the Bacon and Swart wells, the lowest water levels recorded during 1948 in the other four wells occurred during the period January 1 to February 10. The lowest stage in the Bacon well occurred during the first week of October, and in the Swart well during the last week of July.

Well descriptions and water-level measurements

Arlington County

Halls Hill well. On Lee Highway, at Langston School. Records available: 1932-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	28.40	Apr. 5	24.38	July 6	22.29	Oct. 4	23.32
12	28.37	12	24.09	12	22.51	11	22.81
19	28.03	19	24.09	19	22.62	18	23.20
26	27.95	26	23.93	26	22.79	25	23.33
Feb. 2	27.85	May 3	23.79	Aug. 2	22.87	Nov. 1	23.56
9	27.90	10	23.66	9	22.29	9	23.44
16	27.70	17	22.98	16	22.05	15	23.62
24	27.16	24	22.93	23	22.08	22	23.78
Mar. 1	26.90	June 1	22.86	31	22.07	29	20.43
9	26.09	8	22.54	Sept. 6	22.36	Dec. 6	21.96
15	25.66	14	22.75	13	22.53	13	22.34
22	25.43	21	21.91	20	22.63	20	21.78
29	24.88	28	22.28	27	23.10	27	21.08

Ross well. In rear of 1918 North Wayne Street, Rosslyn. Records available: 1928-48.

Jan. 5	23.67	Apr. 5	19.80	July 6	19.34	Oct. 4	21.25
12	23.46	12	19.67	12	19.72	11	21.15
19	23.06	19	19.91	19	19.96	18	21.32
26	22.94	26	20.03	26	20.23	25	21.42
Feb. 2	22.87	May 3	20.13	Aug. 2	20.35	Nov. 1	21.61
9	22.95	10	20.24	9	19.72	9	21.60
16	22.84	17	19.39	16	19.56	15	21.67
24	22.49	24	19.19	23	19.65	22	21.71
Mar. 1	22.36	June 1	19.11	31	19.90	29	21.32
9	21.77	8	18.87	Sept. 6	20.28	Dec. 6	19.62
15	21.24	14	19.29	13	20.55	13	19.85
22	21.11	21	19.30	20	20.65	20	19.60
29	20.34	28	19.16	27	21.01	27	19.48

Fairfax County

Bacon well. About 2 miles west of Fairfax, at Fair Acres farm, on U. S. Highway 50. Records available: 1932-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	16.23	.....	14.22	13.54	13.88	13.42	14.42	15.71	15.38	16.19	15.71	12.80
2	16.09	15.60	14.16	13.09	13.93	13.44	14.48	15.51	15.40	16.22	15.72	12.94
3	16.06	15.60	14.12	13.08	13.92	13.49	14.51	15.52	15.43	16.25	15.74	12.97
4	16.03	15.60	14.12	13.08	13.97	13.51	14.55	15.16	15.47	16.30	15.74	12.88
5	16.01	15.60	14.15	13.04	13.91	13.55	14.59	15.00	15.51	16.30	15.75	11.66
6	.....	15.61	14.10	13.03	13.92	13.66	14.62	14.99	15.56	.....	15.76	11.72
7	.....	15.62	13.98	13.08	13.85	13.66	14.66	15.02	15.56	.....	15.19	11.93
8	.....	15.61	13.70	13.09	13.78	13.68	14.75	15.04	15.58	.....	15.06	12.02
9	.....	15.68	13.61	13.14	13.81	13.74	14.80	15.09	15.61	.....	14.98	12.17
10	.....	15.70	13.57	13.23	13.84	13.83	14.85	15.10	15.65	.....	14.95	12.25
11	.....	15.72	13.52	13.22	13.85	13.88	14.88	15.11	15.67	15.66	14.96	12.37
12	15.99	15.71	13.53	13.23	13.87	13.92	14.93	15.09	15.71	15.65	14.97	12.37
13	16.00	15.71	13.53	13.32	13.70	13.97	14.96	15.02	15.75	15.65	14.93	12.46
14	16.03	15.18	13.54	13.33	13.52	14.04	15.00	15.02	15.76	15.64	14.94	12.53
15	16.04	14.91	13.53	13.34	13.48	14.07	15.03	15.05	15.80	15.64	14.94	12.58
16	.....	14.76	13.53	13.36	13.46	14.12	15.07	15.07	15.84	15.64	14.95	12.50
17	.....	14.62	13.58	13.43	13.29	14.15	15.10	15.08	15.88	15.64	14.93	12.45
18	.....	14.46	13.67	13.51	13.16	14.21	15.14	15.09	15.88	15.64	14.96	12.44
19	15.66	14.35	13.67	13.52	13.14	14.22	15.20	15.10	15.91	15.64	14.96	12.32
20	.....	14.28	13.68	13.53	13.12	14.02	15.22	15.07	15.94	15.62	14.92	12.36
21	.....	14.29	13.69	13.54	13.06	14.06	15.25	15.08	15.96	15.64	14.95	12.40
22	.....	14.25	13.71	13.65	13.13	14.08	15.29	15.08	15.96	15.64	14.94	12.43
23	.....	14.27	13.74	13.68	13.17	14.13	15.34	15.10	15.98	15.64	14.93	12.46
24	.....	14.29	13.59	13.69	13.20	14.14	15.40	15.10	16.01	15.64	14.93	12.46
25	.....	14.24	13.47	13.70	13.21	14.16	15.46	15.11	16.05	15.63	14.86	12.44
26	15.50	14.17	13.38	13.77	13.25	14.23	15.51	15.14	16.08	15.63	14.69	12.45
27	.....	14.18	13.26	13.77	13.27	14.27	15.54	15.19	16.13	15.65	14.59	12.52
28	.....	14.11	13.31	13.77	13.30	14.31	15.56	15.22	16.14	15.66	14.48	12.54
29	.....	14.14	13.39	13.80	13.32	14.34	15.61	15.25	16.15	15.67	13.33	12.53
30	.....	.....	13.38	13.83	13.36	14.37	15.64	15.28	16.16	15.69	12.72	12.23
31	.....	.....	13.39	.....	13.38	.....	15.68	15.33	.....	15.70	.....	11.55

Bell well. At Ash Grove, about 1 mile northwest of Tysons Crossroads on State Highway 7 (Leesburg Pike). Well destroyed, measurements discontinued after Mar. 25, 1948. Records available: 1932-48.

Bell well (new). At Ash Grove, about 1 mile northwest of Tysons Crossroads on State Highway 7 (Leesburg Pike). Augured well, diameter 2 inches; depth 9.28 feet, casing 2-inch galvanized pipe. Approximately 15 feet east and at same elevation as original well which was destroyed at the request of the owner. Water levels reported for this well continue the record begun in April 1932 on the former well at this location. Measuring point, top of 2-inch casing, 2.07 feet above land-surface datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	2.40	Apr. 5	0.89	July 6	1.73	Oct. 4	3.53
12	3.80	12	1.52	12	2.54	11	1.27
19	3.12	19	1.67	19	2.49	18	1.53
26	3.01	26	2.35	26	3.09	25	2.25
Feb. 2	3.73	May 3	.90	Aug. 2	.31	Nov. 1	2.69
9	3.88	10	1.25	9	1.82	9	.77
16	.67	17	.23	16	1.85	15	1.63
24	1.64	24	1.40	23	.51	22	1.03
Mar. 1	1.50	June 1	.72	31	2.33	29	.02
9	.72	8	.86	Sept. 6	2.83	Dec. 6	.18
15	.99	14	2.37	13	2.36	13	.59
22	1.19	21	.43	20	3.17	20	.19
29	1.14	28	1.25	27	3.13	27	.75

Jefferson School well. In Falls Church, near southeast corner of Jefferson School. Records available: 1938-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	24.58	Apr. 5	20.75	July 6	21.70	Oct. 4	24.04
12	24.58	12	20.83	12	22.19	11	23.22
19	23.93	19	21.04	19	22.51	18	23.20
26	23.68	26	21.32	26	22.98	25	23.26
Feb. 2	23.61	May 3	21.53	Aug. 2	23.02	Nov. 1	23.45
9	23.63	10	21.20	9	22.37	9	23.02
16	23.56	17	20.63	16	22.10	15	22.81
24	22.92	24	20.71	23	21.98	22	22.80
Mar. 1	22.73	June 1	20.75	31	22.33	29	22.20
9	22.03	8	20.90	Sept. 6	22.85	Dec. 6	20.89
15	21.69	14	21.34	13	23.28	13	20.65
22	21.53	21	21.15	20	23.60	20	20.43
29	21.08	28	21.20	27	23.84	27	20.38

Swart well. On 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, about 50 feet north of the road and 162 feet west of Difficult Run. Records available: 1932-48.

Jan. 5	1.25	Apr. 5	0.81	July 6	1.73	Oct. 4	1.64
12	1.52	12	1.00	12	1.97	11	1.37
19	1.44	19	1.18	19	2.05	18	1.07
26	1.33	26	1.48	26	2.15	25	1.40
Feb. 2	1.46	May 3	.86	Aug. 2	1.05	Nov. 1	1.42
9	1.43	10	1.16	9	1.47	9	1.01
16	.68	17	.46	16	1.47	15	1.21
24	1.11	24	1.42	23	1.40	22	1.06
Mar. 1	1.28	June 1	1.24	31	1.42	29	.26
9	.74	8	1.40	Sept. 6	1.62	Dec. 6	.49
15	.96	14	1.61	13	1.54	13	.87
22	1.02	21	1.06	20	1.62	20	.71
29	.88	28	1.52	27	1.64	27	.89

SOUTHEASTERN VIRGINIA

By Allen Sinnott

Program of work

Periodic measurements of water levels in the eight observation wells in southeastern Virginia were continued in 1948. An additional observation well was established during the year on the Eastern Shore peninsula, in the extreme northeastern part of the Virginia coastal plain. The observation-well program is part of an investigation of the ground-water resources of the State being carried out in cooperation with the Virginia Geological Survey, William M. McGill, State Geologist.

At the end of the year, eight wells were being measured regularly, of which five are key wells included in the Nation-wide system of observation wells. Four of the wells were equipped with automatic water-stage recorders actuated by floats; generally, the depth to water level was also measured by means of a weighted tape once a week. A total of 273 measurements was made during 1948.

The long-range program, a systematic study of the ground-water resources of the State, was carried forward. Bulletin 63 of the Virginia Geological Survey, "Geology and ground-water resources of the coastal plain in southeastern Virginia," by D. J. Cederstrom, was published in July.

Fluctuations of water level

Accomack County

Water levels on the Eastern Shore peninsula, based on measurements at a newly established observation well at the Chincoteague Naval Auxiliary Air Station, have shown little change during the 10 months of record in 1948 beginning in March. The total fluctuation was less than 1 foot during this period.

Chesterfield County (Petersburg area)

After an interruption of 10 months, measurements were resumed on the Pilcher well near Petersburg Chesterfield County well 36. At the end of August 1948 the water level was 17.20 feet below land-surface datum, or about 1 foot below the level at the end of this month in 1947. There was a substantial rise toward the end of the year, the water level being 16.27 feet below the surface on November 30, and 14.70 feet below the surface on January 4, 1949.

The rainfall at Richmond during 1948 was 10.49 inches above normal. June was the only month which showed more than a slight deficiency, with a departure of -1.95 inches. Only 3 months showed deficient rainfall compared with the normal; of the other 9 months, 8 showed positive departures of 1 inch or greater. Rainfall for November and December was 3.22 inches, 1.00 inch above normal, respectively, and is reflected in the considerable rise in water level recorded in the Pilcher well during December.

Prince George County (Hopewell area)

Measurements of water levels were continued during 1948 at well 13, at the Old Dominion Water Corporation, in Hopewell. Artificial recharge, in order to store cold water underground for reuse during the warm summer months, was apparently not begun at the nearby Solvay Process Company before February 1949. The general water level averaged about 36 feet below the land surface during the first 4 months of the year, similar to the same period in 1947. The summer pumping season began on April 28 and

during the ensuing 3 weeks the water level at well 13 declined from about 39 feet to above 50 feet below land-surface datum. On October 21, the heavy pumping at the Solvay Process Company ceased, and the water level in well 13 began to rise from 50 feet below the surface to 37 feet by the end of November, remaining about at this level until the end of the year.

Sussex County

Weekly measurements of water levels in the Jeb S. White well, at Wakefield, in Sussex County, were continued in 1948. The total fluctuation was about $2\frac{1}{2}$ feet. In general, the levels showed a decline of about 1 foot compared with those of 1947, presumably reflecting heavy industrial withdrawals at Franklin, 20 miles to the south-southeast.

Isle of Wight and Southampton Counties (Franklin area)

Measurements were continued on well 161 in the Franklin area in Isle of Wight County during 1948. These measurements record a general decline of water levels below the corresponding levels of 1947. Thus, a level of 20 feet below land surface was observed in the middle of April 1948, and remained at about that depth through October, whereas in 1947 it reached 20 feet below the surface only during mid-September. Even so, at the end of September recovery had been such that the water level was half a foot above that at the end of 1947.

Measurements during 1948 at the observation well owned by the city of Franklin showed that during the months of June through September water levels were as much as 2 feet below those of 1947; nevertheless, during the first 5 months, water levels were at times nearly 3 feet higher, and by December 1948 were about the same as those of December 1947.

Measurements were resumed on the Virginian Railway well, at Sebrell, in October 1948. The water level at this well was over 31 feet below land surface during the closing months of 1948, or about 1 foot below the levels in 1946, when the last measurements were made on this well.

Warwick County (York-James peninsula)

Measurements were continued during 1948 on Milstead well 1, at Fort Eustis, in Warwick County, on the lower York-James peninsula. Water levels fluctuated within narrow limits, and during the first 7 months of the year were but little different from the corresponding levels of 1946. However, the levels reached their lowest since 1943 during September,

following a sharp decline of 4 feet in August, caused by increased pumping of water for use in a swimming pool at the post during the summer months. Levels continued low during the fall months, but by December they had recovered so that at the end of the year they were half a foot above the 1947 levels.

Well descriptions and water-level measurements

Accomack County

Well B-8. Naval Auxiliary Air Station, Chincoteague. In east side of Station in B area. Unused drilled well, diameter 8 inches, depth about 60 feet. Measuring point, top of level casing, 1.0 foot above land surface, and 35.10 feet above sea level. Equipped with automatic water-stage recorder; operation has been unsatisfactory, so that reliable month-end measurements only are listed. Water level influenced about 0.2 foot by pumping in nearby well. Measurements by Navy Department. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level
Mar. 25	25.72	Sept. 30	25.74	Dec. 1	25.94
Aug. 31	25.43	Nov. 1	26.03		

Chesterfield County

36. Pilcher well. At Matoaka Manor, 3 miles north of Petersburg. New measuring point, top of level casing, 1.0 foot above land-surface datum, or 1.7 feet below previous measuring point. Records available: 1939-48. Aug. 31, 17.20; Oct. 2, 17.30; Oct. 30, 16.90; Nov. 30, 16.27.

Isle of Wight County

161. Chesapeake-Camp Corporation. Records available: 1942-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	18.88	Apr. 5	19.95	July 5	15.82	Oct. 6	19.86
5	18.89	12	19.86	12	19.28	11	19.88
12	19.05	19	20.02	19	19.60	18	20.01
19	19.11	26	19.92	26	19.83	25	19.94
26	19.11	May 3	19.73	Aug. 2	19.82	Nov. 1	19.93
Feb. 2	19.08	10	19.93	9	19.82	8	19.50
9	19.03	17	19.85	16	19.96	15	19.08
16	18.90	24	19.95	23	20.00	22	18.84
23	18.90	31	19.49	30	20.15	29	17.90
Mar. 1	19.04	June 7	19.78	Sept. 6	20.22	Dec. 6	18.12
8	18.95	14	19.98	13	19.55	13	18.53
15	19.29	21	20.25	20	20.03	20	18.56
22	19.48	28	20.27	27	20.16	27	17.43
29	19.82						

Prince George County

13. Old Dominion Water Corporation. In Hopewell. Records available: 1939-48.

Jan. 2	37.51	Feb. 13	28.96	Mar. 26	36.51	May 7	44.61
9	37.26	20	36.51	Apr. 2	31.41	14	47.46
16	37.21	27	35.76	9	35.36	21	48.56
23	36.56	Mar. 5	36.61	16	35.91	28	47.46
30	36.96	12	36.26	23	36.36	June 4	49.76
Feb. 6	34.36	19	36.46	30	38.11	11	49.91

13--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 18	49.91	Aug. 13	50.01	Oct. 1	49.76	Nov. 19	37.61
25	50.11	20	50.16	8	49.21	26	36.76
July 2	50.46	27	50.21	15	49.51	Dec. 3	28.06
9	50.56	Sept. 3	50.16	22	48.56	10	36.36
16	50.36	10	49.86	29	43.16	17	36.16
23	55.16	17	49.96	Nov. 5	40.21	24	36.21
30	50.41	24	49.66	12	38.86	31	34.06
Aug. 6	49.66						

Southampton County

29. Virginian Railway. At Sebrell. Records available: 1942-48.
Oct. 2, 32.60; Oct. 30, 31.60; Nov. 30, 31.35.

89. Southampton County Courthouse. At Courtland. Records available;
1942-46. No measurements made in 1948.

205. City of Franklin. Measurements by city of Franklin. Records
available: 1942-48.

Jan. 3	24.0	Apr. 3	22.5	July 3	27.5	Oct. 2	27.5
10	23.5	10	22.7	10	25.5	9	27.0
17	23.1	17	22.7	17	27.5	16	26.5
24	22.5	24	22.5	24	29.5	23	26.0
31	25.5	31	23.5	31	29.0	30	26.5
Feb. 7	26.9	May 8	25.5	Aug. 7	28.0	Nov. 6	22.5
14	27.0	15	23.5	14	28.5	13	21.5
21	21.5	22	24.5	21	26.5	20	22.5
28	22.5	29	25.5	28	27.5	27	24.5
Mar. 6	22.8	June 5	25.5	Sept. 4	28.5	Dec. 4	25.5
13	22.5	12	27.5	11	27.7	11	25.5
20	22.8	19	29.5	18	25.5	18	25.0
27	22.5	26	29.5	25	27.5	25	24.5

Sussex County

90. Jeb S. White well. In Wakefield. Records available: 1940-48.

Jan. 5	71.90	Apr. 5	72.00	July 12	73.60	Oct. 12	72.73
12	71.76	12	72.08	19	72.85	18	73.30
19	71.75	19	72.59	26	72.96	25	73.15
26	71.88	26	72.30	Aug. 2	73.04	Nov. 1	73.13
Feb. 2	71.40	May 3	72.15	9	73.10	8	73.12
9	71.60	10	72.42	16	73.43	15	73.50
16	71.96	17	72.79	23	73.55	22	73.40
23	71.92	24	72.37	30	73.61	29	72.70
Mar. 1	72.04	June 7	72.98	Sept. 7	73.96	Dec. 6	72.50
8	71.94	14	72.59	13	73.95	13	73.19
13	71.61	22	72.54	20	73.08	20	73.10
22	72.35	28	73.25	27	73.55	27	72.60
29	72.11	July 6	73.09	Oct. 4	73.09		

Warwick County

Milstead 1. At Fort Eustis. Equipped with automatic water-stage
recorder. Records available: 1941-48.

Milstead 1--Continued.

Water level, in feet with reference to land-surface datum, 1948

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	+5.51	Apr. 9	+5.88	July 9	+4.51	Oct. 12	+2.87
15	+5.61	16	+6.00	16	+4.25	18	+3.45
22	+5.75	23	+5.84	23	+4.38	26	+4.35
29	+5.76	30	+5.82	30	+3.82	Nov. 2	+3.68
Feb. 5	+5.81	May 7	+5.90	Aug. 6	+3.90	9	+4.29
13	+5.55	14	+5.62	13	+1.77	17	+4.79
20	+5.54	21	+5.20	20	+1.85	24	+5.20
27	+6.14	28	+5.33	27	+1.34	Dec. 1	+5.20
Mar. 5	+5.86	June 4	+5.17	Sept. 3	-.35	8	+4.90
12	+6.22	11	+5.07	10	+.56	15	+5.01
19	+5.62	18	+4.68	17	+2.96	23	+5.27
26	+6.00	25	+4.57	24	+1.40	30	+5.40
Apr. 2	+5.85	July 2	+4.35	Oct. 6	-.20		

WEST VIRGINIA

By R. L. Griggs

PROGRAM OF WORK

The ground-water investigations in West Virginia, begun in 1941 in cooperation with the West Virginia Geological and Economic Survey, were continued in 1948. Water-level measurements in observation wells are a part of this program, and measurements were made during the year in 14 observation wells--at periodic or irregular intervals in 12 wells, and single measurements in 2 wells. Automatic water-stage recorders were maintained on 2 wells during most of the year and on 1 well for all but a few days of the year. Measurements by the wetted-tape method were made in the other 11 wells. Of the 1,483 measurements given in this report, 1,160 were taken from recorder charts and 323 were tape measurements.

OCCURRENCE OF GROUND WATER

Eight of the observation wells maintained during the year are drilled to artesian aquifers in bedrock. Six of these eight wells are drilled to sandstones of Pennsylvanian age, one well is drilled to a sandstone of Mississippian age, and one is drilled into beds of Permian age. Three other observation wells are in alluvium adjacent to the Ohio River, and another three are shallow water-table wells.

FLUCTUATIONS OF WATER LEVEL

Variations in precipitation affect the fluctuations insignificantly in all or nearly all of the bedrock observation wells in the State. The fluctuations in these wells are related, apparently almost entirely, to the amount of water pumped from the aquifers to which these observation wells are drilled. As water is withdrawn from pumped wells, the artesian pressure falls and the water levels decline. In most cases, the safe yield of the aquifers is not being exceeded and when the pumpage ceases or drops to a minimum the water levels recover. Well 42-4-1, which is drilled into Pennsylvanian sandstone (Pottsville group) and is affected primarily by

pumpage at a nearby bottling and ice company, is a typical example. The water levels in this well decline during the summer and recover during the fall to approximately 23 to 24 feet below the land surface. At the end of 1948 the water level was at approximately 23 feet below the land surface and slightly above average for the period of record (since 1942). Wells 40-5-14, 9-6-45, and 11-3-8 behave similarly. Well 9-2-2 probably behaves similarly and well 9-6-1 possibly does also.

In the case of well 39-1-6A, there is good evidence that the safe yield of the Pennsylvanian sandstone or sandstones, which supply the town of Buffalo is being exceeded. This well is about 900 feet southwest of two closely spaced wells from which approximately 4 million gallons of water are pumped annually to supply this town. In 1947 the levels in well 39-1-6A declined about 15 feet. In the early part of 1948 there was an additional decline of about 7 feet which was followed by a recovery of about 13 feet in the late winter and early spring. Then, between May 15 and August, during a period of heavy pumpage at the nearby wells, the decline was rapid with the levels dropping over 16 feet, and, on August 21, a low for the period of record (since January 1947) was reached. From August to the end of the year the record is poor as the well is obstructed at a depth of 82 feet. However, it appears that the level has fluctuated some near this depth. In any event, it is probable that the town of Buffalo will eventually have to augment its present source of supply.

Well 9-6-27, drilled to the Pottsville formation at Morgantown, reached a record high in June 1948. From 1941, when measurements were first begun at this well, to the end of the pumping season in September 1945, water levels in this well indicated a general decrease of artesian pressure in the formation in the area. From the end of the pumping season in 1945 to the beginning of the pumping season in 1948, the water level in the well rose over 60 feet. Hydrographs of the well during this period indicate a decrease in pumpage in the area during the latter period. The hydrograph for 1947 indicates that pumpage was very small in that year as compared to previous years. In 1948 there appears to have been only a moderate amount of pumpage in the area, and at the close of the year water levels in well 9-6-27 were at a near record high.

Wells 27-3-20, 27-3-22, and 50-1-5 are in alluvium adjacent to the Ohio River. The two former wells are at Parkersburg, where approximately 1,500 million gallons of water are pumped annually from the alluvium of the river valley. The water level in well 27-3-22 was at a low stage at the beginning of the year, and, though it was raised slightly by a rise in the Ohio River that occurred early in January, the level showed a net decline until February 12 when a low for the period of record was reached. Following this the levels rose due to high waters (near-flood conditions) that occurred in the river in mid-February and in the latter part of March. Later, in mid-April, a major flood occurred in the Ohio, which washed away the recorder shelter, and on May 9, when the first measurement was made following the flood, the water level reached a high for the period of record. Following this the river was in pool during most of the remainder of the year and the water levels in the well generally declined and were near normal as the year ended.

Well 50-1-5 is at Kenova in an unpumped area of the river alluvium. As the year began, the level in this well was below normal and continued below normal until late February; then, due to the high river stages that occurred in mid-February, the level began to rise and continued to rise until a high for the period of record was reached on April 23. During the rest of the year to about the middle of August the levels steadily declined after which they were rather steady and near normal for the remainder of the year.

Because of above-normal precipitation in 1948, levels in the three shallow water-table wells (9-6-46, 39-1-7, and 40-3-1) were at high stages during the year.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Fayette County

42-1-1. J. H. Simms. In Boomer, Falls district, southeast of cross-roads. Records available: 1942-44. No measurements made in 1948.

42-4-1. Baldwin Supply Co. At Montgomery, Kanawha district. Records available: 1942-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 16	28.52	Sept. 2	29.86	Oct. 11	24.44	Nov. 22	23.48
July 12	29.48	7	30.39	20	27.43	29	23.27
26	33.84	13	28.94	25	25.11	Dec. 6	23.04
Aug. 9	27.15	22	29.39	Nov. 1	23.75	20	22.20
16	28.90	28	28.38	8	23.06	28	22.98
23	27.00	Oct. 8	26.98	15	23.58		

42-4-2. Virginian Railway Co. At Deepwater, Kanawha district. Records available: 1942-45. No measurements made in 1948.

Harrison County

12-2-26. City of Lumberport. At Lumberport, along Jones Creek, 0.5 mile northwest of State Highway 20, Eagle district. Records available: 1942. No measurements made in 1948.

Kanawha County

40-3-1. L. T. Smith. At Nitro, Union district, along 40th Street, 0.45 mile west of U. S. Highway 35. Records available: 1942-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	7.40	Mar. 23	2.46	July 23	7.69	Oct. 18	11.20
9	7.00	28	3.55	28	7.97	28	11.48
17	4.23	Apr. 5	2.72	Aug. 2	8.12	Nov. 4	9.60
28	6.81	13	2.28	9	5.78	12	9.20
Feb. 3	8.11	20	4.89	17	7.61	17	9.41
9	3.59	28	6.39	28	8.94	29	1.56
21	4.39	May 4	5.10	Sept. 15	10.34	Dec. 8	7.72
28	2.80	11	5.00	23	10.58	16	1.78
Mar. 5	3.80	18	6.79	28	10.86	21	2.32
11	4.29	28	7.80	Oct. 4	11.05	28	6.20
16	4.01	June 28	9.46	11	11.24		

40-5-14. Coyle & Richardson Department Store. At Charleston, Charleston district. Records available: 1941-48.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	33.00	32.69	31.61	31.27	30.82	35.48	40.37	37.57	41.26	38.64	34.14	32.82
2	33.18	32.75	31.72	31.42	30.78	35.81	40.17	41.70	41.96	39.01	34.13	32.84
3	33.14	32.68	31.85	31.42	30.74	35.93	40.35	42.00	42.33	36.51	33.95	32.80
4	33.04	32.58	32.16	31.35	30.88	36.13	37.97	42.03	42.43	38.41	33.98	32.80
5	33.10	32.70	31.99	31.18	30.65	36.56	37.62	37.72	37.92	36.55	33.97	32.52
6	33.09	32.85	31.76	31.24	30.57	34.20	40.20	39.14	37.70	36.20	33.90	32.40
7	33.10	32.61	31.53	31.18	30.51	36.07	40.25	40.17	41.98	36.12	33.90	32.35
8	33.03	32.55	31.72	31.12	30.51	36.22	40.35	37.16	42.29	36.10	33.90	32.60
9	33.10	32.56	31.59	31.56	30.40	35.40	40.85	40.48	42.41	36.08	33.89	32.65
10	33.07	32.58	31.60	30.86	32.19	36.66	40.91	41.52	42.29	35.99	34.00	32.86
11	33.02	32.51	31.74	30.55	34.92	37.06	38.18	41.45	42.39	35.92	33.97	32.75
12	32.86	32.44	31.74	30.95	35.97	36.76	41.00	41.73	37.97	35.93	33.86	32.62
13	32.90	32.28	31.64	30.87	36.40	34.50	40.97	41.65	41.92	35.93	33.75	32.75
14	32.99	31.90	31.51	30.78	32.74	37.07	41.05	42.19	42.23	35.95	33.70	32.80
15	32.95	31.42	31.58	30.36	34.38	37.54	41.40	37.59	39.80	35.91	33.72	32.67
16	32.94	31.08	31.65	29.77	32.35	37.31	41.52	41.72	41.05	35.82	33.67	32.37
17	32.89	31.52	31.77	30.05	32.64	36.20	41.82	41.82	42.16	35.72	33.67	32.37
18	32.85	31.55	31.72	30.18	33.50	38.45	38.45	42.01	42.36	35.84	33.65	32.55
19	32.80	31.53	31.56	30.54	33.02	38.78	41.56	41.91	37.99	35.82	33.55	32.60
20	32.77	31.69	31.55	30.62	31.50	37.62	41.79	42.16	42.17	35.77	33.62	32.35
21	32.67	31.60	31.50	30.83	33.67	37.07	41.91	42.24	42.08	35.10	33.60	32.25
22	32.80	31.58	31.52	30.82	33.10	38.69	41.75	37.84	40.27	34.83	33.40	32.25
23	32.94	31.91	31.55	30.85	31.67	38.60	.....	42.10	39.35	34.67	33.44	32.25
24	32.82	31.96	31.54	34.05	31.44	38.93	.....	.....	38.98	34.52	33.43	32.22
25	32.80	31.89	31.25	31.11	33.42	39.34	.....	42.37	36.94	34.47	33.39	32.25
26	32.76	31.91	30.76	34.15	32.79	39.67	.....	42.48	36.80	34.40	33.30	32.25
27	32.82	31.20	32.90	34.46	35.17	37.55	.....	42.63	36.75	34.35	33.40	32.27
28	32.82	31.26	31.17	32.72	35.61	39.75	.....	42.73	36.39	34.32	33.36	32.25
29	32.75	31.48	31.06	31.17	36.25	39.97	42.08	37.87	38.50	34.26	33.25	32.25
30	32.72		31.15	30.92	33.65	40.27	42.12	41.96	39.52	34.20	33.15	32.31
31	32.70		31.15		32.83		42.28	42.28		34.10		32.25

40-5-15. Valley Bell Dairy. At Charleston, Charleston district, along Delmar Avenue, 600 feet from Roane Avenue. Records available: 1942. No measurements made in 1948.

Mason County

38-3-3. West Virginia Industrial School. At Lakin, Robinson district. Records available: 1942-44. No measurements made in 1948.

38-3-4. V. K. Smith. At Kaylong, Robinson district, 1 mile south of post office. Records available: 1942-45. No measurements made in 1948.

38-3-5. Homer Smith. At Kaylong, Robinson district, 1.2 miles south of Lakin. Records available: 1942-44. No measurements made in 1948.

38-3-12. C. C. Lewis. 1.1 miles south of York Station, Robinson district. Records available: 1942-44. No measurements made in 1948.

Monongalia County

Wells 9-2-1 and 9-2-2 are in the town of Blacksville, which is partly in Clay district, Monongalia County, West Virginia, and partly in Wayne township, Greene County, Pennsylvania. 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. D. C. Johnson. At Blacksville. Records available: 1941. No measurements made in 1948.

9-2-2. Earl Miller. At sawmill in Blacksville. Records available: 1941-45, 1948. Dec. 6, 13, 67.

9-6-1. Baltimore & Ohio Railroad. At mouth of Aaron Creek, in Sabraton, Morgan district. Flowing well. Records available: 1941-48.

Rate of flow, in gallons a minute

Date	Rate of flow	Date	Rate of flow	Date	Rate of flow	Date	Rate of flow
May 18	21.5	July 19	23.5	Sept. 13	23.0	Nov. 8	26.0
24	21.5	26	23.0	20	23.0	15	25.5
31	21.5	Aug. 2	21.0	27	24.0	22	26.0
June 7	22.5	9	22.0	Oct. 4	24.0	29	26.5
14	22.0	16	22.0	11	24.5	Dec. 6	26.0
21	22.5	23	22.0	19	26.5	13	26.0
27	22.0	30	22.0	25	26.0	20	26.5
July 6	23.0	Sept. 6	23.0	Nov. 1	25.5	27	26.0
12	23.5						

9-6-27. T. J. Johnson. At Morgantown, Morgan district, east end of Foundry Street. Records available: 1941-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 18	104.71	July 12	110.53	Sept. 6	113.71	Nov. 1	108.72
24	104.60	19	111.62	13	114.42	8	109.49
31	104.60	26	111.66	20	114.49	15	108.10
June 7	104.21	Aug. 2	112.41	27	114.99	22	106.70
14	103.95	9	112.81	Oct. 4	115.27	29	105.67
21	107.78	16	113.70	11	113.18	Dec. 6	104.65
27	109.14	23	113.73	19	111.89	13	104.54
July 6	109.69	30	114.54	25	110.99	27	104.56

9-6-45. Deckers Creek Sand Co. At Greer, Morgan district, below sand quarry. Records available: 1941-45, 1947-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 18	10.57	July 19	10.80	Sept. 13	12.41	Nov. 8	11.56
24	11.02	26	10.94	20	12.56	15	11.23
31	11.12	Aug. 2	11.44	27	12.12	22	10.98
June 7	10.87	9	11.14	Oct. 4	24.02	29	10.28
14	10.70	16	11.37	11	13.20	Dec. 6	10.46
21	10.78	23	11.62	19	12.22	13	10.80
27	11.20	30	12.20	25	11.80	20	10.07
July 6	10.68	Sept. 6	12.20	Nov. 1	11.69	27	10.78
12	11.01						

9-6-46. W. L. Madire. In Morgantown, Morgan district, at 132 Prairie Street, about 100 feet southeast of corner of Prairie Street and University Avenue. Records available: 1943-45, 1947-48. Nov. 15, 13.38; Dec. 13, 11.82.

Preston County

11-3-3A. Preston Coal & Coke Co. At Cascade, Valley district, 0.7 mile east of post office, on terrace east of Deckers Creek, 150 feet south of State Highway 7. Records available: 1941-43, 1946. No measurements made in 1948.

11-3-4. Masontown well 4. At Oak Park, Valley district. Records available: 1942. No measurements made in 1948.

11-3-8. G. F. Lemmons. At Masontown, Valley district, east Depot Street. Records available: 1942-48. Recorder removed on Oct. 11.

Highest and lowest daily water levels (From recorder charts May 18-Oct. 11)

Day	May		June		July		August		September		October	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	.....	.....	17.78	17.93	14.78	14.93	16.47	16.78	20.11	20.22	21.05	21.23
2	.....	.....	17.90	17.95	14.67	14.81	16.78	17.29	20.07	20.17	21.19	21.35
3	.....	.....	17.91	17.99	14.65	14.70	17.27	17.43	20.11	20.23	21.33	21.50
4	.....	.....	17.94	17.99	14.51	14.81	17.36	17.53	20.22	20.40	21.45	21.54
5	.....	.....	17.99	18.35	.....	.....	17.49	17.82	20.38	20.47	21.32	21.46
6	.....	.....	18.35	18.54	14.06	14.19	17.82	18.07	20.40	20.55	21.25	21.32
7	.....	.....	18.13	18.48	13.97	14.10	18.09	18.09	20.40	20.46	21.16	21.26
8	.....	.....	17.85	18.13	14.14	14.26	18.09	18.16	20.40	20.50	21.06	21.20
9	.....	.....	17.14	17.84	14.27	41.51	18.16	18.37	20.46	20.60	21.10	21.17
10	.....	.....	16.61	17.14	14.51	14.80	18.34	18.42	20.56	20.64	21.15	21.20
11	.....	.....	16.37	16.61	14.81	15.16	18.30	18.37	20.56	20.67	21.09	21.18
12	.....	.....	16.22	16.37	15.16	15.62	18.26	18.35	20.67	20.74	.....	.....
13	.....	.....	16.10	16.30	15.62	15.92	18.31	18.44	20.71	20.86	.....	.....
14	.....	.....	15.59	16.10	15.92	16.20	18.44	18.59	20.76	20.93	.....	.....
15	.....	.....	15.29	15.39	16.19	16.48	18.57	18.77	20.88	21.05	.....	.....
16	.....	.....	14.81	15.32	16.02	16.56	18.75	18.93	21.05	21.18	.....	.....
17	.....	.....	14.61	14.81	15.15	16.00	18.90	18.97	21.08	21.19	.....	.....
18	14.76	14.82	14.52	14.61	14.91	15.15	18.92	19.02	20.95	21.07	.....	.....
19	14.75	14.84	14.47	14.59	14.91	15.10	18.97	19.15	20.91	21.01	.....	.....
20	14.56	14.75	.....	.....	15.04	15.16	19.12	19.20	20.83	21.04	.....	.....
21	14.49	14.70	14.93	14.96	14.75	15.01	19.20	19.29	20.82	20.92	.....	.....
22	14.71	15.17	14.91	15.11	14.57	14.76	19.29	19.48	20.77	20.82	.....	.....
23	15.18	15.45	15.10	15.38	14.03	14.55	19.46	19.66	20.73	20.83	.....	.....
24	15.46	16.05	15.35	15.42	13.98	14.08	19.60	19.65	20.81	21.07	.....	.....
25	16.05	16.41	15.42	15.51	14.09	14.28	19.61	19.68	21.05	21.28	.....	.....
26	16.41	16.71	15.40	15.50	14.26	14.56	19.73	19.79	21.23	21.29	.....	.....
27	16.72	16.99	15.20	15.43	14.57	15.01	19.80	19.92	21.11	21.24	.....	.....
28	16.99	17.13	15.11	15.28	15.02	15.44	19.91	19.95	21.04	21.14	.....	.....
29	17.18	17.30	15.19	15.28	15.46	15.82	19.89	19.95	21.01	21.10	.....	.....
30	17.30	17.45	14.92	15.20	15.82	16.11	19.90	20.02	21.00	21.09	.....	.....
31	17.47	17.80	.....	.....	16.11	16.46	19.96	20.11	.....	.....	.....	.....

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 19	21.32	Nov. 8	21.29	Nov. 29	17.15	Dec. 17	14.76
25	21.33	15	20.89	Dec. 6	15.57	27	15.73
Nov. 1	21.38	22	19.47	13	16.91		

11-3-14. Belfort Corporation. Near plant at Reedsville, Valley district. Records available: 1942-43, 1945-46. No measurements made in 1948.

11-3-51. Elmer Smith. About 1 mile northwest of Sutherland, Valley district. Records available: 1941-42. No measurements made in 1948.

Putnam County

39-6-6A. Town of Buffalo. At Buffalo, Buffalo district, at east end (dead end) of Sycamore Street. Unused drilled well, depth 156 feet, 8-inch steel casing. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	71.52	Apr. 3	68.41	June 26	70.10	Oct. 16	(a)
10	71.41	10	68.52	July 3	72.60	30	(a)
Feb. 7	73.74	24	65.96	17	73.32	Nov. 6	(a)
14	77.96	May 1	65.63	31	79.37	13	(a)
21	71.41	8	64.74	Aug. 7	81.10	27	(a)
28	70.63	15	64.63	14	81.41	Dec. 5	(a)
Mar. 6	68.63	22	65.96	21	81.52	11	(a)
13	69.96	29	69.52	Sept. 4	(a)	18	(a)
20	70.52	June 5	69.96	Oct. 2	81.52	25	(a)
27	66.52	12	70.41	9	(a)		

a Obstructed at depth of 82 feet; dry above that depth.

39-1-7. C. C. Wears. At south edge of Buffalo, near church. Buffalo district. Records available: 1943-48.

Jan. 3	5.94	May 1	3.61	July 17	7.20	Oct. 16	10.00
10	6.83	8	2.72	31	6.52	30	12.00
Feb. 7	10.72	15	3.72	Aug. 7	7.80	Nov. 6	7.61
21	3.16	22	7.16	14	8.50	13	8.68
Mar. 6	2.72	29	7.16	21	10.16	20	8.64
13	5.27	June 5	4.72	28	10.52	27	1.00
20	2.16	12	5.05	Sept. 4	12.08	Dec. 4	2.67
27	3.72	26	5.20	28	11.90	18	2.30
Apr. 3	5.83	July 3	7.80	Oct. 2	12.16	25	3.58
10	2.61	10	9.20	9	12.40	31	3.40
24	5.05						

39-1-8. H. E. Fruth. At Buffalo, Buffalo district, about 1 mile south of church. Records available: 1942-44. No measurements made in 1948.

39-1-10. Burgess Tate. At Wood, Buffalo district, along highway. Records available: 1942-44. No measurements made in 1948.

Wayne County

50-1-5. Ashland Oil & Refining Co. At Kenova, Ceredo district, at refining plant. Cleaned to its original depth in October 1948. Records available: 1942-46, 1948.

Oct. 15	40.27	Nov. 5	40.62	Nov. 26	40.77	Dec. 18	39.97
23	40.41	12	40.60	Dec. 3	40.60	24	40.24
29	40.43	19	40.81	10	40.68		

50-1-5A. Ashland Oil & Refining Co. At Kenova, Ceredo district, at refining plant. Approximately 800 feet west of well 50-1-5. Records available: 1947-48.

Jan. 2	43.12	Mar. 12	38.31	May 21	32.85	July 30	39.62
9	43.04	19	37.85	29	34.21	Aug. 6	39.87
17	42.95	26	36.77	June 5	34.91	21	40.46
23	42.91	Apr. 2	36.14	11	35.79	27	40.46
30	43.08	10	37.16	18	36.79	Sept. 3	40.54
Feb. 6	43.04	16	33.14	25	37.58	10	40.54
13	43.04	23	28.69	July 2	38.16	17	40.46
20	41.27	May 1	31.41	9	38.66	25	41.44
27	40.25	8	32.00	16	39.08	Oct. 1	41.37
Mar. 5	39.16	14	32.19	23	39.50	8	41.37

Wetzel County

6-1-1. Ida Monroe. At Proctor, Proctor district, about 0.75 mile east of church. Records available: 1942-44. No measurements made in 1948.

Wood County

27-3-20. City of Parkersburg well 4. At Parkersburg, Parkersburg district. Records available: 1943-48. Oct. 6, 40.60.

27-3-22. City of Parkersburg test well "P". At Parkersburg, Parkersburg district, on terrace about 700 feet from Ohio River and 600 feet northeast of municipal pumping plant. Records available: 1943-44, 1946-48.

Highest and lowest daily water levels, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	36.57	36.73	37.14	37.21	32.47	32.74	30.95	31.12	.....	.....	.....	.....
2	36.38	36.64	37.19	37.26	32.37	32.54	31.12	31.36	.....	.....	.....	.....
3	36.04	36.38	37.26	37.31	32.45	32.57	31.25	31.40	.....	.....	.....	.....
4	35.86	36.04	37.30	37.44	32.53	32.67	31.08	31.27	.....	.....	.....	.....
5	35.71	35.86	37.41	37.45	32.53	32.69	31.15	31.26	.....	.....	.....	.....
6	35.69	35.77	37.45	37.53	32.53	32.62	31.26	31.51	.....	.....	.....	32.99
7	35.77	35.96	37.47	37.55	32.53	32.76	31.51	31.66	.....	.....	.....	.....
8	35.96	36.08	37.55	37.62	32.77	33.20	31.65	31.94	.....	.....	.....	.....
9	36.00	36.15	37.57	37.64	33.21	33.53	31.95	32.07	.....	28.41	.....	.....
10	36.15	36.22	37.64	37.69	33.53	33.81	31.90	32.07	.....	.....	.....	.....
11	36.18	36.24	37.65	37.69	33.73	34.06	31.90	32.29	.....	.....	.....	.....
12	36.23	36.30	37.67	37.75	34.08	34.26	31.24	32.42	.....	.....	.....	.....
13	36.29	36.37	37.44	37.67	34.26	34.36	29.41	31.24	.....	.....	.....	33.46
14	36.34	36.41	37.02	37.55	34.31	34.43	.....	.....	.....	.....	33.38	33.46
15	36.31	36.41	36.19	37.00	34.44	34.53	.....	.....	.....	.....	33.40	33.49
16	36.41	36.47	36.32	36.17	34.50	34.65	.....	.....	29.12	33.48	33.48	33.51
17	36.46	36.51	34.82	35.32	34.51	34.66	.....	.....	.....	.....	33.44	33.49
18	36.50	36.54	34.57	34.82	34.31	34.53	.....	.....	.....	.....	33.38	33.43
19	36.52	36.80	34.37	34.56	34.00	34.35	.....	.....	.....	.....	33.41	33.62
20	.....	.....	34.06	34.58	33.87	34.30	.....	.....	.....	.....	33.60	33.63
21	.....	.....	33.57	34.06	33.53	33.85	.....	.....	.....	.....	33.58	33.66
22	.....	.....	33.50	33.57	33.21	33.52	.....	.....	.....	.....	33.56	33.76
23	.....	.....	33.15	33.29	32.73	33.71	.....	.....	31.08	33.73	33.73	33.77
24	.....	.....	33.09	33.22	32.20	32.77	.....	.....	.....	.....	33.74	33.85
25	.....	.....	33.11	33.17	31.50	32.20	.....	.....	.....	.....	33.84	33.86
26	.....	.....	33.14	33.26	30.77	31.49	.....	.....	.....	.....	33.80	33.90
27	36.79	36.84	32.74	33.19	30.69	30.83	.....	.....	.....	.....	33.85	33.97
28	36.84	36.87	32.75	32.94	30.58	30.76	.....	.....	.....	.....	33.97	34.15
29	36.85	36.97	32.74	32.91	30.35	30.58	.....	.....	.....	.....	34.04	34.11
30	36.97	37.05	.....	.....	30.55	30.72	.....	.....	32.30	34.11	34.11	34.17
31	37.05	37.15	.....	.....	30.67	30.95	.....	.....	.....	.....	.....	.....

a Recorder shelter washed away by flood water Apr. 14; manual measurements with tape to June 14.

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	34.16	34.25	34.56	34.60	34.75	34.90	35.27	35.32	35.55	35.82	.....	.....
2	34.17	34.29	34.58	34.64	34.86	34.94	35.32	35.35	35.57	35.70	.....	.....
3	34.28	34.36	34.56	34.63	34.91	34.96	35.32	35.35	35.56	35.70	.....	.....
4	34.23	34.39	34.59	34.66	34.96	35.00	35.31	35.33	35.69	35.77	.....	.....
5	34.03	34.27	34.64	34.66	34.97	35.02	.....	.....	35.73	35.78	35.32	35.47
6	34.09	34.30	34.56	34.66	34.95	35.02	.....	.....	35.75	35.88	35.40	35.55
7	34.30	34.42	34.57	34.62	.....	.....	.....	.....	35.85	35.90	35.45	35.51
8	34.41	34.46	34.56	34.63	.....	.....	.....	.....	35.53	35.85	35.51	35.63
9	34.45	34.51	34.54	34.61	.....	.....	.....	.....	35.56	35.64	35.62	35.65
10	34.51	34.53	34.49	34.56	.....	.....	.....	a35.40	.....	.....	35.65	35.77
11	34.53	34.59	34.49	34.54	.....	.....	.....	.....	.....	.....	35.68	35.73
12	34.56	34.62	34.52	34.60	.....	.....	.....	.....	.....	.....	35.73	35.83
13	34.60	34.66	34.56	34.63	35.14	35.18	.....	.....	.....	.....	35.78	35.84

a Tape measurement.

27-3-22--Continued.

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
14	34.51	34.65	34.62	34.68	35.16	35.21	.....	.....	.....	a35.96	35.84	35.89
15	34.56	34.64	34.67	34.69	35.17	35.22	.....	.....	.....	.....	35.32	35.82
16	34.56	34.60	34.31	34.69	35.22	35.26	.....	.....	.....	.....	34.68	35.32
17	34.56	34.60	34.26	34.51	35.20	35.26	35.50	35.52	.....	.....	33.82	34.68
18	34.56	34.64	34.51	34.63	35.20	35.25	35.45	35.51	.....	.....	32.83	33.82
19	34.54	34.58	34.63	34.70	35.20	35.32	35.42	35.50	.....	.....	32.67	32.83
20	34.54	34.59	34.70	34.75	35.26	35.30	35.50	35.52	.....	.....	32.70	32.77
21	34.51	34.61	34.74	34.77	35.20	35.26	35.52	35.55	.....	a36.00	32.77	33.00
22	34.24	34.54	34.76	34.81	35.22	35.25	35.55	35.59	.....	.....	33.01	33.16
23	34.27	34.42	34.78	34.82	35.25	35.29	35.57	35.60	.....	.....	33.16	33.27
24	34.14	34.27	34.78	34.83	35.30	35.33	35.60	35.63	.....	.....	33.27	33.39
25	34.06	34.13	34.83	34.91	35.32	35.34	35.63	35.66	.....	.....	33.39	33.78
26	34.09	34.34	34.91	34.96	35.25	35.34	35.62	35.65	.....	.....	33.70	33.78
27	34.34	34.45	34.92	34.97	35.24	35.30	35.62	35.66	.....	.....	33.71	33.87
28	34.40	34.47	34.87	34.97	35.25	35.27	35.66	35.67	.....	.....	33.85	33.93
29	34.43	34.46	34.76	34.87	35.23	35.29	35.67	35.71	.....	a35.93	33.85	34.11
30	34.44	34.51	34.74	34.85	35.25	35.31	35.71	35.72	.....	.....	34.06	34.12
31	34.49	34.56	34.82	34.87			35.72	35.77			34.01	34.08

a Tape measurement.