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Water-Supply Paper 986

WATER LEVELS AND ARTESIAN PRESSURE IN OBSERVATION WELLS IN THE UNITED STATES IN 1943

PART 1. NORTHEASTERN STATES

BY

O. E. MEINZER, L. K. WENZEL
and others

Prepared in cooperation with the States of
CONNECTICUT, INDIANA, MAINE, MASSACHUSETTS MICHIGAN, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, OHIO, PENNSYLVANIA and VERMONT
and other agencies

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WATER LEVELS AND ARTESIAN PRESSURE IN OBSERVATION WELLS IN THE UNITED STATES IN 1943

Part 1. NORTHEASTERN STATES

INTRODUCTION

By O. E. Meinzer and L. K. Wenzel

Significance of records of water level and artesian pressure

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

Annual publication of records by Geological Survey

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

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

Year	North-eastern States	South-eastern States	North-central States	South-central States	North-western States	South-western States and Hawaii
1935	777	777	777	777	777	777
1936	817	817	817	817	817	817
1937	840	840	840	840	840	840
1938	845	845	845	845	845	845
1939	886	886	886	886	886	886
1940	906	907	908	909	910	911
1941	936	937	938	939	940	941
1942	944	945	946	947	948	949
1943	986	987	988	989	990	991

Scope of present volume

The present volume covers the northeastern States and gives records of water level and artesian pressure in about 800 observation wells of the Geological Survey and cooperating agencies in Connecticut, Indiana, Maine, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, and Vermont. Of these wells, 108 are equipped with automatic water-stage recorders. For some wells not previously reported complete records of water level are given in this volume, including those for the years before 1943. For wells whose previous records have been published this volume gives only the current records. If a complete description of a well has been published in a previous report, only the well number or the well number and a brief identifying description are given in this report. The numbers in parentheses immediately following a well number are those of the water-supply papers in which earlier records of that well are given and the pages on which they appear. An asterisk indicates that a description of the well is given in the paper whose number is so marked. This report includes about 30,830 individual determinations of water level and artesian pressure.

Land-surface datum

Hitherto, in Geological Survey reports, the water levels and artesian pressures for some wells have been given in feet above or below the measuring points and for other wells in feet above or below sea level or above or below various assumed datum planes. It was considered inadvisable to adopt a standard procedure in expressing water levels and artesian heads until after a period of trial with datum planes of different kinds. The time has now come, however, for the adoption of a uniform practice as to

datum in making the records to be published in the annual water-level reports. It has become evident that the water levels in each well should be expressed with reference to a permanent datum plane established for that well in order to preserve the continuity of the record if the measuring point is changed. The chief objection to the use of datum planes

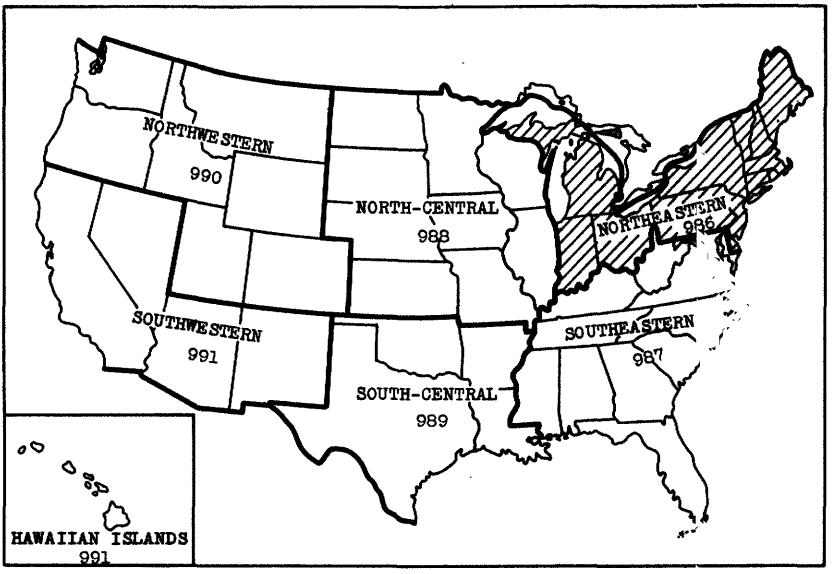

Figure 1.--Outline map of the United States, showing sections of the country covered by the six water-supply papers on water levels and artesian pressure in observation wells in 1943. The shaded section represents the part of the country covered by this volume.

other than land surface has been that the significance of the water level with respect to the land surface is thereby concealed. It appears, however, that this objection can be overcome by using a precise datum plane that approximates the land surface.

The adoption of land-surface datum planes as the standard to be used in expressing water levels and artesian heads will not prevent the use of other datum planes for the summary tables and for maps and graphs in the annual water-level reports or in other reports. The use of the sea-level datum and the 10-foot datum planes are to be encouraged for purposes of study and interpretation, but the land-surface datum planes will be used exclusively for publishing original records. Bench marks must be established,

as heretofore, near each observation well to prevent the loss of the precise record if the measuring point or the well itself is destroyed. New data as to the positions of the measuring point and of the bench marks, in feet above or below land-surface datum plane, will be published in the appropriate annual reports.

In accordance with the above, the water levels and artesian heads for all wells listed in this report are given in reference to land-surface datum planes. If the water levels or artesian heads are referred to land-surface datum for the first time, a conversion factor is given in the descriptive matter preceding them in order to facilitate comparison of the older and newer records. Wherever the conversion factor is given in the report for 1942, it is not repeated in this report.

Network of key observation wells

During 1942 the Geological Survey established a network of key observation wells in order to make available current information on general ground-water conditions over the country. These wells were selected because the fluctuations of water level in them are believed to be typical, and they represent the general fluctuations that occur in the parts of the country in which the wells are situated. At the end of 1942 the network included about 130 wells in 40 States. About 40 of the wells were established expressly for the network in 1942; the other 90 were selected from wells measured regularly in connection with cooperative ground-water investigations. The coverage of the country is still far from adequate, and it is expected that some wells not now included will be added to the network from time to time.

General summary of changes in ground-water level in 1943 in the northeastern part of the United States

In 1943, precipitation in all of the States in the northeastern part of the United States was below normal, except in New York, where precipitation was normal, and in Michigan, where it was somewhat above normal. The fluctuations of both water level and artesian pressure in wells depend, however, on many factors besides the amount of precipitation. In certain of the observation wells there are fluctuations caused by differences in the rate of pumping or artesian flow from other wells in the area, but most of the observation wells are not noticeably affected by pumping or artesian flow.

Acknowledgments

Acknowledgments for effective services in the preparation of this water-supply paper are due Misses Dorothy M. Ireland, Nauvoo Morris, and Gladys A. Case, Mrs. Susan H. Washburn, and Mr. Rodney Hart. Miss Ireland had general charge of the assembling and typing of the several reports; Mrs. Washburn edited all of the reports; and Mr. Hart prepared the illustrations.

CONNECTICUT

By Jean Lowry

PROGRAM OF WORK

A study of ground-water conditions in Connecticut was begun in October 1934 as a project of the Federal Emergency Relief Administration, sponsored by the State Planning Board and the State Water Commission and under the technical direction of the Geological Survey, United States Department of the Interior. For several years the study was continued as a project of the Works Progress Administration, under the same sponsorship and technical direction. No records of water-level measurements were published, however, until 1938, when seven reports that include water-level measurements were released by the Works Progress Administration, in mimeographed form, as Bulletins GW 1 to GW 7, inclusive.

Beginning in 1939 and continuing in each succeeding year, a cooperative investigation of ground-water conditions in the New Haven area has been conducted by the Geological Survey, United States Department of the Interior, and the State Water Commission of Connecticut. The investigation includes a program of periodic measurements of water level in wells in the area, records of which have been published for each year by the Geological Survey. The program at the beginning of 1943 included 22 wells, in 1 of which measurements were discontinued during the year, leaving 21 under observation at the end of the year. Measurements were made at least once a month in 1943 in all the wells, and the number of individual measurements made was about 300.

The monthly collection of samples of ground water used to determine the chloride content, which was begun July 31, 1941, was also continued in 1943. During the year 305 samples were collected from 19 pumping plants in the city of New Haven. The chloride content of these samples was determined at the Connecticut State Agricultural Experiment Station, at New Haven, under the direction of Dr. E. M. Bailey, chemist.

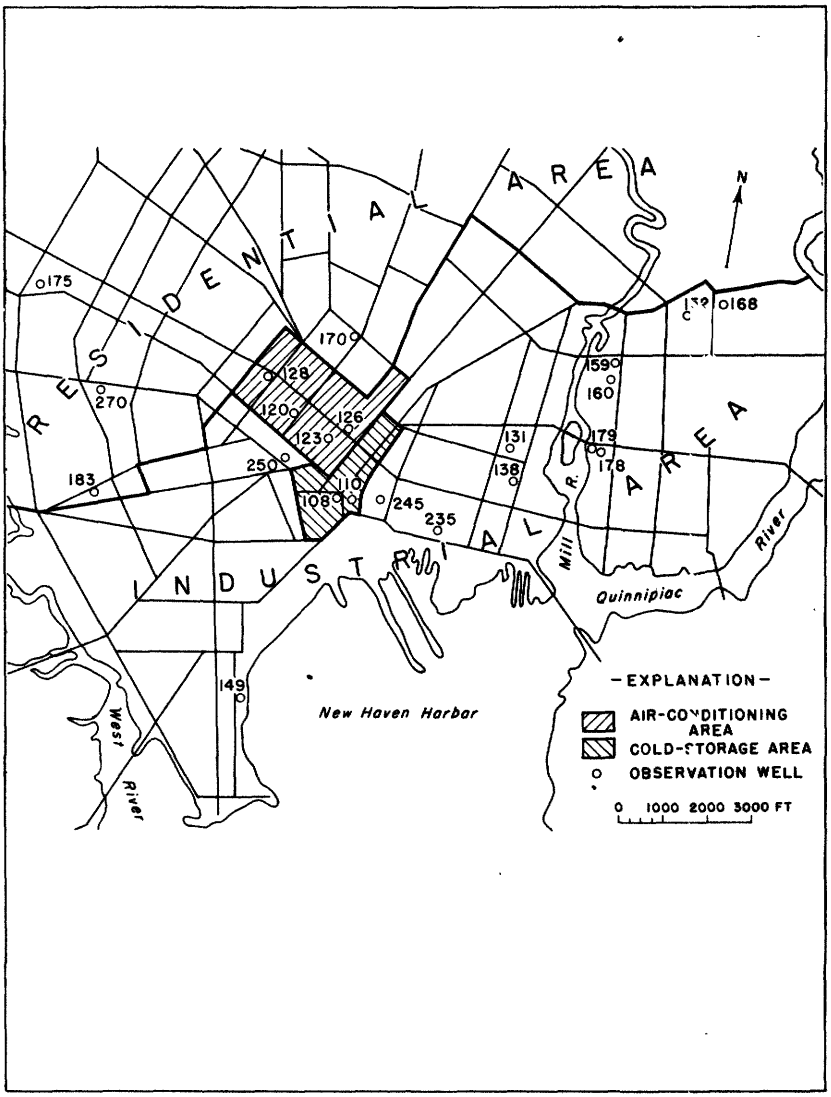

Figure 2.--Map of part of New Haven, Conn., showing location of observation wells.

As an aid in studying the results of the water-level measurement and chloride-sampling program, the city of New Haven has been divided into four somewhat arbitrarily determined areas based on the chief use of ground water in each. The boundaries of these areas are shown in figure 2 The Residential area comprises the north upland part of the city, where there are relatively few wells, most of them of small capacity. At widely separated locations in this area, however, are a few industrial plants that pump considerable water. The Air-conditioning area includes the business section, in which theaters, stores, and restaurants use ground water for air-conditioning. The Cold-storage area, in which ground water is used chiefly for the refrigeration of meat and dairy products, extends along State Street from Columbus Avenue to Grand Avenue. The Industrial area, where ground water is used chiefly in manufacturing, is in the vicinity of the West and Mill Rivers.

FLUCTUATIONS OF WATER LEVEL

Ground-water levels in New Haven are affected by both precipitation and pumping. In the Residential area rainfall is the major factor. In the Industrial area, however, the effects of pumping are sufficient to mask the effects of precipitation. During the colder months, when withdrawals are relatively light, the movement of water levels in the Air-conditioning and Cold-storage areas reflects the precipitation conditions, as do wells in the Residential area. However, during the summer when considerable quantities of water are withdrawn, the effects of pumping masks the effect of precipitation.

The following table presents a summary of data on the water levels, listing 20 of the observation wells, which are grouped under the four "areas" already defined.

Summary of data on water levels in New Haven, Conn.
(Measurements refer to mean sea level)

Well	First measured	Lowest observed water level		Highest observed water level		Water level Dec. 29, 1943 (feet)
		Feet	Date	Feet	Date	
Residential area						
NHn 170	June 23, 1939	+15.64	Jan. 14, 1942	+18.41	June 23, 1939	+16.41
NHn 175	June 23, 1939	+2.27	Dec. 17, 1941	+4.51	June 23, 1939	+2.77
NHn 183	Dec. 13, 1939	+2.67	Dec. 3, 1941	+5.88	June 12, 1940	+2.98
NHn 270	May 21, 1941	+3.78	Dec. 17, 1941	+5.94	Apr. 28, 1943	+4.56
Air-conditioning area						
NHn 120	May 23, 1939	+2.60	Aug. 20, 1942	+9.24	May 23, 1939	.....
NHn 123	Feb. 26, 1941	a-1.06	a/Aug. 13, 1942	+2.48	June 1, 1943	+.20
NHn 126	Jan. 22, 1941	a+.44	a/Oct. 15, 1941	+2.81	Apr. 28, 1943	+1.19
NHn 128	May 31, 1939	+13.58	Aug. 27, 1941	+17.66	May 31, 1939	.....
Cold-storage area						
NHn 108	May 12, 1939	-2.36	Sept.17, 1941	+1.26	May 8, 1940	-.68
NHn 110	May 12, 1939	-2.16	Nov. 12, 1941	+.51	May 12, 1939	-1.09
Industrial area						
NHn 131	June 1, 1939	-5.38	Dec. 10, 1941	-2.06	Feb. 19, 1941	-4.71
NHn 138	Feb. 28, 1940	-5.60	Dec. 10, 1941	-1.83	Jan. 2, 1941	-4.80
NHn 149	June 13, 1939	+1.08	Nov. 12, 1941	+3.25	June 30, 1939	+2.64
NHn 159	June 7, 1939	-16.40	Mar. 11, 1942	-4.11	June 12, 1939	-12.92
NHn 160	June 7, 1939	-15.62	Sept.23, 1943	+4.15	Mar. 6, 1940	.....
NHn 178	July 21, 1939	-5.75	Mar. 11, 1942	+.04	June 12, 1940	-5.10
NHn 179	July 21, 1939	-5.19	Mar. 11, 1942	-.17	July 17, 1940	-5.12
NHn 235	Oct. 2, 1940	-1.65	Jan. 28, 1942	+.15	Mar. 30, 1943	-1.07
NHn 245	Oct. 2, 1940	-1.07	Oct. 8, 1941	+.82	Mar. 30, 1943	.....
NHn 250	Oct. 9, 1940	+2.63	Feb. 25, 1942	+4.79	Oct. 9, 1940	+3.00

The summary table affords a comparison of the lowest and highest water levels reached in each well with its water level at the end of 1943 and also a comparison of the fluctuations in each of the four areas with the fluctuations in the other areas. It shows that the water levels in all except three of the wells reached their lowest observed stages in the latter part of 1941 or the early part of 1942. Of the three exceptions, the water levels in two--wells NHn 120 and NHn 123--reached their lowest stages in August 1942. These two wells are in the Air-conditioning area, where water levels generally reach their lowest stages during the latter part of August, when the advent of cooler weather causes a sharp decrease in pumpage. Wells NHn 120 and NHn 123 are considerably nearer the center of pumping of the Air-conditioning area than well NHn 128, which accounts for their water levels reaching lower stages than the water level in well NHn 128. The third exception is well NHn 160, whose water level reached its lowest stage in September 1943. Well NHn 160 is in the Industrial area, at a plant in the Mill River section, and its water level is affected by changes in the rate of pumping from other wells at the same plant.

a Well inaccessible for measurement during summer owing to pumping for air-conditioning.

The water levels in four wells--NHn 270, in the Residential area, NHn 123 and 126, in the Air-conditioning area, and NHn 245, in the Industrial area-- reached record high stages in the spring of 1943. Except for NHn 245, this may be attributed to above-normal rainfall in March and May. It is presumed that the high stage at NHn 245 resulted from a decrease in the rate of withdrawal in the area.

The net change in ground-water level during 1943 in each of 15 wells in New Haven, grouped under the areas defined, is shown in the following table:

Net change in water levels in observation wells in New Haven, Conn., in feet, during 1943

Area	Well	Net rise (+) or net decline (-)
Residential	NHn 170	-0.66
	NHn 175	-.41
	NHn 183	-1.15
	NHn 270	-.70
Air-conditioning	NHn 126	-.79
Cold-storage	NHn 108	-.25
	NHn 110	+.15
Industrial	NHn 131	-1.38
	NHn 138	-1.59
	NHn 149	-.33
	NHn 159	-1.89
	NHn 178	-2.11
	NHn 179	-2.05
	NHn 235	-.71
	NHn 250	-.21

All but one of the wells listed in the table of net change showed a net decline in water level during 1943, which was caused by below-normal precipitation. One well, however, NHn 110, showed a net rise, caused by a decrease in the pumpage from a nearby well. Well NHn 110 is in a building situated at the center of the Cold-storage area, and its water level is considerably affected by changes in the rate of pumping from this nearby well, which is in the same building.

Another well affected by changes in the rate of pumping of nearby wells is NHn 120, which has shown a persistent downward trend in water level since the first measurement was made in it. This trend is undoubtedly the result of an increase in the rate of pumping in the surrounding area. Well NHn 120 is in the Roger Sherman Theater, which is in the center of a district of theaters, restaurants, and department stores that use ground water for air-conditioning. In many of these establishments the air-conditioning equipment has been installed fairly recently, so that the pumpage of ground water during the summer in downtown New Haven has greatly increased in the last few years.

The effects of pumping and precipitation are shown by the graphs on figure 3 which affords a comparison of the fluctuations, over a period of years, in a representative well in each of the three areas--Residential, Air-conditioning, and Cold-storage--with the variations in monthly precipitation, as shown by the accumulated departure from a 10-year running average. In general, the trend of the water level in well NHn 170 (Residential area) corresponds to the highs and lows in the precipitation curve. In the other two areas, however, the effect of pumping during the summer months has a noticeable effect on the water levels, overpumping causing a downward trend in both wells.

The precipitation at New Haven in 1943 was 36.62 inches, or about 21 inches less than in 1942. This is 10 inches below normal and the lowest recorded since 1930. In March, May, and June the precipitation was above normal, and, in consequence, water levels were at high stages during these months. During the period July to December, however, the precipitation was below normal, and the water levels, in response, declined steadily. The average for the year of the water levels in the Residential area was only 0.5 foot higher than the lowest average observed for any year to date--that of 1941. Two factors prevented the average level for 1943 from declining to the low of 1941, namely, (1) the concentration in the spring of 1943 of a large proportion of the year's precipitation, resulting in some recharge later in the same year, and (2) above-normal precipitation in the preceding year (1942), especially in November and December, also resulting in recharge in 1943. In 1941, on the other hand, the precipitation was less in amount that in 1943 and less favorably distributed for recharge in the same year, nor was the precipitation in the preceding year (1940) favorably distributed for recharge in 1941.

In the Cold-storage area, ground-water levels are frequently drawn below mean sea level, as illustrated in figure 3 , which includes a graph showing the fluctuations over a period of several years in well NHn 108, a typical well in the Cold-storage area. As a result, salt water encroaches on the wells. The chloride content in well waters in this area varies considerably, being greater when the water levels are low. During the period of low water levels in 1941, the chloride content of water from one plant, NHn 173, one of the 19 pumping plants that are sampled, was 1,612

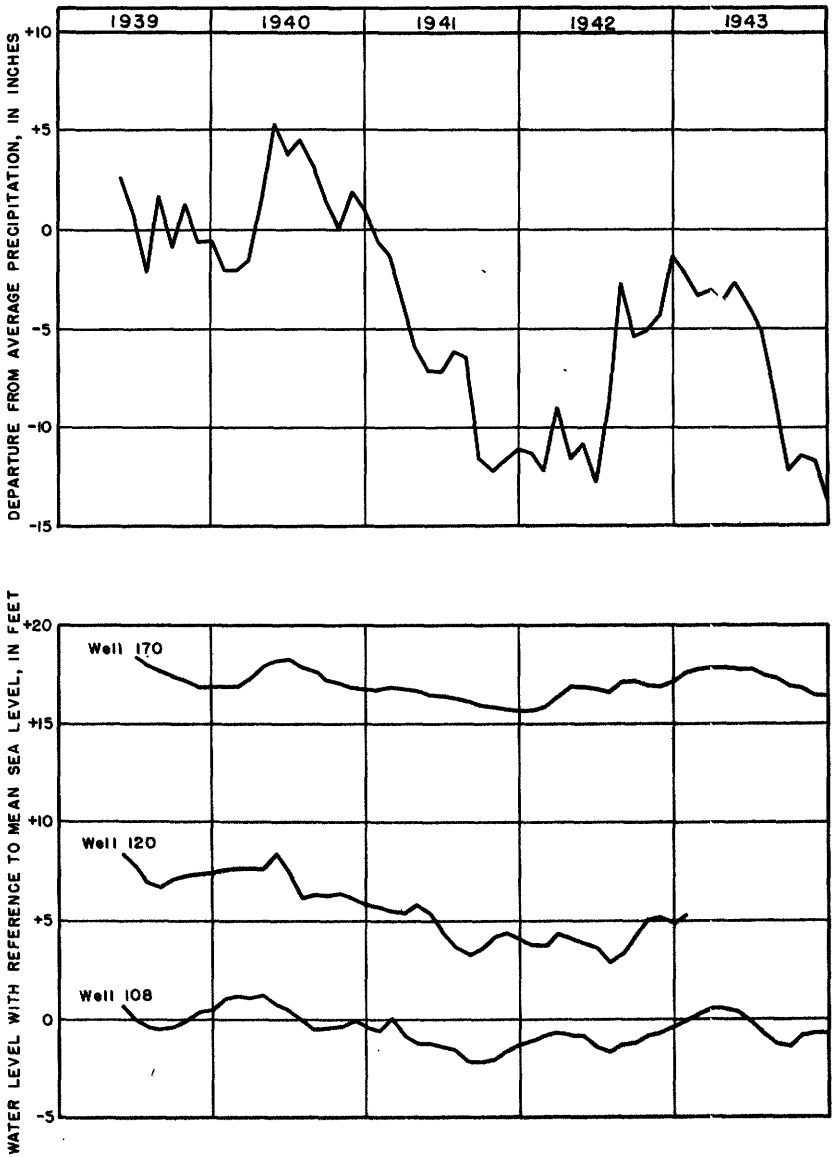

Figure 3.--Graphs showing average ground-water levels in wells in New Haven, Conn., and accumulated departure from average precipitation, 1939-43.

parts per million. This plant consists of 6 shallow wells which penetrate 27 feet of sand and gravel in the heart of the Cold-storage area. In May 1943, a period of high water levels (see curve for well NHn 108), the chloride content of water from well NHn 173 was 1,101 parts per million.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

New Haven County

NHn 108 (*886, p. 58; 906, p. 8; 936, p. 11; 944, p. 12). Whiting Realty Co. About 100 feet south of Whiting Street and about 100 feet west of State Street, New Haven. Land-surface datum is 15.86 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 1	15.92	Apr. 28	15.35	Aug. 3	16.66	Oct. 28	16.74
26	15.61	June 1	15.53	31	17.12	Nov. 24	16.54
Mar. 30	15.34	29	16.03	Sept.23	17.30	Dec. 29	16.54

Water level, in feet with reference to mean sea level, 1943

Feb. 1	-0.06	Apr. 28	+0.51	Aug. 3	-0.80	Oct. 28	-0.88
26	+.25	June 1	+.33	31	-1.26	Nov. 24	-.68
Mar. 30	+.52	29	-.17	Sept.23	-1.44	Dec. 29	-.68

NHn 110 (*886, p. 58; 906, p. 8; 936, p. 12; 944, p. 12). Federal Packing Co. On east side of State Street at Whiting Street, New Haven. Land-surface datum is 11.44 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 1	12.40	Apr. 28	11.67	Aug. 3	11.89	Oct. 28	12.55
26	12.17	June 1	11.62	31	12.13	Nov. 24	12.52
Mar. 30	11.87	29	11.67	Sept.23	12.36	Dec. 29	12.53

Water level, in feet with reference to mean sea level, 1943

Feb. 1	-0.96	Apr. 28	-0.23	Aug. 3	-0.45	Oct. 28	-1.11
26	-.73	June 1	-.18	31	-.69	Nov. 24	-1.08
Mar. 30	+.43	29	-.23	Sept.23	-.92	Dec. 29	-1.09

NHn 120 (*886, p. 59; 906, p. 9; 936, p. 12; 944, p. 12). Roger Sherman Theater. On northwest side of College Street, about 160 feet northwest of Crown Street, New Haven. Land-surface datum is 37.62 feet above mean sea level. Water level, in feet below land-surface datum, 1943: Feb. 1, 32.25. Water level, in feet above mean sea level, 1943: Feb. 1, 5.37.

NHn 123 (*936, p. 13; 944, p. 13). New York Life Insurance Co. On west side of Church Street, about 135 feet south of Center Street, New Haven. Land-surface datum is 24.41 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 26	22.65	Apr. 28	22.06	Sept.24	24.38	Nov. 24	23.72
Mar. 30	22.34	June 1	21.93	Oct. 29	23.35	Dec. 29	24.21

Water level, in feet above mean sea level, 1943

Feb. 26	1.76	Apr. 28	2.35	Sept.24	0.03	Nov. 24	0.69
Mar. 30	2.07	June 1	2.48	Oct. 29	1.06	Dec. 29	.20

NHn 126 (*936, p. 13; 944, p. 13). Liggett Drug Store. On east side of Church Street, about 100 feet north of Chapel Street, New Haven. Land-surface datum is 22.33 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 1	20.05	Mar. 30	19.66	Oct. 29	20.76	Dec. 29	21.14
26	19.92	Apr. 28	19.52	Nov. 24	20.94		

Water level, in feet above mean sea level, 1943

Feb. 1	2.28	Mar. 30	2.67	Oct. 29	1.57	Dec. 29	1.19
26	2.41	Apr. 28	2.81	Nov. 24	1.39		

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NHn 128 (*886, p. 59; 906, p. 9; 936, p. 13; 944, p. 13). United Restaurant. On southwest side of Chapel Street, about 80 feet northwest of York Street, New Haven. Land-surface datum is 43.78 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 1	28.44	Apr. 28	28.25	June 29	28.32	Aug. 31	28.89
26	28.20	June 1	27.87	Aug. 3	28.58	Sept.23	29.11
Mar. 30	27.98						

Water level, in feet above mean sea level, 1943

Feb. 1	15.34	Apr. 28	15.53	June 29	15.46	Aug. 31	14.89
26	15.58	June 1	15.91	Aug. 3	15.20	Sept.23	14.67
Mar. 30	15.80						

NHn 131 (*886, p. 59; 906, p. 9; 936, p. 13; 944, p. 13). New Haven Clock Co. On west side of Wallace Street, about 120 feet north of St. John Street, New Haven. Land-surface datum is 17.23 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 1	20.65	Apr. 28	19.72	Aug. 3	20.01	Oct. 29	21.58
26	20.65	June 1	20.09	31	20.17	Nov. 26	21.69
Mar. 30	20.13	29	20.20	Sept.24	20.44	Dec. 30	21.94

Water level, in feet below mean sea level, 1943

Feb. 1	3.42	Apr. 28	2.49	Aug. 3	2.78	Oct. 29	4.35
26	3.42	June 1	2.86	31	2.94	Nov. 26	4.46
Mar. 30	2.90	29	2.97	Sept.24	3.21	Dec. 30	4.71

NHn 138 (*906, p. 9; 936, p. 14; 944, p. 13). Associated Realty Co. On south side of Greene Street, about 130 feet west of East Street, New Haven. Land-surface datum is 17.75 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 1	21.14	June 1	20.70	Aug. 3	20.26	Nov. 26	22.28
26	21.06	29	20.80	31	20.30	Dec. 30	22.55

Water level, in feet below mean sea level, 1943

Feb. 1	3.39	June 1	2.95	Aug. 3	2.51	Nov. 26	4.53
26	3.31	29	3.05	31	2.55	Dec. 30	4.80

NHn 149 (*886, p. 60; *906, p. 10; 936, p. 14; 944, p. 14). Seamless Rubber Co. On east side of Hallock Avenue, about 200 feet south of Second Street, New Haven. Land-surface datum is 22.94 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 1	20.38	Apr. 28	20.52	Aug. 3	20.56	Oct. 28	20.56
26	20.67	June 1	20.43	31	20.64	Nov. 24	20.69
Mar. 30	20.59	29	20.39	Sept.23	20.80	Dec. 29	20.30

Water level, in feet above mean sea level, 1943

Feb. 1	2.56	Apr. 28	2.42	Aug. 3	2.38	Oct. 28	2.38
26	2.27	June 1	2.51	31	2.30	Nov. 24	2.25
Mar. 30	2.35	29	2.55	Sept.23	2.14	Dec. 29	2.64

NHn 152 (*886, p. 60; 906, p. 10; 936, p. 14; 944, p. 14). A. C. Gilbert Co. About 220 feet north of Peck Street and about 330 feet east of Blatchley Avenue, New Haven. Land-surface datum is 42.48 feet above mean sea level.

NHn 152. A. C. Gilbert Co.--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 1	27.63	Apr. 28	27.55	Aug. 3	28.59	Oct. 29	30.46
26	27.72	June 1	27.74	31	29.28	Nov. 26	30.07
Mar. 30	27.41	29	27.63	Sept.24	30.32	Dec. 29	31.79

Water level, in feet above mean sea level, 1943

Feb. 1	14.85	Apr. 28	14.93	Aug. 3	13.89	Oct. 29	12.02
26	14.76	June 1	14.74	31	13.20	Nov. 26	12.41
Mar. 30	15.07	29	14.85	Sept.24	12.16	Dec. 29	10.69

NHn 159 (*886, p. 61; 906, p. 11; 936, p. 15; 944, p. 14). National Folding Box Co. About 270 feet north of Alton Street and about 250 feet west of James Street, New Haven. Land-surface datum is 7.33 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 1	18.14	Apr. 28	20.90	Aug. 3	21.60	Oct. 28	23.13
26	19.72	June 1	19.21	31	19.42	Nov. 26	21.04
Mar. 30	17.58	29	17.58	Sept.23	19.78	Dec. 29	20.25

Water level, in feet below mean sea level, 1943

Feb. 1	10.81	Apr. 28	13.57	Aug. 3	14.27	Oct. 28	15.80
26	12.39	June 1	11.88	31	12.09	Nov. 26	13.71
Mar. 30	10.25	29	10.25	Sept.23	12.45	Dec. 29	12.92

NHn 160 (*886, p. 61; 906, p. 11; 936, p. 15; 944, p. 15). National Folding Box Co. About 25 feet south of Alton Street and about 315 feet west of James Street. New Haven. Land-surface datum is 6.89 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 1	5.73	Apr. 28	4.75	Aug. 3	5.84	Oct. 28	5.25
26	5.73	June 1	4.59	31	22.17	Nov. 26	5.32
Mar. 30	4.66	29	5.16	Sept.23	22.51		

Water level, in feet with reference to mean sea level, 1943

Feb. 1	+1.16	Apr. 28	+2.14	Aug. 3	+1.05	Oct. 28	+1.64
26	+1.16	June 1	+2.30	31	-15.28	Nov. 26	+1.57
Mar. 30	+2.23	29	+1.73	Sept.23	-15.62		

NHn 168 (*886, p. 61; 906, p. 11; 936, p. 15; 944, p. 15). Story Dairy. About 120 feet south of Bailey Street and about 180 feet east of Ferry Street, New Haven. Land-surface datum is 44.72 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 1	36.52	Apr. 28	36.73	Aug. 3	37.18	Oct. 28	37.57
26	36.73	June 1	36.87	31	37.42	Nov. 26	38.04
Mar. 30	36.62	29	36.89	Sept.23	37.61	Dec. 29	38.46

Water level, in feet above mean sea level, 1943

Feb. 1	8.20	Apr. 28	7.99	Aug. 3	7.54	Oct. 28	7.15
26	7.99	June 1	7.85	31	7.30	Nov. 26	6.68
Mar. 30	8.10	29	7.83	Sept.23	7.11	Dec. 29	6.26

NHn 170 (*886, p. 61; 906, p. 11; 936, p. 15; 944, p. 15). Yale University. About 100 feet southwest of Grove Street and about 200 feet northwest of College Street, New Haven. Land-surface datum is 41.09 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 1	23.48	Apr. 28	23.27	Aug. 3	23.61	Oct. 29	24.42
26	23.36	June 1	23.34	31	23.87	Nov. 24	24.66
Mar. 30	23.31	29	23.29	Sept.24	24.11	Dec. 29	24.68

NHn 170. Yale University--Continued.

Water level, in feet above mean sea level, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 1	17.61	Apr. 28	17.82	Aug. 3	17.48	Oct. 29	16.67
26	17.73	June 1	17.75	31	17.22	Nov. 24	16.43
Mar. 30	17.78	29	17.80	Sept.24	16.98	Dec. 29	16.41

NHn 175 (*886, p. 62; 906, p. 12; 936, p. 16; 944, p. 15). Monarch Laundry. About 200 feet north of Derby Avenue and about 70 feet west of Ellsworth Street. Land-surface datum is 33.84 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 1	30.35	Apr. 28	29.94	Aug. 3	30.31	Oct. 28	30.96
26	30.22	June 1	30.00	31	30.39	Nov. 24	30.97
Mar. 30	29.93	29	30.02	Sept.23	30.59	Dec. 29	31.07

Water level, in feet above mean sea level, 1943

Feb. 1	3.49	Apr. 28	3.90	Aug. 3	3.53	Oct. 28	2.88
26	3.62	June 1	3.84	31	3.45	Nov. 24	2.87
Mar. 30	3.91	29	3.82	Sept.23	3.25	Dec. 29	2.77

NHn 178 (*886, p. 63; 906, p. 12; 936, p. 16; 944, p. 16). Connecticut Co. About 40 feet south of Grand Avenue and about 200 feet west of Haven Street, New Haven. Land-surface datum is 14.36 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 1	17.45	Apr. 28	18.20	Aug. 3	18.32	Oct. 29	19.44
26	17.54	June 1	18.63	31	18.65	Nov. 26	19.34
Mar. 30	17.84	29	18.59	Sept.24	19.21	Dec. 30	19.46

Water level, in feet below mean sea level, 1943

Feb. 1	3.09	Apr. 28	3.84	Aug. 3	3.96	Oct. 29	5.08
26	3.18	June 1	4.27	31	4.29	Nov. 26	4.98
Mar. 30	3.48	29	4.23	Sept.24	4.85	Dec. 30	5.10

NHn 179 (*886, p. 63; 906, p. 13; 936, p. 16; 944, p. 16). Connecticut Co. About 40 feet south of Grand Avenue and about 220 feet west of Haven Street. New Haven. Land-surface datum is 14.35 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 1	17.24	Apr. 28	17.88	Aug. 3	18.28	Oct. 29	19.23
26	17.55	June 1	18.31	31	18.59	Nov. 26	19.30
Mar. 30	17.66	29	18.34	Sept.24	18.89	Dec. 30	19.47

Water level, in feet below mean sea level, 1943

Feb. 1	2.89	Apr. 28	3.53	Aug. 3	3.93	Oct. 29	4.88
26	3.20	June 1	3.96	31	4.24	Nov. 26	4.95
Mar. 30	3.31	29	3.99	Sept.24	4.54	Dec. 30	5.12

NHn 183 (*906, p. 13; 936, p. 17; 944, p. 16). Frank X. Hall Storage Co. On south side of Davenport Avenue, about 500 feet west of West Street, New Haven. Land-surface datum is 23.94 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 1	19.28	Apr. 28	19.34	Aug. 3	19.96	Oct. 28	20.78
26	19.24	June 1	19.47	31	20.26	Nov. 24	20.60
Mar. 30	19.14	29	19.60	Sept.23	20.55	Dec. 29	20.96

Water level, in feet above mean sea level, 1943

Feb. 1	4.66	Apr. 28	4.60	Aug. 3	3.98	Oct. 28	3.16
26	4.70	June 1	4.47	31	3.68	Nov. 24	3.34
Mar. 30	4.80	29	4.34	Sept.23	3.39	Dec. 29	2.98

NHn 235 (#906, p. 14; 936, p. 17; 944, p. 16). C. Cowles & Co. About 100 feet north of Water Street and about 70 feet west of Chestnut Street, New Haven. Land-surface datum is 14.80 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 1	14.99	Apr. 28	14.72	Aug. 3	14.99	Nov. 26	15.54
26	14.92	June 1	14.68	31	15.28	Dec. 30	15.87
Mar. 30	14.65	29	14.75	Oct. 29	15.58		

Water level, in feet with reference to mean sea level, 1943

Feb. 1	-0.19	Apr. 28	+0.08	Aug. 3	-0.19	Nov. 26	-0.74
26	-.12	June 1	+.12	31	-.48	Dec. 30	-1.07
Mar. 30	+.15	29	+.05	Oct. 29	-.78		

NHn 245 (#906, p. 15; 936, p. 18; 944, p. 17). Atlantic Bottling Works. On south side of Fair Strset, about 90 feet east of Prindle Street, New Haven. Land-surface datum is 18.71 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 1	18.32	June 1	17.95	Aug. 31	18.96	Oct. 28	18.90
26	18.11	29	18.04	Sept.24	19.18	Nov. 24	18.82
Mar. 30	17.89	Aug. 3	18.50				

Water level, in feet with reference to mean sea level, 1943

Feb. 1	+0.39	June 1	+0.76	Aug. 31	-0.25	Oct. 28	-0.19
26	+.60	29	+.67	Sept.24	-.47	Nov. 24	-.11
Mar. 30	+.82	Aug. 3	+.21				

NHn 250 (#906, p. 15; 936, p. 18; 944, p. 17). I. Newman & Sons. On north side of Oak Street, about 180 feet east of Factory Street, New Haven. Land-surface datum is 14.93 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 1	11.38	Apr. 28	10.58	Aug. 3	11.20	Oct. 29	11.63
26	11.17	June 1	10.20	31	11.72	Nov. 24	11.55
Mar. 30	10.84	29	10.50	Sept.24	11.92	Dec. 29	11.93

Water level, in feet above msan sea level, 1943

Feb. 1	3.55	Apr. 28	4.35	Aug. 3	3.73	Oct. 29	3.30
26	3.76	June 1	4.73	31	3.21	Nov. 24	3.38
Mar. 30	4.09	29	4.43	Sept.24	3.01	Dec. 29	3.00

NHn 270 (#936, p. 19; 944, p. 18). Carl E. Altmann. On east side of Auburn Street, about 190 feet south of Legion Avenue, New Haven. Land-surface datum is 38.18 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 1	32.48	Apr. 28	32.24	Aug. 3	32.60	Oct. 28	33.37
26	32.38	June 1	32.35	31	32.84	Nov. 24	33.50
Mar. 30	32.25	29	32.32	Sept.23	33.05	Dec. 29	33.62

Water level, in feet above mean sea level, 1943

Feb. 1	5.70	Apr. 28	5.94	Aug. 3	5.58	Oct. 28	4.81
26	5.80	June 1	5.83	31	5.34	Nov. 24	4.68
Mar. 30	5.93	29	5.86	Sept.23	5.13	Dec. 29	4.56

INDIANA

By F. H. Klaer, Jr., and J. G. Ferris

PROGRAM OF WORK

The cooperative observation-well program in Indiana, begun in 1935, was continued in 1943 in cooperation with the Indiana State Department of Conservation. In March 1943 a bill was passed by the Indiana Legislature authorizing the State Department of Conservation to make a detailed investigation of the water resources of the State in cooperation with the Federal Geological Survey, and funds were appropriated for this purpose. The observation-well program now forms part of this investigation, for which funds were contributed, also, by the State Highway Commission and the State Board of Health. State funds are matched by the Federal Geological Survey.

The water-resources investigation includes the study of ground-water conditions and ground-water supplies throughout the State, giving particular attention at present to the areas in which large quantities of water are pumped from wells for municipal and industrial uses. This will require the expansion of the present observation-well program, in order that data on water levels may be available for all parts of the State. Detailed quantitative studies will be made in certain heavily pumped areas in order to estimate, insofar as possible, the safe yields of the water-bearing formations.

The field work in the Indianapolis area was curtailed during 1943 but measurements of water level were continued. A detailed report on this area[1/] was issued at the beginning of the year.

At the beginning of 1943, periodic measurements of water level were being made in 50 wells, including 11 in the Indianapolis area, in Marion County. During the year, measurements were begun in five wells and discontinued in two wells. The new observation wells are in Clark, Dearborn, and Marion Counties. At the end of the year, periodic measurements were

1/ McGuinness, C. L., Ground-water resources of the Indianapolis area: Indiana Div. Geology Pub., 49 pp., January 1, 1943. (Mimeographed.)

being made in 53 wells, including 13 in the Indianapolis area. The measurements were made by members of the Indiana Department of Conservation and municipal water departments and by private individuals. They were made twice a month in most wells, monthly or weekly in a few wells, and daily in two wells. During the year about 1,700 measurements of water level were made. Two automatic water-stage recorders were in operation on wells in the Indianapolis area during most of the year, and one each on wells in Clark and Dearborn Counties for parts of the year. The location of the observation wells is shown in figure 4 .

PRECIPITATION

The average precipitation in Indiana during 1943 was 37.45 inches, or 1.72 inches below the average for the 57-year period of record. The precipitation was irregularly distributed, causing floods in the spring and droughts in the fall in certain parts of the State. May, March, and July were the wettest months, with 8.70, 4.67, and 4.22 inches of precipitation, respectively, and December, January, and February were the driest, with only 1.16, 1.17, and 1.47 inches. Heavy precipitation in March and May caused flooding in many of the larger streams, particularly the Wabash River and the West Fork of the White River. Drought conditions prevailed during the fall, particularly in the southern part of the State, and water shortages were reported in many of the southern counties.

Precipitation, in inches, in Indiana during 1943

Section	Average annual precipitation	Departure from average	Wettest month		Driest month	
Northern	39.77	+3.94	May	(9.76)	Dec.	(0.43)
Central	37.12	-1.90	May	(10.08)	Jan.	(1.05)
Southern	35.45	-7.22	Mar.	(7.24)	Aug.	(0.48)
Entire State	37.45	-1.72	May	(8.70)	Dec.	(1.16)

FLUCTUATIONS OF WATER LEVEL

The data on water levels in observation wells, for which essentially complete records are available, for the period during which they have been measured are given in the following table:

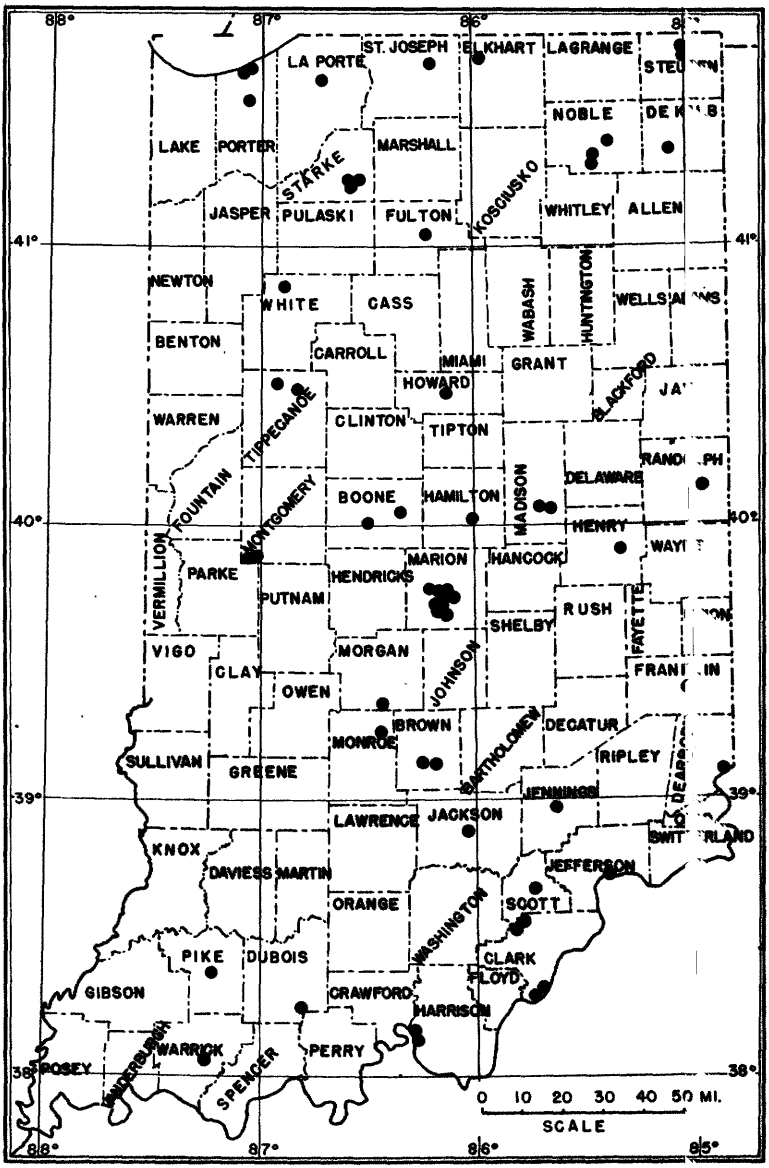

Figure 4.--Map of Indiana showing observation wells, 1943.

Water levels in observation wells in Indiana, in feet below land-surface datum

Well	Date of first measurement	Lowest observed water level		Highest observed water level		Water level on last date of record
		Water level	Date	Water level	Date	
Clark 1	Dec. 2,1936	25.75	Dec. 15,1941	1.3	Feb. 15,1937	25.29
Clark 2	Dec. 2,1936	13.45	May 30,1942	.05	June 3,1943	13.34
Dubois 2	Dec. 1,1936	17.89	Dec. 1,1943	5.77	May 15,1943	17.89
Fulton 3	Sept.10,1935	10.1	Feb. 1,1940	3.27	June 3,1943	8.01
Hamilton 2[a]	Nov. 2,1935	27.33	Sept.15,1941	14.71	May 19,1943	23.38
Harrison 1	Dec. 2,1936	5.65	Nov. 15,1941	.00	Apr. 15,1939	1.30
Harrison 3	Oct. 25,1938	7.8	Sept.30,1941	2.00	Mar. 21,1939	7.17
Howard 3[a]	Nov. 25,1942	20.52	July 23,1942	14.4	Feb. 18,1942	17.3
Jackson 1	Dec. 3,1936	11.4	Oct. 14,1941	1.2	Apr. 15,1939	10.75
Jennings 1	Dec. 3,1936	16.98	Dec. 15,1943	1.86	Jan. 15,1937	16.98
La Porte 1[a]	July 4,1942	15.5	July 18,1942	4.61	Nov. 13,1943	6.20
La Porte 2	July 2,1942	6.54	Sept.15,1942	1.07	June 1,1943	5.87
Madison 2	Oct. 16,1935	17.41	Feb. 5,1942	10.9	Nov. 15,1938	15.50
Montgomery 1	Sept.27,1935	15.45	Nov. 16,1940	4.78	Jan. 15,1937	12.85
Noble 2	Oct. 9,1935	28.2	Sept.15,1936	5.4	Apr. 16,1939	21.50
Noble 3	Oct. 9,1935	25.5	Dec. 14,1935	11.6	Mar. 18,1939	22.10
Noble 5	May 1,1942	7.68	Dec. 15,1943	.49	May 17,1943	7.68
Porter 1[a]	Oct. 16,1935	57.34	Oct. 16,1937	50.63	Aug. 3,1943	50.91
Randolph 1[a]	Feb. 8,1942	17.33	Dec. 31,1943	12.74	June 1,1943	17.33
St. Joseph 1[a]	Oct. 16,1935	13.34	Aug. 1,1941	4.46	May 25,1943	9.33
Scott 1[a]	May 4,1942	24.30	Sept.25,1942	16.50	June 22,1942	22.40
Starke 1[a]	Oct. 3,1935	15.94	Sept.15,1941	11.28	June 1,1943	13.07
Starke 2[a]	Oct. 3,1935	6.19	Sept.15,1941	2.53	Mar. 17,1943	3.71
Starke 3[a]	Oct. 3,1935	5.45	Sept.15,1941	1.00	May 9,1939	2.94
Steuben 1	Sept.16,1935	4.72	Nov. 1,1935	+1.00	June 1,1943	1.60
Steuben 2	Sept.16,1935	6.4	Dec. 1,1941	.03	Apr. 15,1939	3.85
White 1[a] b	Oct. 7,1935	20.34	Oct. 3,1941	c 8.0	June 5,1936	14.43
Marion 1[a]	Aug. 1,1935	37.46	Aug. 5,1941	13.85	Apr. 16,1938	17.24
2[a]	Oct. 15,1935	71.55	Sept.21,1941	47.44	Apr. 12,1938	55.18
3[a]	Oct. 15,1935	71.16	Oct. 7,1941	50.00	Mar. 29,1938	55.71
4[a]	Dec. 3,1937	15.72	May 27,1941	+3.92	Apr. 16,1938	3.52
9[a]	July 26,1939	62.48	Oct. 3,1942	43.38	Mar. 26,1941	57.21
10[a]	Aug. 2,1939	70.78	Aug. 29,1941	50.64	Feb. 13,1940	57.28
11[a]	July 30,1939	24.20	Sept.29,1941	10.10	May 21,1943	22.29
12[a]	July 17,1939	25.19	Sept.20,1940	11.50	May 21,1943	23.55
13[a]	Jan. 12,1928	Dry at 6.00	Sept.22,1930	+2.19	Jan 20,1932	2.04
14[a]	June 3,1929	Dry at 22.96	Nov. 1,1930	11.75	Jan 18,1937	21.28
16[a]	Mar. 19,1940	109.63	Apr. 25,1942	56.65	Jan 28,1941	99.17

During 1943 the highest water levels for the periods of record were reached in 15 of the observation wells, and in 12 of these the highest water levels occurred in May or June, largely as a result of heavy precipitation during the period May 7-25. These wells are located mainly in the northern part of the State. The lowest water levels of record were reached in four wells, mainly in the southern part of the State. In the following table are given the net changes in water levels in the observation wells, for which records are available, from the dates of the measurements nearest to December 31, 1942, to those nearest December 31, 1943.

a Affected by pumping from nearby wells.
\+ Water level above land-surface datum.
b No record from Sept. 10, 1936, to Oct. 3, 1941
c Water flowing over top of casing, 8.0 feet below land-surface datum.

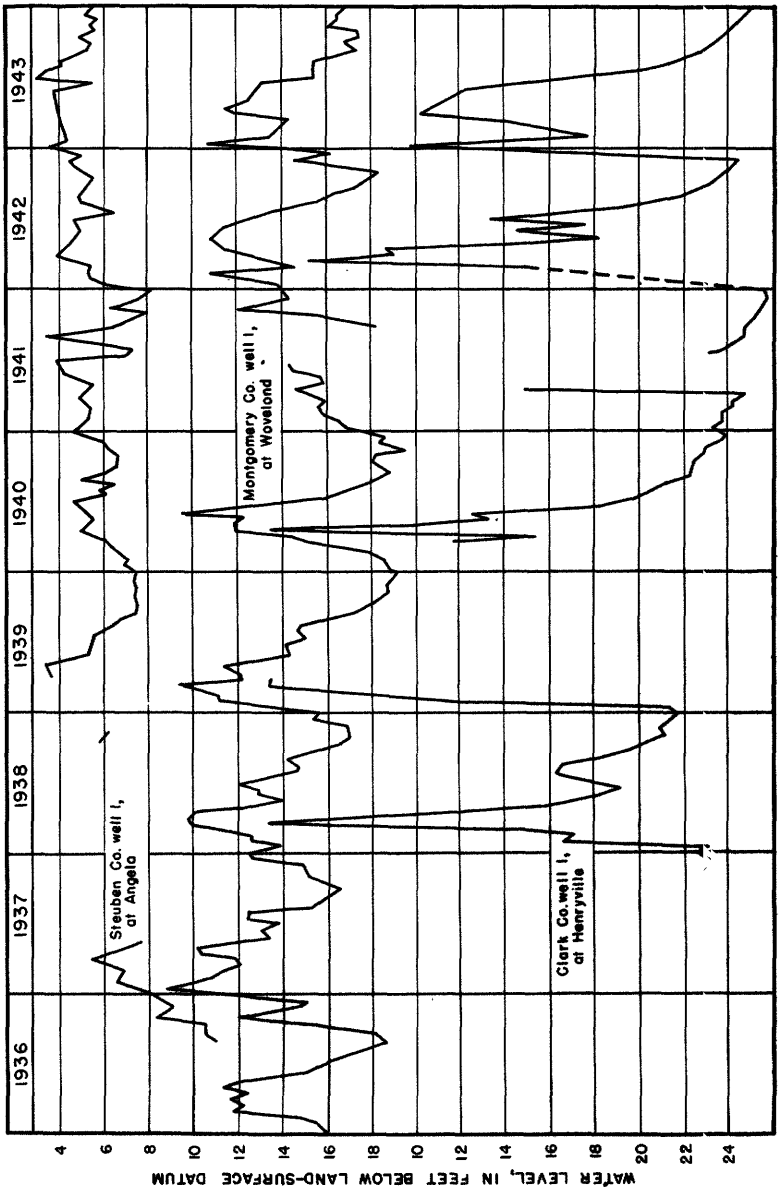

Figure 5.--Graphs showing fluctuations of water level in three wells in Indiana that represent widely separated parts of the State. These wells are not affected by pumping.

Net changes, in feet, in water levels in observation wells in Indiana during 1943

Well	Net rise (+) or net decline (-)	Well	Net rise (+) or net decline (-)	Well	Net rise (+) or net decline (-)
Clark 1	-15.34	Noble 2	-2.3	*Marion 1	+1.21
Clark 2	-2.27	Noble 3	-.8	* 2	+.60
*DeKalb 1	+2.0	Noble 5	-3.82	* 3	+.90
Dubois 2	-5.65	Pike 1	-1.72	* 4	-1.52
Fulton 3	+.40	*Porter 1	+1.51	* 9	-1.59
*Howard 3	+.80	*Randolph 1	-1.38	* 10	+.36
Jackson 1	-2.45	*St. Joseph 1	-.08	* 11	+1.14
Jennings 1	-1.06	Steuben 1	-.45	* 13	+.87
*La Porte 1	+6.7	Steuben 2	-1.20	14	-4.55
Madison 2	+1.18	Warrick 1	.00	* 16	-12.69
Montgomery 1	-.55	*White 1	-3.53		

Water levels in observation wells unaffected by pumping were generally rising on January 1, 1943, and continued to rise until May or June. Heavy precipitation in March caused the levels in many wells to rise considerably and additional heavy precipitation in May, particularly in the northern part of the State, caused the levels in many wells to reach their highest stage on record. The water levels in most wells declined from June to December, in several wells reaching stages lower than those of 1941 and in at least two reaching the lowest stages on record. In most of the observation wells there was a net decline in 1943.

The fluctuations of the water levels in three wells in different parts of the State are shown by graphs in figure 5. These are Steuben County well 1, at Angola, in the northeastern corner of the State; Montgomery County well 1, at Waveland, in the central part; and Clark County well 1, at Henryville, in the southern part. All three wells are essentially unaffected by pumping, and the fluctuations of their water levels are therefore due primarily to natural causes. Although their records show a large annual fluctuation the net decline of water level in these wells, since Jan. 1, 1937, has been relatively small.

Measurements of water level in observation wells in the Indianapolis area were continued during 1943 and two new wells, Marion 18 and 19, were added to the program. It is believed that the changes in water level in these new wells are due primarily to natural causes in contrast to the other observation wells in the area, which are affected by pumping. In figure 6 are shown graphs of water levels in wells Marion 2, which taps the sand and gravel of the alluvial deposits, and Marion 10, which taps the underlying Devonian limestone. The general trend of water level in

* Affected by pumping from nearby wells.

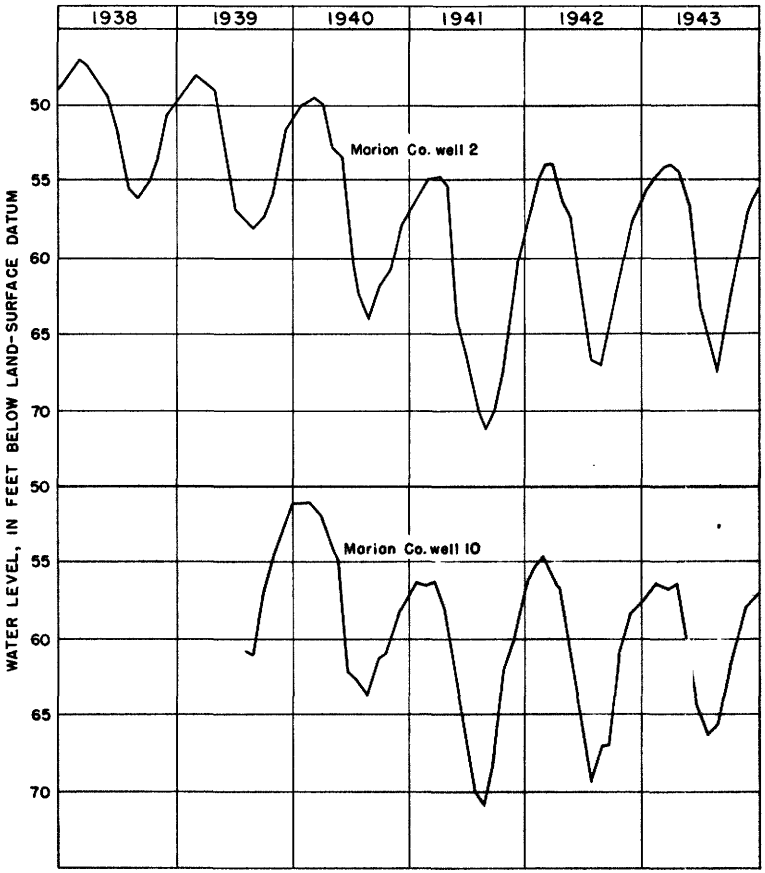

Figure 6.--Graphs showing fluctuations of water level in two wells in the heavily pumped Indianapolis area.

these wells, which are both in the downtown district of Indianapolis, was downward from 1937 to 1941 but has been upward since that time. It is believed that they are not greatly affected by any one nearby well or group of wells, but are within the area of influence of many wells used for industrial and air-conditioning supplies.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Boone County

Boone 1 (*817, p. 43; 840, p. 73; 845, p. 70; 886, p. 97; 90[c], p. 21; 936, p. 23; 944, p. 23). Leland H. Dale. NW¼NW¼ sec. 23, T. 18 N., R. 1 W., about 3 miles south of Lebanon along State Highway 39. No measurements made in 1943.

Boone 2 (*817, p. 43; 840, p. 73; 845, p. 70; 886, p. 97; 90[c], p. 21; 936, p. 23; 944, p. 23). R. W. Gorrell. SE¼SE¼ sec. 4, T. 18 N., R. 1 E., at east end of abandoned school house on south side of State Highway 32, about 3 miles east of Lebanon. No measurements made in 1943.

Brown County

Brown 2 (*840, p. 73; 845, p. 70; 886, p. 98; 906, p. 21; 93[c], p. 23; 944, p. 23). Brown County State Park. Near head of valley northwest of Blockhouse. Measuring point is at land-surface datum. Measurements made by Millard Thickstun, Brown County State Park, A. E. Weddle, superintendent. Water levels, in feet below land-surface datum, 1943: Jan. 5, 3.5; Feb. 2, 3.5; Mar. 2, 3.6.

Brown 3 (*840, p. 74; 845, p. 70; 886, p. 98; 906, p. 21; 93[c], p. 23; 944, p. 23). Brown County State Park. In front of Hoosier's Nest cabin, near tower at entrance to Brown County State Game Preserve. Measuring point is 2.0 feet above land-surface datum. Measurements made by Millard Thickstun. Brown County State Park, A. E. Weddle, superintendent. Water levels, in feet with reference to land-surface datum, 1943: Jan. 5, -0.6; Feb. 2, +0.3; Mar. 2, -3.2.

Clark County

Clark 1 (*840, p. 74; 845, p. 70; 886, p. 98; 906, p. 21; 93[c], p. 24; 944, p. 23). Clark State Forest. Sec. 36, T. 2 N., R. 6 E. Schlamm well, on west side of trail 9, about an eighth of a mile north of trail 10. Measuring point is 0.5 foot above land-surface datum. Measurements made by Bruce Bell, Orville Neville, George Demuth and Mary Coombs, Clark State Forest.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	17.7	June 30	17.85	Sept.15	23.19	Nov. 15	24.54
Feb. 27	14.65	July 15	19.85	30	23.64	30	24.82
Mar. 31	10.2	31	21.15	Oct. 15	23.97	Dec. 18	25.13
Apr. 30	11.35	Aug. 14	22.07	30	24.19	31	25.29
May 31	12.5	31	22.71				

Clark 2 (*840, p. 74; 845, p. 70; 886, p. 98; 906, p. 21; 93[c], p. 24; 944, p. 23). Clark State Forest. NW¼, lot 282, Clark Military Grant. At Purdue camp site. Measuring point is 0.5 foot above land-surface datum. Measurements made by Bruce Bell, Orville Neville, George Demuth and Mary Coombs, Clark State Forest.

Water level, in feet below land-surface datum, 1943

Jan. 30	11.20	June 3	0.05	Aug. 31	11.60	Nov. 15	12.87
Feb. 27	8.16	30	5.95	Sept.15	12.05	30	12.04
Mar. 31	1.2	July 15	7.25	30	12.32	Dec. 18	13.21
Apr. 30	1.15	31	9.07	Oct. 15	12.56	31	13.34
May 31	2.7	Aug. 14	10.32	30	12.71		

Clark 3. Public Service Co. of Indiana. Jeffersonville public water-supply well field, Tenth and Fulton Streets, Jeffersonville. Unused test well, diameter 2 inches, depth 45 feet. Measuring point, top of 2-inch pipe, 1.25 feet above land-surface datum. Measurements made by T. Himmel, Public Service Co. of Indiana, F. A. Schaefer, manager.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 26	33.15	Sept. 26	32.78	Oct. 26	32.44	Dec. 2	32.89
27	33.09	27	32.92	27	33.08	3	32.97
28	33.06	28	32.92	28	32.78	4	33.13
29	32.93	29	32.97	29	32.82	5	33.16
30	32.78	30	32.94	30	32.77	6	33.12
31	32.82	Oct. 1	32.96	31	32.83	7	33.10
Sept. 1	32.92	2	33.00	Nov. 1	32.62	8	33.13
2	32.88	3	32.98	2	32.88	9	33.12
3	32.95	4	32.88	3	32.59	10	33.12
4	33.43	5	32.92	4	32.62	11	33.17
5	32.94	6	32.89	5	32.57	12	32.95
6	32.93	7	33.00	6	32.58	13	33.17
7	32.86	8	32.96	7	32.86	14	33.16
8	32.83	9	32.93	8	32.38	15	33.19
9	32.80	10	33.02	9	32.54	16	33.18
10	32.61	11	32.89	10	32.49	17	33.19
11	32.70	12	33.10	11	32.61	18	33.19
12	32.99	13	32.91	12	32.44	19	33.40
13	32.56	14	32.93	13	32.61	20	33.37
14	32.67	15	32.86	21	32.71	21	33.39
15	32.69	16	32.82	22	32.76	22	33.48
16	32.70	17	32.81	23	32.76	23	33.46
17	32.74	18	32.70	24	32.78	24	33.46
18	32.72	19	32.76	25	32.78	25	33.44
19	32.72	20	32.77	26	32.80	26	33.53
20	32.49	21	32.81	27	32.79	27	33.30
21	32.52	22	32.71	28	32.55	28	33.32
22	32.71	23	32.67	29	32.56	29	33.37
23	32.78	24	32.52	30	32.78	30	33.39
24	32.83	25	32.41	Dec. 1	32.80	31	33.40
25	32.90						

Clark 4. Public Service Co. of Indiana test well 1, Arctic Springs well field, Jeffersonville. SW¼SE¼, lot 3 Clark Military Grant. Drilled test well, diameter 6 inches, depth 50.7 feet. Measuring point, top of recorder shelter floor which is 0.20 foot above top of 6-inch casing and 2.3 feet above land-surface datum. Automatic water-stage recorder installed Nov. 24, 1943. Measurements made by S. Ginther, Public Service Co., F. A. Schaefer, manager, Jeffersonville.

Daily water level at 2 a.m., in feet below land-surface datum, 1943
(From recorder charts)

Nov. 25	26.67	Dec. 3	26.74	Dec. 11	26.79	Dec. 19	27.02
26	26.67	4	26.79	12	26.67	20	26.98
27	26.67	5	26.78	13	26.68	21	26.98
28	26.65	6	26.79	14	26.71	22	27.05
29	26.78	7	26.79	15	26.74	28	26.98
30	26.73	8	26.75	16	26.84	29	27.02
Dec. 1	26.74	9	26.75	17	26.99	30	26.94
2	26.76	10	26.76	18	27.05	31	26.80

Dearborn County

Dearborn 1. Schenley Distillers, Inc., well 1. Old Quaker plant, Greendale, Lawrenceburg. Unused drilled well, diameter 10 inches, depth 112 feet. Measuring point, top of 10-inch casing, at land-surface datum. Measurements started Nov. 15, 1943. Automatic water-stage recorder installed Nov. 23, 1943. Measurements made by F. C. Caveman, of Schenley Distillers, Inc.

Dearborn 1. Schenley Distillers, Inc., well 1--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 15	89.47	Nov. 18	89.55	Nov. 23	89.37	Dec. 14	89.22
16	89.84	19	89.61	30	89.50	21	89.26
17	89.58	22	89.37	Dec. 7	90.30	28	86.70

De Kalb County

De Kalb 1 (*817, p. 44; 840, p. 75; 845, p. 71; 886, p. 98; 906, p. 22; 936, p. 24; 944, p. 24). Auburn Water Department well 3. At Auburn Waterworks. Measuring point is 2.0 feet above land-surface datum. Measurements made by Auburn Water Department, Ted Haynes, superintendent.

Water level, in feet below land-surface datum, 1943

Date	Static water level	Pumping water level	Date	Static water level	Pumping water level
Jan. 11	9.5	16.5	July 10	7.5	15.5
25	7.5	16.5	26	7.5	17.5
Feb. 11	7.5	15.5	Aug. 12	9.5	16.5
26	7.5	15.5	25	9.5	17.5
Mar. 12	9.5	16.5	Sept. 10	9.5	17.5
26	8.5	16.5	27	8.5	16.5
Apr. 23	6.5	14.5	Nov. 1	8.5	17.5
May 10	6.5	14.5	15	8.5	16.5
26	5.5	15.5	30	7.5	16.5
June 12	6.5	15.5	Dec. 15	8.5	16.5
29	9.5	16.5	30	7.5	17.5

Dubois County

Dubois 2 (*840, p. 75; 936, p. 24; 944, p. 24). Ferdinand State Forest. North side of road near foot of hill at entrance to forest. SW¼NW¼ sec, 18, T. 3 S., R. 3 W. Measuring point is at land-surface datum. Measurements made by Emmeran Tretter, superintendent, Ferdinand State Forest.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	10.19	Apr. 2	9.71	July 1	12.91	Oct. 1	15.39
15	12.22	15	7.76	15	12.79	16	16.20
Feb. 1	13.17	May 3	7.97	Aug. 2	13.40	Nov. 1	16.24
18	11.68	15	5.77	16	13.79	16	16.36
Mar. 1	12.37	31	9.75	Sept. 1	14.47	Dec. 1	17.89
17	8.45	June 15	11.99	15	15.44		

Elkhart County

Elkhart 1 (*936, p. 24; 944, p. 24). Elkhart City Waterworks. "Bucklen" well at city water plant on east side of North Main Street and north side of Christiana Creek. Measuring point is at land-surface datum. Measurements made by Charles Stone, Elkhart City Waterworks, Richard B. Corns, superintendent.

Water level, in feet below land-surface datum, 1943

Feb. 3	10.96	Apr. 8	9.0	Nov. 1	12.4	Dec. 7	13.7
5	8.9	May 6	8.9	16	12.8	21	19.0

Franklin County

Franklin 1 (*840, p. 75; 845, p. 71; 886, p. 99; 944, p. 24). Brookville Water Department. At south end of pumping plant in Brookville. No measurements made in 1943.

Fulton County

Fulton 3 (*817, p. 45; 840, p. 76; 845, p. 72; *886, p. 99; 906, p. 22; 936, p. 25; 944, p. 25). City of Rochester. At Federal Fish Hatchery east of Rochester. Measuring point is 3.0 feet above land-surface datum. Measurements made by K. W. Morrison and C. H. Walker, foreman, Federal Fish Hatchery.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	7.84	May 1	4.20	Sept. 6	6.27	Nov. 15	8.05
Feb. 2	8.30	June 3	3.27	Oct. 6	7.72	Dec. 1	8.05
Mar. 1	8.30	July 5	4.97	Nov. 1	8.00	15	8.01
Apr. 5	6.38	Aug. 2	5.88				

Hamilton County

Hamilton 2 (*817, p. 45; 840, p. 77; 845, p. 72; 886, p. 99; 906, p. 23; 936, p. 25; 944, p. 25). Public Service Co. of Indiana. At water plant, in Noblesville. Measuring point is at land-surface datum. Measurements made by A. L. Wann, engineer, Noblesville water plant, Public Service Co. of Indiana.

Water level, in feet below land-surface datum, 1943

Jan. 2	23.94	Apr. 8	23.49	May 19	14.71	Nov. 1	23.38
Mar. 1	24.18	30	23.68	Aug. 1	21.70		

Harrison County

Harrison 1 (*845, p. 73; 886, p. 99; 906, p. 23; 936, p. 26; 944, p. 25). Harrison County State Forest, NE¼NE¼ sec. 23, T. 4 S., R. 2 E., on south side of road near Lowe Pond, on south side of truck trail 1. Measuring point is at land-surface datum. Measurements made by Lafe Cline and K. I. Schumaker, superintendents, Harrison County State Forest.

Water level, in feet below land-surface datum, 1943

Feb. 1	0.75	May 31	0.56	Sept. 1	2.66	Nov. 18	2.02
Mar. 27	.64	June 15	2.33	15	2.33	30	2.45
Apr. 15	.80	July 17	2.41	Oct. 2	2.62	Dec. 16	2.37
29	.87	Aug. 2	2.10	17	2.25	31	1.30
May 15	.57	14	2.94	30	2.15		

Harrison 2 (*840, p. 77; 845, p. 73; 936, p. 26; 944, p. 25). No measurements made in 1943.

Harrison 3 (*845, p. 73; 886, p. 99; 906, p. 23; 936, p. 26; 944, p. 25). Harrison County State Forest, on south side of truck trail 1, SE¼NW¼ sec. 2, T. 4 S., R. 2 E. Measuring point is at land-surface datum. Measurements made by Lafe Cline and K. I. Schumaker, superintendents, Harrison County State Forest.

Water level, in feet below land-surface datum, 1943

Feb. 1	3.80	May 31	3.61	Aug. 14	5.08	Oct. 30	6.69
Mar. 27	3.16	June 15	4.20	Sept. 1	5.76	Nov. 18	6.84
Apr. 15	3.15	30	4.97	15	6.10	30	7.00
29	3.16	July 17	5.19	Oct. 2	6.38	Dec. 16	7.07
May 15	3.02	Aug. 2	4.40	17	6.61	31	7.17

Henry County

Henry 1 (*817, p. 46; 840, p. 77; 845, p. 73; 886, p. 100; 906, p. 23; *936, p. 26; 944, p. 25). City of Newcastle. Newcastle Waterworks. No measurements in 1943.

Howard County

Howard 3 (944, p. 25). Pittsburg Plate Glass Co. On north side of creek, 0.31 mile west of pumping station of Kokomo water works. Measuring point is 0.9 foot above land-surface datum. Measurements made by personnel of Kokomo Water Works Co., M. A. Stearns, manager.

Howard 3. Pittsburg Plate Glass Co.--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 15	16.1	Apr. 26	18.0	Sept. 4	20.3	Nov. 18	18.5
Feb. 6	15.9	June 21	17.1	25	19.2	Dec. 2	17.5
20	15.7	July 9	15.9	Oct. 14	19.7	18	17.9
Mar. 6	16.1	Aug. 2	17.5	29	19.3	31	17.3

Jackson County

Jackson 1 (*840, p. 78; 845, p. 74; 886, p. 100; *906, p. 24; 936, p. 27; 944, p. 26). Jackson State Forest. Near northeast corner of office of CCC camp, Jackson State Forest. Measuring point is at land-surface datum. Measurements made by Forrest Miller, district forester, Department of Conservation, Brownstown.

Water level, in feet below land-surface datum, 1943

Jan. 1	6.2	May 15	5.5	Aug. 3	9.2	Oct. 15	10.8
19	6.9	June 1	5.1	17	9.6	Nov. 2	10.7
Feb. 1	7.1	15	6.5	Sept. 1	10.3	16	10.5
Apr. 15	5.5	July 1	7.8	15	10.0	Dec. 2	10.6
May 1	6.1	19	8.8	30	10.4	17	10.75

Jefferson County

Jefferson 2 (*840, p. 79; 845, p. 74; 886, p. 101; 906, p. 24; 936, p. 28; 944, p. 26). Clifty Falls State Park. At superintendent's house. Measurements made by personnel of Clifty Falls State Park, M. L. Carr, superintendent. Measuring point is 0.5 foot above land-surface datum. Water level, in feet below land-surface datum, 1943: Aug. 16, 32.5 feet.

Jennings County

Jennings 1 (*840, p. 79; 845, p. 74; 886, p. 101; 906, p. 24; 936, p. 28; 944, p. 26). Muscatatuck State Park. SE¼NW¼ sec. 3, T. 6 N., R. 8 E. in northwest corner of park, near North Vernon. Measuring point is at land-surface datum. Measurements made by G. J. Bernhart, Muscatatuck State Park, Charles Vogel, superintendent.

Water level, in feet below land-surface datum, 1943

Mar. 1	7.98	May 15	3.94	Aug. 1	12.95	Oct. 15	15.98
15	4.92	June 2	2.95	15	13.91	31	16.00
Apr. 1	4.98	15	5.92	Sept. 1	14.92	Nov. 15	16.92
15	2.96	July 1	9.95	15	14.99	30	16.96
May 1	4.92	15	10.07	Oct. 1	15.94	Dec. 15	16.98

Kosciusko County

Kosciusko 2 (*845, p. 74; 886, p. 101; 936, p. 28; 944, p. 26). Wawasee State Fish Hatchery. Flowing well at sunken garden. Measuring point is 1.0 foot below land-surface datum. Measurements made by personnel of Wawasee State Fish Hatchery, Raymond Underwood, superintendent.

Water level, in feet above land-surface datum, 1943

Jan. 25	2.50	June 1	2.90	July 19	3.00	Oct. 2	2.98
May 3	2.54	17	2.79	Sept.15	3.02	Nov. 2	2.75
17	2.88	July 2	3.02				

La Porte County

La Porte 1 (*944, p. 26). City of La Porte. Well 4 at pumping station of La Porte waterworks. Measuring point is 1.3 feet above land-surface datum. Measurements made by personnel of La Porte Water Works, Arthur C. Baker, superintendent.

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La Porte 1. City of La Porte--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	11.50	Apr. 3	12.30	July 3	14.80	Oct. 2	13.06
9	11.80	10	13.30	10	13.00	9	10.60
16	12.50	17	12.90	17	12.11	16	8.51
23	13.60	24	12.90	26	12.72	23	6.61
30	13.40	May 1	12.70	31	12.61	Nov. 1	7.41
Feb. 6	12.40	8	13.60	Aug. 7	12.79	6	6.70
13	12.10	15	12.40	14	12.71	13	4.61
20	12.30	22	11.16	21	13.50	20	8.61
27	13.50	29	12.74	28	13.60	27	8.01
Mar. 6	14.50	June 5	13.06	Sept. 4	12.70	Dec. 4	7.71
13	14.30	12	13.20	11	13.20	11	5.91
20	13.34	19	14.50	18	12.04	18	5.70
27	14.80	26	14.70	25	12.60	25	6.20

La Porte 2 (*944, p. 27). Kankakee State Game Preserve. About 500 feet north of State Highway 8, SW¼SE¼ sec. 10, T. 33 N., R. 3 W. Measuring point is 1.1 feet above land-surface datum. Measurements made by John Geiselman and Arthur Timm, superintendents, Kankakee State Game Preserve.

Water level, in feet below land-surface datum, 1943

Jan. 15	3.71	Apr. 1	3.32	June 15	2.49	Sept. 1	5.32
Feb. 1	4.99	15	3.93	July 1	4.20	15	5.33
15	3.55	30	4.02	15	4.74	30	5.63
Mar. 1	3.84	May 15	2.74	Aug. 1	4.58	Oct. 15	5.93
15	4.14	June 1	1.07	16	5.23	Nov. 1	5.87

Madison County

Madison 1 (*817, p. 47; 840, p. 79; 845, p. 75; 886, p. 101; 906, p. 25; 936, p. 28; 944, p. 27). Mounds State Park, Anderson. Because of the questionable accuracy of measurements made by an unchalked steel tape, no measurements are given for 1943.

Madison 2 (*817, p. 47; 840, p. 79; 845, p. 75; 886, p. 101; 906, p. 25; *936, p. 28; 944, p. 27). Anderson Water Department well 2. Thirty-second Street and Central Avenue (extended), Anderson. Measuring point is 1.0 foot above land-surface datum. Measurements made by B. F. Burrows, and Earl Walker, Anderson Water Department, Paul Laux, superintendent.

Water level, in feet below land-surface datum, 1943

Jan. 2	16.56	Apr. 1	15.65	May 17	13.77	July 16	13.48
17	16.96	16	15.75	June 1	12.82	Dec. 4	15.50
Mar. 2	16.92	May 2	15.63	July 1	13.63		

Madison 3 (*817, p. 47; 840, p. 79; 845, p. 75; 886, p. 101; 906, p. 25; *936, p. 29; 944, p. 27). Albert Closser. About 2 blocks east of CCC camp, in Frankton. Measurements discontinued May 1, 1942.

Madison 4 (*817, p. 47; 840, p. 79; 845, p. 75; 886, p. 102; 906, p. 25; 936, p. 29; 944, p. 27). At home formerly owned by Walter McCoy, about 3 blocks south of CCC camp, in Frankton. Measurements discontinued May 1, 1942.

Marion County

Marion 1 (*817, p. 48; 840, p. 80; 845, p. 75; *886, p. 102; 906, p. 25; *936, p. 29; 944, p. 27). Indianapolis Water Co. "Motor well 15," at intersection of Eighteenth and Harding Streets, in Riverside well field, Indianapolis. Measuring point is 16.0 feet below land-surface datum. Measurements made by personnel of Indianapolis Water Co., W. C. Mabee, chief engineer.

Marion 1. Indianapolis Water Co.--Continued.

Water level, in feet above land-surface datum, 1943

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	18.16	a18.64	18.12	17.66	18.12	a16.30	17.46	a17.44	a21.20	a19.10	18.84	.....
2	.....	18.30	18.22	17.68	17.86	a16.46	17.46	.....	a19.00	18.62	18.82	a20.52
3	.....	18.22	18.18	17.64	18.00	16.42	17.46	a21.74	a26.64	18.16	18.78	a20.70
4	17.98	18.16	.....	17.40	a18.40	16.40	17.12	a21.70	a19.52	.....	a18.78	20.23
5	18.08	17.86	18.30	17.54	.....	.....	17.00	a22.30	18.80	a21.06	a26.34	18.46
6	18.04	18.04	18.16	17.70	a21.46	16.06	17.18	a22.80	18.62	a21.14	a19.58	18.50
7	18.02	a17.84	a18.14	17.62	.....	16.60	17.42	a22.02	a20.66	a21.06	18.74	18.68
8	18.14	a18.54	a18.66	17.72	.....	16.34	a18.74	a20.20	a19.32	a21.26	18.76	18.66
9	18.06	.....	a18.86	17.72	18.04	16.42	a20.24	a22.82	a20.84	a19.20	18.72	18.78
10	18.03	a21.76	18.36	17.72	a18.08	16.46	a20.56	a22.92	18.80	18.46	a18.82	18.68
11	17.88	a21.88	18.24	17.50	a20.82	16.42	17.62	a22.64	18.78	a20.56	a21.32	18.70
12	18.02	a18.60	18.24	.....	a20.92	16.46	a19.62	.....	18.48	a21.24	a21.08	18.44
13	a18.48	a21.66	18.22	.....	a20.88	16.66	a20.66	a21.76	18.50	a21.00	a21.28	18.56
14	.....	a21.64	17.96	17.72	a18.40	.....	a21.34	a19.42	18.64	18.84	.....	18.54
15	a18.76	a22.02	18.10	17.72	a18.36	a18.73	a18.76	18.86	18.56	18.80	a19.98	a19.04
16	a18.58	a19.44	18.14	.....	a18.06	a16.70	a21.30	a18.74	18.58	a18.70	a19.34	.....
17	18.04	a21.80	a17.92	.....	a20.36	16.54	a21.72	a20.96	18.50	a21.36	a21.40	.....
18	18.08	a21.88	a20.46	.....	a19.38	.....	a21.62	a18.98	18.54	a24.72	a19.70	a19.32
19	a18.36	a21.86	a17.54	17.54	a18.25	.....	a18.86	a20.62	18.14	a25.44	19.00	19.52
20	a18.66	18.64	a19.24	17.82	.....	17.34	a19.32	a19.82	.....	.....	18.86	18.72
21	a18.68	18.34	a18.04	a17.82	a16.10	a17.00	.....	18.68	18.52	a26.46	18.64	18.60
22	a18.84	a21.18	a20.72	a23.28	a16.14	a19.62	a21.60	18.50	18.46	a21.98	18.54	.....
23	.....	18.46	a21.28	a20.02	a16.00	a21.52	a19.62	a19.14	18.42	19.12	18.52	a18.58
24	18.64	18.36	a20.74	18.46	a16.10	a20.18	19.44	a22.90	a20.38	18.84	18.76	a18.92
25	18.16	18.36	18.06	18.06	a16.35	.....	a19.10	a23.60	a19.32	.....	18.60	.....
26	a18.54	18.28	17.90	18.00	a16.50	18.68	a21.38	a21.92	18.36	18.94	18.66	.....
27	a18.72	18.20	17.72	18.14	a16.68	17.44	a21.74	a21.86	18.42	18.90	18.68	.....
28	a18.78	18.24	17.50	18.34	a16.74	a19.38	a21.88	a21.24	18.52	18.88	18.44	a17.60
29	a18.76	.....	17.48	18.30	a16.74	a17.66	a18.88	18.84	18.56	a18.90	18.62	a17.64
30	18.20	.....	17.64	18.36	a16.46	17.50	a21.50	a18.82	20.44	a19.48	18.82	a17.16
31	a17.24	.....	17.64	.....	a16.18	.....	a21.44	a21.04	.....	18.58	.....	a17.24

Marion 2 (*817, p. 48; 840, p. 80; *886, p. 102; 906, p. 26; 936, p. 32; 944, p. 28). Security Trust Bank Building, 130 East Washington Street, Indianapolis. Equipped with automatic water-stage recorder. Measuring point is 24.0 feet below land-surface datum. Measurements made by personnel of U. S. Geological Survey and Indiana Department of Conservation.

Water level, in feet above land-surface datum, 1943

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	54.68	53.67	53.01	52.72	53.38	b55.89	62.08	64.48	66.43	61.59	58.25	55.57
2	54.62	53.71	53.03	52.80	53.35	b56.15	62.00	64.48	66.55	61.59	58.16	55.50
3	54.55	53.65	53.00	52.88	53.21	56.48	61.99	64.48	66.64	61.70	58.05	55.48
4	54.48	53.57	53.00	52.89	53.25	56.83	62.19	64.54	66.74	61.47	57.94	55.44
5	54.49	53.57	52.90	52.77	53.25	57.17	62.25	64.66	66.85	61.16	57.79	55.39
6	54.42	53.51	52.86	52.78	53.24	b57.32	.....	64.78	66.85	60.93	57.70	55.28
7	54.36	53.55	52.88	52.80	53.43	b57.48	.....	64.93	66.72	60.74	57.57	55.25
8	b54.30	53.54	52.90	52.74	53.62	57.58	.....	65.10	66.50	60.60	57.46	55.18
9	b54.23	53.48	52.87	52.83	53.75	57.68	.....	65.13	66.33	60.46	57.35	55.17
10	54.16	53.43	52.77	52.89	53.74	57.98	.....	65.13	65.93	60.39	57.30	55.16
11	54.15	53.44	52.75	52.97	53.75	58.25	.....	65.25	65.55	60.27	57.20	55.12
12	54.11	53.49	52.75	52.85	53.92	58.51	.....	65.33	65.25	60.15	57.10	55.01
13	54.11	53.48	52.73	52.79	54.06	b58.76	62.75	65.46	65.00	60.06	56.98	54.97
14	54.04	53.44	52.74	52.83	54.11	58.93	62.86	65.60	64.58	59.99	56.92	.....
15	53.98	53.40	52.65	52.86	54.11	59.07	62.97	65.77	64.41	59.90	56.76	.....
16	53.94	53.37	52.60	52.83	54.13	59.31	63.06	65.77	64.24	59.75	56.69	.....
17	53.98	53.30	52.67	b52.84	54.38	59.55	63.18	65.86	64.03	59.64	56.61	.....
18	53.97	53.30	52.70	.....	54.50	b59.74	63.32	65.96	63.72	59.47	56.50	.....
19	53.91	53.27	52.64	.....	54.60	b59.95	63.33	66.03	63.41	59.31	56.41	.....
20	54.02	53.19	52.64	.....	54.77	b60.15	63.30	66.06	63.21	59.19	56.35	.....
21	53.91	53.17	52.75	.....	54.94	b60.35	63.43	66.03	62.93	59.13	56.28	54.59
22	53.86	53.15	52.68	.....	54.95	b60.53	63.53	66.10	62.69	59.15	56.24	54.55
23	53.83	53.12	52.68	.....	55.02	b60.73	63.67	66.10	62.54	59.14	56.18	54.58

a One or more gravel wells at White River filtration plant pumping at time of measurement.
b Estimated.

Marion 2. Security Trust Bank Building--Continued.

Water level, in feet above land-surface datum, 1943

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
24	53.84	53.10	52.66	.....	54.96	a60.94	63.78	66.02	62.36	59.10	56.12	54.59
25	53.79	53.18	52.62	.....	54.89	a61.14	63.91	66.10	62.11	58.95	56.04	54.50
26	53.86	53.13	52.61	.....	54.94	61.42	63.92	66.23	61.91	58.79	55.91	54.38
27	53.87	53.10	52.59	53.09	55.03	61.65	63.95	66.33	61.63	58.64	55.84	54.30
28	53.81	53.01	52.63	53.30	55.11	61.78	64.02	66.45	61.46	58.49	55.79	54.26
29	53.76	.....	52.65	53.38	55.38	61.96	64.14	66.46	61.36	58.37	55.70	54.23
30	53.70	.....	52.64	53.34	a55.59	62.16	64.24	66.48	61.44	58.26	55.63	54.20
31	53.71	.....	52.62	.....	a55.74	.....	64.35	66.36	.....	58.22	.....	54.18

Marion 3 (*817, p. 48; 840, p. 80; 845, p. 75; 886, p. 102; 906, p. 27; 936, p. 32; 944, p. 29). Emmerich Manual Training High School. In North room of school building, South Meridian and Henry Streets, Indianapolis. Measuring point is 0.8 foot below land-surface datum. Measurements made by personnel of U. S. Geological Survey and Indiana Department of Conservation.

Water level, in feet above land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	56.42	Mar. 29	55.5	July 12	56.33	Oct. 11	58.17
7	57.04	Apr. 3	55.67	19	55.36	18	57.56
9	56.78	10	55.41	26	56.83	25	57.53
16	57.11	17	55.30	Aug. 2	57.07	Nov. 2	57.57
25	56.47	24	54.45	9	57.20	8	56.89
Feb. 2	56.43	May 3	55.05	16	58.20	15	56.59
8	56.15	17	55.45	23	57.70	22	56.85
15	55.4	22	54.93	30	58.41	29	56.66
22	55.75	June 8	55.69	Sept. 13	58.14	Dec. 6	55.90
27	56.16	14	55.70	20	57.55	13	56.00
Mar. 6	55.36	21	56.14	27	57.80	20	55.93
17	55.98	30	55.97	Oct. 4	58.29	27	55.71

Marion 4 (*840, p. 80; 845, p. 76; 886, p. 103; 906, p. 27; 936, p. 32; 944, p. 29). Layne-Northern Co., Inc. In valley of Lick Creek, about 100 feet north of creek, about 700 feet west of South Meridian Street (4200 block), and about 350 feet south of Edwards Avenue, Indianapolis. Measuring point is 5.5 feet above land-surface datum. Measurements made by personnel of U. S. Geological Survey and Indiana Department of Conservation.

Water level, in feet below land-surface datum, 1943

Jan. 2	1.76	Apr. 10	1.28	July 19	2.36	Oct. 11	3.42
7	1.69	17	1.10	26	2.25	18	3.07
16	1.53	24	1.09	Aug. 2	1.65	25	3.01
25	1.71	May 3	1.44	9	2.04	Nov. 2	2.94
Feb. 1	1.73	15	.77	16	2.24	8	2.89
8	1.67	22	.04	23	2.46	15	3.08
15	1.65	June 8	.26	30	2.99	22	3.12
22	1.53	14	.39	Sept. 6	3.04	29	3.18
27	1.58	21	.53	13	2.84	Dec. 6	3.26
Mar. 6	1.56	30	.93	20	2.58	13	3.26
17	1.46	July 5	.99	27	2.97	20	3.45
27	1.13	12	1.77	Oct. 4	3.29	27	3.52
Apr. 3	1.17						

Marion 6 (*845, p. 77; *886, p. 103; 906, p. 27; *936, p. 32; 944, p. 29). Measurements discontinued June 24, 1941.

Marion 9 (*886, p. 103; 906, p. 27; *936, p. 32; 944, p. 30). At former American Brewery, on West Ohio Street at Indianapolis Water Co. canal, and about 250 feet south of well Marion 6, Indianapolis. Measuring point is 0.5 foot above land-surface datum. Measurements made by personnel of U. S. Geological Survey and Indiana Department of Conservation.

a Estimated.

Marion 9. At former American Brewery--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	55.86	Apr. 3	55.76	July 12	57.90	Oct. 11	59.25
7	56.40	6	55.93	19	59.92	18	59.27
16	56.31	10	55.70	26	59.38	25	59.03
25	56.13	17	55.63	Aug. 2	59.11	Nov. 2	58.36
Feb. 1	57.87	24	56.07	9	59.17	8	58.06
8	57.82	May 3	56.25	16	59.55	15	60.62
15	57.46	15	56.42	23	59.70	22	60.09
22	56.91	22	56.39	30	60.00	29	59.02
27	56.98	June 8	56.58	Sept. 6	59.73	Dec. 6	57.63
Mar. 6	55.66	14	57.25	13	59.57	13	57.37
17	55.75	21	57.14	20	59.45	20	57.37
20	55.41	30	57.81	27	59.46	27	57.21
27	55.74	July 5	57.19	Oct. 4	59.36		

Marion 10 (*886, p. 104; 906, p. 27; 936, p. 32; 944, p. 30). Federal Building, Meridian and Ohio Streets, Indianapolis. In basement of building. Measuring point is 10 feet below land-surface datum. Measurements made by personnel of U. S. Geological Survey and Indiana Department of Conservation.

Water level, in feet above land-surface datum, 1943

Jan. 2	57.34	Mar. 27	56.31	July 5	62.32	Oct. 4	61.96
7	57.29	Apr. 3	56.54	12	63.18	11	62.11
9	56.81	6	56.21	19	64.74	18	60.74
16	57.30	10	56.17	26	65.94	25	60.52
25	56.66	17	56.15	Aug. 2	66.20	Nov. 2	60.12
Feb. 1	56.70	24	56.21	9	66.23	8	59.06
8	56.60	May 3	56.44	16	66.80	15	58.70
15	56.52	15	57.38	23	66.60	22	58.77
22	56.35	22	57.83	30	67.23	29	58.77
27	56.15	June 8	61.08	Sept. 6	65.41	Dec. 6	57.54
Mar. 6	56.10	14	63.72	13	64.28	13	57.69
13	56.35	21	63.96	20	63.59	20	57.42
20	56.07	30	64.17	27	62.17	27	57.28

Marion 11 (*886, p. 105; 906, p. 28; 936, p. 33; 944, p. 30). Indianapolis sanitation plant. Owner's well 3. In dehydration building, about 500 feet west of power house. Equipped with automatic water-stage recorder, operated by personnel of Indianapolis sanitation plant, D. O. Bender, chief engineer. Measuring point is 3.0 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 2	20.75	May 7	21.74	Aug. 27	21.72	Dec. 11	20.63
8	20.92	14	17.30	Sept. 3	21.94	13	20.63
15	21.13	21	10.10	10	21.66	14	20.68
22	21.40	26	15.60	17	22.02	15	20.72
29	21.47	28	16.60	24	22.13	16	20.79
Feb. 5	21.43	June 4	18.78	Oct. 1	22.37	17	20.75
13	21.15	11	19.47	15	21.85	18	20.63
19	21.32	18	20.18	22	20.80	20	20.72
26	21.27	25	20.45	29	19.00	21	20.54
Mar. 5	21.62	July 2	21.00	Nov. 5	21.57	22	20.71
13	21.62	9	20.82	12	22.11	23	20.78
20	20.83	16	20.83	18	22.29	24	20.72
27	20.00	23	21.13	Dec. 6	20.47	27	20.63
Apr. 2	20.80	30	21.38	7	20.54	28	20.54
9	21.12	Aug. 6	20.82	8	20.54	29	20.61
16	21.19	13	20.98	9	20.69	30	20.58
23	21.47	20	21.38	10	20.62	31	20.64
30	21.79						

Marion 12 (*886, p. 106; 906, p. 29; 936, p. 34; 944, p. 31). Indianapolis sanitation plant, South Harding Street south of Raymond Street, Indianapolis. Owner's well 11 (?). About 300 feet southeast of power house and about 50 feet north of resettler tank. Measuring point is 1.3 feet above land-surface datum. Measurements made by personnel of Indianapolis sanitation plant, D. O. Bender, chief engineer.

Marion 12. Indianapolis sanitation plant--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	22.44	Mar. 27	20.66	June 11	20.73	Aug. 27	23.10
8	22.08	Apr. 2	21.94	18	21.50	Sept. 3	23.08
15	22.52	9	22.43	25	21.68	17	22.98
22	22.82	16	22.51	July 2	22.30	24	23.22
29	22.74	23	22.69	9	23.17	Oct. 1	23.53
Feb. 5	22.60	30	22.97	16	22.00	15	23.93
13	21.82	May 7	23.07	23	22.43	22	22.95
19	22.44	14	18.08	30	22.62	29	23.98
26	22.38	21	11.50	Aug. 6	22.21	Nov. 5	23.84
Mar. 5	22.66	28	17.65	13	22.00	12	23.33
13	22.83	June 4	20.10	20	22.48	24	23.55
20	21.60						

Marion 13 (*886, p. 106; 906, p. 29; 936, p. 34; 944, p. 31). Indianapolis sanitation plant. "East" observation well, about 500 feet east of power house. Measurements made by D. O. Bender, Indianapolis sanitation plant. Measuring point is 5.0 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 6	2.20	Mar. 5	2.97	May 6	3.11	July 7	2.83
Feb. 1	3.13	Apr. 2	1.95	June 7	.75	Dec. 3	2.04

Marion 14 (*886, p. 106; 906, p. 29, 936, p. 34; 944, p. 31). Indianapolis sanitation plant. "Resettler" observation well, about 400 feet southeast of power house, at southeast edge of resettler tank. Measuring point is at land-surface datum. Measurements made by D. O. Bender, Indianapolis sanitation plant.

Water level, in feet below land-surface datum, 1943

Jan. 6	19.50	Mar. 5	20.23	May 6	20.53	July 7	19.92
Feb. 1	20.35	Apr. 2	19.25	June 7	18.25	Dec. 3	21.28

Marion 16 (*906, p. 30; *936, p. 33; 944, p. 31). At former American Hominy Co.'s plant B, Madison Avenue and Palmer Street, Indianapolis. At south end of main building, near base of steel smokestack. Measuring point is 0.25 foot above land-surface datum. Measurements made by personnel of the U. S. Geological Survey and the Indiana Department of Conservation.

Water level, in feet below land-surface datum, 1943

Jan. 2	64.14	Apr. 6	102.38	July 12	108.71	Oct. 4	105.18
7	91.44	10	90.13	19	105.27	11	105.67
16	90.03	17	94.75	26	104.88	18	104.99
25	93.00	24	97.69	Aug. 2	105.45	25	104.93
Feb. 1	93.03	May 3	95.19	9	106.07	Nov. 1	104.17
8	93.93	15	104.79	16	106.80	8	103.39
15	66.05	22	109.23	23	106.59	15	107.45
22	93.53	June 8	109.30	30	105.99	22	99.33
27	93.39	14	109.12	Sept. 6	105.78	29	94.83
Mar. 6	91.46	21	109.11	13	106.03	Dec. 6	94.74
17	94.70	30	108.86	20	105.08	13	85.73
27	94.30	July 5	108.66	27	104.36	20	99.18
Apr. 3	106.98					27	99.17

Marion 18. Anna M. Stelzner, 4948 Vermont Street, Speedway. SW¼NW¼ sec. 6, T. 15 N., R. 3 E., 500 feet north of Vermont Street, west of junction with Cassell Drive. Unused dug well, diameter 24 inches, depth 28.1 feet below land-surface datum. Measuring point, top of brick in fourth course, east side, 0.6 foot below land-surface datum.

Water level, in feet below land-surface datum, 1943

Oct. 11	24.74	Nov. 1	24.97	Nov. 22	25.37	Dec. 13	25.70
18	24.84	8	25.03	29	25.48	20	25.88
25	24.96	15	25.24	Dec. 6	25.60	27	26.01

Marion 19. Peoria & Eastern Railway Co. Tenth Street at Big Four Railroad tracks crossing, 250 feet west of Exeter Avenue, 60 feet south of center line of Tenth Street, Indianapolis. Unused driven well, diameter 1¼ inches, depth 24.6 feet below land-surface datum. Measuring point, top of 1¼-inch flange, 3.03 feet below land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 18	18.76	Nov. 8	19.16	Nov. 29	19.37	Dec. 20	19.60
25	18.92	15	19.22	Dec. 6	19.41	27	19.63
Nov. 2	19.08	22	19.34	13	19.53		

Monroe County

Monroe 1 (*840, p. 82; 845, p. 79; 886, p. 107; 906, p. 30; 936, p. 35; 944, p. 32). Morgan-Monroe State Forest. At old camp site, north of Bean Blossom Road, near head of shallow draw. Northwesternmost of three dug wells. Measuring point is 0.2 foot above land-surface datum. Measurements made by John Holwager, superintendent, Morgan-Monroe State Forest. Well destroyed Mar. 1, 1943; measurements discontinued. Water levels, in feet below land-surface datum, 1943: Jan. 2, 0.8; Feb. 1, 0.6.

Montgomery County

Montgomery 1 (*817, p. 49; 840, p. 82; 845, p. 79; 886, p. 109; 906, p. 30; 936, p. 35; 944, p. 32). W. H. Moore. NW¼NW¼ sec. 36, T. 17 N., R. 6 W., at site of burned house, in Waveland. Measuring point is 1.5 feet above land-surface datum. Measurements made by C. N. McBrayer, Waveland.

Water level, in feet below land-surface datum, 1943

Jan. 2	9.47	May 1	8.50	Aug. 16	11.47	Oct. 30	13.49
15	6.90	June 15	9.10	31	12.43	Nov. 19	12.10
Feb. 1	9.40	July 1	11.42	Sept. 15	13.45	30	12.50
Mar. 14	10.41	28	10.81	Oct. 1	12.83	Dec. 15	12.60
Apr. 1	7.90	30	11.46	15	13.50	31	12.85
16	7.46						

Montgomery 2 (*817, p. 49; 840, p. 82; 845, p. 79; 886, p. 109; p. 30; 936, p. 35; 944, p. 32). Former Vandalia Railroad (now part of Pennsylvania Railroad). In former railroad stock pen, north side of railroad track, in Waveland. Measurements made by C. N. McBrayer, Waveland. Measuring point is 1.0 feet above land-surface datum. Measurements discontinued July 28, 1943.

Water level, in feet below land-surface datum, 1943

Jan. 15	2.40	Apr. 1	2.50	May 1	3.00	July 1	3.96
Feb. 1	3.00	16	2.96	June 15	3.00	28	3.39
Mar. 14	2.96						

Montgomery 3 (*817, p. 49; 840, p. 82; 845, p. 79; 886, p. 109; 906, p. 30; 936, p. 35; 944, p. 32). Charles Lamson. At residence, about 0.4 mile north of Waveland. Measurements discontinued July 22, 1942.

Montgomery 4 (*817, p. 49; 840, p. 82; 845, p. 79; 886, p. 109; 906, p. 30; 936, p. 35; 944, p. 32). Mrs. W. L. Glenn. At residence, about 2 miles north of Waveland. Measurements discontinued July 22, 1942.

Morgan County

Morgan 1 (*840, p. 82; 845, p. 80; 886, p. 109; 906, p. 31; 936, p. 35; 944, p. 32). Morgan-Monroe State Forest. SW¼SW¼ sec. 27, T. 11 N., R. 1 E., south of trail 3, in front of Shady Rest cabin. Measuring point is 0.2 foot above land-surface datum. Measurements made by John O. Holwager superintendent, Morgan-Monroe State Forest.

Water level, in feet below land-surface datum, 1943

Jan. 2	6.8	Mar. 1	6.6	May 1	4.1	July 1	8.9
Feb. 1	6.6	Apr. 2	6.6	June 1	6.6		

Noble County

Noble 2 (*840, p. 83; 845, p. 80; 886, p. 109; 906, p. 31; 936, p. 36; 944, p. 32). Lawrence Ott. SW¼SE¼ sec. 35, T. 33 N., R. 9 E., about 0.8 mile east of State Highway 9 and about 0.2 mile west of State Highway 102; about 100 yards north of county line road. Measuring point is 0.5 foot above land-surface datum. Measurements made by James Bodley, superintendent Tri-Lakes Fish Hatchery, Columbia City.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	18.10	Apr. 14	16.30	July 14	13.10	Oct. 18	17.90
29	18.00	29	18.20	Aug. 2	12.30	30	18.40
Feb. 13	17.60	May 15	24.00	16	13.64	Nov. 30	20.10
27	16.20	31	20.30	Sept.16	16.30	Dec. 15	20.70
Mar. 13	14.30	June 14	18.00	Oct. 2	12.90	31	21.50
31	17.60	30	15.10				

Noble 3 (*840, p. 83; 845, p. 80; 886, p. 109; 906, p. 31; 936, p. 36, 944, p. 33). Della May Kitt. NW¼SE¼ sec. 23, T. 33 N., R. 9 E., about 1.1 miles northwest of Merriam, across road from residence of Della May Kitt. Measuring point is 3.0 feet above land-surface datum. Measurements made by James Bodley, superintendent, Tri-Lakes Fish Hatchery, Columbia City.

Water level, in feet below land-surface datum, 1943

Jan. 14	19.60	Apr. 14	18.70	July 14	18.20	Oct. 18	19.90
29	19.40	29	19.00	Aug. 2	18.70	30	20.20
Feb. 13	19.30	May 15	19.00	16	19.00	Nov. 30	20.70
27	19.90	31	17.00	Sept.16	18.75	Dec. 15	20.90
Mar. 13	19.40	June 14	17.10	Oct. 2	19.30	31	22.10
31	19.20	30	17.70				

Noble 5 (*944, p. 33). Rolla Becker. N½NW¼NE¼ sec. 13, T. 34 N., R. 10 E., about 1 mile north of State Highway 8 and about 4 miles southwest of Kendallville, about 6 feet south of owner's residence. Measuring point is 0.5 foot above land-surface datum. Measured by Keith Becker, Rural Route 3, Kendallville.

Water level, in feet below land-surface datum, 1943

Jan. 6	2.67	Apr. 1	3.22	July 4	4.44	Oct. 2	6.74
18	3.62	15	3.50	16	4.49	15	7.02
Feb. 1	3.16	May 3	2.65	30	4.95	31	7.40
17	3.24	17	.49	Aug. 20	5.69	Nov. 17	7.47
Mar. 5	3.63	June 1	2.89	Sept. 3	6.12	Dec. 2	7.52
20	1.94	16	3.78	13	6.22	15	7.68

Pike County

Pike 1 (*840, p. 83; 845, p. 80; 886, p. 109; 906, p. 32; 936, p. 36; 944, p. 33). A. J. Heuring. In front of Heuring residence at Lafayette and Main Streets, in Winslow. Measuring point is 1.0 foot above land-surface datum. Measurements made by Hoyt McClure, superintendent. Pike State Forest, Winslow.

Water level, in feet below land-surface datum, 1943

Jan. 4	9.63	May 15	5.91	Aug. 2	8.87	Oct. 16	10.98
16	8.99	June 1	5.80	16	8.93	Nov. 1	11.01
30	9.42	15	6.92	Sept. 2	9.94	15	11.18
Feb. 16	9.13	July 1	7.95	15	9.93	Dec. 15	11.97
26	9.09	15	7.74	Oct. 1	10.94		

Porter County

Porter 1 (*817, p. 50; 840, p. 83; 845, p. 80; 886, p. 108; 906, p. 32; 936, p. 36; 944, p. 33). Valparaiso Water Department. Test well at well 1 pump house at Flint Lake, about 3 miles north of Valparaiso along State Highway 49. Measuring point is 0.2 foot above land-surface datum. Measurements made by J. F. Bradley, engineer, Valparaiso Water Department.

Porter 1. Valparaiso Water Department--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	51.62	Apr. 1	51.92	July 2	51.17	Sept. 16	51.21
15	51.94	15	51.80	15	51.14	Oct. 1	50.88
Feb. 1	51.28	May 3	51.92	Aug. 3	50.63	31	51.00
15	51.68	17	51.73	17	51.08	Nov. 16	50.82
Mar. 1	51.96	June 1	51.75	Sept. 2	51.14	Dec. 1	50.91
15	52.08	15	51.20				

Porter 2 (*817, p. 50; 840, p. 83; 845, p. 80; 886, p. 10[illegible]; 906, p. 32; 936, p. 37; 944, p. 33). Indiana Dunes State Park. At Waverly Beach. Measuring point is 2.0 feet above land-surface datum. Measurements made by K. R. Cougill, superintendent, Indiana Dunes State Park.

Water level, in feet below land-surface datum, 1943

Jan. 8	11.8	Apr. 30	11.2	July 10	10.5	Nov. 16	10.1
Mar. 24	12.2	May 15	10.9	Aug. 9	12.1	30	10.8
Apr. 5	12.3	June 20	10.7	Nov. 1	10.5		

Porter 3 (*817, p. 50; 840, p. 83; 845, p. 80; 886, p. 10[illegible]; 906, p. 32; 936, p. 37; 944, p. 34). Indiana Dunes State Park. Near grocery store on picnic ground. Measuring point is 2.0 feet above land-surface datum. Measurements made by K. R. Cougill, superintendent, Indiana Dunes State Park.

Water level, in feet below land-surface datum, 1943

Jan. 8	13.9	Apr. 5	12.8	June 20	11.1	Nov. 1	13.6
Feb. 2	13.1	30	12.8	July 10	11.3	16	13.9
Mar. 24	12.8	May 15	11.8	Aug. 9	12.7	30	13.9

Randolph County

Randolph 1 (*944, p. 34). Artie V. Keys. SE¼NE¼ sec. 26, T. 20 N., R. 14 E., in pump pit at rear of owner's residence, about 3 miles east and 1 mile south of Winchester. Measuring point is 5.9 feet below land-surface datum. Measurements made by Artie V. Keys, Rural Route 3, Winchester.

Water level, in feet below land-surface datum, 1943

Jan. 1	14.54	Apr. 15	13.79	July 15	14.87	Oct. 15	16.74
15	14.14	May 1	14.13	Aug. 1	15.34	31	17.80
Feb. 1	14.28	15	12.90	15	15.73	Nov. 15	16.95
15	13.65	June 1	12.74	Sept. 1	16.13	30	16.96
Mar. 1	13.51	15	13.81	15	16.22	Dec. 15	17.20
15	14.07	July 1	14.67	Oct. 1	16.59	31	17.33
Apr. 1	13.37						

St. Joseph County

St. Joseph 1 (*817, p. 52; 840, p. 85; 845, p. 82; 886, p. 110; 906, p. 33; *936, p. 38; 944, p. 34). Mishawaka Water and Light Department. At pumping plant, Mishawaka. Measuring point is 0.5 foot above land-surface datum. Measurements made by A. R. Klein, superintendent, Mishawaka Water and Light Department.

Water level, in feet below land-surface datum, 1943

Jan. 1	6.25	Apr. 1	7.08	July 1	9.50	Oct. 1	9.58
16	8.00	15	7.50	15	9.68	15	9.42
Feb. 1	7.60	May 1	8.33	Aug. 1	10.17	Nov. 1	8.75
16	7.15	15	5.58	16	9.75	15	9.42
18	11.18	25	4.46	Sept. 1	9.75	Dec. 1	8.67
Mar. 1	6.92	June 1	4.67	15	9.16	16	9.33
Mar. 16	7.42	15	7.34				

Scott County

Scott 1 (944, p. 35). Scottsburg Water Department. At northeast corner of intersection of Hyland and Thomas Streets, Scottsburg. Measuring point is 1.4 feet above land-surface datum. Measurements made by C. E. Robbins, superintendent, Scottsburg Water Department.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	18.15	Mar. 9	19.15	Apr. 28	18.76	July 22	21.33
11	19.17	15	18.04	May 15	18.75	26	21.00
25	18.75	24	18.05	June 1	17.29	30	19.70
Feb. 8	18.55	31	17.72	10	19.12	Aug. 16	19.92
17	19.30	Apr. 16	16.97	24	19.47	23	21.01
23	19.24	26	18.20	July 7	18.42	Oct. 30	22.40

Starke County

Starke 1 (*817, p. 53; 840, p. 86; 845, p. 83; 886, p. 111; 906, p. 33; *936, p. 39; 944, p. 36). Joe Tomassi. At Bass Lake State Fish Hatchery, about 200 feet north of superintendent's house. Measuring point is 1.50 feet below land-surface datum. Measurements made by Richard Good, Bass Lake State Fish Hatchery, P. J. Lavery, superintendent.

Water level, in feet below land-surface datum, 1943

Jan. 1	15.36	Mar. 17	14.79	June 17	12.85	Sept. 1	14.09
16	15.10	Apr. 3	14.14	July 1	13.12	15	14.16
Feb. 8	15.01	May 1	14.30	15	13.40	Oct. 2	14.34
15	14.92	15	13.71	31	13.64	18	14.57
Mar. 1	14.83	June 1	12.78	Aug. 16	13.87		

Starke 2 (*817, p. 53; 840, p. 86; 845, p. 83; 886, p. 111; 906, p. 33; 936, p. 39; 944, p. 36). S. A. Craigmile. At mint still about 0.25 mile northeast of owner's residence, near junction of State Highways 10 and 29. 6-inch well. Measuring point is 0.60 foot above land-surface datum. Measurements made by Richard Good, Bass Lake State Fish Hatchery, P. J. Lavery, superintendent.

Water level, in feet below land-surface datum, 1943

Jan. 4	2.47	Mar. 17	1.93	June 1	2.29	July 31	3.12
16	2.97	Apr. 3	3.03	17	2.70	Sept. 15	2.64
Feb. 8	2.52	May 1	2.90	July 1	3.40	Oct. 2	3.37
15	2.97	15	2.14	15	3.40	18	3.11
Mar. 1	2.98						

Starke 3 (*817, p. 53; 840, p. 86; 845, p. 83; 886, p. 111; 906, p. 33; 936, p. 39; 944, p. 36). S. A. Craigmile. About 1 foot from well 2. 2-inch well. Measuring point is 2.5 feet above land-surface datum. Measurements made by Richard Good, Bass Lake State Fish Hatchery, P. J. Lavery, superintendent.

Water level, in feet below land-surface datum, 1943

Jan. 4	2.32	Mar. 17	1.78	June 17	2.57	Sept. 1	3.26
16	2.83	Apr. 3	2.91	July 1	3.25	15	2.49
Feb. 8	2.24	May 1	2.75	15	3.23	Oct. 2	3.22
15	2.83	15	2.00	31	2.93	18	2.94
Mar. 1	2.78	June 1	2.16	Aug. 16	2.96		

Steuben County

Steuben 1 (*817, p. 53; 840, p. 87; 845, p. 83; 886, p. 111; 906, p. 34; 936, p. 40; 944, p. 36). Pokagon State Park. Near superintendent's house, on south side of area formerly used for buffalo pen. Measuring point is 2.0 feet above land-surface datum. Measurements made by R. N. Sprague, superintendent, Pokagon State Park.

Steuben 1. Pokagon State Park--Continued.

Water level, in feet with reference to land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	+0.10	May 1	+0.10	July 15	-0.10	Oct. 1	-1.65
16	+.40	15	-1.50	Aug. 1	-.80	15	-1.50
Feb. 1	-.40	June 2	+1.00	19	-1.45	Nov. 1	-1.85
Mar. 1	-.20	15	+.60	Sept. 1	-1.55	15	-1.25
15	-.10	July 1	-.30	15	-1.00	Dec. 1	-1.60
Apr. 1	.00						

Steuben 2 (*817, p. 50; 840, p. 87; 845, p. 83; 886, p. 111; 906, p. 34; 936, p. 40; 944, p. 36). Pokagon State Park. On north side of area formerly used for buffalo pen. Measuring point is 2.8 feet above land-surface datum. Measurements made by R. N. Sprague, superintendent, Pokagon State Park.

Water level, in feet below land-surface datum, 1943

Jan. 1	0.70	Apr. 1	0.80	July 15	2.20	Oct. 1	4.35
16	1.25	May 1	.70	Aug. 1	3.10	15	4.50
Feb. 1	1.45	June 1	.20	19	4.00	Nov. 1	4.60
Mar. 1	1.10	15	.80	Sept. 1	4.25	15	3.80
15	1.10	July 1	2.40	15	3.90	Dec. 1	3.85

Tippecanoe County

Tippecanoe 1 (*840, p. 87; 845, p. 84; 886, p. 111; 906, p. 34; 936, p. 34; 944, p. 37). Tippecanoe Township School. In basement of school building at Battleground. No measurements made in 1943.

Tippecanoe 3 (*817, p. 53; 840, p. 87; 845, p. 84; 886, p. 111; 906, p. 34; 936, p. 41; 944, p. 37). Wallace Martin. NW¼NW¼ sec. 17, T. 24 N., R. 4 W., at residence of Benton Moore. No measurements made in 1943.

Warrick County

Warrick 1 (*840, p. 88; 886, p. 112; 906, p. 35; 936, p. 41; 944, p. 37). Sunlight Stripper Co. On east side of railroad track, about 0.7 mile north of Boonville along Folsomville road and about 0.1 mile east of road, north of Scales Lake State Forest. Measuring point is 3.0 feet above land-surface datum. Measurements made by Shelby McLemore, patrolman, Scales Lake State Forest, Boonville.

Water level, in feet below land-surface datum, 1943

Feb. 1	18.00	Aug. 7	18.60	Oct. 16	19.10	Nov. 15	18.20
Apr. 28	18.80	Sept. 2	18.58	Nov. 1	18.10	Dec. 1	18.90
June 30	18.70						

White County

White 1 (*817, p. 54; *840, p. 88; *936, p. 41; *944, p. 37). Town of Monon. In basement of municipal building. Measuring point is 8.0 feet below land-surface datum. Measurements made by John M. Winkley, superintendent, Monon Water Works.

Water level, in feet below land-surface datum, 1943

Jan. 1	10.39	Apr. 1	11.67	July 1	11.77	Oct. 1	14.79
16	10.86	15	12.71	16	14.42	15	14.83
Feb. 1	12.12	May 1	11.94	Aug. 1	13.30	Nov. 1	14.83
15	12.82	16	9.50	16	13.18	15	13.82
Mar. 1	12.13	June 1	9.79	Sept. 1	14.21	Dec. 1	13.52
15	11.95	16	10.73	16	13.88	15	14.43

MAINE

By M. L. Brashears, Jr.

PROGRAM OF WORK

Periodic measurements of water level were made in 1943 by the Geological Survey, United States Department of the Interior, in five observation wells in Maine. Three of the wells are in the southern part of the State, at Amherst, Cornish, and Mercer, which are in the drainage basins, respectively, of the Union, Saco, and Kennebec Rivers. The other two wells are in the northern part of the State, at Portage and Sherman Mills, in the drainage basins, respectively of the St. John and Penobscot Rivers. The observation-well program in the State began in July 1939, when a measurement was made in the well at Sherman Mills (U. S. 105). Measurements were first made in each of the other wells in either 1942 or 1943. During 1943 the measurements made in all the wells totaled about 360. All the measurements made since the beginning of the program are included in the present report.

SOURCE OF WATER

Four of the observation wells in Maine--all except the one at Sherman Mills--penetrate unconsolidated material that ranges in composition from sand and gravel to more or less clayey overburden. The Sherman Mills well passes through the overburden and ends in bedrock, and it is open to both. All the wells are in hilly country, and all except U. S. 159, at Cornish, are in rural areas.

FLUCTUATIONS OF WATER LEVEL

The wells in Maine generally show seasonal characteristics in water level that appear only occasionally in wells in southern New England. This is because of the colder climate in Maine. For long periods during the winter the ground is deeply frozen and covered with snow, and there is little, if any, recharge. During these periods the water level declines steadily and the ground-water reservoirs are gradually emptied, the ground-water runoff maintaining in large part the flow of streams during the severe winter weather. Seasonal recharge, which, in southern New England, usually takes place throughout the winter, is therefore delayed and generally does

not take place until the snow cover is removed in late winter or early spring. According to the available records, the ground-water reservoirs are filled rapidly at the time of the seasonal thaw. The water-level measurements for the wells at Sherman Mills and Portage (U. S. 103 and 105) show that the larger part of the seasonal recharge takes place within a period of only 1 to 2 weeks, the rise of water level during that period amounting to as much as 12 feet in the well at Sherman Mills and as much as 4 feet in the well at Portage.

In general, the precipitation in the southern part of the State, along the seacoast, is greater than in other parts. In 1943 it was 53.57 inches at Machias, in the southern part of Washington County, and 32.47 inches at Caribou, in the northern part of Aroostook County. Although 24 out of 31 stations scattered throughout the State reported excessive precipitation for 1943, the precipitation was generally below normal in January, April, September, and December. In October and November all stations reported excessive precipitation, the total, at many places, amounting to more than 7 inches. The water-level records for the wells at Sherman Mills, Portage, and Mercer reflect the changes in precipitation month by month during 1943 and show rather clearly the effect of the heavy precipitation during October and November. The wells at Portage and Sherman Mills showed a slight net decline for the year, but the well at Mercer showed a net rise. The net change in water level in these three wells is in fair accord with the change in the measured precipitation in the vicinity of each. The precipitation in 1943 at the Millinocket station, in the vicinity of Sherman Mills, and at Fort Kent station, in the vicinity of Portage, was less than in 1942, but at Winslow station, in the vicinity of Mercer, it was greater than in 1942.

As far as is known, none of the observation wells in Maine is affected by the pumping of other wells.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Aroostook County

U. S. 103. H. L. Stevens. Portage well 1. In town of Portage Lake, State Route 11, 1.0 mile north of Portage Lake post office. Unused dug domestic well, diameter 28 inches, depth 10.5 feet. Measuring point, top of 2- by 4-inch timber set inside well, at land-surface datum, which is about 930 feet above mean sea level.

U.S. 103. H. L. Stevens--Continued.

Water level, in feet below land-surface datum, 1942-43

Date	Water level	Date	Water level	Date	Water level
Nov. 13, 1942	4.22	Apr. 4, 1943	5.20	Aug. 23, 1943	7.30
21	2.96	11	5.52	29	6.24
28	3.61	18	5.27	Sept. 5	6.83
Dec. 6	4.51	25	1.03	13	7.37
13	5.30	May 2	1.62	19	7.75
21	6.05	9	1.47	27	8.22
27	6.32	15	1.90	Oct. 3	6.15
Jan. 3, 1943	6.82	23	2.55	11	6.51
9	7.17	30	3.00	18	1.90
16	7.43	June 6	2.15	25	2.24
23	7.75	13	3.01	31	2.26
30	8.13	21	2.74	Nov. 7	1.22
Feb. 6	8.61	28	3.82	14	2.00
13	8.47	July 6	4.76	21	2.54
20	8.67	12	5.45	28	3.12
27	6.90	19	6.07	Dec. 5	4.32
Mar. 6	7.28	25	6.34	12	5.15
13	5.89	Aug. 1	6.77	19	5.90
21	6.30	8	7.21	26	6.34
28	5.69	15	7.42		

U.S. 105. C. C. Young. Sherman Mills well 1. In town of Sherman, on west side of U. S. Route 2, about 6 miles south of Island Falls, near Sherman Mills. Unused domestic well, diameter 28 inches at top and 8 inches at bottom, depth 31 feet, upper 12 feet dug in overburden and lower 19 feet drilled in rock. Measuring point, horizontal staple on wooden block on well cover, at land-surface datum. Well flows after periods of intense recharge. Overflow control shifts slightly from year to year and was 0.93 foot below measuring point in 1943.

Water level, in feet below land-surface datum, 1939-43

July 14, 1939	11.88	Mar. 4, 1940	14.98	Oct. 22, 1940	11.89
31	13.63	11	14.65	29	12.42
Aug. 6	4.68	18	14.23	Nov. 5	11.64
7	5.32	25	14.73	14	2.87
14	9.18	Apr. 2	2.65	19	.88
21	11.73	8	2.60	26	.93
28	12.93	15	.78	Dec. 3	1.26
Sept. 4	13.67	23	.88	11	2.98
11	14.03	29	.78	17	5.10
18	13.83	May 6	.68	24	8.60
25	14.20	13	.99	Jan. 1, 1941	2.18
Oct. 2	10.36	19	1.28	8	3.28
9	12.03	27	2.83	16	6.05
16	7.56	June 5	6.28	21	7.98
23	9.20	10	8.74	28	10.03
30	4.73	18	10.33	Feb. 4	11.39
Nov. 6	1.04	24	11.04	11	11.28
13	1.53	July 1	3.41	18	12.03
22	3.53	8	4.13	25	12.78
27	5.50	16	7.14	Mar. 4	13.21
Dec. 4	2.23	22	9.13	12	13.70
11	4.06	30	11.20	19	13.93
18	6.15	Aug. 5	12.05	25	14.03
26	8.43	13	12.88	Apr. 1	13.80
Jan. 8, 1940	11.56	20	13.35	8	8.43
15	12.48	27	13.77	15	.88
22	13.15	Sept. 3	14.11	22	1.88
29	13.65	10	14.29	29	.88
Feb. 4	13.81	17	14.41	May 6	1.16
5	13.90	26	13.80	13	2.83
12	14.23	Oct. 2	9.74	20	4.75
19	14.56	8	11.70	27	7.70
26	14.73	15	12.94	June 4	10.18

U.S. 105. C. C. Young--Continued.

Water level, in feet below land-surface datum, 1939-43

Date	Water level	Date	Water level	Date	Water level
June 10, 1941	11.58	Apr. 16, 1942	1.18	Mar. 18, 1943	3.66
17	12.58	22	.88	26	4.34
25	13.18	29	.88	31	2.43
July 16	14.01	May 6	1.08	Apr. 8	1.53
22	14.19	15	1.03	15	1.28
29	14.43	19	3.18	22	.93
Aug. 5	14.58	27	6.23	30	.93
12	14.73	June 3	9.08	May 6	.93
20	14.80	10	10.68	14	.93
26	14.48	18	1.18	20	.93
Sept. 2	15.08	25	.98	26	3.48
9	15.14	July 1	4.03	June 9	8.53
16	15.18	8	5.98	17	10.68
23	15.41	14	9.37	23	11.78
30	15.60	29	12.38	30	12.23
Oct. 6	15.73	Aug. 4	12.93	July 7	12.75
14	15.04	11	13.43	14	13.80
21	14.48	19	13.68	21	13.53
28	14.73	25	13.98	31	13.63
Nov. 4	8.98	Sept. 2	14.33	Aug. 3	13.83
11	3.33	9	14.58	11	14.18
18	4.68	16	14.70	20	14.28
25	5.73	24	14.98	26	14.58
Dec. 2	8.23	Oct. 1	14.88	31	14.68
10	7.13	9	14.93	Sept. 8	14.88
16	9.56	15	15.03	15	15.03
24	11.13	21	15.08	23	14.98
30	7.11	28	15.43	30	14.98
Jan. 6, 1942	2.31	Nov. 3	15.19	Oct. 5	14.68
13	2.95	5	14.98	12	14.68
20	5.98	12	14.08	20	3.23
27	8.98	Dec. 31	11.98	28	1.68
Feb. 4	11.11	Jan. 5, 1943	12.68	31	1.28
10	12.03	14	13.58	Nov. 10	.93
17	12.95	23	14.08	17	1.03
25	13.58	28	14.28	25	1.30
Mar. 4	13.98	Feb. 11	14.56	30	2.33
11	.98	18	12.88	Dec. 8	5.08
18	3.28	25	9.08	16	9.18
25	3.96	28	9.08	23	10.88
Apr. 1	4.18	Mar. 10	12.78	31	12.18
7	.98				

Hancock County

U.S. 158. George C. Orcutt. Amherst well 1. In town of Amherst, on south side of State Route 9 about 0.5 mile west of its junction with State Route 131. Unused dug domestic well, diameter 18 inches, depth 12.4 feet. Measuring point, top of vertical 2- by 4-inch timber set inside well, at land-surface datum, which is about 330 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 5	5.00	Nov. 21	5.00	Dec. 5	5.19	Dec. 19	6.37
14	5.50	28	4.51	12	6.10	26	6.90

Somerset County

U.S. 102. J. Harrison Farrand. Mercer well 1. In town of Mercer, on northwest side of Bog Stream Road, about 2.2 miles north of Mercer, Unused dug domestic well, diameter 60 inches, depth 13.9 feet. Measuring point, top of vertical 2- by 4-inch timber set inside well, at land-surface datum, which is about 270 feet above mean sea level.

U.S. 102. J. Harrison Farrand--Continued.

Water level, in feet below land-surface datum, 1942-43

Date	Water level	Date	Water level	Date	Water level
Nov. 12, 1942	8.54	Apr. 4, 1943	5.19	Aug. 23, 1943	6.25
19	8.01	11	4.97	29	6.48
27	7.08	18	4.88	Sept. 6	6.68
Dec. 3	6.03	25	4.91	12	6.64
10	5.48	May 2	4.74	19	6.87
17	5.75	9	5.07	26	7.03
24	6.02	16	5.11	Oct. 3	7.08
31	6.05	23	5.45	10	7.09
Jan. 8, 1943	6.58	30	5.00	17	6.19
16	6.75	June 6	5.75	24	5.28
24	6.94	13	6.06	31	5.14
31	7.08	20	5.32	Nov. 7	5.22
Feb. 7	7.14	27	6.22	14	4.99
14	7.25	July 6	6.42	21	5.03
21	7.02	11	6.57	28	5.19
28	6.76	18	6.96	Dec. 5	5.40
Mar. 7	6.68	25	7.12	12	5.55
14	6.49	Aug. 1	6.13	19	5.70
21	6.17	7	5.72	25	5.86
28	5.58	15	5.67		

York County

U.S. 159. Cornish well 1. J. P. Small. In Cornish, town of Cornish, on south side of Main Street, about 0.2 mile west of Little River crossing. Unused dug domestic well, diameter 36 inches, depth 23.6 feet. Measuring point, top edge of hole in southwest corner of concrete well cover, at land-surface datum, which is about 370 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 6	11.55	Nov. 21	10.60	Dec. 3	10.76	Dec. 18	11.82
13	9.30	27	10.78	11	10.98	25	12.36

MASSACHUSETTS

By M. L. Brashears, Jr.

PROGRAM OF WORK

The investigation of the ground-water resources of Massachusetts, begun in 1938, was continued in 1943 in cooperation with the Massachusetts Department of Public Works. The program was continued of making periodic measurements of water levels in a number of wells in Middlesex and Worcester Counties and in one well each in Berkshire, Essex, Franklin, and Hampden Counties. Monthly water-level measurements were made in 32 wells in the Lowell and the Aberjona Valley areas, Middlesex County. In all, about 600 water-level measurements were made. Water-stage recorders were operated continuously on three wells--at Leominster, Lowell, and Winchendon. At the end of 1943 the recorder on the well at Lowell was removed, but periodic measurements of the water level are to be made in this well. The general location of the observation wells is shown on the index map of Massachusetts (fig. 7).

The observation wells are listed alphabetically by counties. Complete descriptions of the observation wells were given in reports for previous years, most of them in Water-Supply Papers 886 and 906. In previous water-supply papers the records of water level were expressed either in feet above or below the measuring point or in feet above mean sea level, but in this paper they are expressed in feet below or above the land-surface datum, as is explained in the Introduction.

The following tables summarize the data pertaining to ground-water levels in Massachusetts.

Summary of water levels in observation wells in Massachusetts, in feet below land-surface datum

Well	Date of first measurement	Lowest observed water level		Highest observed water level		Water level on last date of record in 1943[a]
		Water level	Date	Water level[a]	Date	
Brimfield 12	Feb. 6,1936	16.05	Nov. 3,1942	7.32	June 7,1943	12.87
Chelmsford 68	July 27,1939	10.58	Oct. 4,1941	5.69	Apr. 23,1940	8.87
Chelmeford 69	Aug. 22,1939	6.05	Aug. 23,1941	.11	Feb. 24,1943	2.39
Leominster 11	July 13,1939	9.21	Oct. 31,1939	.81	May 23,1943	4.71
Lowell 4	May 26,1939	12.18	Oct. 5,1941	7.56	May 7,1940	10.15
Lowell 9	May 29,1939	17.67	Oct. 11,1941	7.73	Apr. 23,1940	12.50

a (+) indicates water level was above land-surface datum.

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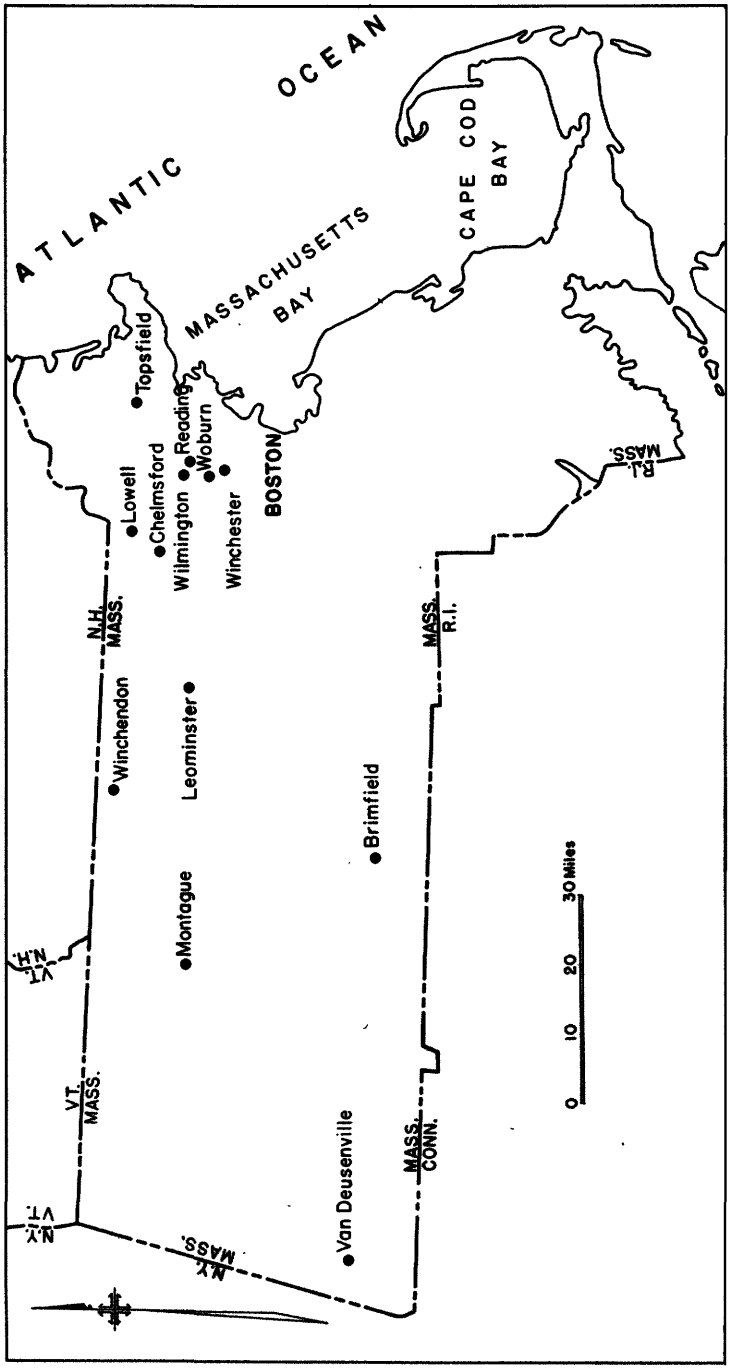

Figure 7.--Map of Massachusetts showing location of observation wells

Summary of water levels in observation wells in Massachusetts, in feet below land-surface datum--Continued

Well		Date of first measurement	Lowest observed water level		Highest observed water level		Water level on last date of record in 1943[a]
			Water level	Date	Water level[a]	Date	
Lowell	14	May 29,1939	22.46	Nov. 7,1939	9.67	May 7,1940	13.99
Lowell	18	May 29,1939	28.95	May 12,1940	26.93	May 24,1941	28.09
Lowell	22	Sept. 7,1939	8.86	Oct. 24,1939	4.83	Apr. 30,1940	7.60
Lowell	26	Aug. 9,1939	12.65	Oct. 18,1941	1.97	Apr. 2,1940 May 7,1940	11.00
Lowell	33	May 29,1939	11.33	Oct. 4,1941	6.42	Feb. 8,1941	8.18
Lowell	41	Aug. 22,1939	20.74	Oct. 17,1942	4.66	Feb. 15,1941	19.42
Lowell	43	May 28,1940	19.09	Dec. 28,1943	10.62	June 4,1940	19.09
Montague	5	Jan. 16,1936	4.38	Jan. 16,1936	0.94	May 1,1943	3.26
Reading	1	Aug. 25,1939	22.72	Aug. 25,1939	13.73	Apr. 30,1940	20.30
Reading	3	June 20,1940	5.63	Nov. 1,1941	1.29	Feb. 8,1941	2.43
Topsfield	13	Feb. 8,1936	17.43	Dec. 6,1939	7.20	Apr. 22,1939	14.54
Van Deusen-ville	20	Mar. 4,1936	19.94	Oct. 11,1942	14.71	Feb. 7,1938	19.14
Wilmington	10	July 18,1940	(b)	Dec. 13,1941	1.01	Feb. 8,1941	4.25
Wilmington	29	July 24,1940	11.70	Sept.27,1941	8.40	Mar. 28,1942	10.40
Wilmington	44	July 26,1940	7.61	Oct. 11,1941	1.68	Feb. 8,1941	4.74
Wilmington	56	Aug. 12,1940	7.97	Oct. 4,1941	2.07	Feb. 8,1941	5.37
Wilmington	58	July 27,1940	12.65	Nov. 1,1941	2.77	Mar. 23,1942	8.07
Winchendon	13	July 18,1939	12.75	Nov. 27,1939	2.36	Mar. 22,1943	6.42
Winchester	4	Aug. 22,1939	(c)	Dec. 26,1941	7.45	May 7,1940	16.24
Winchester	14	June 13,1940	14.99	Dec. 14,1941	5.62	Mar. 23,1942	9.90
Winchester	18	July 15,1940	(d)	Dec. 26,1941	1.15	Mar. 23,1942	9.08
Woburn	1	Aug. 14,1939	9.73	Sept.29,1943	4.95	Feb. 8,1942	6.56
Woburn	3	Aug. 18,1939	2.41	Aug. 16,1941	+.71	Mar. 23,1942	.47
Woburn	4	Sept.12,1939	2.57	Sept.26,1939	.23	Apr. 23,1940	1.41
Woburn	5	Sept.12,1939	1.00	Sept.19,1939	+.22	Dec. 24,1940	.23
Woburn	17	July 15,1940	(e)	Dec. 26,1941	4.40	Feb. 8,1942	6.52
Woburn	19	June 20,1940	14.85	Oct. 18,1941	5.77	Feb. 24,1943	11.55
Woburn	21	June 21,1940	9.69	Oct. 25,1941	5.80	Mar. 28,1942	8.11
Woburn	23	July 15,1940	3.10	Sept.27,1941	.61	Feb. 8,1941	1.38
Woburn	36	June 28,1940	3.53	Nov. 2,1941	1.77	May 10,1941	3.22
Woburn	38	June 28,1940	19.15	Dec. 14,1941	8.79	Mar. 23,1942	11.94
Woburn	49	July 10,1940	4.25	Dec. 5,1941	+1.59	Feb. 8,1941	+.46
Woburn	53	July 13,1940	10.69	Sept.27,1941	7.93	Mar. 23,1942	9.00

Net change, in feet, in water levels, in observation wells in Massachusetts, 1943

Well		Net change	Well		Net change	Well		Net change
Brimfield	12	-1.76	Montague	5	-3.10	Winchester	18	-1.68
Chelmsford	68	-.43	Reading	1	-.96	Woburn	1	+1.27
Chelmsford	69	-.24	Reading	3	-.43	Woburn	3	-.21
Leominster	11	-3.21	Topsfield	13	-3.93	Woburn	4	-.14
Lowell	4	-.28	Van Deusen-ville	20	-2.14	Woburn	5	-.45
Lowell	9	-.97	Wilmington	10	-1.49	Woburn	17	.00
Lowell	14	+.32	Wilmington	29	-.26	Woburn	19	-4.85
Lowell	18	+.19	Wilmington	44	-.47	Woburn	21	-.64
Lowell	22	-.85	Wilmington	56	-.78	Woburn	23	-.42
Lowell	26	-1.26	Wilmington	58	-.85	Woburn	36	-.88
Lowell	33	-.42	Winchendon	13	-.56	Woburn	38	-.99
Lowell	41	-2.45	Winchester	4	-.89	Woburn	49	-.42
Lowell	43	-1.46	Winchester	14	-.34	Woburn	53	-.12

a (+) indicates water level was above land-surface datum.
b Well dry. Water level more than 9.0 feet below land-surface datum.
c Well dry. Water level more than 22.6 feet below land-surface datum.
d Well dry. Water level more than 14.1 feet below land-surface datum.
e Well dry. Water level more than 12.0 feet below land-surface datum.

As indicated in the foregoing table, all but three of the observation wells in Massachusetts showed a net decline in water level during 1943. In general, the decline was greatest in wells that penetrate deposits of more or less unstratified sandy clay, the average decline being about twice as great as in wells that penetrate stratified sand and gravel. The decline of water levels during 1943 is chiefly the result of deficient precipitation during the year. The water level in one of the three wells that showed a net rise in 1943, Woburn 1, is affected by pumping from nearby wells. The other two wells, Lowell 14 and Lowell 18, did not react to the heavy precipitation in 1942 as rapidly as did the other observation wells, and as a result the water levels in these wells were relatively lower than in other wells at the beginning of 1943. Consequently, the rise in water level during the early part of 1943 was relatively greater than in other wells, resulting eventually in a net rise for the year.

In 1943 the precipitation was about 7 inches less than the average for the preceding 10 years and about 10 inches less than in 1942. However, during the first part of the year the precipitation was about normal. The ground-water levels were high at the beginning of the year and rose to exceptionally high stages by the end of May. During this period the water levels in a number of the wells reached the highest stage of record. In contrast, dry conditions during the latter part of the year caused a sharp decline of water levels, and by the end of September the water levels were lower than in any year of record except 1941. The water levels began to rise after the end of the growing season but the recovery was insufficient to bring them up to their positions at the beginning of the year.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Berkshire County

Van Deusenville 20 (*944, p. 41). Mr. Kopf. Northwest corner of North Plains Road and Division Street, Van Deusenville. Measuring point is level with land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	16.83	Apr. 21	16.81	July 28	18.04	Nov. 3	19.72
Feb. 6	17.92	May 27	16.41	Sept. 2	18.80	12	19.18
26	16.95	June 27	16.95	Oct. 2	19.50	Dec. 5	19.14
Mar. 24	15.84						

Essex County

Topsfield 13 (*944, p. 41). Mr. Tainter. About 1.5 miles east of Newburyport turnpike (U. S. Highway 1), 0.7 mile south of Ipswich-Topsfield road, and 2.3 miles east of Topsfield. Measuring point is level with land-surface datum and 135 feet above mean sea level.

Topsfield 13. Mr. Tainter--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	9.20	Apr. 2	9.31	July 9	12.75	Oct. 8	15.66
Feb. 1	10.71	May 3	9.86	Aug. 12	14.22	Nov. 4	15.82
Mar. 2	10.19	June 18	11.66	Sept. 3	14.94	Dec. 11	14.54

Franklin County

Montague 5 (*944, p. 41). Charles Kurtyka. On west side of Turners Falls-Montague road, about 1.3 miles north of Montague. Measuring point is 1.3 feet below land-surface datum which is about 270 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	1.50	Apr. 5	1.26	July 5	2.64	Oct. 4	3.92
Feb. 1	2.90	May 1	.96	Aug. 3	3.25	Nov. 3	3.91
Mar. 4	1.87	June 4	1.02	Sept. 4	3.73	Dec. 4	3.26

Hampden County

Brimfield 12 (*944, p. 42). Q. Q. Goodrich. On south side of Palmer-Brimfield road (State Highway 20), about 30 feet south of abandoned section of old Highway 20, 2.3 miles west of Brimfield. Measuring point is 0.5 foot below land-surface datum which is about 740 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 6	12.18	Apr. 3	9.10	July 16	10.62	Sept.28	13.62
Feb. 4	13.97	29	10.14	29	10.96	Oct. 29	14.27
23	13.69	June 7	7.32	Aug. 29	12.56	Dec. 5	12.87

Middlesex County

Chelmsford 68 (*886, p. 254; 906, p. 39; 936, p. 44; 944, p. 42). Wannalancit Trotting Park. In northeast corner of abandoned trotting tract, 2,100 feet east of Middlesex Street (U. S. Highway 3), 1,300 feet north of intersection of Trotting Park Lane and Boston & Maine Railroad tracks, 0.5 mile north of Vinal Square, North Chelmsford. Measuring point is 1.4 feet below land-surface datum which is 100.83 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 8	8.44	Apr. 29	7.17	July 30	9.11	Oct. 29	8.86
24	7.74	May 29	6.68	Aug. 30	9.15	Nov. 26	7.54
Mar. 29	7.52	June 29	8.41	Sept.28	9.58	Dec. 28	8.87

Chelmsford 69 (*886, p. 254; 906, p. 39; 936, p. 45; 944, p. 42). City of Lowell, Washington test well 2. About 2,100 feet southeast of Chelmsford Street, 300 feet southwest of Ecuador Road, and 1.7 miles northeast of Chelmsford Center, Chelmsford. Measuring point is at land surface which is 103.62 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 23	1.27	Apr. 29	1.80	July 30	2.30	Oct. 29	1.94
Feb. 6	.97	May 29	1.17	Aug. 30	2.94	Nov. 26	1.35
24	.11	June 29	2.55	Sept.28	3.44	Dec. 28	2.39
Mar. 29	1.21						

Lowell 4 (*886, p. 254; 906, p. 39; 936, p. 45; 944, p. 43). Remington Arms Co., Inc. About 135 feet north of Marginal Street and 1,000 feet east of Pawtucket Street bridge over Boston & Maine Railroad tracks, Lowell. During June and July 1943 nearby pumping for dewatering purposes caused an artificial decline of water level. A gradual recovery of water level occurred thereafter. Water-stage recorder removed on Dec. 26, 1943. Measuring point is 2.2 feet above land-surface datum which is 102.26 feet above mean sea level.

Lowell 4. Remington Arms Co., Inc.--Continued.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	....	8.99	9.07	8.25	8.32	11.57	10.32	10.08	.....	9.54a	8.60
2	....	....	9.02	9.15	8.25	8.39	11.54	10.10	10.16	.....	9.60	....
3	....	....	9.04	9.24	8.21	8.50	11.43	9.96	10.28	.....	9.7[illegible]	....
4	....	....	9.08	9.25	8.17	8.63	11.28	9.76	10.44	.....	....	....
5	....	....	9.19	9.30	8.14	8.96	11.20	9.53	10.46	.....	....	....
6	....	....	9.22	9.39	8.06	9.24	11.20	9.39	10.42	a10.62	....	....
7	....	....	9.19	9.42	8.01	9.54	11.19	9.29	10.31	.....	....a	9.15
8	....	9.66	9.04	9.47	8.07	9.91	11.15	9.24	10.31	.....	9.84	....
9	....	9.73	9.11	9.57	8.10	10.11	11.19	9.27	10.22	.....	9.69	....
10	....	9.78	9.16	9.66	8.10	10.35	11.21	9.50	10.21	.....	9.51	....
11	....	9.78	9.17	9.72	8.11	10.58	11.14	9.64	10.26	.....	9.26	....
12	....	9.69	9.06	9.76	8.10	10.71	11.04	9.64	10.26	.....	9.05	....
13	....	9.68	8.91	9.84	8.10	10.70	11.00	9.63	10.23	a10.73	8.91	....
14	....	....	8.80	9.81	8.07	10.60	.....	9.55	10.34	.....	8.87	....
15	....	....	8.78	9.69	8.01	10.77	.....	9.47	10.47	.....	....	....
16	....	a9.70	....	9.54	7.99	10.95	.....	9.37	10.55	.....	....a	9.81
17a	9.68	....	....	9.40	8.01	11.09	11.18	9.36	10.58	.....	9.02	....
18	9.72	....	....	9.30	8.08	11.18	11.16	9.39	10.62	.....	9.03	....
19	9.72	....	....	9.20	8.11	a11.46	11.00	9.38	10.62	a10.27	9.15	....
20a	9.70	....	....	9.14	8.11	a11.46	10.96	9.41	10.49	.....	9.18	....
21a	9.77	....	....	9.05	8.06	.....	10.96	9.46	10.40	.....	9.18	....
22a	9.84	a9.47	....	8.98	8.04	.....	10.90	9.46	10.35	.....	9.14	....
23	9.95	....	9.15	8.87	7.90	.....	10.88	9.53	10.43	.....	9.02	....
24	9.95	....	9.23	8.78	7.81	.....	10.85	9.63	10.55	.....	8.82	....
25	9.86	....	9.33	8.67	7.84	.....	10.81	9.78	.....	.....	8.72	....
26	9.83	....	9.35	8.60	7.92	.....	10.61	9.96	.....	a10.27	8.63	a10.23
27	9.89	....	9.34	8.54	8.02	.....	10.56	10.05	.....	.....	....	....
28a	10.02	a9.02	9.28	8.47	8.08	.....	10.61	10.16	.....	.....	....a	10.17
29	....	....	9.19	8.42	8.13	11.42	10.64	10.17	.....	a 9.81	....	....
30	....	....	9.09	8.33	8.18	11.50	10.63	10.13	.....	9.76	....	....
31	....	....	9.05	....	8.26	.....	10.47	10.04	.....	9.63	....	....

Lowell 9 (*886, p. 255; 906, p. 40; 936, p. 46; 944, p. 44). Roark Estate. About 25 feet east of Wilder Street and 40 feet south of Parker Street, Lowell. Measuring point, top edge of sharp rock projecting from north wall of well, 1.7 feet below land-surface datum which is 173.87 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 23	12.11	Apr. 29	10.80	July 30	14.35	Oct. 29	16.16
Feb. 6	12.66	May 29	9.69	Aug. 30	14.83	Nov. 26	13.81
Mar. 29	11.40	June 29	12.47	Sept.29	15.76	Dec. 28	12.50

Lowell 14 (*886, p. 255; 906, p. 40; 936, p. 46; 944, p. 44). Rogers Hall School. About 90 feet north of Rogers Street and 2,000 feet east of Fort Hill Avenue, Lowell. Measuring point is level with land-surface datum which is 157.78 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 17	13.92	Mar. 29	12.17	July 30	13.41	Oct. 29	15.96
23	14.02	Apr. 29	11.64	Aug. 30	14.03	Nov. 26	15.36
Feb. 6	14.18	May 29	10.32	Sept.28	15.22	Dec. 28	13.99
24	13.92	June 29	12.05				

Lowell 18 (*886, p. 255; 906, p. 41; 936, p. 46; 944, p. 44). Mrs. Logan. About 130 feet west of Rolfe Street and 500 feet south of Pawtucket Street, Lowell. Measuring point is 2.5 feet above land-surface datum which is 146.21 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 23	28.22	Apr. 29	28.00	July 30	28.16	Oct. 29	28.23
Feb. 8	28.11	May 29	27.89	Aug. 30	28.26	Nov. 26	27.98
24	28.05	June 29	27.96	Sept.28	28.02	Dec. 28	28.09
Mar. 29	27.97						

a Estimated.

Lowell 22 (*886, p. 256; 906, p. 41; 936, p. 46; 944, p. 45). Shaw Paper Co. About 70 feet south of Shaw Street and 270 feet east of Smith Street, Lowell. Measuring point is level with land-surface datum which is 116.88 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	6.12	Mar. 29	6.74	July 30	7.78	Oct. 29	8.37
23	7.70	Apr. 29	6.50	Aug. 30	8.02	Nov. 26	7.12
Feb. 6	7.21	May 29	6.17	Sept.28	8.69	Dec. 28	7.60
24	6.45	June 29	7.17				

Lowell 26 (*886, p. 256; 906, p. 41; 936, p. 47; 944, p. 45). A. W. Crosby (well 1). About 55 feet northeast of Pawtucket Boulevard Extension and about 4,500 feet west of East Avenue, Lowell. Measuring point is level with land-surface datum which is 102.26 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 23	8.90	Apr. 29	4.56	July 30	9.96	Oct. 29	11.38
Feb. 8	9.24	May 29	4.10	Aug. 30	10.70	Nov. 26	10.16
24	6.14	June 29	7.97	Sept.28	11.53	Dec. 28	11.00
Mar. 29	4.58						

Lowell 33 (*886, p. 256; 906, p. 41; 936, p. 47; 944, p. 45). Thomas Varnum. About 400 feet south and 50 feet west from intersection of Varnum Avenue and West Meadow Road, Lowell. Measuring point is level with land-surface datum which is 101.83 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 23	7.57	Apr. 29	6.87	July 30	8.34	Oct. 29	8.46
Feb. 8	7.16	May 29	6.85	Aug. 30	8.96	Nov. 26	7.35
24	6.61	June 29	8.20	Sept.28	9.67	Dec. 28	8.18
Mar. 29	6.92						

Lowell 41 (*886, p. 257; 906, p. 42; 936, p. 47; 944, p. 45). City of Lowell (Cook test well 3). About 50 feet north and 75 feet east from northeast corner of owner's Cook well-field pump house. Pump house about 1,300 feet southwest of intersection of Plain and Manufacturers Streets, Lowell. Measuring point is at land surface which is 105.63 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 23	16.64	Apr. 29	16.74	July 30	19.32	Oct. 29	20.13
Feb. 8	16.95	May 29	14.87	Aug. 30	20.10	Nov. 26	17.06
24	15.57	June 29	18.06	Sept.28	20.54	Dec. 28	19.42
Mar. 29	15.42						

Lowell 43 (*906, p. 42; 936, p. 47; 944, p. 46). City of Lowell (test well 26). About 230 feet south of Pawtucket Boulevard, about 415 feet east of Boulevard Avenue, 30 feet southwest of southeast corner of Pawtucket Boulevard pump house, Lowell. Measuring point is at land surface which is 101.06 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 23	17.84	Apr. 29	16.60	July 30	17.26	Oct. 29	17.49
Feb. 8	17.02	May 29	15.46	Aug. 30	16.09	Nov. 26	16.65
24	17.50	June 29	16.67	Sept.28	17.73	Dec. 28	19.09
Mar. 29	18.51						

Reading 1 (*886, p. 257; 906, p. 42; 936, p. 48; 944, p. 46). William Kelch. About 50 feet northeast of West Street, 1,000 feet northwest of intersection of West and Willow Streets, and about 1.4 miles northwest of Reading. Measuring point is at land surface which is 107.94 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 17	18.52	Mar. 29	16.39	July 30	19.74	Oct. 29	21.80
23	18.70	Apr. 29	17.22	Aug. 30	20.77	Nov. 26	19.28
Feb. 6	19.10	May 29	14.93	Sept.28	21.56	Dec. 28	20.30
24	18.16	June 29	18.07				

Reading 3 (*906, p. 43; 936, p. 48; 944, p. 46). Merle W. Farr. About 500 feet southeast of intersection of West Street and County Road and about 1.2 miles southwest of Reading. Measuring point is at land surface which is 159.28 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	1.88	Mar. 29	1.64	July 30	2.42	Oct. 29	2.50
23	1.93	Apr. 29	1.60	Aug. 30	4.48	Nov. 26	2.10
Feb. 6	1.55	May 29	1.60	Sept.28	5.12	Dec. 28	2.43
24	1.47	June 29	2.86				

Wilmington 10 (*906, p. 43; 936, p. 48; 944, p. 47). L. Chisholm. About 75 feet southeast of Hopkins Street, 1,100 feet southwest of Shawsheen Avenue, and 2.1 miles west of Wilmington Center. Measuring point is 1.5 feet above land-surface datum which is 113.63 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 17	2.44	Mar. 29	1.49	July 30	4.59	Oct. 29	6.33
23	2.47	Apr. 29	1.45	Aug. 30	6.13	Nov. 26	2.78
Feb. 6	1.83	May 29	1.47	Sept.28	7.29	Dec. 28	4.25
24	1.20	June 29	4.17				

Wilmington 29 (*906, p. 43; 936, p. 49; 944, p. 47). Oliver R. Surette. About 40 feet east of Andover Street, 2,700 feet northeast of intersection of Andover and Woburn Streets, and 2.5 miles northeast of Wilmington Center. Measuring point is level with land-surface datum which is 99.99 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 17	10.02	Apr. 29	10.07	July 30	10.39	Oct. 29	10.57
Feb. 6	10.00	May 29	9.58	Aug. 30	10.94	Nov. 26	10.14
24	9.73	June 29	10.40	Sept.28	11.35	Dec. 28	10.40
Mar. 29	9.84						

Wilmington 44 (*906, p. 44; 936, p. 49; 944, p. 47). Mrs. Anne M. McMahon. About 700 feet northwest of intersection of Federal Street and Middlesex Avenue and 0.4 mile northeast of Wilmington Center. Measuring point is at land surface which is 87.70 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 17	4.29	Mar. 29	3.60	July 30	5.07	Oct. 29	4.34
23	4.20	Apr. 29	3.81	Aug. 30	6.13	Nov. 26	3.13
Feb. 6	3.95	May 29	3.30	Sept.28	6.97	Dec. 28	4.74
24	3.64	June 29	4.88				

Wilmington 56 (*944, p. 47). D. B. Falkner. East side of Woburn Street, about 700 feet north of Lowell Street and 1.4 miles southeast of Wilmington Center, Wilmington. Measuring point is level with land-surface datum which is about 95 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 17	4.28	Mar. 29	3.63	July 30	5.90	Oct. 29	4.95
23	4.33	Apr. 29	3.88	Aug. 30	6.69	Nov. 26	3.81
Feb. 6	3.70	May 29	3.57	Sept.28	7.51	Dec. 28	5.37
24	3.23	June 29	5.65				

Wilmington 58 (*906, p. 44; 936, p. 49; 944, p. 48). Mrs. R. Malatesta. About 3 feet south of Butters Row, 1,600 feet west of Main Street, and 1.5 miles south of Wilmington Center. Measuring point is level with land-surface datum which is 109.10 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 17	6.97	Mar. 29	5.59	July 30	10.49	Oct. 29	11.54
23	7.09	Apr. 29	6.86	Aug. 30	11.29	Nov. 26	7.28
Feb. 6	7.46	May 29	5.08	Sept.28	12.31	Dec. 28	8.07
24	6.37	June 29	8.96				

Winchester 4 (*886, p. 257; 906, p. 44; 936, p. 49; 944, p. 49). Town of Winchester (test well AA). About 60 feet south of Royal Street, 800 feet east of Pond Street, and 1,000 feet west of Sylvester Avenue, Winchester. Measuring point is at land surface which is 43.97 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 23	15.04	Apr. 29	15.14	July 30	15.10	Oct. 30	20.29
Feb. 6	15.11	May 29	8.84	Aug. 30	18.11	Nov. 26	16.59
24	14.19	June 29	9.77	Sept.29	19.88	Dec. 28	16.24
Mar. 30	12.77						

Winchester 14 (*906, p. 44; 936, p. 50; 944, p. 49). F. E. Gregory. About 105 feet north of Forest Street, 360 feet northeast of west intersection of Forest Street and Forest Circle, and 1.7 miles northeast of Winchester. Measuring point is level with land-surface datum which is 116.29 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 17	9.75	Mar. 29	8.37	July 30	12.52	Oct. 29	14.02
23	10.08	Apr. 29	8.87	Aug. 30	13.26	Nov. 26	10.64
Feb. 6	10.70	May 29	7.96	Sept.28	13.88	Dec. 28	9.90
24	10.44	June 29	11.19				

Winchester 18 (*944, p. 49). Thomas N. Vinson. About 60 feet east of Ridge Street, 40 feet north of High Street, about 1.9 miles west of Winchester. Measuring point is 1.1 feet below land-surface datum which is about 280 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 6	7.12	Apr. 29	8.02	July 30	12.24	Oct. 29	(a)
24	5.70	May 29	6.63	Aug. 30	13.38	Nov. 26	10.87
Mar. 30	5.73	June 29	10.70	Sept.29	(a)	Dec. 28	9.08

Woburn 1 (*886, p. 258; 906, p. 45; 936, p. 50; 944, p. 50). E. P. Fox. About 225 feet south of Green Street, 250 feet west of Highland Street, 3.5 miles north of Woburn. Measuring point is 1.5 feet above land-surface datum which is 91.45 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 23	7.68	Apr. 29	6.85	July 30	8.02	Oct. 30	6.22
Feb. 6	6.80	May 29	6.47	Aug. 30	9.01	Nov. 26	5.99
24	6.84	June 29	8.48	Sept.29	9.73	Dec. 28	6.56
Mar. 30	6.83						

Woburn 3 (*886, p. 258; 906, p. 45; 936, p. 50; 944, p. 50). Lord Tannery. About 70 feet north of Lord Tannery well field concrete pump pit 670 feet north of Ashburton Avenue, 200 feet east of Boston & Maine Railroad tracks, 2.7 miles north of Woburn. Measuring point is 1.5 feet above land-surface datum which is 72.58 feet above mean sea level.

Water level, in feet with reference to land-surface datum, 1943

Jan. 17	-0.24	Mar. 29	+0.10	July 30	-1.08	Oct. 29	-0.70
23	-.09	Apr. 29	-.12	Aug. 30	-.97	Nov. 26	-.25
Feb. 6	-.16	May 29	+.41	Sept.28	-1.72	Dec. 28	-.47
24	-.02	June 29	-.77				

Woburn 4 (*886, p. 258; 906, p. 46; 936, p. 51; 944, p. 50). Consolidated Chemical Industries, Inc. (well 10). About 800 feet north of intersection of Merrimac and New Boston Streets, 350 feet west of New Boston Street, 3 miles north of Woburn. Measuring point is 2.2 feet above land-surface datum which is 68.20 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 17	1.33	Mar. 29	1.23	July 30	1.38	Oct. 29	0.08
23	1.32	Apr. 29	1.29	Aug. 30	1.95	Nov. 26	1.10
Feb. 6	1.05	May 29	1.09	Sept.28	1.96	Dec. 28	1.41
24	1.09	June 29	1.68				

a Well dry. Water level below 14.1 feet below land-surface datum.

Woburn 5 (*886, p. 259; 906, p. 46; 936, p. 51; 944, p. 51). Consolidated Chemical Industries, Inc. About 1,000 feet south of intersection of Merrimac and New Boston Streets, 350 feet east of New Boston Street, 2.6 miles north of Woburn. Measuring point is 1.4 feet above land-surface datum which is 59.61 feet above mean sea level.

Water level, in feet with reference to land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	-0.04	Mar. 29	-0.22	July 30	-0.21	Oct. 29	-0.13
23	+.06	Apr. 29	-.23	Aug. 30	-.57	Nov. 26	-.18
Feb. 6	-.06	May 29	-.18	Sept.28	-.60	Dec. 28	-.23
Mar 24	-.05	June 29	-.40				

Woburn 17 (*906, p. 46; 936, p. 51; 944, p. 51). J. D. Coakley. About 70 feet north of north end of Ingalls Street, 370 feet north of intersection of Montvale Avenue and Ingalls Street, and 0.8 mile east of Woburn. Measuring point is at land-surface datum which is 180.75 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 17	5.36	Mar. 29	4.89	July 30	7.54	Oct. 29	8.97
23	5.65	Apr. 29	5.68	Aug. 30	8.53	Nov. 26	5.20
Feb. 6	5.25	May 29	4.94	Sept.28	9.12	Dec. 28	6.52
24	5.32	June 29	6.92				

Woburn 19 (*906, p. 47; 936, p. 52; 944, p. 51). De Greasing Co., Inc. About 230 feet north of Montvale Avenue and 300 feet west of Albany Street, East Woburn. Measuring point is at land-surface datum which is 38.65 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 17	6.46	Mar. 29	5.95	July 30	10.10	Oct. 29	9.17
23	7.39	Apr. 29	6.50	Aug. 30	12.22	Nov. 26	6.32
Feb. 6	6.36	May 29	5.96	Sept.28	12.52	Dec. 28	11.55
24	5.77	June 29	7.28				

Woburn 21 (*906, p. 47; 936, p. 52; 944, p. 51). Morris Kaplan. About 150 feet south of Webster Street, 1,100 feet west of Kimball Lane, North Woburn. Measuring point is 3.0 feet above land-surface datum which is 118.78 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 23	7.19	Apr. 29	6.56	July 30	7.87	Oct. 30	8.94
Feb. 6	7.04	May 29	5.86	Aug. 30	8.52	Nov. 26	8.18
24	6.76	June 29	7.09	Sept.29	9.18	Dec. 28	8.11
Mar. 29	6.27						

Woburn 23 (*906, p. 47; 936, p. 52; 944, p. 52). F. H. Howser. About 490 feet southwest of intersection of Main and Elm Streets, 0.6 mile south of North Woburn. Measuring point is at land-surface datum which is 95.77 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 23	0.95	Apr. 29	1.17	July 30	1.59	Oct. 30	1.43
Feb. 6	.78	May 29	.90	Aug. 30	2.48	Nov. 26	1.05
24	.72	June 29	1.90	Sept.29	2.77	Dec. 28	1.38
Mar. 29	.85						

Woburn 36 (*906, p. 47; 936, p. 52; 944, p. 52). Town of Woburn (test well 12-A). About 100 feet east of Willow Street, 365 feet south of Lexington Street, 320 feet west of owner's Unit E pump house, 1.2 miles southwest of Woburn. Measuring point is at land-surface datum which is 43.88 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 23	2.19	Apr. 29	2.12	July 30	2.56	Oct. 30	3.40
Feb. 6	2.18	May 29	2.06	Aug. 30	2.81	Nov. 26	3.28
24	2.18	June 29	2.18	Sept.29	3.19	Dec. 28	3.22
Mar. 30	2.11						

Woburn 38 (*906, p. 48; 936, p. 53; 944, p. 52). Town of Woburn. On Woburn Country Club golf course, about 300 feet northwest of owner's Unit D pump house. Pump house is about 60 feet west of Woburn Parkway and 1.1 miles southwest of Woburn. Measuring point is 1.5 feet above land-surface datum which is 52.66 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 23	9.36	Apr. 29	9.34	July 30	11.53	Oct. 30	15.91
Feb. 24	8.31	May 29	8.47	Aug. 30	12.53	Nov. 26	13.34
Mar. 30	8.63	June 29	10.30	Sept.29	14.13	Dec. 28	10.94

Woburn 49 (*906, p. 48; 936, p. 53; 944, p. 52). Leo Pias. About 260 feet south of Locust Street, 560 feet east of Cambridge Road, and 1.3 miles west of Woburn. Measuring point is 2 feet above land-surface datum which is 63.25 feet above mean sea level.

Water level, in feet with reference to land-surface datum, 1943

Jan. 23	-0.88	Apr. 29	-0.99	July 30	-0.44	Oct. 30	+2.23
Feb. 6	-.93	May 29	-1.21	Aug. 30	+.76	Nov. 26	+.63
24	-1.10	June 29	-.81	Sept.29	+2.40	Dec. 28	-.46
Mar. 30	-1.11						

Woburn 53 (*906, p. 48; 936, p. 53; 944, p. 53). P. Flowers. About 240 feet north of Kilby Street, 550 feet west of Hard Street, about 0.6 mile north of Woburn. Measuring point is at land-surface datum which is 105.90 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 23	8.83	Apr. 29	8.66	July 30	9.65	Oct. 30	9.27
Feb. 6	8.59	May 29	8.38	Aug. 30	10.19	Nov. 26	8.73
24	8.37	June 29	9.37	Sept.29	10.48	Dec. 28	9.00
Mar. 30	8.60						

Worcester County

Leominster 11 (*886, p. 259; 906, p. 48; 936, p. 53; 944, p. 53). C. S. Pierce. About 100 feet east of Nashua Street, 300 feet west of Boston & Maine Railroad tracks, 0.7 mile south of North Leominster, 1.2 miles east of Leominster. Measuring point is 1.3 feet above land-surface datum which is 363.18 feet above mean sea level.

Water level at noon, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.70	3.73	2.30	2.53	2.13	3.44	5.93	7.16	7.14	8.03	4.92	2.71
2	1.98	3.68	2.43	2.52	2.50	3.29	6.03	7.07	7.20	8.03	4.90	2.80
3	2.17	3.73	2.48	2.62	2.15	3.48	6.12	7.02	7.25	8.07	4.80	2.89
4	2.27	3.67	2.68	2.74	1.79	3.71	6.20	7.01	7.27	8.01	4.64	2.93
5	2.48	3.31	2.74	2.68	2.15	3.88	6.25	6.98	7.29	7.94	4.63	2.96
6	2.63	2.81	2.84	2.83	2.46	4.08	6.28	6.96	7.29	7.83	4.56	3.07
7	2.75	2.44	2.89	2.85	2.43	4.22	6.31	6.96	7.32	7.85	4.42	2.77
8	2.85	2.29	3.02	2.95	2.65	3.70	6.33	6.97	7.35	7.83	4.38	2.89
9	2.95	2.43	3.12	2.98	2.29	3.82	6.40	7.01	7.38	7.82	3.77	2.90
10	3.07	2.56	3.14	3.04	2.61	3.99	6.46	7.07	7.42	7.84	2.90	3.00
11	3.17	2.55	3.06	3.13	2.63	3.92	6.53	7.12	7.46	7.83	2.92	3.08
12	3.22	1.96	1.89	3.20	2.09	4.07	6.60	7.13	7.50	7.93	2.99	3.27
13	3.30	2.13	1.90	2.65	1.83	4.20	6.66	7.10	7.54	7.95	3.06	3.42
14	3.38	1.21	2.22	1.98	2.31	4.04	6.71	7.01	7.57	7.93	3.20	3.61
15	3.41	2.36	2.31	2.34	2.63	4.16	6.71	6.94	7.59	8.03	3.29	3.75
16	3.47	2.37	2.37	2.58	2.87	4.30	6.83	6.87	7.63	8.00	3.04	3.89
17	3.52	2.39	2.33	2.51	2.97	4.44	6.90	6.81	7.66	7.94	2.88	4.03
18	3.54	2.91	1.90	2.67	3.09	4.45	6.95	6.81	7.70	7.73	3.02	4.12
19	3.50	2.95	1.78	2.81	2.10	4.56	7.01	6.86	7.73	7.42	3.10	4.17
20	3.36	3.05	1.04	1.69	1.38	4.64	7.07	6.93	7.76	7.16	3.20	4.16
21	3.39	1.34	1.38	1.90	1.84	4.75	7.13	7.02	7.79	7.01	3.28	4.22
22	3.48	1.35	1.66	1.74	.81	4.85	7.17	7.09	7.82	6.90	2.29	4.27
23	3.59	1.37	1.91	2.07	1.44	4.99	7.22	7.18	7.84	6.83	1.83	4.34
24	3.68	1.04	2.10	2.33	1.94	5.11	7.25	7.25	7.87	6.84	1.86	4.45
25	3.69	1.31	2.15	2.54	2.29	5.22	7.28	7.27	7.91	6.85	1.88	4.55

Leominster 11. C. S. Pierce--Continued.

Water level at noon, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	3.72	1.69	2.15	2.73	2.49	5.36	7.31	7.18	7.94	6.86	2.01	4.65
27	3.76	2.00	2.05	2.97	2.33	5.47	7.34	7.10	7.97	6.81	2.10	4.66
28	3.78	2.18	2.20	2.18	2.57	5.58	7.37	7.04	8.00	5.94	2.26	4.53
29	3.78	....	2.40	2.48	2.82	5.70	7.40	7.04	8.04	5.11	2.46	4.50
30	3.81	....	2.48	2.70	3.04	5.81	7.39	7.04	8.07	4.91	2.57	4.57
31	3.79	....	2.54	....	3.25	....	7.29	7.08	....	4.89	....	4.71

Winchendon 13 (*886, p. 260; 906, p. 50; 936, p. 55; 944, p. 54). W. B. Hart. About 10 feet east of Forristall Road, 800 feet south of intersection of Forristall and Crosby Roads, and 1.5 miles northeast of Winchendon. Measuring point is 2.0 feet above land-surface datum which is 1,209.36 feet above mean sea level.

Water level at noon, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.24	6.13	3.76	3.74	3.06	4.05	7.59	9.96	9.41	10.90	a11.49	4.90
2	5.09	6.18	3.89	3.77	3.34	3.92	7.73	9.98	9.49	10.94	.....	5.00
3	5.50	6.27	3.93	3.75	3.36	4.09	7.85	9.99	9.58	10.96	.....	5.12
4	4.97	6.25	4.07	3.77	2.86	4.31	7.94	9.92	9.66	11.00	.....	5.16
5	5.07	6.11	....	3.79	3.18	4.47	8.03	9.66	9.73	11.03	.....	5.16
6	5.15	6.05	....	....	3.40	4.67	8.12	9.25	9.79	11.07	.....	5.22
7	5.22	5.89	....	....	3.53	4.82	8.21	8.89	9.85	11.10	.....	5.16
8	5.27	5.88	....	....	3.69	4.48	8.26	8.63	9.91	11.15	10.99	5.12
9	5.31	5.94	....	4.10	3.62	4.54	8.33	8.47	9.97	11.18	10.87	5.05
10	5.39	6.00	....	4.13	3.74	4.71	8.41	8.39	10.02	11.21	9.91	4.95
11	5.45	5.89	....	4.15	3.76	4.68	8.50	8.36	10.08	11.24	7.46	4.82
12	5.47	5.63	3.74	4.20	3.43	4.82	8.58	8.34	10.12	11.28	5.78	4.84
13	5.58	5.48	3.20	4.06	3.08	4.94	8.66	8.32	10.17	11.30	5.39	4.96
14	5.63	5.33	3.38	3.42	3.39	5.11	8.74	8.26	10.22	11.33	5.37	5.17
15	5.62	5.37	3.25	....	3.66	5.24	8.82	8.22	10.26	11.36	5.42	5.30
16	5.73	5.48	3.21	....	3.85	5.37	8.91	8.18	10.30	11.38	5.42	5.40
17	5.82	5.51	3.39	3.66	3.94	5.55	9.00	8.16	10.35	11.40	5.50	5.50
18	5.88	5.61	3.42	3.67	3.19	5.64	9.08	8.18	10.39	11.43	5.59	5.57
19	5.86	5.66	3.01	3.71	2.70	5.79	9.16	8.26	10.44	11.46	5.63	5.66
20	5.94	5.69	2.91	3.63	2.77	5.93	9.24	8.35	10.48	11.48	5.63	5.67
21	5.95	5.38	2.97	3.16	3.05	6.09	9.31	8.44	10.52	11.50	5.54	5.76
22	5.96	4.96	3.07	2.96	2.36	6.20	9.38	8.53	10.56	11.52	5.42	5.82
23	5.99	4.45	3.24	3.04	2.80	6.37	9.46	8.62	10.60	11.54	5.29	5.93
24	6.04	3.36	3.39	3.17	3.05	6.52	9.54	8.71	10.63	11.55	5.18	6.04
25	6.07	3.04	3.46	3.28	3.25	6.67	9.60	8.79	10.67	11.57	5.11	6.09
26	6.09	3.18	3.29	3.42	3.40	6.84	9.66	8.88	10.71	11.58	5.02	6.17
27	6.12	3.33	3.03	3.58	3.04	6.99	9.72	8.99	10.75	11.59	4.89	6.19
28	6.13	3.51	3.06	2.76	3.17	7.15	9.77	9.07	10.79	11.59	4.80	6.25
29	6.13	....	3.27	3.02	3.46	7.28	9.83	9.17	10.83	11.59	4.80	6.32
30	6.18	....	3.40	3.20	3.67	7.44	9.87	9.25	10.87	11.58	4.81	6.36
31	6.17	....	3.59	....	3.87	....	9.92	9.34	.....	11.54	....	6.42

a Estimated.

MICHIGAN

By W. T. Stuart, O. F. Poindexter, and Norman Billings

PROGRAM OF WORK

The program of water-level measurements in observation wells in Michigan, begun in 1932 by the Geological Survey, United States Department of the Interior, in cooperation with the Geological Survey Division of the Michigan Department of Conservation, was continued in 1943. All the wells for which records are included in this report are in the Southern Peninsula, which, for the purpose of the program is considered as made up of two parts--northern and southern. As the conditions affecting water levels differ widely in the two parts, each part is discussed separately as to water-level fluctuations.

At the beginning of 1943 the program embraced 114 wells; 2 were dropped during the year and 2 were added, making the total the same at the end of the year. Automatic water-stage recorders were maintained in two wells throughout the year. This report lists 1,015 individual measurements during the year, distributed among 103 wells. These include 377 measurements selected from a large number made monthly or oftener in municipal wells in the southern part of the Southern Peninsula. In the wells in the northern part of that peninsula, measurements were made at least once during the year--monthly in wells in Crawford, Kalkaska, Otsego, and Roscommon Counties, and annually or semiannually in wells in Cheboygan, Grand Traverse, Missaukee, Montmorency, Presque Isle, and Wexford Counties. No measurements were made in Charlevoix County in 1943.

Most of the measurements of water level in 1943 in the northern part of the Southern Peninsula were made by Norman Billings, of the Michigan Geological Survey Division, under the supervision of O. F. Poindexter, also of the Division.

FLUCTUATIONS OF WATER LEVEL

Northern part of Southern Peninsula

The observation wells in the northern part of the Southern Peninsula are in forested areas, and therefore their water levels fluctuate principally in response to precipitation. In the 43 wells in which measurements were made monthly, the water levels averaged about the same at the end of 1943 as at the end of 1942 but several tenths of a foot lower than at the end of 1941, when they reached record high year-end stages. In many wells they reached high stages in the spring as a result of above-normal winter precipitation, but by the end of the year they had declined considerably, owing to prolonged periods of dry weather. The fluctuations in the two wells in which automatic water-stage recorders are maintained are considered typical for this part of the State, and these wells have therefore been chosen for a detailed study of fluctuations of water level in this general area and the causes of their fluctuations. The two wells are the so-called Roscommon and Grayling recorder wells, in Roscommon and Crawford Counties, respectively, under which periodic measurements of the water levels in 1943 are listed in this report.

Roscommon recorder well

An automatic water-stage recorder was installed in November 1934 in a well constructed especially for observation at the Michigan Forest Fire Experiment Station, about 2 miles south of Roscommon, Roscommon County. The recorder was in operation throughout 1943, and the records made lead to the following conclusions:

Rains in November of 1942 caused the water level to rise to about 5.5 feet below land-surface datum during the period November 17-26, after which it declined slowly until, on December 27, it was about 5.6 feet below land-surface datum. Heavy rains late in December caused it to rise rapidly, and it reached a stage of 5.23 feet below land-surface datum on January 1, 1943, after which it again slowly declined and on February 10 reached a stage of 5.33 feet below land-surface datum. The following day it rose 0.08 foot, and it remained at about that stage until February 22, when it rose to 5.03 feet below land-surface datum. The maximum daily temperature of the air was above freezing for several days in the period February 11-22, and the melting of some of the snow cover probably contributed to these rises. During the period February 22 to March 27 the water level again

rose, but slowly and irregularly, until, on the last day of this period, it was 4.50 feet below land-surface datum. After this it rose more rapidly and by April 12 reached a stage 3.49 feet below land-surface datum. A slight decline, with minor fluctuations, followed this rise until April 29, after which the water level rose again until May 3--0.25 foot in all, or to a stage 3.46 feet below land-surface datum. It then declined again until May 24, when it stood at 3.71 feet below land-surface datum, following which, apparently as the result of heavy rains, it rose to its highest stage of the year, 3.07 feet below land-surface datum, which it reached on June 4. The effects on the water level of transpiration by the trees in the vicinity became evident about May 15. After June 4 the water level declined steadily until November 6, when it reached a stage 5.25 feet below land-surface datum. As the result of rains early in November it had risen to 4.86 feet below land-surface datum by November 13, after which it declined slowly, with only minor fluctuations, until the end of the year. On December 31 it was 5.13 feet below land-surface datum.

The high stage of 3.07 feet below land-surface datum on June 4, 1943, is the highest on record for this well and exceeds by 0.01 foot the previous highest recorded stage, which was 3.08 feet below land-surface datum on April 2, 1938. The low stage for the year, 5.33 feet below land-surface datum on February 8, is 0.34 foot above the lowest stage in 1942 and 0.69 foot above the lowest recorded stage, which was reached in August 1936.

Grayling recorder well

On November 11, 1942, an automatic water-stage recorder was installed in a newly constructed well 3 miles west of Grayling, Crawford County, to aid in the study of conditions affecting recharge and ground-water runoff in that area. The well is on the divide between the drainage basins of the Manistee and Au Sable Rivers and also as near as possible to the ground-water divide between these basins.

During the period of record the water level in the Grayling well rose rapidly after each rain, indicating that at least a part of the precipitation reached the water table in the form of recharge to the ground-water reservoir. Thus, rapid rises after rains occurred in 1942 on November 16 and December 29, and in 1943 on February 11 and 24, March 17, 27, and 31, April 18, June 1, and 17, July 17, August 11, October 24, and November 8.

As will be noted from the record of measurements, however, the water level declined promptly after each rise, rapidly at first and at a gradually decreasing rate on each successive day. The highest stage during the period--3.50 feet below land-surface datum--was reached on June 17, 1943, and the lowest stage--7.11 feet below land-surface datum--on October 13, 1943. The stage was 0.21 foot lower on December 31, 1943, than on December 31, 1942.

Southern part of Southern Peninsula

As already stated, all the observation wells in the southern part of the Lower Peninsula, 23 in all, are municipal wells, and all are affected by pumpage as well as by precipitation.

Ground-water conditions, as shown by the records of these municipal wells, were generally somewhat better in 1943 than in 1942 or 1941, owing largely to above-normal precipitation. At each of the cities in which the wells are situated the precipitation was excessive, ranging from 1.03 inches above normal at Three Rivers to 6.27 inches above normal at Ann Arbor and averaging 3.9 inches above normal.

The average daily pumpage in 1943 increased in five and probably in six of the seven cities in which the wells are situated. (The record at Three Rivers, St. Joseph County, is incomplete.) One city, Battle Creek, in Calhoun County, reported a slight decrease in pumpage. The pumpage affecting the water level in each of the city wells is discussed in connection with the water-level record for that well, under the county in which the city and well are situated.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

The number assigned to each well, except the municipal wells, is its number in the township in which it is situated. The number assigned to each of the municipal wells is preceded by the name of the county in which the well is situated and to which it refers.

Calhoun County

Calhoun 1 (*886, p. 267; 906, p. 58; *936, pp. 59-60; 944, pp. 59-60), City of Battle Creek. Well 22 at Verona pumping station of city waterworks. Measurements made by S. C. Einhardt, Sr., operator, Verona pumping station. Measuring point is 1.00 foot above land-surface datum, which is 829.54 feet above mean sea level.

Calhoun 1. City of Battle Creek--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	3.24	Mar. 16	2.55	June 30	6.00	Nov. 8	5.30
12	3.00	23	2.97	July 5	7.89	15	5.12
25	2.76	29	2.48	12	8.43	22	5.53
Feb. 5	3.05	Apr. 6	3.45	19	7.02	29	5.43
8	2.00	26	7.84	Aug. 2	9.27	Dec. 6	5.75
15	2.39	May 3	7.66	9	7.55	13	5.80
22	2.95	June 8	6.37	16	7.50	20	5.75
Mar. 1	3.00	21	8.00	23	8.58	27	6.00
10	3.13						

The average daily withdrawal from wells at the Verona pumping station in 1943 ranged from 2.74 million gallons in January to 5.34 million gallons in July and averaged 3.93 million gallons for the year. The average rate of withdrawal for 1942 was 2.79 million gallons; for 1941, 3.75 million gallons; and for 1940, 2.49 million gallons. In 1943 the water level in well 1 averaged about 1.6 feet lower than in 1942, about the same as in 1941, and 0.5 foot lower than in 1940.

Calhoun 2 (*886, p. 267-268; 906, p. 58; *936, pp. 60-61; 944, p. 60). City of Battle Creek. Armstrong test well 3 at Goguac pumping station of city waterworks. Measurements made by C. A. Bunce, operator Goguac pumping station. Measuring point is 2.40 feet above land-surface datum, which is 915.06 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 4	24.0	Apr. 12	24.00	July 6	19.1	Oct. 1	25.8
11	23.8	19	14.85	18	19.8	3	23.1
18	23.95	26	14.98	25	17.2	17	21.7
25	24.12	May 3	14.99	Aug. 2	18.8	31	22.0
Feb. 1	23.06	10	14.95	7	19.1	Nov. 1	22.4
8	24.0	17	14.96	15	19.1	8	21.6
15	24.1	24	15.26	22	19.0	12	21.7
22	25.66	31	15.89	29	19.4	19	22.0
Mar. 7	24.6	June 6	17.22	Sept. 5	19.5	Dec. 5	21.6
14	23.0	13	17.41	12	19.3	12	21.8
21	23.6	20	18.07	19	19.5	19	22.3
28	23.4	27	18.21	26	25.8	26	21.8
Apr. 5	24.12	July 3	18.8				

The average daily pumpage at the Goguac pumping station in 1943 ranged 0.3 million gallons in May to 1.7 million gallons in September and averaged 1.30 million gallons for the year. The average daily pumpage in 1943 was 0.04 million gallons less than in 1942, about 0.2 million gallons more than in 1941, and about 0.2 million gallons less than in 1940. Because of variations in the pumpage at the different wells at the station and the low withdrawals in May, it is difficult to compare the water levels in well 2 in 1943 with those in this well in 1942. However, the water levels were generally higher throughout 1943 than in each of several years prior to 1943. The improved ground-water conditions are undoubtedly due to the continued above-normal precipitation. The accumulated excess in precipitation above normal for the years 1940-43 was more than 20 inches.

Charlevoix County

T. 32 N., R. 4 W.

1 (*840, pp. 125-126; 845, p. 153; 886, p. 268; 906, p. 58; 936, p. 61; 944, p. 61). SE¼SE¼ sec. 1. No measurements made in 1943.

33 (*840, pp. 125-126; 845, p. 153; 886, p. 268; 906, p. 58; 936, p. 61; 944, p. 61). NE¼SE¼ sec. 10. No measurements made in 1943.

34 (*840, pp. 125-126; 845, p. 153; 936, p. 61; 944, p. 61). NW¼NW¼ sec. 4. No measurements made in 1943.

T. 33 N., R. 4 W.

31 (*840, pp. 125-126; 845, p. 153; 886, p. 268; 936, p. 61; 944, p. 61). NW¼SW¼ sec. 36. No measurements made in 1943.

T. 33 N., R. 5 W.

12 (*840, pp. 125-126; 845, p. 153; 886, p. 268; 906, p. 59; 936, p. 61; 944, p. 61). NE¼NE¼ sec. 4. No measurements made in 1943.

Cheboygan County

T. 33 N., R. 1 E.

5 (*886, p. 268; 906, p. 59; 936, p. 61; 944, p. 61). SE¼NW¼ sec. 27. Measuring point is 1.82 feet above land-surface datum. Water level, in feet below land-surface datum, 1943: July 14, 2.52.

7 (*840, pp. 129-130; 845, p. 153; 886, p. 268; 906, p. 59; 936, p. 61; 944, p. 61). NE¼NW¼ sec. 28. Measuring point is 0.62 foot above land-surface datum. Water level, in feet below land-surface datum, 1943: July 14, 2.58.

8 (*840, pp. 129-130; 845, p. 153; 886, p. 268; 906, p. 59; 936, p. 61; 944, p. 61). NE¼NW¼ sec. 29. Measuring point is 1.55 feet above land-surface datum. Water level, in feet below land-surface datum, 1943: July 14, 4.14.

17 (*840, pp. 129-130; 845, p. 153; 886, p. 268; 906, p. 59; 936, p. 61; 944, p. 61). NE¼SE¼ sec. 23. Measuring point is 3.50 feet above land-surface datum. Water level, in feet below land-surface datum, 1943: July 14, 4.57.

T. 33 N., R. 1 W.

2 (*840, pp. 129-130; 845, p. 153; 886, p. 268; 906, p. 59; 936, p. 61; 944, p. 61). SW¼SW¼ sec. 3. Measuring point is 2.10 feet above land-surface datum. Water level, in feet below land-surface datum, 1943: July 14, 4.34.

4 (*840, pp. 129-130; 845, p. 153; 886, p. 268; 906, p. 59; 936, p. 61; 944, p. 61). SE¼SE¼ sec. 10. No measurements made in 1943.

11 (*840, pp. 129-130; 845, p. 153; 886, p. 268; 906, p. 59; 936, p. 61; 944, p. 61). NW¼SE¼ sec. 25. No measurements made in 1943.

T. 34 N., R. 1 W.

11 (845, p. 153; *886, p. 268; 906, p. 59; 936, p. 61; 944, p. 61). NW¼SW¼ sec. 1. Measuring point is 1.08 feet above land-surface datum. Water level, in feet below land-surface datum, 1943: July 14, 3.74.

33 (*840, pp. 129-131; 845, p. 153; 886, p. 268; 906, p. 59; 936, p. 61; 944, p. 61). SE¼NW¼ sec. 26. Measuring point is 1.15 feet above land-surface datum. Water level, in feet below land-surface datum, 1943: July 14, 5.24.

Crawford County

T. 25 N., R. 3 W.

8 (*886, pp. 268-269; 906, p. 59; 936, pp. 61-62; 944, p. 61). SE¼SE¼ sec. 29. Measuring point is 1.00 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	10.08	Apr. 15	9.08	July 9	8.89	Oct. 17	9.48
Feb. 22	9.98	May 13	9.26	Aug. 13	9.09	Nov. 11	9.40
Mar. 15	10.20	June 15	8.70	Sept. 18	9.36	Dec. 10	9.54

T. 26 N., R. 2 W.

9 (*840, pp. 134,137; 845, p. 154; 886, p. 269; 906, p. 59; 936, pp. 61-62; 944, p. 61). SW¼SW¼ sec. 12. Measuring point is 3.80 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 15	2.07	Apr. 16	1.98	July 11	2.17	Oct. 8	2.13
Feb. 26	2.01	May 14	2.01	Aug. 16	2.15	Nov. 12	2.02
Mar. 16	2.02	June 14	2.01	Sept.17	2.12	Dec. 10	2.10

T. 26 N., R. 3 W.

26 (*840, pp. 134, 137; 845, p. 154; 886, p. 269; 906, p. 59; 936, pp. 61-62; 944, p. 61). NE¼NE¼ sec. 19. Measuring point is 0.90 foot above land-surface datum, which is 1,156.00 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 15	10.35	Apr. 15	8.77	July 9	8.27	Oct. 17	9.61
Feb. 26	10.29	May 13	9.08	Aug. 13	9.07	Nov. 11	8.92
Mar. 15	10.31	June 15	8.40	Sept.18	9.43	Dec. 10	9.28

28 (*840, pp. 134, 137-138; 845, p. 154; 886, p. 269; 906, p. 59; 936, pp. 61-62; 944, pp. 61-62). SE¼SE¼ sec. 12. Measuring point is 0.10 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 15	8.21	Apr. 15	6.60	July 9	6.00	Oct. 8	7.08
Feb. 26	8.45	May 13	6.92	Aug. 13	6.49	Nov. 12	6.87
Mar. 15	8.41	June 15	6.44	Sept.18	6.89	Dec. 10	6.94

T. 26 N., R. 4 W.

9 (*840, pp. 134, 138; 845, p. 154; 886, p. 269; 906, p. 59; 936, p. 62; 944, p. 62). NE¼NE¼ sec. 6. Measuring point is 0.65 foot above land-surface datum, which is 1, 137.17 feet above mean sea level.

Water level, in feet above or below land-surface datum, 1943

Jan. 15	-2.16	Apr. 13	+0.16	July 11	-0.18	Oct. 8	-2.17
Feb. 22	-2.15	May 15	-.50	Aug. 16	-.81	Nov. 12	-.47
Mar. 16	-2.02	June 17	+.35	Sept.18	-1.63	Dec. 10	-.80

10 (*840, pp. 134, 138; 845, p. 154; 886, p. 269; 906, p. 59; 936, p. 62; 944, p. 62). NE¼SE¼ sec. 10. Measuring point is 1.50 feet above land-surface datum, which is 1,146.11 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 15	4.87	Apr. 13	3.62	July 11	3.95	Oct. 8	5.54
Feb. 22	4.53	May 15	4.05	Aug. 16	4.74	Nov. 12	3.89
Mar. 16	4.54	June 17	2.04	Sept.18	5.28	Dec. 10	4.25

Grayling recorder well. NE¼SE¼ sec. 10. About 50 feet south of State Highway M-72 and about 100 feet west of railroad crossing, 3 miles west of Grayling. Used dug observation well, diameter 15 inches, depth 8 feet. Measuring point, top of wooden cover and base of instrument shelter, 3.50 feet above land-surface datum, which is 1,147.59 feet above mean sea level. Equipped with water-stage recorder after Nov. 11, 1942.

Water level, in feet below land-surface datum, 1942-43

Date	Water level	Date	Water level	Date	Water level
Nov. 11, 1942	6.52	Jan. 24, 1943	6.50	Apr. 10, 1943	5.11
19	6.29	Feb. 9	6.61	20	5.07
Dec. 1	6.51	11	6.36	30	5.09
15	6.72	21	6.28	May 10	5.42
26	6.83	Mar. 1	6.02	20	5.64
28	5.92	10	6.36	30	5.37
Jan. 3, 1943	6.10	20	6.00	June 10	5.08
15	6.34	31	4.10	17	3.50

Grayling recorder well--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 20	4.07	Aug. 10	6.24	Sept.30	6.99	Nov. 20	5.57
30	5.19	20	6.34	Oct. 13	7.11	30	5.77
July 10	5.33	30	6.70	20	6.87	Dec. 10	5.71
20	5.50	Sept.10	6.65	30	6.45	20	6.01
30	5.73	20	6.84	Nov. 10	5.28	31	6.19

12 (*840, pp. 134, 138; 845, p. 154; 886, p. 269; 906, p. 59; 936, p. 62; 944, p. 62). NW¼SE¼ sec. 5. Measuring point is 0.50 foot above land-surface datum, which is 1,144.01 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Apr. 13	2.69	June 17	2.31	Sept.18	4.12	Nov. 12	3.32
May 15	3.35	July 11	3.01	Oct. 8	4.52	Dec. 10	3.56
19	3.78	Aug. 16	3.63				

T. 27 N., R. 1 W.

8 (*840, pp. 134, 139-140; 845, p. 154; 886, p. 269; 906, p. 60; 936, p. 62; 944, p. 62). SW¼SW¼ sec. 4. Measuring point is 0.50 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Apr. 16	3.10	July 11	3.14	Sept.17	3.64	Nov. 12	3.54
May 14	3.30	Aug. 16	3.49	Oct. 8	3.76	Dec. 15	3.83
June 14	2.94						

22 (*840, pp. 134, 139-140; 845, p. 154; 886, p. 269; 906, p. 60; 936, p. 62; 944, p. 62). SW¼SW¼ sec. 20. Measuring point is 0.60 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 15	4.35	Apr. 16	2.48	July 11	1.55	Oct. 8	3.17
Feb. 26	4.22	May 14	2.58	Aug. 16	2.08	Nov. 12	2.93
Mar. 16	4.34	June 14	1.95	Sept.17	2.78	Dec. 10	3.39

27 (*840, pp. 134, 139-140; 845, p. 154; 886, p. 269; 906, p. 60; 936, p. 62; 944, p. 62). NE¼NE¼ sec. 22. Measuring point is 1.60 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 15	5.27	Apr. 16	3.62	July 11	4.05	Oct. 8	5.02
Feb. 26	5.24	May 14	4.03	Aug. 16	4.45	Nov. 12	4.94
Mar. 16	6.18	June 14	3.71	Sept.17	4.82	Dec. 15	5.28

T. 27 N., R. 4 W.

42 (*840, pp. 135, 141; 845, p. 154; 886, p. 269; 906, p. 60; 936, p. 62; 944, p. 63). NE¼NW¼ sec. 2. Measuring point is 1.00 foot above land-surface datum, which is 1,194.18 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 15	5.36	Apr. 16	4.15	July 11	4.48	Oct. 8	4.94
Feb. 26	5.34	May 13	4.60	Aug. 16	4.82	Nov. 12	4.15
Mar. 16	5.47	June 14	4.26	Sept.17	4.92	Dec. 15	4.50

51 (*886, pp. 268-269; 906, p. 60; 936, p. 62; 944, p. 63). NE¼NE¼ sec. 14. Measuring point is 1.85 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Apr. 16	11.27	July 11	10.91	Sept.17	11.59	Nov. 12	11.10
May 13	11.44	Aug. 16	11.32	Oct. 8	11.72	Dec. 15	11.51
June 14	11.02						

T. 28 N., R. 1 W.

6 (*840, pp. 135, 141-142; 845, p. 154; 886, p. 269; 906, p. 60; 936, p. 62; 944, p. 63). NE¼NE¼ sec. 8. Measuring point is 0.40 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 16	4.80	July 11	4.88	Sept.17	6.15	Nov. 12	6.50
May 13	5.05	Aug. 16	5.55	Oct. 8	6.47	Dec. 15	6.75
June 14	4.40						

18 (*840, pp. 135, 141-142; 845, p. 154; 886, p. 269; 906, p. 60; 936, p. 62; 944, p. 63). NE¼SW¼ sec. 20. Measuring point is 0.70 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 15	6.12	Apr. 16	3.86	July 11	4.17	Oct. 8	5.91
Feb. 26	6.06	May 13	4.40	Aug. 16	5.02	Nov. 12	5.89
Mar. 16	6.17	June 14	3.73	Sept.17	5.63	Dec. 15	6.16

T. 28 N., R. 2 W.

2. NW¼SW¼ sec. 30, 100 feet south and 20 feet west of junction of road leading north from County Highway 612. Used driven observation well, diameter 2 inches, depth 13 feet. Measuring point, top of pipe, 2.0 feet above land-surface datum.

Water level, in feet below land-surface datum, 1933, 1935, 1943

Date	Water level	Date	Water level	Date	Water level
Oct. 12, 1933	3.30	June 21, 1935	3.24	Oct. 8, 1943	3.57
May 8, 1935	2.73	July 12	3.33	Nov. 12	2.29
31	3.10	Aug. 16, 1943	3.14	Dec. 15	2.87
June 19	3.24	Sept.17	3.47		

T. 28 N., R. 4 W.

50 (*845, p. 155; 886, p. 269; 906, p. 60; 936, p. 62; 944, p. 63). SW¼SE¼ sec. 14. No measurements made in 1943.

Grand Traverse County

T. 25 N., R. 9 W.

6 (*840, pp. 143-144; 936, p. 62; 944, p. 63). NW¼SE¼ sec. 23. Measuring point is 1.30 feet above land-surface datum, which is 1,017.85 feet above mean sea level. Water level, in feet below land-surface datum, 1943: Aug. 6, 4.48.

24 (*840, pp. 143-144; 936, p. 62; 944, p. 63). NW¼NW¼ sec. 26. Measuring point is 2.20 feet above land-surface datum, which is 1,024.02 feet above mean sea level. Water level, in feet below land-surface datum, 1943: Aug. 6, 5.03.

27 (*840, pp. 143-144; 936, p. 62; 944, p. 63). NW¼NW¼ sec. 34. Measuring point is 2.10 feet above land-surface datum, which is 1,025.34 feet above mean sea level. Water level, in feet below land-surface datum, 1943: Aug. 6, 10.86.

T. 25 N., R. 10 W.

25 (*840, pp. 143-145; 936, p. 62; 944, p. 63). SW¼SW¼ sec. 2, Measuring point is 1.00 foot above land-surface datum, which is 945.27 feet above mean sea level. Water level, in feet below land-surface datum, 1943: Aug. 6, 1.02.

26 (*840, pp. 143-145; 936, p. 62; 944, p. 63). NW¼NW¼ sec. 8. Measuring point is 5.50 feet above land-surface datum, which is 949.58 feet above mean sea level. Water level, in feet below land-surface datum, 1943: Aug. 6, 1.07.

T. 25 N., R. 11 W.

19 (*840, pp. 143,145). SE¼NW¼ sec. 2. Measuring point is 2.70 feet above land-surface datum, which is 1,058.81 feet above mean sea level. Water level, in feet below land-surface datum, 1943: Aug. 6, 3.35.

T. 26 N., R. 9 W.

2 (*840, pp. 143, 145-146; 936, p. 62; 944, p. 63). SW¼SW¼ sec. 13. Measuring point is 2.20 feet above land-surface datum, which is 961.78 feet above mean sea level. Water level, in feet below land-surface datum, 1943: Aug. 6, 5.72.

T. 26 N., R. 11 W.

2 (*840, pp. 143, 146; 936, p. 63; 944, p. 63). NW¼SW¼ sec. 27. Measuring point is 0.40 foot above land-surface datum, which is 914.25 feet above mean sea level. Water level, in feet below land-surface datum, 1943: Aug. 6, 1.98.

4 (*840, pp. 143, 146; 936, p. 63; 944, p. 63). SW¼SW¼ sec. 18. No measurements made in 1943.

7 (*840, pp. 143, 146; 936, p. 63; 944, p. 63). NE¼NE¼ sec. 7. No measurements made in 1943.

14 (*840, pp. 143, 146; 936, p. 63; 944, p. 63). SW¼SW¼ sec. 21. Measuring point is 0.80 foot above land-surface datum, which is 839.26 feet above mean sea level. Water level, in feet below land-surface datum, 1943: Aug. 6, 1.67.

T. 27 N., R. 9 W.

1 (*840, pp. 143, 147-148; 936, p. 63; 944, p. 63). SE¼NW¼ sec. 36. Measuring point is 1.00 foot above land-surface datum, which is 906.11 feet above mean sea level. Water level, in feet below land-surface datum, 1943: Aug. 6, 12.54.

6 (*840, pp. 143, 147-148; 936, p. 63; 944, p. 63). SE¼SW¼ sec. 25. Measuring point is 3.00 feet above land-surface datum, which is 909.15 feet above mean sea level. Water level, in feet below land-surface datum, 1943: Aug. 6, 2.39.

15 (*840, pp. 143, 147-148; 936, p. 63; 944, p. 63). SE¼NW¼ sec. 28. Measuring point is 2.20 feet above land-surface datum, which is 833.26 feet above mean sea level. Water level, in feet below land-surface datum, 1943: Aug. 6, 12.11.

18 (*840, pp. 143, 147-148; 936, p. 63; 944, p. 63). NW¼NE¼ sec. 4. Measuring point is 4.00 feet above land-surface datum, which is 637.01 feet above mean sea level. Water level, in feet below land-surface datum, 1943: Aug. 6, 1.40.

25 (*840, pp. 143, 147-148; 936, p. 63; 944, p. 64). SE¼NW¼ sec. 34. Measuring point is 1.00 foot above land-surface datum, which is 900.25 feet above mean sea level. Water level, in feet below land-surface datum, 1943: Aug. 6, 13.78.

Ingham County

Ingham 1 (*886, pp. 270-272; 906, p. 60; *936, pp. 63-64; 944, p. 64). City of Lansing. Well 2 at Cedar Street pumping station, near southeast corner of Cedar Street and Michigan Avenue, Lansing. Measuring point is 0.70 foot above land-surface datum, which is 846.06 feet above mean sea level. Water levels, in feet below land-surface datum, 1943: Feb. 26, 69.42; Mar. 25, 70.42. Pump placed in well after March 25.

Ingham 2 (*886, pp. 270-272; *936, pp. 63-64; 944, p. 64). City of Lansing. Well 9 at Cedar Street pumping station, near northeast corner of Cedar and Kalamazoo Streets, Lansing. Measuring point is 2.80 feet below land-surface datum, which is 848.45 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 26	47.05	May 28	45.72	Aug. 25	49.05	Nov. 25	48.73
Mar. 25	46.13	June 18	47.51	Sept.29	48.83	Dec. 23	49.83
Apr. 23	46.72	July 30	47.68	Oct. 27	48.84		

Ingham 3 (*886, pp. 270-272; 906, pp. 60-61; *936, pp. 63-64; 944, p. 64). City of Lansing. Well 5 in Pennsylvania Avenue well field, at northwest corner of crossing of Pennsylvania Avenue and Grand Trunk Railroad, Lansing. Measuring point is 1.30 feet above land-surface datum, which is 822.79 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 26	30.19	May 28	29.69	Aug. 25	33.94	Nov. 25	33.55
Mar. 25	29.11	June 18	29.44	Sept.29	33.85	Dec. 23	34.55
Apr. 23	30.61	July 30	32.61	Oct. 27	33.61		

Ingham 4 (*886, pp. 265, 270-272; 906, pp. 60-61; *936, pp. 63-64; 944, p. 64). City of Lansing. Well 9 in Pennsylvania Avenue well field, about 500 feet east of Pennsylvania Avenue and just north of Grand Trunk Railroad, Lansing. Measuring point is 0.80 foot above land-surface datum, which is 829.63 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 26	35.66	May 28	36.58	Sept.29	44.16	Nov. 25	44.11
Mar. 25	35.41	Aug. 25	44.16	Oct. 27	44.16	Dec. 23	44.91
Apr. 23	36.83						

Ingham 5 (*886, pp. 270-272; 906, pp. 60-61; 944, p. 64). City of Lansing. Well 7 in Riverside well field, just north of Cedar River on approximate line of Mifflin Avenue, Lansing. No measurements made in 1943, as well had been equipped with pump.

Ingham 6 (*886, pp. 270-272; 906, pp. 60-61; *936, pp. 63-64; 944, p. 64). City of Lansing. Logan well, at Logan Street pumping station, Lapeer and Logan Streets, Lansing. Measuring point is 4.70 feet below land-surface datum, which is 857.98 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 26	76.45	May 28	77.12	Aug. 25	80.78	Nov. 25	79.55
Mar. 25	78.07	June 18	78.49	Sept.29	80.03	Dec. 23	80.55
Apr. 23	78.62	July 30	79.70	Oct. 27	79.62		

Ingham 7 (*886, pp. 270-272; 906, pp. 60-61; *936, pp. 63-64; 944, p. 64). City of Lansing. Seymour well, at Seymour Avenue pumping station, on north side of Josephine Street, about 500 feet east of Seymour (Grand River) Avenue, Lansing. Measuring point is 4.20 feet below land-surface datum, which is 821.92 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 26	66.87	May 28	64.78	Aug. 25	68.12	Nov. 25	65.50
Mar. 25	67.95	June 18	66.58	Sept.29	67.65	Dec. 23	66.50
Apr. 23	65.20	July 30	67.75	Oct. 27	65.62		

Ingham 8 (*886, pp. 265, 270-272; 906, pp. 60-61; *936, pp. 63-64; 944, p. 65). City of Lansing. Townsend well, at Townsend Street pumping station, on east side of Townsend Street opposite Olds Street, Lansing. Measuring point is 6.95 feet below land-surface datum, which is 833.48 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 26	29.58	May 28	28.66	Aug. 25	31.16	Nov. 25	30.50
Mar. 25	28.41	June 18	31.21	Sept.29	30.90	Dec. 23	32.51
Apr. 23	29.16	July 30	31.21	Oct. 27	30.58		

Measurements in wells 1, 2, 3, 4, 5, 6, 7, and 8 were made by members of the Mechanical Engineering Department, Board of Water and Electric Light Commissioners, Lansing.

In 1943, the average daily pumpage from municipal wells in Lansing was about 12.8 million gallons, as compared with 11.1 million gallons in 1942, 10.8 million gallons in 1941, and 9.4 million gallons in 1940. The average daily pumpage in August, the month of heaviest pumpage during the year, was 14.9 million gallons. The maximum average daily pumpage was 17.9 million gallons in June 1943.

The water level in well 2 averaged 1.3 feet lower in 1943 than in 1942, although the total pumpage for the Cedar Street field decreased from about 50 million gallons to 0.7 million gallons in 1943.

The water levels in wells 3 and 4 averaged about 8 feet lower in 1943 than in 1942, largely owing to increased pumpage in the Pennsylvania and Riverside well fields.

The water levels in wells 6 and 7 averaged 9.2 feet lower in 1943 than in 1942, largely owing to the shift in pumpage from the Cedar Street to the Maple Street and Northwest well fields.

The water level in well 8 averaged about 2 feet lower in 1943 than in 1942, part of which decrease may represent a general lowering of the ground-water levels under the city, and it may also represent the increased pumpage by the industries associated with the war effort.

The precipitation at Lansing was above normal during each of the past 4 years: 1940, excess 6.35 inches; 1941, excess 0.85 inch; 1942, excess 5.59 inches; and 1943, excess 5.06 inches. However, it is believed that the sandstones penetrated by the municipal wells are recharged in more or less remote areas and that, therefore, fluctuations in precipitation affect the Lansing wells only after considerable lag. It is believed that fluctuations in the volume of pumpage and the shift in centers of pumpage are primarily responsible for the water-level fluctuations in the observation wells at Lansing.

Kalamazoo County

Kalamazoo 1 (*886, pp. 264, 273-274; *906, pp. 61-62; *936, pp. 64-65; 944, p. 66). Well B at Central (Burdick Street) pumping station of city waterworks, Kalamazoo. Measuring point is 764.36 feet above mean sea level.

Water level, in feet below measuring point, 1943

Jan. 3	17.98	Mar. 14	13.34	May 23	11.31	Sept.26	14.98
17	18.97	21	10.13	June 6	8.81	Oct. 24	15.23
31	13.58	28	11.92	July 18	12.10	Nov. 7	15.92
Feb. 14	13.72	Apr. 11	12.45	Aug. 29	14.92	21	16.03
28	13.27	May 9	13.12	Sept.12	14.78		

Kalamazoo 2 (*886, pp. 264, 273-274; *906, p. 62; *936, pp. 64-65; 944, p. 66). Well C at city waterworks, about 1,100 feet southeast of Central pumping station, Kalamazoo. Measuring point is 764.88 feet above mean sea level.

Kalamazoo 2. Well C at city waterworks--Continued.

Water level, in feet below measuring point, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	10.42	Mar. 14	12.11	May 23	10.42	Sept.26	13.96
17	10.92	21	10.05	June 6	8.66	Oct. 24	14.25
31	11.75	28	10.84	July 18	11.60	Nov. 7	14.72
Feb. 14	12.03	Apr. 11	11.41	Aug. 29	13.87	21	14.77
28	11.68	May 9	11.97	Sept.12	13.75		

Kalamazoo 3 (*886, pp. 264, 273-274; *906, p. 62; *936, pp.65; 944, p. 66). At Balach Street pumping station of city waterworks, between supply wells 1 and 2, Kalamazoo. Measuring point is land-surface datum, which is 767.04 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 3	9.94	Mar. 14	12.12	May 23	10.85	Sept.26	13.58
17	10.38	21	10.50	June 6	9.80	Oct. 24	14.71
31	10.95	28	10.49	July 18	12.07	Nov. 7	14.55
Feb. 14	11.05	Apr. 11	11.63	Aug. 29	13.85	21	14.74
28	10.82	May 9	11.76	Sept.12	12.74		

Measurements in wells 1, 2, and 3 were made by Leon L. Simpkins, engineer, city waterworks, Leo Witters, superintendent.

The average daily pumpage from the municipal wells in Kalamazoo in 1943 was 6.72 million gallons which is about 0.95 million gallons more than in 1942 and 0.5 million gallons more than in 1941. The average daily pumpage ranged from 5.18 million gallons in January to 8.26 million gallons in June.

The water levels in wells 1, 2, and 3 averaged about 0.9 foot lower in 1943 than in 1942, but 1.9 feet above the lowest reported average in 1941. The average decline in water levels has not kept pace with the increase in pumpage, owing probably to the cumulative effects of excess precipitation during each of the years in the period 1940-43. The cumulative excess of precipitation above normal has been over 21 inches in the 4 years.

Kalkaska County

T. 27 N., R. 5 W.

13 (*944, p. 67). NE¼SW¼ sec. 27. Measuring point is 0.40 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 15	15.16	Apr. 13	13.86	July 11	12.50	Oct. 8	13.08
Feb. 22	15.50	May 15	13.74	Aug. 16	12.63	Nov. 12	13.13
Mar. 16	15.52	June 17	13.17	Sept.18	12.93	Dec. 10	13.24

100 (*886, p. 274; 906, p. 65; 936, p. 65; 944, p. 67). NE¼NW¼ sec. 36. Measuring point is 1.70 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 15	13.05	Apr. 13	11.59	July 11	11.12	Oct. 8	11.72
Feb. 22	13.36	May 15	11.79	Aug. 16	11.31	Nov. 12	11.67
Mar. 16	13.38	June 17	11.28	Sept.16	11.58	Dec. 10	11.56

Missaukee County

T. 22 N., R. 5 W.

1 (*840, pp. 148, 150-151; 845, p. 155; 886, pp. 274-275; 906, pp.62-63; 936, p.66; 944, p. 67). NE¼NW¼ sec. 2. Measuring point is 0.70 foot above land-surface datum. Water levels, in feet below land-surface datum, 1943: Apr. 15, 0.41; Oct. 7, 4.44.

T. 23 N., R. 6 W.

17 (*840, pp. 148, 152-153; 845, p. 155; 886, pp. 274-275; 906, pp. 62-63; 936, p. 66; 944, p. 67). SE¼NW¼ sec. 13. Measuring point is 0.65 foot above land-surface datum. Water levels, in feet below land-surface datum, 1943: Apr. 15, 0.96; Oct. 7, 3.14.

T. 24 N., R. 6 W.

45 (*840, pp. 149, 154-155; 845, p. 155; 886, pp. 274-275; 906, pp. 62-63; 936, p. 66; 944, p. 67). SE¼SE¼ sec. 13. Measuring point is 1.00 foot above land-surface datum. Water levels, in feet below land-surface datum, 1943: Apr. 15, 3.21; Oct. 7, 3.24.

46 (*840, pp. 149, 154-155; 845, p. 155; 886, pp. 274-275; 906, pp. 62-63; 936, p. 66; 944, p. 67). NE¼NE¼ sec. 25. Measuring point is 1.00 foot below land-surface datum. Water level, in feet below land-surface datum, 1943: Apr. 15, 0.07. Well destroyed Apr. 15.

Montmorency County

T. 31 N., R. 2 E.

6 (*840, pp. 156-158; 845, p. 156; 886, p. 275; 906, p. 63; 936, p. 66; 944, p. 67). NW¼NW¼ sec. 11. Measuring point is 0.90 foot above land-surface datum. Water level, in feet below land-surface datum, 1943: July 14, 9.32.

15 (*840, pp. 156-158; 845, p. 156; 886, p. 275; 906, pp. 62-63; 936, p. 66; 944, p. 67). NW¼NW¼ sec. 14. Measuring point is 1.15 feet above land-surface datum. Water level, in feet below land-surface datum, 1943: July 14, 8.25.

18 (*845, p. 156; 886, p. 275; 906, p. 63; 944, p. 67). SE¼SE¼ sec. 15. Measuring point is 1.20 feet above land-surface datum. Water level, in feet below land-surface datum, 1943: July 14, 12.00.

28 (*845, p. 156; 886, p. 275; 906, p. 63; 936, p. 66; 944, p. 67). SE¼SE¼ sec. 34. No measurements made in 1943.

T. 31 N., R. 3 E.

22 (*840, pp. 156, 158-159; 845, pp. 156-157; 886, p. 275; 906, p. 63; 936, p. 66; 944, p. 68). NW¼NE¼ sec. 9. Measuring point is 0.97 foot above land-surface datum. Water level, in feet below land-surface datum, 1943: July 14, 4.40.

30 (*840, pp. 156, 158-159; 845, pp. 156-157; 886, p. 275; 906, p. 63; 936, p. 66; 944, p. 68). SW¼SW¼ sec. 7. Measuring point is 1.17 feet above land-surface datum. Water level, in feet below land-surface datum, 1943: July 14, 12.28.

T. 31 N., R. 4 E.

1 (*840, pp. 156, 160; 845, p. 157; 886, p. 275; 906, p. 63; 936, p. 66; 944, p. 68). NE¼SW¼ sec. 8. Measuring point is 1.10 feet above land-surface datum. Water level, in feet below land-surface datum, 1943: July 14, a/ 0.39.

12 (*840, pp. 156, 160; 845, p. 157; 886, p. 275; 906, p. 63; 936, p. 66; 944, p. 68). SE¼SW¼ sec. 20. Measuring point is 0.80 foot above land-surface datum. Water level, in feet below land-surface datum, 1943: July 14, 3.08.

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a Water level affected by impounding of water behind dam on outlet of Avalon Lake, about 400 feet east of well.

Oakland County

Oakland 1 (*886, pp. 266, 276-277; 906, pp. 63-64; *936, pp. 66-67; 944, p. 68). City of Pontiac. Well 6 at Walnut Street pumping station. In Pontiac, about 200 feet west of supply well 1. Measuring point is 2.75 feet above land-surface datum, which is 921.88 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	70.3	Mar. 29	66.3	July 2	71.3	Oct. 1	80.8
11	64.3	Apr. 2	66.8	7	74.8	8	78.8
15	69.3	9	71.2	14	74.3	15	78.6
20	70.3	16	69.6	21	79.1	20	78.0
25	66.8	23	67.3	28	79.3	27	77.3
29	66.6	30	65.3	Aug. 2	77.7	Nov. 1	74.3
Feb. 1	63.3	May 3	63.1	9	76.7	8	74.3
8	66.3	10	62.8	16	80.1	15	73.8
15	63.1	17	63.1	23	80.3	22	74.8
23	63.3	26	66.8	30	81.1	29	72.1
26	63.8	June 1	66.1	Sept. 3	80.8	Dec. 1	74.3
Mar. 1	61.3	7	66.3	8	77.0	8	73.5
8	63.1	14	67.3	15	80.7	15	74.5
15	63.6	21	72.3	22	79.3	24	75.9
22	64.3	28	74.3	29	79.6	31	76.3

Oakland 2 (*886, pp. 266, 276-277; 906, p. 64; *936, pp. 66-68; 944, p. 68). City of Pontiac. Well 21 in Walnut Street well group. In Pontiac, about 40 feet northwest of supply well 3. Measuring point is 1.17 feet above land-surface datum, which is 931.08 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 4	74.5	Mar. 29	74.9	July 2	82.9	Oct. 1	93.4
11	76.7	Apr. 2	74.9	7	84.9	8	87.9
15	77.9	9	80.9	14	85.9	15	88.5
20	79.9	16	79.5	21	87.7	20	90.4
25	74.9	23	75.1	28	98.4	27	87.7
29	74.7	30	75.9	Aug. 2	88.8	Nov. 1	84.2
Feb. 1	69.9	May 3	74.5	9	86.9	8	83.4
8	74.7	10	72.9	16	89.7	15	85.9
15	71.9	17	73.9	23	91.4	22	85.4
23	71.9	26	77.9	30	89.9	29	83.6
26	71.9	June 1	76.9	Sept. 3	91.7	Dec. 1	83.9
Mar. 1	70.9	7	76.4	8	89.9	8	82.4
8	72.9	14	77.6	15	89.4	15	84.7
15	71.9	21	82.9	22	92.9	24	86.2
22	75.7	28	85.9	29	89.6	31	85.2

Oakland 3 (*886, pp. 266, 276-277; 906, p. 64; *936, pp. 66-68; 944, p. 68). City of Pontiac. Just outside pump house of East Boulevard supply well, near intersection of East Boulevard and Mount Clemens Street, Pontiac. Measuring point is 0.60 foot below land-surface datum, which is 883.22 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 4	15.6	Apr. 9	15.4	July 14	20.1	Oct. 8	25.6
11	17.6	16	16.0	21	23.6	15	26.1
15	16.6	23	16.6	28	23.9	20	25.6
20	18.6	30	15.6	Aug. 2	21.6	27	24.6
25	16.6	May 3	16.6	9	24.6	Nov. 1	24.6
29	17.4	10	15.6	16	24.6	8	24.6
Feb. 1	15.6	17	16.1	23	28.4	15	23.6
8	17.6	26	16.4	30	25.1	22	23.6
15	18.6	June 1	15.6	Sept. 3	27.1	29	23.4
Mar. 1	14.6	7	16.6	8	26.6	Dec. 1	26.1
8	18.6	14	18.6	15	26.1	8	26.6
15	15.2	21	19.2	22	26.6	15	25.1
22	17.1	28	19.9	29	26.6	24	24.9
29	16.1	July 2	22.6	Oct. 1	27.4	29	24.6
Apr. 2	16.6	7	21.7				

Measurements in Oakland wells 1, 2, and 3 were made by members of the Department of Water Supply, Pontiac, H. L. Monroe, superintendent, H. W. MacDuff, chief engineer.

The average daily pumpage from the municipal wells in Pontiac during 1943 ranged from 6.98 million gallons in April to 8.59 million gallons in August and averaged 7.64 million gallons for the year. Of this, 3.44 million gallons a day was pumped from wells of the Central or Walnut Street group and 4.20 million gallons from wells at the outlying stations, including the East Boulevard station.

The average daily pumpage from the municipal wells in 1942 was about 7.07 million gallons, of which 3.59 million gallons was pumped from wells of the Walnut Street group. Thus, although the total pumpage increased about 8 percent in 1943, the pumpage from the Walnut Street group decreased about 4 percent. In spite of the decrease in pumpage at the Walnut Street plant, the average water level in Oakland well 1 was 1.1 foot lower in 1943 than in 1942, but it was about 1.85 feet higher in 1942 than in 1941 in spite of an increase in pumpage in 1942 at the plant. In Oakland well 2, however, which is also at the Walnut Street plant, the average water level was 0.5 foot higher in 1943 than in 1942. These facts would indicate that there was probably a lessening in the rate of decline in these two wells, owing, in part, to the above-normal precipitation during 1942 and 1943.

An average of about 227,000 gallons a day was pumped at the East Boulevard station in 1943, as compared with about 450,000 gallons a day in 1942, a decrease of about 50 percent. Because of this decrease in pumpage and because of the above-normal precipitation, the water level averaged 1.1 feet higher in 1943 than in 1942.

Otsego County

T. 29 N., R. 3 W.

105 (*840, p. 163; 845, p. 157; 886, p. 277; 906, p. 64; 936, p. 68; 944, p. 69). SW¼SE¼ sec. 32. Measuring point is 1.60 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 16	1.15	July 11	1.77	Sept.17	2.21	Nov. 12	1.61
May 13	1.60	Aug. 16	2.16	Oct. 8	2.29	Dec. 15	1.90
June 14	1.23						

106 (*840, p. 163; 845, p. 157; 886, p. 277; 906, p. 64; 936, p. 68; 944, p. 69). SW¼SW¼ sec. 29. Measuring point is 0.55 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 15	8.25	Apr. 16	5.71	July 11	6.88	Oct. 8	7.85
Feb. 26	8.13	May 13	6.58	Aug. 16	7.50	Nov. 12	7.79
Mar. 16	8.19	June 14	6.35	Sept.17	7.81	Dec. 15	7.59

Presque Isle County

T. 33 N., R. 2 E.

13 (*840, pp. 164-166; 845, pp. 157-158; 886, p. 277; 906, p. 65; 936, p. 68; 944, p. 69). SW¼NE¼ sec. 29. Measuring point is 2.10 feet above land-surface datum. Water level, in feet below land-surface datum, 1943: July 14, 8.05.

16 (*944, pp. 69-70). NE¼SE¼ sec. 17. Measuring point is 0.75 foot above land-surface datum. Water level, in feet below land-surface datum, 1943: July 14, 5.57.

17 (*845, pp. 157-158; 886, p. 277; 906, p. 65; 936, p. 68; 944, p. 70). NE¼SE¼ sec. 20. No measurements made in 1943.

18 (*840, pp. 164-166; 845, p. 157-158; 886, p. 277; 906, p. 65; 936, p. 68; 944, p. 70). NE¼SE¼ sec. 30. Measuring point is 1.20 feet above land-surface datum. Water level, in feet below land-surface datum, 1943: July 14, 2.29.

19 (*840, pp. 165-166; 845, pp. 157-158; 886, p. 277; 906, p. 65; 936, p. 68; 944, p. 70). SW¼NW¼ sec. 30. Measuring point is 1.60 feet above land-surface datum. Water level, in feet below land-surface datum, 1943: July 14, 7.78.

20 (*840, pp. 165-166; 845, pp. 157-158; 886, p. 277; 906, p. 65; 936, p. 68; 944, p. 70). NE¼NE¼ sec. 18. Measuring point is 1.24 feet above land-surface datum. Water level, in feet below land-surface datum, 1943: July 14, 3.11.

23 (*845, pp. 157-158; 886, p. 277; 906, p. 65; 936, p. 68; 944, p. 70). NE¼NE¼ sec. 6. Measuring point is 1.30 feet above land-surface datum. Water level, in feet below land-surface datum, 1943: July 14, 3.60.

Roscommon County

T. 21 N., R. 3 W.

3 (*840, pp. 168, 171-172; 845, p. 158; 886, p. 278; 906, p. 65; 936, p. 69; 944, p. 70). NE¼NW¼ sec. 2. Measuring point is 1.50 feet above land-surface datum, which is 1,201.40 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Wster level	Date	Water level	Date	Water level	Date	Water level
Apr. 15	13.39	July 9	11.96	Sept.18	12.64	Nov. 11	13.18
May 13	13.23	Aug. 13	12.23	Oct. 17	12.83	Dec. 10	13.36
June 15	12.10						

15 (*840, pp. 168, 171-172; 845, p. 158; 886, p. 278; 906, p. 65; 936, p. 69; 944, p. 70). NE¼NW¼ sec. 5. Measuring point is 3.00 feet above land-surface datum, which is 1,147.86 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 14	9.34	Apr. 15	8.72	July 9	8.74	Oct. 17	9.25
Feb. 22	9.41	May 13	8.83	Aug. 13	9.02	Nov. 11	9.10
Mar. 15	9.36	June 15	8.31	Sept.18	9.18	Dec. 10	9.20

T. 21 N., R. 4 W.

8 (*840, pp. 169, 172-173; 845, p. 158; 886, p. 278; 906, p. 65; 936, p. 69; 944, p. 70). NE¼NE¼ sec. 13. Measuring point is 1.30 feet above land-surface datum, which is 1,132.33 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Apr. 15	2.27	July 9	2.93	Sept.18	4.70	Nov. 11	3.68
May 13	2.40	Aug. 13	3.89	Oct. 17	4.99	Dec. 10	3.74
June 15	2.29						

50 (*886, p. 278; 906, p. 65; 936, p. 69; 944, p. 70). NW¼SE¼ sec. 4. Measuring point is 1.00 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 14	4.28	Apr. 15	1.92	July 9	3.28	Oct. 17	6.34
Feb. 22	3.98	May 13	2.08	Aug. 13	4.96	Nov. 11	5.39
Mar. 15	4.02	June 15	1.80	Sept.18	6.00	Dec. 10	5.43

T. 22 N., R. 1 W.

5 (*840, pp. 169, 174; 845, p. 158; 886, p. 278; 906, p. 65; 936, p. 69; 944, p. 70). NW¼NW¼ sec. 11. Measuring point is 1.30 feet above land-surface datum.

5. NW¼NW¼ sec. 11--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	2.85	Apr. 15	1.80	July 9	1.32	Oct. 17	2.62
Feb. 22	2.84	May 13	1.67	Aug. 13	1.85	Nov. 11	2.05
Mar. 15	2.92	June 15	1.10	Sept.18	2.29	Dec. 10	2.25

T. 22 N., R. 2 W.

3 (*840, pp. 169, 174-175; 845, p. 158; 886, p. 278; 906, p. 65; 936, p. 69; 944, p. 70). SW¼SW¼ sec. 6. Measuring point is 1.60 feet above land-surface datum, which is 1,163.38 feet above mean sea level. Water levels, in feet below land-surface datum, 1943: Apr. 15, 5.90; May 13, 5.58.

9 (*840, pp. 169, 174-175; 845, p. 158; 886, p. 278; 906, p. 65; 936, p. 69; 944, p. 70). NE¼NW¼ sec. 14. Measuring point is 1.20 feet above land-surface datum, which is 1,201.55 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 14	5.12	Apr. 15	4.25	July 9	4.40	Oct. 17	5.62
Feb. 22	4.98	May 13	4.30	Aug. 13	4.94	Nov. 11	4.99
Mar. 15	4.96	June 15	3.60	Sept.18	5.40	Dec. 10	5.02

15 (*840, pp. 169, 174-175; 845, p. 158; 886, p. 278; 906, p. 65; 936, p. 69; 944, pp. 70-71). NE¼NW¼ sec. 17. Measuring point is 1.80 feet above land-surface datum, which is 1,165.46 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 14	3.20	May 13	2.04	Aug. 13	3.01	Nov. 11	3.31
Feb. 22	3.11	June 15	1.52	Sept.18	3.67	Dec. 10	3.29
Apr. 15	1.94	July 9	2.23	Oct. 17	3.92		

16 (*840, pp. 169, 174-175; 845, p. 158; 886, p. 278; 906, p. 65; 936, p. 69; 944, p. 71). NW¼NW¼ sec. 18. Measuring point is 1.00 foot above land-surface datum which is 1,166.07 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 14	4.53	Apr. 15	2.83	July 9	2.82	Oct. 17	4.80
Feb. 22	4.48	May 13	2.97	Aug. 13	3.75	Nov. 11	4.17
Mar. 15	4.24	June 15	1.95	Sept.18	4.55	Dec. 10	4.34

T. 22 N., R. 3 W.

7 (*840, pp. 169, 176-177; 845, p. 159; 886, p. 278; 906, pp. 65-66; 936, p. 69; 944, p. 71). SE¼NE¼ sec. 22. Measuring point is 1.30 feet above land-surface datum, which is 1,170.58 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level
Jan. 14	5.96	May 13	3.66	Nov. 11	4.94
Apr. 15	3.92	Oct. 17	5.24	Dec. 10	5.38

20 (*840, pp. 170, 176-177; 845, p. 159; 886, p. 278; 906, pp. 65-66; 936, p. 69; 944, p. 71). SW¼SE¼ sec. 31. Measuring point is 1.00 foot above land-surface datum, which is 1,138.92 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 15	5.90	July 9	6.59	Sept.18	7.52	Nov. 11	7.00
May 13	6.13	Aug. 13	7.24	Oct. 17	7.65	Dec. 10	6.97
June 15	5.64						

26 (*840, pp. 170, 176-177; 845, p. 159; 886, p. 278; 906, pp. 65-66; 936, p. 69; 944, p. 71). SE¼SW¼ sec. 34. Measuring point is 1.00 foot above land-surface datum, which is 1,177.82 feet above mean sea level.

26. SE¼SW¼ sec. 34--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 15	3.98	July 9	2.74	Sept.18	4.09	Nov. 11	4.61
May 13	3.67	Aug. 13	3.37	Oct. 17	4.44	Dec. 10	4.90
June 15	2.54						

T. 22 N., R. 4 W.

4 (*840, pp. 170, 177; 845, p. 159; 886, p. 278; 906, pp. 65-66; 936, p. 69; 944, p. 71). SE¼SE¼ sec. 15. Measuring point is 1.30 feet above land-surface datum, which is 1,155.72 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 14	2.94	Apr. 15	1.76	July 9	2.26	Oct. 17	4.18
Feb. 22	2.55	May 13	1.87	Aug. 13	3.23	Nov. 11	3.45
Mar. 15	2.66	June 15	1.43	Sept.18	3.94	Dec. 10	3.48

T. 23 N., R. 1 W.

50 (*886, p. 278; 906, pp. 65-66; 936, p. 69; 944, p. 71). SE¼SE¼ sec. 3. Measuring point is 0.88 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 14	4.81	Apr. 15	2.89	July 9	2.25	Oct. 17	4.09
Feb. 22	5.05	May 13	2.60	Aug. 13	2.71	Nov. 11	3.83
Mar. 15	4.57	June 15	1.62	Sept.18	3.73	Dec. 10	3.92

T. 23 N., R. 3 W.

5 (*840, pp. 170, 178; 845, p. 159; 886, p. 278; 906, pp. 65-66; 936, p. 69; 944, p. 71). SE¼SE¼ sec. 25. Measuring point is 0.70 foot above land-surface datum, which is 1,154.29 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Apr. 15	3.89	July 9	4.30	Sept.18	5.33	Nov. 11	4.84
May 13	4.00	Aug. 13	4.88	Oct. 17	5.49	Dec. 10	4.84
June 15	3.47						

75 (*845, pp. 158-159; 886, p. 278; 906, pp. 65-66; 936, p. 69; 944, p. 71). SE¼SE¼ sec. 12. Measuring point is 1.10 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 14	6.84	Apr. 15	5.93	July 9	5.41	Oct. 17	6.26
Feb. 22	6.96	May 13	5.73	Aug. 13	5.72	Nov. 11	6.17
Mar. 15	6.80	June 15	5.21	Sept.18	6.09	Dec. 10	6.26

T. 24 N., R. 1 W.

30 (*840, pp. 170, 178; 845, p. 159; 886, pp. 278-279; 906, p. 66; 936, p. 66; 944, p. 71). NE¼NE¼ sec. 34. Measuring point is 1.30 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 14	16.87	Apr. 15	15.31	July 9	14.54	Oct. 17	15.67
Feb. 22	17.00	May 13	15.15	Aug. 13	14.96	Nov. 11	16.00
Mar. 15	16.68	June 15	14.40	Sept.18	15.43	Dec. 10	16.08

T. 24 N., R. 2 W.

Roscommon recorder well 1 (*817, pp. 83-85; *840, pp. 123-124, 170, 179; *845, pp. 152, 160; *886, pp. 261, 263, 267, 279; *906, pp. 51, 53, 54, 67; *936, pp. 58-59, 70; *944, pp. 57-58, 72). SW¼ sec. 17. Measuring point is 2.50 feet above land-surface datum.

Roscommon recorder well 1--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	5.23	Mar. 24	4.83	June 1	3.44	Sept.30	4.99
8	5.23	26	4.56	4	3.07	Oct. 10	5.12
15	5.24	30	4.18	10	3.10	20	5.18
21	5.26	Apr. 3	3.66	20	3.28	31	5.24
31	5.28	7	3.55	30	3.34	Nov. 8	5.20
Feb. 8	5.33	15	3.55	July 10	3.50	10	4.90
15	5.25	22	3.61	20	3.74	15	4.86
20	5.20	29	3.71	31	3.97	20	4.91
22	5.03	May 3	3.46	Aug. 10	4.07	30	4.98
28	5.00	7	3.46	20	4.31	Dec. 10	5.02
Mar. 6	5.00	15	3.61	31	4.54	20	5.08
15	5.04	24	3.71	Sept.10	4.73	31	5.13
18	4.88	26	3.51	20	4.86		

81 (*840, pp. 170, 179; 845, p. 159; 886, pp. 278-279; 906, p. 66; 936, pp. 69-70; 944, p. 72). NW¼NW¼ sec. 3. Measuring point is 0.80 foot above land-surface datum, which is 1,150.90 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 14	3.50	Apr. 15	2.36	July 9	1.34	Oct. 17	2.05
Feb. 22	3.81	May 13	2.08	Aug. 13	1.44	Nov. 11	2.35
Mar. 15	3.85	June 15	1.54	Sept.18	1.86	Dec. 10	2.57

88 (*840, pp. 170, 179; 845, p. 159; 886, pp. 278-279; 906, p. 66; 936, pp. 69-70; 944, p. 72). NE¼NE¼ sec. 1. Measuring point is 0.70 foot above land-surface datum, which is 1,164.39 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 14	9.77	Apr. 15	7.67	July 9	7.21	Oct. 17	9.12
Feb. 22	9.75	May 13	7.48	Aug. 13	7.95	Nov. 11	9.35
Mar. 15	9.38	June 15	6.90	Sept.18	8.75	Dec. 10	9.24

107 (*840, pp. 170, 179; 845, p. 159; 886, pp. 278-279; 906, p. 66; 936, p. 69-70; 944, p. 72). SE¼NE¼ sec. 7. Measuring point is 2.00 feet above land-surface datum, which is 1,138.01 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Apr. 15	5.40	July 9	5.88	Sept.18	7.05	Nov. 11	7.13
June 15	5.27	Aug. 13	6.53	Oct. 17	7.21	Dec. 10	7.04

150 (*840, pp. 171, 179; 845, p. 159; 886, pp. 278-279; 906, p. 66; 936, pp. 69-70; 944, p. 72). NE¼SW¼ sec. 19. Measuring point is 0.80 foot above land-surface datum, which is 1,154.17 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 14	3.13	Apr. 15	1.80	July 9	1.49	Oct. 17	3.20
Feb. 22	2.73	May 13	1.69	Aug. 13	1.71	Nov. 11	2.00
Mar. 15	3.01	June 15	1.15	Sept.18	2.67	Dec. 10	2.24

1,000 (*886, pp. 278-279; 906, p. 66; 936, pp. 69-70; 944, p. 72). NW¼NW¼ sec. 21. Measuring point is 1.50 feet above land-surface datum.

66 Water level, in feet below land-surface datum, 1943

Apr. 15	3.34	July 9	2.78	Sept.18	4.51	Nov. 11	5.05
May 13	3.00	Aug. 13	3.50	Oct. 17	5.04	Dec. 10	4.86
June 15	2.38						

T. 24 N., R. 3 W.

1 (*840, pp. 171, 180-181; 845, p. 159; 906, p. 66; 936, pp. 69-70; 944, p. 72). NW¼NW¼ sec. 24. Measuring point is 0.50 foot above land-surface datum, which is 1,162.42 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Apr. 15	7.25	July 9	5.95	Sept.18	7.83	Nov. 11	8.40
May 13	6.87	Aug. 13	7.01	Oct. 17	8.18	Dec. 10	8.35
June 15	5.96						

7 (*840, pp. 171, 180-181; 845, p. 159; 906, p. 66; 936, pp. 69-70; 944, pp. 72-73). SW¼SE¼ sec. 15. Measuring point is 1.65 feet above land-surface datum, which is 1,167.26 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	11.24	Apr. 15	8.91	July 9	8.67	Oct. 17	11.28
Feb. 22	11.37	May 13	8.88	Aug. 13	9.89	Nov. 11	11.10
Mar. 15	11.08	June 15	8.00	Sept.18	9.91	Dec. 10	10.88

17 (*840, pp. 171, 180-181; 845, p. 159; 886, p. 279; 906, p. 66; 936, p. 70; 944, p. 73). NW¼NW¼ sec. 3. Measuring point is 3.00 feet above land-surface datum, which is 1,170.02 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 14	11.83	Apr. 15	10.81	July 9	10.30	Oct. 17	11.13
Feb. 22	12.08	May 13	10.98	Aug. 13	10.58	Nov. 11	11.10
Mar. 15	12.06	June 15	10.33	Sept.18	10.96	Dec. 10	11.19

St. Joseph County

St. Joseph 1 (*886, p. 279; 906, p. 67; 936, pp. 70-71; 944, p. 73). City of Three Rivers. About 350 feet south of West Michigan Street on island at confluence of St. Joseph and Rock Rivers. Measuring point is 2.90 feet above land-surface datum, which is 790.52 feet above mean sea level. Measurements made by A. C. Walls, pumping station operator, city waterworks; under supervision of O. O. Johnson, city manager, city of Three Rivers. Measurements discontinued after Feb. 20, when Mr. Walls left the service of the city of Three Rivers.

Water level, in feet above land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level
Jan. 9	1.90	Jan. 30	1.55	Feb. 13	2.53
16	1.90	Feb. 6	1.75	20	2.51

Washtenaw County

Washtenaw 1 (*906, pp. 57, 67-68; *936, p. 71; 944, pp. 73-74). City of Ann Arbor. About 200 feet south of main building of Steere Farm pumping station of city water works. Measuring point is 0.60 foot above land-surface datum, which is 817.43 feet above mean sea level.

Highest and lowest water level in each month, in feet below land-surface datum, 1943

Date	Highest water level	Lowest water level	Date	Highest water level	Lowest water level
Jan. 10-26	(a)		Aug. 1-9	(a)	
27		0.73	14		0.33
Feb. 10-20	(a)		Sept.14	(a)	
28		.96	22		.82
Mar. 10,15-30	(a)		Oct. 19,28,31	(a)	
11-12		.60	29		1.40
Apr. 1-30	(a)	....	Nov. 2	.80	
May 1-31	(a)	....	13		1.72
June 1-30	(a)	....	Dec. 5	.25	
July 1-31	(a)	....	30		3.2

The average daily pumpage at the Steere Farm pumping station in 1943 ranged from 0.76 million gallons in April to 1.98 million gallons in August and averaged 1.46 million gallons. The average daily pumpage for 1942 was 1.75 million gallons; for 1941, 1.27 million gallons; and for 1940, 1.68 million gallons. The lowest water levels reached in well 1 averaged about

a Flowing.

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2.8 feet higher in 1943 than in 1942, and 2.5 feet higher in 1943 than in 1941. In view of the decrease in the average daily pumpage at the station in 1943 as compared with the average in 1942--although it did not fall as low as the average in 1941--the rise in water level indicates that ground-water conditions improved considerably during 1942 and 1943. The precipitation at Ann Arbor was 2.28 inches below normal in 1941; 5.87 inches above normal in 1942; and 6.27 inches above normal in 1943.

Wexford County

T. 24 N., R. 9 W.

7 (*840, pp. 181-182; 936, p. 72; 944, p. 74). NW¼NW¼ sec. 27. Measuring point is 0.80 foot above land-surface datum, which is 1,052.52 feet above mean sea level. Water level, in feet below land-surface datum, 1943: Aug. 6, 10.65.

38 (*840, pp. 181-182; 936, p. 72; 944, p. 74). SW¼NW¼ sec. 19. Measuring point is 1.00 foot above land-surface datum, which is 994.16 feet above mean sea level. Water level, in feet below land-surface datum, 1943: Aug. 6, 2.03.

T. 24 N., R. 10 W.

2 (*840, pp. 181-182; 936, p. 72; 944, p. 74). SW¼NW¼ sec. 22. Measuring point is 1.30 feet above land-surface datum, which is 974.11 feet above mean sea level. Water level, in feet below land-surface datum, 1943: Aug. 6, 1.40.

3 (*840, pp. 181-182; 936, p. 72; 944, p. 74). SE¼NE¼ sec. 23. Measuring point is 0.60 foot above land-surface datum, which is 1,005.49 feet above mean sea level. Water level, in feet below land-surface datum, 1943: Aug. 6, 5.20.

4 (*840, pp. 181-182; 936, p. 72; 944, p. 74). SW¼NW¼ sec. 23. Measuring point is 0.60 foot above land-surface datum, which is 979.26 feet above mean sea level. Water level, in feet below land-surface datum, 1943: Aug. 6, 1.75.

42 (*840, pp. 181-182; 936, p. 72; 944, p. 74). NW¼NW¼ sec. 36. Measuring point is 0.90 foot above land-surface datum, which is 1,004.86 feet above mean sea level. Water level, in feet below land-surface datum, 1943: Aug. 6, 3.43.

NEW HAMPSHIRE

By M. L. Brashears, Jr.

PROGRAM OF WORK

Periodic measurements of water level by the Geological Survey, United States Department of the Interior, were begun in New Hampshire in October 1942 with the establishment of an observation well in the Town of Hill, Merrimac County. This well is about 2 miles south of Bristol, Grafton County, in the drainage basin of the Smith River. It is in hilly country and penetrates relatively thin overburden but does not reach bedrock. Measurements were continued in this well in 1943 and were made about monthly. Two measurements were made in March and two in December, but none in April and October, so that the total for the year was 12. All the measurements that have been made are included in the present report.

FLUCTUATIONS OF WATER LEVEL

The fluctuations in the Bristol well appear to be caused by changes in precipitation and temperature. The slight gain in underground storage during 1943, represented by a net rise in water level of about 0.6 foot, seems to be the result of the increased precipitation during the year, which at nearby Franklin was 41.62 inches, or 0.3 inch greater than in 1942. The sharp rise in water level during March is attributable largely to temperatures sufficiently high to melt much of the snow cover, as the precipitation during the month was only two-thirds of normal. During May both precipitation and temperatures were above normal, but nevertheless there was a sharp decline in water level, apparently caused by the greater amount of water consumed by plants, whose growth was rapidly accelerated by the greater precipitation and higher temperature.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Merrimac County

U. S. 91. J. E. Norcross. Bristol well 1. In Town of Hill, about 0.2 mile south of Smith River, 1.0 mile west of U. S. Route 3A, and 2 miles south of Bristol, Grafton County. Unused dug domestic well, diameter 18 inches, depth 10.8 feet. Measuring point, top edge of flat rock at top of well, at land-surface datum, which is about 500 feet above sea level.

U. S. 91--Continued.

Water level, in feet below land-surface datum, 1942-43

Date	Water level	Date	Water level	Date	Water level
Oct. 8, 1942	9.81	Mar. 1, 1943	8.80	Aug. 2, 1943	8.89
Nov. 2	9.77	29	4.92	Sept. 1	8.49
Dec. 1	9.57	May 1	4.37	Nov. 1	8.80
Jan. 1, 1943	9.30	June 1	8.05	Dec. 1	6.62
Feb. 1	9.27	July 4	8.73	Dec. 29	8.64

NEW JERSEY

By G. D. DeBuchananne and J. M. Ludlow

PROGRAM OF WORK

Investigations of the ground-water resources of New Jersey were continued in 1943 in cooperation with the New Jersey State Water Policy Commission. It consists, in a large part, of quantitative studies of these resources in selected areas (see fig. 8). In connection with these investigations measurements are made periodically of the water level in selected observation wells. About 3,500 measurements of water level were made during 1943, and at the end of the year 190 wells were being observed. Measurements were made monthly or less frequently in some of the wells, biweekly in some, weekly in some, and at least twice a day in one. Continuous records from water-stage recorders were obtained for 48 wells during the year. The State and Federal governments owned and operated 41 of these recorders; the other 7 being owned by municipalities, private water-supply companies, or industries.

FLUCTUATIONS OF WATER LEVEL

The precipitation in the State during 1943 averaged 6.70 inches below normal, May and October being the only months with precipitation above normal. Consequently many water-table wells, even those not affected by pumping, showed unusually low levels during the year.

The Morrell well (29.11.1.2.3), a shallow well near Old Bridge, Middlesex County, is considered one of the best indices of ground-water storage for this general region. The hydrograph for this well indicated relatively low ground-water storage until the end of September. The well is not affected by pumping and the loss in ground-water storage must have been due to the combined effects of the subnormal precipitation and the heavy seasonal demands of vegetation. In October the precipitation was 3.90 inches above normal, and the hydrograph showed a very sharp rise to about the level at the beginning of the year. The ground-water storage remained about normal for the remainder of the year.

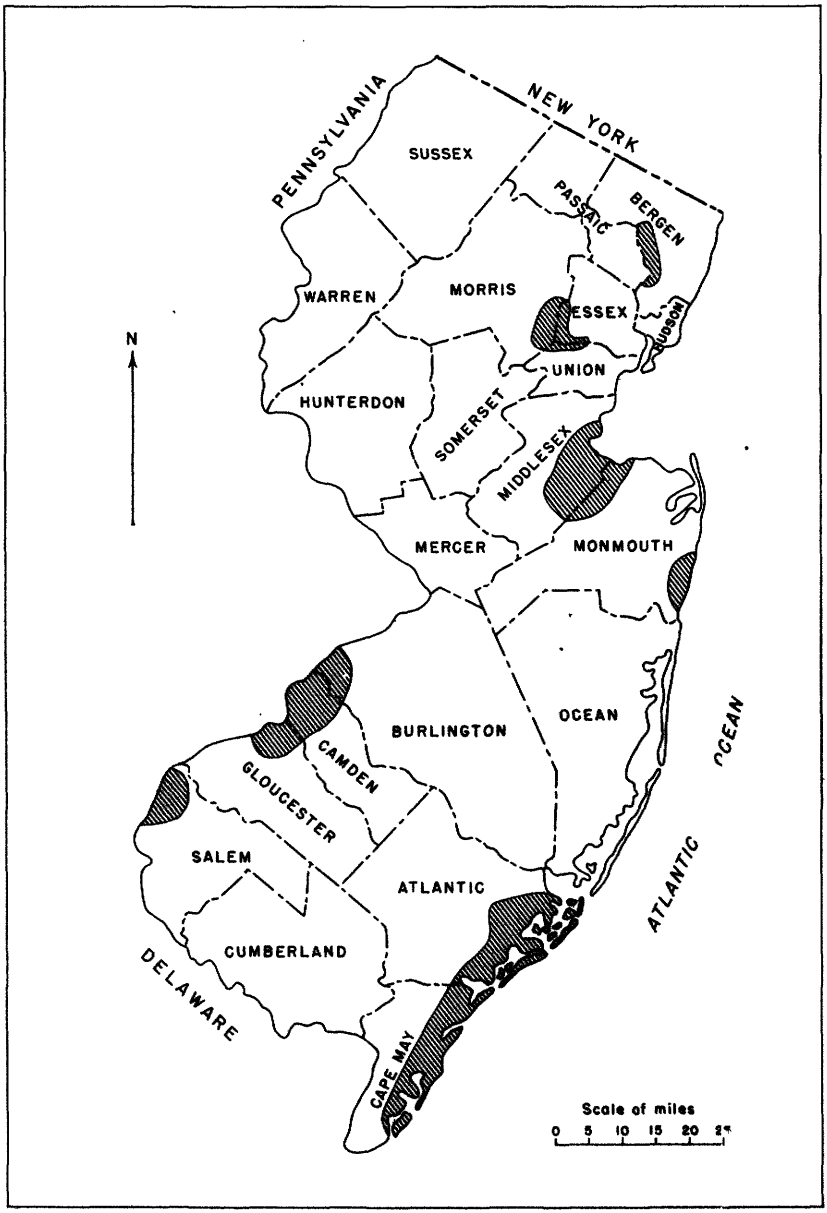

Figure 8.--Map of New Jersey showing areas of observation wells.

In Middlesex County 10 wells showed new record low water levels during 1943. All of these wells tap the Old Bridge sand member of the Raritan formation. These record low levels are probably due to unusually heavy pumping from wells that tap this sand at the Duhernal Water Supply and at the Perth Amboy Water Department. Although most of the lows occurred at the end of the summer, the deficiency of rainfall was not great enough to cause record laws in adjacent areas not affected by pumping.

Three observation wells in Middlesex County showed record high water levels during the year. All of these wells tap the Farrington sand member of the Raritan formation. The record high pressures in this sand were caused by a reduction of pumping at the industrial plants in the Parlin area. This reduction was made up by an increase in pumpage from wells tapping the Old Bridge sand at the Duhernal Water Supply. This shift in pumpage from one sand to the other was made to retard the salt-water encroachment in the Farrington sand.

In Salem County the water levels in 21 wells reached new low stages in 1943. Ten of these are within the influence of municipal and industrail pumping, and the low levels are due, in part at least, to pumpage. The low levels in the other 11 wells are believed to be due to deficiencies in precipitation and recharge, as they are located beyond the influence of pumpage.

Eight wells in Salem County reached record high levels during the early part of the year. These high levels were probably due to the above-normal precipitation during the fall and winter of 1942.

WELL-NUMBERING SYSTEM

The compound numbers of the wells in the New Jersey section of this and previous reports of this series are descriptive numbers, rather than serial numbers, because they indicate the location of each well. This system of location numbers has been used in New Jersey since about 1910 and is based upon the State topographic atlas sheets. It was adapted to fit these maps by Dr. H. B. Kümmel[1] who was then the State Geologist, and

1/ Kümmel, H. B., Annual administrative report of the State Geologist for the year 1911: New Jersey Geol. Survey Bull. 6, pp. 13-17, 1912.

follows in a general way the pattern suggested by Professor Kemp[2/] of Columbia for use with the Survey topographic maps. Under this system each of the five numbers that make up the composite well number refers to a specific area and each successive number refers to a small part of the area defined by the preceding number.

The first number is that of the atlas sheet on which the well location may be found. Lines showing latitude and longitude are engraved on these sheets at 2-minute intervals so that they are divided into 2-minute rectangles. For the purpose of the location numbering system, the atlas sheets are divided into 6-minute rectangles, and a number is assigned to each of these divisions. The second number refers to the 6-minute rectangle in which the well is located.

From this point on the system follows that suggested by Professor Kemp. In each 6-minute rectangle there are nine 2-minute rectangles which are numbered from 1 to 9, beginning in the upper left-hand corner and numbering to the right, 4 being on the left under 1, and 7 under 4. The third number in the compound well number refers to the 2-minute rectangle in which the well is located. For greater accuracy each of the 2-minute rectangles is divided into nine equal rectangles which are similarly numbered. These divisions are again divided into nine equal rectangles and again numbered in the same way. The fourth and fifth numbers in the compound well number refer to these subdivisions of the 2-minute rectangles.

The smallest subdivision is a rectangle about 330 by 440 yards, so that it rarely happens that two wells are located in the same small rectangle on the map. If it should occur, they are given letters in our well-numbering system. In writing location numbers in the office, it is also the practice to draw a small rectangle after the last number and indicate thereon the position of the well in the smallest rectangle. Also, in practice, the 2-minute rectangles are not divided by actually drawing lines on the map, but use is made of a transparent overlay on which the divisions have been ruled.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

In the records of water levels obtained by tape measurements, the dates of measurements and the water levels are given. In the records obtained from water-stage recorders, a single water level is given for each

2/ Kemp, James Furman, Geologic bookkeeping: Geo. Soc. of America, Bull. 16, pp. 411-418, 1905.

day. An attempt has been made, however, to give the most significant daily level for each well. For wells in which the fluctuation is small, the water level at the end of the day is given. For wells in which the daily fluctuations is large, due to nearby pumping or to tides, the lowest water level for each day is given. An exception is made of the Longport well (No. 36.23.1.9.6), in Atlantic City, for which the water level given for each day is the average of the two high and the two low levels caused by tides on that day.

Atlantic County

Atlantic City area

36.13.2.9.1 (*845, p. 197; 886, p. 342; 906, p. 76; 936, p. 78; 944, p. 78). Atlantic City Water Works 600-foot well. Atlsntic City Water Dept. Land surface is 11.78 feet above sea level. Extremes of observed water level, in feet below mean sea level: Highest, 3.05 Mar. 28, 1925; Lowest, 25.47 Sept. 28 and 29, 1929.

Water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	31.61	31.20	.....	.....	31.1	30.6	31.6	32.4	33.4	33.3	32.5	31.4
2	.....	31.28	.....	.....	31.0	30.8	31.7	32.4	33.4	33.3	32.4	31.3
3	.....	31.29	.....	31.11	31.0	30.8	31.7	32.5	33.4	33.3	32.4	31.3
4	31.67	31.12	.....	31.04	31.0	30.8	31.7	32.5	33.4	33.4	32.3	31.3
5	31.69	31.18	31.34	31.04	31.0	30.9	31.7	32.5	33.4	33.4	32.3	31.3
6	31.70	30.99	31.06	31.13	30.9	30.9	31.8	32.6	33.4	33.4	32.3	31.2
7	31.68	31.08	31.30	31.10	30.9	30.9	31.7	32.6	33.5	33.4	32.3	31.2
8	31.60	31.19	31.41	31.10	31.0	31.0	31.8	32.6	33.4	33.4	32.2	31.2
9	31.55	31.22	31.40	31.06	31.0	31.0	31.8	32.7	33.4	33.3	32.1	31.1
10	31.52	31.12	31.29	31.12	30.9	31.0	31.8	32.7	33.5	33.4	32.1	31.1
11	31.46	31.19	31.21	31.12	30.9	31.0	31.8	32.8	33.6	33.4	32.1	31.1
12	31.50	.....	31.25	30.96	30.9	31.0	31.9	32.8	33.6	33.3	32.0	31.0
13	31.52	31.15	.....	30.96	31.0	31.0	31.9	32.8	33.6	33.3	32.0	31.1
14	31.38	31.24	.....	a31.1	31.0	31.1	31.8	32.8	33.5	33.2	32.0	31.1
15	.....	31.34	31.32	31.2	31.0	31.0	31.8	32.8	33.5	33.0	32.0	31.1
16	31.48	31.37	31.24	31.2	31.0	31.0	31.9	32.9	33.5	33.0	31.9	31.1
17	31.50	31.38	31.25	31.2	30.9	31.0	31.9	32.9	33.6	33.0	31.9	31.0
18	31.42	31.38	31.26	31.2	30.9	31.0	31.9	33.0	33.6	33.0	31.9	31.0
19	31.47	.....	31.15	20.8	30.9	31.1	31.9	33.1	33.7	33.0	31.8	30.9
20	31.51	31.27	31.18	30.9	30.9	31.1	32.0	33.1	33.6	33.0	31.8	30.9
21	31.45	.....	31.15	30.9	30.7	31.3	32.0	33.1	33.6	33.0	31.7	30.9
22	.....	31.27	31.11	31.0	30.8	31.1	32.0	33.1	33.6	32.9	31.7	30.9
23	31.37	31.24	31.15	31.0	30.8	31.2	32.1	33.2	33.6	32.9	31.7	31.0
24	31.38	31.23	31.11	31.0	30.8	31.3	32.2	33.2	33.6	33.0	31.7	31.0
25	31.35	31.28	31.12	31.0	30.8	31.3	32.2	33.2	33.6	32.8	31.7	31.0
26	31.41	.....	31.08	31.0	30.8	31.4	32.2	33.3	33.6	32.2	31.6	30.8
27	31.37	31.28	31.05	31.0	30.8	31.4	32.2	33.2	33.6	32.2	31.5	30.7
28	31.16	.....	31.14	31.0	30.8	31.4	32.2	33.3	33.7	32.2	31.5	30.7
29	31.18	.....	.....	31.1	30.8	31.4	32.2	33.3	33.6	32.3	31.5	30.7
30	31.19	.....	.....	31.0	30.8	31.5	32.3	33.3	33.3	32.3	31.4	30.7
31	31.18	.....	.....	.....	30.8	.....	32.3	33.3	.....	32.4	....	30.7

a Recorders changed, new gage height ratio.

36.13.2.9.1. Atlantic City Water Dept.--Continued.

Water level, at end of day, in feet below mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	19.83	19.42	.....	.....	19.3	18.8	19.8	20.6	21.6	21.5	20.7	19.6
2	.....	19.50	.....	.....	19.2	19.0	19.9	20.6	21.6	21.5	20.6	19.5
3	.....	19.51	.....	19.33	19.2	19.0	19.9	20.7	21.6	21.5	20.6	19.5
4	19.89	19.34	.....	19.26	19.2	19.0	19.9	20.7	21.6	21.6	20.5	19.5
5	19.91	19.40	19.56	19.26	19.2	19.1	19.9	20.7	21.6	21.6	20.5	19.5
6	19.92	19.21	19.28	19.35	19.1	19.1	19.9	20.8	21.6	21.6	20.5	19.4
7	19.90	19.30	19.52	19.32	19.1	19.1	19.9	20.8	21.7	21.6	20.5	19.4
8	19.82	19.41	19.63	19.32	19.2	19.2	20.0	20.8	21.6	21.6	20.4	19.4
9	19.77	19.44	19.62	19.28	19.2	19.2	20.0	20.9	21.6	21.5	20.3	19.3
10	19.74	19.34	19.51	19.34	19.1	19.2	20.0	20.9	21.7	21.6	20.3	19.3
11	19.68	19.41	19.43	19.34	19.1	19.2	20.0	21.0	21.8	21.6	20.3	19.3
12	19.72	.....	19.47	19.18	19.1	19.2	20.1	21.0	21.8	21.5	20.2	19.2
13	19.74	19.37	.....	19.18	19.2	19.2	20.1	21.0	21.8	21.5	20.2	19.3
14	19.60	19.46	.....a	19.3	19.2	19.3	20.0	21.0	21.7	21.4	20.2	19.3
15	.....	19.56	19.54	19.4	19.2	19.2	20.0	21.0	21.7	21.2	20.2	19.3
16	19.70	19.59	19.46	19.4	19.2	19.2	20.1	21.1	21.7	21.2	20.1	19.3
17	19.72	19.60	19.47	19.4	19.1	19.2	20.1	21.1	21.8	21.2	20.1	19.2
18	19.64	19.60	19.48	19.4	19.1	19.2	20.1	21.2	21.8	21.2	20.1	19.2
19	19.69	.....	19.37	19.0	19.1	19.3	20.1	21.3	21.9	21.2	20.0	19.1
20	19.73	19.49	19.40	19.1	19.1	19.3	20.2	21.3	21.8	21.2	20.0	19.1
21	19.67	.....	19.37	19.1	18.9	19.5	20.2	21.3	21.8	21.2	19.9	19.1
22	.....	19.49	19.33	19.2	19.0	19.3	20.2	21.3	21.8	21.1	19.9	19.1
23	19.59	19.46	19.37	19.2	19.0	19.4	20.3	21.4	21.8	21.1	19.9	19.2
24	19.60	19.45	19.33	19.2	19.0	19.5	20.4	21.4	21.8	21.2	19.9	19.2
25	19.57	19.50	19.34	19.2	19.0	19.5	20.4	21.4	21.8	21.0	19.9	19.2
26	19.63	.....	19.30	19.2	19.0	19.6	20.4	21.5	21.8	20.4	19.8	19.0
27	19.59	19.50	19.27	19.2	19.0	19.6	20.4	21.4	21.8	20.4	19.7	18.9
28	19.38	.....	19.36	19.2	19.0	19.6	20.4	21.5	21.9	20.4	19.7	18.9
29	19.40	.....	.....	19.3	19.0	19.6	20.4	21.5	21.8	20.5	19.7	18.9
30	19.41	.....	.....	19.2	19.0	19.7	20.5	21.5	21.5	20.5	19.6	18.9
31	19.40	.....	.....	....	19.0	....	20.5	21.5	....	20.6	....	18.9

36.14.5.8.7 (*906, p. 77; 936, p. 79; 944, p. 78). Citizens Ice. Co. well. Reading Railroad Co. Land surface is 7 feet above mean sea level. Extremes of observed water level, in feet below mean sea level: Highest, 38.72 Mar. 13, 1939; Lowest, 78.72 Aug. 2, 1929. Daily fluctuations, due to tide and nearby pumping, as much as 3.5 feet; seasonal fluctuations, due to regional pumping, as much as 26 feet.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	57.9	59.6	60.2	60.3	60.2	59.5	....	61.4	....	58.8	54.1	49.6
2	57.7	59.9	60.2	60.6	60.4	59.6	....	61.3	61.7	....	52.5	50.0
3	57.7	60.4	59.9	60.6	59.5	60.2	....	61.8	61.3	....	51.9	50.4
4	57.8	60.4	....	60.5	59.8	60.7	60.9	62.3	62.2	....	51.2	50.3
5	57.9	....	61.0	60.4	59.9	61.5	60.8	62.2	61.4	....	50.7	50.1
6	58.1	....	60.7	61.0	60.1	60.7	60.9	62.0	60.2	....	50.6	50.0
7	58.2	60.8	60.8	60.9	60.5	60.8	60.8	61.4	60.6	....	50.6	50.3
8	58.1	61.2	60.8	....	60.8	60.8	....	60.8	60.7	57.9	50.2	50.1
9	57.7	60.5	60.8	60.8	59.9	60.8	....	61.2	60.7	57.0	50.5	51.1
10	57.7	60.6	60.8	61.0	59.4	61.0	....	61.5	61.8	57.0	50.2	51.2
11	57.4	60.4	....	60.1	59.1	61.1	60.1	61.5	61.8	56.2	50.3	50.9
12	58.2	60.8	....	59.6	59.0	61.5	60.7	61.9	60.6	56.5	50.2	50.7
13	58.3	60.4	60.6	60.0	59.3	61.4	60.6	61.8	60.0	57.0	50.6	50.7
14	58.4	60.6	60.1	60.2	59.5	61.0	60.3	61.8	60.6	56.8	50.6	51.0
15	58.4	60.6	60.4	60.0	....	61.0	60.1	61.1	60.4	56.2	50.1	50.7
16	58.7	60.7	59.6	59.9	59.7	....	60.1	61.1	....	55.8	49.6	50.3
17	58.7	60.9	60.1	60.6	59.2	....	60.8	....	60.1	55.6	50.7	50.7
18	57.8	61.4	59.8	60.6	59.6	61.2	60.4	61.7	60.1	55.1	50.8	50.4
19	58.1	61.5	59.6	59.3	59.7	61.4	60.9	62.0	59.6	55.2	50.7	50.1
20	58.8	61.7	59.6	59.5	59.5	61.0	....	62.0	59.6	55.7	50.5	50.2
21	59.0	61.4	59.8	59.4	58.4	61.1	60.9	61.7	59.5	55.9	49.8	50.2
22	....	61.0	59.4	59.8	58.8	....	62.3	60.8	59.5	55.7	49.4	50.4
23	58.9	60.8	....	60.1	58.2	....	62.0	61.1	....	55.9	49.6	50.8

a Recorders changed, new gage height ratio.

36.14.5.8.7. Citizens Ice Co. well--Continued.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
24	58.9	60.8	....	60.7	58.3	....	....	61.7	59.1	55.9	49.6	50.8
25	59.0	60.5	60.9	59.6	....	61.5	61.8	61.7	58.4	54.9	49.3	50.7
26	59.3	60.4	60.8	59.9	....	61.6	61.4	61.7	58.4	54.9	49.5	50.0
27	59.1	60.3	61.2	60.2	....	61.6	62.3	61.6	59.1	54.8	49.5	....
28	58.4	60.2	60.1	60.7	58.3	60.8	....	61.4	59.4	55.4	49.5	....
29	58.2	....	60.3	60.5	58.9	61.2	....	60.8	58.8	55.6	49.2	49.9
30	58.5	....	60.0	60.4	59.0	....	62.1	61.3	57.9	55.7	49.2	51.0
31	59.0	....	60.4	....	59.4	....	61.8	....	....	54.8	....	50.4

Lowest daily water level, in feet below mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	50.9	52.6	53.2	53.3	53.2	52.5	....	54.4	....	51.8	47.1	42.6
2	50.7	52.9	53.2	53.6	53.4	52.6	....	54.3	54.7	....	45.5	43.0
3	50.7	53.4	52.9	53.6	52.5	53.2	....	54.8	54.3	....	44.9	43.4
4	50.8	53.4	....	53.5	52.8	53.7	53.9	55.3	55.2	....	44.2	43.3
5	50.9	....	54.0	53.4	52.9	54.5	53.8	55.2	54.4	....	43.7	43.1
6	51.1	....	53.7	54.0	53.1	53.7	53.9	55.0	53.2	....	43.6	43.0
7	51.2	53.8	53.8	53.9	53.5	53.8	53.8	54.4	53.6	....	43.6	43.3
8	51.1	54.2	53.8	....	53.8	53.8	....	53.8	53.7	50.9	43.2	43.1
9	50.7	53.5	53.8	53.8	52.9	53.8	....	54.2	53.7	50.0	43.5	44.1
10	50.7	53.6	53.8	54.0	52.4	54.0	....	54.5	54.8	50.0	43.2	44.2
11	50.4	53.4	....	53.1	52.1	54.1	53.1	54.5	54.8	49.2	43.3	43.9
12	51.2	53.8	....	52.6	52.0	54.5	53.7	54.9	53.6	49.5	43.2	43.7
13	51.3	53.4	53.6	53.0	52.3	54.4	53.6	54.8	53.0	50.0	43.6	43.7
14	51.4	53.6	53.1	53.2	52.5	54.0	53.3	54.8	53.6	49.9	43.6	44.0
15	51.4	53.6	53.4	53.0	....	54.0	53.1	54.1	53.4	49.2	43.1	43.7
16	51.7	53.7	52.6	52.9	52.7	....	53.1	54.1	....	48.8	42.6	43.3
17	51.7	53.9	53.1	53.6	52.2	....	53.8	....	53.1	48.6	43.7	43.7
18	50.8	54.4	52.8	53.6	52.6	54.2	53.4	54.7	53.1	48.1	43.8	43.4
19	51.1	54.5	52.6	52.3	52.7	54.4	53.9	55.0	52.6	48.2	43.7	43.1
20	51.8	54.7	52.6	52.5	52.5	54.0	....	55.0	52.6	48.7	43.5	43.2
21	52.0	54.4	52.9	52.4	51.4	54.1	53.9	54.7	52.5	48.9	42.8	43.2
22	....	54.0	52.4	52.8	51.8	....	55.3	53.8	52.5	48.7	42.4	43.4
23	51.9	53.8	....	53.1	51.2	....	55.0	54.1	....	48.9	42.6	43.8
24	51.9	53.8	....	53.7	51.3	....	....	54.7	52.1	48.9	42.6	43.8
25	52.0	53.5	53.9	52.6	....	54.5	54.8	54.7	51.4	47.9	42.3	43.7
26	52.3	53.4	53.8	52.9	....	54.6	54.4	54.7	51.4	47.2	42.5	43.0
27	52.1	53.3	54.2	53.2	....	54.6	55.3	54.6	52.1	47.9	42.5	....
28	51.4	53.2	53.1	53.7	51.3	53.8	....	54.4	52.4	48.4	42.5	....
29	51.2	....	53.3	53.5	51.9	54.2	....	53.8	51.8	48.6	42.2	42.9
30	51.5	....	53.0	53.4	52.0	....	55.1	54.3	50.9	48.7	42.2	44.0
31	52.0	....	53.4	....	52.4	....	54.8	....	....	47.9	....	43.4

36.23.1.9.6 (777, p. 99; *817, p. 172; 840, p. 242; 845, p. 198; 886, p. 342; 906, p. 84; 936, p. 79; 944, p. 79). Longport Fourteenth Avenue well. Longport Water Dept. Land surface is 5.37 feet above mean sea level. Extremes of observed water level, in feet with reference to mean sea level: Highest, about +19 in 1895, when well was drilled; Lowest, -54.5 Sept. 4, 1929. Daily fluctuations, due to tide, 1943: 1.2 to 3.8 feet.

Average daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	38.5	37.8	37.9	37.2	37.3	39.5	46.3	51.6	53.0	45.2	41.3	38.1
2	38.5	38.4	37.6	37.3	37.5	39.4	46.7	51.9	53.0	45.3	41.3	38.3
3	38.5	38.2	37.4	37.5	37.3	39.7	47.3	52.3	52.5	44.9	41.2	38.1
4	38.6	37.9	38.1	37.7	37.3	40.3	47.7	52.3	51.9	44.7	41.1	37.9
5	38.9	37.7	38.4	37.7	37.5	41.3	47.7	51.9	51.9	44.7	40.9	38.2
6	39.1	37.4	37.6	37.9	37.5	42.5	47.5	52.2	52.3	44.9	40.7	37.9
7	38.9	37.7	38.0	37.8	37.6	42.9	47.1	52.5	52.6	45.1	40.6	37.9
8	38.5	38.6	38.5	37.7	38.1	42.5	46.6	53.0	52.3	44.4	40.1	37.6
9	37.9	38.1	38.3	37.8	38.5	42.2	46.6	53.1	51.7	44.1	40.1	37.7
10	37.9	37.9	38.0	37.7	38.5	41.5	46.6	53.5	51.7	43.8	40.3	37.9
11	37.9	37.8	37.8	37.6	38.1	41.5	46.9	52.9	51.7	43.7	39.9	38.3

36.23.1.9.6. Longport Fourteenth Avenue well--Continued.

Average daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
12	38.1	38.6	37.8	37.1	38.0	42.0	47.3	52.5	51.8	43.8	41.0	37.8
13	38.5	38.1	37.7	37.2	38.1	42.9	47.6	52.4	51.5	43.7	40.2	38.1
14	38.1	38.1	38.0	37.7	38.3	43.5	47.3	52.1	50.9	43.4	40.3	37.8
15	37.9	38.9	38.1	37.7	38.4	43.7	47.5	51.8	50.1	42.9	39.9	....
16	38.1	38.7	37.9	37.5	38.4	44.0	48.0	52.5	50.1	42.4	39.5	....
17	37.9	38.6	37.7	37.6	38.7	44.5	48.5	52.3	49.9	42.9	39.4	....
18	37.5	38.6	37.9	37.5	39.0	44.7	48.9	52.3	49.4	42.7	39.3	38.1
19	37.8	38.7	37.7	36.6	39.1	44.9	49.3	52.7	49.3	42.5	39.3	37.8
20	38.9	38.3	37.3	36.7	39.0	45.3	49.7	53.0	49.1	42.4	39.1	38.0
21	39.0	38.3	37.7	36.8	38.8	45.5	49.8	53.1	48.7	42.1	38.8	38.3
22	38.5	38.1	37.3	37.1	38.7	45.9	49.9	53.5	47.8	41.9	39.0	38.0
23	37.8	38.1	37.5	37.2	39.0	46.3	49.4	53.8	47.3	42.0	38.9	37.9
24	37.7	38.0	37.8	37.3	39.3	46.7	49.9	53.9	46.9	41.9	38.6	38.1
25	37.5	37.9	37.8	37.3	39.1	47.0	50.5	53.9	46.5	41.5	38.7	38.1
26	37.7	37.7	37.5	37.4	39.0	47.4	50.4	54.0	46.5	40.1	38.6	37.8
27	37.7	37.3	37.6	37.4	39.1	47.4	49.7	53.5	46.9	40.7	38.5	37.3
28	37.0	37.8	37.3	37.1	39.3	47.4	49.5	52.9	46.9	41.1	38.7	37.5
29	37.1	....	37.5	37.5	39.3	47.1	49.9	52.6	46.1	....	38.2	37.3
30	37.3	....	37.9	37.3	39.6	46.1	50.1	52.5	44.7	....	38.9	37.3
31	37.6	....	37.4	....	39.5	....	50.9	52.9	....	41.6	....	37.3

Average daily water level, in feet below mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	33.1	32.4	32.5	31.8	31.9	34.1	40.9	46.2	47.6	39.8	35.9	32.7
2	33.1	33.0	32.2	31.9	32.1	34.0	41.3	46.5	47.6	39.9	35.9	32.9
3	33.1	32.8	32.0	32.1	31.9	34.3	41.9	46.9	47.1	39.5	35.8	32.7
4	33.2	32.5	32.7	32.3	31.9	34.9	42.3	46.9	46.5	39.3	35.7	32.5
5	33.5	32.3	33.0	32.3	32.1	35.9	42.3	46.5	46.5	39.3	35.5	32.8
6	33.7	32.0	32.2	32.5	32.1	37.1	42.1	46.8	46.9	39.5	35.3	32.5
7	33.5	32.3	32.6	32.4	32.2	37.5	41.7	47.1	47.3	39.7	35.2	32.5
8	33.1	33.2	33.1	32.3	32.7	37.1	41.2	47.6	46.9	39.0	34.7	32.2
9	32.5	32.7	32.9	32.4	33.1	36.8	41.2	47.7	46.3	38.7	34.7	32.3
10	32.5	32.5	32.6	32.3	33.1	36.1	41.2	48.1	46.3	38.4	34.9	32.5
11	32.5	32.4	32.4	32.2	32.7	36.1	41.5	47.5	46.3	38.3	34.5	32.9
12	32.7	33.2	32.4	31.7	32.6	36.6	41.9	47.1	46.4	38.4	34.6	32.4
13	33.1	32.7	32.3	31.8	32.7	37.5	42.2	47.0	46.1	38.3	34.8	32.7
14	32.7	32.7	32.6	32.3	32.9	38.1	41.9	46.7	45.5	38.0	34.9	32.4
15	32.5	33.5	32.7	32.3	33.0	38.3	42.1	46.4	44.7	37.5	34.5	....
16	32.7	33.3	32.5	32.1	33.0	38.6	42.6	47.0	44.7	37.0	34.1	....
17	32.5	33.2	32.3	32.2	33.3	39.1	43.1	46.9	44.5	37.5	34.0	....
18	32.1	33.2	32.5	32.1	33.6	39.3	43.5	46.9	44.0	37.3	33.9	32.7
19	32.4	33.3	32.3	31.2	33.7	39.5	43.9	47.3	43.9	37.1	33.9	32.4
20	33.5	32.9	31.9	31.3	33.6	39.9	44.3	47.6	43.7	37.0	33.7	32.6
21	33.6	32.9	32.3	31.4	33.4	40.1	44.4	47.7	43.3	36.7	33.4	32.9
22	33.1	32.7	31.9	31.7	33.3	40.5	44.5	48.1	42.4	36.5	33.6	32.6
23	32.4	32.7	32.1	31.8	33.6	40.9	44.0	48.4	41.9	36.6	33.5	32.5
24	32.3	32.6	32.4	31.9	33.9	41.3	44.5	48.5	41.5	36.5	33.2	32.7
25	32.1	32.5	32.4	31.9	33.7	41.6	45.1	48.5	41.1	36.1	33.3	32.7
26	32.3	32.3	32.1	32.0	33.6	42.0	45.0	48.6	41.1	34.7	33.2	32.4
27	32.3	31.9	32.2	32.0	33.7	42.0	44.3	48.1	41.5	35.3	33.1	31.9
28	31.6	32.4	31.9	31.7	33.9	42.0	44.1	47.5	41.5	35.7	33.3	32.1
29	31.7	....	32.1	32.1	33.9	41.7	44.5	47.2	40.7	....	32.8	31.9
30	31.9	....	32.5	31.9	34.2	40.7	44.7	47.1	32.3	....	32.5	31.9
31	32.2	....	32.0	....	34.1	....	45.5	47.5	....	36.2	....	31.9

Bergen County

East Paterson area

26.3.1.7.3 (*817, p. 192; 840, p. 245; 845, p. 202; 886, p. 343; 906, p. 85; 944, p. 80). City of Garfield well 11. Land surface is 66.63 feet above mean sea level. Extremes of observed water level, in feet, with reference to mean sea level: Highest, +56.2 Mar. 8, 1926; Lowest, -1.8 Nov. 5, 1932.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	37.7	37.4	....	38.3	38.7	52.7	56.6	59.1	58.4	57.9	52.5
2	....	37.9	37.4	....	38.3	38.7	53.3	56.6	59.3	58.8	58.2	52.4
3	....	38.1	37.4	....	38.2	38.0	53.4	56.8	59.4	58.3	58.6	52.8
4	....	38.1	37.5	....	38.3	39.1	53.4	56.8	59.4	58.3	58.9	52.5
5	....	38.3	37.4	....	38.5	47.0	52.9	56.9	59.2	58.2	59.7	52.3
6	....	38.3	37.4	....	38.6	47.7	51.5	56.7	58.3	58.2	60.6	52.7
7	36.6	38.4	37.4	....	38.9	48.0	51.3	56.2	58.5	58.0	59.1	52.8
8	36.6	38.4	37.5	....	39.1	48.6	53.1	56.5	59.4	57.9	58.6	52.8
9	36.5	38.5	37.5	....	39.1	48.6	53.1	56.5	59.7	58.2	58.0	53.3
10	36.3	38.5	37.2	....	39.1	48.6	53.5	56.9	60.0	58.4	58.0	53.3
11	35.8	38.4	36.8	....	39.1	48.2	53.5	57.0	60.0	58.2	57.9	53.5
12	36.0	38.4	36.6	....	39.1	49.0	52.8	57.1	60.0	58.2	57.5	53.4
13	36.0	38.2	36.3	....	39.3	49.0	53.2	57.3	59.4	58.00	56.5	53.7
14	36.0	37.8	35.9	....	39.3	48.9	53.7	57.3	60.0	57.7	....	54.1
15	36.0	37.4	35.5	....	39.2	49.5	54.3	57.4	60.1	57.6	....	54.1
16	36.1	37.6	35.6	....	39.2	50.6	54.6	57.1	59.6	57.6	....	54.6
17	36.0	37.7	35.1	....	38.9	50.9	54.7	....	59.9	61.2	....	54.7
18	35.7	37.7	35.5	....	38.9	50.9	54.7	....	59.5	57.8	53.8	54.7
19	36.3	37.6	35.5	....	39.1	50.9	54.9	....	59.2	57.2	53.2	54.2
20	36.4	37.5	35.2	....	39.2	51.0	54.9	....	60.2	57.0	52.7	54.2
21	36.6	37.5	35.3	....	39.2	51.5	55.4	....	59.3	56.9	52.6	54.7
22	36.6	37.5	35.2	....	39.0	51.7	55.4	....	59.1	56.9	52.1	55.0
23	36.7	37.3	35.2	....	38.7	52.3	55.5	....	59.0	57.2	52.1	55.4
24	36.8	37.3	35.2	....	38.0	52.4	55.8	....	58.9	57.4	52.1	55.5
25	36.8	37.4	34.9	....	38.5	52.5	55.9	....	59.0	57.2	52.4	55.5
26	37.0	37.4	..[illegible].	....	38.5	52.9	55.9	58.9	58.8	57.0	52.1	54.3
27	37.3	37.3	....	....	38.7	52.9	56.2	58.9	59.8	57.0	52.5	55.1
28	37.4	37.3	....	38.0	38.7	52.5	56.2	58.9	58.9	57.0	52.4	55.7
29	37.5	....	....	38.2	38.7	52.5	56.3	58.6	58.6	57.0	52.3	55.9
30	37.6	....	....	38.2	38.7	51.9	56.2	58.7	58.4	57.2	52.3	56.2
31	37.6	....	....	....	38.7	....	56.5	58.8	....	62.0	....	56.2

Lowest daily water level, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	28.9	29.2	....	28.3	27.9	13.9	10.0	7.5	8.2	8.7	14.1
2	....	28.7	29.2	....	28.3	27.9	13.3	10.0	7.3	7.8	8.4	14.2
3	....	28.5	29.2	....	28.4	28.6	13.2	9.8	7.2	8.3	8.0	13.8
4	....	28.5	29.1	....	28.3	27.5	13.2	9.8	7.2	8.3	7.7	14.1
5	....	28.3	29.2	....	28.1	19.6	13.7	9.7	7.4	8.4	6.9	14.3
6	....	28.3	29.2	....	28.0	19.9	15.1	9.9	8.3	8.4	6.6	13.9
7	30.0	28.2	29.2	....	27.7	18.6	15.3	10.4	8.1	8.6	7.5	13.8
8	30.0	28.2	29.1	....	27.5	18.0	13.5	10.1	7.2	8.7	8.0	13.8
9	30.1	28.1	29.1	....	27.5	18.0	13.5	10.1	6.9	8.4	8.6	13.3
10	30.3	28.1	29.4	....	27.5	18.0	13.1	9.7	6.6	8.2	8.6	13.3
11	30.8	28.2	29.8	....	27.5	18.4	13.1	9.6	6.6	8.4	8.7	13.1
12	30.6	28.2	30.0	....	27.5	17.6	13.8	9.5	6.6	8.4	9.1	13.2
13	30.6	28.4	30.3	....	27.3	17.6	13.4	9.3	7.2	8.6	10.1	12.9
14	30.6	28.8	30.7	....	27.3	17.7	12.9	9.3	6.6	8.9	....	12.5
15	30.6	29.2	31.1	....	27.4	17.1	12.3	9.2	6.5	9.0	....	12.5
16	30.5	29.0	31.0	....	27.4	16.6	12.0	9.5	7.0	9.0	....	12.0
17	30.6	28.9	31.5	....	27.7	15.7	11.9	....	6.7	5.4	....	11.9
18	30.9	28.9	31.1	....	27.7	15.7	11.9	....	7.1	8.8	12.8	11.9
19	30.3	29.0	31.1	....	27.5	15.7	11.7	....	7.4	9.4	13.4	12.4
20	30.2	29.1	31.4	....	27.4	15.6	11.7	....	6.4	9.6	13.9	12.4
21	30.0	29.1	31.3	....	27.4	15.1	11.2	....	7.3	9.7	14.0	11.9
22	30.0	29.1	31.4	....	27.6	14.9	11.2	....	7.5	9.7	14.5	11.6

26.3.1.7.3. City of Garfield well 11--Continued.

Lowest daily water level, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
23	29.9	29.3	31.4	....	27.9	14.3	11.1	...	7.6	9.4	14.5	11.2
24	29.8	29.3	31.4	....	28.6	14.2	10.8	...	7.7	9.2	14.5	11.1
25	29.8	29.2	31.7	....	28.1	14.1	10.7	...	7.6	9.4	14.2	11.1
26	29.6	29.2	....	....	28.1	13.7	10.7	7.7	7.8	9.6	14.5	12.3
27	29.3	29.3	....	....	27.9	13.7	10.4	7.7	6.8	9.6	14.1	11.5
28	29.2	29.3	....	28.6	27.9	14.1	10.4	7.7	7.7	9.6	14.2	10.9
29	29.1	....	....	28.4	27.9	14.1	10.3	8.0	8.0	9.6	14.3	10.7
30	29.0	....	....	28.4	27.9	14.7	10.4	7.9	8.2	9.4	14.3	10.4
31	29.0	....	....	....	27.9	....	10.1	7.8	...	4.6	....	10.4

Camden County

Camden area

31.2.2.5.2 (*817, p. 174; 840, p. 242; 845, p. 200; 886, p. 343; 906, p. 80; 944, p. 80). Morris Station test well 3. City of Camden. Land surface is 5.81 feet above mean sea level. Extremes of observed water level in feet below mean sea level: Highest, 0.3 Mar. 19, 1936; Lowest, 35.84 June 14, 1926. Daily fluctuations, 1943: Less than 1 foot to about 2.5 feet.

Water level, in feet below land-surface datum, 1943
(From recorder charts)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	13.41	Jan. 21	15.61	Feb. 23	10.71	Mar. 13	11.01
3	14.31	22	15.61	24	10.86	14	10.66
4	14.11	23	13.36	25	10.86	15	11.21
5	14.71	24	12.21	26	11.21	16	11.26
6	14.76	25	12.96	27	10.96	17	11.26
7	14.76	26	13.01	28	10.51	18	11.21
8	14.66	27	13.61	Mar. 1	11.61	19	11.11
9	14.71	28	13.51	2	11.41	20	10.81
10	13.76	29	13.51	3	11.56	21	10.31
11	14.66	Feb. 14	9.91	4	11.81	22	10.56
12	14.61	15	11.71	5	11.56	23	10.76
13	15.06	16	11.76	6	11.56	24	10.51
14	14.96	17	11.01	7	10.41	25	10.76
15	15.11	18	11.56	8	11.41	26	11.16
16	15.06	19	11.61	9	11.21	27	11.41
17	14.01	20	10.36	10	10.86	28	11.36
18	14.91	21	9.81	11	10.76	29	11.31
19	14.86	22	10.21	12	11.11	30	11.16
20	15.56						

Lowest daily water level, in feet below mean sea level, 1943
(From recorder charts)

Jan. 2	7.60	Jan. 20	9.75	Feb. 23	4.90	Mar. 13	5.20
3	7.50	21	9.80	24	5.05	14	4.85
4	8.30	22	9.80	25	5.05	15	5.40
5	8.90	23	7.95	26	5.40	16	5.45
6	8.95	24	6.80	27	5.15	17	5.45
7	8.95	25	7.55	28	4.70	18	5.40
8	8.85	26	7.60	Mar. 1	5.80	19	5.30
9	8.90	27	7.80	2	5.60	20	5.00
10	7.95	28	7.70	3	5.75	21	4.50
11	8.85	Feb. 14	4.10	4	6.00	22	4.75
12	8.80	15	5.90	5	5.75	23	4.95
13	9.25	16	5.95	6	5.75	24	4.70
14	9.15	17	5.20	7	4.60	25	4.95
15	9.30	18	5.75	8	5.60	26	5.35
16	9.25	19	5.80	9	5.40	27	5.60
17	8.20	20	4.55	10	5.05	28	5.55
18	9.10	21	4.00	11	4.95	29	5.50
19	9.05	22	4.40	12	5.30	20	5.35

31.2.4.5.1 (*845, p. 201; 886, p. 344; 906, p. 86; 936, p. 81; 944, p. 81). New Jersey Water Co. well 10. Land surface is 3.59 feet above mean sea level. Extremes of observed water level, in feet, with reference to mean sea level: Highest, +1.26 Mar. 19, 1933; Lowest, -19.3 July 2, 1941. Daily fluctuations, 1943: 11.5 to 1.3 feet.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts).

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	16.9	19.7	21.3	19.8	20.5	19.6	21.6	21.7	22.8	21.8	....	20.6
2	18.2	19.4	19.8	19.8	20.5	20.3	21.6	22.8	24.6	20.3	....	20.7
3	18.1	19.6	21.1	19.2	20.6	20.6	21.7	23.9	21.6	....	....	20.8
4	....	19.2	20.7	20.8	20.6	21.8	21.5	23.7	21.4	....	....	20.2
5	....	19.6	21.1	20.8	21.2	22.7	20.5	22.9	20.6	....	....	19.6
6	....	19.4	20.5	19.2	21.0	22.0	21.0	23.0	21.4	....	....	20.3
7	....	19.1	19.1	19.0	21.5	21.5	21.0	22.6	22.6	....	....	20.2
8	....	21.5	21.6	20.7	21.6	20;5	20.6	22.3	23.2	....	....	20.0
9	....	19.6	21.0	20.1	21.7	19.0	20.4	24.2	23.8	....	....	20.3
10	....	19.7	21.2	19.1	20.9	19.8	20.5	24.2	24.0	....	....	20.1
11	....	19.3	20.4	18.9	20.9	20.5	20.0	24.6	23.8	....	....	20.8
12	....	19.3	18.9	19.2	18.7	20.6	21.0	24.8	21.4	....	....	19.7
13	....	19.4	18.8	18.9	20.5	20.8	21.0	22.2	23.6	....	....	20.8
14	....	18.6	18.5	20.3	20.4	20.8	21.4	24.8	23.1	....	....	20.5
15	....	19.8	17.9	18.6	20.5	20.9	21.6	23.8	23.5	....	....	20.5
16	....	20.2	18.3	18.3	19.7	22.6	22.0	23.6	22.7	....	20.4	20.6
17	....	20.2	20.9	18.6	21.9	22.9	21.8	24.1	22.7	....	20.8	20.2
18	....	19.9	20.9	19.7	22.3	21.6	20.8	23.8	22.7	....	21.3	2014
19	....	20.1	18.6	19.4	21.7	21.7	22.3	24.0	21.4	....	21.2	19.9
20	....	21.1	18.9	18.7	21.0	21.9	21.9	24.0	20.9	....	21.2	20.9
21	....	19.4	18.9	19.0	19.8	22.2	23.0	24.1	21.3	....	20.4	20.9
22	....	20.9	18.6	19.1	20.1	22.0	21.5	23.8	21.1	....	21.8	20.8
23	....	21.1	19.6	20.5	19.8	22.4	22.0	24.2	22.7	....	21.5	21.9
24	....	21.5	19.0	18.8	20.4	22.1	22.7	25.1	21.7	....	21.5	20.7
25	....	19.3	19.1	20.9	20.3	24.2	21.9	25.4	21.8	....	21.1	20.3
26	....	19.7	19.2	20.9	19.9	23.4	21.2	25.3	20.9	....	21.3	19.6
27	....	19.5	19.1	20.9	20.0	21.8	22.8	23.7	22.4	....	21.5	22.1
28	19.7	19.0	21.4	20.9	20.2	23.4	22.8	22.3	22.2	....	20.3	21.0
29	20.2	....	20.8	20.7	20.1	22.1	21.5	22.0	21.8	....	21.7	21.0
30	19.6	....	20.6	20.5	20.0	21.3	22.8	23.0	22.3	....	21.4	22.2
31	19.0	....	19.3	....	19.5	....	22.8	23.4	....	....	....	21.0

Lowest daily water level, in feet below mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	13.3	16.1	17.7	16.2	16.9	16.0	18.0	18.1	19.2	18.2	....	17.0
2	14.6	15.8	16.2	16.2	16.9	16.7	18.0	19.2	21.0	16.7	....	17.1
3	14.5	16.0	17.5	15.6	17.0	17.0	18.1	20.3	18.0	....	....	17.2
4	....	15.6	17.1	17.2	17.0	18.2	17.9	20.1	17.8	....	....	16.6
5	....	16.0	17.5	17.2	17.6	19.1	16.9	19.3	17.0	....	....	16.0
6	....	15.8	16.9	15.6	17.4	18.4	17.4	19.4	17.8	....	....	16.7
7	....	15.5	15.5	15.4	17.9	17.9	17.4	19.0	19.0	....	....	16.6
8	....	17.9	18.0	17.1	18.0	16.9	17.0	18.7	19.6	....	....	16.4
9	....	16.0	17.4	16.5	18.1	15.4	16.8	20.6	20.2	....	....	16.7
10	....	16.1	17.6	15.5	17.3	16.2	16.9	20.6	20.4	....	....	16.5
11	....	15.7	16.8	15.3	17.3	16.9	16.4	21.0	20.2	....	....	17.2
12	....	15.7	15.3	15.6	15.1	17.0	17.4	21.2	17.8	....	....	16.1
13	....	15.8	15.2	15.3	16.9	17.2	17.4	18.6	20.0	....	....	17.2
14	....	15.0	14.9	16.7	16.7	17.2	17.8	21.2	19.5	....	....	16.9
15	....	16.2	14.3	15.0	16.9	17.3	18.0	20.2	19.9	....	....	16.9
16	....	16.6	14.7	14.7	16.1	19.0	18.4	20.0	19.1	....	16.8	17.0
17	....	16.6	17.3	15.0	18.3	19.3	18.2	20.5	19.1	....	17.2	16.6
18	....	16.3	17.3	16.1	18.7	18.0	17.2	20.2	19.1	....	17.7	16.8
19	....	16.5	15.0	15.8	18.1	18.1	18.7	20.4	17.8	....	17.6	16.3
20	....	17.5	15.3	15.1	17.4	18.3	18.3	20.4	17.3	....	17.6	17.3
21	....	15.8	15.3	15.4	16.2	18.6	19.4	20.5	17.7	....	16.8	17.3
22	....	17.3	15.0	15.5	16.5	18.4	17.9	20.2	17.5	....	18.2	17.2
23	....	17.5	16.0	16.9	16.2	18.8	18.4	20.6	19.1	....	17.9	17.3
24	....	17.9	15.4	15.2	16.8	18.5	19.1	21.5	18.1	....	17.9	17.1
25	....	15.7	15.5	14.6	16.7	20.6	18.3	21.8	18.2	....	17.5	16.7

31.2.4.5.1. New Jersey Water Co. well 10--Continued

Lowest daily water level, in feet below mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	....	16.1	15.6	17.3	16.3	19.8	17.6	21.7	17.3	....	17.7	16.0
27	....	15.9	15.5	17.3	16.4	18.2	19.2	20.1	18.8	....	17.9	18.5
28	16.1	15.4	17.8	17.3	16.6	19.8	19.2	18.7	18.6	....	17.0	17.4
29	16.6	....	17.2	17.1	16.5	18.5	17.9	18.4	18.2	....	18.1	17.4
30	16.0	....	17.0	16.9	16.4	17.7	19.2	19.4	18.7	....	17.8	18.6
31	15.4	....	15.7	....	15.9	....	19.2	19.8	....	....	....	17.4

Cape May County

Atlantic City area

36.31.9.1.9.(*845, p. 199; 886, p. 345; 906, p. 87; 936, p. 82; 944, p. 82). Sea Isle City Water Dept. well 1. Measuring point is 3 feet above the land surface. Extremes of observed water level in feet below land-surface datum: Highest 9.0 Apr. 7, 1930; Lowest, 15.6 Sept. 13, 1931. Daily fluctuations due to tides, 1943: 1.0 to 0.1 foot.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Nov.	Dec.
1	11.3	11.1	11.0	....	11.0	10.7	....	11.5	12.0	....	12.4
2	11.4	11.3	11.0	....	11.0	10.7	....	11.5	12.0	....	12.4
3	11.4	11.3	11.0	....	10.9	10.7	....	11.6	12.0	....	12.4
4	11.5	11.3	11.1	....	10.9	10.7	....	11.6	12.0	....	12.4
5	11.6	11.2	11.2	....	10.9	10.7	....	11.6	12.0	....	12.4
6	11.6	11.2	11.2	....	10.8	10.8	....	11.6	12.0	12.6	12.5
7	11.7	11.1	11.1	....	10.8	10.8	....	11.6	12.0	12.7	12.4
8	11.6	11.2	11.2	....	10.8	10.8	....	11.6	12.0	12.6	12.4
9	11.5	11.2	11.3	....	10.9	....	....	11.6	12.0	12.6	12.4
10	11.4	11.2	11.2	....	10.8	....	....	11.7	12.1	12.7	12.4
11	11.3	11.1	11.1	....	10.7	....	....	11.7	12.2	12.6	12.4
12	11.4	11.2	11.0	....	10.7	....	....	11.7	12.2	12.6	....
13	11.4	11.1	11.0	....	10.9	....	11.2	11.8	12.2	12.6	....
14	11.3	11.2	11.0	....	10.8	....	11.1	11.8	12.1	12.7	....
15	11.3	11.3	11.1	....	10.9	....	11.1	11.8	12.1	12.7	....
16	11.3	11.3	11.0	....	10.9	....	11.2	11.8	12.0	12.5	....
17	11.3	11.3	11.0	10.9	10.9	....	11.3	11.8	12.1	12.5	....
18	11.2	11.3	11.0	10.9	11.0	....	11.2	11.9	12.1	12.5	....
19	11.3	11.3	11.0	10.9	11.0	....	11.3	11.9	12.1	12.5	....
20	11.3	11.2	10.9	10.6	10.9	....	11.3	11.9	12.0	12.5	....
21	11.5	11.2	11.0	10.6	10.8	....	11.2	12.0	12.0	12.5	....
22	11.4	11.2	10.9	10.7	10.8	....	11.2	11.9	11.9	12.4	....
23	11.4	11.2	10.9	10.8	10.8	....	11.3	12.0	11.9	12.5	....
24	11.3	11.1	10.9	10.8	10.8	....	11.3	12.0	11.9	12.5	....
25	11.2	11.1	....	10.8	10.7	....	11.4	12.0	11.9	12.3	....
26	11.2	11.0	....	10.8	10.6	....	11.4	12.0	12.0	12.5	....
27	11.2	10.9	....	10.9	10.7	....	11.4	12.0	12.0	12.5	....
28	11.0	11.0	....	10.8	10.7	....	11.4	11.9	12.1	12.5	....
29	11.0	....	....	10.9	10.7	....	11.3	12.0	12.1	12.5	....
30	10.9	....	....	10.9	10.7	....	11.4	12.0	....	12.4	....
31	11.0	....	....	....	10.7	....	11.5	12.0	....	....	....

Essex County

Canoe Brook area

25.15.7.5.4 (*886, p. 345; 906, p. 88; 936, p. 82; 944, p. 83). Commonwealth Water Co. well 30. Land surface 4.5 feet below the measuring point. Extremes of observed water level, in feet below land-surface datum: Highest, 11.8 Aug. 25, 1931; Lowest, 63.4 Sept. 5, 1929. Daily fluctuations 1943: Less than 1 foot to 6.4 feet.

25.15.7.5.4. Commonwealth Water Co. well 30--Continued.

Water level, in feet below land-surface datum, 1943
(From recorder charts)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	38.70	Apr. 27	37.10	Nov. 29	31.20	Dec. 11	31.90
25	37.10	28	37.70	30	32.90	12	32.10
26	38.70	29	36.50	Dec. 5	34.40	19	30.60
30	34.9	Nov. 19	30.10	6	34.40	21	31.20
31	35.30	20	37.30	7	34.50	22	31.90
Feb. 1	36.20	21	32.50	8	34.50	23	32.10
2	39.80	22	30.50	9	34.60	26	27.60
3	38.10	23	30.70	10	34.60	27	28.00
4	35.20	28	29.60				

26.21.1.5.6 (*817, p. 189; 840, p. 244; 845, p. 202; 886, p. 355; 906, p. 88; 936, p. 83; 944, p. 83). Short Hills test well 10. Measuring point is about 0.5 foot above the land surface. Extremes of observed water level, in feet below land-surface datum: Highest, 3.40 May 12, 1933; Lowest, 28.78 Oct. 31, 1941.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level
Jan. 5	11.27	June 29	18.20	Nov. 17	13.69
Apr. 27	13.40	July 23	19.74		

Middlesex and Monmouth Counties

Runyon area

Average of the water levels in water-table wells near Runyon, New Jersey, in feet above an assumed datum[a]

Date	Wells less than 25 feet in depth		Wells 25 feet or more in depth	
	Number of wells	Water level	Number of wells	Water level
July 16, 17, 1943	19	10.44	5	8.22

a Since this is an average of several wells, it is not feasible to relate the average water levels to land-surface datum.

Middlesex County

Runyon area

29.1.4.6.8 (*840, p. 247; 845, p. 203; 886, p. 356; 906, p. 90; 936, p. 84; 944, p. 84). Browntown test well. Clyde Bowne. Land surface is 31.62 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 28.14 Apr. 9 and 10, 1939; Lowest, 21.83 Nov. 18, 1932.

Water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	6.74	6.30	6.04	6.18	5.98	6.31	6.70	....	8.02	8.43	8.23
2	....	6.74	6.30	6.05	6.18	5.98	6.33	6.71	....	....	8.43	8.23
3	6.78	6.75	6.25	6.06	6.18	5.98	6.35	6.73	....	8.03	8.43	8.23
4	....	6.75	....	6.06	6.18	5.98	6.36	6.75	....	8.05	8.43	8.23
5	....	6.75	....	6.06	6.18	6.01	6.38	6.76	....	8.07	8.43	8.23
6	....	....	....	6.09	6.18	6.02	6.39	6.78	....	8.09	8.43	8.23
7	....	....	....	6.09	6.18	6.02	6.40	6.80	....	8.11	8.43	8.23
8	....	....	6.21	6.09	6.20	6.03	6.42	6.82	....	8.12	8.42	8.23
9	....	....	6.10	6.09	6.20	6.03	6.43	6.83	....	8.14	8.35	8.23
10	....	....	6.11	6.10	6.20	6.04	6.41	6.85	....	8.16	3.34	8.23
11	....	....	6.11	6.10	6.20	6.05	6.41	6.87	7.56	8.18	8.32	8.26

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29.1.4.6.8. Browntown test well--Continued.

Water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
12	....	....	6.10	6.10	6.20	6.06	6.42	6.89	7.58	8.20	8.28	8.26
13	....	6.38	....	6.10	6.20	6.06	6.43	6.91	7.60	8.21	8.24	8.26
14	....	6.37	6.10	6.11	6.21	6.07	6.43	6.92	7.62	8.23	8.24	8.26
15	....	6.37	6.10	6.11	6.22	6.08	6.44	6.94	7.64	8.26	8.24	8.26
16	6.74	6.37	6.10	6.12	6.22	6.09	6.45	6.96	7.66	8.26	8.23	....
17	6.74	6.37	6.10	6.14	6.22	6.10	6.46	6.97	7.68	8.27	8.23	....
18	6.73	6.37	6.10	6.14	6.22	6.11	6.47	6.99	7.71	8.29	8.23	8.28
19	6.73	6.37	6.10	6.14	6.22	6.13	6.45	7.01	7.74	8.30	8.22	....
20	....	....	6.08	6.15	6.20	6.14	6.50	7.05	7.76	8.31	8.23	....
21	....	6.30	6.08	6.16	6.08	6.16	6.51	7.07	7.78	8.33	8.23	....
22	....	6.30	6.08	6.16	6.07	6.18	6.53	7.10	7.80	....	8.23	8.31
23	6.75	6.30	6.08	6.16	6.07	6.19	6.55	7.13	....	8.36	8.23	8.31
24	6.74	6.30	6.08	6.17	6.07	6.21	6.57	7.15	....	8.38	8.23	8.33
25	6.74	6.30	6.08	6.17	6.06	6.22	6.59	7.18	7.86	8.39	8.23	8.33
26	6.74	6.30	6.08	6.17	6.02	6.24	6.62	7.20	7.88	8.42	8.23	8.33
27	6.74	6.30	6.03	6.17	6.00	6.25	6.64	7.23	7.90	8.42	8.23	8.32
28	6.75	6.30	6.03	6.17	6.00	6.26	6.65	....	7.92	8.42	8.23	8.32
29	6.75	....	6.04	6.17	5.98	6.27	6.66	....	7.94	8.42	8.23	8.32
30	....	....	6.04	6.17	5.98	6.29	6.68	....	7.97	8.43	8.23	8.33
31	....	....	6.04	....	5.98	....	6.69	....	....	8.43	....	8.33

Water level at end of day, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	24.87	25.31	25.57	25.43	25.63	25.30	24.91	.....	23.59	23.18	23.38
2	.....	24.87	25.31	25.56	25.43	25.63	25.28	24.90	.....	.....	23.18	23.38
3	24.83	24.86	25.36	25.55	25.43	25.63	25.26	24.88	.....	23.58	23.18	23.38
4	.....	24.86	.....	25.55	25.43	25.63	25.25	24.86	.....	23.56	23.18	23.38
5	.....	24.86	.....	25.55	25.43	25.60	25.23	24.85	.....	23.54	23.18	23.38
6	.....	.....	.....	25.52	25.43	25.59	25.22	24.83	.....	23.52	23.18	23.38
7	.....	.....	.....	25.52	25.43	25.59	25.21	24.81	.....	23.50	23.18	23.38
8	.....	.....	25.40	25.52	25.41	25.58	25.19	24.79	.....	23.49	23.19	23.38
9	.....	.....	25.51	25.52	25.41	25.58	25.18	24.78	.....	23.47	23.26	23.38
10	.....	.....	25.50	25.51	25.41	25.57	25.20	24.76	.....	23.45	23.27	23.38
11	.....	.....	25050	25.51	25.41	25.56	25.20	24.74	24.05	23.43	23.29	23.35
12	.....	.....	25.51	25.51	25.40	25.55	25.19	24.72	24.03	23.41	23.33	23.35
13	.....	25.23	.....	25.51	25.40	25.55	25.18	24.70	24.01	23.40	23.37	23.35
14	.....	25.24	25.51	25.50	25.40	25.54	25.18	24.69	23.99	23.38	23.37	23.35
15	.....	25.24	25.51	25.50	25.39	25.53	25.17	24.67	23.97	23.35	23.37	23.35
16	24.87	25.24	25.51	25.49	25.39	25.52	25.16	24.65	23.95	23.35	23.38	.....
17	24.87	25.24	25.51	25.47	25.39	25.51	25.15	24.64	23.93	23.34	23.38	.....
18	24.88	25.24	25.51	25.47	25.39	25.50	25.14	24.62	23.90	23.32	23.38	23.33
19	24.88	25.24	25.51	25.47	25.39	25.48	25.13	24.60	23.87	23.31	23.39	.....
20	.....	.....	25.53	25.46	25.41	25.47	25.11	24.56	23.85	23.30	23.38	.....
21	.....	25.31	25.53	25.45	25.53	25.45	25.10	24.54	23.83	23.28	23.38	.....
22	.....	25.31	25.53	25.45	25.54	25.43	25.08	24.51	23.81	.....	23.38	23.30
23	24.86	25.31	25.53	25.45	25.54	25.42	25.06	24.48	.....	23.25	23.38	23.30
24	24.87	25.31	25.53	25.44	25.54	25.40	25.04	24.46	.....	23.23	23.38	23.28
25	24.87	25.31	25.53	25.44	25.55	25.39	25.02	24.43	23.75	23.22	23.38	23.28
26	24.87	25.31	25.53	25.44	25.59	25.37	24.99	24.41	23.73	23.19	23.38	23.28
27	24.87	25.31	25.58	25.44	25.61	25.36	24.97	24.38	23.71	23.19	23.38	23.29
28	24.86	25.31	25.58	25.44	25.61	25.35	24.96	.....	23.69	23.19	23.38	23.29
29	24.86	.....	25.57	25.44	25.63	25.34	24.95	.....	23.67	23.19	23.38	23.29
30	.....	.....	25.57	25.44	25.63	25.32	24.93	.....	23.64	23.18	23.38	23.28
31	.....	.....	25.57	.....	25.63	.....	24.92	.....	.....	23.18	.....	23.28

28.5.4.8.1 (*845, p. 203; 886, p. 357; 906, p. 91; 936, p. 84; 944, p. 84). Duhernal observation well 1. Land surface is 18.70 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 7.58 Apr. 18, 1939; Lowest, 4.06 Dec. 12, 1941.

28.5.4.8.1. Duhernal observation well 1--Continued.

Water level at end of day, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	13.00	12.80	12.75	13.14	.....	13.23	13.66	14.09	14.28	14.11	13.76
2	.....	13.06	12.80	12.74	13.15	.....	13.26	13.69	14.11	14.29	14.08	13.77
3	.....	13.08	12.77	12.78	13.14	.....	13.28	13.70	14.10	14.30	14.07	13.78
4	.....	13.04	12.80	12.78	13.16	.....	13.29	13.73	14.11	14.32	14.06	13.78
5	.....	13.05	12.82	12.81	13.17	.....	13.31	13.75	14.12	14.33	14.04	13.82
6	.....	12.95	12.81	12.88	13.16	.....	13.32	13.78	14.13	14.35	14.02	13.84
7	.....	12.95	.....	.....	13.17	.....	13.33	13.79	14.14	14.38	14100	13.86
8	.....	13.00	.....	.....	13.19	.....	13.34	13.81	14.16	14.39	13.97	13.86
9	.....	13.03	.....	.....	13.21	.....	13.35	13.82	14.17	14.40	13.95	13.87
10	.....	13.02	12.76	.....	13.22	.....	13.37	13.83	.....	14.40	13.92	13.89
11	.....	13.01	12.76	.....	13.22	.....	.....	13.84	.....	14.40	13.91	13.96
12	.....	13.04	12.78	.....	13.20	.....	.....	.....	.....	14.40	13.90	13.97
13	.....	13.00	12.80	.....	13.20	.....	.....	13.86	.....	14.40	13.90	14.00
14	.....	13.03	12.81	13.03	13.22	.....	.....	13.86	.....	14.40	13.90	14.01
15	.....	13.07	12.82	13.06	13.22	.....	.....	13.87	14.19	14.40	13.88	14.07
16	.....	13.07	12.81	13.08	13.21	.....	.....	13.86	14.21	14.37	13.88	14.08
17	.....	13.07	12.79	13.09	13.21	.....	.....	13.88	.....	14.38	13.85	14.10
18	.....	13.06	12.80	13.11	13.21	.....	.....	13.90	.....	14.39	13.87	14.12
19	.....	13.02	12.77	13.03	13.18	.....	.....	13.92	.....	14.41	13.87	14.15
20	.....	12.97	12.76	12.99	13.12	.....	.....	13.94	.....	14.45	13.86	14.20
21	.....	12.93	12.76	12.97	13.04	.....	.....	13.95	.....	14.46	13.85	14.23
22	.....	13.89	12.74	12.97	13.01	.....	.....	13.97	14.27	14.46	13.85	14.23
23	.....	12.86	12.73	12.98	12.98	13.04	.....	13.98	14.27	14.47	13.86	14.23
24	.....	12.84	12.73	12.99	12.97	13.06	.....	14.00	14.28	14.48	13.81	14.26
25	.....	12.83	12.76	13.01	12.94	13.08	.....	14.04	14.29	14.47	13.80	14.26
26	.....	12.79	12.76	13.06	.....	13.11	.....	14.05	14.30	14.33	13.78	14.26
27	.....	12.78	12.78	13.06	.....	13.12	.....	14.05	14.31	14.23	13.79	14.25
28	.....	12.78	12.79	13.10	.....	13.14	13.61	14.05	14.33	14.16	13.77	14.26
29	12.96	.....	12.79	13.11	.....	13.16	13.61	14.06	14.37	14.16	13.77	14.24
30	12.94	.....	12.79	13.10	.....	13.21	13.62	14.06	14.29	14.15	13.77	14.23
31	12.97	.....	12.78	.....	.....	.....	13.64	14.07	.....	14.14	.....	14.22

Water level at end of day, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	5.70	5.90	5.95	5.56	....	5.47	5.04	4.61	4.42	4.59	4.94
2	....	5.64	5.90	5.96	5.55	....	5.44	5.03	4.59	4.41	4.62	4.93
3	....	5.62	5.93	5.92	5.56	....	5.42	5.00	4.60	4.40	4.63	4.92
4	....	5.66	5.90	5.92	5.54	....	5.41	4.97	4.59	4.39	4.64	4.92
5	....	5.65	5.88	5.89	5.53	....	5.39	4.95	4.58	4.37	4.66	4.88
6	....	5.75	5.89	5.82	5.54	....	5.38	4.92	4.57	4.35	4.68	4.86
7	....	5.75	....	....	5.53	....	5.37	4.91	4.56	4.32	4.70	4.84
8	....	5.70	....	....	5.51	....	5.36	4.89	4.54	4.31	4.73	4.84
9	....	5.67	....	....	5.49	....	5.35	4.88	4.53	4.30	4.75	4.83
10	....	5.68	5.94	....	5.48	....	5.33	4.87	....	4.30	4.78	4.81
11	....	5.69	5.94	....	5.48	....	....	4.86	....	4.30	4.79	4.74
12	....	5.66	5.92	....	5.50	....	....	....	....	4.30	4.80	4.73
13	....	5.70	5.90	....	5.50	....	....	4.84	....	4.30	4.80	4.70
14	....	5.67	5.89	5.67	5.48	....	....	4.84	....	4.30	4.80	4.69
15	....	5.63	5.88	5.64	5.48	....	....	4.83	4.51	4.30	4.82	4.63
16	....	5.63	5.89	5.62	5.49	....	....	4.84	4.49	4.33	4.82	4.62
17	....	5.63	5.91	5.61	5.49	....	....	4.82	....	4.32	4.85	4.60
18	....	5.64	5.90	5.59	5.49	....	....	4.80	....	4.31	4.83	4.58
19	....	5.68	5.93	5.67	5.52	....	....	4.78	....	4.29	4.83	4.55
20	....	5.73	5.94	5.71	5.58	....	....	4.76	....	4.25	4.84	4.50
21	....	5.77	5.94	5.73	5.66	....	....	4.75	....	4.24	4.85	4.47
22	....	5.81	5.96	5.73	5.69	....	....	4.73	4.43	4.24	4.85	4.47
23	....	5.84	5.97	5.72	5.72	5.66	....	4.72	4.43	4.23	4.84	4.47
24	....	5.86	5.97	5.71	5.73	5.64	....	4.70	4.42	4.22	4.89	4.44
25	....	5.87	5.94	5.69	5.76	5.62	....	4.66	4.41	4.23	4.90	4.44
26	....	5.91	5.94	5.64	....	5.59	....	4.65	4.40	4.37	4.92	4.44
27	....	5.92	5.92	5.64	....	5.58	....	4.65	4.39	4.43	4.91	4.45
28	....	5.92	5.91	5.60	....	5.56	5.09	4.65	4.37	4.54	4.93	4.44
29	5.74	....	5.91	5.59	....	5.54	5.09	4.64	4.33	4.54	4.93	4.46
30	5.76	....	5.91	5.60	....	5.49	5.08	4.64	4.41	4.53	4.93	4.47
31	5.73	....	5.92	....	....	....	5.06	4.63	....	4.56	....	4.48

28.5.4.8.7 (*845, p. 204; 886, p. 358; 906, p. 91; 936, p. 85; 944, p. 85). Duhernal water-supply observation well 2. Land surface is 28.88 feet above mean sea level. No measurements made in 1943.

28.4.9.3.5 (*845, p. 206; 886, p. 359; 906, p. 93; 936, p. 86; 944, p. 85). Duhernal water-supply observation well 4. Land surface is 23.11 feet above mean sea level. Extremes of observed water level, in feet, with reference to mean sea level: Highest, +11.75 Apr. 29, 1939; Lowest, -0.85 Oct. 22-23, 1943.

Water level at end of day, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	22.21	22.36	22.86	21.96	22.01	20.86	22.26	22.71	23.16	23.81	23.26	23.31
2	22.61	22.16	22.66	21.96	21.91	20.86	22.31	22.81	23.21	23.76	23.21	23.36
3	22.56	22.06	22.81	21.96	21.91	20.91	22.31	22.86	23.26	23.76	23.21	23.41
4	22.71	21.51	22.81	21.96	21.86	20.96	22.36	22.81	23.26	23.81	23.16	23.41
5	22.71	21.11	22.96	22.06	21.86	21.01	22.31	22.91	23.16	23.81	23.16	23.36
6	22.71	20.76	22.96	22.16	21.91	21.06	22.31	22.91	23.21	23.81	23.16	23.41
7	22.76	20.61	22.91	22.21	22.01	21.11	22.26	22.96	23.26	23.81	23.06	23.36
8	22.71	20.51	22.76	22.26	22.06	21.11	22.21	22.81	23.31	23.86	23.11	23.26
9	22.76	20.46	22.61	22.21	22.01	21.11	22.16	22.91	23.31	23.86	23.06	23.26
10	22.76	21.66	22.66	22.26	21.96	21.16	22.21	22.96	23.31	23.86	22.96	23.41
11	22.81	22.11	22.86	22.31	21.91	21.21	22.26	22.96	23.31	23.86	.....	23.36
12	22.81	22.26	23.01	22.36	21.91	21.21	22.26	22.91	23.16	23.86	.....	23.26
13	22.86	22.31	23.01	22.36	21.71	21.26	22.31	22.96	23.41	23.86	.....	23.26
14	22.46	22.41	23.06	22.31	21.61	21.31	22.31	22.96	23.41	23.91	.....	23.21
15	22.71	22.51	23.01	22.26	21.56	21.31	22.36	22.96	23.46	23.91	.....	23.26
16	22.76	22.51	22.96	22.26	21.51	21.31	22.41	22.96	23.51	23.86	.....	23.26
17	22.81	22.71	22.96	22.31	21.61	21.06	22.36	23.01	23.56	23.76	.....	23.21
18	.....	22.81	22.61	22.36	21.56	21.16	22.36	23.06	23.56	23.66	.....	23.21
19	.....	22.61	22.51	22.26	21.26	21.06	22.46	23.06	23.56	23.66	.....	23.06
20	22.71	21.21	22.46	22.11	21.31	21.06	22.51	23.11	23.61	23.86	23.31	23.11
21	22.71	21.01	22.36	21.96	21.21	21.06	22.61	23.11	23.61	23.91	23.36	23.21
22	22.76	22.36	22.16	21.81	21.16	21.61	22.56	23.06	23.66	23.96	23.36	23.26
23	22.71	22.61	22.11	21.81	21.11	21.86	22.56	23.11	23.66	23.96	23.36	23.36
24	22.76	22.76	22.01	21.76	20.96	21.96	22.61	23.16	23.71	23.61	23.31	22.46
25	22.81	22.81	22.06	21.76	20.91	22.11	22.61	23.21	23.71	23.81	23.31	21.71
26	22.81	22.86	22.06	21.71	20.81	22.16	22.36	23.21	23.76	23.81	23.36	21.36
27	22.71	22.91	22.06	21.81	20.76	22.21	22.51	23.26	23.76	23.76	23.36	22.41
28	22.65	22.91	22.01	21.86	21.11	22.21	22.61	23.21	23.76	23.61	23.26	22.61
29	22.71	.....	21.91	21.86	20.91	22.21	22.66	23.11	23.81	23.46	23.21	22.61
30	22.81	.....	21.96	21.86	20.86	22.21	22.71	23.11	23.81	23.46	23.26	22.71
31	22.81	.....	21.91	.....	20.86	.....	22.71	23.11	.....	23.31	.....	22.81

Water level at end of day, in feet with reference to mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	+0.90	0.75	+0.25	+1.15	+1.10	+2.25	+0.85	+0.40	-0.05	-0.70	-0.15	-0.20
2	+.50	+.95	+.45	+1.15	+1.20	+2.25	+.80	+.30	-.10	-.65	-.10	-.25
3	+.55	+1.05	+.30	+1.15	+1.20	+2.20	+.80	+.25	-.15	-.65	-.10	-.30
4	+.40	+1.60	+.30	+1.15	+1.25	+2.15	+.75	+.30	-.15	-.70	-.05	-.30
5	+.40	+2.00	+.15	+1.05	+1.25	+2.10	+.80	+.20	-.05	-.70	-.05	-.25
6	+.40	+2.35	+.15	+.95	+1.20	+2.05	+.80	+.20	-.10	-.70	-.05	-.30
7	+.35	+2.50	+.20	+.90	+1.10	+2.00	+.85	+.15	-.15	-.70	+.05	-.25
8	+.40	+2.60	+.35	+.85	+1.05	+2.00	+.90	+.30	-.20	-.75	.0	-.15
9	+.35	+2.65	+.50	+.90	+1.10	+2.00	+.95	+.20	-.20	-.75	+.05	-.15
10	+.35	+1.45	+.45	+.85	+1.15	+1.95	+.90	+.15	-.20	-.75	+.15	-.30
11	+.30	+1.00	+.25	+.80	+1.20	+1.90	+.85	+.15	-.20	-.75	....	-.25
12	+.30	+.85	+.10	+.75	+1.20	+1.90	+.85	+.20	-.05	-.75	....	-.15
13	+.25	+.80	+.10	+.75	+1.40	+1.85	+.80	+.15	-.30	-.75	....	-.15
14	+.65	+.70	+.05	+.80	+1.50	+1.80	+.80	+.15	-.30	-.80	....	-.10
15	+.40	+.60	+.10	+.85	+1.55	+1.80	+.75	+.15	-.35	-.80	....	-.15
16	+.35	+.60	+.15	+.85	+1.60	+1.80	+.70	+.15	-.40	-.75	....	-.15
17	+.30	+.40	+.15	+.80	+1.50	+2.05	+.75	+.10	-.45	-.65	....	-.10
18	....	+.30	+.50	+.75	+1.55	+1.95	+.75	+.05	-.45	-.55	....	-.10
19	....	+1.50	+.60	+.85	+1.85	+2.05	+.65	+.05	-.45	-.55	....	-.05
20	+.40	+1.90	+.65	+1.00	+1.80	+2.05	+.60	.0	-.50	-.75	-.20	.0
21	+.40	+2.10	+.75	+1.15	+1.90	+2.05	+.50	.0	-.50	-.80	-.25	-.10

28.4.9.3.5. Duhernal water-supply observation well 4--Continued.

Water level at end of day, in feet with reference to mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
22	+0.35	+0.75	+0.95	+1.30	+1.95	+1.50	+0.55	+0.05	-0.55	-0.85	-0.25	-0.15
23	+.40	+.50	+1.00	+1.30	+2.00	+1.25	+.55	.0	-.55	-.85	-.25	-.25
24	+.35	+.35	+1.10	+1.35	+2.15	+1.15	+.50	-.05	-.60	-.50	-.20	.65
25	+.30	+.30	+1.05	+1.35	+2.20	+1.00	+.50	-.10	-.60	-.70	-.20	1.40
26	+.30	+.25	+1.05	+1.40	+2.30	+.95	+.75	-.10	-.65	-.70	-.25	1.75
27	+.40	+.20	+1.05	+1.30	+2.35	+.90	+.60	-.15	-.65	-.65	-.25	.70
28	+.45	+.20	+1.10	+1.25	+2.00	+.90	+.50	-.10	-.65	-.50	-.15	.60
29	+.40	....	+1.20	+1.25	+2.20	+.90	+.45	.0	-.70	-.35	-.10	.50
30	+.30	....	+1.15	+1.25	+2.25	+.90	+.40	.0	-.70	-.35	-.15	.40
31	+.30	....	+1.20	....	+2.25	....	+.40	.0	....	-.20	....	.30

28.5.7.1.5 (*886, p. 359; 906, p. 93; 936, p. 86; 944, p. 86). Duhernal water-supply observation well 5. Land surface is 21.0[illegible] feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 14.94 Apr. 7 and 8, 1939; Lowest, 6.17 Oct. 14, 1943.

Water level at end of day, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	Sept.	Oct.	Nov.	Dec.
1	10.19	11.68	11.10	10.92	11.32	.....	14.63	14.10	13.34
2	10.22	11.72	11.07	10.97	11.20	.....	14.62	14.03	13.42
3	10.22	11.72	11.00	11.02	11.27	.....	14.63	13.93	13.49
4	10.32	11.72	10.94	10.92	11.28	.....	14.65	13.88	13.52
5	10.35	11.72	10.87	11.06	11.28	.....	14.68	13.84	13.57
6	10.38	11.50	11.01	11.15	11.32	.....	14.71	13.81	13.56
7	10.46	11.32	10.57	11.15	11.38	.....	14.74	13.76	13.62
8	10.51	11.26	10.55	11.18	11.44	.....	14.76	13.69	13.62
9	10.59	11.19	10.55	11.12	11.47	.....	14.79	13.61	13.67
10	10.66	11.12	10.55	11.22	11.49	14.21	14.81	13.55	13.66
11	10.72	10.90	10.58	11.26	11.48	14.23	14.83	13.50	13.73
12	10.83	10.74	10.65	11.27	11.44	14.26	14.85	13.42	.....
13	10.89	10.65	10.72	11.29	11.32	14.28	14.86	14.41	.....
14	10.89	10.67	10.75	11.35	11.26	14.30	14.91	13.38	.....
15	11.01	10.73	10.76	11.37	11.25	14.30	14.89	13.33	13.85
16	11.10	10.76	10.74	11.38	11.22	14.32	14.80	13.32	.....
17	11.16	10.83	10.77	11.46	11.24	14.36	14.80	13.32	.....
18	11.18	10.85	10.75	11.47	11.24	14.36	14.80	13.32	.....
19	11.17	10.90	10.72	11.44	.....	14.40	14.81	13.31	.....
20	11.12	10.92	10.77	11.42	.....	14.42	14.84	13.31	.....
21	11.18	10.91	10.77	11.21	.....	14.44	14.85	13.31	.....
22	11.23	10.90	10.78	11.17	.....	14.47	14.86	13.32	.....
23	11.28	10.82	10.81	11.13	.....	14.50	14.88	13.33	.....
24	11.32	10.86	10.78	11.13	.....	14.52	14.83	13.38	.....
25	11.38	10.90	10.83	11.09	.....	14.55	14.87	13.38	.....
26	11.43	10.89	10.83	11.15	.....	14.57	14.76	13.33	.....
27	11.40	11.00	10.86	11.10	.....	14.60	14.61	13.29	.....
28	11.50	11.02	10.93	11.21	.....	14.63	14.41	13.27	.....
29	11.58	.....	10.95	11.23	.....	14.63	14.30	13.25	.....
30	11.60	.....	10.93	11.21	.....	14.64	14.24	13.31	.....
31	11.63	.....	10.96	.....	.....	.....	14.16	.....	.....

Water level at end of day, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	Sept.	Oct.	Nov.	Dec.
1	10.89	9.40	9.98	10.14	9.76	....	6.45	6.98	7.74
2	10.86	9.36	10.01	10.11	9.88	....	6.46	7.05	7.66
3	10.86	9.36	10.08	10.06	9.81	....	6.45	7.15	7.59
4	10.76	9.36	10.14	10.16	9.80	....	6.43	7.20	7.56
5	10.73	9.36	10.21	10.02	9.80	....	6.40	7.24	7.51
6	10.70	9.58	10.07	9.93	9.76	....	6.37	7.27	7.52
7	10.62	9.76	10.51	9.93	9.70	....	6.34	7.32	7.46
8	10.57	9.82	10.53	9.90	9.64	....	6.32	7.39	7.46
9	10.49	9.89	10.53	9.96	9.61	....	6.29	7.47	7.41
10	10.42	9.96	10.53	9.86	9.59	6.87	6.27	7.53	7.42

28.5.7.1.5. Duhernal water-supply observation well 5--Continued.

Water level at end of day, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	Sept.	Oct.	Nov.	Dec.
11	10.36	10.18	10.50	9.82	9.60	6.85	6.25	7.58	7.35
12	10.25	10.34	10.43	9.81	9.64	6.82	6.23	7.66	....
13	10.19	10.43	10.36	9.79	9.76	6.80	6.21	6.67	....
14	10.19	10.41	10.33	9.73	9.82	6.78	6.17	7.70	....
15	10.07	10.35	10.32	9.71	9.83	6.78	6.19	7.75	7.23
16	9.98	10.32	10.34	9.70	9.86	6.76	6.28	7.76	....
17	9.92	10.25	10.31	9.62	9.84	6.72	6.28	7.76	....
18	9.90	10.23	10.33	9.61	9.84	6.72	6.28	7.76	....
19	9.91	10.18	10.36	9.64	....	6.68	6.27	7.77	....
20	9.96	10.16	10.31	9.66	....	6.66	6.24	7.77	....
21	9.90	10.17	10.31	9.87	....	6.64	6.23	7.77	....
22	9.85	10.18	10.30	9.91	....	6.61	6.22	7.76	....
23	9.80	10.26	10.27	9.95	....	6.58	6.20	7.75	....
24	9.76	10.22	10.29	9.95	....	6.56	6.25	7.70	....
25	9.70	10.18	10.25	9.99	....	6.53	6.21	7.70	....
26	9.65	10.19	10.25	9.93	....	6.51	6.32	7.75	....
27	9.60	10.08	10.22	9.98	....	6.48	6.47	7.79	....
28	9.58	10.06	10.15	9.87	....	6.45	6.67	7.81	....
29	9.50	.....	10.13	9.85	....	6.45	6.78	7.83	....
30	9.48	.....	10.15	9.87	....	6.44	6.84	7.77	....
31	9.45	.....	10.12	....	....	....	6.92	....	....

28.4.9.5.1 (*886, p. 360; 906, p. 94, 936, p. 87; 944, p. 87). Duhernal water-supply observation well 9. Land surface is 15.00 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 14.85 June 1, 1940; Lowest, 8.45 Sept. 29 and Oct. 13 and 14, 1943.

Water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	Aug.	Sept.	Oct.	Nov.	Dec.
1	3.85	4.90	4.55	4.60	4.65	4.35	....	6.35	6.30	....	....
2	3.80	4.85	4.55	4.65	4.75	.....	....	6.35	....	....	....
3	3.80	4.85	4.55	4.65	4.85	....	....	....	....	4.45	....
4	3.90	4.85	4.50	4.70	4.85	....	....	....	....	4.50	....
5	3.95	4.80	4.55	4.80	4.95	....	....	....	....	4.40	....
6	4.00	4.40	4.10	....	....	....	....	....	....	....	....
7	4.10	4.25	3.70	4.80	....	....	....	....	....	....	....
8	4.20	4.25	3.95	4.85	....	....	....	6.35	....	....	....
9	4.30	4.35	....	4.85	....	....	....	6.35	....	....	....
10	4.35	4.35	....	4.90	....	....	....	6.35	....	....	....
11	4.45	4.15	....	4.90	....	....	....	6.35	....	....	....
12	4.55	4.00	....	4.90	4.70	....	....	6.35	....	....	....
13	4.60	4.10	....	4.85	4.55	....	....	6.30	6.55	....	....
14	4.60	4.20	....	4.80	4.55	....	....	6.30	6.55	....	....
15	4.70	....	....	4.80	4.55	....	....	6.35	6.25	....	5.25
16	4.70	....	....	4.85	4.55	....	....	6.35	6.05	....	5.25
17	4.70	4.40	....	4.90	4.45	....	....	6.40	6.00	....	5.30
18	4.70	4.40	....	4.90	4.55	....	....	6.40	5.95	....	5.30
19	4.55	4.50	....	4.75	4.65	....	....	6.40	5.95	....	5.30
20	4.55	4.55	....	4.55	4.05	....	....	6.40	6.00	....	5.30
21	4.55	4.50	....	4.35	4.05	....	....	6.40	6.00	....	5.25
22	4.60	4.50	....	4.40	4.05	....	....	....	6.05	....	5.30
23	4.70	4.55	....	4.45	4.15	....	....	....	6.10	....	5.30
24	4.75	4.60	....	4.50	4.25	....	....	....	6.05	....	5.35
25	4.80	4.60	....	4.55	4.25	....	6.30	....	6.10	....	5.35
26	4.80	4.55	....	4.65	4.20	....	6.30	....	5.55	....	5.20
27	4.85	4.55	....	4.50	4.15	....	6.20	....	....	....	4.95
28	4.85	4.55	....	4.65	3.95	....	....	....	....	....	4.90
29	4.90	....	....	4.70	3.95	....	....	6.55	....	....	4.85
30	4.90	....	....	4.70	4.20	....	....	6.50	....	....	4.90
31	4.90	....	4.55	....	4.35	....	....	....	....	....	4.90

28.4.9.5.1. Duhernal water-supply observation well 9--Continued.

Water level at the end of day, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	Aug.	Sept.	Oct.	Nov.	Dec.
1	11.15	10.10	10.45	10.40	10.35	10.65	....	....	8.70	8.70	....
2	11.20	10.15	10.45	10.35	10.25	.....	....	8.65	....	.....	....
3	11.20	.....	10.45	10.35	10.15	.....	....	....	....	10.55	....
4	11.10	10.15	10.50	10.30	10.15	.....	....	....	....	10.50	....
5	11.05	10.20	10.45	10.20	10.05	.....	....	....	....	10.60	....
6	11.00	10.60	10.90	.....	.....	.....	....	....	....	.....	....
7	10.90	10.75	11.30	10.20	.....	.....	....	....	....	.....	....
8	10.80	10.75	11.05	10.15	.....	.....	....	8.65	....	.....	....
9	10.70	10.65	.....	10.15	.....	.....	....	8.65	....	.....	....
10	10.65	10.65	.....	10.10	.....	.....	....	8.65	....	.....	....
11	10.55	10.85	.....	10.10	.....	.....	....	8.65	....	.....	....
12	10.45	11.00	.....	10.10	10.30	.....	....	8.65	....	.....	....
13	10.40	10.90	.....	10.15	10.45	.....	....	8.70	8.45	.....	....
14	10.40	10.80	.....	10.20	10.45	.....	....	8.70	8.45	.....	....
15	10.30	.....	.....	10.20	10.45	.....	....	8.65	8.75	.....	9.75
16	10.30	.....	.....	10.15	10.45	.....	....	8.65	8.95	.....	9.75
17	10.30	10.60	.....	10.10	10.55	.....	....	8.60	9.00	.....	9.70
18	10.30	10.60	.....	10.10	10.45	.....	....	8.60	9.05	.....	9.70
19	10.45	10.50	.....	10.25	10.35	.....	....	8.60	9.05	.....	9.70
20	10.45	10.45	.....	10.45	10.95	.....	....	8.60	9.00	.....	9.70
21	10.45	10.50	.....	10.65	10.95	.....	....	8.60	9.00	.....	9.75
22	10.40	10.50	.....	10.60	10.95	.....	....	....	8.95	.....	9.70
23	10.30	10.45	.....	10.55	10.85	.....	....	....	8.90	.....	9.70
24	10.25	10.40	.....	10.50	10.75	.....	....	....	8.95	.....	9.65
25	10.20	10.40	.....	10.45	10.75	.....	8.70	....	8.90	.....	9.65
26	10.20	10.45	.....	10.35	10.80	.....	8.70	....	9.45	.....	9.80
27	10.15	10.45	.....	10.50	10.85	.....	8.80	....	....	.....	10.05
28	10.15	10.45	.....	10.35	11.05	.....	....	....	....	.....	10.10
29	10.10	.....	.....	10.30	11.05	.....	....	8.45	....	.....	10.15
30	10.10	.....	.....	10.30	10.80	.....	....	8.50	....	.....	10.10
31	10.10	.....	10.45	.....	10.65	.....	....	....	....	.....	10.10

28.4.9.8.2 (*845, p. 206; 886, p. 361; 906, p. 94; 936, p. 88, 944, p.887). Duhernal water-supply observation well 10. Land surface is 19.94 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 21.98 Feb. 8, 1941; Lowest, 12.56 Sept. 28, and Oct. 1, 1943.

Water level at end of day, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.06	5.54	5.23	4.97	5.33	4.86	5.67	6.32	7.05	7.13	....	....
2	5.15	5.56	5.19	5.04	5.28	4.86	....	6.37	7.11	....	....	....
3	5.14	5.56	5.21	5.10	5.23	4.93	5.73	6.39	7.13	7.14	....	....
4	5.18	5.56	5.24	5.11	5.30	5.00	5.75	....	7.12	7.17	....	....
5	5.21	5.57	3.49	5.11	5.34	5.09	5.58	....	7.12	7.20	....	....
6	5.22	5.30	2.57	5.22	5.28	5.14	5.70	6.42	7.08	7.20	5.96	....
7	5.23	5.21	2.22	5.23	5.33	....	5.56	6.46	7.12	7.20	5.96	....
8	5.23	5.25	4.15	5.22	5.37	....	....	....	....	....	....	....
9	5.25	5.28	4.58	5.22	5.41	....	5.58	....	7.15	7.23	....	....
10	5.27	....	4.61	5.25	5.39	....	5.65	....	7.19	....	....	....
11	5.31	3.30	4.71	5.28	5.38	5.17	5.69	....	7.21	....	5.73	....
12	5.35	2.80	4.79	5.26	....	5.21	5.72	6.60	7.21	....	5.78	....
13	5.37	4.21	4.82	5.22	....	5.24	5.76	6.61	7.22	....	5.54	....
14	5.21	4.78	4.86	5.27	....	5.31	5.79	6.65	7.22	7.33	5.78	....
15	5.38	4.94	4.81	5.31	....	5.31	5.84	6.70	....	6.93	....	....
16	5.41	4.99	4.73	5.34	....	5.38	5.90	....	7.25	6.93	5.83	....
17	5.47	5.01	4.74	5.35	....	5.40	5.89	6.81	....	6.93	5.88	....
18	5.44	5.10	4.62	5.36	....	5.31	5.93	....	7.29	6.97	....	....
19	5.26	5.16	4.56	5.07	....	5.32	5.96	6.83	7.29	....	....	....
20	....	5.18	4.60	5.05	....	5.36	6.03	6.86	7.26	....	5.93	....
21	5.30	5.18	....	5.03	....	5.16	6.05	6.87	7.30	....	5.95	....
22	5.32	5.16	....	5.05	....	5.47	....	....	7.32	....	....	....
23	5.33	5.14	....	5.05	....	5.61	6.10	6.91	7.34	7.05	....	....
24	5.41	5.13	4.67	5.06	....	....	6.13	6.94	....	7.05	....	5.92

28.4.9.8.2. Duhernal water-supply observation well 10--Continued.

Water level at end of day, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
25	5.44	5.17	4.70	5.07	....	5.65	6.14	7.01	....	....	....	5.90
26	5.49	5.15	4.73	5.16	....	5.64	6.12	7.06	....	....	6.02	5.91
27	5.50	5.20	4.80	5.22	4.68	....	6.68	6.94	....	....	....	6.04
28	5.43	5.22	4.89	5.23	4.85	....	6.23	....	7.38	....	....	6.05
29	5.54	....	4.92	5.26	4.90	....	6.19	....	....	....	....	....
30	5.54	....	4.90	5.20	4.90	....	6.18	6.97	7.38	....	....	....
31	5.54	....	4.95	....	4.87	....	6.30	7.03	....	....	....	....

Water level at end of day, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	14.88	14.41	14.71	14.97	14.61	15.08	14.27	13.62	12.89	12.81	.....	.....
2	14.79	14.38	14.75	14.90	14.66	15.08	.....	13.57	12.83	.....	.....	.....
3	14.80	14.38	14.73	14.84	14.71	15.01	14.21	13.55	12.82	12.80	.....	.....
4	14.76	14.38	14.70	14.83	14.64	14.94	14.19	.....	12.82	12.77	.....	.....
5	14.73	14.37	16.45	14.83	14.60	14.85	14.36	.....	12.82	12.74	.....	.....
6	14.72	14.64	17.37	14.72	14.66	14.81	14.24	13.52	12.86	12.74	13.98	.....
7	14.71	14.73	17.72	14.71	14.61	.....	14.38	13.48	12.82	12.74	13.98	.....
8	14.71	14.69	15.79	14.72	14.57	.....	.....	.....	.....	.....	.....	.....
9	14.69	14.66	15.36	14.72	14.53	.....	14.36	.....	12.79	12.69	.....	.....
10	14.67	.....	15.33	14.69	14.55	.....	14.29	.....	12.75	.....	.....	.....
11	14.63	16.64	15.23	14.66	14.56	14.77	14.25	.....	12.73	.....	14.17	.....
12	14.59	17.14	15.15	14.72	.....	14.73	14.22	13.34	12.73	.....	14.16	.....
13	14.57	15.73	15.12	14.72	.....	14.70	14.18	13.33	12.72	.....	14.60	.....
14	14.73	15.16	15.08	14.67	.....	14.63	14.15	13.29	12.72	12.55	14.16	.....
15	14.56	15.00	15.13	14.63	.....	14.63	14.10	13.24	.....	12.95	.....	.....
16	14.53	14.95	15.21	14.60	.....	14.56	14.04	.....	12.69	12.96	14.11	.....
17	14.47	14.93	15.20	14.59	.....	14.54	14.05	13.19	.....	12.98	14.06	.....
18	14.50	14.84	15.32	14.58	.....	14.63	14.01	.....	12.65	12.98	.....	.....
19	14.68	14.78	15.38	14.77	.....	14.62	13.95	13.11	12.65	.....	.....	.....
20	.....	14.76	15.34	14.89	.....	14.58	13.91	13.08	12.65	.....	14.01	.....
21	14.64	14.76	.....	14.91	.....	14.78	13.89	13.07	12.64	.....	13.99	.....
22	14.62	14.78	.....	14.89	.....	14.47	.....	.....	12.62	.....	.....	.....
23	14.61	14.80	.....	14.89	.....	14.33	13.84	13.03	12.60	12.89	.....	.....
24	14.55	14.81	15.27	14.88	.....	.....	13.81	13.00	.....	12.89	.....	14.02
25	14.50	14.77	15.24	14.87	.....	14.29	13.80	12.93	.....	.....	.....	14.04
26	14.45	14.79	15.21	14.78	.....	14.30	13.82	12.88	.....	.....	13.92	14.03
27	14.44	14.74	15.14	14.72	15.26	.....	13.76	13.00	.....	.....	.....	13.90
28	14.51	14.78	15.05	14.71	15.09	.....	13.71	.....	12.56	.....	.....	13.89
29	14.40	.....	15.02	14.68	15.04	.....	13.75	.....	.....	.....	.....	.....
30	14.40	.....	15.04	14.74	15.04	.....	13.76	12.97	12.56	.....	.....	.....
31	14.40	.....	14.99	.....	15.07	.....	13.64	12.91	.....	.....	.....	.....

28.4.9.3.1 (*886, p. 361; 906, p. 95; 936, p. 88; 944, p. 88). Duhernal water-supply observation well 11. Land surface is 35.42 feet above mean sea level. Extremes of observed water level, in feet, with reference to mean sea level. Highest, +14.23 June 1, 1940; Lowest -1.90 Jan. 22, 23, and 24, 1943.

Water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	36.7	36.9	36.1	35.5	36.1	35.4	35.9	36.3	36.2	36.3	36.2	36.4
2	36.8	36.9	36.9	35.5	36.1	35.4	35.9	36.3	36.3	36.3	36.2	36.4
3	36.8	37.0	35.9	35.6	35.9	35.4	35.9	36.3	36.3	36.4	36.1	36.4
4	36.9	37.0	35.9	35.7	35.8	35.4	35.9	36.3	36.3	36.4	36.2	36.4
5	36.9	37.0	36.0	35.8	35.8	35.5	35.9	36.3	36.2	36.4	36.3	36.5
6	37.0	36.9	35.8	35.9	35.9	35.5	36.0	36.4	36.2	36.3	36.3	36.5
7	37.0	36.9	35.8	36.0	35.9	35.5	35.9	36.4	36.2	36.3	36.3	36.5
8	37.0	36.9	35.6	36.0	35.9	35.4	35.9	36.3	36.2	36.3	36.4	36.4
9	37.1	36.9	35.7	36.1	35.7	35.4	36.0	36.3	35.7	36.5	36.3	36.4
10	37.1	36.4	35.6	36.2	35.6	35.4	36.0	36.3	35.8	36.6	36.3	36.4
11	37.1	36.4	35.5	36.2	35.7	35.5	36.0	36.2	36.1	36.5	36.3	36.4
12	37.1	36.4	35.6	36.2	35.6	35.6	36.0	36.2	36.0	36.6	36.3	36.4

28.4.9.3.1. Duhernal water-supply observation well 11--Continued.

Water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
13	37.2	36.4	35.5	36.2	35.6	35.6	36.1	36.2	36.4	36.6	36.4	36.4
14	37.2	36.5	35.6	36.2	35.6	35.5	36.2	36.1	36.4	36.7	36.4	36.5
15	37.2	36.5	35.4	36.2	35.7	35.6	36.1	36.1	36.2	36.7	36.4	36.5
16	37.2	36.6	35.5	36.2	35.7	35.5	36.1	36.1	36.4	36.6	36.5	36.6
17	37.2	36.6	35.4	36.2	35.7	35.4	36.1	36.2	36.6	36.6	36.4	36.6
18	37.2	36.6	35.5	36.2	35.8	35.2	36.1	36.3	36.6	36.6	36.3	36.7
19	37.1	36.6	35.3	36.1	35.7	35.3	36.2	36.3	36.6	36.6	36.3	36.4
20	37.2	36.6	35.5	36.0	....	35.4	36.2	36.3	36.6	36.7	36.3	36.6
21	37.2	36.6	....	36.0	....	35.4	36.3	36.3	36.4	36.7	36.3	36.6
22	37.3	36.6	....	31.8	....	35.5	36.3	36.3	36.3	36.7	36.4	36.8
23	37.3	36.5	....	35.6	....	35.6	36.3	36.3	36.4	36.7	36.3	36.8
24	37.3	36.4	35.8	35.8	....	35.6	36.3	36.3	36.4	36.8	36.4	36.7
25	37.2	36.3	36.0	35.8	....	35.6	36.3	36.3	36.4	36.8	36.4	36.6
26	37.2	36.3	35.8	35.9	....	35.7	36.3	36.3	36.4	36.6	36.4	36.6
27	37.2	36.3	35.7	35.9	35.4	35.6	36.3	36.3	36.4	36.6	36.5	36.4
28	35.4	36.2	35.6	35.9	35.4	35.7	36.3	36.3	36.2	36.4	36.4	36.4
29	36.5	....	35.6	36.0	35.4	35.6	36.2	36.2	36.4	36.4	36.4	36.6
30	36.7	....	35.6	36.1	35.4	35.7	36.3	36.1	36.4	36.4	36.3	36.5
31	36.8	....	35.5	....	35.4	....	36.1	36.2	....	36.3	....	36.7

Water level at end of day, in feet with reference to mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	-1.3	-1.5	-0.7	-0.1	-0.7	0.0	-0.5	-0.9	-0.8	-0.9	-0.8	-1.0
2	-1.4	-1.5	-.5	-.1	-.7	.0	-.5	-.9	-.9	-.9	-.8	-1.0
3	-1.4	-1.6	-.5	-.2	-.5	.0	-.5	-.9	-.9	-1.0	-.7	-1.0
4	-1.5	-1.6	-.5	-.3	-.4	.0	-.5	-.9	-.9	-1.0	-.8	-1.0
5	-1.5	-1.6	-.6	-.4	-.4	-.1	-.5	-.9	-.8	-1.0	-.9	-1.1
6	-1.6	-1.5	-.4	-.5	-.5	-.1	-.6	-1.0	-.8	-.9	-.9	-1.1
7	-1.6	-1.5	-.4	-.6	-.5	-.1	-.5	-1.0	-.8	-.9	-.9	-1.1
8	-1.6	-1.5	-.2	-.6	-.5	.0	-.5	-.9	-.8	-.9	-1.0	-1.0
9	-1.7	-1.5	-.3	-.7	-.3	.0	-.6	-.9	-.3	-1.1	-.9	-1.0
10	-1.7	-1.0	-.2	-.8	-.2	.0	-.6	-.9	-.4	-1.2	-.9	-1.0
11	-1.7	-1.0	-.1	-.8	-.3	-.1	-.6	-.8	-.7	-1.1	-.9	-1.0
12	-1.7	-1.0	-.2	-.8	-.2	-.2	-.6	....	-.6	-1.2	-.9	-1.0
13	-1.8	-1.0	-.1	-.8	-.2	-.2	-.7	-.8	-1.0	-1.2	-1.0	-1.0
14	-1.8	-1.1	-.2	-.8	-.2	-.1	-.8	-.7	-1.0	-1.3	-1.0	-1.1
15	-1.8	-1.1	.0	-.8	-.3	-.2	-.7	-.7	-.8	-1.3	-1.0	-1.1
16	-1.8	-1.2	-.1	-.8	-.3	-.1	-.7	-.7	-1.0	-1.2	-1.1	-1.2
17	-1.8	-1.2	.0	-.8	-.3	.0	-.7	-.8	-1.2	-1.2	-1.0	-1.2
18	-1.8	-1.2	-.1	-.8	-.4	+.2	-.7	-.9	-1.2	-1.2	-.9	-1.3
19	-1.7	-1.2	-.1	-.7	-.3	+.1	-.8	-.9	-1.2	-1.2	-.9	-1.0
20	-1.8	-1.2	-.1	-.6	....	.0	-.8	-.9	-1.2	-1.3	-.9	-1.2
21	-1.8	-1.2	....	-.6	....	.0	-.9	-.9	-1.0	-1.3	-.9	-1.2
22	-1.9	-1.2	....	+3.6	....	-.1	-.9	-.9	-.9	-1.3	-1.0	-1.4
23	-1.9	-1.1	....	-.2	....	-.2	-.9	-.9	-1.0	-1.3	-.9	-1.4
24	-1.9	-1.0	-.4	-.4	....	-.2	-.9	-.9	-1.0	-1.4	-1.0	-1.3
25	-1.8	-.9	-.6	-.4	....	-.2	-.9	-.9	-1.0	-1.4	-1.0	-1.2
26	-1.8	-.9	-.4	-.5	....	-.3	-.9	-.9	-1.0	-1.2	-1.0	-1.2
27	-1.8	-.9	-.3	-.5	.0	-.2	-.9	-.9	-1.0	-1.2	-1.1	-1.0
28	.0	-.8	-.2	-.5	.0	-.3	-.9	-.9	-.8	-1.0	-1.0	-1.0
29	-1.1	....	-.2	-.6	.0	-.2	-.8	-.8	-1.0	-1.0	-1.0	-1.2
30	-1.3	....	-.2	-.7	.0	-.3	-.9	-.7	-1.0	-1.0	-.9	-1.1
31	-1.4	....	-.1	....	.0	....	-.7	-.8	....	-.9	....	-1.3

28.4.4.2.1 (*845, p. 207; 886, p. 364; 906, p. 98; 936, p. 89; 944, p. 89). Robert D. Fischer test well. Measuring point is 2 feet above the land surface. Extremes of observed water level, in feet below land surface: Highest, 10.58 Apr. 26 and 27, 1939; Lowest, 16.29 Jan. 30, 1942.

28.4.4.2.1. Robert D. Fischer test well--Continued.

Water level at end of day, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	June	July	Aug.	Sept.	Nov.	Dec.
1	14.95	.....	14.06	13.66	.....	13.70	14.14	14.72	.....	15.92
2	14.90	.....	14.04	13.66	.....	13.72	14.16	14.74	.....	15.92
3	14.84	.....	14.04	13.67	.....	13.72	14.18	14.76	.....	15.93
4	14.79	.....	14.05	13.64	.....	13.72	14.19	14.78	.....	15.94
5	14.75	.....	14.04	13.64	.....	13.72	14.20	.....	.....	15.94
6	14.72	.....	14.00	13.65	....	13.75	14.22	.....	.....	15.94
7	14.68	.....	13.98	13.64	.....	13.76	14.24	.....	.....	15.94
8	14.64	.....	14.00	13.62	.....	13.77	14.25	.....	.....	15.95
9	14.61	.....	13.98	.....	.....	13.78	14.28	.....	.....	15.96
10	14.58	.....	13.96	.....	.....	13.82	14.28	.....	.....	15.96
11	14.54	.....	13.94	.....	13.53	13.84	14.31	.....	.....	15.96
12	14.52	.....	13.92	.....	13.53	13.85	14.32	.....	.....	15.97
13	14.50	.....	13.92	.....	13.52	13.86	14.34	.....	.....	15.98
14	14.46	.....	13.92	.....	13.53	13.87	14.36	.....	.....	15.98
15	14.44	.....	13.90	.....	13.52	13.88	14.38	.....	.....	16.00
16	14.42	.....	13.88	.....	13.52	13.90	14.40	.....	.....	16.00
17	14.41	.....	13.87	.....	13.52	13.92	14.42	.....	.....	16.00
18	14.39	.....	13.86	.....	13.52	13.93	14.45	.....	.....	16.01
19	14.39	.....	13.84	.....	13.53	13.94	14.47	.....	15.88	16.02
20	14.38	.....	13.83	.....	13.54	13.96	14.49	.....	15.88	16.02
21	14.36	.....	13.82	.....	13.54	13.97	14.51	.....	15.89	16.02
22	14.34	.....	13.80	.....	13.54	13.98	14.52	.....	15.89	16.04
23	14.33	.....	13.80	.....	13.58	14.00	14.55	.....	15.90	16.04
24	14.32	.....	13.78	.....	13.59	14.02	14.56	.....	15.90	16.06
25	14.32	14.09	13.76	.....	13.60	14.04	14.58	.....	15.90	16.06
26	.....	14.06	13.74	.....	13.60	14.05	14.60	.....	15.90	16.05
27	.....	14.06	13.72	.....	13.62	14.06	14.62	.....	15.90	16.06
28	.....	14.05	13.72	.....	13.62	14.08	14.64	.....	15.91	16.06
29	.....	.....	13.72	.....	13.64	14.08	14.66	.....	15.92	16.08
30	.....	.....	13.70	.....	13.67	14.11	14.68	.....	15.92	16.08
31	.....	.....	13.68	.....	.....	14.13	14.70	.....	.....	16.08

29.11.1.2.3 (*777, p. 100; *817, p. 182; 840, p. 246; *845, p. 208; 886, p. 366; 906, p. 100; 936, p. 89; 944, p. 89). Joseph Morrell well. Land surface is 74.72 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 75.08 Mar. 28, 1932; Lowest, 68.05 Oct. 6, 1932. Not affected by pumping.

Water level at end of day, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0.56	0.61	0.98	1.14	1.20	2.29	....	3.90	5.39	6.02	1.57	1.53
2	.64	.86	1.02	1.14	1.24	2.43	....	3.94	5.44	6.03	1.44	1.56
3	.68	.84	1.09	1.22	1.24	2.58	3.54	3.99	5.47	6.03	.85	1.58
4	.76	.81	1.14	1.21	1.28	2.72	3.58	4.04	5.51	6.03	1.03	1.59
5	.84	.49	1.14	1.24	1.32	2.85	3.49	4.09	5.54	6.03	1.14	1.61
6	.80	.21	.23	1.29	1.33	2.94	3.26	4.14	5.58	6.03	1.25	1.57
7	.96	.38	.50	1.31	1.37	2.90	2.60	4.19	5.61	6.03	1.32	1.55
8	1.00	.47	.61	1.28	1.40	2.93	2.36	4.24	5.62	6.04	1.33	1.55
9	1.06	.54	.68	1.30	1.41	2.90	2.33	4.30	5.65	6.05	.78	1.56
10	1.10	.57	.83	1.33	1.45	2.96	2.40	4.35	5.67	6.06	.81	1.53
11	1.14	.27	.61	1.35	1.45	3.06	2.45	4.40	5.70	6.06	1.02	1.60
12	1.16	.49	.73	.95	1.38	3.12	2.51	4.45	5.72	6.07	1.08	1.58
13	1.19	.41	.77	.90	1.65	3.17	2.60	4.49	5.75	6.07	1.18	1.65
14	1.21	.61	.63	.96	1.63	3.29	2.69	4.54	5.77	6.08	1.26	1.68
15	1.21	....	.71	....	1.76	3.38	2.84	4.59	5.80	6.07	1.26	1.71
16	1.14	....	.65	....	1.88	3.51	3.00	4.64	5.83	6.06	1.33	1.73
17	1.09	....	.57	....	2.00	3.51	3.14	4.69	5.85	6.02	1.40	1.74
18	.78	....	.66	....	2.13	3.26	3.25	4.74	5.88	5.97	1.42	1.75
19	.59	....	.63	....	1.95	3.44	3.39	4.79	5.90	5.92	1.43	1.74
20	.70	....	.73	....	1.40	3.58	3.50	4.85	5.91	5.86	1.47	1.75
21	.80	....	.80	.44	1.43	3.68	3.59	4.90	5.93	5.80	1.48	1.74
22	.91	....	.85	.54	1.66	3.76	3.62	....	5.94	5.74	1.51	1.76
23	1.08	....	.92	.64	1.81	3.89	3.63	5.00	5.94	5.68	1.57	1.81
24	1.03	....	.95	.74	1.95	3.97	3.65	5.05	5.96	5.61	1.58	....

29.11.1.2.3. Joseph Morrell well--Continued.

Water level at end of day, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
25	1.03	0.78	1.01	0.81	2.08	4.06	3.68	5.10	5.97	5.53	1.36	1.85
26	1.03	.85	1.05	.93	1.62	4.16	3.70	5.15	5.88	5.45	1.38	1.32
27	1.04	.91	1.08	.98	1.87	4.22	3.72	5.20	5.98	1.23	1.42	.70
28	1.04	.92	1.15	1.07	2.00	4.30	3.86	5.24	5.99	.79	1.37	.77
29	1.08	....	1.18	1.12	2.17	4.32	3.79	5.28	6.00	1.08	1.49	.88
30	1.09	....	1.18	1.13	2.28	4.35	3.82	5.32	6.01	1.28	1.51	.98
31	1.09	....	1.20	....	2.37	....	3.86	5.35	....	1.44	....	1.07

Water level at end of day, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	74.16	73.91	73.74	73.58	73.52	72.43	.....	70.82	69.33	68.70	73.15	73.19
2	74.08	73.86	73.70	73.58	73.48	72.29	.....	70.78	69.28	68.69	73.28	73.16
3	74.04	73.78	73.63	73.50	73.48	72.14	71.18	70.73	69.25	68.69	73.87	73.14
4	73.96	73.91	73.58	73.51	73.44	72.00	71.14	70.68	69.21	68.69	73.69	73.13
5	73.88	74.23	73.58	73.48	73.40	71.87	71.23	70.63	69.18	68.69	73.58	73.11
6	73.82	74.52	74.49	73.43	73.39	71.78	71.46	70.58	69.14	68.69	73.47	73.15
7	73.76	74.34	74.22	73.41	73.35	71.82	72.12	70.53	69.11	68.69	73.40	73.17
8	73.72	74.25	74.11	73.44	73.32	71.79	72.36	70.48	69.10	68.69	73.39	73.17
9	73.66	74.18	74.04	73.42	73.29	71.82	72.39	70.42	69.07	68.67	73.94	73.16
10	73.62	74.15	73.99	73.39	73.27	71.76	72.32	70.37	69.05	68.63	73.81	73.18
11	73.58	74.45	74.01	73.37	73.27	71.66	72.27	70.32	69.02	68.63	73.70	73.12
12	73.56	74.23	73.99	73.77	73.34	71.60	72.19	70.27	69.00	68.65	73.64	73.14
13	73.53	74.31	73.95	73.82	73.07	71.55	72.12	70.23	68.97	68.65	73.54	73.07
14	73.51	74.11	74.09	73.76	73.09	71.43	72.03	70.18	68.95	68.64	73.46	73.04
15	73.51	.....	74.01	.....	72.96	71.34	71.88	70.13	68.92	68.63	73.46	73.01
16	73.58	.....	74.17	.....	72.84	71.21	71.72	70.08	68.89	68.66	73.39	72.99
17	73.63	.....	74.15	.....	72.72	71.21	71.58	70.03	68.87	68.70	73.32	72.98
18	73.94	.....	74.06	.....	72.59	71.46	71.47	69.98	68.84	68.75	73.30	72.97
19	74.13	.....	74.09	.....	73.77	71.28	71.33	69.93	68.82	68.80	73.29	72.98
20	74.02	.....	73.99	.....	73.32	71.14	71.22	69.87	68.81	68.83	73.25	72.96
21	73.92	.....	73.92	74.28	73.29	71.04	71.13	69.82	68.79	68.93	73.24	72.97
22	73.81	.....	73.87	74.18	73.06	70.96	71.10	.....	68.78	68.93	73.21	72.96
23	73.74	.....	73.80	74.08	72.91	70.83	71.09	69.72	68.78	69.04	73.15	72.91
24	73.69	.....	73.77	73.98	72.77	70.75	71.07	69.67	68.76	69.11	73.14	.....
25	73.69	73.94	73.71	73.91	72.64	70.66	71.04	69.62	68.75	69.17	73.36	72.87
26	73.69	73.87	73.67	73.79	73.10	70.56	71.02	69.57	68.74	73.27	73.34	73.40
27	73.68	73.81	73.64	73.74	72.85	70.50	71.00	69.52	68.74	73.40	73.30	74.02
28	73.68	73.80	73.57	73.65	72.72	70.42	70.96	69.48	68.73	73.95	73.35	73.95
29	73.64	.....	73.54	73.60	72.55	70.40	70.93	69.44	68.72	73.64	73.23	73.84
30	73.63	.....	73.54	73.59	72.44	70.37	70.90	69.40	68.71	73.44	73.21	73.74
31	73.63	.....	73.52	.....	72.35	.....	70.86	69.37	.....	73.23	.....	73.65

28.4.3.1.5 (*845, p. 209; 886, p. 367; 906, p. 101; 936, p. 90; 944, p. 90). National Fireproofing Corporation dug well. Measuring point is 4 feet above the land surface. Extremes of observed water level, in feet below land-surface: Highest, 2.57 Sept. 22, 1938; Lowest, 7.68 Jan. 18, 1942.

Water level at end of day, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1	5.66	6.36	5.92	5.77	5.97	5.65	....	6.43	6.85	....
2	5.67	6.33	5.96	....	5.94	5.68	....	6.45	6.85	....
3	5.69	....	5.98	5.85	5.97	5.72	6.09	6.46	....	....
4	5.76	....	....	5.83	6.00	....	6.09	6.49	6.88	6.92
5	5.83	....	....	5.87	5.99	5.78	6.09	6.51	6.89	6.94
6	5.89	5.73	5.49	5.91	6.01	5.80	6.09	....	6.88	....
7	5.94	5.64	5.46	5.91	....	5.82	6.02	6.54	6.88	6.96
8	....	5.61	5.47	....	6.05	5.83	5.98	6.56	6.89	6.96
9	5.97	5.59	5.49	....	6.06	5.84	5.95	6.57	6.91	6.92
10	6.02	5.47	5.51	5.96	6.07	....	5.95	6.59	....	6.93
11	6.06	....	5.55	5.94	6.07	....	5.98	6.60	6.93	6.94
12	6.08	....	5.60	5.95	5.99	5.88	6.01	6.61	6.94	6.94

28.4.3.1.5. National Fireproofing Corporation dug well--Continued.

Water level at end of day, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
13	....	5.45	5.62	5.98	5.96	5.91	6.04	....	6.98	5.95
14	....	5.54	5.62	6.02	5.95	5.91	6.07	6.64	6.97	6.95
15	....	5.59	5.54	6.03	5.96	5.93	6.11	6.65	6.91	6.81
16	6.21	5.67	5.52	....	5.96	5.95	....	6.66	6.92	6.72
17	6.24	5.72	5.51	6.06	5.96	....	....	6.68	....	6.70
18	6.23	5.75	5.49	6.06	5.96	....	....	6.70	6.95	6.72
19	6.28	5.76	5.53	5.97	5.82	6.00	....	....	6.97	6.76
20	6.28	5.80	5.54	5.89	5.64	6.00	....	....	6.98	6.79
21	....	5.82	5.60	5.85	....	6.03	....	6.74	6.98	6.80
22	....	5.82	5.62	5.83	5.58	6.05	....	6.76	6.98	....
23	6.33	5.85	5.63	5.82	5.59	....	....	6.77	6.99	....
24	6.35	5.85	5.66	5.81	5.60	....	6.28	6.79	7.01	....
25	6.38	....	5.66	5.85	5.61	....	6.30	6.80	....	....
26	6.40	....	....	5.85	5.57	6.08	6.32	6.81	....	....
27	6.40	5.89	5.68	5.89	5.55	6.01	6.33	....	....	....
28	....	5.92	5.73	5.92	5.58	5.96	6.35	6.80	....	....
29	....	....	5.75	5.90	5.60	5.99	6.37	6.81	....	....
30	6.37	....	5.75	....	5.64	....	6.39	6.83	....	....
31	6.36	....	5.77	....	5.65	....	6.41	6.84	....	....

28.5.4.7.2 (*845, p. 210; 886, p. 368; 906, p. 101; 936, p. 91; 944, p. 91). Perth Amboy Water Department. Old Bridge observation well. Land surface is 5.30 feet above mean sea level. Extremes of observed water level: Above top of casing Sept. 22, 1938, and Apr. 21-25, 1940; lowest, 1.9 feet below sea level May 2, 1943.

Water level in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Oct.	Nov.	Dec.
1	...	...	6.2	6.0	6.6	...	6.5	6.3	...	6.1	6.4
2	5.7	...	6.1	6.1	7.2	...	6.6	6.4	...	6.2	6.4
3	5.8	...	5.9	6.3	7.1	...	6.6	6.6	...	6.0	6.3
4	5.9	...	6.5	6.4	7.1	...	6.6	...	...	5.9	6.3
5	6.1	...	6.4	6.5	7.1	...	6.2	...	...	6.1	6.6
6	6.4	...	...	6.6	7.1	...	6.2	...	...	6.2	6.7
7	6.3	...	4.7	6.6	7.0	...	5.8	...	...	6.2	6.6
8	6.3	...	5.2	...	6.9	...	5.7	...	...	6.1	6.5
9	6.3	...	5.9	...	7.1	5.9	5.9	...	...	5.9	6.6
10	6.3	...	...	...	6.8	5.9	5.8	...	...	5.9	6.7
11	6.1	...	5.9	...	6.5	5.8	6.2	...	...	6.0	6.9
12	6.4	...	5.7	...	6.0	5.9	6.2	...	...	6.4	6.8
13	6.5	...	5.7	...	5.9	6.2	6.5	...	...	6.6	6.8
14	6.5	...	5.8	...	6.3	6.4	6.4	...	...	6.8	6.8
15	6.2	...	5.8	...	6.6	6.4	6.5	...	...	6.8	6.7
16	6.2	...	5.8	...	6.7	6.7	6.7	...	...	6.6	6.5
17	6.2	...	5.6	...	6.9	6.6	6.6	...	...	6.4	...
18	5.5	...	5.9	6.5	7.1	6.3	6.6	...	...	6.2	...
19	5.3	...	6.0	6.4	7.1	6.1	6.6	...	...	5.9	...
20	6.0	...	5.9	5.2	6.5	6.3	6.5	...	...	6.0	...
21	6.3	...	6.1	5.3	5.8	6.4	6.4	...	...	5.9	...
22	6.4	...	6.1	5.6	6.2	6.4	6.4	...	...	6.4	...
23	6.1	...	6.1	5.9	6.5	6.5	6.3	...	...	6.5	6.9
24	...	...	6.2	6.0	6.6	6.5	6.3	...	...	6.2	7.0
25	6.0	...	...	6.2	6.6	6.6	6.4	...	...	6.3	7.0
26	...	5.6	6.2	6.2	6.4	6.6	6.5	...	...	6.4	7.0
27	...	5.4	6.3	6.2	6.3	6.3	6.4	...	...	6.4	6.3
28	...	6.2	6.1	6.4	6.5	6.3	6.1	...	4.6	6.5	5.9
29	4.7	...	5.7	6.4	...	6.6	6.2	...	5.2	6.5	6.2
30	...	...	6.1	6.4	...	6.4	6.0	...	5.9	6.1	6.4
31	...	...	6.2	...	...	...	6.1	...	6.2	...	6.4

28.5.4.7.2. Perth Amboy Water Department--Continued.

Lowest daily water level, in feet with reference to mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Oct.	Nov.	Dec.
1	...	...	-0.9	-0.7	-1.3	...	-1.2	-1.0	...	-0.8	-1.1
2	-.4	...	-.8	-.8	-1.9	...	-1.3	-1.1	...	-.9	-1.1
3	-.5	...	-.6	-1.0	-1.8	...	-1.3	-1.3	...	-.7	-1.0
4	-.6	...	-1.2	-1.1	-1.8	...	-1.3	....	...	-.6	-1.0
5	-.8	...	-1.1	-1.2	-1.8	...	-.9	....	...	-.8	-1.3
6	-1.1	...	...	-1.3	-1.8	...	-.9	....	...	-.9	-1.4
7	-1.0	...	+.6	-1.3	-1.7	...	-.5	....	...	-.9	-1.3
8	-1.0	...	+.1	....	-1.6	...	-.4	....	...	-.8	-1.2
9	-1.0	...	-.6	....	-1.8	-.6	-.6	....	...	-.6	-1.3
10	-1.0	...	...	....	-1.5	-.6	-.5	....	...	-.6	-1.4
11	-.8	...	-.6	....	-1.2	-.5	-.9	....	...	-.7	-1.6
12	-1.1	...	-.4	....	-.7	-.6	-.9	....	...	-1.0	-1.5
13	-1.2	...	-.4	....	-.7	-.9	-1.2	....	...	-1.3	-1.5
14	-1.2	...	-.5	....	-1.0	-1.1	-1.1	....	...	-1.5	-1.5
15	-.9	...	-.5	....	-1.3	-1.1	-1.2	....	...	-1.5	-1.4
16	-.9	...	-.5	....	-1.4	-1.4	-1.4	....	...	-1.3	-1.2
17	-.9	...	-.3	....	-1.6	-1.3	-1.3	....	...	-1.1	....
18	-.2	...	-.6	-1.2	-1.8	-1.0	-1.3	....	...	-.9	....
19	.0	...	-.7	-1.1	-1.8	-.8	-1.3	....	...	-.6	....
20	-.7	...	-.6	+.1	-1.2	-1.0	-1.2	....	...	-.7	....
21	-1.0	...	-.8	.0	-.5	-1.1	-1.1	....	...	-.6	....
22	-1.1	...	-.8	-.3	-.9	-1.1	-1.1	....	...	-1.1	....
23	-.8	...	-.8	-.6	-1.2	-1.2	-1.0	....	...	-1.2	-1.6
24	...	...	-.9	-.7	-1.3	-1.2	-1.0	....	...	-.9	-1.7
25	-.7	...	...	-.9	-1.3	-1.3	-1.1	....	...	-1.0	-1.7
26	...	-.3	-.9	-.9	-1.1	-1.3	-1.2	....	...	-1.1	-1.7
27	...	-.1	-1.0	-.9	-1.0	-1.0	-1.1	....	...	-1.1	-1.0
28	...	-.9	-.8	-1.1	-1.2	-1.0	-.8	....	+.7	-1.2	-.6
29	+.6	...	-.4	-1.1	....	-1.3	-.9	....	+.1	-1.2	-.9
30	...	...	-.8	....	....	-1.1	-.7	....	-.6	-.8	-1.1
31	...	...	-.9	....	....	....	-.8	....	-.9	....	-1.1

28.5.4.3.9 (*845, p. 227; 886, p. 368; 906, p. 102; 936, p. 91; 944, p. 91). Perth Amboy Water Department. Runyon old deep well 1. Land surface is 18.20 feet above mean sea level. Extremes of observed water level, in feet, with reference to mean sea level: Highest, +12.8 Mar. 1, 1943; Lowest, -46.6 Oct. 25, 1935. Daily fluctuations, 1943: Less than 1 foot to 24 feet.

Water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	June	July	Oct.	Nov.	Dec.
1	....	...	5.7	....	15.9	....	43.6	38.9
2	....	...	...	....	15.2	....	43.7	39.5
3	12.0	...	...	....	....	....	44.5	40.3
4	12.1	9.0	...	....	14.7	....	43.5	40.2
5	12.2	9.3	...	....	13.4	....	44.0	....
6	12.9	9.3	7.3	....	14.0	....	44.0	....
7	13.1	9.0	6.9	....	12.4	....	44.1	....
8	13.2	8.8	6.3	....	12.6	....	44.5	....
9	13.1	8.5	...	....	13.0	....	44.6	....
10	12.4	8.4	...	....	14.1	....	58.8	....
11	11.6	7.9	...	....	14.2	....	44.2	....
12	11.7	7.9	...	....	14.2	....	44.1	....
13	11.9	7.8	...	....	15.6	....	44.2	....
14	11.5	7.8	...	....	15.7	....	44.2	....
15	11.8	7.8	...	....	16.4	....	44.8	....
16	11.7	...	...	....	16.8	....	44.5	....
17	11.1	...	...	....	17.2	....	43.7	....
18	10.8	...	...	....	17.2	....	43.4	....
19	10.9	...	...	....	36.4	....	....	....
20	10.9	...	...	....	39.8	....	39.9	....
21	10.7	...	...	....	42.3	....	39.9	....
22	10.4	...	...	....	43.5	....	39.1	....
23	10.3	...	...	....	44.1	....	38.4	38.7

28.5.4.3.9. Perth Amboy Water Department--Continued.

Water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	June	July	Oct.	Nov.	Dec.
24	10.2	...	...	....	44.3	45.4	38.4	38.7
25	9.7	...	...	....	44.4	45.3	38.1	38.6
26	9.6	7.5	...	....	44.7	43.9	39.2	37.9
27	9.5	6.5	...	15.6	44.8	43.1	40.0	37.2
28	9.1	6.2	...	15.8	45.3	42.8	40.1	38.9
29	8.9	...	...	15.9	45.3	42.2	39.6	39.2
30	....	...	...	15.9	....	42.5	38.7	38.9
31	....	...	...	....	....	43.1	....	38.6

Lowest daily water level, in feet, with reference to mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	June	July	Oct.	Nov.	Dec.
1	....	....	+12.5	....	+2.3	.....	-25.4	-20.7
2	....	....	.....	....	+3.0	.....	-25.5	-21.3
3	+6.2	....	.....	....	....	.....	-26.3	-22.1
4	+6.1	+9.2	.....	....	+3.5	.....	-25.3	-22.0
5	+6.0	+8.9	.....	....	+4.8	.....	-25.8	.....
6	+5.3	+8.9	+10.9	....	+6.2	.....	-25.8	.....
7	+5.1	+9.2	+11.3	....	+5.8	.....	-25.9	.....
8	+5.0	+9.4	+11.9	....	+5.6	.....	-26.3	.....
9	+5.1	+9.7	.....	....	+5.2	.....	-26.4	.....
10	+5.8	+9.8	.....	....	+4.1	.....	-40.6	.....
11	+6.6	+10.3	.....	....	+4.0	.....	-26.0	.....
12	+6.5	+10.3	.....	....	+4.0	.....	-25.9	.....
13	+6.3	+10.4	.....	....	+2.6	.....	-26.0	.....
14	+6.7	+10.4	.....	....	+2.5	.....	-26.0	.....
15	+6.4	+10.4	.....	....	+1.8	.....	-26.6	.....
16	+6.5	.....	.....	....	+1.4	.....	-26.3	.....
17	+7.1	.....	.....	....	+1.0	.....	-25.5	.....
18	+7.4	.....	.....	....	+1.0	.....	-25.2	.....
19	+7.3	.....	.....	....	-18.2	.....	.....	.....
20	+7.3	.....	.....	....	-21.6	.....	-21.7	.....
21	+7.5	.....	.....	....	-24.1	.....	-21.7	.....
22	+7.8	.....	.....	....	-25.3	.....	-20.9	.....
23	+7.9	.....	.....	....	-25.9	.....	-20.2	-20.5
24	+8.0	.....	.....	....	-26.1	-27.2	-20.2	-20.5
25	+8.5	.....	.....	....	-26.2	-27.1	-19.9	-20.4
26	+8.6	+10.7	.....	....	-26.5	-25.7	-21.0	-19.7
27	+8.7	+11.7	.....	+2.6	-26.6	-24.9	-21.8	-19.0
28	+9.1	+12.0	.....	+2.4	-27.1	-24.6	-21.9	-20.7
29	+9.3	.....	.....	+2.3	-27.1	-24.0	-21.4	-21.0
30	....	.....	.....	+2.3	.....	-24.3	-20.5	-20.7
31	....	.....	....	....	.....	-24.9	.....	-20.4

29.1.4.1.1 (*840, p. 248; 845, p. 229; 886, p. 369; 906, p. 103; 936, p. 92; 944, p. 92). Perth Amboy Water Department. Runyon old deep well 8. Land surface is 18.01 feet above mean sea level. Extremes of observed water level with reference to mean sea level; Highest, +12.2 Apr. 18, 1943; Lowest, -40.6 Oct. 25, 1935. Daily fluctuations, 1943: Less than 1 foot to 13 feet.

Water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	15.9	....	...	7.1	...	....	19.6	33.2	33.1	....	....	26.0
2	14.3	10.4	....	7.1	9.4	....	18.6	32.7	33.0	....	....	26.9
3	14.2	10.6	....	7.1	8.0	....	18.6	33.1	33.4	....	....	27.9
4	14.4	10.8	....	6.9	8.3	....	18.0	33.5	....	....	....	27.8
5	14.7	10.9	....	6.2	8.3	....	16.4	33.7	....	....	....	26.9
6	15.4	11.1	....	6.2	...	....	15.0	33.9	....	....	....	26.5
7	15.7	11.1	....	6.3	...	....	15.7	33.8	....	....	27.5	26.6
8	15.7	10.6	....	6.0	...	....	....	33.8	32.0	....	27.5	26.5
9	15.4	10.3	....	7.4	10.0	....	....	31.9	32.1	....	....	26.6
10	14.6	10.3	....	7.6	9.6	....	....	31.0	32.6	32.2	....	26.9
11	13.8	9.6	....	7.6	8.5	....	18.0	31.5	33.0	31.2	....	26.9

29.1.4.1.1. Perth Amboy Water Department--Continued.

Water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
12	14.3	9.7	...	6.8	8.5	....	17.9	31.6	33.0	....	....	26.7
13	14.4	9.7	...	6.5	8.7	11.9	19.6	32.2	31.2	32.0	....	26.1
14	14.0	9.4	...	6.7	...	13.0	19.8	33.1	30.7	32.5	28.0	26.8
15	14.2	9.2	9.2	6.7	...	13.2	20.3	33.1	30.9	....	26.8	26.8
16	13.7	9.5	9.6	6.7	8.8	14.7	20.6	32.0	31.2	....	27.8	26.7
17	12.9	...	10.0	7.0	...	14.8	21.3	32.0	31.8	32.0	....	26.6
18	12.7	...	10.0	7.0	...	14.6	21.3	32.0	31.8	31.5	....	26.4
19	12.9	...	9.0	6.5	...	15.7	....	31.7	31.5	31.5	....	26.2
20	12.8	...	8.4	6.6	...	15.8	....	32.4	30.4	31.9	27.0	25.8
21	12.6	...	8.3	7.2	...	....	....	33.1	30.7	31.8	27.0	25.8
22	12.3	...	7.2	7.3	...	....	....	33.1	....	31.1	26.0	25.8
23	12.3	...	7.6	7.6	10.2	....	....	32.1	33.5	....	25.3	25.6
24	12.1	...	7.7	...	...	....	....	32.7	....	33.8	25.3	25.6
25	11.4	...	7.6	...	10.7	....	....	33.2	33.0	....	25.0	....
26	11.5	...	7.1	...	...	....	....	34.2	32.7	....	26.7	....
27	11.2	...	7.4	...	...	19.5	....	34.0	31.5	....	27.6	....
28	10.8	...	7.4	...	...	19.7	....	34.0	32.1	....	27.6	26.3
29	10.8	...	7.1	...	...	19.9	....	34.0	....	....	27.2	26.6
30	....	...	7.9	...	...	19.9	....	33.7	....	....	25.7	25.9
31	....	...	7.6	...	...	....	....	32.8	....	28.8	....	25.5

Lowest daily water level, in feet with reference to mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	+2.1	....	....	+10.9	....	....	-1.6	-15.2	-15.1	.....	....	-8.0
2	+3.7	+7.6	....	+10.9	+8.6	....	-.6	-14.7	-15.0	.....	....	-8.9
3	+3.8	+7.4	....	+10.9	+10.0	....	-.6	-15.1	-15.4	.....	....	-9.9
4	+3.6	+7.2	....	+11.1	+9.7	....	.0	-15.5	.....	.....	....	-9.8
5	+3.3	+7.1	....	+11.8	+9.7	....	+1.6	-15.7	.....	.....	....	-8.9
6	+2.6	+6.9	....	+11.8	....	....	+3.0	-15.9	.....	.....	....	-8.5
7	+2.3	+6.9	....	+11.7	....	....	+2.3	-15.8	.....	.....	-9.5	-8.6
8	+2.3	+7.4	....	+12.0	....	....	....	-15.8	-14.0	.....	-9.5	-8.5
9	+2.6	+7.7	....	+10.6	+8.0	....	....	-13.9	-14.1	.....	....	-8.6
10	+3.4	+7.7	....	+10.4	+8.4	....	....	-13.0	-14.6	-14.2	....	-8.9
11	+4.2	+8.4	....	+10.4	+9.5	....	.0	-13.5	-15.0	-13.2	....	-8.9
12	+3.7	+8.3	....	+11.2	+9.5	....	+.1	-13.6	-15.0	.....	....	-8.7
13	+3.6	+8.3	....	+11.5	+9.3	+6.1	-1.6	-14.2	-13.2	-14.0	....	-8.1
14	+4.0	+8.6	....	+11.3	....	+5.0	-1.8	-15.1	-12.7	-14.5	-10.0	-8.8
15	+3.8	+8.8	+8.8	+11.3	....	+4.8	-2.3	-15.1	-12.9	.....	-8.8	-8.8
16	+4.3	+8.5	+8.4	+11.3	+9.2	+3.3	-2.6	-14.0	-13.2	.....	-9.8	-8.7
17	+5.1	....	+8.0	+11.0	....	+3.2	-3.3	-14.0	-13.8	-14.0	....	-8.6
18	+5.3	....	+8.0	+11.0	....	+3.4	-3.3	-14.0	-13.8	-13.5	....	-8.4
19	+5.1	....	+9.0	+11.5	....	+2.3	....	-13.7	-13.5	-13.5	....	-8.2
20	+5.2	....	+9.6	+11.4	....	+2.2	....	-14.4	-12.4	-13.9	-9.0	-7.8
21	+5.4	....	+9.7	+10.8	....	....	....	-15.1	-12.7	-13.8	-9.0	-7.8
22	+5.7	....	+10.8	+10.7	....	....	....	-15.1	.....	-13.1	-8.0	-7.8
23	+5.7	....	+10.4	+10.4	+7.8	....	....	-14.1	-15.5	.....	-7.3	-7.6
24	+5.9	....	+10.3	.....	....	....	....	-14.7	....	-15.8	-7.3	-7.6
25	+6.6	....	+10.4	.....	+7.3	....	....	-15.2	-15.0	.....	-7.0	....
26	+6.5	....	+10.9	.....	....	....	....	-16.2	-14.7	.....	-8.7	....
27	+6.8	....	+10.6	.....	....	-1.5	....	-16.0	-13.5	.....	-9.6	....
28	+7.2	....	+10.6	.....	....	-1.7	....	-16.0	-14.1	.....	-9.6	-8.3
29	+7.2	....	+10.9	.....	....	-1.9	....	-16.0	.....	.....	-9.2	-8.6
30	....	....	+10.1	.....	....	-1.9	....	-14.7	.....	.....	-7.7	-7.9
31	....	....	+10.4	.....	....	....	....	-14.8	.....	-10.8	....	-7.5

28.5.4.7.3 (*845, p. 212; 886, p. 369; 906, p. 103; 936, p. 93; 944, p. 93). Perth Amboy Water Department. Runyon well 123. Land surface is 3.58 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 6.14 Sept. 22, 1938 (flooded); lowest, 0.53 Jan. 23, 1940.

28.5.4.7.3. Perth Amboy Water Department--Continued.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.70	....	1.90	1.85	....	1.95	2.15	....	2.20	1.80	2.00	2.05
2	1.90	2.00	1.95	1.95	....	1.90	2.15	....	2.25	1.90	2.00	2.10
3	1.90	2.00	1.95	2.05	....	1.90	2.15	....	1.85	....	....	2.10
4	1.80	1.90	2.10	2.10	....	1.85	2.15	....	....	1.85	....	2.10
5	2.05	1.80	2.10	2.15	....	1.90	1.95	....	....	2.00	....	2.35
6	2.10	1.65	....	2.25	....	1.95	1.95	....	....	2.20	....	2.25
7	2.00	1.30	....	2.25	....	1.90	1.80	....	....	2.40	1.95	2.30
8	1.90	1.65	....	2.10	....	1.80	....	2.05	1.90	2.30	1.90	2.20
9	....	1.75	1.85	2.10	....	1.90	....	1.95	2.15	....	1.75	2.35
10	....	1.65	1.85	2.10	....	1.85	....	1.90	2.30	....	1.90	2.20
11	....	1.50	1.85	2.05	....	1.80	2.00	2.05	2.15	....	1.90	2.65
12	....	....	1.85	1.85	....	1.75	2.05	2.10	2.10	....	2.00	2.65
13	....	....	1.80	1.80	....	1.75	2.20	2.10	2.10	....	2.15	2.65
14	....	1.95	....	2.15	....	1.45	2.10	2.30	1.95	....	2.30	2.65
15	....	2.20	1.90	2.25	....	1.35	2.15	2.25	1.70	....	2.30	2.55
16	....	2.20	1.80	2.25	2.20	1.20	2.25	2.20	1.85	....	2.15	....
17	1.80	2.25	1.85	2.30	2.30	....	2.20	2.20	1.95	2.15	2.10	....
18	1.60	2.25	2.00	2.30	2.40	....	2.15	2.20	2.10	2.15	1.95	....
19	1.70	2.29	2.00	2.20	....	....	2.10	2.25	2.15	2.10	2.00	2.45
20	2.00	....	1.85	1.50	....	1.85	2.05	2.20	2.05	2.10	2.05	2.80
21	2.20	....	2.00	1.05	....	1.90	2.00	2.15	2.05	1.95	2.00	2.80
22	2.25	1.90	1.95	1.15	....	1.90	2.00	2.10	1.95	2.15	2.30	2.80
23	2.05	1.85	1.95	1.25	1.90	1.90	2.05	2.00	2.00	2.20	2.35	2.80
24	2.00	1.80	2.00	1.90	1.95	1.90	2.00	2.10	1.95	2.10	2.20	....
25	1.85	1.85	2.05	2.00	2.00	2.00	2.05	2.10	1.85	2.10	2.15	....
26	1.90	1.70	2.00	2.00	1.85	2.00	2.10	2.10	2.05	....	2.20	....
27	1.80	1.60	2.05	2.05	1.80	2.00	2.10	1.95	2.35	....	2.15	2.25
28	1.35	1.90	2.00	2.15	1.95	2.10	2.00	1.80	2.45	1.25	2.25	2.30
29	1.20	....	1.90	2.15	2.00	2.10	2.00	1.90	2.40	1.60	2.20	2.35
30	....	....	2.00	2.20	2.00	2.05	1.90	1.95	1.70	1.95	1.90	2.35
31	....	....	1.90	....	1.95	....	....	2.10	....	2.05	....	2.30

Lowest daily water level, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.88	....	1.68	1.73	....	1.63	1.43	....	1.38	1.78	1.58	1.53
2	1.68	1.58	1.63	1.63	....	1.68	1.43	....	1.33	1.68	1.58	1.48
3	1.68	1.58	1.63	1.53	....	1.68	1.43	....	1.73	....	....	1.48
4	1.78	1.68	1.48	1.48	....	1.73	1.43	....	....	1.73	....	1.48
5	1.53	1.78	1.48	1.43	....	1.68	1.63	....	....	1.58	....	1.23
6	1.48	1.93	....	1.33	....	1.63	1.63	....	....	1.38	....	1.33
7	1.58	2.28	....	1.33	....	1.68	1.78	....	....	1.18	1.63	1.28
8	1.68	1.93	....	1.48	....	1.78	....	1.53	1.68	1.28	1.68	1.38
9	....	1.83	1.73	1.48	....	1.68	....	1.63	1.43	....	1.83	1.23
10	....	1.93	1.73	1.48	....	1.73	....	1.68	1.28	....	1.68	1.18
11	....	2.08	1.73	1.53	....	1.78	1.58	1.53	1.43	....	1.68	.93
12	....	....	1.73	1.73	....	1.83	1.53	1.48	1.48	....	1.58	.93
13	....	....	1.78	1.78	....	1.83	1.38	1.48	1.48	....	1.43	.93
14	....	1.63	....	1.43	....	2.13	1.48	1.28	1.63	....	1.28	.93
15	....	1.38	1.68	1.33	....	2.23	1.43	1.33	1.88	....	1.28	1.03
16	....	1.38	1.78	1.33	1.38	2.38	1.33	1.38	1.73	....	1.43	....
17	1.78	1.33	1.73	1.28	1.28	....	1.38	1.38	1.63	1.43	1.48	....
18	1.98	1.33	1.58	1.28	1.18	....	1.43	1.38	1.48	1.43	1.63	....
19	1.88	1.38	1.58	1.38	....	....	1.48	1.33	1.43	1.48	1.58	1.13
20	1.58	....	1.73	2.08	....	1.73	1.53	1.38	1.53	1.48	1.53	.78
21	1.38	....	1.58	2.53	....	1.68	1.58	1.43	1.53	1.63	1.58	.78
22	1.33	1.68	1.63	2.43	....	1.68	1.58	1.48	1.63	1.43	1.28	.78
23	1.53	1.73	1.63	2.33	1.68	1.68	1.53	1.58	1.58	1.38	1.23	.78
24	1.58	1.78	1.58	1.68	1.63	1.68	1.58	1.48	1.63	1.48	1.38	....
25	1.73	1.73	1.53	1.58	1.58	1.58	1.53	1.48	1.73	1.48	1.43	....
26	1.68	1.88	1.58	1.58	1.73	1.58	1.48	1.48	1.53	....	1.38	....
27	1.78	1.98	1.53	1.53	1.78	1.58	1.48	1.63	1.23	....	1.43	1.33
28	2.23	1.68	1.58	1.43	1.63	1.48	1.58	1.78	1.13	2.33	1.33	1.28
29	2.38	....	1.68	1.43	1.58	1.48	1.58	1.68	1.18	1.98	1.38	1.23
30	....	....	1.58	1.38	1.58	1.53	1.68	1.63	1.88	1.63	1.68	1.23
31	....	....	1.68	....	1.63	....	....	1.48	....	1.53	....	1.28

28.5.4.6.3.A (*936, p. 94; 944, p. 93). A-2. Perth Amboy Water Department. Land-surface is 16.67 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 13.65 May 27, 1940; Lowest, 3.86 Oct. 23, 1941. Water level, in feet below land-surface datum, 1943: July 17, 11.30. Water level, in feet above mean sea level, 1943: July 17, 5.37.

28.5.4.6.6 (*936, p. 95; 944, p. 93). A-3. Perth Amboy Water Department. Land surface is 17.22 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 15.89 May 10, 1933; Lowest, 5.80 Oct. 1935. Water level, in feet, 1943: Below land-surface datum, July 17, 8.19; above mean sea level, July 17, 9.03.

28.5.4.6.6.A (*936, p. 96; 944, p. 93). A-40. Perth Amboy Water Department. Land-surface is 17.59 feet above mean sea level. Extremes of observed water level: Well flowing Apr. 24, 1940; lowest, 8.89 feet above mean sea level Oct. 29, 1939. Water level, in feet, 1943: Below land-surface datum, July 17, 5.52; above mean sea level, July 17, 12.07.

28.5.4.6.6.A (*845, p. 230; 886, p. 356; 906, p. 89; 936, p. 97; 944, p. 94). B-2. Perth Amboy Water Department. Land surface is 14.04 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 14.49 July 29, 1938; lowest, 1.08 Dec. 29, 1939. Water level, in feet, 1943: Below land-surface datum, July 17, 9.85; above mean sea level, July 17, 4.19.

28.5.4.6.2.B (*845, p. 230; 886, p. 356; 906, p. 89; 936, p. 97; 944, p. 94). B-3. Perth Amboy Water Department. Land surface is 14.44 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 10.59 May 5, 1939; lowest, 2.11 Oct. 19, 1935. Water level, in feet, 1943: Below land-surface datum, July 17, 10.29; above mean sea level, July 17, 4.15.

28.5.4.6.5 (*845, p. 231; 886, p. 356; 906, p. 89; 936, p. 97; 944, p. 94). B-4. Perth Amboy Water Department. Land surface is 13.89 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 11.54 May 22, 1937; lowest, 5.08 Oct. 24, 1941. Water level, in feet, 1943: Below land-surface datum, July 17, 7.94; above mean sea level, July 17, 5.95.

28.5.4.5.9 (*936, p. 97; 944, p. 94). B-5. Perth Amboy Water Department. Land surface is about 9.48 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 9.50 Apr. 29, 1937; lowest, 6.30 Oct. 27, 1941. Water level, in feet, 1943: Below land-surface datum, July 17, 1.92; above mean sea level, July 17, 7.56.

28.5.4.3.7 (*845, p. 231; 886, p. 357; 906, p. 90; 936, p. 98; 944, p. 94). C-1. Perth Amboy Water Department. Land surface is 12.18 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 7.30 Mar. 29, 1938; lowest, 2.43 Jan. 27, 1940. Water level, in feet, 1943: Below land-surface datum, July 17, 9.40; above mean sea level, July 17, 2.78.

28.5.4.3.7.A (*845, p. 232; 886, p. 357; 906, p. 90; 936, p. 98; 944, p. 94). C-2. Perth Amboy Water Department. Land surface is 11.25 feet above mean sea level. No measurements made in 1943. Well destroyed; measurements discontinued.

28.5.4.3.6 (*845, p. 233; 886, p. 257; 906, p. 90; 936, p. 99; 944, p. 94). D-1. Perth Amboy Water Department. Land surface is about 16.68 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 12.29 July 29, 1938; lowest, 5.19 Nov. 13, 1941. Water level, in feet, 1943: Below land-surface datum, July 17, 10.07; above mean sea level, July 17, 6.61.

28.5.4.3.2 (*845, p. 233; 886, p. 357; 906, p. 91; 936, p. 100; 944, p. 94). D-2. Perth Amboy Water Department. Land surface is 15.94 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 14.39 July 29, 1938; lowest, 7.91 Nov. 13, 1941. Water level, in feet, 1943: Below land-surface datum, July 17, 6.22; above mean sea level, July 17, 9.72.

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29.1.4.5.2 (*845, p. 213; 886, p. 362; 906, p. 96, 936, p. 101; 944, p. 94). F-2. H. C. Perrine. Land surface 23.76 feet above mean sea level: Highest, 22.9 Mar. 27, 1936; lowest, 14.59 Sept. 24, 1932 and Oct. 27, 1941. Water level, in feet, 1943: Below land-surface datum, July 17, 6.77; above mean sea level, July 17, 16.99.

29.1.4.3.9 (*817, p. 186; 840, p. 251; 845, p. 214; 886, p. 362; 906, p. 96; 936, p. 101; 944, p. 94). F-3. Clyde Browne. Land surface is 69.64 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 31.91 June 17, 1939; lowest, 24.07 Nov. 24, 1942. Water level, in feet, 1943: Below land-surface datum, July, 43.23; above mean sea level, July, 26.41.

29.1.5.1.4 (*845, p. 215; 886, p. 363; 906, p. 96; 936, p. 101; 944, p. 94). F-4. A. R. Brown. Land surface is 68.19 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 29.47 July 12, 1939; lowest, 22.89 Mar. 11, 1932. Water level, in feet, 1943: Below land-surface datum, July, 41.40; above mean sea level, July, 26.79.

29.1.5.1.9 (*845, p. 215; 886, p. 363; 906, p. 96; 936, p. 101; 944, p. 94). F-5. A. Hanley. Land surface is 106.51 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 105.73 Jan. 24, 1934; lowest, 97.69 Sept. 24, 1932. Water level, in feet, 1943: Below land-surface datum, July, 5.71; above mean sea level, July, 100.80.

29.1.5.6.3 (*845, p. 216; 886, p. 363; 906, p. 96; 936, p. 101; 944, p. 95). F-9. Owner unknown. Land surface is 107.96 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 106.79 Apr. 15, 1932; lowest 98.43 Oct. 27, 1941. Water level, in feet, 1943: Below land surface datum, July, 5.45; above mean sea level, July, 102.51.

29.1.5.6.3.A (*845, p. 217; 886, p. 363; 906, p. 96; 936, p. 102; 944, p. 95). F-10. Maude Lamberton. Land surface is 127.38 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 126.71 Mar. 27, 1936; lowest, 119.12 Oct. 27, 1941. Water level, in feet, 1943: Below land-surface datum, July, 5.43; above mean sea level, July, 122.95.

29.1.5.4.6 (*845, p. 218; 886, p. 363; 906, p. 97; 936, p. 102; 944, p. 95). F-11. Charles Schunck. Land surface is 44.68 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 33.94 Apr. 18, 1941; lowest, 22.75 Mar. 11, 1932. Water level, in feet, 1943: Below land-surface datum, July, 17.93; above mean sea level, July, 26.75.

29.1.5.4.8 (*845, p. 218; 886, p. 363; 906, p. 97; 936, p. 102; 944, p. 95). F-12. George Burlew. Land surface is 52.46 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 34.98 May 4, 1939; well dry on several days during 1932. Water level, in feet, 1943: Below land-surface datum, July, 22.65; above mean sea level, July, 29.81.

29.1.5.4.8.A (*845, p. 219; 886, p. 363; 906, p. 97; 936, p. 102; 944, p. 95). F-13. George Burlew. Land surface is 48.92 feet above mean sea level. No measurements made in 1943.

29.1.5.7.2 (*817, p. 187; 840, p. 251; *845, p. 220; 886, p. 363; 906, p. 97; 936, p. 102; 944, p. 95). F-14. William Jurman. Land surface is 41.74 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 38.94 July 27, 1938; well dry Oct. 21, 1925, and Nov. 13, 1931. Water level, in feet, 1943: Below land-surface datum, July, 8.02; above mean sea level, July 33.72.

29.1.5.7.5.A (*845, p. 220; 886, p. 364; 906, p. 97; 936, p. 102; 944, p. 95). F-16. Amos Burlew. Land surface is 91.04 feet above mean sea level. Extremes of water level, in feet above mean sea level: Highest, 89.34 Mar. 17, 1939; lowest, 82.92 Aug. 10, 1936. Water level, in feet, 1943: Below land-surface datum, July, 4.55; above mean sea level, July, 86.49.

29.1.4.7.6 (*845, p. 221; 886, p. 364; 906, p. 97; 936, p. 102; 944, p. 95). F-20. A. Fredda. Land surface is 45.12 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 36.63 Apr. 11, 1939; lowest, 28.54 Sept. 24, 1932. Water level, in feet, 1943: Below land-surface datum, July, 13.60; above mean sea level, July, 31.52.

29.1.4.9.8 (*845, p. 222; 886, p. 364; 906, p. 97; 936, p. 102; 944, p. 95). F-21. Mrs. A. Green. Land surface is 68.40 feet above mean sea level. Extremes of observed level, in feet above mean sea level: Highest, 66.47 Sept. 17, 1934; lowest, 59.78 July 19, 1935. Water level, in feet, 1943: Below land-surface datum, July, 5.31; above mean sea level, July, 62.73.

29.1.7.3.5 (*845, p. 222; 886, p. 364; 906, p. 97, 936, p. 102; 944, p. 95). F-22. Reuben Miller. Land surface is 90.21 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 88.76 Sept. 17, 1934; lowest, 76.19 Oct. 20, 1932. Water level, in feet, 1943: Below land-surface datum, July, 6.20; above mean sea level, 84.01.

29.11.1.2.5 (*845, p. 224; 886, p. 364; 906, p. 98; 936, p. 103; 944, p. 95). F-26. Ambrose Green. Land surface is 100.76 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 88.10 Apr. 11, 1939; lowest, 82.61 Sept. 18, 1925. Water level, in feet, 1943: Below land-surface datum, July, 14.60; above mean sea level, July, 86.16.

29.11.1.2.5.A (*845, p. 225; 886, p. 364; 906, p. 98; 936, p. 103; 944, p. 95). F-27. Mrs. J. Green. Land surface is 101.83 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 88.38 Aug. 5, 1939; lowest, 32.33 Aug. 11, 1925. Water level, in feet, 1943: Below land-surface datum, July, 16.23; above mean sea level, July, 85.60.

29.1.1.7.8. (*845, p. 234; 886, p. 365; 906, p. 98; 936, p. 103; 944, p. 96). G-1. Perth Amboy Water Department. Land surface is 24.34 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 23.79 May 10, 1933; lowest, 17.43 Oct. 27, 1941. Water level, in feet, 1943: Below land-surface datum, July 17, 6.96; above mean sea level, July 17, 18.38.

29.1.1.7.8.A (*845, p. 234; 886, p. 365; 906, p. 99; 936, p. 103; 944, p. 96). G-2. Perth Amboy Water Department. Land surface is 27.45 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 25.45 Nov. 17, 1934; lowest, 20.84 Oct. 27, 1941. Water level, in feet, 1943: Below land-surface datum, July 17, 5.67; above mean sea level, July 17, 21.78.

29.1.1.7.9 (*845, p. 235; 886, p. 365; 906, p. 99; 936, p. 103; 944, p. 96). G-3. Perth Amboy Water Department. Land surface is 29.38 feet above mean sea level. Extremes of observed level, in feet above mean sea level: Highest, 28.43 June 12, 1937; lowest, 24.51 Jan. 7, 1942. Water level, in feet, 1943: Below land-surface datum, July 17, 3.68; above mean sea level, July 17, 25.70.

29.1.1.8.4 (*845, p. 235; 886, p. 365; 906, p. 99; 936, p. 103; 944, p. 96). G-4. Perth Amboy Water Department. Land surface is 50.71 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 31.91 May 23, 1938; lowest, 27.00 Jan. 7, 1942. Water level, in feet, 1943: Below land-surface datum, July 17, 21.16; above mean sea level, July 17, 29.55.

29.1.1.7.9.A (*936, p. 103; 944, p. 96). G-20. Perth Amboy Water Department. Land surface is 27.54 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 25.94 Dec. 20, 1938, and Feb. 14, 1939; lowest, 20.58 Oct. 27, 1941. Water level, in feet, 1943: Below land-surface datum, July 17, 6.02; above mean sea level, July 17, 21.52.

29.1.4.2.4 (*936, p. 104). H-1. Owner unknown. Land surface is 32.24 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 23.45 Apr. 19, 1941; lowest, 17.75 Aug. 6, 1935. Water level, in feet, 1943: Below land-surface datum, July 17, 12.34; above mean sea level, July 17, 19.32.

29.1.4.1.4 (*845, p. 236; 886, p. 365; 906, p. 99; 936, p. 104; 944, p. 96). J-1. Owner unknown. Land surface is 20.60 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 15.61 Oct. 16, 1933; lowest, 9.10 Oct. 24, 1941. Water level, in feet, 1943: Below land-surface datum, July 17, 10.37; above mean sea level, July 17, 10.23.

29.1.4.1.6 (*845, p. 236; 886, p. 366; 906, p. 99; 936, p. 105; 944, p. 96). J-2. Owner unknown. Land surface is 18.92 feet above mean sea level: Extremes of observed water level, in feet above mean sea level: Highest, 16.25 Jan. 27, 1937, and July 29, 1938; lowest, 11.49 Jan. 11, 1935. Water level, in feet, 1943: Below land-surface datum, July 16, 5.71; above mean sea level, July 16, 13.11.

29.1.4.2.7 (*845, p. 237; 886, p. 366; 906, p. 99; 936, p. 105; 944, p. 96). J-3. Owner unknown. Land surface is 20.89 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 17.69 July 29, 1938; lowest, 13.23 Sept. 24, 1932. Water level, in feet, 1943: Below land-surface datum, July 16, 6.49; above mean sea level, July 16, 14.40.

29.1.4.2.7.A (*845, p. 237; 886, p. 366; 906, p. 99; 936, p. 105; 944, p. 96). J-4. Owner unknown. Land surface is 20.49 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 18.35 Sept. 18, 1934; lowest, 13.76 Oct. 24, 1941. Water level, in feet, 1943: Below land-surface datum, July 16, 5.87; above mean sea level, July 16, 14.62.

29.1.4.5.2.A (*845, p. 238; 886, p. 366; 906, p. 99; 936, p. 105; 944, p. 96). J-5. Owner unknown. Land surface is 27.45 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 23.80 Feb. 22, 1938; lowest, 13.82 July 16, 1943. Water level, in feet, 1943: Below land-surface datum, July 16, 13.63; above mean sea level, July 16, 13.82.

29.1.4.4.6 (*936, p. 105; 944, p. 96). K-1. Perth Amboy Water Department. Measuring point is 1 foot above the land surface. No measurements made in 1943.

28.5.4.5.6 (*845, p. 238; 886, p. 366; 906, p. 100; 936, p. 105; 944, p. 97). L-1. Perth Amboy Water Department. Land surface is 11.88 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 7.56 Apr. 16, 1935; lowest, 2.03 July 17, 1943. Water level, in feet, 1943: Below land-surface datum, July 17, 9.85; above mean sea level, July 17, 2.03.

28.5.4.6.7.A (*845, p. 239; 886, p. 366; 906, p. 100; 936, p. 105; 944, p. 97). L-2. Perth Amboy Water Department. Land surface is 12.06 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 9.06 July 29, 1938; lowest, 4.82 Oct. 24, 1941. Water level, in feet, 1943: Below land-surface datum, July 17, 6.25; above mean sea level, July 17, 5.81.

28.5.4.6.7.B (*845, p. 239; 886, p. 366; 906, p. 100; 936, p. 106; 944, p. 97). L-3. Perth Amboy Water Department. Land surface is 14.61 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 11.51 July 29, 1938; lowest, 3.84 Sept. 30, 1937. Water level, in feet, 1943: Below land-surface datum, July 17, 4.97; above mean sea level, July 17, 9.64.

28.5.4.5.1.A (*936, p. 106; 944, p. 97). M-1. Perth Amboy Water Department. Measuring point is 0.4 foot above land surface. No measurements made in 1943.

28.5.4.5.1.B (*936, p. 106; 944, p. 97). M-2. Perth Amboy Water Department. Measuring point is 0.4 foot above land surface. No measurements made in 1943.

28.5.4.4.9.A (*936, p. 106; 944, p. 97). N-1. New Jersey State Water Policy Commission. Land surface is 3.87 feet above mean sea level. Extremes of observed water level: Well flowing June 23, 1940, and Jan. 18, 1941; lowest, 2.87 Jan. 27, 1940. Water level, in feet, 1943: Above land-surface datum, July 17, 0.64; above mean sea level, July 17, 4.51.

28.5.4.4.9.B (*936, p. 107; 944, p. 97). N-2. New Jersey State Water Policy Commission. Land surface is 18.61 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 6.48 June 12, 1937; lowest, 3.65 Nov. 14, 1941. Water level, in feet, 1943: Below land-surface datum, July 17, 14.30; above mean sea level, July 17, 4.31.

28.5.4.8.1.A (*936, p. 107; 944, p. 97). N-3. New Jersey State Water Policy Commission. Land surface is 20.14 feet above mean sea level: Extremes of observed water, in feet above mean sea level: Highest, 11.18 May 10, 1933; lowest, 4.66 Nov. 13, 1941. Water level, in feet, 1943: Below land-surface datum, July 17, 14.53; above mean sea level, July 17, 5.61.

29.1.1.7.5.A (*936, p. 107; 944, p. 97). P-1. New Jersey State Water Policy Commission. Land surface is 27.75 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 25.15 Mar. 27, 1936; lowest, 19.90 July 17, 1943. Water level, in feet, 1943: Below land-surface datum, July 17, 7.85; above mean sea level, July 17, 19.90.

29.1.1.7.5.B (*936, p. 108; 944, p. 97). P-2. New Jersey State Water Policy Commission. Land surface is 32.02 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 28.72 Apr. 27, 1939; lowest, 21.59 July 17, 1943. Water level, in feet, 1943: Below land-surface datum, July 17, 10.43; above mean sea level, July 17, 21.59.

29.1.4.1.8 (*936, p. 108; 944, p. 97). R-1. Perth Amboy Water Department. Land surface is 15.72 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 12.16 Apr. 24, 1940; lowest, 7.22 Oct. 13, 1936. Water level, in feet, 1943: Below land-surface datum, July 18, 6.82; above mean sea level, July 18, 8.90.

29.1.4.4.2.A (*936, p. 109; 944, p. 97). R-2. Perth Amboy Water Department. Land surface is 16.08 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 12.16 Aug. 15, 1938, lowest, 6.39 Dec. 29, 1939. Water level, in feet, 1943: Below land-surface datum, July 18, 8.92; above mean sea level, July 18, 7.16.

29.1.4.4.1.A (*817, p. 185; 840, p. 250; *845, p. 240; 886, p. 370; 906, p. 104; 936, p. 110; 944, p. 97). S-1. Perth Amboy Water Department. Land surface is 15.49 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 11.46 Apr. 15, 1935; lowest, 2.80 Oct. 23, 1941. Water level, in feet, 1943: Below land-surface datum, July 17, 12.50; above mean sea level, July 17, 2.99.

28.5.1.8.4 (*886, p. 370; 906, p. 104; 936, p. 110; 944, p. 98). Sayreville Borough test well 4. Land surface is 5.73 feet above mean sea level. Extremes of observed water level, in feet, with reference to mean sea level: Highest, +9.60 Apr. 5 and 8, 1943; lowest-32.9 Oct. 25, 1935.

Lowest daily water level, in feet with reference to land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	-2.43	+1.77	.....	+3.32	+2.32	+2.02
2	-.73	+1.27	.....	+3.32	+2.32	+1.87
3	-.73	+1.27	+2.82	+3.32	+3.12	+1.22
4	.....	+1.67	+2.97	+3.37	+2.92	-1.13
5	.....	+1.37	+2.67	+3.67	+2.92	-1.63
6	-2.05	+1.37	+2.12	+3.62	+2.92	-1.43
7	-2.30	+1.62	+2.57	+3.57	+3.02	-.48
8	-2.45	+2.07	+3.22	+3.77	+2.17	+.42

28.5.1.8.4. Sayreville Borough test well 4--Continued.

Lowest daily water level, in feet with reference to land-surface datum. 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June
9	-1.85	+2.12	+3.32	+3.47	+2.07	+0.62
10	-.90	+2.27	+2.37	+3.22	+2.37	+1.12
11	-.45	+2.52	+2.97	+3.27	+2.97	+1.62
12	-.85	+2.57	+2.22	+3.52	+2.92	+1.37
13	-.90	+2.52	+1.77	+3.42	+2.77	+1.02
14	-.85	+2.92	+1.62	+3.42	+2.72	-.43
15	-1.18	+2.22	+2.52	+3.42	+1.87	-.78
16	-.63	+1.07	+2.22	+3.42	+1.87	-1.98
17	+.37	+2.12	+1.87	+3.32	+1.87	-1.98
18	.....	+2.57	+1.97	+3.27	+2.17	-1.53
19	.....	+2.72	+2.32	+3.57	+1.47	-2.78
20	.....	+2.22	+2.97	+3.57	+1.37	-2.88
21	+.57	+2.22	+3.07	+3.22	+2.02	-5.83
22	+1.02	+2.12	+3.37	+3.27	+1.52	-4.98
23	+1.02	+1.72	+3.12	+3.07	+1.97	-3.98
24	+1.07	+1.92	+3.02	+2.97	+1.82	-4.63
25	+1.47	+2.47	+3.17	+2.92	+1.37	-5.83
26	+1.32	+2.82	+3.37	+3.32	+1.22	-7.18
27	+1.52	+3.27	+3.17	+2.47	+.87	-6.63
28	+1.62	+3.37	+3.27	+2.27	-.18	-6.68
29	+1.67	.....	+3.37	+2.57	-1.18	-6.63
30	+1.37	.....	+3.02	+2.72	-.88	-6.23
31	+1.42	.....	+3.17	.....	+.27	.....

Lowest daily water level, in feet with reference to land-surface datum, 1943
(From recorder charts)

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	-5.93	.....	.....	-13.38	-7.93	-7.08
2	-5.18	.....	.....	-13.48	-5.98	-7.68
3	-5.18	.....	.....	-12.88	-8.98	-8.63
4	-4.28	.....	.....	-12.88	-8.88	-8.23
5	-2.68	.....	.....	-12.53	-8.18	-7.08
6	-1.58	-14.63	.....	-12.18	-8.33	-6.88
7	-1.88	-14.63	.....	-12.08	-8.18	-7.03
8	-2.03	.....	.....	-11.83	-7.33	-6.78
9	-2.38	.....	-12.88	-12.48	-8.23	-7.13
10	-3.98	.....	-13.43	-11.98	-8.83	-7.38
11	-3.83	.....	-14.18	-11.03	-8.63	-7.78
12	-3.83	-11.98	.....	-11.58	-8.08	-7.18
13	-5.43	-12.83	.....	-11.78	-8.78	-6.88
14	-5.43	-13.73	.....	-12.38	-8.38	-7.98
15	-6.68	.....	.....	-12.53	-7.23	-7.83
16	-7.43	.....	-12.48	-13.38	-8.73	-7.58
17	-7.53	.....	-13.13	-12.88	-9.48	-7.43
18	-7.58	.....	-13.53	-12.28	-9.73	-7.33
19	-6.13	-11.98	-12.73	-12.33	-8.23	-6.93
20	-8.53	-12.78	-11.48	-13.13	-7.93	-7.03
21	-11.53	-14.03	-12.23	-12.33	-7.48	-6.83
22	-12.48	.....	-14.03	-11.68	-6.48	-6.73
23	-13.18	.....	-15.78	-11.13	-6.03	-6.78
24	-13.63	.....	-15.48	-15.13	-5.83	-6.83
25	.....	.....	.....	-14.18	-5.43	-6.48
26	.....	-14.48	.....	-12.23	-7.68	-5.08
27	.....	-14.53	.....	-11.48	-8.48	-5.43
28	.....	-14.53	.....	-10.58	-8.48	-7.63
29	.....	.....	-12.53	-10.18	-8.53	-7.88
30	.....	.....	-13.33	-9.58	-6.68	-6.83
31	.....	.....	.....	-8.98	.....	-6.98

28.5.1.8.4. Sayreville Borough test well 4--Continued.

Lowest daily water level, in feet with reference to mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	+3.30	+7.50	.....	+9.05	+8.05	+7.75	-0.20	.....	.....	-7.65	-2.20	-1.35
2	+5.00	+7.00	.....	+9.05	+8.05	+7.60	+.55	.....	.....	-7.75	-2.25	-1.95
3	+5.00	+7.00	+8.55	+9.05	+8.85	+6.95	++.55	.....	.....	-7.15	-3.25	-2.90
4	.....	+7.40	+8.70	+9.10	+8.65	+4.60	+1.45	.....	.....	-7.15	-3.15	-2.50
5	.....	+7.10	+8.40	+9.40	+8.65	+4.10	+3.05	.....	.....	-6.80	-2.45	-1.35
6	+3.65	+7.10	+7.85	+9.35	+8.65	+4.30	+4.15	-8.90	.....	-6.45	-2.60	-1.15
7	+3.40	+7.45	+8.30	+9.30	+8.75	+5.45	+3.85	-8.90	.....	-6.35	-2.45	-1.30
8	+3.25	+7.80	+8.95	+9.50	+7.90	+6.15	+3.70	.....	.....	-6.10	-1.60	-1.05
9	+3.85	+7.95	+9.05	+9.20	+7.80	+6.35	+3.35	.....	-7.15	-6.75	-2.50	-1.40
10	+4.80	+8.00	+9.10	+8.95	+8.10	+6.85	+1.75	.....	-7.70	-6.25	-3.10	-1.65
11	+5.25	+8.25	+8.70	+9.00	+8.70	+7.35	+1.90	.....	-8.45	-5.30	-2.90	-2.05
12	+4.85	+8.30	+7.95	+9.25	+8.65	+7.10	+1.90	-6.25	.....	-5.85	-2.35	-1.45
13	+4.80	+8.25	+7.50	+9.15	+8.50	+6.75	+.30	-7.10	.....	-6.05	-3.05	-1.15
14	+4.85	+8.65	+7.35	+9.15	+8.45	+5.30	+.30	-8.00	.....	-6.65	-2.65	-2.25
15	+4.55	+8.05	+8.25	+9.15	+7.60	+4.95	-.95	.....	.....	-6.80	-1.50	-2.10
16	+5.10	+7.80	+7.95	+9.15	+7.60	+3.75	-1.70	.....	-6.75	-7.65	-3.00	-1.85
17	+6.10	+7.85	+7.60	+9.05	+7.60	+3.75	-1.80	.....	-7.45	-7.15	-3.75	-1.70
18	.....	+8.30	+7.70	+9.00	+7.90	+4.20	-1.85	.....	-7.80	-6.55	-4.00	-1.60
19	.....	+8.45	+8.05	+9.30	+7.20	+2.95	-.40	-6.25	-7.00	-6.60	-2.50	-1.20
20	.....	+7.95	+8.70	+9.35	+7.10	+2.85	-2.80	-7.05	-5.75	-7.40	-2.20	-1.30
21	+6.30	+7.95	+8.80	+8.95	+7.75	-.10	-5.80	-8.30	-6.50	-6.60	-1.75	-1.10
22	+6.75	+7.85	+9.10	+9.00	+7.25	+.75	-6.75	.....	-8.30	-5.95	-.75	-1.00
23	+6.75	+7.45	+8.85	+8.80	+7.70	+1.75	-7.45	.....	-10.05	-5.40	-.30	-1.05
24	+6.80	+7.65	+8.75	+8.70	+7.55	+1.10	-7.90	.....	-9.75	-9.40	-.10	-1.10
25	+7.20	+8.10	+8.90	+8.65	+7.10	-.10	.....	.....	.....	-8.45	+.30	-.75
26	+7.05	+8.55	+9.10	+9.05	+6.95	-1.45	.....	-8.75	.....	-6.50	-1.95	+.65
27	+7.35	+9.00	+8.90	+8.20	+6.60	-.90	.....	-8.80	.....	-5.75	-2.75	+.30
28	+7.45	+9.10	+9.00	+8.00	+5.55	-.95	.....	-8.80	.....	-4.85	-2.75	-1.90
29	+7.40	.....	+9.10	+8.30	+4.55	-.90	.....	.....	-6.80	-4.45	-2.80	-2.15
30	+7.10	.....	+8.85	+8.45	+4.85	-.50	.....	.....	-7.60	-3.85	-.95	-1.10
31	+7.15	.....	+8.90	.....	+6.00	....	.....	.....	.....	-3.85	....	-1.25

26.41.5.9.5. (*845, p. 240; 886, p. 374; 906, p. 105; 936, p. 110; 944, p. 98). South Amboy Water Department old deep well 3. Land surface is 1 foot above mean sea level. Extremes of observed water level, in feet below land surface: Highest, 19.6 sometime between July 23 and Aug. 2, 1938; lowest, 47.7 Aug. 22, 1937.

Water level at end of day, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	.....	15.40	13.50	12.87	12.85	13.90	.....	25.70	25.27
2	.....	15.85	.....	12.85	12.55	14.48	.....	25.72	.....
3	19.60	15.91	.....	13.07	12.13	15.28	23.80	25.72	.....
4	19.73	15.54	.....	12.50	12.10	15.93	23.70	25.70	.....
5	19.20	15.28	.....	12.41	12.13	17.16	23.50	25.65	.....
6	19.12	14.50	....	12.47	11.67	17.85	23.18	25.46	.....
7	18.89	14.53	.....	12.12	11.74	17.91	23.10	25.52	.....
8	18.74	14.90	.....	12.24	12.02	17.80	23.21	25.25	.....
9	19.14	14.37	.....	13.00	12.62	17.95	23.33	25.13	.....
10	18.85	14.24	13.22	13.59	12.82	18.06	23.70	25.38	.....
11	18.60	14.87	13.43	12.80	12.60	17.90	23.99	25.20	.....
12	18.15	14.50	13.83	12.21	12.80	17.87	23.89	24.98	.....
13	18.23	14.00	14.37	12.15	12.76	17.96	23.91	24.59	.....
14	17.15	14.14	14.44	12.75	12.73	17.90	24.30	24.19	.....
15	16.47	14.77	14.13	12.47	12.64	18.07	24.54	23.88	.....
16	16.60	14.17	13.77	11.90	12.84	18.47	24.95	24.09	.....
17	16.71	14.05	13.99	11.98	12.30	18.66	24.75	24.56	.....
18	16.53	13.99	13.95	11.89	12.17	18.83	25.90	24.90	.....
19	16.63	13.60	13.60	10.85	12.65	19.35	26.39	25.08	.....
20	17.98	13.32	13.55	11.47	13.04	19.81	26.07	25.10	.....
21	17.58	13.10	13.07	11.55	13.20	19.82	26.55	24.98	.....
22	17.35	12.82	12.62	11.64	13.54	21.15	26.95	24.70	.....
23	16.70	12.54	12.73	12.00	13.55	21.42	27.50	24.70	.....
24	16.80	12.76	12.82	12.05	13.20	21.67	28.41	24.70	.....

26.41.5.9.5. South Amboy Water Department old deep well 3--Continued.

Water level at end of day, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
25	16.56	13.16	12.90	12.35	13.05	22.20	29.27	24.60	.....
26	16.47	13.35	12.90	12.30	12.90	22.85	29.30	24.09	.....
27	16.18	13.69	13.15	11.96	13.34	23.80	29.05	23.89	.....
28	15.30	13.64	13.01	12.80	13.66	24.02	28.59	24.21	.....
29	15.35	.....	12.98	13.12	13.93	.....	27.70	24.69	.....
30	15.28	.....	13.01	12.88	13.55	.....	27.02	24.98	.....
31	15.03	.....	12.80	.....	13.50	.....	26.04	25.10	.....

Monmouth County

Asbury Park area

29.24.7.1.6 (*817, p. 176; 840, p. 243; *845, p. 196; 886, p. 375; 906, p. 105; 936, p. 111; 944, p. 99). Avon Water Department well 1. Land surface is 28.27 feet above mean sea level. Extremes of observed water level, in feet below mean sea level: Highest, 4.46 Apr. 12, 1937; lowest, 132.0 Aug. 4, 1925, while well was being pumped.

Water level, in feet, 1943

Date	Below land-surface datum	Below mean sea level
Jan. 15	48.64	20.37
Aug. 4	88.09	59.82
4	85.18	56.91
Nov. 30	50.63	22.36

29.24.4.8.4 (*817, p. 178; 840, p. 243; *845, p. 197; 886, p. 375; 906, p. 105; 936, p. 111; 944, p. 99). Bradley Beach, 650-foot well. Monmouth Consolidated Water Co. Land surface is 16.54 feet above mean sea level. Extremes of observed water level, in feet below mean sea level: Highest, 5.17 Apr. 17, 1935; lowest, 136.68 Aug. 27, 1925.

Water level, in feet, 1943

Date	Below land-surface datum	Below mean sea level
Jan. 15	28.23	11.69
Aug. 4	32.94	16.40
Nov. 30	31.10	14.56

Monmouth County

Runyon area

29.11.2.1.1 (*845, p. 226; 886, p. 375; 906, p. 106; 936, p. 111; 844, p. 99). F-30. Edward Huffrey. Land surface is 76.61 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 75.85 Dec. 14, 1940; lowest, 59.93 June 28, 1929. Water level, in feet, 1943: Below land-surface datum, July, 14.20; above mean sea level, July, 62.41.

29.1.8.9.4 (*845, p. 227; 886, p. 375; 906, p. 106; 936, p. 112). F-31. W. Gilson. Land surface is 88.92 feet above mean sea level. Extremes of observed water level, in feet above mean sea level. Highest, 85.48 Apr. 16, 1935; lowest, 80.02 Oct. 21, 1925. Water level, in feet, 1943: Below land-surface datum, July, 6.95; above mean sea level, July, 81.97.

29.11.1.2.9 (*817, p. 185; 840, p. 247; 845, p. 208; 886, p. 375; 906, p. 106; 936, p. 112; 944, p. 99). Hulsart well. Rufus Hulsart. Land surface is 113.34 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 100.40 Apr. 19, 1939; lowest, 95.47 Feb. 18, 1940.

29.11.1.2.9. Hulsart well--Continued.

Water level at end of day, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Dec.
1	.....	15.96	15.58	15.25	15.31	14.87	15.40	15.98	16.69	.....	.....
2	16.34	15.96	15.56	15.26	15.29	14.86	15.42	16.00	16.71	.....	.....
3	16.29	15.96	15.56	15.29	.....	14.85	15.43	16.02	16.74	.....	.....
4	16.24	15.94	15.58	15.26	.....	14.85	15.44	16.04	16.76	.....	.....
5	16.22	15.94	15.57	15.27	15.31	14.85	15.46	.....	16.79	.....	.....
6	16.18	15.91	15.51	15.31	15.29	14.86	15.47	.....	16.79	.....	.....
7	16.15	15.88	15.54	15.29	.....	14.87	15.47	16.12	16.81	17.30	.....
8	16.12	15.84	15.51	15.29	15.33	14.87	15.47	16.14	.....	17.30	.....
9	16.09	15.81	15.47	15.29	15.35	14.87	15.47	16.16	.....	17.32	.....
10	16.08	15.76	15.43	15.31	15.35	14.86	15.49	16.19	.....	17.34	.....
11	16.06	15.74	15.40	15.32	15.34	14.88	15.52	16.22	.....	17.35	.....
12	16.03	15.73	15.39	15.29	15.33	14.90	15.53	16.24	.....	17.36	.....
13	16.02	15.69	15.39	15.29	15.31	14.91	15.55	16.26	.....	17.37	.....
14	16.01	15.67	15.38	15.36	15.29	14.95	15.57	16.28	.....	17.39	.....
15	16.00	15.68	15.36	15.38	15.28	14.94	15.60	16.30	.....	17.38	.....
16	15.99	15.67	15.34	15.38	15.24	14.99	15.62	16.33	.....	17.39	.....
17	15.99	15.65	15.34	15.42	15.23	15.01	15.64	.....	.....	17.39	.....
18	15.99	15.65	15.31	15.43	15.23	15.04	15.67	16.38	.....	17.39	.....
19	15.99	15.64	15.30	15.34	15.20	15.06	15.68	16.40	.....	17.39	.....
20	15.97	15.60	15.29	15.34	15.19	15.09	15.71	16.42	.....	17.39	.....
21	15.97	15.60	15.27	15.31	15.14	15.11	15.72	16.45	.....	17.39	.....
22	15.96	15.60	15.27	15.30	15.11	15.15	15.75	16.47	.....	17.39	17.09
23	15.95	15.60	15.27	15.28	15.08	15.18	15.79	16.49	.....	17.42	17.11
24	15.96	15.59	15.26	15.26	15.04	15.20	15.81	16.52	.....	17.42	17.12
25	15.96	15.59	15.26	15.24	15.00	15.23	15.82	16.54	.....	17.43	17.13
26	15.96	15.57	15.25	15.28	14.97	15.26	15.84	16.57	.....	.....	17.13
27	15.97	15.57	15.25	15.25	14.95	15.27	15.86	16.59	.....	.....	17.16
28	15.94	15.55	15.28	15.29	14.92	15.30	15.88	16.62	.....	.....	17.17
29	15.97	15.58	15.29	15.29	14.91	15.32	15.90	16.63	.....	.....	17.17
30	15.97	.....	15.25	15.26	14.90	15.37	15.92	16.65	.....	.....	17.20
31	15.97	.....	15.26	.....	14.90	.....	15.96	16.67	.....	.....	17.21

Water level at end of day, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Dec.
1	.....	97.38	97.76	98.09	98.03	98.47	97.94	97.36	96.65	.....	.....
2	97.00	97.38	97.78	98.08	98.05	98.48	97.92	97.34	96.63	.....	.....
3	97.05	97.38	97.78	98.05	.....	98.49	97.91	97.32	96.60	.....	.....
4	97.10	97.40	97.76	98.08	.....	98.49	97.90	97.30	96.58	.....	.....
5	97.12	97.40	97.77	98.07	98.03	98.49	97.88	.....	96.55	.....	.....
6	97.16	97.43	97.83	98.03	98.05	98.48	97.87	.....	96.55	.....	.....
7	97.19	97.46	97.80	98.05	.....	98.47	97.87	97.22	96.53	96.04	.....
8	97.22	97.50	97.83	98.05	98.01	98.47	97.87	97.20	.....	96.04	.....
9	97.25	97.53	97.87	98.05	97.99	98.47	97.87	97.18	.....	96.02	.....
10	97.26	97.58	97.91	98.03	97.99	98.48	97.85	97.15	.....	96.00	.....
11	97.28	97.60	97.94	98.02	98.00	98.46	97.82	97.12	.....	95.99	.....
12	97.31	97.61	97.95	98.05	98.01	98.44	97.81	97.10	.....	95.98	.....
13	97.32	97.65	97.95	98.05	98.03	98.43	97.79	97.08	.....	95.97	.....
14	97.33	97.67	97.96	97.98	98.05	98.39	97.77	97.06	.....	95.95	.....
15	97.34	97.66	97.98	97.96	98.06	98.40	97.74	97.04	.....	95.96	.....
16	97.35	97.67	98.00	97.96	98.10	98.35	97.72	97.01	.....	95.95	.....
17	97.35	97.69	98.00	97.92	98.11	98.33	97.70	.....	.....	95.95	.....
18	97.35	97.69	98.03	97.91	98.11	98.30	97.67	96.96	.....	95.95	.....
19	97.35	97.70	98.04	98.00	98.14	98.28	97.66	96.94	.....	95.95	.....
20	97.37	97.74	98.05	98.00	98.15	98.25	97.63	96.92	.....	95.95	.....
21	97.37	97.74	98.07	98.03	98.20	98.23	97.62	96.89	.....	95.95	.....
22	97.38	97.74	98.07	98.04	98.23	98.19	97.59	96.87	.....	95.95	96.25
23	97.39	97.74	98.07	98.06	98.26	98.16	97.55	96.85	.....	95.92	96.23
24	97.38	97.75	98.08	98.08	98.30	98.14	97.53	96.82	.....	95.92	96.22
25	97.38	97.75	98.08	98.10	98.34	98.11	97.52	96.80	.....	95.91	96.21
26	97.38	97.77	98.09	98.06	98.37	98.08	97.50	96.77	.....	.....	96.21
27	97.37	97.77	98.09	98.09	98.39	98.07	97.48	96.75	.....	.....	96.18
28	97.40	97.79	98.06	98.05	98.42	98.04	97.46	96.72	.....	.....	96.17
29	97.37	.....	98.05	98.05	98.43	98.02	97.44	96.71	.....	.....	96.17
30	97.37	.....	98.09	98.08	98.44	97.97	97.41	96.69	.....	.....	96.14
31	97.37	.....	98.08	.....	98.44	.....	97.38	96.67	.....	.....	96.13

Salem County

Penns Grove area

30.23.1.8.5 (*936, p. 112; 944, p. 100). Penns Grove observation well 6. New Jersey State Water Policy Commission. Land surface is 0.3 foot below the measuring point. Extremes of observed water level, in feet below land surface: Highest, 3.38 Aug. 14, 1942; lowest, 6.16 Sept. 27, 1941

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3	4.00	May 9	4.39	July 31	4.72	Oct. 20	4.75
14	3.82	23	3.96	Aug. 14	5.13	24	4.66
28	4.05	June 6	4.41	28	5.55	Nov. 7	4.04
Mar. 14	3.95	20	4.35	Sept.12	5.20	20	4.12
28	4.10	July 4	4.80	25	5.45	Dec. 4	4.28
Apr. 11	4.40	18	4.84	Oct. 10	4.98	18	4.51
25	4.05						

30.23.4.1.9 (*936, p. 113; 944, p. 100). Penns Grove observation well 7. New Jersey State Water Policy Commission. Land surface is 0.2 foot below the measuring point. Extremes of observed water level, in feet, below land surface: Highest, 2.83 Aug. 14, 1942; lowest, 7.08 Nov. 22, 19 1941.

Water level, in feet below land-surface datum, 1943

Feb. 3	3.78	May 9	4.03	July 31	5.33	Oct. 20	6.83
14	3.55	23	3.77	Aug. 14	5.84	24	6.85
28	3.90	June 6	3.96	28	6.29	Nov. 7	4.30
Mar. 14	3.82	20	4.06	Sept.12	6.22	20	4.10
28	3.83	July 4	4.48	25	6.60	Dec. 4	4.26
Apr. 11	4.04	18	4.89	Oct. 10	6.76	18	4.49
25	3.75						

30.22.6.6.7 (*936, p. 113; 944, p. 101). Penns Grove observation well 9. New Jersey State Water Policy Commission. Land surface is 0.6 foot below the measuring point. Extremes of observed water level, in feet below land surface: Highest, 2.64 feet Mar. 13, 1941; lowest, 6.75 feet Sept. 25, 1943.

Water level, in feet below land-surface datum, 1943

Feb. 3	3.07	May 9	3.73	July 31	5.20	Oct. 20	6.40
14	2.66	23	3.09	Aug. 14	5.90	24	6.50
28	3.11	June 6	3.67	28	6.48	Nov. 7	3.90
Mar. 14	2.93	20	3.80	Sept.12	6.22	20	3.65
28	2.13	July 4	4.60	25	6.75	Dec. 4	3.95
Apr. 11	3.71	18	4.98	Oct. 10	6.50	18	4.29
25	3.08						

30.22.6.9.3 (*936, p. 113; 944, p. 101). Penns Grove observation well 10. New Jersey State Water Policy Commission. Land surface is 0.2 foot below the measuring point. Extremes of observed water level, in feet below land-surface: Highest, 1.63 Mar. 13, 1941; lowest, 6.89 Oct. 24, 1943.

Water level, in feet below land-surface datum, 1943

Feb. 3	2.30	May 9	3.20	July 31	5.15	Oct. 20	6.87
14	1.95	23	2.26	Aug. 14	5.85	24	6.89
28	2.62	June 6	3.14	28	6.38	Nov. 7	3.78
Mar. 14	2.33	20	3.37	Sept.12	6.35	20	3.11
28	2.62	July 4	4.39	25	6.77	Dec. 4	3.40
Apr. 11	3.16	18	4.83	Oct. 10	6.80	18	3.75
25	2.44						

30.23.4.7.8 (*936, p. 114; 944, p. 101). Penns Grove observation well 11. New Jersey State Water Policy Commission. Measuring point is 0.6 foot above the land surface. Extremes of observed water level, in feet below land surface: Highest, 5.20 Dec. 11, 1940; lowest, 10.77 Feb. 12, 1942.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3	8.74	May 9	7.22	July 31	7.14	Oct. 20	9.47
14	8.43	23	7.19	Aug. 14	7.22	24	9.58
28	8.08	June 6	7.09	28	7.47	Nov. 7	9.86
Mar. 14	7.84	20	7.03	Sept.12	7.96	20	9.85
28	7.55	July 4	7.05	25	8.54	Dec. 4	9.80
Apr. 11	7.40	17	7.07	Oct. 11	9.12	18	9.79
25	7.31						

30.22.8.3.5 (*936, p. 114; 944, p. 101). Penns Grove observation well 12. New Jersey State Water Policy Commission. Measuring point is 1.5 feet above the land surface. Extremes of observed water level, in feet below land surface: Highest, 0.34 above land surface, Mar. 13, 1941; lowest, 2.32 Oct. 11, 1941.

Water level, in feet with reference to land-surface datum, 1943

Feb. 3	0.0	May 9	-0.38	July 31	-1.29	Oct. 20	-1.57
14	.0	23	+.10	Aug. 14	-1.48	24	-1.58
28	+.28	June 6	-.06	28	-1.84	Nov. 7	-1.67
Mar. 14	+.27	20	-.37	Sept.12	-1.72	20	-.34
28	+.26	July 4	-.71	25	-1.84	Dec. 4	-.56
Apr. 11	-.18	17	-1.07	Oct. 11	-1.70	18	-.85
25	+.30						

30.22.9.2.1 (*936, p. 114; 944, p. 102). Penns Grove observation well 13. New Jersey State Water Policy Commission. Measuring point is 1.0 foot above the land surface. Extremes of observed water level, in feet below land surface: Highest, 0.83 Mar. 13, 1941; lowest, 6.90 Nov. 22, 1941.

Water level, in feet below land-surface datum, 1943

Feb. 3	1.51	May 9	2.90	July 31	5.04	Oct. 20	7.04
14	1.13	23	1.60	Aug. 14	5.45	24	7.08
28	1.46	June 6	2.71	28	6.08	Nov. 7	4.52
Mar. 14	1.10	20	2.98	Sept.12	6.33	20	3.38
28	1.72	July 4	4.12	25	6.66	Dec. 4	3.77
Apr. 11	2.74	18	4.59	Oct. 10	6.90	18	4.23
25	1.59						

30.22.9.6.2 (*936, p. 115; 944, p. 102). Penns Grove observation well 14. New Jersey State Water Policy Commission. Land surface is 25.38 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 22.51 Mar. 13, 1941; lowest, 16.85 Sept. 25, 1943.

Water level, in feet, 1943

Date	Below land-surface datum	Above mean sea level
Feb. 3	3.79	21.59
14	3.08	22.30
28	3.82	21.56
Mar. 14	3.60	21.78
28	3.88	21.50
Apr. 11	4.85	20.53
25	3.83	21.55
May 9	5.05	20.33
23	3.52	21.86
June 6	4.53	20.85
20	4.87	20.51
July 4	5.92	19.46
18	6.46	18.92
31	6.93	18.45

30.22.9.6.2. Penns Grove observation well 14--Continued.

Water level, in feet, 1943

Date		Below land-surface datum	Above mean sea level
Aug.	14	7.48	17.90
	28	7.96	17.42
Sept.	12	8.25	17.13
	25	8.53	16.85
Oct.	10	8.72	16.66
	20	8.80	16.58
	24	8.83	16.55
Nov.	7	6.14	19.24
	20	5.43	19.95
Dec.	4	5.91	19.47
	18	6.29	19.09

30.22.9.5.8 (*936, p. 115; 944, p. 102). Penns Grove observation well 15. New Jersey State Water Policy Commission. Land surface is 23.78 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 9.43 Mar. 29, 1941; lowest, 3.15 Nov. 6, 1942.

Water level, in feet, 1943

Feb.	3	18.70	5.08
	14	18.04	5.74
	28	17.19	6.59
Mar.	14	17.09	6.69
	28	16.44	7.34
Apr.	11	16.32	7.46
	25	16.34	7.44
May	9	16.33	7.45
	23	16.51	7.27
June	6	15.91	7.87
	20	16.04	7.74
July	4	16.43	7.35
	18	16.82	6.96
	31	17.34	6.44
Aug.	14	17.82	5.96
	28	18.33	5.45
Sept.	12	18.84	4.94
	25	19.20	4.58
Oct.	10	19.65	4.13
	20	19.95	3.83
	24	20.03	3.75
Nov.	7	20.27	3.51
	20	20.12	3.66
Dec.	4	20.03	3.75
	18	20.14	3.64

30.22.9.5.5 (*936, p. 115; 944, p. 102). Penns Grove observation well 21. New Jersey State Water Policy Commission. Land surface is 19.99 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 14.87 Mar. 13, 1941; lowest, 8.24, Oct. 24, 1943.

Water level, in feet, 1943

Feb.	3	8.50	11.49
	14	6.81	13.18
	28	7.21	12.78
Mar.	14	7.03	12.96
	28	6.49	13.50
Apr.	11	7.16	12.83
	25	6.52	13.47
May	9	7.31	12.68
	23	6.99	13.00
June	6	6.81	13.18
	20	7.36	12.63
July	4	8.00	11.99
	17	8.53	11.46
	31	9.11	10.88

30.22.9.5.5. Penns Grove observation well 21--Continued.

Water level, in feet, 1943

Date		Below land-surface datum	Above mean sea level
Aug.	14	9.65	10.34
	28	10.19	9.80
Sept.	12	10.72	9.27
	25	11.09	8.90
Oct.	11	11.50	8.49
	20	11.68	8.31
	24	11.75	8.24
Nov.	7	11.50	8.49
	20	10.64	9.35
Dec.	4	9.55	10.44
	18	10.77	9.22

30.22.9.4.9 (*936, p. 116; 944, p. 102). Penns Grove observation well 22. Penns Grove Water Co. Land surface is 14.38 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 14.92 Aug. 18, 1939; well dry after July 11, 1942. Water level, in feet, 1943: Above land-surface datum, Mar. 28, 12.80; above mean sea level, Mar. 28, 1.58.

30.22.9.7.3 (*936, p. 117; 944, p. 103). Penns Grove observation well 24. New Jersey State Water Policy Commission. Land surface is 18.14 feet above mean sea level. Extremes of observed water level, in feet referred to mean sea level: Highest, +0.33 June 15, 16, 17, 1943; lowest, -5.62 Nov. 30 and Dec. 3, 1942.

Water level at end of day, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July
1	23.36	22.19	20.50	19.21	18.62	18.07	18.02
2	23.30	22.18	20.45	19.17	18.52	18.03	18.04
3	23.25	22.16	20.43	19.17	18.53	18.01	18.05
4	23.18	22.11	20.41	19.07	18.55	18.00	18.01
5	23.14	22.10	20.40	19.06	18.53	.....	18.01
6	23.09	22.00	20.31	19.07	18.47	17.97	18.08
7	23.02	21.94	20.36	19.00	18.48	17.94	.....
8	22.95	21.89	20.36	18.99	18.49	17.94	.....
9	22.70	21.82	20.26	18.95	18.52	17.92	.....
10	22.85	21.72	20.19	18.95	18.48	17.90	.....
11	22.80	21.66	20.19	18.92	18.47	17.89	.....
12	22.76	21.61	20.10	18.87	18.44	17.89	.....
13	22.72	21.50	20.09	18.87	18.49	17.84	.....
14	22.65	21.42	20.09	18.94	18.53	17.85	.....
15	22.62	21.37	20.04	18.98	18.55	17.81	.....
16	22.59	21.29	19.98	18.90	18.51	17.81	.....
17	22.55	21.21	19.96	18.96	18.50	17.81	.....
18	22.53	21.14	19.94	18.93	18.47	17.82	.....
19	22.51	21.04	19.87	18.80	18.45	17.82	.....
20	22.48	.....	19.85	18.82	18.48	.....	.....
21	22.45	20.86	19.80	.....	18.44	.....	.....
22	22.42	20.80	19.75	.....	18.42	.....	.....
23	22.37	20.74	19.71	18.75	18.40	17.87	.....
24	22.35	20.69	19.63	18.70	18.34	17.87	.....
25	22.33	20.66	19.58	18.66	18.30	17.86	.....
26	22.32	20.57	19.51	18.69	18.28	.....	.....
27	22.31	20.55	19.46	18.61	18.26	17.86	.....
28	22.27	20.49	19.43	18.65	18.23	17.84	.....
29	22.26	.....	19.40	18.62	.....	17.89	.....
30	22.24	.....	19.31	18.58	18.15	17.99	.....
31	22.21	.....	19.27	.....	18.13	.....	.....

30.22.9.7.3. Penns Grove observation well 24--Continued.

Water level at end of day, in feet with reference to mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July
1	-5.22	-4.05	-2.36	-1.07	-0.48	+0.07	+0.12
2	-5.16	-4.04	-2.31	-1.03	-.38	+.11	+.10
3	-5.10	-4.02	-2.29	-1.03	-.39	+.13	+.09
4	-5.04	-3.97	-2.27	-.93	-.41	+.14	+.13
5	-5.00	-3.96	-2.26	-.92	-.39	....	+.13
6	-4.95	-3.86	-2.17	-.93	-.33	+.17	+.06
7	-4.88	-3.80	-2.22	-.86	-.34	+.20	....
8	-4.81	-3.75	-2.19	-.85	-.35	+.20	....
9	-4.76	-3.68	-2.12	-.81	-.38	+.22	....
10	-4.71	-3.58	-2.05	-.81	-.34	+.24	....
11	-4.66	-3.52	-1.97	-.78	-.30	+.25	....
12	-4.62	-3.47	-1.96	-.73	-.30	+.25	....
13	-4.58	-3.36	-1.95	-.73	-.35	+.30	....
14	-4.51	-3.28	-1.95	-.80	-.39	+.29	....
15	-4.48	-3.23	-1.90	-.84	-.41	+.33	....
16	-4.45	-3.15	-1.84	-.76	-.37	+.33	....
17	-4.41	-3.07	-1.82	-.82	-.36	+.33	....
18	-4.39	-3.00	-1.80	-.79	-.33	+.32	....
19	-4.37	-2.90	-1.73	-.66	-.31	+.32	....
20	-4.34	.....	-1.71	-.68	-.34	....	....
21	-4.31	-2.72	-1.66	....	-.30	....	....
22	-4.28	-2.66	-1.61	....	-.28	....	....
23	-4.23	-2.60	-1.57	-.61	-.26	+.27	....
24	-4.21	-2.54	-1.49	-.56	-.20	+.27	....
25	-4.19	-2.52	-1.44	-.52	-.16	+.28	....
26	-4.18	-2.43	-1.37	-.55	-.14	....	....
27	-4.17	-2.41	-1.32	-.47	-.12	+.28	....
28	-4.13	-2.35	-1.29	-.51	-.09	+.30	....
29	-4.12	.....	-1.26	-.48	....	+.25	....
30	-4.10	.....	-1.17	-.44	-.01	+.15	....
31	-4.07	.....	-1.13	....	+.01	....	....

30.22.2.2.3 (*936, p. 118; 944, p. 103). Penns Grove observation well 31. New Jersey State Water Policy Commission. Land surface is 5.20 feet above mean sea level. Extremes of observed water level, in feet with reference to mean sea level: Highest, +0.26 Mar. 13, 1941; lowest, -4.23 Nov. 22, 1941 and Oct. 24, 1943.

Water level, in feet, 1943

Date		Below land-surface datum	Below mean sea level
Feb.	3	6.05	0.85
	14	5.16	a .04
	28	5.66	.46
Mar.	14	5.50	.30
	28	5.44	.24
Apr.	11	6.09	.89
	25	5.36	.16
May	9	6.20	1.00
	23	5.68	.48
June	6	5.95	.75
	20	6.37	1.17
July	4	6.99	1.79
	17	7.35	2.15
	31	7.74	2.54
Aug.	14	8.11	2.91
	28	8.55	3.35
Sept.	12	8.82	3.62
	25	9.11	3.91
Oct.	11	9.28	4.08
	20	9.37	4.17
	24	9.43	4.23
Nov.	7	8.67	3.47
	20	7.90	2.70
Dec.	4	7.90	2.70
	18	8.00	2.80

a Above mean sea level.

30.22.8.9.5 (*936, p. 119; 944, p. 104). Penns Grove observation well 32. New Jersey State Water Policy Commission. Land surface is 3.88 feet above mean sea level. Extremes of observed water level, in feet, with reference to mean sea level: Highest, +1.65 Mar. 13, 1941; lowest, -1.06 Nov. 22, 1941.

Water level, in feet, 1943

Date		Below land-surface datum	With reference to mean sea level
Feb.	3	3.15	+0.73
	14	2.47	+1.41
	28	2.96	+.92
Mar.	14	2.70	+1.18
	28	2.71	+1.17
Apr.	11	3.09	+.79
	25	2.70	+1.17
May	9	3.14	+.74
	23	2.77	+1.11
June	6	2.96	+.92
	20	3.20	+.68
July	4	3.55	+.33
	17	3.78	+.10
	31	4.02	-.14
Aug.	14	4.26	-.38
	28	4.52	-.64
Sept.	12	4.67	-.79
	25	4.82	-.94
Oct.	11	4.83	-1.00
	20	4.89	-1.01
	24	4.93	-1.05
Nov.	7	4.13	-.25
	20	3.71	+.17
Dec.	4	3.94	-.06
	18	4.13	-.25

30.22.9.8.6 (*936, p. 119; 944, p. 104). Penns Grove observation well 35. New Jersey State Water Policy Commission. Land surface is 20.61 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 18.66 Nov. 29, 1940; lowest, 0.35 Oct. 9, 1942.

Water level, in feet, 1943

Date		Below land-surface datum	Above mean sea level
Feb.	3	17.74	2.87
	14	16.99	3.62
	28	16.57	4.04
Mar.	14	16.51	4.10
	28	16.08	4.53
Apr.	11	16.06	4.55
	25	15.90	4.71
May	9	16.15	4.46
	23	15.95	4.66
June	6	15.85	4.76
	20	15.90	4.71
July	4	16.25	4.36
	18	16.60	4.01
	31	17.05	3.56
Aug.	14	17.51	3.10
	28	18.03	2.58
Sept.	12	18.56	2.05
	25	18.95	1.66
Oct.	10	19.37	1.24
	20	19.60	1.01
	24	19.71	.90
Nov.	7	19.18	1.43
	20	18.87	1.74
Dec.	4	18.95	1.66
	18	19.14	1.47

30.22.9.8.4 (*936, p. 119; 944, p. 104). Penns Grove observation well 36. New Jersey State Water Policy Commission. Land surface is 26.41 feet above mean sea level. Extremes of observed water level, in feet below mean sea level: Highest, 0.76 Dec. 17, 1940; lowest, 9.39 Dec. 4, 1942.

Water level, in feet, 1943

Date		Below land-surface datum	Above mean sea level
Feb.	3	34.20	7.79
	14	33.68	7.27
	28	32.57	6.16
Mar.	14	32.03	5.62
	28	31.70	5.29
Apr.	11	30.90	4.49
	25	30.63	4.22
May	9	30.36	3.95
	23	30.20	3.79
June	6	29.76	3.35
	20	29.39	2.98
July	4	29.56	3.15
	18	29.80	3.39
	31	30.11	3.70
Aug.	14	30.58	4.17
	28	31.07	4.66
Sept.	12	31.70	5.29
	25	32.19	5.78
Oct.	10	32.91	6.50
	20	33.53	7.12
	24	33.72	7.31
Nov.	7	34.32	7.91
	20	34.58	8.17
Dec.	4	34.66	8.25
	18	35.00	8.59

30.32.2.3.3 (*936, p. 120; 944, p. 104). Penns Grove observation well 41. New Jersey State Water Policy Commission. Land surface is 10.27 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 11.0 Mar. 19, 1943; lowest, 4.66 Oct. 15, 1943.

Water level at end of day, in feet with reference to land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	-0.18	....	+0.03	-0.36	+0.02	-1.79	-3.45	-4.73	-5.43	-4.03	-2.34
2	....	.....	....	+.05	-.37	+.04	-1.89	-3.51	-4.76	-5.43	-3.81	-2.39
3	....	-.18	....	-.07	-.41	-.10	-1.95	-3.56	-4.79	-5.43	-3.61	-2.41
4	....	+.14	....	-.15	-.51	-.24	.....	-3.61	-4.80	-5.43	-3.53	-2.43
5	....	+.41	....	-.13	-.57	-.39	.....	-3.67	-4.82	-5.44	-3.47	-2.48
6	....	+.65	....	-.25	-.59	-.53	.....	-3.73	-4.86	-5.45	-3.45	-2.45
7	....	+.59	....	-.37	-.67	-.61	-2.07	-3.77	-4.89	-5.47	-3.43	-2.46
8	....	+.45	....	-.39	-.72	-.68	-2.14	-3.82	-4.93	-5.47	-3.07	-2.47
9	....	+.38	....	-.42	-.81	-.29	-2.20	-3.87	-4.96	-5.48	-2.59	-2.50
10	....	+.37	....	-.43	-.83	-.29	-2.29	-3.92	-5.01	-5.52	-2.43	-2.51
11	....	+.58	....	....	-.80	-.38	-2.34	-3.98	-5.04	-5.55	-2.29	-2.57
12	....	+.56	....	....	-.44	-.49	-2.37	-4.01	-5.07	-5.56	-2.18	.....
13	....	+.60	....	....	-.43	-.54	-2.41	-4.02	-5.09	-5.58	-2.18	.....
14	....	....	+.35	....	-.45	-.67	-2.47	-4.02	-5.12	-5.60	-2.18	.....
15	....	....	+.38	....	-.51	-.76	-2.52	-4.09	-5.15	-5.61	-2.13	.....
16	....	....	+.37	....	-.57	-.89	-2.61	-4.13	-5.17	-5.60	-2.13	.....
17	....	....	+.32	....	-.65	-.77	-2.67	-4.17	-5.19	-5.58	-2.15	.....
18	....	....	+.52	....	-.74	-.64	-2.75	-4.23	-5.22	-5.55	-2.15	.....
19	....	....	+.73	....	-.72	-.77	-2.82	-4.30	-5.25	-5.54	-2.15	.....
20	....	....	+.59	....	-.53	-.91	-2.87	-4.33	-5.27	-5.51	-2.18	.....
21	....	....	+.58	....	+.03	-1.04	-2.93	-4.39	-5.29	-5.51	-2.16	.....
22	....	....	+.53	....	+.05	-1.14	-2.95	-4.43	-5.29	-5.51	-2.13	.....
23	....	....	+.45	....	+.01	-1.27	-3.03	-4.47	-5.31	-5.51	-2.12	.....
24	....	....	+.43	....	-.05	-1.31	-3.09	-4.51	-5.32	-5.51	-2.15	.....
25	....	....	+.36	+.11	-.07	-1.40	-3.13	-4.54	-5.45	-5.51	-2.16	.....

30.32.2.3.3. Penns Grove observation well 41--Continued.

Water level at end of day, in feet with reference to land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	-0.43	.....	+0.33	-0.01	+0.32	-1.50	-3.12	-4.57	-5.47	-5.15	-2.17	.....
27	-.42	.....	+.31	-.04	+.28	-1.57	-3.13	-4.59	-5.48	-4.92	-2.20	.....
28	-.37	.....	+.19	-.17	+.18	-1.67	-3.19	-4.63	-5.48	-4.45	-2.25	.....
29	-.43	.....	+.11	-.23	+.08	-1.66	-3.24	-4.65	-5.44	-4.25	-2.29	.....
30	-.43	.....	+.10	-.20	+.08	-1.69	-3.32	-4.65	-5.43	-4.15	-2.32	.....
31	-.42	.....	+.05	....	+.06	.....	-3.39	-4.68	.....	-4.03	.....	.....

Water level at end of day, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	10.09	.....	10.30	9.91	10.29	8.48	6.82	5.54	4.84	6.24	7.93
2	....	.....	.....	10.32	9.90	10.31	8.38	6.76	5.51	4.84	6.46	7.88
3	....	10.09	.....	10.20	9.86	10.17	8.32	6.71	5.48	4.84	6.66	7.86
4	....	10.41	.....	10.12	9.76	10.03	....	6.66	5.47	4.84	6.74	7.84
5	....	10.68	.....	10.14	9.70	9.88	....	6.60	5.45	4.83	6.80	7.79
6	....	10.92	.....	10.02	9.68	9.74	....	6.54	5.41	4.82	6.82	7.82
7	....	10.86	.....	9.90	9.60	9.66	8.20	6.50	5.38	4.80	6.84	7.81
8	....	10.72	.....	9.88	9.55	9.59	8.13	6.45	5.34	4.80	7.20	7.80
9	....	10.65	.....	9.85	9.46	9.98	8.07	6.40	5.31	4.79	7.68	7.77
10	....	10.64	.....	9.84	9.44	9.98	7.98	6.35	5.26	4.75	7.84	7.76
11	....	10.85	.....	....	9.47	9.89	7.96	6.29	5.23	4.72	7.98	7.70
12	....	10.83	.....	....	9.83	9.78	7.90	6.26	5.20	4.71	8.09	....
13	....	10.87	.....	....	9.84	9.73	7.86	6.25	5.18	4.69	8.09	....
14	....	.....	10.62	....	9.82	9.60	7.80	6.25	5.15	4.67	8.09	....
15	....	.....	10.65	....	9.76	9.51	7.75	6.18	5.12	4.63	8.14	....
16	....	.....	10.64	....	9.70	9.38	7.66	6.14	5.10	4.67	8.14	....
17	....	.....	10.59	....	9.62	9.50	7.60	6.10	5.08	4.69	8.12	....
18	....	.....	10.79	....	9.53	9.63	7.52	6.04	5.05	4.73	8.12	....
19	....	.....	11.00	....	9.55	9.50	7.45	5.97	5.02	4.73	8.12	....
20	....	.....	10.86	....	9.74	9.36	7.40	5.94	5.00	....	8.09	....
21	....	.....	10.85	....	10.30	9.23	7.34	5.88	4.98	4.76	8.11	....
22	....	.....	10.80	....	10.32	9.13	7.32	5.84	4.98	4.76	8.14	....
23	....	.....	10.72	....	10.28	9.00	7.24	5.80	4.96	4.76	8.15	....
24	....	.....	10.70	....	10.22	8.96	7.18	5.76	4.95	4.78	8.12	....
25	....	.....	10.63	10.38	10.20	8.87	7.14	5.73	4.82	4.76	8.11	....
26	9.84	.....	10.60	10.26	10.59	8.77	7.15	5.70	4.80	5.12	8.10	....
27	9.85	.....	10.58	10.23	10.55	8.70	7.14	5.68	4.79	5.35	8.07	....
28	9.90	.....	10.46	10.10	10.45	8.60	7.08	5.64	4.79	5.83	8.02	....
29	9.84	.....	10.38	10.04	10.35	8.61	7.03	5.62	4.83	6.03	7.98	....
30	9.84	.....	10.37	10.07	10.35	8.58	6.95	5.62	4.84	6.12	7.95	....
31	9.85	.....	10.32	.....	10.33	....	6.88	5.59	....	6.19	....	....

30.32.2.3.9 (*936, p. 120; 944, p. 105). Penns Grove observation well 51. New Jersey State Water Policy Commission. Land surface is 12.71 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 10.99 Mar, 13, 1941; lowest, 3.94 Oct. 24, 1943.

Water level, in feet, 1943

Date	Below land-surface datum	Above mean sea level
Feb. 3	2.09	10.62
14	1.86	10.85
28	2.34	10.37
Mar. 14	2.16	10.55
28	2.40	10.31
Apr. 11	3.18	9.53
25	2.34	10.37
May 9	3.28	9.43
23	2.04	10.67
June 6	3.14	9.57
20	3.59	9.12
July 4	4.97	7.74
18	5.58	7.13
31	6.28	6.43

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30.32.2.3.9. Penns Grove observation well 51--Continued.

Water level, in feet, 1943

Date	Below land-surface datum	Above mean sea level
Aug. 14	6.97	5.74
28	7.56	5.15
Sept. 12	8.08	4.63
25	8.40	4.31
Oct. 10	8.62	4.09
20	8.72	3.99
24	8.77	3.94
Nov. 7	6.94	5.77
20	5.10	7.61
Dec. 4	5.06	7.65
18	5.29	7.42

30.32.2.5.1 (*936, p. 121; 944, p. 105). Penns Grove observation well 52. New Jersey State Water Policy Commission. Land surface is 7.16 feet above mean sea level. Extremes of observed water level, in feet below mean sea level: Highest, 8.91 Mar. 29, 1941; lowest, 13.65 Feb. 12, 1942.

Water level, in feet, 1943

Date	Below land-surface datum	Below mean sea level
Feb. 3	18.28	11.12
14	18.10	10.94
28	17.90	10.74
Mar. 14	17.82	10.66
28	17.60	10.44
Apr. 11	17.84	10.68
25	17.74	10.58
May 9	17.77	10.61
23	17.80	10.64
June 6	17.63	10.47
20	17.70	10.54
July 4	17.64	10.48
17	17.86	10.70
31	17.84	10.68
Aug. 14	18.00	10.84
28	18.44	11.28
Sept. 12	18.88	11.72
25	19.23	12.07
Oct. 11	19.60	12.44
20	19.75	12.59
24	19.84	12.68
Nov. 7	19.82	12.66
20	19.25	12.09
Dec. 4	18.86	11.70
18	18.67	11.51

30.32.2.6.5 (*936, p. 121; 944, p. 105). Penns Grove observation well 54. New Jersey State Water Policy Commission. Land surface is 12.79 feet above mean sea level. Extremes of observed water level: Well flowing Mar. 13, 1941; lowest, 5.63 feet above mean sea level Oct. 24, 1943.

Water level, in feet, 1943

Date	Below land-surface datum	Above mean sea level
Feb. 3	2.66	10.13
14	2.00	10.79
28	2.37	10.42
Mar. 14	2.32	10.47
28	2.54	10.25
Apr. 11	2.70	10.09
25	2.08	10.71
May 9	2.61	10.18
23	2.22	10.57
June 6	2.70	10.09
20	2.78	10.01
July 4	4.07	8.72
18	4.19	8.60
31	4.57	8.22

30.32.2.6.5. Penns Grove observation well 54--Continued.

Water level, in feet, 1943

Date		Below land-surface datum	Above mean sea level
Aug.	14	5.24	7.55
	28	5.85	6.94
Sept.	12	6.37	6.42
	25	6.75	6.04
Oct.	10	7.00	5.79
	20	7.12	5.67
	24	7.16	5.63
Nov.	7	5.23	7.56
	20	3.93	8.86
Dec.	4	4.02	8.77
	18	4.30	8.49

30.32.3.5.5 (*936, p. 121; 944, p. 106). Penns Grove observation well 55. New Jersey State Water Policy Commission. Land surface is 8.22 feet above mean sea level. Extremes of observed water level in feet above mean sea level: Highest, 7.22 Dec. 2, 1940; lowest, 1.93 feet Oct. 20 and 24, 1943.

Water level, in feet, 1943

Feb.	3	1.38	6.84
	14	1.19	7.03
	28	1.71	6.51
Mar.	14	1.33	6.89
	28	1.60	6.62
Apr.	11	2.18	6.04
	25	1.55	6.67
May	9	2.32	5.90
	23	1.26	6.96
June	6	2.25	5.97
	20	2.42	5.80
July	4	3.47	4.75
	18	4.02	4.20
	31	4.55	3.67
Aug.	14	5.05	3.17
	28	5.54	2.68
Sept.	12	5.85	2.37
	25	6.10	2.12
Oct.	10	6.23	1.99
	20	6.29	1.93
	24	6.29	1.93
Nov.	7	3.79	4.43
	20	2.85	5.37
Dec.	4	3.07	5.15
	18	3.34	4.88

30.32.2.5.8 (*936, p. 122; 944, p. 106). Penns Grove observation well 62. New Jersey State Water Policy Commission. Measuring point is 1.1 feet above the land surface. Extremes of observed water level, in feet below the land surface: Highest, 17.84 Apr. 26, 1941; lowest, 20.90 Feb. 13, 1942.

Water level, in feet below land-surface datum, 1943

Date		Water level	Date		Water level	Date		Water level	Date		Water level
Feb.	3	19.80	May	9	18.68	July	31	19.10	Oct.	20	20.63
	14	19.64		23	18.68	Aug.	14	19.18		24	20.66
	28	19.33	June	6	18.52		28	19.53	Nov.	7	20.78
Mar.	14	19.25		20	18.49	Sept.	12	19.84		20	20.76
	28	18.98	July	4	18.61		25	20.14	Dec.	4	20.71
Apr.	11	18.77		17	18.86	Oct.	11	20.52		18	20.60
	25	18.68									

30.32.2.9.1 (*936, p. 122; 944, p. 106). Penns Grove observation well 63. New Jersey State Water Policy Commission. Land surface is 17.81 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 15.10 Mar. 13, 1941; lowest, 8.09 Oct. 24, 1943.

Water level, in feet, 1943

Date		Below land-surface datum	Above mean sea level
Feb.	3	3.28	14.53
	14	2.55	15.26
	28	4.47	14.34
Mar.	14	3.10	14.71
	28	3.20	14.61
Apr.	11	4.15	13.66
	25	3.16	14.65
May	9	4.40	13.41
	23	3.10	14.71
June	6	4.20	13.61
	20	4.85	12.96
July	4	6.00	11.81
	18	6.72	11.09
	31	7.42	10.39
Aug.	14	7.97	9.84
	28	8.48	9.33
Sept.	12	8.91	8.90
	25	9.23	8.58
Oct.	10	9.48	8.33
	20	9.66	8.15
	24	9.72	8.09
Nov.	7	8.48	9.33
	20	7.23	10.58
Dec.	4	7.12	10.69
	18	7.26	10.55

30.32.2.9.5 (*936, p. 122; 944, p. 106). Penns Grove observation well 64. New Jersey State Water Policy Commission. Land surface is 5.02 feet above mean sea level. Extremes of observed water level, in feet, with reference to mean sea level: Highest, +2.00 Mar. 13, 1941; lowest, -1.42 Sept. 25, 1943.

Water level, in feet, 1943

Date		Below land-surface datum	With reference to mean sea level
Feb.	3	3.51	+1.51
	14	3.55	+1.47
	28	3.70	+1.32
Mar.	14	3.43	+1.59
	28	3.54	+1.48
Apr.	11	3.86	+1.16
	25	3.71	+1.31
May	9	3.89	+1.13
	23	3.10	+1.92
June	6	4.10	+.92
	20	3.79	+1.23
July	4	4.05	+.97
	18	4.15	+.87
	31	4.13	+.89
Aug.	14	4.69	+.33
	28	5.52	-.50
Sept.	12	6.01	-.99
	25	6.44	-1.42
Oct.	10	5.69	-.67
	20	5.29	-.27
	24	5.28	-.26
Nov.	7	3.77	+1.25
	20	3.65	+1.37
Dec.	4	3.75	+1.27
	18	3.94	+1.08

30.32.6.1.6 (*936, p. 123; 944, p. 106). Penns Grove observation well 65. New Jersey State Water Policy Commission. Land surface is 10.85 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 8.78 Feb. 14, 1943; lowest, 1.88 Oct. 24, 1943.

Water level, in feet, 1943

Date	Below land-surface datum	Above mean sea level
Feb. 3	2.96	7.89
14	2.07	8.78
28	2.84	8.01
Mar. 14	2.47	8.38
28	2.57	8.28
Apr. 11	3.53	7.52
25	2.47	8.38
May 9	3.41	7.44
23	2.36	8.49
June 6	3.50	7.35
20	4.22	6.63
July 4	5.42	5.43
18	6.11	4.74
31	6.74	4.11
Aug. 14	7.38	3.47
28	7.92	2.93
Sept. 12	8.35	2.50
25	8.67	2.18
Oct. 10	8.84	2.01
20	8.95	1.90
24	8.97	1.88
Nov. 7	7.43	3.42
20	6.37	4.48
Dec. 4	6.44	4.41
18	6.55	4.30

30.32.1.9.5.(*936, p. 123; 944, p. 107). Penns Grove observation well 71. New Jersey State Water Policy Commission. Measuring point is 0.7 foot above the land surface. Extremes of observed water level, in feet below land surface: Highest, 5.65 Apr. 25, 1943; lowest, 10.87 Dec. 6, 1941.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3	7.40	May 9	6.20	July 31	8.15	Oct. 20	10.75
14	6.21	23	5.95	Aug. 14	8.78	24	10.81
28	6.41	June 6	5.90	28	9.35	Nov. 7	10.32
Mar. 14	6.15	20	6.30	Sept.12	9.83	20	9.57
28	5.70	July 4	6.94	25	10.21	Dec. 4	9.61
Apr. 11	6.30	17	7.48	Oct. 11	10.56	18	9.83
25	5.65						

30.32.5.1.3 (*936, p. 123; 944, p. 107). Penns Grove observation well 72. New Jersey State Water Policy Commission. Measuring point is 0.5 foot above land surface. Extremes of observed water level, in feet below land surface: Highest, 3.36 Feb. 14, 1943; lowest, 9.13 Oct. 24, 1943.

Water level, in feet below land-surface datum, 1943

Feb. 3	4.48	May 9	5.10	July 31	7.16	Oct. 20	9.08
14	3.36	23	4.06	Aug. 14	7.59	24	9.13
28	4.23	June 6	4.74	28	8.08	Nov. 7	8.19
Mar. 14	3.91	20	5.09	Sept.12	8.39	20	7.41
28	4.01	July 4	6.02	25	8.72	Dec. 4	7.58
Apr. 11	4.93	17	6.65	Oct. 11	8.98	18	7.83
25	4.00						

30.32.4.6.4 (*936, p. 124; 944, p. 107). Penns Grove observation well 73. New Jersey State Water Policy Commission. Measuring point is 0.7 foot above the land surface. Extremes of observed water level, in feet below land surface: Highest, 1.20 Mar. 14, 1943; lowest, 5.52 Sept. 25, 1943.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3	1.44	May 9	1.91	July 31	3.99	Oct. 20	4.78
14	1.26	23	1.30	Aug. 14	4.32	24	4.75
28	1.54	June 6	1.99	28	5.13	Nov. 7	2.70
Mar. 14	1.20	20	2.13	Sept.12	5.30	20	2.37
28	1.47	July 4	3.07	25	5.52	Dec. 4	2.53
Apr. 11	1.86	18	3.44	Oct. 11	4.99	18	2.72
25	1.43						

30.32.5.4.6 (*936, p. 124; 944, p. 107). Penns Grove observation well 74. New Jersey State Water Policy Commission. Measuring point is 1.1 feet above the land surface. Extremes of observed water level, in feet below land surface: Highest, 1.17 Dec. 3, 1940; lowest, 7.87 Oct. 24, 1943.

Water level, in feet below land-surface datum, 1943

Feb. 3	5.38	May 9	5.48	July 31	6.24	Oct. 20	7.84
14	4.84	23	5.60	Aug. 14	6.50	24	7.87
28	4.99	June 6	5.44	28	6.78	Nov. 7	7.30
Mar. 14	5.12	20	5.50	Sept.12	7.17	20	6.60
28	4.92	July 4	5.72	25	7.54	Dec. 4	6.57
Apr. 11	5.22	17	5.96	Oct. 11	7.76	18	6.74
25	5.32						

30.32.4.8.7 (*936, p. 124; 944, p. 107). Penns Grove observation well 81. New Jersey State Water Policy Commission. Measuring point is 1.2 feet above the land surface. Extremes of observed water level, in feet below land surface: Highest, 4.45 Feb. 14, 1943; lowest, 12.36 Dec. 6, 1941.

Water level, in feet below land-surface datum, 1943

Feb. 3	5.65	May 9	7.40	July 31	10.38	Oct. 20	12.25
14	4.45	23	5.63	Aug. 14	10.87	24	12.30
28	6.07	June 6	6.80	28	11.25	Nov. 7	11.97
Mar. 14	5.62	20	7.49	Sept.12	11.60	20	11.27
28	5.54	July 4	8.90	25	11.84	Dec. 4	10.96
Apr. 11	7.07	17	9.75	Oct. 11	12.10	18	10.83
25	5.60						

30.32.5.7.7 (*936, p. 125; 944, p. 108). Penns Grove observation well 84. New Jersey State Water Policy Commission. Measuring point is 0.5 foot above land surface. Extremes of water level, in feet below land surface: Highest, 0.03 Mar. 14, 1943; lowest, 6.70 Oct. 24, 1943.

Water level, in feet below land-surface datum, 1943

Feb. 3	0.28	May 9	1.83	July 31	4.58	Oct. 20	6.65
14	.08	23	.40	Aug. 14	5.03	24	6.70
28	.51	June 6	1.84	28	5.55	Nov. 7	5.30
Mar. 14	.03	20	1.79	Sept.12	5.96	20	3.28
28	.43	July 4	3.23	25	6.26	Dec. 4	3.60
Apr. 11	1.61	17	3.95	Oct. 11	6.53	18	3.85
25	.56						

30.31.9.6.6 (*936, p. 125; 944, p. 108). Penns Grove observation well 91. New Jersey State Water Policy Commission. Measuring point is 1.3 feet above the land surface. Extremes of observed water level, in feet below land surface: Highest, 2.98 Mar. 13, 1941; lowest, 7.49 Oct. 11, 1941.

Water level, in feet below land-surface datum, 1943

Feb. 3	3.48	May 9	4.55	July 31	6.34	Oct. 20	6.51
14	3.08	23	3.24	Aug. 14	6.33	24	6.57
28	3.84	June 6	4.36	28	6.70	Nov. 7	4.65
Mar. 14	3.39	20	4.72	Sept.12	6.82	20	4.42
28	3.61	July 4	5.57	25	6.80	Dec. 4	4.87
Apr. 11	4.47	17	6.03	Oct. 11	6.64	18	5.25
25	3.56						

30.32.7.6.9 (*936, p. 125; 944, p. 108). Penns Grove observation well 92. New Jersey State Water Policy Commission. Measuring point is 0.6 foot above land surface. Extremes of observed water level, in feet below land-surface: Highest, 2.45 Feb. 14, 1943; lowest, 11.87 Dec. 6, 1941.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3	4.84	May 9	6.12	July 31	9.31	Oct. 20	11.56
14	2.45	23	4.35	Aug. 14	9.86	24	11.54
28	4.04	June 6	5.57	28	10.36	Nov. 7	11.48
Mar. 14	3.57	20	6.47	Sept.12	10.76	20	11.78
28	3.35	July 4	7.74	25	11.05	Dec. 4	10.54
Apr. 11	5.52	17	8.60	Oct. 11	11.35	18	10.60
25	3.90						

30.22.9.4.3 (*936, p. 126; 944, p. 108). Penns Grove observation well E-14. Logwood Inn. Land surface is 21.14 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 16.69 May 24, 1940; lowest, 9.82 Dec. 6, 1941.

Water level, in feet, 1943

Date	Below land-surface datum	Above mean sea level
Feb. 3	7.47	13.67
July 17	8.80	12.34
31	9.34	11.80
Aug. 14	9.88	11.26
28	10.40	10.74
Sept. 25	11.12	10.02
Oct. 20	11.60	9.54
Nov. 20	10.08	11.06
Dec. 4	10.03	11.11
18	10.24	10.90

30.22.9.5.4 (*936, p. 126; 944, p. 108). Penns Grove observation well E-15. George Schmid. Land surface is 19.91 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 15.12 Apr. 23, 1940; lowest, 5.79 Nov. 7, 1943.

Water level, in feet, 1943

Feb. 3	11.30	8.61
14	10.14	9.77
28	10.07	9.84
Mar. 14	10.05	9.86
28	9.52	10.39
Apr. 11	9.86	10.05
25	9.53	10.38
May 9	10.18	9.73
23	9.94	9.97
June 6	9.67	10.24
20	10.05	9.86
July 4	10.57	9.34
17	11.03	8.88
31	11.59	8.32
Aug. 14	12.19	7.72
28	12.67	7.24
Sept. 12	13.04	6.87
25	13.40	6.51
Oct. 11	13.79	6.12
20	13.98	5.93
24	14.05	5.86
Nov. 7	14.12	5.79
20	13.61	6.30
Dec. 4	13.32	6.59
18	13.40	6.51

30.32.2.6.4 (*936, p. 127; 944, p. 109). Penns Grove observation well E-16. Owner unknown. Land surface is 15.05 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 14.85 Mar. 14, 1943; lowest, 10.21 Oct. 23, 1943.

Water level, in feet, 1943

Date		Below land-surface datum	Above mean sea level
Feb.	3	0.23	14.82
	14	.30	14.75
	28	.25	14.80
Mar.	14	.20	14.85
	28	.39	14.66
Apr.	11	1.08	13.97
	25	.35	14.70
May	9	1.37	13.68
	23	.29	14.76
June	6	1.04	14.01
	20	1.29	13.76
July	4	2.70	12.35
	18	3.60	11.45
	31	3.30	11.75
Aug.	14	3.51	11.54
	28	3.91	11.14
Sept.	12	4.25	10.80
	25	4.47	10.58
Oct.	10	4.65	10.40
	20	4.64	10.41
	24	4.84	10.21
Nov.	7	2.95	12.10
	20	2.20	12.85
Dec.	4	2.78	12.27
	18	2.83	12.22

30.32.9.9.8 (*936, p. 127; 944, p. 109). Penns Grove observation well R-5. Penns Grove Water Supply Co. Land surface is 9.84 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 10.30 Apr. 24, 1940; lowest, 4.10 Oct. 24, 1943.

Water level, in feet, 1943

Feb.	3	1.90	7.94
	14	1.21	8.63
	28	1.54	8.30
Mar.	14	1.43	8.41
	28	1.34	8.50
Apr.	11	1.72	8.12
	25	1.67	8.17
May	9	1.85	7.99
	23	1.25	8.59
June	6	1.68	8.16
	20	1.87	7.97
July	4	2.62	7.22
	18	3.07	6.77
	31	3.57	6.27
Aug.	14	4.13	5.71
	28	4.71	5.13
Sept.	12	5.10	4.74
	25	5.56	4.28
Oct.	10	5.63	4.21
	20	5.67	4.17
	24	5.74	4.10
Nov.	7	3.82	6.02
	20	3.14	6.70
Dec.	4	3.30	6.54
	18	3.55	6.29

30.23.7.1.4 (*936, p. 128; 944, p. 109). Penns Grove test well R-7. Penns Grove Water Supply Co. Land surface is 24.55 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 23.90 Apr. 30, 1940; lowest, 18.82 Oct. 20, 1943.

Water level, in feet, 1943

Date		Below land-surface datum	Above mean sea level
Feb.	3	1.52	23.03
	14	1.14	23.41
	28	1.47	23.08
Mar.	14	1.10	23.45
	28	1.53	23.02
Apr.	11	2.09	22.46
	25	1.47	23.08
May	9	2.17	22.38
	23	1.57	22.98
June	6	1.07	23.48
	20	1.27	23.28
July	4	1.24	23.31
	17	1.55	23.00
	31	1.99	22.56
Aug.	14	2.73	21.82
	28	3.60	20.95
Sept.	12	4.26	20.29
	25	4.77	19.78
Oct.	11	5.08	19.47
	20	5.73	18.82
	24	5.56	18.99
Nov.	7	3.29	21.26
	20	2.45	22.10
Dec.	4	2.79	21.76
	18	3.19	21.36

30.32.3.6.5 (*936, p. 128; 944, p. 109). Penns Grove observation well R-8. Penns Grove Water Supply Co. Land surface is 9.13 feet above mean sea level. Extremes of observed water level, in feet above mean sea level: Highest, 5.98 May 2, 1940; lowest, 2.09 Oct. 10, 1943.

Water level, in feet, 1943

Feb.	3	3.87	5.26
	14	3.10	6.03
	28	3.65	5.48
Mar.	14	3.49	5.64
	28	3.44	5.69
Apr.	11	3.86	5.27
	25	3.53	5.60
May	9	3.96	5.17
	23	3.47	5.66
June	6	3.73	5.40
	20	4.06	5.07
July	4	4.73	4.40
	18	5.15	3.98
	31	5.47	3.66
Aug.	14	6.00	3.13
	28	6.40	2.73
Sept.	12	6.69	2.44
	25	6.89	2.24
Oct.	10	7.04	2.09
	20	7.00	2.13
	24	7.00	2.13
Nov.	7	5.71	3.42
	20	4.87	4.26
Dec.	4	4.90	4.23
	18	5.02	4.11

NEW YORK

CENTRAL NEW YORK

By Gordon R. Ayer

PROGRAM OF WORK

The periodic observation of water levels in a few wells in the central part of the State of New York, begun in connection with a study made to determine the effects of reforestation on stream flow, was continued in 1943 by the Geological Survey, United States Department of the Interior, in cooperation with the New York State Department of Conservation. At the end of the year seven wells were under observation--four in Cortland County, two in Chenango County, and one in Delaware County.

Weekly measurements of water level in all the wells were obtained, but the records of only four of them are presented in this report. These four wells are equipped with automatic water-stage recorders, which are inspected weekly by local observers and frequently, also, between the weekly inspections, by an engineer of the Geological Survey. During the year 251 measurements were obtained in the four wells.

FLUCTUATIONS OF WATER LEVEL

An earlier report discusses briefly the topography and geology of the three areas in central New York in which observation wells are situated, especially as regards their effect on ground-water conditions. (See Water-Supply Paper 886, p. 468.) Of the four well records included in the present report, that of Shackham Brook well 1, in Cortland County, best reflects the effect of climatologic variations on the fluctuations of water level in these areas. The year 1943 was characterized by above-normal precipitation in the late spring, with the result that the water levels were fairly steady up to June 15 and somewhat above their stages during the corresponding period in each of the preceding three years, especially in May and early June. A dry period during the early summer caused them to decline

steadily until mid-August, when heavy rains brought partial recovery to all wells. Another dry spell, which began early in September, caused the water levels again to decline rapidly, until lows for the year in practically all wells were reached in mid-October. In the latter part of October, however, heavy precipitation caused the levels to rise considerably, so that by mid-December they were about normal once more in all wells. This relief continued for a short time only, and soon the water levels began to decline and declined so rapidly that by December 31 all wells showed calendar-year losses averaging more than a foot. Temperatures for the year averaged about the same as for 1942 except in October, which was slightly colder, and in the first part of November, which was somewhat warmer than the first part of November in the preceding year.

None of the wells is affected by pumping or by any other act of man.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Chenango County

Sage Brook well 2 (*777, p. 128; 817, p. 198; 840, p. 256; *845, p. 302; *886, p. 469; *906, p. 108; *936, p. 130; 944, p. 111). Latitude 42°31'55", longitude 75°25'30". About 50 feet upstream from stream-gaging station, 100 feet to left of Sage Brook, and about 2.5 miles west of South New Berlin. Measuring point is 1.0 foot above land-surface datum. Extremes of water level, in feet below land-surface datum, 1943: Highest, 0.00 Feb. 24; lowest, 3.11 Oct. 15. Calendar-year loss, 0.02 foot (1.70-1.68). Bottom of well is about 7.5 feet below land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	0.81	Apr. 5	0.67	July 5	0.70	Oct. 4	2.79
11	.80	12	.73	12	1.29	11	3.00
18	.74	19	.35	19	1.45	18	1.13
25	.80	26	.58	27	1.70	25	1.22
Feb. 1	.78	May 3	.63	Aug. 2	1.27	Nov. 1	.67
8	.74	10	.57	9	1.09	8	.44
15	.79	16	.73	16	1.06	15	.64
22	.65	24	.68	23	1.40	22	.67
Mar. 1	.78	31	.71	30	.82	29	.67
8	.82	June 7	.54	Sept. 6	1.12	Dec. 6	.69
15	.76	14	.70	13	1.47	13	a .72
22	.72	21	.83	20	1.72	21	.72
29	.76	28	.90	27	2.22	27	.70

a Estimate based on reading of Dec. 21 and precipitation records.

Cortland County

East Homer Creek well 1 (*845, p. 303; 886, p. 470; *906, p. 109; *936, p. 131; 944, p. 111). Latitude 42°43'05", longitude 76°06'50". On side of hill, about 70 feet to right of creek and about 2.5 miles above gaging station, in East Homer. Extremes of water level, in feet below land-surface datum, 1943: Highest, 0.15 Jan. 1; lowest, 4.58 Oct. 15. Calendar-year loss, a/2.29 feet (a/2.45-0.16). Measuring point is 2.3 feet above land-surface datum. Bottom of well is 8.7 feet below land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	0.29	Apr. 4	1.23	July 5	2.50	Oct. 3	4.03
10	.54	11	1.36	11	2.67	10 c	4.34
17	.69	18	1.56	18	3.00	17	4.34
24	.78	25	1.37	25	3.38	24	3.23
31	1.20	May 2	1.30	Aug. 1	3.77	31	2.14
Feb. 9	1.43	9	1.31	8	4.05	Nov. 7	1.87
15 b	1.47	16	1.37	15	4.29	14	1.21
21	1.70	25	1.42	22	3.50	21	1.04
28	1.22	30	1.61	29	3.09	28	.81
Mar. 7	1.32	June 6	1.69	Sept. 5	2.83	Dec. 5	.80
14	1.23	13	1.91	12	2.98	12	.85
21	.67	20	2.09	19	3.27	19	1.45
28	1.01	27	2.17	26	3.64	26	1.79

Shackham Brook well 1 (*777, p. 127; 817, p. 198; 840 p. 255; *845, p. 301; 886, p. 469; *906, p. 108; *936, p. 430; 944, p. 112). Latitude 42°46'00", longitude 76°01'10". On side of hill, about 300 feet upstream from gaging station, 500 feet to left of Shackham Brook, and about 5 miles north of Truxton. Measuring point is 0.3 foot above land-surface datum. Extremes of water level, in feet below land-surface datum, 1943: Highest, 0.03 Jan. 1; lowest, 3.4 Aug. 16 (estimate based on observation of Aug. 15). Calendar-year loss 0.96 foot (0.99-0.03). Bottom of well is 5.8 feet below land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 2	0.04	Apr. 4	0.21	July 4	2.03	Oct. 3	2.85
10	.12	11	.29	11	1.98	10 d	3.36
17	.23	18	.34	18	2.45	17	2.14
24	.33	25	.07	25	2.74	24	1.31
31	.45	May 2	.09	Aug. 1	2.97	31	.24
Feb. 5	.50	9	.14	8	3.13	Nov. 7	.49
13	.54	16	.10	15	3.38	14	.25
21	.40	23	.14	22	1.82	21	.43
28	.13	30	.21	29	1.07	28	.44
Mar. 7	.19	June 6	.10	Sept. 5	1.43	Dec. 5	.48
14	.13	13	.24	12	1.91	12	.32
21	.02	20	.84	19	2.42	19	.54
28	.11	27	1.89	26	2.63	26	.88

Delaware County

Cold Spring Brook well 1 (*777, p. 128; 817, p. 199; 840, p. 256; *845, p. 302; *886, p. 469; *906, p. 109; *936, p. 131; 944, p. 112). Latitude 42°09'35", longitude 75°23'35". On side of hill, about 150 feet to left of gaging station, about 1 mile upstream from China and 2 miles west of Upper Barbourville. Measuring point is 2.0 feet above land-surface datum. Extremes of water level, in feet below land-surface datum, 1943: Highest, 0.54 Feb. 24; lowest, 8.28 Oct. 14. Calendar-year loss, e/2.45 feet (e/3.43-0.98). Bottom of well is 10.0 feet below land-surface datum.

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a Estimate based on level of Jan. 2, 1944.
b Estimate based on reading of Feb. 19.
c Estimate based on automatic-recorder record.
d Estimate based on comparison with measurements of nearby wells and precipitation records.
e Estimate based on level of Jan. 2, 1943.

Cold Spring Brook well 1--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	1.20	Apr. 3	1.78	July 3	5.28	Oct. 3	7.96
9	2.36	10	2.93	11 b	5.44	10	8.10
16	3.85	17	3.20	18	5.87	17	7.34
23	3.60	24	1.52	25	5.85	24	7.64
30	4.60	May 1	1.03	Aug. 1	6.12	31	2.16
Feb. 6	4.86	8	2.62	8	6.47	Nov. 7	2.63
16	2.34	15	2.07	15	6.69	14	2.35
20	3.20	22	.86	22	6.92	21	2.13
27	1.34	29	2.32	29	6.29	28	a 2.07
Mar. 7	2.82	June 5	a 2.65	Sept. 5	6.84	Dec. 5	2.80
13	1.16	12	4.28	12	7.17	12	a 2.71
20	.82	19	4.56	19	7.45	19	a 3.94
27	2.39	26	4.98	26	7.71	24	4.51

a Estimated on basis of automatic-recorder record.
b Estimated on basis of observation on July 8 and automatic-recorder record.

LONG ISLAND

By M. L. Brashears, Jr.

The investigation of ground-water conditions on Long Island was continued during 1943 by the Geological Survey, United States Department of the Interior, in cooperation with the New York State Water Power and Control Commission, the Nassau County Department of Public Works, the Suffolk County Board of Supervisors, and also the Suffolk County Water Authority. A part of the ground-water investigation consisted of periodic measurements of water levels in a large number of observation wells scattered throughout the four counties on Long Island, in the area lying west of Riverhead. During the year, water-level measurements were continued in about 200 wells, about 20 of which were equipped with automatic water-stage recorders. In addition, measurements were begun in about 25 wells, some of which were installed by the Geological Survey.

The following tables summarize the data pertaining to ground-water levels for Long Island. The comparative data is given in terms of mean sea level only.

Summary of data on ground-water levels on Long Island, N. Y.

Well No.	Date of first measurement	Lowest observed water level with reference to mean sea level		Highest observed water level with reference to mean sea level		Water level on last date of record in 1943 (feet)
		Water level (feet)	Date	Water level (feet)	Date	
K10	Nov. 8, 1937	-18.53	Sept.19, 1942	-11.52	Mar. 26, 1938	.....
K19	Sept.10, 1940	a-26.80	Sept.26, 1941	a-24.43	Mar. 8, 1943	a-24.94
K30	June 14, 1935	a-29.75	Nov. 8, 1941	a-24.34	June 14, 1935	a-27.51
K65	Nov. 8, 1937	-28.34	Aug. 25, 1939	-24.01	Apr. 9, 1938	-25.11
K67	Nov. 8, 1937	-20.75	Oct. 11, 1941	-18.49	Mar. 26, 1938	-18.99
K92	Dec. 11, 1937	-29.69	Dec. 11, 1937	-21.29	May 3, 1941	-22.90
K104	Aug. 27, 1940	-26.87	Nov. 15, 1941	-25.37	May 29, 1943	.....
K196	Sept.12, 1942	-4.75	Sept.19, 1942	-3.11	May 29, 1943	-3.38
K502	Oct. 18, 1941	-10.08	Oct. 31, 1942	-9.18	Mar. 27, 1943	.....
K533	Sept. 8, 1932	a-23.89	Sept.16, 1942	a-12.73	Dec. 20, 1932	-21.63
K535	Nov. 5, 1936	+1.25	Apr. 9, 1938	+2.81	Sept.30, 1938	.....
K539	Oct. 28, 1939	-8.28	Feb. 21, 1942	-2.98	Nov. 27, 1943	-2.98
K921	Feb. 12, 1938	-27.23	Dec. 16, 1938	-22.77	Oct. 14, 1938	.....
K1139	Oct. 28, 1939	a -9.51	Mar. 10, 1942	a -1.69	Apr. 25, 1943	.....
K1194	Nov. 2, 1940	-8.36	Mar. 7, 1942	-2.86	Mar. 15, 1941	.....
K1198	Nov. 2, 1940	-8.45	Mar. 14, 1942	-5.22	Nov. 27, 1943	-5.22
K1199	Nov. 16, 1940	-16.70	Oct. 17, 1942	-15.28	May 10, 1941	-16.45
K1235	Jan. 25, 1941	-10.65	June 27, 1942	-8.84	Apr. 26, 1941	-8.93
K1236	Jan. 25, 1941	-19.42	Oct. 4, 1941	-17.41	May 3, 1941	-19.11
K1237	Jan. 18, 1941	-34.55	Dec. 6, 1941	-31.56	Apr. 12, 1941	-33.71
K1263	Apr. 21, 1933	-11.97	July 21, 1936	-7.58	Nov. 2, 1933	-10.67
K1264	Apr. 21, 1933	-15.17	July 25, 1942	-9.42	June 28, 1933	-14.61
K1265	Apr. 21, 1933	-11.55	Aug. 22, 1942	-6.34	Apr. 21, 1933	.....
K1266	Apr. 21, 1933	-7.49	June 27, 1942	-2.02	Apr. 21, 1933	-5.82

a Based on instrumental records of lowest daily water level.

Summary of data on ground-water levels on Long Island, N. Y.--Continued

Well No.	Date of first measurement	Lowest observed water level with reference to mean sea level		Highest observed water level with reference to mean sea level		Water level on last date of record in 1943 (feet)
		Water level (feet)	Date	Water level (feet)	Date	
K1296	Sept. 6, 1941	-8.27	Mar. 7, 1942	-0.95	Nov. 27, 1943	-0.95
K1347	Oct. 15, 1942	-23.43	July 31, 1943	-19.92	Apr. 24, 1943	-21.51
N7	July 24, 1936	a +6.16	Aug. 15, 1937	a+12.75	Mar. 9, 1941	a+10.73
N9	July 3, 1936	+20.99	Sept.11, 1936	+23.57	Sept.27, 1938	+21.54
N53	Jan. 21, 1934	+12.05	Feb. 17, 1940	+16.49	Apr. 15, 1939	+13.65
N67	Mar. 16, 1932	a+13.48	Aug. 15, 1937	a+18.89	Mar. 9, 1941	a+17.01
N157	Sept.22, 1932	+75.71	May 5, 1933	a+88.84	Oct. 31, 1939	+83.53
N844	Oct. 3, 1939	a+78.87	Apr. 16, 1942	a+85.48	Aug. 5, 1939	a+79.65
N1101	Apr. 21, 1939	+42.93	Sept.29, 1941	+45.64	Apr. 28, 1939	.....
N1102	Apr. 21, 1939	+53.81	July 31, 1942	+58.64	July 28, 1939	+54.47
N1103	Apr. 21, 1939	+54.06	Nov. 1, 1943	+60.46	June 30, 1939	+55.35
N1104	Apr. 21, 1939	+55.27	May 1, 1942	+61.15	June 2, 1939	+56.14
N1105	Apr. 21, 1939	+52.88	Mar. 30, 1942	+58.85	June 8, 1939	+53.36
N1107	Apr. 21, 1939	+41.64	Feb. 27, 1942	+48.21	Apr. 28, 1939	+43.15
N1108	Apr. 21, 1939	+36.94	Jan. 30, 1942	+43.62	Apr. 28, 1939	+38.72
N1109	Apr. 21, 1939	+25.28	Jan. 30, 1942	+30.04	Apr. 21, 1939	+26.87
N1110	Apr. 21, 1939	+18.68	Dec. 1, 1941	+21.05	Apr. 21, 1939	+19.93
N1111	Apr. 21, 1939	+11.95	Nov. 3, 1939	+14.54	Nov. 1, 1943	+13.84
N1112	Jan. 6, 1939	+6.84	Dec. 13, 1941	+10.17	Apr. 8, 1939	+9.04
N1113	Apr. 21, 1939	+3.91	Oct. 31, 1941	+6.85	Jan. 1, 1943	.....
N1114	Apr. 21, 1939	+7.97	Dec. 1, 1941	+11.87	Apr. 21, 1939	.....
N1115	Apr. 21, 1939	+8.57	Dec. 1, 1941	+12.93	Apr. 21, 1939	.....
N1126	Mar. 12, 1938	+55.27	Jan. 31, 1942	+62.21	Apr. 28, 1939	+56.48
N1132	Apr. 2, 1938	+6.06	Feb. 24, 1940	+9.77	Sept.27, 1938	+7.37
N1140	Jan. 7, 1939	+58.32	Feb. 7, 1942	+66.09	Apr. 28, 1939	+59.62
N1147	Jan. 6, 1939	+16.62	Dec. 13, 1941	+19.72	Apr. 8, 1939	+17.72
N1160	Jan. 7, 1939	+63.37	Jan. 31, 1942	+70.90	Apr. 15, 1939	+64.50
N1167	Mar. 12, 1938	+9.63	Dec. 13, 1941	+12.92	Apr. 15, 1939	+10.58
N1174	Nov. 1, 1940	+70.77	Mar. 30, 1942	+73.89	Nov. 1, 1940	.....
N1175	Nov. 1, 1940	+78.13	July 31, 1942	+82.02	Nov. 1, 1940	.....
N1176	Nov. 1, 1940	+81.04	July 31, 1942	+85.15	Nov. 29, 1940	.....
N1177	Sept.27, 1940	+82.27	July 31, 1942	+86.17	Sept.27, 1940	.....
N1179	Apr. 29, 1940	+72.37	Jan. 30, 1942	+76.30	May 31, 1940	.....
N1181	Apr. 29, 1940	+56.30	Jan. 30, 1942	+59.14	Mar. 29, 1943	.....
N1182	Mar. 5, 1938	+49.03	Jan. 30, 1942	+53.15	Sept.30, 1938	.....
N1183	Apr. 29, 1940	+35.10	Dec. 1, 1941	+37.92	Mar. 29, 1943	.....
N1184	Apr. 29, 1940	+20.69	Oct. 31, 1941	+23.30	Apr. 29, 1940	.....
N1185	Apr. 2, 1938	-10.50	Dec. 13, 1941	+15.39	Apr. 8, 1939	+12.52
N1186	Apr. 29, 1940	+3.48	June 29, 1942	+6.03	Jan. 1, 1943	.....
N1198	Jan. 6, 1939	+63.46	Feb. 7, 1942	+70.49	May 6, 1939	+64.65
N1204	Jan. 6, 1939	+5.58	Feb. 17, 1940	+12.26	Apr. 8, 1939	+10.90
N1212	Jan. 1, 1943	a+83.72	Jan. 20, 1943	a+85.34	Oct. 28, 1943	a+84.55
N1215	May 27, 1943	+71.57	Oct. 15, 1943	+73.19	May 27, 1943	+71.97
N1216	Jan. 7, 1939	+62.31	Feb. 14, 1942	+69.16	May 20, 1939	+64.14
N1222	Jan. 6, 1939	+1.27	Jan. 31, 1942	+9.67	Apr. 8, 1939	+8.63
N1232	May 27, 1943	+75.30	Dec. 16, 1943	+76.06	Sept.27, 1943	+75.30
N1233	May 27, 1943	+68.07	Dec. 16, 1943	+69.17	May 27, 1943	+68.07
N1234	Jan. 7, 1939	+59.01	Feb. 14, 1942	+66.64	May 6, 1939	+61.04
N1240	Jan. 6, 1939	-1.08	Jan. 24, 1942	+11.29	Apr. 8, 1939	+9.90
N1242	Apr. 21, 1939	+26.30	Oct. 2, 1942	+27.77	Sept. 1, 1939	.....
N1243	Nov. 3, 1939	+54.94	Oct. 30, 1942	+58.22	Dec. 1, 1939	.....
N1244	May 31, 1940	+71.31	Oct. 30, 1942	+76.50	May 31, 1940	+72.14
N1245	Feb. 2, 1940	+75.96	Oct. 30, 1942	+82.88	Feb. 2, 1940	+76.97
N1246	May 31, 1940	+77.14	Aug. 31, 1942	+82.12	May 31, 1940	+78.01
N1247	Apr. 21, 1939	+70.52	July 31, 1942	+76.98	July 28, 1939	+71.44
N1249	Apr. 21, 1939	+50.34	Jan. 30, 1942	+58.18	Apr. 21, 1939	+52.94
N1250	Apr. 21, 1939	+43.20	Jan. 30, 1942	+49.64	Apr. 21, 1939	+45.87
N1251	Apr. 21, 1939	+35.57	Jan. 30, 1942	+40.18	Apr. 21, 1939	+38.10
N1252	Apr. 21, 1939	+22.48	Jan. 30, 1942	+26.19	Apr. 21, 1939	+24.84
N1253	Jan. 6, 1939	+11.31	Jan. 31, 1942	+16.89	Apr. 8, 1939	+15.08

a Based on instrumental records of lowest daily water level.

Summary of data on ground-water levels on Long Island, N. Y.--Continued

Well No.	Date of first measurement	Lowest observed water level with reference to mean sea level		Highest observed water level with reference to mean sea level		Water level on last date of record in 1943 (feet)
		Water level (feet)	Date	Water level (feet)	Date	
N1254	Apr. 21, 1939	+2.55	Feb. 2, 1940	+4.08	Apr. 28, 1939	.....
N1255	May 12, 1913	+58.57	Nov. 11, 1918	+65.59	Apr. 15, 1939	+59.73
N1256	May 12, 1913	+70.30	Feb. 27, 1933	+80.97	May 20, 1939	+75.45
N1257	Aug. 17, 1932	+5.83	Dec. 13, 1941	+10.17	Apr. 8, 1939	+7.38
N1258	Oct. 8, 1931	+33.68	Dec. 28, 1931	+39.58	Apr. 8, 1939	+37.09
N1259	Feb. 5, 1909	+47.83	Jan. 24, 1933	+56.43	Apr. 29, 1939	+51.47
N1260	June 6, 1903	+16.52	Dec. 20, 1916	+23.68	Apr. 8, 1939	+20.56
N1262	Oct. 5, 1931	+32.66	Oct. 5, 1942	+36.20	Apr. 8, 1939	+34.47
N1263	Nov. 3, 1911	+46.22	Oct. 31, 1932	+54.98	Apr. 22, 1939	+49.73
N1264	Mar. 7, 1932	+2.70	Feb. 17, 1940	+9.41	Apr. 8, 1939	+7.59
N1265	Mar. 9, 1939	+2.43	Dec. 1, 1941	+4.34	Dec. 31, 1949	.....
N1269	Mar. 9, 1939	+3.52	Oct. 1, 1942	+9.57	Mar. 14, 1939	.....
N1271	Mar. 9, 1939	+1.21	Sept.30, 1941	+3.66	Dec. 31, 1949	.....
N1273	Nov. 1, 1939	+4.34	Jan. 2, 1940	+7.38	Mar. 31, 1947	.....
N1275	Nov. 1, 1939	+1.89	Oct. 31, 1941	+4.07	Dec. 31, 1949	.....
N1278	Nov. 3, 1939	+4.87	Jan. 30, 1942	+6.96	Mar. 31, 1947	.....
N1280	Jan. 2, 1940	+2.22	Jan. 30, 1942	+10.10	Mar. 31, 1947	.....
N1282	Nov. 1, 1939	+.34	Apr. 1, 1940	+2.58	Jan. 2, 1949	.....
N1285	Nov. 1, 1939	+2.12	Jan. 31, 1940	+4.03	Dec. 31, 1949	.....
N1288	Nov. 1, 1939	+2.21	Jan. 2, 1940	+4.23	Dec. 31, 1949	.....
N1461	Apr. 27, 1943	a+74.34	Oct. 10, 1943	a+76.32	May 3, 1947	a+74.73
N1462	May 6, 1943	a+61.41	Dec. 24, 1943	a+63.11	May 12, 1947	a+61.65
N1463	May 6, 1943	a+36.82	Oct. 15, 1943	a+39.05	May 6, 1943	a+37.85
N1464	May 13, 1943	a+14.87	Sept.14, 1943	a+16.76	Nov. 16, 1947	a+15.69
N1613	July 3, 1936	+21.73	Dec. 6, 1941	+24.38	Apr. 15, 1939	+23.11
N1614	Apr. 2, 1913	+61.90	Feb. 27, 1933	+71.03	May 1, 1914	+66.35
N1615	Mar. 17, 1913	+41.49	Oct. 27, 1932	+47.17	Mar. 28, 1939	+43.49
N1616	Mar. 17, 1913	+74.05	Feb. 27, 1933	+85.42	June 1, 1939	+79.77
N1617	Nov. 26, 1903	+2.32	Feb. 21, 1912	+4.80	Nov. 5, 1906	.....
N1672	Oct. 4, 1940	+55.42	Dec. 6, 1941	+58.40	Feb. 8, 1941	.....
N1682	Nov. 30, 1940	+41.29	Feb.26-28,1942	+43.51	May 1, 1943	+42.53
N1683	Dec. 3, 1940	+53.46	Jan. 31, 1942	+55.92	May 1, 1943	+54.54
N1684	Nov. 30, 1940	+55.33	Feb. 7, 1942	+58.60	May 1, 1943	+56.75
N1685	Mar. 19, 1932	+3.63	Oct. 16, 1937	+11.04	Feb. 17, 1938	.....
N1828	June 10, 1942	a+58.45	July 27, 1942	a+60.66	Apr. 2, 1943	a+59.47
N1829	June 10, 1942	a+66.22	Oct. 15, 1943	a+68.42	Mar. 17, 1943	a+66.61
N1830	June 3, 1942	a+49.05	June 7, 1942	a+50.76	June 11, 1943	a+49.62
Q273	Mar. 15, 1935	a+1.12	Mar. 21, 1942	a+8.47	Apr. 20, 1939	a+4.40
Q287	Apr. 13, 1939	a +.35	Feb. 13, 1940	a+9.65	Mar. 8, 1941	+8.71
Q350	Mar. 17, 1937	-2.00	Oct. 31, 1941	+3.51	Apr. 29, 1939	+.63
Q470	Sept.21, 1933	a-12.75	July 15, 1937	a+6.78	Jan. 8, 1938	a+3.20
Q471	Mar. 31, 1939	+13.69	Mar. 31, 1939	+16.77	July 31, 1943	+15.03
Q543	May 17, 1932	a-28.36	Feb. 13, 1940	a+11.2	Apr. 13, 1943	+9.2
Q1027	Jan. 1, 1942	a+4.08	Mar. 20, 1942	a+5.92	Mar. 17, 1943	.....
Q1089	Oct. 10, 1911	-.42	Oct. 17, 1932	+4.04	Sept.23, 1938	+2.01
Q1090	Oct. 10, 1911	+1.19	Oct. 17, 1932	+8.29	May 12, 1913	+4.05
Q1222	Apr. 1, 1940	-9.19	Feb. 28, 1942	+3.52	Feb. 8, 1941	+2.26
Q1223	Jan. 28, 1933	+5.78	Dec. 12, 1935	+10.23	Apr. 4, 1939	+7.87
Q1224	Apr. 20, 1933	+6.88	July 18, 1942	+12.41	May 29, 1939	+8.28
Q1225	Apr. 20, 1933	+26.72	Feb. 7, 1942	+32.19	Apr. 4, 1939	+27.56
Q1237	Feb. 10, 1939	a-6.38	Mar. 1, 1942	a+5.03	May 4, 1939	a+1.75
Q1248	Oct. 12, 1940	+34.48	Feb. 14, 1942	+36.53	May 29, 1943	+35.38
Q1249	Oct. 19, 1940	+30.46	Feb. 7, 1942	+32.27	May 29, 1943	+31.23
Q1250	Oct. 19, 1940	+19.36	Feb. 7, 1942	+21.68	Mar. 29, 1941	+20.65
Q1251	Oct. 19, 1940	+9.85	Feb. 14, 1942	+13.02	Oct. 19, 1940	+11.23
Q1252	Oct. 26, 1940	+11.69	Feb. 28, 1942	+13.70	Feb. 15, 1941	+12.43
Q1253	Nov. 2, 1940	+2.32	Aug. 8, 1942	+4.58	Apr. 26, 1941	.....
Q1254	Oct. 26, 1940	-2.24	June 20, 1942	+.29	Apr. 12, 1941	-.75
Q1255	Oct. 12, 1911	-5.95	Apr. 11, 1942	+12.03	May 12, 1914	.....

a Based on instrumental records of lowest daily water level.

Summary of data on ground-water levels on Long Island, N. Y.--Continued

Well No.	Date of first measurement	Lowest observed water level with reference to mean sea level		Highest observed water level with reference to mean sea level		Water level on last date of record in 1943 (feet)
		Water level (feet)	Date	Water level (feet)	Date	
Q1256	Oct. 26, 1940	-6.98	Mar. 14, 1942	-2.55	Mar. 1, 1941	.....
Q1281	Oct. 11, 1911	-3.62	Mar. 7, 1942	+8.59	June 4, 1913	-0.94
Q1282	Jan. 31, 1933	+.17	Jan. 31, 1933	+2.49	May 10, 1941	+1.45
Q1283	Oct. 12, 1911	+2.12	Mar. 3, 1933	+13.33	Nov. 10, 1911	+4.60
Q1284	Oct. 12, 1911	+5.01	Jan. 28, 1933	+11.55	June 2, 1913	+6.97
Q1285	Apr. 20, 1933	+5.74	Feb. 21, 1942	+8.05	May 31, 1941	+6.79
Q1286	Apr. 20, 1933	+9.06	Aug. 1, 1942	+11.29	Apr. 26, 1941	+10.04
Q1287	Apr. 20, 1933	+11.49	Sept.25, 1943	+15.80	Oct. 5, 1934	.....
Q1288	Apr. 20, 1933	+16.22	Jan. 31, 1942	+22.06	Oct. 5, 1934	+17.65
Q1289	Apr. 20, 1933	+30.10	Feb. 7, 1942	+34.56	Nov. 8, 1934	+31.14
Q1290	Apr. 20, 1933	+15.25	Jan. 31, 1942	+19.48	Oct. 5, 1934	+17.00
Q1292	May 10, 1941	+26.41	Feb. 28, 1942	+28.01	May 17, 1941	+27.16
S202	May 25, 1936	a+36.93	Feb. 1, 1939	a+47.17	Apr. 10, 1937	+39.31
S203	Feb. 14, 1937	a+70.94	Feb. 17, 1937	a+77.13	Oct. 31, 1939	+71.59
S1803	Oct. 18, 1912	+14.93	Oct. 25, 1941	+18.19	Apr. 22, 1913	+15.93
S1805	Oct. 16, 1912	+37.90	Oct. 27, 1932	+47.01	Apr. 8, 1939	+41.92
S1806	Oct. 18, 1912	+50.61	Jan. 5, 1933	+61.69	Apr. 22, 1939	+53.92
S1807	Oct. 19, 1912	+20.59	Sept.12, 1932	+23.48	Oct. 14, 1938	+21.42
S1808	Oct. 21, 1912	+9.45	Sept.12, 1932	+12.94	Sept.23, 1938	+10.76
S1809	Oct. 21, 1912	+25.00	Nov. 2, 1932	+32.56	Apr. 15, 1939	+27.07
S1810	Oct. 21, 1912	+45.24	Feb. 23, 1933	+56.19	Apr. 29, 1939	+49.48
S1811	Feb. 28, 1937	+51.41	Aug. 28, 1941	+55.56	Apr. 20, 1940	+52.82
S1812	Apr. 17, 1937	+45.12	Mar. 7, 1942	+51.09	May 27, 1939	+45.55
S1813	Nov. 4, 1939	+37.05	Jan. 31, 1942	+39.64	June 15, 1940	+37.49
S1814	Nov. 4, 1939	+35.01	Feb. 14, 1942	+38.28	June 29, 1940	+35.86
S1815	Dec. 2, 1939	+43.80	Mar. 14, 1942	+47.81	June 29, 1940	+44.68
S1816	Dec. 2, 1939	+55.01	Feb. 14, 1942	+59.93	June 1, 1940	+56.01
S1817	Dec. 2, 1939	+50.24	Jan. 17, 1942	+53.95	June 1, 1940	+51.46
S2314	Mar. 27, 1943	+58.81	Oct. 30, 1943	+59.63	Mar. 27, 1943	+59.18
S2454	Sept.21, 1940	+6.70	Oct. 4, 1941	+8.28	Aug. 15, 1942	+7.24
S2455	June 23, 1933	a+19.98	Nov. 6, 1937	a+24.85	Sept.23, 1938	+21.24
S2543	Mar. 23, 1907	+33.21	Dec. 3, 1909	+36.20	May 30, 1908	.....
S3112	Aug. 30, 1941	+51.65	Feb. 7, 1942	+54.64	Sept. 5, 1942	+53.49
S3496	Nov. 2, 1942	+47.62	Dec. 30, 1943	+48.83	Aug. 2, 1943	+47.62
S3497	Nov. 2, 1942	+47.26	Dec. 30, 1943	+48.56	Aug. 2, 1943	+47.26
S3498	Sept.11, 1942	+43.98	Dec. 30, 1943	+45.44	June 28, 1943	+43.98
S3512	Apr. 24, 1942	+66.57	Dec. 30, 1943	+68.41	May 27, 1943	+66.57
S3513	Apr. 24, 1942	+61.36	Dec. 30, 1943	+63.32	May 27, 1943	+61.36
S3514	May 15, 1942	+66.09	Dec. 26, 1942	+66.63	May 22, 1942	+66.37
S3515	Mar. 5, 1907	+31.84	Dec. 31, 1943	+34.64	May 8, 1907	+31.84
S3516	Mar. 5, 1907	+35.76	Dec. 2, 1909	+39.72	July 24, 1907	+36.77
S3517	Apr. 2, 1907	+11.60	Dec. 4, 1909	+13.86	Mar. 2, 1908	+12.13
S3518	Mar. 22, 1907	+31.01	Nov. 30, 1942	+33.04	May 8, 1907	+30.97
S3519	Mar. 22, 1907	+23.69	Dec. 3, 1909	+26.69	Aug. 21, 1942	+25.06
S3520	Mar. 5, 1907	+18.11	Nov. 30, 1942	+19.40	Mar. 31, 1943	.....
S3521	Feb. 28, 1907	+36.22	Dec. 30, 1943	+38.44	Aug. 2, 1907	+36.22
S3522	Feb. 6, 1907	+19.18	Dec. 30, 1943	+19.99	Apr. 4, 1942	+19.18
S3523	Jan. 2, 1907	+25.73	Dec. 30, 1943	+27.96	June 8, 1907	+25.73
S3524	Mar. 8, 1907	+21.47	Dec. 30, 1943	+23.28	Apr. 6, 1908	+21.47
S3525	July 15, 1907	+25.72	Nov. 30, 1942	+28.24	June 8, 1907	+26.70
S3527	Mar. 7, 1907	+31.35	Apr. 2, 1942	+35.69	June 4, 1908	+31.64
S3529	Mar. 8, 1907	+24.62	Dec. 30, 1943	+28.07	Apr. 27, 1907	+24.62
S3530	Mar. 8, 1907	+31.73	Dec. 30, 1943	+34.78	Aug. 5, 1908	+31.78
S3531	Aug. 9, 1907	+9.14	Dec. 11, 1909	+10.37	May 7, 1908	+9.32
S3532	Apr. 21, 1907	+46.38	Dec. 30, 1943	+51.74	June 8, 1908	+46.38
S3533	Apr. 4, 1907	+45.14	Dec. 30, 1943	+49.48	June 8, 1908	+45.14
S3534	June 9, 1907	+26.73	Dec. 31, 1942	+31.75	June 9, 1907	+26.82
S3535	Aug. 13, 1907	+18.13	Dec. 31, 1942	+21.75	Aug. 13, 1908	+18.26
S3536	Apr. 10, 1907	+23.68	Dec. 31, 1942	+28.62	June 5, 1908	+24.17
S3537	Jan. 11, 1908	+14.52	Nov. 30, 1942	+16.35	Jan. 11, 1908	.....

a Based on instrumental records of lowest daily water level.

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Summary of data on ground-water levels on Long Island, N. Y.--Continued

Well No.	Date of first measurement	Lowest observed water level with reference to mean sea level		Highest observed water level with reference to mean sea level		Water level on last date of record in 1943 (feet)
		Water level (feet)	Date	Water level (feet)	Date	
S3538	Jan. 11, 1908	+14.79	Nov. 30, 1942	+17.56	Aug. 19, 190[illegible]	+15.38
S3539	Apr. 12, 1907	+22.26	Dec. 31, 1942	+26.72	June 5, 190[illegible]	.....
S3540	Mar. 9, 1909	+19.11	Dec. 31, 1942	+23.02	May 8, 190[illegible]	.....
S3541	Mar. 9, 1909	+11.38	Nov. 30, 1942	+14.06	July 8, 190[illegible]	.....
S3542	Apr. 12, 1907	+18.71	Dec. 31, 1942	+22.89	June 10, 190[illegible]	.....
S3543	Mar. 18, 1907	+15.84	Dec. 31, 1942	+19.49	June 10, 190[illegible]	.....
S3544	Mar. 18, 1907	+10.27	Nov. 30, 1942	+13.17	Apr. 4, 190[illegible]	.....
S3545	Mar. 12, 1907	+34.44	Dec. 30, 1943	+38.00	June 7, 1907	+34.44

Net change in water level in wells on Long Island, N. Y., 1943

Well No.	Net change (feet)	Well No.	Net change (feet)	Well No.	Net change (feet)	Well No.	Net change (feet)
K19	+0.76	N1160	-0.37	Q287	-0.64	S1811	-0.25
K30	+1.32	N1167	-.09	Q350	+.77	S1812	-.43
K65	+.80	N1185	-.22	Q470	-1.23	S1813	-.38
K67	+.27	N1198	-.37	Q471	-.77	S1814	-.02
K92	-.42	N1204	-.01	Q543	+.45	S1815	+.17
K196	+.13	N1216	+.54	Q1089	+.60	S1816	+.04
K533	+1.68	N1222	+.11	Q1090	+.50	S1817	+.56
K539	+1.34	N1234	+.68	Q1222	+.02	S2454	-.12
K1198	+1.10	N1240	-.19	Q1223	+.52	S2455	-.77
K1199	+.07	N1244	+.76	Q1224	+.91	S3112	+.66
K1235	+.77	N1245	+.92	Q1225	+.25	S3496	-.31
K1236	-.70	N1246	+.50	Q1237	+.40	S3497	-.15
K1237	+.36	N1247	+.06	Q1248	+.23	S3498	-.27
K1263	+.09	N1249	+.95	Q1249	+.21	S3512	-.87
K1264	+.22	N1250	+1.16	Q1250	+.42	S3513	-.90
K1266	+.73	N1251	+1.14	Q1251	+.03	S3514	+.28
K1296	+1.40	N1253	+.28	Q1252	+.23	S3515	-.58
K1347	-.49	N1255	-.30	Q1254	+.46	S3516	-.53
N7	-1.37	N1256	+.01	Q1281	+.64	S3517	-.67
N9	-.32	N1257	+.28	Q1282	+.40	S3518	-.33
N53	+.27	N1258	+.91	Q1283	+.49	S3519	-.56
N67	-.83	N1259	+.72	Q1284	+.48	S3521	-.65
N157	+.16	N1260	+.64	Q1285	+.31	S3522	-.52
N1102	+.27	N1262	+.18	Q1286	+.42	S3523	-.58
N1103	-.65	N1263	+.58	Q1288	+.51	S3524	-.57
N1104	-.13	N1264	-.31	Q1289	+.24	S3525	+.85
N1105	-.35	N1613	+.26	Q1290	+.47	S3526	-.20
N1107	+.10	N1614	-.58	Q1292	+.42	S3527	-.11
N1108	+.29	N1615	-.21	S202	+.81	S3529	-.88
N1109	+.46	N1616	-.20	S203	+.17	S3530	-.52
N1110	+.11	N1682	+.25	S1803	-.03	S3531	-.36
N1111	-.02	N1683	-.02	S1805	+.79	S3532	-.44
N1112	+.11	N1684	+.05	S1806	-.52	S3533	-.58
N1126	-.01	N1828	+.68	S1807	-.16	S3534	+.09
N1132	-.34	N1829	-.76	S1808	-.24	S3535	+.13
N1140	+.03	N1830	-.03	S1809	-.77	S3536	+.49
N1147	+.26	Q273	+.19	S1810	-.15	S3538	+.37
						S3545	+.01

On Long Island there are a number of water-bearing beds that yield large supplies of water to wells that tap them. There are five more or less well recognized water-bearing zones. The upper and most productive

consists of extensive beds of glacial outwash which, in most places, are not overlain with impervious material. The second zone, the Jameco gravel, also a glacial outwash deposit, is distributed only around the borders of the island and is usually covered by the Gardiners clay. The third and fourth zones consist of widespread Cretaceous beds of supposed Magothy age. The third zone lies in the upper part of the Magothy deposits and generally consists of coarse sand. In the center of the island these sands are open to the overlying glacial outwash, whereas around the borders of the island they are covered by either the Gardiners clay or the Jameco gravel. The fourth zone lies in the lower part of the Magothy beds, consists of coarse sand and gravel, and is generally overlain by beds and lenses of clay distributed within the Magothy deposits. The fifth and lowermost zone, the Lloyd sand, lies just above the bedrock floor of the island and is generally covered by beds of Raritan clay. The Lloyd sand, also of Cretaceous age, consists of beds of sand and gravel which extend throughout much of Long Island.

The upper glacial beds constitute a reservoir in which large quantities of water are stored and into which water provided by precipitation can readily sink. As a result, the water table in these beds responds more or less rapidly to changes in the rate of precipitation. In contrast, the deeper sands that lie beneath clay beds are under artesian pressure and are fed at a more or less constant rate by water percolating down through relatively small intake areas, from the overlying formations. The safe yield of the upper glacial beds is governed more or less by the average rate of precipitation, whereas that of the deeper sands is limited by the capacity of the beds to transmit water from the areas of intake to points of withdrawal. Because of these features the movement of water levels in wells that penetrate the deeper sands is controlled chiefly by changes in rate of withdrawal.

The relation between precipitation and the fluctuation of water levels has been discussed at considerable length by Leggette [1] and by Jacob [2] and the effect of ground-water withdrawal on water levels in deep wells has been reported by Leggette.[3]

1/ Leggette, R. M., Section entitled, "ground-water recharge on Long Island" in U. S. Geol. Survey Water-Supply Paper 867, pp. 529-552, 1940. Leggette, R. M., Long Island section in U. S. Geol. Survey Water-Supply Paper 886, pp. 473-482, 1941.

2/ Jacob, C. E., Correlation of ground-water levels and precipitation on Long Island; Amer. Geophys. Union Trans., pp. 564-572, 1944.

3/ Leggette, R. M., The mutual interference of artesian wells on Long Island, New York: Am. Geophys. Union Trans., pp. 490-494, 1937.

Most of the observation wells on Long Island are screened in the upper glacial beds but a number of them penetrate the deeper beds. The observation wells that appear in the present report and which penetrate the deeper water-bearing formations are listed in the following table:

Source formations of deeper observation wells on Long Island, N. Y.

Jameco gravel	Magothy sands	Lloyd sand
K19	N9	N7
K533	N157	N6[illegible]
K921	N844	Q2[illegible]3
K1139	N1613	Q287
Q350	S2314	Q4[illegible]0
Q1237		Q543
		Q1027
		Q1222
		S202

Generally speaking, Long Island may be divided into two hydrologic provinces. At the western end of the island excessive pumping for a number of years has lowered the water table below sea level in a large area in Kings County and adjacent parts of Queens County. At places, the bottom of the depression in the water table lies as much as 30 feet below mean sea level, with the water level in pumping wells being at even greater depths. In the other parts of the island the perennial recharge exceeds ground-water withdrawals with the result that the water table stands above sea level except at a few places along the shore where local overdevelopment has occurred. In the higher parts of the island the water table stands as much as 80 feet above mean sea level. In the overdeveloped area at the western end of Long Island, the water table responds more or less rapidly to changes in the distribution of pumping and also the over-all rate of withdrawal, whereas in the other parts of the island the major fluctuations of the ground-water level are chiefly the result of differences in amount and distribution of precipitation.

Prior to 1942, water levels in Kings County had progressively declined for a number of years as the result of excessive pumping. In 1942, however, the trend of water levels was reversed and a general rise occurred, particularly in the center of the overpumped area. The upward trend of the water table continued in 1943, indicating a net decline in over-all pumpage and the establishment of a more favorable relationship between ground-water recharge and withdrawal in Kings County. However, water levels are still

far below sea level over a large area and salt water continues to flow inland from the bodies of sea water surrounding Kings County.

Although many of the wells are affected to a considerable degree by pumping from nearby wells, the records given in the preceding tables show in a general way the extent of the recovery of water levels in the past 2 years. Observations were begun in some of the wells as early as 1932. Additional wells have been installed each year since then, with about half of the wells having been installed since 1939. The first table shows that the lowest observed water level since the start of record in most of the observation wells occurred in the latter part of 1941 or the early part of 1942, indicating a continued decline even for the wells installed as early as 1932 and 1933. Further, it will be noted that the highest observed water level in wells installed previous to 1939 occurred relatively soon after measurements were begun, whereas the highest water level for a majority of the wells installed since 1939, was recorded in 1943. It will appear, therefore, that, in general, the water table has recovered to approximately its stage in 1939. Further evidence regarding the recovery is indicated by the record for well K30, a well which is situated near the bottom of the water-table depression and on which a water-stage recorder has been operated since 1935. The lowest water level for this well, 29.75 feet below mean sea level, was recorded in November 1941. At the end of 1943, the water level was 27.51 feet below mean sea level, a net rise of over 2 feet, more than half of which occurred in 1943. At the end of 1943, the water level in well K30 was higher than any preceding year-end stage since 1935. The second of the preceding tables indicates equally favorable conditions. As shown, a net rise occurred in all but three of the wells in 1943, the rises ranging up to as much as 1.7 feet. Similar rises occurred in the wells in Queens County that are adjacent to the overpumped area in Kings County.

Elsewhere on Long Island, where the perennial recharge exceeds ground-water withdrawals, the trend of the water table was not well defined. During the year, the precipitation was several inches below normal and about 9 inches less than in 1942. In the western part of Long Island the precipitation for the entire year, 40.5 inches at New York City, was only slightly greater than in the eastern part of the island, 39.6 inches at Setauket, but during the last half of the year it was greater in the western

part by more than 5 inches. Further, the rate of precipitation varied considerably from month to month, ranging at Setauket from 1.5 inches in April to 10.1 inches in June, and at New York City, from 9.2 inches in October to 1.4 inches in December. Because of the unequal distribution of rainfall, which favored the western part of the island during the last half of the year and also because of antecedent rainfall conditions, most of the wells in Suffolk County showed a net decline in 1943, whereas a net rise of water level occurred in most of the observation wells in Nassau County. During the year, the water level in many wells in Suffolk County which have been measured for only a year or two reached the lowest stage for the period of record.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Kings County

K10 (*840, p. 258; 845, p. 307; 886, p. 483; 906, p. 115; 936, p. 140; *944, p. 124). Rubel Ice Corporation well 1. Bond Street and Third Avenue, Brooklyn. Land-surface datum is 10.21 feet above mean sea level. Measurements discontinued on Feb. 27, 1943, as well was destroyed during March 1943. Water levels, in feet below mean sea level, 1943: Jan. 2, 17.14; Jan. 30, 16.47; Feb. 27, 15.45. Water levels, in feet below land-surface datum, 1943: Jan. 2, 27.35; Jan. 30, 26.68; Feb. 27, 25.66.

K19 (*906, p. 116; 936, p. 140; 944, p. 124). Kew-Pacific Garage. Dean Street and Fifth Avenue, Brooklyn. Land-surface datum is 45.30 feet above mean sea level.

Mean daily water level, in feet below mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	25.55	25.24	24.93	24.75	24.73	24.59	.....	25.31	25.62	25.63	25.38	25.23
2	25.52	25.35	24.99	24.79	24.64	24.67	.....	.....	25.70	25.61	25.46	25.24
3	25.53	25.36	24.95	24.81	24.56	24.76	.....	.....	.....	25.57	.....	.....
4	25.47	25.32	24.92	24.67	24.68	24.83	25.09	.....	25.58	25.55	.....	25.21
5	25.59	25.37	24.61	24.63	24.73	24.84	24.99	.....	25.48	25.62	.....	25.13
6	25.61	25.26	24.48	24.75	24.70	24.83	.....	.....	25.44	25.61	25.53	25.06
7	25.59	25.16	24.44	24.78	24.71	24.73	.....	25.36	25.51	25.61	25.46	25.15
8	25.58	25.16	24.43	24.75	24.73	24.82	.....	25.30	.....	.....	25.37	25.15
9	25.55	25.27	24.51	24.78	24.69	24.85	.....	25.28	.....	25.59	25.45	.....
10	25.47	25.27	24.79	24.75	24.58	24.88	25.15	25.36	.....	25.57	25.51	.....
11	25.44	25.22	24.86	24.69	24.63	24.88	25.13	25.44	.....	25.51	.....	25.16
12	25.50	25.30	24.86	24.59	24.65	24.92	25.06	.....	.....	25.56	.....	25.03
13	25.56	25.23	24.81	24.70	24.73	24.84	25.13	.....	.....	25.63	25.49	25.04
14	25.54	25.10	24.71	24.77	24.77	24.90	25.17	25.46	.....	25.63	25.43	25.12
15	25.52	25.12	24.68	24.81	24.76	24.96	25.20	25.44	.....	.....	25.32	25.13
16	25.51	25.13	24.77	24.81	24.65	25.02	25.23	25.37	.....	25.58	25.35	.....
17	25.44	25.18	24.82	24.75	24.57	25.08	25.31	25.41	.....	25.55	25.39	.....
18	25.40	25.22	24.86	24.68	24.65	25.07	25.23	25.51	25.75	25.50	.....	25.09
19	25.44	25.17	24.85	24.59	24.68	25.08	25.20	.....	25.63	25.57	.....	24.99
20	25.54	25.11	24.80	24.64	24.66	25.00	25.30	.....	25.56	25.62	25.42	24.97
21	25.48	25.00	24.78	24.67	24.65	24.99	25.34	25.53	25.66	25.62	25.31	25.00
22	25.48	24.94	24.70	24.70	24.65	25.10	25.33	25.47	25.70	.....	25.25	25.02
23	25.45	25.01	24.82	24.72	24.61	25.15	.....	25.43	25.71	25.59	25.30	25.06
24	25.38	25.02	24.83	24.70	24.57	25.14	25.22	25.54	25.72	25.52	.....	.....
25	25.31	24.97	24.84	24.58	24.64	25.19	25.18	25.60	25.69	25.45	.....	24.88
26	25.42	25.03	24.84	24.60	24.64	25.24	25.15	.....	25.63	25.43	.....	24.77
27	25.45	25.03	24.82	24.67	24.68	25.14	25.27	.....	25.58	25.48	25.25	24.76
28	.....	24.91	24.74	24.70	24.70	25.07	25.32	25.55	25.66	25.48	25.23	24.91
29	.....	.....	24.71	24.74	.....	25.16	25.32	25.50	25.71	25.49	25.17	24.94
30	.....	.....	24.71	24.71	24.59	.....	25.34	25.46	25.66	25.47	25.21	24.95
31	25.29	.....	24.71	.....	24.53	.....	25.41	25.57	.....	25.41	.....	24.94

K19. Kew-Pacific Garage--Continued.

Mean daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	70.85	70.54	70.23	70.05	70.03	69.89	.....	70.61	70.92	70.93	70.68	70.53
2	70.82	70.65	70.29	70.09	69.94	69.97	.....	.....	71.00	70.91	70.76	70.54
3	70.83	70.66	70.25	69.97	69.86	70.06	.....	.....	.....	70.87	.....	.....
4	70.77	70.62	70.22	69.97	69.98	70.13	70.39	.....	70.88	70.85	.....	70.51
5	70.89	70.67	69.91	69.93	70.03	70.14	70.29	.....	70.78	70.92	.....	70.43
6	70.97	70.56	69.78	70.05	70.00	70.13	.....	.....	70.74	70.91	70.83	70.36
7	70.89	70.46	69.74	70.08	70.01	70.03	.....	70.66	70.81	70.91	70.76	70.45
8	70.88	70.46	69.73	70.05	70.03	70.12	.....	70.60	.....	.....	70.67	70.45
9	70.85	70.57	69.81	70.08	69.99	70.15	.....	70.58	.....	70.89	70.75	.....
10	70.77	70.57	70.09	70.05	69.88	70.18	70.45	70.66	.....	70.87	70.81	.....
11	70.74	70.52	70.16	69.99	69.93	70.18	70.43	70.74	.....	70.81	.....	70.46
12	70.80	70.60	70.16	69.89	69.95	70.22	70.36	.....	.....	70.86	.....	70.33
13	70.86	70.53	70.11	70.00	70.03	70.14	70.43	.....	.....	70.93	70.79	70.34
14	70.84	70.40	70.01	70.07	70.07	70.20	70.47	70.76	.....	70.93	70.73	70.42
15	70.82	70.42	69.98	70.11	70.06	70.26	70.50	70.74	.....	.....	70.62	70.43
16	70.81	70.48	70.07	70.11	69.95	70.32	70.53	70.67	.....	70.88	70.65	.....
17	70.74	70.48	70.12	70.05	69.87	70.38	70.61	70.71	.....	70.85	70.69	.....
18	70.70	70.52	70.16	69.98	69.95	70.37	70.53	70.81	71.05	70.80	.....	70.39
19	70.74	70.47	70.15	69.89	69.98	70.38	70.50	.....	70.93	70.87	.....	70.29
20	70.84	70.41	70.10	69.94	69.96	70.30	70.60	.....	70.96	70.92	70.72	70.27
21	70.78	70.30	70.08	69.97	69.95	70.29	70.64	70.83	70.96	70.92	70.61	70.30
22	70.78	70.24	70.00	70.00	69.95	70.40	70.63	70.77	71.00	.....	70.55	70.32
23	70.75	70.31	70.12	70.02	69.91	70.45	.....	70.73	71.01	70.89	70.60	70.36
24	70.68	70.32	70.13	70.00	69.87	70.44	70.52	70.84	71.02	70.82	.....	.....
25	70.61	70.27	70.14	69.88	69.94	70.49	70.48	70.90	70.99	70.75	.....	70.18
26	70.72	70.33	70.14	69.90	69.94	70.54	70.45	.....	70.93	70.73	.....	70.07
27	70.75	70.33	70.12	69.97	69.98	70.44	70.57	.....	70.88	70.78	70.55	70.06
28	.....	70.21	70.04	70.00	70.00	70.37	70.62	70.85	70.96	70.78	70.53	70.21
29	.....	.....	70.01	70.04	.....	70.46	70.62	70.80	71.01	70.79	70.47	70.24
30	.....	.....	70.04	70.01	69.89	.....	70.64	70.76	70.96	70.77	70.51	70.25
31	70.59	.....	70.06	.....	69.83	.....	70.71	70.87	.....	70.71	.....	70.24

K30 (*817, p. 201; *840, p. 258; 845, p. 307; 886, p. 483; 906, p. 116; 936, p. 141; 944, p. 125). C. J. Tagliabue Manufacturing Co. Park and Nostrand Avenues, Brooklyn. Land-surface datum is 17.79 feet above mean sea level.

Water level at noon, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	46.61	46.23	45.97	45.62	45.58	45.48	.....	45.68	45.60	45.65	45.67	45.44
2	46.57	46.23	45.95	45.61	45.55	45.48	.....	45.64	45.61	45.65	45.63	45.44
3	46.56	46.22	45.92	45.63	45.48	45.51	45.70	45.63	45.65	45.63	45.62	45.46
4	46.49	.....	45.94	45.60	45.50	45.54	45.69	45.64	45.67	45.59	45.64	45.46
5	46.51	.....	45.93	45.56	45.52	45.55	45.64	45.67	45.65	45.59	45.65	.....
6	46.51	46.14	45.91	45.57	45.53	45.55	45.61	45.70	45.59	45.62	45.65	.....
7	46.52	46.14	45.94	45.58	45.54	45.50	45.61	45.72	45.55	45.62	45.64	.....
8	46.53	46.12	45.91	45.57	45.56	45.50	45.62	45.68	45.55	45.64	45.57	.....
9	46.53	46.11	45.90	45.59	45.57	45.52	45.65	45.64	45.56	45.65	45.57	.....
10	46.51	46.11	45.84	45.59	45.52	45.54	45.68	45.62	45.59	45.67	45.60	.....
11	46.47	46.08	45.83	45.59	45.51	45.55	45.66	45.65	45.62	45.62	45.60	45.45
12	46.44	46.13	45.83	45.54	45.51	45.53	45.61	45.68	45.62	45.62	45.60	45.38
13	46.46	46.09	45.84	45.54	45.55	45.56	45.60	45.68	45.59	45.64	45.60	45.40
14	46.46	46.07	45.82	45.55	45.58	45.54	45.62	45.68	45.57	45.65	45.61	45.39
15	46.46	46.05	45.79	45.58	45.60	45.54	45.64	45.65	45.57	45.67	45.55	45.42
16	46.47	46.04	45.76	45.61	45.58	45.55	45.67	45.62	45.58	45.65	45.52	45.42
17	46.48	46.03	45.75	45.62	45.52	45.60	45.71	45.62	45.62	45.63	45.55	45.44
18	46.43	46.07	45.76	45.58	45.51	45.61	45.67	45.65	45.68	45.61	45.57	45.39
19	46.38	46.06	45.75	45.52	45.52	45.64	45.63	45.68	45.66	45.61	45.56	45.37
20	46.44	46.05	45.74	45.53	45.54	45.61	45.62	45.70	45.60	45.65	45.56	45.34
21	46.42	46.04	45.74	45.54	45.54	45.57	45.65	45.72	45.61	45.68	45.53	45.32
22	46.41	46.01	45.71	45.57	45.55	45.56	45.67	45.68	45.61	45.69	45.48	45.34
23	46.40	46.00	45.70	45.58	45.55	45.60	45.71	45.63	45.63	45.72	45.46	45.37
24	46.40	45.98	45.68	45.58	45.50	45.62	45.72	45.61	45.66	45.72	45.47	45.38
25	46.35	46.01	45.68	45.54	45.48	45.64	45.69	45.61	45.68	45.68	45.49	45.36

K30. C. J. Tagliabue Manufacturing Co.--Continued.

Water level at noon, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	.....	46.00	45.70	45.53	45.49	45.66	45.64	45.63	45.67	45.67	45.46	45.33
27	.....	46.00	45.69	45.52	45.52	45.66	45.62	45.65	45.63	45.69	45.44	45.28
28	.....	45.97	45.67	45.52	45.55	45.61	45.63	45.66	45.63	45.67	45.46	45.28
29	.....	.....	45.65	45.56	45.58	45.61	45.65	45.64	45.65	45.72	45.44	45.29
30	46.30	.....	45.62	45.52	45.55	45.65	45.67	45.58	45.65	45.72	45.42	45.30
31	46.29	.....	45.64	.....	45.50	.....	45.71	45.58	.....	45.71	.....	45.30

Water level at noon, in feet below mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	28.82	28.44	28.18	27.83	27.79	27.69	.....	27.89	27.81	27.86	27.88	27.65
2	28.78	28.44	28.16	27.82	27.76	27.69	.....	27.85	27.82	27.86	27.84	27.65
3	28.77	28.43	28.13	27.84	27.69	27.72	27.91	27.84	27.86	27.84	27.83	27.67
4	28.70	.....	28.15	27.81	27.71	27.75	27.90	27.85	27.88	27.80	27.85	27.67
5	28.72	.....	28.14	27.77	27.73	27.76	27.85	27.88	27.86	27.80	27.86	.....
6	28.72	28.35	28.12	27.78	27.74	27.76	27.82	27.91	27.80	27.83	27.86	.....
7	28.73	28.35	28.15	27.79	27.75	27.71	27.82	27.93	27.76	27.83	27.85	.....
8	28.74	28.33	28.12	27.78	27.77	27.71	27.83	27.89	27.76	27.85	27.78	.....
9	28.74	28.32	28.11	27.80	27.78	27.73	27.86	27.85	27.77	27.86	27.78	.....
10	28.72	28.32	28.05	27.80	27.73	27.75	27.89	27.83	27.80	27.88	27.81	.....
11	28.68	28.29	28.04	27.80	27.72	27.76	27.87	27.86	27.83	27.83	27.81	27.66
12	28.65	28.34	28.04	27.75	27.72	27.79	27.82	27.89	27.83	27.83	27.81	27.59
13	28.67	28.30	28.05	27.75	27.76	27.77	27.81	27.89	27.80	27.85	27.81	27.61
14	28.67	28.28	28.03	27.76	27.79	27.75	27.83	27.89	27.78	27.86	27.82	27.60
15	28.67	28.26	28.00	27.79	27.81	27.75	27.85	27.86	27.78	27.88	27.76	27.63
16	28.68	28.25	27.97	27.82	27.79	27.76	27.88	27.83	27.79	27.86	27.73	27.63
17	28.69	28.24	27.96	27.83	27.73	27.81	27.92	27.83	27.83	27.84	27.76	27.65
18	28.64	28.28	27.97	27.79	27.72	27.82	27.88	27.86	27.89	27.82	27.78	27.60
19	28.59	28.27	27.96	27.73	27.73	27.85	27.84	27.89	27.87	27.82	27.77	27.58
20	28.65	28.26	27.95	27.74	27.75	27.82	27.83	27.91	27.81	27.86	27.77	27.55
21	28.63	28.25	27.95	27.75	27.75	27.78	27.86	27.93	27.82	27.89	27.74	27.53
22	28.62	28.22	27.92	27.78	27.76	27.77	27.88	27.89	27.82	27.90	27.69	27.55
23	28.61	28.21	27.91	27.79	27.76	27.81	27.92	27.84	27.84	27.93	27.67	27.58
24	28.61	28.19	27.89	27.79	27.71	27.83	27.93	27.82	27.87	27.93	27.68	27.59
25	28.56	28.22	27.89	27.75	27.69	27.85	27.90	27.82	27.89	27.89	27.70	27.57
26	.....	28.21	27.91	27.74	27.70	27.87	27.85	27.84	27.88	27.88	27.67	27.54
27	.....	28.21	27.90	27.73	27.73	27.87	27.83	27.86	27.84	27.90	27.65	27.49
28	.....	28.18	27.88	27.73	27.76	27.82	27.84	27.87	27.84	27.88	27.67	27.49
29	.....	.....	27.86	27.77	27.79	27.82	27.86	27.85	27.86	27.93	27.65	27.50
30	28.51	.....	27.83	27.73	27.76	27.86	27.88	27.79	27.86	27.93	27.63	27.51
31	28.50	.....	27.85	.....	27.71	.....	27.92	27.79	.....	27.92	.....	27.51

K65 (*840, p. 259; 845, p. 308; 886, p. 484; 906, p. 117; 936, p. 142; 944, p. 125). A. Ludwig Co. well 2. 123 Middleton Street, Brooklyn. Land-surface datum is 17.34 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	43.07	Mar. 27	43.02	June 26	42.92	Sept.25	42.82
30	43.22	May 1	43.00	July 31	42.87	Oct. 30	42.74
Feb. 27	43.12	29	42.95	Aug. 28	42.78	Nov. 27	42.45

Water level, in feet below mean sea level, 1943

Jan. 2	25.73	Mar. 27	25.68	June 26	25.58	Sept.25	25.48
30	25.88	May 1	25.66	July 31	25.53	Oct. 30	25.40
Feb. 27	25.78	29	25.61	Aug. 28	25.44	Nov. 27	25.11

K67 (*840, p. 259; 845, p. 308; 886, p. 484; 906, p. 117; 936, p. 143; 944, p. 126). Young Men's Christian Association. 179 Marcy Avenue, Brooklyn. Land-surface datum is 46.95 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	66.25	Mar. 27	66.23	June 26	66.14	Sept.25	66.07
30	66.22	May 1	66.20	July 31	66.17	Oct. 30	65.93
Feb. 27	66.22	29	66.15	Aug. 28	66.13	Nov. 27	65.94

K67. Young Men's Christian Association--Continued.

Water level, in feet below mean sea level, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	19.30	Mar. 27	19.28	June 26	19.19	Sept.25	19.12
30	19.27	May 1	19.25	July 31	19.22	Oct. 30	18.98
Feb. 27	19.27	29	19.20	Aug. 28	19.18	Nov. 27	18.99

K92 (*840, p. 260; 845, p. 309; 886, p. 484; 906, p. 117; 936, p. 143; 944, p. 126). St. Johns University. 75 Lewis Avenue, Brooklyn. Land-surface datum is 69.05 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	91.46	Mar. 27	90.93	June 26	90.70	Oct. 30	91.87
30	91.25	May 1	90.77	July 31	90.73	Nov. 27	91.95
Feb. 27	91.13	29	90.66	Aug. 28	90.75		

Water level, in feet below mean sea level, 1943

Jan. 2	22.41	Mar. 27	21.88	June 26	21.65	Oct. 30	22.82
30	22.20	May 1	21.72	July 31	21.68	Nov. 27	22.90
Feb. 27	22.08	29	21.61	Aug. 28	21.70		

K104 (*906, p. 118; 936, p. 143; 944, p. 126). The Borden Co. Clermont Avenue and Fulton Street, Brooklyn. Land-surface datum is 75.29 feet above mean sea level. Measurements discontinued on Aug. 28, 1943.

Water level, in feet below land-surface datum, 1943

Jan. 2	101.62	Mar. 27	101.01	May 29	100.66	July 31	100.90
30	101.22	May 1	100.72	June 26	100.72	Aug. 28	101.01
Feb. 27	101.20						

Water level, in feet below mean sea level, 1943

Jan. 2	26.33	Mar. 27	25.72	May 29	25.37	July 31	25.61
30	25.93	May 1	25.43	June 26	25.43	Aug. 28	25.72
Feb. 27	25.91						

K196. Knickerbocker Ice Co. well 1. Twelfth Avenue and 37th Street, Brooklyn. Diameter 10 inches, measured depth 137.8 feet below measuring point. Measuring point, top of 10-inch casing, 10.00 feet above land-surface datum and 79.68 feet above mean sea level. Water level, Sept. 12, 1942, 84.43 feet below measuring point and 4.75 feet below mean sea level.

Water level, in feet below land-surface datum, 1942-43

Date	Water level	Date	Water level	Date	Water level
Sept.12, 1942	74.43	Nov. 21, 1942	73.24	Mar. 27, 1943	72.80
19	74.43	28	73.23	May 1	72.80
26	73.54	Dec. 5	73.19	29	72.79
Oct. 3	73.53	12	73.17	June 26	72.89
10	73.55	19	73.16	July 31	72.96
17	73.49	26	73.19	Aug. 28	73.06
24	73.40	Jan. 2, 1943	73.15	Sept.25	73.14
31	73.33	30	73.06	Oct. 30	73.15
Nov. 7	73.31	Feb. 27	73.01	Nov. 27	73.06
14	73.25				

Water level, in feet below mean sea level, 1942-43

Sept.12, 1942	4.75	Nov. 21, 1942	3.56	Mar. 27, 1943	3.12
19	4.75	28	3.55	May 1	3.12
26	3.86	Dec. 5	3.51	29	3.11
Oct. 3	3.85	12	3.49	June 26	3.21
10	3.87	19	3.48	July 31	3.28
17	3.81	26	3.51	Aug. 28	3.38
24	3.72	Jan. 2, 1943	3.47	Sept.25	3.46
31	3.65	30	3.38	Oct. 30	3.47
Nov. 7	3.63	Feb. 27	3.33	Nov. 27	3.38
14	3.57				

K502 (*936, p. 144; 944, p. 126). New York Water Service Corporation well F2. About 250 feet north of Foster Avenue and 90 feet west of East 31st Street, Brooklyn. Land-surface datum is 15.90 feet above mean sea level. Water levels, in feet below land-surface datum, 1943: Jan. 2, 25.59; Jan. 30, 25.36; Feb. 27, 25.39; Mar. 27, 25.08. Water levels, in feet below mean sea level, 1943: Jan. 2, 9.69; Jan. 30, 9.46; Feb. 27, 9.49; Mar. 27, 9.18.

K533 (*777, p. 120; *817, p. 200; *840, p. 261; 845, p. 310; 886, p. 486; *906, p. 118; 936, p. 144; 944, p. 127). New York Water Service Corporation test well. On southwest side of East 98th Street near Rutland Road, Brooklyn. Land-surface datum is 41.38 feet above mean sea level.

Lowest daily water level, in feet below land-surface datum, 1943 (Record from Jan. 1, 1943, through May 1, 1943, from recorder charts; record after May 1, 1943, from taps measurements.)

Day	Jan.	Feb.	Mar.	Apr.	May	June	Aug.	Nov.
1	64.64	64.38	64.15	63.80	a63.80	.....	.....	.....
2	64.59	64.39	64.19	63.83	.....	.....	.....	.....
3	64.63	64.37	64.08	63.83	.....	.....	.....	.....
4	64.59	64.35	a64.05	63.88	.....	.....	.....	.....
5	64.59	64.44	.....	63.78	.....	.....	.....	.....
6	64.58	64.38	a64.05	63.83	.....	.....	.....	.....
7	64.58	64.39	64.21	63.82	.....	.....	.....	.....
8	64.58	64.36	64.08	63.82	.....	.....	.....	.....
9	64.55	64.36	64.10	63.82	.....	.....	.....	.....
10	64.63	64.34	64.04	63.77	.....	.....	.....	.....
11	64.51	64.31	64.03	63.93	.....	.....	.....	.....
12	64.53	64.42	64.05	63.74	.....	.....	.....	.....
13	64.53	64.37	64.00	63.77	.....	.....	.....	.....
14	64.53	64.36	64.11	63.78	.....	.....	.....	.....
15	64.55	64.36	63.96	63.80	.....	.....	.....	.....
16	64.54	64.38	63.86	64.80	.....	.....	.....	.....
17	64.56	64.35	63.86	63.75	.....	.....	.....	.....
18	64.50	64.37	63.89	63.89	.....	.....	.....	.....
19	64.50	64.31	63.89	63.75	.....	.....	.....	.....
20	64.56	64.28	63.83	63.69	.....	.....	.....	.....
21	64.49	64.31	64.03	63.65	.....	.....	.....	.....
22	64.51	64.25	63.80	63.69	.....	.....	.....	.....
23	64.48	64.20	63.84	63.76	.....	.....	.....	.....
24	64.57	64.20	63.84	63.80	.....	.....	.....	.....
25	64.43	64.24	63.82	63.86	.....	.....	.....	.....
26	64.46	64.24	63.85	63.73	.....	64.10	.....	.....
27	64.46	64.16	63.82	63.74	.....	.....	.....	63.01
28	64.44	64.24	64.01	63.81	.....	.....	63.15	.....
29	64.46	.....	63.81	63.81	63.74	.....	.....	.....
30	64.42	.....	63.74	63.75	.....	.....	.....	.....
31	64.49	.....	63.78	.....	.....	.....	.....	.....

Lowest daily water level, in feet below mean sea level, 1943 (Record from Jan. 1, 1943, through May 1, 1943, from recorder charts; record after May 1, 1943, from tape measurements.)

Day	Jan.	Feb.	Mar.	Apr.	May	June	Aug.	Nov.
1	23.26	23.00	22.77	22.42	a22.42	.....	.....	.....
2	23.21	23.01	22.81	22.45	.....	.....	.....	.....
3	23.25	22.99	22.70	22.45	.....	.....	.....	.....
4	23.21	22.97	a22.67	22.50	.....	.....	.....	.....
5	23.21	23.06	.....	22.40	.....	.....	.....	.....
6	23.20	23.00	a22.67	22.45	.....	.....	.....	.....
7	23.20	23.01	22.83	22.44	.....	.....	.....	.....
8	23.20	22.98	22.70	22.44	.....	.....	.....	.....
9	23.17	22.98	22.72	22.44	.....	.....	.....	.....
10	23.25	22.96	22.66	22.39	.....	.....	.....	.....
11	23.13	22.93	22.65	22.55	.....	.....	.....	.....
12	23.15	23.04	22.67	22.36	.....	.....	.....	.....
13	23.15	22.99	22.62	22.39	.....	.....	.....	.....
14	23.15	22.98	22.73	22.40	.....	.....	.....	.....
15	23.17	22.98	22.58	22.42	.....	.....	.....	.....
16	23.16	23.00	22.48	22.42	.....	.....	.....	.....
17	23.18	22.97	22.48	22.37	.....	.....	.....	.....
18	23.12	22.99	22.51	22.51	.....	.....	.....	.....
19	23.12	22.93	22.51	22.37	.....	.....	.....	.....
20	23.18	22.90	22.45	22.31	.....	.....	.....	.....
21	23.11	22.93	22.65	22.27	.....	.....	.....	.....
22	23.13	22.87	22.42	22.31	.....	.....	.....	.....

a Estimated.

K533. New York Water Service Corporation test well--Continued.

Lowest daily water level, in feet below mean sea level, 1943 (Record from Jan. 1, 1943, through May 1, 1943, from recorder charts; record after May 1, 1943, from tape measurements)

Day	Jan.	Feb.	Mar.	Apr.	May	June	Aug.	Nov.
23	23.10	22.82	22.46	22.38	.....	.....	.....	.....
24	23.19	22.82	22.44	22.48	.....	.....	.....	.....
25	23.05	22.86	22.44	22.48	.....	.....	.....	.....
26	23.08	22.86	22.47	22.35	.....	22.72	.....	.....
27	23.08	22.78	22.44	22.36	.....	.....	.....	21.63
28	23.06	22.86	22.63	22.43	.....	.....	21.77	.....
29	23.08	.....	22.43	22.43	22.36	.....	.....	.....
30	23.04	.....	22.36	22.37	.....	.....	.....	.....
31	23.11	.....	22.40	.....	.....	.....	.....	.....

K535 (*840, p. 261; 845, p. 310; 886, p. 486; *906, p. 119; 936, p. 145; 944, p. 127). New York City Department of Water Supply, Gas and Electricity well Gravesend 1. Avenue S and East 16th Street, Brooklyn. Measurements temporarily discontinued on May 1, 1943. Land-surface datum is 19.09 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level
Jan. 2	17.20	Feb. 27	17.14	May 1	16.74
30	17.24	Mar. 27	16.87		

Water level, in feet above mean sea level, 1943

Jan. 2	1.89	Feb. 27	1.95	May 1	2.35
30	1.85	Mar. 27	2.22		

K539 (*906, p. 120; 936, p. 146; 944, p. 128). New York City Department of Water Supply, Gas and Electricity. Atlantic Avenue and Logan Street, Brooklyn. Land-surface datum is 32.92 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	37.15	Mar. 27	36.58	June 26	36.12	Sept.25	36.13
30	36.95	May 1	36.48	July 31	36. 6	Oct. 30	36.08
Feb. 27	36.76	29	36.29	Aug. 28	36.08	Nov. 27	35.90

Water level, in feet below mean sea level, 1943

Jan. 2	4.23	Mar. 27	3.66	June 26	3.20	Sept.25	3.21
30	4.03	May 1	3.56	July 31	3.14	Oct. 30	3.16
Feb. 27	3.84	29	3.37	Aug. 28	3.16	Nov. 27	2.98

K921 (*845, p. 311; 886, p. 487; 906, p. 120; *936, p. 146; 944, p. 128). Knox Hats. Grand and St. Marks Avenues, Brooklyn. Measurements discontinued on Aug. 28, 1943. Land-surface datum is 115.88 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	141.48	Mar. 27	141.31	May 29	141.18	July 31	141.45
30	141.52	May 1	141.34	June 26	141.59	Aug. 28	141.39

Water level, in feet below mean sea level, 1943

Jan. 2	25.60	Mar. 27	25.43	May 29	25.30	July 31	25.57
30	25.64	May 1	25.46	June 26	25.71	Aug. 28	25.51

K1139 (*906, p. 121; 936, p. 147; 944, p. 129). New York City Department of Water Supply, Gas and Electricity well New Lots 1. Chestnut Street and Blake Avenue, Brooklyn. Land-surface datum is 7.18 feet above mean sea level. Measurements discontinued on May 1, 1943. See K1296.

K1139. New York City Department of Water Supply, Gas and Electricity well New Lots 1--Continued.

Lowest daily water level, in feet below mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May
1	2.40	2.23	2.06	1.72	a1.73
2	2.38	2.26	2.07	1.69	....
3	2.35	2.26	2.05	1.74	....
4	2.32	2.25	2.06	1.74	....
5	2.33	2.19	2.07	1.71	....
6	2.32	2.19	2.07	1.74	....
7	2.31	2.09	2.00	1.76	....
8	2.29	2.11	2.04	1.74	....
9	2.27	2.12	2.05	1.71	....
10	2.27	2.12	2.01	1.71	....
11	2.25	2.09	1.94	1.74	....
12	2.25	2.12	1.92	1.73	....
13	2.27	2.12	1.92	1.70	....
14	2.26	2.06	1.94	1.76	....
15	2.24	2.13	1.94	1.80	....
16	2.24	2.13	1.92	1.82	....
17	2.28	2.12	1.86	1.81	....
18	2.28	2.11	1.84	1.83	....
19	2.29	2.09	1.82	1.82	....
20	2.32	2.06	1.80	1.71	....
21	2.30	2.04	1.80	1.71	....
22	2.26	2.05	1.79	1.74	....
23	2.25	2.04	1.78	1.74	....
24	2.25	2.04	1.77	1.72	....
25	2.24	2.07	1.73	1.69	....
26	2.29	2.07	1.73	1.73	....
27	2.31	2.01	1.71	1.74	....
28	2.31	2.02	1.75	1.73	....
29	2.28	.....	1.77	1.74	....
30	2.29	....	1.76	1.74	....
31	2.25	....	1.72	....	....

K1194 (*906, p. 122; *936, p. 148; 944, p. 130). New York City Department of Water Supply, Gas and Electricity. Atlantic and Nichols Avenues, Brooklyn. Land-surface datum is 31.84 feet above mean sea level. Well destroyed during February. Water level, in feet below land surface datum, 1943: Jan. 2, 35.48; Jan. 30, 35.27. Water level, in feet, below mean sea level, 1943: Jan. 2, 3.64; Jan. 30, 3.43.

K1198 (*906, p. 122; 936, p. 148; 944, p. 130). New York City Department of Water Supply, Gas and Electricity. Cleveland and Fulton Streets, Brooklyn. Land-surface datum is 36.77 feet above mean sea level.

Water level, in feet below land surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	43.19	Mar. 27	42.70	June 26	42.29	Sept.25	42.30
30	43.03	May 1	42.52	July 31	42.25	Oct. 30	42.25
Feb. 27	42.87	29	42.38	Aug. 28	42.20	Nov. 27	42.12

Water level, in feet below mean sea level, 1943

Jan. 2	6.29	Mar. 27	5.80	June 26	5.39	Sept.25	5.40
30	6.13	May 1	5.62	July 31	5.35	Oct. 30	5.35
Feb. 27	5.97	29	5.48	Aug. 28	5.30	Nov. 27	5.22

K1199 (*906, p. 123; 936, p. 149; 944, p. 131). New York City Department of Water Supply, Gas and Electricity. Jefferson and Howard Avenues, Brooklyn. Land-surface datum is 48.49 feet above mean sea level.

Water level, in feet below land surface datum, 1943

Jan. 2	65.11	Mar. 27	64.83	June 26	64.52	Sept.25	64.51
30	64.94	May 1	64.70	July 31	64.70	Oct. 30	64.93
Feb. 27	64.90	29	64.60	Aug. 28	64.73	Nov. 27	65.07

a Estimated.

K1199. New York City Department of Water Supply, Gas and Electricity--Continued.

Water level, in feet below mean sea level, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	16.49	Mar. 27	16.21	June 26	15.90	Sept.25	15.89
30	16.32	Mar. 1	16.08	July 31	16.08	Oct. 30	16.31
Feb. 27	16.28	29	15.98	Aug. 28	16.11	Nov. 27	16.45

K1235 (*936, p. 149; *944, p. 131). New York City Department of Water Supply, Gas and Electricity. Fulton Street and Pennsylvania Avenue, Brooklyn. Land-surface datum is 60.47 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	70.13	May 1	69.62	July 31	69.60	Oct. 30	69.60
Feb. 27	69.96	29	69.55	Aug. 28	69.63	Nov. 27	69.40
Mar. 27	69.78	June 26	69.60	Sept.25	69.73		

Water level, in feet below mean sea level, 1943

Jan. 2	9.66	May 1	9.15	July 31	9.13	Oct. 30	9.13
Feb. 27	9.49	29	9.08	Aug. 28	9.16	Nov. 27	8.93
Mar. 27	9.31	June 26	9.13	Sept.25	9.26		

K1236 (*936, p. 149; 944, p. 131). New York City Department of Water Supply, Gas and Electricity. Lexington and Patchen Avenues, Brooklyn. Land-surface datum is 50.94 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	69.47	Mar. 27	69.16	June 26	69.06	Sept.25	69.49
30	69.38	May 1	68.90	July 31	69.07	Oct. 30	69.88
Feb. 27	69.20	29	68.75	Aug. 28	69.45	Nov. 27	70.02

Water level, in feet below mean sea level, 1943

Jan. 2	18.56	Mar. 27	18.25	June 26	18.15	Sept.25	18.58
30	18.47	May 1	17.99	July 31	18.16	Oct. 30	18.97
Feb. 27	18.29	29	17.84	Aug. 28	18.54	Nov. 27	19.11

K1237 (936, p. 150; 944, p. 131). New York City Department of Water Supply, Gas and Electricity. Delmonico Place and Hopkins Street, Brooklyn. Land-surface datum is 18.02 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	51.71	Mar. 27	52.03	June 26	52.05	Oct. 30	51.84
30	52.17	May 1	52.08	Aug. 28	52.47	Nov. 27	51.73
Feb. 27	52.28	29	51.98	Sept.25	51.49		

Water level, in feet below mean sea level, 1943

Jan. 2	33.69	May. 27	34.01	June 26	34.03	Oct. 30	33.82
30	34.15	May 1	34.06	Aug. 28	34.45	Nov. 27	33.71
Feb. 27	34.26	29	33.96	Sept.25	33.47		

K1263 (*936, p. 150; 944, p. 132). New York City Department of Water Supply, Gas and Electricity. East 16th Street and Cortelyou Road, Brooklyn. Land-surface datum is 35.87 feet above mean sea level.

Water level, in feet below land surface datum, 1943

Jan. 2	46.49	Mar. 27	46.44	June 26	46.46	Sept.25	46.75
30	46.47	May 1	46.29	July 31	46.54	Oct. 30	46.73
Feb. 27	46.54	29	46.24	Aug. 28	46.65	Nov. 27	46.54

Water level, in feet below mean sea level, 1943

Jan. 2	10.62	Mar. 27	10.57	June 26	10.59	Sept.25	10.88
30	10.60	May 1	10.42	July 31	10.67	Oct. 30	10.86
Feb. 27	10.67	29	10.37	Aug. 28	10.78	Nov. 27	10.67

K1264 (*936, p. 151; 944, p. 132). New York City Department of Water Supply, Gas and Electricity. East 37th Street and Snyder Avenue, Brooklyn. Land-surface datum is 43.89 feet above mean sea level.

K1264. New York City Department of Water Supply, Gas and Electricity well--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	58.70	Mar. 27	58.51	June 26	58.35	Sept.25	58.60
30	58.57	May 1	58.35	July 31	58.37	Oct. 30	58.66
Feb. 27	58.67	29	58.26	Aug. 28	58.47	Nov. 27	58.50

Water level, in feet below mean sea level, 1943

Jan. 2	14.81	Mar. 27	14.62	June 26	14.46	Sept.25	14.71
30	14.68	May 1	14.46	July 31	14.48	Oct. 30	14.77
Feb. 27	14.78	29	14.37	Aug. 28	14.58	Nov. 27	14.61

K1265 (*936, p. 151; 944, p. 132). New York City Department of Water Supply, Gas and Electricity. Riverdale Avenue and Thatford Street, Brooklyn. Measurements temporarily discontinued on May 29, 1943. Land-surface datum is 23.22 feet above mean sea level.

Water level, in feet below land surface datum, 1943

Date	Water level	Date	Water level	Date	Water level
Jan. 2	34.25	Feb. 27	34.10	May 1	33.98
30	34.22	Mar. 27	33.93	29	33.86

Water level, in feet below mean sea level, 1943

Jan. 2	11.03	Feb. 27	10.88	May 1	10.76
30	11.00	Mar. 27	10.71	29	10.64

K1266 (*936, p. 152; 944, p. 133). New York City Department of Water Supply, Gas and Electricity. Vermont Street and Livonia Avenue, Brooklyn. Land-surface datum is 27.68 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	34.32	Mar.27	33.78	June 26	33.45	Sept.25	33.83
30	34.07	May 1	33.72	July 31	33.50	Oct. 30	33.79
Feb. 27	33.96	29	33.60	Aug. 28	33.64	Nov. 27	33.50

Water level, in feet below mean sea level, 1943

Jan. 2	6.64	Mar. 27	6.10	June 26	5.77	Sept.25	6.15
30	6.39	May 1	6.04	July 31	5.82	Oct. 30	6.11
Feb. 27	6.28	29	5.92	Aug. 28	5.96	Nov. 27	5.82

K1296 (*936, p. 152; 944, p. 133). New York City Department of Water Supply, Gas and Electricity. Blake Avenue and Crystal Street, Brooklyn. Land-surface datum is 7.30 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	9.51	Mar. 27	8.70	June 26	8.61	Sept.25	8.85
30	9.45	May 1	8.86	July 31	8.75	Oct. 30	8.40
Feb. 27	9.03	29	8.68	Aug. 28	8.82	Nov. 27	8.25

Water level, in feet below mean sea level, 1943

Jan. 2	2.21	Mar. 27	1.40	June 26	1.31	Sept.25	1.55
30	2.15	May 1	1.56	July 31	1.45	Oct. 30	1.10
Feb. 27	1.73	29	1.38	Aug. 28	1.52	Nov. 27	.95

K1347. R.K.O. Albee Theater. DeKalb Avenue and Fulton Street, Brooklyn. Diameter 48 inches, depth 57.8 feet below measuring point. Measuring point, top of pipe flange, 2.8 feet above basement floor, 14.00 feet below land-surface datum and 26.27 feet above mean sea level.

K1347. R.K.O. Albee Theater well--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 22	61.29	May 8	60.36	July 9	62.64	Sept. 4	63.56
Feb. 20	60.91	15	60.57	17	63.17	11	63.64
Mar. 20	60.65	22	60.96	23	63.50	18	63.08
27	60.45	29	60.69	31	63.70	25	62.68
Apr. 3	60.34	June 5	61.77	Aug. 7	63.36	Oct. 30	62.23
10	60.29	12	61.08	14	63.20	Nov. 20	62.00
17	60.25	19	62.71	21	63.19	27	61.94
24	60.19	26	62.36	28	63.20	Dec. 18	61.78
May 1	60.43	July 3	62.88				

Water level, in feet below mean sea level, 1943

Jan. 22	21.02	May 8	20.09	July 9	22.37	Sept. 4	23.29
Feb. 20	20.64	15	20.30	17	22.90	11	23.37
Mar. 20	20.38	22	20.69	23	23.23	18	22.81
27	20.18	29	20.42	31	23.43	25	22.41
Apr. 3	20.07	June 5	21.50	Aug. 7	23.09	Oct. 30	21.96
10	20.02	12	20.81	14	22.93	Nov. 20	21.73
17	19.98	19	22.44	21	22.92	27	21.67
24	19.92	26	22.09	28	22.93	Dec. 18	21.51
May 1	20.16	July 3	22.61				

Nassau County

N7 (*840, p. 263; 845, p. 311; 886, p. 488; *906, p. 123; *936, p. 153; 944, p. 133). Citizens Water Supply Co. well Valley Stream 26. About 130 feet north of Remsen Street and 150 feet west of Corona Avenue, Valley Stream. Land-surface datum is 20.80 feet above mean sea level.

Water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	8.77	9.13	8.98	8.97	9.14	8.95	10.68	11.50	12.27	11.43	10.31	10.03
2	8.89	9.12	9.04	8.87	9.30	8.84	10.84	11.53	12.30	11.30	10.36	10.02
3	9.00	9.21	9.00	8.89	9.15	8.81	10.93	11.54	12.32	11.27	.....	10.02
4	8.92	9.22	8.99	9.07	9.12	8.87	10.96	11.54	12.33	11.29	.....	10.04
5	9.01	9.08	9.04	8.90	9.21	8.94	10.86	11.54	12.30	.....	.....	9.99
6	9.14	9.10	9.08	8.96	9.19	9.08	10.80	11.64	12.23	.....	.....	10.03
7	9.26	8.89	8.85	9.15	9.09	9.13	10.85	11.71	12.12	.....	10.29	9.89
8	9.30	8.89	9.13	9.15	9.09	9.19	10.84	11.70	12.11	.....	10.26	....
9	9.31	9.01	9.36	9.17	9.17	9.24	10.85	11.72	12.10	11.11	9.95	9.88
10	9.31	9.14	9.36	9.13	9.24	9.25	10.86	11.71	12.11	11.07	10.00	9.88
11	9.31	9.03	9.17	9.18	9.20	9.22	10.89	11.72	12.15	11.20	10.05	9.75
12	9.25	9.04	9.03	9.18	9.09	9.25	10.90	11.77	12.18	11.15	10.08	9.83
13	9.24	9.13	9.07	8.94	9.05	9.26	10.90	11.77	12.19	11.06	10.00	9.78
14	9.24	8.96	9.15	8.93	9.14	9.28	10.86	11.66	12.18	10.99	10.10	9.95
15	9.18	9.02	9.21	9.13	9.23	9.33	10.81	11.64	12.07	10.91	10.19	10.04
16	9.17	9.01	9.16	9.32	9.30	9.27	10.83	11.65	12.05	10.58	10.09	10.11
17	....	8.95	8.98	9.33	9.26	9.35	10.90	11.61	12.03	10.45	10.10	10.13
18	....	9.02	9.03	9.45	9.19	9.36	10.92	11.67	12.09	10.52	10.17	10.08
19	....	9.08	9.03	9.45	9.12	9.45	10.94	11.76	12.06	10.52	10.18	10.06
20	....	9.09	8.95	9.15	9.02	9.55	10.97	11.82	12.01	10.51	10.16	9.93
21	....	9.07	9.02	9.14	9.01	9.62	10.98	11.89	11.93	10.53	10.17	9.98
22	....	9.09	9.01	9.19	8.93	9.69	11.03	11.94	11.87	10.50	10.09	9.93
23	9.37	9.11	9.01	9.28	9.05	9.77	11.13	11.97	11.77	10.46	10.09	10.09
24	9.37	9.08	9.04	9.28	9.06	9.91	11.29	11.99	11.71	10.48	10.11	10.27
25	9.38	9.08	8.95	9.24	8.99	9.98	11.36	12.00	11.67	10.53	10.16	10.35
26	9.37	9.13	8.95	9.19	8.87	10.09	11.38	12.05	11.66	10.47	10.18	10.32
27	9.47	9.03	8.89	9.34	8.83	10.14	11.40	12.17	11.66	.....	10.10	10.06
28	9.48	8.99	8.91	9.19	8.86	10.23	11.38	12.34	11.65	.....	.....	10.03
29	9.44	....	9.09	9.31	8.89	10.30	11.39	12.33	11.65	9.93	10.11	10.06
30	9.44	....	9.12	9.29	8.91	10.46	11.38	12.32	11.65	10.00	10.07	10.07
31	9.35	....	8.99	....	8.92	.....	11.46	12.29	.....	10.12	.....	10.07

N7. Citizens Water Supply Co. well Valley Stream 26--Continued.

Water level at noon, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	12.03	11.67	11.82	11.83	11.66	11.85	10.12	9.30	8.53	9.37	10.49	10.77
2	11.91	11.68	11.76	11.93	11.50	11.96	9.96	9.27	8.50	9.50	10.44	10.78
3	11.80	11.59	11.80	11.91	11.65	11.99	9.87	9.26	8.48	9.53	.....	10.78
4	11.88	11.58	11.81	11.73	11.68	11.93	9.84	9.26	8.47	9.51	.....	10.76
5	11.79	11.72	11.76	11.90	11.59	11.86	9.94	9.26	8.50	....	.....	10.81
6	11.66	11.70	11.72	11.84	11.61	11.72	10.00	9.16	8.57	....	.....	10.77
7	11.54	11.91	11.95	11.65	11.71	11.67	9.95	9.09	8.68	....	10.51	10.91
8	11.50	11.91	11.67	11.65	11.71	11.61	9.96	9.10	8.69	....	10.54	.....
9	11.49	11.79	11.44	11.63	11.63	11.56	9.95	9.08	8.70	9.69	10.85	10.92
10	11.49	11.66	11.44	11.67	11.56	11.55	9.94	9.09	8.69	9.73	10.80	10.92
11	11.49	11.77	11.63	11.62	11.60	11.58	9.91	9.08	8.65	9.60	10.75	11.05
12	11.55	11.76	11.77	11.62	11.71	11.55	9.90	9.03	8.62	9.65	10.72	10.97
13	11.56	11.67	11.73	11.86	11.75	11.54	9.90	9.03	8.61	9.74	10.80	11.02
14	11.56	11.84	11.65	11.87	11.66	11.52	9.94	9.14	8.62	9.81	10.70	10.85
15	11.62	11.78	11.59	11.67	11.57	11.47	9.99	9.16	8.73	9.89	10.61	10.76
16	11.63	11.79	11.64	11.48	11.50	11.53	9.97	9.15	8.75	10.22	10.71	10.69
17	.....	11.85	11.82	11.47	11.64	11.45	9.90	9.19	8.77	10.35	10.70	10.67
18	.....	11.78	11.77	11.35	11.61	11.44	9.88	9.13	8.71	10.28	10.63	10.72
19	.....	11.72	11.77	11.35	11.68	11.35	9.86	9.04	8.74	10.28	10.62	10.74
20	.....	11.71	11.85	11.65	11.78	11.25	9.83	8.98	8.79	10.29	10.64	10.87
21	.....	11.73	11.78	11.66	11.79	11.18	9.82	8.91	8.87	10.27	10.63	10.82
22	.....	11.71	11.79	11.61	11.87	11.11	9.77	8.86	8.93	10.30	10.71	10.87
23	11.43	11.69	11.79	11.52	11.75	11.03	9.67	8.83	9.03	10.34	10.71	10.71
24	11.43	11.72	11.76	11.52	11.74	10.89	9.51	8.81	9.09	10.32	10.69	10.53
25	11.42	11.72	11.85	11.56	11.81	10.82	9.44	8.80	9.13	10.27	10.64	10.45
26	11.43	11.67	11.85	11.61	11.93	10.71	9.42	8.75	9.14	10.33	10.62	10.48
27	11.33	11.77	11.91	11.46	11.97	10.66	9.40	8.63	9.14	.....	10.70	10.74
28	11.32	11.81	11.89	11.61	11.94	10.57	9.42	8.46	9.15	.....	.....	10.77
29	11.36	.....	11.71	11.49	11.91	10.50	9.41	8.47	9.15	10.87	10.69	10.74
30	11.36	.....	11.68	11.51	11.89	10.34	9.42	8.48	9.15	10.80	10.73	10.73
31	11.45	.....	11.81	.....	11.88	.....	9.34	8.51	....	10.68	.....	10.73

N9 (*840, p. 264; 845, p. 312; 886, p. 489, *906, p. 124; 9'6, p. 153; *944, p. 134). Citizens Water Supply Co. well Valley Stream 7. On west side of Corona Avenue, 650 feet north of Remsen Street, Valley S'ream. Land-surface datum is 23.18 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	0.96	Mar. 27	.84	July 31	1.62	Nov. 1	1.19
30	1.22	May 1	1.55	Aug. 30	1.86	29	1.33
Feb. 27	1.40	29	1.49	Sept.27	1.95	Dec. 31	1.64

Water level, in feet above mean sea level, 1943

Jan. 2	22.22	Mar. 27	22.34	July 31	21.56	Nov. 1	21.99
30	21.96	May 1	21.63	Aug. 30	21.32	29	21.85
Feb. 27	21.78	29	21.69	Sept.27	21.23	Dec. 31	21.54

N53 (*777, p. 123; *817, p. 201; *840, p. 265; 845, p. 312; 886, p. 489; *906, p. 124; 936, p. 154; 934, p. 134). Village of Rockville Centre. In basement of municipal power station, Morris and Maple Avenues, Rockville Centre. Land-surface datum is 26.11 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	12.42	May 1	11.47	July 31	12.02	Nov. 1	12.17
30	12.21	29	11.64	Aug. 30	12.52	29	11.91
Feb. 27	11.59	June 26	11.78	Sept.27	12.74	Dec. 31	12.46
Mar. 27	11.06						

Water level, in feet above mean sea level, 1943

Jan. 2	13.69	May 1	14.64	July 31	14.09	Nov. 1	13.94
30	13.90	29	14.47	Aug. 30	13.59	29	14.20
Feb. 27	14.52	June 26	14.33	Sept.27	13.37	Dec. 31	13.65
Mar. 27	15.05						

N67 (*777, p. 122; *817, p. 201; *840, p. 266; *845, p. 313; 886, p. 490; 906, p. 125; 936, p. 154; 944, p. 135). Village of Freeport. On north side of Sunrise Highway, about 200 feet west of Long Beach Avenue, Freeport. Land-surface datum is 20.60 feet above mean sea level.

Water level at noon, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2.74	2.60	2.89	2.58	2.89	2.62	3.99	4.68	5.45	4.63	4.12	3.57
2	2.86	2.86	2.96	2.47	3.01	2.46	4.13	4.74	5.44	4.61	3.97	3.54
3	2.87	3.03	2.62	2.69	2.69	2.49	4.17	4.75	5.55	4.70	3.81	3.67
4	2.50	2.76	2.92	2.82	2.82	2.59	4.13	4.75	5.54	4.72	3.94	3.65
5	2.91	2.71	2.90	2.55	2.93	2.65	3.95	4.77	5.50	4.77	....	3.67
6	3.04	2.59	2.85	2.79	2.83	2.83	4.06	4.88	5.45	4.86	....	3.69
7	3.09	2.42	2.75	2.98	2.73	2.83	....	4.92	5.40	4.75	....	3.54
8	3.04	2.71	3.12	2.80	2.77	2.91	....	4.92	5.48	4.68	....	3.59
9	2.95	2.91	3.37	2.83	2.95	2.92	4.16	4.95	5.48	4.48	....	3.48
10	2.94	2.94	3.19	2.70	2.94	2.88	4.21	4.89	5.56	4.70	....	3.49
11	2.90	2.57	2.96	2.85	2.86	2.80	4.28	5.04	5.59	4.71	....	3.55
12	2.73	2.96	2.84	2.65	2.66	2.90	4.30	5.06	5.59	4.62	....	3.37
13	2.98	2.86	2.94	2.52	2.76	2.85	4.30	4.97	5.58	4.57	....	3.54
14	2.91	2.61	3.08	2.57	2.89	2.97	4.24	4.80	5.47	4.46	....	3.66
15	2.63	3.00	3.08	2.84	3.02	2.94	4.21	4.86	5.12	4.36	....	3.81
16	2.70	3.17	2.90	3.01	3.03	2.85	4.27	4.86	5.13	3.95	....	3.75
17	2.84	3.03	2.77	2.94	2.95	2.97	4.36	4.83	5.25	3.98	....	3.73
18	2.84	3.22	2.86	2.97	2.92	2.92	4.29	4.98	5.45	4.14	....	3.65
19	2.50	3.13	2.84	2.98	2.85	3.03	4.34	5.10	5.41	4.07	....	3.57
20	3.13	2.92	2.67	2.66	2.77	3.09	4.34	5.20	5.25	4.10	....	3.50
21	3.11	2.86	2.87	2.65	2.67	3.19	4.36	5.25	5.20	4.13	....	3.54
22	....	2.92	2.77	2.80	2.68	3.19	4.32	5.25	5.11	3.95	....	3.58
23	2.78	2.92	2.84	2.89	2.81	3.35	4.52	5.28	5.04	4.02	....	3.77
24	2.90	2.76	2.84	2.87	2.80	3.45	4.62	5.26	4.97	4.05	3.71	3.93
25	2.77	2.96	2.74	2.81	2.71	3.49	4.66	5.29	4.93	4.12	3.75	3.82
26	2.96	2.85	2.75	2.86	2.53	3.56	4.65	5.35	4.96	3.83	3.70	3.79
27	3.13	2.66	2.67	3.04	2.56	3.58	4.64	5.41	5.03	3.50	3.48	3.43
28	3.00	2.62	2.76	2.79	2.61	3.58	4.58	5.38	5.07	3.39	3.61	3.49
29	2.93	....	2.92	3.03	2.63	3.63	4.56	5.45	5.10	3.70	3.68	3.54
30	2.96	....	2.83	2.82	2.63	3.81	4.51	5.42	4.89	3.75	3.48	3.63
31	2.87	....	2.74	....	2.64	....	4.65	5.46	....	3.92	....	3.59

Water level at noon, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	17.86	18.00	17.71	18.02	17.71	17.98	16.61	15.92	15.15	15.97	16.48	17.03
2	17.74	17.74	17.64	18.13	17.59	18.14	16.47	15.86	15.16	15.99	16.63	17.06
3	17.73	17.57	17.98	17.91	17.91	18.11	16.43	15.85	15.05	15.90	16.79	16.93
4	18.10	17.84	17.68	17.78	17.78	18.01	16.47	15.85	15.06	15.88	16.66	16.95
5	17.69	17.89	17.70	18.05	17.67	17.95	16.65	15.83	15.10	15.83	.....	16.93
6	17.56	18.01	17.75	17.81	17.77	17.77	16.54	15.72	15.15	15.74	.....	16.91
7	17.51	18.18	17.85	17.62	17.87	17.77	.....	15.68	15.20	15.85	.....	17.06
8	17.56	17.89	17.48	17.80	17.83	17.69	.....	15.68	15.12	15.92	.....	17.01
9	17.65	17.69	17.23	17.77	17.65	17.68	16.44	15.65	15.12	16.12	.....	17.12
10	17.66	17.66	17.41	17.90	17.66	17.72	16.39	15.71	15.04	15.90	.....	17.11
11	17.70	18.03	17.64	17.75	17.74	17.80	16.32	15.56	15.01	15.89	.....	17.05
12	17.87	17.64	17.76	17.95	17.94	17.70	16.30	15.54	15.01	15.88	.....	17.23
13	17.62	17.74	17.66	18.08	17.84	17.75	16.30	15.63	15.02	16.03	.....	17.06
14	17.69	17.99	17.52	18.03	17.71	17.63	16.36	15.80	15.13	16.14	.....	16.94
15	17.97	17.60	17.52	17.76	17.58	17.66	16.39	15.74	15.48	16.24	.....	16.79
16	17.90	17.43	17.70	17.59	17.57	17.75	16.33	15.74	15.47	16.65	.....	16.85
17	17.76	17.57	18.83	17.66	17.65	17.63	16.24	15.77	15.35	16.62	.....	16.87
18	17.76	17.38	17.74	17.63	17.68	17.68	16.31	15.62	15.15	16.46	.....	16.95
19	18.10	17.47	17.76	17.62	17.75	17.57	16.26	15.50	15.19	16.53	.....	17.03
20	17.47	17.68	17.93	17.94	17.83	17.51	16.26	15.40	15.35	16.50	.....	17.10
21	17.49	17.74	17.73	17.95	17.93	17.41	16.24	15.35	15.40	16.47	.....	17.06
22	.....	17.68	17.83	17.80	17.92	17.41	16.28	15.35	15.49	16.65	.....	17.02
23	17.82	17.68	17.76	17.71	17.79	17.25	16.08	15.32	15.56	16.58	.....	16.83
24	17.70	17.84	17.76	17.73	17.80	17.15	15.98	15.34	15.63	16.55	16.89	16.67
25	17.83	17.64	17.86	17.79	17.89	17.11	15.94	15.31	15.67	16.48	16.85	16.78
26	17.64	17.75	17.85	17.74	18.07	17.04	15.95	15.25	15.64	16.77	16.90	16.81

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N67. Village of Freeport well--Continued.

Water level at noon, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
27	17.47	17.94	17.93	17.56	18.04	17.02	15.96	15.19	15.57	17.10	17.12	17.17
28	17.60	17.98	17.84	17.81	17.99	17.02	16.02	15.22	15.53	17.21	16.99	17.11
29	17.67	.....	17.68	17.57	17.97	16.97	16.04	15.15	15.50	16.90	16.92	17.06
30	17.64	.....	17.77	17.78	17.97	16.79	16.09	15.18	15.71	16.85	17.12	16.97
31	17.73	.....	17.86	.....	17.96	.....	15.95	15.14	.....	16.68	.....	17.01

N157 (*777, p. 122; *817, p. 201; *840, p. 267; 845, p. 314; 886, p. 491; *906, p. 125; 936; p. 155; 944, p. 135). J. N. Hill. About 0.4 mile south of Cedar Swamp Road and 450 feet west of Wheatley Road, Whestley Hills. Land-surface datum is 218.47 feet above mean sea level.

Water level, in feet below land surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	136.07	Mar. 27	135.60	June 26	135.37	Sept.25	134.97
30	135.97	Apr. 30	135.63	July 31	135.16	Oct. 30	135.03
Feb. 27	135.71	May 29	135.44	Aug. 28	135.00	Nov. 27	134.94

Water level, in feet above mean sea level, 1943

Jan. 2	82.40	Mar. 27	82.87	June 26	83.10	Sept.25	83.50
30	82.50	Apr. 30	82.84	July 31	83.31	Oct. 30	83.44
Feb. 27	82.76	May 29	83.03	Aug. 28	83.47	Nov. 27	83.53

N844 (*906, p. 126; 936, p. 155; *944, p. 136). Long Island Railroad. About 60 feet east of Jerusalem Avenue and 110 feet north of railroad tracks, Hicksville. Land-surface datum is 149.16 feet above mean sea level. Measurement resumed on June 18, 1943.

Daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	68.08	68.27	.....	68.87	69.19	69.34
2	.....	68.10	68.28	.....	68.88	69.17	69.34
3	.....	68.10	68.28	.....	68.90	69.17	69.36
4	.....	68.07	68.28	.....	68.92	69.20	69.36
5	.....	68.05	68.29	.....	68.93	69.20	69.37
6	.....	68.09	68.31	.....	68.94	69.20	69.37
7	.....	68.10	68.31	.....	68.94	69.21	69.38
8	.....	68.11	68.31	68.66	68.95	69.20	69.39
9	.....	68.12	68.33	68.67	68.95	69.19	69.40
10	.....	68.12	68.33	68.69	68.97	69.23	69.39
11	.....	68.12	68.35	68.71	69.00	69.23	69.41
12	.....	68.13	68.36	68.72	69.00	69.23	69.39
13	.....	68.14	68.36	68.73	69.01	69.23	69.43
14	.....	68.13	68.35	68.73	69.02	69.25	69.44
15	.....	68.14	68.36	68.72	69.01	69.24	69.46
16	.....	68.16	68.37	68.74	69.00	69.23	69.46
17	.....	68.16	68.38	68.76	69.03	69.26	69.47
18	67.97	68.15	68.41	68.78	69.05	69.27	69.47
19	67.98	68.16	68.42	68.77	69.05	69.26	69.46
20	67.98	68.17	68.43	68.77	69.07	69.27	69.47
21	67.99	68.18	68.44	68.78	69.07	69.27	69.47
22	67.99	68.18	68.44	68.79	69.08	69.28	69.49
23	68.01	68.20	68.46	68.80	69.09	69.29	69.51
24	68.02	68.20	68.46	68.81	69.10	69.30	69.52
25	68.01	68.20	68.46	68.82	69.12	69.30	69.50
26	68.02	68.21	68.48	68.83	69.11	69.31	69.48
27	68.01	68.21	68.48	68.85	69.11	69.30	69.46
28	68.02	68.22	68.50	68.86	69.11	69.31	69.48
29	68.02	68.22	68.51	68.87	69.15	69.32	69.49
30	68.06	68.24	68.52	68.87	69.16	69.32	69.51
31	.....	68.26	68.53	.....	69.17	.....	69.51

N844. Long Island Railroad well--Continued.

Daily water level, in feet above mean sea level, 1943
(From recorder charts)

Day	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	81.08	80.89	.....	80.29	79.97	79.82
2	.....	81.06	80.88	.....	80.28	79.99	79.82
3	.....	81.06	80.88	.....	80.26	79.99	79.80
4	.....	81.09	80.88	.....	80.24	79.96	79.80
5	.....	81.11	80.87	.....	80.23	79.96	79.79
6	.....	81.07	80.85	.....	80.22	79.96	79.79
7	.....	81.06	80.85	.....	80.22	79.95	79.78
8	.....	81.05	80.85	80.50	80.21	79.96	79.77
9	.....	81.04	80.83	80.49	80.21	79.97	79.76
10	.....	81.04	80.83	80.47	80.19	79.93	79.77
11	.....	81.04	80.81	80.45	80.16	79.93	79.75
12	.....	81.03	80.80	80.44	80.16	79.93	79.77
13	.....	81.02	80.80	80.43	80.15	79.93	79.73
14	.....	81.03	80.81	80.43	80.14	79.91	79.72
15	.....	81.02	80.80	80.44	80.15	79.92	79.70
16	.....	81.00	80.79	80.42	80.16	79.93	79.70
17	.....	81.00	80.78	80.40	80.13	79.90	79.69
18	81.19	81.01	80.75	80.38	80.11	79.89	79.69
19	81.18	81.00	80.74	80.39	80.11	79.90	79.70
20	81.18	80.99	80.73	80.39	80.09	79.89	79.69
21	81.17	80.98	80.72	80.38	80.09	79.89	79.69
22	81.17	80.98	80.72	80.37	80.08	79.88	79.67
23	81.15	80.96	80.70	80.36	80.07	79.87	79.65
24	81.14	80.96	80.70	80.35	80.06	79.83	79.64
25	81.15	80.96	80.70	80.34	80.04	79.83	79.66
26	81.14	80.95	80.68	80.33	80.05	79.85	79.68
27	81.15	80.95	80.68	80.31	80.05	79.83	79.70
28	81.14	80.94	80.66	80.30	80.05	79.85	79.68
29	81.14	80.94	80.65	80.29	80.01	79.84	79.67
30	81.10	80.92	80.64	80.29	80.00	79.84	79.65
31	.....	80.90	80.63	.....	79.99	.....	79.65

N1101 (*886, p. 491; 906, p. 127; 936, p. 156; 944, p. 137). Nassau County Department of Public Works. On north side of Valley Road, about 0.8 mile north of Willets Road, Manhasset. Measurements discontinued on June 25, 1943. Land-surface datum is 49.88 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	6.28	Feb. 26	6.16	Apr. 30	5.87	June 25	6.16
29	6.44	Mar. 29	5.94	May 28	5.79		

Water level, in feet above mean sea level, 1943

Jan. 1	43.60	Feb. 26	43.72	Apr. 30	44.01	June 25	43.72
29	43.44	Mar. 29	43.94	May 28	44.09		

N1102 (*886, p. 491; 906, p. 128; 936, p. 156; 944, p. 137). Nassau County Department of Public Works. Willets and Valley Roads, Lake Success. Land-surface datum is 185.82 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	131.60	Apr. 30	131.00	Aug. 2	131.04	Nov. 1	131.52
29	131.70	May 28	131.03	30	130.93	29	131.40
Feb. 26	131.42	June 25	131.00	Sept.27	131.26	Dec. 31	131.35
Mar. 29	131.52						

Water level, in feet above mean sea level, 1943

Jan. 1	54.22	Apr. 30	54.82	Aug. 2	54.78	Nov. 1	54.30
29	54.12	May 28	54.79	30	54.89	29	54.42
Feb. 26	54.40	June 25	54.82	Sept.27	54.56	Dec. 31	54.47
Mar. 29	54.30						

N1103 (*886, p. 493; 906, p. 128; 936, p. 156; 944, p. 137). Nassau County Department of Public Works. North side of Marcus Avenue and 253 feet east of Lakeville Road, Lake Success. Land-surface datum is 146.12 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	90.24	Apr. 30	90.52	Aug. 2	89.85	Nov. 1	92.06
29	90.36	May 28	90.57	30	91.33	29	90.95
Feb. 26	90.72	June 25	90.19	Sept.27	90.70	Dec. 31	90.77
Mar. 29	90.71						

Water level, in feet above mean sea level, 1943

Jan. 1	55.88	Apr. 30	55.60	Aug. 2	56.27	Nov. 1	54.06
29	55.76	May 28	55.55	30	54.79	29	55.17
Feb. 26	55.40	June 25	55.93	Sept.27	55.42	Dec. 31	55.35
Mar. 29	55.41						

N1104 (*886, p. 493; 906, p. 128; 936, p. 156; 944, p. 137). Nassau County Department of Public Works. Rhodes Street and 80th Avenue, New Hyde Park. Land-surface datum is 125.37 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	69.29	Apr. 30	68.80	Aug. 2	68.74	Nov. 1	69.07
29	69.46	May 28	68.63	30	68.87	29	69.15
Feb. 26	69.38	June 25	68.53	Sept.27	68.97	Dec. 31	69.23
Mar. 29	69.05						

Water level, in feet above mean sea level, 1943

Jan. 1	56.08	Apr. 30	56.57	Aug. 2	56.63	Nov. 1	56.30
29	55.91	May 28	56.74	30	56.50	29	56.22
Feb. 26	55.99	June 25	56.84	Sept.27	56.40	Dec. 31	56.14
Mar. 29	56.32						

N1105 (*886, p. 493; 906, p. 128; 936, p. 156; 944, p. 137). Nassau County Department of Public Works. Emerson and Whittler Avenues, New Hyde Park. Land-surface datum is 108.20 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	54.68	Apr. 30	53.99	Aug. 2	54.35	Nov. 1	54.68
29	54.81	May 28	53.85	30	54.58	29	54.67
Feb. 26	54.66	June 25	54.00	Sept.27	54.66	Dec. 31	54.84
Mar. 29	54.44						

Water level, in feet above mean sea level, 1943

Jan. 1	53.52	Apr. 30	54.21	Aug. 2	53.85	Nov. 1	53.52
29	53.39	May 28	54.35	30	53.62	29	53.53
Feb. 26	53.54	June 25	54.20	Sept.27	53.54	Dec. 31	53.36
Mar. 29	53.76						

N1107 (*886, p. 493; 906, p. 128; 936, p. 157; 944, p. 138). Nassau County Department of Public Works. Bertha Street and Kingston Avenue, South Floral Park. Land-surface datum is 66.41 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	23.39	Apr. 30	22.01	Aug. 2	22.88	Nov. 1	23.33
29	23.01	May 28	22.19	30	23.17	29	23.05
Feb. 26	22.76	June 25	22.43	Sept.27	23.47	Dec. 31	23.26
Mar. 29	22.29						

Water level, in feet above mean sea level, 1943

Jan. 1	43.02	Apr. 30	44.40	Aug. 2	43.53	Nov. 1	43.08
29	43.40	May 28	44.22	30	43.24	29	43.36
Feb. 26	43.65	June 25	43.98	Sept.27	42.94	Dec. 31	43.15
Mar. 29	44.12						

N1108 (*886, p. 492; 906, p. 128; 936, p. 157; 944, p. 139). Nassau County Department of Public Works. Jacob Street and Rosalind Avenue, Elmont. Land-surface datum is 70.12 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	31.73	Apr. 30	30.17	Aug. 2	31.23	Nov. 1	31.79
29	31.19	May 28	30.51	30	31.50	29	31.38
Feb. 26	30.88	June 25	30.80	Sept.27	31.80	Dec. 31	31.40
Mar. 29	30.52						

Water level, in feet above mean sea level, 1943

Jan. 1	38.39	Apr. 30	39.95	Aug. 2	38.89	Nov. 1	38.33
29	38.93	May 28	39.61	30	38.62	29	38.74
Feb. 26	38.24	June 25	39.32	Sept.27	38.32	Dec. 31	38.72
Mar. 29	39.60						

N1109 (*886, p. 492; 906, p. 128; 936, p. 157; 944, p. 139). Nassau County Department of Public Works. Dutch Broadway and Henry Street, Elmont. Land-surface datum is 42.34 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	15.67	Apr. 30	14.73	Aug. 2	15.52	Nov. 1	15.50
29	15.30	May 28	14.98	30	15.85	29	15.08
Feb. 26	14.90	June 25	15.08	Sept.27	16.15	Dec. 31	15.47
Mar. 29	14.30						

Water level, in feet above mean sea level, 1943

Jan. 1	26.67	Apr. 30	27.61	Aug. 2	26.82	Nov. 1	26.84
29	27.04	May 28	27.36	30	26.49	29	27.26
Feb. 26	27.44	June 25	27.26	Sept.27	26.19	Dec. 31	26.87
Mar. 29	28.04						

N1110 (*886, p. 492; 906, p. 129; 936, p. 157; 944, p. 139). Nassau County Department of Public Works. On east side of Henry Street about 500 feet south of Southern State Parkway. North Valley Stream. Land-surface datum is 30.85 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	10.57	Apr. 30	10.58	Aug. 2	11.13	Nov. 1	10.40
29	10.80	May 28	10.58	30	11.32	29	10.53
Feb. 26	10.50	June 25	10.83	Sept.27	11.46	Dec. 31	10.92
Mar. 29	10.20						

Water level, in feet above mean sea level, 1943

Jan. 1	20.28	Apr. 30	20.27	Aug. 2	19.72	Nov. 1	20.45
29	20.05	May 28	20.27	30	19.53	29	20.32
Feb. 26	20.35	June 25	20.02	Sept.27	19.39	Dec. 31	19.93
Mar. 29	20.65						

N1111 (*886, p. 492; 906, p. 129; 936, p. 157; 944, p. 139). Nassau County Department of Public Works. Fletcher and Teneyck Avenues, Valley Stream. Land-surface datum is 20.44 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	6.00	Apr. 30	6.67	Aug. 2	6.58	Nov. 1	5.90
29	6.77	May 28	6.29	30	6.69	29	6.60
Feb. 26	6.61	June 25	6.54	Sept.27	6.66	Dec. 31	6.60
Mar. 29	6.54						

Water level, in feet above mean sea level, 1943

Jan. 1	14.44	Apr. 30	13.77	Aug. 2	13.86	Nov. 1	14.54
29	13.67	May 28	14.15	30	13.75	29	13.84
Feb. 26	13.83	June 25	13.90	Sept.27	13.78	Dec. 31	13.84
Mar. 29	13.90						

N1112(*886, p. 492; 906, p. 129; 936, p. 157; 944, p. 136). Nassau County Department of Public Works. Sunrise Highway and Second Street, Valley Stream. Land-surface datum is 13.44 feet above mean sea level.

N1112. Nassau County Department of Public Works well--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	3.70	May 1	4.24	July 31	4.54	Nov. 1	3.54
30	4.32	29	4.03	Aug. 30	4.85	29	4.07
Feb. 27	4.04	June 26	4.51	Sept.27	4.82	Dec. 31	4.40
Mar. 27	3.77						

Water level, in feet above mean sea level, 1943

Jan. 2	9.74	May 1	9.20	July 31	8.90	Nov. 1	9.90
30	9.12	29	9.41	Aug. 30	8.59	29	9.37
Feb. 27	9.40	June 26	8.93	Sept.27	8.62	Dec. 31	9.04
Mar. 27	9.67						

N1113 (*886, p. 494; 906, p. 129; 936, p. 157; 944, p. 138). Nassau County Department of Public Works. DuBois Avenue and Drew Street, Gibson. Measurements discontinued on June 25, 1943. Land-surface datum is 10.46 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	3.61	Feb. 26	4.35	Apr. 30	4.66	June 25	5.24
29	4.81	Mar. 29	4.17	May 28	4.39		

Water level, in feet above mean sea level, 1943

Jan. 1	6.85	Feb. 26	6.11	Apr. 30	5.80	June 25	5.22
29	5.65	Mar. 29	6.29	May 28	6.07		

N1114 (*886; p. 494; 906, p. 129; 936, p. 158; 944, p. 139). Nassau County Department of Public Works. West Broadway and Hamilton Avenue, Hewlett. Measurements discontinued on June 25, 1943. Land-surface datum is 24.00 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	14.59	Feb. 26	13.64	Apr. 30	13.72	June 25	14.18
29	14.26	Mar. 29	13.23	May 28	13.84		

Water level, in feet above mean sea level, 1943

Jan. 1	9.41	Feb. 26	10.36	Apr. 30	10.28	June 25	9.82
29	9.74	Mar. 29	10.77	May 28	10.16		

N1115 (*886, p. 494; 906, p. 129; 936, p. 158; 944, p. 139). Nassau County Department of Public Works. Wood Street and Brower Avenue, Woodmere. Measurements discontinued on June 25, 1943. Land-surface datum is 22.88 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	12.73	Feb. 26	11.87	Apr. 30	11.89	June 25	12.17
29	12.59	Mar. 29	11.46	May 28	12.00		

Water level, in feet above mean sea level, 1943

Jan. 1	10.15	Feb. 26	11.01	Apr. 30	10.99	June 25	10.71
29	10.29	Mar. 29	11.42	May 28	10.88		

N1126 (*845, p. 322; 886, p. 494; 906, p.129; 936, p. 158; 944, p. 139). Nassau County Department of Public Works. At northwest corner of Stewart Avenue and Sackville Road, Garden City. Land-surface datum is 86.74 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	29.95	May 1	28.66	July 31	29.37	Nov. 1	30.13
Mar. 1	29.30	29	28.90	Aug. 30	29.71	29	30.01
27	28.85	June 26	29.08	Sept.27	30.19	Dec. 31	30.26

Water level, in feet above mean sea level, 1943

Jan. 2	56.79	May 1	58.08	July 31	57.37	Nov. 1	56.61
Mar. 1	57.44	29	57.84	Aug. 30	57.03	29	56.73
27	57.89	June 26	57.66	Sept.27	56.55	Dec. 31	56.48

N1132 (*845, p. 320; 886, p. 494; 906, p. 130; 936; p. 158; 944, p. 139). Nassau County Department of Public Works. On west side of Lakewood Boulevard, 111 feet south of Sunrise Highway, Lynbrook. Land-surface datum is 20.87 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	12.62	May 1	12.54	July 31	12.82	Nov. 1	12.52
30	12.81	29	12.45	Aug. 30	13.20	29	12.94
Feb. 27	12.44	June 26	12.89	Sept.27	13.24	Dec. 31	13.50
Mar. 27	12.02						

Water level, in feet above mean sea level, 1943

Jan. 2	8.25	May 1	8.33	July 31	8.05	Nov. 1	8.35
30	8.06	29	8.42	Aug. 30	7.67	29	7.93
Feb. 27	8.43	June 26	7.98	Sept.27	7.63	Dec. 31	7.37
Mar. 27	8.85						

N1140 (*886, p. 495; 906, p. 130; 936, p. 158; 944, p. 139). Nassau County Department of Public Works. On west side of Kellum Place, 37 feet north of Ninth Street, Garden City. Land-surface datum is 91.34 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	31.64	May 1	30.04	July 31	31.03	Nov. 1	32.13
Mar. 1	30.89	29	30.29	Aug. 30	31.58	29	31.82
27	30.56	June 26	30.48	Sept.27	31.87	Dec. 31	31.72

Water level, in feet above mean sea level, 1943

Jan. 2	59.70	May 1	61.30	July 31	60.31	Nov. 1	59.21
Mar. 1	60.45	29	61.05	Aug. 30	59.76	29	59.52
27	60.78	June 26	60.86	Sept.27	59.47	Dec. 31	59.62

N1147 (*886, p. 495; 906, p. 130; 936, p. 159; 944, p. 140). Nassau County Department of Public Works. On north side of Seaman Avenue, 310 feet east of Knollwood Road, Baldwin. Land-surface datum is 27.32 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	9.52	May 1	9.14	July 31	9.57	Nov. 1	9.25
30	9.61	29	9.18	Aug. 30	9.91	29	9.19
Feb. 27	9.14	June 26	9.36	Sept.27	9.91	Dec. 31	9.60
Mar. 27	8.69						

Water level, in feet above mean sea level, 1943

Jan. 2	17.80	May 1	18.18	July 31	17.75	Nov. 1	18.07
30	17.71	29	18.14	Aug. 30	17.41	29	18.13
Feb. 27	18.18	June 26	17.96	Sept.27	17.41	Dec. 31	17.72
Mar. 27	18.63						

N1160 (*886, p. 495; 906, p. 130; 936, p. 159; 944, p. 140). Nassau County Department of Public Works. On south side of Stewart Avenue, about 75 feet east of Mitchel Field, 1.5 miles east of Garden City. Land-surface datum is 92.57 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	27.43	May 1	26.55	July 31	27.49	Nov. 1	28.20
Mar. 1	26.78	29	26.82	Aug. 30	27.94	29	27.64
27	26.19	June 26	26.96	Sept.27	28.33	Dec. 31	28.07

Water level, in feet above mean sea level, 1943

Jan. 2	65.14	May 1	66.02	July 31	65.08	Nov. 1	64.37
Mar. 1	65.79	29	65.75	Aug. 30	64.63	29	64.93
27	66.38	June 26	65.61	Sept.27	64.24	Dec. 31	64.50

N1167 (*845, p. 321; 886, p. 496; 906, p. 131; 936, p. 159; 944, p. 140). Nassau County Department of Public Works. On east side of North Ocean Avenue, 38 feet north of Brooklyn Avenue, Freeport. Land-surface datum is 23.76 feet above mean sea level.

K1167. Nassau County Department of Public Works well--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	12.81	May 1	12.47	July 31	13.05	Nov. 1	13.18
30	12.77	29	12.50	Aug. 30	13.50	29	12.80
Feb. 27	12.32	June 26	12.74	Sept.27	13.59	Dec. 31	13.18
Mar. 27	12.06						

Water level, in feet above mean sea level, 1943

Jan. 2	10.95	May 1	11.29	July 31	10.71	Nov. 1	10.58
30	10.99	29	11.26	Aug. 30	10.26	29	10.96
Feb. 27	11.44	June 26	11.02	Sept.27	10.17	Dec. 31	10.58
Mar. 27	11.70						

N1174 (*936, p. 159; 944, p. 141). Nassau County Department of Public Works. On south side of Chicken Valley Road about 0.8 mile west of Hegemans Lane. Old Brookville. Measurements discontinued on June 25, 1943. Land-surface datum is 112.92 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	41.20	Feb. 26	40.85	Apr. 30	40.30	June 25	40.20
29	41.22	Mar. 29	40.72	May 28	40.31		

Water level, in feet above mean sea level, 1943

Jan. 1	71.72	Feb. 26	72.07	Apr. 30	72.62	June 25	72.72
29	71.70	Mar. 29	72.20	May 28	72.61		

N1175 (*936, p. 160; 944, p. 141). Nassau County Department of Public Works. About 0.8 mile southwest of Cedar Swamp Road, about 0.4 mile southeast of North Hempstead Turnpike, Old Westbury. Measurements discontinued on June 25, 1943. Land-surface datum is 176.99 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	98.04	Feb. 26	97.91	Apr. 30	97.52	June 25	97.39
29	98.29	Mar. 29	98.03	May 28	97.59		

Water level, in feet above mean sea level, 1943

Jan. 1	78.95	Feb. 26	79.08	Apr. 30	79.47	June 25	79.60
29	78.70	Mar. 29	78.96	May 28	79.40		

N1176 (*936, p. 160; 944, p. 141). Nassau County Department of Public Works. On northeast side of Post Avenue at intersection of Old Westbury-Wheatley Road, Old Westbury. Land-surface datum is 194.61 feet above mean sea level. Measurements discontinued on June 25, 1943.

Water level, in feet below land-surface datum, 1943

Jan. 1	112.79	Feb. 26	112.55	Apr. 30	112.27	June 25	112.15
29	112.96	Mar. 29	112.86	May 28	112.54		

Water level, in feet above mean sea level, 1943

Jan 1	81.82	Feb. 26	82.06	Apr. 30	82.34	June 25	82.46
29	81.65	Mar. 29	81.75	May 28	82.07		

N1177 (*906, p. 131; 936, p. 160; 944, p. 141). Nassau County Department of Public Works. On east side of Hitchcock Lane, 100 feet south of Powell Lane, Old Westbury. Measurements discontinued on June 25, 1943. Land-surface datum is 182.88 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	99.89	Feb. 26	99.70	Apr. 30	99.23	June 25	99.05
29	100.13	Mar. 29	99.85	May 28	99.28		

Water level, in feet above mean sea level, 1943

Jan. 1	82.99	Feb. 26	83.18	Apr. 30	83.65	June 25	83.83
29	82.75	Mar. 29	83.03	May 28	83.60		

N1179 (*906, p. 131; 936, p. 160; 944, p. 141). Nassau County Department of Public Works. On west side of School Street, 300 feet south of Old Country Road, Westbury. Measurements discontinued on June 25, 1943. Land-surface datum is 104.24 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	30.24	Feb. 26	29.25	Apr. 30	28.90	June 25	29.56
29	29.50	Mar. 29	28.90	May 28	29.29		

Water level, in feet above mean sea level, 1943

Jan. 1	74.00	Feb. 26	74.99	Apr. 30	75.34	June 25	74.68
29	74.74	Mar. 29	75.34	May 28	74.95		

N1181 (*906, p. 131; 936, p. 161; 944, p. 141). Nassau County Department of Public Works. On north side of Fulton Street, 400 feet east of Merrick Avenue, East Meadow. Measurements discontinued on June 25, 1943. Land-surface datum is 82.85 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	25.03	Feb. 26	24.17	Apr. 30	24.06	June 25	24.60
29	24.51	Mar. 29	23.71	May 28	24.39		

Water level, in feet above mean sea level, 1943

Jan. 1	57.82	Feb. 26	58.68	Apr. 30	58.79	June 25	58.25
29	58.34	Mar. 29	59.14	May 28	58.46		

N1182 (*906, p. 132; 936, p. 161; 944, p. 142). Nassau County Department of Public Works. At northeast corner of Spring Street and Merrick Avenue, East Meadow. Measurements discontinued on June 25, 1943. Land-surface datum is 70.91 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	20.24	Feb. 26	19.58	Apr. 30	19.40	June 25	20.09
29	20.02	Mar. 29	18.93	May 28	19.82		

Water level, in feet above mean sea level, 1943

Jan. 1	50.67	Feb. 26	51.33	Apr. 30	51.51	June 25	50.82
29	50.89	Mar. 29	51.98	May 28	51.09		

N1183 (*906, p. 132; 936, p. 161; 944, p. 142). Nassau County Department of Public Works. On north side of William Street, 50 feet east of Jerusalem Avenue, North Merrick. Measurements discontinued on June 25, 1943. Land-surface datum is 50.17 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	13.21	Feb. 26	12.81	Apr. 30	12.84	June 25	13.38
29	13.27	Mar. 29	12.25	May 28	13.20		

Water level, in feet above mean sea level, 1943

Jan. 1	36.96	Feb. 26	37.36	Apr. 30	37.33	June 25	36.79
29	36.90	Mar. 29	37.92	May 28	36.97		

N1184 (*906, p. 132; 936, p. 161; 944, p. 142). Nassau County Department of Public Works. Northeast corner of Meader and Camp Avenues, North Merrick. Measurements discontinued on June 25, 1943. Land-surface datum is 33.17 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	10.50	Feb. 26	10.42	Apr. 30	10.65	June 25	11.12
29	10.93	Mar. 29	10.09	May 28	10.87		

Water level, in feet above mean sea level, 1943

Jan. 1	22.67	Feb. 26	22.75	Apr. 30	22.52	June 25	22.05
29	22.24	Mar. 29	23.08	May 28	22.30		

N1185 (*845, p. 321; 886, p. 496; 906, p. 132; 936, p. 161; 944, p. 142). Nassau County Department of Public Works. Northwest corner of West Grand Avenue and Lindgren Street, Merrick. Land-surface datum is 21.12 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	7.42	May 1	7.91	July 31	8.91	Nov. 1	8.05
30	8.01	29	7.97	Aug. 30	9.44	29	8.06
Feb. 27	7.62	June 26	8.54	Sept.27	9.14	Dec. 31	8.60
Mar. 27	7.28						

Water level, in feet above mean sea level, 1943

Jan. 2	13.70	May 1	13.21	July 31	12.21	Nov. 1	13.07
30	13.11	29	13.15	Aug. 30	11.68	29	13.06
Feb. 27	13.50	June 26	12.58	Sept.27	11.98	Dec. 31	12.52
Mar. 27	13.84						

N1186 (*906, p. 133; 936, p. 161; 944, p. 142). Nassau County Department of Public Works. At northwest corner of Merrick Road and Central Parkway, Merrick. Measurements discontinued on Aug. 2, 1943. Land-surface datum is 9.90 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	3.87	Feb. 26	4.27	Apr. 30	4.60	June 25	5.17
29	4.65	Mar. 29	4.22	May 28	4.48	Aug. 2	5.53

Water level, in feet above mean sea level, 1943

Jan. 1	6.03	Feb. 26	5.63	Apr. 30	5.30	June 25	4.73
29	5.25	Mar. 29	5.68	May 28	5.42	Aug. 2	4.37

N1198 (*886, p. 496; 906, p. 133; 936, p. 161; 944, p. 142). Nassau County Department of Public Works. On east side of Newbridge Road, 73 feet north of Motor Parkway, about 2.5 miles south of Hicksville. Land-surface datum is 100.84 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	35.76	May 1	34.07	July 31	35.12	Nov. 1	36.38
Mar. 1	34.36	31	34.39	Aug. 30	35.52	29	36.23
27	34.10	June 26	34.68	Sept.27	35.94	Dec. 31	36.19

Water level, in feet above mean sea level, 1943

Jan. 2	65.08	May 1	66.77	July-31	65.72	Nov. 1	64.46
Mar. 1	66.48	31	66.45	Aug. 30	65.32	29	64.61
27	66.74	June 26	66.16	Sept.27	64.90	Dec. 31	64.65

N1204 (*886, p. 497; 906, p. 133; 936, p. 162; 944, p. 143). Nassau County Department of Public Works. At northwest corner of Harris Court and John Street, Bellemore. Land-surface datum is 21.47 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	9.76	May 1	10.31	July 31	10.58	Nov. 1	9.85
30	10.49	29	10.24	Aug. 30	10.81	29	12.61
Feb. 27	10.17	June 26	10.48	Sept.27	10.82	Dec. 31	10.57
Mar. 27	9.96						

Water level, in feet above mean sea level, 1943

Jan. 2	11.71	May 1	11.16	July 31	10.89	Nov. 1	11.62
30	10.98	29	11.23	Aug. 30	10.66	29	8.86
Feb. 27	11.30	June 26	10.99	Sept.27	10.65	Dec. 31	10.90
Mar. 27	11.51						

N1212. Nassau County Department of Public Works. On north side of Jericho Turnpike about 1.3 miles east of Broadway, Locust Grove. Diameter 4 inches, depth 184.8 feet below top of 4-inch casing. Measuring point, top of instrument shelf, at land-surface datum, 1.0 foot above top of casing, and 228.21 feet above mean sea level. Water level, Jan. 1, 1943, 144.19 feet below land-surface datum and 84.02 feet above mean sea level.

N1212. Nassau County Department of Public Works well--Continued.

Water level at noon, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	144.19	143.89	144.37	143.83	143.97	.....
2	144.30	144.23	144.32	143.77	143.90	.....
3	144.19	144.32	143.90	144.10	143.54	.....
4	143.71	143.94	144.35	144.07	143.87	143.62
5	144.25	144.19	144.15	143.73	143.90	143.60
6	144.29	143.95	144.03	144.05	143.71	143.61
7	144.24	143.99	144.29	144.14	143.73	143.49
8	144.15	144.22	144.42	143.85	143.77	143.57
9	144.11	144.29	144.46	143.95	144.00	143.54
10	144.16	144.30	144.11	143.81	143.78	143.44
11	144.17	143.88	143.95	143.98	143.71	143.43
12	143.98	144.41	143.98	143.75	143.60	143.54
13	144.28	144.06	144.11	143.92	143.82	143.35
14	144.14	144.04	144.26	144.02	143.92	143.58
15	143.96	144.43	144.12	144.11	143.94	143.40
16	144.05	144.40	143.99	144.15	143.82	143.34
17	144.27	144.17	143196	144.02	143.72	143.49
18	144.16	144.42	144.06	144.09	143.68	143.38
19	143.80	144.19	143.99	143.87	143.67	143.44
20	144.49	144.05	143.91	143.90	143.73	143.39
21	144.20	144.13	144.14	143.86	143.61	143.42
22	144.17	144.20	143.97	143.99	143.79	143.32
23	144.11	144.18	144.11	143.94	143.79	143.48
24	144.27	143.99	144.01	143.86	143.68	143.43
25	144.05	144.29	143.95	143.79	143.58	143.34
26	144.37	144.05	143.98	143.93	143.53	143.36
27	144.42	144.10	143.93	144.02	.....	143.34
28	144.20	144.09	144.09	143.72	143.61	143.29
29	144.31	.....	144.21	144.03	143.62	143.31
30	144.22	.....	143.94	143.57	143.58	143.47
31	144.15	.....	143.98	.....	143.59	.....

Water level at noon, in feet below land-surface datum, 1943
(From recorder charts)

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	143.50	143.24	143.13	143.09	143.55	143.55
2	143.49	143.20	143.16	143.10	143.27	143.46
3	143.38	143.17	143.31	143.27	143.26	143.56
4	143.27	143.12	143.25	143.29	143.39	143.52
5	143.17	143.24	143.16	143.30	143.37	143.58
6	143.37	143.24	143.10	143.34	143.39	143.51
7	143.29	143.17	143.11	143.15	143.50	143.55
8	143.33	143.13	143.14	143.17	143.24	143.60
9	143.31	143.17	143.15	143.06	143.26	143.53
10	143.31	143.07	143.29	143.48	143.47	143.46
11	143.32	143.26	143.25	143.38	143.36	143.63
12	143.29	143.25	143.25	143.26	143.42	143.33
13	143.27	143.12	143.25	143.25	143.29	143.76
14	143.21	143.02	143.14	143.21	143.62	143.69
15	143.25	143.16	143.05	143.19	143.39	143.81
16	143.54	143.13	143.11	143.08	143.29	143.66
17	143.33	143.17	143.27	143.24	143.51	143.61
18	143.22	143.26	143.35	143.28	143.56	143.55
19	143.25	143.25	143.21	143.22	143.36	143.49
20	143.20	143.25	143.07	143.25	143.43	143.55
21	143.25	143.22	143.16	143.31	143.44	143.47
22	143.17	143.17	143.13	143.13	143.42	143.67
23	143.37	143.17	143.11	143.29	143.43	143.83
24	143.29	143.11	143.16	143.34	143.51	143.86
25	143.22	143.13	143.19	143.38	143.54	143.61
26	143.19	143.17	143.29	143.15	143.48	143.63
27	143.14	143.17	143.28	143.26	143.29	143.51
28	143.17	143.24	143.29	143.87	143.52	143.64
29	143.13	143.23	143.55	143.37	143.58	143.65
30	143.22	143.18	143.17	143.28	143.41	143.74
31	143.30	143.20	.....	143.45	.....	143.66

N1212. Nassau County Department of Public Works--Continued.

Water level at noon, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	84.02	84.32	83.84	84.38	84.24	.....	84.71	84.97	85.08	85.12	84.66	84.66
2	83.91	83.98	83.89	84.44	84.31	.....	84.72	85.01	85.05	85.11	84.94	84.75
3	84.02	83.89	84.31	84.11	84.67	.....	84.83	85.04	84.90	84.94	84.95	84.65
4	84.50	84.27	83.86	84.14	84.34	84.59	84.94	85.09	84.96	84.92	84.82	84.69
5	83.96	84.02	84.06	84.48	84.31	84.61	85.04	84.97	85.05	84.91	84.84	84.63
6	83.92	84.26	84.18	84.16	84.50	84.60	84.84	84.97	85.11	84.87	84.82	84.70
7	83.97	84.22	83.92	84.07	84.48	84.72	84.92	85.04	85.10	85.06	84.71	84.66
8	84.06	83.99	83.79	84.36	84.44	84.64	84.88	85.08	85.07	85.04	84.97	84.61
9	84.10	83.92	83.75	84.26	84.21	84.67	84.90	85.04	85.06	85.04	84.95	84.68
10	84.05	83.91	84.10	84.40	84.43	84.77	84.90	85.14	84.92	84.73	84.74	84.75
11	84.04	84.33	84.26	84.23	84.50	84.78	84.89	84.95	84.96	84.83	84.85	84.58
12	84.23	83.80	84.23	84.46	84.61	84.67	84.92	84.96	84.96	84.95	84.79	84.88
13	83.93	84.15	84.10	84.29	84.39	84.86	84.94	85.09	84.96	84.96	84.92	84.45
14	84.07	84.17	83.95	84.19	84.29	84.63	85.00	85.19	85.07	85.00	84.59	84.52
15	84.25	83.78	84.09	84.10	84.27	84.81	84.96	85.05	85.16	85.02	84.82	84.40
16	84.16	83.81	84.22	84.06	84.39	84.87	84.87	85.08	85.10	85.15	84.92	84.55
17	83.94	84.04	84.25	84.19	84.49	84.72	84.88	85.04	84.94	84.97	84.70	84.60
18	84.05	83.79	84.15	84.12	84.53	84.83	84.99	84.95	84.86	84.93	84.65	84.66
19	84.41	84.02	84.22	84.34	84.54	84.77	84.96	84.96	85.00	84.99	84.85	84.72
20	83.72	84.16	84.30	84.31	84.48	84.82	85.01	84.96	85.14	84.96	84.78	84.66
21	84.01	84.08	84.07	84.35	84.60	84.79	85.96	84.99	85.05	84.90	84.77	84.74
22	84.04	84.01	84.24	84.22	84.42	84.89	85.04	85.04	85.08	85.08	84.79	84.54
23	84.10	84.03	84.10	84.27	84.42	84.73	84.84	85.04	85.10	84.92	84.78	84.38
24	83.94	84.22	84.20	84.35	84.53	84.78	84.92	85.10	85.05	84.87	84.70	84.35
25	84.16	83.92	84.26	84.42	84.63	84.87	84.99	85.08	85.02	84.83	84.67	84.60
26	83.84	84.16	84.23	84.28	84.68	84.85	85.02	85.04	84.92	85.06	84.73	84.58
27	83.79	84.11	84.28	84.19	.....	84.87	85.07	85.04	84.93	84.95	84.92	84.70
28	84.01	84.20	84.12	84.49	84.60	84.92	85.04	84.97	84.92	85.34	84.69	84.57
29	83.90	.....	84.00	84.18	84.59	84.90	85.08	84.98	84.86	84.84	84.63	84.56
30	83.99	.....	84.27	84.64	84.63	84.74	84.99	85.03	85.04	84.93	84.80	84.47
31	84.06	.....	84.23	.....	84.62	.....	84.91	85.01	.....	84.76	.....	84.55

N1215. Nassau County Department of Public Works. Bloomingdale Road and Broadway, Ricksville. Diameter 1½ inches, depth 53.6 feet below top of pipe which is measuring point. Elevation of measuring point and also land-surface datum is 115.47 feet above mean sea level. Water level on May 27, 1943, 42.28 feet below measuring point and 73.19 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 27	42.28	July 22	43.22	Sept. 16	43.75	Nov. 15	43.65
June 3	42.40	29	43.33	23	43.75	15	43.62
10	42.54	Aug. 5	43.43	30	43.88	26	43.61
17	42.72	13	43.54	Oct. 7	43.86	Dec. 3	43.60
24	42.84	19	43.68	15	43.90	10	43.60
July 1	42.95	26	43.75	22	43.83	18	43.62
8	43.01	Sept. 2	43.83	28	43.66	23	43.72
15	43.11	9	43.86	Nov. 5	43.71	30	43.60

Water level, in feet above mean sea level, 1943

May 27	73.19	July 22	72.25	Sept. 16	71.72	Nov. 15	71.82
June 3	73.07	29	72.14	23	71.72	15	71.85
10	72.93	Aug. 5	72.04	30	71.59	26	71.86
17	72.75	13	71.93	Oct. 7	71.61	Dec. 3	71.87
24	72.63	19	71.79	15	71.57	10	71.87
July 1	72.52	26	71.72	22	71.64	18	71.85
8	72.46	Sept. 2	71.64	28	71.81	23	71.75
15	72.36	9	71.61	Nov. 5	71.76	30	71.97

N1216 (*886, p. 497; 906, p. 133; 936, p. 162; 944, p. 143). Nassau County Department of Public Works. On north side of Central Boulevard, 500 feet west of Wantagh Road, Central Park. Land-surface datum is 104.43 feet above mean sea level.

N1216. Nassau County Department of Public Works well--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	40.89	June 26	38.83	Aug. 28	39.16	Oct. 28	40.08
30	40.47	July 1	38.72	Sept. 2	39.02	30	39.88
Feb. 27	39.84	8	38.72	9	39.15	Nov. 5	40.23
Mar. 27	39.52	15	38.80	16	39.30	12	40.20
Apr. 30	39.12	22	38.87	23	39.36	19	40.24
May 27	38.77	29	38.92	25	39.59	26	40.24
29	38.93	31	39.05	30	39.61	27	40.30
June 3	38.72	Aug. 5	38.97	Oct. 7	39.77	Dec. 3	40.25
10	38.70	13	39.01	15	40.09	10	40.28
17	38.68	19	39.08	22	40.06	16	40.29
24	38.69	26	39.08				

Water level, in feet above mean sea level, 1943

Jan. 2	63.54	June 26	65.60	Aug. 28	65.27	Oct. 30	64.55
30	63.96	July 1	65.71	Sept. 2	65.41	Nov. 5	64.20
Feb. 27	64.59	8	65.71	9	65.28	12	64.23
Mar. 27	64.91	15	65.63	16	65.13	19	64.19
Apr. 30	65.31	22	65.56	23	65.07	26	64.19
May 27	65.66	29	65.51	25	64.84	27	64.13
29	65.50	31	65.38	30	64.82	Dec. 3	64.18
June 3	65.71	Aug. 5	65.46	Oct. 7	65.66	10	64.15
10	65.73	13	65.42	15	64.34	16	64.14
17	65.75	19	65.35	22	64.37		
24	65.74	26	65.35	28	64.35		

N1222 (*886, p. 497; 906, p. 134; 936, p. 162; 944, p. 143). Nassau County Department of Public Works. At southwest corner of Cecelia Place and John Street, Seaford. Land-surface datum is 21.18 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	12.04	May 1	12.37	July 31	12.64	Nov. 1	11.94
30	12.41	29	12.32	Aug. 30	12.75	29	13.60
Feb. 27	12.18	June 26	12.51	Sept.27	12.64	Dec. 31	12.55
Mar. 27	11.97						

Water level, in feet above mean sea level, 1943

Jan. 2	9.14	May 1	8.81	July 31	8.54	Nov. 1	9.24
30	8.77	29	8.86	Aug. 30	8.43	29	7.58
Feb. 27	9.00	June 26	8.67	Sept.27	8.54	Dec. 31	8.63
Mar. 27	9.21						

N1232. Nassau County Department of Public Works. Plainview Road and Plain Hay Path, Plainview. Diameter 2½ inches, depth 54.5 feet below top of pipe which is measuring point. Elevation of measuring point and also land-surface datum is 111.81 feet above mean sea level. Water level on May 27, 1943, was 35.81 feet below measuring point and 76.00 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

May 27	35.81	July 8	35.94	Aug. 19	36.19	Sept.23	35.75
June 3	35.82	15	35.94	26	36.25	30	36.12
10	35.89	22	35.95	Sept. 2	36.30	Oct. 7	36.29
17	35.89	29	36.00	9	36.36	28	35.94
24	35.89	Aug. 5	36.07	16	35.88	Dec. 16	36.51
July 1	35.92	13	36.14				

Water level, in feet above mean sea level, 1943

May 27	76.00	July 8	75.87	Aug. 19	75.62	Sept.23	76.06
June 3	75.99	15	75.87	26	75.56	30	75.69
10	75.92	22	75.86	Sept. 2	75.51	Oct. 7	75.52
17	75.92	29	75.81	9	75.45	28	75.87
24	75.92	Aug. 5	75.74	16	75.93	Dec. 16	75.30
July 1	75.89	13	75.67				

N1233. Nassau County Department of Public Works. Plainview Road and Motor Parkway. Bethpage. Diameter 1¼ inches, depth 53.7 feet below top of pipe which is measuring point. Elevation of measuring point and also land-surface datum is 95.19 feet above mean sea level. Water level on May 27, 1943, 26.02 feet below measuring point and 69.17 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 27	26.02	July 8	26.19	Aug. 19	26.59	Sept. 23	26.80
June 3	26.03	15	26.22	26	26.66	30	26.89
10	26.10	22	26.23	Sept. 2	26.68	Oct. 7	26.96
17	26.11	29	26.32	9	26.75	23	27.02
24	26.15	Aug. 5	26.40	16	26.77	Dec. 16	27.12
July 1	26.28	13	26.44				

Water level, in feet above mean sea level, 1943

May 27	69.17	July 8	69.00	Aug. 19	68.60	Sept. 23	68.39
June 3	69.16	15	68.97	26	68.53	30	68.30
10	69.09	22	68.96	Sept. 2	68.51	Oct. 7	68.23
17	69.08	29	68.87	9	68.44	23	68.17
24	69.04	Aug. 5	68.79	16	68.42	Dec. 16	68.07
July 1	68.91	13	68.75				

N1234 (*886, p. 498; 906, p. 134; 936, p. 162; 944, p. 143). Nassau County Department of Public Works. On southwest side of Plainview Road, 400 feet northwest of Bethpage State Parkway, Central Park. Land-surface datum is 101.13 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	40.83	June 26	39.23	Aug. 26	39.75	Oct. 23	40.29
30	40.39	July 1	39.22	28	39.92	Oct. 30	40.48
Feb. 27	39.99	8	39.23	Sept. 2	39.84	Nov. 5	40.39
Mar. 27	39.50	15	39.23	9	39.97	12	40.30
Apr. 30	39.03	22	39.31	16	40.01	19	40.17
May 27	38.98	29	39.39	23	39.98	23	40.12
29	39.09	31	39.59	25	40.39	27	40.14
June 3	38.87	Aug. 5	39.46	30	40.13	Dec. 3	40.09
10	38.99	13	39.57	Oct. 7	40.14	10	40.09
17	39.07	19	39.68	22	40.38	16	40.09
24	39.14						

Water level, in feet above mean sea level, 1943

Jan. 2	60.30	June 26	61.90	Aug. 26	61.38	Oct. 23	60.84
30	60.74	July 1	61.91	28	61.21	Oct. 30	60.65
Feb. 27	61.14	8	61.90	Sept. 2	61.29	Nov. 5	60.74
Mar. 27	61.63	15	61.90	9	61.16	12	60.83
Apr. 30	62.10	22	61.82	16	61.12	19	60.96
May 27	62.15	29	61.74	23	61.15	26	61.01
29	62.04	31	61.54	25	60.74	27	60.99
June 3	62.26	Aug. 5	61.67	30	61.00	Dec. 3	61.04
10	62.14	13	61.56	Oct. 7	60.99	10	61.04
17	62.06	19	61.45	22	60.75	16	61.04
24	61.99						

N1240 (*886; p. 498; 906, p. 134; 936, p. 163; 944, p. 144). Nassau County Department of Public Works. 44 feet south of Sunrise Highway and 62 feet east of Manhattan Avenue, Massapequa Park. Land-surface datum is 23.00 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	12.43	May 1	12.48	July 31	12.93	Nov. 1	12.53
30	12.61	29	12.37	Aug. 30	13.10	29	15.80
Feb. 27	12.32	June 26	12.58	Sept. 27	12.97	Dec. 31	13.10
Mar. 27	12.14						

Water level, in feet above mean sea level, 1943

Jan. 2	10.57	May 1	10.52	July 31	10.07	Nov. 1	10.47
30	10.39	29	10.63	Aug. 30	9.90	29	7.20
Feb. 27	10.68	June 26	10.42	Sept. 27	10.03	Dec. 31	9.90
Mar. 27	10.86						

N1242 (*886, p. 498; 906, p. 134; 936, p. 163; 944, p. 144). Nassau County Department of Public Works. On south side of Route 25A, about 1,000 feet west of Cold Spring Harbor Road, and about 1 mile south of Cold Spring Harbor. Measurements discontinued on June 25, 1943. Land-surface datum is 41.08 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	14.59	Feb. 26	14.65	Apr. 30	14.52	June 25	14.55
29	14.73	Mar. 29	14.65	May 27	14.44		

Water level, in feet above mean sea level, 1943

Jan. 1	26.49	Feb. 26	26.43	Apr. 30	26.56	June 25	26.53
29	26.35	Mar. 29	26.43	May 27	26.64		

N1243 (*906, p. 135; 936, p. 163; 944, p. 144). Nassau County Department of Public Works. On south side of Velsor-Stillwell Road, about 250 feet west of Cold Spring Harbor Road, about 2 miles south of Cold Spring Harbor. Measurements discontinued on June 25, 1943. Land-surface datum is 64.61 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	9.58	Feb. 26	9.41	Apr. 30	9.25	June 25	9.29
29	9.51	Mar. 29	9.22	May 27	9.13		

Water level, in feet above mean sea level, 1943

Jan. 1	55.03	Feb. 26	55.20	Apr. 30	55.36	June 25	55.32
29	55.10	Mar. 29	55.39	May 27	55.48		

N1244 (*906, p. 135; 936, p. 163; 944, p. 144). Nassau County Department of Public Works. On north side of Jericho Turnpike, 60 feet west west of Avery Road, about 2.5 miles east of Syosset. Land-surface datum is 248.89 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	177.37	Apr. 30	177.29	Aug. 2	176.90	Nov. 1	176.65
29	177.57	May 27	177.16	30	176.75	29	176.69
Feb. 26	177.50	June 25	177.10	Sept.27	176.65	Dec. 31	176.75
Mar. 29	177.43						

Water level, in feet above mean sea level, 1943

Jan. 1	71.52	Apr. 30	71.60	Aug. 2	71.99	Nov. 1	72.24
29	71.32	May 27	71.73	30	72.14	29	72.20
Feb. 26	71.39	June 25	71.79	Sept.27	72.14	Dec. 31	72.14
Mar. 29	71.46						

N1245 (*906, p. 135; 936, p. 163; 944, p. 144). Nassau County Department of Public Works. On west side of Plainview-Cold Spring Harbor, Road, about 1 mile south of Jericho Turnpike and about 2 miles northeast of Plainview. Land-surface datum is 259.93 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	183.75	Apr. 30	183.43	Aug. 2	183.15	Nov. 1	183.02
29	183.86	May 27	183.37	30	182.88	29	182.95
Feb. 26	183.65	June 25	183.30	Sept.27	182.96	Dec. 31	182.96
Mar. 29	183.82						

Water level, in feet above mean sea level, 1943

Jan. 1	76.18	Apr. 30	76.50	Aug. 2	76.78	Nov. 1	76.91
29	76.07	May 27	76.56	30	77.05	29	76.98
Feb. 26	76.28	June 25	76.63	Sept.27	76.97	Dec. 31	76.97
Mar. 29	76.11						

N1246 (*906, p. 135; 936, p. 163; 944, p. 144). Nassau County Department of Public Works. On east side of Plainview-Melville Road, just west of Suffolk County Line, Plainview. Land-surface datum is 185.10 feet above mean sea level.

N1246. Nassau County Department of Public Works well--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	107.47	Apr. 30	107.02	Aug. 2	106.80	Nov. 1	107.10
29	107.71	May 27	107.03	30	106.72	29	107.10
Feb. 26	107.36	June 25	106.87	Sept.27	106.89	Dec. 31	107.09
Mar. 29	107.50						

Water level, in feet above mean sea level, 1943

Jan. 1	77.63	Apr. 30	78.08	Aug. 2	78.30	Nov. 1	78.00
29	77.39	May 27	78.07	30	78.38	29	78.00
Feb. 26	77.74	June 25	78.23	Sept.27	78.21	Dec. 31	78.01
Mar. 27	77.60						

N1247 (*886, p. 498; 906, p. 135; 944, p. 145). Nassau County Department of Public Works. 500 feet north of Motor Parkway, 200 feet west of Suffolk County Line, Bethpage. Land-surface datum is 157.13 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	85.96	Mar. 29	85.66	May 27	85.00	Nov. 29	85.72
29	86.03	Apr. 30	85.08	June 25	85.01	Dec. 31	85.69
Feb. 26	85.84						

Water level, in feet above mean sea level, 1943

Jan. 1	71.17	Mar. 29	71.47	May 27	72.13	Nov. 29	71.41
29	71.10	Apr. 30	72.05	June 25	72.12	Dec. 31	71.44
Feb. 26	71.29						

N1249 (*906, p. 136; 936, p. 164; 944, p. 145). Nassau County Department of Public Works. At northeast corner of Secatogue Avenue and Wall Street, Farmingdale. Land-surface datum is 67.84 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	15.53	Apr. 30	14.25	Aug. 2	15.20	Nov. 1	14.71
29	15.22	May 27	14.50	30	15.70	29	14.20
Feb. 26	14.42	June 25	14.70	Sept.27	15.07	Dec. 31	14.90
Mar. 29	13.80						

Water level, in feet above mean sea level, 1943

Jan. 1	52.31	Apr. 30	53.59	Aug. 2	52.64	Nov. 1	53.13
29	52.62	May 27	53.34	30	52.14	29	53.64
Feb. 26	53.42	June 25	53.14	Sept.27	52.77	Dec. 31	52.94
Mar. 29	54.04						

N1250 (*886, p. 499; 906, p. 136; 936, p. 164; 944, p. 145). Nassau County Department of Public Works. 37 feet northwest of Old Carmans Road and about 2,200 feet northeast of Great Neck Road, Farmingdale. Land-surface datum is 62.24 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	16.91	Apr. 30	15.75	Aug. 2	16.99	Nov. 1	16.30
29	16.61	May 27	15.99	30	17.55	29	15.64
Feb. 26	15.76	June 25	16.29	Sept.27	16.92	Dec. 31	16.37
Mar. 29	15.08						

Water level, in feet above mean sea level, 1943

Jan. 1	45.33	Apr. 30	46.49	Aug. 2	45.25	Nov. 1	45.94
29	45.63	May 27	46.25	30	44.69	29	46.60
Feb. 26	46.48	June 25	45.95	Sept.27	45.32	Dec. 31	45.87
Mar. 29	47.16						

N1251 (*886, p. 499; 906, p. 136; 936, p. 164; 944, p. 145). Nassau County Department of Public Works. About 275 feet west of County Line Road, about 800 feet north of Southern State Parkway, and about 2 miles south of Farmingdale. Land-surface datum is 48.85 feet above mean sea level.

N1251. Nassau County Department of Public Works well--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	11.02	Apr. 30	9.95	Aug. 2	11.35	Nov. 1	10.61
29	10.90	May 27	10.07	30	11.85	29	10.10
Feb. 26	10.05	June 25	10.54	Sept.27	11.64	Dec. 31	10.75
Mar. 29	9.54						

Water level, in feet above mean sea level, 1943

Jan. 1	37.83	Apr. 30	38.90	Aug. 2	37.50	Nov. 1	38.24
29	37.95	May 27	38.78	30	37.00	29	38.75
Feb. 26	38.80	June 25	38.31	Sept.27	37.21	Dec. 31	38.10
Mar. 29	39.31						

N1252 (*906, p. 136; 936, p. 164; 944, p. 145). Nassau County Department of Public Works. At southwest corner of County Line Road and Smith Street, about 1 mile north of Amityville. Measuring point raised 2.02 feet on Jan. 1, 1943, to conform with new land fill. New measuring point, top of pipe, at land surface, which is 29.31 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	4.54	Apr. 30	3.88	Aug. 2	4.79	Nov. 1	4.20
29	4.50	May 27	3.84	30	5.28	29	4.03
Feb. 26	3.87	June 25	4.21	Sept.27	4.82	Dec. 31	4.47
Mar. 29	3.61						

Water level, in feet above mean sea level, 1943

Jan. 1	24.77	Apr. 30	25.43	Aug. 2	24.52	Nov. 1	25.11
29	24.81	May 27	25.47	30	24.03	29	25.28
Feb. 26	25.44	June 25	25.10	Sept.27	24.49	Dec. 31	24.84
Mar. 29	25.70						

N1253 (*886, p. 499; 906, p. 137; 936, p. 164). Nassau County Department of Public Works. At northwest corner of Clocks Boulevard and Pine Street, about 1 mile east of Massapequa Park. Land-surface datum is 28.48 feet above mean sea level.

Water level, in feet above mean sea level, 1942

Jan. 3	11.54	Apr. 4	13.20	July 6	11.97	Oct. 3	12.89
10	11.46	11	13.20	11	11.88	10	12.83
17	11.37	18	13.13	18	11.89	17	12.78
24	11.35	25	13.07	25	11.81	24	12.80
31	11.31	May 2	12.99	Aug. 1	12.14	31	13.05
Feb. 7	11.55	9	12.87	8	12.10	Nov. 7	13.35
14	11.81	16	12.72	15	12.33	14	13.62
21	12.04	23	12.62	22	12.90	21	13.82
Feb. 28	12.09	30	12.47	29	13.16	28	14.05
Mar. 7	12.15	June 6	12.30	Sept. 5	13.14	Dec. 5	14.32
14	12.27	13	12.23	12	13.06	12	14.55
21	12.56	20	12.13	19	13.02	19	14.71
28	13.00	27	12.02	26	12.95	26	14.80

Water level, in feet below land-surface datum, 1943

Jan. 2	13.11	May 1	12.84	July 31	13.48	Nov. 1	12.81
30	13.18	29	12.76	Aug. 30	13.83	29	13.25
Feb. 27	12.68	June 26	13.09	Sept.27	13.35	Dec. 31	13.40
Mar. 27	12.31						

Water level, in feet above mean sea level, 1943

Jan. 2	15.37	May 1	15.64	July 31	15.00	Nov. 1	15.67
30	15.30	29	15.72	Aug. 30	14.65	29	15.23
Feb. 27	15.80	June 26	15.39	Sept.27	15.13	Dec. 31	15.08
Mar. 27	16.17						

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N1254 (*906, p. 137; 936, p. 165). Nassau County Department of Public Works. At southeast corner of County Line and Merrick Roads, West Amityville. Measurements discontinued on Sept. 27, 1943. Land-surface datum is 14.04 feet above mean sea level.

Water level, in feet above mean sea level, 1942

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	3.14	Mar. 30	3.61	June 29	2.98	Oct. 2	3.11
30	2.94	May 1	3.27	July 31	3.30	30	3.05
Feb. 27	2.71	29	3.01	Aug. 31	3.57	Nov. 30	3.20

Water level, in feet below land-surface datum, 1943

Jan. 1	10.44	Mar. 29	10.31	June 25	10.56	Aug. 30	10.47
29	10.29	Apr. 30	10.49	Aug. 2	10.47	Sept. 27	10.43
Feb. 26	10.36	May 27	10.23				

Water level, in feet above mean sea level, 1943

Jan. 1	3.60	Mar. 29	3.73	June 25	3.48	Aug. 30	3.57
29	3.75	Apr. 30	3.55	Aug. 2	3.57	Sept. 27	3.61
Feb. 26	3.68	May 27	3.81				

N1255 (*840, p. 277; 845, p. 319; 886, p. 500; *906, p. 137; 936, p. 165). Nassau County Department of Public Works. On east side of Clinton Road near St. James Street, Garden City. Land-surface datum is 79.36 feet above mean sea level.

Water level, in feet above mean sea level, 1942

Jan. 3	58.88	Apr. 4	60.27	July 6	60.03	Oct. 3	60.68
10	58.77	11	60.33	11	59.90	10	60.61
17	58.68	18	60.30	18	59.97	17	60.49
24	58.67	25	60.22	25	59.80	24	60.39
31	58.67	May 2	60.07	Aug. 1	60.79	31	60.30
Feb. 7	58.78	9	60.06	8	60.70	Nov. 7	60.36
14	58.98	16	59.93	15	61.05	14	60.29
21	59.11	23	59.92	22	61.28	21	60.20
28	59.11	30	59.76	29	61.22	28	60.17
Mar. 7	59.27	June 6	59.70	Sept. 5	61.08	Dec. 5	60.22
14	59.54	13	60.31	12	60.97	12	60.23
21	59.74	20	60.12	19	60.88	19	60.10
28	60.13	27	59.98	26	60.74	26	60.03

Water level, in feet below land-surface datum, 1943

Jan. 2	18.84	May 1	17.95	July 31	19.02	Nov. 1	19.43
Mar. 1	18.26	29	18.33	Aug. 30	19.51	29	19.20
27	17.69	June 26	18.59	Sept. 27	19.88	Dec. 31	19.63

Water level, in feet above mean sea level, 1943

Jan. 2	60.52	May 1	61.41	July 31	60.34	Nov. 1	59.93
Mar. 1	61.10	29	61.03	Aug. 30	59.85	29	60.16
27	61.67	June 26	60.77	Sept. 27	59.48	Dec. 31	59.73

N1256 (*777, p. 125; *817, p. 202; *840, p. 277; 845, p. 319; 886, p. 500; *906, p. 138; 936, p. 165). Nassau County Department of Public Works. At junction of Hillside Avenue and Bacon Road, Westbury. Land-surface datum is 112.34 feet above mean sea level.

Water level, in feet above mean sea level, 1942

Jan. 3	75.00	Apr. 4	75.27	July 4	75.04	Oct. 3	75.75
10	75.01	11	75.39	11	75.01	10	75.75
17	74.84	18	75.42	18	74.95	17	75.74
24	74.80	25	75.40	25	74.91	24	75.67
31	74.72	May 2	75.37	Aug. 1	75.19	31	75.65
Feb. 7	74.70	9	75.36	8	75.30	Nov. 7	75.60
14	74.65	16	75.31	15	75.40	14	75.60
21	74.73	23	75.29	22	75.55	21	75.57
28	74.71	30	75.20	29	75.71	28	75.52
Mar. 7	74.70	June 6	75.15	Sept. 5	75.81	Dec. 5	75.50
14	74.78	13	75.19	12	75.85	12	75.48
21	74.91	20	75.13	19	75.86	19	75.47
28	75.06	27	75.05	26	75.79	26	75.44

N1256. Nassau County Department of Public Works well--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	36.93	Mar. 27	35.97	June 26	35.90	Sept.25	36.66
30	36.63	Apr. 30	35.72	July 31	36.10	Oct. 30	36.91
Feb. 27	36.38	May 29	35.80	Aug. 28	36.37	Nov. 27	36.89

Water level, in feet above mean sea level, 1943

Jan. 2	75.41	Mar. 27	76.37	June 26	76.44	Sept.25	75.68
30	75.71	Apr. 30	76.62	July 31	76.24	Oct. 30	75.43
Feb. 27	75.96	May 29	76.54	Aug. 28	75.97	Nov. 27	75.45

N1257 (*840, p. 278; 845, p. 319; *886, p. 500; 906, p. 138; 936, p. 165; 944, p. 146). New York City Department of Water Supply, Gas and Electricity. Carman and Scranton Avenues, East Rockaway. Land-surface datum is 21.94 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	13.98	May 1	13.94	July 31	14.86	Nov. 1	13.71
30	14.36	29	14.07	Aug. 30	15.30	29	13.65
Feb. 27	13.69	June 26	14.47	Sept.27	15.23	Dec. 31	14.56
Mar. 27	13.13						

Water level, in feet above mean sea level, 1943

Jan. 2	7.96	May 1	8.00	July 31	7.08	Nov. 1	8.23
30	7.58	29	7.87	Aug. 30	6.64	29	8.29
Feb. 27	8.25	June 26	7.47	Sept.27	6.71	Dec. 31	7.38
Mar. 27	8.81						

N1258 (*840, p. 278; 845, p. 320; 886, p. 500; 906, p. 138; 936, p. 166; 944, p. 146). New York City Department of Water Supply, Gas and Electricity. West side of Carmans Road about 300 feet north of Southern State Parkway, Farmingdale. Land-surface datum is 48.19 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	11.12	May 1	10.49	Aug. 2	11.73	Nov. 1	10.94
30	11.24	29	10.55	30	12.30	29	10.49
Mar. 1	10.55	June 26	11.00	Sept.27	11.77	Dec. 31	11.10
27	9.94						

Water level, in feet above mean sea level, 1943

Jan. 2	37.07	May 1	37.70	Aug. 2	36.46	Nov. 1	37.25
30	36.95	29	37.64	30	35.89	29	37.70
Mar. 1	37.64	June 26	37.19	Sept.27	36.42	Dec. 31	37.09
27	38.25						

N1259 (*777, p. 125; *840, p. 279; 845, p. 320; 886, p. 501; 906, p. 138; 936, p. 166; 944, p. 146). Geological Survey, U. S. Dept. of Interior. About 600 feet south of Union Avenue on west side of Hicksville-Massapequa Road, about 2 miles south of Central Park. Land-surface datum is 78.37 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	27.48	May 1	25.51	July 31	26.58	Nov. 1	27.40
30	26.60	29	25.87	Aug. 30	26.95	29	26.84
Feb. 27	26.00	June 26	26.17	Sept.27	27.30	Dec. 31	26.90
Mar. 27	25.73						

Water level, in feet above mean sea level, 1943

Jan. 2	50.89	May 1	52.86	July 31	51.79	Nov. 1	50.97
30	51.77	29	52.50	Aug. 30	51.42	29	51.53
Feb. 27	52.37	June 26	52.20	Sept.27	51.07	Dec. 31	51.47
Mar. 27	52.64						

N1260 (*777, p. 126; *817, p. 281; 845, p. 322; 886, p. 501; *906, p. 139; 936, p. 166; 944, p. 147). Nassau County Department of Public Works. On west side of Main Street, 100 feet south of Pittsburg Avenue, Massapequa. Land-surface datum is 33.14 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	12.48	May 1	11.61	July 31	12.78	Nov. 1	12.50
30	12.33	31	11.51	Aug. 30	13.28	29	11.95
Feb. 27	11.48	June 26	12.11	Sept.27	13.30	Dec. 31	12.58
Mar. 27	10.84						

Water level, in feet above mean sea level, 1943

Jan. 2	20.66	May 1	21.53	July 31	20.36	Nov. 1	20.64
30	20.81	31	21.63	Aug. 30	19.86	29	21.19
Feb. 27	21.66	June 26	21.03	Sept.27	19.84	Dec. 31	20.56
Mar. 27	22.30						

N1262 (*840, p. 282; 845, p. 323; 886, p. 502; 906, p. 139; 936, p. 166; 944, p. 147). New York City Department of Water Supply, Gas and Electricity. East side of Wantagh Avenue, about 0.25 mile south of Southern State Parkway, Wantagh. Land-surface datum is 40.96 feet above mean sea level.

Water level, in feet below land surface datum, 1943

Jan. 2	6.07	May 1	6.04	July 31	6.66	Nov. 1	6.39
30	6.24	29	6.21	Aug. 30	6.97	29	6.30
Feb. 27	5.86	June 26	6.49	Sept.27	6.97	Dec. 31	6.49
Mar. 27	5.62						

Water level, in feet above mean sea level, 1943

Jan. 2	34.89	May 1	34.92	July 31	34.30	Nov. 1	34.57
30	34.72	29	34.75	Aug. 30	33.99	29	34.66
Feb. 27	35.10	June 26	34.47	Sept.27	33.99	Dec. 31	34.47
Mar. 27	35.34						

N1263 (*840, p. 283; 845, p. 323; 886, p. 502; *906, p. 139; 944, p. 147). Nassau County Department of Public Works. At northeast corner of Wantagh and Farmingdale (Seamans Neck) Roads, about 1.3 miles north of Southern State Parkway and about 2 miles south of Central Park. Land-surface datum is 65.97 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	16.34	May 1	14.71	July 31	15.97	Nov. 1	16.66
30	15.79	29	15.14	Aug. 30	16.40	29	16.20
Feb. 27	14.97	June 26	15.48	Sept.27	16.75	Dec. 31	16.24
Mar. 27	14.38						

Water level, in feet above mean sea level, 1943

Jan. 2	49.63	May 1	51.26	July 31	50.00	Nov. 1	49.31
30	50.18	29	50.83	Aug. 30	49.57	29	49.77
Feb. 27	51.00	June 26	50.49	Sept.27	49.22	Dec. 31	49.73
Mar. 27	51.59						

N1264 (*840, p. 285; 845, p. 323; 886, p. 502; 906, p. 140; 936, p. 167; 944, p. 147). New York City Department of Water Supply, Gas and Electricity. On west side of Newbridge Road about 300 feet south of Sunrise Highway, Bellmore. Land-surface datum is 13.72 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	4.86	May 1	5.60	July 31	5.95	Nov. 1	4.89
30	5.68	29	5.48	Aug. 30	6.09	29	7.56
Feb. 27	5.47	June 26	5.94	Sept.27	5.89	Dec. 31	6.13
Mar. 27	5.30						

N1264. New York City Department of Water Supply, Gas and Electricity well--Continued.

Water level, in feet above mean sea level, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	8.86	May 1	8.12	July 31	7.77	Nov. 1	8.83
30	8.04	29	8.24	Aug. 30	7.63	29	6.16
Feb. 27	8.25	June 26	7.78	Sept.27	7.83	Dec. 31	7.59
Mar. 27	8.42						

N1265 (*906, p. 140; *936, p. 167; 944, p. 148). Nassau County Department of Public Works. At southwest corner of Albany Avenue and Merrick Road, Freeport. Land-surface datum is 5.87 feet above mean sea level. Water levels, in feet below land-surface datum, 1943: Jan. 27, 2.50; Mar. 3, 2.33; Mar. 31, 2.31; Aug. 25, 2.94. Water levels, in feet above mean sea level, 1943: Jan. 27, 3.37; Mar. 3, 3.54; Mar. 31, 3.56; Aug. 25, 2.93.

N1269 (*906, p. 140; 936, p. 168; 944, p. 148). Nassau County Department of Public Works. At southwest corner of Babylon Turnpike and Popular Street, Merrick. Land-surface datum is 12.98 feet above mean sea level. Water levels, in feet below land-surface datum, 1943: Jan. 27, 5.39; Mar. 3, 4.94; Mar. 31, 4.64. Water levels, in feet above mean sea level, 1943: Jan. 27, 7.59; Mar. 3, 8.04; Mar. 31; 8.34.

N1271 (*906, p. 141; 936, p. 168; *944, p. 148). Nassau County Department of Public Works. At northeast corner of Beach Drive and Florence Street, Merrick. Land-surface datum is 4.62 feet above mean sea level. Water levels, in feet below land-surface datum, 1943: Jan. 27, 2.28; Mar. 3, 2.19; Mar. 31, 2.23; Aug. 25, 3.31. Water levels, in feet above mean sea level, 1943: Jan. 27, 2.34; Mar. 3, 2.43; Mar. 31; 2.39; Aug. 25, 1.31.

N1273 (*906, p. 141; 936, p. 168; 944, p. 148). Nassau County Department of Public Works. At northwest corner of Cypress Street and Walters Avenue, Wantagh. Land-surface datum is 15.11 feet above mean sea level. Water levels, in feet below land-surface datum, 1943: Jan. 27, 8.45; Mar. 3, 8.00; Mar. 31, 7.73. Water levels, in feet above mean sea level, 1943: Jan. 27, 6.66; Mar. 3, 7.11; Mar. 31, 7.38.

N1275 (*906, p. 141; 936, p. 168; 944, p. 148). Nassau County Department of Public Works. At northeast corner of Byron and Willow Streets, Wantagh. Land-surface datum is 9.31 feet above mean sea level. Water levels, in feet below land-surface datum, 1943: Jan. 27, 6.63; Mar. 3, 6.33; Mar. 31, 6.14. Water levels, in feet above mean sea level, 1943: Jan. 27, 2.68; Mar. 3, 2.98; Mar. 31, 3.17.

N1278 (*906, p. 142; 936, p. 168; 944, p. 148). Nassau County Department of Public Works. At southeast corner of Nassau Street and Bay Drive, Massapequa. Land-surface datum is 13.16 feet above mean sea level. Water levels, in feet below land-surface datum, 1943: Jan. 27, 6.90; Mar. 3, 6.47; Mar. 31, 6.20. Water levels, in feet above mean sea level, 1943: Jan. 27, 6.26; Mar. 3, 6.69; Mar. 31, 6.96.

N1280 (*906, p. 142; 936, p. 169; 944, p. 149). Nassau County Department of Public Works. At northwest corner of Harmony Drive and Park Boulevard, Massapequa. Land-surface datum is 19.77 feet above mean sea level. Water levels, in feet below land-surface datum, 1943: Jan. 27, 10.50; Mar. 3, 9.89; Mar. 31, 9.67. Water levels, in feet above mean sea level, 1943: Jan. 27, 9.27; Mar. 3, 9.88; Mar. 31, 10.10.

N1282 (*906, p. 143; 936, p. 169; *944, p. 149). Nassau County Department of Public Works. On west side of Wantagh State Parkway, about 0.9 mile south of Merrick Road, Wantagh. Land-surface datum is 7.45 feet above mean sea level. Water levels, in feet below land-surface datum, 1943: Jan. 27, 5.87; Mar. 3, 5.78; Mar. 31, 6.16. Water levels, in feet above mean sea level, 1943: Jan. 27, 1.58; Mar. 3, 1.67; Mar. 31, 1.29.

N1285 (*906, p. 143; 936, p. 169; *944, p. 149). Nassau County Department of Public Works. At northwest corner of Spruce and Melvin Streets, Wantagh. Land-surface datum is 6.66 feet above mean sea level. Water levels, in feet below land-surface datum, 1943: Jan. 27, 3.85; Mar. 3, 3.75; Mar. 31, 3.78. Water levels, in feet above mean sea level, 1943: Jan. 27, 2.81; Mar. 3, 2.91; Mar. 31, 2.88.

N1288 (*906, p. 143; 936, p. 169; 944, p. 149). Nassau County Department of Public Works. On west side of Bay View Avenue at St. Regis Street, Wantagh. Land-surface datum is 9.98 feet above mean sea level. Water levels, in feet below land-surface datum, 1943: Jan. 27, 6.90; Mar. 3, 6.60; Mar. 31, 6.37. Water levels, in feet above mean sea level, 1943: Jan. 27, 3.08; Mar. 3, 3.38; Mar. 31, 3.61.

N1461. Nassau County Department of Public Works. On southwest side of Long Island Railroad tracks about 235 feet southeast of intersection with New South Road, South Hicksville. Diameter 6 inches, depth 74.5 feet below measuring point. Measuring point, top of casing, 2.0 feet above land-surface and 131.49 feet above mean sea level. Land-surface datum is 129.49 feet above mean sea level. Water level, Apr. 27, 1943, 53.24 feet below land-surface datum and 76.25 feet above mean sea level.

Water level at noon, in feet below land-surface datum, 1943
(From recorder charts)

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	53.23	53.56	54.07	54.54	54.92	55.10	54.93	54.77
2	.....	53.24	53.57	54.09	54.55	54.94	55.11	54.90	54.76
3	.....	53.17	53.59	54.09	54.57	54.95	55.13	54.87	54.78
4	.....	53.20	53.63	54.09	54.58	54.97	55.14	54.88	54.79
5	.....	53.21	53.66	54.08	54.60	54.97	55.14	54.89	54.78
6	.....	53.23	53.68	54.10	54.63	54.95	55.14	54.88	54.78
7	.....	53.25	53.70	54.12	54.64	54.94	55.11	54.99	54.76
8	.....	53.26	53.72	54.15	54.65	54.98	55.09	54.86	54.77
9	.....	53.32	53.74	54.17	54.66	54.99	55.09	54.84	54.76
10	.....	53.32	53.76	54.18	54.66	55.01	55.15	54.85	54.76
11	.....	.....	53.77	54.20	54.69	55.01	55.14	54.83	54.76
12	.....	53.21	53.79	54.21	54.70	55.02	55.12	54.82	54.77
13	.....	53.26	53.80	54.22	54.70	55.02	55.11	54.81	54.80
14	.....	53.31	53.82	54.23	54.70	55.02	55.10	54.84	54.84
15	.....	53.34	53.83	54.25	54.71	55.00	55.10	54.84	54.87
16	.....	53.34	53.82	54.28	54.71	55.02	55.06	54.82	54.89
17	.....	53.33	53.85	54.30	54.72	55.04	55.07	54.83	54.90
18	.....	53.33	53.87	54.31	54.74	55.06	55.09	54.84	54.88
19	.....	.....	53.89	54.33	54.75	55.06	55.07	54.84	54.86
20	.....	.....	53.90	54.34	54.77	55.04	55.07	54.83	54.84
21	.....	53.35	53.92	54.36	54.78	55.03	55.06	54.82	54.84
22	.....	53.38	53.93	54.37	54.79	55.04	55.04	54.80	54.84
23	.....	53.41	53.95	54.40	54.80	55.05	55.04	54.80	54.88
24	.....	53.41	53.97	54.42	54.81	55.06	55.04	54.79	54.90
25	.....	53.40	53.98	54.43	54.83	55.08	55.04	54.79	54.89
26	.....	53.39	53.99	54.44	54.85	55.09	55.00	54.78	54.87
27	53.24	53.43	54.00	54.46	54.86	55.09	54.98	54.75	54.81
28	53.20	53.47	54.00	54.47	54.88	55.10	54.93	54.76	54.80
29	53.24	53.50	54.01	54.48	54.89	55.12	54.95	54.77	54.78
30	53.20	53.52	54.06	54.50	54.90	55.12	54.92	54.77	54.77
31	.....	53.54	.....	54.53	54.91	.....	54.92	.....	54.76

Water level at noon, in feet above mean sea level, 1943
(From recorder charts)

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	76.26	75.93	75.42	74.95	74.57	74.39	74.56	74.72
2	.....	76.25	75.92	75.40	74.94	74.55	74.38	74.59	74.73
3	.....	76.32	75.90	75.40	74.92	74.54	74.36	74.62	74.71
4	.....	76.29	75.86	75.40	74.91	74.52	74.35	74.61	74.70
5	.....	76.28	75.83	75.41	74.89	74.52	74.35	74.60	74.71
6	.....	76.26	75.81	75.39	74.86	74.54	74.35	74.61	74.71
7	.....	76.24	75.79	75.37	74.85	74.55	74.38	74.60	74.73
8	.....	76.23	75.77	75.34	74.84	74.51	74.40	74.63	74.72
9	.....	76.17	75.75	75.32	74.83	74.50	74.40	74.65	74.73

N1461. Nassau County Department of Public Works--Continued.

Water level at noon, in feet above mean sea level, 1943
(From recorder charts)

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
10	.....	76.17	75.73	75.31	74.83	74.48	74.34	74.64	74.73
11	.....	.....	75.72	75.29	74.80	74.48	74.35	74.66	74.73
12	.....	76.28	75.70	75.28	74.79	74.47	74.37	74.67	74.72
13	.....	76.23	75.69	75.27	74.79	74.47	74.38	74.68	74.69
14	.....	76.18	75.67	75.26	74.79	74.47	74.39	74.65	74.65
15	.....	76.15	75.66	75.24	74.78	74.49	74.39	74.65	74.62
16	.....	76.15	75.67	75.21	74.78	74.47	74.43	74.67	74.60
17	.....	76.16	75.64	75.19	74.77	74.45	74.42	74.66	74.59
18	.....	76.16	75.62	75.18	74.75	74.43	74.40	74.65	74.61
19	.....	.....	75.60	75.16	74.74	74.43	74.42	74.65	74.63
20	.....	.....	75.59	75.15	74.72	74.45	74.42	74.66	74.65
21	.....	76.14	75.57	75.13	74.71	74.46	74.43	74.67	74.65
22	.....	76.11	75.56	75.12	74.70	74.45	74.45	74.69	74.65
23	.....	76.08	75.54	75.09	75.69	76.44	74.45	74.69	74.61
24	.....	76.08	74.52	75.07	74.68	74.43	74.45	74.70	74.59
25	.....	76.09	75.51	75.06	74.66	74.41	74.45	74.70	74.60
26	.....	76.10	75.50	75.05	74.64	74.40	74.49	74.71	74.62
27	76.25	76.06	74.49	75.03	74.63	74.40	74.51	74.74	74.68
28	76.29	66.02	75.48	75.02	74.61	74.39	74.56	74.73	74.69
29	76.25	75.99	75.47	75.01	74.60	74.37	74.54	74.72	74.71
30	76.29	75.97	75.43	74.99	74.59	74.37	74.57	74.72	74.72
31	.....	75.95	.....	74.96	74.58	.....	74.57	.....	74.73

N1462. Nassau County Department of Public Works. At northwest corner of intersection of Bloomindale Road and Hempstead Branch of Long Island Railroad, Island Trees. Diameter 6 inches, depth 51.7 feet below measuring point. Measuring point, top of casing, at land-surface datum and 94.98 feet above mean sea level. Water level, May 6, 1943, 31.88 feet below land-surface datum and 63.10 feet above mean sea level.

Water level at noon, in feet below land-surface datum, 1943
(From recorder charts)

Day	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	32.07	32.27	32.55	32.90	33.26	33.54	33.36
2	.....	32.06	32.29	32.56	32.91	33.26	33.52	33.36
3	.....	32.07	32.29	32.57	32.92	33.28	33.50	33.36
4	.....	32.09	.....	32.58	32.94	33.29	33.52	33.36
5	.....	32.10	.....	32.59	32.94	33.31	33.53	33.37
6	31.88	32.11	.....	32.62	32.95	33.33	33.52	33.38
7	31.87	32.11	.....	32.63	32.96	33.34	33.41	33.36
8	31.88	32.13	.....	32.64	32.98	33.35	33.35	33.39
9	31.91	32.14	32.34	32.65	32.99	33.36	33.33	33.38
10	31.92	32.14	32.35	32.66	33.01	33.38	33.35	33.40
11	31.91	32.14	32.36	32.67	33.04	33.40	33.34	33.39
12	31.87	32.14	32.37	32.69	33.05	33.41	33.34	33.41
13	31.92	32.14	32.38	32.69	33.06	33.43	33.33	33.43
14	31.95	32.16	32.38	32.70	33.07	33.44	33.34	33.47
15	31.98	32.16	32.39	32.71	33.07	33.45	33.33	33.48
16	31.99	32.14	32.40	32.72	33.08	33.45	33.32	33.50
17	31.97	32.17	32.41	32.72	33.09	.....	33.33	33.51
18	31.98	32.17	32.42	32.74	33.12	.....	33.33	33.51
19	31.98	32.18	32.43	32.75	33.13	.....	33.32	33.52
20	31.99	32.19	32.43	32.77	33.13	.....	33.32	33.50
21	31.99	32.19	32.45	32.78	33.14	.....	33.34	33.51
22	.....	32.20	32.45	32.79	33.15	33.50	33.33	33.53
23	32.04	32.21	32.47	32.80	33.16	33.51	33.34	33.55
24	32.04	32.22	32.48	32.81	33.17	33.53	33.36	33.57
25	32.02	32.22	32.49	32.82	33.18	33.54	33.38	.....
26	32.01	32.23	32.49	32.83	33.19	33.55	33.38	.....
27	32.04	32.23	32.50	32.85	33.21	33.56	33.36	33.46
28	32.05	32.23	32.51	32.86	33.22	33.52	33.37	33.28
29	32.05	32.24	32.51	32.88	33.24	33.50	33.38	33.27
30	32.06	32.25	32.52	32.89	33.25	33.49	33.36	33.31
31	32.07	.....	32.54	32.89	.....	33.51	.....	33.33

N1462. Nassau County Department of Public Works--Continued.

Water level at noon, in feet above mean sea level, 1943
(From recorder charts)

Day	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	62.91	62.71	62.43	62.08	61.72	61.44	61.62
2	.....	62.92	62.69	62.42	62.07	61.72	61.46	61.62
3	.....	62.91	62.69	62.41	62.06	61.70	61.48	61.62
4	.....	62.89	.....	62.40	62.04	61.69	61.46	61.62
5	.....	62.88	.....	62.39	62.04	61.67	61.45	61.61
6	63.10	62.87	.....	62.36	62.03	61.65	61.46	61.60
7	63.11	62.87	.....	62.35	62.02	61.64	61.57	61.62
8	63.10	62.85	.....	62.34	62.00	61.63	61.63	61.59
9	63.07	62.84	62.64	62.33	61.99	61.62	61.65	61.60
10	63.06	62.84	62.63	62.32	61.97	61.60	61.63	61.58
11	63.07	62.84	62.62	62.31	61.94	61.58	61.64	61.59
12	63.11	62.84	62.61	62.29	61.93	61.57	61.64	61.57
13	63.06	62.84	62.60	62.29	61.92	61.55	61.65	61.55
14	63.03	62.82	62.60	62.28	61.91	61.54	61.64	61.51
15	63.00	62.82	62.59	62.27	61.91	61.53	61.65	61.50
16	62.99	62.84	62.58	62.26	61.90	61.53	61.66	61.48
17	63.02	62.81	62.57	62.26	61.89	.....	61.65	61.47
18	63.00	62.81	62.56	62.24	61.86	.....	61.65	61.47
19	63.00	62.80	62.55	62.23	61.85	.....	61.66	61.46
20	62.99	62.79	62.55	62.21	61.85	.....	61.66	61.48
21	62.99	62.79	62.53	62.20	61.84	.....	61.64	61.47
22	.....	62.78	62.53	62.19	61.83	61.48	61.65	61.45
23	62.94	62.77	62.51	62.18	61.82	61.47	61.64	61.43
24	62.94	62.76	62.50	62.17	61.81	61.45	61.62	61.41
25	62.96	62.76	62.49	62.16	61.80	61.44	61.60	.....
26	62.97	62.75	62.49	62.15	61.79	61.43	61.60	.....
27	62.94	62.75	62.48	62.13	61.77	61.42	61.62	61.52
28	62.93	62.75	62.47	62.12	61.76	61.46	61.61	61.70
29	62.93	62.74	62.47	62.10	61.74	61.48	61.60	61.71
30	62.92	62.73	62.46	61.09	61.73	61.49	61.62	61.67
31	62.91	.....	62.44	62.09	.....	61.47	.....	61.65

N1463. Nassau County Department of Public Works. About 250 feet southwest of intersection of Southern State Parkway and Seamans Neck Road, Jerusalem. Diameter 6 inches, depth 30.6 feet below measuring point. Measuring point, top of casing, at land-surface datum and 50.67 feet above mean sea level. Water level, May 6, 1943, 11.62 feet below land-surface datum and 39.05 feet above mean sea level.

Water level at noon, in feet below land-surface datum, 1943
(From recorder charts)

Day	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	12.03	12.39	12.89	13.46	13.71	13.18	12.50
2	.....	12.01	12.41	12.90	13.47	13.72	13.15	12.50
3	.....	12.06	12.43	12.92	13.49	13.73	13.11	12.53
4	.....	12.07	12.44	12.94	13.51	13.74	13.10	12.55
5	.....	12.07	12.43	12.96	13.52	13.75	13.08	12.57
6	11.62	12.08	12.46	12.99	13.54	13.76	13.01	12.58
7	11.64	12.08	12.47	13.02	13.56	13.77	12.97	12.59
8	11.66	12.09	12.49	13.04	13.57	13.78	12.91	12.61
9	11.69	12.10	12.51	13.06	13.58	13.78	12.92	12.62
10	11.71	12.11	12.53	13.02	13.61	13.79	12.81	12.63
11	11.73	12.12	12.54	13.08	13.63	13.81	12.76	12.66
12	11.75	12.13	12.55	13.10	13.65	13.81	12.72	12.66
13	11.77	12.14	12.57	13.11	13.67	13.82	12.67	12.69
14	11.80	12.15	12.59	13.12	13.68	13.84	12.64	12.70
15	11.81	12.15	12.61	13.14	13.40	13.85	12.61	12.71
16	11.82	12.16	12.63	13.16	13.44	13.72	12.57	12.74
17	11.85	12.18	12.65	13.18	13.46	13.77	12.55	12.76
18	11.86	12.19	12.66	13.19	13.48	13.78	12.53	12.78
19	11.87	12.19	12.68	13.21	13.50	13.78	12.51	12.79
20	11.82	12.20	12.69	13.23	13.51	13.78	12.48	12.80
21	11.88	12.21	12.71	13.25	13.53	13.79	12.47	12.82
22	11.89	12.23	12.72	13.27	13.56	13.79	12.46	12.83

N1463. Nassau County Department of Public Works--Continued.

Water level at noon, in feet below land-surface datum, 1943
(From recorder charts)

Day	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
23	11.90	12.24	12.75	13.29	13.58	13.80	12.45	12.85
24	11.92	12.27	12.77	13.31	13.61	13.81	12.44	.....
25	11.92	12.29	12.78	13.33	13.62	13.83	12.45	.....
26	11.93	12.30	12.80	13.35	13.63	13.83	12.45	.....
27	11.95	12.32	12.81	13.37	13.65	13.63	12.44	12.73
28	11.97	12.33	12.83	13.38	13.67	13.39	12.45	12.77
29	12.00	12.35	12.85	13.40	13.69	13.32	12.48	12.80
30	12.01	12.37	12.86	13.42	13.70	13.26	12.48	12.81
31	12.03	.....	12.87	13.45	.....	13.21	.....	12.82

Water level at noon, in feet above mean sea level, 1943
(From recorder charts)

Day	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	38.64	38.28	37.78	37.21	36.96	37.49	38.17
2	.....	38.66	38.26	37.77	37.20	36.95	37.52	38.17
3	.....	38.61	38.24	37.75	37.18	36.94	37.56	38.14
4	.....	38.60	38.23	37.73	37.16	36.93	37.57	38.12
5	.....	38.60	38.24	37.71	37.15	36.92	37.59	38.10
6	39.05	38.59	38.21	37.68	37.13	36.91	37.66	38.09
7	39.03	38.59	38.20	37.65	37.11	36.90	37.70	38.08
8	39.01	38.58	38.18	37.63	37.10	36.89	37.76	38.06
9	38.98	38.57	38.16	37.61	37.09	36.89	37.85	38.05
10	38.96	38.56	38.14	37.65	37.06	36.88	37.86	38.04
11	38.94	38.55	38.13	37.59	37.04	36.86	37.91	38.01
12	38.92	38.54	38.12	37.57	37.02	36.86	37.95	38.01
13	38.90	38.53	38.10	37.56	37.00	36.85	38.00	37.98
14	38.87	38.52	38.08	37.55	36.99	36.83	38.03	37.97
15	38.86	38.52	38.06	37.53	37.27	36.82	38.06	37.96
16	38.85	38.51	38.04	37.51	37.23	36.95	38.10	37.93
17	38.83	38.49	38.03	37.49	37.21	36.90	38.12	37.91
18	38.81	38.48	38.02	37.48	37.19	36.89	38.14	37.89
19	38.80	38.48	37.99	37.46	37.17	36.89	38.16	37.88
20	38.85	38.47	37.98	37.44	37.16	36.89	38.19	37.87
21	38.79	38.46	37.96	37.42	37.14	36.88	38.20	37.85
22	38.78	38.44	37.95	37.40	37.11	36.88	38.21	37.84
23	38.77	38.43	37.92	37.38	37.09	36.87	38.22	37.82
24	38.76	37.40	37.90	37.36	37.06	36.86	38.23	.....
25	38.75	38.38	37.89	37.34	37.05	36.84	38.22	.....
26	38.74	38.37	37.87	37.82	37.04	36.84	38.22	.....
27	38.72	38.35	37.86	37.30	37.02	37.04	38.23	37.94
28	38.70	38.34	37.84	37.29	37.00	37.28	38.22	37.90
29	38.67	38.32	37.82	37.27	36.98	37.35	38.19	37.87
30	38.66	38.30	37.81	37.25	36.97	37.41	38.19	37.86
31	38.64	.....	37.80	37.22	.....	37.46	.....	37.85

N1464. Nassau County Department of Public Works. At northeast corner of Grant and Franklin Avenues, Seaford. Diameter 6 inches, depth 42.1 feet below measuring point. Measuring point, top of casing, 1.5 feet above land-surface datum and 30.32 feet above mean sea level. Land-surface datum is 28.82 feet above mean sea level. Water level, May 13, 1943, 12.99 feet below land-surface datum and 15.83 feet above mean sea level.

Water level at noon, in feet below land-surface datum, 1943
(From recorder charts)

Day	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	12.84	13.25	13.54	13.80	13.75	12.83	12.60
2	.....	12.86	13.26	13.55	13.80	13.73	12.74	12.63
3	.....	12.87	13.27	13.55	13.82	13.74	12.67	12.68
4	.....	12.91	13.27	13.56	13.82	13.76	12.62	12.72
5	.....	12.87	13.27	13.58	13.83	13.77	12.58	12.76
6	.....	12.91	13.27	13.60	13.83	13.78	12.53	12.80
7	.....	12.92	13.28	13.61	13.84	13.77	12.49	12.82
8	.....	12.91	13.28	13.62	13.87	13.77	12.42	12.86
9	.....	12.93	13.29	13.62	13.88	13.76	12.33	12.87

N1464. Nassau County Department of Public Works well--Continued.

Water level at noon, in feet below land-surface datum, 1943
(From recorder charts)

Day	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
10	.....	12.94	13.30	13.62	13.90	13.81	12.27	12.90
11	.....	12.95	13.31	13.63	13.91	13.83	12.20	12.91
12	.....	12.97	13.32	13.64	13.92	13.83	12.15	12.92
13	12.99	12.98	13.33	13.63	13.94	13.82	12.08	12.95
14	13.01	13.00	13.33	13.61	13.95	13.82	12.08	12.98
15	13.02	13.01	13.34	13.63	13.87	13.83	12.07	13.00
16	13.03	13.01	13.36	13.64	13.73	13.74	12.06	13.02
17	13.03	13.04	13.37	13.64	13.69	13.67	12.12	13.04
18	13.04	13.05	13.38	13.65	13.66	13.65	12.18	13.06
19	13.04	13.06	13.39	13.66	13.65	13.62	12.20	13.06
20	13.02	13.07	13.41	13.67	13.63	13.61	12.24	13.07
21	12.95	13.09	13.42	13.68	13.62	13.61	12.29	13.08
22	12.89	13.10	13.43	13.69	13.62	13.59	12.32	13.10
23	12.86	13.12	13.45	13.70	13.63	13.59	12.36	13.13
24	12.81	13.14	13.47	13.71	13.65	13.60	12.39	13.16
25	12.77	13.15	13.47	13.72	13.67	13.61	12.43	13.18
26	12.74	13.18	13.48	13.73	13.70	13.60	12.46	13.19
27	12.74	13.19	13.49	13.73	13.73	13.54	12.46	13.12
28	12.75	13.20	13.50	13.76	13.75	13.36	12.50	13.08
29	12.77	13.21	13.51	13.77	13.77	13.20	12.54	13.07
30	12.79	13.23	13.52	13.77	13.77	13.05	12.56	13.11
31	12.82	.....	13.53	13.79	.....	12.91	.....	13.13

Water level at noon, in feet above mean sea level, 1943
(From recorder charts)

Day	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	15.98	11.57	15.28	15.02	15.07	15.99	16.22
2	.....	15.96	15.56	15.27	15.02	15.09	16.08	16.19
3	.....	15.95	15.55	15.27	15.00	15.08	16.15	16.14
4	.....	15.91	15.55	15.26	15.00	15.06	16.20	16.10
5	.....	15.95	15.55	15.24	14.99	15.05	16.24	16.06
6	.....	15.91	15.55	15.22	14.99	15.04	16.29	16.02
7	.....	15.90	15.54	15.21	14.98	15.05	16.33	16.00
8	.....	15.91	15.54	15.20	14.95	15.05	16.40	15.96
9	.....	15.89	15.53	15.20	14.94	15.06	16.49	15.95
10	.....	15.88	15.52	15.20	14.92	15.01	16.55	15.92
11	.....	15.87	15.51	15.19	14.91	14.99	16.62	15.91
12	.....	15.85	15.50	15.18	14.90	14.99	16.67	15.90
13	15.83	15.84	15.49	15.19	14.88	15.00	16.74	15.87
14	15.81	15.82	15.49	15.21	14.87	15.00	16.74	15.84
15	15.80	15.81	15.48	15.19	14.95	14.99	16.75	15.82
16	15.79	15.81	15.46	15.18	15.09	15.08	16.76	15.80
17	15.79	15.78	15.45	15.18	15.13	15.15	16.70	15.78
18	15.78	15.77	15.44	15.17	15.16	15.17	16.64	15.76
19	15.78	15.76	15.43	15.16	15.17	15.20	16.62	15.76
20	15.80	15.75	15.41	15.15	15.19	15.21	16.58	15.75
21	15.87	15.73	15.40	15.14	15.20	15.21	16.53	15.74
22	15.93	15.72	15.39	15.13	15.20	15.23	16.50	15.72
23	15.96	15.70	15.37	15.12	15.19	15.23	16.46	15.69
24	16.01	15.68	15.35	15.11	15.17	15.22	16.43	15.66
25	16.05	15.67	15.35	15.10	15.15	15.21	16.39	15.64
26	16.08	15.64	15.34	15.09	15.12	15.22	16.36	15.63
27	16.08	15.63	15.33	15.07	15.09	15.28	16.36	15.70
28	16.07	15.62	15.32	15.06	15.07	15.46	16.32	15.74
29	16.05	15.61	15.31	15.05	15.05	15.62	16.28	15.75
30	16.03	15.59	15.30	15.05	15.05	15.77	16.26	15.71
31	16.00	.....	15.29	15.03	.....	15.91	.....	15.69

N1613 (*840, p. 263; 845, p. 312; *886, p. 489; *906, p. 144; 936, p. 170; 944, p. 149). Citizens Water Supply Co. well Valley Stream 5. About 1,500 feet west of Corona Avenue and 96 feet north of Southern State Parkway, North Valley Stream. Land-surface datum is 24.36 feet above mean sea level.

N1613. Citizens Water Supply Co. well Valley Stream 5 well--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	1.14	May 1	0.77	July 31	1.27	Nov. 1	1.09
30	1.06	29	.81	Aug. 30	1.60	29	.92
Feb. 27	.73	June 26	1.17	Sept.27	1.75	Dec. 31	1.25
Mar. 29	.44						

Water level, in feet above mean sea level, 1943

Jan. 2	23.22	May 1	23.59	July 31	23.09	Nov. 1	23.27
30	23.30	29	23.55	Aug. 30	22.76	29	23.44
Feb. 27	23.63	June 26	23.19	Sept.27	22.61	Dec. 31	23.11
Mar. 29	23.92						

N1614 (*906, p. 144; 936, p. 170; 944, p. 150). New York City Department of Water Supply, Gas and Electricity. On west side of Herricks Road, about 150 feet north of Florence Road, Mineola. Measuring point raised 0.12 foot on July 31, 1943. New measuring point, top of pipe, 100.70 feet above mean sea level. Land-surface datum is also 100.70 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	33.46	Mar. 27	32.95	Aug. 28	33.70	Oct. 30	34.50
30	33.63	Apr. 30	32.46	Sept.25	34.08	Nov. 27	34.35
Feb. 27	33.48	July 31	33.34				

Water level, in feet above mean sea level, 1943

Jan. 2	67.12	Mar. 27	67.63	Aug. 28	67.00	Oct. 30	66.20
30	66.95	Apr. 30	68.12	Sept.25	66.62	Nov. 27	66.35
Feb. 27	67.10	July 31	67.36				

N1615 (*906, p. 145; 936, p. 170; 944, p. 150). New York City Department of Water Supply, Gas and Electricity. On east side of Merrick Avenue, 324 feet north of Luddington Road, East Meadow. Land-surface datum is 62.75 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 1	18.75	Mar. 29	17.08	June 25	18.38	Nov. 29	18.87
29	18.32	Apr. 30	17.77	Nov. 1	19.57	Dec. 31	19.26
Feb. 26	17.86	May 28	18.23				

Water level, in feet above mean sea level, 1943

Jan. 1	44.00	Mar. 29	45.67	June 25	44.37	Nov. 29	43.88
29	44.43	Apr. 30	44.98	Nov. 1	43.18	Dec. 31	43.49
Feb. 26	44.89	May 28	44.52				

N1616 (*906, p. 146; 936, p. 170; 944, p. 150). New York City Department of Water Supply, Gas and Electricity. On east side of Post Avenue at Argyle Road, Westbury. Land-surface datum is 122.80 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	42.92	Mar. 27	42.33	June 26	41.89	Sept.25	40.51
30	42.92	Apr. 30	41.83	July 31	42.08	Oct. 30	42.82
Feb. 27	42.64	May 29	41.70	Aug. 28	42.24	Nov. 27	43.03

Water level, in feet above mean sea level, 1943

Jan. 2	79.88	Mar. 27	80.47	June 26	80.91	Sept.25	82.29
30	79.88	Apr. 30	80.97	July 31	80.72	Oct. 30	79.98
Feb. 27	80.16	May 29	81.10	Aug. 28	80.56	Nov. 27	79.77

N1617 (*906, p. 147; 936, p. 170; 944, p. 150). New York City Department of Water Supply, Gas and Electricity. On south side of Merrick Road, 200 feet west of East Shore Drive, West Amityville. Measurements discontinued on Feb. 27, 1943. Land-surface datum is 15.62 feet above mean sea level. Water levels, in feet below land-surface datum, 1943: Jan. 2, 12.57; Feb. 27, 11.99. Water levels, in feet above mean sea level, 1943: Jan. 2, 3.05; Feb. 27, 3.63.

N1672 (*906, p. 151; 936, p. 171; 944, p. 151). U. S. War Department well Camp Mills 6. About 0.5 mile south of Commercial Avenue and about 0.5 mile east of Clinton Road, Garden City. Measurements discontinued on Mar. 1, 1943. Land-surface datum is 65.87 feet above mean sea level. Water levels, in feet below land-surface datum, 1943: Jan. 2, 9.03; Mar. 1, 8.81. Water levels, in feet above mean sea level, 1943: Jan. 2, 56.84; Mar. 1, 57.06.

N1682 (*906, p. 151, 936, p. 171; 944, p. 151). Nassau County Department of Public Works. On southwest corner of Crocus and Elm Avenues, Bellerose. Land-surface datum is 83.11 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	40.82	May 1	39.60	July 31	40.05	Nov. 1	40.88
30	40.58	29	39.63	Aug. 31	40.30	29	40.50
Mar. 1	40.37	June 26	39.69	Sept.27	40.68	Dec. 31	40.58
27	40.10						

Water level, in feet above mean sea level, 1943

Jan. 2	42.29	May 1	43.51	July 31	43.06	Nov. 1	42.23
30	42.53	29	43.48	Aug. 31	42.81	29	42.61
Mar. 1	42.74	June 26	42.42	Sept.27	42.43	Dec. 31	42.53
27	43.01						

N1683 (*906, p. 151; 936, p. 171; 944, p. 151). Nassau County Department of Public Works. At northwest corner of Sixth and Stewart Avenue, New Hyde Park. Land-surface datum is 83.03 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	28.32	May 1	27.11	July 31	27.64	Nov. 1	28.33
Mar. 1	27.72	31	27.32	Aug. 30	27.93	29	28.20
27	27.40	June 26	27.37	Sept.27	28.32	Dec. 31	28.49

Water level, in feet above mean sea level, 1943

Jan. 2	54.71	May 1	55.92	July 31	55.39	Nov. 1	54.70
Mar. 1	55.31	31	55.71	Aug. 30	55.10	29	54.83
27	55.63	June 26	55.66	Sept.27	54.71	Dec. 31	54.54

N1684 (*906, p. 151; 936, p. 172; 944, p. 151). Nassau County Department of Public Works. About 150 feet west of Madison Avenue and 690 feet north of Steward Avenue, Garden City. Land-surface datum is 89.53 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	32.81	May 1	30.93	July 29	31.76	Nov. 1	33.09
Mar. 1	31.80	29	31.28	Aug. 30	32.28	29	32.67
27	31.44	June 26	31.41	Sept.27	32.68	Dec. 31	32.78

Water level, in feet above mean sea level, 1943

Jan. 2	56.72	May 1	58.60	July 29	57.77	Nov. 1	56.44
Mar. 1	57.73	29	58.25	Aug. 30	57.25	29	56 86
27	58.09	June 26	58.12	Sept.27	56.85	Dec. 31	56.75

N1685 (*840, p. 265; 845, p. 313; 886, p. 490; 906, p. 124; *936, p. 172; 944, p. 152). Nassau County Department of Public Works. Sunrise Highway about 200 feet west of Long Beach Avenue, Freeport. Measurements discontinued on Feb. 27, 1943. Land-surface datum is 20.60 feet above mean sea level. Water levels, in feet below land-surface datum, 1943: Jan. 2, 13.33; Jan. 30, 11.94; Feb. 27, 12.36. Water levels, in feet above mean sea level, 1943: Jan. 2, 7.27; Jan. 30, 8.66; Feb. 27, 8.24.

N1828 (*886, p. 499; 906, p. 136; 936, p. 164; *944, p. 152). Nassau County Department of Public Works. On northwest side of Melville Road near Suffolk County line, Farmingdale. Land-surface datum is 81.89 feet above mean sea level.

N1828. Nassau County Department of Public Works--Continued.

Water level at noon in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	23.07	22.48	21.85	21.24	21.65	.....	.....	.....	22.99	22.75	22.50	21.73
2	23.00	22.49	21.85	21.23	21.68	.....	22.13	.....	23.00	22.76	22.41	21.76
3	22.90	22.52	21.85	21.24	21.65	.....	22.14	.....	23.01	22.79	22.29	21.79
4	22.76	22.52	21.86	21.28	21.69	21.94	22.15	.....	23.03	22.82	22.25	21.81
5	22.65	22.52	21.87	21.27	21.70	21.94	22.06	.....	23.05	22.84	22.15	21.83
6	22.59	22.53	21.88	21.28	21.70	21.95	22.15	22.61	23.06	22.86	22.05	21.84
7	.....	22.44	21.83	21.33	21.71	21.95	22.17	22.62	23.08	22.88	22.07	21.86
8	22.40	22.43	21.88	21.34	21.72	21.95	22.19	22.64	23.10	22.89	22.05	21.88
9	22.37	22.43	21.91	21.35	21.74	21.96	22.15	22.65	23.12	22.90	21.98	21.91
10	22.35	22.43	21.89	21.35	21.74	21.97	22.20	22.61	23.14	22.92	21.98	.....
11	22.32	22.38	21.86	21.38	21.75	21.97	22.21	22.67	23.16	22.94	21.98	.....
12	22.27	22.36	21.86	21.39	21.74	21.97	22.22	22.70	23.17	22.96	21.94	.....
13	22.27	22.34	21.88	21.38	21.75	21.97	22.24	22.71	23.20	22.98	21.89	.....
14	22.26	22.28	21.91	21.38	21.77	21.93	22.24	22.72	23.21	22.99	21.86	.....
15	22.21	22.28	21.91	21.45	.....	21.94	22.26	22.73	22.68	23.01	21.80	.....
16	22.21	22.28	21.85	21.46	.....	21.93	22.27	22.75	22.79	22.87	21.74	.....
17	22.22	22.23	21.81	21.46	.....	21.95	22.29	22.76	22.70	22.97	21.70	22.17
18	22.23	22.18	21.82	21.47	21.81	21.95	22.30	22.77	22.66	23.00	21.67	22.17
19	22.23	22.13	21.80	21.47	21.81	.....	22.31	22.79	22.64	23.01	21.63	22.18
20	22.28	22.06	21.73	21.45	21.80	.....	22.33	22.80	22.61	23.03	21.60	22.21
21	22.29	22.00	21.66	21.49	21.82	.....	22.34	22.82	22.60	23.05	21.59	22.23
22	22.32	21.96	21.58	21.52	.....	.....	22.35	22.84	22.60	23.06	21.57	22.25
23	22.32	21.93	21.51	21.55	.....	.....	22.38	22.86	22.60	23.06	21.57	22.28
24	22.33	21.89	21.45	21.56	.....	.....	.....	22.87	22.60	23.08	21.57	22.29
25	22.33	21.88	21.38	21.56	.....	22.03	.....	22.88	22.62	23.10	21.58	.....
26	22.39	21.87	21.34	21.57	.....	.....	.....	22.90	22.64	23.11	21.60	.....
27	22.42	21.86	21.31	21.58	.....	.....	.....	22.92	22.67	22.89	21.61	22.30
28	22.44	21.84	21.29	21.60	21.89	.....	.....	22.93	22.69	22.96	21.64	22.37
29	22.46	.....	21.29	21.63	.....	.....	22.48	22.95	22.71	22.85	21.68	22.39
30	22.47	.....	21.27	21.33	.....	.....	22.48	22.96	22.73	22.74	21.70	22.41
31	22.48	.....	21.25	.....	.....	.....	.....	22.98	.....	22.62	.....	22.42

Water level at noon, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	58.82	59.41	60.04	60.65	60.24	.....	.....	.....	58.90	59.14	59.39	60.16
2	58.89	59.40	60.04	60.66	60.21	.....	59.76	.....	58.89	59.13	59.48	60.13
3	58.99	59.37	60.04	60.65	60.24	.....	59.75	.....	58.88	59.10	59.60	60.10
4	59.13	59.37	60.03	60.61	60.20	59.95	59.74	.....	58.86	59.07	59.64	60.08
5	59.24	59.37	60.02	60.62	60.19	59.95	59.83	.....	58.84	59.05	59.74	60.06
6	59.30	59.36	60.01	60.61	60.19	59.94	59.74	59.28	58.83	59.03	59.84	60.05
7	.....	59.45	60.07	60.56	60.18	59.94	59.72	59.27	58.81	59.01	59.82	60.03
8	59.49	59.46	60.01	60.55	60.17	59.94	59.70	59.25	58.79	59.00	59.84	60.01
9	59.52	59.46	59.98	60.54	60.15	59.93	59.74	59.24	58.77	58.99	59.91	59.98
10	59.54	59.46	60.00	60.54	60.15	59.92	59.69	59.28	58.75	58.97	59.91	.....
11	59.57	59.51	60.03	60.51	60.14	59.92	59.68	59.22	58.73	58.95	59.91	.....
12	59.62	59.53	60.03	60.50	60.15	59.92	59.67	59.19	58.72	58.93	59.95	.....
13	59.62	59.55	60.01	60.51	60.14	59.92	59.65	59.18	58.69	58.91	60.00	.....
14	59.63	59.61	59.98	60.51	60.12	59.96	59.65	59.17	58.68	58.90	60.03	.....
15	59.68	59.61	59.98	60.44	.....	59.95	59.63	59.16	59.21	58.88	60.09	.....
16	59.68	59.61	60.04	60.43	.....	59.96	59.62	59.14	59.10	59.02	60.15	.....
17	59.67	59.66	60.08	60.43	.....	59.94	59.60	59.13	59.19	58.92	60.19	59.72
18	59.66	59.71	60.07	60.42	60.08	59.94	59.59	59.12	59.23	58.89	60.22	59.72
19	59.66	59.76	60.09	60.42	60.08	.....	59.58	59.10	59.25	58.88	60.26	59.71
20	59.61	59.83	60.16	60.44	60.09	.....	59.56	59.09	59.28	58.86	60.29	59.68
21	59.60	59.89	60.23	60.40	60.07	.....	59.55	59.07	59.29	58.84	60.30	59.66
22	59.57	59.93	60.31	60.37	.....	.....	59.54	59.05	59.29	58.83	60.32	59.64
23	59.57	59.96	60.38	60.34	.....	.....	59.51	59.03	59.29	58.83	60.32	59.61
24	59.56	60.00	60.44	60.33	.....	.....	.....	59.02	59.29	58.81	60.32	59.60
25	59.56	60.01	60.51	60.33	.....	59.86	.....	59.01	59.27	58.79	60.31	.....
26	59.50	60.02	60.55	60.32	.....	.....	.....	58.99	59.25	58.78	60.29	.....
27	59.47	60.03	60.58	60.31	.....	.....	.....	58.97	59.22	59.00	60.28	59.59
28	59.45	60.05	60.60	60.29	60.00	.....	.....	58.96	59.20	58.93	60.25	59.52
29	59.43	.....	60.60	60.26	.....	.....	59.41	58.94	59.18	59.04	60.21	59.50
30	59.42	.....	60.62	60.26	.....	.....	59.41	58.93	59.16	59.15	60.19	59.48
31	59.41	.....	60.64	.....	.....	.....	.....	58.91	.....	59.27	.....	59.47

N1829 (*845, p. 321; 886, p. 496; 906, p. 131; 936, p. 160; *944, p. 153). Nassau County Department of Public Works. On south side of Stewart Avenue, 700 feet west of Newbridge Avenue, Salisbury. Land-surface datum is 76.67 feet above mean sea level.

Water level at noon, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	9.22	9.17	8.87	8.38	8.72	9.03	9.27	9.59	9.96	10.25	10.04	9.96
2	9.20	9.21	8.80	8.38	8.74	8.98	9.29	9.60	9.97	10.27	10.03	9.96
3	9.19	9.23	8.78	8.42	9.71	9.03	9.30	9.61	9.99	10.29	10.00	9.98
4	9.15	9.20	8.83	8.45	8.75	9.04	9.30	9.62	10.00	10.31	10.03	9.99
5	9.17	9.07	8.85	8.41	8.77	9.05	9.18	9.63	10.01	10.32	10.04	10.00
6	9.17	8.70	8.86	8.46	8.78	9.06	9.28	9.65	10.02	10.34	9.91	10.01
7	9.16	8.37	8.25	8.49	8.78	9.06	9.30	9.66	10.03	10.35	9.92	10.01
8	9.14	8.50	8.45	8.48	8.79	9.05	9.32	9.66	10.06	10.36	9.91	10.02
9	9.12	8.57	8.52	8.50	8.82	9.07	9.32	9.68	10.08	10.37	9.87	10.02
10	9.12	8.63	8.52	8.50	8.82	9.07	9.33	9.58	10.10	10.39	9.88	10.03
11	9.10	8.56	8.52	8.52	8.83	9.08	9.35	9.68	10.11	10.41	9.87	10.03
12	9.09	8.47	8.53	8.51	8.83	9.10	9.36	9.70	10.12	10.42	9.86	10.03
13	9.11	8.51	8.56	8.51	8.84	9.10	9.37	9.71	10.13	10.43	9.84	10.05
14	9.10	8.31	8.61	8.52	8.86	9.10	9.38	9.71	10.14	10.44	9.86	10.06
15	9.07	8.43	8.62	8.54	8.87	9.11	9.39	9.73	9.74	10.45	9.85	10.07
16	9.08	8.51	8.55	8.57	8.88	9.11	9.41	9.74	9.95	9.99	9.84	10.07
17	9.09	8.53	8.25	8.58	8.89	9.13	9.43	9.76	10.02	10.12	9.85	10.08
18	9.10	8.58	8.27	8.60	8.90	9.12	9.43	9.77	10.07	10.17	9.85	10.09
19	9.05	8.59	8.29	8.60	8.91	9.14	9.45	9.79	10.09	10.20	9.85	10.09
20	9.06	8.59	8.29	8.57	8.83	9.15	9.46	9.81	10.11	10.23	9.85	10.10
21	9.05	8.60	8.32	8.60	8.89	9.16	9.47	9.82	10.13	10.26	9.86	10.11
22	9.06	8.62	8.31	8.62	8.92	9.17	9.47	9.83	10.15	10.27	9.86	10.13
23	9.06	8.64	8.33	8.64	8.94	9.18	9.49	9.84	10.16	10.30	9.86	10.16
24	9.08	8.65	8.33	8.64	8.94	9.19	9.50	9.86	10.18	10.33	9.88	10.17
25	9.07	8.69	8.33	8.64	8.97	9.20	9.52	9.88	10.20	10.35	9.90	10.18
26	9.11	8.72	8.34	8.65	8.95	9.21	9.53	9.89	10.22	10.35	9.90	10.19
27	9.14	8.72	8.34	8.67	8.97	9.21	9.54	9.90	10.23	9.98	9.90	9.67
28	9.14	8.73	8.36	8.66	9.00	9.22	9.55	9.89	10.25	.....	9.92	9.90
29	9.17	....	8.40	8.70	9.01	9.24	9.55	9.91	10.26	10.03	9.94	9.98
30	9.19	....	8.38	8.68	9.02	9.25	9.56	9.93	10.27	10.03	9.94	10.04
31	9.19	....	8.39	....	9.03	....	9.58	9.94	.....	10.02	....	10.06

Water level at noon, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	67.45	67.50	67.89	68.29	67.95	67.64	67.40	67.08	66.71	66.42	66.63	66.71
2	67.47	67.46	67.87	68.29	67.93	67.69	67.38	67.07	66.70	66.40	66.64	66.71
3	67.48	67.44	67.89	68.25	67.96	67.64	67.37	67.06	66.68	66.38	66.67	66.69
4	67.52	67.47	67.84	68.22	67.92	67.63	67.37	67.05	66.67	66.36	66.64	66.68
5	67.50	67.60	67.82	68.26	67.90	67.62	67.49	67.04	66.66	66.35	66.63	66.67
6	67.50	67.97	67.81	68.21	67.89	67.61	67.39	67.02	66.65	66.33	66.76	66.66
7	67.51	68.30	68.42	68.18	67.89	67.61	67.37	67.01	66.64	66.32	66.75	66.66
8	67.53	68.17	68.22	68.19	67.88	67.62	67.35	67.01	66.61	66.31	66.76	66.65
9	67.55	68.10	68.15	68.17	67.85	67.60	67.35	66.99	66.59	66.30	66.80	66.65
10	67.55	68.04	68.15	68.17	67.85	67.60	67.34	67.09	66.57	66.28	66.79	66.64
11	67.57	68.11	68.15	68.15	67.84	67.59	67.32	66.99	66.56	66.26	66.80	66.64
12	67.58	68.20	68.14	68.16	67.84	67.57	67.31	66.97	66.55	66.25	66.81	66.64
13	67.56	68.16	68.11	68.16	67.83	67.57	67.30	66.96	66.54	66.24	66.83	66.62
14	67.57	68.36	68.06	68.15	67.81	67.57	67.29	66.96	66.53	66.23	66.81	66.61
15	67.60	68.24	68.05	68.13	67.80	67.56	67.28	66.94	66.93	66.22	66.82	66.60
16	67.59	68.16	68.12	68.10	67.79	67.56	67.26	66.93	66.72	66.68	66.83	66.60
17	67.58	68.14	68.42	68.09	67.78	67.54	67.24	66.91	66.65	66.55	66.82	66.59
18	67.57	68.09	68.40	68.07	67.77	67.55	67.24	66.90	66.60	66.50	66.82	66.58
19	67.62	68.08	68.38	68.07	67.76	67.53	67.22	66.88	66.58	66.47	66.82	66.58
20	67.61	68.08	68.38	68.10	67.84	67.52	67.21	66.86	66.56	66.44	66.82	66.57
21	67.62	68.07	68.35	68.07	67.78	67.51	67.20	66.85	66.54	66.41	66.81	66.56
22	67.61	68.05	68.36	68.05	67.75	67.50	67.20	66.84	66.52	66.40	66.81	66.54
23	67.61	68.03	68.34	68.03	67.73	67.49	67.18	66.83	66.51	66.37	66.81	66.51
24	67.59	68.02	68.34	68.03	67.73	67.48	67.17	66.81	66.49	66.34	66.79	66.50
25	67.60	67.98	68.34	68.03	67.70	67.47	67.15	66.79	66.47	66.32	66.77	66.49
26	67.56	67.95	68.33	68.02	67.72	67.46	67.14	66.78	66.45	66.32	66.77	66.48

N1829. Nassau County Department of Public Works--Continued.

Water level at noon, in feet above mean sea level, 1947
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
27	67.53	67.95	68.33	68.00	67.70	67.46	67.13	66.77	66.44	66.69	66.77	67.00
28	67.53	67.94	68.31	68.01	67.67	67.45	67.12	66.78	66.42	.....	66.75	66.77
29	67.50	.....	68.27	67.97	67.66	67.43	67.12	66.76	66.41	66.64	66.73	66.69
30	67.48	.....	68.29	67.99	67.65	67.42	67.11	66.74	66.40	66.64	66.73	66.63
31	67.48	.....	68.28	.....	67.64	.....	67.09	66.73	.....	66.65	.....	66.61

N1830 (*886, p. 493; 906, p. 128; 936, p. 156; 944, p. 153). Nassau County Department of Public Works. On west side of Tyson Avenue just north of Greedmoor Spur of Long Island Railroad, Floral Park. Land-surface datum is 95.02 feet above mean sea level.

Water level at noon, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	45.29	45.37	45.20	44.81	44.50	44.30	44.46	44.67	44.96	45.26	45.10	.....
2	45.28	45.39	45.20	44.80	44.50	44.29	44.68	44.68	44.97	45.27	.....	.....
3	45.27	45.40	45.18	44.80	44.48	44.29	44.49	44.69	44.98	45.28	.....	.....
4	45.26	45.38	45.20	44.79	44.48	44.28	44.50	44.69	45.00	45.29	.....	.....
5	45.28	45.38	45.19	44.77	44.49	44.28	44.50	44.70	45.01	45.30	.....	.....
6	45.30	45.37	45.19	44.76	44.48	44.28	44.50	44.71	45.02	45.31	.....	.....
7	45.30	45.35	45.18	44.76	44.47	44.27	44.49	44.72	45.03	45.32	.....	.....
8	45.31	45.33	45.17	44.76	44.47	44.28	44.49	44.73	45.04	45.32	.....	.....
9	45.32	45.31	45.16	44.74	44.49	44.27	44.50	44.74	45.05	45.33	.....	.....
10	45.33	45.29	45.13	44.73	44.49	44.27	44.51	44.75	45.06	.....	.....	.....
11	45.35	45.26	45.11	44.72	44.48	44.26	44.51	44.76	45.08	.....	.....	.....
12	45.35	45.28	45.09	44.71	44.47	44.27	44.52	44.76	45.09	.....	.....	.....
13	45.36	.....	45.09	44.69	44.48	44.27	44.53	44.76	45.09	.....	.....	.....
14	45.37	45.26	45.08	44.69	44.48	44.29	44.54	44.75	45.11	.....	.....	.....
15	45.36	45.27	45.08	44.68	44.47	44.29	44.54	44.75	45.12	.....	.....	.....
16	45.37	45.26	45.07	44.68	44.46	44.28	44.55	44.76	45.12	.....	.....	.....
17	45.39	45.25	45.05	44.66	44.45	44.30	44.57	44.77	45.13	.....	.....	.....
18	45.40	45.25	45.02	44.65	44.44	44.30	44.57	44.78	45.13	.....	.....	.....
19	45.38	45.23	44.98	44.63	44.43	44.31	44.58	44.79	45.13	.....	.....	.....
20	45.41	45.22	44.96	44.62	44.43	44.32	44.59	44.80	45.13	.....	.....	.....
21	45.41	45.21	44.94	44.60	44.42	44.33	44.60	44.81	45.14	.....	.....	.....
22	45.40	45.21	44.92	44.60	44.41	44.34	44.61	44.82	45.15	.....	.....	.....
23	45.39	45.21	44.91	44.58	44.40	44.36	44.62	44.84	45.16	.....	.....	.....
24	45.40	45.20	44.89	44.59	44.39	44.37	44.63	44.85	45.17	.....	.....	.....
25	45.39	45.22	44.88	44.55	44.37	44.38	44.63	44.86	45.18	.....	.....	.....
26	45.40	45.21	44.87	44.54	44.36	44.39	44.64	44.87	45.20	.....	.....	.....
27	45.42	45.20	44.85	44.54	44.35	44.40	44.64	44.88	45.22	.....	.....	.....
28	45.41	45.20	44.84	44.52	44.34	44.41	44.65	44.90	45.23	.....	.....	.....
29	45.40	.....	44.84	44.52	44.32	44.42	44.66	.....	45.24	.....	a45.14	.....
30	45.41	.....	44.83	44.50	44.31	44.45	44.67	.....	45.25	.....	.....	.....
31	45.39	.....	44.82	.....	44.31	.....	44.68	44.95	.....	.....	.....	a45.40

Water level at noon, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	49.73	49.65	49.82	50.21	50.52	50.72	50.56	50.35	50.06	49.76	49.92	.....
2	49.74	49.63	49.82	50.22	50.52	50.73	50.54	50.34	50.05	49.75	.....	.....
3	49.75	49.62	49.84	50.22	50.54	50.73	50.53	50.33	50.04	49.74	.....	.....
4	49.76	49.64	49.82	50.23	50.54	50.74	50.52	50.33	50.02	49.73	.....	.....
5	49.74	49.64	49.83	50.25	50.53	50.74	50.52	50.32	50.01	49.72	.....	.....
6	49.72	49.65	49.83	50.26	50.54	50.74	50.52	50.31	50.00	49.71	.....	.....
7	49.72	49.67	49.84	50.26	50.55	50.75	50.53	50.30	49.99	49.70	.....	.....
8	49.71	49.69	49.85	50.26	50.55	50.74	50.53	50.29	49.98	49.70	.....	.....
9	49.70	49.71	49.86	50.28	50.53	50.75	50.52	50.28	49.97	49.69	.....	.....
10	49.69	49.73	49.89	50.29	50.53	50.75	50.51	50.27	49.96	.....	.....	.....
11	49.67	49.76	49.91	50.30	50.54	50.76	50.51	50.26	49.94	.....	.....	.....
12	49.67	49.74	49.93	50.31	50.55	50.75	50.50	50.26	49.93	.....	.....	.....
13	49.66	.....	49.93	50.33	50.54	50.75	50.49	50.26	49.93	.....	.....	.....
14	49.65	49.76	49.94	50.33	50.54	50.73	50.48	50.27	49.91	.....	.....	.....

a Tape measurements.

N1830. Nassau County Department of Public Works--Continued.

Water level at noon, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
15	49.66	49.75	49.94	50.34	50.55	50.73	50.48	50.27	49.90	.....	.....	.....
16	49.65	49.76	49.95	50.34	50.56	50.74	50.47	50.26	49.90	.....	.....	.....
17	49.63	49.77	49.97	50.36	50.57	50.72	50.45	50.25	49.89	.....	.....	.....
18	49.62	49.77	50.00	50.37	50.58	50.72	50.45	50.24	49.89	.....	.....	.....
19	49.64	49.79	50.04	50.39	50.59	50.71	50.44	50.23	49.89	.....	.....	.....
20	49.61	49.80	50.06	50.40	50.59	50.70	50.43	50.22	49.89	.....	.....	.....
21	49.61	49.81	50.08	50.42	50.60	50.69	50.42	50.21	49.88	.....	.....	.....
22	49.62	49.81	50.10	50.42	50.61	50.68	50.41	50.20	49.87	.....	.....	.....
23	49.63	49.81	50.11	50.44	50.62	50.66	50.40	50.18	49.86	.....	.....	.....
24	49.62	49.82	50.13	50.45	50.63	50.65	50.39	50.17	49.85	.....	.....	.....
25	49.63	49.80	50.14	50.47	50.65	50.64	50.39	50.16	49.84	.....	.....	.....
26	49.62	49.81	50.15	50.48	50.66	50.63	50.38	50.15	49.82	.....	.....	.....
27	49.60	49.82	50.17	50.48	50.67	50.62	50.38	50.14	49.80	.....	.....	.....
28	49.61	49.82	50.18	50.50	50.68	50.51	50.37	50.12	49.79	.....	.....	.....
29	49.62	.....	50.18	50.50	50.70	50.60	50.36	.....	49.78	.....	a49.88	.....
30	49.61	.....	50.19	50.52	50.71	50.57	50.35	.....	49.77	.....	.....	.....
31	49.63	.....	50.20	.....	50.71	.....	50.34	50.07	.....	.....	.....	a49.62

Queens County

Q273 (*817, p. 201; *840, p. 268; 845, p. 315; *886, p. 507; 906, p. 153; 936, p. 173; 944, p. 154). New York City Department of Water Supply, Gas and Electricity well 1. On south side of Grand Central Parkway about 1,000 feet east of Queens Boulevard, Forest Hills. Land-surface datum is 25.63 feet above mean sea level.

Water level at noon, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	21.47	21.23	20.83	20.79	20.94	20.99	21.43	21.24	21.48	21.43	21.48	21.11
2	21.55	21.25	20.93	20.81	21.11	20.93	21.45	21.27	21.47	21.36	21.42	21.13
3	21.58	21.34	20.78	20.99	20.99	20.93	21.40	21.27	21.57	21.44	21.24	21.15
4	21.40	21.22	20.84	21.16	21.00	21.02	21.31	21.28	21.60	21.53	21.27	21.16
5	20.51	21.12	20.86	21.04	21.13	21.08	21.13	21.28	21.54	21.58	21.27	21.15
6	21.61	21.10	20.87	21.09	21.11	21.15	21.14	21.38	21.48	21.63	21.17	21.21
7	21.64	20.96	20.69	21.25	21.03	21.08	21.18	21.40	21.43	21.54	21.25	21.08
8	21.57	21.04	20.93	21.22	21.05	21.09	21.17	21.35	21.44	21.46	21.22	21.15
9	21.48	21.19	21.12	21.22	21.14	21.07	21.17	21.36	21.47	21.38	21.04	21.14
10	21.48	21.26	21.01	21.17	21.20	21.03	21.18	21.31	21.54	21.51	21.19	21.16
11	21.47	21.06	20.79	21.21	21.13	20.96	21.20	21.39	21.59	21.67	21.25	21.09
12	21.38	21.15	20.64	21.19	20.98	20.01	21.20	21.44	21.61	21.63	21.25	21.10
13	21.49	21.15	20.69	21.05	20.98	20.98	21.15	21.37	21.61	21.55	21.16	21.12
14	21.50	20.98	20.79	21.07	21.09	21.03	21.11	21.29	21.56	21.50	21.28	21.28
15	21.31	21.15	20.85	21.23	21.21	21.05	21.09	21.39	21.38	21.45	21.31	21.37
16	21.34	21.29	20.70	21.32	21.22	20.97	21.14	21.33	21.37	21.19	21.16	21.38
17	21.47	21.24	20.62	21.24	21.15	21.03	21.23	21.32	21.46	21.21	21.22	21.35
18	21.55	21.28	20.67	21.29	21.08	21.03	21.24	21.41	21.60	21.38	21.30	21.25
19	21.41	21.19	20.68	21.23	21.01	21.08	21.30	21.47	21.60	21.38	21.27	21.19
20	21.63	21.03	20.59	21.03	20.96	21.09	21.31	21.48	21.50	21.41	21.26	21.08
21	21.60	20.95	20.69	21.02	20.94	21.10	21.31	21.49	21.44	21.45	21.26	21.15
22	21.54	21.01	20.70	21.11	20.94	21.12	21.25	21.47	21.42	21.40	21.19	21.11
23	21.49	21.04	20.72	21.20	21.07	21.17	21.35	21.48	21.42	21.42	21.23	21.29
24	21.48	20.97	20.75	21.17	21.08	21.28	21.38	21.45	21.42	21.48	21.25	21.45
25	21.47	21.04	20.68	21.11	20.99	21.27	21.37	21.43	21.45	21.55	21.28	21.42
26	21.55	21.01	20.67	21.10	20.87	21.28	21.35	21.44	21.51	21.45	21.29	21.34
27	21.67	20.79	20.61	21.15	20.90	21.30	21.29	21.54	21.55	21.19	21.15	21.11
28	21.63	20.75	20.64	20.93	20.97	21.27	21.23	21.53	21.57	21.11	21.12	21.13
29	21.51	.....	20.80	20.98	21.01	21.21	21.21	21.58	21.61	21.20	21.18	21.20
30	21.52	.....	20.79	21.00	21.03	21.33	21.18	21.54	21.60	21.25	21.12	21.23
31	21.40	.....	20.73	.....	21.04	.....	21.21	21.51	.....	21.34	.....	21.23

a Tape measurements.

Q273. New York City Department of Water Supply, Gas and Electricity --Continued.

Water level at noon, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.16	4.40	4.80	4.84	4.69	4.64	4.20	4.39	4.15	4.20	4.15	4.52
2	4.08	4.38	4.70	4.82	4.52	4.70	4.18	4.36	4.16	4.27	4.21	4.50
3	4.05	4.29	4.85	4.64	4.64	4.70	4.23	4.36	4.06	4.19	4.39	4.48
4	4.23	4.41	4.79	4.47	4.63	4.61	4.32	4.35	4.03	4.10	4.36	4.47
5	4.12	4.51	4.77	4.59	4.50	4.55	4.50	4.35	4.09	4.05	4.36	4.48
6	4.02	4.53	4.76	4.54	4.52	4.48	4.49	4.25	4.15	4.00	4.46	4.42
7	3.99	4.67	4.94	4.38	4.60	4.55	4.45	4.23	4.20	4.09	4.38	4.55
8	4.06	4.59	4.70	4.41	4.58	4.54	4.46	4.28	4.19	4.17	4.41	4.48
9	4.15	4.44	4.51	4.41	4.49	4.56	4.46	4.27	4.16	4.25	4.59	4.49
10	4.15	4.37	4.62	4.46	4.45	4.60	4.45	4.32	4.09	4.12	4.44	4.47
11	4.16	4.57	4.84	4.42	4.50	4.67	4.43	4.24	4.04	3.96	4.38	4.54
12	4.25	4.48	4.99	4.44	4.65	4.62	4.43	4.19	4.02	4.00	4.38	4.53
13	4.14	4.48	4.94	4.58	4.65	4.65	4.48	4.26	4.02	4.08	4.47	4.51
14	4.13	4.65	4.84	4.56	4.54	4.60	4.52	4.34	4.07	4.13	4.35	4.35
15	4.32	4.48	4.78	4.40	4.42	4.58	4.54	4.33	4.25	4.18	4.32	4.26
16	4.29	4.34	4.93	4.31	4.41	4.66	4.49	4.30	4.26	4.44	4.47	4.25
17	4.16	4.39	5.01	4.39	4.48	4.60	4.40	4.31	4.17	4.42	4.41	4.28
18	4.08	4.35	4.96	4.34	4.55	4.59	4.39	4.22	4.03	4.25	4.33	4.38
19	4.22	4.44	4.95	4.40	4.62	4.55	4.33	4.16	4.03	4.25	4.36	4.44
20	4.00	4.60	5.04	4.60	4.67	4.54	4.32	4.15	4.13	4.22	4.37	4.55
21	4.03	4.68	4.94	4.61	4.69	4.53	4.32	4.14	4.19	4.18	4.37	4.48
22	4.09	4.62	4.93	4.52	4.69	4.51	4.38	4.16	4.21	4.23	4.44	4.52
23	4.14	4.59	4.91	4.43	4.56	4.46	4.28	4.15	4.21	4.21	4.40	4.34
24	4.15	4.66	4.88	4.46	4.55	4.35	4.25	4.18	4.21	4.15	4.38	4.18
25	4.16	4.59	4.95	4.52	4.64	4.36	4.26	4.20	4.18	4.08	4.35	4.21
26	4.08	4.62	4.96	4.53	4.76	4.35	4.28	4.19	4.12	4.18	4.34	4.29
27	3.96	4.84	5.02	4.48	4.73	4.33	4.34	4.09	4.08	4.44	4.48	4.52
28	4.00	4.88	4.99	4.70	4.66	4.36	4.40	4.10	4.06	4.52	4.51	4.50
29	4.12	....	4.83	4.65	4.62	4.42	4.42	4.05	4.02	4.43	4.45	4.43
30	4.11	....	4.84	4.63	4.60	4.30	4.45	4.09	4.03	4.38	4.51	4.40
31	4.23	....	4.90	....	4.59	....	4.42	4.12	....	4.29	....	4.40

Q287 (*886, p. 504; 906, p. 153; 936, p. 174; 944, p. 155). Broad Channel Corporation well 2. On southeast side of Shad Creek Road about 100 feet southwest of Ninth Road, Broad Channel. Land-surface datum is 5.64 feet above mean sea level. Measurements discontinued on May 1, 1943.

Daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	Nov.
1	....	2.73	2.94	3.24	3.01	....
2	a2.66	2.35	2.79	3.21	....	....
3	2.59	2.30	2.85	2.83	....	....
4	2.59	2.59	2.70	2.74	....	....
5	2.35	2.55	2.43	2.94	....	....
6	2.19	2.59	2.38	2.58	....	....
7	2.14	2.84	2.44	2.69	....	....
8	2.22	2.54	2.29	3.00	....	....
9	2.58	2.71	2.24	2.96	....	....
10	2.71	2.91	2.60	3.12	....	....
11	2.87	3.25	2.86	3.21	....	....
12	2.79	2.71	3.05	3.61	....	....
13	2.70	2.97	3.09	3.61	....	....
14	2.81	2.77	3.00	3.01	....	....
15	3.01	a2.77	2.97	2.99	....	....
16	2.98	....	3.22	2.88	....	....
17	2.96	a3.08	3.14	2.78	....	....
18	3.11	a3.01	2.98	2.63	....	....
19	2.79	2.69	2.95	2.74	....	....
20	2.23	2.96	3.24	3.00	....	....
21	2.31	2.94	2.85	2.98	....	....
22	2.46	2.93	2.98	2.81	....	....
23	2.83	2.97	2.94	2.72	....	....

a Estimated

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Q287. Broad Channel Corporation well 2--Continued.

Daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	Nov.
24	2.78	3.10	2.84	2.74	....	....
25	3.03	2.94	2.94	2.80	....	....
26	2.72	3.11	3.04	2.86	....	....
27	2.72	3.48	3.07	2.69	....	a3.07
28	3.06	3.00	3.11	3.76	....	....
29	3.17	....	3.10	2.64	....	....
30	3.06	....	3.08	2.69	....	....
31	2.84	....	3.11	....	....	....

Daily water level, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	Nov.
1	....	8.37	8.58	8.28	b8.65	....
2	b8.30	7.99	8.43	8.85	....	....
3	8.23	7.94	8.49	8.47	....	....
4	8.23	8.23	b8.34	8.38	....	....
5	7.99	8.19	8.07	8.58	....	....
6	7.83	8.23	8.02	8.22	....	....
7	7.78	8.48	8.08	8.33	....	....
8	7.86	8.18	7.93	8.64	....	....
9	8.22	8.35	7.88	8.60	....	....
10	8.35	8.55	8.24	8.76	....	....
11	8.51	8.89	8.50	8.85	....	....
12	8.43	8.35	8.69	9.25	....	....
13	8.34	8.61	8.73	9.25	....	....
14	8.45	8.41	8.64	8.65	....	....
15	8.65	b8.41	8.61	8.63	....	....
16	8.62	....	8.86	8.52	....	....
17	8.60	b8.72	8.78	8.42	....	....
18	8.75	b8.65	8.62	8.27	....	....
19	8.43	8.33	8.59	8.38	....	....
20	7.87	8.60	8.88	8.64	....	....
21	7.95	8.58	8.49	8.62	....	....
22	8.10	8.57	8.62	8.45	....	....
23	8.47	8.61	8.58	8.36	....	....
24	8.42	8.74	8.48	8.38	....	....
25	8.67	8.58	8.58	8.44	....	....
26	8.36	8.75	8.68	8.50	....	....
27	8.36	9.12	8.71	8.33	....	a8.71
28	8.70	8.64	8.75	8.40	....	....
29	8.81	....	8.74	8.28	....	....
30	8.70	....	8.72	8.33	....	....
31	8.48	....	8.75	....	....	....

Q350 (*840, p. 269; 845, p. 315; 886, p. 504; *936, p. 174; 944, p. 155). Aqueduct deep test well of New York Service Corporation. About 0.5 mile south of Rockaway Boulevard. 700 feet east of Centreville Street, and 200 feet north of owner's Aqueduct pumping station, Aqueduct. Land-surface datum is 31.68 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	31.78	Mar. 27	31.44	June 26	32.20	Sept.25	31.02
30	31.74	May 1	31.31	July 31	31.40	Oct. 30	30.95
Feb. 27	31.69	29	31.25	Aug. 28	31.95	Nov. 27	31.05

Water level, in feet above mean sea level, 1943

Jan. 2	-0.10	Mar. 27	+0.24	June 26	-0.52	Sept.25	+0.66
30	-.06	May 1	+.37	July 31	+.28	Oct. 30	+.73
Feb. 27	-.01	29	+.43	Aug. 28	-.27	Nov. 27	+.63

a Tape measurement.
b Estimated.

Q470 (*777; p. 123; *817, p. 201; *840, p. 269; *845, p. 315; *886, p. 505; *906, p. 155; 936, p. 175; 944, p. 156). New York City Department of Water Supply, Gas and Electricity well Bayside 10. About 325 feet south of Northern Boulevard and 100 feet west of Cross Island Parkway, Bayside. Land-surface datum is 12.79 feet above mean sea level.

Water level at noon, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	8.27	8.47	8.33	8.03	8.38	7.76	....	....	9.69	9.37	....	9.53
2	8.28	8.46	8.34	8.02	8.36	7.74	....	....	9.66	9.40	....	9.48
3	8.28	8.47	8.33	8.02	8.31	7.72	....	....	9.66	9.47	....	....
4	8.28	8.46	8.32	8.05	8.24	7.71	....	....	9.67	9.53	....	9.41
5	8.29	8.42	8.35	8.06	8.21	7.71	....	....	9.66	9.55	....	9.39
6	8.33	8.42	8.35	8.06	8.19	7.73	....	....	....	9.60	....	9.37
7	8.41	8.36	8.27	8.11	8.17	7.74	....	8.65	....	9.64	....	9.31
8	8.47	8.36	8.29	8.15	8.16	7.73	....	8.65	....	9.57	....	9.28
9	8.49	8.37	8.32	8.17	8.15	7.73	8.05	8.64	....	8.88	....	9.27
10	8.51	8.40	8.33	8.19	8.18	7.75	8.00	8.63	....	8.85	....	9.28
11	8.50	8.40	8.33	8.20	8.19	7.76	7.98	8.62	9.54	8.84	....	9.30
12	8.49	8.39	8.30	8.23	8.19	7.79	7.96	8.65	9.55	8.83	....	9.31
13	8.51	8.43	8.29	8.22	8.18	7.82	7.93	8.68	9.56	8.80	....	9.29
14	8.54	8.39	8.28	8.21	8.17	7.83	7.90	8.69	9.56	8.78	....	9.30
15	8.55	8.41	8.28	8.26	8.17	7.86	7.86	8.69	9.54	8.76	....	9.35
16	8.56	8.46	8.26	8.33	8.16	7.87	7.85	8.69	9.53	8.67	....	9.41
17	8.57	8.49	8.22	8.38	8.15	7.90	7.85	8.65	9.53	....	....	9.49
18	8.59	8.52	8.16	8.43	8.12	7.92	7.88	8.67	9.56	....	....	9.57
19	8.57	8.55	8.14	8.47	8.09	7.95	7.89	8.71	9.59	....	....	9.60
20	8.60	....	8.11	8.40	8.04	....	7.92	8.78	9.56	....	....	9.61
21	8.67	....	8.07	8.37	8.01	....	7.97	8.86	9.50	....	....	9.64
22	8.70	....	8.06	8.36	7.96	....	8.08	8.93	9.46	....	....	9.65
23	8.70	....	8.04	8.41	7.94	....	8.18	8.99	9.43	8.52	....	9.69
24	8.65	....	8.06	8.43	7.93	....	8.27	9.09	9.41	8.53	9.67	9.80
25	8.62	....	8.06	8.44	7.89	....	8.31	9.25	9.39	8.52	9.67	9.87
26	8.59	...	8.06	8.43	7.83	....	8.36	9.41	9.38	8.44	9.67	9.90
27	8.60	....	8.05	8.44	7.79	....	8.39	9.54	9.37	8.23	9.65	9.86
28	8.62	8.35	8.04	8.44	7.79	....	8.41	9.65	9.37	....	9.66	9.76
29	8.57	....	8.05	8.43	7.78	....	8.46	9.70	9.39	8.19	9.65	9.74
30	8.55	....	8.05	8.41	7.77	....	8.51	9.70	9.39	....	9.59	9.72
31	8.53	....	8.04	....	7.76	....	8.54	9.70	....	....	....	9.59

Water level at noon, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.52	4.32	4.46	4.76	4.41	5.03	....	....	3.10	3.42	....	3.26
2	4.51	4.33	4.45	4.77	4.43	5.05	....	....	3.13	3.39	....	3.31
3	4.51	4.32	4.46	4.77	4.48	5.07	....	....	3.13	3.32	....	....
4	4.51	4.33	4.47	4.74	4.55	5.08	....	....	3.12	3.26	....	3.38
5	4.50	4.37	4.44	4.73	4.58	5.08	....	....	3.13	3.24	....	3.40
6	4.46	4.37	4.44	4.73	4.60	5.06	....	....	....	3.19	....	3.42
7	4.38	4.43	4.52	4.68	4.62	5.05	....	4.14	....	3.15	....	3.48
8	4.32	4.43	4.50	4.64	4.63	5.06	....	4.14	....	3.22	....	3.51
9	4.30	4.42	4.47	4.62	4.64	5.06	4.74	4.15	....	3.91	....	3.52
10	4.28	4.39	4.46	4.60	4.61	5.04	4.79	4.16	....	3.94	....	3.51
11	4.29	4.39	4.46	4.59	4.60	5.03	4.81	4.17	3.25	3.95	....	3.49
12	4.30	4.40	4.49	4.56	4.60	5.00	4.83	4.14	3.24	3.96	....	3.48
13	4.28	4.36	4.50	4.57	4.61	4.97	4.86	4.11	3.23	3.99	....	3.50
14	4.25	4.40	4.51	4.58	4.62	4.96	4.89	4.10	3.23	4.01	....	3.49
15	4.24	4.38	4.51	4.53	4.62	4.93	4.93	4.10	3.25	4.03	....	3.44
16	4.23	4.33	4.53	4.46	4.62	4.92	4.94	4.10	3.26	4.12	....	3.38
17	4.22	4.30	4.57	4.41	4.64	4.89	4.94	4.14	3.26	....	....	3.30
18	4.20	4.27	4.63	4.36	4.67	4.87	4.91	4.12	3.23	....	....	3.22
19	4.22	4.24	4.65	4.32	4.70	4.84	4.90	4.08	3.20	....	....	3.19
20	4.19	....	4.68	4.39	4.75	....	4.87	4.01	3.23	....	....	3.18
21	4.12	....	4.72	4.42	4.78	....	4.82	3.93	3.29	....	....	3.15
22	4.09	....	4.73	4.43	4.83	....	4.71	3.86	3.33	....	....	3.14
23	4.09	....	4.75	4.38	4.85	....	4.61	3.80	3.36	4.27	....	3.10
24	4.14	....	4.73	4.36	4.86	....	4.52	3.70	3.38	4.26	3.12	2.99

Q470. New York City Department of Water Supply, Gas and Electricity--Continued.

Water level at noon, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
25	4.17	....	4.73	4.35	4.90	....	4.48	3.54	3.40	4.27	3.12	2.92
26	4.20	....	4.73	4.36	4.96	....	4.43	3.38	3.41	4.35	3.12	2.89
27	4.19	....	4.74	4.35	5.00	....	4.40	3.25	3.42	4.56	3.14	2.93
28	4.17	4.44	4.75	4.35	5.00	....	4.38	3.14	3.42	....	3.13	3.02
29	4.22	....	4.74	4.36	5.01	....	4.33	3.09	3.40	4.60	3.14	3.05
30	4.24	....	4.74	4.38	5.02	....	4.28	3.09	3.40	....	3.20	3.07
31	4.26	....	4.75	4.41	5.03	....	4.25	3.09	....	....	....	3.20

Q471 (*906, p. 155; 936, p. 176; 944, p. 157). New York City Department of Water Supply, Gas and Electricity well Bayside 11. About 310 feet south of Northern Boulevard and 110 feet west of Cross Island Parkway (Belt Parkway), Bayside. Land-surface datum is 12.79 feet above mean sea level.

Water level, in feet above land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	3.06	Mar. 27	3.33	June 26	3.79	Sept.25	3.91
30	3.08	May 1	3.46	July 31	3.98	Oct. 30	3.08
Feb. 27	3.21	29	3.64	Aug. 28	3.78	Nov. 27	2.24

Water level, in feet above mean sea level, 1943

Jan. 2	15.85	Mar. 27	16.12	June 26	16.58	Sept.25	16.70
30	15.87	May 1	16.25	July 31	16.77	Oct. 30	15.87
Feb. 27	16.00	29	16.43	Aug. 28	16.57	Nov. 27	15.03

Q543 (*840, p. 271; *845, p. 316; *886, p. 506; 906, p. 156; 936, p. 176; 944, p. 157). New York City Department of Water Supply, Gas and Electricity well Rockaway Park 3. Rockaway Beach Boulevard and Beach 110th Street, Rockaway Park. Land-surface datum is 7.40 feet above mean sea level.

Daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2.8	2.8	2.7	3.4	2.9	3.1	2.0	1.5	1.1	1.6	2.2	2.3
2	2.6	2.3	2.7	3.4	2.8	3.3	1.8	1.5	1.2	1.5	2.3	2.2
3	2.6	2.5	3.0	3.1	3.3	3.3	1.8	1.4	1.3	1.5	2.3	2.3
4	2.7	3.0	2.3	3.0	3.2	3.2	2.0	1.5	1.1	1.7	2.3	2.3
5	2.4	2.9	2.3	3.1	3.0	3.0	2.2	1.5	1.0	1.6	2.3	1.9
6	2.3	3.3	3.1	2.6	3.1	2.9	2.1	1.4	1.2	1.4	2.3	2.2
7	2.3	3.2	...	2.9	3.3	3.0	2.3	1.5	1.2	1.3	2.2	2.2
8	2.6	2.5	...	3.1	3.1	2.8	2.1	1.5	1.3	1.5	2.7	2.4
9	3.0	2.7	...	3.0	2.9	2.7	2.0	1.5	1.2	1.8	2.7	2.2
10	3.2	3.0	...	3.1	3.1	2.8	2.0	1.5	.9	1.8	2.3	...
11	3.1	3.4	...	3.3	3.3	2.9	1.8	1.4	.9	1.6	2.4	...
12	3.0	2.4	...	3.7	3.4	2.6	1.7	1.3	.8	1.5	2.2	...
13	2.5	2.9	...	3.8	3.2	2.6	1.8	1.4	.9	1.5	...	...
14	2.8	2.7	2.5	3.0	2.9	2.5	1.9	1.4	1.1	1.7	...	...
15	3.2	1.6	2.4	2.8	2.8	2.6	2.0	1.3	1.3	2.0	...	...
16	3.1	2.1	2.7	2.9	2.9	2.6	1.8	1.5	1.0	2.4	...	...
17	3.2	2.2	2.9	2.8	2.9	2.8	1.8	1.2	.8	1.8	...	...
18	3.4	2.2	2.7	2.7	2.9	2.9	1.9	1.2	.7	1.8	...	1.9
19	3.1	2.4	2.9	3.3	3.0	2.7	1.9	1.1	.8	1.9	...	2.1
20	2.0	2.8	3.3	3.5	3.2	2.7	2.1	1.1	1.0	1.8	2.1	1.9
21	2.0	2.9	2.9	3.3	3.3	2.7	2.0	1.2	1.0	2.0	2.2	1.9
22	2.3	2.9	3.2	3.1	3.2	2.8	2.0	1.3	1.2	2.2	1.9	2.0
23	3.1	3.0	3.1	2.9	3.0	2.6	1.8	1.3	1.2	2.1	1.5	1.8
24	2.9	3.0	2.9	2.9	3.0	2.4	1.6	1.3	1.3	2.3	2.2	...
25	3.1	2.9	2.9	3.1	3.2	2.4	1.6	1.4	1.4	2.6	2.1	...
26	2.8	3.1	3.1	3.0	3.4	2.4	1.6	1.4	1.2	3.5	2.2	...
27	2.7	3.4	1.8	2.9	3.2	2.4	1.7	1.5	.9	3.3	2.4	...
28	3.1	3.0	3.1	3.0	3.2	2.5	1.7	1.5	.8	3.0	2.2	...
29	3.3	...	3.0	2.9	3.1	2.3	1.8	1.2	1.2	1.9	2.2	...
30	3.1	...	2.9	3.2	3.0	2.3	1.7	1.2	1.9	1.9	2.6	...
31	2.9	...	3.2	...	3.1	...	1.5	1.1	...	1.9	...	...

Q543. New York City Department of Water Supply, Gas and Electricity--Continued.

Daily water level, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	10.2	10.2	10.1	10.8	10.3	10.5	9.4	8.9	8.5	9.0	9.6	9.7
2	10.0	9.7	10.1	10.8	10.2	10.7	9.2	8.9	8.6	8.9	9.7	9.6
3	10.0	9.9	10.4	10.5	10.7	10.7	9.2	8.8	8.7	8.9	9.7	9.7
4	10.1	10.4	9.7	10.4	10.6	10.6	9.4	8.9	8.5	9.1	9.7	9.7
5	9.8	10.3	9.7	10.5	10.4	10.4	9.6	8.9	8.4	9.0	9.7	9.3
6	9.7	10.7	10.5	10.0	10.5	10.3	9.5	8.8	8.6	8.8	9.7	9.6
7	9.7	10.6	....	10.3	10.7	10.4	9.7	8.9	8.6	8.7	9.6	9.6
8	10.0	9.9	....	10.5	10.5	10.2	9.5	8.9	8.7	8.9	10.1	9.8
9	10.4	10.1	....	10.4	10.3	10.1	9.4	8.9	8.6	9.2	10.1	9.6
10	10.6	10.4	....	10.5	10.5	10.2	9.4	8.9	8.3	9.2	9.7	...
11	10.5	10.8	....	10.7	10.7	10.3	9.2	8.8	8.3	9.0	9.8	...
12	10.4	9.8	....	11.1	10.8	10.0	9.1	8.7	8.2	8.9	9.6	...
13	9.9	10.3	....	11.2	10.6	10.0	9.2	8.8	8.3	8.9	...	...
14	10.2	10.1	9.9	10.4	10.3	9.9	9.3	8.8	8.5	9.1	...	...
15	10.6	9.0	9.8	10.2	10.2	10.0	9.4	8.7	8.7	9.4	...	...
16	10.5	9.5	10.1	10.3	10.3	10.0	9.2	8.9	8.4	9.8	...	...
17	10.6	9.6	10.3	10.2	10.3	10.2	9.2	8.6	8.2	9.2	...	9.3
18	10.8	9.6	10.1	10.1	10.3	10.3	9.3	8.6	8.1	9.2	...	9.3
19	10.5	9.8	10.3	10.7	10.4	10.1	9.3	8.5	8.2	9.3	...	9.5
20	9.4	10.2	10.7	10.9	10.6	10.1	9.5	8.5	8.4	9.2	9.5	9.3
21	9.4	10.3	10.3	10.7	10.7	10.1	9.4	8.6	8.4	9.4	9.6	9.3
22	9.7	10.3	10.6	10.5	10.6	10.2	9.4	8.7	8.6	9.6	9.3	9.4
23	10.5	10.4	10.5	10.3	10.4	10.0	9.2	8.7	8.6	9.5	8.9	9.2
24	10.3	10.4	10.3	10.3	10.4	9.8	9.0	8.7	8.7	9.7	9.6	...
25	10.5	10.3	10.3	10.5	10.6	9.8	9.0	8.8	8.8	10.0	9.5	...
26	10.2	10.5	10.5	10.4	10.8	9.8	9.0	8.8	8.6	10.9	9.6	...
27	10.1	10.8	9.2	10.3	10.6	9.8	9.1	8.9	8.3	10.7	9.8	...
28	10.5	10.4	10.5	10.4	10.6	9.9	9.1	8.9	8.2	10.4	9.6	...
29	10.7	....	10.4	10.3	10.5	9.7	9.2	8.6	8.6	9.3	9.6	...
30	10.5	....	10.3	10.6	10.4	9.7	9.1	8.6	9.3	9.3	10.0	...
31	10.3	....	10.6	....	10.5	....	8.9	8.5	...	9.3	....	...

Q1027 (*944, p. 158). New York City Department of Parks. About 370 feet west of Rodman Street and 35 feet north of 58th Avenue extended, Flushing Meadow Park, Flushing. Land-surface datum is 8.58 feet above mean sea level. Measurements discontinued on May 1, 1943.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	3.25	Jan. 23	3.08	Feb. 14	2.84	Mar. 8	3.07
2	3.26	24	3.09	15	2.99	9	3.06
3	3.22	25	3.13	16	3.07	10	2.99
4	3.16	26	3.23	17	2.99	11	2.89
5	3.19	27	3.25	18	3.00	12	2.82
6	3.19	28	3.25	19	2.92	13	2.88
7	3.16	29	3.13	20	2.84	14	2.89
8	3.14	30	3.16	21	2.83	15	2.87
9	3.09	31	3.10	22	2.91	16	2.81
10	3.07	Feb. 1	3.06	23	2.87	17	2.66
11	3.06	2	3.23	24	2.82	18	2.75
12	3.01	3	3.23	25	2.91	19	2.75
13	3.04	4	3.10	26	2.89	20	2.71
14	3.01	5	3.07	27	2.81	21	2.78
15	2.96	6	3.00	28	2.83	22	2.72
16	3.01	7	2.90	Mar. 1	2.90	23	2.81
17	3.04	8	3.11	2	2.92	24	2.78
18	3.03	9	3.08	3	2.82	25	2.81
19	3.06	10	3.04	4	2.92	26	2.77
20	3.16	11	2.92	5	2.94	27	2.73
21	3.12	12	2.99	6	2.93	28	2.82
22	3.09	13	2.98	7	2.86	29	2.86

Q1027. New York City Department of Parks--Continued.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 30	2.84	Apr. 8	2.95	Apr. 16	3.05	Apr. 24	2.98
31	2.75	9	3.02	17	3.01	25	2.93
Apr. 1	2.76	10	2.98	18	3.05	26	2.96
2	2.77	11	3.04	19	2.98	27	2.99
3	2.92	12	3.00	20	2.83	28	2.91
4	2.95	13	2.90	21	2.84	29	2.96
5	2.89	14	2.98	22	2.96	30	2.94
6	2.97	15	3.04	23	2.94	May 1	a 2.96
7	2.99						

Daily water level, in feet above mean sea level, 1943
(From recorder charts)

Jan. 1	5.33	Feb. 2	5.35	Mar. 2	5.66	Apr. 2	5.81
2	5.32	3	5.35	3	5.76	3	5.66
3	5.36	4	5.48	4	5.66	4	5.63
4	5.42	5	5.51	5	5.64	5	5.69
5	5.39	6	5.58	6	5.65	6	5.61
6	5.39	7	5.68	7	5.72	7	5.59
7	5.42	8	5.47	8	5.51	8	5.63
8	5.44	9	5.50	9	5.52	9	5.56
9	5.49	10	5.54	10	5.59	10	5.60
10	5.51	11	5.66	11	5.69	11	5.54
11	5.52	12	5.59	12	5.76	12	5.58
12	5.57	13	5.60	13	5.70	13	5.68
13	5.54	14	5.74	14	5.69	14	5.60
14	5.57	15	5.59	15	5.71	15	5.54
15	5.62	16	5.51	16	5.77	16	5.53
16	5.57	17	5.59	17	5.92	17	5.57
17	5.54	18	5.58	18	5.83	18	5.53
18	5.55	19	5.66	19	5.83	19	5.60
19	5.52	20	5.74	20	5.87	20	5.75
20	5.42	21	5.75	21	5.80	21	5.74
21	5.46	22	5.67	22	5.86	22	5.62
22	5.49	23	5.71	23	5.77	23	5.64
23	5.50	24	5.76	24	5.80	24	5.60
24	5.49	25	5.67	25	5.77	25	5.65
25	5.45	26	5.69	26	5.81	26	5.62
26	5.35	27	5.77	27	5.85	27	5.59
27	5.33	28	5.75	28	5.76	28	5.67
28	5.33	29	....	29	5.72	29	5.62
29	5.45	30	....	30	5.74	30	5.64
30	5.42	31	....	31	5.83	31	....
31	5.48	Mar. 1	5.68	Apr. 1	5.82	May 1	a5.62
Feb. 1	5.52						

Q1089 (*840, p. 274; 845, p. 318; *886, p. 506; *936, p. 177; 944, p. 158). New York City Department of Water Supply, Gas and Electricity. On north side of North Conduit Avenue, about 800 feet east of Far Rockaway Branch of Long Island Railroad, Aqueduct. Land-surface datum is 20.51 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	18.97	Mar. 27	18.77	June 26	18.89	Sept.25	18.77
30	18.86	May 1	18.86	July 31	18.78	Oct. 30	18.06
Feb. 27	18.90	29	18.60	Aug. 28	18.86	Nov. 27	18.50

Water level, in feet above mean sea level, 1943

Jan. 2	1.54	Mar. 27	1.74	June 26	1.62	Sept.25	1.74
30	1.65	May 1	1.65	July 31	1.73	Oct. 30	2.45
Feb. 27	1.61	29	1.91	Aug. 28	1.65	Nov. 27	2.01

a Estimated.

Q1090 (*840, p. 275; 845, p. 318; 886, p. 507; 906, p. 157; *936, p. 178; 944, p. 159). New York City Department of Water Supply, Gas and Electricity. On east side of Hawtree Creek Road, about 350 feet south of 133d Avenue, Aqueduct. Land-surface datum is 31.62 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	27.99	Mar. 27	27.49	June 26	27.68	Sept.25	28.21
30	27.77	May 1	27.35	July 31	27.97	Oct. 30	27.94
Feb. 27	27.70	29	27.47	Aug. 28	28.06	Nov. 27	27.57

Water level, in feet above mean sea level, 1943

Jan. 2	3.63	Mar. 27	4.13	June 26	3.94	Sept.25	3.41
30	3.85	May 1	4.27	July 31	3.65	Oct. 30	3.68
Feb. 27	3.92	29	4.15	Aug. 28	3.56	Nov. 27	4.05

Q1222 (*906, p. 158; 936, p. 178; 944, p. 159). New York City Department of Water Supply, Gas and Electricity well Whitestone 9. About 200 feet east of 142d Street, about 850 feet north of 20th Avenue, Whitestone. Land-surface datum is 7.58 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	4.90	Mar. 27	4.71	June 26	5.15	Sept.25	5.57
30	4.80	May 1	5.13	July 31	5.17	Oct. 30	4.70
Feb. 27	4.97	29	4.87	Aug. 28	5.54	Nov. 27	5.32

Water level, in feet above mean sea level, 1943

Jan. 2	2.68	Mar. 27	2.87	June 26	2.43	Sept.25	2.01
30	2.78	May 1	2.45	July 31	2.41	Oct. 30	2.88
Feb. 27	2.61	29	2.71	Aug. 28	2.04	Nov. 27	2.26

Q1223 (*906, p. 159; *936, p. 178; 944, p. 159). New York City Department of Water Supply, Gas and Electricity. On northeast corner of Rockaway Boulevard and 142d Place, South Ozone Park. Land-surface datum is 26.60 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	18.92	Mar. 27	18.27	June 26	18.84	Sept.25	19.65
30	18.79	May 1	18.58	July 31	18.20	Oct. 30	19.23
Feb. 27	18.64	29	18.56	Aug. 28	19.46	Nov. 27	18.73

Water level, in feet above mean sea level, 1943

Jan. 2	7.68	Mar. 27	8.33	June 26	7.76	Sept.25	6.95
30	7.81	May 1	8.02	July 31	8.40	Oct. 30	7.37
Feb. 27	7.96	29	8.04	Aug. 28	7.14	Nov. 27	7.87

Q1224 (*906, p. 159; *936, p. 179; 944, p. 159). New York City Department of Water Supply, Gas and Electricity. On north side of 102d Avenue, about 100 feet east of Van Wyck Boulevard, Jamaica. Land-surface datum is 47.65 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	40.30	Mar. 27	39.72	June 26	39.35	Sept.25	40.03
30	39.77	May 1	39.25	July 31	39.57	Nov. 27	39.37
Feb. 27	40.08	29	39.06	Aug. 28	39.85		

Water level, in feet above mean sea level, 1943

Jan. 2	7.35	Mar. 27	7.93	June 26	8.30	Sept.25	7.62
30	7.88	May 1	8.40	July 31	8.08	Nov. 27	8.28
Feb. 27	7.57	29	8.59	Aug. 28	7.80		

Q1225 (*906, p. 160; *936, p. 179; 944, p. 160). New York City Department of Water Supply, Gas and Electricity. Southeast corner of 109th Avenue and 200th Street. Land-surface datum is 49.40 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	22.03	Mar. 27	21.40	June 28	21.36	Sept.25	22.17
30	21.53	Apr. 30	21.05	July 31	21.70	Oct. 30	22.16
Feb. 27	21.65	May 29	21.05	Aug. 28	21.96	Nov. 27	21.84

Q1225. New York City Department of Water Supply, Gas and Electricity--Continued.

Water level, in feet above mean sea level, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	27.37	Mar. 27	28.00	June 28	28.04	Sept. 28	27.23
30	27.87	Apr. 30	28.35	July 31	27.70	Oct. 30	27.24
Feb. 27	27.75	May 29	28.35	Aug. 28	27.44	Nov. 27	27.56

Q1237 (*906, p. 160; 936, p. 179; 944, p. 160). New York City Department of Water Supply, Gas and Electricity. About 1,450 feet west of 150th Street and 200 feet north of Belt Parkway, Baisley Park. Land-surface datum is 17.54 feet above mean sea level.

Water level at noon, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	16.35	16.35	15.25	15.60	15.70	15.70	16.95	16.05	.....	.....	.....	15.60
2	16.45	16.60	15.25	15.65	15.65	15.35	17.15	16.25	.....	15.55	.....	15.60
3	16.55	16.75	15.15	15.85	15.45	15.40	17.60	16.70	.....	.....	.....	15.65
4	16.50	16.75	15.25	16.00	15.40	15.65	17.40	16.65	15.50	.....	15.95	15.65
5	16.70	16.70	15.35	15.95	15.45	16.35	16.45	16.55	.....	.....	16.05	15.65
6	16.80	16.70	15.35	16.10	15.60	16.75	15.65	16.25	.....	.....	16.05	15.65
7	16.80	16.55	15.10	16.25	15.40	16.50	15.35	16.40	.....	.....	16.05	15.50
8	16.70	16.70	15.40	16.20	15.60	15.75	14.90	16.60	.....	.....	16.00	15.55
9	16.60	16.90	15.55	16.20	16.10	15.40	14.70	16.25	.....	15.25	15.75	15.55
10	16.50	16.85	15.45	16.20	16.35	15.30	14.80	16.20	.....	.....	15.85	15.60
11	16.70	16.55	15.35	16.25	16.15	15.35	15.25	15.80	15.95	.....	15.90	15.75
12	16.15	16.65	15.30	16.20	15.65	15.75	15.35	15.55	.....	.....	15.85	15.85
13	16.30	16.65	15.40	16.05	15.45	15.95	15.65	15.45	.....	.....	15.85	15.80
14	16.40	16.55	15.50	16.10	15.40	16.30	15.80	15.50	.....	.....	16.05	15.95
15	16.30	16.80	15.60	16.30	15.30	16.35	16.11	15.75	.....	.....	16.10	15.95
16	16.35	17.00	15.50	16.55	15.20	16.35	16.85	15.50	.....	15.40	16.05	15.90
17	16.40	17.00	15.35	16.50	15.15	16.90	17.25	15.25	.....	.....	16.10	15.90
18	16.35	17.05	15.35	16.50	15.65	16.35	17.50	15.45	15.25	.....	16.10	15.90
19	16.15	17.10	15.35	16.45	15.70	16.35	17.40	.....	.....	.....	16.10	15.90
20	16.45	17.00	15.25	16.10	15.20	16.95	17.75	.....	.....	.....	16.10	15.85
21	16.60	17.05	15.35	16.00	14.90	17.40	17.50	16.40	.....	.....	16.15	16.00
22	16.70	16.75	15.35	15.95	14.80	17.65	16.75	16.65	.....	.....	16.10	16.00
23	16.60	15.80	15.35	15.95	14.90	18.00	16.40	16.55	.....	14.95	16.20	16.15
24	16.55	15.45	15.35	15.95	14.95	18.15	16.50	16.55	.....	.....	16.20	16.25
25	16.40	15.30	15.30	16.00	15.10	18.20	16.70	16.50	15.15	.....	16.25	16.20
26	16.45	15.30	15.35	16.00	14.95	18.45	16.50	17.00	.....	.....	16.25	16.20
27	16.50	15.25	15.35	16.10	15.00	18.50	16.70	17.35	.....	.....	16.15	15.95
28	.....	15.15	15.40	16.00	15.25	18.45	16.75	16.30	.....	.....	16.20	15.90
29	.....	.....	15.45	16.10	15.35	18.40	16.25	.....	.....	.....	16.20	15.90
30	.....	.....	15.45	16.10	15.35	17.65	15.90	.....	.....	15.60	15.75	15.85
31	16.30	.....	15.45	.....	15.35	.....	15.95	.....	.....	.....	.....	15.80

Water level at noon, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.20	1.20	2.30	1.95	1.85	1.85	0.60	1.50	....	....	....	1.95
2	1.10	.95	2.30	1.90	1.90	2.20	.40	1.30	....	2.00	....	1.95
3	1.00	.80	2.40	1.75	2.10	2.15	.05	.85	....	....	....	1.90
4	1.05	.80	2.30	1.55	2.15	1.90	.15	.90	2.05	....	1.60	1.90
5	.85	.85	2.20	1.60	2.10	1.20	1.10	1.00	....	....	1.50	1.90
6	.75	.85	2.20	1.45	1.95	.80	1.90	1.30	....	....	1.50	1.90
7	.75	1.00	2.45	1.30	2.15	1.05	2.20	1.15	....	....	1.50	2.05
8	.85	.85	2.15	1.35	1.95	1.80	2.65	.95	....	....	1.55	2.00
9	.95	.65	2.00	1.35	1.45	2.15	2.85	1.30	....	2.30	1.80	2.00
10	1.05	.70	2.10	1.35	1.20	2.25	2.75	1.35	....	....	1.70	1.95
11	1.15	1.00	2.20	1.30	1.40	2.20	2.30	1.75	1.60	....	1.65	1.80
12	1.40	.90	2.25	1.35	1.90	1.80	2.20	2.00	....	....	1.70	1.70
13	1.25	.90	2.15	1.50	2.10	1.60	1.90	2.10	....	....	1.70	1.75
14	1.15	1.00	2.05	1.45	2.15	1.25	1.75	2.05	....	....	1.50	1.60
15	1.25	.75	1.95	1.25	2.25	1.20	1.40	1.80	....	....	1.45	1.60
16	1.20	.55	2.05	1.00	2.35	1.20	.70	2.05	....	2.15	1.50	1.65

Q1237. New York City Department of Water Supply, Gas and Electricity --Continued.

Water level at noon, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
17	1.15	0.55	2.20	1.05	2.40	0.65	0.30	2.30	....	....	1.45	1.65
18	1.20	.50	2.20	1.05	1.90	1.20	.05	2.10	2.30	....	1.45	1.65
19	1.40	.45	2.20	1.10	1.85	1.20	.15	....	....	....	1.45	1.65
20	1.10	.55	2.30	1.45	2.35	.60	.20	....	....	....	1.45	1.70
21	.95	.50	2.20	1.55	2.65	.15	.05	1.15	....	....	1.40	1.55
22	.85	.80	2.20	1.60	2.75	.10	.80	.90	....	....	1.45	1.55
23	.95	1.65	2.20	1.60	2.65	.45	1.15	1.00	....	2.60	1.35	1.40
24	1.00	2.10	2.20	1.60	2.60	.60	1.05	1.00	....	....	1.35	1.30
25	1.15	2.25	2.25	1.55	2.45	.65	.85	1.05	2.40	....	1.30	1.35
26	1.10	2.25	2.20	1.55	2.60	.90	1.05	.55	....	....	1.30	1.35
27	1.05	2.30	2.20	1.45	2.55	.95	.85	.20	....	....	1.40	1.60
28	....	2.40	2.15	1.55	2.30	.90	.80	1.25	....	....	1.35	1.65
29	....	....	2.10	1.45	2.20	.85	1.30	....	....	....	1.35	1.65
30	....	....	2.10	1.45	2.20	.10	1.65	....	....	1.95	1.80	1.70
31	1.25	....	2.10	....	2.20	....	1.60	....	....	....	....	1.75

Q1248 (*906, p. 161; *936, p. 160; 944, p. 161). New York City Department of Water Supply, Gas and Electricity. At 100th Road and Belt Parkway, Queens Village. Land-surface datum is 76.53 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	41.34	Mar. 27	40.62	June 28	40.46	Sept.25	41.40
30	41.14	Apr. 30	40.11	July 31	41.18	Oct. 30	41.42
Feb. 27	40.90	May 29	40.00	Aug. 28	41.54	Nov. 27	41.15

Water level, in feet above mean sea level, 1943

Jan. 2	35.19	Mar. 27	35.91	June 28	36.07	Sept.25	35.13
30	35.39	Apr. 30	36.42	July 31	35.35	Oct. 30	35.11
Feb. 27	35.63	May 29	36.53	Aug. 28	34.99	Nov. 27	35.38

Q1249 (*906, p. 161; *936, p. 180; 944, p. 161). New York City Department of Water Supply, Gas and Electricity. On northwest corner of 106th Avenue and 216th Street, Queens Village. Land-surface datum is 72.35 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	41.28	Mar. 27	40.69	June 28	40.34	Sept.25	41.40
30	41.12	Apr. 30	40.13	July 31	40.74	Oct. 30	41.42
Feb. 27	40.96	May 29	40.08	Aug. 28	41.11	Nov. 27	41.12

Water level, in feet above mean sea level, 1943

Jan. 2	31.07	Mar. 27	31.66	June 28	32.01	Sept.25	30.95
30	31.23	Apr. 30	32.22	July 31	31.61	Oct. 30	30.93
Feb. 27	31.39	May 29	32.27	Aug. 28	31.24	Nov. 27	31.23

Q1250 (*906, p. 161; *936, p. 181; 944, p. 161). New York City Department of Water Supply, Gas and Electricity. At southwest corner of Liberty and Camden Avenues, Hollis. Land-surface datum is 37.56 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	17.07	Mar. 27	16.25	June 28	16.55	Sept.25	17.50
30	16.89	Apr. 30	16.34	July 31	16.89	Oct. 30	17.11
Feb. 27	16.64	May 29	16.37	Aug. 28	17.19	Nov. 27	16.91

Water level, in feet above mean sea level, 1943

Jan. 2	20.49	Mar. 27	21.31	June 28	21.01	Sept.25	20.06
30	20.67	Apr. 30	21.22	July 31	20.67	Oct. 30	20.45
Feb. 27	20.92	May 29	21.19	Aug. 28	20.37	Nov. 27	20.65

Q1251 (*906, p. 161; *936, p. 181; 944, p. 161). New York City Department of Water Supply, Gas and Electricity. At northwest corner of 107th Avenue and 172d Street, Jamaica. Land-surface datum is 42.69 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	31.41	Mar. 27	30.50	June 28	31.24	Sept.25	32.53
30	30.99	Apr. 30	30.58	July 31	31.78	Oct. 30	32.24
Feb. 27	30.80	May 29	30.85	Aug. 28	32.21	Nov. 27	31.46

Water level, in feet above mean sea level, 1943

Jan. 2	11.28	Mar. 27	12.19	June 28	11.45	Sept.25	10.16
30	11.70	Apr. 30	12.11	July 31	10.91	Oct. 30	10.45
Feb. 27	11.89	May 29	11.84	Aug. 28	10.48	Nov. 27	11.23

Q1252 (*906, p. 161; *936, p. 181; 944, p. 162). New York City Department of Water Supply, Gas and Electricity. At northeast corner of Liberty Avenue and 157th Street, Jamaica. Land-surface datum is 31.18 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	18.97	Mar. 27	18.37	July 31	18.90	Sept.25	19.10
30	18.73	May 1	18.27	Aug. 28	19.03	Nov. 27	18.75
Feb. 27	18.67	June 26	18.55				

Water level, in feet above mean sea level, 1943

Jan. 2	12.21	Mar. 27	12.81	July 31	12.28	Sept.25	12.08
30	12.45	May 1	12.91	Aug. 28	12.15	Nov. 27	12.43
Feb. 27	12.51	June 26	12.63				

Q1253 (*906, p. 161; *936, p. 182; 944, p. 162). New York City Department of Water Supply, Gas and Electricity. At northeast corner of 101st Avenue and 121st Street, Richmond Hill. Measurements discontinued temporarily on May 29, 1943. Land-surface datum is 49.16 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level
Jan. 2	46.17	Feb. 27	45.95	May 1	45.39
30	46.01	Mar. 27	45.77	29	45.28

Water level, in feet above mean sea level, 1943

Jan. 2	2.99	Feb. 27	3.21	May 1	3.77
30	3.15	Mar. 27	3.39	29	3.88

Q1254 (*906, p. 162; *936, p. 182; *944, p. 162). New York City Department of Water Supply, Gas and Electricity. At northwest corner of 101st Avenue and 108th Street, Richmond Hill. Land-surface datum is 45.46 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	46.63	Mar. 27	46.23	June 26	46.22	Sept.25	46.77
30	46.41	May 1	45.93	July 31	46.55	Nov. 27	46.21
Feb. 27	46.37	29	45.95	Aug. 28	46.59		

Water level, in feet below mean sea level, 1943

Jan. 2	1.17	Mar. 27	0.77	June 26	0.76	Sept.25	1.31
30	.95	May 1	.47	July 31	1.09	Nov. 27	.75
Feb. 27	.91	29	.49	Aug. 28	1.23		

Q1255 (*936, p. 182; 944, p. 162). New York City Department of Water Supply, Gas and Electricity. At northwest corner of Atlantic Avenue and Woodhaven Boulevard, Woodhaven. Land-surface datum is 40.43 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	44.73	Feb. 27	44.10	May 1	43.70	June 26	44.00
30	44.42	Mar. 27	43.98	29	43.64	July 31	44.30

Water level, in feet below mean sea level, 1943

Jan. 2	4.30	Feb. 27	3.67	May 1	3.27	June 26	3.57
30	3.99	Mar. 27	3.55	29	3.21	July 31	3.87

Q1256 (*906, p. 162; *936, p. 184; 944, p. 163). New York City Department of Water Supply, Gas and Electricity. At southeast corner of 95th Avenue and 82d Street, Woodhaven. Land-surface datum is 23.97 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	27.77	Mar. 27	27.17	June 26	26.92	Sept.25	27.24
30	27.39	May 1	26.87	July 31	27.06	Oct. 30	27.07
Feb. 27	27.28	29	26.84	Aug. 28	27.15		

Water level, in feet below mean sea level, 1943

Jan. 2	3.80	Mar. 27	3.20	June 26	2.95	Sept.25	3.27
30	3.42	May 1	2.90	July 31	3.09	Oct. 30	3.10
Feb. 27	3.31	29	2.87	Aug. 28	3.18		

Q1281 (*936, p. 184; 944, p. 163). New York City Department of Water Supply, Gas and Electricity. At southwest corner of Liberty Avenue and Woodhaven Boulevard, Ozone Park. Land-surface datum is 28.78 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	30.39	May 1	29.68	July 31	30.36	Oct. 30	30.17
Feb. 27	29.97	29	29.74	Aug. 28	30.46	Nov. 27	29.72
Mar. 27	29.86	June 26	30.07	Sept.25	30.47		

Water level, in feet below mean sea level, 1943

Jan. 2	1.61	May 11	0.90	July 31	1.58	Oct. 30	1.39
Feb. 27	1.19	29	.96	Aug. 28	1.68	Nov. 27	.94
Mar. 27	1.08	June 26	1.29	Sept.25	1.69		

Q1282 (*936, p. 185; 944, p. 163). New York City Department of Water Supply, Gas and Electricity. At northeast corner of Liberty Avenue and 113th Street, Richmond Hill. Land-surface datum is 40.02 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	38.93	Mar. 27	38.10	June 26	38.22	Sept.25	38.75
30	38.71	May 1	38.20	Aug. 28	38.74	Nov. 27	38.57
Feb. 27	38.72	29	38.13				

Water level, in feet above mean sea level, 1943

Jan. 2	1.09	Mar. 27	1.92	June 26	1.80	Sept.25	1.27
30	1.31	May 1	1.82	Aug. 28	1.28	Nov. 27	1.45
Feb. 27	1.30	29	1.89				

Q1283 (*936, p. 186; 944, p. 163). New York City Department of Water Supply, Gas and Electricity. At southeast corner of Rockaway Boulevard and 121st Street, South Ozone Park. Land-surface datum is 26.74 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	22.52	Mar. 27	21.96	June 26	22.09	Sept.25	22.65
30	22.29	May 1	21.70	July 31	22.41	Oct. 30	22.48
Feb. 27	22.20	29	21.88	Aug. 28	22.49	Nov. 27	22.14

Q1283. New York City Department of Water Supply, Gas and Electricity--Continued.

Water level, in feet above mean sea level, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	4.22	Mar. 27	4.78	June 26	4.65	Sept.25	4.09
30	4.45	May 1	5.04	July 31	4.33	Oct. 30	4.26
Feb. 27	4.54	29	4.86	Aug. 28	4.25	Nov. 27	4.60

Q1284 (*936, p. 187; 944, p. 164). New York City Department of Water Supply, Gas and Electricity. At northwest corner of Rockaway Boulevard and Lincoln Street, South Ozone Park. Land-surface datum is 33.84 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	27.20	May 1	26.41	July 31	27.17	Oct. 30	26.20
Feb. 27	26.79	29	25.68	Aug. 28	26.53	Nov. 27	26.87
Mar. 27	26.52	June 26	26.96	Sept.25	26.58		

Water level, in feet above mean sea level, 1943

Jan. 2	6.64	May 1	7.43	July 31	6.67	Oct. 30	7.64
Feb. 27	7.05	29	8.16	Aug. 28	7.31	Nov. 27	6.97
Mar. 27	7.32	June 26	6.88	Sept.25	7.26		

Q1285 (*906, p. 187; 944, p. 164). New York City Department of Water Supply, Gas and Electricity. At northwest corner of 132d Street and 111th Avenue, South Ozone Park. Land-surface datum is 42.72 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	36.25	Mar. 27	35.59	June 26	35.45	Sept.25	36.12
30	35.96	May 1	35.16	July 31	35.71	Oct. 30	36.23
Feb. 27	35.84	29	35.27	Aug. 28	35.89	Nov. 27	35.93

Water level, in feet above mean sea level, 1943

Jan. 2	6.47	Mar. 27	7.13	June 26	7.27	Sept.25	6.60
30	6.76	May 1	7.56	July 31	7.01	Oct. 30	6.49
Feb. 27	6.88	29	7.45	Aug. 28	6.83	Nov. 27	6.79

Q1286 (*936, p. 188; 944, p. 164). New York City Department of Water Supply, Gas and Electricity. On east side of 144th Place, about 315 feet south of Jamaica Avenue, Jamaica. Measuring point raised 0.15 foot on May 1, 1943. New measuring point, top of pipe, 46.94 feet above mean sea level. Water level on May 1, 1943, was 36.63 feet below measuring point and 10.31 feet above mean sea level. Land-surface datum is also 46.94 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	37.10	May 1	36.63	July 31	37.06	Oct. 30	37.25
30	36.84	29	36.63	Aug. 28	37.25	Nov. 27	36.90
Feb. 27	36.80	June 26	36.75	Sept.25	37.45		

Water level, in feet above mean sea level, 1943

Jan. 2	9.69	May 1	10.31	July 31	9.88	Oct. 30	9.69
30	9.95	29	10.31	Aug. 29	9.69	Nov. 27	10.04
Feb. 27	9.99	June 26	10.19	Sept.25	9.49		

Q1287 (*936, p. 188; 944, p. 164). New York City Department of Water Supply, Gas and Electricity. At north corner of Merrick Boulevard and 116th Avenue, St. Albans. Land-surface datum is 25.33 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	12.77	Mar. 27	11.85	June 26	12.91	Aug. 28	13.72
30	12.55	May 1	12.64	July 31	13.47	Sept.25	13.84
Feb. 27	12.50	29	12.49				

Q1287. New York City Department of Water Supply, Gas and Electricity --Continued.

Water level, in feet above mean sea level, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	12.56	Mar. 27	13.48	June 26	12.42	Aug. 28	11.61
30	12.78	May 1	12.69	July 31	11.86	Sept.25	11.49
Feb. 27	12.83	29	12.84				

Q1288 (*936, p. 189; 944, p. 165). New York City Department of Water Supply, Gas and Electricity. At northwest corner of Murdock Avenue and 180th Street, St. Albans. Land-surface datum is 36.30 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	19.11	Mar. 27	17.76	June 26	18.42	Sept.25	19.54
30	18.80	May 1	18.00	July 31	18.81	Nov. 27	18.65
Feb. 27	18.29	29	17.79	Aug. 28	19.17		

Water level, in feet above mean sea level, 1943

Jan. 2	17.19	Mar. 27	18.54	June 26	17.88	Sept.25	16.76
30	17.50	May 1	18.30	July 31	17.49	Nov. 27	17.65
Feb. 27	18.01	29	18.51	Aug. 28	17.13		

Q1289 (*936, p. 189; 944, p. 165). New York City Department of Water Supply, Gas and Electricity. At northwest corner of Springfield Boulevard and 110th Avenue, Queens Village. Land-surface datum is 53.80 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	23.07	Mar. 27	22.34	June 28	21.86	Sept.25	22.71
30	22.76	Apr. 30	21.76	July 31	22.25	Oct. 30	22.84
Feb. 27	22.62	May 29	21.70	Aug. 28	22.40	Nov. 27	22.66

Water level, in feet above mean sea level, 1943

Jan. 2	30.73	Mar. 27	31.46	June 28	31.94	Sept.25	31.09
30	31.04	Apr. 30	32.04	July 31	31.55	Oct. 30	30.96
Feb. 27	31.18	May 29	32.10	Aug. 28	31.40	Nov. 27	31.14

Q1290 (*936, p. 190; 944, p. 165). New York City Department of Water Supply, Gas and Electricity. At southwest corner of Merrick Road and Springfield Boulevard, Springfield. Land-surface datum is 24.03 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	7.21	Mar. 27	6.71	June 26	7.45	Sept.25	7.79
30	6.99	May 1	7.15	July 31	7.65	Oct. 30	7.18
Feb. 27	6.70	29	7.16	Aug. 28	7.71	Nov. 27	7.03

Water level, in feet above mean sea level, 1943

Jan. 2	16.82	Mar. 27	17.32	June 26	16.58	Sept.25	16.24
30	17.04	May 1	16.88	July 31	16.38	Oct. 30	16.85
Feb. 27	17.33	29	16.87	Aug. 28	16.32	Nov. 27	17.00

Q1292 (*936, p. 190; 944, p. 166). New York City Department of Water Supply, Gas and Electricity. About 96 feet south of Union Turnpike and 81 feet east of 185th Street, Jamaica. Land-surface datum is 67.71 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	40.85	Mar. 27	40.40	June 26	40.19	Sept.25	40.70
30	40.74	May 1	40.32	July 31	40.39	Oct. 30	39.56
Feb. 27	40.69	29	40.20	Aug. 28	40.55	Nov. 27	40.55

Water level, in feet above mean sea level, 1943

Jan. 2	26.86	Mar. 27	27.31	June 26	27.52	Sept.25	27.01
30	26.97	May 1	27.39	July 31	27.32	Oct. 30	28.15
Feb. 27	27.02	29	27.51	Aug. 28	27.16	Nov. 27	27.16

Suffolk County

S202 (*840, p. 273; *845, p. 317; 886, p. 509; *906, p. 164; 936, p. 191; 944, p. 166). New York Water Service Corporation, abandoned well at Spring Street pumping station, 450 feet south of Gains Avenue, Huntington. Operation of recorder discontinued as this well requires cleaning. Land-surface datum is 69.00 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	30.44	May 1	29.96	July 31	30.12	Oct. 29	29.83
Feb. 27	30.10	29	30.05	Aug. 28	30.04	Nov. 27	29.69
Mar. 27	30.02	June 26	30.09	Sept.25	30.00		

Water level, in feet above mean sea level, 1943

Jan. 30	38.56	May 1	39.04	July 31	38.88	Oct. 29	39.17
Feb. 27	38.90	29	38.95	Aug. 28	38.96	Nov. 27	39.31
Mar. 27	38.98	June 26	38.91	Sept.25	39.00		

S203 (*840, p. 273; 845, p. 318; 886, p. 510; *906, p. 164; 936, p. 192; 944, p. 167). C. A. Gould. About 125 feet north of Wolf Hill Road and about 1.4 miles west of Deer Park Avenue, Dix Hills. Land-surface datum is 203.45 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	132.04	Mar. 27	132.18	June 26	132.97	Sept.25	131.87
30	132.02	Apr. 30	132.28	July 31	131.98	Oct. 30	131.88
Feb. 27	132.12	May 29	132.12	Aug. 28	131.96	Nov. 27	131.86

Water level, in feet above mean sea level, 1943

Jan. 2	71.41	Mar. 27	71.27	June 26	70.48	Sept.25	71.58
30	71.43	Apr. 30	71.17	July 31	71.47	Oct. 30	71.57
Feb. 28	71.33	May 29	71.33	Aug. 28	71.49	Nov. 27	71.59

S1803 (*840, p. 285; 845, p. 324; 886, p. 510; 906, p. 165; 936, p. 192; 944, p. 167). New York City Department of Water Supply, Gas and Electricity. At north corner of Belmont Avenue and Farmingdale Road, about 1.5 miles west of Babylon. Land-surface datum is 21.69 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	4.79	May 1	5.37	July 31	6.13	Nov. 1	5.40
30	5.46	29	5.25	Aug. 30	6.47	29	5.40
Feb. 27	5.10	June 26	5.62	Sept.27	6.08	Dec. 31	5.76
Mar. 27	4.82						

Water level, in feet above mean sea level, 1943

Jan. 2	16.90	May 1	16.32	July 31	15.56	Nov. 1	16.29
30	16.23	29	16.44	Aug. 30	15.22	29	16.29
Feb. 27	16.59	June 26	16.07	Sept.27	15.61	Dec. 31	15.93
Mar. 27	16.87						

S1805 (*840, p. 287; 845, p. 324; 886, p. 511; 906, p. 166, *936, p. 193; 944, p. 168). New York City Department of Water Supply, Gas and Electricity. At southwest corner of Albany Avenue and Farmingdale Road, about 3 miles north of Amityville. Land-surface datum is 57.19 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	15.34	May 1	14.01	July 31	15.24	Nov. 1	15.58
Feb. 27	14.31	29	14.18	Aug. 20	16.03	29	14.62
Mar. 27	13.43	June 26	14.46	Sept.27	16.09	Dec. 31	15.27

Water level, in feet above mean sea level, 1943

Jan. 2	41.85	May 1	43.18	July 31	41.95	Nov. 1	41.61
Feb. 27	42.88	29	43.01	Aug. 30	41.16	29	42.57
Mar. 27	43.76	June 26	42.73	Sept.27	41.10	Dec. 31	41.92

S1806 (*840, p. 288; 845, p. 325; 886, p. 511; 906, p. 166; 936, p. 193; 944, p. 168). New York City Department of Water Supply, Gas and Electricity. On northeast corner of Wellwood and Long Island Avenues, Pinelawn. Land-surface datum is 86.38 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	31.93	Feb. 27	30.67	Apr. 30	30.00	Oct. 30	32.38
30	31.25	Mar. 27	30.17	Sept.25	31.98	Nov. 27	32.46

Water level, in feet above mean sea level, 1943

Jan. 2	54.45	Feb. 27	55.71	Apr. 30	56.38	Oct. 30	54.00
30	55.13	Mar. 27	56.21	Sept.25	54.40	Nov. 27	53.92

S1807 (*840, p. 289; 845, p. 325; 886, p. 511; 906, p. 166; 936, p. 193; 944, p. 168). New York City Department of Water Supply, Gas and Electricity. On east side of Higbie Lane, 0.4 mile south of Hunter Avenue and about 1.5 miles northeast of Babylon. Land-surface datum is 24.67 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	2.44	May 1	2.80	July 31	3.20	Nov. 1	3.07
30	2.87	29	2.60	Aug. 30	3.56	29	2.98
Feb. 27	2.59	June 26	2.80	Sept.27	3.48	Dec. 31	3.25
Mar. 27	2.31						

Water level, in feet above mean sea level, 1943

Jan. 2	22.23	May 1	21.87	July 31	21.47	Nov. 1	21.60
30	21.80	29	22.07	Aug. 30	21.11	29	21.69
Feb. 27	22.08	June 26	21.87	Sept.27	21.19	Dec. 31	21.42
Mar. 27	22.36						

S1808 (*777, p. 124; *817, p. 202; *840, p. 290; 845, p. 325; 886, p. 511; 906, p. 166, 936, p. 194; 944, p. 168). New York City Department of Water Supply, Gas and Electricity. On east side of Sagtikos Manor Lane, about 4,250 feet south of Montauk Branch of Long Island Railroad, and 2.5 miles east of Babylon. Land-surface datum is 15.85 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	4.06	May 1	4.93	July 31	5.61	Nov. 1	4.70
30	4.94	29	4.73	Aug. 30	6.11	29	5.04
Mar. 1	4.70	June 26	5.23	Sept.27	5.60	Dec. 31	5.09
27	4.58						

Water level, in feet above mean sea level, 1943

Jan. 2	11.79	May 1	10.92	July 31	10.24	Nov. 1	11.15
30	10.91	29	11.12	Aug. 30	9.74	29	10.81
Mar. 1	11.15	June 26	10.62	Sept.27	10.25	Dec. 31	10.76
27	11.27						

S1809 (*777, p. 124; *817, p. 202; *840, p. 291; 845, p. 326, 886, p. 512; 906, p. 167; 936, p. 194; 944, p. 169). New York City Department of Water Supply, Gas and Electricity. At northwest corner of Sagtikos Manor Lane and road 0.1 mile south of Bay Shore Road, about 1.5 miles northwest of Bay Shore. Land-surface datum is 41.49 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	13.32	May 1	12.40	July 31	13.01	Nov. 1	14.85
Mar. 1	12.38	29	12.20	Aug. 30	13.85	29	14.10
27	11.82	June 26	12.06	Sept.27	14.44	Dec. 31	14.42

Water level, in feet above mean sea level, 1943

Jan. 2	28.17	May 1	29.09	July 31	28.48	Nov. 1	26.64
Mar. 1	29.11	29	29.29	Aug. 30	27.64	29	27.39
27	29.67	June 26	29.43	Sept.27	27.05	Dec. 31	27.07

S1810 (*777, p. 124; *817, p. 202; *840, p. 291; 845, p. 326; 886, p. 512; 906, p. 167; 936, p. 194; 944, p. 169). Geological Survey, U. S. Dept. of Interior. On east side of Sagtikos Manor Lane, about 1,000 feet south of main line of Long Island Railroad and 1.5 miles southwest of Brentwood. Land-surface datum is 90.10 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	40.57	Mar. 27	39.48	June 26	39.15	Sept.25	39.71
30	40.14	Apr. 30	38.97	July 31	38.86	Oct. 30	40.34
Feb. 27	39.86	May 29	39.24	Aug. 28	39.25	Nov. 27	40.62

Water level, in feet above mean sea level, 1943

Jan. 2	49.53	Mar. 27	50.62	June 26	50.95	Sept.25	50.39
30	49.96	Apr. 30	51.13	July 31	51.24	Oct. 30	49.76
Feb. 27	50.24	May 29	50.86	Aug. 28	50.85	Nov. 27	49.48

S1811 (*840, p. 292; 845; p. 326; *886, p. 512; *906, p. 167; *936, p. 194; 944, p. 169). Geological Survey, U. S. Dept. of Interior. At north shore of Lake Ronkonkoma. Measurements show the level of Lake Ronkonkoma. Measuring point lowered 5.49 feet on Jan. 3, 1942. New measuring point, top of 1¼-inch pipe driven into bed of lake about 15 feet south of previously used measuring point. Elevation of new measuring point is 53.68 feet above mean sea level.

Water level, in feet above mean sea level, 1943

Jan. 2	53.24	May 29	53.37	Aug. 28	52.94	Oct. 30	52.93
30	53.38	June 26	53.23	Sept.25	52.84	Nov. 27	52.82
Apr. 30	53.33	July 31	53.07				

S1812 (*840, p. 292; 845, p. 327; 886, p. 512; *906, p. 168; 936, p. 195; 944, p. 170). Geological Survey, U. S. Dept. of Interior. On northeast side of Smithtown Boulevard, about 100 feet northwest of Nichols Road and 1 mile west of Lake Ronkonkoma, Nesconset. Land-surface datum is 69.03 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	23.06	Mar. 27	22.30	June 26	22.05	Sept.25	22.80
30	22.83	Apr. 30	22.00	July 31	22.25	Oct. 30	23.24
Feb. 27	22.59	May 29	21.98	Aug. 28	22.50	Nov. 27	23.48

Water level, in feet above mean sea level, 1943

Jan. 2	45.97	Mar. 27	46.73	June 26	46.98	Sept.25	46.23
30	46.20	Apr. 30	47.03	July 31	46.78	Oct. 30	45.79
Feb. 27	46.44	May 29	47.05	Aug. 28	46.53	Nov. 27	45.55

S1813 (*906, p. 168; 936, p. 195; 944, p. 170). Geological Survey, U. S. Dept. of Interior. On south side of Johnson Avenue about 1.5 miles west of Ocean Avenue, Ronkonkoma. Land-surface datum is 58.75 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	20.75	Mar. 27	20.23	Aug. 28	20.77	Oct. 30	21.13
30	20.80	Apr. 30	20.26	Sept.25	20.98	Nov. 27	21.26
Feb. 27	20.51	July 31	20.53				

Water level, in feet above mean sea level, 1943

Jan. 2	38.00	Mar. 27	38.52	Aug. 28	37.98	Oct. 30	37.62
30	37.95	Apr. 30	38.49	Sept.25	37.77	Nov. 27	37.49
Feb. 27	38.24	July 31	38.22				

S1814 (*906, p. 169; 936, p. 196; 944, p. 170). Geological Survey, U. S. Dept. of Interior. On northwest corner of Suffolk and Lowells Avenues, Central Islip. Land-surface datum is 79.63 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	43.77	Mar. 27	42.82	June 26	42.53	Sept.25	43.34
30	43.34	Apr. 30	42.57	July 31	42.75	Oct. 30	43.72
Feb. 27	43.10	May 29	42.64	Aug. 28	43.05	Nov. 27	43.77

S1814. Geological Survey, U. S. Dept. of Interior--Continued.

Water level, in feet above mean sea level, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	35.86	Mar. 27	36.81	June 26	37.10	Sept.25	36.29
30	36.29	Apr. 30	37.06	July 31	36.88	Oct. 30	35.91
Feb. 27	36.53	May 29	36.99	Aug. 28	36.58	Nov. 27	35.86

S1815 (*906, p. 169; 936, p. 196; 944, p. 171). Geological Survey, U. S. Dept. of Interior. On northwest corner of Suffolk and Eastern Avenues, Brentwood. Land-surface datum is 72.14 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	27.66	Mar. 27	26.71	June 26	26.31	Sept.25	26.80
30	27.25	Apr. 30	26.40	July 31	26.30	Oct. 30	27.18
Feb. 27	26.95	May 29	26.43	Aug. 28	26.56	Nov. 27	27.46

Water level, in feet above mean sea level, 1943

Jan. 2	44.48	Mar. 27	45.43	June 26	45.83	Sept.25	45.34
30	44.89	Apr. 30	45.74	July 31	45.84	Oct. 30	44.96
Feb. 27	45.19	May 29	45.71	Aug. 28	45.58	Nov. 27	44.68

S1816 (*906, p. 170; 936, p. 196; 944, p. 171). Geological Survey, U. S. Dept. of Interior. On northeast corner of Brentwood and Commack Roads, Deer Park. Land-surface datum is 85.21 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	29.25	Mar. 27	27.96	June 26	27.60	Sept.25	28.63
30	28.49	Apr. 30	27.70	July 31	27.69	Oct. 30	29.25
Feb. 27	28.30	May 29	27.99	Aug. 28	28.33	Nov. 27	29.20

Water level, in feet above mean sea level, 1943

Jan. 2	55.96	Mar. 27	57.25	June 26	57.61	Sept.25	56.58
30	56.72	Apr. 30	57.51	July 31	57.52	Oct. 30	55.96
Feb. 27	56.91	May 29	57.22	Aug. 28	56.88	Nov. 27	56.01

S1817 (*906, p. 170; 936, p. 196; 944, p. 171). Geological Survey, U. S. Dept. of Interior. Southeast corner of Long Island Avenue and 18th Street, Wyandanch. Land-surface datum is 58.93 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	6.96	Mar. 27	6.69	June 26	7.42	Sept.25	7.94
30	7.57	Apr. 30	7.07	July 31	6.96	Oct. 30	7.28
Feb. 27	7.15	May 29	7.03	Aug. 28	8.49	Nov. 27	7.47

Water level, in feet above mean sea level, 1943

Jan. 2	51.97	Mar. 27	52.24	June 26	51.51	Sept.25	50.99
30	51.36	Apr. 30	51.86	July 31	51.97	Oct. 30	51.65
Feb. 27	51.78	May 29	51.90	Aug. 28	50.44	Nov. 27	51.46

S2314. Foundation Sand & Gravel Co. On west side of Burr's Lane about 1,500 feet north of Straight Path, Wyandanch. Diameter 8 inches, depth 480 feet below measuring point. Measuring point is top of 2-inch pipe inserted in top of 8-inch well cap. Elevation of measuring point and also land-surface datum is 92.78 feet above mean sea level. Water level on Mar. 27, 1943, 33.15 feet below measuring point and 59.63 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Mar. 27	33.15	June 26	33.20	Aug. 28	33.73	Oct. 30	33.97
Apr. 30	33.26	July 31	33.48	Sept.25	33.83	Nov. 27	33.60
May 29	33.24						

Water level, in feet above mean sea level, 1943

Mar. 27	59.63	June 26	59.58	Aug. 28	59.05	Oct. 30	58.81
Apr. 30	59.52	July 31	59.30	Sept.25	58.95	Nov. 27	59.18
May 29	59.54						

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S2454 (*906, p. 171; 936, p. 197; 944, p. 171). Long Island Railroad. On south side of railroad tracks, about 80 feet east of Deer Park Avenue, Babylon. Land-surface datum is 13.07 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	4.90	Mar. 27	5.36	June 26	5.80	Nov. 1	5.28
30	5.68	May 1	5.71	July 31	5.93	29	5.70
Feb. 27	5.52	29	5.50	Sept. 27	5.78	Dec. 31	5.83

Water level, in feet above mean sea level, 1943

Jan. 2	8.17	Mar. 27	7.71	June 26	7.27	Nov. 1	7.79
30	7.39	May 1	7.36	July 31	7.14	29	7.37
Feb. 27	7.55	29	7.57	Sept. 27	7.29	Dec. 31	7.24

S2455 (*777, p. 121; *817, p. 201; *840, p. 272; 845, p. 317; *886, p. 508; 906, p. 172; 936, p. 198; 944, p. 172). Geological Survey, U. S. Dept. of Interior. About 4,000 feet southeast of intersection of Udalls Road and Hunter Avenue, about 2 miles west of Bay Shore. Land-surface datum is 33.09 feet above mean sea level.

Water level at noon, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	10.74	10.79	10.26	9.79	10.38	10.20	10.55	11.37	12.17	.....	.....	.....
2	10.51	10.82	10.29	9.81	10.40	10.15	10.59	11.40	12.19	12.47	.....	.....
3	10.41	10.85	10.27	9.86	10.38	10.13	10.62	11.42	12.22	12.48	.....	.....
4	10.31	10.85	10.33	9.90	10.41	10.13	10.64	11.44	12.24	12.49	.....	.....
5	10.30	10.84	10.35	9.89	10.44	10.12	10.65	11.47	12.26	12.51	.....	.....
6	10.29	10.81	10.37	9.93	10.45	10.12	10.66	10.51	.....	12.53	.....	.....
7	10.29	10.74	10.29	9.98	10.45	10.10	10.69	11.54	.....	12.53	.....	.....
8	10.29	10.67	10.29	9.99	10.47	10.09	10.72	11.56	.....	12.55	.....	.....
9	10.28	10.61	10.28	10.02	10.51	10.09	10.75	11.59	.....	12.55	.....	.....
10	10.30	10.55	10.21	10.04	10.52	10.09	10.78	11.62	.....	12.58	.....	.....
11	10.32	10.46	10.14	10.08	10.53	10.10	10.80	11.64	.....	.....	.....	.....
12	10.31	10.42	10.10	10.09	10.53	10.15	10.83	11.66	.....	.....	.....	.....
13	10.38	10.32	10.06	10.10	10.55	10.17	10.85	11.69	.....	.....	.....	.....
14	10.40	10.23	10.11	10.12	10.58	10.16	10.87	11.70	.....	12.63	.....	.....
15	10.40	10.17	10.11	10.16	10.61	10.15	10.89	11.73	.....	12.65	.....	.....
16	10.45	10.13	10.10	10.20	10.63	10.14	10.93	11.75	.....	12.59	.....	.....
17	10.50	10.09	10.03	10.21	10.64	10.20	10.96	11.77	.....	12.57	.....	.....
18	10.53	10.09	9.89	10.25	10.65	10.21	10.99	.....	.....	.....	.....	.....
19	10.49	10.07	9.75	10.26	10.66	10.24	11.01	.....	.....	.....	.....	.....
20	10.57	10.05	9.63	10.25	10.62	10.27	11.04	.....	12.26	.....	.....	.....
21	10.58	10.05	9.60	10.26	10.51	10.30	11.07	11.90	12.28	.....	.....	.....
22	10.60	10.07	9.57	10.29	10.41	10.32	11.09	11.92	12.29	.....	.....	.....
23	10.62	10.09	9.57	10.31	10.33	10.35	11.14	11.95	12.31	.....	.....	.....
24	10.65	10.09	9.59	10.32	10.26	10.38	11.17	11.97	12.33	.....	.....	.....
25	10.66	10.14	9.58	10.32	10.20	10.39	11.20	11.99	12.35	.....	.....	.....
26	10.69	10.16	9.62	10.33	10.14	10.42	11.22	.....	12.38	.....	.....	.....
27	10.73	10.17	9.63	10.35	10.12	10.45	11.24	.....	12.40	.....	.....	.....
28	10.74	10.20	9.69	10.33	10.12	10.47	11.26	.....	12.42	.....	.....	.....
29	10.76	.....	9.76	10.37	10.12	10.49	11.29	.....	12.44	.....	a11.37	.....
30	10.78	.....	9.77	10.35	10.14	10.52	11.31	12.12	12.46	.....	.....	.....
31	10.79	.....	9.78	.....	10.17	.....	11.34	12.14	.....	.....	.....	a11.85

Water level at noon, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	22.35	22.30	22.83	23.30	22.71	22.89	22.54	21.72	20.92	.....	.....	.....
2	22.58	22.27	22.80	23.28	22.69	22.94	22.50	21.69	20.90	20.62	.....	.....
3	22.68	22.24	22.82	23.23	22.71	22.96	22.47	21.67	20.87	20.61	.....	.....
4	22.78	22.24	22.76	23.19	22.68	22.96	22.45	21.65	20.85	20.60	.....	.....
5	22.79	22.25	22.74	23.20	22.65	22.97	22.44	21.62	20.83	20.58	.....	.....
6	22.80	22.28	22.72	23.16	22.64	22.97	22.43	21.58	.....	20.56	.....	.....
7	22.80	22.35	22.80	23.11	22.64	22.99	22.40	21.55	.....	20.56	.....	.....
8	22.80	22.42	22.80	23.10	22.62	23.00	22.37	21.53	.....	20.54	.....	.....
9	22.81	22.48	22.81	23.07	22.58	23.00	22.34	21.50	.....	20.54	.....	.....

a Tape measurements.

S2455. Geological Survey, U. S. Dept. of Interior--Continued.

Water level at noon, in feet above mean sea level, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
10	22.79	22.54	22.88	23.05	22.57	23.00	22.31	21.47	.....	20.51	.....	.....
11	22.77	22.63	22.95	23.01	22.56	22.99	22.29	21.45	.....	.....	.....	.....
12	22.78	22.67	22.99	23.00	22.56	22.94	22.26	21.43	.....	.....	.....	.....
13	22.71	22.77	23.00	22.99	22.54	22.92	22.24	21.40	.....	.....	.....	.....
14	22.69	22.86	22.98	22.97	22.51	22.93	22.22	21.39	.....	20.46	.....	.....
15	22.69	22.92	22.98	22.93	22.48	22.94	22.20	21.36	.....	20.44	.....	.....
16	22.64	22.96	22.99	22.89	22.46	22.95	22.16	21.34	.....	20.50	.....	.....
17	22.59	23.00	23.06	22.88	22.45	22.89	22.13	21.32	.....	20.52	.....	.....
18	22.56	23.00	23.20	22.84	22.44	22.88	22.10	.....	.....	.....	.....	.....
19	22.60	23.02	23.34	22.83	22.43	22.85	22.08	.....	.....	.....	.....	.....
20	22.52	23.04	23.46	22.84	22.47	22.82	22.05	.....	20.83	.....	.....	.....
21	22.51	23.04	23.49	22.83	22.58	22.79	22.02	21.19	20.81	.....	.....	.....
22	22.49	23.02	23.52	22.80	22.68	22.77	22.00	21.17	20.80	.....	.....	.....
23	22.47	23.00	23.52	22.78	22.76	22.74	21.95	21.14	20.78	.....	.....	.....
24	22.44	23.00	23.50	22.77	22.83	22.71	21.92	21.12	20.76	.....	.....	.....
25	22.43	22.95	23.51	22.77	22.89	22.70	21.89	21.10	20.74	.....	.....	.....
26	22.40	22.93	23.47	22.76	22.95	22.67	21.87	.....	20.71	.....	.....	.....
27	22.36	22.92	23.46	22.74	22.97	22.64	21.85	.....	20.69	.....	.....	.....
28	22.35	22.89	23.40	22.76	22.97	22.62	21.83	.....	20.67	.....	.....	.....
29	22.33	.....	23.33	22.72	22.97	22.60	21.80	.....	20.56	.....	a21.72	.....
30	22.31	.....	23.32	22.74	22.95	22.57	21.78	20.97	20.63	.....	.....	.....
31	22.30	.....	23.31	.....	22.92	.....	21.75	20.95	.....	.....	.....	a21.24

S2543 (*936, p. 198; 944, p. 172). New York City Board of Water Supply test well 106. About 100 feet south of Suffolk Avenue and 200 feet east of Blydenburgh Road, Central Islip. Measurements discontinued on Sept. 25, 1943, as well was destroyed during October. Land-surface datum is 62.32 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	28.15	Mar. 27	27.40	June 26	27.37	Aug. 28	28.05
30	27.80	Apr. 30	27.45	July 31	27.72	Sept. 25	28.28
Feb. 27	27.67	May 29	27.44				

Water level, in feet above mean sea level, 1943

Jan. 2	34.17	Mar. 27	34.92	June 26	34.95	Aug. 28	34.27
30	34.52	Apr. 30	34.87	July 31	34.60	Sept. 25	34.04
Feb. 27	34.65	May 29	34.88				

S3112 (*936, p. 199; 944, p. 172). New York City Department of Water Supply, Gas and Electricity. On northeast corner of Long Island Avenue and Little East Neck Road, Wyandanch. Land-surface datum is 78.09 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	25.20	Mar. 27	23.49	June 26	23.89	Sept. 25	25.42
30	24.85	Apr. 30	23.50	July 31	24.34	Oct. 30	25.86
Feb. 27	24.09	May 29	23.87	Aug. 28	24.95	Nov. 27	24.60

Water level, in feet above mean sea level, 1943

Jan. 2	52.89	Mar. 27	54.60	June 26	54.20	Sept. 25	52.67
30	53.24	Apr. 30	54.59	July 31	53.75	Oct. 30	53.23
Feb. 27	54.00	May 29	54.22	Aug. 28	53.14	Nov. 27	53.49

S3496 (*944, p. 173). Geological Survey, U. S. Dept. of Interior. On east side of Coates Avenue about 100 feet north of Long Island Railroad, Holbrook. Land-surface datum is 115.87 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 30	68.18	Apr. 30	67.62	Aug. 2	67.04	Oct. 28	67.50
Feb. 25	68.14	May 29	67.16	Sept. 2	67.16	Nov. 29	67.96
Mar. 31	67.86	June 28	67.04	24	67.26	Dec. 30	68.25

a Tape measurements.

S3496. Geological Survey, U. S. Dept. of Interior--Continued.

Water level, in feet above mean sea level, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	47.69	Apr. 30	48.25	Aug. 2	48.83	Oct. 28	48.37
Feb. 26	47.73	May 29	48.71	Sept. 2	48.71	Nov. 29	47.91
Mar. 31	48.01	June 28	48.83	24	48.61	Dec. 30	47.62

S3497 (*944, p. 173). Geological Survey, U. S. Dept. of Interior. On northeast corner of Waverly and Long Island Avenues, Holtsville. Land-surface datum is 103.81 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 25	56.09	May 29	55.40	Sept. 2	55.31	Nov. 29	56.14
Mar. 31	55.80	June 28	55.30	24	55.48	Dec. 30	56.55
Apr. 30	55.63	Aug. 2	55.25	Oct. 28	55.77		

Water level, in feet above mean sea level, 1943

Feb. 25	47.72	May 29	48.41	Sept. 2	48.50	Nov. 29	47.67
Mar. 31	48.01	June 28	48.51	24	48.33	Dec. 30	47.26
Apr. 30	48.18	Aug. 2	48.56	Oct. 28	48.04		

S3498 (*944, p. 173). Geological Survey, U. S. Dept. of Interior. On south side of Long Island Avenue about 1,000 feet west of State Highway 112, Medford. Land-surface datum is 94.71 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 30	50.09	Apr. 30	49.30	Aug. 2	49.30	Oct. 28	50.06
Feb. 25	49.71	May 27	49.28	Sept. 2	49.54	Nov. 29	50.39
Mar. 31	49.59	June 28	49.27	24	49.71	Dec. 30	50.73

Water level, in feet above mean sea level, 1943

Jan. 30	44.62	Apr. 30	45.41	Aug. 2	45.41	Oct. 28	44.65
Feb. 25	45.00	May 27	45.43	Sept. 2	45.17	Nov. 29	44.32
Mar. 31	45.12	June 28	45.44	24	45.00	Dec. 30	43.98

S3512 (*944, p. 173). New York State Division of Highways. On south side of Middle County Road (State Highway 25), about 0.6 mile east of Lake Avenue, Lake Grove. Land-surface datum is 107.41 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 29	40.10	Apr. 30	39.19	Aug. 2	39.34	Oct. 28	40.08
Feb. 25	39.90	May 27	39.00	Sept. 2	39.53	Nov. 29	40.47
Mar. 29	39.61	June 29	39.14	24	39.73	Dec. 30	40.84

Water level, in feet above mean sea level, 1943

Jan. 29	67.31	Apr. 30	68.22	Aug. 2	68.07	Oct. 28	67.33
Feb. 25	67.51	May 27	68.41	Sept. 2	67.88	Nov. 29	66.94
Mar. 29	67.80	June 29	68.27	24	67.68	Dec. 30	66.57

S3513 (*944, p. 173). New York State Division of Highways. On south side of Middle County Road (State Highway 25), about 0.9 mile west of Selden. Land-surface datum is 102.10 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 29	39.77	Apr. 30	38.93	Aug. 2	39.10	Oct. 28	39.97
Feb. 25	39.55	May 27	38.78	Sept. 2	39.36	Nov. 29	40.36
Mar. 29	39.33	June 29	38.84	24	39.59	Dec. 30	40.74

Water level, in feet above mean sea level, 1943

Jan. 29	62.33	Apr. 30	63.17	Aug. 2	63.00	Oct. 28	62.13
Feb. 25	62.55	May 27	63.32	Sept. 2	62.74	Nov. 29	61.74
Mar. 29	62.77	June 29	63.26	24	62.51	Dec. 30	61.36

S3514 (*944, p. 174). Herman Jurgens. On south side of Jericho Turnpike (State Highway 25), about 0.5 mile east of Larkfield Avenue, Commack. Land-surface datum is 154.22 feet above mean sea level.

S3514. Herman Jurgens--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	88.10	Mar. 27	87.88	June 26	87.74	Sept.25	87.74
30	88.02	Apr. 30	88.06	July 31	87.69	Oct. 30	87.91
Feb. 27	87.84	May 29	87.85	Aug. 28	87.73	Nov. 27	87.85

Water level, in feet above mean sea level, 1943

Jan. 2	66.12	Mar. 27	66.34	June 26	66.48	Sept.26	66.48
30	66.20	Apr. 30	66.16	July 31	66.53	Oct. 30	66.31
Feb. 27	66.38	May 29	66.37	Aug. 28	66.49	Nov. 27	66.37

S3515 (*944, p. 174). New York City Board of Water Supply test well 57. West side of East Third Avenue, about 0.35 mile north of Brook Street, Bay Shore. Land-surface datum is 44.15 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	11.42	May 1	10.76	July 31	10.94	Nov. 1	12.23
Feb. 27	10.67	29	10.10	Aug. 30	11.63	29	11.94
Mar. 31	10.28	June 26	10.15	Sept.27	12.05	Dec. 31	12.31

Water level, in feet above mean sea level, 1943

Jan. 2	32.73	May 1	33.39	July 31	33.21	Nov. 1	31.92
Feb. 27	33.48	29	34.05	Aug. 30	32.52	29	32.21
Mar. 31	33.87	June 26	34.00	Sept.27	32.10	Dec. 31	31.84

S3516 (*944, p. 174). New York City Board of Water Supply test well 58. On east side of East Third Avenue, about 105 feet south of Walbridge Avenue, Bay Shore. Land-surface datum is 60.50 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 2	23.07	May 1	21.99	July 31	21.92	Nov. 1	23.62
Feb. 27	22.14	29	22.10	Aug. 30	22.57	29	23.44
Mar. 31	21.79	June 26	21.38	Sept.27	23.11	Dec. 31	23.73

Water level, in feet above mean sea level, 1943

Jan. 2	37.43	May 1	38.51	July 31	38.58	Nov. 1	36.88
Feb. 27	38.36	29	38.40	Aug. 30	37.93	29	37.06
Mar. 31	38.71	June 26	39.12	Sept.27	37.39	Dec. 31	36.77

S3517 (*944, p. 175). New York City Board of Water Supply test well 60. On southwest corner of Lakeland Avenue and Tariff Street, Sayville. Land-surface datum is 31.56 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 30	18.45	Apr. 30	18.40	Aug. 2	18.92	Oct. 28	19.44
Feb. 25	18.26	May 29	18.51	Sept. 2	19.27	Nov. 29	19.38
Mar. 31	18.03	June 28	18.58	24	19.35	Dec. 30	19.43

Water level, in feet above mean sea level, 1943

Jan. 30	13.11	Apr. 30	13.16	Aug. 2	12.64	Oct. 28	12.12
Feb. 25	13.30	May 29	13.05	Sept. 2	12.29	Nov. 29	12.18
Mar. 31	13.53	June 28	12.98	24	12.21	Dec. 30	12.13

S3518 (*944, p. 175). New York City Board of Water Supply test well 79. East side of Islip Avenue, about 190 feet north of Locust Street, Central Islip. Land-surface datum is 51.73 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 30	19.92	Apr. 30	19.62	Aug. 2	19.96	Nov. 29	20.41
Feb. 25	19.76	May 27	19.53	Sept. 2	20.55	Dec. 30	20.76
Mar. 31	19.18	June 28	19.37	24	20.78		

Water level, in feet above mean sea level, 1943

Jan. 30	31.81	Apr. 30	32.11	Aug. 2	31.77	Nov. 29	31.32
Feb. 25	31.97	May 27	32.20	Sept. 2	31.18	Dec. 30	30.97
Mar. 31	32.55	June 28	32.36	24	30.95		

S3519 (*944, p. 176). New York City Board of Water Supply test well 93. On east side of Carleton Avenue, about 2.25 miles south of main line of Long Island Railroad, Central Islip. Land-surface datum is 32.60 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 25	6.59	May 27	6.51	Sept. 2	7.74	Nov. 29	7.31
Mar. 31	6.40	June 28	6.79	24	7.64	Dec. 30	7.54
Apr. 30	6.76	Aug. 2	7.28	Oct. 28	7.61		

Water level, in feet above mean sea level, 1943

Feb. 25	26.01	May 27	26.09	Sept. 2	24.86	Nov. 29	25.29
Mar. 31	26.20	June 28	25.81	24	24.96	Dec. 30	25.06
Apr. 30	25.84	Aug. 2	25.32	Oct. 28	24.99		

S3520 (*944, p. 176). New York City Board of Water Supply test well 146. At southwest corner of Sylvan Avenue and Church Street, about 1 mile northwest of Blue Point. Measurements discontinued on Aug. 2, 1943. Land-surface datum is 41.54 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 30	22.22	Mar. 31	22.14	May 29	22.51	Aug. 2	22.79
Feb. 25	22.33	Apr. 30	22.19	June 28	22.48		

Water level, in feet above mean sea level, 1943

Jan. 30	19.32	Mar. 31	19.40	May 29	19.03	Aug. 2	18.75
Feb. 25	19.21	Apr. 30	19.35	June 28	19.06		

S3521 (*944, p. 176). New York City Board of Water Supply test well 162. On east side of Medford Avenue, 0.9 mile south of Long Island Avenue, Medford. Land-surface datum is 72.57 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 30	35.15	Apr. 30	34.85	Aug. 2	35.10	Oct. 28	35.89
Feb. 25	35.16	May 27	35.03	Sept. 2	35.41	Nov. 29	36.11
Mar. 31	35.00	June 28	34.82	24	35.62	Dec. 30	36.35

Water level, in feet above mean sea level, 1943

Jan. 30	37.42	Apr. 30	37.72	Aug. 2	37.47	Oct. 28	36.68
Feb. 25	37.41	May 27	37.54	Sept. 2	37.16	Nov. 29	36.46
Mar. 31	37.57	June 28	37.75	24	36.95	Dec. 30	36.22

S3522 (*944, p. 177). New York City Board of Water Supply test well 166. On east side of Waverly Avenue, 1.0 mile north of Main Street, Patchogue. Land-surface datum is 43.35 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 25	23.56	May 29	23.65	Sept. 2	24.01	Nov. 29	24.10
Mar. 31	23.40	June 28	23.60	24	24.03	Dec. 30	24.17
Apr. 30	23.62	Aug. 2	23.82	Oct. 28	24.05		

Water level, in feet above mean sea level, 1943

Feb. 25	19.79	May 29	19.70	Sept. 2	19.34	Nov. 29	19.25
Mar. 31	19.95	June 28	19.75	24	19.32	Dec. 30	19.18
Apr. 30	19.73	Aug. 2	19.53	Oct. 28	19.30		

S3523 (*944, p. 177). New York City Board of Water Supply test well 202. On south side of Barton Avenue, about 1.1 miles east of Medford Avenue, and about 2 miles northeast of Patchogue. Land-surface datum is 49.24 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 30	22.43	Apr. 30	22.13	Aug. 2	22.39	Oct. 28	23.11
Feb. 25	22.25	May 27	22.24	Sept. 2	22.70	Nov. 29	23.21
Mar. 31	22.21	June 28	22.13	24	22.88	Dec. 30	23.51

Water level, in feet above mean sea level, 1943

Jan. 30	26.81	Apr. 30	27.11	Aug. 2	26.85	Oct. 28	26.13
Feb. 25	26.99	May 27	27.00	Sept. 2	26.54	Nov. 29	26.03
Mar. 31	27.03	June 28	27.11	24	26.36	Dec. 30	25.73

S3524 (*944, p. 177). New York City Board of Water Supply test well 215. On south side of Park Road, about 0.3 mile east of Yaphank Avenue and about 0.1 mile south of main line of Long Island Railroad, Yaphank. Land-surface datum is 46.45 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	24.05	Apr. 30	24.07	Aug. 2	24.30	Oct. 28	24.83
Feb. 25	24.01	May 27	24.17	Sept. 2	24.49	Nov. 29	24.91
Mar. 31	23.99	June 28	24.14	24	24.64	Dec. 30	24.98

Water level, in feet above mean sea level, 1943

Jan. 30	22.40	Apr. 30	22.38	Aug. 2	22.15	Oct. 28	21.62
Feb. 25	22.44	May 27	22.28	Sept. 2	21.96	Nov. 29	21.54
Mar. 31	22.46	June 28	22.31	24	21.81	Dec. 30	21.47

S3525 (*944, p. 178). New York City Board of Water Supply test well 216. On north side of Long Island Avenue, 0.6 mile east of Yaphank Avenue, Yaphank. Land-surface datum is 54.02 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 30	27.60	May 27	27.13	Sept. 2	27.11	Nov. 29	27.45
Feb. 25	27.04	June 28	27.07	24	27.10	Dec. 30	27.32
Mar. 31	27.04	Aug. 2	26.95	Oct. 28	27.34		

Water level, in feet above mean sea level, 1943

Jan. 30	26.42	May 27	26.89	Sept. 2	26.91	Nov. 29	26.57
Feb. 25	26.98	June 28	26.95	24	26.84	Dec. 30	26.70
Mar. 31	26.98	Aug. 2	27.07	Oct. 28	26.68		

S3527 (*944, p. 178). New York City Board of Water Supply test well 222. On south side of Horseblock Road, 1.6 miles west of Yaphank Avenue and about 1.7 miles southeast of Plainfield. Land-surface datum is 90.11 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 30	58.25	Apr. 30	57.28	Aug. 2	56.98	Oct. 28	57.69
Feb. 25	57.84	May 27	57.06	Sept. 2	57.16	Nov. 29	58.09
Mar. 31	57.52	June 28	56.97	24	57.40	Dec. 30	58.47

Water level, in feet above mean sea level, 1943

Jan. 30	31.86	Apr. 30	32.83	Aug. 2	33.13	Oct. 28	32.42
Feb. 25	32.27	May 27	33.05	Sept. 2	32.95	Nov. 29	32.02
Mar. 31	32.59	June 28	33.14	24	32.71	Dec. 30	31.64

S3528 (*944, p. 179). New York City Board of Water Supply test well 226. At southeast corner of trail intersection, about 1.5 miles east of Patchogue--Coram Road (State Highway 112), and about 1.1 miles north of Horseblock Road, Plainfield. Sand rushed into well during November 1942 and well has been dry since then. Water level records for 1942 show a fluctuation of only 0.15 foot, indicating that well was clogged throughout 1942.

S3529 (*944, p. 179). New York City Board of Water Supply test well 238. On north side of Horseblock Road, about 0.7 mile west of Yaphank Avenue, and about 1.3 miles northwest of Brookhaven Railroad station, Brookhaven. Land-surface datum is 38.42 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 30	12.73	Apr. 30	11.96	Aug. 2	12.42	Oct. 28	13.43
Feb. 25	12.26	May 26	11.82	Sept. 2	12.88	Nov. 29	13.55
Mar. 31	11.90	June 28	11.96	24	13.12	Dec. 30	13.80

Water level, in feet above mean sea level, 1943

Jan. 30	25.69	Apr. 30	26.46	Aug. 2	26.00	Oct. 28	24.99
Feb. 25	26.16	May 27	26.60	Sept. 2	25.54	Nov. 29	24.87
Mar. 31	26.52	June 28	26.46	24	25.30	Dec. 30	24.62

S3530 (*944, p. 179). New York City Board of Water Supply test well 240. At northeast corner of trail intersection, about 0.9 mile west of Yaphank Avenue, and about 300 feet south of main line of Long Island Railroad, Yaphank. Land-surface datum is 65.92 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 25	33.07	May 27	32.66	Sept. 2	32.99	Nov. 29	33.93
Mar. 31	32.81	June 28	32.49	24	33.20	Dec. 30	34.19
Apr. 30	32.68	Aug. 2	32.75	Oct. 28	33.59		

Water level, in feet above mean sea level, 1943

Feb. 25	32.85	May 27	33.26	Sept. 2	32.93	Nov. 29	31.99
Mar. 31	33.11	June 28	33.43	24	32.72	Dec. 30	31.73
Apr. 30	33.24	Aug. 2	33.17	Oct. 28	32.33		

S3531 (*944, p. 180). New York City Board of Water Supply test well 254. On east side of River Road, about 0.5 mile north of Montauk Highway (State Highway 27), and about 0.3 mile east of Carmens River, South Haven. Land-surface datum is 25.29 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 25	15.48	May 27	15.30	Sept. 2	15.66	Nov. 29	15.79
Mar. 31	15.34	June 28	15.32	24	15.68	Dec. 30	15.97
Apr. 30	15.30	Aug. 2	15.52	Oct. 28	15.64		

Water level, in feet above mean sea level, 1943

Feb. 25	9.81	May 27	9.99	Sept. 2	9.63	Nov. 29	9.50
Mar. 31	9.95	June 28	9.97	24	9.61	Dec. 30	9.32
Apr. 30	9.99	Aug. 2	9.77	Oct. 28	9.65		

S3532 (*944, p. 180). New York City Board of Water Supply test well 265. At southeast corner of Whiskey and Randall Roads, about 1.4 miles north of intersection of Randall Road and Middle Country Road (State Highway 25), Ridge. Land-surface datum is 85.00 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 29	37.70	Apr. 30	36.57	Aug. 2	36.59	Oct. 28	37.60
Feb. 25	37.28	May 27	36.41	Sept. 2	36.89	Nov. 29	38.14
Mar. 29	36.95	June 29	36.40	24	37.14	Dec. 30	38.62

Water level, in feet above mean sea level, 1943

Jan. 29	47.30	Apr. 30	48.43	Aug. 2	48.41	Oct. 28	47.40
Feb. 25	47.72	May 27	48.59	Sept. 2	48.11	Nov. 29	46.86
Mar. 29	48.05	June 29	48.60	24	47.86	Dec. 30	46.38

S3533 (*944, p. 181). New York City Board of Water Supply test well 272. On east side of dirt road, about 0.8 mile east of Yaphank--Middle Island road and about 1.1 miles south of Middle Country Road (State Highway 25), Middle Island. Land-surface datum is 61.46 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 29	15.08	Apr. 30	14.38	Aug. 2	14.76	Oct. 28	15.72
Feb. 25	14.74	May 27	14.42	Sept. 2	15.07	Nov. 29	15.99
Mar. 29	14.51	June 29	14.53	24	15.34	Dec. 30	16.32

Water level, in feet above mean sea level, 1943

Jan. 29	46.38	Apr. 30	47.08	Aug. 2	46.70	Oct. 28	45.74
Feb. 25	46.72	May 27	47.04	Sept. 2	46.39	Nov. 29	45.47
Mar. 29	46.95	June 29	46.93	24	46.12	Dec. 30	45.14

S3534 (*944, p. 181). New York City Board of Water Supply test well 276. On northeast side of trail, about 1.8 miles east of intersection of Long Island Avenue and South Haven road, and about 3.4 miles east of Yaphank. Land-surface datum is 68.21 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 25	40.72	May 27	39.66	Sept. 2	39.88	Nov. 29	40.99
Mar. 31	40.28	June 28	39.55	24	40.10	Dec. 30	41.39
Apr. 30	39.87	Aug. 2	39.59	Oct. 28	40.53		

S3534. New York City Board of Water Supply test well 27[illegible]--Continued.

Water level, in feet above mean sea level, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 25	27.49	May 27	28.55	Sept. 2	28.33	Nov. 29	27.22
Mar. 31	27.93	June 28	28.66	24	28.11	Dec. 30	26.82
Apr. 30	28.34	Aug. 2	28.62	Oct. 28	27.68		

S3535 (*944, p. 181). New York City Board of Water Supply test well 284. On south side of Chichester Avenue, about 1,000 feet southeast of Brookfield Avenue, Center Moriches. Land-surface datum is 50.91 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 30	32.40	Apr. 30	31.36	Aug. 2	31.28	Oct. 28	32.02
Feb. 25	32.03	May 27	31.24	Sept. 2	31.52	Nov. 29	32.34
Mar. 31	31.67	June 28	31.19	24	31.70	Dec. 30	32.65

Water level, in feet above mean sea level, 1943

Jan. 30	18.51	Apr. 30	19.55	Aug. 2	19.63	Oct. 28	18.89
Feb. 25	18.88	May 27	19.67	Sept. 2	19.39	Nov. 29	18.57
Mar. 31	19.24	June 28	19.72	24	19.21	Dec. 30	18.26

S3536 (*944, p. 182). New York City Board of Water Supply test well 289. On southwest side of Manor Branch of Long Island Railroad, about 2.7 miles northwest of Eastport railroad station, and about 2.3 miles northeast of Center Moriches. Land-surface datum is 74.48 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Feb. 25	50.49	May 27	49.49	Sept. 2	49.37	Nov. 29	50.08
Mar. 31	50.13	June 28	49.30	24	49.53	Dec. 30	50.31
Apr. 30	49.80	Aug. 2	49.25	Oct. 28	49.77		

Water level, in feet above mean sea level, 1943

Feb. 25	23.99	May 27	24.99	Sept. 2	25.11	Nov. 29	24.40
Mar. 31	24.35	June 28	25.18	24	24.95	Dec. 30	24.17
Apr. 30	24.68	Aug. 2	25.23	Oct. 28	24.71		

S3537 (*944, p. 182). New York City Board of Water Supply test well 331. On west side of trail, about 1,000 feet north of old country road, about 1 mile west of Speonk--Riverhead road, and about 1.1 miles northwest of Speonk. Measurements discontinued on Apr. 30, 1943, for duration of war. Land-surface datum is 43.34 feet above mean sea level. Water levels, in feet below land-surface datum, 1943: Jan. 30, 27.89; Feb. 25, 27.80; Mar. 31, 27.72; Apr. 30, 27.67. Water levels, in feet above mean sea level, 1943: Jan. 30, 15.45; Feb. 25, 15.54; Mar. 31, 15.62; Apr. 30, 15.67.

S3538 (*944, p. 183). New York City Board of Water Supply test well 339. On northwest side of Fox Trail about 1.7 miles south of intersection of old Riverhead road and Riverhead--Quogue Road (State Highway 113), and about 0.6 mile west of Oakville. Land-surface datum is 33.75 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 29	18.46	Apr. 30	17.80	Aug. 2	17.36	Nov. 29	18.09
Feb. 25	18.24	May 27	17.65	Sept.24	17.66	Dec. 30	18.37
Mar. 29	17.98	June 28	17.42	Oct. 28	17.90		

Water level, in feet above mean sea level, 1943

Jan. 29	15.29	Apr. 30	15.95	Aug. 2	16.39	Nov. 29	15.66
Feb. 25	15.51	May 27	16.10	Sept.24	16.09	Dec. 30	15.38
Mar. 29	15.77	June 28	16.33	Oct. 28	15.85		

S3539 (*944, p. 183). New York City Board of Water Supply test well 403. On west side of trail, about 0.4 mile west of Speonk--Riverhead Road, about 1.8 miles north of old country road, and about 2.3 miles north of Speonk. Measurements discontinued on Mar. 31, 1943, for duration of war. Land-surface datum is 79.33 feet above mean sea level. Water levels, in feet below land-surface datum, 1943: Feb. 25, 56.49; Mar. 31, 56.16. Water levels, in feet above mean sea level, 1943: Feb. 25, 22.84; Mar. 31, 23.17.

S3540 (*944, p. 183). New York City Board of Water Supply test well 404. On west side of trail, about 0.4 mile west of Speonk--Riverhead Road, 1.0 mile north of old country road, and 1.6 miles north of Speonk. Measurements discontinued on Mar. 31, 1943, for duration of war. Land-surface datum is 31.94 feet above mean sea level. Water levels, in feet below land-surface datum, 1943: Feb. 25, 12.02; Mar. 31, 11.90. Water levels, in feet above mean sea lsvel, 1943: Feb. 25, 19.92; Mar. 31, 20.04.

S3541 (*944, p. 184). New York City Board of Water Supply test well 410. About 200 feet west of trail, about 0.2 mile north of old country Road, and about 1.3 miles northeast of Speonk. Measurements discontinued on Apr. 30, 1943, for duration of war. Land-surface datum is 26.37 feet above mean sea level. Water levels, in feet below land-surface datum, 1943: Jan. 29, 13.88; Feb. 25, 13.58; Mar. 31, 13.35; Apr. 30, 13.27. Water levels, in feet above mean sea level, 1943: Jan. 29, 12.49; Feb. 25, 12.79; Mar. 31, 13.02; Apr. 30, 13.10.

S3542 (*944, p. 184). New York City Board of Water Supply test well 413. On west side of trail, about 1.5 miles north of old country road, and about 2.1 miles northeast of Speonk. Measurements discontinued Mar. 31, 1943, for duration of war. Land-surface datum is 72.11 feet above mean sea level. Water levels, in feet below land-surface datum, 1943: Feb. 25, 52.54; Mar. 31, 52.22. Water levels, in feet above mean sea level, 1943: Feb. 25, 19.57; Mar. 31, 19.89.

S3543 (*944, p. 185). New York City Board of Water Supply test well 418. On west side of Bishop's Lane, about 0.9 mile north of Montauk Division of Long Island Railroad at Westhampton station, Westhampton. Measurements discontinued on Apr. 30, 1943, for duration of war. Land-surface datum is 64.44 feet above mean sea level. Water levels, in feet below land-surface datum, 1943: Jan. 29, 48.11; Feb. 25, 47.67; Mar. 31, 47.35; Apr. 30, 47.13. Water levels, in feet above mean sea level, 1943: Jan. 29, 16.33; Feb. 25, 16.77; Mar. 31, 17.09; Apr. 30, 17.31.

S3544 (*944, p. 185). New York City Board of Water Supply test well 421. About 200 feet north of Montauk Division of Long Island Railroad and 0.7 mile east of old Riverhead road, Westhampton. Measurements discontinued on Apr. 30, 1943, for duration of war. Land-surface datum is 25.52 feet above mean sea level. Water levels, in feet below land-surface datum, 1943: Jan. 29, 14.17; Feb. 25, 13.85; Mar. 31, 13.62; Apr. 30, 13.58. Water levels, in feet above mean sea level, 1943: Jan. 29, 11.35; Feb. 25, 11.67; Mar. 31, 11.90; Apr. 30, 11.94.

S3545 (*944, p. 185). New York City Board of Water Supply test well 130. On east side of Lincoln Avenue, about 0.6 mile north of Church Street and 2.2 miles south of Holbrook. Land-surface datum is 56.56 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	20.54	Apr. 30	19.90	Aug. 2	20.04	Oct. 28	21.23
Feb. 25	20.43	May 29	20.08	Sept. 2	20.45	Nov. 29	21.70
Mar. 31	20.18	June 28	19.79	24	20.74	Dec. 30	22.12

Water level, in feet above mean sea level, 1943

Jan. 30	36.02	Apr. 30	36.66	Aug. 2	36.52	Oct. 28	35.33
Feb. 25	36.13	May 29	36.48	Sept. 2	36.11	Nov. 29	34.86
Mar. 31	36.38	June 28	36.77	24	35.82	Dec. 30	34.44

OHIO

By E. J. Schaefer

PROGRAM OF WORK

Ground-water investigations in Ohio were continued in 1943 by the Geological Survey, U. S. Department of the Interior, in cooperation with the Ohio Engineering Experiment Station, the Boards of Commissioners of Butler and Hamilton Counties, and the Federal Works Agency. One report, "A quantitative study of the well field of the Mill Creek Valley water-supply project, Butler County, Ohio", by Fred H. Klaer, Jr. and Raphael G. Kazmann, was released in 1943 in mimeographed form by the Geological Survey. This report describes the ground-water resources of the Miami Valley immediately south of Hamilton, where a well field has been operated by the Federal Works Agency since July 1943 to supply water to the Wright Aeronautical Corporation plant in Hamilton County.

At the end of the year a total of 116 observation wells were being measured in Ohio. Of this total, 102 wells are located in Butler and Hamilton Counties and 14 wells are located in the larger communities in other parts of the State. A total of 12,775 individual measurements of ground-water levels were made during the year; 12,047 in Butler and Hamilton Counties and 728 throughout the rest of the State. Continuous records of water level were obtained by means of automatic water-stage recorders from 18 wells in Butler and Hamilton Counties and from 8 wells in other parts of the State. Water-level records outside of Hamilton and Butler Counties were obtained in financial cooperation with the Ohio Engineering Experiment Station. This program included maintenance of automatic water-stage recorders on wells at Canton, Columbus, Dayton, Mansfield, Marietta, Massillon, and Zanesville.

The average total precipitation for Ohio, as determined by the United States Weather Bureau, amounted to 35.54 inches for the year, 2.33 inches below normal. In most areas, however, conditions were favorable for recharge in the first 6 months of the year because of heavy precipitation in several of these months. Most of the alluvial aquifers bordering the principal streams of the State received considerable recharge from floods occurring at the beginning of the year.

In general, substantial rises occurred in observation wells during the first 6 months of the year where pumping was not excessive but declined during the serious drought prevailing throughout most of the State in the last half of the year.

The following paragraphs summarize the trends of ground-water levels in the areas where observation wells were measured in 1943 under the direction of the U. S. Geological Survey and cooperating agencies.

Butler and Hamilton Counties

Precipitation at the Abbe Observatory Station of the United States Weather Bureau in Cincinnati during 1943 amounted to 32.04 inches, 6.51 inches below average. Precipitation was below average all months of the year except March, May, and July. The greatest amount of precipitation for any one month--6.46 inches, 2.57 inches above average--occurred in March.

Middletown area

In Middletown water levels in the shallow beds reached record high levels in March and April. However, because of the severe drought beginning in August and continuing through the end of the year, water levels were again near their record lows by the end of the year.

Hamilton area

Observation wells in the southern part of the city of Hamilton, in an area where the effect of pumping is slight, indicate that recharge in the late winter and spring months was about equal to that received in the spring of 1939, and slightly more than in 1940. Water levels in these wells throughout the year were generally higher than for corresponding periods in 1941 and 1942. A steady drop in water levels occurred through the last half of the year, although at the end of the year they were still slightly higher than at the beginning.

In the heavily pumped areas in Hamilton, water levels in observation wells were generally slightly lower at the end of the year than at the beginning of the year. At the Hamilton waterworks, about a mile northeast of the city limits, the water level in well 85-7, in the city well field, reached a record high stage in the spring but because of drought during the last half of the year and a probable increase in pumping, reached a record low stage near the end of the year--7 feet lower than at the beginning of the year.

Miami Valley immediately south of Hamilton

In the Miami Valley, immediately south of Hamilton, an average of 7.3 million gallons a day was pumped by the Federal Works Agency, from July to the end of the year, to supply the Wright Aeronautical Corporation plant at Lockland.

Recharge in this area in the late winter and spring of 1943 was about equal to that received in 1939 but somewhat greater than in 1940. It was considerably greater than in 1941 and 1942. However, water levels were slightly lower at the end of this period of recharge than in 1939 and 1940 because of exceptionally low stages existing at the beginning of the year. In the immediate vicinity of the wells pumped by the Federal Works Agency, water levels in four observation wells, for which measurements are available for the entire year, were from 2.2 feet to 3.9 feet lower at the end than at the beginning of the year. Water levels in four observation wells immediately south of Hamilton and outside the effect of pumping from the Federal Works Agency wells, were from 0.6 foot lower to 3.9 feet higher at the end of the year than at the beginning of the year.

Mill Creek Valley

Throughout most of the Mill Creek Valley, from the Hamilton County line to Ivorydale, near the north corporation limits of Cincinnati, steady declines in ground-water levels in the deeper beds have taken place since 1938. At the end of 1943 the piezometric surface along a general north-south line through the valley followed a slight down-gradient from the divide area near Flockton, in Butler County, to Kemper Road, about a mile south of the Butler-Hamilton county line. Here a sharp break downward occurs because of pumping from wells owned by the village of Glendale, a

short distance to the south. Continuing south the gradient drops steeply to Reading, the total drop between Kemper Road and Reading, a distance of about 4 miles, amounting to about 110 feet. From Reading south to Ivorydale, a distance of about 5 miles, there was an additional drop of about 30 feet.

Water levels declined appreciably throughout most of the valley during 1943. The exceptions were at the Wright Aeronautical Corporation and the Gardner-Richardson plants at Lockland. At the Wright plant, the water level in well 216-E, rose about 13 feet from the end of May to mid-November, as a result of a complete shutdown of the wells at the Wright plant following completion of the Mill Creek Valley water-supply project which was constructed by the Federal Works Agency to supply water to the Wright plant. Full recovery from this pumping seems to have taken place in well 216-E by mid-November, the record showing a slight downward trend from that time to the end of the year. Notwithstanding this recovery, the water level remained about 22 feet lower than in April 1941 when the well was first measured.

The slight upward trend for most of the year, shown by the record for well 241-3 at the Gardner-Richardson plant, resulted from a reduction in pumping in the immediate vicinity of this well.

The water level at the village of Wyoming waterworks, as shown by the record for well 237-3, declined about 8.9 feet in 1943. A similar trend is shown by the record for well 236-4, about 0.4 mile north of the Wyoming waterworks, where the decline amounted to 8.5 feet during the year.

The water level in well 252, at Carthage, declined 1.6 feet during 1943.

At Ivorydale the water level in one pumping well, measured in December 1943, was within 13 feet of the rock floor. Water levels in wells 265-5 and 270-T7, at Ivorydale, were about 4 feet and 3 feet lower, respectively, at the end of the year than at the beginning of the year.

FRANKLIN COUNTY

Columbus

Wells in Columbus obtain water from glacial deposits of sand and gravel at depths of 100 feet or less and from the Columbus and other limestones at depths of from 200 to 400 feet. Large quantities of water are pumped in the central part of the city from wells ending in the Columbus limestone. To check the type and magnitude of water-level fluctuations in the limestone in this area, an automatic water-stage recorder was installed on an unused well, 252 feet deep, in the Moores & Ross Dairy Co. garage at Ninth and Spring Streets, and has been in operation since April 27, 1942.

Large seasonal declines in water level beginning late in April and ending late in September occurred in 1942 and 1943, and amounted to about 14 feet in each year. Full recovery from the 1942 decline was not attained during 1943, probably because of an increase in the rate of pumping in the area during the fall and winter of 1942 and 1943, as compared to the same months in 1941 and 1942. This is illustrated by the fact that the water level in the last week of April 1943 was 4.9 feet lower than in the last week of April 1942. The water level at the end of 1943 was 1.7 feet lower than at the end of 1942 and 7.6 feet lower than on April 27, 1942, when the automatic water-stage recorder was installed.

MONTGOMERY COUNTY

Dayton

Ground-water supplies in Dayton are obtained mainly from alluvial deposits of sand and gravel filling the pre-glacial valleys now occupied by the Mad and Miami Rivers. The best water-bearing materials are generally encountered at depths of 70 to 130 feet below the surface, although bedrock is known to be 200 feet or more below the surface in some places.

An automatic water-stage recorder was installed on an abandoned well at the steam distribution plant of the Dayton Power & Light Co. at 118 East Fourth Street on May 27, 1942. This well is in the alluvium and is in the main business section of Dayton. Water-level fluctuations are caused by variations in precipitation and by pumping from wells used for air-conditioning and other purposes. Rises in the water level in this well

due to precipitation occurred principally in January, March, and May. The largest rise--2.5 feet between March 12 and March 25--was caused by moderately heavy precipitation on March 10, 11, 16, and 19. With the exception of a rise of 1.2 feet from precipitation in May, the water level in this well declined steadily from the end of March until the end of July, the total drop in this period amounting to 6.6 feet. It is believed that most of this decline was due to increased use of ground water for air-conditioning and cooling purposes during the summer months. From the end of July to the end of the year, the water level followed a more or less level trend, indicating that pumping in the area had been reduced to an amount approximately equal to the recharge received during that period. The water level in this well was 2.4 feet lower at the end of the year than at the beginning of the year.

The municipal water supply for the city of Dayton is obtained from wells in the valley of the Mad River. Although the average pumpage amounts to about 29 million gallons a day, as much as 52 million gallons has been pumped by the city in one day. Most of the city wells are located on Rohrer's Island, several miles northeast of the city, where artificial recharge is obtained by diverting water from the Mad River through diversion channels into dredged areas on the island. Flow into the diversion channels is controlled by several gates constructed for the purpose. The effectiveness of this method of recharge is shown by the water-level record for Dayton well 2 for 1943. From September 1 to October 10, for instance, during a period of drought, the water level in Dayton well 2 was raised a total of 10.9 feet by introduction of water from the Mad River into the flooding areas. At the end of 1943, despite the extreme drought prevailing during the last half of the year, the water level in this well was 1.9 feet higher than at the end of 1942.

MUSKINGUM COUNTY

Zanesville

An automatic water-stage recorder has been maintained on an observation well at Zanesville, in the city well field, since May 21, 1942. The city well field is located along the east bank of the Muskingum River, a short distance north of the city. The wells furnishing the city supply obtain water from the sands and gravels filling the river valley. Recharge

is derived from direct precipitation in the area, from flood waters of the Muskingum, and probably from infiltration from the river induced by pumping of the city wells.

The water-level record for the Zanesville observation well shows that large rises in water level occurred in the early part of January and throughout most of March. The largest rise in January amounted to 7.6 feet, following moderately heavy precipitation in the latter part of December 1942.

Precipitation amounting to 4.91 inches in March resulted in a rise of 6.3 feet between March 7 and March 27. Precipitation amounting to 5.08 inches in May, however, resulted in a rise of only 3.6 feet, probably because of increased pumping and transpiration and evaporation losses. A rise of about 2.4 feet also occurred in September. However, since precipitation was negligible, it seems probable that this rise was due to a decrease in pumping from the city wells. The largest declines in water levels in the Zanesville well occurred in July and August and in November and December. At the end of 1943 the water level in this well was 4.3 feet higher than at the end of 1942.

RICHLAND COUNTY

Mansfield

An automatic water-stage recorder was installed on an unused well at the old North Main Street pumping station of the Mansfield water department on May 5, 1942. Although the city no longer obtains water in this area, several industries pump large quantities.

The water-level record obtained from this well in 1943 is characterized by relatively large daily and weekly fluctuations in water level due to pumping. The daily fluctuations in 1943 usually ranged from less than 1 foot to slightly more than 1 foot, the drawdown generally occurring between 6 a.m. and 6 p.m. and recovery generally occurred between 6 p.m. and 6.a.m. The weekly trend was usually downward from Monday through Saturday of each week, and substantial recovery occurred each week-end. Weekly fluctuations generally ranged from about 1½ to 3 feet, except at the ends of several weeks when periods of shutdown of wells in the area were longer than the normal week-end shutdowns. Recovery of more than 6 feet, for instance, occurred when wells were shut down for the July 4th and Labor Day week ends.

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Since a record of pumpage in the vicinity of the Mansfield observation well has not been obtained, interpretation of the seasonal trends of water levels in this well is difficult. The water level followed a downward trend until about March 18, an upward trend from then until July 2, and a downward trend for the rest of the year.

It seems probable that the rise during the spring was due, at least in part, to moderately heavy precipitation and that the drop during the last half of the year was caused in great part by extreme drought conditions prevailing during that period. Although a record of water levels was not obtained during December, the trend at the beginning of December indicates that the water level at the end of the year was about 5 feet lower than at the beginning of the year.

STARK COUNTY

Canton

Ten wells in and near Canton were under observation in 1943. Weekly measurements of water level in seven of these wells and daily measurements in one were made by the Canton Water Department. In addition, one well, the Republic Steel Co.'s test well, was measured weekly by E. V. Beftoulides under the direction of the Geological Survey, and on another well, the Ohio Power Co.'s observation well, an automatic water-stage recorder was maintained by C. R. Phillips, under the direction of the Geological Survey.

In former reports of this series only monthly measurements were published for the Northeast well field observation well and the Goughnour observation well. However, it was found that weekly measurements of water level in the Goughnour well and daily measurements in the Northeast well field observation well had been made by the Canton Water Department for several years. Because of their importance, these records are given in full in this report.

Similarly, only weekly measurements of water level had been published for the Ohio Power Co's observation well in previous years, although a continuous recorder record had been obtained. In this report daily readings taken from the recorder charts are given.

The Goughnour well is located about 1½ miles northeast of the Northeast well field of the Canton Water Department, at Trump, and about 0.35 mile east of the Middle Branch of Nimishillen Creek in a preglacial valley filled with deposits of sand, gravel, and clay and trending north and slightly east from Canton.

While the water level in the Goughnour well may be affected by pumping at the Northeast well field, it is believed that the effect is slight and that the fluctuations of the water table shown by the water-level measurements made in this well are fairly representative of natural fluctuations of the water table in the area.

The record for the Goughnour well for 1943 indicates that underground storage in the area was increased mainly from the beginning of the year until about March 22. In that period the water level rose about 6.3 feet. A more or less steady decline occurred throughout the remainder of the year so that at the end of the year the water level was about 1.8 feet lower than at the beginning of the year.

The following table of pumpage for 1943 from wells in the Northeast well field of the Canton Water Department is included to facilitate interpretation of the water-level record for the Northeast well field observation well and the water-level records included for the production wells in this field.

Monthly pumpage from wells in the Canton Water Department's Northeast well field, in millions of gallons

January	323.3	May	323.8	September	262.8
February	309.1	June	313.6	October	242.0
March	332.5	July	287.7	November	232.4
April	303.3	August	301.5	December	185.1

It should be noted that a steady decline in yield from these wells occurred throughout most of the last half of the year, although the water levels in the pumping wells and in the Northeast well field observation well were generally held higher throughout most of the first half of the year than in the last half of the year. This decline in yield coincides with falling water levels in the area, as shown by the water-level record for the Goughnour well.

The water-level records for the Ohio Power Co.'s observation well and the Republic Steel Corporation's observation well, located about a mile apart within the city limits of Canton, each show a small net rise for the year. The water level in the Republic Steel Corporation's test well was 0.4 foot higher at the end of 1943 than at the beginning of the year and in the Ohio Power Co.'s observation well it was 0.2 foot higher at the end of the year than at the beginning of the year. Water-level measurements have been made in both wells since 1939. Until 1943 both wells have shown appreciable net declines for each year of record. The total decline in the Republic Steel Co.'s test well from January 1939 to the end of 1942 amounted to 18.4 feet. The small net rises in both wells in 1943 are probably attributable to increased recharge during the first half of the year and to a decrease in pumping by the industries in the central and eastern parts of the city.

The water-level record for the Canton Water Department's Ninth Street well shows a net drop in water level of about 3 feet for 1943, as compared to a drop of 9 feet in 1942. The reduction in the rate of decline was probably due to a marked reduction in pumping from this well as compared to 1942. The total pumpage from this well for the entire year amounted to only 118.2 million gallons as compared to 680.1 million gallons in 1942.

Massillon

An automatic water-stage recorder has been maintained since June 1942 on an unused well in the basement of the main office building of the Republic Steel Corporation. This well is located in the southern part of the city, slightly north of Oberlin Avenue about 0.1 mile west of the Tuscarawas River. Large quantities of water are pumped for industrial purposes from the sands and gravels in this section of Massillon. However, the record obtained from the observation well indicates that it is apparently unaffected by the pumping of any individual well, although it is probably affected by the regional pumping in the area. The record also shows rises in water level during periods of heavy precipitation.

In 1943 the water level in the Massillon observation well rose about 5.1 feet from January through July. The largest individual rises occurred rather sharply in January, March, June, and July. Each individual rise followed a period of heavy precipitation. A steady decline amounting to about 3.5 feet took place during the remainder of the year. At the end of the year the water level in this well was 1.6 feet higher than at the beginning of the year.

WASHINGTON COUNTY

Marietta

An automatic water-stage recorder has been maintained on a well at the rear of the Marietta Osteopathic Clinic, in the business section of Marietta, since May 1942. This well penetrates the sands and gravels underlying most of Marietta. Although slightly affected in the summer months by pumping of an air-conditioning well at a nearby theatre, fluctuations of the water level in this well seem to be caused principally by variations in precipitation and by flood waters from the Muskingum River.

The water-level record for 1943 is featured by a sharp rise early in January resulting from flood waters which covered most of the business section of Marietta during the last few days in December 1942. Although the record for this period is incomplete, it indicates that the rise amounted to more than 7 feet. Smaller rises from precipitation, ranging from about 0.5 foot to 3 feet, occurred in each of the first 5 months of the year. A decline of nearly 4 feet then occurred between June 1 and July 26. Except for August and November, the record is incomplete for the remainder of the year. However, measurements obtained throughout most of November show that an additional drop of slightly more than 0.5 foot took place by the end of November, the end of the record for the year. The water level at the end of November 1943 was 1.2 feet lower than at the end of November 1942, indicating that the large ground-water storage accumulated during the December 1942 flood had been lost during the drought period prevailing during the last half of 1943.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Butler County

12-1 (*886, p. 565; 906, p. 177; 936, p. 207; 944, p. 203). Village of Trenton. In Trenton, 203 miles west of Excello. Municipal water-supply well. Measuring point, top of 8-inch casing, 21.1 feet below land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	35.93	Apr. 27	32.99	June 22	32.23	Aug. 31	33.91
23	35.49	May 4	33.22	29	32.59	Sept. 7	34.16
Mar. 16	35.40	11	33.34	July 6	32.89	Oct. 5	34.93
23	31.74	18	33.15	13	33.03	19	35.28
30	31.28	25	32.18	20	33.20	Nov. 2	35.52
Apr. 6	32.04	June 1	32.18	Aug. 3	33.38	23	35.90
13	32.50	8	32.10	10	32.96	Dec. 21	36.39
20	32.77	15	32.23	17	33.29		

12-2 (*944, p. 203). Village of Trenton. In Trenton, 2.3 miles west of Excello. Municipal water-supply well. Measuring point, top of casing 4.8 feet below land-surface datum. Water level, in feet below land-surface datum, 1943: Feb. 2, 37.88

25-5 (*936, p. 207; 944, p. 203). City of Middletown. On Columbia Avenue, in Middletown. Boiler pit well, at municipal water plant. Measuring point, top of grating over pump pit, level with floor of pumphouse, 27.5 feet above top of casing, and 1.0 foot above land-surface datum.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	32.82	32.48	32.00	22.85	28.07	26.22	30.13	32.33	33.24	34.95	36.64	37.44
2	31.95	32.51	32.11	23.31	28.07	26.58	30.35	32.25	33.25	35.20	36.68	37.62
3	31.60	32.68	32.25	23.62	27.67	26.90	30.58	32.26	33.27	35.40	36.79	37.78
4	31.04	32.76	32.27	23.73	27.95	27.26	30.62	32.27	33.25	35.40	36.85	37.79
5	31.10	32.75	32.43	24.12	28.15	.....	30.30	32.28	32.99	35.52	36.91	37.66
6	31.15	32.68	32.50	24.40	28.33	.....	30.39	32.21	32.74	35.53	36.91	37.57
7	31.20	32.40	32.57	24.65	28.48	.....	30.55	32.12	32.75	35.48	36.91	37.60
8	31.20	32.15	32.37	24.95	28.63	a27.45	30.65	31.81	32.96	35.52	36.78	37.75
9	31.12	32.11	32.39	25.18	28.64	.....	30.78	31.33	33.01	35.53	36.83	37.83
10	30.82	32.08	32.46	25.47	28.53	.....	30.89	31.30	33.01	35.56	36.87	37.85
11	30.68	32.04	32.51	25.68	28.35	.....	30.88	31.36	32.98	35.63	36.87	37.87
12	31.22	31.98	32.51	25.90	28.26	.....	30.81	31.49	32.91	35.63	36.90	37.67
13	31.42	31.81	32.51	26.06	28.30	.....	31.00	31.60	32.91	35.68	36.95	37.47
14	31.50	31.50	32.40	26.18	28.23	.....	31.10	31.76	32.99	35.71	36.96	37.61
15	31.40	31.38	32.30	26.32	28.09	a28.29	31.13	31.76	33.10	35.70	36.83	37.61
16	31.58	31.38	32.29	26.67	28.00	.....	31.21	31.87	33.20	35.74	37.04	37.62
17	31.65	31.55	32.17	26.72	28.00	.....	31.29	32.05	33.33	35.87	37.10	37.65
18	31.65	31.60	28.56	26.74	27.97	.....	31.38	32.15	33.38	35.92	37.32	37.64
19	31.65	31.62	24.78	26.72	27.66	.....	31.50	32.25	33.49	36.08	37.41	37.37
20	31.62	31.58	22.35	26.75	27.10	.....	31.60	32.43	33.70	36.23	37.57	37.69
21	31.82	31.46	16.79	27.01	26.30	.....	31.73	32.50	34.18	36.40	37.63	37.75
22	31.93	31.46	16.67	27.21	25.93	a28.50	31.87	32.47	34.40	36.51	37.40	37.85
23	31.95	31.47	17.70	27.35	25.80	.....	32.00	32.44	34.55	36.58	37.45	37.89
24	31.80	31.60	18.68	27.45	25.63	.....	32.16	32.68	34.72	36.08	37.35	37.90
25	32.14	31.68	19.32	27.51	25.63	.....	32.27	32.84	34.86	36.08	37.33	37.56
26	32.22	31.70	.....	27.66	25.55	.....	32.35	32.92	34.90	36.27	37.35	37.27
27	32.35	31.75	.....	27.70	25.51	.....	32.40	32.99	34.65	36.45	37.41	37.26
28	32.45	31.77	.....	27.77	25.64	.....	32.48	33.00	34.65	36.60	37.35	37.32
29	32.50	.....	.....	27.87	25.85	29.87	32.60	33.01	34.66	36.70	37.30	37.42
30	32.50	.....	22.10	27.98	25.96	29.96	32.60	33.02	34.75	36.77	37.36	37.61
31	32.40	.....	22.50	.....	26.09	.....	32.42	33.15	.....	36.75	.....	37.64

a Tape measurement.

Pit J (*845, p. 373; 886, pp. 560-561; 906, p. 180; 936, pp. 207-208; 944, p. 204). Moorman Sand & Gravel Co. Gravel pit, on Columbia Avenue, Middletown. Zero of staff gage, 618.0 feet above sea level and 26 feet below land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	20.75	Apr. 13	16.59	July 13	20.92	Oct. 5	23.82
12	20.42	20	16.57	20	21.28	12	24.18
19	21.96	27	18.20	27	21.85	19	24.52
26	21.50	May 4	18.76	Aug. 3	21.79	26	24.80
Feb. 2	21.75	11	19.13	10	20.92	Nov. 2	25.08
9	21.38	18	18.53	17	21.20	9	25.08
16	20.80	25	16.27	24	21.85	16	25.10
23	20.96	June 1	16.67	31	22.35	23	25.24
Mar. 2	21.30	8	17.67	Sept. 7	22.60	30	25.26
9	21.80	15	18.59	14	22.68	Dec. 7	25.40
16	21.60	22	18.86	21	22.95	14	25.52
30	17.65	29	19.87	28	23.44	28	25.60
Apr. 6	20.70	July 6	20.72				

Pit L (*886, pp. 560-561; 906, p. 180; 936, p. 208; 944, p. 204). Smith Farm gravel pit. Abandoned at, 0.3 mile north of Middletown. Zero of staff gage, 623.4 feet above sea level, and approximately 19 feet below land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	18.90	Apr. 6	9.85	July 6	14.44	Oct. 5	18.04
12	17.80	13	11.50	13	14.79	12	18.32
19	17.45	20	12.50	20	15.20	19	18.55
26	27.44	27	13.18	27	15.48	26	18.70
Feb. 2	17.42	May 4	13.60	Aug. 3	15.80	Nov. 2	18.82
9	17.36	11	13.96	10	15.90	9	18.96
16	17.20	18	14.02	17	15.85	16	19.05
23	16.88	25	13.42	24	16.10	23	19.24
Mar. 2	16.80	June 1	12.90	31	16.50	30	19.36
9	16.90	8	12.80	Sept. 7	16.92	Dec. 7	19.44
16	16.88	15	13.10	14	17.17	14	19.55
23	(a)	22	13.50	21	17.45	21	19.50
30	(a)	29	13.93	28	17.75	28	19.55

29-1 (*886, pp. 565-566; 906, p. 178; 936, p. 208; 944, p. 204). Young Men's Christian Association. At Manchester Avenue and Broad Street, in Middletown. Measuring point, top of 4-inch flange, 15.01 feet below land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	35.08	Apr. 6	27.21	July 6	32.00	Oct. 5	37.59
12	34.54	13	28.40	13	32.63	12	38.01
19	34.98	20	29.23	20	31.97	19	38.36
25	35.12	27	29.81	27	33.84	26	38.44
Feb. 2	35.34	May 4	29.86	Aug. 3	34.04	Nov. 2	38.94
9	35.23	11	30.50	10	33.44	9	39.32
16	34.48	18	30.38	17	33.80	16	39.50
23	34.39	25	28.80	24	34.45	23	39.96
Mar. 2	34.63	June 1	29.08	31	35.28	30	39.88
9	35.04	8	29.91	Sept. 7	35.11	Dec. 7	40.65
16	34.88	15	30.43	14	36.01	14	40.76
23	23.70	22	30.75	21	36.21	21	40.95
30	25.70	29	31.73	28	37.09	28	40.78

a Water level above graduations on gage board.

29-2 (*944, p. 205). Young Men's Christian Association. At Manchester Avenue and Broad Street, in Middletown. Measuring point, top of 4-inch flange, 15.08 feet below land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	45.75	Apr. 6	36.75	July 6	39.28	Oct. 5	44.12
12	44.78	13	37.08	13	39.48	12	45.07
19	45.12	20	37.75	20	30.68	19	44.30
26	44.82	27	37.98	27	40.58	26	44.08
Feb. 2	44.35	May 4	37.38	Aug. 3	41.99	Nov. 2	45.24
9	44.11	11	36.35	10	40.50	9	45.39
16	44.05	18	38.58	17	41.71	16	45.18
23	43.32	25	37.93	24	42.67	23	45.95
Mar. 2	43.20	June 1	37.49	31	43.68	30	45.47
9	44.41	8	36.96	Sept. 7	42.79	Dec. 7	45.74
16	43.99	15	37.82	14	43.12	14	46.17
23	48.15	22	38.29	21	44.08	21	47.30
30	35.95	29	38.98	28	44.66	28	41.99

33-1 (*886, p. 569; 906, p. 178; 938, p. 208; 944, p. 205). Wardlow-Thomas Paper Co. At Vandeveer and Fifth Avenues, in Middletown. Measuring point, top of concrete cover over well, 0.5 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	42.30	Apr. 6	32.28	July 6	34.02	Oct. 5	38.81
12	41.38	13	32.43	13	34.20	12	39.02
19	41.04	20	32.08	20	34.50	19	40.23
26	40.98	27	32.07	27	34.95	26	40.50
Feb. 2	40.71	May 4	31.98	Aug. 3	35.34	Nov. 2	40.87
9	40.61	11	32.65	10	35.58	9	41.40
15	40.32	18	33.44	17	35.65	16	41.70
23	38.80	25	33.22	24	36.50	23	40.85
Mar. 2	38.96	June 1	32.78	31	37.77	30	40.67
9	39.42	8	33.24	Sept. 7	38.05	Dec. 7	40.51
16	39.71	15	33.49	14	38.72	14	41.04
23	35.75	22	34.09	21	39.23	21	41.86
30	32.53	29	34.68	28	38.79	28	41.93

36-13 (*845, p. 375; 886, pp. 568-569; 906, pp. 209-210; 944, p. 205). American Rolling Mill Co. well 13. At east end of company's plant, in Middletown. Measuring point, top of metal plate covering well, 0.1 foot above floor of pumphouse, and 0.3 foot above land-surface datum.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	119.41	117.93	117.45	116.82	114.70	111.84
2	119.30	117.75	117.44	116.93	113.57	112.14
3	118.57	117.75	117.54	116.90	113.52	112.50
4	118.95	117.88	117.57	115.94	113.67	112.65
5	119.12	118.78	117.70	116.07	113.82	112.45
6	119.35	118.76	118.55	116.09	114.51	111.50
7	119.45	117.24	118.50	116.10	114.24	111.33
8	119.62	116.65	117.26	116.32	114.07	111.63
9	119.45	116.70	117.58	116.40	113.80	111.86
10	118.83	116.96	118.52	116.15	113.43	112.28
11	118.91	117.19	118.21	115.60	113.40	112.10
12	119.16	117.20	118.32	115.58	113.56	111.55
13	119.28	117.06	118.22	115.70	113.58	111.03
14	119.40	116.95	117.54	115.80	113.45	111.90
15	119.57	116.75	117.01	115.87	113.12	110.88
16	119.50	116.96	117.20	116.87	112.23	111.13
17	118.86	117.37	117.20	116.67	112.11	111.54
18	119.01	117.37	117.21	115.37	112.08	112.82
19	119.41	117.42	117.20	114.88	112.87	111.90
20	119.40	117.41	117.13	115.13	112.76	111.90
21	119.27	117.54	116.54	115.25	112.83	110.80

36-13. American Rolling Mill Co. well 13--Continued.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June
22	119.40	117.66	116.53	115.36	112.83	110.90
23	119.05	117.90	116.55	115.38	112.04	111.00
24	119.55	118.28	116.80	115.00	111.78	111.10
25	119.04	118.43	118.10	114.16	112.03	111.18
26	119.06	118.60	118.62	114.40	112.33	111.18
27	119.25	118.43	117.20	114.72	112.58	110.90
28	118.65	117.75	116.48	114.98	112.73	111.20
29	118.58	.....	116.53	114.97	112.47	111.57
30	118.51	.....	116.61	115.08	111.05	111.80
31	118.21	.....	116.72	.....	111.53	.....

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	112.00	110.30	110.10	110.82	114.05	120.30
2	112.08	110.26	110.25	111.11	114.92	120.45
3	112.05	110.34	110.35	110.91	114.71	120.70
4	111.35	110.42	110.26	110.68	113.80	120.65
5	111.08	110.60	110.00	109.90	114.03	119.52
6	111.12	110.68	109.85	111.07	114.04	119.74
7	111.44	110.68	109.96	111.19	113.80	119.59
8	112.24	110.27	110.05	111.26	113.81	119.58
9	111.85	109.99	110.23	111.30	115.31	119.80
10	111.74	110.23	110.27	111.07	115.84	119.77
11	111.35	110.43	110.21	111.08	116.15	119.75
12	111.03	110.57	109.70	111.32	116.32	119.91
13	111.52	110.67	109.38	111.48	116.36	120.60
14	111.34	110.67	109.59	112.15	115.09	121.06
15	111.53	110.15	109.74	111.85	115.62	121.20
16	111.64	110.18	110.40	112.19	115.20	121.45
17	111.64	110.30	110.11	112.17	115.37	121.59
18	111.06	110.45	110.15	111.71	115.63	121.90
19	110.99	110.98	110.78	111.67	115.85	121.75
20	111.20	110.61	111.10	112.42	116.02	121.67
21	111.30	110.53	110.45	112.18	117.40	121.97
22	111.48	110.31	110.51	113.86	118.03	122.06
23	111.55	.....	110.60	113.95	118.45	122.19
24	111.69	110.26	110.66	113.09	118.80	122.21
25	111.61	110.38	110.73	112.63	110.10	121.75
26	110.62	110.50	110.45	112.84	119.32	121.19
27	110.42	110.56	110.18	112.95	119.65	121.60
28	110.29	110.45	110.42	114.19	119.55	121.78
29	110.35	109.95	110.55	114.55	119.84	121.91
30	110.70	109.72	110.67	114.72	120.15	122.14
31	.....	109.93	.....	113.76	.....	122.31

Pit P (*906, p. 180; 936, p. 210; 944, p. 206). South Middletown Sand & Gravel Co. Gravel pit, 0.1 mile west of 2100 South Main Street, Middletown. Zero of staff gage, 616.6 feet above sea level, and 17 feet below land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	10.40	Apr. 13	10.73	July 13	12.43	Oct. 12	15.04
12	11.50	20	11.07	20	12.69	19	15.12
19	12.35	27	11.30	27	12.98	26	15.22
26	12.75	May 4	11.92	Aug. 3	12.50	Nov. 2	15.32
Feb. 2	13.07	11	11.65	10	11.65	9	15.45
9	12.35	18	10.60	17	12.37	16	15.58
16	11.90	25	8.55	24	13.10	23	16.24
23	12.57	June 1	9.92	31	13.52	30	15.75
Mar. 2	12.98	8	10.45	Sept. 7	13.88	Dec. 7	15.88
9	13.47	15	11.10	14	14.12	14	16.00
16	12.68	22	11.20	21	14.40	21	16.00
30	7.88	29	11.95	28	14.44	28	16.10
Apr. 6	9.90	July 6	12.56	Oct. 5	14.85		

85-7 (*886, pp. 567-568; 906, p. 181; 936, pp. 210-211; 944, pp. 206-207). City of Hamilton. West test well in new well field, 0.9 mile north of Hamilton on U. S. Highway 127 in Fairfield Township. Measuring point, top of 3-inch casing, 1.5 feet above land-surface datum.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	22.27	25.53	25.17	17.52	20.90	20.52	25.62	25.96	27.03	26.20	.....	.....
2	22.60	24.05	24.16	17.00	21.23	20.57	24.77	26.43	27.03	27.03	.....	.....
3	23.40	24.05	24.07	18.22	21.38	21.95	25.06	26.50	27.00	27.25	28.66	.....
4	23.60	23.82	24.65	18.66	21.55	22.56	25.25	26.77	25.59	27.25	28.50	.....
5	22.74	24.42	25.37	18.69	20.02	22.92	25.69	26.18	26.63	27.25	28.56	.....
6	22.53	24.50	25.37	17.76	20.32	23.07	25.75	25.14	27.00	27.31	.....	.....
7	22.82	23.60	24.20	17.92	20.36	22.79	25.75	24.92	27.03	27.05	.....	29.24
8	22.93	23.44	24.24	17.87	21.27	21.37	23.77	24.78	25.65	27.55	.....	29.20
9	23.10	23.30	24.25	19.06	21.52	21.40	24.88	24.93	25.51	27.50	28.15	29.20
10	24.23	23.28	24.41	19.49	21.52	22.83	25.04	26.10	26.29	27.20	28.16	29.61
11	24.70	23.45	24.46	19.67	20.24	23.03	25.04	26.05	26.85	28.25	27.24	29.67
12	24.00	23.12	24.10	19.72	19.70	23.23	25.13	26.18	26.95	28.25	27.03	29.54
13	23.45	23.75	24.38	18.55	20.73	.....	25.28	26.33	26.96	27.60	26.92	28.97
14	23.45	24.25	24.83	18.39	21.57	.....	25.28	26.45	26.07	27.66	27.81	29.07
15	23.51	24.76	24.99	18.73	21.84	.....	25.68	26.34	25.87	26.57	28.08	29.50
16	23.54	24.81	25.00	18.77	21.46	23.68	25.85	26.23	25.87	25.50	27.79	29.80
17	24.75	23.99	21.97	19.68	22.05	21.99	25.98	26.52	27.13	27.00	.....	29.43
18	24.86	23.92	20.36	20.01	21.58	22.35	26.03	26.78	27.35	27.46	.....	29.51
19	23.83	23.42	19.01	20.12	20.90	22.83	25.85	26.60	27.73	27.64	.....	29.51
20	24.25	24.54	17.00	19.07	20.34	22.70	25.85	24.71	27.54	26.23	.....	29.81
21	24.12	24.97	.....	18.91	20.30	23.57	25.80	26.46	27.13	27.11	.....	30.09
22	23.66	24.97	.....	19.11	19.38	23.72	26.02	26.95	27.08	27.11	.....	29.62
23	24.82	23.82	13.02	19.40	19.53	23.82	26.09	27.16	26.23	27.21	a28.30	29.34
24	25.16	23.83	.....	20.20	20.27	24.41	26.56	27.42	26.75	27.66	.....	29.34
25	25.26	24.08	.....	20.55	20.32	24.71	26.83	27.47	27.04	27.71	.....	.....
26	23.94	24.12	.....	20.61	20.33	24.83	26.85	27.46	27.23	27.11	.....	.....
27	23.90	24.69	.....	19.48	20.67	27.85	27.07	27.06	27.23	26.56	.....	28.47
28	23.92	25.09	.....	19.57	20.97	25.32	27.12	26.92	27.23	26.31	.....	28.83
29	24.36	.....	.....	20.00	21.27	25.34	27.12	27.29	26.06	26.28	.....	29.26
30	25.13	.....	16.40	20.32	21.50	25.55	25.96	27.29	26.06	.....	a28.04	.....
31	25.37	.....	17.28	.....	21.47	.....	25.90	26.96	.....	.....	.....	.....

86-7 (*886, p. 567; 906, pp. 181-182; 936, p. 211; 944, p. 207). City of Hamilton. In old city well field, 0.2 mile north of Hamilton on U. S. Highway 127, in Fairfield Township. Measuring point, top of 1-inch board supporting recorder shelter over well, 3.25 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	13.28	Apr. 20	8.06	July 20	10.42	Oct. 12	13.42
12	13.07	27	8.41	27	10.78	19	13.60
19	13.12	May 4	8.81	Aug. 3	10.87	26	13.74
26	13.17	11	8.91	10	10.75	Nov. 1	13.91
Feb. 2	13.21	18	8.94	17	11.17	9	14.14
9	12.85	25	8.44	24	11.49	16	14.23
16	12.75	June 1	8.51	31	11.87	23	14.48
23	12.78	8	8.77	Sept. 7	12.28	30	14.63
Mar. 9	13.05	15	9.00	14	12.50	Dec. 7	14.82
16	12.67	22	9.24	21	12.76	14	15.00
23	7.49	29	9.58	28	13.02	21	15.15
Apr. 6	7.41	July 6	9.91	Oct. 5	13.31	28	15.25
13	7.80	13	10.07				

a Tape measurement.

89-3 (*845, p. 374; 886, p. 566; 906, p. 182; 936, pp. 211-212; 944, p. 207). General Machinery Co. (Niles Tool Works). In Hamilton. No measurements made in 1943.

104-1 (*845, p. 377; 886, pp. 565-566; 906, p. 183; 936, p. 212; 944, pp. 207-208). McGreevy Dairy Co. At Dixie Highway and Lurel Avenue, in Hamilton. Measuring point, top of 2-inch pipe, 0.55 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	38.70	Mar. 23	31.70	June 1	31.13	Aug. 10	33.92
12	38.35	30	31.08	8	31.09	17	34.25
19	38.30	Apr. 6	31.98	15	30.90	24	34.51
26	38.18	13	32.62	22	31.41	31	34.93
Feb. 2	38.10	20	33.10	29	31.97	Sept. 7	35.25
9	37.88	27	33.32	July 6	32.39	14	35.45
16	37.79	May 4	33.71	13	32.75	21	35.81
23	37.58	11	33.59	20	33.15	28	36.16
Mar. 2	37.51	18	32.47	27	33.47	Oct. 5	36.45
9	37.49	25	30.94	Aug. 3	33.64	12	(a)
16	37.25						

104-2 (*944, p. 208). McGreevy Dairy Co. At Dixie Highway and Laurel Avenue, in Hamilton. Measuring point, top of 6-inch pipe, 1.0 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	38.40	Apr. 6	37.99	July 6	35.17	Oct. 5	35.80
12	38.46	13	37.60	13	35.20	12	35.96
19	38.85	20	37.42	20	35.31	19	36.09
26	39.02	27	37.33	27	35.36	26	36.12
Feb. 2	39.20	May 4	37.25	Aug. 3	35.04	Nov. 2	36.28
9	39.35	11	37.00	10	35.13	9	36.45
16	39.50	18	36.91	17	35.12	16	36.60
23	39.60	25	36.50	24	35.22	23	36.74
Mar. 2	39.71	June 1	35.84	31	35.28	30	36.94
9	39.81	8	35.40	Sept. 7	35.27	Dec. 7	37.12
16	39.85	15	35.34	14	35.37	14	37.20
23	39.90	22	35.27	21	35.54	21	37.38
30	39.85	29	35.19	28	35.66	28	37.47

Pit D (*845, p. 372; 886, pp. 560-561; 906, p. 183; 936, p. 212; 944, p. 208). Paul Benninghofen. Gravel pit, (Symmes Lake) 2.1 miles west of Symmes, in Fairfield Township. Zero of staff gage, 543.0 feet above sea level and 18 feet below land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	13.10	Apr. 5	11.80	July 12	13.80	Oct. 11	17.16
12	14.10	12	12.50	19	14.50	18	17.20
19	14.60	19	12.70	26	14.90	25	17.50
26	15.00	26	12.90	Aug. 3	14.90	Nov. 1	17.70
Feb. 2	15.00	May 3	13.20	10	14.20	8	17.80
5	14.54	10	13.40	16	14.80	15	17.70
9	14.30	17	12.30	23	15.40	22	17.70
16	14.00	24	10.50	30	15.56	29	17.70
23	14.50	31	11.60	Sept. 6	16.40	Dec. 6	17.80
Mar. 2	14.70	June 7	12.30	13	16.50	13	17.80
8	15.10	14	12.90	20	16.60	20	17.94
15	14.60	21	12.90	27	16.80	27	18.00
19	7.55	28	13.60	Oct. 4	16.84		
29	8.70	July 6	14.10				

a Dry Oct. 12 - Dec. 28.

110 (*845, p. 373; 886, pp. 563-564; 906, p. 183; 944, p. 208). Joe Conrad. 2.2 miles west and 0.7 mile south of Symmes, on River Road, in Fairfield Township. Measuring point, top of concrete cover over well, 1.2 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	16.18	Apr. 5	13.37	July 6	16.32	Oct. 4	20.15
12	16.55	12	13.49	12	16.28	11	20.05
19	17.13	19	14.95	19	16.63	18	19.94
26	17.44	26	15.35	26	17.19	25	20.73
Feb. 2	17.49	May 3	15.76	Aug. 3	18.39	Nov. 1	21.16
9	16.20	10	16.18	10	18.05	8	20.97
16	16.41	17	14.82	16	18.77	15	20.62
23	16.60	24	13.69	23	18.66	22	21.11
Mar. 2	16.97	31	13.29	30	17.56	29	21.94
8	16.39	June 7	14.24	Sept. 6	19.77	Dec. 6	20.73
15	16.85	14	14.77	13	19.56	13	(a)
22	8.97	21	14.99	20	19.68	20	20.98
29	11.44	28	15.74	27	19.70	27	(a)

112A. Louis Mergy. On River Road, approximately 1.85 miles west of Symmes, and 135 feet northwest of Mill Creek Valley water-supply project production well F4. Diameter 3 inches, depth 31 feet. Measuring point, top of 3-inch pipe, 2.5 feet below land-surface datum and 566.92 feet above sea level.

Water level, in feet below land-surface datum, 1943

Date	Hour	Water level	Date	Hour	Water level
Apr. 2	.....	18.90	June 28	.....	19.38
6	.....	19.40	July 6	.....	20.05
7	10:00 a.m.	b 19.43	12	.....	20.95
	1:05 p.m.	b 20.59	19	.....	23.94
	3:10 p.m.	b 20.74	26	.....	24.17
	5:40 p.m.	b 20.81	Aug. 3	.....	22.15
	7:15 p.m.	b 20.86	10	.....	21.63
	8:55 p.m.	b 20.89	16	.....	22.12
8	8:20 a.m.	b 21.02	23	.....	22.75
	10:05 a.m.	b 21.02	30	.....	23.24
	12:25 p.m.	b 21.02	Sept. 7	.....	26.04
	2:05 p.m.	b 19.85	13	.....	26.35
	3:05 p.m.	b 19.79	14	.....	24.18
	4:05 p.m.	b 19.75	20	.....	23.75
	5:05 p.m.	b 19.72	27	.....	24.00
	8:02 p.m.	b 19.68	Oct. 4	.....	24.20
9	10:10 a.m.	b 19.63	11	.....	24.37
	11:30 a.m.	b 19.70	18	.....	24.57
12	.....	19.79	25	.....	25.01
19	.....	20.05	Nov. 1	.....	25.61
26	.....	20.19	8	.....	25.16
May 3	.....	20.60	15	.....	25.15
10	.....	20.52	22	.....	25.16
17	.....	19.34	29	.....	25.24
24	.....	18.17	Dec. 6	.....	25.37
31	.....	18.95	13	.....	25.42
June 7	.....	19.26	20	.....	25.58
14	.....	19.74	27	.....	25.49
21	.....	20.17			

114 (*886, pp. 563-564; 906, p. 183; 936, p. 212; 944, p. 208). George Groh. 1.4 miles west of Symmes along River Road, in Fairfield Township. Measuring point, top of 4-inch casing, 5.8 feet below land-surface datum. Measurements discontinued after July 26, 1943.

a Dry.
b Well F4, 135 feet distant, pumping.

114. George Groh--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 18	21.80	June 7	19.12	June 28	20.37	July 19	21.35
24	18.63	14	19.38	July 6	20.69	26	22.03
31	18.85	21	19.69	12	19.82		

117 (*845, p. 376; 886, pp. 563-564; 906, p. 183; 936, p. 212; 944, pp. 208-209). Anna Magie. On River Road, 0.7 mile northwest of Symmes, in Fairfield Township. Measuring point, top of 1¼-inch pipe, 2.25 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	26.75	Apr. 13	21.92	July 6	23.47	Oct. 5	26.76
12	26.57	20	22.19	12	25.10	12	27.59
19	26.32	27	22.39	19	25.75	19	30.60
26	26.44	May 2	22.39	26	24.51	26	29.87
Feb. 2	26.42	3	22.45	Aug. 3	23.98	Nov. 1	27.77
9	26.27	4	22.55	10	23.87	8	28.12
16	26.04	11	22.60	17	26.44	16	28.39
23	25.89	18	22.12	24	24.40	23	28.69
Mar. 2	25.83	25	21.13	30	24.99	30	28.94
9	25.90	June 1	20.89	Sept. 7	25.60	Dec. 7	29.21
16	25.75	8	21.01	14	25.67	14	28.90
23	22.08	15	20.94	21	26.49	20	29.63
30	21.33	22	21.16	28	26.60	28	29.86
Apr. 6	21.64	29	21.51				

Pit M (*944, p. 209). Edward Hieb. Abandoned gravel pit, 3,500 feet south of Miami River and 100 feet west of River Road, in Fairfield Township. Zero of staff gage, 543.9 feet above sea level, and 16 feet below land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	2.90	Apr. 13	0.80	July 20	3.00	Oct. 12	4.80
12	4.10	20	1.00	27	3.00	19	4.90
19	4.20	May 4	3.90	Aug. 3	3.90	26	5.00
26	4.80	11	3.30	10	2.90	Nov. 2	5.20
Feb. 2	4.90	18	2.80	17	3.30	9	5.10
9	4.50	25	a 1.00	24	4.00	16	4.20
16	4.20	June 1	a .50	30	3.60	23	4.30
23	2.60	8	.70	Sept. 7	3.80	30	4.40
Mar. 2	2.90	15	.10	14	3.90	Dec. 7	4.40
9	3.10	22	.10	21	4.00	14	4.50
16	3.60	29	3.90	28	4.30	21	5.50
30	a 1.00	July 6	2.00	Oct. 5	4.30	28	5.70
Apr. 6	a .30	13	2.20				

Pit N (*944, p. 209). Edward Hieb. Abandoned gravel pit, 3,500 feet south of Miami River and 2,300 feet west of River Road, in Fairfield Township. Zero of staff gage, 553.8 feet above sea level, and 6 feet below land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	2.50	Apr. 13	2.10	July 13	3.10	Oct. 12	5.50
12	3.00	20	2.30	20	3.30	19	5.60
19	3.60	27	2.60	27	3.70	26	5.70
26	3.90	May 4	3.10	Aug. 3	3.80	Nov. 2	5.70
Feb. 2	3.90	11	2.90	10	2.70	9	5.80
9	3.10	18	1.90	17	3.10	16	5.80
16	2.70	25	.10	24	3.40	23	5.90
23	3.30	June 1	.80	30	4.24	30	6.00
Mar. 2	3.60	8	1.40	Sept. 7	4.46	Dec. 7	6.00
9	3.90	15	1.90	14	4.50	14	6.00
16	2.40	22	1.90	21	4.90	21	6.00
30	a 1.10	29	2.60	28	5.10	28	6.00
Apr. 5	1.20	July 6	3.20	Oct. 5	5.40		

a Above land-surface datum.

121 (*906, p. 184; 936, p. 212; 944, p. 210). Edward Hieb. On River Road, 0.5 mile west and 1.3 miles north of Symmes, in Fairfield Township. No measurements made in 1943.

T-50 (*886, pp. 563-564; 906, p. 184; 936, p. 213; 944, p. 210). Mary Gerber. Geological Survey test well, on River Road, 0.5 mile south of Hamilton, in Fairfield Township. Measuring point, top of 1½-inch pipe, 0.7 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	14.85	Apr. 6	10.76	July 6	13.53	Oct. 5	14.89
12	14.59	13	11.58	13	12.65	12	15.08
19	14.46	20	12.07	20	12.95	19	15.25
26	14.75	27	12.42	27	13.15	26	15.35
Feb. 2	14.73	May 4	12.78	Aug. 3	13.28	Nov. 2	15.49
9	14.42	11	12.97	10	12.88	9	15.59
16	15.02	18	12.07	17	13.32	16	15.71
23	15.19	25	11.56	24	13.59	23	15.79
Mar. 2	14.16	June 1	11.45	30	13.13	30	15.79
9	14.56	8	11.57	Sept. 7	14.14	Dec. 7	15.99
16	14.30	15	11.75	14	14.16	14	15.94
23	8.19	22	11.65	21	14.64	20	16.19
30	9.47	29	12.23	28	14.71	28	16.32

T-51 (*886, p. 564; 906, p. 184; 936, p. 213; 944, p. 210). Miami Conservancy District. Geological Survey test well, on River Road, 0.1 mile south of Fairview Avenue, in Hamilton. Measuring point, top of 1½-inch pipe, 0.6 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	13.55	Apr. 6	14.74	July 6	15.69	Oct. 5	17.56
12	15.26	13	14.96	13	15.69	12	17.64
19	15.28	20	15.15	20	16.09	19	17.44
26	15.45	27	15.37	27	16.24	26	17.57
Feb. 2	15.00	May 5	16.32	Aug. 3	15.79	Nov. 2	17.68
9	14.45	11	14.64	10	13.66	9	17.65
16	14.29	18	13.80	17	15.99	16	17.63
23	14.22	25	12.21	24	16.45	23	17.65
Mar. 2	15.75	June 1	14.15	30	16.79	30	17.78
9	15.60	8	14.29	Sept. 7	15.53	Dec. [illegible]	17.79
16	14.60	15	14.53	14	15.54	14	17.84
23	7.60	21	15.15	21	17.27	20	17.78
30	13.24	29	15.69	28	17.42	28	17.89

122 (*886, pp. 563-564; 944, p. 210). Carl Federle. On U. S. Highway 127, At Pleasant and Saint Clair Avenues, in Hamilton. Measuring point, top of 4-inch casing, 2.0 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	41.68	Apr. 5	37.79	July 6	38.28	Oct. 4	41.09
12	42.07	12	38.27	12	38.41	11	41.30
19	41.85	19	37.83	19	38.64	18	41.85
26	41.78	26	38.31	26	38.05	Nov. 1	42.39
Feb. 2	41.75	May 3	38.64	Aug. 3	39.73	8	41.97
9	41.60	10	39.62	9	39.27	15	42.19
16	41.45	17	38.82	16	39.32	22	42.34
23	41.39	24	38.49	23	39.55	29	42.46
Mar. 2	41.33	31	38.88	30	39.93	Dec. 6	42.57
8	41.39	June 7	37.62	Sept. 7	40.12	13	42.72
15	41.34	14	37.49	13	40.19	20	42.84
22	38.85	21	38.97	20	41.45	27	42.95
29	36.39	28	38.55	27	40.84		

Pit E (*845, p. 372; 886, pp. 560-561; 906, pp. 184-185; 936, p. 213; 944, p. 210). South Hamilton Sand & Gravel Co. Gravel pit, 1.4 miles north of Symmes and 0.4 mile east of U. S. Highway 127, in Fairfield Township. Zero of staff gage, 552.6 feet above sea level and approximately 47 feet below land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	39.45	Apr. 5	34.20	June 21	30.40	Sept. 20	34.00
19	38.90	6	34.08	28	30.40	27	34.40
26	38.80	12	33.50	July 6	30.70	Oct. 4	34.70
Feb. 2	38.54	19	33.00	12	30.90	18	35.20
9	38.35	20	33.00	19	31.24	25	35.60
16	38.12	27	32.80	26	31.44	Nov. 8	36.00
23	38.10	May 3	32.60	Aug. 3	31.70	15	36.50
Mar. 1	38.00	10	32.50	9	31.90	22	36.71
8	37.80	17	32.30	16	32.10	29	37.00
15	37.70	24	31.80	23	33.10	Dec. 6	37.20
22	37.00	31	31.10	30	32.80	13	37. 0
23	36.70	June 7	30.60	Sept. 7	33.30	20	37.60
29	35.20	14	30.50	13	33.40	27	37.90
30	34.98						

128 (*886, pp. 562-563; 906, p. 185; 936, p. 213; 944, p. 211). George Shearer. Near crossing of State Highway 4 and Baltimore & Ohio Railroad, in Schenck, a suburb of Hamilton. Measuring point, top of 4-inch casing, 2.5 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 12	50.20	Apr. 6	44.19	June 29	41.24	Sept. 28	45.17
19	50.20	13	43.62	July 6	41.84	Oct. 5	45.41
26	49.92	20	43.22	13	41.59	12	45.65
Feb. 2	49.72	27	42.96	20	41.73	19	46.01
9	49.48	May 4	42.93	27	41.94	26	46.25
16	49.33	11	42.69	Aug. 3	42.06	Nov. 2	46.63
23	49.04	18	42.39	10	42.33	9	46.98
Mar. 2	48.90	25	41.39	24	43.35	16	47.20
9	48.79	June 1	41.23	Sept. 7	44.05	23	47.48
16	38.55	8	40.90	14	44.35	30	47.72
23	46.93	15	40.67	21	44.78	Dec. 6	47.99
30	46.95	22	40.90				

133 (*886, pp. 562-563; 906, p. 185; 934, p. 214; 944, p. 211). J. E. Ryan. 0.7 mile south of Schenck, on road to Symmes and 0.2 mile east of State Highway 4, in Fairfield Township. Measuring point, top of 6-inch casing, 0.4 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	40.80	Apr. 6	32.91	July 6	30.73	Oct. 12	35.12
12	41.30	13	31.91	13	30.55	19	35.38
19	40.60	20	31.80	20	30.53	26	35.65
26	40.22	27	31.40	27	30.67	Nov. 2	36.05
Feb. 2	39.89	May 4	31.54	Aug. 3	30.78	9	36.41
9	39.51	11	31.17	10	31.24	16	36.72
16	39.34	18	30.65	17	31.65	23	37.10
23	38.92	25	29.00	24	32.56	30	37.30
Mar. 2	38.92	June 1	29.47	31	33.59	Dec. 7	37.53
9	38.67	8	29.32	Sept. 7	33.68	14	37.78
16	38.50	15	29.10	14	33.57	21	38.15
23	35.95	22	29.62	21	34.09	28	38.83
30	33.59	29	30.30	Oct. 5	34.79		

150-2 (*845, p. 376; 886, pp. 562-563; 906, p. 186; 936, p. 214; 944, p. 211). Harry A. Morris. At Flockton, in Fairfield Township. Measuring point, top of concrete curb, 0.2 foot above land-surface datum.

150-2. Harry A. Morris--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	2.52	Apr. 6	3.92	July 6	7.99	Oct. 5	12.14
12	3.00	13	2.75	13	8.85	12	12.39
19	3.20	20	2.35	20	9.52	19	12.63
26	3.63	27	3.22	27	10.20	26	12.73
Feb. 2	3.14	May 4	4.00	Aug. 3	9.36	Nov. 2	12.78
9	2.50	11	4.49	10	9.58	9	12.95
16	2.98	18	1.56	17	9.99	16	13.00
23	3.17	25	2.85	24	10.40	23	13.03
Mar. 2	3.58	June 1	4.04	31	10.94	30	13.09
9	4.13	8	2.94	Sept. 7	11.30	Dec. 7	13.29
16	1.00	15	4.15	14	11.46	14	13.38
23	2.35	22	5.50	21	11.62	21	13.54
30	3.05	29	6.84	28	11.99	28	13.74

151-1 (*906, pp. 186-187; 936, pp. 214-215; 944, p. 212). Harry A. Morris. Geological Survey test well. At Flockton, in Fairfield Township. Deep well. Measuring point, top of 6-inch casing, 1.2 feet above land-surface datum.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	26.10	24.36	22.74	14.44	12.72	10.14	13.78	13.11	17.98	18.73	19.95	21.37
2	25.93	24.31	22.67	14.36	12.64	10.28	13.98	13.06	17.86	18.80	20.05	21.44
3	25.73	24.30	22.69	14.40	12.80	10.44	14.15	13.08	17.72	18.85	20.09	21.50
4	25.56	24.20	22.68	14.27	12.89	10.78	14.33	13.04	17.62	18.89	20.11	21.57
5	25.50	24.16	22.64	14.15	12.90	10.96	14.60	13.21	17.50	18.93	20.15	21.57
6	25.39	24.00	22.64	14.18	12.83	10.97	14.84	13.30	17.47	18.96	20.20	21.61
7	25.26	23.94	22.73	14.05	12.92	10.60	14.98	13.30	17.49	18.95	20.24	21.63
8	25.14	23.88	22.77	13.83	13.15	9.46	15.01	13.22	17.48	18.95	20.29	21.70
9	25.04	23.71	22.71	13.73	13.19	9.22	15.14	13.57	17.53	18.98	20.36	21.78
10	24.91	23.65	22.62	13.74	13.13	9.36	14.94	13.78	17.56	19.06	20.40	21.80
11	24.90	23.59	22.56	13.74	12.90	9.35	14.57	13.82	17.58	19.09	20.46	21.83
12	24.83	23.56	22.53	13.27	12.58	9.44	13.96	13.96	17.58	19.11	20.45	22.50
13	24.82	23.40	22.43	13.26	12.50	9.74	13.61	14.08	17.51	19.11	20.56	21.93
14	24.73	23.34	22.41	13.79	12.40	9.94	13.63	14.16	17.76	19.20	20.58	22.03
15	24.64	23.30	22.26	13.79	12.27	10.00	13.57	14.34	18.09	19.20	20.58	22.09
16	24.61	23.25	22.12	13.15	11.99	10.14	13.77	14.82	18.36	19.25	20.69	22.16
17	24.63	23.16	22.05	13.15	11.60	10.45	13.74	14.82	18.47	19.30	20.71	22.17
18	24.60	23.15	21.75	13.04	10.94	10.72	13.67	15.08	18.51	19.34	20.76	22.17
19	24.70	23.08	21.42	12.70	9.81	10.90	13.53	15.47	18.55	19.38	20.80	22.21
20	24.70	22.98	20.67	12.49	9.26	11.10	13.59	15.76	18.55	19.42	20.85	22.28
21	24.56	22.90	19.44	12.60	8.89	11.33	13.44	16.04	18.48	19.45	20.94	22.32
22	24.49	22.88	18.26	12.59	8.88	11.53	13.60	16.26	18.58	19.52	21.02	22.51
23	24.44	22.82	17.52	12.44	8.74	11.77	13.67	16.47	18.60	19.56	21.08	22.70
24	24.43	22.85	16.99	12.35	8.57	11.98	13.71	16.69	18.79	19.58	21.12	22.90
25	24.48	22.85	16.56	12.27	8.50	12.26	13.75	16.91	18.58	19.63	21.13	23.00
26	24.49	22.77	16.06	12.33	8.62	12.47	13.80	17.08	18.61	19.65	21.14	23.17
27	24.48	22.77	15.61	12.18	8.87	12.59	13.83	17.32	18.72	19.68	21.21	23.38
28	24.43	22.70	15.41	12.44	9.40	12.82	13.83	17.46	18.83	19.74	21.24	23.55
29	24.37	.....	15.27	12.47	9.69	13.27	13.72	17.65	18.79	19.77	21.30	23.75
30	24.35	.....	14.97	12.60	10.00	13.57	13.58	17.81	18.75	19.84	21.35	23.82
31	24.35	.....	14.67	.....	10.13	.....	13.27	17.93	.....	19.90	.....	24.11

151-2 (*906, p. 187; 936, p. 215; 944, p. 211). Geological Survey test well. Harry A. Morris. At Flockton, in Fairfield Township. Shallow well. Measuring point, top of 6-inch casing, 1.5 feet above land-surface datum.

151-2. Harry A. Morris--Continued.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	.....	.....	.....	a8.27	11.34	12.02	15.63	17.23	18.66	19.99
2	.....	a22.77	.....	.....	.....	.....	11.52	11.97	15.65	17.35	18.70	20.05
3	.....	.....	.....	.....	.....	.....	11.68	11.97	15.68	17.43	18.77	20.11
4	.....	.....	.....	.....	a11.47	.....	11.83	11.92	15.69	17.47	18.79	20.16
5	a24.21	.....	.....	.....	.....	.....	12.08	12.05	15.71	17.57	18.84	20.19
6	.....	.....	.....	a13.43	.....	.....	12.25	12.13	15.72	17.56	18.86	20.24
7	.....	.....	.....	.....	.....	.....	12.41	12.11	15.82	17.57	18.90	20.26
8	.....	.....	.....	.....	.....	7.00	12.53	12.13	15.87	17.59	18.94	20.34
9	.....	a22.27	a22.42	.....	.....	7.02	12.64	12.20	15.94	17.67	19.02	20.41
10	.....	.....	.....	.....	.....	7.13	12.63	12.40	15.99	17.71	19.07	20.44
11	.....	.....	.....	.....	11.14	7.12	12.55	12.47	16.04	17.74	19.13	20.46
12	a23.59	.....	.....	.....	.....	6.97	12.29	12.55	16.07	17.77	19.12	20.50
13	.....	.....	.....	a12.60	.....	7.24	12.17	12.62	16.06	17.77	19.22	20.55
14	.....	.....	.....	.....	.....	7.45	12.05	12.75	16.15	17.87	19.25	20.63
15	.....	.....	.....	.....	.....	7.85	12.08	12.78	16.31	17.87	19.26	20.69
16	.....	a21.75	a20.49	.....	.....	.....	12.15	13.02	16.50	17.93	19.37	20.76
17	.....	.....	.....	.....	.....	.....	12.22	13.22	16.61	17.98	19.40	20.77
18	.....	.....	.....	.....	a 8.68	.....	12.53	13.37	16.65	18.01	19.44	20.80
19	a23.47	.....	.....	.....	.....	7.85	12.15	13.56	16.72	18.08	19.48	20.83
20	.....	.....	.....	a11.75	.....	8.06	12.10	13.74	16.74	18.12	19.53	20.89
21	.....	.....	.....	.....	.....	.....	12.14	13.93	16.82	18.16	19.60	20.93
22	.....	.....	.....	.....	.....	9.34	12.25	14.10	16.90	18.22	19.67	21.05
23	.....	a21.25	a16.19	.....	.....	9.54	12.36	14.26	16.97	18.27	19.79	21.17
24	.....	.....	.....	.....	.....	9.75	12.37	14.46	16.98	18.29	19.81	21.22
25	.....	.....	.....	.....	a 7.29	10.00	12.43	14.64	17.04	18.34	19.84	21.29
26	a23.00	.....	.....	.....	.....	10.18	12.49	14.78	17.08	18.37	19.89	21.39
27	.....	.....	.....	a11.13	.....	10.29	12.52	14.97	17.12	18.40	19.92	21.52
28	.....	.....	.....	.....	.....	10.48	12.57	15.10	17.23	18.47	19.97	21.64
29	.....	.....	.....	.....	.....	10.87	12.54	15.25	17.25	18.49	.....	21.77
30	.....	.....	a14.28	.....	.....	11.12	12.32	15.40	17.27	18.56	.....	21.88
31	.....	.....	.....	.....	.....	.....	12.16	15.55	.....	18.62	.....	22.01

156 (*944, p. 212). Ray Milder's Inn. At northwest corner of U. S. Highway 127 and Nilles Road, in Symmes, Fairfield Township. Measuring point, top of 2-inch pipe, 2.0 feet above floor of concrete pump pit, 4.4 feet below top of metal rim of manhole cover, and 0.3 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Date		Water level	Date		Water level	Date		Water level	Date		Water level
Jan.	5	32.60	Apr.	12	26.72	July	6	25.42	Oct.	4	30.71
	12	32.45		19	27.54		12	25.74		11	30.97
	19	32.24		21	26.58		19	26.59		18	31.92
	26	32.09		26	26.59		26	27.27		25	31.91
Feb.	2	31.99	May	3	26.65	Aug.	3	27.76	Nov.	1	32.15
	9	31.73		10	26.73		9	27.89		8	32.37
	16	32.56		17	26.39		16	28.24		15	32.79
	23	31.38		24	25.29		23	28.56		22	33.15
Mar.	1	31.23		31	25.05		30	27.92		29	33.52
	8	31.22	June	7	24.85	Sept.	7	29.35	Dec.	6	33.85
	15	31.07		14	24.37		13	29.39		13	34.22
	22	29.12		21	24.73		20	29.87		20	34.51
	29	27.87		28	25.04		27	31.35		27	34.78
Apr.	5	27.14									

a Tape measurement.

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157 (*944, p. 212). Carl Schiering. On River Road, 5,800 feet west of U. S. Highway 127, in Fairfield Township. Measuring point, top of concrete platform over well, 0.3 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	23.47	Apr. 12	18.83	July 12	20.12	Oct. 11	25.24
12	23.15	19	19.19	19	20.68	18	25.58
26	23.08	26	19.55	26	21.27	25	25.68
Feb. 2	23.02	May 3	19.83	Aug. 3	21.52	Nov. 1	25.84
9	22.81	10	19.95	9	22.04	8	25.95
16	22.55	17	19.45	16	22.45	15	26.35
23	22.46	24	18.19	23	22.44	22	26.26
Mar. 2	22.46	31	18.14	30	22.66	29	26.24
8	22.59	June 7	18.47	Sept. 6	23.03	Dec. 6	26.93
15	22.44	14	18.66	13	24.24	13	26.72
22	17.99	21	18.85	20	23.78	20	27.53
29	17.87	28	19.27	27	24.13	27	26.95
Apr. 5	18.34	July 6	18.79	Oct. 4	24.97		

158-1 (*944, p. 212). Ralph Miller. On Seward Road, 0.3 mile south of Tylersville Road (Deerfield Pike), in Fairfield Township. Measuring point top of 4-inch pipe, 1.4 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	43.01	Apr. 13	31.70	July 13	30.60	Oct. 12	36.15
19	42.25	20	30.68	20	30.63	19	36.50
26	41.86	27	29.87	27	30.97	26	36.79
Feb. 2	41.62	May 4	30.08	Aug. 3	30.46	Nov. 2	37.10
9	41.18	11	29.57	10	30.91	9	37.44
16	40.74	18	26.52	17	31.57	16	37.75
23	40.18	25	25.75	24	32.52	23	38.08
Mar. 2	39.86	June 1	26.53	31	33.52	30	38.35
9	39.55	8	25.28	Sept. 7	34.05	Dec. 7	38.66
16	39.23	15	25.90	14	34.48	14	39.01
19	37.88	22	27.40	21	35.08	21	39.37
30	33.70	29	28.94	28	34.55	28	39.69
Apr. 6	32.52	July 6	30.22	Oct. 5	35.92		

158-2 (*944, p. 213). Ralph Miller. On Seward Road, 0.3 mile south of Tylersville Road (Deerfield Pike), in Fairfield Township. Measuring point, top of 4-inch pipe, 1.4 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	1.60	Apr. 6	3.51	July 6	4.45	Oct. 5	6.09
12	2.10	13	2.49	13	4.39	12	6.30
19	1.65	20	1.64	20	4.30	19	6.42
26	2.04	27	2.50	27	4.77	26	7.04
Feb. 2	1.59	May 4	3.33	Aug. 3	3.79	Nov. 2	6.94
9	1.78	11	1.95	10	4.00	9	6.20
16	2.10	18	1.38	17	4.49	16	5.68
23	1.62	25	1.82	24	4.85	23	5.26
Mar. 2	1.92	June 1	2.75	31	5.03	30	5.50
9	2.30	8	2.75	Sept. 7	5.16	Dec. 7	5.23
16	1.20	15	3.18	14	5.40	14	4.75
23	1.82	22	3.74	21	5.58	21	2.51
30	2.65	29	4.21	28	5.84	28	2.42

160-1 (*906, p. 188; 936, p. 215; 944, p. 213). Orin James. 0.9 mile east of Flockton, in Union Township. Deep well. Measuring point, top of 6-inch casing, at land-surface datum.

160-1. Orin James--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	29.58	Apr. 27	19.98	July 20	21.16	Oct. 12	26.25
9	28.85	May 4	20.04	27	21.80	19	25.82
16	28.78	11	19.58	Aug. 3	20.02	26	26.52
23	27.92	18	18.65	10	21.26	Nov. 2	28.19
Mar. 2	28.07	25	16.47	17	22.29	9	27.02
9	27.96	June 1	17.30	24	22.36	16	27.16
16	27.52	8	16.82	31	23.44	23	28.12
23	25.25	15	18.25	Sept. 7	24.04	30	27.70
30	23.56	22	17.38	14	23.87	Dec. 7	27.86
Apr. 6	22.10	29	19.27	21	24.84	14	29.72
13	21.31	July 6	19.61	28	25.53	21	28.39
20	20.68	13	20.21	Oct. 5	26.09		

160-2 (*845, p. 376; 886, pp. 562-563; 906, p. 188; 936, p. 216; 944, p. 213). Orin James. 0.9 mile east of Flockton, in Union Township. Shallow well. Measuring point, top of concrete curb, 1 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	13.60	Apr. 6	3.55	July 6	6.69	Oct. 5	14.50
12	12.78	13	1.93	13	7.60	12	15.17
19	11.42	20	1.23	20	8.37	19	15.86
26	10.61	27	2.17	27	9.07	26	16.47
Feb. 2	9.27	May 4	2.78	Aug. 3	9.52	Nov. 2	17.05
9	3.62	11	1.48	10	9.75	9	17.63
16	3.42	18	1.09	17	10.22	16	18.07
23	4.50	25	1.74	24	10.75	23	18.52
Mar. 2	4.11	June 1	2.99	31	11.36	30	18.90
9	5.35	8	2.50	Sept. 7	12.04	Dec. 7	19.26
16	.70	15	3.28	14	12.62	14	19.65
23	1.94	22	4.40	21	13.25	21	19.99
30	2.53	29	4.66	28	13.82		

165-1 (*944, p. 213). E. C. Shepherd, On Princeton Pike, 0.7 mile north of Port Union, in Union Township. Measuring point, top of pump base, 1.0 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	37.27	Apr. 6	34.99	July 6	35.97	Oct. 5	40.20
12	37.39	13	34.69	13	35.81	12	40.42
19	37.85	20	34.40	20	35.91	19	40.58
26	38.05	27	34.20	27	36.47	26	41.17
Feb. 2	38.38	May 4	34.52	Aug. 3	35.65	Nov. 2	41.57
9	37.11	11	33.96	10	36.10	9	42.00
16	37.10	18	32.83	17	36.79	16	42.12
23	37.32	25	32.07	24	37.15	23	42.65
Mar. 2	37.84	June 1	33.67	31	37.76	30	42.90
9	38.97	8	33.96	Sept. 7	38.55	Dec. 7	43.05
16	37.20	15	34.07	14	38.80	14	43.38
23	35.13	22	34.59	21	39.24	21	43.54
30	34.68	29	35.28	28	39.93	28	43.83

165-2 (*845, p. 375; 886, pp. 561-562; 906, p. 188; 936, p. 216; 944, pp. 213-214). E. C. Shepherd. On Princeton Pike, 0.7 mile north of Port Union, Union Township. Shallow well. Measuring point, base of pump, 0.3 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	14.55	Apr. 6	6.37	July 6	9.30	Oct. 5	13.17
12	14.75	13	6.47	13	9.76	12	14.78
19	14.15	20	5.66	20	10.26	19	14.81
26	13.79	27	5.68	27	10.88	26	14.75
Feb. 2	13.34	May 4	6.70	Aug. 3	10.98	Nov. 2	14.66
9	12.75	11	6.01	10	11.37	9	14.67
16	11.18	18	4.60	17	11.81	16	14.92
23	9.14	25	5.05	24	13.14	23	14.70

165-2. E. C. Shepherd--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 2	8.80	June 1	5.95	Aug. 31	12.48	Nov. 30	14.74
9	8.90	8	6.44	Sept. 7	12.60	Dec. 7	14.89
16	6.17	15	7.07	14	12.96	14	14.95
23	5.08	22	8.14	21	13.53	21	15.04
30	5.47	29	8.74	28	13.68	28	15.63

168 (*906, pp. 188-189; 936, p. 216; 944, p. 214). M. Haugbers. At Princeton Pike and Rialto Road, in Port Union, Union Township. Measuring point beginning Jan. 26, 1943, top of metal pump base, 4.18 feet above that used previously, 606.98 feet above sea level, and 0.78 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 26	23.62	Apr. 27	22.61	July 20	22.35	Oct. 12	26.91
Feb. 2	23.66	May 4	22.31	27	23.19	19	27.73
9	22.26	11	20.48	Aug. 3	21.95	26	27.42
16	22.97	18	18.87	10	23.38	Nov. 2	27.96
23	23.35	25	20.11	17	23.19	9	29.11
Mar. 2	23.51	June 1	21.26	24	24.17	16	28.87
9	23.92	8	20.11	31	24.20	23	28.67
16	21.60	15	21.52	Sept. 7	25.21	30	28.91
23	21.06	22	21.87	14	25.06	Dec. 7	29.17
30	22.27	29	22.42	21	26.29	14	29.73
Apr. 6	22.40	July 6	22.85	28	26.09	21	30.16
13	22.36	13	22.66	Oct. 5	26.40	28	30.21
20	22.66						

175 (*845, p. 375; 886, pp. 561-562; 908, p. 189; 936, p. 216; 944, p. 214). J. W. Margonett. In Rialto, Union Township. Measuring point, top of wood curb around well, 0.3 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	5.94	Apr. 6	7.07	July 6	9.88	Oct. 5	11.57
12	6.60	13	6.60	13	9.34	12	11.64
19	6.92	20	6.02	20	9.69	19	11.74
26	7.70	27	6.89	27	10.39	26	11.80
Feb. 2	7.65	May 4	7.64	Aug. 3	9.06	Nov. 2	12.51
9	6.03	11	6.42	10	9.88	9	11.90
16	6.41	18	5.52	17	10.45	16	12.03
23	7.00	25	6.00	24	10.82	23	12.05
Mar. 2	7.79	June 1	6.65	31	11.08	30	12.23
9	8.49	8	6.30	Sept. 7	9.88	Dec. 7	12.19
16	5.89	15	6.94	14	11.06	14	12.19
23	5.72	22	8.47	21	11.15	21	12.27
30	6.47	29	8.97	28	11.31	28	12.32

180 (*845, p. 373; 886, pp. 561-562; 906, p. 189; 936, p. 217; 944, p. 214). Fox Paper Co. In Crescentville, Union Township. Measuring point, top of metal plate covering well, 1.5 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	8.29	Apr. 6	8.69	July 6	11.45	Oct. 5	15.59
12	8.70	13	8.50	13	9.60	12	15.69
19	9.63	20	8.46	20	8.72	19	16.10
26	10.04	27	8.50	27	9.96	26	16.17
Feb. 2	9.90	May 4	9.13	Aug. 3	9.19	Nov. 2	16.59
9	8.95	11	8.38	10	9.55	9	16.75
16	9.13	18	7.41	17	11.57	16	16.93
23	8.97	25	6.58	24	12.61	23	17.47
Mar. 2	9.84	June 1	7.07	31	13.68	30	17.50
9	10.39	8	7.80	Sept. 7	14.05	Dec. 7	17.51
16	8.45	15	7.98	14	14.19	14	17.88
23	6.16	22	8.76	21	14.60	21	17.54
30	7.20	29	10.38	28	15.62	28	17.93

B1 (*944, p. 215). Ohio State Highway Department. Along State Highway 4, 330 feet south of Symmes road, 45 feet east of highway, in Fairfield Township. Measuring point, top of 6-inch plug flush with top of 6-inch coupling, 0.2 foot below land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	43.24	Apr. 5	38.06	July 6	34.07	Oct. 4	35.10
12	43.27	12	37.25	12	34.12	11	35.19
19	43.28	19	36.81	19	34.38	18	35.28
26	43.28	26	36.56	26	34.25	25	35.40
Feb. 2	43.27	May 3	36.27	Aug. 2	34.24	Nov. 1	35.50
9	43.24	10	35.97	9	34.31	8	35.63
16	42.90	17	35.96	16	34.38	15	35.75
23	42.50	24	34.99	23	34.51	22	35.93
Mar. 1	42.98	31	34.45	30	34.27	29	36.12
8	42.79	June 7	34.28	Sept. 7	34.69	Dec. 6	36.25
15	42.62	14	34.02	13	34.69	13	36.38
22	41.46	21	33.98	20	34.89	20	36.54
29	39.23	28	33.99	27	34.98	27	36.68

B2 (*944, p. 215). Ohio State Highway Department. Along U. S. Highway 127, 90 feet north of Symmes road, and 12 feet west of highway, in Fairfield Township. Measuring point, top of 6-inch casing, 1.0 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	37.08	Apr. 5	31.38	July 12	29.96	Oct. 11	34.13
12	36.83	26	31.06	19	30.39	18	34.52
19	36.08	May 3	31.07	Aug. 2	31.02	25	34.75
26	35.40	10	31.03	9	31.05	Nov. 1	34.95
Feb. 2	35.80	17	30.82	16	31.26	8	35.14
9	35.58	24	29.97	23	31.65	15	35.42
16	35.44	31	29.49	30	32.01	22	35.68
23	35.29	June 7	29.32	Sept. 7	32.46	29	35.90
Mar. 1	35.23	14	29.15	13	32.56	Dec. 6	36.17
8	35.24	21	29.11	20	33.12	13	36.41
15	35.02	28	29.30	27	33.49	20	36.66
22	32.68	July 6	29.65	Oct. 4	33.78	27	36.85
29	31.54						

B3 (*944, p. 215). E. H. Zinsmeister. Along River Road, 0.6 mile north of Nilles Road, 107 feet west of River Road, in Fairfield Township. Measuring point, top of 6-inch plug flush with top of 6-inch casing, 0.8 foot above land- surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	21.12	Apr. 6	15.71	July 12	19.18	Oct. 11	21.77
12	20.61	13	15.99	20	19.79	19	21.68
19	20.53	20	16.27	27	18.69	26	22.05
26	20.49	May 4	16.62	Aug. 3	18.12	Nov. 2	21.99
Feb. 2	20.43	11	16.66	10	18.01	9	22.35
9	20.25	18	16.14	17	18.38	16	22.62
16	20.06	25	15.16	24	18.65	23	22.92
23	19.89	June 1	14.96	30	19.18	30	23.17
Mar. 1	19.87	8	15.09	Sept. 7	19.74	Dec. 7	23.42
8	19.96	15	15.09	14	19.76	14	25.65
15	19.76	21	15.28	21	20.63	21	23.85
22	15.99	29	15.65	28	20.77	28	23.99
30	14.70	July 6	17.59	Oct. 5	20.94		

B4 (*944, p.,215). A. H. Kollstadt. Along River Road, 0.3 mile north of Symmes road, and 186 feet east of River Road, in Fairfield Township. Measuring point, top of 6-inch casing, 1.0 foot above land-surface datum.

B4. A. H. Kollstadt--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	25.25	Apr. 6	22.79	July 6	24.47	Oct. 5	27.35
12	25.62	13	23.71	12	24.48	11	27.56
19	26.12	20	24.05	20	25.03	19	27.77
26	26.35	27	24.09	26	25.36	26	27.72
Feb. 2	26.26	May 5	24.55	Aug. 3	25.06	Nov. 2	27.75
9	25.49	11	24.47	10	24.34	9	27.96
16	25.32	18	23.39	17	25.14	16	28.03
23	25.69	25	21.91	24	25.69	23	28.09
Mar. 1	25.76	June 1	22.32	30	26.08	30	28.27
9	26.29	8	22.77	Sept. 7	26.45	Dec. 7	28.39
16	25.53	15	23.19	14	26.45	14	28.48
22	16.80	21	23.24	21	26.79	21	28.61
29	20.64	29	23.95	28	27.14	28	28.71

B5 (*944, pp. 215-216). L. Haviland. 0.45 mile south of River (Nilles) Road and 0.15 mile east of Muskoff Road, in Fairfield Township. Measuring point, top of 6-inch plug flush with top of 6-inch coupling, 2.3 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	30.25	Apr. 5	25.36	July 6	24.33	Oct. 4	24.72
12	30.57	12	25.09	12	24.34	11	24.79
19	30.46	19	24.99	19	24.37	18	24.80
26	30.44	26	24.98	26	24.42	25	24.83
Feb. 2	30.36	May 3	26.16	Aug. 3	24.44	Nov. 2	24.86
9	30.26	10	24.92	10	24.47	9	24.88
16	30.18	17	24.55	17	24.49	16	24.91
23	30.12	24	24.77	23	24.52	23	24.85
Mar. 1	30.05	31	24.70	30	24.57	30	25.00
8	29.98	June 7	24.59	Sept. 7	24.57	Dec. 7	24.99
15	29.84	14	24.50	13	24.59	14	25.04
22	29.55	21	24.45	20	24.65	21	25.05
29	29.25	28	24.41	27	24.68	28	25.07

B6 (*944, p. 216). Andrew Groh. 3,900 feet west of River Road and 2,500 feet north of River (Nilles) Road, about 250 feet south of Pleasant Run, in Fairfield Township. Measuring point, top of 6-inch casing, 1.5 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	18.59	Apr. 12	16.28	July 13	17.52	Oct. 12	21.97
12	20.11	19	16.63	20	18.02	19	22.29
19	17.83	26	17.78	27	18.51	26	22.29
26	19.15	May 3	17.08	Aug. 3	18.93	Nov. 2	22.72
Feb. 2	18.33	10	17.19	10	18.85	9	22.77
9	18.65	17	16.14	17	20.27	16	23.14
16	18.00	24	14.77	24	19.07	23	22.38
23	18.56	June 1	15.34	30	19.36	30	23.19
Mar. 1	18.74	8	15.79	Sept. 6	19.66	Dec. 7	23.58
8	19.03	15	16.16	14	20.39	14	23.36
15	18.55	21	16.33	21	20.61	21	23.48
22	11.39	29	16.96	28	20.85	28	22.65
29	14.18	July 6	17.46	Oct. 5	21.13		

B7 (*944, p. 216). Louis M. Conrad. Along River Road, 0.45 mile south of River (Nilles) Road, in Fairfield Township. Measuring point, top of 6-inch plug flush with top of 6-inch coupling, 1.2 feet above land-surface datum. Measurements discontinued after Sept. 13, 1943.

B7. Louis M. Conrad--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	16.04	Mar. 15	15.38	May 17	8.16	July 19	8.49
12	15.95	22	8.12	24	8.24	26	8.88
19	15.88	29	7.55	31	8.26	Aug. 3	9.11
26	15.82	Apr. 5	8.40	June 7	8.17	10	9.25
Feb. 2	15.50	12	8.15	14	8.19	17	9.32
9	15.30	19	7.96	21	8.25	23	9.45
16	15.42	26	8.03	28	7.32	30	9.53
23	15.54	May 3	8.10	July 6	8.37	Sept. 6	9.66
Mar. 1	15.49	10	8.16	12	8.45	13	10.06
8	15.44						

B8 (*944, p. 216). Pauline Benninghofen. 2,500 feet west of River Road and 400 feet south of Miami River, in Fairfield Township. Measuring point, top of 6-inch plug flush with top of 6-inch coupling, 0.9 foot above land-surface datum. Measurements discontinued after Mar. 15, 1943.

Water level, in feet below land-surface datum, 1943

Jan. 5	11.12	Jan. 26	11.33	Feb. 16	11.32	Mar. 8	11.43
12	11.22	Feb. 2	11.35	23	11.36	15	11.42
19	11.40	9	11.34	Mar. 1	11.39		

B9 (*944, p. 216). Henrietta Joyce. About 5,100 feet west of River Road and 6,700 feet north of River (Nilles) Road, in Fairfield Township. Measuring point, top of 6-inch plug flush with top of 6-inch coupling, 0.9 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	12.49	Apr. 6	8.41	July 6	11.93	Oct. 5	13.98
12	12.75	13	9.38	13	12.08	12	14.13
19	13.19	20	9.92	20	12.27	19	14.27
26	13.59	27	10.36	27	13.48	26	14.38
Feb. 2	13.69	May 4	10.82	Aug. 3	13.61	Nov. 2	14.52
9	13.49	11	11.18	10	12.63	9	14.53
16	12.19	18	11.33	17	12.75	16	14.73
23	13.32	25	11.18	24	12.95	23	14.83
Mar. 2	13.43	June 1	11.18	30	13.11	30	14.94
9	13.69	8	11.29	Sept. 7	13.29	Dec. 7	15.05
16	13.61	15	11.44	14	13.34	14	15.12
23	11.79	21	11.49	21	13.64	20	15.22
30	7.55	29	11.66	28	13.79	28	15.12

B10 (*944, p. 217). Elizabeth Groh. About 660 feet west of River Road and 4,000 feet north of River (Nilles) Road, in Fairfield Township. Measuring point beginning July 21, 1943, 4.32 feet above previous measuring point, 567.00 feet above sea level (U. S. Geol. Survey datum), and 5.4 feet above land-surface datum.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	9.45	11.14	11.02	5.18	7.57	8.13	9.10	a9.31	9.83	11.12	11.76	12.39
2	9.55	11.12	10.87	5.33	7.63	8.21	9.13	9.33	9.85	11.15	11.77	12.42
3	9.60	11.06	10.96	5.46	7.68	8.28	9.16	9.33	9.88	11.18	11.80	12.44
4	9.63	11.07	11.06	5.58	7.73	8.11	9.19	9.34	9.91	11.18	11.83	12.45
5	9.58	10.55	11.13	5.70	7.77	8.43	9.22	9.34	9.93	11.16	11.84	12.46
6	9.68	10.18	11.17	5.80	7.84	8.48	9.24	9.35	9.95	11.18	11.87	12.49
7	9.85	11.15	11.23	5.91	7.88	8.50	9.26	9.36	9.97	11.21	11.89	12.51
8	10.02	10.20	11.30	6.01	7.93	8.60	9.28	9.37	10.00	11.23	11.92	12.54
9	10.18	10.26	11.46	6.11	7.98	8.64	9.30	9.38	10.02	11.23	11.94	12.55
10	10.34	10.36	11.49	6.21	8.02	8.67	9.32	9.39	10.05	11.23	11.97	12.57
11	10.45	10.36	11.45	6.31	8.07	8.70	9.34	9.40	10.07	11.33	11.99	12.59
12	10.59	9.75	10.47	6.40	8.10	8.72	9.35	9.41	10.10	11.36	12.01	12.61
13	10.72	9.81	10.33	6.42	8.13	8.75	9.37	9.43	10.15	11.33	12.04	12.63
14	10.84	10.00	10.33	6.44	8.16	8.78	9.38	9.45	10.16	11.40	12.06	12.61
15	10.90	10.20	10.33	6.52	8.19	8.79	9.40	9.47	10.19	11.43	12.08	12.63

a Figures approximate.

B10. Elizabeth Groh--Continued.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	10.94	10.46	11.17	6.59	8.20	8.80	9.42	9.48	10.12	11.45	12.10	12.65
17	10.94	10.55	8.49	6.67	8.21	8.80	9.44	9.51	10.24	11.47	12.11	12.67
18	10.83	10.65	7.06	6.73	8.12	8.81	9.46	9.53	10.27	11.49	12.13	12.69
19	10.74	10.72	6.54	8.82	7.73	8.83	9.47	9.55	10.29	11.51	12.16	12.72
20	10.88	10.77	....	6.94	7.29	8.85	9.48	9.58	10.30	11.57	12.18	12.78
21	11.00	10.79	....	7.01	7.11	8.87	(a)	9.60	10.32	11.55	12.20	12.78
22	11.06	10.80	....	7.07	7.17	8.88	(a)	9.62	10.34	11.57	12.22	12.80
23	11.10	10.74	4.13	7.13	7.33	8.90	.....	9.63	10.40	11.59	12.24	12.82
24	11.13	10.75	4.18	7.19	7.58	8.93	....	9.64	10.47	11.61	12.25	12.85
25	11.14	10.77	4.27	7.25	7.57	8.95	....	9.66	10.66	11.63	12.28	12.86
26	11.05	10.82	4.38	7.31	7.56	8.98	b9.20	9.69	10.85	11.62	12.30	12.87
27	10.90	10.87	4.49	7.35	7.59	9.00	b9.22	9.71	10.97	11.64	12.32	12.89
28	11.03	10.95	4.62	7.41	7.63	9.03	b9.24	9.71	11.02	11.66	12.34	12.89
29	11.14	.....	4.73	7.46	7.82	9.05	b9.26	9.76	11.05	11.68	12.35	12.90
30	11.24	.....	4.87	7.52	7.96	9.08	b9.28	9.78	11.09	11.70	12.37	12.91
31	11.30	.....	5.03	....	8.08	....	b9.30	9.80	.....	11.72	12.92	12.92

B11 (*944, p. 217). Fred Bandtel. Along Gilmore Road, 0.35 mile south of Miami & Erie Canal, and 25 feet east of Gilmore Road, in Fairfield Township. Measuring point, beginning Feb. 2, 1943, 1.87 feet below previous measuring point, 1.8 feet above land-surface datum and 614.53 feet above mean sea level (U. S. Geological Survey datum).

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	40.18	Apr. 20	29.12	July 20	29.07	Oct. 12	34.29
19	40.70	27	28.51	27	29.29	19	34.67
Feb. 2	43.70	May 4	29.25	Aug. 3	28.87	26	34.91
9	43.06	11	28.86	10	29.60	Nov. 2	35.34
16	42.84	18	27.17	17	30.60	9	35.75
23	42.24	25	30.30	24	38.05	16	36.01
Mar. 2	42.34	June 1	32.06	31	39.31	23	36.46
9	42.17	8	31.83	Sept. 7	32.74	30	36.66
16	41.51	15	31.64	14	38.12	Dec. 7	36.96
30	30.78	22	33.57	21	34.00	14	37.47
Apr. 1	30.64	29	34.92	28	34.25	21	37.66
6	30.49	July 6	36.46	Oct. 5	34.13	28	44.70
13	29.69	13	33.81				

B22. Joseph N. Conrad. On southwest corner of River and Gray Roads, in Fairfield Township. Drilled test well, diameter 6-inches, depth 196 feet. Measuring point, top of 6-inch pipe, 3.5 feet above land-surface datum and 563.80 feet above mean sea level (U. S. Geological Survey datum).

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	17.65	18.39	20.18	19.85
2	17.36	17.86	18.44	20.14	19.80
3	17.38	18.08	18.76	20.20	19.78
4	17.48	18.27	19.08	20.21	19.78
5	17.51	18.45	19.26	20.10	19.77
6	17.57	18.67	19.28	20.10	19.75
7	17.60	18.92	19.23	20.08	19.70
8	17.61	19.15	19.08	19.95	19.74
9	17.54	19.35	19.00	19.82	19.85
10	17.36	19.36	18.95	19.75	19.96
11	17.24	19.13	18.88	19.73	20.07
12	17.18	18.87	18.87	19.73	20.16
13	17.01	18.75	18.85	19.73	20.23
14	16.85	18.53	18.84	19.73	20.16
15	16.75	18.61	18.82	19.65	20.12

a New recorder being installed.
b Figures approximate.

B22. Joseph N. Conrad--Continued.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Aug.	Sept.	Oct.	Nov.	Dec.
16	.....	18.69	18.82	19.64	20.07
17	16.91	18.69	18.82	19.66	20.03
18	17.07	18.62	18.82	19.65	19.99
19	17.18	18.53	18.74	19.70	19.96
20	17.28	18.48	18.82	19.83	19.95
21	17.35	18.53	19.14	19.91	20.06
22	17.45	18.53	19.37	19.96	20.15
23	17.54	18.51	19.55	20.12	20.19
24	17.53	18.58	19.61	20.18	20.25
25	17.48	18.58	19.72	20.20	20.29
26	17.37	18.52	19.86	20.18	20.28
27	17.31	18.47	19.99	20.05	20.31
28	17.27	18.45	20.12	19.98	20.34
29	17.25	18.42	20.23	19.98	20.38
30	17.30	18.40	20.33	19.92	20.39
31	17.50	.....	20.34	.....	20.42

B23. Carl E. Schiering. On north side of River Road, 1,100 feet west of Muskoff Road, in Fairfield Township. Drilled test well, diameter 6 inches, depth 176 feet. Measuring point, top of 6-inch pipe, 1.8 feet above land-surface datum and 575.0 feet above mean sea level (U. S. Geological Survey datum).

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	21.60	.....	24.78	25.61
2	20.61	21.71	.....	24.77	25.67
3	20.79	21.76	.....	24.81	25.71
4	20.86	21.81	23.73	24.83	25.76
5	20.91	21.85	23.90	24.70	25.80
6	20.90	21.89	24.23	24.63	25.84
7	20.90	21.95	24.44	24.77	25.86
8	20.85	22.00	24.56	24.91	25.76
9	20.85	22.20	24.43	24.98	25.66
10	20.99	22.34	24.24	25.05	25.61
11	21.04	22.77	24.30	25.11	25.69
12	21.07	22.98	24.65	25.15	25.61
13	21.09	23.25	24.73	25.20	25.72
14	21.24	23.34	24.58	25.24	25.85
15	21.30	23.04	24.44	25.31	25.92
16	21.37	22.85	24.45	25.35	25.98
17	21.45	22.73	24.47	25.38	26.03
18	21.49	22.66	24.47	25.41	26.07
19	21.39	22.62	24.49	25.32	26.11
20	21.33	22.77	24.51	25.25	26.12
21	21.30	22.85	24.45	25.17	26.06
22	21.30	22.81	24.56	25.13	26.09
23	21.34	23.00	24.40	25.07	26.09
24	21.36	23.17	24.52	25.07	26.06
25	21.39	23.08	25.20	25.20	25.96
26	21.42	23.03	24.60	25.35	25.90
27	21.45	23.06	24.62	25.45	25.80
28	21.48	.....	24.65	25.49	25.80
29	21.51	.....	25.48	25.48	25.91
30	21.55	.....	24.68	25.56	25.82
31	21.55	.....	.....	.....	25.74

B24. City of Hamilton. On southwest corner of Minor Park, Minor and Benninghofen Avenues, Hamilton. Drilled test well, diameter 6 inches, depth 132 feet. Measuring point, top of 6-inch casing, 2.3 feet above land-surface datum and 602.81 feet above mean sea level (U. S. Geological Survey datum). Recorder installed Jan. 16, 1943, removed Dec. 11, 1943.

B24. City of Hamilton--Continued.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	43.40	39.50	36.05	35.42	34.08	33.95	34.95	36.08	37.24	38.35	39.20
2	.....	43.38	39.51	35.99	35.36	34.04	34.02	35.03	36.12	37.27	38.31	39.25
3	.....	.....	39.49	35.99	.....	34.01	34.02	35.05	36.17	37.32	38.42	39.29
4	.....	.....	39.49	35.92	35.49	34.05	34.08	35.06	36.21	37.36	38.45	39.30
5	.....	.....	39.47	35.80	35.45	34.05	34.11	35.10	36.25	37.40	38.46	39.30
6	.....	.....	39.46	35.78	35.40	34.03	34.15	35.13	36.27	37.45	38.50	39.35
7	.....	.....	39.46	35.78	35.41	34.00	34.20	35.12	36.32	37.45	38.50	39.37
8	.....	.....	39.50	35.69	35.45	33.95	34.23	35.10	36.35	37.47	38.52	39.42
9	.....	.....	39.45	39.65	35.46	33.91	34.28	35.08	36.40	37.50	38.55	39.47
10	.....	.....	39.41	35.64	35.44	33.89	34.32	35.08	36.42	37.55	38.57	39.48
11	.....	.....	39.39	35.62	35.35	33.85	34.32	35.10	36.45	37.59	38.59	39.50
12	.....	.....	39.39	35.57	35.40	33.83	34.43	35.12	36.46	37.64	38.63	.....
13	.....	.....	39.37	35.57	35.38	33.83	34.45	35.13	36.50	37.65	38.67	a39.49
14	.....	.....	39.37	35.58	35.37	33.82	34.47	35.17	36.53	37.70	38.69	.....
15	.....	.....	39.33	35.58	35.32	33.81	34.49	35.19	36.57	37.71	38.75	.....
16	43.63	.....	39.33	35.54	35.26	33.79	34.52	35.26	36.64	37.75	38.80	.....
17	43.63	39.70	39.33	35.57	35.25	33.77	34.58	35.32	36.69	37.77	38.82	.....
18	43.61	39.70	39.26	35.54	35.23	33.78	34.59	35.36	35.72	37.80	38.85	.....
19	43.62	39.70	39.17	35.49	35.14	33.76	34.59	35.40	.....	37.85	38.88	.....
20	43.60	39.65	39.02	35.48	35.05	33.74	34.63	35.45	36.82	37.90	38.90	a39.72
21	43.54	39.64	38.73	35.53	34.93	33.75	34.67	35.50	36.85	37.90	38.91	.....
22	43.50	39.60	38.28	35.51	34.86	33.78	34.70	35.53	36.90	37.95	38.98	.....
23	43.48	39.60	37.82	35.45	34.73	33.82	34.75	35.59	36.95	38.00	39.00	.....
24	43.46	39.61	37.42	35.44	34.60	33.85	34.76	35.65	36.97	38.00	39.03	.....
25	43.48	39.61	37.10	35.40	34.48	33.88	34.80	35.71	37.00	38.05	39.03	.....
26	43.46	39.56	36.85	35.39	34.41	33.90	34.83	35.77	.....	38.08	39.05	.....
27	43.45	39.55	36.63	35.36	34.33	33.90	34.85	35.83	37.08	38.10	39.10	a39.92
28	43.42	39.50	36.48	35.41	34.27	33.89	34.91	35.88	37.14	38.14	39.10	.....
29	43.40	.....	36.35	35.40	34.20	33.80	34.91	35.92	37.17	38.18	39.14	.....
30	43.42	.....	36.25	35.40	34.13	33.90	34.95	35.98	37.20	38.21	39.18	.....
31	43.40	.....	36.15	.....	34.08	.....	34.96	36.03	.....	38.24	.....	.....

B25. Elizabeth J. Sipp. 6,300 feet south of Pershing Ave. bridge and 1,500 feet west of Miami River, in St. Clair Township. Drilled test well, diameter 6 inches, depth 120 feet. Measuring point, top of 1¼-inch pipe installed in 6-inch drill hole, 0.8 foot above land-surface datum and 576.32 feet above mean sea level (U. S. Geological Survey datum).

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 30	13.98	July 1	17.66	Aug. 30	18.92	Nov. 1	19.87
Apr. 26	16.59	6	18.14	Sept. 7	19.19	8	20.62
May 3	17.25	12	17.29	14	19.19	15	19.85
12	16.40	19	17.79	20	19.43	22	19.69
18	14.82	26	18.32	27	19.56	29	19.94
31	14.69	Aug. 2	17.19	Oct. 4	19.55	Dec. 6	19.95
June 7	15.72	9	15.23	11	19.90	13	20.95
14	16.43	16	17.37	18	19.87	20	21.09
21	16.14	23	18.39	25	19.82	27	20.14
28	17.47						

B26. Miami Conservancy District. 6,300 feet south of Pershing Ave. bridge, and 200 feet west of Miami River, in St. Clair Township. Drilled test well, diameter 6-inches, depth 150 feet. Measuring point, top of 1¼-inch pipe installed in 6-inch drill hole, 3.2 feet above land-surface datum and 577.15 feet above mean sea level (U. S. Geological Survey datum).

Water level, in feet below land-surface datum, 1943

Apr. 27	15.33	June 7	13.95	July 6	16.18	Aug. 9	13.85
May 3	15.15	14	15.33	12	15.78	16	16.17
12	14.62	21	14.95	19	16.36	23	17.05
18	12.14	28	17.26	27	16.81	30	17.37
31	13.84	July 1	15.94	Aug. 1	15.79	Sept. 7	17.06

a Tape measurement.

B26. Miami Conservancy District--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 14	17.16	Oct. 11	18.28	Nov. 8	18.13	Dec. 6	18.33
20	17.75	18	18.25	15	18.23	20	18.51
27	17.99	25	18.15	22	18.16	27	18.50
Oct. 4	18.13	Nov. 1	18.20	29	18.27		

B27. Andrews Asphalt Paving Co. On northwest corner of Bell and Freeman Avenues, in Hamilton. Drilled test well, diameter 6-inches, depth 174 feet. Measuring point, top of 1¼-inch pipe installed in 6-inch drill hole, 3.4 feet above land-surface datum and 594.01 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Mar. 31	29.93	June 7	31.09	Aug. 16	30.29	Oct. 25	31.57
Apr. 7	30.01	14	31.19	23	30.41	Nov. 1	31.52
12	30.26	21	31.26	30	30.46	8	31.34
19	30.39	28	31.45	Sept. 7	30.71	15	32.08
26	30.55	July 6	31.52	13	30.76	22	32.04
May 3	30.72	12	31.65	20	30.59	29	32.37
10	30.50	19	31.75	27	31.12	Dec. 6	32.45
17	31.02	26	31.89	Oct. 4	31.24	13	32.49
24	31.04	Aug. 2	30.15	11	31.33	20	32.67
31	31.03	9	30.23	18	31.58	27	32.59

B28. Baltimore & Ohio Railroad. On Woodlawn Avenue, west side of Baltimore & Ohio Railroad tracks, in Hamilton. Drilled test well, diameter 6 inches, depth 133 feet. Measuring point, top of 6-inch pipe, 1.3 feet above land-surface datum and 602 64 feet above mean sea level (U. S. Geological Survey datum).

Water level, in feet below land-surface datum, 1943

June 24	40.62	Aug. 16	37.16	Oct. 4	39.08	Nov. 22	35.60
July 5	36.09	23	37.45	11	39.33	29	40.75
12	36.36	30	37.77	18	39.53	Dec. 6	40.91
19	36.55	Sept. 7	38.08	25	39.76	13	41.12
26	36.79	13	38.10	Nov. 1	40.00	20	41.30
Aug. 1	36.95	20	38.57	8	40.17	27	41.40
9	37.02	27	38.81	15	41.39		

B29. Pennsylvania Railroad Co. On west side of Pennsylvania Railroad, 1,100 feet south of Hamilton city limits, in Fairfield Township. Drilled test well, diameter 6 inches, depth 74 feet. Measuring point, top of 6-inch pipe, 3.8 feet above land-surface datum and 606.66 feet above mean sea level (U. S. Geological Survey datum).

Water level, in feet below land-surface datum, 1943

July 1	37.34	Aug. 16	38.05	Oct. 4	40.08	Nov. 22	41.68
5	37.12	23	38.35	11	40.33	29	41.84
12	37.19	30	38.72	18	40.55	Dec. 6	42.02
19	37.40	Sept. 7	39.03	25	40.80	13	42.21
26	37.63	13	39.07	Nov. 1	41.01	20	42.37
Aug. 3	37.84	20	39.56	8	41.22	27	42.52
9	37.91	27	39.82	15	41.19		

B30-D. City of Hamilton. On Pleasant Avenue, in Hamilton. Drilled well, diameter 6 inches, depth 187 feet. Measurements made in 1¼-inch pipe set in 6-inch drill hole, with screen from 180 to 182 feet. Measuring point, top of 1¼-inch pipe, 1.7 feet above land-surface datum and 595.71 feet above mean sea level (U. S. Geological Survey datum).

B30-D. City of Hamilton--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	33.03	Apr. 26	30.06	July 19	29.49	Oct. 11	32.03
12	33.70	May 3	30.06	26	29.69	18	32.28
17	33.40	10	29.89	Aug. 2	29.98	25	32.32
23	33.38	17	30.08	9	30.01	Nov. 1	32.73
Mar. 1	33.35	24	29.76	16	30.07	8	32.93
8	33.36	31	28.07	23	30.10	15	33.14
15	33.20	June 7	29.16	30	30.53	22	33.29
22	31.57	14	29.01	Sept. 7	30.83	29	33.48
29	30.89	21	28.72	13	30.87	Dec. 6	33.65
Apr. 5	30.20	28	28.85	20	31.21	13	33.81
12	30.15	July 6	28.75	27	32.55	20	34.02
19	30.03	12	29.32	Oct. 4	31.80	27	34.24

B30-M. City of Hamilton. On Pleasant Avenue, in Hamilton. Measurements made in 2-inch pipe set in same drill hole as well B30-D. Measuring point, top of 2-inch pipe, 2.1 feet above land-surface datum and 596.17 feet above mean sea level (U. S. Geol. Survey datum).

Water level, in feet below land-surface datum, 1943

Feb. 10	33.73	Apr. 26	30.46	July 19	30.27	Oct. 11	32.89
12	33.62	May 3	30.52	26	30.53	18	33.11
17	33.36	10	30.63	Aug. 3	30.68	25	33.31
23	34.41	17	30.43	9	30.79	Nov. 1	33.51
Mar. 1	33.43	24	30.03	16	30.80	8	33.65
8	33.51	31	29.64	23	31.08	15	33.76
15	33.44	June 7	29.58	30	31.41	22	33.64
22	32.17	14	29.53	Sept. 7	31.72	29	33.88
29	30.49	21	29.48	13	31.75	Dec. 6	34.28
Apr. 5	30.35	28	29.66	20	32.24	13	34.40
12	30.39	July 6	29.92	27	32.46	20	34.59
19	30.42	12	30.07	Oct. 4	32.70	27	34.65

B30-S. City of Hamilton. On Pleasant Avenue, in Hamilton. Measurements made in 2-inch pipe set in same drill hole as wells B30-D and B30-M. Measuring point, top of 2-inch pipe, 2.6 feet above land-surface datum and 596.70 feet above mean sea level (U. S. Geol. Survey datum).

Water level, in feet below land-surface datum, 1943

Feb. 10	33.76	Apr. 26	31.03	July 19	30.87	Oct. 11	33.44
12	33.58	May 3	31.12	26	31.15	18	33.63
17	33.42	10	30.68	Aug. 3	31.23	25	33.75
23	33.46	17	30.88	9	31.28	Nov. 1	33.97
Mar. 1	33.55	24	30.45	16	31.32	8	34.13
8	33.71	31	30.12	23	31.58	15	34.30
15	33.56	June 7	29.88	30	31.93	22	34.39
22	32.67	14	30.17	Sept. 7	32.18	29	34.55
29	30.22	21	30.21	13	32.20	Dec. 6	34.67
Apr. 5	30.58	28	30.37	20	32.75	13	34.35
12	30.78	July 6	30.63	27	32.99	20	34.95
19	30.92	12	30.69	Oct. 4	33.23	27	34.92

B32. City of Hamilton. On Hamilton-Cleves Road (U. S. Highway 127), 0.5 mile south of Pershing Avenue bridge, in St. Clair Township. Drilled well, diameter 6 inches, depth 97 feet. Measuring point, top of 1¼ inch pipe, installed in 6-inch drill hole, 3.6 feet above land-surface datum and 593.00 feet above mean sea level (U. S. Geol. Survey datum).

Water level, in feet below land-surface datum, 1943

Feb. 2	30.70	Mar. 22	17.12	May 17	27.20	July 12	29.47
8	27.97	29	21.83	24	25.82	19	30.09
12	26.78	Apr. 5	25.26	31	26.92	27	30.85
17	28.57	12	26.43	June 7	26.44	Aug. 2	28.63
23	28.16	19	28.48	14	28.35	9	27.27
Mar. 1	20.26	26	29.22	21	28.45	16	28.59
8	25.08	May 3	29.87	28	30.06	23	29.84
15	27.80	10	30.30	July 6	30.99	30	30.80

B32. City of Hamilton--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 7	31.35	Oct. 11	31.80	Nov. 8	31.78	Dec. 6	31.83
13	31.38	18	31.74	15	31.76	13	31.84
20	31.54	25	31.72	22	31.71	20	31.91
27	31.63	Nov. 1	31.72	29	31.77	27	31.92
Oct. 4	31.73						

B33-D. City of Hamilton. On southeast corner of South Avenue and Front Street, in Hamilton. Drilled well, diameter 6-inches, depth 211 feet. Measurements made in 1¼-inch pipe set in 6-inch drill hole. Measuring point, top of 1¼-inch pipe, 3.1 feet above land-surface datum and 586.64 feet above sea level (U. S. Geol. Survey datum).

Water level, in feet below land-surface datum, 1943

Jan. 29	23.24	Apr. 5	22.37	July 6	23.34	Oct. 4	25.30
Feb. 2	23.39	12	22.80	12	23.27	11	25.37
4	21.90	19	22.83	19	23.88	18	25.32
6	20.12	26	22.84	26	24.15	25	25.35
8	20.99	May 3	23.45	Aug. 2	23.25	Nov. 1	25.40
10	21.93	10	22.88	9	21.17	8	25.42
17	22.70	17	21.03	16	23.82	15	25.43
23	22.68	24	19.97	23	24.46	22	25.39
Mar. 1	23.25	31	21.74	30	24.75	29	26.47
8	23.99	June 7	21.23	Sept. 7	24.49	Dec. 6	25.47
15	21.66	14	23.03	13	24.53	13	25.60
22	13.34	21	22.78	20	25.17	20	26.67
29	20.62	28	23.56	27	25.18	27	25.69

B33-S. City of Hamilton. On southeast corner of South Avenue and Front Street, in Hamilton. Measurements made in 1¼-inch pipe set in 6-inch drill hole. Measuring point, top of 1¼-inch pipe, 2.4 feet above land-surface datum and 585.97 feet above sea level (U. S. Geol. Survey datum).

Water level, in feet below land-surface datum, 1943

Jan. 29	24.67	Apr. 5	23.77	July 6	24.76	Oct. 4	26.65
Feb. 2	23.34	12	24.29	12	24.62	11	26.67
4	22.05	19	24.23	19	25.27	18	26.71
6	21.56	26	24.24	27	25.55	25	26.75
8	22.42	May 3	24.85	Aug. 2	24.65	Nov. 1	25.63
10	23.36	10	24.07	9	22.37	8	26.49
17	24.05	17	22.45	16	25.18	15	26.83
23	24.13	24	21.38	23	25.85	22	26.75
Mar. 1	24.65	31	23.09	30	26.13	29	26.88
8	24.37	June 7	22.62	Sept. 7	26.19	Dec. 6	26.95
15	23.08	14	24.41	13	26.19	13	26.59
22	14.77	21	24.05	20	26.57	20	27.05
29	22.04	28	24.93	27	26.57	27	26.75

B34. City of Hamilton. On southwest corner of South Avenue and Second Street, in Hamilton. Diameter of original well, 6 inches, depth 174 feet. Completed Jan. 18, 1943.

B34-D. City of Hamilton. On southwest corner of South Avenue and Second Street, in Hamilton. Measurements made in 1¼-inch pipe set in same drill hole as well B-34. Measuring point, top of 1¼-inch pipe, 1.8 feet above land-surface datum and 590.45 feet above sea level. (Geological Survey datum.)

Water level, in feet below land-surface datum, 1943

Jan. 21	29.76	Feb. 10	28.66	Apr. 5	27.95	May 31	27.95
23	29.87	17	29.10	12	28.55	June 7	27.43
26	29.72	23	29.41	19	28.51	14	28.39
29	29.84	Mar. 1	29.78	26	28.61	21	28.16
Feb. 2	29.58	8	30.36	May 3	29.03	28	28.99
4	28.87	15	28.79	10	28.97	July 6	29.48
6	27.23	22	20.83	17	28.04	12	29.09
8	28.24	29	26.31	24	25.95	19	29.59

B34-D. City of Hamilton--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 27	29.95	Sept. 7	30.95	Oct. 18	31.95	Nov. 29	32.02
Aug. 2	29.06	13	30.95	25	31.75	Dec. 6	31.95
9	27.48	20	31.19	Nov. 1	31.84	13	31.25
16	29.58	27	31.38	8	32.97	20	32.28
23	30.27	Oct. 4	31.56	15	32.91	27	32.27
30	30.70	11	31.69	22	31.92		

B34-S. City of Hamilton. On southwest corner of South Avenue and Second Street, in Hamilton. Measurements made in 1¼-inch pipe set in same drill hole as wells B34 and B34-D. Measuring point, top of 1¼-inch pipe, 3.2 feet above land-surface datum and 591.91 feet above sea level (Geological Survey datum).

Water level, in feet below land-surface datum, 1943

Jan. 21	28.85	Mar. 22	22.10	June 28	36.96	Sept. 27	29.25
23	28.91	29	24.15	July 6	27.41	Oct. 4	29.54
26	29.17	Apr. 5	26.05	12	27.37	11	29.63
29	29.24	12	26.87	19	27.53	18	29.85
Feb. 2	29.19	19	27.09	27	27.88	Nov. 1	30.17
4	29.03	26	27.21	Aug. 2	27.58	8	30.27
6	28.77	May 3	28.43	9	27.04	15	30.35
8	28.48	10	27.62	16	27.54	22	30.31
10	28.36	17	26.95	23	28.02	29	30.53
17	28.14	24	25.38	30	28.49	Dec. 6	30.62
23	28.58	31	27.42	Sept. 7	28.69	13	30.75
Mar. 1	28.20	June 7	26.12	13	28.72	20	30.83
8	28.93	14	26.23	20	28.17	27	30.75
15	28.09	21	26.39				

B35. Baltimore & Ohio Railroad Co. At roundhouse, Eighth and Long Streets, in Hamilton. Drilled test well, diameter 6 inches, depth 191 feet. Measuring point, top of 6-inch pipe, 0.8 foot above land-surface datum and 596.72 feet above mean sea level (U. S. Geol. Survey datum).

Water level, in feet below land-surface datum, 1943

June 10	32.63	Aug. 1	33.35	Sept. 27	34.75	Nov. 15	36.16
15	32.59	9	33.34	Oct. 4	34.99	22	36.38
24	32.71	16	33.35	11	35.23	29	36.53
July 1	32.91	23	33.48	18	35.47	Dec. 6	36.65
5	32.97	30	33.69	25	35.66	13	36.83
12	32.98	Sept. 7	33.99	Nov. 1	36.15	20	36.98
19	33.02	13	34.00	8	36.04	27	37.11
26	33.13	20	34.47				

B36. Baltimore & Ohio Railroad Co. At roundhouse, Eighth and Long Streets, in Hamilton. Drilled test well, diameter 6 inches, depth 75 feet. Measuring point, top of 6-inch pipe, 0.8 foot above land-surface datum and 596.67 feet above mean sea level (U. S. Geol. Survey datum).

Water level, in feet below land-surface datum, 1943

June 10	32.50	Aug. 2	33.71	Sept. 27	35.45	Nov. 15	36.79
15	32.52	9	33.67	Oct. 4	35.68	22	36.94
24	32.62	16	33.68	11	35.89	29	37.06
July 1	32.95	23	33.99	18	36.10	Dec. 6	37.18
5	33.05	30	34.36	25	36.29	13	38.30
12	33.22	Sept. 7	34.66	Nov. 1	36.55	20	37.42
19	33.33	13	34.68	8	36.65	27	37.51
26	33.55	20	35.16				

B37. Esther Spinelli and Mary Jelle. On northeast corner of Mosler Avenue and Crawford Run, in Hamilton. Drilled test well. Original diameter 6-inches, depth 100 feet. Observation well diameter 1¼ inches, depth 57 feet. Measuring point, top of 1¼-inch pipe, 2.2 feet above land-surface datum and 610.03 feet above mean sea level (U. S. Geol. Survey datum).

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 27	43.77	July 1	42.97	Aug. 30	44.76	Nov. 1	47.14
May 3	43.73	6	43.15	Sept. 7	45.09	8	47.31
12	43.77	12	43.23	13	45.15	15	47.50
18	43.73	19	44.52	20	45.59	22	47.69
31	43.12	26	43.75	27	45.82	29	47.72
June 7	42.99	Aug. 2	43.96	Oct. 4	46.15	Dec. 6	47.95
14	42.90	9	44.03	11	46.42	13	47.26
21	43.86	16	44.20	18	46.58	20	48.48
28	42.96	23	44.43	25	46.70	27	48.58

B38. City of Hamilton. In rear of electric substation, on Fifth Street and Maple Avenue, in Hamilton. Drilled test well, diameter 6 inches, depth 174 feet. Measuring point, top of 6-inch pipe, 3.8 feet above land-surface datum and 600.06 feet above mean sea level (U. S. Geol. Survey datum).

Water level, in feet below land-surface datum, 1943

Mar. 30	34.50	May 31	34.59	July 19	36.30	Sept. 14	38.15
Apr. 6	34.67	June 7	34.88	26	36.61	20	38.35
13	34.83	15	35.20	Aug. 2	36.71	27	38.56
26	35.10	24	35.41	17	36.68	Oct. 4	38.79
May 3	35.30	July 1	35.74	24	47.50	Nov. 27	39.86
12	35.63	5	35.87	31	37.44	Dec. 4	40.00
18	35.60	12	36.12	Sept. 7	37.82	11	40.07
25	34.70						

B39. City of Hamilton. On west side of North Third Street in front of transformer station, in Hamilton. Drilled test well, diameter 6 inches, depth 164 feet. Measuring point, top of 6-inch pipe, 2.2 feet above land-surface datum and 593.38 feet above sea level. Automatic water-stage recorder installed Mar. 30, 1943.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	27.88	.....	26.61	27.78	28.87	29.90	30.90	31.51	32.25
2	.....	27.88	.....	26.64	27.84	28.92	29.98	30.94	31.55	32.28
3	.....	27.88	27.68	26.62	27.89	28.98	30.03	30.96	31.58	32.32
4	.....	27.88	27.75	26.72	27.93	28.98	30.06	31.04	31.60	32.34
5	.....	27.88	27.79	26.76	27.96	28.95	30.07	31.08	31.60	32.36
6	.....	27.87	27.77	26.78	28.00	28.91	30.10	31.11	31.62	32.40
7	.....	27.87	27.72	26.82	28.05	28.82	30.17	31.12	31.63	32.42
8	.....	27.87	27.74	26.84	28.08	28.73	30.21	31.12	31.67	32.24
9	.....	27.87	27.74	26.87	28.12	28.75	30.24	31.14	31.72	32.47
10	.....	27.87	27.63	26.90	28.15	28.80	30.28	31.14	31.75	32.50
11	.....	27.86	.....	26.93	28.15	28.86	30.32	31.15	31.78	32.51
12	.....	27.86	.....	26.96	28.18	28.98	30.30	31.15	31.78	32.51
13	.....	27.85	.....	27.00	28.25	28.99	30.30	31.16	31.80	32.54
14	.....	27.82	.....	27.04	28.27	28.99	30.36	31.21	31.80	32.56
15	.....	27.79	.....	27.07	28.33	29.04	30.40	31.22	31.79	32.59
16	.....	27.77	.....	27.12	28.38	29.13	30.44	31.20	31.85	32.62
17	.....	27.75	.....	27.15	28.45	29.19	30.49	31.20	31.87	32.65
18	.....	27.73	.....	27.18	28.44	29.23	30.53	31.23	31.90	32.66
19	.....	27.72	.....	27.21	28.50	29.27	30.53	31.30	31.92	32.66
20	.....	27.99	.....	27.22	28.55	29.31	30.52	31.31	31.95	32.69
21	.....	27.90	.....	27.27	28.63	29.31	.....	31.32	31.95	32.71
22	.....	27.90	.....	27.33	28.68	29.39	.....	31.34	31.99	32.74
23	.....	27.88	.....	.....	28.74	.....	.....	31.35	32.05	32.77
24	.....	27.80	.....	27.45	28.77	29.46	.....	31.35	32.08	32.76
25	.....	27.82	.....	27.50	28.77	29.55	.....	31.39	32.08	32.74

B39. City of Hamilton--Continued.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	.....	27.81	.....	27.55	28.83	29.63	.....	31.43	32.09	32.70
27	.....	.....	26.56	27.57	28.88	29.66	30.78	31.45	32.11	32.71
28	.....	.....	26.60	27.60	28.95	29.72	30.83	31.46	32.12	32.76
29	.....	.....	26.61	27.65	28.94	29.71	30.86	31.48	32.13	32.79
30	27.90	.....	26.61	27.72	28.90	29.75	30.88	31.49	32.22	32.81
31	27.89	.....	26.59	.....	28.89	29.83	.....	31.49	.....	32.86

11-D-2. Federal Works Agency. 150 feet southwest of well F-11 and 132 feet south of the centerline of Nilles Road. Diameter 4 inches, depth 127 feet. Measuring point, before Feb. 13, 1943, top of casing, 587.89 feet above mean sea level and 0.44 foot above land-surface datum; after Feb. 13, 1943, top of casing, 590.45 feet above mean sea level and 3.0 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	34.56	Apr. 5	25.80	June 14	27.42	Sept. 27	33.59
12	34.34	12	25.70	21	27.55	Oct. 4	33.70
16	34.09	13	25.93	28	27.81	11	34.37
19	34.44	15	28.37	July 6	28.32	18	36.31
26	33.77	17	28.63	12	31.46	25	35.02
29	33.69	18	28.62	19	30.26	Nov. 1	34.89
Feb. 2	33.63	19	28.59	26	33.05	8	37.74
8	33.39	26	28.97	Aug. 2	31.27	15	35.99
17	30.54	24	29.02	9	31.56	22	37.47
23	30.49	May 3	29.08	16	31.78	29	38.43
Mar. 1	28.65	10	29.12	23	31.16	Dec. 8	39.53
8	30.39	17	29.56	30	32.49	13	39.44
15	29.78	24	27.67	Sept. 7	32.23	20	39.72
22	28.18	31	27.38	13	32.39	27	39.92
29	26.57	June 7	27.43	20	35.49		

11-D-3. Federal Works Agency. 300 feet southwest of well F-11 and 210 feet south of the centerline of Nilles Road. Diameter 4 inches, depth 123 feet. Measuring point, top of casing, 3 feet above land-surface datum and 587.16 feet above mean sea level.

Water level, in feet below land-surface datum, 1943

Jan. 7	31.55	Mar. 29	25.75	June 7	24.15	Sept. 20	30.69
9	31.40	Apr. 5	25.35	14	24.25	27	30.21
12	31.00	12	25.25	21	24.18	Oct. 4	30.78
16	30.72	13	25.25	28	24.55	11	31.46
19	30.75	15	24.56	July 6	25.11	18	32.57
21	30.58	17	25.42	12	27.59	25	32.05
26	30.44	18	25.44	19	27.24	Nov. 1	31.85
29	30.39	19	25.39	26	29.23	8	33.01
Feb. 2	30.32	24	25.83	Aug. 2	27.68	15	33.43
8	30.14	26	25.73	9	28.13	22	34.95
17	29.94	May 3	25.83	16	28.76	29	35.30
23	28.86	10	24.75	23	28.36	Dec. 6	35.55
Mar. 1	28.75	17	24.79	30	29.56	13	35.98
8	28.86	24	24.49	Sept. 7	29.25	20	36.12
15	29.49	31	24.19	13	29.32	27	36.26
22	27.49						

11-D-4. Federal Works Agency. 725 feet southwest of well F-11 and 416 feet south of Nilles Road, in Fairfield Township. Drilled test well, diameter 6 inches, depth 220 feet. Measuring point, top of 6-inch pipe, 3.1 feet above land-surface datum and 587.42 feet above mean sea level (U. S. Geol. Survey datum).

11-D-4. Federal Works Agency--Continued.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	a30.13	26.02	26.27	24.64	25.39	28.78	29.96	31.33	32.38	35.09
2	.....	a35.29	.....	25.94	26.27	24.63	25.43	28.75	30.07	31.33	32.35	35.13
3	.....	.....	.....	25.90	26.27	24.60	25.43	28.43	30.02	31.30	32.55	35.18
4	.....	.....	.....	25.86	26.30	24.62	25.44	28.28	29.88	31.27	32.91	35.22
5	.....	.....	.....	25.71	26.32	24.64	25.55	28.19	29.78	31.27	33.20	35.24
6	.....	.....	.....	25.71	26.32	24.66	25.85	28.13	29.71	31.27	33.41	35.28
7	a36.51	.....	.....	25.70	26.36	24.66	26.41	28.11	29.67	31.27	33.57	35.32
8	.....	a35.10	a30.13	25.67	26.38	24.66	26.67	28.10	29.65	31.30	33.72	35.36
9	a36.34	.....	.....	25.66	26.44	24.66	26.78	28.28	29.66	31.50	33.83	35.40
10	.....	.....	.....	25.68	26.49	24.66	27.03	28.35	29.68	31.67	33.93	35.44
11	.....	.....	.....	25.69	26.47	24.67	27.23	28.78	29.70	31.90	34.00	35.47
12	a35.87	.....	.....	25.72	26.43	24.67	27.47	29.07	29.71	32.23	33.92	35.51
13	.....	.....	.....	25.73	26.40	24.68	27.64	29.26	29.72	32.48	34.00	35.58
14	.....	.....	.....	25.77	26.37	24.69	27.77	29.42	29.80	32.67	34.02	35.61
15	.....	.....	a29.28	25.84	26.34	24.70	27.89	29.52	29.84	32.84	33.87	35.65
16	a35.87	.....	.....	25.84	26.28	24.70	27.78	29.45	29.99	32.83	34.01	35.69
17	.....	a35.88	.....	25.92	26.25	24.71	27.55	29.20	30.08	32.83	34.15	35.73
18	.....	.....	.....	25.92	26.11	24.73	27.75	29.05	30.24	32.83	34.27	35.76
19	a35.73	.....	.....	25.89	25.93	24.76	27.63	28.98	30.43	33.11	34.36	35.79
20	.....	.....	.....	26.23	25.71	24.78	27.70	28.90	30.77	33.20	34.45	35.80
21	a35.67	.....	.....	26.50	25.52	24.79	28.10	28.86	31.03	33.14	34.50	35.79
22	.....	.....	27.96	26.58	25.36	24.71	28.34	28.83	31.23	32.93	34.52	35.81
23	.....	a30.25	27.82	26.41	25.23	24.74	28.52	28.82	31.40	32.83	34.64	35.76
24	.....	.....	27.51	26.24	25.12	24.77	28.65	28.94	31.41	32.71	34.70	35.71
25	.....	.....	27.23	26.20	25.04	24.80	28.80	29.23	31.33	32.61	34.75	35.78
26	a35.50	.....	26.97	26.20	24.96	24.85	28.90	29.50	31.23	32.55	34.80	35.83
27	.....	.....	26.73	26.20	24.89	24.88	28.76	29.75	31.15	32.50	34.85	35.91
28	.....	.....	26.56	26.21	24.85	25.07	28.58	29.96	31.08	32.45	34.90	35.95
29	a35.37	.....	26.35	26.24	24.80	25.24	28.52	30.09	31.03	32.42	35.00	35.93
30	.....	.....	26.25	26.23	24.76	25.24	28.51	29.94	31.15	32.40	35.05	35.76
31	.....	.....	26.12	.....	24.69	.....	28.80	29.96	.....	32.30	.....	35.79

FRANKLIN COUNTY

Columbus

Columbus 1 (*944, p. 189). Moores & Ross Dairy Co. At Spring Street garage. Measuring point, top of wooden floor of recorder, 1.75 feet above top of 10-inch casing and 0.5 foot above land-surface datum.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	.....	105.50	106.29	105.65	104.88	109.49
2	.....	105.75	106.41	105.56	104.66	110.78
3	.....	106.39	107.18	106.13	105.27	111.02
4	.....	106.25	106.65	105.93	105.55	111.77
5	105.55	106.78	106.92	105.77	105.63	111.68
6	105.66	106.30	106.68	106.05	105.64	111.52
7	105.70	105.80	106.65	106.18	105.65	111.89
8	105.71	105.65	106.76	106.23	105.65	112.47
9	105.40	106.07	106.98	106.17	105.36	112.65
10	104.45	106.21	107.27	106.08	105.30	112.97
11	105.33	106.58	107.25	105.51	105.71	112.90
12	105.60	106.23	107.77	105.93	106.33	112.78
13	106.07	106.13	107.50	106.45	107.12	112.68
14	105.97	105.85	105.85	106.84	107.33	112.18
15	106.58	106.55	105.61	106.90	107.13	112.94
16	106.16	106.45	105.90	106.88	106.67	113.07
17	106.37	106.76	105.55	106.74	106.70	113.07
18	106.33	106.71	106.36	105.94	107.37	113.13
19	105.59	107.40	106.35	105.91	108.83	113.35
20	105.67	105.99	106.34	106.87	109.63	113.35

a Tape measurement.

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Columbus 1. Moores & Ross Dairy Co.--Continued.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June
21	106.13	105.35	.....	106.84	109.91	113.22
22	106.37	105.71	.....	106.65	109.79	113.70
23	105.95	105.87	105.76	105.75	109.24	114.71
24	105.63	105.98	106.07	105.31	108.72	115.10
25	105.33	106.75	106.15	104.54	109.29	115.14
26	105.47	106.88	105.70	104.87	109.62	115.25
27	105.94	106.70	105.71	104.49	109.86	115.25
28	105.70	105.27	105.55	104.87	109.27	114.95
29	106.15	.....	106.15	104.92	109.72	113.23
30	105.76	.....	105.75	104.98	109.43	112.98
31	105.42	.....	105.01	.....	108.59	.....

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	111.85	114.58	115.55	112.89	110.36	.....
2	112.32	115.02	115.80	113.68	110.36	.....
3	112.25	114.05	.....	113.32	110.87	109.01
4	113.32	114.06	.....	114.12	110.94	108.53
5	114.20	.....	115.30	114.06	111.18	107.34
6	114.05	.....	116.26	114.70	111.18	106.95
7	113.28	.....	.....	114.86	110.03	106.87
8	113.65	114.67	.....	.....	110.12	107.09
9	113.57	115.30	.....	.....	111.00	106.96
10	114.02	114.79	.....	115.34	111.07	107.82
11	.....	114.70	.....	115.25	111.07	107.50
12	.....	115.11	.....	112.94	110.91	107.13
13	.....	114.95	.....	112.42	109.82	107.13
14	.....	115.12	.....	112.93	109.81	108.07
15	.....	115.00	.....	112.32	108.92	108.07
16	.....	115.54	.....	112.68	108.89	107.80
17	.....	114.42	.....	113.60	109.38	107.33
18	112.90	114.17	113.97	112.23	109.66	106.28
19	113.05	114.36	114.12	112.28	109.01	106.19
20	112.20	114.28	117.45	112.26	108.89	107.12
21	112.30	.....	118.45	111.45	108.69	106.85
22	112.06	114.30	118.26	111.40	108.78	106.85
23	112.20	114.80	.....	111.45	109.04	107.44
24	112.13	114.18	.....	110.72	109.39	107.28
25	.....	114.80	113.92	111.09	109.38	106.27
26	.....	114.97	113.54	111.40	108.22	104.29
27	.....	114.91	113.30	.....	108.13	106.52
28	.....	115.02	112.91	.....	106.92	107.14
29	.....	114.90	113.20	.....	108.07	107.60
30	.....	115.10	113.24	.....	108.16	107.36
31	113.90	115.43	.....	109.88	.....	107.25

Gallia County

For records of a well near Addison, see the section on West Virginia in Water-Supply Paper 987, under Mason County. As the ground-water conditions in this area in Ohio are similar to those in the heavily pumped area directly across the Ohio River, in West Virginia, the record of fluctuations of water level in the Addison well may aid in the interpretation of ground-water conditions in the West Virginia area on the opposite side of the river.

Hamilton County

T74 (*906, p. 190; 936, p. 217; 944, pp. 217-218). Frederick Hauck. On Crescentville Road, 0.5 mile east of Crescentville, in Sycamore Township. Measuring point, top of 1½-inch pipe, 2.1 feet above land-surface datum (U. S. Geol. Survey datum).

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	6.60	Mar. 23	4.28	June 21	7.46	Sept. 27	11.50
11	7.13	29	5.79	28	7.65	Oct. 4	11.76
18	7.75	Apr. 5	7.09	July 5	8.03	11	11.94
25	8.15	12	7.15	12	7.62	18	12.26
Feb. 1	8.26	19	6.83	19	7.40	25	12.48
8	7.42	26	7.08	26	7.93	Nov. 1	12.57
15	7.45	May 3	7.37	Aug. 2	7.70	8	13.00
22	7.77	10	6.57	9	7.98	15	13.23
Mar. 1	8.11	11	6.45	16	8.73	22	13.40
8	8.44	17	4.90	23	9.48	29	13.60
15	7.36	24	5.87	30	10.06	Dec. 6	13.80
19	1.29	31	6.12	Sept. 6	10.48	13	13.98
20	3.06	June 7	6.55	13	10.72	20	14.17
22	4.02	14	7.06	20	11.14	27	14.35

T75 (*906, p. 190; 936, p. 217; 944, p. 218). Frederick Hauck. Geological Survey test well. On Crescentville Road, 0.1 mile east of Crescentville, in Sycamore Township. Measuring point, top of 1½-inch pipe, 2.8 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	5.75	Mar. 23	4.65	June 21	7.10	Sept. 27	9.52
11	6.74	29	6.20	28	7.36	Oct. 4	9.79
18	6.99	Apr. 5	6.97	July 5	7.62	11	9.97
25	7.25	12	6.70	12	6.92	18	10.15
Feb. 1	7.20	19	6.23	19	6.90	25	10.30
8	6.27	26	6.65	26	7.48	Nov. 1	10.39
15	6.57	May 3	6.97	Aug. 2	7.10	8	10.69
22	6.92	10	5.15	9	7.44	15	10.88
Mar. 1	7.22	11	4.98	16	7.88	22	11.02
8	7.52	17	3.68	23	8.20	29	11.20
15	6.11	24	5.68	30	8.52	Dec. 6	11.33
16	5.35	31	6.02	Sept. 6	8.78	13	11.48
19	a .20	June 7	5.42	13	8.98	20	11.68
20	2.55	14	6.63	20	9.27	27	11.81
22	4.26						

204-4 (*886, p. 587; 906, p. 190; 936, p. 217; 944, p. 218). Albert Sorter Estate. 0.2 mile north of Kemper Road and 100 feet east of Mill Creek, in Sycamore Township. Measuring point, top of 6-inch coupling, 3.7 feet above land-surface datum.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.70	9.50	9.42	7.75	8.58	7.80	9.33	9.42	10.64	.....	12.34	12.94
2	7.84	9.52	9.55	7.96	8.59	7.92	9.40	9.45	10.66	.....	12.35	12.95
3	7.94	9.53	9.64	8.08	8.61	8.06	9.47	9.48	10.70	.....	12.37	12.97
4	8.13	9.53	9.69	8.13	8.62	8.20	9.51	9.51	10.72	b11.62	12.40	12.98
5	8.25	9.12	9.71	8.20	8.63	8.32	9.56	9.55	10.75	.....	12.42	12.99
6	8.33	9.07	9.72	8.26	8.64	8.39	9.60	9.60	10.78	.....	12.44	13.00
7	8.40	8.97	9.73	8.28	8.64	8.35	9.64	9.64	10.79	.....	12.46	12.99
8	8.47	8.99	9.75	8.33	8.64	8.14	9.69	9.67	10.81	.....	12.48	13.01
9	8.49	8.99	9.75	8.36	8.64	8.26	9.74	9.71	10.83	.....	12.49	13.03
10	8.65	9.01	9.75	8.39	8.64	8.35	9.76	9.75	10.88	.....	12.51	13.06
11	8.77	8.98	9.76	8.42	8.46	8.36	9.67	9.80	10.92	b11.78	12.54	13.07
12	8.85	8.77	9.43	8.45	8.05	8.32	9.56	9.85	10.96	.....	12.56	13.09
13	8.91	8.75	9.24	8.01	8.01	8.45	9.49	9.91	10.99	.....	12.59	13.13
14	8.94	8.84	9.21	8.44	8.03	8.56	9.23	9.96	.....	.....	12.61	13.13
15	8.95	8.91	9.21	8.44	8.05	8.68	9.09	10.01	.....	.....	12.64	13.17

a Above land-surface datum.
b Tape measurement.

204-4. Albert Sorter Estate--Continued.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	8.96	8.97	9.20	8.45	8.00	8.77	9.15	10.06	....	....	12.66	13.21
17	9.01	9.00	7.30	8.44	6.63	8.93	9.19	10.09	....	....	12.67	13.25
18	9.06	9.02	6.10	8.40	....	8.95	9.14	10.13	....	a11.92	12.70	13.28
19	9.17	9.05	6.14	8.36	....	8.95	9.19	10.16	....	....	12.71	13.31
20	9.21	9.08	4.12	8.25	....	8.98	9.22	10.17	a11.18	....	12.74	13.33
21	9.22	9.11	5.24	8.20	....	9.00	9.27	10.02	....	....	12.76	13.38
22	9.24	9.14	5.72	8.21	....	....	9.33	10.26	....	....	12.79	13.40
23	9.25	9.17	6.22	8.22	....	....	9.40	10.30	....	....	12.81	13.43
24	9.26	9.20	6.54	8.25	7.30	....	9.46	10.34	....	....	12.82	13.45
25	9.28	9.24	6.80	8.27	7.28	....	9.51	10.37	....	a12.04	12.84	13.47
26	9.36	9.28	6.98	8.39	6.77	....	9.58	10.41	....	....	12.86	13.49
27	9.42	9.32	7.20	8.41	6.94	....	9.62	10.45	a11.41	....	12.88	13.50
28	9.44	9.35	7.42	8.47	7.16	9.02	9.67	10.49	....	....	12.91	13.51
29	9.47	....	7.56	8.52	7.34	9.20	9.67	10.53	....	....	12.92	13.52
30	9.48	....	7.62	8.54	7.47	9.27	9.36	10.53	....	....	12.94	13.54
31	9.50	....	7.68	....	7.68	....	9.39	10.59	....	....	....	13.56

T67 (*906, p. 191; 936, p. 218; 944, p. 219). Emmit Ferris. Geological Survey test well. On Kemper Road, 0.2 mile east of Mill Creek, in Sycamore Township. Measuring point, top of 1½-inch pipe, 0.5 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	3.08	Mar. 29	3.27	July 5	4.28	Oct. 4	6.92
12	3.70	Apr. 5	3.70	12	2.59	11	7.14
18	3.79	12	3.40	19	2.95	18	7.32
25	4.24	19	3.10	26	4.07	25	7.42
Feb. 1	4.20	26	3.57	Aug. 2	3.86	Nov. 1	7.60
8	4.64	May 3	3.75	9	4.18	8	7.67
15	3.75	10	3.65	16	4.70	15	7.85
22	3.96	17	2.06	23	5.28	22	7.96
Mar. 1	4.23	24	2.90	30	5.65	29	8.05
8	4.49	31	2.98	Sept. 6	5.15	Dec. 6	8.15
15	3.57	June 7	3.18	13	6.09	13	8.24
16	3.00	14	3.74	20	6.40	20	8.28
20	1.50	21	3.98	27	6.69	27	8.32
22	2.02						

207-3 (*845, p. 381; 886, p. 586; 906, p. 192; 936, p. 218; 944, p. 219). Village of Glendale. At municipal water works plant, on Sharon Avenue, 0.2 mile east of Mostellar Road, in Sycamore Township. Measuring point, top of recorder platform, 5.45 feet above land-surface datum.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	50.10	45.15	49.67	44.45	44.34	44.38	44.63	44.71	45.23	47.45	47.96	49.75
2	49.49	48.56	49.16	44.71	43.83	44.73	45.15	44.78	44.47	47.35	48.25	49.73
3	49.45	48.44	50.05	45.14	44.16	44.84	46.23	44.37	45.97	46.57	47.86	49.71
4	49.35	48.23	50.82	45.06	43.59	46.27	43.83	44.30	44.87	47.67	47.69	49.95
5	49.10	48.92	49.82	45.21	43.48	44.94	46.13	44.31	33.91	47.15	48.15	50.70
6	49.25	48.67	49.57	44.46	44.42	45.31	48.65	46.55	45.25	47.55	48.11	50.17
7	49.25	49.36	50.24	44.03	44.00	44.02	45.50	44.64	45.41	46.96	48.87	49.57
8	48.85	49.15	50.60	44.43	44.23	44.73	45.45	55.17	46.03	46.96	48.91	49.64
9	49.60	58.46	50.04	44.32	44.71	44.45	45.45	44.46	45.91	46.83	47.98	50.17
10	50.60	48.27	49.76	43.96	45.55	44.80	46.29	44.95	46.91	47.67	48.14	49.94
11	50.90	48.27	49.35	44.13	44.03	44.56	46.18	44.45	45.65	47.47	48.33	49.97
12	48.74	48.77	49.52	43.45	44.00	45.06	46.46	44.73	45.95	44.55	48.75	50.01
13	48.71	48.04	50.86	43.95	44.25	45.05	44.19	44.60	46.35	43.83	48.37	50.45
14	49.05	48.94	49.84	43.67	44.07	44.98	44.20	44.69	52.25	44.20	48.85	51.24
15	49.57	49.12	50.09	44.03	44.14	44.80	44.00	45.49	45.67	43.91	48.86	50.95
16	48.67	48.40	49.73	44.41	44.39	44.84	44.95	44.23	46.44	43.47	48.20	51.47

a Tape measurement.

207-3. Village of Glendale--Continued.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
17	48.70	49.37	51.20	46.73	44.67	44.97	44.43	44.95	46.65	44.33	48.43	51.33
18	48.86	48.87	50.13	44.58	43.96	44.66	45.30	44.76	46.26	42.33	48.64	51.35
19	48.56	48.59	49.11	44.53	44.34	44.70	44.37	44.95	46.77	46.88	48.48	52.35
20	49.56	48.34	48.57	44.27	44.21	45.37	44.46	44.49	46.13	46.85	49.09	51.65
21	48.87	49.59	48.60	43.59	44.30	45.07	44.29	44.55	46.09	46.86	49.55	50.73
22	49.35	49.08	48.55	44.20	45.42	44.45	44.25	45.51	46.40	47.03	49.03	50.94
23	48.54	48.78	46.75	43.94	44.76	45.77	46.55	45.39	46.67	47.37	49.35	41.15
24	49.06	49.83	46.09	43.65	44.51	44.51	44.40	44.45	46.56	47.85	48.90	50.65
25	49.18	49.33	46.10	43.97	44.26	44.56	44.31	46.10	46.25	47.60	49.41	50.76
26	48.62	48.91	45.54	44.04	44.28	44.22	44.52	45.17	47.69	47.45	48.97	50.45
27	48.55	48.87	45.70	45.04	44.97	44.97	44.51	44.85	46.37	47.11	49.60	50.68
28	49.03	48.87	45.64	43.98	44.56	44.17	44.33	45.87	46.71	47.31	49.55	50.27
29	49.07	.....	45.38	44.00	.....	44.71	44.05	45.03	47.51	47.61	49.87	50.77
30	48.13	.....	46.33	44.00	.....	44.96	44.35	46.23	46.61	48.85	49.77	50.57
31	48.75	.....	44.85	.....	.....	.....	44.19	45.95	.....	47.87	.....	50.94

T47 (*886, p. 585; 906, p. 193; 936, p. 219; 944, p. 220). Drackett Chemical Co. Geological Survey test well. On Sharon Avenue, 0.1 mile west of Mostellar Road, in Sycamore Township. Water level, in feet below land-surface datum, 1943: Mar. 22, 10.43.

212-1 (*845, pp. 382-383; 886, p. 585; 906, pp. 193-194; 936, pp. 219-220; 944, p. 220). Johns-Manville Corporation. 0.1 mile north of Glendale-Milford road, in Sycamore Township. Measuring point, top of 8-inch casing, 4.65 feet above land-surface datum.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	53.60	54.09	54.76	49.03	49.62	50.06	50.38	49.76	49.90	50.65	51.81	52.95
2	53.50	54.06	54.74	49.36	49.41	50.07	50.14	49.81	49.88	50.74	51.91	53.00
3	53.40	53.85	54.91	49.48	49.40	50.20	50.23	49.53	50.05	50.75	51.78	53.15
4	54.01	53.85	54.80	49.02	49.42	50.34	50.18	49.63	49.91	51.12	51.87	53.11
5	53.77	53.95	54.90	49.30	49.30	50.22	50.10	59.75	49.96	51.06	51.80	53.14
6	53.66	54.03	54.80	49.10	49.34	50.24	49.97	49.93	49.85	51.14	51.89	53.10
7	54.93	54.15	55.11	48.82	49.45	50.09	50.20	49.75	49.92	51.13	51.95	53.05
8	54.71	54.24	55.20	48.86	49.65	50.25	50.16	49.68	50.00	50.98	51.84	53.22
9	54.62	53.95	55.11	48.98	49.64	50.25	50.15	49.65	50.16	51.01	52.09	53.51
10	54.65	53.99	54.92	49.16	49.62	50.31	50.10	49.65	50.13	51.26	52.10	53.26
11	54.62	54.30	54.82	49.12	49.32	50.17	50.09	49.64	50.29	51.10	52.32	53.34
12	53.88	54.23	55.08	48.75	49.72	50.32	50.20	49.64	50.03	51.09	52.20	53.32
13	53.76	54.16	55.26	48.89	49.81	50.15	50.25	49.69	50.09	50.99	52.34	53.47
14	53.42	54.46	55.16	49.09	49.88	50.21	49.05	49.66	49.97	51.11	52.39	53.60
15	53.48	54.43	55.03	49.28	49.79	50.14	50.10	49.69	50.02	51.06	52.26	53.64
16	53.63	54.50	54.91	49.17	49.75	49.99	50.20	49.57	50.22	51.17	52.38	53.79
17	53.79	54.32	55.18	49.60	50.09	50.13	50.10	49.80	50.53	.....	52.38	53.65
18	53.80	54.54	55.21	49.34	49.97	50.21	50.43	49.86	50.47	51.13	52.40	53.52
19	53.89	54.37	54.86	48.97	49.82	50.28	50.02	49.91	50.20	51.21	52.49	52.52
20	54.10	54.09	53.93	48.99	49.72	50.18	49.77	49.83	50.10	51.27	52.58	53.70
21	53.76	54.16	51.47	49.29	50.01	50.18	49.80	49.77	50.19	51.27	52.77	53.43
22	53.65	54.23	50.27	49.44	49.84	50.18	49.87	49.80	50.37	51.45	52.85	53.81
23	53.71	54.10	49.77	49.22	49.85	50.27	50.04	49.82	50.52	51.44	52.77	53.92
24	53.59	54.52	49.61	49.18	49.70	50.24	49.85	49.75	50.47	51.35	52.78	54.01
25	53.86	54.53	49.18	49.27	49.78	50.33	49.75	49.88	50.51	51.42	52.71	53.84
26	54.05	54.44	48.97	49.26	49.87	50.30	49.86	49.90	50.65	51.44	52.52	53.67
27	54.16	54.65	48.89	49.14	50.29	50.09	49.83	49.86	50.68	51.44	52.74	53.77
28	54.05	54.49	49.02	49.35	50.19	50.07	49.80	49.89	50.69	51.52	52.75	53.67
29	54.10	.....	48.95	49.42	50.22	50.07	49.73	49.78	50.73	51.52	52.87	53.90
30	54.00	.....	48.87	49.47	50.17	50.38	49.78	49.98	50.58	51.69	53.02	54.03
31	53.97	.....	48.82	.....	50.13	.....	49.83	49.97	.....	51.71	.....	54.20

T8 (*886, pp. 583-585; 906, p. 194; 936, p. 220; 944, p. 220). Saint Rita School for Deaf Children. Geological Survey test well. Near crossing of Glendale-Milford road and Pennsylvania Railroad. Measuring point, top of 1½-inch pipe, 0.6 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 15	17.64	May 17	14.50	Aug. 2	16.60	Oct. 18	17.93
Mar. 15	17.51	24	14.86	9	16.72	25	18.05
19	14.22	31	15.13	16	16.84	Nov. 1	18.11
20	3.47	June 7	15.33	23	16.98	8	18.19
22	7.64	14	15.55	30	17.12	15	18.26
29	10.52	21	15.74	Sept. 6	17.32	22	18.36
Apr. 5	11.52	28	15.93	13	17.37	29	18.45
12	12.09	July 5	16.09	20	17.50	Dec. 6	18.50
19	12.67	12	16.22	27	17.59	13	18.60
26	13.20	19	16.34	Oct. 4	17.75	20	18.68
May 3	13.69	26	16.49	11	17.83	27	18.79
10	14.08						

214-3 (*886, pp. 583-585; 906, p. 195; 936, p. 220; 944, p. 220). Tennessee Corporation. Near crossing of Glendale-Milford road and Big Four Route tracks, at rear of old office, in Sycamore Township. Measuring point, top of 4-inch coupling, 4.8 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	28.32	Mar. 22	13.47	June 21	22.58	Sept. 27	26.98
12	27.81	29	15.03	July 5	23.32	Oct. 11	27.53
18	27.61	Apr. 5	16.48	12	23.63	18	27.78
25	27.45	12	17.47	19	23.74	25	28.02
Feb. 1	27.35	19	18.40	26	24.14	Nov. 1	28.24
8	27.22	26	19.12	Aug. 2	24.46	8	28.45
15	27.20	May 3	19.79	9	24.76	15	28.63
22	27.20	10	20.27	16	22.02	22	28.88
Mar. 1	27.25	17	20.87	23	25.46	29	29.05
8	27.37	24	21.24	30	24.79	Dec. 6	29.31
15	27.34	31	21.58	Sept. 6	26.20	13	29.50
19	27.41	June 7	21.92	13	26.37	27	29.72
20	15.65	14	22.23	20	26.70		

215-1 (*906, p. 196; 936, p. 221; 944, p. 221). Pennsylvania Railroad. On Harry F. Pittman farm, on Jackson Road, 1.3 miles north of Lockland, in Sycamore Township. Deep well. Measuring point, top of 6-inch reducing coupling, 6.5 feet below land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	72.00	Mar. 29	73.45	July 5	69.89	Oct. 4	64.82
11	71.79	Apr. 5	72.92	12	68.66	11	64.90
18	72.32	12	72.67	19	67.54	18	64.75
25	73.52	19	72.38	26	66.90	25	64.90
Feb. 1	72.65	26	72.23	Aug. 2	66.34	Nov. 1	64.25
8	73.70	May 3	73.57	9	65.94	8	65.02
15	72.89	10	73.48	16	65.47	15	65.03
22	73.25	17	71.97	23	65.31	22	65.70
Mar. 1	73.73	24	73.60	30	65.33	29	65.32
8	74.50	31	73.97	Sept. 6	64.80	Dec. 6	65.28
15	74.00	June 7	73.48	13	64.90	13	65.72
19	74.92	14	71.49	20	64.82	20	65.93
20	74.52	21	71.02	27	65.03	27	65.96
22	73.85	28	70.24				

215-2 (*845, p. 383; 886, pp. 582-583; 906, p. 196; 936, p. 221; 944, p. 221). Pennsylvania Railroad. On Harry F. Pittman farm, on Jackson Road, 1.3 miles north of Lockland, in Sycamore Township. Shallow well. Measuring point, top of 8-inch casing, 0.55 foot above land-surface datum.

215-2. Pennsylvania Railroad--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 18	31.09	Apr. 12	28.48	July 12	28.85	Oct. 11	29.98
25	31.08	19	28.52	19	28.88	18	29.98
Feb. 1	31.08	26	28.54	26	28.89	25	30.30
8	31.08	May 3	28.62	Aug. 2	28.94	Nov. 1	30.00
22	31.08	10	28.71	9	28.95	8	30.00
Mar. 1	31.08	17	28.79	16	29.11	15	30.01
8	31.08	24	28.81	23	26.14	22	30.03
15	31.06	31	28.80	30	29.17	29	30.05
19	31.05	June 7	28.76	Sept. 6	29.19	Dec. 6	30.07
20	31.05	14	28.78	13	29.41	13	30.09
22	31.05	21	28.80	20	29.70	20	30.11
29	28.78	28	28.83	27	29.71	27	30.15
Apr. 5	28.48	July 5	28.84	Oct. 4	24.76		

216-C (*936, p. 223; 944, p. 222). Wright Aeronautical Corporation. At southeast corner of intersection of Lockland and Jackson Roads, in Lockland. Measuring point, top of 6-inch coupling, 0.2 foot above land-surface.

Water level, in feet below land-surface datum, 1943

Jan. 4	94.12	Apr. 5	95.38	July 5	94.30	Oct. 4	83.00
11	94.11	12	96.97	12	88.71	11	82.81
18	94.80	19	96.37	19	86.79	18	82.57
25	95.25	26	97.40	26	85.74	25	82.68
Feb. 1	95.17	May 3	97.97	Aug. 2	84.99	Nov. 1	82.99
8	95.09	10	98.18	9	84.40	8	82.68
15	96.14	17	98.72	16	83.86	15	82.66
22	96.52	24	98.38	23	83.70	22	83.32
Mar. 1	97.05	31	98.62	30	83.70	29	82.80
8	97.39	June 7	97.92	Sept. 6	83.09	Dec. 6	82.74
15	96.54	14	95.15	13	83.04	13	83.13
22	96.44	21	95.62	20	82.91	20	83.29
29	96.82	28	94.78	27	82.79	27	83.22

216-D (*936, p. 223; 944, p. 222). Wright Aeronautical Corporation. 1,100 feet south of Jackson Road and 120 feet east of Lockland Road, in Lockland. Measuring point, top of 6-inch coupling, 0.6 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 4	94.05	Apr. 5	97.16	July 5	95.51	Oct. 4	90.47
11	94.38	12	96.80	12	95.69	11	90.25
18	94.75	19	97.46	19	94.43	18	89.98
25	94.78	26	98.03	26	93.48	25	90.04
Feb. 1	95.20	May 3	98.03	Aug. 2	92.72	Nov. 1	90.25
8	95.50	10	98.36	9	92.10	8	89.75
15	96.11	17	98.75	16	91.52	15	90.03
22	95.75	24	98.77	23	91.42	22	90.40
Mar. 1	96.31	31	99.02	30	91.23	29	98.97
8	97.34	June 7	98.87	Sept. 6	90.73	Dec. 6	89.99
15	96.82	14	98.02	13	90.66	13	90.19
22	96.95	21	97.72	20	90.45	20	90.33
29	97.30	28	97.03	27	90.51	27	90.22

216-E (*936, p. 224; 944, p. 222). Wright Aeronautical Corporation. At southwest corner of crossing of Jackson Road and Big Four Route tracks, in Lockland. Measuring point, top of 6-inch casing, 5.0 feet above land-surface datum.

216-E. Wright Aeronautical Corporation--Continued.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	71.50	74.44	76.34	76.23	77.15	76.58	70.56	66.50	65.18	64.38	64.70	64.70
2	73.00	74.59	76.59	76.50	76.77	77.28	70.23	66.35	65.60	65.04	64.64	65.50
3	72.95	72.54	74.45	76.44	76.80	76.49	70.88	66.51	65.19	64.52	64.65	64.98
4	73.65	73.92	76.05	76.19	77.07	76.54	70.84	66.25	64.92	64.60	65.38	64.94
5	74.40	74.09	76.40	75.65	76.95	76.60	70.87	66.87	64.71	64.59	64.40	64.94
6	72.40	74.18	75.88	76.73	76.90	76.17	70.94	66.42	64.68	64.59	64.50	64.72
7	73.15	74.08	75.46	76.70	77.02	75.43	70.92	66.15	65.14	64.95	64.36	64.82
8	73.75	74.65	76.50	76.50	77.10	75.40	69.79	65.92	64.75	64.28	64.36	64.82
9	73.45	74.72	76.45	75.85	77.00	74.93	69.85	65.76	65.56	64.14	64.71	65.89
10	72.50	74.68	76.03	76.30	76.92	74.61	70.02	66.12	65.09	64.34	64.22	65.14
11	73.40	74.70	75.93	76.26	76.78	74.59	69.71	66.12	65.39	64.40	65.70	65.09
12	73.80	74.93	76.11	75.78	77.25	73.50	69.21	66.30	64.81	64.35	64.81	64.78
13	72.10	74.65	76.18	76.10	77.62	72.65	69.06	65.73	64.70	64.19	64.80	65.00
14	72.80	74.42	76.10	76.45	77.92	72.10	68.62	65.60	65.05	65.02	64.90	65.22
15	73.30	75.21	75.95	76.79	77.65	73.64	68.20	65.60	64.78	64.32	64.58	65.32
16	73.46	75.50	76.09	76.73	76.95	73.93	68.20	65.40	65.40	64.20	64.62	66.22
17	73.30	73.42	76.49	77.25	77.27	73.60	67.99	65.83	65.30	64.25	64.68	65.40
18	74.00	75.28	77.11	75.78	77.45	73.98	67.92	65.98	65.02	64.30	65.30	65.00
19	74.51	75.28	76.49	74.95	77.54	74.10	67.75	65.66	64.70	64.50	64.68	64.85
20	73.02	75.04	76.83	75.44	77.50	72.58	67.73	65.52	65.00	64.50	64.70	65.18
21	73.50	79.32	76.11	76.49	77.55	72.52	67.65	65.46	64.98	64.90	64.80	64.92
22	73.93	75.64	76.10	76.62	77.42	72.17	67.86	65.31	64.75	64.52	65.05	65.29
23	74.00	75.78	76.03	76.53	77.30	72.28	67.50	65.25	65.42	64.58	65.02	65.51
24	73.20	73.91	75.95	76.50	76.90	72.24	67.18	65.12	64.95	64.43	65.03	66.18
25	74.50	75.30	75.72	76.28	77.36	72.65	67.10	65.16	64.60	64.32	65.55	65.21
26	75.12	75.50	75.79	76.32	77.37	72.88	66.91	65.28	64.66	64.30	64.60	64.88
27	72.90	76.00	75.80	76.51	77.72	72.20	67.14	65.10	64.70	64.26	64.60	65.08
28	73.90	75.30	75.88	76.97	77.72	72.36	66.90	65.25	64.66	64.40	64.60	65.07
29	73.94	.....	76.40	76.97	77.71	70.78	67.06	65.10	64.62	64.40	64.60	65.12
30	73.94	.....	76.09	76.95	77.52	70.90	66.70	65.10	64.88	64.50	64.70	65.90
31	73.10	.....	76.03	.....	77.42	.....	66.70	65.40	.....	.....	.....	65.33

236-4 (*936, p. 226; 944, pp. 223-224). Grasselli Chemicals Division, E. I. du Pont de Nemours & Co. At company's plant on Wayne Avenue at crossing of West Fork of Mill Creek, in Lockland. Measuring point, top of 6-inch pipe, 0.5 foot above land-surface datum. Recorder removed Jan. 14, 1943.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	a115.77	Feb. 2	114.94	May 17	117.48	Sept. 20	122.11
2	a114.38	8	114.78	24	116.48	27	121.75
3	a114.38	15	116.21	June 7	117.44	Oct. 4	121.25
4	a114.80	22	116.58	14	118.06	11	121.10
5	a116.18	Mar. 1	115.74	21	117.70	18	120.80
6	a114.86	8	117.45	28	117.81	25	121.49
7	a116.11	15	116.69	July 12	118.98	Nov. 1	121.80
8	a116.00	22	118.00	19	119.09	8	121.68
9	a114.65	29	118.64	26	119.04	15	121.80
10	a115.68	Apr. 5	116.92	Aug. 2	119.55	22	123.09
11	a114.65	12	115.41	9	120.46	29	122.32
12	a114.56	19	114.78	16	119.92	Dec. 6	122.54
13	a114.57	26	115.05	23	120.03	13	122.85
14	a114.33	May 3	115.33	30	120.83	20	123.23
18	114.42	10	115.68	Sept. 13	122.11	27	123.77
25	114.38						

237-3 (*845, pp. 377-378; 886, pp. 578-579; 906, pp. 200-201; 936, pp. 226-227; 944, pp. 224-225). Village of Wyoming. At municipal water plant, at Vine and Water Streets, in Wyoming. Measuring point, edge of concrete pump house floor, 1 foot above land-surface datum.

a Lowest daily water level from recorder charts.

237-3. Village of Wyoming--Continued.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	133.40	134.55	136.43	136.67	137.37	137.44
2	133.62	134.55	136.59	137.24	136.35	137.35
3	133.54	134.42	136.76	137.31	137.17	137.57
4	134.18	133.93	136.77	137.00	137.07	137.91
5	134.17	133.99	136.58	136.91	134.05	138.01
6	134.02	133.86	136.48	137.17	135.57	138.00
7	133.75	134.04	136.77	136.95	136.29	138.01
8	133.82	134.11	137.23	136.75	136.97	138.03
9	133.69	134.67	136.95	136.76	137.09	138.06
10	133.25	135.07	136.77	136.82	136.97	138.01
11	133.36	135.73	136.62	136.88	136.76	137.92
12	133.81	.....	136.53	136.21	137.11	138.13
13	133.81	.....	136.50	136.47	137.31	138.32
14	133.35	.....	136.10	136.94	137.53	138.45
15	133.25	136.66	136.15	136.03	137.30	138.36
16	133.09	136.68	136.55	136.87	137.27	138.35
17	133.57	136.82	136.62	137.27	137.46	138.42
18	133.50	136.92	136.60	136.67	137.46	138.63
19	134.55	136.77	136.20	136.34	137.42	138.59
20	134.56	136.46	136.43	136.73	137.37	138.51
21	134.03	136.29	136.31	136.87	137.55	138.06
22	133.61	136.34	136.52	136.99	137.71	137.31
23	133.60	136.28	136.43	136.77	137.58	138.70
24	133.00	136.08	136.56	136.67	137.37	138.75
25	133.84	134.29	136.67	136.85	137.01	138.88
26	133.94	135.40	136.62	136.98	137.25	138.93
27	134.03	135.56	136.74	136.68	137.39	138.89
28	134.08	136.00	137.07	137.11	137.65	138.26
29	134.12	.....	137.17	137.17	137.64	138.73
30	134.27	.....	136.94	137.20	137.56	138.96
31	134.30	.....	136.81	.....	137.58	.....

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	139.10	138.97	139.49	139.97	140.52	141.08
2	139.16	139.05	139.52	140.08	140.77	141.13
3	138.93	139.00	139.56	140.25	140.93	141.25
4	138.72	138.84	139.57	140.43	140.93	141.30
5	137.98	139.06	139.52	140.67	140.73	140.80
6	138.31	139.19	139.50	140.80	140.77	140.99
7	138.41	139.16	139.62	140.75	140.74	141.08
8	138.60	139.00	139.62	140.72	140.87	141.39
9	138.80	138.92	139.83	140.74	141.16	142.01
10	138.91	139.12	139.92	141.00	141.22	142.01
11	138.53	139.18	139.96	141.10	141.39	141.98
12	138.71	139.16	139.95	141.13	141.25	141.53
13	139.03	139.09	139.73	140.93	141.35	141.82
14	138.91	139.15	139.66	141.13	141.49	142.29
15	138.91	139.20	139.66	141.13	141.22	142.45
16	139.01	139.05	139.88	.....	141.28	142.61
17	139.10	139.24	140.10	.....	141.37	142.61
18	139.18	139.38	140.15	140.88	141.22	142.28
19	139.11	139.43	139.43	140.67	141.20	141.65
20	138.94	139.36	139.26	140.56	141.18	142.04
21	138.85	139.35	139.32	140.80	141.05	141.87
22	139.12	139.33	139.32	141.25	141.56	142.33
23	139.18	139.30	138.12	140.88	141.65	142.65
24	139.21	139.26	139.42	140.65	141.60	142.72
25	139.18	139.27	138.18	140.57	141.50	142.35
26	139.22	139.39	139.44	140.46	141.22	141.63
27	139.25	139.40	139.79	140.40	140.94	142.07
28	138.95	139.50	140.07	140.44	140.90	142.01
29	138.83	139.45	140.35	140.53	141.02	142.12
30	139.09	139.62	140.12	140.57	141.11	142.07
31	139.10	139.60	.....	140.24	.....	142.33

241-3 (*845, p. 378; 885, pp. 579-580; 906, pp. 201-202; 936, pp. 228-229; 944, pp. 225-226). Gardner-Richardson Co. On South Cooper Avenue, in Lockland. Measuring point, top of recorder platform, 1.0 foot above top of flange of casing, 1.9 feet above concrete foundation and 3.5 feet above land-surface datum.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	126.16	124.97	124.15	123.58	123.54	122.46
2	126.15	123.00	124.36	123.80	123.32	122.38
3	125.57	123.00	124.22	123.95	123.16	122.54
4	125.60	125.14	124.22	123.75	123.18	123.73
5	123.55	125.27	124.17	123.55	123.04	122.72
6	125.15	125.47	124.34	123.62	122.86	122.65
7	124.95	125.64	124.83	123.42	123.03	122.52
8	124.80	123.70	124.92	123.28	123.22	122.49
9	124.70	125.11	124.70	123.22	123.23	122.43
10	124.70	125.11	124.37	123.48	122.95	122.30
11	124.73	125.46	124.44	123.49	122.58	122.27
12	124.93	125.49	124.57	123.96	122.94	122.34
13	124.93	125.27	124.45	123.30	123.01	122.43
14	124.55	125.24	124.43	123.51	123.06	122.38
15	124.40	125.24	124.02	123.54	122.94	122.30
16	124.45	125.24	124.39	123.34	122.76	122.18
17	124.36	125.08	124.58	123.73	123.02	122.30
18	124.25	125.12	124.60	123.62	123.03	122.43
19	124.70	124.89	124.47	123.10	123.02	122.43
20	124.70	124.44	124.87	123.05	123.00	122.36
21	123.90	124.25	124.87	123.30	123.14	122.15
22	123.57	124.25	124.59	123.28	123.10	122.16
23	123.59	124.24	124.63	123.07	122.92	122.22
24	123.58	124.43	124.44	122.97	122.61	122.28
25	124.04	124.56	124.04	122.87	122.46	122.36
26	124.38	124.50	123.82	122.89	122.65	122.51
27	124.45	124.52	123.69	122.87	122.82	122.30
28	124.25	123.92	123.95	123.31	122.85	122.15
29	124.25	.....	124.03	123.38	122.81	122.56
30	124.65	.....	123.75	123.42	122.63	122.68
31	124.65	.....	123.53	.....	122.52	.....

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	122.65	124.77	124.45	123.71	122.64	122.20
2	122.62	124.45	124.54	123.60	122.60	122.35
3	122.57	124.46	124.56	123.56	122.77	122.51
4	122.42	124.58	124.56	123.51	122.65	122.50
5	121.92	124.82	124.40	123.42	122.33	122.53
6	121.90	124.92	124.30	123.33	122.40	122.36
7	122.15	124.79	124.30	123.14	122.20	122.44
8	122.46	124.50	124.20	123.94	122.12	122.53
9	122.74	124.47	124.23	122.86	122.40	122.82
10	122.93	124.74	124.26	123.01	122.42	122.74
11	122.99	124.81	124.26	122.98	122.45	122.64
12	123.08	124.80	124.17	122.94	122.30	122.27
13	123.28	124.77	123.92	122.73	122.29	122.45
14	123.39	124.92	123.87	122.79	122.34	123.56
15	123.63	124.91	123.95	122.78	121.95	124.05
16	123.80	124.63	124.20	122.66	122.00	.....
17	124.10	124.92	124.37	122.68	122.02	.....
18	124.17	125.05	124.32	122.58	122.92	.....
19	124.10	125.05	124.06	122.66	123.67	.....
20	124.21	124.96	123.83	122.65	123.92	.....
21	124.37	124.97	123.85	122.48	123.02	123.41
22	124.65	124.98	123.96	122.56	123.00	123.68
23	124.83	124.72	124.06	122.59	122.95	123.96
24	124.90	124.81	124.05	122.50	122.76	124.00
25	124.80	124.90	124.05	122.36	122.60	123.26
26	124.71	125.02	124.09	122.33	122.30	122.86

241-3. Gardner-Richardson Co.--Continued.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
27	124.70	125.00	123.95	122.30	122.30	123.17
28	124.65	125.09	124.03	122.34	122.29	123.63
29	124.57	124.65	124.00	122.35	122.18	123.96
30	124.82	124.56	123.89	122.36	122.20	124.08
31	124.87	124.53	.....	122.40	.....	124.11

242-T (*944, p. 226). Philip Carey Manufacturing Co. On South Wayne Avenue, in Lockland. Measuring point, top of 2-inch pipe, 4.5 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	131.70	May 24	132.12	Aug. 9	133.48	Oct. 25	132.67
11	131.62	31	132.32	16	133.40	Nov. 1	132.88
18	131.45	June 7	132.50	23	133.79	8	133.12
25	131.40	14	132.74	30	137.96	15	133.00
Apr. 5	131.57	21	132.59	Sept. 6	133.45	22	133.70
12	132.22	28	132.54	13	133.42	29	133.32
19	131.95	July 5	132.95	20	133.18	Dec. 6	133.36
26	132.47	12	133.14	27	133.34	13	133.67
May 3	132.39	19	133.39	Oct. 4	133.73	20	134.34
10	132.27	26	133.01	11	133.69	27	134.19
17	132.16	Aug. 2	133.32	18	133.50		

252 (*845, p. 383; 886, p. 575; 906, pp. 204-205; 936, p. 229; 944, p. 227). Flintkote Co. At Seventy-fifth Street and Longview Avenue, in Carthage, a suburb of Cincinnati. Measuring point, top of 6-inch casing, 0.3 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 4	107.63	Apr. 5	107.50	July 12	108.41	Oct. 11	109.44
11	107.40	12	107.39	19	108.48	18	109.35
18	107.38	19	107.49	26	108.59	25	109.43
25	107.35	26	107.72	Aug. 2	108.62	Nov. 1	109.54
Feb. 1	107.40	May 3	107.56	9	108.66	8	109.36
8	107.27	10	107.74	16	108.67	15	109.19
15	107.51	17	107.92	23	108.87	22	109.42
22	107.38	24	107.82	30	109.02	29	109.12
Mar. 1	107.54	31	107.92	Sept. 13	109.07	Dec. 6	109.06
8	107.83	June 7	108.12	20	109.05	13	109.29
15	107.58	14	108.16	27	109.29	20	109.23
23	107.80	21	108.19	Oct. 4	109.40	27	109.22
29	107.68	28	108.14				

265 (*886, pp. 575-576; 906, p. 205; 936, p. 229; 944, p. 227). Cities Service Oil Co. On Laidlaw Avenue at crossing of Norfolk & Western Railway, in Cincinnatti. Measuring point, top of 6-inch drop pipe, 2.0 feet above land-surface datum.

Water levsl, in feet below land-surface datum, 1943

Jan. 4	128.25	Apr. 5	129.42	July 5	130.05	Oct. 4	131.33
11	128.19	12	128.95	12	129.94	11	131.29
18	128.15	19	129.25	19	129.77	18	131.19
25	128.20	26	129.80	26	129.88	25	131.35
Feb. 1	128.37	May 3	129.65	Aug. 2	129.99	Nov. 1	131.74
8	128.39	10	129.75	9	130.06	8	131.60
15	128.51	17	130.00	16	130.04	15	131.53
22	128.42	24	129.73	23	130.36	22	132.14
Mar. 1	128.80	31	129.85	30	130.61	29	131.74
8	129.20	June 7	130.06	Sept. 6	130.15	Dec. 6	131.59
15	129.05	14	130.12	13	130.62	13	132.12
22	129.56	21	130.22	20	130.70	20	132.11
29	129.69	28	129.96	27	131.10	27	132.10

270-A-4 (*886, p. 574; 906, p. 206; 936, p. 230; 944, p. 227). Procter & Gamble Co. Abandoned well, at south end of Ross Rundwell field, on Vine Street near Big Four Route tracks. Measuring point, top of 6-inch coupling, 0.8 foot above land-surface datum.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	94.05	94.10	93.15	92.76	93.08	92.42	93.05	92.35	92.50	92.41	92.55	92.59
2	94.00	94.12	92.93	91.58	92.92	92.59	93.00	91.98	92.55	92.41	92.47	92.65
3	94.00	94.12	93.27	92.06	92.85	92.77	92.95	92.11	92.55	92.27	92.50	92.73
4	94.03	94.19	93.27	91.95	92.90	92.97	92.85	92.26	92.52	92.30	92.50	92.70
5	94.05	94.25	93.45	92.40	92.88	92.97	92.61	92.41	92.54	92.38	92.49	92.70
6	94.00	94.38	93.73	92.59	92.81	92.96	92.30	92.47	92.52	92.43	92.52	92.56
7	94.01	94.42	93.93	92.15	92.94	93.02	92.17	92.37	92.25	92.36	92.46	92.58
8	94.10	94.45	93.93	91.37	93.17	93.03	91.85	92.20	92.36	92.34	92.26	92.67
9	94.05	94.29	93.62	91.13	93.17	93.03	91.53	92.22	92.47	92.43	92.58	92.84
10	94.31	94.41	93.52	91.51	93.03	92.97	91.73	92.37	92.50	92.52	92.59	92.76
11	94.31	94.56	93.57	91.30	93.03	92.96	91.66	92.40	92.51	92.17	92.66	92.69
12	94.41	94.57	93.26	91.53	93.27	92.99	92.01	92.36	92.47	92.27	92.56	92.61
13	94.41	94.45	93.66	92.01	93.28	93.06	92.12	92.33	92.34	92.25	92.62	92.60
14	94.20	94.57	93.72	92.02	93.29	93.05	92.80	92.45	92.39	92.43	92.66	92.76
15	94.25	94.23	93.10	91.34	93.23	92.95	91.33	92.46	92.45	92.43	92.44	92.78
16	94.40	94.38	93.65	91.57	93.16	92.94	91.20	92.47	92.62	92.48	92.52	92.81
17	94.50	94.20	93.70	91.89	93.03	92.98	91.68	92.58	92.71	92.51	92.52	92.76
18	94.41	93.52	93.38	91.65	93.04	93.04	91.88	92.62	92.67	92.25	92.46	92.49
19	95.08	93.12	93.47	93.16	93.05	93.01	91.95	92.60	92.48	92.39	92.50	92.47
20	95.08	93.38	93.77	92.46	93.06	92.94	92.05	92.53	92.42	92.44	92.50	92.72
21	94.25	93.60	93.75	92.24	93.21	92.98	92.10	92.55	92.47	92.44	92.47	92.50
22	94.22	93.27	93.16	92.41	93.23	92.86	92.16	92.54	92.54	92.53	92.60	92.75
23	94.30	92.73	93.31	91.94	93.13	92.92	91.70	92.50	92.58	92.56	92.61	92.62
24	94.30	92.90	93.30	92.17	97.97	92.94	91.90	92.45	92.57	92.51	92.60	92.84
25	94.65	93.13	93.10	92.20	93.05	92.92	92.00	92.46	92.58	92.16	92.54	92.56
26	94.45	92.77	93.23	92.43	93.16	92.89	92.05	92.54	92.60	92.26	92.18	91.67
27	94.45	92.93	93.36	92.62	93.27	92.84	92.10	92.52	92.53	92.30	92.39	92.13
28	94.30	93.37	92.73	92.87	93.27	92.83	92.23	92.52	92.60	92.43	92.42	92.23
29	94.32	.....	93.02	92.89	93.25	93.08	92.25	92.53	92.56	92.44	92.55	92.38
30	94.37	.....	92.61	93.05	93.11	93.11	92.38	92.62	92.48	92.48	92.60	92.35
31	94.37	.....	92.47	.....	93.10	.....	92.42	92.56	.....	92.55	.....	92.54

270-T-7 (*886, p. 574; 906, pp. 205-206; 936, p. 230; 944, p. 228). Procter & Gamble Co. At Ivorydale, a suburb of Cincinnati. Test well in bed of abandoned Miami & Erie Canal, 500 feet south of Murray Road, in Ross Run well field. Measuring point, top of 6-inch coupling, 2.1 feet above land-surface datum.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	122.13	Apr. 5	123.20	July 5	123.79	Oct. 4	124.65
11	122.45	12	122.88	12	122.95	11	124.64
18	122.60	19	123.48	19	123.28	18	124.73
25	122.50	26	123.77	26	123.86	25	122.74
Feb. 1	122.71	May 3	123.57	Aug. 2	123.48	Nov. 1	125.02
8	122.79	10	123.99	9	123.89	8	124.96
15	122.86	17	124.02	16	123.98	15	124.96
22	122.83	24	124.02	23	124.18	22	125.35
Mar. 1	123.27	31	123.17	30	124.40	29	125.12
8	123.85	June 7	123.81	Sept. 6	124.30	Dec. 6	125.00
15	123.47	14	124.19	13	124.25	13	125.22
22	123.82	21	124.28	20	124.36	20	125.33
29	123.67	28	124.25	27	124.68	27	125.12

315-3 (*845, p. 379; 996, p. 573; 906, p. 207; 936, p. 231; 944, p. 228). Globe Wernicke Co. At Norwood and Carthage Avenues, in Norwood. Measuring point, top of 1-inch plank on top of casing, 2.75 feet above land-surface datum.

315-3. Globe Wernicke Co.--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 15	184.64	May 17	184.56	Aug. 16	185.08	Oct. 18	185.45
Mar. 15	184.56	June 14	184.65	Sept.20	185.78	Dec. 20	186.09
Apr. 12	183.37	July 12	184.81				

326 (*906, p. 209; 936, p. 232; 944, p. 228). Cincinnati Milling Machine Co. At Madison and Marburg Roads, in Oakley, a suburb of Cincinnati. Measuring point, top of 6-inch casing, 1.0 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Feb. 15	166.86	May 17	167.59	Aug. 16	167.95	Nov. 22	168.89
Mar. 15	166.21	June 14	167.49	20	168.05	Dec. 20	168.87
Apr. 12	165.80	July 12	167.98	Oct. 18	167.92		

Dayton 1 (*944, p. 190). City of Dayton water department. In Rohrer's Island well field, 54 feet southwest of well T77. Measuring point, top of 6-inch pipe, 4.0 feet above land-surface datum.

Lowest daily water level, in feet below land-surface datum, 1943

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	11.20	14.30	10.61	.....	11.15	9.12	.....	18.08	19.27	11.71	14.07	17.67
2	.....	13.38	11.28	.....	12.02	9.27	.....	19.23	18.97	10.99	14.58	17.07
3	.....	14.94	11.32	.....	11.60	9.17	11.70	18.68	16.42	10.20	14.34	14.48
4	.....	15.05	11.34	.....	11.15	8.85	11.80	17.25	14.76	9.63	14.45	12.81
5	.....	15.54	12.85	.....	11.27	8.85	11.78	17.22	13.05	9.64	14.26	12.30
6	.....	15.88	12.85	.....	11.52	8.86	10.84	17.25	12.60	9.54	15.12	12.37
7	.....	16.16	13.80	.....	12.00	8.85	11.18	17.47	12.26	9.56	15.19	11.80
8	.....	16.08	13.82	9.65	.....	9.57	.....	17.45	11.52	9.40	14.77	11.38
9	.....	17.42	11.85	....	.....	9.78	10.63	16.11	11.67	8.75	14.77	11.84
10	.....	17.52	10.15	....	11.22	9.99	11.52	16.88	11.39	8.40	14.59	11.85
11	.....	16.51	13.60	....	12.00	9.76	12.66	.....	11.39	8.66	15.57	11.78
12	.....	.....	14.52	....	12.05	....	.....	17.32	11.30	8.87	15.61	12.28
13	.....	.....	14.83	9.33	11.78	....	13.91	17.73	10.93	10.06	15.94	12.29
14	.....	.....	15.35	9.83	12.64	....	13.88	17.73	11.03	10.14	15.94	12.20
15	.....	17.75	16.52	9.91	13.19	8.60	14.75	16.51	11.35	10.56	16.44	12.31
16	.....	17.76	17.52	9.98	.....	9.46	16.51	16.75	11.86	11.55	16.45	12.59
17	.....	16.85	17.19	10.21	.....	11.67	16.37	16.70	12.50	12.39	16.32	12.61
18	.....	14.00	15.83	10.05	11.77	11.68	15.90	16.08	12.67	12.10	16.44	11.48
19	.....	13.67	.....	9.88	11.95	12.38	16.27	15.40	12.67	11.47	16.69	10.52
20	.....	13.67	.....	9.43	12.42	12.95	16.45	15.32	12.91	11.44	16.99	9.82
21	.....	14.15	.....	9.49	13.59	13.30	17.11	16.60	12.94	11.44	17.02	10.44
22	.....	14.27	.....	9.83	.....	14.83	17.12	16.28	13.06	11.89	17.10	10.79
23	.....	12.94	6.48	9.86	13.06	14.65	17.21	16.33	13.19	12.52	17.44	10.50
24	.....	11.80	7.37	9.68	12.47	13.84	17.25	18.05	13.25	12.51	17.40	11.07
25	.....	10.08	7.37	10.46	9.76	10.41	16.77	18.40	13.02	12.21	17.80	10.71
26	.....	9.24	7.78	10.32	....	10.00	15.15	18.12	12.98	12.86	17.99	9.25
27	.....	10.80	7.95	10.61	....	10.60	15.54	16.85	12.14	12.93	17.92	9.74
28	13.85	10.82	8.20	11.20	....	12.35	15.66	16.68	11.71	13.01	17.88	10.32
29	14.39	.....	7.52	11.20	....	13.15	15.40	17.41	12.03	13.32	18.59	10.45
30	14.48	.....	....	11.57	....	11.20	15.95	17.41	12.23	13.71	18.50	10.12
31	14.54	.....	....	.....	....	.....	16.46	18.10	.....	13.80	.....	10.35

Dayton 2 (*944, p. 191). Dayton Power & Light Co. At steam-distribution plant, 118 East Fourth Street, in fan room. Measuring point, top of 8-inch casing, 0.2 foot above concrete floor and 2.5 feet above land-surface datum.

Lowest daily water level, in feet below land-surface datum, 1943

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	24.65	23.44	23.18	21.50	23.25	23.12	26.04	27.39	27.77	27.76	27.29	27.03
2	24.40	23.47	23.24	21.55	23.14	23.38	26.07	27.33	27.84	27.77	27.34	27.11
3	24.16	23.47	23.31	21.58	23.21	23.61	26.14	27.40	27.91	27.75	27.36	27.18
4	23.91	23.45	23.37	21.54	23.33	23.58	26.10	27.50	27.86	27.57	27.36	27.17
5	23.82	23.37	23.42	21.68	23.42	24.07	25.85	27.55	27.80	27.63	27.37	27.08

Dayton 2. Dayton Power & Light Co.--Continued.

Lowest daily water level, in feet below land-surface datum, 1943

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	23.71	23.35	23.42	21.78	23.56	23.98	26.02	27.42	27.60	27.64	27.30	27.10
7	23.65	23.55	23.42	21.82	23.76	24.19	26.20	27.32	27.54	27.65	27.14	27.18
8	.....	23.12	23.47	21.94	23.86	24.35	26.34	27.12	27.64	27.66	27.04	27.26
9	.....	23.04	23.50	22.09	23.80	24.49	26.66	26.79	27.70	27.66	27.09	27.34
10	.....	23.04	23.52	22.20	23.82	24.65	26.74	26.81	27.70	27.63	27.09	27.39
11	23.44	23.07	23.52	22.17	23.85	24.77	26.65	26.86	27.70	27.50	27.11	27.40
12	23.50	23.10	23.51	22.18	23.93	24.90	26.67	26.93	27.55	27.53	27.17	27.32
13	23.51	22.90	23.41	22.22	23.97	24.82	.....	26.99	27.50	27.54	27.20	27.16
14	23.51	22.87	23.35	22.28	23.98	24.95	.....	27.01	27.54	27.59	27.12	27.16
15	23.78	22.91	23.26	22.33	23.87	25.09	.....	26.92	27.60	27.62	27.07	27.18
16	23.78	22.98	23.29	22.34	23.81	25.19	27.05	26.90	27.65	27.65	27.15	27.20
17	23.75	23.04	23.26	22.38	23.81	25.25	27.18	27.05	27.68	27.53	27.15	27.21
18	23.69	23.06	23.07	22.34	23.79	25.33	27.10	27.10	27.65	27.44	27.20	27.31
19	23.77	23.05	22.82	22.28	23.71	25.37	27.10	27.08	27.52	27.47	27.25	27.25
20	23.76	22.95	22.55	22.38	23.64	25.28	27.19	27.14	27.50	27.47	27.25	27.22
21	23.73	22.95	22.15	22.47	23.47	25.26	27.31	27.18	27.55	27.50	27.06	27.25
22	23.72	22.91	21.61	22.56	23.17	25.40	27.41	27.05	27.63	27.53	26.97	27.27
23	23.68	22.95	21.30	22.61	22.99	25.54	27.36	27.15	27.67	27.56	27.03	27.30
24	23.61	23.08	21.02	22.72	22.78	25.69	27.40	27.25	27.68	27.51	27.05	27.32
25	23.62	23.12	20.97	22.65	22.79	25.86	27.25	27.40	27.70	27.53	27.08	27.20
26	23.61	23.14	21.00	22.74	22.79	25.98	27.28	27.50	27.60	27.53	27.05	27.07
27	23.60	23.12	21.03	22.88	22.83	25.93	27.38	27.60	27.58	27.51	27.08	27.06
28	23.48	23.10	21.01	23.05	22.91	25.89	27.49	27.67	27.65	27.51	26.97	27.12
29	23.47	.....	21.10	23.13	23.05	26.03	27.57	27.57	27.69	27.50	26.94	27.19
30	23.45	.....	21.21	23.21	22.92	26.05	27.54	27.50	27.72	27.45	26.97	27.24
31	23.42	.....	21.36	.....	22.81	.....	27.54	27.65	.....	27.39	.....	27.27

Muskingum County

Zanesville 1 (*944, p. 192). City of Zanesville water department. On east bank of Muskingum River, 0.5 mile north of north corporation line. Measuring point, top of booster 2.6 feet below top of metal manhole cover, at land-surface datum.

Lowest daily water level, in feet below land-surface datum, 1943

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	28.19	22.29	23.57	18.55	20.00	18.17	18.66	20.94	22.35	20.34	20.19	21.97
2	27.38	22.42	23.70	18.96	19.91	17.86	18.80	20.94	22.41	20.46	20.22	22.11
3	26.85	22.46	23.70	19.14	20.07	17.25	19.02	21.13	22.47	20.46	20.30	22.08
4	26.24	22.53	.....	19.15	20.23	17.13	19.08	21.15	22.47	20.20	20.37	.....
5	25.75	22.57	.....	19.49	20.23	16.92	18.88	21.04	22.22	20.19	20.44	.....
6	25.14	22.57	.....	19.69	20.35	16.92	19.23	20.95	21.88	20.19	20.46	.....
7	24.25	22.53	.....	19.77	20.47	17.05	19.34	20.87	21.77	20.22	20.33	.....
8	.....	22.60	.....	20.00	20.47	17.43	19.34	20.87	21.59	20.17	20.35	.....
9	.....	22.60	.....	20.10	20.31	17.94	19.26	20.93	21.55	20.29	20.52	22.30
10	.....	22.70	.....	20.22	20.25	17.80	19.15	21.21	21.25	20.31	20.63	22.26
11	20.59	22.89	.....	20.13	20.23	17.78	19.16	21.18	21.05	20.27	20.76	22.27
12	20.69	22.90	.....	20.16	20.26	18.15	19.20	21.33	20.85	20.25	20.82	22.26
13	20.82	22.73	.....	20.31	20.28	18.16	19.33	21.50	20.74	20.27	20.88	22.33
14	21.05	22.30	.....	20.59	20.30	18.15	19.40	21.65	20.78	20.24	20.85	22.52
15	21.48	22.30	.....	20.66	20.30	18.18	19.48	21.65	20.76	20.15	20.87	22.67
16	21.70	22.66	.....	20.69	20.13	18.28	19.69	21.55	20.80	20.05	21.03	22.95
17	21.71	22.87	21.57	20.73	20.14	18.52	19.86	21.50	20.82	19.94	21.13	23.22
18	21.40	23.07	21.57	20.71	20.16	18.58	19.89	21.53	20.68	20.00	21.18	23.24
19	21.49	23.02	21.22	20.55	20.17	18.29	19.93	21.55	20.55	20.10	21.23	23.31
20	21.56	23.31	20.81	20.48	19.98	18.20	20.09	21.56	20.57	20.13	21.21	23.38
21	21.69	23.31	19.80	20.47	19.75	17.94	20.40	21.62	20.63	20.15	21.11	23.46
22	21.55	23.25	18.80	19.63	19.56	17.98	20.40	21.63	20.70	20.11	21.17	23.60
23	21.66	23.35	.....	19.48	19.15	17.95	20.60	21.82	20.70	20.07	21.24	23.75
24	.....	23.40	18.41	19.19	18.56	17.96	20.60	21.93	20.56	19.96	21.37	24.02
25	.....	23.40	18.24	18.97	18.58	18.09	20.74	22.08	20.44	20.01	21.38	24.06
26	21.83	23.40	17.86	19.00	18.70	18.21	20.75	22.10	20.17	20.09	21.42	23.96
27	21.86	23.44	17.61	19.15	18.70	18.38	20.90	22.24	20.11	20.09	21.52	23.94
28	21.93	23.47	17.43	19.34	18.77	18.51	20.90	22.25	20.18	20.15	21.57	23.90
29	22.09	.....	17.56	19.64	18.86	18.61	20.97	22.16	20.21	20.24	21.65	23.89
30	22.21	.....	17.90	19.88	18.86	18.66	20.98	22.10	20.14	20.24	21.00	24.21
31	22.18	.....	18.23	.....	18.60	.....	20.93	22.14	.....	20.12	.....	24.27

Richland County

Mansfield 1 (*944, p. 193). City of Mansfield water department. At North Main Street pumping station. On north side of abandoned pumping station, near southeast corner of reservoir. Measuring point, top of wooden platform, 1.3 feet above land-surface datum.

Lowest daily water level, in feet below land-surface datum, 1943

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	36.46	36.95	37.60	36.75	34.40	35.00	35.48	37.70	37.66	35.89	38.53
2	.....	37.93	38.26	37.37	.....	35.21	35.44	34.83	37.90	37.03	38.04	(a)
3	.....	38.08	38.76	37.20	35.00	35.47	35.35	36.49	38.11	35.59	38.07	.....
4	.....	38.52	39.02	36.45	35.96	35.48	34.68	36.82	37.39	35.37	38.17	.....
5	.....	38.76	39.12	35.14	35.81	35.37	28.85	36.90	36.25	36.74	38.60	.....
6	.....	38.65	39.05	36.46	36.70	34.58	33.69	37.02	31.40	37.98	.....	.....
7	.....	38.06	39.08	36.55	36.96	33.03	34.60	37.10	35.00	37.64	.....	.....
8	.....	.....	37.58	36.73	36.50	34.50	35.26	35.76	37.12	.....	34.10	.....
9	36.13	.....	39.12	37.35	35.78	35.00	35.68	35.20	37.07	37.23	35.89	.....
10	35.88	.....	39.56	37.07	34.53	35.08	35.33	36.13	37.07	36.60	36.45	.....
11	35.47	.....	39.79	36.13	35.94	35.28	34.92	36.41	36.55	35.98	.....	.....
12	36.44	.....	40.01	33.76	36.77	35.52	33.76	36.64	35.82	36.44	.....	.....
13	36.80	39.06	39.51	35.77	37.07	34.10	35.33	36.87	34.25	36.93	.....	.....
14	36.79	38.25	39.07	36.86	37.33	32.95	35.55	37.15	36.10	37.97	.....	.....
15	37.04	35.55	37.20	.....	37.33	34.58	35.98	36.40	36.80	38.10	36.31	.....
16	36.75	37.52	38.83	.....	36.35	35.35	36.15	35.29	36.61	37.03	38.95	.....
17	.....	38.41	39.36	37.34	34.00	35.59	35.70	37.06	36.98	36.70	40.00	.....
18	36.50	38.69	39.80	36.79	35.05	35.95	35.12	37.17	36.42	35.98	40.33	.....
19	37.76	38.65	39.70	34.86	36.00	35.88	33.42	37.18	32.22	.....	40.86	.....
20	38.12	38.43	39.09	36.45	35.43	35.05	36.42	38.00	34.50	.....	39.02	.....
21	38.39	38.01	.....	36.91	35.83	34.70	36.42	37.30	36.41	.....	39.13	.....
22	38.57	36.74	.....	36.58	35.63	35.50	36.73	36.58	36.44	.....	38.27	.....
23	38.16	38.05	37.49	36.95	37.19	35.89	36.68	35.25	36.60	37.70	.....	.....
24	37.93	38.56	37.76	36.58	.....	36.22	36.46	36.92	36.65	37.65	38.41	.....
25	36.39	38.89	37.82	36.04	33.74	36.00	36.06	36.05	36.76	36.12	38.10	.....
26	38.04	39.17	37.76	33.98	34.13	35.90	34.60	37.30	35.50	37.70	39.75	.....
27	38.26	39.04	37.34	35.50	34.58	33.30	35.98	36.78	35.66	39.34	40.37	.....
28	38.34	38.35	37.06	36.11	35.04	29.96	36.28	36.40	36.97	38.30	38.29	.....
29	38.52	.....	35.93	36.44	35.85	29.50	36.43	34.35	37.35	38.47	41.37	.....
30	38.45	.....	37.22	36.37	34.82	31.65	37.13	34.57	37.10	38.03	38.87	.....
31	37.95	.....	37.42	.....	.....	.....	36.61	36.76	.....	36.90	38.53	.....

Stark County

3 (*886, p. 589; 906, p. 210; 936, p. 236; 944, p. 195). City of Canton. In the Canton Water Department's Northeast well field, Canton quadrangle, sec. 35, T. 11 N., R. 8 W., 1,080 feet south of the centerline of 30th Street, N.E., and 1,345 feet east of the west section line of section 35. Air gage measurements by Canton Water Department.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	41	May 1	41	Aug. 1	41	Nov. 1	42
Feb. 1	42	June 1	41	Sept. 1	43	Dec. 1	43
Mar. 1	41	July 1	42	Oct. 1	43	31	40
Apr. 1	42						

5 (*886, p. 589; 906, p. 210; 936, p. 236; 944, p. 195). City of Canton. In the Canton Water Department's Northeast well field, Canton quadrangle, sec. 35, T. 11 N., R. 8 W., 1,465 feet south of the center line of 30th Street, N.E., and 1,395 feet east of the west section line of section 35. Air gage measurements by Canton Water Department.

Water level, in feet below land-surface datum, 1943

Jan. 2	43	May 1	42	Aug. 1	43	Nov. 1	43
Feb. 1	44	June 1	43	Sept. 1	44	Dec. 1	44
Mar. 1	45	July 1	43	Oct. 1	44	31	41
Apr. 1	44						

a Recorder not operating.

9 (*886, p. 590; 906, p. 210; 936, p. 236; 944, p. 195). City of Canton. In the Canton Water Department's Northeast well field, Canton quadrangle, sec. 35, T. 11 N., R. 8 W., 1,475 feet south of the center line of 30th Street, N.E., and 1,083 feet east of the west section line of section 35. Air gage measurements by the Canton Water Department.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	40	May 1	40	Aug. 1	40	Nov. 1	40
Feb. 1	40	June 1	40	Sept. 1	40	Dec. 1	42
Mar. 1	42	July 1	40	Oct. 1	41	31	39
Apr. 1	41						

10 (*886, p. 590; 906, p. 210; 936, p. 236; 944, p. 195). City of Canton. In the Canton Water Department's Northeast well field, Canton quadrangle, sec. 35, T. 11 N., R. 8 W., 1,625 feet south of the center line of 30th Street, N.E., and 1,505 feet east of the west section line of section 35. Air gage measurements by the Canton Water Department.

Water level, in feet below land-surface datum, 1943

Jan. 2	43	May 1	41	Aug. 1	43	Nov. 1	43
Feb. 1	43	June 1	43	Sept. 1	44	Dec. 1	44
Mar. 1	45	July 1	42	Oct. 1	44	31	42
Apr. 1	45						

11 (*886, p. 590; 906, p. 210; 936, p. 236; 944, p. 195). City of Canton. In Canton Water Department's Northeast well field, Cantor quadrangle, sec. 35, T. 11 N., R. 8 W., 520 feet south of the center line of 30th Street, N.E., and 875 feet east of the west section line of section 35. Air gage measurements by Canton Water Department.

Water level, in feet below land-surface datum, 1943

Jan. 2	37	May 1	36	Aug. 1	37	Nov. 1	38
Feb. 1	37	June 1	37	Sept. 1	38	Dec. 1	39
Mar. 1	38	July 1	37	Oct. 1	38	31	35
Apr. 1	38						

12 (*936, p. 236; 944, p. 195). Goughnour well. Adessi Bros. In Canton quadrangle, T. 11 N., R. 8 W., 0.43 mile north of intersection of Harrisburg Road and Harmont extension, 24 feet west of the center line of Harmont extension. Measuring point, top of plug on casing, 0.4 foot above land-surface datum. Measurements by Canton Water Department. Measurements published in Water-Supply Paper 936 and 944 are incorrect. Correct measurements are given below.

Water level, in feet below land-surface datum, 1941-43

Date	Water level	Date	Water level	Date	Water level
Apr. 16, 1941	16.3	Oct. 13, 1941	19.2	Mar. 23, 1942	17.3
21	16.4	20	19.4	30	17.4
28	16.6	Nov. 10	19.5	Apr. 5	17.6
May 12	16.6	17	19.6	13	16.3
19	16.7	24	19.6	20	15.9
26	16.8	Dec. 1	20.6	27	16.0
June 3	17.0	8	20.5	May 4	16.3
10	17.2	17	20.4	11	16.5
17	17.2	22	21.2	18	16.3
23	17.6	30	21.4	25	16.0
30	17.9	Jan. 5, 1942	21.4	June 1	16.3
July 14	18.1	12	21.5	22	16.7
21	18.0	19	21.5	29	16.6
28	18.3	26	21.9	July 6	17.1
Aug. 4	18.4	Feb. 2	22.0	13	17.3
11	18.6	9	21.9	20	17.4
18	18.5	16	21.9	27	17.6
Sept. 8	18.7	23	19.9	Aug. 3	17.9
15	19.0	Mar. 2	19.9	10	18.1
22	19.3	11	19.6	17	18.3
Oct. 6	19.4	16	18.4	24	18.5

12. Goughnour well--Continued.

Water level, in feet below land-surface datum, 1941-43

Date	Water level	Date	Water level	Date	Water level
Aug. 31, 1942	18.8	Feb. 8, 1943	14.9	July 19, 1943	15.9
Sept. 7	18.9	15	15.1	26	15.9
14	19.0	22	14.4	Aug. 2	16.3
21	19.4	Mar. 1	14.4	9	16.4
28	19.5	8	14.9	16	16.1
Oct. 5	19.6	15	14.7	23	16.4
12	19.7	22	12.5	30	16.6
19	19.9	29	12.9	Sept. 7	16.9
26	20.0	Apr. 5	13.3	14	17.1
Nov. 2	20.2	12	13.5	21	17.3
9	20.4	19	14.1	28	17.6
16	20.4	26	13.6	Oct. 4	17.9
23	20.3	May 3	13.9	11	18.2
30	20.5	10	14.2	18	18.4
Dec. 7	20.2	17	14.5	25	18.5
14	20.0	24	14.3	Nov. 8	19.0
21	20.6	June 7	14.4	22	19.4
28	20.5	14	14.8	29	19.7
Jan. 4, 1943	16.5	21	15.0	Dec. 6	19.8
11	15.6	28	15.4	13	20.0
18	15.5	July 5	15.6	20	20.3
25	14.9	12	15.7	27	20.5
Feb. 1	14.6				

13 (*936, p. 237; 944, p. 196). Northeast well field observation well (formerly called Harrisburg well). City of Canton. In Canton Water Department's Northeast well field. Located in Canton quadrangle, sec. 35, T. 11 N., R. 8 W., 990 feet south of the center line of 30th Street, N.E., and 1,085 feet east of the west section line of section 35. Measuring point, top of casing, 0.7 foot above land-surface datum. Record obtained from log book of the Canton Water Department.

Water level, in feet below land-surface datum, 1941

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	....	....	....	35.0	36.0	38.7	38.5	....	40.7	41.7	44.5
2	....	....	....	....	35.1	35.6	38.4	38.5	....	40.5	41.5	45.1
3	....	37.0	35.0	....	35.2	36.3	38.6	38.5	....	40.5	41.2	43.9
4	....	....	....	....	35.3	....	38.7	38.3	....	40.6	41.5	44.1
5	....	....	....	....	35.6	35.7	38.4	39.0	....	40.6	41.6	43.8
6	39.8	....	....	....	35.8	36.1	37.5	39.1	....	40.8	41.7	43.3
7	....	....	....	33.8	36.0	36.3	37.7	38.9	39.3	41.8	41.8	43.1
8	....	....	....	....	35.6	36.0	37.4	39.1	39.3	42.0	41.8	42.8
9	....	....	....	....	35.1	35.8	37.6	....	39.3	41.8	41.7	42.8
10	....	36.4	34.6	....	34.9	36.0	37.7	39.1	40.3	41.8	41.5	42.9
11	....	....	....	....	34.7	36.6	37.7	39.3	40.5	41.3	42.3	43.4
12	....	....	....	....	34.6	36.4	37.8	39.3	40.0	41.2	42.6	43.5
13	38.8	....	....	....	34.6	36.2	37.6	39.0	40.3	41.2	43.1	43.2
14	....	....	....	33.7	35.5	36.5	37.3	38.1	40.5	41.4	43.3	43.3
15	....	....	....	....	35.5	36.2	38.6	38.1	40.0	41.1	43.4	43.4
16	....	....	....	....	35.3	35.9	37.5	39.1	40.9	41.5	43.8	43.5
17	....	....	34.5	....	35.8	35.7	37.8	38.1	41.2	41.5	43.5	42.5
18	....	35.7	....	....	35.3	36.3	....	38.1	41.1	41.1	43.8	42.6
19	....	....	....	....	34.8	36.6	37.5	38.3	41.3	41.1	44.0	43.1
20	37.8	....	....	....	35.1	36.9	37.7	38.6	41.5	41.0	44.0	43.1
21	....	....	....	34.0	35.8	37.6	37.3	38.9	41.3	41.8	44.1	43.1
22	....	....	....	....	36.0	37.1	37.6	38.6	41.2	....	44.2	43.0
23	....	....	....	....	36.3	37.6	37.8	38.9	41.5	42.0	44.2	43.5
24	....	35.3	34.0	....	36.0	38.1	38.1	38.5	41.7	42.1	43.7	43.6
25	....	....	....	....	35.5	38.4	38.2	38.2	42.0	42.0	44.1	43.3
26	....	....	....	....	35.5	38.9	38.2	38.2	42.0	41.5	44.6	43.7
27	37.6	....	....	....	36.1	39.1	38.3	38.2	42.0	41.1	44.8	43.5
28	....	....	....	34.6	36.3	39.6	38.5	38.5	40.9	41.7	45.0	43.1
29	....	....	....	....	36.6	....	38.6	....	40.9	41.7	45.1	42.6
30	....	....	....	....	36.8	38.0	38.5	....	40.6	41.7	45.2	43.4
31	....	....	33.9	....	36.3	....	38.4	....	....	41.6	....	43.1

13. Northeast well field observation well--Continued.

Water level, in feet below land-surface datum, 1942

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	....	43.0	41.5	41.5	40.6	38.3	42.6	39.7	38.4	40.1	41.2
2	43.5	43.5	42.7	41.7	41.5	40.7	38.6	42.8	39.5	38.5	40.1	41.5
3	43.2	44.1	43.0	41.8	41.3	40.7	38.3	42.8	39.9	38.5	39.6	41.5
4	....	44.3	42.6	41.7	41.5	40.8	38.1	42.9	39.8	37.7	39.9	41.7
5	41.5	43.9	....	41.4	41.1	41.1	37.7	42.3	39.3	37.9	40.1	42.0
6	43.4	43.9	43.1	41.2	41.2	41.4	37.3	41.8	39.2	38.9	40.1	41.1
7	43.5	44.1	43.0	41.3	40.5	41.5	37.5	42.2	39.1	39.2	40.2	40.3
8	43.8	44.0	43.0	41.1	40.5	41.7	37.8	41.7	39.3	39.1	40.3	40.2
9	43.5	43.6	42.8	41.4	40.6	41.9	39.0	41.3	39.3	40.1	39.9	40.2
10	43.5	....	43.5	41.3	40.4	42.1	39.1	40.5	39.4	41.1	39.6	40.1
11	43.2	43.9	42.9	41.1	40.1	42.2	39.5	40.8	39.3	40.7	....	40.3
12	43.1	43.7	43.2	41.1	40.5	42.3	39.5	40.5	39.0	41.1	39.2	40.3
13	43.8	43.7	43.4	40.7	....	42.5	39.6	40.4	37.9	41.1	39.2	39.5
14	43.6	43.9	43.3	40.5	....	42.6	40.1	40.3	39.1	41.1	39.3	39.7
15	43.8	43.5	43.1	40.5	....	42.5	40.5	40.6	39.1	40.9	39.3	39.9
16	43.7	43.3	42.7	40.8	40.9	41.5	40.7	40.5	39.2	41.4	38.6	39.8
17	43.5	....	42.9	40.8	40.7	41.0	40.8	39.8	39.8	41.5	38.9	39.8
18	43.5	....	42.5	41.3	40.5	40.1	41.1	40.1	40.1	41.7	39.0	39.7
19	43.4	....	42.8	41.6	41.1	39.8	41.1	40.3	39.7	41.9	39.1	39.6
20	....	....	42.6	41.3	41.1	39.6	41.3	40.5	39.5	42.2	39.1	39.0
21	43.5	....	42.7	41.1	40.6	39.5	41.1	40.5	39.3	42.1	39.2	39.4
22	44.0	....	42.5	40.7	40.7	39.4	41.3	40.3	39.3	42.3	39.1	39.4
23	43.3	43.2	42.0	40.8	40.5	38.8	....	40.2	39.2	41.5	39.0	39.4
24	43.5	43.2	42.4	....	40.7	39.1	41.6	39.3	38.3	41.1	39.1	39.5
25	43.5	43.6	42.4	40.8	40.5	38.7	41.6	39.7	38.7	40.8	39.1	39.5
26	43.5	43.6	42.4	40.6	40.6	38.3	41.8	....	38.9	40.5	40.0	39.1
27	....	43.9	42.6	40.5	40.7	39.1	42.0	39.7	38.2	40.6	39.8	38.9
28	....	43.8	42.1	40.8	40.8	38.2	42.1	39.8	38.1	40.6	40.3	39.1
29	....	....	42.0	41.0	40.5	38.1	42.1	39.5	38.2	40.6	40.8	38.9
30	....	....	41.6	41.3	40.5	38.2	42.4	....	38.3	40.7	41.0	38.9
31	....	....	41.7	....	40.6	....	42.5	39.5	....	40.6	....	38.8

Water level, in feet below land-surface datum, 1943

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	38.8	40.3	41.1	41.3	39.9	40.7	39.3	41.0	41.9	42.0	41.2	41.5
2	39.4	40.1	41.0	41.1	39.7	40.7	39.1	40.8	41.9	42.0	41.5	41.5
3	39.8	40.1	40.9	40.9	39.5	40.0	39.0	41.3	42.1	41.6	41.8	41.5
4	40.2	....	41.0	40.7	39.7	40.9	39.1	41.4	42.1	41.3	42.3	41.5
5	39.7	....	41.0	39.8	39.7	41.1	38.1	41.4	42.3	41.3	42.5	41.2
6	39.7	40.1	41.1	40.1	39.9	40.9	38.1	41.5	42.1	41.5	41.8	41.5
7	40.1	40.1	41.1	40.1	40.0	40.9	38.9	41.4	41.8	41.5	42.3	41.7
8	40.4	40.5	41.2	40.2	40.0	41.1	39.3	41.1	42.1	41.6	41.5	41.8
9	40.2	40.4	41.1	40.1	39.9	41.1	39.5	41.3	42.1	41.7	41.4	41.8
10	40.3	40.3	41.1	40.1	40.1	41.1	39.8	41.4	41.9	41.4	41.5	41.9
11	40.5	40.4	41.2	39.9	40.1	41.2	39.5	41.6	41.7	41.1	41.7	42.0
12	40.5	40.5	41.1	39.9	40.1	41.3	39.3	41.9	41.3	41.4	41.6	41.7
13	40.6	40.5	41.2	40.0	40.1	41.4	39.5	42.0	41.8	....	41.4	42.1
14	40.7	40.5	41.3	40.0	40.2	41.5	39.5	42.1	41.9	41.4	....	42.1
15	40.8	40.5	41.3	40.1	40.1	41.5	40.1	42.0	41.9	41.6	41.3	42.3
16	40.7	40.8	41.3	40.1	40.2	40.5	40.3	41.7	41.8	41.5	41.3	42.6
17	40.6	41.0	....	40.1	40.2	41.6	40.5	41.3	41.9	41.3	41.5	43.0
18	40.7	41.4	41.8	40.0	....	41.7	40.7	41.4	41.6	41.3	41.4	43.0
19	40.8	41.7	41.9	39.5	40.5	41.7	40.4	....	41.5	41.5	41.5	42.4
20	40.7	42.0	41.8	39.5	40.6	41.8	40.6	41.4	41.2	41.6	41.4	41.1
21	40.8	42.2	41.7	39.6	40.7	41.8	40.9	41.5	41.5	41.5	41.3	41.0
22	40.9	41.7	40.9	39.6	40.7	41.9	41.1	41.2	41.7	41.5	41.4	39.7
23	40.9	41.5	40.9	39.7	40.6	42.0	41.1	41.2	41.5	41.4	41.5	40.0
24	40.7	41.2	41.1	39.9	40.7	42.1	41.1	41.5	41.4	41.3	41.5	....
25	40.6	....	41.4	39.9	40.6	41.2	40.7	41.8	41.2	41.1	41.5	....
26	40.6	41.1	41.3	40.0	40.7	41.6	40.9	42.1	41.3	41.2	41.5	39.2
27	40.6	41.1	41.2	40.1	....	40.9	41.0	42.1	41.3	41.3	41.6	38.9
28	....	41.1	41.1	40.1	40.8	40.1	....	42.0	41.2	41.5	41.5	39.5
29	40.7	....	41.1	40.0	40.7	40.0	41.2	41.7	41.4	41.5	....	39.2
30	40.6	....	41.1	39.9	40.9	39.9	41.3	41.2	41.6	41.3	41.4	39.5
31	40.6	....	41.3	....	....	....	41.3	41.5	....	41.1	....	40.0

14 (*936, p. 237; 944, p. 196). Ninth Street well. City of Canton. In City Park, near West Branch of Nimishillen Creek and Ninth Street. Air gage measurements by Canton Water Department.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	28	May 1	30	Aug. 1	30	Nov. 1	31
Feb. 1	29	June 1	29	Sept. 1	30	Dec. 1	30
Mar. 1	30	July 1	30	Oct. 1	31	31	31
Apr. 1	31						

20 (*886, p. 590; 906, p. 210; 936, p. 237; 944, p. 196). Republic Steel Corporation test well. At Lippert Street and Warner Road, N. E. Measuring point, top of 2-inch coupling, 0.9 foot above land-surface datum.

Water level, in feet below land-surface datum, 1943

Jan. 5	48.93	Apr. 6	46.89	July 6	47.35	Oct. 5	47.60
12	47.93	13	46.85	13	47.41	13	47.68
19	47.77	21	46.89	21	47.39	18	47.77
26	47.60	28	46.93	27	47.43	27	47.91
Feb. 2	47.43	May 4	47.06	Aug. 3	47.47	Nov. 3	47.95
9	47.35	11	47.06	12	47.58	10	48.02
17	47.18	18	47.18	18	47.31	17	48.06
23	47.10	25	47.22	25	47.20	23	48.10
Mar. 2	47.02	June 2	47.18	Sept. 1	47.18	Dec. 1	48.20
9	47.16	9	47.18	8	47.25	7	48.27
16	47.10	16	47.18	15	47.35	14	48.33
23	46.81	23	47.18	20	47.41	20	48.39
30	46.81	30	47.31	28	47.50	30	48.52

21 (*886, p. 590; 906, p. 211; 936, p. 237; 944, p. 196). Ohio Power Co. On Second Street at Savannah Street, S.E., in Canton. Measuring point is 24.5 feet below land-surface datum.

Lowest daily water level, in feet below land-surface datum, 1939
(From recorder charts)

Oct. 30	33.67	Nov. 15	33.97	Dec. 1	34.18	Dec. 16	34.48
31	33.68	16	33.99	2	34.21	17	34.50
Nov. 1	33.71	17	34.02	3	34.22	18	34.52
2	33.73	18	34.02	4	34.21	19	34.51
3	33.74	19	34.03	5	33.22	20	34.53
4	33.75	20	34.03	6	34.24	21	34.56
5	33.75	21	34.04	7	34.26	22	34.58
6	33.76	22	34.07	8	34.29	23	34.60
7	33.77	23	34.08	9	34.29	24	34.62
8	33.80	24	34.09	10	34.32	26	34.66
9	33.82	25	34.12	11	34.38	27	34.68
10	33.85	26	34.12	12	34.39	28	34.70
11	33.87	27	34.13	13	34.42	29	34.72
12	33.88	28	34.16	14	34.45	30	34.74
13	33.92	29	34.16	15	34.46	31	34.76
14	33.94	30	34.17				

Lowest daily water level, in feet below land-surface datum, 1940
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	34.77	35.31	35.62	34.77	34.16	34.74	35.32	36.06	36.80	37.58	38.80	39.18
2	34.78	35.33	35.62	34.76	34.13	34.73	35.34	36.09	36.77	37.62	38.83	39.21
3	34.80	35.36	35.62	34.77	34.14	34.77	35.37	36.11	36.82	37.67	38.84	39.24
4	34.82	35.37	35.88	34.79	34.17	34.83	35.36	36.09	36.84	37.71	38.85	39.27
5	34.84	35.38	35.43	34.79	34.16	34.87	35.40	36.14	36.86	37.76	38.87	38.31
6	34.87	35.40	35.17	34.76	34.20	34.91	35.43	36.22	36.89	37.79	38.88	39.35
7	34.87	35.42	34.98	34.75	34.26	34.94	35.41	36.25	36.90	37.85	38.86	39.39
8	34.88	35.43	34.83	34.73	34.30	34.97	35.47	36.28	36.89	37.90	38.86	39.41
9	34.90	35.45	34.73	34.74	34.33	34.96	35.51	36.41	36.92	37.95	38.86	39.43
10	34.92	35.46	34.66	34.78	34.35	35.02	35.55	36.32	36.94	37.99	38.85	39.44
11	34.94	35.46	34.62	34.79	34.37	35.05	35.58	36.31	36.96	38.04	38.85	39.45
12	34.96	35.43	34.59	34.79	34.34	35.07	35.62	36.37	36.98	38.06	38.86	39.46
13	34.98	35.41	34.57	34.76	34.36	35.06	35.63	36.41	36.99	38.12	38.84	39.47

21. Ohio Power Co.--Continued.

Lowest daily water level, in feet below land-surface datum, 1940
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
14	34.98	35.43	34.58	34.73	34.39	35.03	35.61	36.44	37.00	38.16	38.83	39.46
15	35.00	35.45	34.59	34.74	34.42	35.01	35.66	36.47	37.00	38.21	38.84	39.44
16	35.01	35.47	34.62	34.77	34.45	34.99	35.69	36.49	37.04	38.25	38.83	39.43
17	35.02	35.48	34.62	34.76	34.45	35.00	35.72	36.48	37.07	38.30	38.83	39.42
18	35.04	35.49	34.61	34.76	34.50	35.04	35.75	36.53	37.11	38.34	38.85	39.43
19	35.06	35.48	34.61	34.76	34.50	35.08	35.78	.....	37.14	38.37	38.86	39.43
20	35.08	.....	34.60	34.70	34.54	35.10	35.79	36.59	37.17	38.40	38.89	39.43
21	35.10	35.48	34.60	34.67	34.57	35.12	35.78	36.61	37.19	38.48	38.90	39.41
22	35.11	35.49	34.63	34.57	34.60	35.13	35.82	36.64	37.20	38.48	38.94	39.40
23	35.12	35.50	34.65	34.46	34.61	34.11	35.86	36.67	37.25	38.51	38.96	39.41
24	35.14	35.51	34.68	34.37	34.63	35.14	35.89	36.68	37.30	38.56	38.98	39.42
25	35.16	35.51	34.69	34.30	34.64	35.17	35.93	36.67	37.33	38.60	39.01	39.39
26	35.18	35.51	34.72	34.25	.....	35.21	35.95	36.72	37.37	38.63	39.05	39.40
27	35.21	35.52	34.75	34.21	34.70	35.25	35.96	36.73	37.40	38.65	39.07	39.41
28	34.23	35.59	34.77	34.18	34.73	35.27	35.95	36.76	37.42	38.69	39.11	39.42
29	35.26	35.60	34.82	34.17	34.76	35.29	35.98	36.79	37.44	38.70	39.14	39.39
30	35.28	.....	34.82	34.15	34.75	35.28	36.00	36.82	37.54	38.73	39.16	39.35
31	35.30	.....	34.80	.....	34.75	.....	36.03	36.82	.....	38.77	.....	39.31

Lowest daily water level, in feet below land-surface datum, 1941
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	39.29	40.22	41.18	42.11	42.92	43.84	44.55	45.10	45.89	46.11	46.39	46.59
2	39.28	40.25	41.21	42.14	42.97	43.87	44.56	45.12	45.89	46.14	46.41	46.60
3	39.31	40.29	41.25	42.17	43.01	43.90	44.58	45.11	45.92	46.18	46.42	46.61
4	39.31	40.32	41.29	42.20	43.04	43.92	44.57	45.15	45.95	46.21	46.43	46.62
5	39.34	40.36	41.32	42.21	43.09	43.94	44.58	45.16	45.98	46.23	46.44	46.64
6	39.39	40.41	41.36	42.22	43.13	43.97	44.57	45.15	46.00	46.25	46.46	46.66
7	39.48	40.44	41.39	42.26	43.17	43.98	44.60	45.18	46.02	46.27	46.47	46.67
8	39.51	40.46	41.42	42.29	43.22	43.97	44.62	45.20	46.02	46.28	46.49	46.67
9	39.54	40.49	41.43	42.31	43.25	44.01	44.65	45.23	46.05	46.28	46.49	46.67
10	39.58	40.56	41.50	42.34	43.27	44.03	44.68	45.25	46.07	46.29	46.44	46.68
11	39.59	40.60	41.52	45.37	43.28	44.06	44.71	45.27	46.08	46.29	46.45	46.69
12	39.61	40.64	41.55	45.39	43.31	44.10	44.72	45.30	46.09	46.28	46.46	46.69
13	39.63	40.68	41.58	42.40	43.32	44.12	44.71	45.32	46.09	46.26	46.47	46.71
14	39.67	40.72	41.61	42.44	43.34	44.14	44.74	45.35	46.09	46.26	46.48	46.71
15	39.70	40.73	41.65	42.47	43.36	44.14	44.76	45.38	46.05	46.26	46.49	46.72
16	39.73	.....	41.68	42.51	43.39	44.16	44.78	45.42	46.06	46.26	46.50	46.73
17	39.77	.....	41.71	42.54	43.41	44.19	44.80	45.43	46.08	46.25	46.50	46.74
18	39.79	40.83	41.74	42.58	43.42	44.22	44.85	45.43	46.09	46.24	46.52	46.75
19	39.81	40.86	41.77	42.60	43.46	44.25	44.84	45.46	46.09	46.23	46.53	46.76
20	39.83	40.90	41.80	42.62	43.50	44.28	44.83	45.49	46.07	46.22	46.54	46.77
21	39.87	40.93	41.83	42.66	43.53	44.30	44.85	45.52	46.06	46.24	46.55	46.78
22	39.90	40.95	41.86	42.68	43.59	44.30	44.87	45.55	45.02	46.25	46.55	46.78
23	39.94	40.98	41.88	42.70	43.64	44.35	44.90	45.59	46.02	46.27	46.55	46.79
24	39.97	41.02	41.90	42.73	43.66	44.38	44.91	45.60	46.03	46.28	46.54	46.81
25	39.99	41.08	41.93	42.77	43.68	44.41	.....	45.73	46.04	46.29	46.54	46.81
26	40.02	41.09	41.96	42.78	43.73	44.45	.....	45.75	46.05	46.29	46.55	46.80
27	40.03	41.12	41.99	42.78	43.77	44.47	.....	45.78	46.05	46.30	46.56	46.80
28	40.07	41.16	42.02	42.83	43.80	44.49	44.99	45.81	46.04	46.32	46.57	46.80
29	40.10	.....	42.03	42.85	43.84	44.48	45.02	45.84	46.02	46.33	46.58	46.81
30	40.14	.....	42.05	42.89	43.82	44.52	45.05	45.87	46.07	46.35	46.59	46.82
31	40.18	.....	42.08	.....	43.85	.....	45.07	45.89	.....	46.37	.....	46.83

Lowest daily water level, in feet below land-surface datum, 1942
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1	46.85	47.21	47.37	47.56	47.59	47.62	48.13	48.74	49.88	50.74
2	46.87	47.23	47.39	47.57	47.60	47.64	48.22	48.75	49.92	50.76
3	46.89	47.24	47.40	47.57	47.60	47.66	48.26	48.74	49.96	50.80
4	46.89	47.25	47.41	47.57	47.58	47.68	48.29	.....	50.00	50.83
5	46.90	47.27	47.43	47.57	47.58	47.70	48.30	.....	50.05	50.86
6	46.91	47.28	47.44	47.57	47.58	47.72	48.32	.....	50.07	50.89

21. Ohio Power Co.--Continued.

Lowest daily water level, in feet below land-surface datum, 1942
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
7	46.93	47.27	47.45	47.58	47.58	47.73	48.36	.....	50.09	50.91
8	46.94	47.26	47.46	47.59	.....	47.72	48.40	.....	50.12	50.92
9	46.96	47.24	47.46	47.59	.....	47.73	48.43	.....	50.15	50.93
10	46.98	47.25	47.46	47.60	.....	47.74	48.47	49.03	50.19	50.95
11	46.99	47.27	47.48	47.59	47.55	47.76	48.50	49.07	50.24	50.95
12	46.99	47.28	47.49	47.55	47.57	47.78	48.50	49.10	50.27	50.93
13	46.99	47.30	47.51	47.50	47.60	47.80	48.50	49.15	50.30	50.91
14	47.00	47.31	47.52	47.48	47.63	47.80	48.52	49.20	50.24	50.91
15	47.01	47.32	47.52	47.50	47.64	47.76	48.54	49.24	50.28	50.90
16	47.02	47.34	47.48	47.51	47.64	47.73	48.54	49.27	50.32	50.90
17	47.04	47.34	47.47	47.52	47.61	47.76	48.56	49.31	50.36	50.89
18	47.04	47.34	47.47	47.51	47.56	47.78	48.59	49.35	50.41	50.89
19	47.05	47.33	47.48	47.51	47.59	47.80	48.59	49.40	50.45	50.87
20	47.06	47.29	47.49	47.47	47.60	47.83	48.59	49.43	50.49	(a)
21	47.07	47.29	47.49	47.48	47.60	47.84	48.61	49.48	40.51	.....
22	47.08	47.30	47.49	47.50	47.60	47.86	48.62	49.53	50.53	.....
23	47.09	47.29	47.49	47.51	47.60	47.89	48.63	49.58	50.55	.....
24	47.11	47.30	47.51	47.52	47.59	47.92	48.65	49.60	50.57	.....
25	47.13	47.31	47.53	47.53	47.55	47.95	48.67	49.63	50.59	.....
26	47.13	47.33	47.54	47.53	47.55	47.98	48.66	49.67	50.62	.....
27	47.14	47.34	47.55	47.51	47.56	48.02	48.66	49.71	50.65	.....
28	47.16	47.35	47.55	47.52	47.59	48.05	48.69	49.75	50.67	.....
29	47.17	.....	47.55	47.54	47.62	48.08	48.70	49.79	50.69	.....
30	47.19	.....	47.54	47.56	47.62	48.11	48.71	49.82	50.71	.....
31	47.20	.....	47.55	.....	47.62	.....	48.73	49.85	.....	.....

21A. Ohio Power Co. On Second Street at Savannah Street, S.E. In Tunnel 84 feet east of well 21. Diameter 5½ inches, depth 40 feet. Recorder installed Oct. 20, 1942. Measuring point, top of flange on casing, 24.5 feet below land-surface datum and 0.7 foot above tunnel floor. Record may be used as a continuation of the record for well 21 in analysis of long-term trend of water levels in this vicinity.

Lowest daily water level, in feet below land-surface datum, 1942
(From recorder charts)

Date		Water level	Date		Water level	Date		Water level	Date		Water level
Oct.	20	50.72	Nov.	8	51.12	Nov.	26	51.57	Dec.	14	51.57
	21	50.72		9	51.11		27	51.59		15	51.58
	22	50.72		10	51.13		28	51.60		16	51.60
	23	50.72		11	51.16		29	51.60		17	51.62
	24	50.73		12	51.19		30	51.59		18	51.64
	25	50.75		13	51.22	Dec.	1	51.59		19	51.67
	26	50.75		14	51.26		2	51.58		20	51.69
	27	50.77		15	51.29		3	51.58		21	51.71
	28	50.80		16	51.30		4	51.57		22	51.72
	29	50.83		17	51.33		5	51.56		23	51.75
	30	50.85		18	51.35		6	51.53		24	51.77
	31	50.88		19	51.38		7	51.50		25	51.79
Nov.	1	50.91		20	51.41		8	51.47		26	51.80
	2	50.93		21	51.44		9	51.49		27	51.81
	3	50.96		22	51.47		10	51.52		28	51.82
	4	50.98		23	51.51		11	51.54		29	51.83
	5	51.01		24	51.52		12	51.56		30	51.82
	6	51.04		25	51.54		13	51.57		31	51.80
	7	51.08									

a Recorder removed.

21A. Ohio Power Co.--Continued.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	51.72	50.50	50.19	50.19	50.26	50.52	50.63	50.77	50.53	50.52	50.80	50.99
2	51.63	50.47	50.17	50.20	50.26	50.53	50.66	50.74	50.55	50.53	50.81	51.00
3	51.54	50.46	50.15	50.21	50.25	50.54	50.70	50.74	50.57	50.54	50.82	51.01
4	51.46	50.44	50.14	50.21	50.27	50.55	50.73	50.75	50.60	50.53	50.84	51.02
5	51.40	50.41	50.13	50.17	50.29	50.55	50.74	50.78	50.60	50.54	50.85	51.04
6	51.35	50.40	50.12	50.16	50.30	50.55	50.75	50.79	.....	50.55	50.86	51.02
7	51.30	50.38	50.10	50.16	50.32	50.50	50.77	50.80	50.52	50.57	50.86	51.03
8	51.26	50.37	50.08	50.15	50.34	50.44	50.80	50.80	50.54	50.58	50.84	51.05
9	51.22	50.36	50.08	50.15	50.35	50.43	50.82	50.78	50.55	50.60	50.86	51.06
10	51.18	50.35	50.06	50.15	50.34	50.42	50.83	50.81	50.55	50.60	50.87	51.06
11	51.14	50.33	50.07	50.15	50.35	50.43	50.83	50.82	50.54	50.58	50.88	51.07
12	51.10	50.33	50.11	50.12	50.39	50.43	50.80	50.84	50.52	50.60	50.89	51.07
13	51.05	50.32	50.15	50.10	50.41	50.43	50.79	50.88	50.50	50.61	50.90	51.07
14	51.02	50.30	50.15	50.12	50.43	50.42	50.79	50.89	50.45	50.65	50.92	51.08
15	50.98	50.28	50.14	50.13	50.45	50.38	50.81	50.89	50.47	50.66	50.90	51.09
16	50.95	50.25	50.15	50.14	50.45	50.39	50.81	50.79	50.50	50.68	50.92	51.11
17	50.91	50.23	50.18	50.17	50.43	50.37	50.81	.....	50.50	50.68	50.93	51.13
18	50.85	50.22	50.18	50.17	50.45	50.39	50.81	.....	50.51	50.68	50.95	51.05
19	50.84	50.21	50.17	50.16	50.47	50.40	50.88	.....	50.49	50.69	50.96	51.06
20	50.81	50.22	50.18	50.15	50.50	50.39	50.71	.....	50.47	50.71	50.96	51.07
21	50.77	50.22	50.18	50.16	50.52	50.35	50.71	.....	50.47	50.72	50.96	51.09
22	50.74	50.22	50.15	50.17	50.56	50.35	50.72	.....	50.49	50.74	50.95	51.22
23	50.71	50.20	50.13	50.18	50.56	50.37	50.74	50.52	50.50	50.75	50.96	51.26
24	50.69	50.20	50.14	50.19	50.54	50.41	50.74	50.53	50.51	50.75	50.98	51.29
25	50.66	50.21	50.15	50.19	50.50	50.44	50.74	50.54	50.51	50.75	50.98	51.33
26	50.64	50.21	50.16	50.17	50.52	50.48	50.72	50.55	50.51	50.75	50.98	51.36
27	50.61	50.22	50.19	50.15	50.54	50.49	50.70	50.56	50.48	50.77	50.97	51.38
28	50.59	50.21	50.20	50.19	50.55	50.53	50.72	50.58	50.47	50.78	50.97	51.41
29	50.57	.....	50.20	50.21	50.57	50.56	50.75	50.56	50.49	50.80	50.95	51.46
30	50.55	.....	50.19	50.23	50.58	50.60	50.76	50.52	50.51	50.81	50.98	51.50
31	50.53	.....	50.18	.....	50.55	.....	50.77	50.51	.....	50.81	.....	51.54

Massillon 1 (*944, p. 197). Republic Steel Corporation. In basement of main office building of corporation, on Oberlin Avenue, in Massillon. Measuring point, top of concrete pump base, 6.0 feet below land-surface datum.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	48.27	46.98	46.89	45.97	45.84	45.39	44.44	43.38	44.02	45.37	45.81	46.18
2	48.00	47.00	46.91	45.99	45.83	45.18	44.45	43.40	44.04	45.39	45.73	46.21
3	.....	47.05	46.93	46.01	45.80	44.50	44.46	43.44	44.06	45.39	45.70	46.24
4	.....	47.05	46.96	46.00	45.81	44.47	44.46	43.48	44.10	45.39	45.70	46.25
5	.....	47.11	46.98	45.96	45.82	44.37	44.43	43.54	44.12	45.41	45.14	46.25
6	.....	47.10	46.99	45.99	45.81	44.32	44.35	43.55	44.13	45.40	45.76	46.20
7	47.22	47.09	47.00	46.00	45.82	44.24	44.31	43.55	44.13	45.37	45.76	46.22
8	47.21	47.08	47.00	46.12	45.85	44.19	44.30	43.57	44.15	45.36	45.72	46.27
9	47.18	47.10	47.00	46.12	45.86	44.16	.....	43.60	44.23	45.37	45.77	46.31
10	47.12	47.11	47.00	46.08	45.83	44.13	.....	43.63	44.25	45.39	45.78	46.32
11	47.08	47.15	47.02	46.08	45.78	44.12	.....	43.65	44.30	45.39	45.82	46.36
12	47.03	47.15	47.00	46.03	45.79	44.12	.....	43.65	44.32	45.41	45.82	46.36
13	47.04	47.13	46.97	46.05	45.82	44.12	.....	43.67	44.34	45.42	45.85	46.38
14	47.04	47.03	46.93	46.05	45.86	44.14	.....	43.66	44.36	45.46	45.86	46.41
15	47.04	47.00	46.88	46.05	45.87	44.15	.....	43.58	44.40	45.47	45.84	46.46
16	47.03	46.97	46.84	46.05	45.86	44.17	.....	43.52	44.46	45.47	45.86	46.49
17	47.63	47.00	46.81	46.05	45.86	44.18	.....	43.56	44.50	45.47	45.86	46.52
18	47.01	47.05	46.74	46.06	45.86	44.24	.....	43.60	44.52	45.46	45.88	46.56
19	46.97	47.05	46.67	46.06	45.83	44.25	.....	43.70	44.52	45.55	45.90	46.59
20	46.99	47.05	46.58	46.03	45.82	44.25	.....	43.78	44.59	45.65	45.92	46.60
21	47.00	47.03	46.49	45.98	.....	44.23	.....	43.78	44.78	45.68	45.92	46.64
22	47.04	46.98	.....	45.96	.....	44.25	.....	43.75	44.92	45.70	45.92	46.67
23	47.07	46.95	.....	45.89	45.82	44.28	43.50	43.75	45.01	45.74	45.93	46.73
24	47.07	46.92	.....	45.88	45.81	44.30	43.51	43.76	45.04	45.75	45.96	46.77
25	47.02	46.92	.....	45.87	45.76	44.32	43.51	43.79	45.10	45.76	45.98	46.78

Massillon 1. Republic Steel Corporation--Continued.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	47.00	46.92	46.09	45.86	45.70	44.34	43.50	43.82	45.10	45.78	46.00	46.78
27	46.97	46.90	46.06	45.86	45.64	44.35	43.41	43.85	45.14	45.80	.....	46.80
28	46.97	46.90	46.04	45.83	45.56	44.32	43.40	43.90	45.20	45.83	.....	46.81
29	46.99	.....	46.03	45.82	45.60	44.35	43.40	43.93	45.27	45.85	.....	46.83
30	46.99	.....	46.00	45.83	45.56	44.40	43.43	43.95	45.33	45.87	46.20	46.86
31	46.99	.....	45.98	.....	45.55	.....	43.41	43.98	.....	45.88	.....	46.91

Washington County

Marietta 1 (*944, 198). Marietta Osteopathic Clinic. At Fourth and Putnam Streets. On southwest side of clinic, at rear. Measuring point, top of 6-inch pipe, 1.2 feet above land-surface datum.

Lowest daily water level, in feet below land-surface datum, 1943
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
1	.....	25.43	26.39	25.32	25.67	26.03	28.18	29.60	29.88	.....	30.66
2	.....	25.40	26.51	25.56	25.68	26.18	28.56	29.56	29.93	.....	30.66
3	.....	25.40	26.55	25.68	25.92	26.17	28.74	29.62	29.91	.....	30.66
4	.....	25.54	26.57	25.78	25.99	26.26	28.81	29.63	30.07	.....	30.66
5	.....	25.59	26.68	25.99	26.04	26.28	28.94	29.54	30.11	.....	30.68
6	.....	25.67	26.80	26.08	26.08	26.17	28.90	29.39	30.20	.....	30.68
7	.....	25.62	26.77	26.22	26.35	26.43	29.03	29.31	.....	.....	30.69
8	.....	25.55	26.67	26.32	26.51	.....	29.12	29.43	.....	.....	30.61
9	.....	25.46	26.77	26.43	26.53	.....	29.17	29.61	.....	.....	30.63
10	.....	25.56	26.55	26.57	26.57	.....	29.08	29.66	.....	.....	30.63
11	22.42	25.58	26.32	26.58	26.47	.....	29.54	29.73	.....	.....	30.63
12	22.95	25.45	26.31	26.69	26.37	27.17	29.65	29.79	.....	.....	30.71
13	23.30	25.12	26.06	26.75	26.30	27.33	29.57	29.83	.....	.....	30.70
14	23.79	25.00	26.03	26.72	26.16	27.42	29.58	29.87	.....	.....	30.63
15	24.13	25.15	25.81	26.72	25.92	27.47	29.55	29.83	.....	.....	30.62
16	24.43	25.37	25.63	26.76	25.95	27.58	29.60	29.71	.....	.....	30.62
17	24.48	25.74	25.61	26.75	26.11	27.62	29.65	29.48	.....	.....	30.62
18	24.30	25.86	25.34	26.61	26.11	27.58	29.77	29.48	.....	.....	30.61
19	23.98	25.98	24.89	26.73	26.43	27.71	29.81	29.49	.....	.....	30.60
20	23.63	26.13	24.54	25.83	26.28	27.79	29.78	29.55	.....	.....	30.63
21	22.97	26.20	23.84	25.05	25.93	27.87	29.78	29.61	.....	.....	30.62
22	23.36	26.22	23.47	24.35	25.83	27.95	29.78	29.75	.....	.....	30.61
23	23.92	.....	23.46	23.83	25.78	28.02	29.83	29.85	.....	.....	30.64
24	24.12	.....	23.60	24.25	25.68	28.20	29.89	29.90	.....	.....	30.63
25	24.48	.....	23.81	24.42	25.65	28.22	29.94	29.94	.....	.....	30.61
26	24.55	.....	24.00	24.78	25.65	28.37	29.93	29.92	.....	.....	30.60
27	24.63	.....	24.27	25.06	25.65	28.46	29.84	29.95	.....	.....	30.62
28	24.80	.....	24.47	25.36	25.60	28.52	29.84	29.83	.....	.....	30.62
29	24.99	.....	24.67	25.42	25.70	28.48	29.76	29.76	.....	.....	.....
30	25.24	.....	24.92	25.64	26.30	28.27	29.68	29.84	.....	.....	.....
31	25.33	.....	25.15	.....	26.31	.....	29.52	29.87	.....	30.64	.....

PENNSYLVANIA

By J. B. Graham

PROGRAM OF WORK

The program of water-level measurements in observation wells in Pennsylvania, begun in 1931, was continued and enlarged in 1943 by the Geological Survey, United States Department of the Interior, in cooperation with the Topographic and Geologic Survey of the Pennsylvania Department of Internal Affairs. The enlarged program provided for detailed studies of local ground-water problems in the State and establishment of an office in Philadelphia. The first problem to receive attention was that of conditions in the Philadelphia area. The investigation of this area began in October with the establishment of observation wells in that part of the city known as south Philadelphia, which includes the United States Navy Yard.

About 1,200 measurements of water level, distributed among 36 wells, were made in the State during 1943. The measurements were made monthly in 4 wells, weekly in 22 wells, daily in 6 wells, and irregularly in 3 wells. An automatic water-stage recorder, which supplies a continuous record, was maintained on 1 well--Susquehanna County well 100, at Montrose --at which a rain gage was also maintained. Water is pumped daily from five of the wells at the Navy Yard in Philadelphia and during dry periods from Luzerne County well 76, near Wapwallopen.

FLUCTUATIONS OF WATER LEVEL

Precipitation is the predominant factor determining the fluctuations of water level in observation wells in Pennsylvania. Pumpage undoubtedly affects the six wells at the Navy Yard in Philadelphia, however, as five are pumped daily, and it may affect somewhat three other wells, namely, Luzerne County well 76, near Wapwallopen, which is pumped during dry periods, and Northumberland County well 57, at Sunbury, and Perry County well 61, at Newport. The two last-named wells are not pumped, but they are in the immediate vicinity of wells that are pumped.

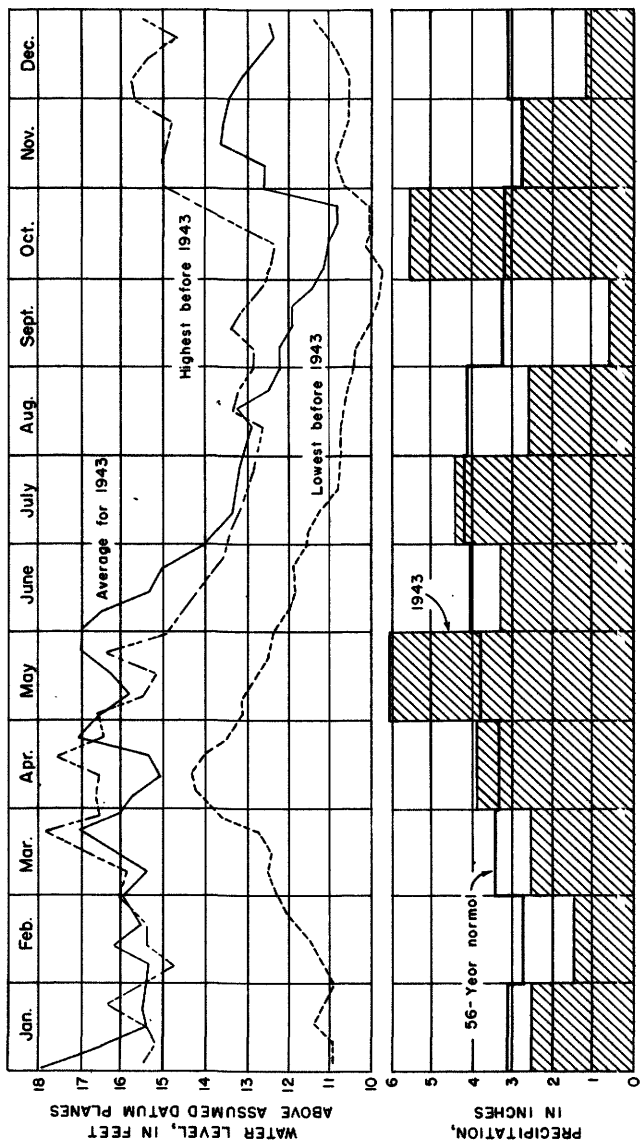

Figure 9.--Graphs showing average ground-water level and precipitation in Pennsylvania in 1943 in comparison with previous years of record.

Figure 9 shows the fluctuations of the weekly average of the water levels in 1943 in all the observation wells in Pennsylvania exclusive of those in Philadelphia, and the highest and lowest weekly averages prior to 1943. The figure shows also the monthly precipitation in 1943 and the normal precipitation based on records over a period of 56 years. For this group of observation wells 1943 was the eleventh year of continuous measurement. Beginning in the first week of January with a record high, the weekly average water level in 1943 fluctuated sharply until the last week of May. About the first of June began a decline, which continued steadily until October, when the stage reached was the lowest of the year. Late in October the average level rose sharply, and it continued to rise until the middle of November, after which it again declined and in December reached a stage about 5.5 feet below its stage at the beginning of the year. The yearly average water level for 1943 was 1.29 feet higher than the average for 11 years of record.

The relation between the weekly averages of water level in 1943 and the monthly precipitation is readily apparent from the graphs. During the year there were two periods in which the precipitation was considerably above normal--the first in April and May and the second in October. Both coincide with periods in which there were pronounced interruptions in the over-all downward trend of the weekly average water level. The unusually high stages recorded early in 1943 for Pennsylvania wells were primarily the result of above-normal precipitation during the second half of 1942.

In the following table the average of the water levels in observation wells in Pennsylvania for each week in 1943 is listed, with the number of wells on which each weekly average is based. This number does not include any of the wells in Philadelphia.

Average of water levels in observation wells in Pennsylvania, by weeks, in feet above assumed datum planes, 1943

Date	Number of wells	Water level	Date	Number of wells	Water level
Jan. 4	22	17.95	Mar. 15	23	16.21
11	25	16.48	22	24	17.07
18	24	15.51	29	22	16.19
25	22	15.66	Apr. 5	23	15.81
Feb. 1	22	15.55	12	23	15.25
8	24	15.46	19	23	15.41
15	23	16.29	26	22	17.18
22	23	15.69	May 3	24	16.56
Mar. 1	23	16.03	10	24	15.89
8	23	15.46	17	23	16.39

Average of water levels in observation wells in Pennsylvania, by weeks, in feet above assumed datum planes, 1943--Continued

Date	Number of wells	Water level	Date	Number of wells	Water level
May 24	23	17.03	Sept. 13	21	11.92
31	23	17.02	20	20	11.91
June 7	23	16.45	27	19	11.52
14	25	15.46	Oct. 4	20	11.16
21	23	15.03	11	19	11.08
27	22	14.26	18	20	10.87
July 5	23	13.76	25	22	10.79
12	24	13.43	Nov. 1	21	12.70
19	23	13.31	8	21	12.57
26	23	13.21	15	23	13.73
Aug. 2	24	13.09	22	21	13.67
9	24	12.92	29	23	13.47
16	22	13.22	Dec. 6	22	13.19
23	22	12.53	13	21	12.77
30	24	12.27	20	21	12.37
Sept. 6	21	12.26	27	20	12.48

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Bedford County

116 (*936, p. 241; 944, p. 233). At West Saxton. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 65.58. Extremes of observed water level, in feet below land-surface datum: Highest, Jan. 1, 1943, 45.49; lowest, Dec. 31, 1943, 53.68.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	45.49	Apr. 10	51.40	July 10	52.04	Oct. 8	53.14
8	50.41	16	51.50	16	52.08	15	53.28
15	51.20	23	47.46	23	52.19	22	53.24
22	51.54	30	50.30	30	52.26	29	53.27
29	51.91	May 7	51.20	Aug. 6	52.17	Nov. 5	53.31
Feb. 5	51.60	14	50.90	13	52.18	12	53.23
12	51.90	21	50.82	20	52.22	19	53.30
19	51.21	29	50.07	27	52.35	26	53.36
26	51.02	June 4	51.10	Sept. 3	52.49	Dec. 3	53.43
Mar. 5	51.20	11	51.20	10	52.58	10	53.52
12	51.11	18	51.49	17	52.80	17	53.56
19	50.34	25	51.51	24	52.96	24	53.64
26	50.65	July 2	51.77	Oct. 1	53.10	31	53.68
Apr. 2	51.10						

Berks County

114 (*817, p. 268; 845, p. 417; 886, p. 628; 906, p. 217; 936, p. 241; 944, p. 233). At Bally. To convert water levels from feet above assumed datum as published in previous reports, to feet below land-surface datum, subtract from 28.87. Extremes of observed water level, in feet below land-surface datum: Highest, Aug. 14, 1942, 4.37; lowest, Feb. 9, 1940, 19.92.

Water level, in feet below land-surface datum, 1943

Jan. 2	8.00	Apr. 3	15.20	July 3	16.40	Oct. 2	18.45
9	13.50	10	15.80	10	16.65	9	18.60
16	15.38	17	16.00	17	16.70	16	18.90
23	15.99	24	13.00	24	16.93	23	19.46
30	16.40	May 1	14.85	31	16.79	30	7.60
Feb. 6	16.10	8	15.75	Aug. 7	17.14	Nov. 6	14.87
13	9.70	13	16.04	14	17.32	13	10.83
20	14.00	22	15.34	21	17.60	20	15.30
27	14.80	29	14.46	28	17.77	27	16.60
Mar. 6	15.30	June 5	15.02	Sept. 4	17.98	Dec. 4	17.20
13	14.10	12	15.70	11	18.14	11	17.60
20	13.50	19	15.60	18	18.31	18	17.80
27	14.40	26	16.00	25	18.45	24	18.02

Bradford County

81 (*817, p. 268; 845, p. 417; 886, p. 628; 906, p. 217; 936, p. 242; 944, p. 233). At Monroeton. To convert water levels from feet above assumed datum, as published in previous reports, subtract from 15.15. Extremes of observed water level, in feet below land-surface datum: Highest Apr. 6, 1941, 1.45; lowest, Sept. 24 to Oct. 8, 1932, Oct. 3-17, 1936, Aug. 20 to Oct. 29, 1939, Oct. 5-19 and Oct. 26 to Nov. 29, 1941, Sept. 21, 1942, Sept. 6 to Oct. 24, 1943, when well was dry.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	3.14	Mar. 22	3.20	June 14	3.54	Aug. 23	5.56
8	3.34	29	3.31	18	3.55	31	5.58
11	3.39	Apr. 5	3.37	21	4.02	Sept. 4	5.66
17	3.37	12	3.31	28	4.42	Oct. 31	3.14
26	3.40	18	3.23	July 4	5.57	Nov. 8	3.06
31	3.49	26	3.21	12	5.40	14	2.94
Feb. 9	3.43	May 2	3.27	21	4.56	21	3.15
16	3.40	6	3.33	22	4.58	29	3.03
21	3.29	11	2.27	26	5.59	Dec. 5	3.57
28	3.32	16	3.24	Aug. 1	4.66	12	3.38
Mar. 7	3.52	25	3.21	11	4.86	19	3.67
15	3.15	31	3.17	16	4.98	26	3.78
19	2.96	June 8	3.08				

82 (*817, p. 269; 845, p. 418; 886, p. 629; 906, p. 219; 936, p. 242; 944, p. 234). At East Towanda. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 64.32. Extremes of observed water level, in feet below land-surface datum: Highest, May 23, 1943, 26.00; lowest, Feb. 15, 1942, 61.70.

Water level, in feet below land-surface datum, 1943

Jan. 3	30.85	Apr. 4	30.78	July 4	40.10	Sept. 26	49.99
10	34.00	11	32.30	11	42.70	Oct. 3	50.55
17	37.13	18	34.73	18	44.02	10	51.14
24	36.16	25	28.51	22	43.85	17	51.98
31	36.40	May 2	29.82	25	44.60	24	52.34
Feb. 7	36.63	6	31.83	Aug. 1	45.20	31	51.85
11	36.85	9	30.70	8	45.74	Nov. 7	49.54
14	34.21	16	26.69	15	46.66	14	41.11
21	37.38	23	26.00	22	47.57	21	37.90
28	36.74	30	26.83	29	47.94	28	37.09
Mar. 7	37.40	June 6	31.91	Sept. 4	48.41	Dec. 5	37.78
14	33.86	13	33.50	5	48.41	12	41.66
19	29.51	17	37.34	12	48.93	19	43.85
21	28.37	20	35.15	19	49.41	26	45.55
28	30.78	27	36.10				

Butler County

120 (*936, p. 242; 944, p. 234). At West Sunbury. To convert water levels from feet above assumed datum, as published in previous reports to feet below land-surface datum, subtract from 22.85. Extremes of observed water level, in feet below land-surface datum: Highest, Mar. 14, 1942, 6.84; lowest, Oct. 9, 1943, 10.96.

Water level, in feet below land-surface datum, 1943

Jan. 2	7.66	Apr. 3	9.03	July 3	9.46	Oct. 2	10.71
9	8.34	10	9.28	10	9.45	9	10.96
16	7.30	17	7.52	17	9.30	16	10.78
23	8.40	24	8.30	24	9.71	23	10.66
30	8.83	May 1	8.38	31	9.82	30	10.52
Feb. 6	8.77	8	8.75	Aug. 7	9.87	Nov. 6	10.26
13	7.59	15	8.57	14	9.98	13	10.15
20	8.75	22	7.80	21	10.14	20	9.69
27	8.41	29	8.75	28	10.21	27	9.58
Mar. 6	8.70	June 5	9.13	Sept. 4	10.28	Dec. 4	9.66
13	7.70	12	9.41	11	10.45	11	9.70
20	8.10	19	9.11	18	10.60	18	9.79
27	8.77	26	9.50	25	10.66	25	9.88

Centre County

38 (*817, p. 271; 845, p. 418; 886, p. 629; 906, p. 219; 936, p. 243; 944, p. 234). At Central City. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 16.10. Extremes of observed water level, in feet below land-surface datum: Highest, Mar. 21, 1936, when well was flooded; lowest, Sept. 23, 1939, 6.76.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	3.70	Apr. 3	5.40	July 10	5.63	Oct. 2	6.96
9	4.76	10	5.46	17	5.74	9	7.02
16	5.20	17	4.52	24	5.62	16	5.96
23	4.98	May 1	5.12	31	5.60	25	5.94
30	5.24	8	5.34	Aug. 7	5.68	Nov. 6	5.40
Feb. 7	5.05	15	5.03	14	5.70	13	5.52
13	5.30	22	5.14	21	6.03	20	5.34
20	5.16	29	5.38	28	6.08	27	5.38
27	5.18	June 5	5.48	Sept. 5	6.33	Dec. 4	5.46
Mar. 6	5.06	12	5.52	12	6.66	11	5.60
13	4.65	19	5.66	19	6.80	18	5.68
20	4.80	26	5.84	26	6.92	25	5.54
27	5.26	July 3	5.80				

Clarion County

103 (*817, p. 272; 845, p. 419; 886, p. 629, 906, p. 219; 936, p. 243; 944, p. 235). At Clarion. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 25.84. Extremes of observed water level, in feet below land-surface datum: Highest, Apr. 9, 1938, 11.36; lowest, Oct. 9, and 16, 1943, 20.39.

Water level, in feet below land-surface datum, 1943

Jan. 2	11.98	Apr. 3	15.39	July 10	16.95	Oct. 2	20.21
9	12.81	10	16.45	17	17.76	9	20.39
16	14.30	17	15.60	19	15.80	16	20.39
23	12.51	24	12.38	24	18.32	23	19.35
30	13.20	May 1	13.60	31	18.50	30	18.92
Feb. 6	14.57	8	13.73	Aug. 7	18.54	Nov. 6	18.93
13	12.10	15	12.23	14	18.88	13	18.89
20	13.17	22	11.99	21	18.87	20	19.34
27	13.68	29	12.78	28	18.91	27	18.63
Mar. 6	15.00	June 5	14.08	Sept. 4	19.36	Dec. 4	19.33
13	14.13	12	14.18	11	19.39	11	19.72
20	12.12	26	16.82	18	19.74	18	19.92
27	13.53	July 3	17.41	25	19.99		

Clearfield County

111 (*817, p. 274; 845, p. 419; 886, p. 630; 906, p. 220; 936, p. 243; 944, p. 235). Near Bower. Measurements discontinued after Oct. 10, 1942.

Columbia County

75 (*817, p. 274; 845, p. 420; 886, p. 630; 906, p. 220; 936, p. 244; 944, p. 235). At Fernville. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 26.91. Extremes of observed water level, in feet below land-surface datum: Highest, Sept. 2, 1933; 7.28; lowest, Dec. 15, 1931, 16.91.

75. At Fernville--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	11.97	Apr. 3	12.96	July 3	13.67	Oct. 2	15.52
9	12.41	10	13.16	10	13.64	9	15.81
16	12.72	17	12.35	17	13.07	16	15.60
23	12.96	24	12.50	24	13.35	23	15.51
30	12.95	May 1	12.07	31	13.54	30	12.32
Feb. 6	12.96	8	13.20	Aug. 7	13.69	Nov. 6	11.28
13	12.42	15	13.18	14	13.54	13	12.47
20	13.40	22	12.36	21	14.32	20	12.50
27	12.74	29	12.76	28	14.70	27	13.21
Mar. 6	12.92	June 5	12.99	Sept. 4	14.13	Dec. 4	13.43
13	12.62	12	12.71	11	15.02	11	13.66
21	12.15	19	12.84	18	15.32	18	13.81
27	12.66	26	13.51	25	15.60	25	13.96

Elk County

118 (*936, p. 244; 944, p. 236). At Kersey. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 24.15. Extremes of observed water level, in feet below land-surface datum: Highest, June 11, 1943, 8.12; lowest, Nov. 29, and Dec. 20, 1941, 11.90.

Water level, in feet below land-surface datum, 1943

Jan. 1	9.61	Apr. 9	9.54	July 9	9.01	Oct. 8	11.56
8	9.62	16	9.59	16	10.04	15	11.58
15	9.56	23	9.04	23	9.39	22	11.87
22	9.46	30	8.80	30	9.55	29	11.76
29	9.55	May 7	8.80	Aug. 6	9.72	Nov. 5	11.76
Feb. 5	9.29	14	8.89	13	10.01	12	11.57
12	9.55	21	8.62	20	10.04	19	11.53
19	9.56	28	8.41	27	10.09	26	11.49
26	9.16	June 4	8.22	Sept. 3	10.47	Dec. 2	11.46
Mar. 5	9.54	11	8.12	10	10.75	9	11.43
12	9.55	18	8.47	17	11.05	17	11.52
19	9.06	25	8.72	24	11.21	24	11.70
26	9.10	July 2	8.85	Oct. 1	11.39	31	11.47
Apr. 2	9.50						

Erie County

1 (*817, p. 276; 845, p. 420; 886, p. 630; 906, p. 220; 936, p. 244; 944, p. 236). Near Carters Corner. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 25.57. Extremes of observed water level, in feet below land-surface datum: Highest, Apr. 4, 1940, 8.92; lowest, Sept. 8, to Dec. 1, 1934, when well was dry.

Water level, in feet below land-surface datum, 1943

Jan. 3	10.70	Apr. 3	14.22	June 19	14.30	Sept. 7	18.30
9	11.40	10	16.00	26	17.00	12	18.32
16	13.00	16	16.25	July 3	18.07	Oct. 2	19.55
23	13.00	24	12.75	9	17.20	9	18.60
Feb. 6	12.10	May 4	11.00	19	16.73	16	18.61
17	12.30	8	11.10	25	16.87	23	19.16
20	12.40	16	10.45	Aug. 1	17.77	Nov. 1	16.34
27	11.95	29	9.90	10	18.07	13	13.95
Mar. 7	12.75	June 2	9.10	21	18.26	27	12.26
13	14.22	5	10.40	28	18.27	Dec. 4	12.74
27	11.65	14	12.40				

Huntingdon County

47 (*817, p. 279; 845, p. 421; 886, p. 631; 906, p. 221; 936, p. 245; 944, p. 236). Near Trexler Bridge. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 36.16. Extremes of observed water level, in feet below land-surface datum: Highest, Mar. 15, 1941, when well was full; lowest, Oct. 1, 1932, 26.25.

47. Near Trexler Bridge--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	13.86	Apr. 3	21.00	July 2	22.12	Oct. 2	23.45
9	17.76	10	21.55	10	22.32	8	23.64
16	19.72	17	22.17	17	22.43	16	23.85
23	18.49	24	15.73	24	22.36	23	24.01
30	19.34	May 1	18.81	30	22.06	30	23.78
Feb. 6	20.20	8	20.83	Aug. 7	21.69	Nov. 6	23.50
13	18.44	15	19.88	14	21.89	13	22.80
20	18.86	22	20.17	22	22.35	20	22.14
26	20.22	28	19.58	28	22.54	27	22.80
Mar. 5	21.23	June 5	20.10	Sept. 4	22.48	Dec. 4	23.20
13	20.08	12	21.07	11	22.65	11	23.59
20	18.96	19	21.48	18	23.10	18	23.88
27	19.56	26	21.78	25	23.22	25	24.20

50 (*817, p. 281; 845, p. 422; 886, p. 631; 906, p. 221; 936, p. 245; 944, p. 237). Near Petersburg. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 14.91. Extremes of observed water level, in feet below land-surface datum: Highest, Jan. 3, 1942, 0.05; lowest, Sept. 28, 1940, 6.96.

Water level, in feet below land-surface datum, 1943

Jan. 2	1.05	Apr. 3	1.70	July 3	2.99	Oct. 2	5.13
9	1.68	10	1.91	10	3.26	9	5.29
16	1.73	17	1.40	17	3.20	16	5.15
23	1.43	24	1.07	24	3.59	23	5.12
30	1.48	May 1	1.42	31	3.75	30	4.60
Feb. 6	.99	8	1.65	Aug. 7	3.20	Nov. 6	4.76
13	1.20	15	1.12	14	3.58	13	2.58
20	1.66	22	1.97	21	4.07	20	2.05
27	1.44	29	1.25	28	4.07	27	3.28
Mar. 6	1.75	June 5	1.42	Sept. 4	4.34	Dec. 4	3.60
13	.99	12	1.77	11	4.58	12	3.80
20	1.05	19	2.09	18	4.82	18	4.02
27	1.33	26	2.65	25	5.02	25	4.22

Lackawanna County

101 (*817, p. 283; 845, p. 422; 886, p. 631; 906, p. 221; 936, p. 245; 944, p. 237). At Waverly. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 16.72. Extremes of observed water level, in feet below land-surface datum: Highest, Mar. 17, 18, and 19, 1936, and Mar. 30, 1940, when well was flooded; lowest, Sept. 30, 1939, 8.43.

Water level, in feet below land-surface datum, 1943

Jan. 2	1.82	Mar. 13	1.87	May 22	1.58	Aug. 2	5.37
10	2.35	20	1.72	29	1.51	9	5.59
17	2.48	27	1.64	June 5	1.40	15	5.90
23	2.62	Apr. 3	1.52	12	2.01	22	6.38
31	2.77	10	1.43	19	3.59	29	6.36
Feb. 6	2.78	17	1.25	26	3.91	Sept. 5	6.70
13	2.35	24	1.59	July 5	4.50	12	6.08
20	1.87	May 1	1.95	12	4.74	19	6.88
27	1.78	8	1.70	19	4.91	26	6.92
Mar. 6	1.82	15	1.64	26	5.18	Oct. 4	6.96

102 (*817, p. 284; 845, p. 423; 886, p. 632; 906, p. 222; 936, p. 246; 944, p. 237). Near Carbondale. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 20.23. Extremes of observed water level, in feet below land-surface datum: Highest, Mar. 21, 1936, 1.17; lowest, Oct. 15, 1943, 13.10.

102. Near Carbondale--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	3.25	Mar. 20	1.85	June 5	5.43	Oct. 23	12.45
9	4.85	27	4.20	12	5.84	30	7.77
16	6.05	Apr. 3	3.83	18	6.45	Nov. 6	6.26
23	5.50	10	3.70	26	7.70	12	4.99
30	6.10	17	4.67	July 3	8.95	19	6.70
Feb. 6	6.30	24	3.42	10	10.00	27	5.90
13	5.50	May 1	4.67	17	10.10	Dec. 3	6.81
20	5.60	7	5.27	24	10.10	11	7.15
27	3.70	15	3.99	31	10.83	18	8.01
Mar. 6	5.50	22	2.88	Aug. 7	11.50	25	8.88
13	5.50	29	4.00	Oct. 15	13.10		

Lancaster County

119 (*936, p. 246; 944, p. 238). At West Quarryville. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 32.56. Extremes of observed water level, in feet below land-surface datum: Highest, Mar. 21, 1943, 6.64; lowest, Jan. 31, 1942, 25.10.

Water level, in feet below land-surface datum, 1943

Jan. 2	9.10	Apr. 11	11.12	July 11	15.67	Oct. 10	20.22
9	10.48	18	12.11	17	15.12	17	20.48
16	12.49	25	8.48	24	15.81	24	20.83
23	12.48	May 2	10.11	Aug. 1	16.27	31	20.48
31	13.57	9	11.60	8	16.74	Nov. 7	20.44
Feb. 6	9.40	16	12.60	15	17.13	14	16.50
13	7.97	23	12.60	22	17.61	21	18.23
20	9.25	30	9.57	29	18.02	28	18.62
28	11.34	June 6	11.32	Sept. 5	18.42	Dec. 5	18.76
Mar. 7	11.04	12	12.35	12	18.80	12	18.89
14	8.80	19	13.41	19	19.18	19	18.97
21	6.64	26	14.22	26	19.56	27	18.01
Apr. 4	9.45	July 4	15.08	Oct. 3	19.87		

Luzerne County

76 (*817, p. 287; 845, p. 424; 886, p. 632; 906, p. 222; 936, p. 247; 944, p. 238). Near Wapwallopen. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 38.85. Extremes of observed water level, in feet below land-surface datum: Highest, Aug. 5, 1933, 18.17; lowest, Sept. 3, 1941, 29.89.

Water level, in feet below land-surface datum, 1943

Jan. 3	23.10	Apr. 11	24.80	July 18	25.10	Oct. 3	28.85
10	24.25	18	24.70	24	25.95	10	28.80
12	24.91	25	23.45	26	25.60	18	27.30
17	24.80	May 2	24.05	Aug. 1	25.80	24	27.35
31	24.85	8	25.11	8	26.35	31	22.80
Feb. 7	24.40	16	24.15	16	27.70	Nov. 7	23.50
14	24.60	23	22.90	22	28.45	14	23.55
21	24.85	30	23.45	29	29.00	21	24.50
28	24.45	June 6	24.15	Sept. 3	28.05	28	24.95
Mar. 7	24.70	13	24.15	8	28.95	Dec. 5	24.95
14	24.30	21	24.25	12	28.90	12	25.10
21	22.65	24	25.35	20	28.85	21	25.30
28	23.95	July 4	25.25	27	28.75	29	24.90
Apr. 4	24.35	11	24.03				

Mifflin County

117 (*936, p. 247; 944, p. 238). At Naginey. Measurements discontinued after Dec. 26, 1942.

Northumberland County

57 (*817; p. 247; 845, p. 425; 886, p. 633; 906, p. 223; 936, p. 247; 944, p. 239). At Sunbury. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 30.11. Extremes of observed water level, in feet below land-surface datum: Highest, Mar. 28, 1936, 6.31; lowest, Dec. 21, 1941, 20.71.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	16.19	May 4	15.34	Aug. 9	18.51	Oct. 27	18.76
Feb. 6	16.54	June 16	16.44	16	18.71	Nov. 30	18.10
Mar. 30	16.41	July 30	17.47	Sept. 2	18.51		

Perry County

61 (*817, p. 292; 845, p. 425; 886, p. 633; 906, p. 223; 936, p. 248; 944, p. 238). At Newport. Measuring point lowered 0.02 foot Sept. 30, 1943. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 27.03. Extremes of observed water level, in feet below land-surface datum: Highest, June 7, 1940, 7.92; lowest, Dec. 12, 1941, 17.34.

Water level, in feet below land-surface datum, 1943

Jan. 1	17.77	Apr. 9	17.39	July 10	16.21	Oct. 2	10.98
9	18.46	17	16.95	17	16.07	9	10.83
16	18.10	24	18.15	24	15.85	16	10.81
23	17.73	May 1	18.49	30	15.71	24	10.70
30	17.58	8	17.98	Aug. 6	15.50	30	11.25
Feb. 6	17.65	15	17.67	14	15.35	Nov. 6	11.18
13	18.07	22	18.12	21	15.12	13	11.75
27	17.83	28	18.59	28	14.96	20	12.07
Mar. 6	17.74	June 5	18.48	Sept. 1	14.85	27	12.05
13	17.68	12	17.89	3	14.80	Dec. 4	11.83
20	18.44	19	17.38	11	14.63	11	11.66
27	18.35	26	16.89	18	14.48	18	11.43
Apr. 3	17.81	July 3	16.45	25	14.34	27	11.45

110 (*840, p. 359; 845, p. 426; 886, p. 634; 906, p. 223; 936, p. 248; 944, p. 239). Near Millerstown. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 14.72. Extremes of observed water level, in feet below land-surface datum: Highest, May 7, 1943, 1.63; lowest, Dec. 11, 1939, 9.33.

Water level, in feet below land-surface datum, 1943

Jan. 19	2.06	May 7	1.63	July 14	2.51	Nov. 16	2.58
Mar. 24	2.58	June 17	2.57	Sept. 1	2.70		

Philadelphia County

P1. Gerard Estate. In Philadelphia, at southwest corner of 20th Street and Oregon Avenue, in yard of Passayunk power station, just north of main building at plant, in concrete well pit. Altitude about 20 feet above mean sea level. Used drilled well, diameter 8 inches, reported depth 612 feet. Well used only for a few hours once or twice a week. Measuring point, top of casing in concrete well pit, 1.5 feet below land-surface datum. Water levels, in feet below land-surface datum, 1943: Nov. 18, 30.42; Dec. 21, 30.91.

P2. Atlantic Refining Co. In Philadelphia, at projected intersection of Pattison Avenue and 27th Street, at refinery, just west and inside of boundary fence enclosing oil-storage tanks. Altitude, about 28 feet above mean sea level. Unused drilled well, diameter 6 inches, depth 74.5 feet. Measuring point, top of casing, 2.2 feet above land-surface datum. Water levels, in feet below land-surface datum, 1943: Nov. 24, 37.55; Dec. 22, 37.91.

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P3. City of Philadelphia. In south Philadelphia, in League Island Park, just east of asphalt driveway bordering east side of swimming pool, in concrete well pit. Altitude about 15 feet above mean sea level. Used drilled well, diameter 12 inches, depth 175.5 feet. Used only in summer. Measuring point, top of casing, 2.0 feet below land-surface datum. Water levels, in feet below land-surface datum, 1943: Nov. 19, 31.36; Dec. 21, 33.17.

P4. City of Philadelphia. In south Philadelphia at Municipal Airport, in frame well house just southeast of passenger office. Altitude about 10 feet above mean sea level. Unused drilled well, diameter 10 inches, depth 198 feet. Measuring point, bottom edge at end of 4-foot horizontal discharge pipe attached to pump, 1.0 foot above land-surface datum. Water level, in feet below land-surface datum, 1943: Dec. 22, 11.95.

N1. United States Navy. In south Philadelphia, on League Island, at Navy Yard. Observer, E. A. Hackbart, Public Works Office, Navy Yard. Altitude about 10 feet above mean sea level. Used drilled well, diameter 12 inches, depth 238 feet. Measuring point, pump base, at land-surface datum. Measured by air-line pressure gage. Well pumping when measured.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Dec. 13	98	Dec. 17	99	Dec. 22	99	Dec. 28	99
14	99	18	99	23	102	29	99
15	102	20	99	24	99	30	99
16	99	21	99	27	99	31	99

N2. United States Navy. In south Philadelphia, on League Island, at Navy Yard. Observer, E. A. Hackbart, Public Works Office, Navy Yard. Altitude about 10 feet above mean sea level. Used drilled well, diameter 12 inches, depth 243 feet. Measuring point, pump base, at land-surface datum. Measured by air-line pressure gage. Well pumping when measured.

Water level, in feet below land-surface datum, 1943

Dec. 13	110	Dec. 17	111	Dec. 22	111	Dec. 28	111
14	111	18	111	23	113	29	111
15	111	20	111	24	111	30	111
16	111	21	111	27	111	31	111

N3. United States Navy. In south Philadelphia, on League Island, at Navy Yard. Observer, E. A. Hackbart, Public Works Office, Navy Yard. Altitude about 10 feet above mean sea level. Used drilled well, diameter 12 inches, depth 239 feet. Measuring point, pump base, at land-surface datum. Measured by air-line pressure gage. Well pumping when measured.

Water level, in feet below land-surface datum, 1943

Dec. 13	85	Dec. 17	86	Dec. 22	86	Dec. 28	85
14	86	18	86	23	87	29	86
15	87	20	85	24	86	30	86
16	87	21	85	27	86	31	86

N4. United States Navy. In south Philadelphia, on League Island, at Navy Yard. Observer, E. A. Hackbart, Public Works Office, Navy Yard. Altitude about 10 feet above mean sea level. Used drilled well, diameter 12 inches, depth 262 feet. Measuring point, pump base, at land-surface datum. Measured by air-line pressure gage. Well pumping when measured.

Water level, in feet below land-surface datum, 1943

Dec. 13	78	Dec. 17	78	Dec. 22	76	Dec. 28	78
14	78	18	78	23	78	29	78
15	79	20	77	24	78	30	76
16	78	21	78	27	76	31	77

N5. United States Navy. In south Philadelphia, on League Island, at Navy Yard. Observer, E. A. Hackbart, Public Works Office, Navy Yard. Altitude about 10 feet above mean sea level. Temporarily unused drilled well, diameter 12 inches, depth 203 feet. Measuring point, pump base, at land-surface datum. Measured by air-line pressure gage.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Dec. 13	45	Dec. 17	46	Dec. 22	45	Dec. 28	54
14	47	18	46	23	45	29	45
15	47	20	54	24	45	30	47
16	47	21	45	27	52	31	47

N6. United States Navy. In south Philadelphia, at Navy Yard. Observer, E. A. Hackbart, Public Works Office, Navy Yard. Altitude about 10 feet above mean sea level. Used drilled well, diameter 12 inches, depth 193 feet. Measuring point, pump base, at land-surface datum. Measured by air-line pressure gage. Well pumping when measured.

Water level, in feet below land-surface datum, 1943

Dec. 13	97	Dec. 17	98	Dec. 22	98	Dec. 28	94
14	99	18	98	23	98	29	94
15	98	20	101	24	96	30	94
16	98	21	96	27	96	31	94

Schuylkill County

72 (*817, p. 204; 845, p. 427; 886, p. 634; 906, p. 224; 936, p. 248; 944, p. 240). Near Pine Grove. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 35.27. Extremes of observed water level, in feet below land-surface datum: Highest, Aug. 31, 1940, 4.14; lowest, Dec. 19, 1931, 25.55. Water level, in feet below land-surface datum, 1943: Jan. 9, 15.45.

Somerset County

16 (*817, p. 296; 845, p. 427; 886, p. 635; 906, p. 224; 936, p. 249; 944, p. 240). At Markelton. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 25.80. Extremes of observed water level, in feet below land-surface datum: Highest, Mar. 28, 1936, 11.98; lowest, Oct. 18, 1943, 16.80.

Water level, in feet below land-surface datum, 1943

Jan. 3	12.50	Apr. 5	14.03	July 5	14.96	Oct. 4	16.50
10	13.28	12	14.10	13	15.40	11	17.70
17	13.25	19	10.75	19	14.50	18	16.80
24	13.40	25	13.13	26	14.95	25	15.70
31	13.10	May 3	13.55	Aug. 2	15.05	Nov. 1	16.60
Feb. 7	12.95	10	13.95	9	14.87	7	16.36
15	12.86	16	13.12	16	14.58	14	16.21
22	13.30	24	13.15	23	15.13	21	16.10
Mar. 1	13.40	31	12.62	31	15.20	29	16.20
7	13.44	June 7	13.40	Sept. 7	15.58	Dec. 8	16.43
14	12.08	14	13.90	14	15.75	12	16.35
22	13.15	20	13.75	20	16.03	20	16.58
29	13.85	27	14.71	27	16.35	26	16.20

115 (*840, p. 360; 845, p. 428; 886, p. 635; 906, p. 224; 936, p. 249; 944, p. 240). Near Trent. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 51.05. Extremes of observed water level, in feet below land-surface datum: Highest, Dec. 19, 1942, 33.47; lowest, Apr. 17, 1937, 41.70.

115. Near Trent--Continued.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	32.48	Apr. 3	32.29	July 3	32.24	Oct. 2	33.52
9	32.42	10	32.20	10	32.40	9	33.64
16	32.32	17	32.02	17	32.42	16	33.59
23	32.33	24	32.01	24	32.41	23	33.68
30	32.32	May 1	32.10	31	32.36	31	33.64
Feb. 6	32.16	8	32.04	Aug. 7	32.76	Nov. 6	33.60
13	32.17	15	32.02	14	32.70	13	33.49
20	32.25	22	31.91	21	32.83	20	33.49
27	32.16	29	31.95	28	32.93	27	33.40
Mar. 6	32.09	June 5	31.89	Sept. 4	33.06	Dec. 4	33.42
13	32.16	12	32.00	11	33.20	11	33.36
20	32.13	19	32.05	18	33.32	18	33.39
27	32.13	27	32.25	25	33.28	25	33.30

Sullivan County

105 (*817, p. 298; 845, p. 428; 886, p. 635; 906, p. 225; 936, p. 249; 944, p. 240). Near Millview. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 35.57. Extremes of observed water level, in feet below land-surface datum: Highest, Mar. 16, 1936, 19.18; lowest, Aug. 31 to Oct. 9, 1935, June 13 to Oct. 31, 1936, June 12 to 26, July 31, Sept. 18 to Oct. 16, 1937, Aug. 6 to Sept. 10, 1938, July 23, Sept. 2 to Oct. 28, 1939, Oct. 25 to Nov. 1, 1941, Sept. 25 to Oct. 16, 1943, when well was dry.

Water level, in feet below land-surface datum, 1943

Jan. 2	21.17	Apr. 3	24.05	June 26	25.13	Sept.18	26.92
9	23.48	10	24.58	July 3	25.22	Oct. 23	26.38
16	24.25	17	24.35	10	25.44	30	21.47
23	24.14	24	23.43	17	25.58	Nov. 6	24.24
30	24.42	May 1	23.74	24	25.66	13	23.36
Feb. 6	24.09	8	24.14	31	25.78	20	23.78
13	24.02	15	24.48	Aug. 7	25.91	27	24.21
20	24.26	22	22.11	14	25.95	Dec. 4	24.56
27	23.13	29	22.08	21	26.08	11	25.02
Mar. 6	23.42	June 5	22.02	28	25.97	18	25.23
13	23.05	12	23.74	Sept. 4	26.42	24	25.43
20	22.33	19	24.68	11	26.58	31	25.46
27	23.14						

Susquehanna County

100 (*777, p. 167-169; 817, p. 298; 845, p.429; 886, p. 636; 906, p. 225; 936, p. 250; 944, p. 241). At Montrose. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 20.19. Extremes of observed water level, in feet below land-surface datum: Highest, Mar. 18, 1936, 1.80; lowest, Oct. 6 and 13, 1939, 11.06.

Water level, in feet below land-surface datum, 1943

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	7.48	4.49	5.47	4.96	....	....	9.52	9.49	9.76	8.48	4.89
2	3.71	7.53	4.75	5.46	....	....	....	9.51	9.48	9.78	8.34	5.02
3	3.94	7.62	4.98	5.48	....	....	9.18	9.50	9.47	9.80	8.22	5.14
4	4.13	7.68	5.14	5.51	....	....	9.22	9.49	9.44	9.81	8.10	5.21
5	4.36	7.73	5.37	5.51	....	3.47	9.25	9.48	9.44	9.83	7.98	5.30
6	4.60	7.76	5.65	5.51	....	3.63	9.28	9.47	9.43	9.85	7.83	5.40
7	4.83	7.71	6.06	5.56	....	3.75	9.30	9.45	9.42	9.88	7.77	5.50
8	5.04	7.67	6.06	5.58	5.07	3.91	9.34	9.45	9.41	9.89	5.58	5.60
9	5.30	7.66	6.29	5.65	4.66	....	9.36	9.45	9.40	9.91	5.13	5.72
10	5.39	7.65	6.49	5.72	3.79	....	9.38	9.45	9.39	9.93	5.00	5.80
11	5.52	7.59	6.50	5.74	3.77	....	9.38	9.45	9.37	9.94	4.93	5.90
12	5.68	7.37	4.55	5.77	3.76	6.62	9.39	9.46	9.37	....	4.87	5.96
13	5.85	7.13	4.22	5.82	3.98	6.76	9.42	9.47	9.37	....	4.86	6.09

100. At Montrose--Continued.

Water level, in feet below land-surface datum, 1943

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
14	6.04	7.04	4.28	5.87	4.27	6.97	9.44	9.47	9.40	9.89	4.87	6.18
15	6.20	7.01	4.29	5.89	4.51	7.17	9.47	9.47	9.42	9.90	4.88	6.30
16	6.43	7.00	4.00	5.91	4.70	7.36	9.49	9.47	9.45	9.89	4.93	6.45
17	6.60	6.99	3.28	5.93	4.87	7.56	9.51	9.47	9.47	9.89	4.99	6.59
18	6.78	7.00	3.29	....	4.92	7.80	9.51	9.47	9.48	9.88	5.06	6.83
19	6.86	7.02	3.19	....	4.88	8.04	9.52	9.47	9.49	9.86	5.00	6.95
20	6.94	6.04	3.28	....	3.84	8.17	9.54	9.48	9.51	9.83	4.85	7.06
21	6.98	3.95	3.58	....	3.15	8.30	9.55	9.47	9.54	9.80	4.46	7.17
22	7.02	3.50	3.85	....	3.23	8.41	9.57	9.47	9.58	9.76	4.34	7.30
23	7.08	3.27	4.16	....	3.64	8.51	9.57	9.48	9.62	9.74	4.36	7.39
24	7.11	2.80	4.37	4.04	3.96	8.61	9.58	9.50	9.66	9.71	4.38	7.57
25	7.17	2.97	4.58	....	4.21	8.70	9.58	9.51	9.68	9.69	4.40	7.83
26	7.25	3.54	4.82	....	2.97	8.78	9.58	9.53	9.69	9.39	4.36	7.40
27	7.33	4.04	5.01	....	3.39	8.84	9.58	9.53	9.70	9.33	4.48	7.51
28	7.37	4.26	5.20	....	3.91	8.89	9.58	9.54	9.71	8.92	4.53	7.53
29	7.43	....	5.38	....	4.33	....	9.57	9.54	9.73	8.79	4.63	7.69
30	7.46	....	5.50	....	....	....	9.55	9.53	9.74	8.66	4.75	7.83
31	7.46	....	5.48	....	....	....	9.53	9.51	....	8.57	....	7.95

Tioga County

106 (*817, p. 299; 845, p. 431; 886, p. 636; 906, p. 226; 936, p. 251; 944, p. 241). At Gaines. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 30.19. Extremes of observed water level, in feet below land-surface datum: Highest, Mar. 21, 1936, 8.45; lowest, Sept. 16, 1939, 24.98.

Water level, in feet below land-surface datum, 1943

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	9.09	Apr. 3	13.40	July 3	18.72	Oct. 2	21.44
9	11.52	10	15.20	10	19.08	9	21.22
16	13.52	17	15.75	17	19.92	16	21.87
23	14.17	24	8.90	24	18.92	23	20.00
30	14.94	May 1	9.94	31	19.38	30	14.72
Feb. 6	15.40	8	11.39	Aug. 7	20.22	Nov. 6	14.44
13	14.55	15	9.66	14	18.26	13	11.42
20	15.75	22	9.45	21	18.12	20	13.28
27	12.38	29	10.96	28	18.97	27	13.97
Mar. 6	14.41	June 5	11.80	Sept. 4	19.33	Dec. 4	14.90
13	13.18	12	13.52	11	19.98	11	17.35
20	10.68	19	14.74	18	21.06	18	19.02
27	11.75	26	16.68	25	21.70	25	20.22

Washington County

112 (*817, p. 299; 845, p. 432; 886, p. 637; 906, p. 226; 936, p. 251; 944, p. 242). At Amity. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 44.53. Extremes of observed water level, in feet below land-surface datum: Highest, Mar. 19, 1938, 9.46; lowest, Oct. 1, 1938, 34.84.

Water level, in feet below land-surface datum, 1943

Jan. 2	10.50	Apr. 3	14.50	July 3	16.54	Oct. 2	27.56
9	10.58	10	16.52	10	13.56	9	27.59
16	13.66	17	14.51	17	15.57	16	28.50
23	11.56	24	19.56	24	13.51	23	31.52
30	10.52	May 1	11.57	31	12.56	30	32.53
Feb. 6	11.51	8	14.58	Aug. 7	11.59	Nov. 6	32.56
13	12.50	15	16.55	15	12.58	13	32.58
20	12.52	22	11.59	21	16.51	20	31.57
27	12.54	29	12.52	28	17.50	27	30.63
Mar. 6	14.52	June 5	10.58	Sept. 4	18.64	Dec. 4	30.54
13	10.52	12	13.50	11	20.50	11	30.55
20	11.51	19	12.59	18	20.58	18	30.57
27	11.56	26	14.57	25	27.50	25	30.58

Wayne County

83 (*817, p. 300; 845, p. 432; 886, p. 637; 906, p. 226; 936, p. 251). Near Hawley. Measurements discontinued after Sept. 26, 1942.

VERMONT

By M. L. Brashears, Jr.

PROGRAM OF WORK

Periodic measurements of water level by the Geological Survey, United States Department of the Interior, were begun in Vermont in October 1942 with the establishment of a shallow observation well in the town of Middlesex, Washington County, near Wrightsville, which is about 3 miles north of Montpelier. The well is in steeply sloping country to the west of the North Branch of Winooski River. Although the well ends in unconsolidated material, outcrops in the vicinity indicate that the bottom of the well is not far above bedrock. Measurements have been made about monthly since they were begun. This report lists all the measurements made so far--3 in 1942 and 12 in 1943.

FLUCTUATIONS OF WATER LEVEL

As would be expected, the water level in the Wrightsville well appears to fluctuate with the precipitation. There was an increase in ground-water storage in 1943, as shown by the net rise in water level of about 1.3 feet. (The water level on January 2, 1944, was 8.26 feet below land-surface datum). Precipitation at the nearby station at Northfield was above the normal of 35.84 inches during both 1942 and 1943, but it was about 2.2 inches greater in 1943 than in 1942. During October and November 1943 it was about 200 percent of normal and probably was the chief factor responsible for the high water levels on November 2 and December 2.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Washington County

U. S. 90. Burton Peterson. Montpelier well 1. Near Wrightsville, town of Middlesex, about 0.7 mile west of North Branch of Winooski River and 3 miles north of Montpelier. Unused dug domestic well, diameter 24 inches, depth 11.9 feet. Measuring point, steel rod driven into cobble casing 2.1 feet below land-surface datum which is about 800 feet above sea level.

Water level, in feet below land surface datum, 1942-43

Date	Water level	Date	Water level	Date	Water level
Oct. 6, 1942	11.28	Mar. 2, 1943	9.33	July 29, 1943	8.41
Nov. 3	8.79	Apr. 2	9.01	Aug. 31	8.53
Dec. 1	9.71	28	8.27	Oct. 4	8.52
Jan. 2, 1943	9.58	June 2, 1943	8.02	Nov. 2	6.76
Feb. 3	9.75	July 2	7.28	Dec. 2	6.24