UNITED STATES DEPARTMENT OF THE INTERIOR
Harold L. Ickes, Secretary

GEOLOGICAL SURVEY
W. C. Mendenhall, Director

Water-Supply Paper 906

WATER LEVELS AND ARTESIAN PRESSURE IN OBSERVATION WELLS IN THE UNITED STATES IN 1940

Part 1. NORTHEASTERN STATES

BY

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

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

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1942

For sale by the Superintendent of Documents, Washington, D. C. - - - - - - -

CONTENTS

ILLUSTRATIONS

INTRODUCTION

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

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 for public waterworks, for irrigation, or for 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 may indicate depletion or replenishment of the artesian reservoirs.

The regular publication of records of water levels and artesian pressure in the United States was begun by the Geological Survey in 1935, and from that year through 1939 one volume containing these data was published each year. The volumes were issued as Water-Supply Papers 777, 817, 840, 845, and 886. This series of reports is in a sense an inventory, year by year, of the ground-water supplies of those parts of the country that it covers. The number of observation wells and the quantity of records on water levels and artesian pressure obtained from them have increased gradually from year to year. As a result it has been deemed advisable to publish the records for 1940 in six volumes, each volume containing records for one of the sections into which the United States has been divided. (See fig. 1.) The present volume covers the northeastern section and gives records of water level or artesian pressure in about 680 observation wells in Connecticut, Indiana, Massachusetts, Michigan, New Jersey, New York, Ohio, and Pennsylvania, that were obtained by the Geological Survey and cooperating agencies. About 103 of these wells are equipped with automatic water-stage recorders. For some wells for which records had not heretofore been published complete records of water levels are given in this report, including those for years before 1940. For wells whose previous records have been published, however, this volume gives only current records. If complete descriptions of the wells were given in one of the previous reports, only the well numbers or the well numbers and brief identifying descriptions are given in this report. The report includes about 27,500 individual measurements of water level or artesian pressure.

The water levels in this report are given with reference to datum planes of different kinds. Some are given in depth below the measuring point--that is, below the recognized reference mark, at or near the top of the well, from which the depth to water level is usually measured; and some are given in height above an assumed datum plane. As the measuring points on some of the wells were changed in 1940, the records may not be directly comparable with those in previous annual volumes, but changes in measuring points are recorded in this report. Water levels given in height above sea level or above assumed datum planes are generally comparable with those given in the previous volumes. Unless otherwise stated, the depth of wells is usually the measured depth below the measuring point.

Acknowledgments for effective services in the preparation of this report are due Mrs. Charlotte P. Berger and Misses Martha M. Evans, Dorothy M. Ireland, Ermelinda F. Mattera, and Goree M. Pellen, who typed the offset copy; and to Rodney Hart, who prepared many of the illustrations and gave other assistance in preparing the copy.

GENERAL SUMMARY OF CHANGES IN GROUND-WATER LEVEL IN 1940 IN THE NORTHEASTERN PART OF THE UNITED STATES

The precipitation in all the northeastern States, except Indiana, was normal in 1940. The fluctuations of water levels and artesian pressure in all wells, however, did not reflect these moisture conditions. The fluctuations of water levels and artesian pressure in wells depend upon many complex factors, such as the distribution and amount of the precipitation, location of the outcrop areas of the formations, permeability and specific yield of the water-bearing materials, depth of the water table below the land surface, and the proximity of the wells to areas of heavy withdrawals. Consequently, it is usually not possible to find a simple relation between the changes in water level or artesian pressure and the departures from normal precipitation. The fluctuations that occur in each well, or group of similar wells, must be studied separately in order to evaluate the effects of the many influencing factors. It is not ordinarily possible to make general statements regarding changes in ground-water levels that apply over large areas. The following paragraphs are taken chiefly from the interpretive texts of the several State sections in this volume. They summarize very briefly the changes in ground-water levels or artesian pressure that occurred in 1940 in the parts of the underground reservoirs in the northeastern States that the wells tap.

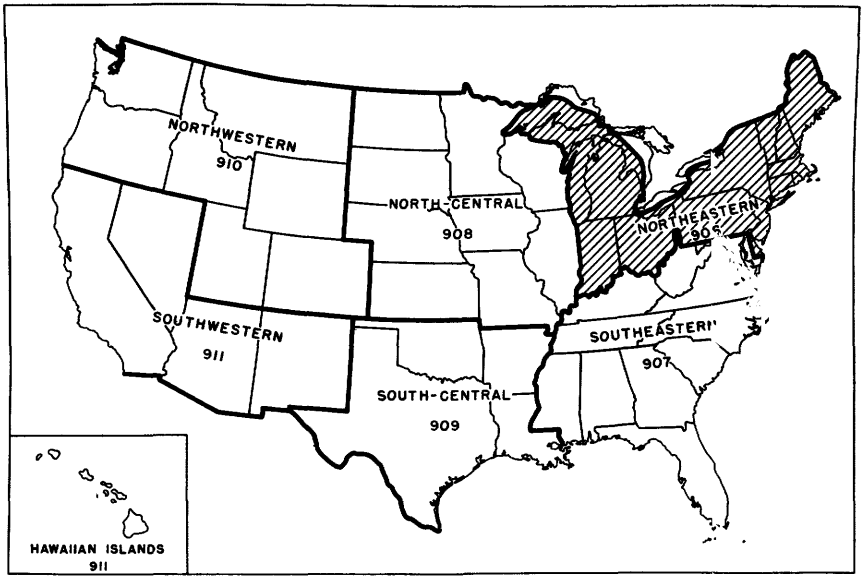


Figure 1.--Outline map of the United States, showing sections of the country covered by the six water-supply papers on water levels and artesian pressure in observation wells in 1940. The shaded section represents the part of the country covered by this volume.

Connecticut.--Of 19 wells in New Haven County for which a year's record is available, 14 showed a net decline in water level in 1940. The declines in water level ranged from about 0.1 foot to 1.6 feet and averaged 0.5 foot. Of the 5 wells that showed net rises in water level, 3 are in areas of heavy withdrawal and the other 2 wells tap water in bedrock.

Indiana.--In Indiana essentially complete water-level records were obtained in 1940 on 52 wells distributed over the State. Fifteen of the wells are in Marion County (Indianapolis). In 36 of the wells, including 14 wells in Marion County, the water levels declined to lower stages during the fall of 1940 than during the fall of 1939 and the winter of 1939-40; in 13 wells the water levels did not decline as low during the fall of 1940 as during the previous fall and winter; in 3 wells the stages reached during the fall of 1940 were about the same as those reached during the previous fall and winter. There was a net decline in the 52 wells in 1940 of about 0.4 foot. The precipitation for the year was 32.55 inches--6.74 inches below normal.

Massachusetts.--All observation wells in Massachusetts for which a complete record for 1940 was obtained--19 wells--showed net rises of water level in the year. The rises ranged from about 0.1 foot to more than 8 feet, but in most the wells the rise was 1 to 2 feet.

Michigan.--The water level in a typical well in Roscommor County fluctuated through a range of about 1.4 feet in 1940, and at the end of the year was about 1 foot higher than at the end of 1939. There was essentially no net change of the water level in the well in 1939. The water levels in other observation wells in the northern part of the Lower Peninsula fluctuated in a similar manner in 1940.

New Jersey.--Records for water table wells in the Runyon area, Middlesex County, show that the water levels in wells less than about 25 feet deep had a net average rise in 1940 of about 3 feet, and that the water levels in wells more than 25 feet deep had an average net rise of about 1 foot in the year. The water level in the Morrell well, Middlesex County, which has been observed continuously for about 17 years, was about 1 foot below the average stage at the beginning of 1940, but only about 0.1 foot below the average stage at the end of 1940.

New York.--Water levels in about a half of 120 observation wells on Long Island were lower at the end of 1940 than at the beginning of 1940, and the water levels in the rest of the wells were higher. Most of the wells in which there was a considerable net rise of water level in the year are in areas of heavy pumping along the south shore of the Island. In these areas, the rate of withdrawal of water was much less during the last part of 1940 than during the last part of 1939.

Ohio.--Water levels in most observation wells, both deep and shallow, in Butler and Hamilton Counties, were lower at the end of 1940 than at the end of 1939.

Pennsylvania.--The average of the water levels in observation wells distributed over Pennsylvania at the end of 1940 was 0.75 foot higher than at the end of any previous year of record, which extends back to 1931, and about 4.2 feet higher than at the end of 1939.

CONNECTICUT

New Haven County

By J. G. Ferris

The cooperative investigation of ground-water conditions in the New Haven area by the Federal Geological Survey and the Connecticut State Water Commission was continued in 1940. At the end of the year one automatic water-stage recorder was in operation and weekly water-level measurements were being made in 29 additional observation wells. A total of about 1,370 individual water-level measurements were made during the year.

A descriptive heading was given for each observation well in Water-Supply Paper 886. Headings have been omitted in this report except for wells whose measuring points have been changed or for wells whose records were not given in Water-Supply Paper 886.

The following table gives a summary of ground-water level data for New Haven:

Summary of ground-water level data for New Haven, Connecticut

Well	First Measured	Lowest observed water level, in feet, with reference to mean sea level		Highest observed water level, in feet, with reference to mean sea level	
		Water level	Date	Water level	Date
NHn 101	May 11, 1939	-1.59	Oct. 9, 1940	+0.79	Feb. 21, 1940
NHn 105	May 11, 1939	-0.55	Aug. 18, 1939	+1.40	May 8, 1940
NHn 107	May 12, 1939	-0.76	Aug. 18, 1939	+1.29	May 8, 1940
NHn 108	May 12, 1939	-0.76	Aug. 18, 1939	+1.26	May 8, 1940
NHn 110	May 12, 1939	-0.93	Oct. 6, 1939	+0.51	May 12, 1939
NHn 117	May 31, 1939	+0.40	Oct. 2, 1940	+1.94	Apr. 23, 1940
NHn 120	May 23, 1939	+5.82	Dec. 26, 1940	+9.24	May 23, 1939
NHn 128	May 31, 1939	+15.15	Dec. 26, 1940	+17.66	May 31, 1939
NHn 131	June 1, 1939	-4.83	Oct. 27, 1939	-2.52	Dec. 26, 1940
NHn 138	Feb. 28, 1940	-5.03	Oct. 30, 1940	-2.24	Dec. 26, 1940
NHn 140	June 6, 1939	-9.76	Aug. 4, 1939	-2.52	Dec. 26, 1940
NHn 149	June 13, 1939	+1.61	Oct. 27, 1939	+3.25	June 30, 1939
NHn 152	June 13, 1939	+13.12	Jan. 10, 1940	+16.18	June 12, 1940
NHn 158	June 7, 1939	-5.40	Oct. 27, 1939	-2.70	July 10, 1940
NHn 159	June 7, 1939	-11.42	Dec. 18, 1940	-4.11	June 12, 1939
NHn 160	June 7, 1939	+1.19	Aug. 4, 1939	+4.15	Mar. 6, 1940
NHn 168	June 22, 1939	+7.02	Jan. 3, 1940	+8.90	June 26, 1940
NHn 170	June 23, 1939	+16.71	Dec. 26, 1940	+18.41	June 23, 1939
NHn 175	June 23, 1939	+3.02	Dec. 26, 1940	+4.51	June 23, 1939
NHn 178	July 21, 1939	-2.49	Dec. 18, 1940	+0.04	June 12, 1940
NHn 179	July 21, 1939	-2.18	Dec. 18, 1940	-0.17	July 17, 1940
NHn 183	Dec. 13, 1939	+4.17	Nov. 13, 1940	+5.88	June 12, 1940
NHn 202	Apr. 17, 1940	+7.35	Sept.18, 1940	+8.17	May 1, 1940
NHn 205	July 17, 1940	-1.65	Oct. 23, 1940	-0.19	Oct. 2, 1940
NHn 222	Sept.11, 1940	+24.73	Dec. 26, 1940	+25.95	Sept.11, 1940
NHn 224	Sept.11, 1940	+3.43	Oct. 30, 1940	+3.70	Nov. 20, 1940
NHn 235	Oct. 2, 1940	-0.53	Nov. 13, 1940	-0.22	Oct. 2, 1940
NHn 245	Oct. 2, 1940	+0.21	Oct. 30, 1940	+0.57	Nov. 20, 1940
NHn 250	Oct. 9, 1940	+3.90	Dec. 31, 1940	+4.79	Oct. 9, 1940

Summary of ground-water level data for New Haven, Connecticut--Continued.

Well	First Measured	Water level, in feet, with reference to mean sea level, Dec. 26, 1940
NHn 101	May 11, 1939	-
Nhn 105	May 11, 1939	-0.06
Nhn 107	May 12, 1939	-0.27
NHn 108	May 12, 1939	-0.25
NHn 110	May 12, 1939	-0.63
NHn 117	May 31, 1939	+0.89
NHn 120	May 23, 1939	+5.82
NHn 128	May 31, 1939	+15.15
NHn 131	June 1, 1939	-2.52
NHn 138	Feb. 28, 1940	-2.24
Nhn 140	June 6, 1939	-2.52
NHn 149	June 13, 1939	+2.09
NHn 152	June 13, 1939	+14.55
NHn 158	June 7, 1939	-
NHn 159	June 7, 1939	-6.00
NHn 160	June 7, 1939	+2.01
NHn 168	June 22, 1939	+7.52
NHn 170	June 23, 1939	+16.71
NHn 175	June 23, 1939	+3.02
NHn 178	July 21, 1939	-2.27
NHn 179	July 21, 1939	-2.01
NHn 183	Dec. 13, 1939	+4.28
NHn 202	Apr. 17, 1940	+7.56
NHn 205	July 17, 1940	-0.29
NHn 222	Sept.11, 1940	+24.73
NHn 224	Sept.11, 1940	+3.53
NHn 235	Oct. 2, 1940	-0.37
NHn 245	Oct. 2, 1940	+0.31
NHn 250	Oct. 9, 1940	+4.12

The lowest observed water level in all wells except those wells located in areas of heavy pumping was lower in 1940, than the lowest stage in 1939. Observations were started in the New Haven area late in the spring of 1939. The water levels in some of the wells were doubtless higher early in the spring of 1939 than in the spring of 1940.

The following table shows the net change of water levels in wells in the New Haven area in 1940:

Net change of ground-water levels, in feet, in New Haven, Connecticut, in 1940

Well	Net change in water level	Well	Net change in water level	Well	Net change in water level
NHn 105	-0.62	NHn 128	-0.46	NHn 160	-0.75
NHn 107	-0.71	NHn 131	+1.34	NHn 168	+0.32
NHn 108	-0.88	NHn 140	+4.01	NHn 170	-0.09
NHn 110	-0.08	NHn 149	-0.39	NHn 175	-0.46
NHn 117	-0.37	NHn 152	+1.14	NHn 178	-0.50
NHn 120	-1.60	NHn 159	+0.58	NHn 179	-0.43
				NHn 183	-0.18

The table shows that of the 19 wells for which a year's record is available, 14 showed a net decline of water level for the year. The declines in water level range from about 0.1 foot to 1.6 feet and average 0.5 foot. Wells NHn 131, 140, and 159, which show net rises of water level in the year, are at plants in the Mill River industrial area, and the water levels in them are affected considerably by pumping at the plants or at nearby plants. Wells NHn 152 and 168, which also show net rises of water levels in the year, are the only wells under observation in the New Haven area that penetrate bedrock. The water levels in these wells are probably not affected directly by all the factors that affect the water levels in the other wells, which tap water in stratified drift.

The precipitation at New Haven in 1940 was about 2.3 inches greater that in 1939, or about 2.4 inches above normal. The distribution of precipitation during the two years, however, was such that greater recharge might be expected in 1939 than in 1940. During the 7-month non-growing season, the period most favorable for recharge, the precipitation was 5.22 inches above normal in 1939, as compared with 1.60 inches above normal in 1940.

A comparison of the water level data for wells NHn 178 and 205, in the Mill River Industrial area, with periodic measurements of the tide stage in the Mill River indicates that the water levels in both wells are affected by the tide in the river. The rapid rise in water levels in wells in the Mill River industrial area, near the middle and end of each year is caused by the large decrease in pumping during factory maintenance, clean-up and materials-inventory, a practice fairly general for most New Haven manufacturers at these two periods of the year.

NHn 101.

Water level, in feet, with reference to mean sea level, 1940.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	+0.20	Mar. 6	+0.61	Apr. 17	+0.23	June 12	-0.41
17	+.10	13	+0.37	23	+.40	19	-.21
24	+.56	20	+.40	May 15	-.08	26	-.57
31	+.48	27	+.35	22	-.17	July 17	-.82
Feb. 14	+.74	Apr. 3	+.16	29	-0.05	Aug. 7	-1.42
21	+.79	10	+.13	June 5	-.03	Oct. 9	-1.59
28	+.55						

NHn 105. Measurements discontinued Dec. 26, 1940.

Water level, in feet, with reference to mean sea level, 1940.

Jan. 3	+0.67	Apr. 3	+1.02	July 3	+0.53	Oct. 2	-0.32
10	+.81	10	+1.00	10	+.44	9	-.31
17	+.90	17	+1.13	17	+.44	16	-.36
24	+1.03	23	+1.27	24	+.28	23	-.24
31	+1.10	May 1	+1.34	31	+.14	30	-.22
Feb. 7	+1.17	8	+1.40	Aug. 7	-.05	Nov. 6	-.15
14	+1.21	15	+1.03	14	-.24	13	-.11
21	+1.27	22	+.91	21	-.34	20	+.03
28	+1.25	29	+.91	28	-.35	27	+.03
Mar. 6	+1.31	June 5	+.99	Sept. 4	-0.40	Dec. 4	+.10
13	+1.20	12	+.79	11	-.46	11	-.09
20	+1.19	19	+.66	18	-.48	18	-.06
27	+1.14	26	+.62	25	-.52	26	-.06

NHn 107. Measurements discontinued Dec. 26, 1940.

Water level, in feet, with reference to mean sea level, 1940.

Jan. 3	+0.67	Feb. 28	+1.15	Apr. 23	+1.13	June 19	+0.51
10	+.73	Mar. 6	+1.21	May 1	+1.23	26	+.42
17	+.78	13	+1.07	8	+1.29	July 3	+.33
24	+.95	20	+1.06	15	+.85	10	+.24
31	+1.01	27	+1.02	22	+.74	17	+.24
Feb. 7	+1.09	Apr. 3	+.89	29	+.75	24	+.10
14	+1.14	10	+.86	June 5	+.82	31	-.06
21	+1.20	17	+.99	12	+.60	Aug. 7	-.25

NHn 107.--Continued.

Water level, in feet, with reference to mean sea level, 1940.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 14	-0.47	Sept. 18	-0.67	Oct. 23	-0.41	Nov. 27	-0.17
21	-.55	25	-.71	30	-.39	Dec. 4	-.10
28	-.55	Oct. 2	-.52	Nov. 6	-.33	11	-.30
Sept. 4	-.62	9	-.48	13	-.31	18	-.28
Sept 11	-.66	16	-.54	20	-.18	26	-.27

NHn 108.

Water level, in feet, with reference to mean sea level, 1940

Jan. 3	+0.56	Apr. 3	+0.88	July 3	+0.33	Oct. 2	-0.49
10	+0.72	10	+0.86	10	+0.24	9	-0.47
17	+0.78	17	+0.98	17	+0.24	16	-0.52
24	+0.94	23	+1.13	24	+0.11	23	-0.40
31	+1.00	May 1	+1.21	31	-0.06	30	-0.39
Feb. 7	+1.06	8	+1.26	Aug. 7	-0.25	Nov. 6	-0.31
14	+1.11	15	+0.85	14	-0.45	13	-0.29
21	+1.17	22	+0.73	21	-0.54	20	-0.15
28	+1.13	29	+0.74	28	-0.53	27	-0.15
Mar. 6	+1.19	June 5	+0.82	Sept. 4	-0.60	Dec. 4	-0.09
13	+1.07	12	+0.60	11	-0.64	11	-0.28
20	+1.05	19	+0.49	18	-0.55	18	-0.25
27	+1.01	26	+0.43	25	-0.69	26	-0.25

NHn 110. Measuring point lowered 0.16 foot May 15, 1940. New measuring point, top of 2-inch pipe, 0.5 foot above basement floor, 1.1 feet below land surface and 10.34 feet above mean sea level. Water level May 22, 1940, 10.03 feet below measuring point and 0.31 foot above mean sea level.

Water level, in feet, with reference to mean sea level, 1940

Jan. 3	-0.49	Apr. 3	+0.25	July 3	+0.14	Oct. 2	-0.64
10	-.42	10	+.25	10	+.10	9	-.67
17	-.34	17	+.28	17	+.05	16	-.69
24	-.27	23	+.30	24	+.01	23	-.70
31	-.20	May 1	+.32	31	-.07	30	-.70
Feb. 7	-.13	8	+.34	Aug. 7	-.13	Nov. 6	-.71
14	-.08	15	+.34	14	-.20	13	-.71
21	-.01	22	+.31	21	-.28	20	-.68
28	+.04	29	+.29	28	-.36	27	-.67
Mar. 6	+.11	June 5	+.29	Sept. 4	-.43	Dec. 4	-.65
13	+.16	12	+.26	11	-.49	11	-.63
20	+.21	19	+.21	18	-.55	18	-.64
27	+.24	26	+.18	25	-.61	26	-.63

NHn 116. Water level at times affected by inflow of surface water. Measurements discontinued Feb. 28, 1940.

Water level, in feet above mean sea level, 1940

Jan. 3	6.16	Jan. 24	6.19	Feb. 7	6.29	Feb. 21	6.30
10	6.05	31	6.16	14	6.40	28	6.34
17	6.17						

NHn 117.

Water level, in feet above mean sea level, 1940

Jan. 3	1.28	Apr. 3	1.61	July 3	1.42	Oct. 2	0.40
10	1.33	10	1.84	10	1.38	9	1.03
17	1.51	17	1.79	17	1.52	.16	.91
24	1.52	23	1.94	24	1.30	23	.99
31	1.50	May 1	1.87	31	1.10	30	.89
Feb. 7	1.60	8	1.89	Aug. 7	.98	Nov. 6	1.13
14	1.63	15	1.83	14	.83	13	1.11
21	1.80	22	1.75	21	.74	20	1.16
28	1.70	29	1.79	28	.71	27	1.11
May 6	1.90	June 5	1.86	Sept. 4	.76	Dec. 4	1.11
13	1.67	12	1.68	11	.65	11	1.07
20	1.77	19	1.50	18	.65	18	1.04
27	1.65	26	1.61	25	.59	26	.89

NHn 120.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	7.44	Apr. 3	7.58	July 3	7.42	Oct. 2	6.26
10	7.43	10	7.46	10	6.92	9	6.41
17	7.48	17	7.37	17	7.01	16	6.41
24	7.51	23	7.34	24	6.46	23	6.42
31	7.52	May 1	7.53	31	6.21	30	6.38
Feb. 7	7.54	8	7.70	Aug. 7	5.97	Nov. 6	6.32
14	7.56	15	7.80	14	5.88	13	6.25
21	7.47	22	7.87	21	5.94	20	6.14
28	7.56	29	7.93	28	6.27	27	6.09
Mar. 6	7.53	June 5	7.46	Sept. 4	5.82	Dec. 4	6.01
13	7.52	12	7.47	11	6.11	11	5.93
20	7.58	19	7.00	18	6.14	18	5.84
27	7.58	26	7.41	25	5.90	26	5.82

NHn 128.

Water level, in feet above mean sea level, 1940

Jan. 3	15.56	Apr. 17	16.08	July 10	16.03	Oct. 9	15.51
10	15.55	23	16.15	17	16.04	16	15.47
17	15.59	May 1	16.34	24	15.87	23	15.43
24	15.59	8	16.35	31	15.81	30	15.40
31	15.57	15	16.50	Aug. 7	15.73	Nov. 6	15.35
Feb. 21	15.51	22	16.43	14	15.66	13	15.31
28	15.50	29	16.53	21	15.82	20	15.33
Mar. 6	15.64	June 5	16.24	28	15.50	27	15.27
13	15.78	12	16.39	Sept. 4	15.43	Dec. 4	15.25
20	15.88	19	16.21	11	15.39	11	15.23
27	15.90	26	16.48	18	15.41	18	15.20
Apr. 3	15.97	July 3	16.13	Oct. 2	15.55	26	15.15
10	16.01						

NHn 131.

Water level, in feet below mean sea level, 1940

Jan. 3	3.41	Apr. 3	3.57	July 3	3.05	Oct. 2	3.64
10	3.64	10	3.60	10	2.53	9	3.72
17	3.51	17	3.39	17	2.90	16	3.94
24	3.49	23	3.31	24	2.99	23	4.03
31	3.77	May 1	3.10	31	3.01	30	4.17
Feb. 7	3.89	8	3.15	Aug. 7	3.15	Nov. 6	3.90
14	4.08	15	3.17	14	3.26	13	3.97
21	4.13	22	3.37	21	3.43	20	3.99
28	4.13	29	3.35	28	3.51	27	3.84
Mar. 6	4.02	June 5	3.27	Sept. 4	3.29	Dec. 4	3.31
13	3.96	12	3.38	11	3.51	11	2.95
20	4.01	19	3.32	18	3.46	18	2.78
27	3.81	26	3.44	25	3.61	26	2.52

NHn 138. Associated Realty Co. On south side of Greene Street, 130 feet west of East Street. Driven test well, diameter 2 inches, measured depth 31.0 feet. Measuring point, top of 1¼-inch bushing, 0.5 foot above basement floor, 6.5 feet below land surface and 11.25 feet above mean sea level. Water level Feb. 28, 1940, 16.15 feet below measuring point and 4.90 feet below mean sea level.

Water level, in feet below mean sea level, 1940

Feb. 28	4.90	May 15	4.20	July 31	3.90	Oct. 16	4.86
Mar. 6	4.75	22	4.49	Aug. 7	4.12	23	4.90
13	4.75	29	4.39	14	4.22	30	5.03
20	4.89	June 5	4.29	21	4.38	Nov. 6	4.39
27	4.63	12	4.50	28	4.49	13	4.69
Apr. 3	4.07	19	4.42	Sept. 4	4.13	20	4.51
10	4.29	26	4.54	11	4.39	27	4.04
17	4.20	July 3	3.92	18	4.23	Dec. 4	3.19
23	4.18	10	3.37	25	4.39	11	2.73
May 1	3.87	17	4.00	Oct. 2	4.49	18	2.51
8	4.03	24	3.88	9	4.58	23	2.24

NHn 140. Measurements discontinued Dec. 26, 1940

Water level, in feet below mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	6.49	Apr. 3	6.77	July 17	7.21	Oct. 9	7.58
10	7.61	10	7.33	24	6.87	16	7.16
17	6.74	17	7.04	31	6.77	23	7.19
24	7.00	23	7.07	Aug. 7	7.03	30	7.32
31	8.01	May 1	6.60	14	7.12	Nov. 6	6.15
Feb. 7	8.07	8	7.21	21	7.74	13	6.62
14	8.02	15	7.50	28	8.00	20	6.32
21	8.18	22	7.86	Sept. 4	7.85	27	5.26
28	8.23	29	7.57	11	7.11	Dec. 4	3.73
Mar. 6	7.93	June 5	6.88	18	7.05	11	3.14
13	8.10	July 3	6.10	25	7.44	18	2.77
20	8.42	10	5.85	Oct. 2	7.46	26	2.52
27	7.85						

NHn 149. Measuring point raised 6.74 feet on June 19, 1940. New measuring point, top of 2-inch coupling, 1.2 feet above land surface and 24.14 feet above mean sea level. Water level Aug. 28, 1940, 21.66 feet below measuring point and 2.48 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Jan. 3	2.30	Mar. 20	2.29	June 5	2.77	Oct. 23	1.81
10	1.90	27	2.16	12	2.80	30	1.83
17	1.97	Apr. 3	2.07	Aug. 28	2.48	Nov. 6	1.92
24	1.91	10	2.25	Sept. 4	3.15	13	1.89
31	1.97	17	2.31	11	2.43	20	1.94
Feb. 7	2.00	23	2.74	18	2.16	27	2.14
14	2.08	May 1	2.57	25	1.70	Dec. 4	2.06
21	2.22	8	2.64	Oct. 2	1.81	11	2.01
28	2.18	15	2.65	9	1.81	18	2.04
Mar. 6	2.43	22	2.69	16	1.77	26	2.09
13	2.28	29	2.64				

NHn 152.

Water level, in feet above mean sea level, 1940

Jan. 3	13.31	Apr. 10	14.86	July 10	15.95	Oct. 9	15.21
10	13.12	17	15.36	17	16.09	16	15.08
17	13.32	23	15.67	24	16.11	23	15.00
24	13.58	May 1	15.90	31	16.02	30	14.87
31	13.45	8	15.89	Aug. 7	15.89	Nov. 6	14.92
Feb. 7	13.23	15	15.84	14	15.76	13	14.88
21	13.32	22	15.80	21	15.62	20	15.22
28	13.68	29	15.71	28	15.51	27	15.22
Mar. 6	13.86	June 5	16.16	Sept. 4	15.38	Dec. 4	15.08
13	14.25	12	16.18	11	15.34	11	14.88
20	14.54	19	16.13	18	15.26	18	14.73
27	14.76	26	16.04	25	15.18	26	14.55
Apr. 3	14.80	July 3	15.95	Oct. 2	15.30		

NHn 158. Well destroyed when new pumping well was drilled at this site. Measurements discontinued Oct. 9, 1940.

Water level, in feet below mean sea level, 1940

Jan. 3	3.42	Mar. 13	3.95	May 29	3.24	July 31	2.84
10	3.97	20	3.88	June 5	2.74	Aug. 7	2.94
17	3.76	27	3.66	12	2.71	14	3.21
24	3.74	Apr. 3	3.76	19	2.72	21	3.19
31	3.90	10	3.73	26	2.96	28	3.10
Feb. 7	3.92	17	3.72	July 3	3.14	Sept. 4	3.46
14	3.66	May 1	3.31	10	2.70	11	3.80
21	3.89	8	3.22	17	2.75	Oct. 2	4.37
28	3.99	15	3.22	24	2.84	9	4.45
Mar. 6	3.87	22	3.12				

NHn 159.

Water level, in feet below mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	6.56	Apr. 3	6.89	July 3	5.71	Oct. 2	8.35
10	7.13	10	6.89	10	5.28	9	7.61
17	6.95	17	4.28	17	5.43	16	8.97
24	7.01	23	6.24	24	5.38	23	5.46
31	7.16	May 1	6.06	31	5.41	30	9.34
Feb. 7	7.12	8	6.01	Aug. 7	5.46	Nov. 6	10.64
14	6.81	15	5.97	14	5.84	13	9.12
21	7.23	22	5.93	21	5.72	20	10.10
28	7.16	29	6.00	28	5.65	27	10.50
Mar. 6	4.75	June 5	5.47	Sept. 4	5.89	Dec. 4	10.02
13	7.07	12	5.41	11	6.14	11	11.12
20	7.03	19	5.44	18	5.99	18	11.42
27	6.85	26	5.63	25	4.88	2[illegible]	6.00

NHn 160.

Water level, in feet above mean sea level, 1940

Jan. 3	2.47	Apr. 3	3.37	June 26	3.47	Sept. 18	2.35
10	2.32	10	3.92	July 3	3.05	2[illegible]	2.67
17	3.56	17	3.67	10	2.97	Oct. 2	2.42
24	2.85	23	3.92	17	3.11	16	2.16
31	2.54	May 1	3.33	24	2.87	2[illegible]	2.01
Feb. 7	2.46	8	3.44	31	2.70	30	1.72
14	2.84	15	3.01	Aug. 7	2.50	Nov. 6	2.11
21	3.63	22	3.01	14	2.36	2[illegible]	2.84
28	2.95	29	3.03	21	2.19	Dec. 4	2.59
Mar. 6	4.15	June 5	3.83	28	2.05	11	2.10
13	3.14	12	3.32	Sept. 4	2.24	18	2.00
20	3.54	19	2.97	11	1.94	2[illegible]	2.01
27	3.15						

NHn 168.

Water level, in feet above mean sea level, 1940

Jan. 3	7.02	Apr. 3	7.59	July 3	8.66	Oct. 2	8.05
10	7.10	10	7.72	10	8.62	9	7.94
17	7.25	17	7.92	17	8.69	16	7.73
24	7.32	23	8.30	24	8.70	23	7.67
31	7.20	May 1	8.42	31	8.57	30	7.69
Feb. 7	7.25	8	8.44	Aug. 7	8.49	Nov. 6	7.71
14	7.42	15	8.52	14	8.41	13	7.62
21	7.42	22	8.58	21	8.31	20	7.63
28	7.36	29	8.57	28	8.24	27	7.84
Mar. 6	7.68	June 5	8.80	Sept. 4	8.20	Dec. 4	7.52
13	7.45	12	8.81	11	8.14	11	7.46
20	7.73	19	8.88	18	7.95	18	7.39
27	7.47	26	8.90	25	7.88	26	7.52

NHn 170.

Water level, in feet above mean sea level, 1940

Jan. 3	16.78	Apr. 3	17.20	July 3	18.16	Oct. 2	17.20
10	16.76	10	17.24	10	18.10	9	17.14
17	16.79	17	17.34	17	18.05	16	17.08
24	16.82	23	17.52	24	17.98	23	17.04
31	16.80	May 1	17.81	31	17.92	30	17.00
Feb. 7	16.79	8	18.01	Aug. 7	17.82	Nov. 6	16.92
14	16.78	15	18.12	14	17.75	13	16.87
21	16.75	22	18.16	21	17.67	20	16.85
28	16.79	29	18.13	28	17.58	27	16.82
Mar. 6	16.88	June 5	18.17	Sept. 4	17.50	Dec. 4	16.82
13	17.03	12	18.20	11	17.42	11	16.78
20	17.10	19	18.21	18	17.51	18	16.75
27	17.15	26	18.23	25	17.26	26	16.71

NHn 175.

Lowest daily water level, in feet above mean sea level, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	3.48	3.45	3.50	a3.78	4.07	4.20	4.28	4.11	3.80	3.54	3.28	3.14
2	3.48	3.45	3.50	a3.80	4.09	4.20	4.28	4.09	3.79	3.54	3.27	3.14
3	3.47	3.45	3.50	a3.81	4.10	4.20	4.28	4.09	3.78	3.53	3.27	3.13
4	3.47	3.45	3.50	3.82	4.11	4.22	4.28	4.08	3.77	3.53	3.26	3.13
5	3.47	3.45	3.51	3.82	4.13	4.23	4.27	4.07	3.77	3.53	3.25	3.13
6	3.46	3.45	3.52	3.82	4.14	4.24	4.27	4.06	3.76	3.51	3.24	3.12
7	3.45	3.45	3.53	3.82	4.15	4.25	4.27	4.05	3.75	3.50	3.23	3.12
8	3.45	3.46	3.54	3.83	4.16	4.26	4.26	4.04	3.74	3.50	3.22	3.12
9	3.44	3.46	3.55	3.83	4.17	4.27	4.25	4.03	3.73	3.48	3.21	3.11
10	3.44	3.46	3.56	3.83	4.18	4.27	4.25	4.02	3.72	3.47	3.21	3.11
11	3.44	3.46	3.57	3.84	4.18	4.28	4.24	4.00	3.72	3.47	3.20	3.10
12	3.44	3.46	3.59	3.85	4.19	4.28	4.24	3.99	3.71	3.46	3.19	3.10
13	3.43	3.46	3.59	3.85	4.19	4.28	4.24	3.98	3.70	3.45	3.18	3.09
14	3.43	3.46	3.59	3.86	4.20	4.28	4.23	3.97	3.69	3.44	3.18	3.09
15	3.43	3.46	3.60	3.87	4.20	4.29	4.23	3.95	3.68	3.44	3.18	3.09
16	3.45	3.46	3.62	3.87	4.20	4.29	4.22	3.94	3.68	3.43	3.18	3.08
17	3.44	3.46	3.63	3.88	4.20	4.29	4.22	3.93	3.67	3.42	3.18	3.08
18	3.44	3.46	3.64	3.88	4.20	4.30	4.21	3.92	3.66	3.42	3.17	3.08
19	3.44	3.46	3.65	3.89	4.20	4.30	4.21	3.91	3.65	3.41	3.17	3.08
20	3.44	3.47	3.66	3.90	4.20	4.30	4.20	3.90	3.64	3.40	3.17	a3.08
21	3.44	3.47	3.67	3.91	4.20	4.30	4.19	3.89	3.63	3.39	3.17	-
22	3.44	3.47	3.68	3.92	4.20	4.29	4.19	3.88	3.62	a3.38	3.16	-
23	3.44	3.47	3.69	3.93	4.20	4.29	4.18	3.87	3.61	a3.38	3.16	-
24	3.44	3.48	3.70	3.95	4.20	4.29	4.17	3.86	3.60	a3.37	3.16	-
25	3.45	3.48	3.70	3.97	4.20	4.29	4.17	3.85	3.59	a3.36	3.15	-
26	3.45	3.48	3.71	3.99	4.20	4.29	4.16	3.84	3.57	a3.35	3.15	b3.02
27	3.45	3.49	3.71	4.01	4.20	4.29	4.15	3.83	3.57	a3.35	3.15	-
28	3.45	3.49	a3.72	4.02	4.20	4.29	4.14	3.82	3.57	a3.34	3.15	-
29	3.45	3.49	a3.73	4.04	4.20	4.29	4.13	3.82	3.56	a3.33	3.15	-
30	3.45	....	a3.75	4.06	4.20	4.29	4.12	3.81	3.55	3.32	3.14	-
31	3.45	....	a3.77	....	4.20	....	4.12	3.80	....	3.30	....	

NHn 176. Measurements discontinued Sept. 18, 1940.

Water level, in feet below mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	0.94	Mar. 13	0.96	May 22	0.73	July 24	0.46
10	.96	20	.95	29	.70	31	.45
17	.96	27	.95	June 5	.66	Aug. 7	.42
24	.96	Apr. 3	.94	12	.63	14	.42
31	.96	10	.93	19	.60	21	.43
Feb. 7	.97	17	.91	26	.56	28	.42
14	.97	23	.88	July 3	.53	Sept. 4	.44
21	.99	May 1	.85	10	.51	11	.43
28	.98	8	.81	17	.47	18	.45
Mar. 6	.96	15	.77				

NHn 177. Water level at times affected by inflow of surface water. Measurements discontinued Apr. 3, 1940.

Water level, in feet above mean sea level, 1940

Jan. 3	5.23	Jan. 31	5.30	Feb. 28	5.39	Mar. 20	5.41
10	5.22	Feb. 7	5.32	Mar. 6	5.40	27	5.41
17	5.25	14	5.36	13	5.41	Apr. 3	5.41
24	5.27	21	5.37				

NHn 178.

Water level, in feet, with reference to mean sea level, 1940

Jan. 3	-1.29	Feb. 28	-1.29	Apr. 23	-0.97	June 19	-0.35
10	-1.72	Mar. 6	-1.57	May 1	-.65	26	-.20
17	-1.26	13	-1.39	8	-.51	July 3	-.55
24	-1.62	20	-1.46	15	-.47	10	-.01
31	-1.64	27	-1.37	22	-.48	17	-.20
Feb. 7	-1.28	Apr. 3	-1.37	29	-.53	24	-.22
14	-1.41	10	-1.37	June 5	-.33	31	-.29
21	-1.71	17	-.93	12	+.04	Aug. 7	-.17

a Estimated.
b Tape measurement.

NHn 178.--Continued.

Water level, in feet, with reference to mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 14	-0.65	Sept.18	-0.74	Oct. 23	-1.55	Nov. 27	-2.19
21	-.38	25	-1.16	30	-1.65	Dec. 4	-1.94
28	-.75	Oct. 2	-1.05	Nov. 6	-2.09	11	-2.40
Sept. 4	-.54	9	-1.38	13	-2.00	18	-2.49
11	-.56	16	-1.33	20	-2.02	26	-2.27

NHn 179.

Water level, in feet below mean sea level, 1940

Jan. 3	1.39	Apr. 3	1.32	July 3	0.39	Oct. 2	1.05
10	1.47	10	1.22	10	.21	9	1.17
17	1.38	17	1.04	17	.17	16	1.25
24	1.34	23	.78	24	.25	23	1.41
31	1.49	May 1	.61	31	.25	30	1.61
Feb. 7	1.47	8	.51	Aug. 7	.38	Nov. 6	1.77
14	1.40	15	.52	14	.50	13	1.76
21	1.48	22	.45	21	.52	20	1.84
28	1.45	29	.50	28	.63	27	1.85
Mar. 6	1.39	June 5	.24	Sept. 4	.59	Dec. 4	1.76
13	1.36	12	.20	11	.57	11	2.03
20	1.33	19	.19	18	.79	18	2.18
27	1.32	26	.27	25	.95	26	2.01

NHn 182. Well destroyed Jan. 10, 1940. Water level Jan. 3, 1940, 4.48 feet above mean sea level.

NHn 183. Replaces well NHn 182. Frank X.Hald Storage Co. On south side of Davenport Avenue, about 500 feet west of West Street and 20 feet east of well NHn 182. Unused driven industrial well, diameter 8 inches, measured depth 24.2 feet. Measuring point, top of pipe, 0.2 foot below pump room floor, 6.0 feet below land surface and 17.94 feet above mean sea level. Water level Dec. 13, 1939, 13.44 feet below measuring point and 4.50 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Dec. 13, 1939	4.50	Apr. 23, 1940	5.51	Aug. 28, 1940	4.89
20	4.46	May 1	5.75	Sept. 4	4.82
27	4.46	8	5.83	11	4.73
Jan. 3, 1940	4.50	15	5.81	18	4.65
17	4.54	22	5.78	25	4.56
24	4.61	29	5.71	Oct. 2	4.53
31	4.59	June 5	5.85	9	4.45
Feb. 7	4.53	12	5.88	16	4.37
14	4.52	19	5.84	23	4.31
21	4.50	26	5.75	30	4.25
28	4.52	July 3	5.65	Nov. 6	4.21
Mar. 6	4.63	10	5.55	13	4.17
13	4.78	17	5.47	20	4.33
20	4.89	24	5.38	27	4.43
27	4.95	31	5.28	Dec. 4	4.37
Apr. 3	4.96	Aug. 7	5.22	11	4.38
10	5.02	14	5.11	18	4.30
17	5.25	21	5.00	26	4.28

NHn 202. City of New Haven, Department of Parks. About 130 feet east of Walnut Street and 130 feet south of Wallace Street. Unused dug public supply well, diameter 24 inches, measured depth 20.5 feet. Measuring point, top of stone manhole curb, at land surface and 27.16 feet above mean sea level. Water level Apr. 17, 1940, 19.31 feet below measuring point and 7.85 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 17	7.85	May 22	7.80	June 26	7.83	July 31	7.68
23	7.96	29	7.79	July 3	7.76	Aug. 7	7.60
May 1	8.17	June 5	7.87	10	7.73	14	7.59
8	7.95	12	7.82	17	7.84	21	7.55
15	7.82	19	7.74	24	7.75	28	7.54

NHn 202.--Continued.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 4	7.52	Oct. 9	7.67	Nov. 6	7.75	Dec. 4	7.68
11	7.45	16	7.59	13	7.79	11	7.63
18	7.35	23	7.54	20	7.77	18	7.64
25	7.52	30	7.54	27	7.70	26	7.56
Oct. 2	7.66						

NHn 205. (One of Chapel Street group of wells described in Water-Supply paper 540, p. 111, No. 36). New Haven Gas Light Company. On north side of Chapel Street about 600 feet east of East Street and about 600 feet west of the Mill River. Unused driven industrial well, diameter 2 inches, measured depth 37.4 feet. Measuring point, top of hole in 2-inch elbow, 0.8 foot above land surface and 11.66 feet above mean sea level. Water level July 17, 1940, 12.08 feet below measuring point and 0.42 foot below mean sea level. Water level fluctuates with the tide.

Water level, in feet below mean sea level, 1940

July 17	0.42	Aug. 28	1.07	Oct. 9	1.52	Nov. 20	1.29
24	.70	Sept. 4	1.43	16	.58	27	1.10
31	.36	11	.48	23	1.65	Dec. 4	.78
Aug. 7	.62	18	.59	30	.76	11	.97
14	.53	25	1.30	Nov. 6	1.63	18	.39
21	.80	Oct. 2	.19	13	.91	26	.29

NHn 222. City of New Haven, Department of Parks. On north side of Henry Street, about 80 feet east of Ashmun Street. Unused drilled public supply well, diameter 6 inches, measured depth 45.4 feet. Measuring point, top of stone manhole curb, at land surface and 41.92 feet above mean sea level. Water level Sept. 11, 1940, 15.97 feet below measuring point and 25.95 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Sept. 11	25.95	Oct. 23	25.41	Nov. 20	25.17	Dec. 11	24.93
18	25.83	30	25.37	27	25.11	18	24.88
Oct. 9	25.56	Nov. 6	25.29	Dec. 4	25.01	26	24.73
16	25.49	13	25.19				

NHn 224. (One of two wells described in Water-Supply Paper 540, p. 113, No. 45). Atlas-Ansonia Company. About 100 feet south of Grant Street and 280 feet west of Plymouth Street. Unused dug industrial well, diameter 30 inches, measured depth 23.4 feet. Measuring point, top of concrete well liner, at land surface and 24.82 feet above mean sea level. Water level Sept. 11, 1940, 21.13 feet below measuring point and 3.69 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Sept. 11	3.69	Oct. 9	3.62	Nov. 6	3.57	Dec. 4	3.56
18	3.68	16	3.53	13	3.54	11	3.55
25	3.62	23	3.48	20	3.70	18	3.50
Oct. 2	3.62	30	3.43	27	3.67	26	3.53

NHn 235. C. Cowles and Company. About 100 feet north of Water Street and 70 feet west of Chestnut Street. Unused drilled industrial well, diameter 8 inches, measured depth 38.6 feet. Measuring point, top of cast iron manhole cover seat, at land surface and 14.80 feet above mean sea level. Water level Oct. 2, 1940, 15.02 feet below measuring point and 0.22 foot below mean sea level.

Water level, in feet below mean sea level, 1940

Oct. 2	0.22	Oct. 30	0.37	Nov. 20	0.42	Dec. 11	0.47
9	.29	Nov. 6	.50	27	.35	18	.43
16	.34	13	.53	Dec. 4	.37	26	.37
23	.43						

NHn 245. Atlantic Bottling Works. On south side of Fair Street, about 90 feet east of Prindle Street. Unused driven industrial well, diameter 1½ inches, measured depth 45.7 feet. Measuring point, top of pipe, 1.0 foot above land surface and 18.71 feet above mean sea level. Water level Oct. 2, 1940, 18.25 feet below measuring point and 0.46 foot above mean sea level.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 2	0.46	Oct. 30	0.21	Nov. 20	0.57	Dec. 11	0.42
9	.45	Nov. 6	.44	27	.48	18	.42
16	.27	13	.40	Dec. 4	.51	26	.31
23	.25						

NHn 250. I. Newman & Sons. On north side of Oak Street, about 180 feet east of Factory Street. Unused dug industrial well, diameter 10 feet, measured depth 12.9 feet. Measuring point, top of metal plate on well hatchway frame, 3.0 feet below land surface and 11.93 feet above mean sea level. Water level Oct. 9, 1940, 7.14 feet below measuring point and 4.79 feet above mean sea level.

Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Oct. 9	a4.79	Nov. 20	a4.43	Dec. 21	4.01	Dec. 27	3.97
16	a4.76	27	a4.44	22	4.08	28	3.92
23	a4.64	Dec. 4	a4.33	23	4.13	29	4.00
30	a4.62	11	a4.19	24	4.04	30	3.96
Nov. 6	a4.59	18	a4.06	25	4.10	31	3.90
13	a4.58	20	b4.00	26	4.05		

a Tape measurement.
b Estimated.

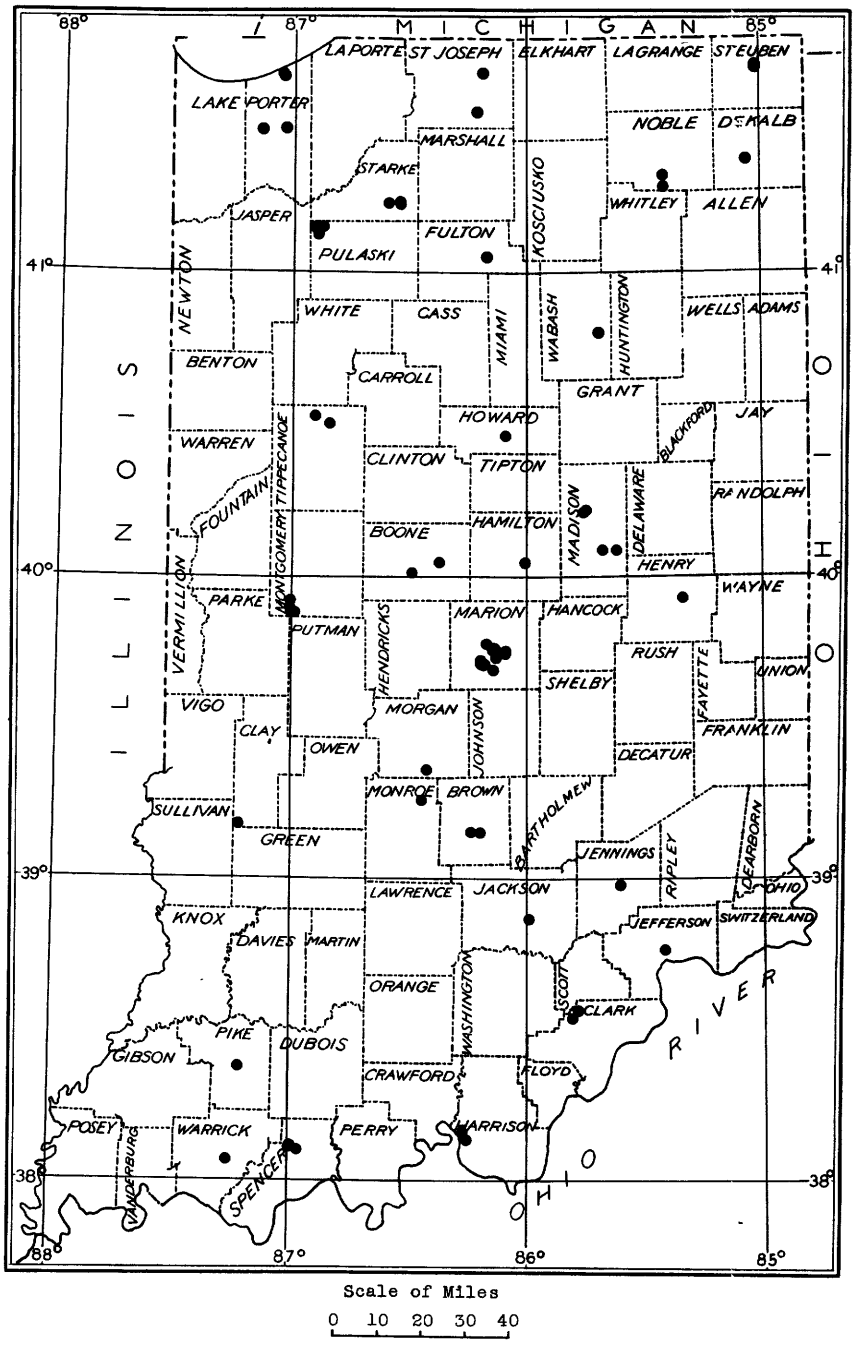
INDIANA

By C. L. McGuinness

The program of water-level measurements in observation wells in Indiana, begun in 1935 in the north half of the State and in 1936 in the south half of the State, was continued in 1940 in cooperation between the Federal Geological Survey and the Division of Geology of the Indiana State Department of Conservation. Work was also continued on the detailed study of the water resources of the Indianapolis area, begun in 1938. A memorandum for the press giving some data on ground-water conditions in the Indianapolis area was released in August, and at the same time records of about 850 wells in the area were placed on file for examination by interested persons in the office of the Federal Survey in Washington, D. C., and the office of the State Division of Geology in Indianapolis.

Water-level measurements were discontinued in a few wells in the State in 1940 but were begun or resumed in several other wells; the number of wells on which observations were being made at the end of the year remained at about 60. Measurements were made at least once in about 65 wells. Measurements are made through the cooperation of the State Department of Conservation, the Civilian Conservation Corps, and municipal water departments. Measurements are made twice a month in most of the wells, once a month or once a week in a few wells, and daily in one well in Indianapolis. About 1,400 individual measurements were made in 1940. Two float-type automatic water-stage recorders were in operation on wells in Indianapolis during the year.

In the following discussion of trends in water-level fluctuations the low and high seasonal stages of 1940 are compared with those of the previous year; net changes during the calendar year 1940 are also given. Essentially complete water-level records were obtained for 52 wells in 1940, including 15 wells in Marion County (Indianapolis). In 36 wells, including 14 wells in Marion County, the water levels declined to lower stages during the fall of 1940 than during the fall of 1939 and winter of 1939-40; in 13 wells the water levels did not decline as low during the fall of 1940 as during the previous fall and winter; in 3 wells the levels reached during the fall of 1940 were about the same as those reached during the previous fall and winter. In 1940 the water levels in practically



Scale of Miles

0 10 20 30 40

Figure 2.--Map of Indiana showing location of observation wells, 1940.

all the wells reached their lowest seasonal stages before the end of the year, whereas in 1939 the water levels in about half the wells were still declining at the end of the year, and in these wells the lowest seasonal stages were not reached until January or February, 1940. The average net decline in the 52 wells from the fall and winter of 1939-40 to the fall of 1940 was 1.19 feet. The average net decline for this period in the 15 wells in Marion County was 2.33 feet; that for the 37 wells in other counties was 0.73 foot.

The highest seasonal stages in 1940 in the 52 observation wells in Indiana averaged 2.23 feet lower than the highest stages of 1939. The high stages of 1940 in the 15 wells in Marion County averaged 2.63 feet lower than in 1939; those of the 37 wells in other counties averaged 2.12 feet lower than in 1939.

Owing to the fact that recovery of the water levels from the low seasonal stages of 1939 did not begin until early in 1940, whereas recovery from the low seasonal stages of 1940 was in progress at the end of the year, the average net decline in the 52 wells from January 1, 1940, to January 1, 1941, was only 0.41 foot. The 15 wells in Marion County showed an average net decline in water level of 2.12 feet from January 1, 1940, to January 1, 1941; the 37 wells in other counties showed an average net rise in water level during this period of 0.32 foot.

Of 17 wells in northern Indiana, 9 wells showed net rises in water level from the fall and winter of 1939-40 to the fall of 1940, 6 wells showed net declines, and 2 wells showed no net change. For the 17 wells the rises almost exactly equaled the declines, and there was no appreciable average net change. Of 29 wells in central Indiana, 1 well showed a net rise in water level during the period, 27 wells showed net declines, and 1 well showed no net change. For the 29 wells the average net decline was 1.95 feet. As indicated above, the average net decline in the 15 wells in Marion County was 2.33 feet; that in the 14 wells in other counties was 1.55 feet. Of 6 wells in southern Indiana, 2 wells showed net rises in water level for the period and 4 wells showed net declines. For the 6 wells the average net decline was 0.64 foot.

Precipitation in the State during 1940 was 32.55 inches, 6.74 inches below normal. The precipitation was considerably above normal in April, and slightly above normal in February, May and November. The other months of the year had deficiencies ranging from 0.42 inch to 2.15 inches. The accumulated deficiency in precipitation during 1940 was about 4 inches for the northern part of the State, about 9 inches for the central part of the State, and a little less than 9 inches for the southern part of the State.

Water levels in most of the wells in the State that showed seasonal fluctuations reached their highest stages of 1940 in late April or early May, somewhat later than in 1939, and in several wells the high stages were not reached until June. Lowest stages of the year in most of these wells were reached in November, although in several wells the low stages were reached in late October and in several others the low stages were reached in December. As indicated above, the water levels in practically all the wells began to recover before the end of the year.

The lowest water levels for the period of record were reached in 26 wells during the fall of 1940, including most of the wells in which the previous record low stages were reached in late 1939 or early 1940, and including also 4 wells in which the previous low stages were reached in 1936. Ten of the 26 wells are in Indianapolis.

The average range of fluctuation in 51 of the 52 wells for which the records for 1940 are essentially complete was about 6.3 feet, 0.3 foot less than in 1939. This brings out the fact that although the 1940 fall stages were lower than those of 1939, the spring 1940 high stages, as compared with those of 1939, were still lower. The fluctuation of water level in one well (Marion 16) is not included in the average, because this well apparently represents special conditions, similar to conditions in the vicinity of Marion 4, described in Water-Supply Paper 886.

Changes that have occurred in water levels in certain observation wells in Indiana during the period of record are summarized in the table below. Because ground-water conditions differ considerably from place to place in the State and because parts of the State are not adequately represented by observation wells, the figures given should not be regarded as absolute average values for the entire State or even for the parts of the State represented, but may be regarded as showing trends.

Net rises (+) or declines (-) of water levels in selected observation wells in Indiana during the period of record (1935-40 in north half of State, 1936-40 in south half of State)

Wells	Spring 1940 average high water level compared with average spring high water level during period of record (feet)	Fall 1940 average low water level compared with average fall low water level during period of record (feet)
Shallow water-table wells, presumably not affected by pumping:		
Northern Indiana: Fulton 3, Noble 2, 3; Porter 2, 3; Steuben 1, 2.	-0.79	+0.51
Central Indiana: Boone 1, 2; Madison 1,3,4; Monroe 1; Montgomery 1, 2,3,4; Morgan 1; Tippecanoe 3.	-1.46	-1.73
Southern Indiana: Clark 1, 2; Harrison 1, 3; Jackson 1; Jennings 1.	-1.21	-1.13
Deep wells presumably not affected by pumping (northern and central Indiana):		
Pulaski 1,3; Starke 1,2; Tippecanoe 1.	-0.51	-0.66
Deep wells affected by pumping from public supply wells (northern and central Indiana):		
DeKalb 1; Hamilton 2; Henry 1; Howard 1; Madison 2; St. Joseph 1.	-1.73	-1.49
Marion County (Indianapolis) wells:		
Limestone wells: Marion 1, 3, 4, 6, 7.	-1.32	-3.79
Gravel well downtown: Marion 2.	-1.47	-7.92
Gravel wells at Sanitation Plant: Marion 13, 14, 15 (1929-40 average)	-2.22	-0.24

In the following pages the wells are listed by counties. Descriptions are given for only those wells whose records do not appear in Water-Supply Papers 817, 840, 845, and 886. Names of the observers are given for each well or group of wells, except for wells in which the only measurements during 1940 were made by G. F. Fix, Assistant State Geologist, or by the writer.

Boone County

Boone 1. Metropolitan Life Insurance Co. About 3 miles south of Lebanon along State Highway 39, NW¼NW¼ sec. 23, T. 18 N., R. 1 W.

Boone 2. R. W. Correll. At east end of old school house on south side of State Highway 32, about 3 miles east of Lebanon, SE¼SE¼ sec. 4, T. 18 N., R. 1 E.

Measurements made by C. R. Brown, technical foreman, CCC camp D-7, Lebanon.

Water levels in wells 1 and 2, in feet below measuring points, 1940

Date	Boone 1	Boone 2	Date	Boone 1	Boone 2
Jan. 2	10.13	9.72	July 3	6.5	6.9
18	10.8	9.9	20	8.0	8.4
Feb. 3	10.8	8.5	Aug. 3	8.48	8.4
15	10.2	7.2	17	9.75	9.4
Mar. 1	9.4	6.4	Sept. 14	10.9	10.6
25	9.1	6.0	Oct. 18	12.15	11.0
Apr. 11	5.5	3.6	Nov. 2	10.8	11.0
20	3.1	2.5	18	12.4	10.53
May 4	2.5	2.4	19	12.40	10.40
June 6	4.8	5.6	Dec. 12	10.96	9.25
20	5.5	6.1			

Brown County

Brown 1. Brown County State Park. Measurements discontinued.

Brown 2. Brown County State Park. Near head of valley northwest of Blockhouse.

Brown 3. Brown County State Park. In front of Hoosier's Nest cabin, near tower at entrance to Brown County State Game Preserve.

Measurements made by Paul Voland, Brown County State Park.

Water levels in wells 2 and 3, in feet below measuring points, 1940

Date	Brown 2	Brown 3	Date	Brown 2	Brown 3
Jan. 1	17.65	11.0	Nov. 8	14.7	11.15
Feb. 1	17.65	11.0	30	13.9	10.55
Oct. 3	14.30	11.10	Dec. 19	8.05	10.75
19	14.4	11.15			

Clark County

Clark 1. Clark County State Forest. Schlamm well, west side of trail 9, about 1/8-mile north of trail 10, sec. 36, T. 2 N., R. 6 E.

Clark 2. Clark County State Forest. At Purdue camp site.

Measurements made by K. W. Vernon and Alfred Fowler, CCC camp S-51-A, W. E. Hanson, project superintendent.

Water levels in wells 1 and 2, in feet below measuring points, 1940

Date	Clark 1	Clark 2	Date	Clark 1	Clark 2
Mar. 11	12.2	10.8	Aug. 20	21.8	11.5
30	15.8	10.95	Sept. 2	22.7	12.1
Apr. 22	3.85	3.75	16	22.9	12.6
30	9.2	2.3	Oct. 1	22.9	12.7
May 16	13.8	2.6	4	22.66	12.59
June 5	13.0	4.0	17	23.0	13.0
18	18.5	5.2	Nov. 4	23.4	12.8
July 2	19.5	6.0	18	23.5	12.9
16	20.5	7.4	Dec. 3	24.1	13.1
Aug. 2	21.3	9.7	16	24.5	12.8

Clay County

Clay 1. Shakamak State Park. In pump house at headquarters of CCC camp SP-3. Altitude of measuring point, 580.35 feet above mean sea level. The well is near a lake formed by a dam on a stream. At normal lake level (552.4 feet above mean sea level) the distance from its nearest edge to the well is 1940 feet. The distance from the old stream channel to the well is 339 feet, and the altitude in the channel at this point is about 545 feet above mean sea level. The lake was lowered 5 feet Sept. 10, 1940, to an altitude of 547.4 feet, and an additional 6 feet Oct. 22, 1940, to an altitude of 541.4 feet. At the end of the year the lake bed near the well was dry, but check dams were holding between 2 and 3 feet of water in the stream channel, at an altitude between 547 and 548 feet above mean sea level.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	28.54	Oct. 13	32.34	Oct. 30	33.54	Dec. 30	33.59
July 12	28.59	23	33.33	Nov. 27	32.99		

De Kalb County

De Kalb 1. Auburn Water Department. Well 3 at Auburn waterworks. Measurements made by Auburn Water Department, Ted Haynes, superintendent.

Water levels, in feet below measuring point, 1940

Date	Static water level	Pumping water level	Date	Static water level	Pumping water level
Jan. 11	9.5	19.5	July 29	10.5	18.5
25	10.5	18.5	Aug. 12	10.5	19.5
Feb. 12	8.5	16.5	26	9.5	17.5
26	8.5	16.5	Sept.10	10.5	18.5
Mar. 11	8.5	16.5	28	11.5	19.5
25	9.5	16.5	Oct. 10	10.5	18.5
Apr. 11	8.5	17.5	27	8.5	18.5
May 13	8.5	16.5	Nov. 12	10.5	18.5
27	8.5	17.5	25	10.5	18.5
June 11	8.5	16.5	Dec. 10	10.5	18.5
July 10	9.5	18.5			

Dubois County

Dubois 1. Measurements discontinued.

Dubois 2. Measurements discontinued.

Franklin County

Franklin 1. No measurements made in 1940.

Fulton County

Fulton 3. City of Rochester. At Federal Fish Hatchery east of Rochester. Measurements made by C. H. Walker, foreman, and K. W. Morrison, Federal Fish Hatchery, Rochester.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 1	13.1	May 1	9.08	Aug. 1	10.79	Nov. 1	12.55
Mar. 1	10.4	June 1	9.37	Sept. 1	10.82	20	12.50
Apr. 1	11.2	July 1	10.0	Oct. 1	11.18	Dec. 1	12.60

Hamilton County

Hamilton 2. Public Service Co. of Indiana. At water plant, Noblesville. Measurements made by A. L. Wann, engineer, Noblesville water plant, Public Service Co. of Indiana.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 1	24.39	Apr. 14	23.34	Aug. 16	25.38	Oct. 18	26.47
17	24.02	May 19	23.02	Sept. 5	25.35	Dec. 7	25.28
Mar. 2	23.60	Aug. 1	25.02	Oct. 2	25.11		

Harrison County

Harrison 1. Harrison County State Forest. On south side of road near Lowe Pond, NE¼NE¼ sec. 23, T. 4 S., R. 2 E.

Harrison 3. Harrison County State Forest. On south side of truck trail 1, SE¼NW¼ sec. 2, T. 4 S., R. 2 E.

Measurements made by Dewey N. Hickman, forest superintendent, Harrison County State Forest.

Water levels in wells 1 and 3, in feet below measuring point, 1940

Date	Harrison 1	Harrison 3	Date	Harrison 1	Harrison 3
Jan. 15	1.06	6.89	July 15	2.41	5.75
31	1.30	7.20	31	3.24	6.22
Feb. 15	0.66	3.16	Aug. 15	3.64	6.56
29	0.85	3.04	31	4.00	6.87
Mar. 15	1.06	3.01	Sept.14	3.78	6.85
31	0.53	3.16	30	4.11	7.10
Apr. 15	1.02	3.15	Oct. 12	4.22	7.22
30	1.01	2.80	15	4.24	7.28
May 15	2.98	3.67	31	4.57	7.37
31	0.87	3.33	Nov. 15	3.71	7.35
June 15	2.59	4.51	30	2.56	7.34
29	2.45	5.36	Dec. 15	2.32	7.30

Henry County

Henry 1. City of New Castle, at waterworks. Measurements made by Nelson Howard, engineer, New Castle Water and Light Department, C. E. Scholl, superintendent.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	20.0	Apr. 2	20.0	July 1	26.0	Oct. 21	25.0
15	25.0	15	16.0	30	30.0	Nov. 4	20.0
Feb. 5	27.0	29	23.0	Sept. 2	22.0	18	19.0
16	21.0	June 1	25.0	15	24.0	Dec. 2	34.0
Mar. 1	27.0	17	25.0	30	29.0	17	27.0
18	22.0						

Howard County

Howard 1. Pittsburg Plate Glass Co. On north side of creek, about 0.1 mile west of Kokomo waterworks. Measurements made by W. O. Thompson, engineer, Kokomo waterworks, F. P. Stradling, superintendent.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	16.4	Apr. 1	16.7	July 25	20.4	Oct. 1	20.0
15	17.8	16	14.9	31	20.3	14	19.8
Feb. 1	18.6	May 4	15.2	Aug. 15	20.1	31	19.0
15	18.0	June 3	16.6	Sept. 3	19.5	Nov.20	18.5
Mar. 2	16.9	July 2	17.7	13	19.9	Dec. 2	18.0
15	16.5						

Jackson County

Jackson 1. Jackson County State Forest. Near northeast corner of office of CCC camp S-55. Measurements made by F. W. Crozier, clerk, CCC camp S-55, Jackson County State Forest, A. C. Foley, project superintendent. New measuring point, bottom of new wooden cover at east side of hinged trap door, 0.04 foot higher than old measuring point.

Water level, in feet below new measuring point, 1940

Date		Date		Date		Date	
Jan. 2	8.65	Apr. 1	5.65	July 1	7.85	Oct. 3	9.74
15	8.7	15	4.65	15	8.0	15	9.9
Feb. 1	8.4	May 1	4.55	Aug. 1	9.15	Nov. 1	10.15
15	7.7	15	6.4	15	9.35	15	9.85
Mar. 1	5.7	June 1	6.65	Sept. 1	9.25	Dec. 1	9.6
15	5.7	15	7.0	15	9.6	16	9.0

Jasper County

Jasper 1. Measurements discontinued.

Jefferson County

Jefferson 2. Clifty Falls State Park, at custodian's house. Measurements made by V. E. Hyden, Clifty Falls State Park, M. L. Carr, custodian.

Water level, in feet below measuring point, 1940

Date		Date		Date		Date	
Jan. 12	30.0	June 5	28.6	Sept. 5	30.1	Oct. 8	30.3
May 6	30.3	July 19	30.0	Oct. 4	30.4		

Jennings County

Jennings 1. Muscatatuck State Park. In northwest corner of park, near North Vernon, SE¼NW¼ sec. 3, T. 6 N., R. 8 E. Measurements made by Charles Vogel, Muscatatuck State Park.

Water level, in feet below measuring point, 1939-40

Date	Water level	Date	Water level	Date	Water level
Nov. 30, 1939	15.11	May 15	6.02	Sept.15	15.09
Dec. 15	15.28	June 1	7.13	Oct. 1	15.26
31	15.59	15	7.92	4	15.26
Feb. 15, 1940	15.70	July 1	9.06	15	15.58
29	15.73	15	10.01	Nov. 1	15.98
Mar. 15	14.82	Aug. 1	12.88	15	16.14
31	10.87	15	13.67	Dec. 1	15.97
Apr. 15	8.93	Sept.1	14.74	15	15.88
30	6.63				

Kosciusko County

Kosciusko 1. No measurements made in 1940.

Kosciusko 2. No measurements made in 1940.

Madison County

Madison 1. Mounds State Park. Measurements made by personnel of Mounds State Park, Mrs. Anne Norton, custodian.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	8.20	Apr. 1	8.41	July 1	6.64	Oct. 1	8.11
17	8.70	15	8.22	15	6.57	15	8.23
Feb. 1	8.42	May 1	7.74	Aug. 1	7.86	Nov. 1	8.20
15	8.35	15	6.35	15	7.48	15	8.3
Mar. 1	7.82	June 1	6.35	Sept. 1	7.20	Dec. 1	8.3
15	7.74	15	6.36	15	7.74	15	8.4

Madison 2. Anderson Water Department. Well 2 at Anderson waterworks. Measurements made by B. E. Burrows, chief engineer, Anderson Water Department, W. J. Norton, superintendent.

Water level, in feet below measuring point, 1940

Jan. 4	16.86	Apr. 1	17.03	July 1	16.08	Oct. 2	17.03
16	16.90	15	16.73	14	16.18	15	17.09
Feb. 1	17.15	May 1	15.60	Aug. 1	16.50	Nov. 2	17.10
15	17.10	15	15.73	15	16.71	16	17.17
Mar. 1	17.00	June 1	15.86	Sept. 2	16.67	30	17.13
15	16.85	15	15.94	16	16.84	Dec. 16	17.09

Madison 3. Albert Closser. About 2 blocks east of CCC camp SCS-21, Frankton. An obstruction in the casing prevents measurements when the water level is low.

Madison 4. Walter McCoy. About 3 blocks south of CCC camp SCS-21, Frankton.

Measurements made by Wilbert Lightle, CCC camp SCS-21, H. C. List, project superintendent.

Water levels in wells 3 and 4, in feet below measuring points, 1940

Date	Madison 3	Madison 4	Date	Madison 3	Madison 4
Jan. 8	Dry	11.83	July 15	24.92	8.92
15	Dry	a 7.4	31	25.07	9.31
31	Dry	10.18	Aug. 15	25.48	10.27
Feb. 14	25.43	6.59	30	25.15	10.18
Mar. 1	26.1+	6.26	Sept.14	25.53	10.65
15	25.2+	6.15	Oct. 1	25.53	10.95
30	24.93+	6.78	15	25.8+	11.28
Apr. 15	24.41	3.17	Nov. 1	25.50	11.68
30	24.39	4.92	14	25.3+	11.84
May 15	24.12	5.66	15	Dry	11.95
31	24.08	6.39	29	25.8+	12.16
June 15	24.44	8.96	Dec. 18	25.8+	12.44
July 2	24.92	10.01	30	25.8+	12.00

Marion County

Marion 1. Indianapolis Water Co. "Motor well 15", at intersection of 18th and Harding Streets, in Riverside well field, Indianapolis. Measurements made by Indianapolis Water Co., W. C. Mabee, chief engineer. Measurements generally made at 10 a.m.

Water level, in feet below measuring point, 1940

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	11.16	.....	2.52	....	.....	2.14	4.50	.....	.....	.....	.....
2	2.62	.....	.....	2.66	1.20	1.18	2.38	.....	2.88	5.50	5.42	.....
3	.....	11.28	.....	2.68	....	1.48	....	.....	.....	5.50	.....	.....
4	.....	11.00	.....	2.70	....	6.20	2.00	.....	.....	.....	.....	.....
5	.....	11.20	9.30	2.58	....	4.10	....	3.17	3.30	....	.....	.....
6	7.00	.....	.....	2.60	....	1.80	....	.....	.....	4.96	.....	.....
7	8.74	.....	9.25	2.66	....	1.89	....	4.40	.....	.....	.....	.....

a Frozen

Marion County--Continued.

Marion 1.--Continued.

Water level, in feet below measuring point, 1940

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
8	7.82	6.10	.....	2.36	.....	1.86	.....	5.88	.....	5.54	.....	2.46
9	8.22	.....	5.30	2.40	1.34	1.50	.....	6.10	.....	5.52	.....	2.68
10	8.38	.....	3.06	2.36	.....	1.56	2.34	6.28	.....	5.54	.....	3.00
11	8.54	.....	2.90	2.30	.....	3.20	2.30	3.16	3.36	5.64	.....	2.88
12	9.00	.....	2.98	.....	0.90	3.60	.....	5.88	3.42	5.60	.....	2.80
13	8.90	5.48	2.94	.....	1.15	3.70	.....	6.18	.....	5.32	.....	2.90
14	8.48	.....	2.88	.....	1.38	.....	1.84	4.64	.....	5.28	.....	2.72
15	8.82	.....	2.80	.....	1.40	.....	2.08	7.06	.....	5.15	.....	....
16	9.39	.....	2.74	.....	1.44	.....	2.32	.....	.....	....	.....	....
17	.....	.....	2.40	2.02	1.50	.....	6.20	.....	3.34	5.48	.....	2.78
18	10.20	.....	2.42	1.72	1.34	.....	.....	.....	.....	....	3.10	....
19	.....	5.18	2.62	.....	1.14	.....	3.84	.....	.....	....	3.30	2.66
20	10.22	5.26	.....	.....	1.28	2.22	2.62	.....	.....	....	3.32	....
21	.....	5.22	2.58	2.08	1.56	.....	4.04	3.40	.....	....	.....	....
22	.....	5.20	.....	2.62	.....	.....	2.62	.....	.....	....	3.18	....
23	10.18	5.30	.....	2.96	.....	2.00	4.52	.....	.....	5.60	3.10	....
24	10.38	5.10	.....	3.26	.....	2.12	2.70	.....	5.36	....	3.08	2.64
25	10.56	.....	.....	1.94	.....	2.22	7.80	.....	.....	....	3.12	....
26	.....	5.01	.....	1.38	.....	2.20	.....	3.06	.....	....	.....	....
27	10.84	5.32	2.60	1.16	.....	.....	.....	9.00	.....	....	.....	....
28	10.58	.....	2.50	.98	.....	2.26	.....	.....	.....	....	.....	....
29	.....	5.26	.....	1.04	.....	2.12	8.36	4.00	.....	5.56	.....	2.38
30	10.54	.....	2.56	1.23	1.52	1.98	.....	.....	.....	....	.....	....
31	11.24	.....	2.36	.....	.....	.....	.....	.....	.....	....	.....	2.62

Marion 2. Security Trust Bank Building, 130 East Washington Street, Indianapolis. Automatic water-stage recorder installed Dec. 20, 1939. Measuring point 688.27 feet above mean sea level.

Lowest water level each day of record, in feet below measuring point, 1939 (from recorder charts)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Dec. 21	26.88	Dec. 24	26.78	Dec. 27	26.44	Dec. 30	26.32
22	26.88	25	26.71	28	26.41	31	26.25
23	26.84	26	26.56	29	26.38		

Lowest water level each day of record, in feet below measuring point, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	26.15	25.11	24.79	25.05	.....	28.58	34.40	.....	.....	36.73	35.85	33.21
2	26.04	25.16	(b)	25.07	.....	28.74	34.61	.....	.....	36.59	35.79	33.17
3	26.01	25.16	.....	.....	.....	28.98	34.74	.....	.....	36.49	35.69	33.12
4	25.96	25.10	.....	25.32	.....	29.39	34.74	.....	39.02	36.65	35.55	33.04
5	25.92	25.00	.....	.....	.....	29.79	34.74	.....	39.06	36.92	35.42	32.99
6	25.90	25.00	24.77	.....	.....	30.18	34.89	.....	39.16	37.05	35.35	32.98
7	25.84	25.03	24.77	.....	.....	30.54	34.89	37.79	39.28	37.07	35.24	32.92
8	25.72	25.03	24.82	.....	.....	30.86	34.80	37.89	39.30	36.85	35.12	32.92
9	25.71	25.03	24.82	.....	.....	30.95	35.00	38.01	39.26	36.65	35.01	32.89
10	(a)	25.03	24.82	25.69	.....	31.25	35.17	38.16	39.28	36.49	34.89	32.79
11	.....	24.97	(c)	25.75	.....	31.58	(d)	38.16	.....	36.37	34.73	32.78

a Jan. 10-11, highest water level 25.55 feet; lowest water level 25.67 feet.

b Mar. 2-5, highest water level 24.69 feet; lowest water level 24.79 feet.

c Mar. 11-14, highest water level 24.76 feet; lowest water level 24.83 feet.

d July 11-20, highest water level 35.17 feet; lowest water level 36.16 feet.

Marion County--Continued.

Marion 2.--Continued.

Lowest water level each day of record, in feet below measuring point, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
12	25.58	24.91	.....	25.76	.....	31.82	....	38.16	.....	36.62	34.67	32.75
13	25.58	24.91	.....	25.79	.....	32.15	....	.....	.....	36.78	34.58	32.75
14	25.49	24.93	.....	25.79	.....	32.42	....	.....	.....	36.78	34.46	32.74
15	25.48	24.94	24.83	25.78	27.89	32.69	....	.....	.....	36.76	34.35	32.73
16	25.48	24.94	24.87	25.89	27.89	32.74	....	.....	.....	36.59	34.27	32.60
17	25.42	24.94	24.87	.....	27.84	32.90	....	.....	.....	36.39	34.17	32.58
18	25.42	24.88	24.83	26.01	28.03	33.12	....	.....	37.40	36.26	34.08	32.58
19	25.40	(a)	24.83	26.01	28.10	33.36	....	.....	37.31	36.10	33.98	32.55
20	25.40	.....	24.90	26.03	28.20	33.55	....	.....	37.59	36.00	33.90	32.51
21	25.39	.....	24.90	26.03	28.50	33.67	36.17	.....	37.98	35.91	33.85	32.48
22	25.32	.....	24.94	26.02	28.79	33.75	36.19	.....	38.08	35.76	33.76	32.43
23	25.29	.....	24.95	(b)	29.09	33.84	36.36	.....	38.09	35.63	33.74	32.38
24	25.28	24.80	24.95	.....	29.08	33.80	36.49	.....	37.85	35.58	33.66	32.27
25	25.28	24.80	24.93	.....	28.98	33.85	36.68	.....	37.73	35.90	33.57	(c)
26	25.25	24.72	24.91	.....	28.87	33.97	36.86	.....	37.61	36.19	33.45	.....
27	25.22	24.65	24.94	.....	28.70	34.15	36.93	.....	37.39	36.35	33.37	.....
28	25.20	24.72	24.96	.....	28.59	34.38	....	.....	37.22	36.35	33.35	.....
29	25.10	24.72	25.03	.....	28.60	34.45	....	.....	37.10	36.26	33.28	.....
30	.....	.....	25.04	.....	28.60	34.48	....	.....	36.93	36.10	33.26	.....
31	.....	.....	25.04	.....	28.58	.....	....	.....	.....	35.98	.....	.....

Marion 3. Emmerich Manual Training High School. In north room of school building, South Meridian and Henry Streets, Indianapolis.

Marion 4. 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.

Marion 5. Measurements discontinued.

Marion 6. Polar Ice and Fuel Co. At Artificial Plant, west of building near railroad track, 317 West Ohio Street, Indianapolis.

Marion 7. Pennsylvania Railroad. In old railroad yards (Belville Street) east of Willard Park, 275 feet south of East Washington Street and just east of Willard Park fence.

Marion 8. Pennsylvania Railroad. About 225 feet south of well 7. Measuring point 753.89 feet above mean sea level, instead of 753.88 feet as given in Water-Supply Paper 886.

Marion 9. At former American Brewery, West Ohio Street at Indianapolis Water Co. canal, Indianapolis, and about 250 feet south of well 6.

Marion 10. U. S. Federal Building. In basement of building. Indianapolis.

Measurements in wells 2, 3, 4, 6, 7, 8, 9, 10, and 16 made by J. R. Harris, assistant geologist, and G. F. Fix, assistant state geologist, Division of Geology, Indiana State Department of Conservation.

a Feb. 19-23, highest water level 24.71 feet; lowest water level 24.83 feet.

b Apr. 23-30 highest water level 26.00 feet; lowest water level 26.40 feet.

c Dec. 25-31, highest water level 31.8± feet; lowest water level 32.16 feet.

Marion County--Continued.

Water levels in wells 3, 4, 6, 7, 8, 9, and 10, in feet below measuring points, 1940

Date	Marion 3	Marion 4	Marion 6	Marion 7	Marion 8	Marion 9	Marion 10
Jan. 3	51.21	7.47	.....	55.64	53.67	47.50	41.85
16	50.77	7.56	.....	55.77	53.80	47.05	41.37
23	51.50	7.67	.....	55.80	53.82	46.90	41.39
31	50.48	7.76	.....	56.25	54.27	46.75	41.10
Feb. 7	52.10	7.68	.....	56.19	54.21	46.11	41.09
13	51.29	7.67	45.12	56.19	54.24	45.77	40.64
Mar. 5	52.05	7.53	45.58	56.06	54.14	46.20	41.09
14	52.43	7.46	44.85	56.46	54.49	45.53	40.96
19	53.99	7.58	44.69	55.59	53.64	45.10	40.98
26	53.35	7.73	45.03	54.63	52.69	45.63	41.22
Apr. 3	54.99	7.80	44.34	55.67	53.98	45.01	41.94
9	55.39	7.76	43.35	56.09	54.17	44.16	42.66
17	57.12	.....	44.47	56.60	54.63	45.19	42.09
23	57.00	7.47	43.48	56.46	54.53	44.34	43.52
30	57.26	7.27	44.10	56.09	54.12	44.85	43.75
May 8	59.10	7.37	44.05	56.76	54.82	44.84	44.05
14	58.10	11.28	44.19	56.63	54.69	44.98	44.63
21	58.29	7.53	44.59	57.12	55.22	45.40	44.98
June 4	61.09	7.09	44.98	56.36	54.44	45.77	45.06
14	59.69	8.41	46.45	58.02	56.02	47.15	51.12
July 3	.....	.....	48.65	.....	.....	.....	.....
4	58.37	13.09	.....	59.93	57.97	.....	.....
5	.....	.....	.....	.....	.....	49.38	52.11
19	.....	15.40	.....	.....	.....	.....	.....
20	59.88	.....	48.83	60.55	58.54	49.54	52.71
Aug. 6	65.34	17.32	49.89	61.98	60.02	49.60	52.86
26	64.96	16.28	50.92	61.62	59.63	51.66	53.73
Sept. 18	67.41	15.03	50.92	60.38	58.41	51.67	53.39
19	.....	15.83	.....	.....	.....	.....	.....
25	66.20	.....	51.63	60.10	58.16	52.30	51.85
Oct. 17	66.65	10.88	51.61	60.00	58.02	52.29	50.94
23	66.08	11.68	50.26	60.13	58.14	51.09	50.59
30	67.46	10.21	.....	59.55	57.57	.....	.....
31	.....	.....	49.65	.....	.....	50.59	50.70
Nov. 6	65.75	9.88	48.71	59.01	57.00	49.66	50.28
12	63.79	9.99	48.48	58.88	56.92	49.38	49.52
19	64.88	9.81	48.24	58.78	57.88	49.11	49.15
27	.....	.....	48.09	58.70	57.81	48.96	48.73
Dec. 4	59.86	.....	47.65	58.93	57.00	48.59	48.67
17	59.88	9.94	47.32	59.22	57.20	48.20	48.48
31	58.48	.....	46.80	58.90	56.95	47.70	47.31

Marion 11. Indianapolis Sanitation Plant. Owner's well 3. In dehydration building, about 500 feet west of power house. Equipped with automatic water-stage recorder.

Lowest water level each day of record, in feet below measuring point, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	26.21	26.08	25.10	25.59	23.59	25.08	25.65	26.32	26.43	26.59	26.67	26.62
2	26.28	26.21	25.08	25.59	23.70	25.06	25.71	26.34	26.47	26.60	26.68	26.64
3	26.31	26.19	24.90	25.56	23.94	24.99	25.72	26.39	26.50	26.64	26.71	26.68
4	26.31	26.09	24.79	25.68	24.02	24.93	25.81	26.39	26.50	.....	26.64	26.51
5	26.45	26.00	24.62	25.76	24.08	24.97	25.87	26.43	26.50	.....	26.61	26.62
6	26.47	26.00	24.45	25.76	24.09	24.98	25.84	26.46	26.48	.....	26.67	(a)
7	26.47	26.14	24.41	25.58	24.09	24.96	25.83	26.46	26.51	.....	26.65	.....

a Dec. 6-7, highest water level 26.42 feet; lowest water level 26.63 feet.

Marion County--Continued.

Marion 11--Continued.

Lowest water level each day of record, in feet below measuring point, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
8	26.48	26.14	24.51	25.32	24.00	24.98	25.84	26.46	26.46	.....	26.69	26.67
9	26.49	26.12	24.62	25.40	24.11	24.98	25.88	26.47	26.41	.....	26.65	26.67
10	26.47	26.04	24.69	25.31	24.16	24.95	25.88	26.45	26.47	.....	26.56	26.84
11	26.32	25.90	24.76	25.11	24.29	24.94	25.87	26.50	26.52	.....	26.66	26.84
12	.....	25.75	24.79	25.13	24.26	24.92	25.94	26.56	26.57	26.70	26.71	26.72
13	.....	25.69	24.87	25.00	24.21	24.96	26.03	26.50	26.56	26.75	26.71	26.72
14	26.11	25.44	24.95	24.81	24.31	.....	26.00	26.48	26.55	26.75	26.67	26.72
15	26.18	25.45	25.03	24.53	24.48	.....	25.96	26.53	26.58	26.80	26.59	26.63
16	26.14	25.37	25.10	24.64	24.61	.....	25.99	26.54	26.58	26.80	26.55	26.41
17	25.81	25.31	25.08	24.62	24.66	.....	26.09	26.54	26.61	26.78	26.61	26.49
18	25.81	25.21	25.16	24.42	24.72	.....	26.10	26.54	26.60	26.79	26.62	26.51
19	25.78	25.05	25.22	24.22	24.69	.....	26.13	26.54	26.59	26.71	26.64	26.37
20	25.76	25.12	25.37	23.67	24.79	.....	26.14	26.56	26.61	26.74	26.58	26.21
21	25.76	25.12	25.39	23.31	24.91	.....	26.14	26.52	26.64	26.77	26.58	26.22
22	25.80	25.18	25.48	22.77	24.93	.....	26.19	26.48	26.65	26.79	26.65	26.21
23	25.79	25.18	25.53	22.32	24.93	.....	26.16	26.56	26.61	26.70	26.68	26.24
24	25.87	25.19	25.56	22.46	24.87	.....	26.14	26.57	26.49	26.72	26.64	26.21
25	25.87	25.28	25.61	22.69	24.90	25.32	26.17	26.53	26.66	26.70	26.64	26.19
26	25.87	25.26	25.57	.....	24.95	25.38	26.18	26.44	26.69	26.64	26.57	26.29
27	25.89	25.09	25.45	.....	24.99	25.42	26.19	26.47	26.63	26.64	26.61	26.26
28	25.89	25.18	25.50	23.17	25.01	.....	26.26	26.46	26.64	26.61	26.61	(a)
29	25.84	25.18	25.54	23.24	25.04	.....	26.29	26.40	26.66	26.59	26.58	.....
30	25.98	.....	25.51	23.37	25.06	25.63	26.28	26.42	26.65	26.61	26.58	.....
31	26.02	.....	25.51	.....	25.02	.....	26.27	26.44	.....	26.61	.....	.....

Marion 12. Indianapolis Sanitation Plant. Owner's well 11 (?). About 300 feet southeast of power house and about 50 feet north of resettler tank.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	25.68	Apr. 5	24.72	July 13	24.93	Oct. 18	25.61
13	25.71	12	24.11	20	25.03	25	25.61
20	24.92	19	22.98	26	25.06	Nov. 1	25.48
26	25.02	27	21.93	Aug. 2	25.12	8	25.45
Feb. 2	25.35	May 4	23.08	9	25.28	15	25.39
9	25.34	11	23.33	16	25.39	22	25.48
16	24.36	18	23.79	23	25.22	29	25.29
23	24.20	25	24.06	30	25.06	Dec. 7	25.47
Mar. 1	24.56	June 1	24.19	Sept. 6	25.38	14	25.35
8	23.47	8	23.98	13	26.47	21	24.92
15	24.21	14	23.89	20	26.49		
22	24.52	29	24.52	27	26.45		
29	24.71	July 6	24.73	Oct. 11	25.54		

Marion 13. Indianapolis Sanitation Plant. "East" observation well, about 500 feet east of power house.

Marion 14. Indianapolis Sanitation Plant. "Resettler" observation well, about 400 feet southeast of power house, at southeast edge of resettler tank.

Marion 15. Indianapolis Sanitation Plant. "No. 2 driven well", about 550 feet north of power house and 64 feet northeast of supply well 6.

Measurements in wells 11-15 made by D. O. Bender, George Bremen, George Ferguson, and P. W. Richards, Indianapolis Sanitation Plant.

a Dec. 28, 1940-Jan. 4, 1941, highest water level 26.11; lowest water level 26.55 feet.

Marion County--Continued.

Water levels in wells 13, 14, and 15, in feet below measuring points, 1940

Date	Marion 13	Marion 14	Marion 15	Date	Marion 13	Marion 14	Marion 15
Jan. 5	9.6	21.6	26.5	July 3	8.75	20.43	25.05
Feb. 3	9.4	21.32	26.13	Aug. 7	9.51	21.41	25.73
Mar. 6	7.35	19.46	25.07	Sept. 4	9.49	21.62	26.30
Apr. 5	8.77	20.8	25.6	Oct. 18	9.75	21.75	26.25
May 10	7.24	19.23	23.81	Nov. 15	9.44	21.70	26.16
June 15	7.99	20.27	24.78	Dec. 7	9.49	21.64	26.17

Marion 16. At former American Hominy Co. Plant B, Madison Avenue and Palmer Street, Indianapolis. At south end of main building, near base of steel smokestack. Abandoned drilled well, diameter 8 inches, depth 295 feet. Taps water in limestone. Measuring point, top of cap on casing, 0.25 foot above land surface and 722.02 feet above mean sea level.

Water level, in feet below measuring point, 1939-40

Date	Water level	Date	Water level	Date	Water level
Aug. 31, 1939	108.09	Apr. 23	58.90	Sept. 18	102.63
Sept. 1	108.15	30	88.94	25	102.35
Oct. 1	64.32	May 8	100+	Oct. 17	90.35
2	63.90	14	100+	23	66.95
Nov. 26	55.56	21	97.06	30	70.82
30	55.23	June 4	90.38	Nov. 6	65.33
Dec. 23	53.86	14	106.84	12	63.87
Mar. 19, 1940	65.82	July 5	109.19	19	63.08
26	73.16	19	108.78	Dec. 4	61.98
Apr. 3	59.22	Aug. 6	106.93	17	61.18
9	59.43	26	108.36	31	59.85

Monroe County

Monroe 1. Morgan-Monroe State Forest. At old camp site, north of Bean Blossom Road, near head of shallow draw. Northwesternmost of three dug wells. Measurements made by Roscoe Hildebrand, Morgan-Monroe State Forest, Mark Winans, forest superintendent.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 21	0.85	July 1	1.5	Sept. 15	3.2	Oct. 31	3.5
May 4	0.55	16	1.8	30	3.75	Nov. 15	2.7
18	0.9	Aug. 1	2.65	Oct. 3	2.92	30	2.2
June 1	0.5	15	3.1	15	4.0	Dec. 15	1.9
17	1.5	31	2.8				

Montgomery County

Montgomery 1. W. H. Moore. At site of burned house, NW¼NW¼ sec. 36, T. 17 N., R. 6 W., Waveland.

Montgomery 2. Vandalia Railroad. In old railroad stock pen, north side of railroad track, Waveland.

Montgomery 3. Charles Lamson. At residence, about 0.4 mile north of Waveland.

Montgomery 4. Mrs. W. L. Glenn. At residence, about 2 miles north of Waveland.

Measurements made by L. W. Trueblood, engineer, Gabor Koncz, Jr., Shelby C. Myers, and Leonard Hinthorn, CCC camp SCS-3, near Waveland.

Montgomery County--Continued.

Water levels in wells 1, 2, 3, and 4, in feet below measuring point, 1940

Date	Montgomery 1	Montgomery 2	Montgomery 3	Montgomery 4
Jan. 2	16.66	4.36	14.43	14.67
15	16.33	3.25	14.04	13.99
Feb. 5	16.16	4.00	13.65	12.06
20	15.66	3.37	11.93	11.00
Mar. 1	14.91	3.20	11.00	10.71
16	12.78	3.03	9.76	10.32
Apr. 3	12.11	3.21	10.02	10.31
17	9.36	1.49	7.25	10.08
30	9.44	2.99	6.15	9.72
May 17	9.91	3.30	6.95	9.48
June 1	7.23	2.46	5.63	9.36
14	9.72	3.20	5.76	9.53
July 2	12.35	4.06	10.15	10.37
24	13.80	4.57	12.62	11.77
Aug. 2	14.31	4.69	13.01	12.34
21	15.40	5.04	13.81	13.85
28	15.63	5.49	13.98	14.26
Sept.16	16.37	4.74	14.48	15.10
25	16.02	5.05	14.52	15.38
Oct. 15	15.47	3.69	14.94	17.33
29	15.62	4.43	14.66	14.07
Nov. 16	16.95	3.97	14.56	13.43
26	15.75	2.31	14.49	13.15
Dec. 13	16.08	2.80	14.15	11.81
30	14.60	3.19	13.13	11.50

Morgan County

Morgan 1. Morgan-Monroe State Forest. South of trail 3, in front of Shady Rest cabin, SW¼SW¼ sec. 27, T. 11 N., R. 1 E. Measurements made by Roscoe Hildebrand, Morgan-Monroe State Forest, Mark Winans, forest superintendent.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 21	7.3	July 1	8.6	Sept.15	10.7	Oct. 31	11.3
May 4	4.5	16	9.5	30	11.6	Nov. 15	11.0
18	6.3	Aug. 1	9.7	Oct. 3	10.94	30	8.8
June 1	6.9	15	10.2	15	11.75	Dec. 15	8.25
17	8.5	31	10.4				

Noble County

Noble 1. No measurements made in 1940.

Noble 2. Lawrence Ott. About 0.8 mile east of State Highway 9 and about 0.2 mile west of State Highway 102, about 300 feet north of county line road, SW¼SE¼ sec. 35, T. 33 N., R. 9 E.

Noble 3. Della May Kitt. Across road from residence, about 1.1 miles southwest of Merriam.

Measurements in wells 2 and 3 made by James Bodley, superintendent, Tri-Lakes Fish Hatchery, Columbia City.

Water levels in wells 2 and 3, in feet below measuring points, 1940

Date	Noble 2	Noble 3	Date	Noble 2	Noble 3	Date	Noble 2	Noble 3
Jan. 2	24.3	24.1	June 15	20.3	23.0	Oct. 16	24.0	24.9
15	24.2	24.2	29	20.3	23.2	Nov. 1	25.1	24.7
Feb. 1	25.5	24.2	July 14	20.4	23.7	14	25.65	25.52
Mar. 2	25.8	24.3	Aug. 2	21.1	23.8	16	25.8	25.1
15	25.1	23.8	15	21.6	24.0	Dec. 2	25.9	25.1
Apr. 1	24.2	23.7	Sept. 2	22.3	24.6	14	25.0	25.0
16	25.6	23.4	16	23.3	24.8	30	25.4	25.0
June 3	20.7	23.1	Oct. 2	23.9	24.8			

Pike County

Pike 1. A. J. Heuring. In front of residence, Lafayette and Main Streets, Winslow. Measurements made by Harry A. Thomas, forest superintendent, Pike County State Forest, Winslow. Water level, in feet below measuring point, 1940: Oct. 12, 12.36; Nov. 9, 13.0; Nov. 30, 13.2.

Porter County

Porter 1. Valparaiso Water Department. Test well at well 1 pump house at Flint Lake, about 3 miles north of Valparaiso along State Highway 49. Measurements made by J. F. Bradley, engineer, Valparaiso Water Department.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	51.29	Apr. 16	51.64	July 15	51.78	Oct. 1	51.93
Feb. 1	51.16	May 2	51.69	Aug. 1	52.36	15	52.06
15	51.64	15	52.05	15	51.80	Nov. 2	52.12
Mar. 1	51.92	June 1	51.18	Sept. 2	51.79	16	51.85
15	51.82	15	51.84	15	51.86	Dec. 15	51.82
Apr. 1	51.74	July 1	51.74				

Porter 2. Indiana Dunes State Park. At Waverly Beach.

Porter 3. Indiana Dunes State Park. Near grocery store on picnic ground.

Measurements made by Ben Wiseman, Indiana Dunes State Park.

Water levels in wells 2 and 3, in feet below measuring point, 1940

Date	Porter 2	Porter 3	Date	Porter 2	Porter 3
Jan. 3	14.0	17.1	July 20	14.4	16.2
Feb. 1	14.3	17.3	Sept.12	13.5	16.9
Mar. 15	14.6	17.0	Oct. 5	13.8	17.2
Apr. 5	14.3	16.9	Nov. 1	14.1	17.1
May 4	13.3	16.3	Dec. 23	14.3	17.3
June 24	14.4	15.6			

Porter 4. No measurements made in 1940.

Porter 5. A. A. Hanrahan. At residence, NW¼NW¼ sec. 36, T. 36 N., R. 6 W. Measurements made by W. J. Taylor and Guy Tindle, CCC camp SCS-20, Valparaiso, Sam Wearley, superintendent.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	44.10	Apr. 2	43.93	July 2	43.87	Oct. 2	44.18
15	43.93	15	43.78	16	43.96	15	44.20
Feb. 1	44.05	May 2	43.73	Aug. 2	44.06	Nov. 2	44.16
15	44.18	17	43.81	16	44.04	15	44.19
Mar. 7	44.08	June 1	43.78	31	44.06	Dec. 16	44.08
16	44.17	15	43.77	Sept.17	44.14		

Pulaski County

Pulaski 1. Jasper-Pulaski State Game Reserve. In basement of custodian's residence.

Pulaski 3. Jasper-Pulaski State Game Reserve. Near north boundary line of preserve, SW¼NE¼ sec. 6, T. 31 N., R. 4 W.

Pulaski 4. On Charles Alberding farm, about 50 feet south of road and Starke County line.

Pulaski County--Continued.

Measurements made by C. E. Paul, engineer, CCC camp S-56, Jasper-Pulaski State Game Preserve.

Water levels in wells 1, 3, and 4, in feet below measuring points, 1940

Date	Pulaski 1	Pulaski 3	Pulaski 4	Date	Pulaski 1	Pulaski 3	Pulaski 4
Jan. 2	5.38	9.60	7.74	July 2	3.53	9.15	5.80
15	5.46	9.72	7.14	15	3.89	8.10	6.14
Feb. 1	4.86	9.75	7.08	Aug. 1	4.36	9.59	6.57
15	5.26	9.72	7.32	17	4.76	9.50	7.09
Mar. 1	5.10	9.63	7.05	31	4.86	9.62	7.13
14	4.66	9.40	6.70	Sept.14	4.84	9.55	7.22
Apr. 1	4.60	9.40	6.59	30	5.26	9.93	7.54
16	4.21	9.02	6.53	Oct. 15	5.06	9.91	7.34
May 1	3.59	8.85	5.85	30	4.64	9.37	7.05
15	3.16	8.55	5.49	Nov. 18	4.16	9.48	6.70
31	2.82	8.40	5.28	Dec. 4	3.78	9.14	6.30
June 15	2.66	8.77	5.30	17	3.86	9.32	6.40

St. Joseph County

St. Joseph 1. Mishawaka Water and Light Department. At pumping plant, Mishawaka. Measurements made by A. R. Klein, superintendent, Mishawaka Water and Light Department.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	10.24	Apr. 1	8.92	July 1	9.11	Oct. 1	10.84
16	9.50	15	8.46	16	9.19	16	11.07
Feb. 1	9.72	May 1	8.93	Aug. 1	12.67	Nov. 1	10.42
15	10.00	16	10.17	16	11.76	15	10.59
Mar. 1	10.09	June 1	8.91	Sept. 1	9.81	Dec. 2	10.25
16	10.43	17	8.58	15	10.35	16	10.05

St. Joseph 3. John Hensler. At old farm house on north side of Quinn Road about 1 mile west of State Highway 331, SW¼SE¼ sec. 33, T. 36 N., R. 3 E. Measurements made by Lester A. House, CCC camp SCS-24, J. M. McCoid, project superintendent. Water levels, in feet below measuring point, 1940: Nov. 20, 9.97; Dec. 14, 9.99; Dec. 31, 9.76.

Spencer County

Spencer 1. Nancy Hanks Lincoln Memorial Park. About 300 yards northwest of ranger's cabin and north of Buckhorn Lake. Water level Oct. 12, 1940, 6.22 feet below measuring point.

Spencer 2. Nancy Hanks Lincoln Memorial Park. About 15 feet southwest of well 1. Water level Oct. 12, 1940, 5.97 feet below measuring point.

Spencer 3. Nancy Hanks Lincoln Memorial Park. About 250 yards southeast of ranger's cabin. Water level Oct. 12, 1940, 4.60 feet below measuring point.

Starke County

Starke 1. Joe Tomassi. At Bass Lake Fish Hatchery, about 200 feet north of superintendent's house.

Starke 2. S. A. Craigmile. At mint still about 0.25 mile northeast of owner's residence, near junction of State Highways 10 and 29. Six-inch well.

Starke 3. S. A. Craigmile. About 1 foot from well 2. Two-inch well.

Starke County--Continued.

Measurements made by Richard Good, Bass Lake Fish Hatchery, P. J. Lavery, superintendent.

Water levels in wells 1, 2, and 3, in feet below measuring points, 1940

Date	Starke 1	Starke 2	Starke 3	Date	Starke 1	Starke 2	Starke 3
Jan. 8	14.83	5.10	6.82	July 15	13.48	4.44	6.19
Feb. 8	14.99	4.98	6.97	Aug. 5	13.85	5.14	6.85
Mar. 18	14.71	4.46	6.18	19	14.07	5.44	7.17
Apr. 1	14.90	4.48	6.20	Sept. 4	14.31	5.57	7.31
16	14.82	3.87	5.59	16	14.53	5.50	7.25
May 6	14.80	3.02	4.78	Oct. 19	14.79	5.31	7.05
17	13.77	3.45	5.19	Nov. 7	14.81	5.21	6.91
June 4	13.33	3.56	5.29	15	14.64	5.03	6.75
18	13.28	3.65	5.40	Dec. 16	14.98	4.43	6.14
July 5	13.36	4.18	5.20				

Steuben County

Steuben 1. Pokagon State Park. Near custodian's house, on south side of area formerly used for buffalo pen.

Steuben 2. Pokagon State Park. On north side of area formerly used for buffalo pen.

Measurements made by H. H. Morgan, project superintendent, and A. B. Sheckler, CCC camp SP-7, Pokagon State Park.

Water levels in wells 1 and 2, in feet below measuring points, 1940

Date	Steuben 1	Steuben 2	Date	Steuben 1	Steuben 2
Jan. 15	4.9	8.5	Aug. 1	3.9	7.0
30	5.15	8.55	15	4.4	7.3
Mar. 1	4.35	8.1	31	3.1	6.8
15	4.2	7.7	Sept.15	4.2	7.5
30	3.6	6.7	30	4.6	7.8
Apr. 15	3.0	5.9	Oct. 15	4.6	7.1
May 1	3.2	5.6	31	4.7	8.1
15	3.6	5.8	Nov. 18	4.2	7.6
31	3.1	5.2	30	4.1	7.4
June 15	3.2	5.7	Dec. 16	3.1	6.3
July 1	2.7	5.2	31	2.7	5.8
15	4.1	6.2			

Tippecanoe County

Tippecanoe 1. Tippecanoe Township School. In basement of school building at Battle Ground.

Tippecanoe 3. Lafayette Loan and Trust Co. At residence of Hershell Byers, $NW\frac{1}{4}NW\frac{1}{4}$ sec. 17, T. 24 N., R. 4 W.

Measurements made by personnel of CCC camp SCS-3, La Fayette, J. W. Slater, project superintendent.

Water levels in wells 1 and 3, in feet below measuring points, 1940

Date	Tippecanoe 1	Tippecanoe 3	Date	Tippecanoe 1	Tippecanoe 3
Jan. 3	34.80	12.23	Aug. 1	34.62	9.60
15	34.82	11.89	15	35.50	10.45
31	34.83	11.43	30	35.51	11.01
Feb. 15	34.82	11.42	Sept.14	35.55	11.45
29	34.76	8.76	30	35.85	11.70
Mar. 15	34.50	7.96	Oct. 15	35.95	11.40
30	34.69	8.41	31	.....	12.75
Apr. 15	34.68	5.34	Nov. 15	36.13	12.77
30	34.64	5.18	19	35.98	12.80
May 15	34.31	5.89	30	36.24	12.83
29	34.54	7.07	Dec. 14	37.45	13.30
June 15	34.64	6.40	31	36.14	12.76
29	34.62	7.70			

Wabash County

Wabash 1. Salamonie River State Forest. At Shipley house, CCC camp S-94, Salamonie River State Forest. Measurements made by Abe Zimmerman and Elmer McCammack, CCC camp S-94, Salamonie River State Forest, W. E. Hanson, project superintendent. Measurements discontinued after Sept. 15 due to obstruction in casing.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 19	33.3	May 3	30.7	July 31	32.1	Aug. 31	32.1
Mar. 28	32.65	July 18	32.2	Aug. 15	32.2	Sept.15	32.25
Apr. 15	30.65						

Warrick County

Warrick 1. 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. Water level Oct. 12, 1940, 22.58 feet below measuring point.

Whitley County

Whitley 1. Measurements discontinued.

MASSACHUSETTS

By M. L. Brashears, Jr.

The investigation of the ground-water resources of Massachusetts was continued in 1940 by the Federal Geological Survey in cooperation with the Massachusetts Department of Public Works. The inventory of existing ground-water supplies of Middlesex County was continued during the summer of 1940. Periodic observations of ground-water level were made in wells in Middlesex and Worcester Counties during the entire year.

At the present time, an inventory of wells has been started in 30 townships and completed in 15 townships in Middlesex County. During the summer of 1940, field work was done in 10 townships in the vicinity of the Aberjona Valley and the area to the north.

Regular weekly water-level measurements were made in 37 wells in the vicinity of Lowell and in the Aberjona Valley. During the year measurements of water level were begun in 19 new wells, and were discontinued in 2 wells that had been measured in 1939. During 1940, three automatic water-stage recorders were operated continuously at Lowell, Leominster, and Winchendon. A total of about 1,425 individual water-level measurements was made during the year.

Most of the observation wells in which measurements were begun during 1940 penetrate unconsolidated glacial material, which ranges in composition from stratified sand and gravel to more or less unstratified sandy clay. A few of the observation wells may end at the contact of the bedrock and the overlying glacial deposits. Well Wilmington 58 penetrates bedrock.

A descriptive heading was given for each observation well in Water-Supply Paper 886. Headings have been omitted in this report except for wells which were not reported on in Water-Supply Paper 886.

The following table summarizes data pertaining to ground-water levels in Massachusetts.

Summary of ground-water level data for Massachusetts

Well No.	First measured	Lowest observed water level above mean sea level		Highest observed water level above mean sea level		Water level above mean sea level, Dec. 28, 1940 (feet)
		Water level (feet)	Date	Water level (feet)	Date	
Chelmsford 68	July 27, 1939	92.62	Oct. 3, 1940 Oct. 24, 1939	95.14	Apr. 23, 1940	92.63
Chelmsford 69	Aug. 22, 1939	98.56	Aug. 6, 1940	102.03	Mar. 19, 1940	101.38
Leominster 11	July 13, 1939	353.97	Oct. 31, 1939	362.36	Apr. 21, 1940 Apr. 24, 1940	.....
Lowell 4	May 26, 1939	90.48	Oct. 1, 1939	94.70	May 7, 1940	92.45
Lowell 9	May 29, 1939	(a)	Oct. 31, 1939	166.14	Apr. 23, 1940	162.06
Lowell 14	May 29, 1939	135.32	Nov. 7, 1939	148.11	May 7, 1940	143.47
Lowell 18	May 29, 1939	117.26	Mar. 12, 1940	119.22	Aug. 20, 1940	117.81
Lowell 22	Sept. 7, 1939	108.02	Oct. 24, 1939	112.05	Apr. 30, 1940	110.30
Lowell 26	Aug. 9, 1939	90.36	Oct. 24, 1939	100.29	Apr. 2, 1940	93.03
Lowell 33	May 29, 1939	91.33	Oct. 24, 1939	95.41	May 7, 1940	94.29
Lowell 40	July 27, 1939	83.09	Feb. 6, 1940	88.55	Apr. 23, 1940	.....
Lowell 41	Aug. 22, 1939	94.15	Aug. 6, 1940	100.61	Mar. 19, 1940	99.00
Lowell 43	May 28, 1940	86.76	Oct. 12, 1940	90.44	June 4, 1940	87.12
Reading 1	Aug. 25, 1939	85.22	Dec. 15, 1939	94.21	Apr. 30, 1940	87.88
Reading 3	June 20, 1940	154.78	Oct. 26, 1940	157.23	Nov. 16, 1940	156.98
Stoneham 2	June 17, 1940	89.01	Sept. 2, 1940	92.55	Nov. 16, 1940	91.51
Wilmington 10	July 18, 1940	106.30	Nov. 2, 1940	111.77	Dec. 28, 1940	111.77
Wilmington 29	July 24, 1940	88.75	Sept. 2, 1940	89.70	Dec. 28, 1940	89.70
Wilmington 44	July 26, 1940	80.80	Sept.16, 1940	84.77	Nov. 16, 1940	83.48
Wilmington 58	July 27, 1940	97.71	Nov. 2, 1940	102.67	Dec. 21, 1940	102.51
Winchendon 13	July 18, 1939	1,196.61	Nov. 27, 1939 Nov. 24, 1939	1,206.63	May 5, 1940	1,204.21
Winchester 3	Aug. 22, 1939	(b)	Jan. 12, 1940	45.80	Dec. 22, 1939	.....
Winchester 4	Aug. 22, 1939	24.14	Oct. 27, 1939	36.52	May 7, 1940	34.52
Winchester 14	June 13, 1940	103.02	Nov. 2, 1940	107.54	Dec. 21, 1940	107.00
Woburn 1	Aug. 14, 1939	81.92	Aug. 14, 1939	86.06	Apr. 23, 1940	84.12
Woburn 2	Aug. 18, 1939	34.20	Oct. 27, 1939	51.45	Dec. 21, 1940	51.28
Woburn 3	Aug. 18, 1939	70.27	Sept.23, 1940	73.10	Apr. 23, 1940	72.12

a Well dry; water level below 157.1 feet above mean sea level.
b Well dry; water level below 43.6 feet above mean sea level.

Summary of ground-water level data for Massachusetts--Continued

Well No.	First measured	Lowest observed water level above mean sea level		Highest observed water level above mean sea level		Water level above mean sea level, Dec. 28, 1940 (feet)
		Water level (feet)	Date	Water level (feet)	Date	
Woburn 4	Sept.12, 1939	65.63	Sept.26, 1939	67.97	Apr. 23, 1940	66.57
Woburn 5	Sept.12, 1939	58.61	Sept.19, 1939	59.78	Apr. 23, 1940	59.21
Woburn 12	June 12, 1940	(a)	Dec. 21, 1940	37.71	June 12, 1940	36.20
Woburn 17	July 15, 1940	171.53	Nov. 2, 1940	175.58	Dec. 21, 1940	175.45
Woburn 19	June 20, 1940	27.11	Sept.16, 1940	30.90	Nov. 16, 1940	29.92
Woburn 21	June 21, 1940	109.58	June 21, 1940	111.56	July 15, 1940	111.12
Woburn 23	July 15, 1940	93.08	Aug. 26, 1940	94.58	Nov. 16, 1940	94.53
Woburn 36	June 28, 1940	40.97	Nov. 2, 1940	41.67	July 15, 1940	41.49
Woburn 38	June 28, 1940	38.73	Nov. 2, 1940	42.31	June 28, 1940	41.64
Woburn 49	July 10, 1940	60.37	Nov. 9, 1940	64.09	Dec. 28, 1940	64.09
Woburn 53	July 13, 1940	95.54	Sept. 2, 1940	97.12	Dec. 21, 1940	97.11

Observations on ground-water levels were first made in Massachusetts during the early part of the summer of 1939. Because ground-water levels are generally at their highest stage during the spring of the year, a comparison of the relative position of the highest stages during 1939 and 1940 cannot be made. Available measurements indicate, however, that in general ground-water levels were somewhat higher during the summer of 1940 than in the summer of 1939. The lowest observed water level in 16 of the 21 wells that were measured during both years occurred in 1939.

The following table shows the net change of water level in wells in Massachusetts in 1940.

Net change of ground-water levels, in feet, in Massachusetts, 1940

Well number	Net change of water level	Well number	Net change of water level
Chelmsford 68	+0.45	Lowell 41	+2.93
Chelmsford 69	+1.21	Reading 1	+2.49
Leominster 11	+2.84	Winchendon 13	+8.43
Lowell 4	+1.52	Winchester 4	+7.96
Lowell 9	+2.86	Woburn 1	+ .71
Lowell 14	+1.51	Woburn 2	+1.07
Lowell 18	+ .09	Woburn 3	+ .53
Lowell 22	+1.23	Woburn 4	+ .28
Lowell 26	+1.29	Woburn 5	+ .22
Lowell 33	+1.33		

a Well dry; water level below 36.1 feet above mean sea level.

The table indicates that all wells in Massachusetts for which one year's record is available showed a net rise of water level during 1940, the rise ranging from 0.09 foot to 8.43 feet. In general, the net change during the year was greater at wells situated relatively distant from areas of considerable pumping.

The precipitation in the area was about 3.5 inches greater during 1940 than during 1939. The precipitation in both years was considerably below normal.

Middlesex County

Chelmsford 68.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	91.71	Apr. 30	94.75	July 23	92.31	Oct. 12	91.15
9	91.50	May 7	94.97	30	92.19	19	91.01
16	91.94	14	94.38	Aug. 6	92.02	26	90.99
23	91.82	21	93.72	13	91.71	Nov. 2	91.20
30	91.72	28	93.36	20	91.39	9	91.73
Feb. 6	91.59	June 4	93.70	27	91.33	16	92.38
13	92.01	7	93.48	Sept. 3	91.44	23	92.66
Mar. 19	92.70	11	93.12	10	91.42	30	92.46
26	92.92	18	92.97	17	91.39	Dec. 7	92.32
Apr. 2	93.41	25	92.62	24	91.45	14	92.43
9	93.62	July 2	92.56	28	91.51	21	92.74
16	94.45	9	92.81	Oct. 5	91.34	28	92.63
23	95.14	16	92.56				

Chelmsford 69.

Water level, in feet above mean sea level, 1940

Jan. 2	99.42	Apr. 30	100.46	July 23	99.67	Oct. 12	100.54
9	99.24	May 7	100.75	30	99.18	19	99.55
16	100.76	14	99.85	Aug. 6	98.56	26	99.73
23	99.92	21	99.84	13	99.96	Nov. 2	100.56
30	99.63	28	100.39	20	99.86	9	100.94
Feb. 6	99.32	June 4	101.07	27	100.18	16	101.95
13	101.03	7	100.59	Sept. 3	100.60	23	101.54
Mar. 19	102.03	11	100.17	10	100.66	30	100.90
26	100.77	18	99.85	17	100.56	Dec. 7	101.10
Apr. 2	101.96	25	100.23	24	100.60	14	101.38
9	101.07	July 2	99.94	28	100.67	21	101.65
16	100.69	9	100.26	Oct. 5	100.58	28	101.38
23	101.35	16	100.07				

Lowell 4.

Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	91.36	91.38	91.66	92.94	94.18	92.90	92.57	92.20	91.52	91.62	91.16	92.30
2	91.46	91.38	91.71	92.94	94.15	93.09	92.45	92.26	91.68	91.51	91.15	92.31
3	91.42	91.39	91.80	92.96	94.14	93.28	92.37	92.27	91.81	91.35	91.36	92.25
4	91.38	91.41	a91.93	93.02	94.14	93.38	92.37	92.31	91.91	91.26	91.64	92.21
5	91.26	91.50	92.07	93.09	94.32	93.39	92.71	92.31	91.91	91.14	91.78	92.12
6	91.23	91.63	92.12	93.13	94.54	93.30	92.79	92.24	91.76	91.14	91.88	92.02
7	91.22	91.98	92.37	93.18	94.70	93.19	92.90	92.16	91.57	91.23	91.81	92.00
8	91.22	91.87	92.43	93.22	94.61	93.08	92.98	92.04	91.56	91.31	91.65	92.01
9	91.18	91.80	92.42	93.25	94.49	92.97	92.95	91.91	91.55	91.20	91.60	92.15
10	91.13	91.80	92.55	93.35	94.35	92.86	92.90	91.85	91.46	91.08	91.62	92.13

a Estimated.

Middlesex County--Continued.

Lowell 4.--Continued.

Lowest daily water level, in feet above mean sea level, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	91.07	91.85	92.55	93.43	94.21	92.82	92.77	91.85	91.41	90.9?	91.77	92.07
12	91.01	a92.36	92.31	93.53	94.10	92.81	92.68	91.91	91.41	90.8?	91.86	92.07
13	90.98	92.26	92.20	93.64	93.98	a92.81	92.69	91.83	91.42	90.8?	91.87	92.04
14	90.98	92.21	92.20	a93.97	93.85	a92.81	92.73	91.69	91.40	91.0?	91.99	92.04
15	91.08	91.99	92.26	94.24	93.73	92.82	92.75	91.54	91.41	91.11	92.37	92.08
16	91.66	91.85	92.67	94.32	a93.61	92.87	92.64	91.45	91.58	90.9?	93.05	92.22
17	91.69	91.81	92.73	94.23	a93.47	a92.84	92.54	91.38	91.64	90.85	93.12	92.50
18	91.65	91.81	92.74	94.20	a93.41	92.84	92.45	91.38	91.62	90.77	93.11	92.54
19	91.57	91.89	92.74	94.20	a93.35	92.79	92.35	91.49	91.61	90.7?	93.05	92.59
20	91.44	91.83	92.81	94.22	a93.28	92.70	92.24	91.53	91.60	90.71	92.97	92.64
21	91.44	91.75	92.80	a94.35	93.21	92.62	92.24	91.45	91.60	90.87	92.85	92.69
22	91.50	91.75	92.78	a94.53	93.10	92.60	92.32	91.38	91.64	90.99	92.70	92.73
23	a91.59	91.75	92.77	94.69	93.00	92.60	92.39	91.33	91.74	90.99	92.68	92.71
24	91.61	91.72	92.77	94.70	92.90	92.52	92.46	91.33	91.70	90.89	92.68	92.66
25	91.58	91.74	92.68	94.60	92.84	92.47	92.51	91.39	91.65	90.83	92.64	92.65
26	91.54	91.85	92.57	94.49	92.82	92.43	92.40	91.50	91.72	90.79	92.54	92.61
27	a91.52	91.83	92.53	94.41	92.75	92.37	92.33	91.61	91.56	90.79	92.47	92.48
28	.....	91.72	92.48	94.35	92.68	92.35	92.34	91.68	91.48	90.9?	92.42	92.45
29	.....	91.66	92.43	94.29	92.64	92.35	92.39	91.66	91.49	91.12	92.39	92.52
30	a91.48	.....	92.43	94.24	92.64	92.45	92.28	91.57	91.66	91.16	92.30	92.71
31	91.42	.....	92.74	.....	92.67	.....	92.19	91.51	.....	91.19	.....	a92.88

Lowell 9.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	159.35	Apr. 9	164.35	July 9	162.27	Oct. 5	158.14
9	159.32	16	165.05	16	161.91	12	157.97
16	159.27	23	166.14	23	161.50	19	157.86
23	159.59	30	165.68	30	161.09	2?	157.77
30	159.70	May 7	165.62	Aug. 6	160.63	Nov. 2	157.71
Feb. 6	159.64	14	164.70	13	160.17	9	158.30
13	159.58	21	163.93	20	159.77	16	159.41
21	159.71	28	163.58	27	159.38	23	160.43
27	159.68	June 4	164.10	Sept. 3	159.07	30	160.53
Mar. 5	159.58	7	163.83	10	158.82	Dec. 7	160.63
12	159.77	11	163.40	17	158.59	14	161.08
19	160.03	18	162.85	24	158.32	21	161.92
26	160.37	25	162.30	28	158.24	28	162.06
Apr. 2	161.08	July 2	162.11				

Lowell 14.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	142.14	Apr. 9	144.76	July 9	145.82	Oct. 5	142.02
9	142.17	16	145.55	16	145.58	12	141.77
16	142.36	23	146.77	23	145.29	19	141.51
23	141.93	30	147.83	30	144.94	26	141.24
30	142.25	May 7	148.11	Aug. 6	144.55	Nov. 2	141.03
Feb. 6	142.17	14	148.05	13	144.17	9	140.88
13	142.11	21	147.55	20	143.96	16	140.86
21	142.07	28	147.32	27	143.65	23	141.48
27	142.00	June 4	147.54	Sept. 3	143.33	30	142.04
Mar. 5	142.06	7	147.42	10	143.01	Dec. 7	142.33
12	142.29	11	147.13	17	142.70	14	142.60
19	142.96	18	146.78	24	142.42	21	143.02
26	143.59	25	146.33	28	142.28	28	143.47
Apr. 2	144.10	July 2	145.99				

a Estimated.

Middlesex County--Continued.

Lowell 18.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	117.70	Apr. 9	117.65	July 9	118.22	Oct. 5	118.00
9	117.65	16	117.74	16	118.19	12	117.96
16	117.70	23	117.94	23	118.17	19	117.93
23	117.70	30	118.28	30	118.14	26	117.92
30	117.67	May 7	118.35	Aug. 6	118.10	Nov. 2	117.92
Feb. 6	117.69	14	118.35	13	118.05	9	117.91
13	117.72	21	118.33	20	119.22	16	117.89
21	117.73	28	118.35	27	118.40	23	117.89
27	117.67	June 4	118.34	Sept. 3	118.31	30	117.89
Mar. 5	117.69	7	118.35	10	118.23	Dec. 7	117.89
12	117.26	11	118.32	17	118.16	14	117.89
19	117.64	18	118.31	24	118.09	21	117.84
26	117.59	25	118.28	28	118.05	28	117.81
Apr. 2	117.61	July 2	118.24				

Lowell 22.

Water level, in feet above mean sea level; 1940

Jan. 2	109.27	Apr. 16	111.76	July 9	110.56	Oct. 5	108.84
9	109.06	23	111.97	16	110.44	12	108.78
16	108.91	30	112.05	23	110.28	19	108.74
23	108.91	May 7	111.70	30	110.06	26	108.65
Feb. 6	108.75	14	111.46	Aug. 6	109.85	Nov. 2	108.62
13	108.61	21	110.98	13	109.69	9	108.83
27	110.48	28	110.91	20	109.47	16	109.61
Mar. 5	109.89	June 4	110.99	27	109.27	23	110.14
12	110.49	7	110.93	Sept. 3	109.29	30	110.16
19	111.27	11	110.92	10	109.12	Dec. 7	110.08
26	110.74	18	110.57	17	108.96	14	110.28
Apr. 2	111.01	25	110.54	24	108.87	21	110.49
9	111.43	July 2	110.26	28	108.87	28	110.30

Lowell 26.

Water level, in feet above mean sea level, 1940

Jan. 2	91.50	May 7	99.12	July 23	94.35	Oct. 12	91.36
9	91.18	14	98.55	30	93.86	19	91.21
16	93.28	21	97.98	Aug. 6	93.38	26	91.06
23	92.03	28	97.86	13	92.98	Nov. 2	90.98
30	91.61	June 4	98.32	20	92.57	9	91.58
Feb. 6	91.29	7	97.90	27	92.23	16	92.06
13	92.89	11	97.25	Sept. 3	92.01	23	92.88
Mar. 26	93.59	18	96.52	10	91.90	30	92.78
Apr. 2	100.29	25	95.58	17	91.73	Dec. 7	92.52
9	97.37	July 2	95.33	24	91.58	14	92.43
16	97.65	9	95.66	28	91.57	21	93.15
23	99.04	16	94.95	Oct. 5	91.50	28	93.03
30	98.87						

Lowell 33.

Water level, in feet above mean sea level, 1940

Jan. 2	92.64	Apr. 9	94.72	July 9	94.20	Oct. 5	92.25
9	92.45	16	94.95	16	93.95	12	92.06
16	93.18	23	95.25	23	93.66	19	91.96
23	93.00	30	94.86	30	93.33	26	91.83
30	92.85	May 7	95.41	Aug. 6	92.98	Nov. 2	92.03
Feb. 6	92.58	14	94.62	13	92.62	9	92.72
13	93.33	21	94.41	20	92.29	16	93.69
21	93.45	28	94.57	27	92.15	23	93.53
27	93.55	June 4	94.89	Sept. 3	92.32	30	93.45
Mar. 5	93.84	7	94.57	10	92.37	Dec. 7	93.54
12	94.11	11	94.43	17	92.28	14	93.90
19	94.50	18	94.21	24	92.18	21	94.11
26	94.14	25	93.90	28	92.47	28	94.29
Apr. 2	94.53	July 2	93.96				

Middlesex County--Continued.

Lowell 40. Measurements discontinued May 21, 1940.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	83.92	Jan. 30	83.40	Apr. 2	85.04	Apr. 30	86.87
9	83.16	Feb. 6	83.09	9	85.27	May 14	87.24
23	84.12	Mar. 26	83.81	23	88.55	21	86.48

Lowell 41.

Water level, in feet above mean sea level, 1940

Jan. 2	96.21	Apr. 16	98.85	July 16	96.06	Oct. 5	96.88
9	95.91	30	98.27	23	95.35	12	96.71
16	97.49	May 7	98.42	30	94.80	19	96.43
30	96.78	14	97.14	Aug. 6	94.15	Nov. 9	97.96
Feb. 6	96.27	21	96.72	13	95.68	16	99.57
13	98.54	28	97.29	20	96.08	23	99.25
21	98.45	June 4	98.31	27	96.14	30	98.25
27	98.42	7	97.68	Sept. 3	96.49	Dec. 7	98.31
Mar. 5	98.28	11	97.04	10	96.56	14	99.00
12	99.41	18	96.49	17	96.47	21	99.35
19	100.61	25	96.64	28	96.90	28	99.00
Apr. 9	99.53	July 9	96.45				

Lowell 43. 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 owner's Pawtucket Boulevard pump house, and about 1,100 feet west of well Lowell 40. Driven well, diameter 2⅛ inches, depth 32.4 feet below land surface. Measuring point, top of pipe, 0.7 foot above land surface and 101.06 feet above mean sea level. Water level May 28, 1940, 12.54 feet below measuring point and 88.52 feet above mean sea level. Water level affected by pumping from owner's Pawtucket Boulevard well field.

Water level, in feet above mean sea level, 1940

May 28	88.52	July 23	90.02	Sept. 17	89.41	Nov. 9	88.11
June 4	90.44	30	89.35	24	89.16	16	90.12
7	89.08	Aug. 6	89.55	28	87.82	23	88.74
11	88.35	13	88.94	Oct. 5	86.88	30	87.89
18	89.41	20	88.93	12	86.76	Dec. 7	87.69
25	88.85	27	89.83	19	87.02	14	87.25
July 2	89.22	Sept. 3	90.26	26	87.50	21	88.20
9	90.04	10	88.73	Nov. 2	88.05	28	87.12
16	89.58						

Reading 1.

Water level, in feet above mean sea level, 1940

Jan. 5	85.45	Apr. 9	91.97	July 9	89.48	Oct. 5	86.57
12	85.51	16	92.85	15	89.21	12	86.45
19	85.63	23	93.85	22	88.93	19	86.32
26	85.92	30	94.21	29	88.64	26	86.19
30	86.30	May 7	93.73	Aug. 5	88.39	Nov. 2	86.09
Feb. 6	86.44	14	93.20	12	88.13	9	85.99
13	86.49	21	92.40	19	87.88	16	86.01
21	86.59	28	91.77	26	87.64	23	86.46
27	86.67	June 4	91.49	Sept. 2	87.42	30	86.65
Mar. 5	86.69	6	91.50	9	87.21	Dec. 7	86.74
12	87.12	11	91.32	16	87.02	14	86.97
19	87.99	18	90.91	23	86.83	21	87.48
26	89.66	25	90.39	28	86.72	28	87.88
Apr. 2	91.18	July 2	89.82				

Middlesex County--Continued.

Reading 3. Merle W. Farr. About 500 feet southeast of intersection of West Street and County Road, and about 1.2 miles southwest of Reading. Unused driven irrigation well, diameter 2½ inches, depth 10.1 feet below land surface. Measuring point, top of pipe, 0.5 foot above land surface and 159.28 feet above mean sea level. Water level June 20, 1940, 2.45 feet below measuring point and 156.83 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 20	156.83	Aug. 26	155.06	Oct. 12	155.07	Nov. 23	156.59
July 15	156.95	Sept. 2	154.94	19	154.93	30	156.56
22	156.78	9	155.20	26	154.78	Dec. 7	156.62
29	156.20	16	155.12	Nov. 2	155.08	14	156.94
Aug. 5	155.99	23	155.49	9	155.70	21	157.00
12	155.53	28	155.88	16	157.23	28	156.98
19	155.20	Oct. 5	155.28				

Stoneham 2. N. Custa. About 75 feet south of Cedar Street, about 1,600 feet east of intersection of Cedar and Washington Streets, and about 1.7 miles northwest of Stoneham. Unused dug domestic well, diameter 24 inches, depth 14.3 feet below land surface. Measuring point, chisel mark on northwest side of inside top edge of tile casing, 2.7 feet below land surface and 93.73 feet above mean sea level. Water level June 17, 1940, 2.60 feet below measuring point and 91.13 feet above mean sea level.

Water level, in feet above mean sea level, 1940

June 17	91.13	Aug. 26	89.21	Oct. 12	90.05	Nov. 23	91.71
July 15	90.83	Sept. 2	89.01	19	89.76	30	91.31
22	90.49	9	89.33	26	89.60	Dec. 7	91.28
29	90.23	16	89.38	Nov. 2	89.56	14	91.87
Aug. 5	90.10	23	89.39	9	90.41	21	91.83
12	89.80	28	90.07	16	92.55	28	91.51
19	89.40	Oct. 5	89.94				

Wilmington 10. L. Chisholm. About 75 feet southeast of Hopkins Street, about 1,100 feet southwest of Shawsheen Avenue, and about 2.1 miles west of Wilmington Center. Unused dug domestic well, diameter 36 inches, depth 9.0 feet below land surface. Measuring point, inside top edge on northwest side of wooden hand pump base, 1.5 feet above land surface and 115.13 feet above mean sea level. Water level July 18, 1940, 5.32 feet below measuring point and 109.81 feet above mean sea level.

Water level, in feet above mean sea level, 1940

July 18	109.81	Sept.16	106.93	Oct. 26	106.41	Nov. 30	110.15
Aug. 12	108.06	23	106.82	Nov. 2	106.30	Dec. 7	110.34
19	107.65	28	107.22	9	107.28	14	111.13
26	107.38	Oct. 5	107.00	16	110.78	21	111.46
Sept. 2	107.12	12	106.76	23	110.31	28	111.77
9	107.09	19	106.57				

Wilmington 29. Oliver R. Surette. About 40 feet east of Andover Street, about 2,700 feet northeast of intersection of Andover and Woburn Streets, and about 2.5 miles northeast of Wilmington Center. Unused dug domestic well, diameter 36 inches, depth 13.3 feet below land surface. Measuring point, inside top edge on south side of trap door opening in center of concrete well cover, about at land surface and 99.99 feet above mean sea level. Water level July 24, 1940, 10.70 feet below measuring point and 89.29 feet above mean sea level.

Water level, in feet above mean sea level, 1940

July 24	89.29	Sept.16	88.82	Oct. 26	88.81	Nov. 30	89.40
Aug. 12	89.13	23	88.89	Nov. 2	88.89	Dec. 7	89.40
19	88.89	28	89.03	9	89.05	14	89.57
26	88.83	Oct. 5	88.89	16	89.67	21	89.70
Sept. 2	88.75	12	88.84	23	89.48	28	89.70
9	88.79	19	88.84				

Middlesex County--Continued.

Wilmington 44. Mrs. Anne M. McMahon. About 700 feet northwest of intersection of Federal Street and Middlesex Avenue, and about 0.4 mile northeast of Wilmington Center. Unused dug domestic well, diameter 36 inches, depth 10.3 feet below land surface. Measuring point, inside top edge of west side of concrete well curb, 1.0 foot above land surface and 87.70 feet above mean sea level. Water level July 26, 1940, 5.73 feet below measuring point and 81.97 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 26	81.97	Sept.16	80.80	Oct. 26	81.01	Nov. 30	83.21
Aug. 12	81.63	23	80.90	Nov. 2	81.10	Dec. 7	83.27
19	81.32	28	81.42	9	82.01	14	83.83
26	81.11	Oct. 5	81.20	16	84.77	21	83.74
Sept. 2	80.90	12	81.04	23	83.51	28	83.48
9	80.84	19	81.05				

Wilmington 58. Mrs. R. Malatesta. About 3 feet south of Butters Row, about 1,600 feet west of Main Street, and about 1.5 miles south of Wilmington Center. Unused drilled domestic well, diameter 8 inches, depth 70 feet below land surface. Measuring point, top of casing, about at land surface and 109.10 feet above mean sea level. Water level July 27, 1940, 9.13 feet below measuring point and 99.97 feet above mean sea level.

Water level, in feet above mean sea level, 1940

July 27	99.97	Sept.16	97.91	Oct. 19	97.77	Nov. 23	101.10
Aug. 12	99.16	23	97.87	26	97.73	Dec. 7	101.19
19	98.79	28	98.04	Nov. 2	97.71	14	101.82
26	98.45	Oct. 5	97.98	9	98.31	21	102.67
Sept. 2	98.16	12	97.88	16	100.16	28	102.51
9	98.06						

Winchester 3. Measurements discontinued May 14, 1940.

Water level, in feet above mean sea level, 1940

Jan. 19	44.80	Feb. 21	44.78	Mar. 26	44.82	Apr. 23	44.81
26	44.79	27	44.80	Apr. 2	44.77	30	44.82
30	44.79	Mar. 5	44.80	9	44.76	May 7	44.82
Feb. 6	44.77	12	44.76	16	44.78	14	44.74
13	44.92	19	44.80				

Winchester 4.

Water level, in feet above mean sea level, 1940

Jan. 5	26.69	Apr. 9	34.29	July 9	34.51	Oct. 5	32.62
12	26.70	16	34.43	15	34.38	12	32.54
19	28.02	23	34.49	22	34.10	19	32.38
26	29.48	30	36.27	29	33.80	26	32.31
30	29.81	May 7	36.52	Aug. 5	33.59	Nov. 2	32.29
Feb. 6	29.91	14	36.20	12	33.12	9	32.33
13	30.54	21	35.86	19	32.69	16	33.43
21	30.78	28	35.77	26	32.46	23	33.92
27	30.92	June 4	36.00	Sept. 2	32.15	30	33.90
Mar. 5	31.30	6	36.06	9	32.31	Dec. 7	33.90
12	32.29	11	36.00	16	32.51	14	34.24
19	33.45	18	35.84	23	32.53	21	34.64
26	33.64	25	35.19	28	32.56	28	34.52
Apr. 2	34.46	July 2	34.72				

Winchester 14. F. E. Gregory. About 105 feet north of Forest Street, about 360 feet northeast of west intersection of Forest Street and Forest Circle, and about 1.7 miles northeast of Winchester. Unused dug domestic well, diameter 36 inches, depth 16.9 feet below land surface. Measuring point, top of piece of black marble on north side of square opening in center of well cover, about at land surface and 116.29 feet above mean sea level. Water level June 13, 1940, 10.00 feet below measuring point and 106.29 feet above mean sea level.

Middlesex County--Continued.

Winchester 14.--Continued.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 13	106.29	Aug. 26	103.89	Oct. 12	103.38	Nov. 23	106.49
July 15	104.88	Sept. 2	103.63	19	103.27	30	106.14
22	104.70	9	103.61	26	103.15	Dec. 7	106.13
29	104.49	16	103.66	Nov. 2	103.02	14	106.96
Aug. 5	104.58	23	103.56	9	103.03	21	107.54
12	104.40	28	103.49	16	103.79	28	107.00
19	104.13	Oct. 5	103.47				

Woburn 1. The location of this well was incorrectly given in all previous reports as 3.5 miles north of Woburn. The correct location is 0.5 mile south of Woburn.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	83.19	Apr. 9	85.27	July 9	83.85	Oct. 5	82.78
12	82.98	16	85.40	15	83.72	12	82.64
19	84.54	23	86.06	22	83.30	19	82.50
26	83.70	30	85.28	29	82.97	26	82.36
30	83.44	May 7	85.14	Aug. 5	83.66	Nov. 2	82.50
Feb. 6	83.31	14	84.59	12	83.10	9	82.97
13	83.97	21	84.23	19	82.87	16	85.35
21	83.70	28	84.34	26	82.80	23	84.13
27	83.45	June 4	84.84	Sept. 2	82.65	30	83.64
Mar. 5	83.43	6	84.65	9	83.22	Dec. 7	83.73
12	84.98	11	84.27	16	83.00	14	84.12
19	85.80	18	83.80	23	82.76	21	84.31
26	85.05	25	83.74	28	83.13	28	84.12
Apr. 2	85.15	July 2	83.48				

Woburn 2.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	45.04	Apr. 9	46.85	July 9	46.51	Oct. 5	50.06
12	50.08	16	46.45	15	47.18	12	48.18
19	50.53	23	46.73	22	47.13	19	49.30
26	50.94	30	46.99	29	47.10	26	46.95
30	45.47	May 7	47.15	Aug. 5	46.88	Nov. 2	48.07
Feb. 6	44.71	14	47.05	12	46.50	9	50.19
13	45.42	21	47.25	19	45.90	16	51.25
21	50.52	28	46.77	26	45.27	23	51.08
27	45.60	June 4	47.11	Sept. 2	43.85	30	46.82
Mar. 5	45.74	6	47.04	9	44.81	Dec. 7	51.04
12	45.98	11	46.85	16	44.38	14	49.71
19	46.20	18	46.06	23	43.56	21	51.45
26	45.81	25	46.63	28	50.15	28	51.28
Apr. 2	46.01	July 2	47.22				

Woburn 3.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	71.66	Apr. 9	72.78	July 9	70.92	Oct. 5	71.40
12	71.66	16	72.93	15	70.86	12	71.30
19	71.95	23	73.10	22	71.54	19	71.29
26	71.91	30	73.01	29	70.77	26	71.22
30	71.88	May 7	72.78	Aug. 5	71.75	Nov. 2	71.20
Feb. 6	71.84	14	72.10	12	71.63	9	71.35
13	71.99	21	71.56	19	70.44	16	71.92
21	71.92	28	71.84	26	71.51	23	71.91
27	71.88	June 4	71.30	Sept. 2	71.51	30	71.88
Mar. 5	72.04	6	71.77	9	70.81	Dec. 7	71.90
12	72.31	11	71.58	16	70.45	14	72.00
19	72.35	18	71.41	23	70.27	21	72.12
26	72.69	25	71.67	28	71.49	28	72.12
Apr. 2	72.80	July 2	71.33				

Middlesex County--Continued.

Woburn 4.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	66.33	Apr. 16	67.17	July 9	66.37	Oct. 5	66.12
12	66.27	23	67.97	15	66.33	12	66.08
19	66.71	30	67.09	22	66.27	19	66.06
26	66.53	May 7	67.01	29	66.06	26	66.03
30	66.49	14	66.76	Aug. 5	66.01	Nov. 2	66.15
Feb. 6	66.46	21	66.63	12	65.81	9	66.27
13	66.82	28	66.87	19	65.85	16	67.10
Mar. 5	67.03	June 4	66.75	26	65.84	23	66.59
12	66.99	6	66.79	Sept. 2	65.91	30	66.49
19	67.73	11	66.67	9	66.06	Dec. 7	66.51
26	67.02	18	66.42	16	66.00	14	66.70
Apr. 2	67.14	25	66.75	23	66.22	21	66.64
9	67.40	July 2	66.35	28	66.32	28	66.57

Woburn 5.

Water level, in feet above mean sea level, 1940

Feb. 13	59.21	June 4	59.20	Aug. 12	58.82	Oct. 19	58.96
Mar. 19	59.59	6	59.20	19	58.87	26	58.96
Apr. 2	59.68	11	59.19	26	58.82	Nov. 2	59.02
9	59.64	18	59.06	Sept. 2	58.89	9	59.03
16	59.50	25	59.36	9	58.95	16	59.44
23	59.78	July 2	59.00	16	58.93	23	59.18
30	59.29	9	58.99	23	59.01	30	59.16
May 7	59.31	15	59.02	28	59.06	Dec. 7	59.31
14	59.22	22	59.03	Oct. 5	58.97	14	59.23
21	59.21	29	58.92	12	58.96	28	59.21
28	59.37	Aug. 5	58.88				

Woburn 12. D. McDonald. About 55 feet southeast of Washington Street, and about 30 feet northeast of Erie Street, East Woburn. Unused dug domestic well, diameter 36 inches, depth 22 feet below land surface. Measuring point, top of brick curb on northeast side of well casing, about at land surface and 56.81 feet above mean sea level. Water level June 12, 1940, 19.10 feet below measuring point and 37.71 feet above mean sea level. Measurements discontinued Dec. 28, 1940.

Water level, in feet above mean sea level, 1940

June 12	37.71	Aug. 26	36.64	Oct. 12	(a)	Nov. 23	(a)
July 15	37.21	Sept. 2	36.52	19	(a)	30	36.20
22	37.12	9	36.48	26	(a)	Dec. 7	36.23
29	37.01	16	36.37	Nov. 2	(a)	14	(a)
Aug. 5	36.93	23	36.24	9	(a)	21	(a)
12	36.82	28	(a)	16	(a)	28	36.20
19	36.73	Oct. 5	(a)				

Woburn 17. J. D. Coakley. About 70 feet north of north end of Ingalls Street, about 370 feet north of intersection of Montvale Avenue and Ingalls Street, and about 0.8 mile east of Woburn. Dug domestic well, diameter 72 inches, depth 11 feet below land surface. Measuring point, top edge of wooden well cover at 1-inch hole in center of cover, 1 foot above land surface and 180.75 feet above mean sea level. Water level July 15, 1940, 6.96 feet below measuring point and 173.79 feet above mean sea level. Well is pumped infrequently during summer for drinking purposes.

Water level, in feet above mean sea level, 1940

July 15	173.79	Sept. 2	172.59	Oct. 12	171.95	Nov. 23	174.57
22	173.76	9	172.61	19	171.80	30	174.52
29	173.59	16	172.45	26	171.67	Dec. 7	174.59
Aug. 5	173.53	23	172.24	Nov. 2	171.53	14	175.41
12	173.29	28	172.20	9	171.54	21	175.58
19	173.05	Oct. 5	172.08	16	173.91	28	175.45
26	172.79						

a Well dry.

Middlesex County--Continued.

Woburn 19. De Greasing Co., Inc. About 230 feet north of Montvale Avenue, and about 300 feet west of Albany Street, East Woburn. Unused driven industrial well, diameter 2½ inches, depth 70 feet below land surface. Measuring point, top of pipe, 0.5 foot above land surface and 38.65 feet above mean sea level. Water level June 20, 1940, 9.10 feet below measuring point and 29.55 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 20	29.55	Aug. 19	28.86	Oct. 19	28.06	Nov. 30	29.65
July 15	29.24	26	28.56	26	28.08	Dec. 7	29.64
22	29.10	Sept. 2	27.73	Nov. 2	28.11	14	30.30
29	29.06	9	27.56	9	28.03	21	30.23
Aug. 5	29.68	16	27.11	16	30.90	28	29.92
12	28.97	23	27.28	23	29.90		

Woburn 21. Morris Kaplan. About 150 feet south of Webster Street, and about 1,100 feet west of Kimball Lane, North Woburn. Unused driven industrial well, diameter 1¼ inches, depth 19.1 feet below land surface. Measuring point, inside bottom edge of hand pump base attached to top of pipe, 3.0 feet above land surface and 121.78 feet above mean sea level. Water level June 21, 1940, 12.20 feet below measuring point and 109.58 feet above mean sea level.

Water level, in feet above mean sea level, 1940

June 21	109.58	Aug. 26	110.41	Oct. 12	109.85	Nov. 23	110.52
July 15	111.56	Sept. 2	110.27	19	109.76	30	110.51
22	111.30	9	110.24	26	109.66	Dec. 7	110.59
29	111.10	16	110.13	Nov. 2	109.61	14	110.83
Aug. 5	110.97	23	110.04	9	109.79	21	111.04
12	110.78	28	110.13	16	110.36	28	111.12
19	110.60	Oct. 5	109.98				

Woburn 23. F. H. Bowser. About 490 feet southwest of intersection of Main and Elm Streets, and about 0.6 mile south of North Woburn. Unused driven test well, diameter 2½ inches, depth 25 feet below land surface. Measuring point, top of pipe, 1.0 foot above land surface and 95.77 feet above mean sea level. Water level July 15, 1940, 1.97 feet below measuring point and 93.80 feet above mean sea level.

Water level, in feet above mean sea level, 1940

July 15	93.80	Aug. 26	93.08	Oct. 5	93.61	Nov. 16	94.58
22	93.83	Sept. 2	93.11	12	93.55	23	94.17
29	93.35	9	93.47	19	93.24	Dec. 7	94.33
Aug. 5	93.35	16	93.35	26	93.17	14	94.29
12	93.15	23	93.41	Nov. 2	93.23	21	94.32
19	93.13	28	93.64	9	93.63	28	94.53

Woburn 36. Town of Woburn test well 12-A. About 100 feet east of Willow Street, about 365 feet south of Lexington Street, about 320 feet west of owner's Unit E pump house, and about 1.2 miles southwest of Woburn. Driven well, diameter 2½ inches, depth 37.7 feet below land surface. Measuring point, top of pipe, 1.0 foot above land surface and 43.88 feet above mean sea level. Water level June 28, 1940, 2.35 feet below measuring point and 41.53 feet above mean sea level.

Water level, in feet above mean sea level, 1940

June 28	41.53	Aug. 26	41.12	Oct. 12	41.09	Nov. 23	41.20
July 15	41.67	Sept. 2	41.07	19	41.05	30	41.26
22	41.50	9	41.08	26	41.01	Dec. 7	41.31
29	41.43	16	41.11	Nov. 2	40.97	14	41.38
Aug. 5	41.42	23	41.08	9	41.00	21	41.44
12	41.32	28	41.15	16	41.13	28	41.49
19	41.18	Oct. 5	41.13				

Middlesex County--Continued.

Woburn 38. Town of Woburn. On Woburn Country Club golf course, about 300 feet northwest of owner's Unit D pump house. Pump house about 60 feet west of Woburn Parkway and about 1.1 miles southwest of Woburn. Driven test well, diameter 2½ inches, depth 20.6 feet below land surface. Measuring point, top of pipe, 1.5 feet above land surface and 53.16 feet above mean sea level. Water level June 28, 1940, 10.85 feet below measuring point and 42.31 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 28	42.31	Aug. 26	39.85	Oct. 12	39.42	Nov. 23	40.70
July 15	41.74	Sept. 2	39.65	19	39.21	30	40.92
22	41.46	9	40.00	26	38.99	Dec. 7	41.04
29	41.02	16	39.95	Nov. 2	38.73	14	41.23
Aug. 5	41.11	23	39.74	9	39.04	21	41.70
12	40.68	28	39.76	16	39.88	28	41.64
19	40.04	Oct. 5	39.64				

Woburn 49. Leo Pias. About 260 feet south of Locust Street, about 560 feet east of Cambridge Road, and about 1.3 miles west of Woburn. Unused irrigation well, diameter 6 inches, depth 12.4 feet below land surface. Measuring point, top of casing, 2 feet above land surface and 65.25 feet above mean sea level. Water level July 10, 1940, 1.19 feet below measuring point and 64.06 feet above mean sea level.

Water level, in feet above mean sea level, 1940

July 10	64.06	Aug. 26	62.95	Oct. 12	61.13	Nov. 23	62.07
15	63.99	Sept. 2	62.59	19	60.89	30	62.37
22	64.01	9	62.47	26	60.61	Dec. 7	62.78
29	63.86	16	62.08	Nov. 2	60.42	14	63.28
Aug. 5	63.71	23	61.67	9	60.37	21	63.63
12	63.65	28	61.71	16	61.80	28	64.09
19	63.44	Oct. 5	61.32				

Woburn 53. P. Flowers. About 240 feet north of Kilby Street, about 550 feet west of Hart Street, and about 0.6 mile north of Woburn. Unused dug domestic well, diameter 48 inches, depth 12.9 feet below land surface. Measuring point, top edge of projecting stone in east side of cobble curb, 1.0 foot below top of casing, 1.0 foot above land surface, and 105.96 feet above mean sea level. Water level July 13, 1940, 9.37 feet below measuring point and 96.59 feet above mean sea level.

Water level, in feet above mean sea level, 1940

July 13	96.59	Aug. 26	95.63	Oct. 12	95.71	Nov. 23	96.86
15	96.52	Sept. 2	95.54	19	95.71	30	96.79
22	96.33	9	95.80	26	95.70	Dec. 7	96.81
29	96.10	16	95.79	Nov. 2	95.85	14	97.04
Aug. 5	96.12	23	95.65	9	96.15	21	97.12
12	95.90	28	95.91	16	97.05	28	97.11
19	95.69	Oct. 5	95.76				

Worcester County

Leominster 11.

Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	356.88	.....	.....	360.50	360.62	361.75
2	356.81	.....	.....	360.39	360.62	361.23
3	356.76	.....	.....	360.37	360.62	360.87
4	356.70	.....	.....	a360.39	360.62	360.60
5	356.68	.....	.....	a360.73	360.62	360.38
6	356.61	.....	.....	361.05	360.62	360.06
7	356.55	.....	.....	360.95	360.62	359.81

a Estimated.

Worcester County--Continued.

Leominster 11.--Continued.

Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June
8	356.54	.....	.....	360.92	360.62	359.76
9	356.48	.....	.....	361.55	360.57	359.57
10	356.45	.....	.....	361.44	360.39	359.57
11	356.42	.....	.....	361.26	360.25	359.65
12	356.41	a357.49	.....	361.25	360.15	359.58
13	356.36	357.57	.....	a362.05	360.02	359.44
14	356.35	357.58	.....	a361.73	359.91	359.27
15	.....	357.25	.....	361.47	359.78	359.25
16	.....	357.23	.....	361.30	359.74	359.09
17	.....	357.21	.....	361.18	359.74	358.96
18	.....	357.13	.....	361.18	360.04	358.85
19	.....	.....	.....	361.74	359.85	358.75
20	.....	.....	.....	361.65	359.67	358.64
21	.....	.....	.....	362.36	359.61	358.52
22	.....	.....	.....	362.23	359.58	358.44
23	.....	.....	.....	362.08	359.58	358.36
24	.....	.....	.....	361.72	360.25	358.29
25	.....	.....	.....	361.46	360.38	358.29
26	.....	.....	.....	361.26	360.57	358.61
27	.....	.....	.....	361.21	360.50	358.81
28	.....	.....	.....	361.02	360.44	358.78
29	.....	.....	.....	360.87	360.49	358.78
30	.....	.....	.....	360.74	360.19	358.80
31	.....	.....	359.90	.....	360.17	.....

Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	358.64	358.03	355.68	355.02	354.56	358.19
2	358.52	357.89	355.64	355.01	354.56	358.43
3	358.44	357.77	355.59	355.00	354.57	358.65
4	358.44	357.61	355.56	354.97	354.59	358.66
5	358.96	357.48	355.52	354.95	354.69	358.65
6	359.01	357.36	355.48	354.94	354.84	358.60
7	358.90	357.27	355.45	354.93	354.98	358.60
8	358.79	357.20	355.42	354.91	355.08	358.70
9	358.69	357.10	355.39	354.89	355.16	359.28
10	358.66	356.99	355.37	354.87	355.22	359.46
11	358.59	356.90	355.34	354.86	355.27	359.55
12	358.59	356.82	355.32	354.84	355.31	359.58
13	358.96	356.75	355.30	354.83	355.35	359.64
14	358.84	356.65	355.27	354.81	355.38	359.87
15	358.68	356.56	355.26	354.80	355.48	359.70
16	358.56	356.48	355.24	354.79	356.64	359.65
17	358.45	356.41	355.21	354.77	357.84	360.26
18	358.35	356.35	355.18	354.76	358.11	360.49
19	358.25	356.29	355.15	354.74	358.13	360.28
20	358.17	356.21	355.13	354.72	358.18	360.27
21	358.16	356.16	355.11	354.71	358.22	360.25
22	358.18	356.10	355.08	354.69	358.20	360.25
23	358.23	356.05	355.05	354.68	358.16	360.19
24	358.11	356.00	355.03	354.67	358.16	360.10
25	358.00	355.96	355.04	354.65	358.23	360.03
26	357.91	355.91	355.01	354.64	358.22	a359.96
27	357.79	355.86	355.01	354.62	358.22	.....
28	357.66	355.81	355.01	354.61	358.19	.....
29	357.56	355.77	355.01	354.59	358.17	.....
30	357.56	355.75	355.01	354.58	358.19	.....
31	357.70	355.71	.....	354.58	.....	.....

a Estimated.

Worcester County--Continued.

Winchendon 13.

Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	1,197.15	.....	.....	1,202.06	1,205.90	1,206.32
2	1,197.19	.....	.....	1,203.53	1,205.97	1,206.23
3	1,197.24	.....	.....	1,204.27	1,206.03	1,205.90
4	1,197.28	.....	.....	1,204.76	1,206.46	1,205.62
5	1,197.32	.....	.....	1,205.14	1,206.63	1,205.40
6	1,197.37	a1,198.65	.....	1,205.45	1,206.40	1,205.14
7	1,197.42	1,198.66	.....	1,205.64	1,206.14	1,204.90
8	1,197.47	1,198.70	.....	1,205.76	1,205.96	1,204.75
9	1,197.48	1,198.71	.....	1,206.44	1,205.81	1,204.62
10	1,197.43	1,198.73	.....	1,206.27	1,205.68	1,204.62
11	1,197.39	1,198.75	.....	1,206.19	1,205.57	1,204.62
12	1,197.38	a1,198.98	.....	1,206.30	1,205.48	1,204.62
13	1,197.30	.....	.....	.....	1,205.40	1,204.58
14	1,197.25	.....	.....	.....	1,205.27	1,204.44
15	1,197.19	.....	.....	.....	1,205.19	1,204.36
16	1,197.15	.....	.....	a1,205.84	1,205.15	1,204.18
17	1,197.13	.....	.....	1,205.89	1,205.15	1,204.06
18	1,197.09	.....	.....	1,205.28	1,205.29	1,203.98
19	1,197.09	.....	.....	1,205.28	1,205.16	1,203.84
20	1,197.08	.....	.....	1,204.69	1,205.03	1,203.67
21	a1,197.03	.....	.....	1,204.69	1,204.94	1,203.53
22	1,196.97	.....	.....	1,205.08	1,204.89	1,203.43
23	.....	.....	.....	1,205.30	1,204.87	1,203.33
24	.....	.....	.....	1,205.30	1,204.94	1,203.21
25	.....	.....	a1,199.66	1,205.44	1,204.90	1,203.21
26	.....	.....	1,199.68	1,205.59	1,204.88	1,203.23
27	.....	.....	1,199.75	1,205.72	1,204.82	1,203.34
28	.....	.....	1,199.84	1,205.79	1,204.80	1,203.40
29	.....	.....	1,199.96	1,205.85	1,204.84	1,203.53
30	.....	.....	1,200.12	1,205.88	1,204.75	1,203.71
31	.....	.....	1,200.52	.....	1,204.73	.....

Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1,203.78	1,201.46	1,199.39	1,198.56	1,197.87	1,201.66
2	1,203.68	1,201.33	1,199.36	1,198.53	1,197.86	1,201.70
3	1,203.58	1,201.25	1,199.32	1,198.51	1,197.86	1,201.70
4	1,203.58	1,201.16	1,199.29	1,198.48	1,197.85	1,201.70
5	1,203.72	1,201.07	1,199.27	1,198.46	1,197.83	1,201.71
6	1,203.75	1,200.98	1,199.24	1,198.44	1,197.82	1,201.74
7	1,203.61	1,200.88	1,199.21	1,198.41	1,197.81	1,201.74
8	1,203.45	1,200.79	1,199.18	1,198.39	1,197.80	1,201.77
9	1,203.28	1,200.71	1,199.16	1,198.36	1,197.79	1,201.77
10	1,203.16	1,200.61	1,199.14	1,198.34	1,197.79	1,201.84
11	1,203.03	1,200.53	1,199.10	1,198.31	1,197.79	1,201.99
12	1,203.01	1,200.47	1,199.07	1,198.29	1,197.79	1,202.03
13	1,203.11	1,200.40	1,199.04	1,198.27	1,197.79	1,202.18
14	1,203.16	1,200.32	1,199.01	1,198.25	1,197.79	1,202.30
15	1,203.05	1,200.24	1,198.98	1,198.23	1,197.80	1,202.58
16	1,202.93	1,200.17	1,198.96	1,198.21	1,197.84	1,202.90
17	1,202.82	1,200.10	1,198.94	1,198.19	1,197.94	1,203.22
18	1,202.72	a1,200.04	1,198.90	1,198.17	1,198.19	1,203.60
19	1,202.61	1,200.00	1,198.87	1,198.16	1,198.58	1,203.92
20	1,202.50	a1,199.92	1,198.84	1,198.14	1,199.07	1,204.04
21	1,202.42	1,199.85	1,198.82	1,198.13	1,199.61	1,204.11
22	1,202.38	a1,199.79	1,198.79	1,198.11	1,200.15	1,204.15
23	1,202.31	1,199.75	1,198.76	1,198.10	1,200.59	1,204.12
24	1,202.23	1,199.69	1,198.74	1,198.08	1,200.89	1,204.11
25	1,202.13	1,199.64	1,198.72	a1,198.04	1,201.16	1,204.09
26	1,202.03	1,199.60	1,198.69	1,198.00	1,201.31	1,204.03
27	1,201.92	1,199.55	1,198.66	1.197.98	1,201.43	1,204.03
28	1,201.81	1,199.51	1,198.63	1,197.95	1,201.59	1,204.21
29	1,201.72	1,199.48	1,198.61	1,197.93	1,201.63	1,204.68
30	a1,201.66	1,199.45	1,198.58	1,197.91	1,201.65	1,205.27
31	1,201.58	1,199.41	.....	1,197.89	.....	1,205.58

a Estimated.

MICHIGAN

By C. L. McGuinness, Norman Billings, and O. F. Poindexter

The program of water-level measurements in observation wells in Michigan,[1/] begun in 1932 in cooperation between the Geological Survey Division of the Michigan Department of Conservation, and the Federal Geological Survey, was continued in 1940. Areas with observation wells are shown in an accompanying figure. At the end of the year, monthly or semi-monthly measurements of water level were being made in 75 wells in forested areas in the northern part of the Lower Peninsula. A total of about 1,500 individual measurements of water level were made in the 75 wells during the year, mostly by members of the Michigan State Civilian Conservation Corps, and measurements were made once during the year in 6 wells in Charlevoix County. Norman Billings, junior geologist, Michigan State Civilian Conservation Corps, was in direct charge of the observations in the northern part of the State in 1940.

The float-type water-stage recorder that was installed in November 1934 on a well at the Forest Fire Experiment Station in Roscommon was in operation throughout the year. Weekly water levels in this well in 1940 are given in this report.

In the Roscommon well there was a fairly steady decline in water level, with minor fluctuations, from 7.50 feet below the measuring point on August 8, 1939, to 8.14 feet below the measuring point on March 29, 1940, the lowest stage of 1940. As a result of a thaw, the water level began to rise on March 29. Although periods of freezing weather caused the ground-water recharge to stop several times during the following week and slight declines in water level resulted, by April 6 the water level had risen to a stage of 7.67 feet. On April 6 a more continuous rise began, and by April 13 the water level had risen to 7.20 feet. The water level remained steady from April 13 to April 20, and then began to rise slowly, reaching a stage of 6.94 feet on June 1. Daily halts in the rise, the result of transpiration by plants, began shortly after the middle of April. On June 1 the water level began to decline, and the daily halts caused by transpiration became daily increases in the rate of decline. The decline continued until June 18, when a moderately heavy rain caused

1/ See Water-Supply Papers 777, 817, 840, 845, and 886.

Figure 3.--Index map showing areas of observation wells in Michigan.

a rise in water level from 7.16 feet to 7.10 feet. The water level then declined slowly until June 23. Moderate rains during the period June 23-25 resulted in a rise in water level from about 7.1 feet on June 23 to 6.88 feet on June 29. The water level then declined again until July 22, when a heavy rain caused a rise in water level from 7.40 feet to 7.13 feet. The water level then declined fairly rapidly to about 7.45 feet on August 2, and rather slowly from August 2 to August 29, when a stage of 7.60 feet below the measuring point was reached. On August 29 a heavy rain started a rise in water level that continued until September 7, when a stage of 7.09 feet was reached. The water level remained at this stage until September 11, when a slow decline began. The decline continued until September 19, when a heavy rain caused a rise in water level from 7.12 feet on that date to 6.92 feet on September 21. The water level then continued to rise slowly, reaching a stage of 6.83 feet on September 28. It then declined slowly, with minor fluctuations, to a stage of 6.97 feet on November 1, when an irregular rise began that culminated in a stage of 6.78 feet during the period November 27-30. The water level then declined, with a few interruptions, to 6.85 feet during the period December 23-25, when it began to rise, reaching a stage of 6.73 feet on December 31, 1940. The range in fluctuation during 1940 was 1.41 feet, from 8.14 feet on March 29 to 6.73 feet on December 31, the highest stage of the year.

The history of the observation well program in the northern part of the Lower Peninsula is given in Water-Supply Paper 777 and in subsequent water-level reports (Water-Supply Papers 817, 840, 845, and 886). The following description of the area of investigation and of water-level fluctuations during the period of record is furnished by Norman Billings.

The observation wells are situated in two main areas. The larger of the two, known as the Higgins Lake area, shown as the southernmost of the two shaded areas in the accompanying index map includes the upper portions of the drainage areas of the Manistee, Muskegon, and Au Sable Rivers in Kalkaska, Crawford, Otsego, Roscommon, and Missaukee Counties. The smaller area, known as the Pigeon River area, includes the upper portions of the drainage areas of the Black and Thunder Bay Rivers in Cheboygan, Presque Isle, and Montmorency Counties. The names of the

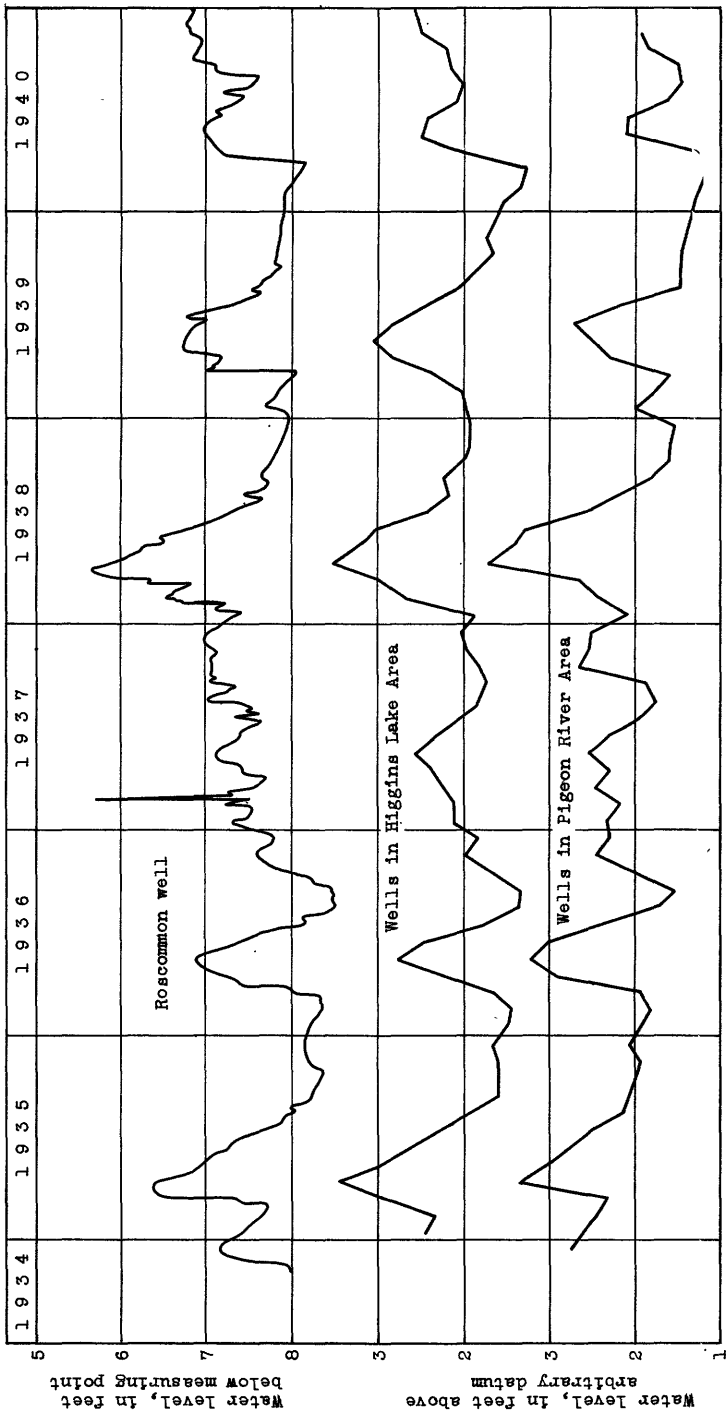


Figure 4.--Hydrographs of observation wells in the northern part of the Lower Peninsula of Michigan.

areas are derived from the names of the State forests in which most of the wells are situated.

The areas of observation wells are underlain by thick deposits of glacial drift. Most of the wells are on sandy moraines or outwash plains and penetrate sand or gravel. Only a few of the wells passed through clay during construction and none end in clay. The wells extend only a few feet below the water table. The water level in the different wells ranges from the land surface to 20 feet below the land surface. The areas in which the water table is less than 20 feet below the surface make up about one-half of the total area of the region.

The region is largely forested. The original cover was mainly white and Norway pine, which was lumbered off during the last half of the 19th century. After an area had been lumbered recurrent forest fires ran unchecked through the slash. During the last 20 or 30 years, however, forest fire suppression has been sufficiently effective to permit uninterrupted plant growth except in a few relatively small areas where fires have occurred, and much of the region has become naturally reforested. In addition, several hundred square miles have been planted to pine seedlings by the State Department of Conservation and the Civilian Conservation Corps.

Periodic measurements in about 200 wells installed by the Michigan State Civilian Conservation Corps were begun in November 1934. In 1938 the number of wells was reduced to 87 and has since been further reduced to the 75 wells that are now being measured regularly. Average water levels in 50 wells in the Higgins Lake area and in 24 wells in the Pigeon River area, computed by the arbitrary datum method, are shown in an accompanying illustration. Fluctuations in water level in the Roscommon recorder well are shown in the same illustration.

The geologic and hydrologic conditions are quite similar throughout the region and the fluctuations in water level in widely separated wells are very similar. The water levels have an annual fluctuation that on the average is about 1.5 feet. The water levels generally reach the highest stage of the year in April or May. The duration of the high stage is short, and the water levels then decline rapidly until September or October, when a slight rise generally occurs. The water levels then decline slowly until February or March, when the melting of snow and

accompanying rains cause considerable ground-water recharge, and a rise begins that culminates in the spring high stage in April or May.

The precipitation during the winter of 1934-35 was slightly below normal and that of the spring of 1935 was only about one-third of normal. Conditions were favorable for ground-water recharge in March 1935, however, and the water levels in the observation wells reached in April an average stage of about 3.4 feet above the arbitrary datum, the second highest stage on record. The water levels then declined rapidly to an average stage of about 1.75 feet above datum in September and then slowly to about 1.7 feet above datum in November. The water levels rose in December to about 1.75 feet above datum, and then declined to about 1.55 feet above datum in February 1936. Although precipitation during the spring of 1936 was almost normal, conditions were not as favorable for recharge as during 1935, and the spring high stage of 1936, reached in May, was only about 2.9 feet above datum. The average autumn low stage, reached in September, was about 1.4 feet above datum, the second lowest stage on record. The water levels then recovered slowly and irregularly to a stage of only about 2.55 feet above datum in May 1937, the lowest spring peak on record. Precipitation during both the winter of 1936-37 and the spring of 1937 was below normal. Summer and autumn precipitation during 1937 was above normal, and the autumn low stage in water levels was about 1.8 feet above datum, nearly the highest low stage during the period of record. Following the low stage there was a rise in water levels, then a slight decline, and finally a rise to the highest average stage on record, about 3.6 feet above datum in April 1938. A pronounced decline in water levels followed, and the low stage in 1938 was about 1.8 feet above datum, about the same as in 1937, but it was reached later in the year. During the following winter and spring precipitation was slightly above normal, but the spring high stage in 1939, reached in May, was about 2.95 feet above datum, about 0.75 foot lower than that of 1938. A long decline in water levels followed, interrupted by a slight autumn rise, and ended in the lowest stage of record, about 1.2 feet above datum in March 1940. Precipitation during the summer and autumn of 1939 and the winter of 1939-40 was somewhat below normal. Spring precipitation in 1940 was slightly above normal, but the spring high stage in

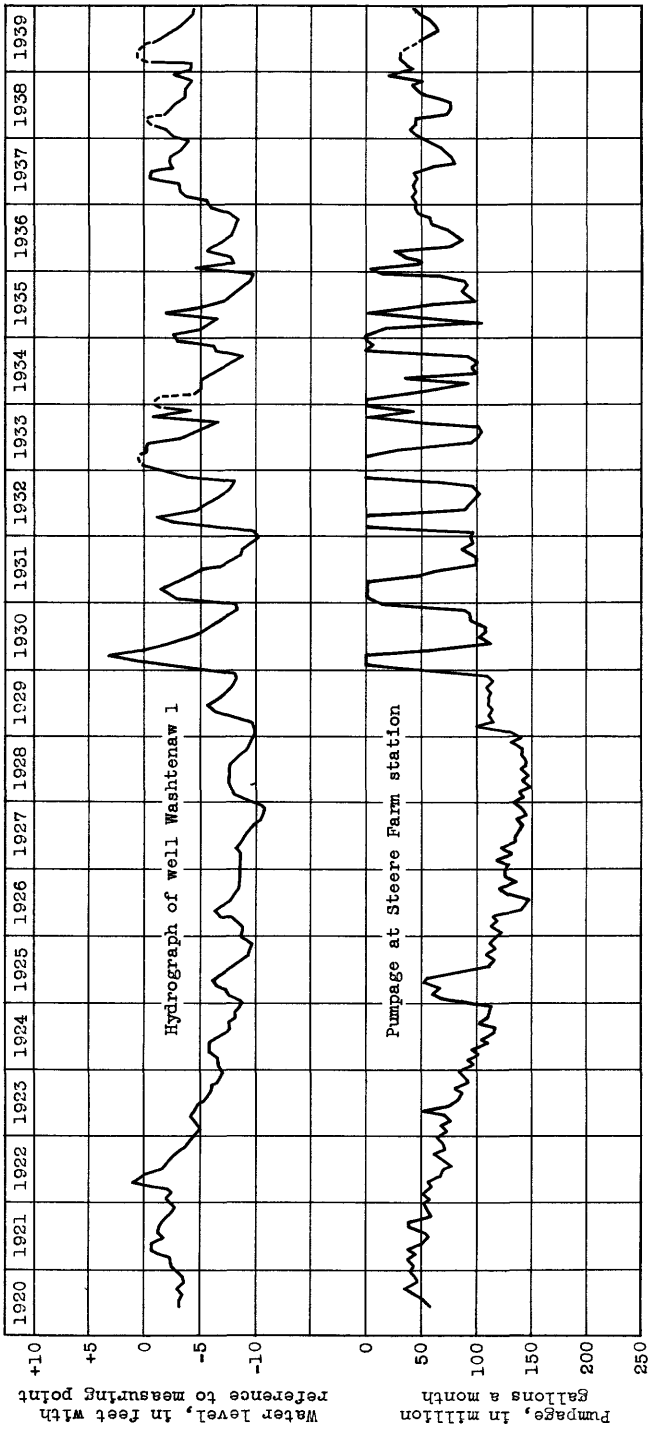


Figure 5.--Graphs showing monthly low water level in well Washtenaw 1 and monthly pumpage from wells at the Steere Farm Station, Ann Arbor, Mich., 1920-1939.

water levels was the lowest on record, about 2.35 feet above datum in May. Summer and autumn precipitation in 1940 was considerably above normal, and the water levels began to recover after reaching a low stage of about 1.85 feet in August. At the end of the year the water levels were about the same as at the end of 1934.

The program of water-level measurements in municipally-owned wells in several cities in the southern part of the Lower Peninsula was continued during the year. Fluctuations in water level in a well in Ann Arbor, Washtenaw County, during the period 1920-1939 are shown in an accompanying figure, and selected water-level measurements made in the well during 1940 are given in this report.

Calhoun County

Calhoun 1. City of Battle Creek. Well 22 at Verona Pumping Station of city waterworks. Measurements made by S. C. Einhardt, Sr., chief engineer, Verona Pumping Station.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	5.61	Apr. 22	6.08	July 22	9.94	Oct. 14	4.94
22	6.17	30	5.98	29	5.95	21	4.58
30	6.70	May 6	5.93	Aug. 5	6.00	28	6.09
Feb. 6	5.95	20	4.79	12	6.22	Nov. 5	5.56
13	5.95	27	5.95	19	6.34	13	5.94
21	5.95	30	3.98	26	5.29	18	5.00
29	5.96	June 4	5.96	Sept. 2	4.49	25	5.33
Mar. 7	5.64	10	5.77	9	4.08	Dec. 3	6.12
18	5.42	17	6.00	16	4.41	9	5.98
29	6.00	24	5.22	23	5.93	16	4.98
Apr. 3	4.99	July 8	6.22	30	4.94	24	4.75
15	5.27	15	7.93	Oct. 7	5.00		

Calhoun 2. City of Battle Creek. Armstrong test well 3 at Goguac Pumping Station of city waterworks. Measurements made by A. M. Stannard, chief engineer, Goguac Pumping Station.

Water level, in feet below measuring point, 1940

Jan. 3	29.13	May 23	30.27	Aug. 7	29.60	Oct. 23	29.17
10	29.03	29	30.08	14	29.64	30	29.93
17	29.15	June 5	29.98	21	29.69	Nov. 6	29.14
24	29.33	13	28.33	28	29.47	13	28.77
31	29.19	19	29.15	Sept. 4	28.89	20	29.11
Feb. 7	29.41	26	30.01	11	29.44	27	29.08
15	29.44	July 3	29.96	24	29.08	Dec. 5	28.58
22	29.16	10	29.87	Oct. 2	29.07	11	28.90
29	29.22	18	29.94	9	27.94	18	28.98
Mar. 7	29.95	24	30.00	16	28.98	25	28.97
28	27.12	30	29.89				

Charlevoix County

Regular measurements in all observation wells were discontinued at the end of 1938. No measurements were made in 1940 in well 31, T. 33 N., R. 4 W.

Water level, in feet below measuring point, 1940

Date	T. 32 N., R. 4 W.			T. 32 N., R. 5 W.	T. 33 N., R. 5 W.	
	1	31	33	15	4	12
Aug. 9	7.92	14.21	5.73	4.55	5.00	3.25

Cheboygan County

Measurements in well 18, T. 34 N., R. 1 W., were discontinued after Apr. 1.

Water level, in feet below measuring point, 1940

Date		T. 33 N., R. 1 W.			T. 33 N., R. 1 E.				T. 34 N., R. 1 W.		
		2	4	11	7	8	17	5	11	18	33
Jan.	8	....	6.64	6.00	3.67	7.60	11.61	5.15	5.50	4.20	7.60
Feb.	5	8.96	6.69	6.18	3.70	7.77	11.87	5.25	5.67	4.19	7.69
Mar.	4	....	6.87	6.38	3.81	7.96	11.97	5.45	5.80	4.80	7.80
Apr.	1	9.16	6.39	5.72	3.56	7.87	12.10	4.76	5.83	3.61	7.69
May	13	8.57	5.16	3.90	2.86	6.14	9.78	4.29	4.96	....	6.90
June	3	8.55	5.35	3.88	2.96	6.18	9.37	4.07	5.04	....	6.96
July	8	8.79	6.17	4.77	3.44	6.75	9.66	4.87	5.55	....	7.36
Aug.	5	9.02	6.31	5.16	3.40	6.75	10.33	4.50	5.93	....	7.65
Sept.	3	9.12	6.17	4.54	3.44	6.86	10.90	4.58	6.12	....	7.71
Oct.	1	8.83	5.82	4.06	3.00	6.15	10.27	4.17	5.78	....	7.40
Nov.	7	9.02	5.50	3.60	2.83	6.00	10.08	4.00	5.60	....	7.29

Crawford County

Water level, in feet below measuring point, 1940

Date		T.25N. R. 3W.	T.26N. R. 2W.	T. 26 N., R. 3 W.			Date		T.25N. R. 3W.	T.26N. R. 2W.	T. 26 N., R. 3 W.		
		8	9	26	28	30			8	9	26	28	30
Jan.	2	11.37	6.17	11.57	8.61	12.33	July	8	11.25	6.28	11.41	8.62	11.87
	17	11.41	6.08	11.64	8.69	12.35		23	11.28	6.34	11.67	8.79	11.85
	29	11.46	6.14	11.65	8.69	12.41	Aug.	5	11.35	6.20	11.78	8.87	11.82
Feb.	13	11.50	6.18	11.72	8.77	12.50		19	11.28	5.90	11.54	8.84	11.60
	26	11.52	6.18	11.78	8.87	12.56	Sept.	7	11.18	6.08	11.29	8.77	11.44
Mar.	12	11.57	6.15	11.85	8.91	12.60		17	11.21	6.06	11.37	8.74	11.53
Apr.	1	11.54	6.02	11.77	....	12.59	Oct.	3	11.10	6.10	11.39	8.72	11.59
	15	11.05	5.99	11.02	8.11	12.54		16	11.10	5.97	11.53	8.69	11.68
	29	11.04	6.01	10.62	8.28	12.49	Nov.	12	11.02	5.90	11.43	8.76	11.78
May	14	11.02	6.03	10.95	8.17	12.35		25	11.00	5.95	11.22	8.66	11.85
	27	11.00	5.98	11.07	8.25	12.15	Dec.	11	11.03	5.96	11.30	8.57	11.86
June	7	11.12	6.16	11.12	8.39	12.12		26	11.01	5.91	11.36	8.63	11.88
	25	11.07	5.94	11.28	8.50	11.92							

Water level, in feet below measuring point, 1940

Date		T. 26 N., R. 4 W.				Date		T. 26 N., R. 4 W.			
		9	10	12	18			9	10	12	18
Jan.	5	3.90	6.80	6.21	5.92	June	26	3.11	6.26	5.85	5.64
	23	3.98	6.83	6.27	5.97	July	10	3.67	6.85	5.93	5.90
	30	4.01	6.88	6.32	6.02		24	3.92	7.19	6.40	5.92
Feb.	13	4.12	6.96	6.41	5.99	Aug.	6	3.83	7.30	6.48	5.70
	26	4.21	7.03	6.51	6.06		20	3.84	6.80	6.40	5.71
Mar.	12	4.30	7.08	6.61	6.04	Sept.	6	3.36	6.47	5.66	5.73
Apr.	1	4.10	6.58	6.47	5.87		19	3.54	6.65	5.87	5.71
	17	2.47	5.17	5.07	5.31	Oct.	4	3.40	6.55	5.74	5.75
	30	2.16	5.66	4.55	5.52		22	3.44	6.36	5.82	5.71
May	13	2.51	5.87	4.84	5.70	Nov.	18	2.64	5.79	5.18	5.48
	28	2.23	5.50	4.78	5.62		27	2.53	5.88	4.97	5.52
June	10	2.85	6.15	5.15	5.69	Dec.	17	2.61	5.95	5.20	5.59

Crawford County--Continued.

Water level, in feet below measuring point, 1940

Date	T. 27 N., R. 1 W.			T. 27 N., R. 4 W.			T. 2[illegible] N., R. 1 W.		T.28N. R.4 W.
	8	22	27	20	42	51	6	18	50
Jan. 2	4.80	5.37	7.43	7.02	7.51	15.68	8.75	7.38	16.14
17	4.64	5.40	7.46	7.13	7.55	15.74	8.80	7.40	16.19
29	4.71	5.54	7.53	7.27	7.57	15.79	8.89	7.46	16.30
Feb. 13	4.82	5.65	7.60	7.40	7.58	15.86	8.97	7.52	.....
26	4.88	5.72	7.64	7.56	7.65	15.91	9.06	7.56	.....
Mar. 12	4.97	5.82	7.70	7.71	7.72	16.00	9.13	7.61	.....
Apr. 1	4.77	5.69	7.57	7.81	7.66	16.08	(a)	7.51	.....
15	4.35	4.95	6.88	6.25	6.91	15.18	(b)	6.88	15.90
29	4.55	4.81	6.77	5.71	6.75	14.91	7.99	6.68	15.52
May 14	4.65	4.88	6.78	6.02	6.93	15.06	7.98	6.59	15.61
27	4.62	4.90	6.78	5.94	6.70	15.03	7.94	6.55	15.73
June 7	4.71	4.90	6.87	5.78	6.93	14.94	7.83	6.55	15.82
25	4.74	4.90	6.95	6.22	7.13	15.14	7.91	6.68	15.88
July 8	4.89	5.24	7.14	6.49	7.30	15.29	8.14	6.85	15.97
23	5.00	5.50	7.30	6.88	7.54	15.47	8.35	7.02	16.10
Aug. 5	4.98	5.60	7.37	7.13	7.63	15.60	8.48	7.15	16.22
19	4.80	5.24	7.28	7.18	7.69	15.65	8.51	7.22	16.31
Sept. 7	4.76	5.27	7.25	6.68	7.60	15.35	8.63	7.36	16.37
17	4.80	5.28	7.31	6.82	7.66	15.48	8.58	7.40	16.41
Oct. 3	4.63	4.98	6.92	6.60	7.51	15.34	8.23	7.08	16.34
16	4.70	4.94	6.91	6.83	7.60	15.48	8.18	7.11	16.32
Nov. 12	4.53	4.73	6.81	6.55	7.40	15.32	8.30	6.96	16.26
25	4.54	4.63	6.74	6.29	7.28	15.17	8.10	6.85	16.14
Dec. 11	4.58	4.64	6.77	6.35	7.33	15.20	7.95	6.80	16.05
26	4.60	4.57	6.70	6.40	7.39	15.27	8.07	6.77	16.12

Ingham County

Observation wells 1 to 8 are the property of the City of Lansing. Measurements made by members of the Mechanical Engineering Department, Board of Water and Electric Light Commissioners, Lansing.

Ingham 1. No measurements made in 1940.

Ingham 2. No measurements made in 1940.

Ingham 3. Well 5 in Pennsylvania Avenue well field, at northwest corner Pennsylvania Avenue and Grand Trunk Railroad.

Ingham 4. Well 9 in Pennsylvania Avenue well field, about 500 feet east of Pennsylvania Avenue and just north of Grand Trunk Railroad.

Ingham 5. Well 7 in Riverside well field, just north of Cedar River on approximate line of Mifflin Avenue.

Ingham 6. Logan well, at Logan Street pumping station, Lapeer and Logan Streets.

Ingham 7. Seymour well, at Seymour Avenue pumping station, on north side Josephine Street about 500 feet east of Seymour (Grand River) Avenue.

Ingham 8. Townsend well, at Townsend Street pumping station on east side Townsend Street opposite Olds Street.

a Covered by snow.
b Filled with ice.

Ingham County--Continued.

Water level, in feet below measuring point, 1940

Date	3	4	5	6	7	8
Jan. 23	33.6	43.9	63.95	43.65	21.75	20.8
Feb. 23	33.9	44.3	63.4	47.65	17.65	21.4
Mar. 20	34.15	44.45	55.65	43.75	20.15	21.55
Apr. 25	33.6	44.05	70.3	44.15	19.45	22.95
May 22	33.65	44.05	.....	44.25	19.55	22.9
June 25	33.0	44.45	.....	44.15	19.65	22.65
July 29	.....	.....	.....	45.6	23.6	23.15
Aug. 21	.....	.....	.....	45.85	25.0	23.45
Sept.19	33.1	44.65	.....	45.25	23.65	23.15
Oct. 17	32.85	44.95	.....	45.35	23.35	23.15
Nov. 26	36.1	44.55	.....	44.75	21.0	21.55
Dec. 13	36.5	45.55	.....	45.15	19.6	21.8

Jackson County

Jackson 1. City of Jackson. Well 5½ (formerly well 19), between supply wells 5 and 6 and about 1,100 feet northeast of main building of pumping station at city waterworks. Measurements made by members of the city water department, D. J. Stellingworth, chief engineer.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	26.32	Mar. 19	31.3	June 24	26.13	Oct. 19	22.78
8	29.47	21	30.5	July 15	27.44	23	32.9
11	29.40	23	21.8	18	42.7	26	29.65
15	23.81	26	32.4	23	42.1	29	37.79
18	25.50	28	30.85	25	40.79	31	38.28
20	29.05	30	27.19	Aug. 1	42.1	Nov. 2	24.33
23	34.25	Apr. 4	26.37	2	43.2	5	32.7
25	34.67	6	22.57	3	43.04	7	39.9
29	29.17	9	28.88	6	37.45	9	34.48
Feb. 1	36.6	13	25.87	8	30.22	12	32.68
3	24.1	17	33.34	12	42.78	16	34.1
6	24.8	20	30.22	15	43.89	19	34.9
8	34.5	23	33.8	19	31.4	26	39.9
10	24.5	May 7	31.1	23	34.7	28	36.2
13	31.65	9	37.62	Sept.10	37.7	30	30.73
15	36.65	11	27.04	12	39.57	Dec. 3	40.27
17	23.9	14	36.6	16	27.51	5	39.98
20	31.0	18	33.1	19	40.72	7	31.05
24	34.54	23	35.52	24	37.5	9	36.15
Mar. 2	23.43	June 4	32.85	26	37.73	12	35.9
4	27.31	6	39.87	30	30.68	17	33.29
7	34.6	8	26.13	Oct. 5	28.03	24	35.78
9	23.36	14	30.87	14	30.78	26	34.9
12	30.48	17	36.48	17	32.58	28	27.75
14	30.8						

Kalamazoo County

Observation wells 1 to 3 are the property of the City of Kalamazoo. Measurements made by Floyd Rothwell, chief operator, pumping station, Leo Witters, superintendent.

Kalamazoo 1. Well B at central pumping station (Burdick Street) of city waterworks. Altitude of measuring point redetermined between July 14 and August 18 measurements as 764.36 feet above mean sea level, a change of -0.15 foot, possibly caused by settling of the pump house.

Kalamazoo County--Continued.

Kalamazoo 2. Well C of city waterworks, about 1,100 feet southwest of central pumping station. Altitude of measuring point redetermined between July 14 and August 18 measurements as 764.88 feet above mean sea level, a change of -0.09 foot, possibly caused by settling of the pump house.

Kalamazoo 3. At Balch Street pumping station of city waterworks, between supply wells 1 and 2. Casing and well point replaced between July 14 and August 18; elevation of measuring point changed to 767.04 feet above mean sea level, a change of +0.26 foot.

Water level, in feet below measuring point, 1940

Date	Kalamazoo 1	Kalamazoo 2	Kalamazoo 3	Date	Kalamazoo 1	Kalamazoo 2	Kalamazoo 3
Jan. 1	12.68	10.75	9.72	Aug. 18	15.96	15.34	15.16
14	12.75	10.68	9.25	Sept. 1	14.80	13.86	13.66
28	13.02	10.81	9.34	20	15.27	14.06	12.93
Feb. 11	12.82	10.65	9.24	Oct. 6	15.36	14.31	13.33
Mar. 3	13.00	11.03	9.46	20	15.57	14.32	12.96
May 5	13.50	12.16	11.11	Nov. 3	15.00	13.87	13.02
19	13.63	12.42	11.91	24	15.02	13.55	12.41
June 9	13.85	13.07	12.92	Dec. 8	15.17	13.77	12.50
23	13.75	12.71	11.73	22	14.65	13.27	12.13
July 14	14.58	13.47	12.65				

Kalkaska County

Water level, in feet below measuring point, 1940

	T. 27 N., R. 5 W.					
Date	100	Date	100	Date	100	Date	100
Jan. 5	16.09	Apr. 1	16.50	June 26	15.42	Sept. 19	15.61
23	16.17	17	16.29	July 10	15.52	Oct. 4	15.63
29	16.20	30	15.51	24	15.66	22	15.65
Feb. 13	16.28	May 13	15.36	Aug. 6	15.76	Nov. 18	15.73
26	16.33	28	15.43	20	15.84	27	15.61
Mar. 12	16.39	June 10	15.40	Sept. 6	15.78	Dec. 17	15.49

Missaukee County

Measurements in well 9, T. 23 N., R. 5 W., discontinued after Apr. 25, 1939.

Measurements in well 3, T. 24 N., R. 6 W., discontinued after Sept. 19, 1940.

Water level, in feet below measuring point, 1940

Date	T. 22 N., R. 5 W.	T. 23 N., R. 6 W.	T. 23 N., R. 6 W.		
	1	17	3	45	46
Jan. 5	4.18	4.34	6.67	8.34	3.12
18	4.18	....	....	....	....
30	4.34	....	....	....	....
Feb. 14	4.43	....	....	....	....
27	4.48	....	....	....	....
Mar. 13	4.52	....	....	....	....
Apr. 2	3.80	....	....	....	....
17	1.80	3.02	5.44	6.80	2.06
30	1.93	3.04	5.23	7.00	2.10
May 13	1.97	2.99	5.18	7.09	2.17
28	1.35	2.78	4.96	7.00	1.78
June 10	1.51	3.14	5.14	7.15	2.25
26	1.52	2.75	4.39	6.87	1.64
July 10	2.73	3.42	4.79	7.04	2.39
24	3.55	3.73	5.24	7.10	2.62
Aug. 6	3.46	3.82	5.37	7.04	2.45
20	3.23	3.83	5.54	7.04	2.32

Missaukee County--Continued.

Water level, in feet below measuring point, 1940

Date	T.22 N., R.5W.	T.23 N., R.6W.	T. 23 N., R. 6 W.		
	1	17	3	45	46
Sept. 6	2.62	3.53	5.20	6.97	2.41
19	3.06	3.76	5.26	7.01	2.52
Oct. 4	3.17	3.86	....	7.15	2.66
22	2.73	3.78	....	7.27	2.47
Nov. 18	2.01	3.34	....	7.26	2.02
27	2.00	3.19	....	7.26	2.02
Dec. 27	1.41	....	....	....	....

Montmorency County

Measurements in well 15, T. 32 N., R. 2 E., discontinued after July 8.

Water level, in feet below measuring point, 1940

Date	T. 31 N., R. 2 E.				T. 31 N., R. 3 E.			T. 31 N., R. 4 E.	
	6	15	18	28	22	30	40	1	12
Jan. 9	(a)	10.80	15.12	4.75	7.92	16.94	(b)	4.90	4.32
Feb. 6	(a)	10.88	15.22	4.74	8.04	17.12	1.35	4.64	4.31
Mar. 5	.....	10.98	15.34	4.82	8.15	17.30	(b)	4.76	4.35
Apr. 2	.....	10.90	15.34	4.64	8.15	17.53	(b)	2.48	4.05
May 14	10.89	9.99	13.87	4.30	6.57	16.69	1.59	4.55	4.20
June 4	10.99	10.06	13.80	4.40	6.49	16.58	1.72	4.53	4.30
July 9	.....	10.24	14.10	5.02	6.90	16.45	1.80	4.90	4.74
Aug. 6	13.03	10.65	14.69	4.87	7.25	16.74	1.70	4.67	4.31
Sept. 4	(a)	10.69	14.86	4.79	7.48	16.97	1.75	4.56	4.29
Oct. 2	.....	10.56	14.56	4.73	7.07	17.12	1.75	4.17	4.27
Nov. 8	.....	10.48	14.40	4.58	7.00	17.08	1.65	4.42	4.15

Water level in well 15 in T. 32 N., R. 2 E., in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	18.40	Mar. 4	18.56	May 13	18.24	July 8	18.75
Feb. 5	19.33	Apr. 1	18.33	June 3	18.15		

Oakland County

Observation wells 1 to 3 are the property of the city of Portiac. Measurements made by members of the Department of Water Supply, Pontiac, H. L. Monroe, superintendent, H. W. MacDuff, chief engineer.

Oakland 1. Well 6 at Walnut Street pumping station, about 200 feet west of supply well 1.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 15	66.1	Mar. 22	71.5	May 20	65.6	July 22	73.5
17	70.8	27	69.5	24	69.8	26	77.0
22	66.1	Apr. 5	72.0	31	65.6	Aug. 2	75.7
26	72.3	12	68.3	June 5	72.9	9	76.7
31	70.4	15	62.5	10	69.1	16	77.0
Feb. 5	65.5	19	66.9	14	72.5	26	71.6
16	69.5	22	62.3	17	68.8	30	73.6
21	66.4	26	69.6	21	72.0	Sept. 6	70.0
29	70.7	29	65.5	26	68.5	13	75.0
Mar. 4	65.5	May 3	69.5	July 3	70.9	16	71.5
13	71.3	13	63.1	5	66.0	20	75.5
18	67.8	17	69.1	12	71.6	30	71.2

a Dry.
b Frozen.

Oakland County--Continued.

Oakland 1--Continued.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 7	68.8	Nov. 1	74.2	Dec. 2	74.0	Dec. 16	74.6
11	73.3	6	75.3	6	79.0	20	78.5
17	70.5	13	73.9	9	75.6	26	71.7
25	73.9	22	70.8	13	78.5	30	79.0
28	68.5	29	78.3				

Oakland 2. Well 21 in Walnut Street well group, about 40 feet northwest of supply well 3.

Water level, in feet below measuring point, 1940

Feb. 7	77.2	May 13	72.8	Aug. 2	85.1	Oct. 30	79.3
16	79.8	15	79.3	9	85.8	Nov. 4	81.7
26	75.3	20	75.1	16	83.9	8	83.5
Mar. 4	75.0	24	78.2	23	81.0	14	81.7
13	79.9	31	74.6	30	82.4	20	84.7
18	76.8	June 7	81.5	Sept. 3	78.5	25	80.3
22	80.0	17	77.4	11	85.7	29	86.1
27	78.4	21	80.2	16	80.2	Dec. 2	84.1
Apr. 5	80.7	26	77.5	20	85.7	9	87.7
12	77.2	July 1	78.7	30	80.1	16	83.3
19	75.7	5	74.7	Oct. 9	82.7	20	86.6
22	72.2	12	80.2	17	78.9	26	80.4
26	78.2	19	81.9	23	82.7	30	81.2
May 6	76.2	26	86.2				

Oakland 3. Just outside pump house of East Boulevard supply well, near intersection of East Boulevard and Mt. Clemens Street.

Water level, in feet below measuring point, 1940

Jan. 17	21.5	May 15	17.2	Aug. 7	26.3	Oct. 14	23.3
22	20.0	20	15.7	16	29.2	21	27.8
29	19.1	22	18.9	19	25.0	28	17.9
Feb. 9	21.0	27	16.3	23	28.4	Nov. 8	31.0
12	19.2	29	19.9	28	24.0	13	27.6
16	20.0	June 3	17.1	Sept. 3	20.1	20	30.5
Apr. 3	19.6	12	20.9	6	26.1	25	28.0
8	16.6	19	21.7	9	23.0	Dec. 4	32.2
10	19.2	24	20.2	20	25.5	9	28.0
19	15.5	July 15	20.3	30	25.5	18	31.2
29	13.7	22	24.2	Oct. 7	24.5	23	27.4
May 3	15.3	26	24.0	11	26.0	30	30.0
8	16.8	31	26.9				

Otsego County

Water level, in feet below measuring point, 1940

Date	T. 29 N., R. 3 W.		Date	T. 29 N., R. 3 W.	
	105	106		105	106
Jan. 2	5.57	9.85	July 8	5.23	9.42
17	5.56	9.85	23	5.63	9.62
29	5.56	9.83	Aug. 5	5.89	9.78
Feb. 13	5.56	9.84	19	5.57	9.85
26	5.58	9.84	Sept. 7	5.93	10.00
Mar. 12	5.61	9.87	17	5.99	9.92
Apr. 1	5.40	9.57	Oct. 3	5.92	9.81
15	4.94	9.47	16	5.88	9.82
29	4.66	9.11	Nov. 12	5.62	9.82
May 14	4.72	8.91	25	5.43	9.75
27	4.61	8.93	Dec. 11	5.37	9.45
June 7	4.73	9.11	26	5.34	9.38
25	4.90	9.25			

Presque Isle County

Water level, in feet below measuring point, 1940

Date	T. 33 N., R. 2 E.					
	13	17	18	19	20	23
Jan. 8	11.11	7.36	5.50	11.10	5.48	5.15
Feb. 5	11.18	7.49	5.67	11.20	5.50	5.11
Mar. 6	11.27	7.60	5.85	11.31	5.60	5.14
Apr. 1	11.14	7.48	5.83	11.05	5.40	4.02
May 13	10.37	7.15	5.09	9.90	4.75	4.62
June 3	10.55	7.20	4.93	10.05	4.76	4.73
July 8	10.76	7.57	5.88	10.40	5.31	5.36
Aug. 5	10.80	7.72	5.10	10.56	5.47	5.44
Sept. 3	10.27	7.58	5.00	10.58	5.27	4.88
Oct. 1	10.19	7.35	4.65	9.88	4.85	4.38
Nov. 7	10.43	7.02	4.38	9.92	4.69	4.00

Roscommon County

Water level, in feet below measuring point, 1940

Date	T. 21 N., R. 3 W.		T. 21 N., R. 4 W.		T. 22 N., R. 1 W.	T. 22 N., R. 2 W.			
	3	15	8	30	5	3	9	15	16
Jan. 4	17.00	12.93	5.32	6.69	5.79	10.25	6.79	5.49	6.26
18	17.08	12.89	5.13	6.54	5.49	10.13	6.61	5.35	6.11
30	17.15	12.94	5.24	6.63	5.85	10.18	6.68	5.51	6.26
Feb. 14	17.23	12.96	5.33	6.72	6.02	10.28	6.74	5.64	6.34
27	17.29	12.96	5.42	6.73	6.11	10.34	6.79	5.72	6.41
Mar. 13	17.38	12.98	5.43	6.74	6.20	10.37	6.82	5.80	6.44
Apr. 2	17.48	12.91	4.73	....	5.40	10.03	6.42	5.40	6.15
16	17.43	12.59	3.84	4.96	4.38	9.17	5.76	4.44	5.07
May 2	17.13	12.57	3.76	4.75	4.19	.....	5.77	4.27	4.98
21	16.87	12.54	3.72	4.35	4.11	8.60	5.80	4.12	4.83
29	16.80	12.50	3.61	4.24	3.97	8.44	5.77	4.02	4.72
June 11	16.71	12.55	4.16	4.75	3.99	8.42	5.83	4.32	5.01
27	16.65	12.58	3.94	4.63	3.82	8.41	5.58	4.09	4.84
July 12	16.64	12.72	4.55	5.33	4.32	8.87	6.01	4.59	5.42
25	16.69	12.84	5.05	5.91	4.91	9.26	6.30	4.99	5.82
Aug. 7	16.76	12.85	4.58	6.06	4.77	9.27	6.16	4.90	5.73
22	16.82	12.84	4.58	5.35	5.20	9.15	6.35	4.94	5.76
Sept. 5	16.81	12.75	4.20	4.97	4.57	8.88	5.55	4.33	5.35
18	16.69	12.77	4.55	5.31	4.79	8.96	5.80	4.40	5.50
Oct. 2	16.70	12.84	4.63	5.49	4.55	8.97	5.79	4.46	5.57
21	16.77	12.78	4.18	5.17	4.32	8.86	5.67	4.32	5.34
Nov. 14	16.75	12.68	3.94	4.61	4.00	8.59	5.43	4.13	5.07
26	16.67	12.66	4.13	4.38	3.98	8.45	5.57	4.14	4.97
Dec. 18	16.59	12.66	4.02	4.43	3.94	8.42	5.64	4.21	4.97
27	16.56	12.65	3.80	3.41	3.83	8.32	5.50	4.07	4.90

Water level, in feet below measuring point, 1940

Date	T. 22 N., R. 3 W.			T. 22 N., R. 4 W.	T. 23 N., R. 1 W.	T. 23 N., R. 3 W.	
	7	20	26	4	50	5	75
Jan. 4	8.88	8.18	8.20	5.20	6.88	6.20	8.64
18	8.89	8.00	8.27	5.10	6.92	6.13	8.69
30	8.99	8.10	8.33	5.28	6.98	6.21	8.72
Feb. 14	9.07	8.14	8.42	5.37	7.05	6.28	8.77
27	9.12	8.10	8.49	5.43	7.10	6.35	8.81
Mar. 13	9.23	8.12	8.59	5.48	7.20	6.34	8.87
Apr. 2	9.16	7.89	8.57	4.66	7.03	5.91	8.85
16	8.33	7.31	8.10	4.04	5.83	5.23	8.24
May 2	8.03	7.27	7.75	3.78	5.55	5.09	8.17
21	7.72	7.20	7.38	3.63	5.47	5.12	8.09
29	7.59	7.11	7.24	3.41	5.41	5.16	8.04

Roscommon County--Continued.

Water level, in feet below measuring point, 1940

Date	T. 22 N., R. 3 W.			T. 22 N., R. 4 W.	T. 23 N., R. 1 W.	T. 23 N., R. 3 W.	
	7	20	26	4	50	5	75
June 11	7.50	7.38	7.10	3.79	5.41	5.48	8.07
27	7.35	7.38	6.95	3.60	5.47	5.32	7.95
July 12	7.53	7.81	7.00	4.11	5.69	5.79	8.11
25	7.86	8.19	7.20	4.41	5.97	5.98	8.32
Aug. 7	7.94	8.08	7.32	4.22	6.17	5.85	8.51
22	8.00	7.98	7.38	3.76	6.01	5.63	8.58
Sept. 5	7.65	7.79	7.17	3.52	5.20	5.31	8.16
18	7.73	7.85	7.21	3.82	5.45	5.36	8.27
Oct. 2	7.81	7.92	7.36	3.95	5.01	5.25	8.12
21	7.74	7.74	7.38	3.70	5.20	5.20	8.13
Nov. 14	7.45	7.52	7.24	3.56	4.72	5.06	7.96
26	7.34	7.50	7.11	3.66	4.64	5.09	7.88
Dec. 18	7.26	7.55	7.00	3.70	4.86	5.12	7.93
27	7.20	7.48	6.94	3.47	4.63	5.02	7.85

Water level, in feet below measuring point, 1940

Date	T. 24 N., R. 1 W.	T. 24 N., R. 2 W.					T. 24 N., R. 3 W.	
	30	81	88	107	150	1000	1	7
Jan. 4	(a)	5.11	11.21	9.58	5.27	8.15	10.80	13.96
18	.....	5.20	11.23	9.61	5.31	8.26	10.85	14.00
30	.....	5.28	11.25	9.62	5.42	....	10.92	14.03
Feb. 14	.....	5.38	11.30	9.64	5.56	8.40	11.01	14.10
27	.....	5.45	11.34	9.66	5.62	8.44	11.10	14.12
Mar. 13	.....	5.56	11.43	9.69	5.60	....	11.19	14.20
Apr. 2	.....	5.67	11.42	....	4.85	....	11.20	14.17
16	.....	5.49	10.71	9.15	3.91	7.67	10.60	12.93
May 2	.....	5.32	10.27	8.77	3.71	6.93	10.34	12.53
21	18.17	5.23	10.05	8.75	3.82	6.44	10.16	12.44
29	18.12	5.20	9.95	8.76	3.74	6.21	10.07	12.34
June 11	18.02	5.16	9.87	8.85	4.34	5.97	9.85	12.42
27	17.96	5.08	9.88	8.90	3.83	5.75	9.94	12.40
July 12	17.86	5.05	10.07	9.06	4.51	6.09	9.75	12.66
25	17.99	5.03	10.36	9.11	4.47	6.32	9.86	12.98
Aug. 7	18.16	5.04	10.56	9.23	4.56	6.64	10.05	13.22
22	18.31	5.06	10.72	9.30	4.81	6.90	10.16	13.37
Sept. 5	18.17	5.11	10.66	9.05	3.91	6.21	9.99	12.78
18	18.05	5.16	10.60	8.84	3.96	6.03	9.87	12.61
Oct. 2	17.96	5.14	10.50	8.68	3.89	5.47	9.75	12.49
21	17.89	5.08	10.40	8.68	3.65	5.46	9.76	12.73
Nov. 14	17.86	5.11	10.20	8.75	3.43	5.19	9.56	12.10
26	17.72	5.06	10.03	8.70	3.47	5.15	9.48	12.00
Dec. 18	17.64	4.97	9.87	8.74	3.34	....	9.31	12.10
27	17.62	4.94	9.80	8.75	3.03	5.05	9.25	11.96

Water level, in feet below measuring point, 1940

Date	T. 24 N., R. 3 W.		Date	T. 24 N., R. 3 W.	
	17	19		17	19
Jan. 2	15.63	7.71	July 8	15.36	8.00
17	15.69	7.76	23	15.44	8.01
29	15.72	7.79	Aug. 5	15.53	8.03
Feb. 13	15.78	7.83	19	15.42	8.04
26	15.84	7.87	Sept. 7	15.07	8.04
Mar. 12	15.87	7.92	17	15.00	8.03
Apr. 1	15.91	8.00	Oct. 3	14.90	8.01
15	15.51	8.02	16	14.96	8.00
29	15.33	8.02	Nov. 12	14.87	7.92
May 14	15.27	8.02	25	14.85	7.90
27	15.27	8.01	Dec. 11	14.87	7.86
June 7	15.31	8.01	26	14.84	7.84
25	15.34	8.00			

a Dry.

Roscommon County--Continued.

Roscommon Recorder well.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	7.88	Apr. 13	7.20	July 13	7.16	Oct. 5	6.83
13	7.90	20	7.19	20	7.33	12	6.86
20	7.88	27	7.17	26	7.26	19	6.89
27	7.89	May 4	7.10	Aug. 2	7.45	26	6.94
Feb. 3	7.93	11	7.07	9	7.48	Nov. 2	6.95
10	7.95	18	7.01	15	7.57	11	6.85
17	7.98	25	6.96	22	7.60	18	6.82
24	8.01	June 1	6.94	29	7.54	23	6.81
Mar. 2	8.03	8	7.02	Sept. 5	7.11	30	6.78
9	8.04	15	7.09	11	7.09	Dec. 7	6.80
16	8.05	22	7.12	19	7.07	14	6.86
23	8.07	29	6.88	21	6.92	21	6.85
30	8.07	July 6	6.93	28	6.83	28	6.78
Apr. 6	7.67						

St. Joseph County

St. Joseph 1. City of Three Rivers, about 350 feet south of West Michigan Street on island at confluence of St. Joseph River and Rock River. Measurements made by A. C. Walls, water supply operator, City of Three Rivers, O. O. Johnson, city manager.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	0.15	Apr. 5	2.52	July 3	3.33	Oct. 7	3.95
15	.15	15	2.60	9	3.60	14	4.00
22	.30	25	.30	15	3.40	22	1.59
31	2.90	30	.30	25	7.12	31	1.59
Feb. 6	3.23	May 3	.50	a Aug. 5	4.00	Nov. 6	5.82
12	3.32	10	.74	a 15	6.88	18	3.94
19	3.39	21	3.10	a 25	4.10	23	3.94
28	.84	29	3.80	31	3.90	30	3.88
Mar. 2	5.00	June 5	3.75	Sept. 6	3.60	Dec. 7	2.80
11	3.09	11	1.03	14	4.00	16	1.36
18	.88	25	5.60	21	3.10	21	.95
29	.07	29	5.60	30	4.06	28	.86

Washtenaw County

Washtenaw 1. City of Ann Arbor. Two-inch observation well at Steere Farm pumping station of city waterworks. In line of supply wells, about 200 feet northeast of well 1 West, about 500 feet southwest of well 2 East, and 200 feet south of southwest corner of pump building. Diameter 2 inches, depth 23 feet. Penetrates unconsolidated deposits. Measuring point, top of casing, 0.6 foot above land surface and 818.03 feet above mean sea level. Water level affected by pumping from 19 supply wells in a line about 4,100 feet long; 5 of the wells (nos. 2-6 East) are northeast of the observation well and 14 of the wells (nos. 1-14 West) are southwest of the observation well. Supply well 1 East has been removed. Measurements are made daily, but only the monthly high and low water levels are given in this report for 1940. For the period 1920-1939 monthly low water levels in well 1 and monthly pumpage at the Steere Farm station are shown in an accompanying figure.

a Approximate date.

Washtenaw County--Continued.

Highest and lowest water level each month, in feet below measuring point, 1940

Date	Highest water level	Lowest water level	Date	Highest water level	Lowest water level
Jan. 27	1.4	....	July 2, 5-7	1.5	....
29	....	3.9	30	....	5.25
Feb. 1, 3-5	....	....	Aug. 17, 18	....	5.85
8-10, 26	2.85	....	31	2.57	....
29	....	4.4	Sept. 1, 16	2.63	....
Mar. 28	....	3.6	29	....	6.93
29	.8	....	Oct. 1	....	6.12
Apr. 13	....	3.85	18	3.37	....
20-22	.6	....	Nov. 5	....	6.28
May 4, 5	.4	....	9	2.70	....
13-17	....	2.9	Dec. 21	....	6.58
June 2, 3	1.0	....	22	2.91	....
6, 10	....	3.8			

NEW JERSEY

By E. J. Schaefer

The investigation of the ground-water resources of New Jersey was continued during 1940 under a cooperative agreement between the Federal Geological Survey and the New Jersey State Water Policy Commission. Most of the measurements included in this report were obtained in connection with quantitative studies being made in selected areas within the State. A map showing these areas and a table giving the names of the counties and corresponding areas were included in Geological Survey Water-Supply Paper 886.

At the end of the year a total of 214 observation wells were being measured. Some were measured once a month, some once a week, and two wells were measured at least twice a day. Continuous records of water levels in 51 wells were obtained by means of automatic water-stage recorders. Approximately 5,500 individual measurements of water level were made during the year.

The only publication relating to water levels in New Jersey issued in 1940 was a paper[1/] on the advance of salt water in the vicinity of Parlin, New Jersey.

The records for wells contained in this report are arranged alphabetically by counties. For purposes of cross reference with reports of this series prior to Water-Supply Paper 886, the name of the area is also given. Detailed descriptions for each well have been omitted where such descriptions were included in one of the previous annual volumes. Wherever a satisfactory determination of the altitude of the measuring point for a well has been made the water level is given with reference to mean sea level. Where this has not been done, the water level is given in depth below the measuring point.

For water levels obtained by tape measurements the date of measurement and the water level are given. For records obtained by means of water-stage recorders a single daily water level is given. An attempt has been made, however, to give the most significant daily level for each well. For wells having small fluctuations in water level, the water level at the end of the day is given; for wells having large daily fluctuations in water level, caused by nearby pumping or tides, the lowest water level for each

1/ Barksdale, H. C., The Contamination of Ground Water by Salt Water near Parlin, New Jersey: Am. Geophys. Union Trans. 1940, pp. 471-474.

day is given. An exception is made in the case of well 36.23.1.9.6. (Longport well), Atlantic County, for which the average of the two low and two high stages for each day is reported.

With one exception all records included in this report are a continuation of those given in previous volumes. The new record is for well 36.14.5.8.7. (Citizens Ice Company well), Atlantic County. This well taps the Atlantic City 800-foot sand and is in Atlantic City.

The largest new ground-water development made in New Jersey in 1940 was the construction of three large wells or "water collectors" in Salem County near Penns Grove. The wells are of a type new to this area. They consist of a large central shaft of reinforced concrete into which the water is conducted by means of a number of screens forced out radially and horizontally into the sand for distances as much as 150 feet or more. By this means an unusually large screen area is developed for each well. The wells at Penns Grove derive their water from relatively shallow beds of sand and gravel in which the ground water occurs under water-table conditions. Withdrawals of water from the wells since their completion during the past summer have been in excess of 5 million gallons daily, most of which is used for industrial purposes. Several observation wells have recently been constructed in this area in connection with studies designed to determine whether the safe yield of the aquifer is being exceeded.

The precipitation in New Jersey in 1940 was generally below normal during January and February, and the water table, where not affected by pumping, was at its lowest level for the year. During the next three months the precipitation was above normal. The water table in most places reached its highest stage of the year late in March and early in April. Subnormal precipitation during June and July and the seasonal increase in transpiration and evaporation during the summer months caused a decline that continued until late in August. The water table, however, did not reach the low levels of January and February or approach record lows for previous summer months. The precipitation for the rest of the year was above normal and water levels ended the year with an appreciable net gain over the beginning of the year.

The records for water table wells in the Runyon area in Middlesex County are illustrative of the conditions just described. Of special interest is the table of average water levels for two groups of farm wells in this area. In general the water levels in wells that are less than 25

feet deep appear to fluctuate differently from those in wells that are somewhat deeper, and the wells are therefore arbitrarily divided into two groups on this basis. Most of the wells are outside the area affected by industrial and public pumping and are measured for the purpose of determining the natural fluctuations that occur in the area. The water-level averages for both the shallow and deep wells were at their lowest for the year early in January. The average of the water levels in the shallow wells reached its high stage of the year late in March, whereas the average of the water levels in the deep wells did not reach its highest stage of 1940 until about 4 months later. This lag is characteristic of the fluctuations of water level in the deep wells. The averages for the shallow wells show a net rise for the year of about 3 feet and the averages for the deep wells show a net rise of about 1 foot. The range of fluctuation in 1940 for the shallow wells was about 5 feet and that for the deep wells was only about 2 feet.

Attention is also called to the table for the Morrell well in the Runyon area, Middlesex County, showing the water level on the first day of each month in 1940 compared with the average water level and with the highest and lowest levels on the same day of the month for the preceding 16 or 17 years of record. An analysis of the table shows that the water level in the well at the beginning of 1940 was about 1 foot below the average level and at the end of the year it was 0.12 foot above the average level. On January 1 and February 1, 1940, the water levels in the well were the lowest of record for those dates. On June 1, the water level was at a record high stage for this date. The greatest departure from average occurred on September 1, when the water level was 2.49 feet above the average. For the other months of the year departures from the average were small.

The major fluctuations of water level in wells that tap artesian aquifers in the State were caused, as in previous years, by changes in the rate of regional pumping. Several records of water levels in wells to the No. 1 Sand in the Runyon area are included in this report. In most of them the artesian head was higher at the end of 1940 than at the end of 1939 due to a reduction in pumping from this sand by the principal industries operating in the area. Further development of the Duherral supply mentioned in Water-Supply Paper 845 has made this possible. Notwithstanding the reduction, the danger of salt-water intrusion into the No. 1 Sand has not been alleviated to any great extent and it appears that a further

reduction in pumping may be necessary. Pumping from the Atlantic City 800-foot sand was slightly less in 1940 than in 1939. In general, water levels in wells tapping this sand ended the year with a small net rise.

With the year 1940 we have completed another decade and this is therefore an opportune time to review the trend of the water levels in New Jersey since the beginning of record.. The hydrograph of the water level in the Morrell well (29.11.1.2.3.) and the monthly precipitation at Runyon are shown in an accompanying figure. The record of water levels was obtained by means of an automatic water-stage recorder that has been maintained on the well since August 1923. Water levels in the Morrell well are believed to indicate roughly the behavior of the water table in those parts of the Coastal Plain where the water table is close to the land surface. A detailed discussion of the conditions affecting water level fluctuations in this well is included in a brief paper published in 1933.2/

An examination of the diagram shows a very close relationship between precipitation and water levels. The water levels respond promptly to precipitation because the water has only a short distance to travel downward to the water table. The water levels respond quickly to periods of drought, in spite of the fact that the drainage of the immediate area does not appear to be very good, because the roots of plants extend to the capillary fringe or to the water table and thus draw heavily on the zone of saturation whenever sufficient moisture is not available in the soil above.

Periods of extreme drought are easily recognized, as is illustrated by the record for the year 1932, the year of greatest drought in the period of record. Other relatively dry years were 1925, 1930, and 1939. In no year during the period of record has a drought been sufficiently severe to affect greatly the water level in the well in the following year. The effect of the drought of 1939 and of one or two other years extended into the first months of the following year, but not throughout the winter. This is probably due, at least in part, to the conditions immediately surrounding the well, but it is believed that the undisturbed water table throughout the State has recovered each winter during the period of record

2/ Barksdale, H. C., A 10-year record of water-table fluctuations near Runyon, N. J.: Am. Geophys. Union Trans., 1933, pp. 467-47[illegible].

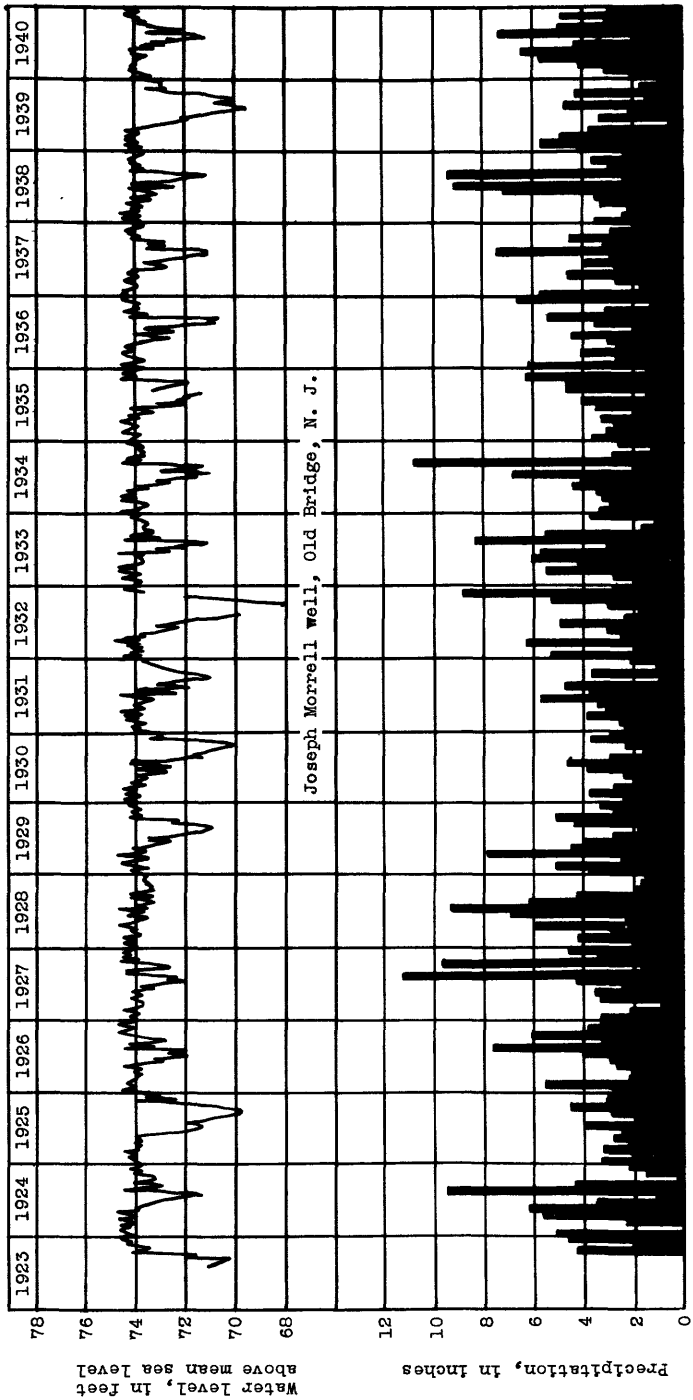


Figure 6.--Hydrograph of the Morrell well and monthly precipitation at Runyon, N. J.

from the effects of whatever droughts may have occurred in the growing seasons. Almost invariably the winter precipitation in New Jersey, and especially in the coastal plain area, is adequate to replenish any normal depletion of the zone of saturation. This is not necessarily true of the artificial depletion in areas where considerable quantities of water are pumped from wells.

The smallest range of fluctuation during any year in the period of record occurred in 1928 because of the unusual distribution of the precipitation in that year. The heaviest precipitation occurred during the summer months when transpiration and evaporation normally are greatest and the water level usually the lowest. As a result, the water level remained relatively high during the entire year.

The fluctuations of water levels in the Longport well (Atlantic County 36.23.1.9.6.) and the Citizens Ice Company well (Atlantic County, 36.14.5.8.7.), shown in an accompanying figure, are indicative of the fluctuations of artesian head at two different points in the 800-foot sand at Atlantic City. In many respects the behavior of the water level in the wells is typical of that in wells tapping artesian aquifers throughout the State where the principal fluctuations of water level are produced by changes in the rate of pumping. Fluctuations caused by tides and changes in atmospheric pressure produce temporary changes of head, but they are not significant in a long-term record. A correlation with precipitation has also been found to lack significance, probably because the yield of the sand appears to be limited more by its capacity to transmit water from the intake area to the pumping wells than by its intake capacity which is probably more than adequate.

One of the most striking features shown by the diagram is the seasonal fluctuations of water levels that are produced by the seasonal changes in pumpage. The long-term trends are somewhat less apparent. Except for the seasonal fluctuations the greatest rate of decline in the head of the water in the sand occurred in the years prior to 1930 when the pumpage increased most rapidly. From 1930 to 1935 the rate of pumping declined and the water levels recovered somewhat, but not in proportion to the decrease in pumpage. For example, the pumpage in 1935 was approximately the same as that in 1925, but the water levels in 1935 were considerably lower than in 1925 (more than 10 feet in the Longport well).

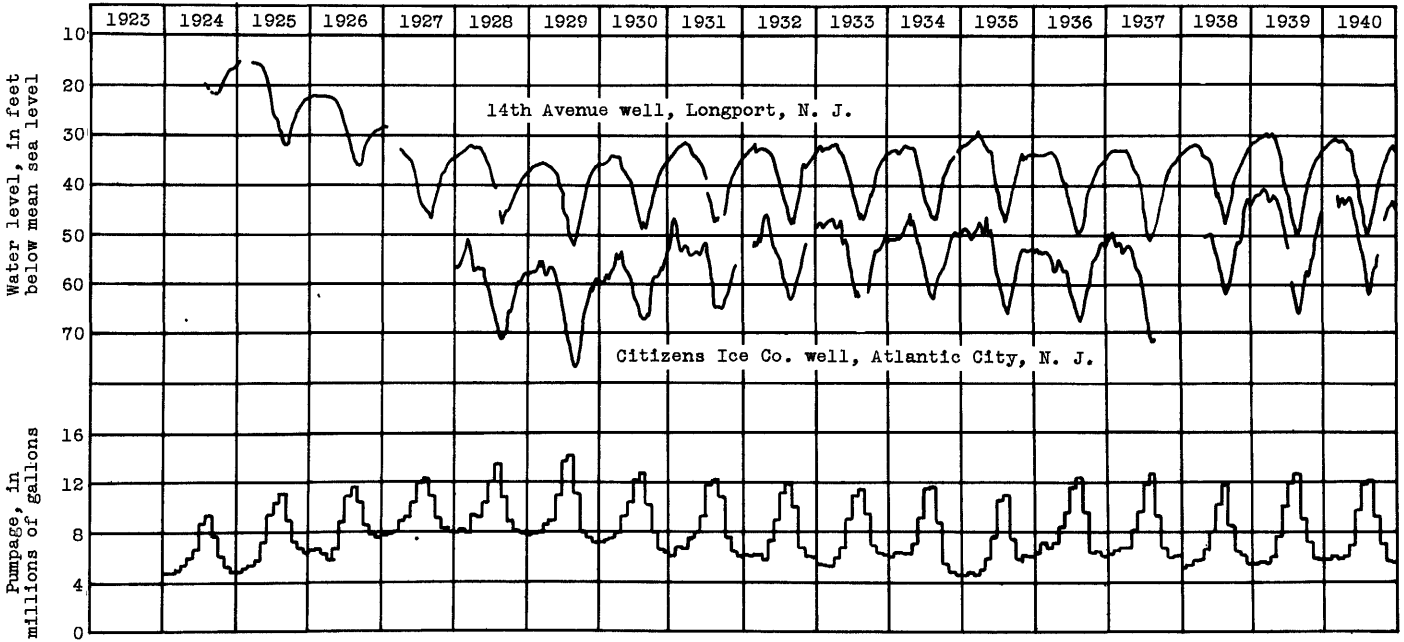


Figure 7.--Graphs showing fluctuations of water level in wells at Longport and Atlantic City, and pumpage at Atlantic City, N. J.

From 1936 to 1940, the total pumpage for the area, which is shown on the diagram, has remained essentially constant and slightly above the rate from 1933 to 1935.

Since the first wells were drilled to the Atlantic City 800-foot sand about 50 years ago, the non-pumping head of the water in the sand at Atlantic City has declined approximately 100 feet. Detailed studies of the conditions affecting this sand[3/] have indicated that this lowering of head may not indicate that the safe yield of the sand has been exceeded. It may be merely that the lowering of head is necessary to cause the water to move into the area. There are definite indications, however, that the lowering of the head may induce an advance of salt water into the area and that in this respect the safe yield of the sand has been exceeded.

In summary, there appears to have been no persistent trend to the fluctuations of the water table in New Jersey, where not affected by pumpage, during the past 17 years. The water levels in wells tapping artesian sands have in general exhibited trends that have depended on the trends in pumpage from the sands. On the whole, the trend of the head in the artesian aquifers has probably been downward over the period of record because of a rather general increase in pumpage, but in some instances the reverse has been true. In some areas, the safe yield of certain water bearing sands is being approached and there is danger that unwise and uncontrolled ground-water developments may produce over-development and serious damage.

Atlantic County

Atlantic City Area

36.13.2.9.1. Atlantic City Water Works 600-foot well. Highest observed water level, 3.05 feet below mean sea level Mar. 28, 1925; lowest observed water level, 25.47 feet below mean sea level Sept. 28 and 29, 1929.

Water level at the end of day, in feet below mean sea level, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	20.12	19.32	18.66	18.14	17.60	17.51	18.48	20.00	21.70	22.05	21.72	20.58
2	20.16	19.32	18.61	18.15	17.56	17.55	18.55	20.07	21.78	22.03	.....	20.54
3	20.20	.....	18.40	18.07	17.54	17.59	18.18	20.13	21.86	22.09	.....	20.59
4	20.18	19.26	18.29	17.96	17.58	17.61	18.46	20.18	21.91	22.15	21.68	20.48
5	20.13	19.21	18.22	18.02	17.64	17.61	18.56	20.27	21.96	22.17	21.56	20.47
6	20.20	19.12	.....	18.08	17.59	17.64	18.62	20.32	21.98	22.12	21.77	20.42
7	20.17	19.06	.....	18.08	17.63	17.66	18.64	20.39	22.03	22.09	21.70	20.36
8	20.06	19.14	.....	17.87	17.60	17.63	18.87	20.49	22.00	22.12	21.55	20.40

3/ Thompson, D. G., Ground-water supplies of the Atlantic City region: N. J. Dept. Cons. and Devel. Bull. 30, 1928.

Barksdale, H. C., Sundstrom, R. W. and Brunstein, M. S., Supplementary report on the ground-water supplies of the Atlantic City region: N. J. State Water Policy Comm., Spec. Rept. 6, 1936.

Atlantic County--Continued.

36.13.2.9.1.--Continued.

Water level at the end of day, in feet below mean sea level, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
9	20.09	19.12	18.25	17.91	17.58	17.67	18.85	20.59	22.00	22.15	21.61	20.36
10	20.04	18.86	18.30	18.01	17.59	17.65	18.85	20.73	22.06	22.15	21.58	20.33
11	19.93	18.91	18.37	17.97	17.59	17.67	18.70	20.81	22.09	22.14	21.51	20.37
12	19.87	18.87	18.39	17.85	17.60	17.67	18.85	20.85	22.13	22.15	21.43	20.22
13	19.86	18.83	18.38	17.82	17.56	17.64	.....	20.86	22.22	22.15	21.29	20.25
14	19.60	18.66	18.06	17.84	17.62	17.72	.....	20.91	22.24	22.12	21.11	20.22
15	19.72	18.86	18.18	17.80	17.65	.....	.....	21.00	22.16	22.14	21.09	20.16
16	19.74	18.89	18.18	17.83	17.55	.....	.....	.....	22.16	22.06	21.08	20.03
17	19.73	18.91	18.19	17.81	17.62	17.93	.....	21.00	22.25	21.98	21.13	20.10
18	19.73	18.82	18.12	17.82	17.64	17.88	.....	21.01	22.29	22.02	21.21	20.07
19	19.72	18.60	18.18	17.71	17.60	17.88	.....	21.08	22.29	21.94	21.12	19.99
20	19.69	18.54	18.13	.....	17.62	18.00	19.25	21.22	22.30	21.96	21.09	19.89
21	19.72	18.59	18.16	.....	17.60	18.07	19.31	21.33	22.23	22.02	21.01	19.87
22	19.70	18.65	18.12	17.47	17.45	18.07	19.33	21.40	22.28	22.02	20.99	19.85
23	19.71	18.69	18.15	17.51	17.40	18.05	19.38	21.47	22.30	21.95	20.99	19.89
24	19.21	18.62	18.15	17.54	17.39	18.03	19.31	21.57	22.26	21.93	20.88	19.86
25	19.44	18.63	18.17	17.57	.....	18.10	.....	21.60	22.28	21.91	20.92	19.75
26	19.40	18.65	18.20	17.60	.....	18.17	19.58	21.62	22.36	21.97	20.37	19.70
27	19.40	18.50	18.14	17.72	.....	18.26	19.70	21.65	22.36	21.96	20.60	19.51
28	19.41	18.53	18.18	17.73	.....	18.32	19.77	21.61	22.36	21.97	20.69	19.34
29	19.41	18.60	18.11	17.71	.....	18.34	19.79	21.66	22.34	21.91	20.61	19.25
30	19.36	.....	17.98	17.65	.....	18.42	19.82	21.71	22.23	21.79	20.56	19.36
31	19.39	.....	18.05	.....	.....	.....	19.89	21.72	.....	21.81	.....	19.42

36.14.5.8.7. Citizens Ice Company well. In Atlantic City, about 100 feet northwest of Baltic Ave. and about 300 feet southwest of Mass. Ave. Diameter 4⅛ inches, depth 805 feet. Equipped with 15 feet of 4⅛-inch screen. When first drilled well flowed 40 gallons a minute 14 feet above mean sea level. For log see annual report of New Jersey State Geologist in 1894. Measuring point, top of 2⅛-foot length of 6-inch pipe set over top of casing, 9.03 feet above mean sea level and about 2 feet above the land surface. First measured July 15, 1927. Water-stage recorder maintained since Jan. 18, 1928. Highest observed water level, 38.72 feet below mean sea level Mar. 13, 1939; lowest observed water level, 78.72 feet below mean sea level 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.

Water level, in feet below mean sea level, 1927

Date	Hour	Water level	Date	Hour	Water level
July 15	11.55 a.m.	67.04	Oct. 5	4.00 p.m.	67.95
15	5.40 p.m.	67.48	6	11.45 a.m.	67.86
16	9.10 a.m.	66.39	Nov. 3	3.15 p.m.	61.73
Sept. 2	11.15 a.m.	71.07	3	3.17 p.m.	61.73
Oct. 5	11.10 a.m.	68.16	Dec.14	12.25 p.m.	56.84

Lowest daily water level, in feet below mean sea level, 1928 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	57.6	51.8	56.8	57.4	58.3	63.1	68.9	73.1	65.5	63.8	61.8
2	....	57.6	51.8	56.4	57.8	58.9	63.2	68.8	73.2	65.7	63.1	61.6
3	....	57.7	52.4	56.6	58.0	58.8	63.5	69.0	72.8	66.1	62.4	61.0
4	....	58.4	52.0	56.5	57.8	59.1	63.9	69.6	72.8	66.1	61.6	60.6
5	....	58.0	52.4	56.6	58.0	59.8	64.1	69.8	72.0	66.0	62.0	60.4
6	....	58.3	52.3	57.0	58.4	60.6	64.0	69.9	71.1	66.0	62.4	59.8
7	....	58.0	51.8	58.1	58.3	61.0	64.2	69.9	70.6	65.5	62.4	59.6
8	....	56.8	52.5	59.0	57.9	61.4	64.2	70.4	70.8	65.8	61.8	58.8
9	....	56.3	51.6	59.6	57.6	61.3	64.6	70.3	70.7	66.7	61.8	59.0
10	....	56.2	52.3	59.4	58.0	60.8	64.5	70.6	70.8	66.8	61.9	59.0
11	....	56.4	52.0	58.2	58.0	60.9	64.2	70.6	70.9	67.4	61.5	59.2
12	....	56.3	52.3	59.2	58.4	60.8	64.2	70.0	70.6	67.4	61.2	59.0
13	....	57.0	52.1	59.6	58.1	61.1	64.1	70.1	70.4	67.8	61.4	58.7
14	....	56.2	51.7	59.6	58.2	61.0	64.2	70.7	71.0	67.8	61.8	58.6

Atlantic County--Continued.

36.14.5.8.7.--Continued.

Lowest daily water level, in feet below mean sea level, 192[illegible]
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
15	....	55.8	51.7	58.9	57.7	60.6	64.2	71.0	71.1	67.2	61.8	58.4
16	....	55.3	51.5	58.8	57.7	61.0	64.2	71.3	71.3	67.2	62.1	58.2
17	....	55.2	51.6	58.6	58.0	61.1	....	71.0	71.4	66.7	61.7	58.2
18	57.0	55.0	52.0	58.6	57.9	61.2	63.3	71.3	70.8	66.6	61.3	58.5
19	56.5	55.4	53.4	58.2	58.2	61.2	65.7	71.3	69.4	66.1	61.0	58.5
20	57.4	55.4	53.8	58.3	57.9	61.6	66.0	71.0	70.5	66.4	61.6	58.2
21	58.6	56.2	53.8	58.2	57.9	62.0	66.5	71.2	....	65.8	61.2	58.6
22	58.3	55.8	54.2	57.6	57.4	62.2	66.6	71.2	70.4	65.4	61.0	58.3
23	58.0	55.6	54.5	57.8	57.3	62.6	66.9	71.4	69.7	65.2	60.8	58.2
24	57.4	55.8	55.2	57.9	57.2	62.0	66.9	71.7	69.4	65.2	60.8	58.8
25	58.2	55.7	55.0	58.2	57.2	62.6	67.0	72.0	....	65.5	60.4	58.7
26	58.6	55.0	55.4	57.9	57.4	63.0	67.0	71.8	68.6	65.2	60.7	58.9
27	58.0	55.0	55.6	57.2	57.8	63.4	67.7	71.8	68.6	64.8	60.8	59.2
28	57.4	53.6	56.2	57.2	57.6	63.6	68.0	72.0	68.0	64.3	60.8	59.3
29	57.2	52.2	55.6	57.9	57.8	63.3	68.1	72.1	66.7	64.1	61.0	60.1
30	57.7	....	55.4	57.7	58.2	63.2	68.4	72.4	65.5	64.2	61.2	61.0
31	57.8	....	56.8	....	58.2	....	68.6	72.8	....	64.0	....	61.4

Lowest daily water level, in feet below mean sea level, 1939
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	60.8	58.8	56.4	59.2	....	60.8	66.0	73.0	78.7	....	65.7	63.4
2	61.3	58.8	56.2	60.4	....	61.2	....	73.4	78.8	....	65.6	62.7
3	60.8	58.3	55.6	60.2	....	61.4	....	74.4	78.6	....	65.5	62.3
4	60.2	58.3	56.1	59.6	57.8	61.6	67.4	75.0	78.2	71.0	65.4	62.4
5	59.5	58.2	56.0	60.2	57.4	62.0	67.6	75.4	77.6	71.2	65.5	62.4
6	58.6	57.9	56.8	60.2	57.6	62.6	68.4	75.8	77.6	70.6	65.3	61.8
7	59.6	57.8	57.3	60.2	57.9	63.1	68.5	75.8	77.0	70.3	65.0	61.6
8	59.6	58.5	57.5	59.7	57.8	62.8	68.6	76.0	77.3	....	64.8	61.5
9	59.2	58.8	57.6	59.4	57.6	62.6	68.6	76.9	77.4	70.0	....	61.6
10	58.7	58.7	58.0	59.0	57.9	61.8	68.8	77.1	77.6	69.6	....	61.0
11	58.8	59.0	58.6	58.8	58.7	61.5	....	76.6	77.7	69.8	....	60.6
12	58.9	59.6	57.8	58.2	58.2	61.6	69.4	77.2	77.0	69.7	....	60.2
13	58.8	59.4	57.9	58.8	58.0	61.7	69.8	76.7	76.4	69.2	64.2	60.4
14	59.6	58.6	57.8	58.3	58.0	62.4	70.1	77.2	76.5	69.0	64.2	60.6
15	59.7	58.8	57.8	58.0	57.6	61.8	70.0	77.6	76.4	69.0	64.3	60.4
16	59.4	58.8	58.2	56.7	57.8	62.3	70.0	77.7	76.3	69.1	64.4	60.5
17	59.2	58.6	58.2	57.7	58.2	63.0	70.2	77.8	75.7	69.2	63.8	60.4
18	59.3	58.6	57.6	58.0	58.2	63.2	70.0	78.0	75.1	68.6	62.9	60.2
19	59.8	58.2	56.2	58.0	58.4	63.2	70.6	78.2	74.7	68.9	63.4	59.7
20	59.6	58.5	55.8	57.8	57.8	63.8	71.4	78.2	74.4	68.2	63.2	60.8
21	59.4	57.8	55.6	58.0	57.3	64.2	71.0	78.5	74.2	68.3	63.0	61.0
22	59.2	59.4	55.7	57.5	58.2	64.9	71.2	78.2	74.2	67.6	62.6	59.8
23	59.1	60.3	55.7	58.0	58.7	64.4	71.2	78.6	73.4	68.4	....	58.4
24	59.4	60.2	56.0	57.6	58.6	64.5	71.7	77.8	73.2	68.2	....	59.8
25	58.8	59.8	56.6	57.6	58.8	65.4	72.2	78.2	72.8	68.2	61.8	59.3
26	59.7	58.8	57.1	57.8	58.6	....	71.7	77.9	72.1	68.0	61.2	59.4
27	59.4	58.4	57.6	58.6	59.0	....	72.8	77.9	72.0	67.4	61.0	60.0
28	59.4	56.7	57.6	....	58.7	....	72.2	78.1	71.8	67.0	62.0	60.0
29	59.4	....	58.2	....	58.4	66.0	72.4	78.6	72.0	66.6	62.4	59.8
30	58.8	....	58.8	....	58.7	65.8	72.6	78.2	71.8	65.6	63.4	60.7
31	58.5	....	59.2	....	....	....	72.8	78.6	....	65.4	....	61.4

Lowest daily water level, in feet below mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	61.0	60.2	60.8	56.2	54.5	59.8	63.9	67.3	....	63.9	60.2	....
2	61.3	59.6	60.0	55.9	54.0	59.9	64.3	67.2	....	63.0	59.5	....
3	60.9	59.7	60.2	55.4	54.0	60.1	64.2	67.4	67.6	62.8	59.4	....
4	61.2	59.4	60.4	55.4	53.6	60.5	64.2	67.4	67.5	62.9	58.5	....
5	61.0	59.2	60.0	55.6	54.4	60.4	64.7	67.3	67.6	62.5	58.4	55.8
6	61.1	59.0	59.9	55.4	55.1	60.3	64.6	....	67.6	62.2	59.2	55.0
7	61.2	59.2	59.6	55.4	55.7	59.8	64.7	....	67.6	61.8	60.0	54.7

Atlantic County--Continued.

36.14.5.8.7.--Continued.

Lowest daily water level, in feet below mean sea level, 1930
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
8	60.8	59.1	59.1	55.8	55.8	59.4	64.7	67.4	....	....	60.2	55.4
9	60.6	59.0	59.0	54.8	56.1	59.0	65.0	67.7	....	61.4	59.8	55.1
10	60.8	59.4	58.6	54.6	56.6	....	65.1	68.0	66.8	61.5	60.2	55.0
11	60.4	59.4	58.0	54.7	56.8	....	65.2	67.8	67.0	61.8	60.3	54.6
12	60.4	59.4	58.6	54.8	57.5	58.6	65.2	68.2	66.9	62.0	59.8	54.4
13	60.6	59.5	58.0	54.8	57.3	58.8	65.0	68.4	66.9	62.6	59.7	54.8
14	60.9	59.6	58.2	54.4	57.0	58.8	64.8	68.7	66.5	61.3	58.8	53.6
15	61.6	60.4	58.8	54.0	56.8	58.6	65.0	68.7	66.6	60.6	58.2	53.6
16	61.7	59.9	58.4	53.9	57.4	59.2	65.3	68.4	66.0	60.2	57.2	53.8
17	62.3	60.2	58.0	....	57.3	59.2	65.6	68.0	65.8	59.6	57.6	53.8
18	61.8	59.0	57.8	....	57.0	59.8	65.6	68.0	65.9	59.8	57.4	53.5
19	61.8	58.7	57.7	56.4	57.4	60.3	65.8	67.8	65.6	59.2	57.4	53.5
20	62.0	58.6	58.2	56.8	58.1	61.1	65.2	....	65.6	59.3	57.6	53.4
21	61.2	59.0	58.1	56.5	57.8	61.3	66.1	....	65.7	59.8	57.7	53.2
22	60.8	59.6	58.8	56.0	57.8	61.6	66.3	67.4	66.0	59.0	57.8	53.4
23	60.6	59.4	57.9	56.2	....	62.0	66.1	67.4	66.6	59.0	58.1	53.0
24	60.7	59.1	58.0	56.6	58.6	62.7	66.3	68.4	67.0	59.7	57.7	54.1
25	60.8	59.0	57.1	56.0	58.4	63.0	....	69.1	66.5	60.2	58.0	53.5
26	60.4	59.7	57.0	56.2	57.6	63.3	67.2	68.9	66.4	60.0	....	54.0
27	60.1	60.6	57.3	56.5	57.5	63.2	67.4	69.0	66.4	60.4	....	53.8
28	60.0	60.8	56.9	56.4	57.0	63.4	67.3	69.2	65.0	60.4	....	53.2
29	60.4	....	56.7	55.9	57.2	63.2	67.6	69.2	65.0	59.9	59.2	53.8
30	59.5	....	56.2	55.0	58.2	64.2	67.6	69.3	64.4	59.8	....	54.2
31	59.6	....	56.4	....	59.3	....	67.6	69.0	....	60.2	....	54.2

Lowest daily water level, in feet below mean sea level, 1931
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	54.3	49.2	54.4	53.0	55.4	55.9	52.6	64.4	66.1	64.2	61.0	....
2	54.6	49.6	54.4	53.6	55.5	55.7	52.8	64.8	66.1	64.4	60.8	....
3	54.8	49.2	54.0	54.6	55.1	55.2	53.4	64.8	65.9	64.0	60.6	....
4	54.0	49.0	53.1	55.8	55.6	54.7	54.9	65.2	65.8	63.4	60.2	....
5	53.0	49.2	53.4	55.6	55.6	54.5	55.4	65.2	66.3	64.0	59.8	....
6	50.8	49.7	53.5	55.2	54.5	54.4	55.5	65.2	66.7	64.0	....	....
7	50.8	50.0	53.6	54.5	54.0	53.6	55.6	65.8	67.0	63.6	59.4	....
8	....	50.5	52.4	54.9	54.0	53.8	55.9	66.3	66.2	64.1	59.5	....
9	....	51.5	53.2	55.8	54.6	53.6	56.1	66.6	66.1	63.8	60.2	....
10	49.0	52.3	53.3	55.7	54.0	52.8	56.5	66.5	65.6	63.8	59.8	....
11	48.3	52.6	53.0	56.6	53.7	52.3	56.7	66.5	65.8	63.8	59.6	....
12	47.8	52.5	53.2	56.2	53.4	52.2	56.7	66.1	66.4	64.5	....	....
13	47.8	53.6	53.2	55.5	53.8	52.1	....	66.0	66.4	64.2	....	....
14	47.4	53.6	53.1	55.0	53.8	52.5	....	66.2	66.9	64.2	58.8	....
15	47.4	53.7	53.1	54.9	54.2	52.4	....	66.2	66.8	63.7	57.8	....
16	47.2	53.4	52.9	55.0	54.4	51.9	....	65.8	66.2	63.1	58.0	....
17	47.8	53.2	52.4	55.2	54.2	51.2	....	65.4	66.3	63.2	57.6	....
18	47.6	53.0	53.2	55.8	54.8	51.2	59.8	66.0	66.4	62.2	....	....
19	46.8	53.4	53.0	55.7	54.8	51.8	60.0	66.3	66.6	62.0	....	....
20	47.5	53.9	53.0	55.6	55.0	52.4	60.6	66.2	66.4	62.2	....	....
21	48.3	55.2	53.9	56.0	55.1	53.2	60.4	65.7	66.0	61.8	57.2	....
22	48.4	55.8	53.5	55.3	55.2	53.4	60.6	65.2	65.8	61.5	56.6	....
23	48.4	56.7	53.0	55.4	55.4	52.5	61.0	64.9	65.7	61.4	56.8	....
24	49.1	55.6	53.3	55.5	55.1	51.6	61.3	64.8	64.9	61.4	56.7	....
25	48.3	55.2	53.4	55.5	54.9	51.4	62.8	65.1	65.0	60.9	56.6	....
26	49.4	54.7	53.4	54.3	54.7	51.6	62.6	65.4	64.5	61.9	....	....
27	49.3	55.2	53.8	54.4	54.7	51.8	62.9	65.5	63.8	61.7	....	....
28	49.2	55.0	53.4	54.1	54.4	51.6	63.4	65.8	63.5	61.2	....	....
29	49.0	....	52.6	55.2	54.9	51.8	63.6	66.4	64.0	61.4	....	....
30	48.8	....	53.0	55.1	55.8	52.3	63.8	66.2	64.2	61.1	....	....
31	49.1	....	53.2	....	56.6	....	64.2	66.2	....	61.4	....	....

Atlantic County--Continued.

36.14.5.8.7.--Continued.

Lowest daily water level, in feet below mean sea level, 193?
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	....	52.4	52.6	46.4	....	....	61.2	....	60.4	....	....
2	....	....	51.8	52.7	46.6	....	56.4	61.3	64.4	59.9	....	....
3	....	....	....	52.4	....	....	57.6	....	....	60.0	56.0	....
4	....	....	52.0	51.6	....	....	58.7	61.0	....	....	56.0	....
5	....	....	52.0	51.2	....	53.4	....	61.4	....	....	....	....
6	....	....	51.4	50.6	47.6	53.1	....	....	....	59.8	55.0	....
7	....	....	53.7	50.9	....	53.2	57.2	62.0	64.6	60.0	....	....
8	....	....	53.6	50.5	....	53.6	57.2	61.9	....	59.8	54.1	....
9	....	....	....	50.4	....	54.0	57.4	62.0	....	59.6	53.8	....
10	....	....	53.5	49.6	....	54.2	57.4	62.4	63.4	59.3	53.0	....
11	....	....	53.0	49.5	48.9	....	57.8	62.5	63.3	59.2	53.6	....
12	....	....	53.0	48.7	48.2	54.4	57.6	62.6	63.1	59.2	....	....
13	....	....	52.0	48.2	49.0	....	57.6	63.2	63.2	59.2	....	....
14	....	....	52.1	47.8	49.0	....	58.0	63.4	63.1	....	....	....
15	....	....	52.4	47.2	49.8	....	58.2	63.6	63.0	58.6	....	....
16	....	....	52.1	....	49.4	54.6	58.4	63.8	62.4	58.6	53.2	....
17	....	....	51.6	....	50.1	55.1	58.9	....	63.0	58.1	53.0	....
18	....	....	51.4	....	50.3	54.4	59.2	64.0	63.5	....	52.0	....
19	....	....	51.2	47.0	50.8	....	59.6	....	63.6	....	....	....
20	....	....	51.9	47.0	50.6	54.6	....	....	62.0	....	....	....
21	....	55.0	51.8	46.8	50.9	54.6	59.5	64.4	61.2	....	....	....
22	....	55.5	51.2	46.9	51.0	54.8	59.4	64.4	61.5	57.6	....	....
23	....	55.5	52.0	46.9	51.5	55.0	59.6	64.4	61.6	56.7	....	....
24	....	54.9	51.5	47.1	51.8	55.1	59.9	64.4	61.5	56.0	....	....
25	....	54.4	51.6	47.0	52.3	55.2	60.4	64.6	61.2	56.2	....	....
26	....	53.9	52.4	46.7	52.4	54.9	60.4	64.4	60.8	56.1	....	....
27	....	53.0	52.4	46.6	52.5	55.3	60.0	64.7	60.6	56.2	....	....
28	....	51.9	52.6	46.4	52.8	55.2	60.0	64.8	....	56.1	....	....
29	....	52.2	52.6	46.4	53.6	....	60.2	....	60.8	56.0	....	....
30	....	....	52.0	46.4	54.2	....	60.5	....	60.2	56.6	....	....
31	....	....	52.2	....	53.9	....	60.6	....	....	....	....	....

Lowest daily water level, in feet below mean sea level, 193?
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	48.3	48.4	47.4	49.8	51.1	58.0	64.0	....	62.0	54.3	54.2
2	....	48.3	47.9	47.2	50.0	51.9	58.4	64.0	....	61.8	54.2	54.5
3	....	49.1	....	47.1	49.6	52.0	58.0	64.0	66.5	61.3	53.5	53.7
4	....	48.4	48.2	....	48.6	51.8	58.7	....	66.7	61.0	54.0	53.2
5	....	48.4	47.8	47.8	48.2	51.8	58.6	....	66.9	59.8	54.0	52.9
6	....	48.2	....	47.4	47.9	51.9	59.2	....	66.4	59.6	53.0	53.0
7	....	48.2	....	....	....	52.6	59.4	....	66.0	59.0	52.5	52.6
8	....	48.3	47.5	48.0	....	52.4	59.9	....	65.6	58.2	53.4	52.0
9	....	49.5	48.3	48.3	....	52.4	60.2	....	....	58.6	53.4	52.0
10	....	49.3	48.4	48.1	....	52.9	60.1	....	....	58.4	53.8	51.6
11	49.0	49.0	....	48.0	....	53.0	60.4	....	....	58.1	54.4	52.5
12	49.8	49.7	48.1	47.8	48.6	53.6	60.6	....	....	57.8	54.8	52.3
13	49.7	49.8	47.8	47.6	49.0	53.6	61.2	....	....	57.2	54.3	51.6
14	....	49.5	47.8	48.2	49.0	53.2	61.0	....	....	57.6	54.4	51.8
15	....	49.5	48.2	49.3	49.8	53.6	61.0	....	....	57.7	54.9	51.5
16	....	49.3	48.4	49.5	49.7	53.6	61.0	....	....	57.5	55.0	51.7
17	....	49.2	48.4	50.0	50.0	54.0	61.0	....	....	56.8	54.6	51.6
18	....	....	....	49.6	50.2	54.0	61.0	....	....	56.9	54.2	52.0
19	....	48.4	47.0	49.2	50.7	54.5	61.6	....	....	56.6	53.4	51.4
20	49.5	....	47.0	49.0	51.2	54.6	61.8	....	....	56.9	53.8	51.0
21	49.6	49.1	47.2	49.2	51.6	54.8	61.8	....	....	56.4	53.3	51.2
22	48.7	49.2	47.6	49.4	51.6	55.1	62.6	....	62.6	56.2	53.5	51.2
23	49.2	49.4	47.8	49.7	51.8	55.4	62.7	....	63.1	56.0	53.1	51.0
24	49.1	48.9	47.6	49.8	51.7	56.0	63.2	....	62.8	55.2	53.2	51.2
25	49.2	48.8	47.9	49.2	51.5	56.0	63.5	....	62.8	55.8	53.5	51.8
26	47.5	48.4	47.7	49.0	51.7	56.4	63.0	66.2	62.6	55.2	52.8	50.9
27	46.9	48.2	47.4	49.3	52.1	56.6	62.1	67.2	62.2	54.5	53.2	51.9
28	48.1	48.8	47.4	49.2	52.5	56.5	61.8	67.2	61.9	54.6	53.2	....
29	48.6	....	47.8	49.5	53.1	57.4	62.4	66.3	61.6	54.3	53.0	52.5
30	48.7	....	47.7	49.4	53.4	....	63.2	66.1	61.7	54.5	53.3	52.9
31	48.6	....	47.5	....	52.3	....	63.3	....	....	54.3	....	53.4

Atlantic County--Continued.

36.14.5.8.7.--Continued.

Lowest daily water level, in feet below mean sea level, 1934
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	54.0	51.6	51.4	49.4	49.7	52.8	57.6	62.4	63.8	59.0	54.6	52.0
2	53.2	51.6	51.4	49.4	49.8	53.0	58.0	62.0	64.5	58.6	54.7	52.4
3	52.6	52.0	50.8	49.6	49.2	52.5	58.4	62.4	64.4	58.3	54.5	52.2
4	52.4	51.6	50.7	49.2	48.6	52.6	59.1	63.2	63.7	58.2	54.4	51.4
5	52.3	51.8	51.0	49.4	48.7	....	59.2	63.2	63.4	58.0	53.8	52.0
6	....	51.8	51.1	49.3	49.2	50.6	58.8	63.5	....	57.9	53.6	51.6
7	....	51.8	51.3	49.6	48.6	50.2	59.2	....	....	58.1	53.9	51.0
8	....	51.2	51.1	49.3	48.5	51.4	59.4	63.2	....	57.8	53.5	49.8
9	....	51.1	51.3	48.5	47.6	52.2	59.3	63.5	....	58.2	53.5	50.2
10	51.0	52.0	....	48.3	47.3	52.6	58.7	63.7	....	58.1	53.0	50.0
11	51.0	52.6	51.0	47.6	47.2	52.8	58.8	63.8	....	58.6	53.4	49.6
12	50.8	52.8	51.2	47.3	47.8	52.7	58.6	64.4	62.6	58.3	53.6	49.2
13	50.1	52.2	51.4	47.6	48.4	52.8	58.6	64.0	61.8	58.9	53.6	49.2
14	50.4	52.4	51.6	47.4	49.0	53.4	58.8	64.0	61.7	58.7	53.2	49.2
15	51.0	52.0	50.9	47.7	49.8	53.0	....	63.7	62.0	58.9	53.2	49.2
16	50.6	51.5	51.2	47.0	49.4	53.4	....	63.4	61.2	58.2	53.2	49.2
17	51.8	51.8	51.5	47.3	49.9	53.4	60.4	63.6	61.0	58.4	52.8	49.3
18	51.7	51.0	51.0	47.0	49.5	53.6	60.1	64.0	60.7	58.1	52.9	49.7
19	51.8	51.3	51.4	46.6	49.8	53.4	60.3	64.4	60.6	58.1	52.6	50.5
20	51.6	52.1	....	45.8	49.4	53.4	60.6	64.2	60.7	57.8	52.8	52.8
21	51.3	51.6	....	46.2	49.8	54.0	61.2	64.0	60.5	57.3	52.6	52.2
22	51.2	51.1	50.0	45.8	50.2	54.5	61.6	63.9	....	57.2	52.4	51.0
23	51.5	51.7	50.2	45.7	50.4	54.6	62.2	64.4	60.4	57.0	52.5	50.6
24	52.0	52.1	50.7	45.2	50.6	55.0	63.2	64.4	60.2	56.8	52.0	51.0
25	51.5	52.0	50.7	45.4	50.9	55.3	62.6	64.8	60.0	56.4	51.4	50.6
26	51.2	50.5	50.4	45.6	50.9	55.7	63.0	65.0	59.7	56.4	51.2	50.8
27	50.8	51.8	49.3	45.8	51.6	56.0	62.8	64.6	59.6	54.9	51.0	51.4
28	50.5	51.6	48.4	47.0	52.2	56.2	63.0	64.0	59.6	55.4	51.0	50.8
29	52.1	....	48.4	48.6	52.1	56.6	62.8	63.4	59.0	55.6	51.0	50.5
30	52.1	....	48.4	48.9	52.6	57.1	62.7	63.4	58.9	55.2	51.7	51.4
31	51.9	....	....	....	52.7	....	62.4	63.6	....	54.6	....	51.5

Lowest daily water level, in feet below mean sea level, 1935
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	52.4	49.4	51.8	50.7	52.0	52.8	56.2	62.0	66.3	59.6	55.0	54.8
2	52.7	50.2	51.4	49.3	51.6	53.0	56.1	63.0	....	59.5	54.6	54.5
3	52.0	49.8	51.2	49.1	51.4	52.4	56.4	63.1	65.9	59.4	54.0	54.2
4	51.8	50.1	51.5	49.1	51.5	52.4	57.0	63.0	64.6	59.4	....	54.1
5	51.9	50.2	51.1	48.6	51.1	52.2	57.6	63.3	64.5	59.1	....	54.0
6	51.2	49.6	51.0	48.7	51.0	52.0	57.7	63.6	64.0	58.1	53.9	54.0
7	51.6	50.2	50.4	48.2	49.5	51.3	57.8	63.0	63.8	58.0	53.9	54.0
8	51.4	49.6	50.5	48.4	49.2	50.6	58.0	63.2	63.8	57.6	53.6	54.2
9	50.6	49.4	50.6	48.0	49.0	50.6	58.0	63.8	....	57.6	54.2	54.2
10	49.9	48.9	49.8	47.8	48.8	50.5	58.4	64.2	....	57.6	54.6	54.8
11	50.0	49.4	50.0	47.6	48.5	50.8	58.8	64.8	....	57.8	54.6	54.6
12	50.0	49.6	49.4	47.6	48.2	51.2	59.3	65.3	62.8	58.2	54.4	54.6
13	49.9	....	....	....	47.9	51.8	59.8	65.1	62.6	57.0	54.6	54.2
14	49.8	48.8	....	....	47.4	52.4	60.0	65.4	62.7	57.0	54.8	54.2
15	50.0	48.8	49.4	....	46.8	52.5	59.9	66.1	62.6	57.1	54.4	54.0
16	49.8	49.7	49.8	....	46.8	53.4	60.1	66.8	62.1	56.4	53.9	54.2
17	49.6	49.4	50.2	....	47.1	53.7	60.2	67.6	61.6	56.0	53.2	53.8
18	50.0	50.2	50.4	49.0	48.7	53.8	60.5	67.2	61.8	55.8	53.6	53.4
19	49.8	....	50.1	49.8	49.6	53.4	60.6	66.9	61.4	55.9	53.5	53.0
20	49.4	51.1	50.2	50.6	50.1	53.5	60.8	67.2	61.1	55.6	53.4	53.0
21	49.4	51.4	50.0	51.3	49.8	53.6	60.8	66.4	60.6	55.4	53.6	53.4
22	49.8	....	49.8	51.3	49.7	53.9	61.2	66.0	60.4	56.0	53.7	53.6
23	18.8	52.6	49.6	51.4	49.6	53.4	61.3	66.0	59.9	56.5	53.7	53.2
24	49.6	53.0	49.9	51.4	49.9	53.8	61.4	66.0	59.4	56.9	53.0	53.8
25	49.8	53.2	50.5	51.4	50.2	54.3	61.4	66.0	59.7	56.8	53.2	54.3
26	49.4	52.4	51.4	51.3	50.4	54.4	61.2	65.8	60.1	57.0	53.3	54.4
27	49.0	51.8	49.8	51.8	50.8	55.0	61.8	66.6	60.6	56.8	53.8	55.2
28	49.6	52.2	48.8	52.1	51.2	55.2	62.0	66.0	60.6	56.4	53.9	55.8
29	49.2	....	....	51.9	51.4	55.8	62.0	65.8	60.0	56.0	54.5	54.8
30	....	....	49.3	51.6	51.6	56.0	62.0	65.4	60.1	56.0	55.2	54.8
31	49.2	....	49.2	....	51.8	....	61.9	66.0	....	55.2	....	55.6

Atlantic County--Continued.

36.14.5.8.7.--Continued.

Lowest daily water level, in feet below mean sea level, 1936
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	55.8	54.7	54.0	56.0	57.2	58.4	59.1	66.4	68.4	62.4	56.4	55.6
2	55.0	54.6	54.0	56.0	57.5	58.0	59.1	66.6	68.2	62.2	56.8	54.2
3	54.8	54.7	54.0	56.6	57.8	57.8	59.4	66.8	....	62.0	56.8	54.4
4	54.6	54.2	53.8	....	57.7	57.6	61.0	66.8	....	61.8	56.4	54.4
5	54.6	54.4	54.2	57.6	57.7	57.6	62.4	67.2	....	61.5	56.1	54.5
6	54.7	54.7	54.2	57.4	56.4	57.8	61.8	67.8	68.6	61.6	55.9	54.2
7	54.6	54.2	54.4	57.4	55.2	57.8	61.1	67.2	68.8	61.9	56.1	54.0
8	54.6	54.9	54.4	58.2	55.2	57.8	....	67.5	....	62.1	56.0	54.0
9	53.6	54.2	54.2	58.3	55.1	58.0	....	67.6	....	62.1	....	53.8
10	54.2	54.4	54.4	58.6	55.5	57.8	62.2	67.4	66.8	61.8	....	....
11	54.2	54.8	53.6	58.9	56.2	57.9	....	67.6	66.2	61.9	55.8	53.2
12	53.6	55.0	53.6	59.4	56.6	58.3	....	....	66.1	62.6	56.0	53.3
13	53.6	54.6	54.0	59.2	56.5	58.4	....	68.0	66.2	62.6	55.8	53.2
14	54.0	53.6	54.4	59.3	56.7	58.1	....	68.4	65.8	....	56.1	53.3
15	53.4	54.0	54.6	....	56.6	58.0	....	69.0	65.1	62.7	56.4	53.6
16	54.0	53.5	54.8	58.8	56.6	58.2	....	69.4	65.0	62.4	56.8	53.2
17	53.8	53.6	54.2	59.0	57.0	58.4	64.2	69.4	64.8	61.8	56.4	52.9
18	53.6	53.9	54.4	59.2	56.8	58.1	64.3	69.1	64.0	....	56.4	53.5
19	52.8	54.4	54.5	59.2	56.6	57.9	64.8	69.3	....	....	56.0	52.6
20	54.0	54.4	54.6	59.0	56.9	57.5	65.0	69.2	63.9	60.6	56.1	52.6
21	54.4	54.2	54.4	58.6	57.1	57.7	64.6	69.4	63.5	60.0	55.8	53.6
22	54.0	54.6	55.0	58.6	57.5	58.7	65.1	69.6	63.1	59.3	55.1	53.4
23	54.6	55.4	55.0	58.6	57.8	58.3	65.1	70.2	63.0	58.4	55.8	52.9
24	55.4	55.4	55.2	58.4	57.6	58.2	65.6	70.2	63.0	57.2	55.4	53.2
25	55.4	54.9	55.0	58.6	57.4	58.6	65.8	69.8	62.8	57.2	55.4	53.3
26	55.2	54.6	55.3	58.5	57.6	58.8	66.2	69.8	....	57.0	55.4	53.7
27	55.0	54.5	55.4	58.4	57.3	58.9	66.0	....	62.4	57.0	55.9	54.3
28	55.4	54.7	55.6	57.8	57.2	58.6	65.3	69.0	62.6	56.5	56.2	54.9
29	55.0	54.7	55.8	57.1	57.4	58.9	65.3	68.8	62.6	56.5	56.3	54.8
30	54.4	....	55.9	57.0	58.4	59.0	65.7	68.8	62.2	56.8	56.0	54.7
31	54.2	....	56.0	....	58.8	....	65.7	68.7	....	56.1	....	55.3

Lowest daily water level, in feet below mean sea level, 1937
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	56.3	50.0	53.0	55.4	52.8	56.6	59.0	70.1	71.3
2	56.2	50.3	52.6	55.5	52.6	55.9	59.5	70.1	71.3
3	56.1	50.0	52.6	55.7	53.0	55.4	60.4	70.2	71.4
4	55.5	49.8	52.5	55.2	52.8	55.0	61.7	70.2	71.6
5	54.7	49.4	52.0	54.5	52.5	55.4	62.2	70.5	72.2
6	54.0	49.2	51.8	53.7	52.5	55.4	62.2	71.2	71.9
7	53.6	49.4	52.0	53.7	52.6	56.0	62.0	72.0	....
8	53.8	49.4	51.8	53.6	53.4	57.1	....	72.4	....
9	53.6	49.4	52.0	53.2	53.5	57.8	....	72.5	....
10	53.4	49.6	52.3	....	53.6	58.0	....	73.0	....
11	53.4	49.8	52.5	53.6	53.8	57.7	....	73.4	....
12	53.0	50.4	52.4	53.4	53.8	57.6	....	73.2	....
13	....	51.0	....	53.5	53.9	56.8	65.6	72.6	....
14	....	50.4	....	53.5	53.8	56.6	65.9	72.6	....
15	....	51.0	....	53.4	53.4	57.2	66.2	72.7	....
16	....	49.9	....	52.8	53.8	57.6	66.5	73.2	....
17	52.4	50.4	....	52.9	53.5	57.6	67.2	73.2	....
18	52.8	50.9	52.3	52.8	53.5	58.1	67.6	72.8	....
19	....	51.6	....	53.0	53.2	58.4	67.7	72.8	....
20	....	53.2	52.0	52.8	53.3	58.4	....	....	....
21	....	53.8	52.2	52.4	53.4	58.4	....	....	....
22	....	55.2	....	52.1	53.6	58.3	....	73.8	....
23	52.2	54.7	....	52.6	54.1	58.2	....	73.2	....
24	52.0	54.0	52.8	52.4	53.9	58.5	....	72.8	....
25	51.8	53.4	52.6	53.3	53.8	58.8	69.1	72.4	....
26	51.2	53.6	53.9	52.4	54.0	59.0	69.1	72.0	....
27	50.6	53.5	55.2	52.5	54.1	59.1	68.8	72.0	....
28	50.2	53.4	55.8	52.8	54.8	59.1	69.2	72.0	....
29	49.6	....	55.5	52.8	55.0	59.1	69.4	72.0	....
30	49.6	....	55.8	52.4	56.2	58.9	69.4	71.5	....
31	49.8	....	....	....	57.0	....	69.5	71.2	....

Atlantic County--Continued.

36.14.5.8.7.--Continued.

Lowest daily water level, in feet below mean sea level, 1938
(from recorder charts)

Day	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	.....	.....	51.5	52.0	59.0	64.4	57.9	52.8	46.4
2	.....	a52.25	a49.02	.....	51.0	....	58.8	64.2	57.2	52.4	45.9
3	.....	.....	.....	.....	50.8	53.8	59.2	64.6	56.6	52.4	45.3
4	.....	.....	.....	a51.08	50.0	55.2	59.4	65.2	56.4	52.3	45.2
5	.....	a50.91	.....	.....	49.4	54.7	60.0	65.2	56.2	52.6	45.0
6	.....	.....	a49.48	.....	49.6	54.4	60.5	64.6	56.2	52.8	44.6
7	.....	.....	.....	a50.66	49.8	53.8	61.0	63.8	56.2	52.9	44.9
8	.....	.....	.....	.....	49.7	54.2	60.8	63.4	56.0	53.6	45.1
9	.....	a50.27	a48.09	.....	50.3	54.4	60.8	63.3	56.6	....	44.6
10	.....	.....	.....	.....	50.6	54.6	61.2	63.2	56.8	53.5	44.8
11	.....	.....	.....	51.5	50.6	55.2	61.0	62.8	57.2	53.4	44.8
12	.....	a48.94	.....	51.6	51.0	55.4	61.6	62.2	57.4	54.2	44.2
13	.....	.....	a48.37	52.2	51.2	55.8	62.3	61.8	56.8	53.6	44.2
14	.....	.....	.....	....	51.2	56.4	62.8	61.2	56.0	54.1	44.8
15	.....	.....	.....	51.8	50.6	57.0	62.8	61.1	55.5	54.1	44.2
16	.....	.....	a51.22	51.6	50.6	57.1	63.0	60.9	54.8	53.1	44.0
17	.....	a48.42	.....	51.8	50.7	57.3	63.4	60.2	54.6	52.6	43.4
18	.....	.....	.....	51.6	50.8	57.5	63.5	59.8	54.5	52.7	43.2
19	.....	a49.67	.....	51.6	51.2	57.7	63.8	59.8	54.2	52.4	42.8
20	.....	.....	a51.87	51.3	50.9	58.0	64.4	59.8	53.8	52.0	42.7
21	.....	.....	.....	51.6	51.2	58.2	64.5	59.4	53.4	50.9	42.4
22	.....	.....	.....	51.0	51.0	58.1	64.2	60.2	53.7	50.3	42.5
23	a50.32	a48.92	a51.95	50.5	51.4	58.0	64.2	60.1	53.2	49.9	42.6
24	.....	.....	.....	50.2	51.9	57.4	64.5	60.2	53.0	....	42.6
25	.....	.....	.....	50.2	52.4	57.5	64.4	59.8	53.4	49.6	42.9
26	a50.60	a49.29	.....	50.8	52.8	57.8	64.4	60.4	53.1	49.6	43.8
27	.....	.....	a50.37	50.8	52.8	57.8	64.8	60.4	52.6	49.4	43.6
28	.....	.....	.....	50.9	52.8	58.0	65.2	59.9	51.4	49.2	44.8
29	.....	.....	.....	51.8	52.6	58.2	64.6	59.5	51.6	48.4	44.4
30	.....	a49.82	a50.96	52.2	52.5	58.6	64.5	57.9	51.7	47.4	44.6
31	.....	.....	.....	52.1	....	58.8	64.2	....	51.9	....	45.8

Lowest daily water level, in feet below mean sea level, 1939
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	47.0	42.7	42.0	43.0	42.9	46.8	....	62.0	65.4	59.7	56.6	50.0
2	47.4	42.6	42.0	43.4	43.4	46.8	....	62.7	65.9	59.0	56.3	49.4
3	47.4	42.6	41.8	44.2	42.6	46.7	....	63.0	66.1	58.9	56.4	....
4	46.2	42.8	41.9	44.4	42.7	46.3	....	63.0	66.7	59.2	56.2	....
5	45.5	43.2	42.0	44.3	42.8	46.6	....	63.5	66.1	59.5	55.4	....
6	45.6	42.8	41.4	44.2	43.4	46.3	....	63.7	65.2	59.3	55.5	....
7	45.7	....	42.2	44.1	43.6	46.6	....	64.5	64.4	59.4	55.2	....
8	45.6	....	42.0	44.2	43.4	46.6	....	64.5	64.0	58.7	55.5	49.4
9	45.8	42.4	41.6	44.5	43.2	47.0	....	64.8	64.1	58.6	55.7	49.4
10	45.2	41.5	41.8	44.4	43.3	46.6	....	65.4	63.7	58.6	55.8	49.1
11	45.2	42.4	41.1	44.2	43.8	47.0	....	65.4	63.8	58.7	56.5	48.1
12	45.0	43.4	40.1	44.4	44.3	47.5	....	66.0	63.8	58.5	56.6	47.5
13	44.6	43.6	40.8	44.9	43.7	47.4	....	66.2	63.9	58.5	55.8	47.2
14	44.7	43.4	40.8	44.8	44.0	48.4	....	66.5	63.8	58.7	54.5	47.2
15	44.6	43.0	....	44.6	44.0	49.3	....	66.4	63.9	58.6	53.4	....
16	44.4	43.6	....	45.0	44.0	50.0	....	....	63.5	58.3	52.7	47.1
17	44.6	43.0	41.4	44.8	43.6	50.9	....	....	63.1	59.0	52.4	46.4
18	44.3	43.0	41.8	44.2	44.2	51.4	....	67.7	61.9	59.4	52.1	46.6
19	43.6	43.1	41.8	43.8	44.6	51.6	....	....	61.8	59.6	51.5	46.4
20	44.1	42.9	42.2	43.8	44.8	52.0	....	67.3	61.5	59.6	50.5	46.2
21	44.4	42.8	42.4	43.7	44.9	51.8	....	67.3	61.4	59.0	49.8	46.5
22	44.2	43.0	42.4	44.1	44.9	51.8	....	67.2	61.0	58.4	50.1	46.6
23	44.8	43.2	42.6	43.8	44.8	52.1	....	67.0	60.9	58.7	50.5	46.7
24	44.0	43.4	42.6	43.9	44.6	52.6	59.4	67.6	60.8	58.6	50.8	46.8
25	44.9	42.8	42.6	43.6	45.0	52.5	59.7	67.7	60.7	58.3	50.7	....
26	43.9	42.0	42.6	42.7	45.4	53.2	59.8	67.4	60.6	57.8	50.5	....
27	43.1	42.4	42.8	42.8	45.4	....	60.3	67.3	60.1	57.3	50.6	....
28	43.3	41.6	42.3	42.2	45.8	53.8	60.8	....	60.0	58.1	50.3	....
29	42.8	....	42.2	42.6	46.4	54.6	61.1	65.9	59.8	57.6	50.5	....
30	42.2	....	42.2	43.0	46.5	54.6	61.4	65.6	59.8	56.9	50.2	....
31	42.4	....	43.0	....	46.6	....	61.9	65.7	....	56.1	....	....

a Tape measurements in afternoon.

Atlantic County--Continued.

36.14.5.8.7.--Continued.

Lowest daily water level, in feet below mean sea level, 1940
(from recorder charts)

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	44.1	43.9	46.2	52.9	59.6	61.9	....	....	45.5
2	....	43.9	43.9	46.2	....	59.8	61.7	55.2	....	45.5
3	....	43.6	44.1	46.3	....	60.5	61.9	55.5	....	45.4
4	....	43.4	44.5	46.3	....	60.7	61.2	55.9	....	45.2
5	....	43.3	44.8	46.6	54.0	61.2	60.9	....	....	45.2
6	....	44.0	44.9	46.3	54.6	61.4	60.7	....	....	45.3
7	....	44.0	45.2	46.3	55.0	61.5	60.4	....	....	45.3
8	....	43.4	44.9	46.6	54.6	61.5	59.6	....	48.1	45.0
9	....	43.0	44.6	47.2	54.5	62.1	58.9	....	48.4	44.9
10	....	43.5	44.5	47.1	54.5	62.5	58.6	....	48.5	44.9
11	....	43.8	44.5	47.1	54.5	62.8	58.5	....	48.5	44.9
12	....	43.5	44.3	47.1	54.6	63.1	58.3	....	48.4	44.7
13	....	43.6	43.9	47.6	54.6	63.7	58.0	....	48.1	44.7
14	....	43.6	44.0	48.1	54.8	63.8	58.0	....	47.0	44.5
15	....	43.4	44.2	49.1	54.8	63.9	57.7	....	47.0	44.4
16	....	43.4	44.4	49.6	54.8	63.9	57.2	....	47.0	44.1
17	....	43.3	44.5	49.7	55.1	63.6	57.3	....	47.1	44.5
18	42.7	43.2	44.4	50.2	55.2	63.4	57.7	....	46.9	44.2
19	42.7	43.2	44.4	50.0	55.7	63.0	57.7	....	46.7	43.9
20	42.9	43.0	43.9	50.2	56.3	62.6	57.6	....	46.6	44.0
21	43.2	42.7	44.0	50.6	56.7	62.7	58.1	....	46.6	43.9
22	....	43.0	43.4	51.0	57.3	62.8	57.6	....	46.7	43.4
23	....	43.8	43.2	50.8	58.1	63.0	57.7	....	46.7	43.6
24	....	44.2	43.0	50.6	58.1	63.5	57.8	....	46.4	43.7
25	45.9	44.3	43.0	50.5	58.3	63.5	58.1	....	46.4	43.8
26	45.6	44.7	43.9	50.6	58.8	62.5	57.6	....	46.4	44.2
27	45.2	44.8	44.0	51.4	59.1	62.1	....	....	45.3	44.0
28	45.0	45.0	44.4	52.0	59.2	61.7	....	....	45.7	44.0
29	44.8	44.8	44.5	52.2	59.3	61.3	....	....	46.0	44.6
30	44.6	44.6	44.9	52.4	59.6	61.4	....	....	45.9	45.3
31	44.4	....	45.3	....	59.5	61.8	....	....	....	46.0

36.23.1.9.6. Longport 14th Avenue well. Daily tidal fluctuations varied from 1.5 feet to 3.5 feet in 1940. Highest observed water level, about 19 feet above mean sea level when drilled in 1895; lowest observed water level, 54.5 feet below mean sea level Sept. 4, 1929.

Average daily water level, in feet below mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	33.1	32.7	31.5	31.4	....	32.5	39.9	47.9	47.7	41.0	37.3	34.3
2	33.4	32.3	31.4	31.5	....	32.7	39.9	47.9	47.9	40.8	36.9	34.2
3	33.9	32.3	30.9	31.4	30.9	33.0	40.3	48.0	48.5	40.9	37.1	34.3
4	33.9	32.3	30.2	30.9	31.1	33.3	39.7	49.1	48.6	40.9	37.3	34.1
5	33.5	32.3	30.6	31.1	31.4	33.4	39.8	49.9	48.5	41.0	37.1	34.1
6	33.7	32.2	30.7	31.5	31.6	33.3	40.1	50.0	48.5	41.1	37.2	34.0
7	33.3	31.9	30.8	31.5	31.7	33.7	40.5	49.6	48.5	40.9	37.0	34.1
8	32.8	32.4	30.7	31.1	32.0	34.2	41.3	48.6	48.9	40.7	36.6	33.9
9	32.7	32.6	....	30.8	31.8	34.7	42.1	48.7	48.7	....	36.4	33.7
10	33.0	31.8	....	31.3	31.8	34.7	43.1	49.4	48.1	....	36.3	33.8
11	32.9	31.8	....	31.3	32.0	34.4	42.9	49.9	47.7	40.1	36.2	33.7
12	32.6	32.4	....	31.1	32.1	34.6	42.4	50.2	47.3	40.1	36.1	33.4
13	32.3	32.3	....	31.1	32.1	34.7	41.3	50.5	....	40.1	35.7	33.5
14	31.8	31.2	....	31.3	32.5	....	41.1	50.3	46.4	39.9	35.4	33.2
15	32.1	31.7	30.5	31.2	32.9	....	41.7	49.5	45.7	39.7	35.3	33.2
16	33.2	32.0	30.9	31.0	32.9	36.9	42.2	49.2	45.0	39.1	35.6	32.9
17	32.9	32.1	30.9	30.9	32.9	37.3	42.1	48.7	45.3	38.8	36.0	33.2
18	32.7	31.9	30.4	30.9	32.7	37.5	42.4	48.3	45.6	38.9	36.0	33.1
19	32.7	30.8	30.3	31.1	32.9	37.5	43.9	48.3	45.1	38.9	35.7	32.9
20	32.5	30.9	30.3	30.4	33.0	37.9	45.2	48.3	44.8	38.7	35.8	32.8
21	32.9	31.2	30.5	29.9	33.0	38.2	44.9	48.3	44.7	38.9	35.7	32.6
22	33.0	31.4	30.4	30.3	32.5	38.5	45.7	48.7	44.6	38.9	35.3	32.3
23	32.8	31.8	31.1	30.7	31.9	38.9	46.9	49.1	44.5	39.0	35.3	32.2
24	....	31.9	32.0	....	31.9	38.7	45.7	49.3	44.5	38.9	34.7	32.3

Atlantic County--Continued.

36.23.1.9.6.--Continued.

Average daily water level, in feet below mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
25	....	31.7	32.0	....	32.1	38.6	45.3	49.5	44.1	38.3	34.9	32.3
26	....	31.7	31.9	31.5	32.0	38.8	45.6	49.1	43.5	38.3	34.6	31.7
27	....	31.4	31.6	31.3	32.2	39.1	46.2	48.5	43.1	38.2	33.8	31.7
28	32.7	31.1	31.5	31.4	32.3	39.5	46.7	47.7	42.9	38.1	34.7	31.7
29	32.8	31.3	31.4	31.2	32.3	39.6	47.2	47.3	42.8	38.1	34.7	31.8
30	32.6	....	31.1	31.3	32.3	39.5	47.7	....	42.2	37.6	34.5	32.4
31	32.5	....	31.1	....	32.3	....	47.9	....	....	37.3	....	33.1

Bergen County

East Paterson Area

26.3.1.7.3. Garfield well 11. Highest observed water level, 56.2 feet above mean sea level Mar. 8, 1926; lowest observed water level, 1.8 feet below mean sea level Nov. 5, 1932.

Lowest daily water level, in feet above mean sea level, 194C
(from recorder charts)

Day	Jan.	Feb.	Mar.	May	June	July	Aug.	Oct.	Nov.	Dec.
1	2.6	2.3	4.1	....	17.5	17.6	....	....	....	9.7
2	2.8	2.3	4.1	19.9	17.6	17.2	....	....	....	9.7
3	2.5	2.1	4.3	19.7	17.8	17.0	....	....	....	9.6
4	2.4	2.1	4.1	19.5	17.7	17.0	....	....	....	9.4
5	2.4	2.1	4.1	19.5	17.7	17.1	....	9.8	....	9.2
6	2.4	2.0	4.5	19.8	18.0	16.8	....	9.8	....	9.2
7	2.3	2.0	4.6	19.6	18.4	16.8	....	....	....	9.2
8	2.2	2.0	7.5	19.3	18.6	....	....	....	....	9.2
9	2.2	2.2	7.5	19.4	19.2	....	....	....	....	9.2
10	2.2	2.4	12.9	19.2	20.4	16.1	....	....	....	9.2
11	2.2	2.8	12.8	19.0	19.7	16.1	....	....	....	8.9
12	2.1	3.6	11.6	19.0	19.7	19.2	....	....	....	9.0
13	2.1	4.1	....	19.0	19.4	17.0	....	....	....	9.0
14	2.1	3.7	....	18.8	19.5	16.4	....	....	9.2	9.0
15	2.3	3.8	....	18.4	19.6	....	....	....	9.1	9.0
16	2.2	3.7	....	18.4	19.6	16.2	....	....	8.7	9.1
17	2.1	3.8	....	20.3	19.4	15.6	....	....	8.7	8.8
18	2.1	4.2	....	21.0	19.2	15.2	....	....	9.6	8.9
19	2.0	5.2	....	21.2	19.2	15.0	....	....	9.2	8.9
20	1.9	4.7	....	19.0	19.5	15.0	....	....	8.9	8.9
21	1.9	4.7	....	18.5	18.8	15.0	....	....	8.9	9.0
22	2.0	4.4	....	18.1	18.6	14.6	....	....	8.8	9.2
23	2.0	5.1	....	18.0	18.5	14.6	10.5	....	8.8	9.3
24	2.0	4.6	....	17.7	18.5	14.7	10.5	....	8.9	9.2
25	2.0	5.8	....	17.3	18.5	14.3	10.8	....	10.9	9.2
26	2.0	4.8	....	17.3	18.1	14.3	10.3	....	10.4	9.2
27	2.1	4.9	....	17.5	18.0	15.0	10.2	....	10.2	9.2
28	2.1	5.8	12.6	17.3	17.8	15.0	10.2	....	10.2	9.2
29	2.3	4.7	12.8	16.9	17.5	....	9.9	....	10.0	9.2
30	2.4	....	13.0	16.9	17.4	....	9.9	....	9.9	9.3
31	2.3	....	12.7	17.2	....	....	9.9	....	....	9.3

Camden County

Camden Area

31.2.2.5.2. Morris Station test well 3. Highest observed water level, 0.3 foot below mean sea level Mar. 19, 1936; lowest observed water level, 35.84 feet below mean sea level June 14, 1926. Daily fluctuations range from less than 1 foot to about 6 feet.

Camden County--Continued.

31.2.2.5.2.--Continued.

Lowest daily water level, in feet below mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	....	7.69	6.45	7.70	7.50	9.05	6.80	....	8.50	8.00
2	.....	.....	....	7.29	6.15	6.90	6.45	8.90	5.75	....	6.40	7.20
3	.....	.....	9.29	7.14	8.55	8.05	6.55	7.60	6.90	7.45	6.25	7.25
4	.....	.....	9.24	6.94	8.40	8.75	5.40	7.40	7.30	7.60	7.00	7.10
5	.....	.....	8.94	6.94	8.45	8.70	5.60	7.85	7.30	6.70	7.00	7.25
6	.....	.....	8.69	6.69	8.80	9.10	5.45	8.15	6.60	6.05	6.95	7.05
7	10.54	.....	8.79	6.59	9.30	8.05	5.35	7.85	7.05	7.60	7.55	7.70
8	10.89	.....	8.99	7.09	9.45	5.50	6.80	7.85	6.20	7.25	7.50	8.45
9	10.89	.....	8.64	6.24	8.85	5.35	7.65	7.85	7.20	7.65	7.45	7.55
10	.....	9.84	8.19	6.74	9.10	7.10	7.30	7.70	7.15	7.25	7.90	7.55
11	.....	9.29	9.44	7.24	8.95	6.60	8.30	6.90	7.60	7.20	7.30	7.75
12	.....	10.49	9.49	6.89	8.60	7.80	7.90	7.75	7.55	6.30	7.00	7.35
13	.....	10.49	9.59	6.19	....	8.85	6.90	8.15	7.60	6.20	6.95	8.25
14	.....	9.69	9.44	5.99	....	7.30	6.70	8.30	7.25	7.70	6.70	8.50
15	.....	11.29	8.94	6.59	....	5.95	7.90	7.95	7.60	8.10	6.20	8.45
16	.....	11.04	8.99	6.39	9.70	5.70	7.00	8.45	7.75	7.00	6.10	8.15
17	.....	9.69	7.04	6.34	9.20	7.35	9.10	....	7.15	6.90	7.70	8.45
18	.....	9.39	9.64	6.29	8.80	6.50	8.90	....	7.30	7.10	7.50	8.40
19	.....	10.24	8.19	....	8.15	7.05	9.25	....	7.65	6.90	6.85	8.90
20	.....	10.29	7.69	....	9.30	6.60	7.85	....	7.35	6.55	6.90	8.05
21	.....	.....	7.74	5.24	9.20	....	8.80	8.05	7.55	7.25	7.50	8.10
22	.....	.....	7.39	6.14	9.40	6.10	10.50	8.05	6.95	7.40	7.45	8.40
23	.....	.....	7.14	5.89	....	5.60	10.80	7.85	9.15	7.20	7.25	8.35
24	.....	9.39	7.19	5.84	8.30	6.90	11.05	9.90	8.30	7.35	7.05	8.55
25	.....	8.79	8.69	7.59	8.20	6.10	10.40	7.10	7.80	7.40	8.25	8.15
26	.....	10.49	8.69	....	8.05	5.80	8.10	7.90	7.60	6.40	9.15	8.15
27	.....	10.19	8.04	....	9.10	6.30	7.65	7.70	8.50	6.40	6.45	7.95
28	.....	10.24	8.14	5.50	9.10	7.20	6.90	7.40	....	7.80	6.90	7.60
29	.....	.....	7.84	8.30	9.00	5.90	8.15	7.35	....	7.85	7.90	7.10
30	.....	.....	7.19	8.45	8.10	5.75	8.85	7.45	....	7.25	6.40	7.05
31	.....	.....	6.84	....	8.25	....	10.75	9.85	....	8.25	....	7.05

31.2.4.5.1. New Jersey Water Company well 10. Highest observed water level, 1.26 feet above mean sea level Mar. 19, 1933; lowest observed water level, 16.0 feet below mean sea level Aug. 5, 6, 19 and 20, 1937. Daily fluctuations ranged from about 1 foot to as much as 10 feet in 1940.

Lowest daily water level, in feet below mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	12.3	9.7	11.9	9.7	8.3	12.6	13.8	....	13.2	11.0	10.5
2	....	12.1	9.2	9.5	11.1	8.0	12.5	14.4	....	12.2	10.7	....
3	....	12.0	9.2	9.3	12.3	11.8	12.0	13.8	....	12.4	10.5	....
4	....	11.7	8.8	8.6	9.7	12.4	8.9	13.7	13.3	12.5	11.0	....
5	....	12.3	9.0	9.2	8.5	12.2	11.6	15.5	13.1	11.9	11.4	....
6	....	12.4	9.3	11.2	13.1	12.8	12.1	15.5	12.9	9.0	11.1	....
7	....	12.1	9.3	8.8	12.8	12.4	12.1	14.2	13.2	13.3	11.3	....
8	....	12.2	12.3	8.8	11.8	12.5	13.6	14.3	12.8	12.2	11.3	....
9	....	12.1	12.4	8.8	10.0	11.9	14.3	14.4	12.8	12.6	11.5	....
10	....	9.4	8.8	9.2	12.4	12.6	15.1	13.7	12.6	12.6	9.6	....
11	....	11.6	12.6	9.2	13.8	11.6	15.7	12.5	12.8	12.1	11.0	....
12	....	12.5	12.4	8.9	8.4	12.8	14.2	14.0	13.2	11.8	11.3	....
13	....	12.3	12.4	9.0	11.2	13.3	12.0	14.8	9.9	11.1	11.0	....
14	....	11.5	9.7	8.8	13.2	13.3	11.8	14.8	12.7	14.5	11.3	....
15	....	12.6	9.7	9.1	14.3	12.9	13.6	15.6	11.5	13.0	11.0	....
16	....	12.5	11.8	9.6	8.8	12.0	13.4	....	12.4	11.1	11.0	....
17	....	11.9	9.3	9.3	9.1	13.8	13.7	....	12.4	10.9	10.3	....
18	....	9.4	12.1	8.8	10.5	14.1	14.5	....	12.9	11.3	11.3	....
19	....	11.9	12.0	10.7	8.6	13.3	14.3	....	....	11.0	11.3	....
20	....	12.1	9.5	8.4	11.3	12.9	14.0	....	10.0	10.4	11.3	....
21	....	11.9	8.3	7.7	9.4	12.8	13.7	....	13.2	13.1	11.3	....
22	....	12.0	7.9	10.6	12.1	12.4	15.3	....	11.9	12.4	10.8	10.3
23	....	9.5	9.6	9.2	11.7	12.0	14.5	....	14.4	14.1	10.8	10.1
24	....	9.3	9.6	9.0	13.6	12.0	13.7	....	13.3	11.4	10.4	11.4

Camden County--Continued.

31.2.4.5.1.--Continued.

Lowest daily water level, in feet below mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
25	....	8.9	12.0	9.0	11.2	12.1	14.0	....	13.4	11.5	12.4	11.4
26	....	12.0	12.3	8.7	9.0	11.9	15.7	....	12.9	10.9	12.9	10.6
27	....	9.4	9.8	8.8	11.4	12.3	14.8	....	12.9	10.3	11.3	10.3
28	13.1	11.9	9.6	8.2	12.2	12.4	13.9	....	12.3	11.2	11.3	10.7
29	12.8	11.9	9.6	10.5	12.4	11.7	16.0	....	11.6	10.5	12.2	10.6
30	12.5	....	9.2	10.6	8.8	8.5	15.7	....	13.2	11.1	11.0	10.2
31	12.5	....	8.8	....	8.5	....	15.6	....	....	11.0	....	10.9

Cape May County

Atlantic City Area

36.31.9.1.9. Sea Isle City Water Department well 1. Highest observed water level, 12.00 feet below top of casing Apr. 7, 1930; lowest observed water level, 18.6 feet below top of casing Sept. 13, 1931. Daily tidal fluctuations in 1940 were as much as 0.8 foot.

Lowest daily water level, in feet below top of casing, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
1	14.8	14.6	14.4	14.3	13.9	13.7	14.2	14.7	15.1	14.9	14.8
2	14.9	14.6	14.4	14.3	13.8	13.7	14.2	14.8	15.1	14.8	14.7
3	15.0	14.6	14.3	14.3	13.7	13.8	14.2	14.8	15.1	14.9	14.8
4	15.0	14.6	14.1	14.2	13.8	13.8	14.1	14.9	15.2	15.0	14.8
5	15.0	14.6	14.0	14.2	13.9	13.8	14.2	14.9	15.2	15.0	14.8
6	15.1	14.6	14.1	14.2	13.9	13.8	14.3	14.9	15.2	15.0	14.8
7	15.1	14.4	14.1	14.3	13.9	13.9	....	14.9	15.2	14.9	14.7
8	15.0	14.6	14.1	14.3	13.9	13.9	....	14.9	15.1	14.9	14.7
9	14.8	14.6	14.0	14.1	13.8	13.9	....	14.9	15.0	14.9	14.7
10	14.8	14.6	14.1	14.2	13.8	13.9	....	15.0	15.0	14.9	14.7
11	14.8	14.5	14.3	14.2	13.8	13.8	....	15.0	15.0	14.9	14.7
12	14.7	14.6	14.3	14.1	13.8	13.9	....	15.1	15.0	15.0	14.7
13	14.6	14.6	14.3	14.1	13.7	13.9	14.3	15.1	15.1	15.0	14.6
14	14.5	14.3	14.3	14.1	13.7	13.9	14.3	15.0	15.1	15.0	14.6
15	14.5	14.4	14.2	14.1	13.8	13.9	14.3	15.0	15.2	15.0	14.5
16	14.7	14.5	14.2	14.0	13.8	14.0	14.3	15.0	15.0	14.9	14.6
17	14.7	14.5	14.2	14.0	13.8	14.1	14.4	15.0	15.1	14.8	14.8
18	14.7	14.4	14.2	14.0	13.9	14.0	14.4	14.9	15.2	14.8	14.8
19	14.7	14.4	....	14.1	13.9	14.0	14.4	14.9	15.2	14.8	14.8
20	14.7	14.1	14.1	14.0	13.9	14.0	14.4	14.9	15.1	14.8	14.8
21	14.8	14.2	14.2	13.7	13.9	14.0	14.4	15.0	15.2	14.8	14.8
22	14.9	14.3	14.2	13.7	13.8	14.1	14.5	15.0	15.2	14.9	14.8
23	14.9	14.4	14.3	13.8	13.6	14.1	14.5	15.0	15.1	15.0	14.8
24	14.7	14.5	14.5	13.8	13.5	14.0	14.4	15.1	15.1	15.0	14.7
25	14.5	14.4	14.5	14.0	13.5	13.9	14.4	15.1	15.1	14.9	14.8
26	14.6	14.5	14.6	14.0	13.5	13.9	14.5	15.0	15.1	15.0	14.7
27	14.6	14.4	14.5	14.0	13.5	14.0	14.5	15.0	15.2	14.9	14.6
28	14.7	14.3	14.5	14.0	13.6	14.0	14.6	15.0	15.2	15.0	14.8
29	14.7	14.3	14.4	13.9	13.6	14.0	14.7	14.9	15.2	15.0	14.8
30	14.7	....	14.3	13.9	13.6	14.1	14.7	15.0	15.2	14.8	....
31	14.6	....	14.2	....	13.6	....	14.7	15.1	....	14.8	....

Essex County

Canoe Brook Area

25.15.7.5.4. Commonwealth Water Company well 30. Highest observed water level, 16.3 feet below top of casing Aug. 25, 1931; lowest observed water level, 67.9 feet below top of casing Sept. 5, 1929. Daily water level fluctuations in 1940 ranged from less than 1 foot to 13 feet.

Lowest daily water level, in feet below top of casing, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	50.35	51.40	.....	36.70	28.05	26.15	40.90	44.55	40.25	39.70	40.45	44.70
2	50.10	51.35	50.65	36.80	27.80	26.25	41.40	43.35	39.70	39.70	40.25	46.95
3	50.45	51.40	50.00	36.80	27.70	29.15	41.40	44.50	39.85	39.75	40.00	45.80
4	50.30	51.30	48.70	36.65	27.90	30.05	41.25	44.10	39.75	39.80	42.55	44.80
5	49.95	51.30	46.20	38.25	27.90	29.90	40.95	44.80	39.80	39.85	41.55	42.65
6	50.80	51.30	48.70	36.75	30.45	.....	41.00	44.90	39.75	39.85	40.05	43.10
7	50.80	51.30	49.40	36.20	29.10	.....	40.85	43.90	39.65	41.80	39.80	43.00
8	.....	51.60	49.10	36.10	28.30	.....	43.20	42.35	39.65	40.80	39.65	42.40
9	50.90	51.60	46.05	35.00	28.00	.....	42.35	41.10	39.65	.....	39.65	44.00
10	.....	51.55	46.40	33.65	27.90	.....	44.40	41.90	39.70	.....	39.35	44.15
11	51.25	50.80	47.65	42.95	27.90	.....	44.75	41.75	39.85	39.85	40.60	44.30
12	50.80	50.85	48.30	43.15	27.70	.....	43.20	44.35	39.80	39.90	.....	43.70
13	51.80	51.20	49.35	30.30	29.35	.....	41.20	43.30	40.05	39.90	.....	44.05
14	52.00	51.05	47.55	29.00	30.45	.....	40.90	40.95	40.00	42.05	.....	44.15
15	50.00	51.35	45.45	28.50	31.85	44.90	42.85	41.00	39.75	40.70	.....	43.10
16	48.25	51.60	44.70	28.20	30.40	44.05	41.80	40.90	40.90	40.15	.....	42.55
17	48.10	51.60	44.35	.....	28.50	44.90	41.05	40.85	40.20	39.85	39.20	43.15
18	49.80	51.55	44.20	.....	27.80	44.80	41.05	40.35	39.80	39.80	41.65	43.55
19	50.50	50.50	43.85	.....	27.65	.....	41.75	40.35	.....	.....	41.20	43.95
20	50.65	.....	39.35	26.75	28.80	46.25	41.70	40.35	.....	39.90	39.85	43.95
21	50.35	.....	37.65	26.30	28.80	44.85	40.70	49.30	41.95	41.25	39.20	43.90
22	50.75	.....	37.25	26.95	28.15	.....	44.05	43.00	41.50	40.70	38.80	43.60
23	50.95	.....	37.25	28.00	27.80	.....	43.50	41.00	42.05	40.30	38.65	43.80
24	50.85	50.85	36.75	27.30	27.45	.....	42.60	40.60	41.10	41.85	38.70	44.15
25	51.05	.....	37.05	27.35	27.30	.....	41.50	40.30	40.40	41.20	41.65	44.20
26	51.25	.....	37.20	27.45	27.20	41.40	43.50	40.15	40.30	41.10	42.40	43.75
27	51.35	.....	37.20	27.45	27.10	41.15	44.40	40.25	40.30	41.00	41.00	43.80
28	50.70	.....	36.70	27.60	27.00	41.15	43.65	40.15	40.00	43.55	41.90	42.40
29	51.15	.....	36.95	30.85	26.90	41.00	44.60	40.00	39.85	42.70	42.00	42.30
30	50.95	.....	37.10	29.40	26.90	41.05	44.80	39.95	39.70	41.35	43.00	43.75
31	51.35	.....	36.65	.....	26.85	.....	44.30	40.30	.....	40.65	.....	44.25

26.21.1.5.6. Short Hills test well 10. Highest observed water level, 3.90 feet below top of casing May 12, 1933; lowest observed water level, 28.95 feet below top of casing Dec. 6, 1939.

Water level, in feet below top of casing, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 8	25.11	June 15	16.22	Oct. 4	15.41	Dec. 11	16.15
Apr. 22	23.74	Aug. 21	17.62	Nov. 13	20.55		

26.21.1.5.8. Short Hills well 14. Highest observed water level, 9.82 feet below top of casing Jan. 12, 1934; lowest observed water level, 28.82 feet below top of casing Jan. 19, 1932.

Water level, in feet below top of casing, 1940

Mar. 8	a	June 15	20.28	Oct. 4	19.47	Dec. 11	20.28
Apr. 22	a	Aug. 21	21.31	Nov. 13	a		

a Obstruction in well 23.24 feet below top of casing.

Middlesex and Monmouth Counties

Runyon Area

Average of the water levels in water-table wells near Runyon, N. J., in feet above an assumed datum, 1940

Date	Wells less than 25 feet deep		Wells more than 25 feet deep	
	Number of wells	Water level	Number of wells	Water level
Jan. 20	19	10.31	5	6.84
27	4	9.06	...	....
Feb. 3	19	9.89	5	6.87
24	4	12.26	...	....
Mar. 14	15	11.90	4	6.91
30	2	14.26	...	....
Apr. 24-26	16	13.62	5	7.19
May 27-28	19	13.19	5	7.25
June 11	16	12.70	5	8.42
23	4	12.99	...	....
July 22-23	19	11.06	5	8.74
Aug. 22-23	19	10.75	5	8.44
Sept.19-21	18	11.08	5	8.32
Oct. 19-22	19	11.01	5	7.81
Nov. 22-23	19	12.19	5	7.97
Dec. 13-14	17	12.09	5	7.96

Middlesex County

Runyon Area

28.5.4.6.2.A. (B-2). Highest observed water level, 14.49 feet above mean sea level July 29, 1938; lowest observed water level, 1.08 feet above mean sea level Dec. 29, 1939.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	2.32	Apr. 24	10.34	July 22	8.19	Oct. 23	7.36
Feb. 4	6.94	May 27	9.84	Aug. 23	6.32	Nov. 27	9.52
Mar. 30	9.35	June 23	8.74	Sept.19	8.48	Dec. 13	9.09

28.5.4.6.2.B. (B-3). Highest observed water level, 10.59 feet above mean sea level May 5, 1939; lowest observed water level, 2.11 feet above mean sea level Oct. 19, 1935.

Water level, in feet above mean sea level, 1940

Jan. 27	4.04	Apr. 24	10.58	July 22	8.57	Oct. 23	7.96
Feb. 4	4.34	May 27	10.26	Aug. 23	6.93	Nov. 23	9.46
Mar. 30	9.43	June 23	8.37	Sept.19	8.70	Dec. 13	9.69

28.5.4.6.5. (B-4). Highest observed water level, 11.54 feet above mean sea level May 22, 1937; lowest observed water level, 5.23 feet above mean sea level Oct. 19, 1935.

Water level, in feet above mean sea level, 1940

Apr. 24	11.36	July 22	9.56	Sept.19	9.25	Nov. 23	9.88
May 27	11.12	Aug. 23	9.75	Oct. 22	9.18	Dec. 13	11.12
June 23	10.51						

Middlesex County--Continued.

29.1.4.6.8. Browntown test well. Highest observed water level, 28.14 feet above mean sea level Apr. 9 and 10, 1939; lowest observed water level, 21.83 feet above mean sea level Nov. 18, 1932.

Water level at end of day, in feet above mean sea level, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	23.93	23.76	23.81	24.74	25.81	26.39	26.31	26.04	25.55	25.48	25.37	25.61
2	23.92	23.76	23.81	24.74	25.81	26.40	26.31	25.98	25.55	25.48	25.37	25.61
3	23.91	23.75	23.83	24.74	25.81	26.40	26.31	25.94	25.55	25.48	25.37	25.61
4	23.90	23.75	24.05	24.75	25.81	26.41	26.31	25.91	25.55	25.48	25.37	25.61
5	23.90	23.74	24.17	24.75	25.81	26.41	26.31	25.89	25.55	25.47	25.37	25.60
6	23.89	23.74	24.24	24.76	25.81	26.41	26.31	25.87	25.55	25.47	25.36	25.60
7	23.88	23.73	24.29	24.76	25.81	26.41	26.31	25.86	25.55	25.47	25.36	25.60
8	23.88	23.73	24.33	24.78	25.80	26.40	26.31	25.84	25.55	25.47	25.36	25.59
9	23.87	23.72	24.34	24.99	25.80	26.40	26.30	25.83	25.55	25.46	25.35	25.59
10	23.86	23.71	24.34	25.01	25.80	26.40	26.30	25.81	25.55	25.46	25.35	25.59
11	23.85	23.71	24.34	25.03	25.81	26.40	26.30	25.80	25.55	25.45	25.35	25.59
12	23.85	23.70	24.33	25.14	25.81	26.40	26.30	25.78	25.55	25.46	25.35	25.59
13	23.84	23.70	24.33	25.26	25.81	26.40	26.29	25.77	25.55	25.46	25.34	25.59
14	23.83	23.69	24.35	25.29	25.81	26.40	26.29	25.75	25.54	25.46	25.34	25.59
15	23.82	23.69	24.47	25.31	25.81	26.40	26.28	25.74	25.54	25.45	25.44	25.59
16	23.82	23.68	24.54	25.31	25.80	26.40	26.28	25.72	25.54	25.45	25.50	25.59
17	23.81	23.68	24.55	25.31	25.80	26.40	26.27	25.71	25.54	25.45	25.53	25.58
18	23.81	23.67	24.61	25.31	25.80	26.40	26.27	25.69	25.53	25.44	25.53	25.58
19	23.80	23.67	24.67	25.31	25.80	26.40	26.26	25.68	25.53	25.43	25.53	25.58
20	23.81	23.67	24.68	25.53	25.80	26.39	26.24	25.67	25.52	25.43	25.53	25.58
21	23.81	23.66	24.68	25.75	25.80	26.39	26.23	25.65	25.53	25.43	25.53	25.60
22	23.81	23.66	24.70	25.80	25.80	26.38	26.21	25.64	25.52	25.42	25.53	25.60
23	23.81	23.66	24.71	25.80	25.85	26.37	26.20	25.63	25.52	25.42	25.53	25.60
24	23.80	23.66	24.71	25.80	25.93	26.37	26.18	25.62	25.51	25.41	25.53	25.60
25	23.80	23.70	24.71	25.80	25.93	26.37	26.17	25.60	25.51	25.41	25.53	25.60
26	23.79	23.70	24.70	25.80	25.93	26.36	26.16	25.59	25.50	25.40	25.53	25.60
27	23.79	23.77	24.70	25.81	25.93	26.36	.....	25.57	25.50	25.40	25.58	25.60
28	23.78	23.81	24.70	25.81	25.94	26.36	26.13	25.56	.....	25.40	25.58	25.66
29	23.78	23.81	24.70	25.81	25.94	26.32	26.10	25.55	.....	25.38	25.58	25.77
30	23.77	.....	24.73	25.81	25.95	26.32	26.08	25.55	25.49	25.38	25.59	25.79
31	23.77	.....	24.74	.....	26.23	.....	26.06	25.55	.....	25.38	.....	25.79

28.5.4.3.7. (C-1). Highest observed water level, 7.30 feet above mean sea level Mar. 29, 1938; lowest observed water level, 2.43 feet above mean sea level Jan. 27, 1940.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	2.43	Apr. 24	6.39	July 22	5.18	Oct. 22	5.03
Feb. 4	4.50	May 27	5.88	Aug. 23	4.65	Nov. 23	6.16
Mar. 30	6.94	June 23	5.49	Sept.19	5.24	Dec. 13	6.09

28.5.4.3.7.A. (C-2). Highest observed water level, 8.89 feet above mean sea level Nov. 23, 1940; lowest observed water level, 2.79 feet above mean sea level Jan. 27, 1940.

Water level, in feet above mean sea level, 1940

Jan. 27	2.79	Apr. 24	6.70	July 22	5.08	Oct. 22	8.01
Feb. 4	4.35	May 27	6.00	Aug. 23	4.73	Nov. 23	8.89
Mar. 30	4.77	June 23	4.53	Sept.19	5.19	Dec. 13	5.90

28.5.4.3.6. (D-1). Highest observed water level, 12.29 feet above mean sea level July 29, 1938; lowest observed water level, 2.93 feet above mean sea level Jan. 27, 1938.

Water level, in feet above mean sea level, 1940

Jan. 27	6.93	Apr. 24	10.18	July 22	9.82	Oct. 22	8.17
Feb. 24	7.74	May 27	10.76	Aug. 23	8.60	Nov. 23	8.97
Mar. 30	9.98	June 23	9.57	Sept.19	9.24	Dec. 13	8.59

Middlesex County--Continued.

28.5.4.3.2. (D-2). Highest observed water level, 14.34 feet above mean sea level July 29, 1938; lowest observed water level, 8.93 feet above mean sea level Oct. 19, 1935.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	9.24	Apr. 24	13.12	July 22	10.72	Oct. 22	10.62
Feb. 24	10.04	May 27	12.89	Aug. 23	10.69	Nov. 23	10.79
Mar. 30	11.68	June 23	13.02	Sept.19	11.35	Dec. 13	10.77

28.5.4.8.1. Duhernal observation well 1. Highest observed water level, 7.58 feet above mean sea level Apr. 18, 1939; lowest observed water level, 4.35 feet above mean sea level Feb. 1, 1940.

Water level at end of day, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	4.35	4.81	5.60	6.87	6.66	....	5.76	5.59	5.97	5.68	6.07
2	....	....	4.82	5.60	6.87	6.75	6.42	5.74	5.72	6.00	5.70	6.07
3	4.40	....	4.85	5.61	6.88	6.86	6.40	5.73	5.85	5.99	5.65	6.05
4	4.39	....	4.92	5.62	6.86	6.95	6.38	5.72	5.97	5.98	5.61	6.04
5	4.39	....	4.98	5.63	6.83	7.04	6.37	5.70	6.07	5.96	5.60	6.01
6	4.36	....	5.01	5.62	6.82	7.10	6.34	5.67	6.16	5.93	5.56	5.98
7	4.37	....	5.04	5.61	6.77	7.13	6.32	5.67	6.20	5.90	5.54	5.98
8	4.40	....	5.09	5.65	6.74	7.16	6.30	5.66	6.27	5.87	5.52	5.94
9	4.42	4.39	5.13	5.68	6.71	7.16	6.28	5.64	6.31	5.84	5.51	5.92
10	4.42	4.42	5.15	5.69	6.68	7.16	6.22	5.62	6.34	5.82	5.50	5.90
11	4.41	4.43	5.16	5.71	6.63	7.15	6.21	5.61	6.34	5.81	5.50	5.85
12	4.42	4.40	5.19	5.73	6.60	7.12	6.21	5.59	6.34	5.79	5.50	5.86
13	4.44	4.39	5.22	5.75	6.60	7.07	6.18	5.57	6.33	5.77	5.52	5.82
14	4.50	4.48	5.29	5.78	6.55	7.02	6.15	5.54	6.30	5.76	5.56	5.80
15	4.51	4.49	5.30	5.83	6.51	6.97	6.14	5.54	6.30	5.75	5.60	5.79
16	4.47	4.48	5.35	5.88	6.50	6.91	6.12	5.54	6.31	5.72	5.62	5.85
17	4.44	4.46	5.37	5.93	6.49	6.86	6.11	5.54	6.27	5.74	5.62	5.79
18	4.41	4.46	5.41	6.00	6.48	6.85	6.10	5.54	6.18	5.73	5.60	5.78
19	4.38	4.52	5.44	6.05	6.48	6.82	6.08	5.54	6.14	5.71	5.64	5.78
20	4.37	4.59	5.47	6.15	6.48	6.77	6.05	5.52	6.10	5.71	5.67	5.78
21	4.36	4.65	5.49	6.25	6.48	6.73	6.04	5.51	6.08	5.68	5.71	5.77
22	4.35	4.68	5.52	6.34	6.53	6.70	6.01	5.51	6.02	5.67	5.77	5.77
23	4.34	4.70	5.53	6.40	6.57	6.67	5.99	5.49	5.98	5.63	5.82	5.76
24	4.39	4.72	5.53	6.49	6.59	6.66	5.96	5.46	5.97	5.60	5.88	5.76
25	4.42	4.74	5.53	6.58	6.58	6.65	5.94	5.45	5.94	5.58	5.91	5.77
26	4.42	4.75	5.54	6.67	6.56	6.62	5.91	5.44	5.92	5.57	5.96	5.82
27	4.41	4.77	5.56	6.74	6.54	6.58	5.88	5.42	5.90	5.56	6.02	5.87
28	4.38	4.80	5.57	6.78	6.52	6.56	5.85	5.41	5.89	5.56	6.03	5.94
29	4.37	4.81	5.58	6.82	6.47	....	5.82	5.44	5.87	5.57	6.06	6.01
30	4.37	....	5.60	6.86	6.48	....	5.80	5.45	5.90	5.62	6.07	5.99
31	4.36	....	5.61	....	6.60	....	5.77	5.46	....	5.65	....	5.94

28.5.4.8.7. Duhernal observation well 2. Highest observed water level, 15.65 feet above mean sea level Apr. 11, 1939; lowest observed water level, 9.36 feet above mean sea level Feb. 15, 1940.

Water level at end of day, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	9.63	9.48	10.01	11.43	13.29	13.80	13.22	12.08	12.04	12.18	11.78	12.49
2	9.59	9.47	10.10	11.44	13.30	13.89	13.15	12.04	12.29	12.18	11.82	12.53
3	9.57	9.47	10.20	11.54	13.25	13.95	13.16	12.03	12.43	12.16	11.76	12.44
4	9.57	9.47	10.28	11.55	13.18	13.98	13.14	12.01	12.52	12.12	11.83	12.50
5	....	9.47	10.34	11.47	13.14	14.00	13.10	11.98	12.57	12.14	11.94	12.43
6	....	9.48	10.39	11.49	13.17	13.97	13.08	11.97	12.63	12.20	11.89	12.44
7	....	9.43	10.46	11.50	13.13	13.92	13.09	11.93	12.65	12.22	11.88	12.50
8	....	9.43	10.53	11.68	13.15	13.90	13.05	11.90	12.71	12.15	11.82	12.43
9	....	9.44	10.56	11.67	13.13	13.88	13.02	11.85	12.70	12.11	11.81	12.39
10	9.50	9.59	10.59	11.72	13.09	13.87	12.99	11.81	12.63	12.12	.....	12.36
11	....	9.42	10.63	11.87	13.05	13.88	12.96	11.78	12.60	12.13	.....	12.30

Middlesex County--Continued.

28.5.4.8.7.--Continued.

Water level at end of day, in feet above mean sea level, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
12	....	9.46	10.67	12.00	13.05	13.87	12.88	11.78	12.57	12.11	.....	12.39
13	....	9.48	10.73	12.06	13.05	13.81	12.83	11.79	12.52	12.07	11.89	12.26
14	....	9.51	10.94	12.12	12.95	13.74	12.82	11.75	12.50	12.11	12.05	12.24
15	....	9.36	10.90	12.20	12.93	13.70	12.81	11.69	12.52	12.00	12.12	12.27
16	....	9.39	10.95	12.20	12.95	13.55	12.76	11.68	12.46	12.02	12.17	12.42
17	9.54	9.42	11.00	12.24	13.02	13.53	12.70	11.68	12.41	12.06	12.22	12.22
18	....	9.48	11.13	12.29	13.05	13.59	12.68	11.67	12.38	11.97	12.18	12.26
19	....	9.58	11.09	12.35	13.11	13.53	12.67	11.65	12.38	11.99	12.29	12.32
20	....	9.62	11.16	12.57	13.06	13.40	12.63	11.60	12.36	11.96	12.38	12.38
21	....	9.61	11.17	12.73	13.07	13.34	12.58	11.56	12.36	11.86	12.42	12.34
22	....	9.67	11.23	12.77	13.14	13.36	12.53	11.55	12.24	11.88	12.41	12.33
23	....	9.72	11.23	12.87	13.19	13.38	12.51	11.52	12.23	11.92	12.43	12.24
24	9.52	9.87	11.27	12.96	13.24	13.37	12.46	11.49	12.24	11.86	12.47	12.30
25	9.52	9.86	11.31	13.03	13.22	13.32	12.42	11.49	12.15	11.85	12.39	12.31
26	9.53	9.91	11.30	13.08	13.23	13.28	12.37	11.50	12.15	11.79	12.57	12.29
27	9.50	10.04	11.38	13.10	13.27	13.24	12.31	11.49	12.17	11.77	12.55	12.28
28	9.49	10.01	11.35	13.14	13.29	13.33	12.27	11.51	12.16	11.74	12.45	12.39
29	9.50	10.01	11.40	13.20	13.22	13.27	12.25	11.56	12.15	11.76	12.56	12.44
30	....	.....	11.56	13.26	13.28	13.26	12.23	11.64	12.16	11.79	12.61	12.36
31	9.49	.....	11.47	.....	13.57	.....	12.16	11.72	.....	11.74	.....	12.34

28.5.4.7.7. Duhernal observation well 3. Highest observed water level, above top of casing Sept. 22, 1938; lowest observed water level, 1.25 feet above mean sea level Jan. 31, Feb. 1, and 4, 1940.

Lowest daily water level, in feet above mean sea level, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.40	1.25	1.85	2.15	....	4.60	2.20	1.60	2.35	2.30	2.60	2.40
2	1.30	1.35	1.90	2.10	....	3.70	2.10	1.70	4.20	2.60	2.60	2.25
3	....	1.30	2.00	2.00	....	3.60	1.95	1.75	3.30	3.00	2.75	2.15
4	....	1.25	2.80	2.10	....	2.75	2.15	1.65	2.85	2.70	2.40	2.05
5	....	1.35	3.85	2.40	....	2.65	2.25	1.70	2.70	2.50	2.30	2.00
6	....	1.40	....	2.05	....	2.60	2.15	1.75	2.60	2.25	2.05	1.95
7	....	1.55	....	2.00	....	2.55	2.00	2.15	2.50	2.20	2.00	1.90
8	....	1.60	2.65	1.95	....	2.50	2.00	1.95	2.40	2.10	1.95	2.15
9	....	1.45	2.45	3.45	2.35	2.50	1.90	1.85	2.40	2.30	1.95	2.10
10	....	1.50	2.30	3.10	2.35	2.85	1.95	1.70	2.40	2.20	1.95	2.00
11	1.35	1.80	2.10	2.60	2.30	2.65	1.95	1.65	2.20	2.10	1.95	2.00
12	1.45	1.90	2.00	2.65	2.30	2.50	2.10	1.60	2.10	2.05	2.00	1.95
13	1.60	1.75	2.05	3.05	2.30	....	2.20	1.55	2.00	2.00	2.30	2.00
14	1.85	2.10	2.10	3.05	2.30	....	2.10	1.90	2.00	1.95	....	2.00
15	2.75	1.75	3.20	2.65	2.20	....	2.00	1.95	2.00	1.95	....	1.95
16	2.40	1.65	3.30	2.55	2.15	....	1.95	1.80	2.25	1.90	3.15	1.90
17	....	1.65	2.85	2.50	2.75	....	....	1.90	2.20	2.10	2.70	2.65
18	....	1.65	2.70	2.55	3.10	....	....	1.90	1.90	2.00	2.30	2.55
19	....	2.50	2.60	2.50	2.65	....	1.85	2.00	....	1.90	2.30	2.25
20	....	3.40	2.50	2.60	2.55	2.50	1.85	2.50	....	1.95	2.15	2.15
21	....	3.50	2.45	4.55	2.65	2.35	1.85	2.25	....	1.85	2.15	2.10
22	....	3.00	2.40	4.75	3.15	2.25	1.85	2.05	....	1.85	2.10	2.10
23	1.35	2.35	2.40	3.70	3.50	2.20	1.85	1.90	....	1.70	2.10	2.00
24	1.80	2.35	2.15	3.20	3.40	2.25	1.90	1.75	....	1.70	2.25	2.00
25	1.75	2.35	2.10	3.05	3.15	2.90	1.85	1.70	....	1.75	2.20	1.95
26	1.55	2.20	2.00	2.85	2.95	2.65	1.80	2.10	....	1.75	2.15	1.95
27	1.50	2.15	2.00	2.75	2.85	2.60	1.80	2.20	2.40	1.75	2.45	2.20
28	1.40	2.00	2.00	2.70	2.80	2.45	1.80	2.60	2.20	1.80	2.90	2.30
29	1.35	1.95	2.05	2.60	2.70	2.55	1.75	3.00	2.10	1.80	2.75	3.40
30	1.35	....	2.05	2.55	2.55	2.30	1.75	2.65	2.10	1.95	2.35	2.90
31	1.25	....	2.30	....	2.75	....	1.60	2.50	....	2.70	....	2.35

Middlesex County--Continued.

28.4.9.3.5. Duhernal observation well 4. Highest observed water level, 11.75 feet above mean sea level Apr. 20, 1939; lowest observed water level, 3.30 feet above mean sea level Feb. 6 and 7, 1940.

Water level at end of day, in feet above mean sea level, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.70	3.50	....	6.25	....	6.90	5.80	4.75	5.70	4.55	3.65	3.95
2	5.45	3.45	....	6.35	....	6.95	6.35	4.90	5.20	4.50	3.70	3.90
3	5.15	3.45	....	5.80	....	6.65	6.45	4.50	5.10	4.45	3.90	3.85
4	4.95	3.85	....	5.95	....	6.30	7.40	5.35	5.05	4.35	3.85	3.95
5	4.95	3.35	....	6.05	....	6.35	6.05	4.65	5.05	4.35	3.70	4.35
6	4.70	3.30	....	6.40	....	6.65	6.15	5.25	5.05	4.30	3.65	5.55
7	5.30	3.30	....	6.15	....	6.80	5.95	4.60	5.20	4.15	3.65	4.55
8	4.65	3.65	....	6.35	7.75	7.20	5.55	4.35	5.10	4.15	3.70	4.40
9	4.75	3.55	....	6.45	7.95	7.35	5.40	4.45	5.05	4.15	3.75	4.20
10	4.70	3.65	....	6.15	8.00	7.25	5.50	4.45	4.95	4.25	3.95	4.00
11	4.60	3.85	....	6.85	7.75	6.65	5.85	4.50	4.90	4.20	4.00	3.90
12	4.70	3.45	....	7.20	7.75	6.70	5.40	4.30	4.80	4.15	3.80	3.80
13	4.75	3.40	....	7.60	7.70	6.55	5.75	4.00	4.75	4.20	3.85	3.75
14	5.10	4.15	....	7.75	7.90	6.45	5.55	4.30	4.85	4.20	3.90	3.85
15	5.00	....	6.00	7.50	8.05	6.70	5.15	4.15	4.85	4.25	4.05	3.80
16	5.05	....	5.15	7.55	7.85	6.75	5.10	4.15	4.85	4.00	4.15	3.70
17	4.70	....	6.30	7.70	7.25	6.25	5.30	4.05	4.70	4.00	4.30	3.70
18	4.85	....	5.70	7.55	7.00	6.05	5.60	4.15	4.60	3.95	4.00	3.65
19	4.55	....	5.10	7.60	7.10	5.95	4.95	5.25	4.55	4.10	3.95	3.70
20	4.25	....	5.40	7.90	6.50	6.25	4.80	5.35	4.50	3.90	3.80	3.60
21	4.20	3.65	5.65	8.40	7.00	6.10	5.50	4.40	4.50	3.80	4.25	3.65
22	4.30	....	5.75	7.90	7.05	6.15	4.80	4.20	4.45	3.65	4.15	3.65
23	4.05	....	6.20	8.00	7.70	7.20	4.95	4.10	4.40	3.70	4.05	3.70
24	4.10	....	7.00	8.20	7.75	6.30	4.85	4.05	4.30	3.60	4.25	4.30
25	3.90	....	6.70	7.90	7.95	6.25	4.55	4.10	4.40	3.55	4.15	4.70
26	3.80	....	6.00	8.10	8.20	6.55	4.70	4.30	4.65	3.65	3.90	3.95
27	3.85	....	6.90	8.05	6.85	6.50	4.95	4.10	4.75	3.55	4.05	3.85
28	3.80	....	5.75	8.50	6.90	6.80	5.50	4.20	4.55	3.50	3.95	4.10
29	3.75	....	6.20	8.45	7.10	6.10	4.70	4.35	4.65	3.45	3.95	4.15
30	3.60	....	6.15	7.90	6.70	6.10	4.50	4.30	4.70	3.50	3.90	3.90
31	3.50	....	6.45	....	6.45	....	4.60	4.40	....	3.80	....	3.85

28.5.7.1.5. Duhernal observation well 5. Highest observed water level, 14.94 feet above mean sea level Apr. 7 and 8, 1939; lowest observed water level, 9.42 feet above mean sea level Feb. 17, 1940.

Water level at the end of day, in feet above mean sea level, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	10.34	9.66	10.32	11.78	13.17	14.02	12.84	11.38	12.38	11.54	10.90	11.78
2	10.26	9.64	10.34	11.76	13.14	14.01	12.75	11.35	12.78	11.61	10.95	11.73
3	10.20	9.61	10.44	11.76	13.09	13.95	12.74	11.28	12.80	11.62	11.05	11.66
4	10.15	9.62	10.91	11.76	13.05	13.92	12.84	11.32	12.77	11.57	11.07	11.62
5	10.10	9.58	11.18	11.72	13.02	13.84	12.81	11.24	12.70	11.54	11.08	11.62
6	10.11	9.56	11.28	11.71	12.96	13.78	12.74	11.29	12.61	11.52	11.08	11.73
7	10.13	9.54	11.29	11.72	12.87	13.72	12.71	11.26	12.56	11.48	11.08	11.68
8	10.06	9.52	11.30	11.94	12.85	13.67	12.66	11.19	12.49	11.47	11.06	11.63
9	10.02	9.51	11.32	12.38	12.81	13.70	12.54	11.13	12.43	11.46	11.09	11.57
10	9.99	9.50	11.34	12.46	12.76	13.69	12.48	11.08	12.35	11.44	11.16	11.53
11	9.96	9.54	11.31	12.52	12.73	13.57	12.45	11.04	12.27	11.42	11.14	11.48
12	9.93	9.51	11.29	12.67	12.72	13.45	12.42	11.00	12.19	11.38	11.16	11.46
13	9.91	9.49	11.29	12.87	12.65	.....	12.40	11.00	12.12	11.38	11.21	11.42
14	10.00	9.54	11.42	12.93	12.62	.....	12.38	.....	12.09	11.35	11.42	11.38
15	10.07	9.46	11.67	12.90	12.61	.....	12.28	.....	12.14	11.31	11.81	11.36
16	10.09	9.43	11.71	12.86	12.72	.....	12.22	.....	12.03	11.27	11.90	11.42
17	10.10	9.42	11.80	12.82	12.96	.....	12.19	.....	11.96	11.25	12.02	11.48
18	10.08	9.44	11.80	12.78	13.12	.....	12.12	.....	11.88	11.22	11.95	11.44
19	10.05	9.61	11.76	12.76	13.13	12.94	12.07	.....	11.83	11.19	11.93	11.43
20	10.01	9.79	11.74	13.24	13.10	13.00	12.01	.....	11.77	11.16	11.90	11.42
21	9.98	9.93	11.76	13.41	13.11	12.99	12.03	10.95	11.72	11.11	11.97	11.40
22	9.95	10.02	11.80	13.52	13.09	12.95	11.94	10.91	11.66	11.08	11.89	11.37

Middlesex County--Continued.

28.5.7.1.5.--Continued.

Water level at the end of day, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
23	9.92	10.08	11.80	13.53	13.20	12.99	11.90	10.86	11.62	11.05	11.85	11.33
24	9.88	10.16	11.86	13.50	13.22	12.98	11.80	10.81	11.56	11.02	11.84	11.39
25	9.86	10.22	11.84	13.50	13.24	12.96	11.74	10.78	11.67	10.99	11.77	11.48
26	9.82	10.26	11.79	13.44	13.25	12.89	11.69	10.84	11.66	10.98	11.74	11.41
27	9.80	10.28	11.90	.....	13.24	12.86	11.64	10.85	11.65	10.94	11.87	11.36
28	9.78	10.30	11.79	.....	13.26	12.95	11.63	11.09	11.62	10.89	11.89	11.55
29	9.76	10.32	11.76	.....	13.22	12.95	11.55	11.25	11.56	10.86	11.87	11.81
30	9.72	.....	11.79	.....	13.24	12.95	11.49	11.31	11.55	10.90	11.82	11.85
31	9.69	.....	11.80	.....	13.94	.....	11.43	11.41	.....	10.92	.....	11.82

28.4.9.5.1. Duhernal observation well 9. Highest observed water level, 14.85 feet above mean sea level June 1, 1940; lowest observed water level, 11.4 feet above mean sea level May 25, 1939.

Water level at the end of day, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	13.40	13.25	13.70	13.90	14.10	14.85	.....	13.50	14.45	13.70	13.80	13.95
2	13.40	13.25	13.70	13.85	14.10	14.40	13.80	13.55	14.40	13.85	13.80	13.90
3	13.35	13.25	13.90	13.90	14.10	14.25	13.80	.....	14.10	13.85	13.80	13.90
4	13.35	13.25	14.20	13.90	14.10	.....	13.85	.....	14.00	13.80	13.80	13.90
5	13.35	13.25	14.20	13.85	14.10	14.10	.....	.....	13.95	13.80	13.80	13.80
6	13.35	13.30	14.10	13.85	14.05	14.10	.....	.....	13.90	13.80	13.75	13.80
7	13.35	13.40	14.05	13.85	14.00	14.05	.....	.....	13.90	13.70	13.70	13.80
8	13.35	13.40	14.00	14.15	14.00	14.00	.....	13.50	13.85	13.75	13.70	13.80
9	13.35	13.40	13.95	14.25	14.00	14.00	.....	13.50	13.85	13.80	13.70	13.80
10	13.35	.....	13.95	14.15	14.00	14.05	.....	13.45	13.85	13.75	13.70	13.80
11	13.35	.....	13.90	14.10	13.95	14.00	.....	13.45	13.80	13.75	13.70	.....
12	13.35	.....	13.85	14.15	13.95	14.00	.....	13.45	13.80	13.75	13.75	.....
13	13.35	.....	13.80	14.20	13.95	13.95	.....	13.50	13.75	13.75	13.80	.....
14	13.60	13.60	13.90	14.20	13.95	13.90	.....	13.55	13.70	.....	14.00	.....
15	13.80	13.50	14.15	14.15	13.90	13.90	.....	13.50	13.70	.....	14.10	.....
16	13.75	13.50	14.10	14.10	14.10	13.90	.....	13.50	13.70	13.60	14.05	.....
17	13.65	13.50	14.10	14.10	14.30	13.85	.....	13.50	13.65	13.60	13.95	.....
18	13.60	.....	14.00	14.10	14.10	13.85	.....	13.50	13.60	13.60	13.90	13.90
19	13.60	.....	13.97	14.10	14.05	13.90	.....	13.65	13.60	13.60	13.90	13.90
20	13.60	.....	13.95	14.25	14.00	13.90	.....	13.70	13.60	13.60	13.85	13.90
21	13.50	14.00	13.95	14.25	14.10	13.85	.....	13.70	13.60	13.60	13.85	13.90
22	13.45	13.85	13.95	14.25	14.20	13.85	.....	13.65	13.60	13.60	13.85	13.90
23	13.45	13.75	13.95	14.25	14.30	13.85	.....	13.60	13.60	.....	13.85	13.85
24	13.50	13.75	13.90	14.25	14.25	13.85	.....	13.55	.....	.....	13.85	13.85
25	13.50	13.75	13.90	14.25	14.15	13.95	.....	13.50	13.90	.....	13.85	13.80
26	13.50	13.75	13.90	14.20	14.15	13.95	.....	13.65	13.90	.....	13.85	13.80
27	13.50	.....	13.85	14.20	14.10	13.95	.....	13.65	13.85	.....	14.05	13.80
28	13.40	13.70	13.85	14.15	.....	13.95	.....	13.95	13.80	.....	14.05	14.05
29	13.40	13.70	13.85	14.15	14.05	13.95	.....	13.95	13.75	.....	13.95	14.10
30	13.35	.....	13.85	14.10	14.05	13.90	.....	13.90	13.75	13.70	13.95	14.10
31	13.25	.....	13.95	.....	14.70	.....	13.40	13.85	.....	13.75	.....	14.00

28.4.9.8.2. Duhernal observation well 10. Highest observed water level, 21.89 feet above mean sea level Apr. 7 and 8, 1939 and June 1, 1940; lowest observed water level, 19.68 feet above mean sea level Sept. 26 and 27, 1939.

Water level at the end of day, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	19.94	19.90	20.31	20.84	21.30	21.89	21.07	20.36	21.45	20.78	20.77	20.99
2	19.92	19.89	20.33	20.82	21.29	21.71	21.01	20.34	21.29	20.93	20.89	20.97
3	19.91	19.89	20.56	20.85	21.31	21.57	21.02	20.31	21.16	20.94	20.88	20.93
4	19.90	19.88	20.94	20.87	21.30	21.47	21.09	20.31	21.11	20.90	20.87	20.92
5	19.90	19.88	20.87	20.81	21.26	21.43	21.03	20.27	21.07	20.87	20.86	20.90
6	19.87	19.90	20.75	20.79	21.25	21.38	20.98	20.46	21.04	20.86	20.83	20.92
7	19.87	19.90	20.73	20.78	21.21	21.33	20.96	20.50	21.00	20.85	20.82	20.92

Middlesex County--Continued.

28.4.9.8.2.--Continued.

Water level at the end of day, in feet above mean sea level, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
8	19.87	19.90	20.72	21.03	21.17	21.29	20.90	20.46	20.99	20.87	20.78	20.94
9	19.85	19.90	20.70	21.28	21.17	21.31	20.87	20.41	20.99	20.87	20.77	20.93
10	19.85	19.95	20.68	21.10	21.17	21.32	20.85	20.37	20.96	20.86	20.76	20.90
11	19.85	19.99	20.65	21.09	21.16	21.30	20.88	20.34	20.93	20.84	20.75	20.87
12	19.85	19.99	20.63	21.24	21.15	21.26	20.90	20.32	20.90	20.82	20.82	20.87
13	19.85	19.97	20.63	21.30	21.14	21.21	20.88	20.38	20.86	20.82	20.93	20.86
14	20.05	.....	20.76	21.26	21.11	21.18	20.85	20.42	20.84	20.79	21.14	20.85
15	20.28	.....	21.04	21.21	21.10	21.18	20.82	.....	20.83	20.79	21.21	20.83
16	20.18	19.86	20.94	.....	21.31	21.12	20.78	.....	20.79	20.74	21.13	20.99
17	20.14	19.88	20.91	21.17	21.48	21.07	20.75	.....	20.76	20.74	21.07	21.01
18	20.14	19.90	20.90	21.17	21.37	21.07	20.73	.....	20.73	20.72	21.02	20.97
19	20.12	20.15	20.83	21.20	21.32	21.11	20.69	.....	20.71	20.72	21.01	20.95
20	20.10	20.52	20.81	.....	21.28	21.09	20.66	.....	20.70	20.71	21.02	20.95
21	20.08	20.38	20.79	21.79	21.34	21.04	20.64	20.55	20.69	20.68	21.01	20.93
22	20.03	20.27	20.83	21.62	21.36	21.03	20.60	20.51	20.65	20.67	21.00	20.92
23	20.02	20.23	20.83	21.52	21.46	21.02	20.58	20.47	20.63	20.68	20.99	20.89
24	20.00	20.27	20.82	21.44	21.40	21.10	20.56	20.43	20.62	20.67	20.99	20.88
25	19.99	20.28	20.80	21.41	21.37	21.14	20.54	20.43	20.90	20.66	20.96	20.89
26	19.98	20.28	20.79	21.37	21.35	21.17	20.51	20.60	20.94	20.64	21.02	20.88
27	19.96	20.29	20.79	21.34	21.33	21.14	20.47	20.65	20.89	20.63	21.16	20.88
28	19.95	20.30	20.78	21.32	21.36	21.20	20.47	20.80	20.84	20.61	21.08	21.16
29	19.94	20.31	20.78	21.31	21.32	21.19	20.44	20.83	20.81	20.61	21.04	21.19
30	19.93	.....	20.84	21.31	21.33	21.13	20.40	20.83	20.79	20.77	21.02	21.10
31	19.90	.....	20.87	.....	21.04	.....	20.39	20.81	.....	20.78	.....	21.04

28.4.9.3.1. Duhernal observation well 11. Highest observed water level, 14.23 feet above mean sea level June 1, 1940; lowest observed water level, 10.43 feet above mean sea level June 22, 1939.

Water level at end of day, in feet above mean sea level, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	12.62	12.40	12.76	13.26	13.88	14.23	13.52	12.92	13.34	13.09	12.92	13.15
2	12.53	12.38	12.79	13.23	13.90	14.09	13.54	12.92	13.41	13.14	12.97	13.14
3	12.51	12.38	12.90	13.25	13.90	14.03	13.58	12.89	13.32	13.15	12.99	13.11
4	12.51	12.40	13.04	13.25	13.86	14.00	13.62	12.89	13.31	13.11	12.99	13.09
5	12.51	12.37	13.12	13.24	13.84	13.99	13.54	12.86	13.30	13.09	12.99	13.10
6	12.45	12.43	13.08	13.22	13.84	13.98	13.50	13.01	13.29	13.09	12.95	13.20
7	12.48	12.42	13.06	13.23	13.77	13.94	13.47	12.97	13.28	13.09	12.93	13.15
8	12.48	12.42	13.05	13.39	13.78	13.93	13.44	12.87	13.27	13.05	12.91	13.16
9	12.43	12.42	13.08	13.47	13.79	13.95	13.40	12.83	13.28	13.07	12.85	13.15
10	12.45	12.48	13.09	13.38	13.75	13.97	13.31	12.81	13.27	13.05	12.85	13.13
11	12.45	.....	13.06	13.41	13.72	13.93	13.31	12.78	13.24	13.04	12.85	13.06
12	12.44	.....	13.04	13.49	13.76	13.91	13.32	12.77	13.21	13.02	12.88	13.08
13	12.45	.....	13.06	13.55	13.74	13.87	13.31	12.78	13.19	13.00	13.00	13.05
14	12.63	12.61	13.23	13.55	13.69	13.82	13.29	12.87	13.17	12.99	13.08	13.03
15	12.73	12.45	13.29	13.54	13.68	13.81	13.27	12.84	13.18	12.97	13.16	13.03
16	12.73	12.44	13.26	13.53	13.73	13.73	13.23	12.80	13.17	12.94	13.16	13.11
17	12.71	12.46	13.29	13.54	13.84	13.69	13.20	12.80	13.13	12.96	13.15	13.14
18	12.68	12.51	13.28	13.54	13.78	13.69	13.18	12.80	13.09	12.92	13.08	13.10
19	12.63	12.68	13.22	13.55	13.75	13.70	13.16	12.94	13.08	12.92	13.07	13.08
20	12.61	12.83	13.23	13.80	13.69	13.68	13.14	12.97	13.06	12.91	13.08	13.10
21	12.59	12.81	13.26	13.96	13.77	13.61	13.14	12.95	13.05	12.90	13.10	13.09
22	12.56	12.80	13.27	13.94	13.87	13.61	13.10	12.89	13.03	12.89	13.11	13.09
23	12.53	12.74	.....	13.88	13.95	13.62	.....	12.85	13.01	12.90	13.08	13.05
24	12.51	12.80	.....	13.87	13.94	13.62	13.03	12.82	13.00	12.88	13.12	13.07
25	12.50	12.80	.....	13.84	13.92	13.68	13.03	12.80	13.13	12.87	13.10	13.10
26	12.49	12.79	.....	13.85	13.92	13.64	13.00	12.93	13.15	12.86	13.12	13.08
27	12.46	12.80	13.28	13.86	13.89	13.63	12.99	12.93	13.15	12.88	13.24	13.07
28	12.44	12.81	13.22	13.89	13.93	13.72	13.00	13.04	13.14	12.84	13.19	13.15
29	12.43	12.77	13.25	13.90	13.86	13.64	12.98	13.09	13.12	12.83	13.20	13.23
30	12.40	.....	13.28	13.88	13.86	13.58	12.94	13.09	13.09	12.92	13.15	13.21
31	12.39	.....	13.30	.....	14.10	.....	12.94	13.10	.....	12.92	.....	13.16

Middlesex County--Continued.

29.1.4.5.1. (F-1). Highest observed water level, 19.5 feet above mean sea level Mar. 27, 1936; lowest observed water level, 13.52 feet above mean sea level Oct. 14, 1932.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 20	15.33	Mar. 14	17.31	July 22	16.57	Sept.19	16.54
27	15.15	Apr. 24	18.22	23	16.58	Oct. 19	16.83
Feb. 3	14.83	May 27	17.41	Aug. 22	16.81	Nov. 22	18.12
24	17.49	June 23	16.97				

29.1.4.5.2. (F-2). Highest observed water level, 22.9 feet above mean sea level Mar. 27, 1936; lowest observed water level, 14.59 feet above mean sea level Sept. 24, 1932.

Water level, in feet above mean sea level, 1940

Jan. 20	16.16	Mar. 14	19.76	July 22	19.26	Sept.19	18.91
27	15.88	Apr. 24	21.62	23	19.66	Oct. 19	18.90
Feb. 3	15.66	May 27	21.28	Aug. 22	17.54	Nov. 22	20.57
24	18.36	June 23	20.30				

29.1.4.3.9. (F-3). Highest observed water level, 31.91 feet above mean sea level June 17, 1939; lowest observed water level, 24.14 feet above mean sea level Mar. 11, 1932.

Water level, in feet above mean sea level, 1940

Jan. 20	27.21	Apr. 26	26.81	July 23	27.79	Oct. 19	26.21
Feb. 3	26.21	May 28	27.01	Aug. 22	27.92	Nov. 22	27.78
Mar. 14	27.21	June 11	27.61	Sept.21	27.94	Dec. 14	27.64

29.1.5.1.4. (F-4). Highest observed water level, 29.47 feet above mean sea level July 12, 1939; lowest observed water level, 22.89 feet above mean sea level Mar. 11, 1932.

Water level, in feet above mean sea level, 1940

Jan. 20	24.69	Apr. 26	24.93	July 23	25.22	Oct. 19	25.08
Feb. 3	23.19	May 28	24.87	Aug. 22	25.54	Nov. 22	25.83
Mar. 14	25.69	June 11	25.61	Sept.21	25.91	Dec. 14	25.77

29.1.5.1.9. (F-5). Highest observed water level, 105.73 feet above mean sea level Jan. 24, 1934; lowest observed water level, 97.69 feet above mean sea level Sept. 24, 1932.

Water level, in feet above mean sea level, 1940

Jan. 20	100.35	Apr. 26	103.87	July 23	101.72	Oct. 19	102.00
Feb. 3	99.68	May 28	103.74	Aug. 22	100.98	Nov. 22	102.74
Mar. 14	102.80	June 11	103.20	Sept.21	101.83	Dec. 14	102.53

29.1.5.6.3. (F-9). Highest observed water level, 106.79 feet above mean sea level Apr. 15, 1932; lowest observed water level, 98.57 feet above mean sea level Oct. 28, 1939.

Water level, in feet above mean sea level, 1940

Jan. 20	104.41	Apr. 26	106.30	July 23	101.82	Oct. 19	104.79
Feb. 3	101.36	May 28	106.63	Aug. 23	102.03	Nov. 22	105.57
Mar. 14	105.71	June 11	105.75	Sept.21	102.31	Dec. 14	105.16

29.1.5.6.3.A. (F-10). Highest observed water level, 126.71 feet above mean sea level Mar. 27, 1936; lowest observed water level, 121.27 feet above mean sea level Nov. 13, 1931.

Water level, in feet above mean sea level, 1940

Jan. 20	124.25	Apr. 26	126.03	July 23	123.53	Oct. 19	124.83
Feb. 3	123.02	May 28	126.39	Aug. 22	123.36	Nov. 22	125.91
Mar. 14	126.18	June 11	125.55	Sept.21	124.27	Dec. 14	125.47

Middlesex County--Continued.

29.1.5.4.6. (F-11). Highest observed water level, 33.03 feet above mean sea level May 19, 1924; lowest observed water level, 22.75 feet above mean sea level Mar. 11, 1932.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 20	25.55	Apr. 26	25.54	July 23	28.45	Oct. 19	27.37
Feb. 3	25.15	May 28	23.46	Aug. 22	27.86	Nov. 22	26.98
Mar. 14	24.77	June 11	28.29	Sept.21	27.56	Dec. 14	26.95

29.1.5.4.8. (F-12). Highest observed water level, 34.98 feet above mean sea level May 4, 1939; lowest observed water level, dry on several dates in 1938.

Water level, in feet above mean sea level, 1940

Jan. 20	28.01	Apr. 26	27.81	July 23	30.52	Oct. 19	30.17
Feb. 3	28.76	May 28	28.96	Aug. 22	29.86	Nov. 22	29.20
Mar. 14	27.51	June 11	29.52	Sept.21	29.61	Dec. 14	29.34

29.1.5.4.8.A. (F-13). Highest observed water level, 46.54 feet above mean sea level Sept. 17, 1934; lowest observed water level, 41.54 feet above mean sea level June 19, 1925. Water levels, in feet above mean sea level, 1940: Jan. 20, 42.82; Feb. 3, 43.12; Mar. 14, 45.12.

29.1.5.7.2. (F-14). Highest observed water level, 38.94 feet above mean sea level July 27, 1938; lowest observed water level, dry Oct. 21, 1925 and Nov. 13, 1931.

Water level, in feet above mean sea level, 1940

Jan. 20	29.56	Apr. 26	35.35	July 23	36.30	Oct. 19	28.12
Feb. 3	29.53	May 28	35.87	Aug. 22	33.20	Nov. 22	34.93
Mar. 14	30.82	June 11	36.74	Sept.21	33.96	Dec. 14	34.83

29.1.5.7.5.A. (F-16). Highest observed water level, 89.34 feet above mean sea level Mar. 17, 1939; lowest observed water level, 82.92 feet above mean sea level Aug. 10, 1936.

Water level, in feet above mean sea level, 1940

Jan. 20	87.64	Apr. 26	88.76	July 23	87.02	Oct. 19	87.40
Feb. 3	87.19	May 28	88.50	Aug. 22	87.19	Nov. 22	88.00
Mar. 14	88.77	June 11	88.28	Sept.21	87.29	Dec. 14	87.79

29.1.4.7.6. (F-20). Highest observed water level, 36.62 feet above mean sea level Apr. 11, 1939; lowest observed water level, 28.54 feet above mean sea level Sept. 24, 1932.

Water level, in feet above mean sea level, 1940

Jan. 20	29.74	June 11	33.98	Sept.21	32.60	Nov. 22	32.95
Feb. 3	30.22	July 23	32.72	Oct. 19	32.42	Dec. 14	33.07
Mar. 14	29.95	Aug. 22	31.88				

29.1.4.9.8. (F-21). Highest observed water level, 66.47 feet above mean sea level Sept. 17, 1934; lowest observed water level, 59.78 feet above mean sea level July 19, 1935.

Water level, in feet above mean sea level, 1940

Jan. 20	63.83	Apr. 26	66.27	July 23	62.31	Oct. 19	63.54
Feb. 3	63.43	May 28	63.37	Aug. 22	62.61	Nov. 22	64.04
Mar. 14	65.36	June 11	63.43	Sept.21	63.45	Dec. 14	63.93

29.1.7.3.5. (F-22). Highest observed water level, 88.76 feet above mean sea level Sept. 17, 1934; lowest observed water level, 76.19 feet above mean sea level Oct. 20, 1932.

Water level, in feet above mean sea level, 1940

Jan. 20	85.53	Apr. 26	88.00	July 23	84.45	Oct. 19	85.53
Feb. 3	84.61	May 28	87.34	Aug. 22	83.26	Nov. 22	86.79
Mar. 14	87.10	June 11	86.43	Sept.21	84.94	Dec. 14	86.75

Middlesex County--Continued.

29.11.1.2.5. (F-26). Highest observed water level, 88.10 feet above mean sea level Apr. 11, 1939; lowest observed water level, 82.51 feet above mean sea level Sept. 18, 1925.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 20	85.34	Apr. 26	87.61	July 23	86.14	Oct. 19	86.14
Feb. 3	85.96	May 28	87.05	Aug. 22	85.70	Nov. 22	86.60
Mar. 14	86.55	June 11	87.66	Sept.21	86.37	Dec. 14	86.43

29.11.1.2.5.A. (F-27). Highest observed water level, 87.38 feet above mean sea level Aug. 5, 1939; lowest observed water level, 82.33 feet above mean sea level Aug. 11, 1925.

Water level, in feet above mean sea level, 1940

Jan. 20	85.05	Apr. 26	87.54	July 23	86.33	Oct. 19	86.02
Feb. 3	84.96	May 28	86.89	Aug. 22	85.74	Nov. 22	86.40
Mar. 14	86.20	June 11	87.27	Sept.21	86.18	Dec. 14	86.29

28.4.4.2.1. Fischer test well. Highest observed water level, 12.58 feet below measuring point Apr. 26 and 27, 1939; lowest observed water level, 18.12 feet below measuring point Feb. 23 and 24, 1940.

Water level at the end of day, in feet below measuring point, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	17.68	17.96	18.08	17.16	15.57	14.81	14.42	15.13	15.76	15.98	16.29	16.16
2	17.70	17.97	18.07	17.14	15.53	14.67	14.46	15.16	15.77	15.98	16.28	16.15
3	17.71	17.98	18.05	17.11	15.48	14.59	14.47	15.19	15.77	16.00	16.30	16.16
4	17.74	17.98	17.93	17.08	15.46	14.52	14.49	15.20	15.76	16.02	16.31	.....
5	17.74	18.00	17.88	17.06	15.44	14.47	14.51	15.23	15.75	16.02	16.30	.....
6	17.76	18.00	17.87	17.04	15.40	14.42	14.54	15.25	15.75	16.02	16.33	.....
7	17.76	18.01	17.85	17.02	15.38	14.39	14.54	15.28	15.75	16.02	16.34	.....
8	17.78	18.02	17.83	16.98	15.36	14.34	14.56	15.32	15.74	16.04	16.36	.....
9	17.79	18.03	17.81	16.94	15.34	14.31	14.58	15.36	15.73	16.06	16.37	.....
10	17.79	18.03	17.80	16.94	15.33	14.28	14.60	15.38	15.75	16.07	16.38	.....
11	17.79	18.04	17.78	16.92	15.32	14.26	14.62	15.41	15.78	16.08	16.38	.....
12	17.80	18.04	17.76	16.86	15.31	14.22	14.64	15.43	15.79	16.09	16.39	.....
13	17.81	18.06	17.74	16.79	15.30	14.21	14.68	15.44	15.81	16.10	16.39	.....
14	17.82	18.05	17.69	16.74	15.30	14.20	14.70	15.46	15.82	16.11	16.36	.....
15	17.82	18.07	17.65	16.68	15.30	14.18	14.71	15.50	15.82	16.12	16.34	.....
16	17.83	18.08	17.65	16.63	15.29	14.21	14.73	15.52	15.84	16.14	16.35	.....
17	17.85	18.09	17.63	16.56	15.26	14.20	14.76	15.54	15.86	16.13	16.36	.....
18	17.85	18.10	17.59	16.49	15.27	14.18	14.78	15.55	15.87	16.15	16.38	.....
19	17.87	18.10	17.57	16.44	15.26	14.18	14.80	15.58	15.88	16.16	16.34	.....
20	17.86	18.09	17.53	16.34	15.27	14.23	14.83	15.61	15.88	16.17	16.29	16.12
21	17.87	18.10	17.49	16.27	15.27	14.26	14.85	15.64	15.89	16.19	16.26	16.12
22	17.88	18.11	17.46	16.23	15.25	14.25	14.88	15.66	15.91	16.20	16.24	16.11
23	17.89	18.12	17.44	16.17	15.23	14.24	14.90	15.70	15.92	16.19	16.23	16.14
24	17.90	18.12	17.40	16.06	15.21	14.24	14.92	15.72	15.92	16.20	16.20	16.12
25	17.90	18.11	17.38	15.97	15.20	14.26	14.94	15.74	15.88	16.21	16.21	16.11
26	17.91	18.11	17.34	15.89	15.19	14.30	14.97	15.75	15.92	16.22	16.18	16.10
27	17.92	18.09	17.30	15.82	15.17	14.34	15.00	15.78	15.94	16.24	16.16	16.10
28	17.93	18.08	17.28	15.76	15.14	14.32	15.02	15.79	15.96	16.26	16.18	16.08
29	17.94	18.08	17.25	15.69	15.14	14.36	15.04	15.81	15.96	16.26	16.16	16.07
30	17.95	.....	17.20	15.63	15.11	14.39	15.06	15.84	15.98	16.26	16.16	16.09
31	17.96	.....	17.18	.....	14.99	.....	15.09	15.85	.....	16.28	.....	16.10

29.1.1.7.8. (G-1). Highest observed water level, 23.79 feet above mean sea level May 10, 1933; lowest observed water level, 18.11 feet above mean sea level Dec. 29, 1939.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	19.54	Apr. 24	22.14	July 22	20.39	Oct. 22	19.65
Feb. 24	20.32	May 27	21.63	Aug. 23	19.56	Nov. 23	20.67
Mar. 30	21.04	June 23	20.95	Sept.19	19.97	Dec. 13	20.34

Middlesex County--Continued.

29.1.1.7.8.A. (G-2). Highest observed water level, 25.45 feet above mean sea level Nov. 17, 1934; lowest observed water level, 22.26 feet above mean sea level Sept. 30, 1932.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	22.50	Apr. 24	24.65	July 22	23.57	Oct. 22	23.23
Feb. 24	23.61	May 27	24.46	Aug. 23	23.04	Nov. 23	23.93
Mar. 30	24.02	June 23	23.96	Sept.19	23.24	Dec. 13	23.76

29.1.1.7.9. (G-3). Highest observed water level, 28.43 feet above mean sea level June 12, 1937; lowest observed water level, 25.38 feet above mean sea level Sept. 30, 1932.

Water level, in feet above mean sea level, 1940

Jan. 27	25.82	Apr. 24	27.48	July 22	27.41	Oct. 22	26.72
Feb. 24	26.58	May 27	26.92	Aug. 23	26.64	Nov. 23	27.02
Mar. 30	26.90	June 23	28.21	Sept.19	26.66	Dec. 13	27.02

29.1.1.8.4. (G-4). Highest observed water level, 31.91 feet above mean sea level May 23, 1938; lowest observed water level, 28.07 feet above mean sea level Sept. 22, 1939.

Water level, in feet above mean sea level, 1940

Jan. 27	28.36	Apr. 24	29.81	July 22	29.80	Oct. 22	29.43
Feb. 24	28.71	May 27	29.99	Aug. 23	29.33	Nov. 23	29.66
Mar. 30	29.22	June 23	30.03	Sept.19	29.72	Dec. 13	29.48

29.1.4.1.4. (J-1). Highest observed water level, 15.61 feet above mean sea level Oct. 16, 1933; lowest observed water level, 9.28 feet above mean sea level Dec. 29, 1939.

Water level, in feet above mean sea level, 1940

Jan. 27	10.30	Apr. 24	15.08	July 22	12.98	Oct. 22	11.96
Feb. 24	11.70	May 27	14.32	Aug. 23	12.43	Nov. 23	13.35
Mar. 30	13.84	June 23	13.85	Sept.19	12.62	Dec. 13	13.05

29.1.4.1.6. (J-2). Highest observed water level, 16.52 feet above mean sea level Jan. 27, 1937 and July 29, 1938; lowest observed water level, 11.49 feet above mean sea level Jan. 11, 1935.

Water level, in feet above mean sea level, 1940

Jan. 27	13.02	Apr. 24	16.24	July 22	14.78	Oct. 22	14.40
Feb. 24	14.54	May 27	16.08	Aug. 23	14.02	Nov. 23	15.54
Mar. 30	15.45	June 23	15.33	Sept.19	14.61	Dec. 13	15.00

29.1.4.2.7. (J-3). Highest observed water level, 17.69 feet above mean sea level July 29, 1938; lowest observed water level, 13.23 feet above mean sea level Sept. 24, 1932.

Water level, in feet above mean sea level, 1940

Jan. 27	14.45	Apr. 24	16.89	July 22	15.88	Oct. 22	15.73
Feb. 24	15.79	May 27	17.14	Aug. 23	15.31	Nov. 23	16.60
Mar. 30	16.54	June 23	17.42	Sept.19	15.83	Dec. 13	16.36

29.1.4.5.1.A. (J-4). Highest observed water level, 18.35 feet above mean sea level Sept. 18, 1934; lowest observed water level, 13.96 feet above mean sea level Sept. 24, 1932.

Water level, in feet above mean sea level, 1940

Jan. 27	14.94	Apr. 24	17.80	July 22	16.08	Oct. 22	16.20
Feb. 24	16.39	May 27	18.07	Aug. 23	15.72	Nov. 23	17.09
Mar. 30	16.92	June 23	16.67	Sept.19	16.16	Dec. 13	16.92

29.1.4.5.2.A. (J-5). Highest observed water level, 23.60 feet above mean sea level Feb. 22, 1938; lowest observed water level, 15.42 feet above mean sea level Oct. 14, 1932.

Water level, in feet above mean sea level, 1940

Jan. 27	16.45	May 27	18.84	Aug. 23	17.23	Nov. 23	18.35
Mar. 30	19.14	June 23	18.01	Sept.19	17.77	Dec. 13	18.31
Apr. 24	18.96	July 22	17.79	Oct. 22	17.76		

Middlesex County--Continued.

28.5.4.5.6. (L-1). Highest observed water level, 7.56 feet above mean sea level Apr. 16, 1935; lowest observed water level, 2.86 feet above mean sea level May 27, 1940.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level
Jan. 27	4.14	Mar. 30	6.13	May 27	2.86
Feb. 24	4.89	Apr. 24	7.14		

28.5.4.6.7.A. (L-2). No measurements made in 1940.

28.5.4.6.7.B. (L-3). No measurements made in 1940.

29.11.1.2.3. Morrell well. Rebuilt in 1940; pre-cast concrete rings installed to replace old wood box that formed wall of well. New measuring point, top of concrete rings, 76.95 feet above mean sea level.

Water level on the first day of each month, January 1940 to January 1941, average water levels, and highest and lowest water levels on the same dates for preceding years of record, in feet above mean sea level

Date	Water level	Number of preceding years of record	Water level in preceding years		
			Average	Highest	Lowest
Jan. 1, 1940	72.91	16	73.93	74.33	73.46
Feb. 1	73.16	16	73.82	74.35	73.40
Mar. 1	73.97	16	73.96	74.63	73.39
Apr. 1	74.05	16	73.93	74.53	73.46
May 1	73.71	16	73.72	74.16	73.32
June 1	74.22	16	73.36	73.95	72.38
July 1	73.09	16	72.65	73.71	71.48
Aug. 1	71.07	16	71.82	73.26	69.86
Sept.1	74.29	17	71.80	74.33	67.17
Oct. 1	72.98	17	72.13	74.03	68.13
Nov. 1	73.84	17	73.17	74.19	70.28
Dec. 1	73.91	17	73.67	74.06	72.83
Jan. 1, 1941	73.99	17	73.87	74.33	72.91

Water level at the end of day, in feet above mean sea level, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	72.91	73.16	73.97	74.05	73.71	74.22	73.09	71.07	74.29	72.98	73.84	73.91
2	72.89	73.15	73.92	73.96	73.70	74.02	72.90	71.04	74.04	73.92	74.20	73.85
3	72.88	73.13	74.33	74.11	73.70	73.80	72.85	71.02	73.82	73.90	74.07	73.77
4	72.88	73.13	74.34	74.19	73.66	73.59	73.43	70.99	73.60	73.72	73.97	73.72
5	72.88	73.13	74.34	74.06	73.64	73.46	73.15	70.94	73.38	73.56	73.91	73.67
6	72.83	73.22	74.33	73.98	73.62	73.29	72.93	70.91	73.22	73.46	73.82	73.65
7	72.82	73.42	74.29	73.90	73.57	73.15	72.75	71.28	73.05	73.36	73.74	73.88
8	72.82	73.43	74.26	74.32	73.54	73.07	72.59	71.35	72.96	73.70	73.66	74.01
9	72.80	73.43	74.21	74.31	73.62	73.44	72.47	71.28	72.99	73.65	73.61	73.91
10	72.79	73.65	74.13	74.23	73.57	.....	72.33	71.18	72.94	73.54	73.57	73.84
11	72.79	73.96	74.05	74.17	73.52	.....	72.36	71.12	72.91	73.46	73.55	73.78
12	72.80	73.92	73.98	74.32	73.52	.....	72.85	71.11	72.79	73.39	74.05	73.76
13	72.90	73.88	73.92	74.39	73.49	.....	72.81	71.14	72.68	73.32	74.30	73.75
14	74.34	73.89	74.33	74.35	73.43	.....	72.59	71.29	72.61	73.28	74.60	73.70
15	74.18	73.79	74.32	74.28	73.39	.....	72.43	71.27	72.56	73.24	74.31	73.67
16	74.09	73.76	74.26	74.18	74.32	.....	72.32	71.30	72.48	73.20	74.16	74.47
17	74.01	73.70	74.26	74.08	74.23	.....	72.32	71.41	72.38	73.21	74.06	74.18
18	73.91	73.71	74.25	74.05	74.07	.....	72.20	71.49	72.27	73.18	73.95	74.08
19	73.83	74.34	74.22	74.01	73.93	.....	72.04	71.60	72.21	73.16	73.90	74.00
20	73.74	74.34	74.19	74.33	73.79	73.05	71.95	71.71	72.16	73.18	73.84	73.96
21	73.67	74.33	74.16	74.33	73.83	72.88	71.82	71.65	72.07	73.15	73.80	73.89
22	73.61	74.26	74.25	74.31	73.96	72.75	71.72	71.57	71.97	73.14	73.76	73.83
23	73.54	74.21	74.13	74.21	74.21	72.67	71.72	71.53	71.91	73.17	73.71	73.76
24	73.50	74.20	74.05	74.12	74.06	73.18	71.67	71.46	71.87	73.17	73.78	73.73
25	73.46	74.32	73.97	74.03	74.07	73.57	71.62	71.41	73.63	73.16	73.70	73.69

Middlesex County--Continued.

29.11.1.2.3.--Continued.

Water level at the end of day, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	73.41	74.21	73.90	73.95	74.02	73.65	71.53	72.11	73.55	73.14	73.94	73.71
27	73.34	74.14	73.88	73.91	73.93	73.33	71.39	72.33	73.38	73.13	74.33	73.72
28	73.30	74.07	73.83	73.85	74.01	73.62	71.31	73.60	73.23	73.11	74.13	74.38
29	73.25	74.02	73.82	73.80	73.84	73.59	71.23	73.55	73.10	73.11	74.06	74.35
30	73.21	.....	73.98	73.76	73.72	73.30	71.15	73.48	73.04	74.08	74.00	74.17
31	73.17	.....	74.10	.....	74.31	.....	71.08	73.22	.....	73.92	.....	74.06

28.4.3.1.5. National Fireproofing dug well. Highest observed water level, 6.57 feet below measuring point Sept. 22, 1938; lowest observed water level, 11.54 feet below measuring point Oct. 18 and 19, 1937.

Water level at end of day, in feet below measuring point, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	11.23	11.41	10.95	10.48	9.60	8.83	9.93	10.48	10.20	10.45	10.64	10.30
2	11.24	11.41	10.97	10.49	9.63	8.81	9.96	10.50	10.10	10.39	10.56	10.31
3	11.26	11.42	10.93	10.50	9.66	8.84	9.98	10.53	10.09	10.37	10.51	10.34
4	11.27	11.43	10.63	10.46	9.70	8.92	10.02	10.54	10.11	10.38	10.49	10.35
5	11.28	11.43	10.50	10.49	9.75	8.99	10.03	10.55	10.19	10.41	10.46	10.36
6	11.30	11.43	.....	10.50	9.78	9.10	10.06	10.56	10.20	10.43	10.48	10.38
7	11.31	.....	.....	10.52	9.82	9.15	10.08	10.58	10.23	10.43	10.50	10.39
8	11.32	.....	.....	10.35	9.85	9.21	10.10	10.59	10.26	10.45	10.54	10.40
9	11.33	11.46	10.40	10.07	9.87	9.26	10.12	10.61	10.28	10.47	10.57	10.42
10	11.34	11.45	10.45	9.97	9.90	9.33	10.14	10.63	10.32	10.48	10.60	10.43
11	11.35	11.41	10.51	9.94	9.93	9.38	10.15	10.64	10.35	10.49	10.62	10.45
12	11.35	11.40	10.57	9.90	9.96	9.42	10.15	10.65	10.39	10.51	10.62	10.47
13	11.36	11.41	10.61	9.82	9.98	9.47	10.17	10.60	10.43	10.52	10.59	10.49
14	11.31	11.40	10.58	9.75	10.02	9.51	10.18	10.59	10.44	10.54	10.37	10.48
15	11.18	.....	10.38	9.72	10.04	9.56	10.20	10.62	10.47	10.56	10.27	10.48
16	11.14	.....	10.32	9.74	9.93	9.61	10.21	10.65	10.49	10.58	10.26	10.43
17	11.14	11.45	10.30	9.79	9.81	9.66	10.24	10.66	10.51	10.59	10.28	10.36
18	11.17	11.46	10.28	9.82	9.74	9.69	10.26	10.66	10.54	10.60	10.31	10.32
19	11.20	.....	10.28	9.82	9.74	9.72	10.28	10.66	10.56	10.62	10.33	10.32
20	.....	.....	10.28	9.63	9.79	9.77	10.28	10.68	10.57	10.63	10.36	10.29
21	.....	.....	10.28	9.41	9.78	9.82	10.30	10.70	10.58	10.65	.....	10.26
22	.....	.....	10.27	9.27	9.70	9.84	10.32	10.71	10.61	10.67	.....	10.26
23	.....	.....	10.28	9.23	9.63	9.87	10.33	10.73	10.63	10.68	10.31	10.29
24	.....	10.81	10.31	9.23	9.58	9.88	10.35	10.74	10.64	10.69	10.32	10.30
25	.....	10.82	10.35	9.29	9.54	9.80	10.36	10.75	10.35	10.70	10.35	10.30
26	.....	10.83	10.40	9.36	9.53	9.81	10.39	10.64	10.36	10.71	10.35	10.31
27	11.35	10.84	10.43	9.44	9.51	9.86	10.40	10.64	10.35	10.73	10.33	10.28
28	11.37	10.86	10.47	9.50	9.46	9.87	10.42	10.55	10.36	10.74	10.33	10.17
29	11.38	10.90	10.49	9.54	9.44	9.87	10.44	10.50	10.40	10.75	10.31	10.05
30	11.39	.....	10.48	9.57	9.42	9.90	10.45	10.48	10.44	10.70	10.29	9.06
31	11.40	.....	10.48	.....	8.97	....	10.46	10.46	.....	10.69	.....	9.04

28.5.4.7.2. Old Bridge observation well. Highest observed water level, above top of casing Sept. 22, 1938 and Apr. 21, 22, 23, 24 and 25, 1940; lowest observed water level, 1.8 feet below mean sea level Jan. 3, 4, 6 and 7, 1940.

Lowest daily water level, in feet with reference to mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	-1.5	-1.3	-0.7	-0.9	-0.5	+1.4	-1.0	-1.1	....	-0.8	-0.6	-0.8
2	-1.7	-1.2	-0.5	-0.9	-0.5	+0.4	-1.0	-1.0	-0.9	-0.5	-0.6	-0.9
3	-1.8	-1.3	-0.1	-0.9	-0.3	-0.3	-1.1	-1.4	....	-0.4	-0.5	-1.0
4	-1.8	-1.4	+1.1	-0.8	-0.5	-0.6	-0.9	-1.4	....	-0.6	-0.8	-0.9
5	-1.7	-1.2	+0.9	-0.7	-0.6	-0.8	-1.0	-1.4	....	-0.7	-0.7	-0.7
6	-1.8	-1.0	+0.3	-1.1	-0.8	-0.8	-1.1	-1.5	....	-0.9	-1.1	-0.8
7	-1.8	-0.9	-0.3	-1.1	-0.8	-0.8	-1.2	-1.0	....	-0.7	-1.0	-0.8
8	-1.2	-1.2	-0.4	-1.1	-1.0	-0.8	-1.3	-1.1	....	-0.6	-0.9	-0.7
9	-1.2	-1.3	-0.5	+0.6	-1.0	-0.8	-1.3	-1.2	....	-0.4	-0.8	-0.7
10	-1.4	-0.8	-0.8	0.0	-0.9	-0.4	-1.3	-1.1	....	-0.7	-0.9	-0.8

Middlesex County--Continued.

28.5.4.7.2.--Continued.

Lowest daily water level, in feet with reference to mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	-1.4	-0.7	-1.0	-0.4	-0.9	-0.5	-1.2	-1.0	-0.6	-0.8	-0.9	-1.0
12	-1.0	-0.8	-1.1	- .4	- .9	- .7	- .9	-1.1	- .8	- .9	- .9	-1.0
13	- .7	- .9	- .9	.0	- .8	- .8	- .9	....	- .9	-1.0	- .8	-1.0
14	.0	+ .6	- .9	- .1	- .7	-1.0	-1.1	....	-1.0	-1.0	- .3	-1.0
15	.0	- .6	+ .2	- .3	- .8	-1.0	-1.2	....	....	-1.1	+ .4	-1.1
16	- .5	- .6	+ .2	- .5	-1.0	-1.1	-1.2	....	- .4	- .9	- .1	-1.0
17	- .9	- .6	- .2	- .6	.0	-1.1	-1.1	....	....	- .4	- .5	- .3
18	-1.0	- .4	[illegible] .1	- .6	- .2	-1.1	-1.2	....	....	- .9	- .9	- .5
19	-1.2	- .2	- .5	- .8	- .7	-1.1	-1.2	....	-1.2	-1.0	- .8	- .6
20	-1.2	+ .9	- .7	- .7	- .7	- .9	-1.3	....	-1.1	- .7	-1.0	- .7
21	-1.5	+ .8	- .7	(a)	- .7	-1.0	-1.2	....	-1.1	-1.2	-1.0	- .8
22	-1.5	.0	- .7	(a)	- .2	-1.1	-1.2	....	- .8	-1.0	- .9	- .8
23	-1.6	- .8	- .8	(a)	+ .3	-1.2	-1.0	....	- .5	-1.1	- .9	- .8
24	-1.2	- .7	-1.1	(a)	+ .3	- .9	- .8	....	- .6	-1.1	- .9	-1.0
25	-1.2	- .8	-1.1	(a)	+ .2	....	- .8	....	- .5	-1.1	-1.0	-1.1
26	-1.4	- .9	-1.2	- .5	.0	- .2	- .9	....	- .5	-1.3	-1.0	- .9
27	-1.5	- .9	-1.1	- .5	- .2	- .5	- .7	....	- .8	-1.3	.0	- .6
28	-1.5	- .8	-1.1	- .6	- .2	- .6	- .6	....	-1.0	-1.3	- .3	- .5
29	-1.5	- .7	-1.0	- .5	.0	- .3	- .8	....	-1.1	-1.3	- .4	+ .5
30	-1.4	....	-1.0	- .6	+ .2	- .9	- .6	....	-1.2	-1.2	- .9	.0
31	-1.2	....	- .8	....	+ .8	....	-1.1	....	....	- .5	....	- .6

28.5.4.3.9. Runyon old deep well 1. Highest observed water level, 8.1 feet above mean sea level Dec. 27, 1940; lowest observed water level, 46.6 feet below mean sea level Oct. 25, 1935. Daily fluctuations ranged from less than 1 foot to as much as 20 feet in 1940.

Lowest daily water level, in feet with reference to mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	-26.6	....	-1.4	+1.0	-0.2	-2.9	-0.8	....	+4.9	+5.7	+6.1
2	.....	-26.3	-2.1	-1.5	+1.3	- .3	-2.8	- .7	....	+4.5	+6.1	+6.8
3	.....	-25.8	-1.7	-1.5	+1.2	-1.2	-2.9	- .6	....	+4.8	+6.1	+7.0
4	-25.8	-25.7	- .9	-1.4	+ .3	-1.4	-2.3	- .4	+ .4	+4.9	+6.3	+7.0
5	-26.0	-25.8	-1.3	-1.4	+ .2	-1.8	-1.3	-19.5	+ .7	+4.5	+6.2	+7.0
6	-26.2	-25.8	-1.3	-1.4	- .1	-2.0	- .9	-22.5	+1.0	+4.6	+6.0	+3.2
7	-25.7	-25.8	-1.3	-1.4	- .6	-2.2	- .6	-23.4	+1.5	+5.5	+6.0	+2.3
8	-25.3	-25.9	-1.3	-1.0	- .9	-2.5	- .2	-25.0	+1.8	+4.9	+6.1	+3.3
9	-26.0	-26.0	-1.7	- .7	-1.0	-2.5	- .1	-25.1	+2.3	+4.7	+6.2	+4.8
10	-26.7	-26.0	-1.8	- .9	-1.0	-2.1	-1.0	-25.4	+2.3	+4.8	+6.4	+5.1
11	.....	-27.0	- .3	- .9	-1.1	-2.1	- .9	-25.4	+2.3	+4.9	+6.6	+4.4
12	-27.1	-27.4	+ .1	- .7	-1.0	-2.4	-1.0	-24.6	+2.6	+5.2	+6.1	+4.5
13	-27.7	-27.8	.0	- .6	-1.1	-2.7	- .9	-24.6	+2.9	+4.7	+6.1	+4.7
14	-27.6	-28.1	.0	- .4	-1.4	-2.9	- .5	-25.8	+3.0	+4.8	+6.1	+4.9
15	-27.9	-28.7	....	+ .4	-1.5	....	+ .1	-25.9	+3.4	+4.2	+6.3	+5.3
16	-28.2	-27.4	....	+ .5	-1.6	....	+ .1	-26.1	+3.9	+3.9	+6.3	+6.1
17	-28.5	-27.5	....	+ .4	-1.0	....	+ .1	-26.1	+3.5	+4.1	+6.5	+6.1
18	.....	-27.4	....	+ .4	-1.6	....	+ .1	-25.8	+3.2	+4.9	+6.7	+5.9
19	.....	-27.8	....	+ .5	-1.4	-2.4	.0	-24.9	+3.5	+5.4	+5.9	+5.9
20	.....	-27.8	....	+ .5	-1.1	-2.7	- .1	-25.6	+3.3	+5.5	+5.8	+6.2
21	.....	-27.4	....	+1.1	-1.3	-2.3	- .2	-25.1	+3.3	+5.6	+5.8	+6.1
22	.....	-7.5	....	+1.3	-1.4	-2.0	- .3	-25.0	+3.4	+5.5	+6.6	+6.1
23	.....	-5.6	-1.1	....	-1.2	-2.0	- .6	-24.5	+4.7	+5.4	+7.1	+6.6
24	.....	-4.7	-1.1	....	-1.2	-1.8	- .7	-24.5	+4.3	+5.6	+7.1	+6.5
25	.....	-4.2	- .1	....	-1.3	-1.8	- .7	-24.0	+4.2	+5.6	+7.7	+6.8
26	-27.0	-3.5	- .3	+1.1	-1.3	-1.7	-1.0	-23.1	+4.2	+5.6	+6.8	+8.0
27	-27.3	-2.6	- .7	+ .9	-1.2	-1.9	-1.2	-24.6	+4.8	+5.6	+6.6	+8.1
28	-27.2	-2.0	-1.3	+ .9	-1.3	-3.7	-1.2	-23.0	+5.1	+6.1	+6.3	+7.9
29	-27.0	-2.6	-1.3	+1.2	-1.5	-5.1	-1.1	-23.2	+5.4	+6.1	+6.1	+8.0
30	-26.9	.....	-1.2	+1.0	-1.5	-4.4	-1.0	-23.3	+5.6	+6.0	+5.9	+8.0
31	-26.8	.....	-1.2	....	-1.0	....	- .9	.....	....	+5.7	....	+7.9

a Flowed over top of casing.

Middlesex County--Continued.

29.1.4.1.1. Runyon old deep well 8. Highest observed water level, 8.8 feet above mean sea level Apr. 3, 1933; lowest observed water level, 40.6 feet below mean sea level Oct. 25, 1935. Daily fluctuations ranged from less than 1 foot to 6.6 feet in 1940.

Lowest daily water level, in feet with reference to mean sea level, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	-13.8	-14.9	-6.6	-5.2	-2.9	-4.2	-7.1	-4.8	-5.5	+1.4	+2.4	+2.7
2	-13.6	-14.6	-5.8	-5.5	-2.4	-4.3	-6.8	-4.6	-5.5	+ .9	+2.9	+3.7
3	-13.8	-14.4	-5.8	-5.5	-2.6	-5.5	-7.3	-4.5	-3.7	+1.4	+2.9	+3.8
4	-14.3	-14.4	-4.7	-5.4	-3.7	-5.8	-6.5	-4.1	-3.0	+1.6	+3.2	....
5	-14.6	-14.4	-5.3	-5.4	-3.8	-6.2	-5.1	-8.4	-2.8	+1.0	+2.9	....
6	-14.9	-14.5	-5.3	-5.3	-4.1	-6.3	-4.7	....	-2.8	+1.2	+2.7	....
7	-14.9	-14.5	-5.3	-5.3	-4.8	-6.6	-4.6	....	-2.2	+2.2	+2.7	-2.0
8	-14.2	-14.5	-5.3	-4.8	-5.1	-6.9	-4.0	-13.5	-1.7	+1.4	+2.9	- .5
9	-15.1	-14.5	-5.5	-4.6	-5.1	-6.8	-4.1	-14.1	-1.2	+1.1	+3.0	+1.4
10	.....	-14.5	-5.5	-4.7	-5.1	-6.4	-5.2	-14.3	-1.2	+1.4	+3.3	+1.7
11	.....	-13.9	-3.8	-4.8	-5.2	-6.4	-5.1	-14.3	-1.2	+1.4	+3.5	+1.1
12	.....	-14.5	-3.6	-4.6	-5.1	-6.6	-5.1	-13.4	- .8	+1.9	+2.9	+1.0
13	.....	-14.9	-3.7	-4.4	-5.2	-6.9	-5.1	-13.3	- .6	+1.1	+2.7	+1.2
14	-17.0	-15.4	-3.8	-4.3	-5.5	-7.2	-4.4	-14.1	- .4	+1.3	+2.9	+1.4
15	-15.7	-16.0	-4.7	-3.2	-5.6	-7.2	-3.9	-14.7	+ .1	+ .7	+3.0	+2.1
16	-16.2	-15.5	-4.7	-3.2	-5.8	-7.0	-3.8	-15.2	+ .5	+ .2	+3.0	+3.0
17	-16.7	-15.5	-4.7	-3.3	-5.9	-6.3	-3.8	-15.2	- .1	+ .2	+3.2	+2.8
18	-16.5	-15.3	-4.8	-3.3	-5.7	-6.3	-3.7	-14.7	- .3	+1.4	+3.3	+2.5
19	-16.2	-16.0	-5.2	-3.3	-5.5	-6.6	-4.0	-13.5	.0	+2.1	+2.3	+2.5
20	-15.9	-16.1	-5.5	-3.2	-5.1	-7.0	-4.1	-14.1	- .2	+2.1	+2.2	+2.8
21	-15.3	-15.4	-5.5	-2.6	-5.5	-6.5	-4.1	-14.2	- .2	+2.1	+2.3	+2.7
22	-15.0	-11.3	-5.5	....	-5.6	-6.1	-4.2	-14.2	- .1	+2.1	+3.2	+2.7
23	-15.6	- 9.5	-4.9	....	-5.3	-6.1	-4.5	-13.6	+1.3	+2.0	+4.0	+3.2
24	-15.8	- 8.7	-4.9	-2.5	-5.5	-6.0	-4.6	-13.6	+ .8	+2.3	+4.0	+3.2
25	-15.6	- 7.8	-3.9	-2.6	-5.5	-6.0	-4.7	-12.9	+ .6	+2.2	+4.7	+3.7
26	-15.4	- 7.2	-4.0	-2.6	-5.5	-5.8	-5.2	-11.5	+ .7	+2.3	+3.4	+5.1
27	-15.9	- 6.1	-4.7	-3.0	-5.4	-6.0	-5.2	-11.9	+1.5	+2.3	+3.2	+4.9
28	-15.7	- 5.9	-5.3	-2.8	-5.5	-8.3	-5.1	-12.0	+1.7	+3.0	+3.0	+4.8
29	-15.5	- 6.6	-5.3	-2.5	-5.6	-10.40	-5.1	-12.4	....	+2.7	+2.7	+4.8
30	-15.3	.....	-5.1	-2.9	-5.6	-8.9	-4.9	-12.5	....	+2.7	+2.3	+4.8
31	-15.3	.....	-5.2	....	-5.0	.....	-4.9	-12.3	....	+2.4	....	+4.7

28.5.4.7.3. Runyon well 123. Highest observed water level, 6.14 feet above mean sea level Sept. 22, 1938 (flooded); lowest observed water level, 0.53 foot above mean sea level Jan. 23, 1940.

Lowest daily water level, in feet above mean sea level, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.18	0.93	1.63	1.48	2.23	2.68	1.78	1.68	1.73	1.98	1.88	1.78
2	.93	....	1.68	1.53	2.23	2.38	1.78	1.78	2.43	....	1.98	1.68
3	.83	1.03	1.88	1.53	2.33	2.13	1.73	1.58	2.13	....	1.83	1.68
4	.78	1.03	2.33	1.68	2.23	2.03	1.78	1.53	1.98	....	1.68	1.73
5	.78	1.18	2.28	1.68	2.18	2.08	1.73	1.53	1.98	....	1.73	1.83
6	.78	1.28	2.03	1.53	2.03	2.08	1.68	1.48	....	1.98	1.53	1.78
7	.68	1.43	1.78	1.43	1.98	2.08	1.68	1.58	....	1.98	1.53	....
8	1.18	1.23	1.83	1.48	1.93	2.18	1.63	1.58	2.18	1.98	1.58	....
9	1.33	1.13	1.78	2.23	1.93	2.13	1.63	1.68	2.18	1.98	1.68	....
10	1.18	1.33	1.53	1.98	1.98	2.33	1.68	1.73	2.23	1.83	1.63	....
11	1.18	1.38	1.38	1.83	1.98	2.28	1.68	1.78	2.03	1.78	1.63	....
12	1.38	1.28	1.33	1.88	2.03	2.18	1.83	1.68	1.98	1.78	1.68	....
13	1.53	1.23	1.53	1.93	2.08	2.08	1.88	1.68	1.93	1.68	1.63	....
14	1.83	1.93	1.53	1.88	2.13	1.98	1.78	1.68	1.98	1.73	1.83	....
15	1.73	1.63	2.03	1.88	2.08	1.98	1.68	1.78	2.03	1.68	2.13	.98
16	1.38	1.58	1.93	1.93	1.93	1.88	1.78	1.78	2.28	1.73	1.88	.98
17	1.23	1.53	1.78	1.88	2.13	1.88	1.78	1.88	1.98	2.08	1.68	1.23
18	1.23	1.58	1.93	1.98	2.03	1.88	1.73	1.83	1.73	1.83	1.53	1.13
19	1.08	2.08	1.78	1.83	....	1.93	1.73	1.93	1.78	1.78	1.53	1.08
20	.83	2.23	1.73	....	....	1.88	1.73	1.83	1.83	1.80	1.48	1.13
21	.68	2.13	1.58	....	....	1.88	1.73	1.83	1.78	1.58	1.48	1.63
22	.58	1.93	1.63	....	....	1.83	1.78	1.78	1.88	1.68	1.63	1.68

Middlesex County--Continued.

28.5.4.7.3.--Continued.

Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
23	.53	1.63	1.48	....	....	1.83	1.83	1.78	2.03	1.63	1.68	1.63
24	.88	1.58	1.33	....	....	1.98	1.88	1.78	1.98	1.58	1.63	1.58
25	1.08	1.53	1.33	....	....	2.33	1.88	1.78	1.88	1.58	1.58	1.58
26	.88	1.48	1.33	....	2.53	2.23	1.78	1.93	1.88	1.43	1.68	1.68
27	.83	1.53	1.43	....	2.33	2.08	1.83	1.88	1.83	1.53	2.13	1.93
28	.78	1.63	1.53	2.18	2.23	1.98	....	1.83	1.63	1.48	1.88	2.03
29	.83	1.68	1.53	2.23	2.33	2.08	1.83	2.13	....	1.53	1.83	2.43
30	.88	....	1.58	2.18	2.23	1.88	1.78	1.93	....	1.58	1.68	2.18
31	.93	....	1.63	....	2.33	....	1.68	1.73	....	1.88	....	1.83

29.1.4.4.1.A. (S-1). Highest observed water level, 11.46 feet above mean sea level Apr. 15, 1935; lowest observed water level, 3.42 feet above mean sea level Jan. 27, 1940.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	3.42	May 27	10.55	Aug. 23	6.25	Nov. 23	10.23
Feb. 24	7.86	June 23	9.23	Sept.19	8.86	Dec. 13	9.59
Mar. 30	9.86	July 22	7.53	Oct. 22	7.69		

28.5.1.8.4. Sayreville Borough test well 4. Highest observed water level, 6.1 feet above mean sea level Dec. 26, 1940; lowest observed water level, 32.9 feet below mean sea level Oct. 25, 1935.

Lowest daily water level, in feet with reference to mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	-8.2	-8.8	-6.0	-5.6	-2.6	-3.8	-5.6	-3.5	-5.7	+2.2	+2.8	+3.0
2	-8.2	-8.5	-5.3	-5.6	-2.1	-3.6	-6.3	-3.4	-2.7	+1.6	+3.2	+4.2
3	-8.4	-8.7	-5.4	-5.6	-2.2	-5.3	-6.2	-3.5	-1.8	....	+3.2	+4.2
4	-8.8	-8.5	-4.3	-5.2	-3.3	-5.4	-5.1	-3.3	-1.2	....	+3.5	+4.4
5	....	-8.5	-5.1	-5.3	-3.4	-5.8	-3.8	-3.3	-1.3	....	+3.2	+4.1
6	....	-8.5	-5.0	-5.3	-3.7	-6.0	-3.6	-5.5	- .7	....	+3.1	-1.5
7	-9.7	-8.4	-4.8	-5.5	-4.3	-6.1	-3.2	-6.6	- .6	....	+3.2	-2.4
8	-8.8	-8.5	-4.8	-4.3	-4.7	-6.6	-2.9	-7.5	- .1	....	+3.6	- .1
9	-9.1	-8.6	-5.4	-4.6	-4.5	-6.2	-2.9	-8.1	....	....	+3.7	+2.2
10	-11.0	-8.5	-5.3	-4.8	-4.6	-5.6	-4.4	-8.5	.0	+2.3	+3.9	+2.0
11	-11.3	-7.9	-3.2	-4.8	-4.9	-5.8	-3.9	-7.6	....	+2.5	+4.0	....
12	-11.2	-7.9	-3.3	-4.3	-4.5	-6.6	-4.0	-6.8	....	+3.0	+3.2	....
13	-12.4	-8.4	-3.5	-4.2	-4.8	-6.5	-3.4	-6.8	....	+2.0	....	....
14	-11.7	-9.0	-3.5	-3.7	-5.1	-6.9	-3.0	-7.7	+ .9	+2.1	....	....
15	-10.7	-9.7	-4.4	-3.1	-5.2	-6.7	-2.6	-8.1	+1.3	+ .9	....	....
16	-10.5	-9.4	-4.7	-3.1	-5.2	-6.1	-2.5	-8.6	+1.7	+ .6	....	....
17	-10.9	-9.5	-4.3	-3.4	-5.2	-5.6	-2.5	-8.6	+1.2	+1.2	....	....
18	.....	-9.0	-4.6	-3.1	-5.0	-5.7	-2.6	-8.0	+ .8	+2.5	....	....
19	.....	-10.2	-5.0	-3.0	-5.0	-6.1	-2.8	-6.4	+1.1	+3.1	....	+3.2
20	-9.8	.....	-5.4	-3.0	-4.7	-6.4	-3.0	-7.3	+ .7	+2.9	....	....
21	-9.2	.....	-5.4	-2.4	-5.0	-5.5	-3.0	-7.7	+ .6	+3.0	+3.0	....
22	-9.0	-9.1	-5.1	-2.1	-4.8	-5.9	-3.4	-7.5	+ .9	+2.9	....	....
23	-10.0	-8.2	-4.8	-2.3	-4.5	-5.6	-3.9	-7.0	+2.5	+2.7	....	....
24	-10.0	-7.8	-4.6	-2.3	-4.4	-5.3	-3.8	-6.7	+1.9	+3.2	....	....
25	-9.7	-7.2	-3.6	-2.5	-4.7	-5.1	-3.8	-6.0	+1.8	+3.1	....	....
26	-9.5	-6.6	-4.0	-2.3	-4.6	-5.1	-4.4	-4.9	+1.9	+2.9	....	+6.1
27	-10.2	-5.0	-4.6	-2.9	-4.7	-5.3	-4.5	-5.3	+2.9	+3.0	+3.5	+5.6
28	-9.7	-5.3	-5.4	-2.9	-4.9	-7.8	-4.4	-5.8	+2.8	+3.6	+3.2	+5.5
29	-10.0	-6.4	-5.1	-2.2	-4.9	-9.8	-4.2	-6.1	+3.2	+3.2	+2.7	+5.7
30	-9.8	.....	-5.0	-2.5	-4.7	-8.1	-3.8	-6.1	+3.5	+2.9	+2.6	+5.4
31	-9.4	.....	-5.0	....	-4.1	....	-3.7	-5.8	....	+2.7	....	+5.3

Middlesex County--Continued.

26.41.5.9.5. South Amboy water works old deep well 3. Highest observed water level, 20.6 feet below measuring point at some time between July 23 and Aug. 2, 1938; lowest observed water level, 48.7 feet below measuring point Aug. 22, 1937.

Water level at end of day, in feet below measuring point, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	28.61	.....	25.90	.....	.....	34.78	.....	31.91	27.00	27.61	25.36
2	28.43	.....	25.96	.....	.....	34.52	.....	31.64	27.04	27.27	25.00
3	28.42	.....	25.99	25.64	.....	34.08	.....	31.32	27.40	27.55	25.34
4	28.07	.....	26.38	25.88	.....	33.25	.....	31.26	27.72	27.04	25.31
5	27.66	.....	25.25	26.13	.....	32.78	.....	31.52	27.77	26.85	25.35
6	27.87	.....	25.15	25.70	.....	32.32	.....	31.63	27.92	27.33	26.08
7	27.68	.....	26.23	25.82	.....	32.00	.....	31.54	27.84	27.60	27.15
8	27.27	.....	25.34	26.15	.....	31.82	.....	31.12	27.80	27.65	27.27
9	27.23	.....	25.40	26.36	.....	31.94	.....	30.60	27.79	27.64	27.24
10	27.39	.....	25.44	26.25	.....	32.02	.....	30.30	27.98	27.33	27.17
11	27.50	.....	25.48	26.15	.....	32.56	.....	30.45	28.15	26.84	27.26
12	27.54	.....	25.57	25.94	.....	32.94	.....	30.55	28.26	26.73	27.33
13	27.51	.....	25.72	25.95	.....	32.72	.....	30.44	28.22	26.93	27.51
14	26.65	.....	25.82	26.34	.....	32.49	.....	30.09	28.44	27.06	27.44
15	26.81	.....	25.86	.....	.....	32.14	33.49	29.39	28.32	27.14	27.29
16	27.42	.....	25.78	.....	.....	31.58	33.52	29.28	28.16	27.22	26.76
17	27.71	.....	25.22	.....	.....	31.74	33.28	29.40	28.11	27.29	27.12
18	27.92	.....	25.41	.....	.....	31.69	32.84	29.41	28.09	27.53	27.32
19	28.05	.....	25.72	.....	.....	31.82	32.93	29.33	28.22	27.40	27.20
20	28.06	.....	25.86	.....	.....	32.31	33.32	29.32	27.84	27.40	27.21
21	28.12	.....	25.86	.....	.....	.....	32.88	29.18	27.66	27.48	27.07
22	27.99	.....	25.46	.....	.....	.....	32.42	29.20	27.85	26.87	26.78
23	27.53	.....	25.49	.....	.....	.....	32.14	28.98	28.02	26.48	26.66
24	26.93	.....	.....	.....	.....	.....	32.22	28.72	28.06	26.15	26.70
25	27.29	.....	.....	.....	32.22	.....	31.89	28.57	28.00	26.24	26.24
26	27.64	26.14	.....	.....	32.23	.....	31.74	28.74	28.04	25.73	25.46
27	27.82	26.10	.....	.....	32.49	.....	31.90	28.53	27.98	25.70	25.47
28	27.90	25.92	.....	.....	32.58	.....	31.99	28.37	27.81	26.87	25.00
29	27.99	25.88	.....	.....	33.66	.....	32.29	27.93	27.64	25.26	24.74
30	.....	.....	.....	.....	34.60	.....	32.43	27.34	27.22	25.24	25.52
31	.....	.....	.....	.....	.....	.....	32.20	.....	27.57	.....	25.82

Monmouth County

Asbury Park Area

29.24.7.1.6. Avon well 1. Highest observed water level, 4.46 feet below mean sea level Apr. 12, 1937; lowest observed water level, 132 feet below mean sea level Aug. 4, 1925 (while well was being pumped).

Water level, in feet below mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	15.83	May 6	12.13	July 9	26.95	Oct. 3	24.83
Apr. 4	12.41	29	12.85	Aug. 20	44.39		

29.24.4.8.4. Bradley Beach 650-foot well. Highest observed water level, 5.17 feet below mean sea level Apr. 17, 1935; lowest observed water level, 136.68 feet below mean sea level Aug. 27, 1925.

Water level, in feet below mean sea level, 1940

Jan. 30	16.13	May 6	13.70	July 9	22.08	Oct. 3	25.43
Apr. 4	14.82	29	13.66	Aug. 20	31.08	Nov. 8	20.75

Monmouth County

Runyon Area

29.11.2.1.1. (F-30). Highest observed water level, 75.85 feet above mean sea level Dec. 14, 1940; lowest observed water level, 59.93 feet above mean sea level June 28, 1929.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 20	64.46	May 28	70.25	Aug. 22	72.37	Nov. 22	66.35
Feb. 3	63.46	June 11	70.07	Sept.21	63.71	Dec. 14	65.85
Apr. 26	71.50	July 23	63.33	Oct. 19	64.52		

29.1.8.9.4. (F-31). Highest observed water level, 85.48 feet above mean sea level Apr. 16, 1935; lowest observed water level, 80.03 feet above mean sea level Oct. 21, 1925.

Water level, in feet above mean sea level, 1940

Jan. 20	81.06	June 11	83.26	Sept.21	81.87	Nov. 22	82.30
Feb. 3	80.84	July 23	82.40	Oct. 19	81.80	Dec. 14	82.08
May 28	83.02	Aug. 22	81.88				

29.11.1.2.9. Hulsart well. Highest observed water level, 100.40 feet above mean sea level Apr. 19, 1939; lowest observed water level, 95.47 feet above mean sea level Feb. 18, 1940.

Water level at the end of day, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	95.80	95.59	95.96	96.95	98.44	98.77	98.78	98.03	97.85	97.50	97.11	97.42
2	95.79	95.58	95.99	96.97	98.50	98.83	98.74	98.00	97.93	97.50	97.12	97.43
3	95.78	95.56	96.03	97.01	98.54	98.89	98.74	97.98	98.00	97.49	97.10	97.41
4	95.77	95.55	96.04	97.02	98.55	98.94	98.72	97.95	98.07	97.49	97.13	97.43
5	95.76	95.54	96.05	97.02	98.58	98.99	98.69	97.93	98.10	97.48	97.14	97.40
6	95.75	95.54	96.09	97.04	98.61	99.01	98.68	97.91	98.11	97.49	97.10	97.40
7	95.74	95.53	96.13	97.04	98.61	99.01	98.67	97.89	98.09	97.48	97.09	97.43
8	95.74	95.53	96.17	97.11	98.64	99.02	98.64	97.88	98.08	97.47	97.07	97.43
9	95.72	95.52	96.20	97.09	98.64	99.03	98.62	97.85	98.05	97.44	97.06	97.43
10	95.71	95.52	.....	97.12	98.64	99.04	98.60	97.83	97.99	97.44	97.05	97.42
11	95.70	95.51	.....	97.17	98.64	99.07	98.59	97.80	97.94	97.43	97.04	97.40
12	95.69	95.50	.....	97.22	98.64	99.08	98.55	97.79	97.90	97.41	97.03	97.44
13	95.69	95.49	.....	97.24	98.65	99.08	98.53	97.78	97.85	97.39	97.04	97.40
14	95.72	95.50	.....	97.28	98.62	99.07	98.51	97.75	97.83	97.39	97.09	97.39
15	95.69	95.48	.....	97.33	98.60	99.06	98.50	97.73	97.80	97.35	97.13	97.40
16	95.68	95.48	.....	97.37	98.62	99.00	98.47	97.71	97.76	97.34	97.18	97.45
17	95.67	95.48	.....	97.40	98.63	98.99	98.44	97.70	97.73	97.34	97.21	97.42
18	95.67	95.47	96.55	97.44	98.63	99.01	98.41	97.69	97.69	97.31	97.21	97.43
19	95.67	95.48	96.59	97.49	98.64	99.00	98.39	97.67	97.68	97.30	97.25	97.45
20	95.66	95.50	96.64	97.55	98.62	98.98	98.38	97.64	97.64	97.28	97.29	97.47
21	95.66	95.59	96.68	97.62	98.60	98.94	98.34	97.63	97.63	97.25	97.31	97.47
22	95.66	95.67	96.70	97.69	98.61	98.94	98.32	97.60	97.59	97.24	97.30	97.47
23	95.66	95.73	96.73	97.78	98.62	98.93	98.29	97.58	97.58	97.24	97.32	97.44
24	95.65	95.79	96.77	97.87	98.63	98.93	98.27	97.56	97.56	97.21	97.36	97.46
25	95.64	95.84	96.79	97.98	98.61	98.92	98.24	97.55	97.54	97.20	97.34	97.47
26	95.64	95.84	96.81	98.08	98.60	98.90	98.22	97.54	97.55	97.18	97.42	97.47
27	95.63	95.88	96.84	98.18	98.62	98.86	98.18	97.55	97.56	97.16	97.40	97.47
28	95.62	95.91	96.87	98.25	98.63	98.89	98.15	97.58	97.54	97.14	97.39	97.49
29	95.61	95.94	96.89	98.33	98.58	98.85	98.14	97.65	97.53	97.13	97.42	97.50
30	95.60	.....	96.94	98.40	98.60	98.82	98.11	97.72	97.51	97.14	97.44	97.50
31	95.59	.....	96.94	.....	98.68	.....	98.08	97.75	.....	97.12	.....	97.51

NEW YORK

CENTRAL NEW YORK

By G. D. Freeman

Measurements of ground-water level in 4 wells in central New York were continued in 1940, by the Federal Geological Survey in cooperation with the New York State Department of Conservation in connection with a study to determine the effects of reforestation on stream flow. Previous records of water levels in the wells are published in Geological Survey Water-Supply Papers 777, 817, 840, 845, and 886. A brief description of the geological character of the water-bearing formations that the wells tap is given in Water-Supply Paper 886. The water level in none of the wells is affected by pumpage or other acts of man.

The most outstanding feature shown by the records of ground-water level in 1940 is the long period of sustained high levels that occurred in the spring months due to abundant recharge to the underground reservoirs from melting snow. The water levels in all the wells were higher at the end of 1940 than at the end of 1939.

The year 1940 was characterized by an abnormally wet winter and spring, an abnormally dry summer and early fall, and an abnormally wet late fall and early winter. The water level in Shackham Brook well 1 reflected these conditions by remaining relatively high until the middle of June, declining with some interruptions until the middle of October, and then rising to within a foot of the land surface by the middle of November and remaining at this high stage throughout the rest of the year. Unusually heavy rains on June 24 and August 5 produced sufficient recharge to cause the water level in the well to rise appreciably. The lowest stage of the year was reached on October 19.

In addition to the four observation wells mentioned above, which are equipped with automatic water-stage recorders, measurements are made in two wells in the Shackham Brook area and in one well in the Sage Brook area. Records of water level are given in the following tables for only the four wells equipped with water-stage recorders.

Shackham Brook Well 1. Latitude 42°46'00", longitude 76°01'10". On top of hill about 300 feet upstream from stream-gaging station, 500 feet to left of Shackham Brook, and about 5 miles north of Truxton, Cortland County. Dug well, formerly lined with concrete tile but relined on Sept. 23, 1938, with 8-foot length of 18-inch corrugated galvanized-iron pipe. Timber instrument shelter formerly rested on concrete base separate from iron pipe of well, but on Aug. 2, 1940, was attached firmly to pipe. Measuring point, painted mark on top of pipe, 0.26 foot above former measuring point, about 1 foot above land surface, which is about 1,600 feet above sea level. Readings until Aug. 2, 1940, made by measuring distance from measuring point to water surface; thereafter by means of tape and weight device with reference point set to datum. Measurements are corrected for change in reference point. Read weekly, Aug. 26, 1933, to June 6, 1935. Stevens water-stage recorder installed June 6, 1935.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	1.20	Apr. 7	0.34	July 6	0.40	Oct. 5	4.76
10	1.34	9	.30	13	1.17	12	4.85
13	1.39	13	.36	20	2.09	19	4.88
20	.94	20	.38	27	2.33	25	4.18
25	1.12	25	.34	29	2.62	26	4.14
27	1.27	27	.37	Aug. 2	2.95	Nov. 2	3.32
Feb. 3	1.48	May 4	.77	3	3.11	9	1.71
10	1.09	11	1.36	10	2.31	10	1.58
12	.62	16	1.54	14	2.69	16	.75
17	.81	18	1.24	17	3.00	23	.80
24	.76	25	.87	24	3.43	30	1.07
Mar. 2	1.07	June 1	.92	31	3.77	Dec. 2	.99
7	.59	8	1.61	Sept. 7	4.12	7	.92
9	.69	11	.61	14	4.32	14	.40
16	.73	15	.80	17	4.45	20	.50
23	.66	22	1.95	21	4.53	21	.48
30	.40	29	.47	28	4.68	28	.36

Sage Brook Well 2. 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, Chenango County. Dug well, lined with concrete tile, 21 inches in diameter, 7.5 feet deep. Timber instrument shelter built on top of well and bolted firmly to it June 10, 1940. Measuring point, painted mark on rim of concrete pipe, about 1 foot above land surface, which is about 1,452 feet (revised) above sea level. Readings made by measuring distance from measuring point to water surface. Read weekly Oct. 27, 1934, to July 20, 1935. Gurley water-stage recorder installed July 20, 1935; replaced by Stevens water-stage recorder Aug. 8, 1939.

Water level, in feet below measuring point, 1940

Jan. 1	1.80	Apr. 8	1.30	July 8	1.83	Oct. 7	1.83
8	1.82	10	1.63	15	1.93	14	1.70
11	1.99	15	1.63	22	2.06	18	1.65
15	1.66	22	1.41	26	1.98	21	1.64
22	1.04	27	1.61	29	2.30	28	1.75
26	1.94	29	1.66	Aug. 5	3.53	29	1.74
29	2.00	May 6	1.71	12	3.02	Nov. 4	1.66
Feb. 5	2.10	13	1.74	19	4.00	11	1.67
12	1.91	17	1.73	26	4.80	18	1.64
19	1.91	20	1.68	Sept. 2	1.61	25	1.63
26	1.98	27	1.72	9	2.10	Dec. 2	1.67
Mar. 4	1.64	June 3	1.71	16	2.13	9	1.65
11	1.88	10	1.86	17	2.24	10	1.66
18	1.84	17	2.04	23	2.12	16	2.36
25	1.89	24	2.70	27	1.64	23	1.68
30	1.64	July 1	1.50	30	1.74	30	1.58
Apr. 1	1.43						

Cold Spring Brook Well 1. Latitude 42°09'35", longitude 75°23'35". About 150 feet to the left of stream-gaging station on Cold Spring Brook, about 1 mile above China and 2 miles west of Upper Barbourville, Delaware County. Dug well lined formerly with vitrified tile 18 inches in diameter, 12 feet deep, but relined with 18-inch corrugated galvanized-iron pipe June 20, 1939. Timber instrument shelter built on top of well and bolted firmly to it Oct. 7, 1940. Measurements made with hook rod and scale until Dec. 16, 1939, when replaced by tape and weight, and are distances to water surface below measuring point, about 2 feet above land surface, which is about 1,540 feet above sea level. Gurley water-stage recorder installed Oct. 24, 1934, replaced by Stevens water-stage recorder June 20, 1939.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	5.42	Apr. 9	2.97	June 23	7.12	Oct. 8	3.39
6	6.18	15	3.31	29	4.66	12	4.75
8	6.74	16	3.23	July 6	5.37	18	5.62
12	7.20	20	2.86	8	6.03	19	5.88
15	5.54	23	3.00	13	6.89	26	7.18
22	5.85	27	4.10	20	7.54	Nov. 1	6.93
26	6.67	29	4.74	27	8.03	2	3.34
29	7.12	30	5.13	31	7.97	9	4.18
Feb. 2	7.51	May 4	5.46	Aug. 3	8.32	16	3.08
5	7.75	11	6.31	10	8.45	18	3.32
12	7.00	18	6.96	17	8.68	23	3.84
20	4.18	20	6.92	24	9.00	30	5.43
26	5.06	25	7.03	31	7.66	Dec. 7	5.88
Mar. 4	4.57	June 1	4.54	Sept. 7	7.38	9	5.90
9	3.97	8	6.20	14	7.04	14	3.16
16	3.58	10	6.24	21	7.78	16	3.29
18	3.78	15	5.58	28	5.10	21	3.37
26	4.43	16	6.01	Oct. 4	6.64	28	2.71
Apr. 1	3.06	22	7.04				

East Homer Creek Well 1. Latitude 42°43'05", longitude 76°06'50". On side of hill, about 70 feet to right of creek, and about 2½ miles above gaging station in East Homer, Cortland County. Dug well lined with 9-foot length of 18-inch corrugated galvanized-iron pipe. Timber instrument shelter formerly rested on concrete base but on Oct. 9, 1940, was bolted firmly to the well pipe. Readings made with a hook gage, with hook gage scale 11.00 feet above zero of staff gage until Jan. 9, 1940, when hook rod was removed and readings made by measuring directly downward from zero of hook gage scale. On Feb. 12, 1940, a tape and weight measuring device was installed. Prior to Jan. 1, 1940, readings were distances in feet above an assumed datum which was about 10 feet below land surface. Beginning Jan. 1, 1940, the readings are distances in feet below measuring point, which is 11.00 feet above the same datum used prior to Jan. 1, 1940. To convert water levels prior to 1940 to datum used in 1940, subtract from 11.00 feet.

Water level, in feet below measuring point, 1940

Jan. 6	(a)	Mar. 30	3.05	July 6	3.40	Oct. 9	6.79
9	3.67	Apr. 5	3.00	13	4.07	13	6.81
13	3.95	9	2.31	20	5.20	20	6.84
20	4.48	13	2.35	27	5.27	25	6.84
24	4.03	21	2.44	Aug. 3	5.69	27	6.84
27	3.86	25	2.46	10	5.75	Nov. 3	6.26
Feb. 3	4.54	27	2.59	14	5.97	10	3.61
10	3.74	May 4	3.05	17	6.16	13	2.96
12	3.48	11	5.15	24	6.37	16	3.11
17	3.20	16	3.67	31	6.54	23	3.05
24	3.19	18	3.30	Sept. 7	6.73	30	3.99
25	3.22	25	4.25	15	6.55	Dec. 3	3.58
Mar. 2	3.49	June 1	4.09	17	6.57	8	3.59
7	3.25	8	5.49	22	6.73	14	3.03
9	3.26	12	3.56	26	6.73	20	2.71
16	3.35	15	4.49	29	6.71	21	2.68
20	3.14	22	5.43	Oct. 6	6.77	28	2.96
23	3.23	30	3.84				

a Water frozen in well.

LONG ISLAND

By R. M. Leggette

The investigation of ground-water conditions on Long Island was continued during 1940 by the Federal Geological Survey in cooperation with the New York State Water Power and Control Commission and with Nassau and Suffolk Counties. Automatic water-stage recorders were in operation on about 25 wells at the end of the year. During the year, water-level measurements were made weekly in about 90 observation wells and monthly in about 55 wells. A total of about 6,000 individual measurements of ground-water level were made during 1940.

The following tables summarize data pertaining to ground-water levels on Long Island.

Summary of ground-water-level data for Long Island, N. Y.

Well No.	First measured	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 1940 (feet)
		Water level (feet)	Date	Water level (feet)	Date	
K 10	Nov. 8, 1937	-16.89	Sept.30, 1939	-11.52	Mar. 26, 1938	-14.14
K 19	Sept.10, 1940	-26.04	Sept.13, 1940	a-25.28	Dec. 29, 1940	-25.40
K 30	June 14, 1935	-29.16	Dec. 14, 1940	a-24.34	June 14, 1935	-28.98
K 65	Nov. 8, 1937	-28.34	Aug. 25, 1939	-24.01	Apr. 9, 1938	-26.13
K 67	Nov. 8, 1937	-20.28	Dec. 28, 1940	-18.49	Mar. 26, 1938	-20.28
K 87	Nov. 8, 1937	-9.25	Dec. 28, 1940	-7.33	July 7, 1939	-9.25
K 92	Dec. 11, 1937	-29.69	Dec. 11, 1937	-22.32	Dec. 28, 1940	-22.32
K 104	Aug. 27, 1940	-26.12	Oct. 12, 1940	-25.74	Dec. 28, 1940	-25.74
K 463	Feb. 26, 1938	-.22	Sept.28, 1940	+6.18	Oct. 14, 1938	.....
K 532	May 29, 1935	-1.63	Mar. 2, 1940	-.17	Oct. 7, 1938	-1.22
K 533	Sept. 8, 1932	-23.07	Dec. 19, 1940	a-12.73	Dec. 20, 1932	-23.02
K 535	Nov. 5, 1936	+1.25	Apr. 9, 1938	+2.81	Sept.30, 1938	+1.78
K 537	Feb. 1, 1936	-7.29	Feb. 17, 1940	-4.77	Sept.30, 1938	-7.10
K 539	Oct. 28, 1939	-7.33	Aug. 31, 1940	-4.18	Dec. 28, 1940	-4.18
K 921	Feb. 12, 1938	-27.23	Dec. 16, 1938	-22.77	Oct. 14, 1938	-25.27
K 1057	Mar. 29, 1939	+.89	Feb. 13, 1940	a+9.30	Mar. 30, 1939	+8.18
K 1139	Oct. 28, 1939	-7.50	Aug. 31, 1940	a-2.58	Dec. 30, 1940	-2.60
K 1141	Oct. 24, 1936	-7.22	Feb. 10, 1940	-4.63	Sept.30, 1938	-7.04
K 1194	Nov. 2, 1940	-3.91	Nov. 2, 1940	-3.23	Dec. 28, 1940	-3.23
K 1198	Nov. 2, 1940	-7.22	Nov. 2, 1940	-6.23	Dec. 28, 1940	-6.23
K 1199	Nov. 16, 1940	-15.77	Nov. 23, 1940	-15.68	Dec. 28, 1940	-15.68
N 7	July 24, 1936	+6.16	Aug. 15, 1937	a+12.57	Mar. 18, 1937	+12.15
N 9	July 3, 1936	+20.99	Sept.11, 1936	+23.57	Sept.23, 1939	+21.85
N 53	Jan. 21, 1934	+12.05	Feb. 17, 1940	+16.49	Apr. 15, 1939	+12.93
N 66	Mar. 19, 1932	+3.63	Oct. 16, 1937	+11.04	Feb. 17, 1933	+10.06
N 67	Mar. 16, 1932	+13.48	Aug. 15, 1937	a+18.85	Apr. 12, 1939	+18.21
N 125	Aug. 14, 1937	+6.96	Feb. 10, 1940	+9.32	Apr. 29, 1939	.....
N 157	Sept.22, 1932	+75.71	May 5, 1933	a+88.84	Oct. 31, 1939	+85.75
N 844	June 27, 1938	+79.85	July 28, 1938	a+85.48	Aug. 5, 1939	+81.79
N 1101	Apr. 21, 1939	+44.18	Sept.29, 1939	+45.64	Apr. 28, 1939	+44.34
N 1102	Apr. 21, 1939	+56.29	Dec. 27, 1940	+58.64	July 28, 1939	+56.29
N 1103	Apr. 21, 1939	+57.32	Dec. 27, 1940	+60.46	June 30, 1939	+57.32
N 1104	Apr. 21, 1939	+57.20	Dec. 27, 1940	+61.15	June 2, 1939	+57.20

a Based on instrumental records of lowest daily water level.

Summary of ground-water-level data for Long Island, N. Y.--Continued.

Well No.	First measured	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 1940 (feet)
		Water level (feet)	Date	Water level (feet)	Date	
N 1105	Apr. 21, 1939	+54.52	Dec. 27, 1940	+58.85	June 2, 1939	+54.52
N 1106	Jan. 6, 1939	+50.02	Dec. 28, 1940	+54.82	May 20, 1939	+50.02
N 1107	Apr. 21, 1939	+42.95	Dec. 27, 1940	+48.21	Apr. 28, 1939	+42.95
N 1108	Apr. 21, 1939	+38.17	Dec. 27, 1940	+43.62	Apr. 28, 1939	+38.17
N 1109	Apr. 21, 1939	+26.12	Feb. 2, 1940	+30.04	Apr. 21, 1939	+26.51
N 1110	Apr. 21, 1939	+18.96	Sept.29, 1939	+21.05	Apr. 21, 1939	+19.81
N 1111	Apr. 21, 1939	+11.95	Nov. 3, 1939	+14.04	Sept.27, 1940	+13.34
N 1112	Jan. 6, 1939	+7.48	Feb. 17, 1940	+10.17	Apr. 8, 1939	+9.14
N 1113	Apr. 21, 1939	+3.98	Sept.29, 1939	+6.76	Apr. 21, 1939	+5.66
N 1114	Apr. 21, 1939	+8.30	Nov. 3, 1939	+11.87	Apr. 21, 1939	+9.08
N 1115	Apr. 21, 1939	+8.85	Feb. 2, 1940	+12.93	Apr. 21, 1939	+9.71
N 1126	Mar. 12, 1938	+56.72	Dec. 28, 1940	+62.21	Apr. 29, 1939	+56.72
N 1132	Apr. 2, 1938	+6.06	Feb. 24, 1940	+9.77	Sept.23, 1938	+7.83
N 1140	Jan. 7, 1939	+59.78	Dec. 28, 1940	+66.09	Apr. 29, 1939	+59.78
N 1147	Jan. 6, 1939	+16.83	Oct. 26, 1940	+19.72	Apr. 8, 1939	+17.29
N 1160	Jan. 7, 1939	+64.77	Dec. 28, 1940	+70.90	Apr. 15, 1939	+64.77
N 1167	Mar. 12, 1938	+10.19	Aug. 19, 1939	+12.92	Apr. 15, 1939	+10.87
N 1177	Sept.27, 1940	+85.61	Dec. 27, 1940	+86.17	Sept.27, 1940	+85.61
N 1179	Apr. 29, 1940	+74.36	Dec. 27, 1940	+76.30	May 31, 1940	+74.36
N 1180	Mar. 5, 1938	+66.65	June 24, 1938	+71.55	Apr. 15, 1939	+67.02
N 1181	Apr. 29, 1940	+57.34	Nov. 1, 1940	+58.85	May 31, 1940	+57.40
N 1182	Mar. 5, 1938	+49.75	Nov. 1, 1940	+53.15	Sept.30, 1938	+49.88
N 1183	Apr. 29, 1940	+35.57	Nov. 1, 1940	+37.73	Apr. 29, 1940	+36.05
N 1184	Apr. 29, 1940	+21.26	Nov. 1, 1940	+23.30	Apr. 29, 1940	+21.92
N 1185	Apr. 2, 1938	+11.24	Aug. 19, 1939	+15.39	Apr. 8, 1939	+12.70
N 1186	Apr. 29, 1940	+4.14	Aug. 2, 1940	+5.54	Nov. 29, 1940	+5.15
N 1198	Jan. 6, 1939	+65.27	Dec. 28, 1940	+70.49	May 6, 1939	+65.27
N 1204	Jan. 6, 1939	+5.58	Feb. 17, 1940	+12.26	Apr. 8, 1939	+9.81
N 1216	Jan. 7, 1939	+64.24	Dec. 28, 1940	+69.16	May 20, 1939	+64.24
N 1222	Jan. 6, 1939	+1.39	Oct. 28, 1939	+9.67	Apr. 8, 1939	+8.56
N 1234	Jan. 7, 1939	+61.27	Dec. 14, 1940	+66.64	May 6, 1939	+61.30
N 1240	Jan. 6, 1939	-.60	Sept.23, 1939	+11.29	Apr. 8, 1939	+8.72
N 1242	Apr. 21, 1939	+27.09	Dec. 27, 1940	+27.77	Sept. 1, 1939	+27.09
N 1243	Nov. 3, 1939	+57.23	Dec. 27, 1940	+58.22	Dec. 1, 1939	+57.23
N 1244	May 31, 1940	+75.60	Dec. 27, 1940	+76.50	May 31, 1940	+75.60
N 1245	Feb. 2, 1940	+80.48	Dec. 27, 1940	+82.88	Feb. 2, 1940	+80.48
N 1246	May 31, 1940	+80.85	Dec. 27, 1940	+82.12	May 31, 1940	+80.85
N 1247	Apr. 21, 1939	+73.46	Dec. 27, 1940	+76.98	July 28, 1939	+73.46
N 1248	Jan. 7, 1939	+59.44	Dec. 28, 1940	+65.51	Apr. 15, 1939	+59.44
N 1249	Apr. 21, 1939	+52.13	Nov. 1, 1940	+58.18	Apr. 21, 1939	+52.16
N 1250	Apr. 21, 1939	+44.59	Nov. 1, 1940	+49.64	Apr. 21, 1939	+44.92
N 1251	Apr. 21, 1939	+36.48	Nov. 1, 1940	+40.18	Apr. 21, 1939	+37.26
N 1252	Apr. 21, 1939	+23.32	Sept.29, 1939	+26.19	Apr. 21, 1939	+24.34
N 1253	Jan. 6, 1939	+11.88	Oct. 28, 1939	+16.89	Apr. 8, 1939	+15.02
N 1254	Apr. 21, 1939	+2.55	Feb. 2, 1940	+4.08	Apr. 28, 1939	+3.74
N 1255	May 12, 1913	+59.35	Nov. 28, 1936	+65.59	Apr. 15, 1939	+60.08
N 1256	May 12, 1913	+70.30	Feb. 27, 1933	+80.97	May 20, 1939	+76.82
N 1257	Aug. 17, 1932	+5.87	Oct. 7, 1932	+10.17	Apr. 8, 1939	+7.24
N 1258	Oct. 8, 1931	+33.68	Dec. 28, 1931	+39.58	Apr. 8, 1939	+36.43
N 1259	Feb. 5, 1909	+47.83	Jan. 24, 1933	+56.43	Apr. 29, 1939	+51.20
N 1260	June 6, 1903	+16.52	Dec. 20, 1916	+23.68	Apr. 8, 1939	+20.36
N 1261	Mar. 7, 1932	+2.49	Feb. 17, 1940	+8.47	Apr. 8, 1939	.....
N 1262	Oct. 5, 1931	+32.66	Oct. 5, 1932	+36.20	Apr. 8, 1939	+34.42
N 1263	Nov. 3, 1911	+46.22	Oct. 31, 1932	+54.98	Apr. 22, 1939	+49.47
N 1264	Mar. 7, 1932	+2.70	Feb. 17, 1940	+9.41	Apr. 8, 1939	+7.15
N 1265	Mar. 9, 1939	+2.78	Jan. 31, 1940	+4.23	Nov. 1, 1939	+3.25
N 1266	Mar. 9, 1939	+4.16	Apr. 1, 1940	+5.84	Mar. 14, 1939	+5.08
N 1269	Mar. 9, 1939	+5.78	Feb. 29, 1940	+9.57	Mar. 14, 1939	+7.57
N 1270	Mar. 9, 1939	+6.55	Apr. 1, 1940	+9.82	Mar. 14, 1939	+8.55
N 1271	Mar. 9, 1939	+1.23	Aug. 1, 1939	+3.49	Mar. 14, 1939	+2.38
N 1273	Nov. 1, 1939	+4.34	Jan. 2, 1940	+6.42	Dec. 2, 1940	+6.42
N 1274	Nov. 1, 1939	+4.38	Jan. 2, 1940	+6.45	Dec. 2, 1940	+6.45
N 1275	Nov. 1, 1939	+1.96	Jan. 2, 1940	+3.35	May 1, 1940	+2.82

Summary of ground-water-level data for Long Island, N. Y.--Continued.

Well No.	First measured	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 1940 (feet)
		Water level (feet)	Date	Water level (feet)	Date	
N 1276	Nov. 1, 1939	+1.96	Jan. 2, 1940	+3.35	May 1, 1940	+2.84
N 1278	Nov. 3, 1939	+5.11	Jan. 2, 1940	+6.59	May 1, 1940	+6.12
N 1279	Nov. 3, 1939	+5.12	Jan. 2, 1940	+6.60	May 1, 1940	+6.13
N 1280	Jan. 2, 1940	+2.68	Feb. 29, 1940	+8.70	Dec. 2, 1940	+8.70
N 1281	Nov. 3, 1939	+2.70	Feb. 29, 1940	+8.67	Dec. 2, 1940	+8.67
N 1282	Nov. 1, 1939	+.34	Apr. 1, 1940	+2.33	Oct. 31, 1940	+1.61
N 1283	Nov. 1, 1939	+.35	Apr. 1, 1940	+2.33	Oct. 1, 1940	+1.62
N 1285	Nov. 1, 1939	+2.12	Jan. 31, 1940	+3.29	May 31, 1940	+2.90
N 1286	Nov. 1, 1939	+2.13	Jan. 31, 1940	+3.29	May 31, 1940	+2.91
N 1288	Nov. 1, 1939	+2.21	Jan. 2, 1940	+3.74	May 1, 1940	+3.16
N 1289	Nov. 1, 1939	+2.26	Jan. 2, 1940	+3.77	May 1, 1940	+3.21
N 1290	Nov. 1, 1939	+2.60	Nov. 1, 1939	+4.94	Dec. 1, 1939	+3.71
N 1613	July 3, 1936	+21.73	Feb. 17, 1940	+24.38	Apr. 15, 1939	+23.00
N 1614	Apr. 2, 1913	+61.90	Feb. 27, 1933	+71.03	May 1, 1914	+67.71
N 1615	Mar. 17, 1913	+41.49	Oct. 27, 1932	+47.17	Mar. 28, 1939	+43.25
N 1616	Mar. 17, 1913	+74.05	Feb. 27, 1933	+85.42	June 1, 1939	+81.56
N 1617	Nov. 26, 1903	+2.32	Dec. 21, 1912	+4.80	Nov. 5, 1906	+3.24
N 1621	Apr. 19, 1940	+38.81	Nov. 2, 1940	+39.99	June 15, 1940	.....
N 1672	Oct. 4, 1940	+56.53	Nov. 2, 1940	a+57.11	Nov. 21, 1940	+56.77
N 1682	Nov. 30, 1940	+42.67	Dec. 28, 1940	+42.81	Dec. 7, 1940	+42.67
N 1683	Dec. 3, 1940	+54.87	Dec. 28, 1940	+55.07	Dec. 3, 1940	+54.87
N 1684	Nov. 30, 1940	+56.93	Dec. 28, 1940	+58.22	Nov. 30, 1940	+56.93
Q 248	Sept.14, 1939	+22.36	Nov. 9, 1940	+24.99	Sept.16, 1939	.....
Q 268	Apr. 21, 1933	+12.80	Aug. 21, 1933	a+17.53	Apr. 11, 1939	+15.76
Q 273	Mar. 15, 1935	+4.32	July 11, 1937	a+8.47	Apr. 20, 1939	+5.50
Q 287	Apr. 13, 1939	+.35	Feb. 13, 1940	a+8.89	May 13, 1940	+7.75
Q 350	Mar. 17, 1937	-.82	Aug. 21, 1937	+3.51	Apr. 29, 1939	-.10
Q 470	Sept.21, 1933	-12.75	July 15, 1937	a+6.78	Jan. 8, 1938	+5.56
Q 471	Mar. 31, 1939	+13.69	Mar. 31, 1939	+16.47	June 15, 1940	+16.04
Q 503	Feb. 1, 1936	+9.36	Dec. 14, 1940	a+12.61	Apr. 30, 1939	+9.39
Q 543	May 17, 1932	-28.36	Feb. 13, 1940	a+10.48	Mar. 12, 1939	+8.11
Q 1078	July 24, 1939	+4.26	Feb. 17, 1940	a+5.97	June 24, 1940	+5.43
Q 1090	Oct. 10, 1911	+1.19	Oct. 17, 1932	+8.29	May 12, 1913	.....
Q 1092	Apr. 8, 1939	+7.32	Feb. 17, 1940	+8.61	Apr. 8, 1939	+8.42
Q 1222	Apr. 1, 1940	+1.34	Apr. 8, 1940	+3.14	Dec. 28, 1940	+3.14
Q 1223	Jan. 28, 1933	+5.78	Dec. 12, 1935	+10.23	Apr. 4, 1939	+7.20
Q 1224	Apr. 20, 1933	+7.12	Jan. 9, 1934	+12.41	May 29, 1939	+8.46
Q 1225	Apr. 20, 1933	+27.85	Dec. 11, 1935	+32.19	Apr. 4, 1939	+28.23
Q 1237	Feb. 10, 1939	-1.59	Apr. 13, 1940	a+5.03	May 4, 1939	+3.40
Q 1248	Oct. 12, 1940	+35.44	Oct. 26, 1940	+35.74	Dec. 7, 1940	+35.67
Q 1249	Oct. 19, 1940	+31.77	Dec. 28, 1940	+31.99	Oct. 19, 1940	+31.77
Q 1250	Oct. 19, 1940	+21.11	Dec. 28, 1940	+21.62	Nov. 2, 1940	+21.11
Q 1251	Oct. 19, 1940	+11.88	Dec. 28, 1940	+13.02	Oct. 19, 1940	+11.88
Q 1252	Oct. 26, 1940	+13.36	Dec. 14, 1940	+13.55	Nov. 16, 1940	+13.40
Q 1253	Nov. 2, 1940	+3.89	Nov. 16, 1940	+4.24	Nov. 23, 1940	+4.13
Q 1254	Oct. 26, 1940	-.54	Nov. 16, 1940	-.17	Dec. 28, 1940	-.17
Q 1256	Oct. 26, 1940	-3.40	Nov. 2, 1940	-3.01	Dec. 28, 1940	-3.01
S 28	Nov. 28, 1936	+93.11	Dec. 18, 1936	a+97.71	May 20, 1939	+93.55
S 201	Apr. 16, 1937	+26.41	July 18, 1938	a+31.35	Apr. 23, 1939	+28.02
S 202	Nov. 25, 1936	+36.93	Feb. 1, 1939	a+47.17	Apr. 10, 1937	+39.50
S 203	Feb. 14, 1937	+70.94	Feb. 17, 1937	a+77.13	Oct. 31, 1939	+75.61
S 1803	Oct. 18, 1912	+14.94	Sept.11, 1937	+18.19	Apr. 22, 1913	+16.08
S 1804	Oct. 16, 1912	+10.10	Oct. 29, 1935	+11.47	Sept.23, 1938	+10.77
S 1805	Oct. 16, 1912	+37.90	Oct. 27, 1932	+47.01	Apr. 8, 1939	.....
S 1806	Oct. 18, 1912	+50.61	Jan. 5, 1933	+61.69	Apr. 22, 1939	+55.58
S 1807	Oct. 19, 1912	+20.59	Sept.12, 1932	+23.48	Oct. 14, 1938	+21.71
S 1808	Oct. 21, 1912	+9.45	Sept.12, 1932	+12.94	Sept.23, 1938	+10.94
S 1809	Oct. 21, 1912	+25.00	Nov. 2, 1932	+32.56	Apr. 15, 1939	+27.75
S 1810	Oct. 21, 1912	+45.24	Feb. 23, 1933	+56.19	Apr. 29, 1939	+51.18
S 1811	Feb. 28, 1937	+51.41	Aug. 28, 1937	a+55.56	Apr. 20, 1940	+54.99
S 1812	Apr. 17, 1937	+45.37	Feb. 12, 1938	+51.09	May 27, 1939	+47.53

a Based on instrumental records of lowest daily water level.

Summary of ground-water-level data for Long Island, N. Y.--Continued.

Well No.	First measured	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 1940 (feet)
		Water level (feet)	Date	Water level (feet)	Date	
S 1813	Nov. 4, 1939	+38.04	Mar. 2, 1940	+39.64	June 15, 1940	+38.46
S 1814	Nov. 4, 1939	+36.34	Mar. 2, 1940	+38.28	June 29, 1940	+36.79
S 1815	Dec. 2, 1939	+45.85	Mar. 2, 1940	+47.81	June 29, 1940	+46.13
S 1816	Dec. 2, 1939	+57.37	Mar. 2, 1940	+59.93	June 1, 1940	+57.52
S 1817	Dec. 2, 1939	+51.40	Oct. 26, 1940	+53.95	June 1, 1940	+52.00
S 2020	Apr. 21, 1940	+9.07	Nov. 29, 1940	a+10.32	June 25, 1940	+9.32
S 2454	Sept.21, 1940	+6.99	Oct. 26, 1940	+8.01	Nov. 16, 1940	+7.49
S 2455	June 23, 1933	+19.98	Nov. 6, 1937	a+24.85	Sept.23, 1938	+21.80

Net change in water level, in feet, in wells on Long Island, N. Y., 1940

Well No.	Net change	Well No.	Net change	Well No.	Net change	Well No.	Net change
K 10	-0.54	N 1110	+0.58	N 1255	-0.60	Q 268	-0.05
K 30	-.19	N 1111	-.15	N 1256	-1.69	Q 273	-1.23
K 65	-.56	N 1112	+1.01	N 1257	+.95	Q 287	+1.95
K 67	-.56	N 1113	+.80	N 1258	+.12	Q 350	-.29
K 87	-.67	N 1114	+.62	N 1259	-1.04	Q 470	+2.91
K 92	+.74	N 1115	+.77	N 1260	+2.15	Q 471	+1.44
K 532	+.21	N 1126	-.88	N 1262	+.12	Q 503	-1.06
K 533	-.60	N 1132	+1.19	N 1263	-1.14	Q 543	+1.51
K 537	-.03	N 1140	-.84	N 1264	+2.69	Q 1078	+.83
K 539	+1.32	N 1147	+.25	N 1265	+.35	Q 1092	+.79
K 921	-.33	N 1160	-.58	N 1266	+.59	Q 1237	+.33
K 1057	+2.64	N 1167	+.48	N 1269	+.77	S 2?	-1.55
K 1139	+1.74	N 1180	-.78	N 1270	+1.12	S 201	-1.28
K 1141	-.06	N 1185	+.66	N 1271	+.73	S 202	-.78
N 7	+.91	N 1198	-1.59	N 1273	+2.14	S 203	-1.37
N 9	+.59	N 1204	+3.77	N 1274	+2.12	S 1803	+.44
N 53	+.59	N 1216	-1.78	N 1275	+1.13	S 1804	+.43
N 66	+.55	N 1222	+6.81	N 1276	+1.13	S 1806	-1.21
N 67	+.22	N 1234	-1.58	N 1278	+1.23	S 1807	+.41
N 157	-2.61	N 1240	+8.42	N 1279	+1.24	S 1808	+.44
N 844	-1.89	N 1242	-.13	N 1280	+5.50	S 1809	+.46
N 1101	-.20	N 1243	-.87	N 1281	+5.46	S 1810	-.47
N 1102	-1.81	N 1247	-2.07	N 1282	+.71	S 1811	+.18
N 1103	-1.85	N 1248	-1.38	N 1283	+.71	S 1812	-.32
N 1104	-1.82	N 1249	-1.02	N 1285	+.96	S 1813	+.01
N 1105	-1.64	N 1250	-.61	N 1286	+.97	S 1814	-.18
N 1106	-1.61	N 1251	-.03	N 1288	+1.22	S 1815	-.77
N 1107	-1.39	N 1252	+.79	N 1289	+1.21	S 1816	-.39
N 1108	-1.12	N 1253	+2.88	N 1290	-.57	S 1817	-.08
N 1109	+.25	N 1254	+.92	N 1613	+.88	S 2455	+.64

The second table indicates that at the end of 1940 the water levels in about half the wells were lower and in about half the wells were higher than at the end of 1939. Most of the wells in which there was a considerable net rise of water level in the year are in areas of heavy pumping along the south shore of the Island. In these areas, the rate of withdrawal of water was much greater during the last part of 1939 and early part of 1940 than during the last part of 1940. The highest observed water level in most

a Based on instrumental records of lowest daily water level.

Figure 8.--Graphs showing cumulative departure from 10-year progressive average monthly precipitation and average ground-water level on Long Island, New York

of the observation wells on Long Island for the entire period of record occurred during the spring or early summer of 1939. In the western part of Long Island, in Kings County, where over-pumping has lowered the water level below sea level, a further progressive decline of water levels took place in 1940. The first table shows that the lowest observed water level in most of the wells in Kings County occurred in 1940.

The accompanying diagram shows graphs of the average ground-water level on Long Island east of Kings County and the cumulative departure from 10-year progressive average monthly precipitation. The method used for determining the average ground-water level each month is described in the Long Island section in Geological Survey Water-Supply Paper 886. The average water level at the end of 1940 is based on measurements in 107 wells; 80 in Nassau County, 15 in Suffolk County, and 12 in Queens County. As indicated on the diagram, the cumulative departure from average precipitation is based on 10-year progressive monthly averages. It is desirable to use monthly averages for precipitation in such a way that the precipitation in earlier years is given little or no weight in determining the departures because the average ground-water level on any date is more a function of the precipitation during the preceding few years than it is of the precipitation during still earlier years. A comparison between cumulative departures based on 3-year progressive averages and cumulative departures based on 10-year progressive averages indicates that the 10-year progressive averages are somewhat better for showing the relation between precipitation and ground-water levels.

A comparison of the two graphs in the diagram shows a rather close relation between both the trends of the precipitation and the trends of the average ground-water level. The graph of average ground-water level indicates that there was a small net rise of water level in 1940. The precipitation likewise was slightly above average for the year.

K 10.

Water level, in feet below mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	14.20	Apr. 6	13.12	July 6	14.88	Oct. 5	15.31
13	14.34	13	13.76	13	15.18	12	15.24
20	13.70	20	13.65	20	14.86	19	15.09
27	13.46	27	13.94	27	15.44	26	14.90
Feb. 3	13.32	May 4	13.96	Aug. 3	15.47	Nov. 2	15.36
10	13.57	11	13.94	10	15.43	9	14.95
17	13.58	18	14.28	17	15.50	16	14.70
24	14.22	25	14.15	24	16.14	23	14.41
Mar. 2	13.82	June 1	14.12	31	16.17	30	14.75
9	14.07	8	14.43	Sept. 7	15.55	Dec. 7	13.64
16	13.35	15	15.15	14	15.94	14	14.34
23	13.59	22	14.66	21	15.69	21	14.92
30	12.59	29	14.50	28	16.60	28	14.14

K 19. Kew-Pacific Garage. About 110 feet northeast of Dean Street and 130 feet northwest of Fifth Avenue, Brooklyn. Abandoned well, diameter 6 inches, measured depth 182.4 feet below measuring point. Measuring point, top of instrument shelf, 1.10 feet above 6-inch flange, about 3 feet above land surface, and 48.30 feet above mean sea level. Water level, Sept. 10, 1940, 74.34 feet below measuring point, and 26.04 feet below mean sea level.

Lowest daily water level, in feet below mean sea level, 1940
(from recorder charts)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 10	26.04	Oct. 9	25.88	Nov. 6	25.77	Dec. 4	25.59
11	26.04	10	25.89	7	25.79	5	25.56
12	26.03	11	25.89	8	25.81	6	25.55
13	26.04	12	25.84	9	25.81	7	25.48
14	26.02	13	25.75	10	25.69	8	25.37
15	a 25.88	14	25.73	11	25.65	9	25.38
16	a 25.90	15	25.80	12	25.70	10	25.44
17	25.97	16	25.85	13	25.70	11	25.45
19	25.93	17	25.83	14	25.69	12	25.45
20	25.92	18	25.85	15	25.70	13	25.45
21	25.92	19	25.85	16	25.70	14	25.45
22	25.79	20	25.72	17	25.60	15	25.37
23	25.86	21	25.76	18	25.66	16	25.31
24	25.92	22	25.78	19	25.66	17	25.48
25	26.01	23	25.78	20	25.67	18	25.49
26	26.01	24	25.77	21	25.68	19	25.47
27	25.98	25	25.78	22	25.62	20	25.43
28	25.97	26	25.77	23	25.62	21	25.43
29	25.83	27	25.70	24	25.54	22	25.34
30	25.80	28	25.76	25	25.59	23	25.39
Oct. 1	25.82	29	25.76	26	25.60	24	25.39
2	25.89	30	25.76	27	25.59	25	25.35
3	25.92	31	25.80	28	25.64	26	25.31
4	25.93	Nov. 1	25.82	29	25.64	27	25.36
5	25.92	2	25.81	30	25.60	28	25.34
6	25.80	3	25.74	Dec. 1	25.49	29	25.28
7	25.81	4	25.76	2	25.52	30	25.36
8	25.85	5	25.76	3	25.59	31	25.40

K 30.

Lowest daily water level, in feet below mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	28.77	28.57	28.39	28.28	28.22	28.25	28.34	28.55	28.78	28.94	29.13	29.11
2	28.72	28.58	28.39	28.28	28.24	28.25	28.35	28.56	28.74	28.98	29.12	29.08
3	28.73	28.58	28.35	28.30	28.25	28.23	28.38	28.56	28.72	29.00	29.10	29.08
4	28.75	28.55	28.29	28.32	28.26	28.23	28.39	28.56	28.75	29.01	29.07	29.10
5	28.75	28.51	28.30	28.33	28.26	28.25	28.39	28.52	28.79	29.02	29.01	29.15
6	28.78	28.47	28.33	28.33	28.22	28.29	28.37	28.56	28.81	29.00	29.04	29.15
7	28.78	28.50	28.36	28.32	28.19	28.31	28.36	28.59	28.83	28.94	29.07	29.15
8	28.72	28.52	28.37	28.26	28.21	28.32	28.33	28.61	28.83	28.98	29.10	29.14
9	28.71	28.52	28.39	28.25	28.23	28.32	28.35	28.63	28.79	29.02	29.11	29.09
10	28.73	28.51	28.38	28.29	28.25	28.27	28.39	28.64	28.83	29.03	29.10	29.09
11	28.74	28.47	28.33	28.30	28.25	28.26	28.42	28.64	28.85	29.05	29.05	29.12
12	28.76	28.47	28.32	28.30	28.25	28.30	28.44	28.60	28.87	29.05	29.05	29.13
13	28.76	28.43	28.35	28.30	28.20	28.34	28.44	28.60	28.89	29.05	29.08	29.16
14	28.75	28.43	28.36	28.30	28.20	28.36	28.44	28.65	28.90	29.00	29.11	29.16
15	28.67	28.46	28.37	28.25	28.23	28.35	28.38	28.67	28.90	29.04	29.13	29.15
16	28.65	28.46	28.38	28.22	28.26	28.35	28.39	28.67	28.85	29.05	29.13	29.08
17	28.66	28.46	28.36	28.25	28.28	28.31	28.43	28.67	28.89	29.05	29.11	29.06
18	28.66	28.44	28.31	28.26	28.29	28.29	28.45	28.67	28.91	29.07	29.07	29.08
19	28.67	28.39	28.29	28.28	28.28	28.34	28.47	28.62	28.93	29.07	29.07	29.08
20	28.67	28.36	28.31	28.28	28.22	28.38	28.47	28.68	28.93	29.06	29.12	29.09
21	28.66	28.40	28.33	28.25	28.22	28.39	28.46	28.70	28.94	29.03	29.13	29.10
22	28.62	28.42	28.34	a28.18	28.25	28.40	28.41	28.72	28.93	29.03	29.11	29.08
23	28.59	28.43	28.36	28.20	28.29	28.38	28.43	28.74	28.90	29.06	29.09	29.04
24	28.61	28.43	28.36	28.23	28.31	28.31	28.47	28.75	28.91	29.09	29.09	29.01
25	28.62	28.39	28.30	28.26	28.32	28.31	28.48	28.75	28.97	29.10	29.05	29.01
26	28.62	28.36	28.29	28.28	28.32	28.36	28.51	28.69	28.97	29.12	29.05	29.01
27	28.62	28.32	28.32	28.29	28.26	28.39	28.51	28.73	28.98	29.11	29.10	28.99
28	28.61	28.34	28.35	28.28	28.27	28.40	28.51	28.75	28.99	29.07	29.13	29.00
29	28.57	28.37	28.35	28.22	28.30	28.39	28.46	28.76	28.99	29.05	29.13	29.00
30	28.54	.....	28.34	28.19	28.30	28.39	28.48	28.78	28.93	29.09	29.15	28.97
31	28.56	.....	28.31	.....	28.28	.....	28.52	28.78	.....	29.12	.....	28.98

a Estimated.

K 65.

Water level, in feet below mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	25.68	Apr. 6	25.58	July 6	25.52	Oct. 5	26.09
13	25.73	13	25.38	13	25.66	12	26.06
20	25.70	20	25.41	20	25.68	19	26.13
27	25.69	27	25.51	27	25.74	26	26.13
Feb. 3	25.68	May 4	25.46	Aug. 3	25.75	Nov. 2	26.06
10	25.59	11	25.51	10	25.50	9	26.23
17	25.66	18	25.52	17	25.66	16	26.16
24	25.61	25	25.55	24	25.78	23	26.17
Mar. 2	25.67	29	25.58	31	25.76	30	26.23
9	25.61	June 8	25.57	Sept. 7	25.81	Dec. 7	26.16
16	25.60	15	25.56	14	25.92	14	26.32
23	25.60	22	25.65	21	25.90	21	26.21
30	25.53	29	25.60	28	26.01	28	26.13

K 67.

Water level, in feet below mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	19.72	Apr. 6	19.78	July 6	19.96	Oct. 5	20.19
13	19.71	13	19.82	13	19.97	12	20.20
20	19.71	20	19.80	20	19.98	19	20.21
27	19.71	27	19.84	27	19.99	26	20.22
Feb. 3	19.73	May 4	19.87	Aug. 3	19.99	Nov. 2	20.22
10	19.74	11	19.85	10	20.02	9	20.21
17	19.72	18	19.87	17	20.03	16	20.21
24	19.69	25	19.90	24	20.05	23	20.22
Mar. 2	19.73	June 1	19.91	31	20.07	30	20.25
9	19.78	8	19.88	Sept. 7	20.10	Dec. 7	20.25
16	19.79	15	19.91	14	20.13	14	20.27
23	19.80	22	19.92	21	20.14	21	20.26
30	19.81	29	19.91	28	20.19	28	20.28

K 87.

Water level, in feet below mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	8.73	Apr. 6	7.60	July 6	8.72	Oct. 12	8.92
13	8.51	13	7.69	13	8.70	19	8.98
20	8.43	20	7.72	20	8.86	26	9.03
27	8.37	27	7.73	Aug. 3	8.34	Nov. 2	9.05
Feb. 3	8.47	May 4	7.75	10	8.50	9	9.10
10	8.44	11	7.77	17	8.44	16	9.13
17	7.69	18	7.78	24	8.55	23	9.13
24	7.71	25	7.79	31	8.51	30	9.16
Mar. 2	7.68	June 1	7.83	Sept. 7	8.67	Dec. 7	9.19
9	7.71	8	7.91	14	8.74	14	9.20
16	7.69	15	8.10	21	8.82	21	9.24
23	7.71	22	8.45	28	8.88	28	9.25
30	7.69	29	7.98	Oct. 5	8.91		

K 92.

Water level, in feet below mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	23.05	Apr. 6	22.85	July 6	23.38	Oct. 5	23.97
13	23.04	13	22.84	13	23.40	12	23.81
20	23.01	20	22.81	20	23.64	19	23.66
27	23.01	27	22.83	27	23.61	26	23.49
Feb. 3	23.00	May 4	22.81	Aug. 3	23.64	Nov. 2	23.33
10	22.96	11	22.86	10	23.73	9	23.17
17	23.02	18	22.83	17	23.79	16	23.01
24	22.93	25	22.84	24	23.84	23	22.89
Mar. 2	22.92	June 1	22.85	31	23.83	30	22.76
9	22.92	8	23.01	Sept. 7	23.95	Dec. 7	22.63
16	22.89	15	23.12	14	23.97	14	22.53
23	22.85	22	23.23	21	23.92	21	22.41
30	22.84	29	23.20	28	23.98	28	22.32

K 104. The Borden Co. Near corner of Clermont Avenue and Fulton Street, Brooklyn. Diameter 10 inches, measured depth 91.2 feet below measuring point. Measuring point, top edge of steel grating covering well pit, about 53 feet above top of casing, about 19 feet below street level, and 56.29 feet above mean sea level. Water level Aug. 27, 1940, 82.18 feet below measuring point and 25.89 feet below mean sea level.

Water level, in feet below mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 27	25.89	Oct. 12	26.12	Nov. 9	26.07	Dec. 7	25.87
Sept. 14	26.04	19	26.11	16	26.03	14	25.81
21	26.04	26	26.10	23	25.99	21	25.78
28	26.08	Nov. 2	26.09	30	25.91	28	25.74
Oct. 5	26.11						

K 463. Measurements discontinued Oct. 5, 1940, because water level declined below obstruction in well.

Water level, in feet, with reference to mean sea level, 1940

Jan. 6	+1.64	Mar. 16	+0.16	May 25	+2.01	Aug. 3	+0.74
13	+1.45	23	+.23	June 1	+1.72	10	+.87
20	+1.16	30	+.89	8	+2.00	17	+.71
27	+1.03	Apr. 6	+.99	15	+1.91	24	+.85
Feb. 3	+.89	13	+.98	22	+1.56	31	+.66
10	+.90	20	+1.23	29	+1.43	Sept. 7	+.33
17	+.09	27	+1.45	July 6	+1.35	14	+.27
24	+.38	May 4	+1.49	13	+.94	21	+.34
Mar. 2	+.53	11	+1.67	20	+1.15	28	-.22
9	+.38	18	+1.96	27	+1.06	Oct. 5	-.06

K 532.

Water level, in feet below mean sea level, 1940

Jan. 6	1.49	Apr. 6	1.45	July 6	1.03	Oct. 5	1.21
13	1.51	13	1.39	13	1.02	12	1.20
20	1.47	20	1.38	20	1.02	19	1.23
27	1.55	28	1.34	27	1.05	26	1.25
Feb. 3	1.57	May 4	1.26	Aug. 3	1.09	Nov. 2	1.25
10	1.59	11	1.21	10	1.13	9	1.26
17	1.53	18	1.17	17	1.16	16	1.23
24	1.62	25	1.13	24	1.16	23	1.20
Mar. 2	1.63	June 1	1.09	31	1.16	30	1.19
9	1.54	8	1.06	Sept. 7	1.16	Dec. 7	1.18
16	1.51	15	1.02	14	1.16	14	1.22
23	1.49	22	1.01	21	1.19	21	1.22
30	1.44	29	.98	28	1.20	28	1.22

K 533. The altitude of the measuring point of this well was incorrectly given in all previous report as 42.18 feet above mean sea level. The correct altitude is 43.67 feet above mean sea level. Thus, all the water levels given in previous reports are 1.49 feet too low. Measuring point was lowered 1.09 feet on July 9, 1940. New measuring point, top of 8-inch flange, 1.2 feet above land surface and 42.58 feet above mean sea level. Water level, July 10, 1940, 65.29 feet below measuring point and 22.71 feet below mean sea level.

Lowest daily water level, in feet below mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	22.42	22.55	22.55	22.44	22.33	22.46	22.70	22.90	22.86	22.88	22.98	22.96
2	22.46	22.51	22.55	22.45	22.31	22.48	22.71	22.92	22.88	22.84	22.97	22.97
3	22.50	22.52	22.55	22.45	22.28	22.54	22.71	22.91	22.94	22.88	22.96	23.03
4	22.50	22.50	22.43	22.41	22.34	22.59	22.70	22.84	22.95	22.91	22.96	23.03
5	22.49	22.49	22.42	22.42	22.37	22.62	22.75	22.87	22.95	22.91	22.94	23.00
6	22.44a	22.48	22.43	22.42	22.37	22.62	22.75	22.87	22.93	22.90	22.90	23.02
7	.....	22.45	22.44	22.43	22.39	22.65	22.72	22.87	22.99	22.82	22.90	23.00
8	.....	22.50	22.44	22.42	22.39	22.64	22.71	22.88	22.98	22.84	22.95	22.97
9	.....	22.50	22.47	22.38	22.41	22.64	22.71	22.90	22.91	22.89	22.95	22.99
10	.....	22.50	22.49	22.43	22.46	22.62	22.71	22.89	22.92	22.90	22.96	22.99
11	.....	22.39	22.53	22.43	22.46	22.65	22.71	22.87	22.94	22.90	22.94	23.05

a Estimated.

K 533.--Continued.

Lowest daily water level, in feet below mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
12	.....	22.40	22.56	22.39	22.45	22.66	22.74	22.88	22.95	22.86	22.98	23.04
13	.....	22.41	22.56	22.33	22.42	22.68	22.75	22.88	22.99	22.89	22.98	23.04
14	.....	22.42	22.56	22.34	22.48	22.68	22.75	22.88	22.98	22.90	22.94	23.05
15	.....	22.45	22.50	22.35	22.49	22.67	22.76	22.91	22.98	22.90	22.90	23.05
16	a22.48	22.49	22.50	22.36	22.49	22.71	22.78	22.91	22.91	22.93	22.90	23.01
17	22.48	22.53	22.51	22.38	22.48	22.73	22.83	22.89	22.94	22.92	22.90	23.06
18	22.48	22.53	22.49	22.38	22.51	22.71	22.85	22.83	22.96	22.91	23.01	23.07
19	22.49	22.46	22.49	22.37	22.50	22.68	22.85	22.84	22.94	22.91	23.01	23.07
20	22.49	22.39	22.49	22.37	22.45	22.71	22.85	22.83	22.91	22.89	22.99	23.03
21	22.45	22.47	22.52	22.29	22.47	22.71	22.84	22.89	22.89	22.96	23.00	22.98
22	22.51	22.51	22.52	22.34	22.46	22.71	22.83	22.88	22.90	22.97	22.98	22.98
23	22.51	22.53	22.52	22.37	22.43	22.69	22.83	22.92	22.92	22.96	23.00	23.04
24	22.49	22.53	22.54	22.37	22.47	22.62	22.83	22.94	22.91	22.92	22.98	23.04
25	22.50	22.49	22.52	22.37	22.48	22.64	22.85	22.91	22.90	22.93	23.02	22.98
26	22.49	22.51	22.55	22.40	22.47	22.66	22.86	22.84	22.94	22.95	23.02	22.94
27	22.53	22.51	22.55	22.40	22.46	22.71	22.85	22.87	22.94	22.96	22.94	22.94
28	22.53	22.45	22.52	22.40	22.47	22.71	22.85	22.87	22.93	22.99	23.02	22.93
29	22.53	22.64	22.50	22.40	22.52	22.65	22.87	22.91	22.92	22.99	23.02	22.87
30	22.53	.....	22.46	22.37	22.52	22.66	22.87	22.92	22.89	22.97	22.98	22.96
31	22.55	.....	22.43	.....	22.48	.....	22.86	22.91	.....	22.97	.....	23.02

K 535. Observations resumed March 16, 1940. Measuring point, top of coupling, about 5 feet below land surface and 14.09 feet above mean sea level. Water level March 16, 1940, 12.74 feet below measuring point and 1.35 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 16	1.35	June 1	1.91	Aug. 17	1.75	Oct. 26	1.73
23	1.37	8	1.94	24	1.73	Nov. 2	1.75
30	1.58	15	1.93	31	1.80	9	1.78
Apr. 6	1.52	22	1.88	Sept. 7	1.81	16	1.83
13	1.59	29	1.90	14	1.80	23	1.85
20	1.68	July 6	1.87	21	1.76	30	1.85
28	1.80	13	1.86	28	1.82	Dec. 7	1.82
May 4	1.82	20	1.84	Oct. 5	1.85	14	1.77
11	1.86	27	1.83	12	1.83	21	1.98
18	1.83	Aug. 3	1.70	19	1.83	28	1.78
25	1.79	10	1.78				

K 537.

Water level, in feet below mean sea level, 1940

Date			Date			Date			Date		
Jan.	6	7.13	Apr.	6	6.95	July	6	6.37	Oct.	12	6.88
	13	7.14		13	6.89		20	6.44		19	6.91
	20	7.15		20	6.84		27	6.52		26	6.93
	27	7.17		28	6.74	Aug.	3	6.57	Nov.	2	6.97
Feb.	3	7.19	May	4	6.73		10	6.63		9	7.00
	10	7.25		11	6.69		17	6.34		16	6.97
	17	7.29		18	6.55		24	6.72		23	6.97
	24	7.25		25	6.52		31	6.72		30	7.01
Mar.	2	7.26	June	1	6.47	Sept.	7	6.77	Dec.	7	7.04
	9	7.06		8	6.41		14	6.82		14	7.05
	16	7.04		15	6.38		21	6.84		21	7.08
	23	7.00		22	6.38		28	6.81		28	7.10
	30	6.94		29	6.36	Oct.	5	6.85			

a Estimated.

K 539. New York City Department of Water Supply, Gas, and Electricity. At Ridgewood pumping station, 120 feet north of Atlantic Avenue, and 300 feet east of Logan Street, Brooklyn. Diameter 4½ inches, measured depth 32.7 feet below measuring point. Measuring point, top of flange, 1.7 feet above basement floor, 10.3 feet below land surface, and 22.62 feet above mean sea level. Water level Oct. 28, 1939, 28.24 feet below measuring point and 5.62 feet below mean sea level.

Water level, in feet below mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Oct. 28, 1939	5.62	Mar. 23, 1940	6.07	Aug. 10, 1940	7.05
Nov. 4	5.63	30	6.17	17	7.12
11	5.55	Apr. 6	6.24	24	7.22
18	5.41	13	6.31	31	7.33
25	5.49	20	6.37	Sept. 7	7.18
Dec. 2	5.53	27	6.43	14	6.88
9	5.55	May 4	6.44	21	6.63
16	5.57	11	6.51	28	6.34
23	5.53	18	6.57	Oct. 12	5.93
30	5.50	25	6.63	19	5.74
Jan. 6, 1940	5.48	June 1	6.69	26	5.47
13	5.46	8	6.74	Nov. 2	5.22
20	5.50	15	6.76	9	5.01
27	5.50	22	6.76	16	4.87
Feb. 3	5.54	29	6.76	23	4.77
10	5.62	July 6	6.80	30	4.63
17	5.69	13	6.82	Dec. 7	4.48
24	5.79	20	6.79	14	4.40
Mar. 2	5.94	27	6.86	21	4.28
9	6.02	Aug. 3	6.96	28	4.18
16	5.99				

K 921.

Water level, in feet below mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	25.03	Apr. 6	23.18	July 6	25.30	Oct. 5	25.66
13	25.02	13	23.45	13	25.55	12	25.67
20	24.85	20	23.38	20	25.71	19	25.72
27	24.79	27	23.44	27	25.61	26	25.74
Feb. 3	24.86	May 4	23.42	Aug. 3	25.53	Nov. 2	25.70
10	24.77	11	25.04	10	25.39	9	25.76
17	24.87	18	25.06	17	25.48	16	25.64
24	24.82	25	25.13	26	25.36	23	25.64
Mar. 2	24.86	June 1	24.89	31	25.70	30	25.63
9	24.82	8	25.43	Sept. 7	25.81	Dec. 7	25.46
16	24.76	15	25.43	14	25.69	14	25.44
23	24.81	22	25.40	21	25.60	21	25.45
30	24.58	29	25.36	28	25.67	28	25.27

K 1057.

Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	a5.50	4.44	4.89	5.87	6.98	6.89	6.37	5.49	4.97	5.64	5.98	....
2	5.51	4.20	4.98	6.00	7.02	6.88	6.24	5.32	5.20	5.83	6.23	....
3	5.21	4.46	5.38	5.96	7.13	6.78	6.09	5.12	4.98	5.66	5.92	....
4	....	4.52	5.92	6.40	7.07	6.69	6.22	5.09	4.91	5.47	a5.90	a8.03
5	5.49	5.17	6.01	....	6.85	6.71	5.95	5.21	4.98	5.47	a6.25	8.04
6	a5.48	4.55	5.86	....	6.77	6.67	5.83	5.18	5.00	5.57	a6.29	7.95
7	....	3.92	5.87	5.76	6.85	6.62	5.83	5.16	5.11	5.87	a6.31	8.10
8	a6.18	a2.59	5.87	5.92	6.72	6.70	5.91	5.18	5.20	6.02	a6.37	8.08
9	6.00	1.82	6.05	6.53	....	6.73	5.93	5.17	5.47	5.91	6.35	8.09
10	5.83	1.87	5.72	6.12	....	6.75	5.90	5.12	5.53	5.81	6.38	7.95
11	5.81	1.52	5.43	6.04	....	6.74	5.99	5.06	5.27	5.80	6.37	7.81
12	6.23	1.11	5.35	6.47	....	6.62	6.05	5.14	5.24	5.83	a6.45	7.78
13	6.41	.89	5.64	6.33	....	6.68	5.96	5.24	5.12	5.76	a6.24	7.77

a Estimated.

K 1057.--Continued.

Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
14	6.65	a1.43	5.75	6.34	....	6.53	5.78	5.28	5.03	5.74	a6.50	7.75
15	6.50	a1.83	5.97	6.46	6.90	6.72	5.86	5.23	5.13	5.97	a6.70	7.78
16	5.80	....	5.80	6.51	6.81	6.50	5.93	5.15	5.51	5.83	6.62	7.98
17	6.01	....	5.96	6.34	6.79	6.38	5.81	5.15	5.20	6.12	6.52	7.97
18	6.13	a3.56	....	6.39	6.59	6.50	5.67	5.19	4.77	6.15	6.37	7.83
19	6.07	4.00	a5.99	6.11	6.55	6.72	5.67	5.59	5.01	5.88	6.49	7.96
20	6.27	3.92	5.97	6.22	6.75	6.52	5.72	5.33	5.15	6.16	6.69	8.21
21	....	3.42	5.63	6.95	6.70	6.42	5.86	5.23	5.28	5.91	6.66	8.24
22	....	a2.66	....	a6.71	6.73	6.34	5.87	5.19	5.42	5.91	7.15	8.52
23	5.72	2.37	5.47	6.59	7.13	6.48	5.88	5.27	5.63	5.89	7.10	8.37
24	6.12	a2.24	5.06	6.58	7.24	6.77	5.89	5.07	5.72	5.98	7.33	8.43
25	a6.25	3.21	5.18	6.54	7.21	7.10	5.90	5.11	5.47	6.09	7.03	8.33
26	....	a3.46	5.19	6.47	7.18	7.03	5.79	5.44	5.30	5.78	7.11	8.56
27	5.90	4.08	5.49	6.53	7.04	6.67	5.70	5.32	5.25	5.78	7.67	8.89
28	5.85	4.77	5.70	6.41	7.03	6.53	5.66	5.45	5.15	5.86	7.15	9.10
29	5.97	4.87	5.73	6.68	6.97	6.75	5.65	5.24	5.11	5.70	6.84	9.07
30	5.40	....	6.00	6.84	6.80	6.42	5.73	5.03	5.23	5.85	a7.18	8.74
31	a4.60	....	6.17	....	7.06	....	5.57	5.02	....	6.21	....	8.18

K 1139. New York City Department of Water Supply, Gas, and Electricity, New Lots No. 1. At corner of Chestnut Street and Blake Avenue, Brooklyn. Diameter 6 inches, measured depth 122.4 feet below measuring point. Measuring point, top of coupling, 1.7 feet above land surface, and 8.88 feet above mean sea level. Water level Oct. 28, 1939, 14.34 feet below measuring point and 5.46 feet below mean sea level.

Lowest daily water level, in feet below mean sea level, 1939
(from recorder charts)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 28	a 5.46	Nov. 13	a 5.10	Nov. 27	4.54	Dec. 17	4.37
29	5.46	14	5.09	28	4.56	18	4.33
30	5.44	15	5.04	29	4.58	19	4.32
31	5.47	16	5.03	30	4.60	20	4.28
Nov. 1	5.69	17	4.96	Dec. 1	4.62	21	4.29
2	5.71	18	4.88	2	4.62	22	4.31
4	a 5.61	19	4.85	3	4.53	23	4.30
5	5.28	20	4.85	4	4.51	24	4.29
6	5.39	21	4.86	5	4.54	25	4.25
7	5.38	22	4.86	6	4.58	26	a 4.23
8	4.92	23	4.44	7	4.58	28	a 4.35
9	5.44	24	4.44	8	4.55	29	4.36
10	5.45	25	4.49	9	a 4.55	30	a 4.34
11	5.27	26	4.51	16	a 4.37		

Lowest daily water level, in feet below mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	4.58	5.46	5.91	5.98	a6.50	....	a7.14	7.24	5.20	3.80	3.04
2	....	4.61	5.47	5.93	5.92	....	....	a7.15	7.00	5.17	a3.74	3.01
3	....	4.64	5.47	5.94	5.89	....	....	7.16	6.86	5.14	....	2.99
4	....	4.69	5.43	5.95	5.98	....	....	a7.17	a6.75	5.13	....	2.98
5	....	4.73	a5.38	5.97	6.09	....	a6.84	7.18	a6.66	5.11	....	2.95
6	a4.00	4.74	....	5.93	6.17	....	a6.86	7.20	a6.56	5.07	....	a2.94
7	4.02	4.79	a5.38	5.90	6.25	....	....	7.21	a6.55	4.92	....	a2.94
8	4.04	4.83	....	5.88	6.32	a6.58	....	7.23	6.49	4.94	....	2.89
9	4.10	4.84	a5.24	5.89	6.35	....	....	7.25	a6.26	4.95	a3.58	a2.88
10	4.13	4.84	a5.18	5.91	6.28	....	....	7.26	....	4.94	3.58	a2.87
11	4.08	4.77	5.14	5.93	6.25	....	....	7.27	....	4.93	3.55	2.86
12	4.01	4.77	5.11	5.93	6.28	....	....	7.28	....	a4.86	3.52	2.86
13	3.99	4.80	5.19	5.94	6.30	....	a6.72	7.28	....	....	3.47	2.83
14	4.04	4.79	5.26	5.95	6.29	....	a6.72	7.30	a5.99	....	3.42	2.83
15	a4.11	a4.92	5.33	5.95	6.31	a6.69	....	7.32	5.93	....	3.38	2.83
16	....	5.02	5.35	5.97	6.33	....	....	7.32	a5.71	....	3.38	2.81

a Estimated.

K 1139.--Continued.
Lowest daily water level, in feet below mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
17	....	5.07	5.39	5.99	a6.33	....	....	7.33	....	....	3.37	a2.75
18	....	5.13	5.42	5.99	....	....	....	7.35	....	....	3.38	a2.76
19	....	5.13	5.48	6.00	....	....	....	7.36	....	a4.44	3.38	a2.77
20	4.34	5.19	5.53	6.00	....	....	a6.79	a7.38	....	4.40	3.37	2.74
21	4.41	a5.31	5.59	5.97	....	....	a6.85	7.39	a5.65	4.34	a3.33	2.73
22	4.44	5.38	5.63	5.96	....	a6.71	6.89	7.41	....	4.31	3.30	2.75
23	4.44	5.44	5.67	a5.96	....	....	6.92	a7.43	....	4.24	3.26	2.79
24	4.37	5.44	5.70	a5.94	....	....	6.95	a7.46	....	4.18	3.23	2.79
25	4.38	5.45	5.74	a5.91	....	....	6.97	a7.49	....	4.15	3.20	2.76
26	4.39	5.45	5.76	a5.89	....	....	7.00	....	....	4.09	a3.18	2.73
27	4.44	5.45	5.77	a5.84	....	....	7.03	....	....	4.07	a3.15	2.70
28	4.49	5.46	5.80	5.87	....	....	7.05	....	a5.37	4.02	a3.13	2.67
29	4.52	5.46	5.82	5.93	....	a6.64	7.07	....	5.34	3.98	a3.10	2.61
30	4.55	....	5.83	5.97	....	....	a7.10	....	5.21	3.92	a3.08	2.58
31	4.58	....	5.87	....	....	....	7.12	a7.50	....	3.84	....	2.60

K 1141. Measurements discontinued Dec. 28, 1940.
Water level, in feet below mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	7.06	Apr. 6	6.86	July 6	6.30	Oct. 5	6.77
13	7.10	13	6.80	20	6.37	12	6.79
20	7.08	20	6.76	27	6.44	19	6.83
27	7.14	28	6.64	Aug. 3	6.50	26	6.86
Feb. 3	7.17	May 4	6.67	10	6.54	Nov. 2	6.90
10	7.22	11	6.62	17	6.59	9	6.92
17	7.21	18	6.47	24	6.63	23	6.89
24	7.21	25	6.45	31	6.65	30	6.93
Mar. 2	7.20	June 1	6.40	Sept. 7	6.69	Dec. 7	6.95
9	6.98	8	6.32	14	6.73	14	7.00
16	6.98	15	6.28	21	6.76	21	7.01
23	6.95	22	6.29	28	6.75	28	7.04
30	6.86	29	6.26				

K 1194. New York City Department of Water Supply, Gas, and Electricity. At northeast corner of Atlantic Avenue and Nichols Avenue, Brooklyn. Diameter 1½ inches, measured depth 48.1 feet below measuring point. Measuring point, top of pipe, about level with land surface, and 31.81 feet above mean sea level. Water level Nov. 2, 1940, 35.72 feet below measuring point and 3.91 feet below mean sea level.
Water level, in feet below mean sea level, 1940

Nov. 2	3.91	Nov. 23	3.65	Dec. 7	3.48	Dec. 21	3.32
9	3.83	30	3.56	14	3.40	28	3.23
16	3.73						

K 1198. New York City Department of Water Supply, Gas, and Electricity. On east side of Cleveland Street, 180 feet north of Fulton Street, Brooklyn. Diameter 1½ inches, measured depth 53.4 feet below measuring point. Measuring point, top of pipe, about level with land surface, and 36.77 feet above mean sea level. Water level Nov. 2, 1940, 43.99 feet below measuring point, and 7.22 feet below mean sea level.
Water level, in feet below mean sea level, 1940

Nov. 2	7.22	Nov. 23	6.76	Dec. 7	6.52	Dec. 21	6.32
9	7.03	30	6.64	14	6.43	28	6.23
16	6.89						

a Estimated.

K 1199. New York City Department of Water Supply, Gas, and Electricity. On south side of Jefferson Avenue, 110 feet east of Howard Avenue, Brooklyn. Diameter 1½ inches, measured depth 75.6 feet below measuring point. Measuring point, top of pipe, about level with land surface, and 48.49 feet above mean sea level. Water level Nov. 16, 1940, 64.26 feet below measuring point and 15.77 feet below mean sea level.

Water level, in feet below mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 16	15.77	Nov. 30	15.71	Dec. 14	15.70	Dec. 28	15.68
23	15.77	Dec. 7	15.68	21	15.68		

N 7. The altitude of the measuring point of this well was incorrectly given in all previous reports as 26.70 feet above mean sea level. The correct altitude is 26.65 feet above mean sea level. Thus all water levels given for this well in previous reports are 0.05 foot too high.

Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	11.25	11.08	10.61	10.79	11.69	11.69	10.86	9.25	9.29	10.17	11.14	11.72
2	11.19	11.15	10.57	10.71	11.80	11.67	10.75	9.09	9.41	10.42	11.15	11.68
3	11.07	11.12	10.61	10.71	11.93	11.64	10.68	9.05	9.40	10.55	11.19	11.61
4	10.97	11.06	10.86	10.84	11.91	11.62	10.71	9.05	9.38	10.47	11.13	11.59
5	10.97	11.06	11.10	10.92	11.80	11.60	10.62	9.02	9.38	10.44	11.18	11.73
6	10.90	11.07	11.16	10.87	11.75	11.58	10.55	9.02	9.37	10.47	11.34	11.64
7	10.80	11.21	11.16	10.84	11.82	11.50	11.56	8.97	9.42	10.64	.....	11.67
8	10.81	11.03	11.18	10.87	11.78	11.44	10.57	8.92	9.46	10.80	.....	11.79
9	10.80	10.96	11.14	11.17	11.83	11.42	10.53	8.88	9.61	10.73a	11.19	11.72
10	10.80	10.96	11.04	10.96	11.84	11.32	10.51	8.81	9.70	10.68	11.18	11.72
11	10.86	11.13	10.88	10.90	11.83	11.32	10.49	8.75	9.62	10.71	11.20	11.60
12	10.96	11.05	10.76	10.95	11.81	11.34	10.33	8.73	9.63	10.77	11.29	11.60
13	10.97	10.96	10.71	11.15	11.81	11.37	10.21	8.79	9.60	10.82	11.30	11.62
14	10.97	10.97	10.72	11.07	11.78	11.31	10.15	8.84	9.58	10.77	11.39	11.57
15	11.40	10.87	11.00	11.03	11.71	11.33	10.15	8.75	9.61	10.84	11.58	11.57
16	11.32	10.73	11.03	10.98	11.68	11.14	10.14	8.71	9.72	10.79	11.68	11.65
17	11.28	10.61	10.96	10.91	11.71	11.05	10.03	8.73	9.78	10.80	11.64	11.81
18	11.22	10.61	10.96	10.92	11.64	11.07	9.97	8.80	9.75	11.02	11.34	11.75
19	11.22	10.68	11.05	10.99	11.61	11.16	9.98	8.91	9.77	11.00	11.30	11.74
20	11.22	11.03	11.02	11.05	11.60	11.05	9.98	8.88	9.80	11.04	11.34	11.81
21	11.24	10.93	10.98	11.31	11.53	10.92	9.94	8.84	9.89	10.95	11.41	11.99
22	11.09	10.82	10.98	11.44	11.55	10.88	9.87	8.84	9.97	10.88	11.43	12.05
23	11.03	10.74	10.99	11.39	11.61	10.92	9.81	8.87	....	10.92	11.44	11.94
24	11.08	10.73	10.91	11.39	11.67	11.02	9.76	8.86	....	11.08	11.46	11.94
25	11.17	10.81	10.88	11.40a	11.71	11.04	9.72	8.84	....	11.04	11.50	.....
26	11.19	10.72	10.73	11.42a	11.64	11.04	9.68	8.91	....	11.06	11.49	.....
27	11.23	10.71	10.71	11.38a	11.65	10.95	9.61	8.98	....	11.05	11.71	.....
28	11.16	10.91	10.65	11.40	11.68	10.91	9.50	9.00 a	9.96	11.02	11.64a	12.34
29	11.13	10.76	10.65	11.43	11.54	11.00	9.45	9.05	10.04	11.02	11.64	12.46
30	11.13	.....	10.71	11.53	11.52	10.93	9.47	9.09	10.10	11.05	11.69	12.38
31	11.08	.....	10.99	.....	11.55	.....	9.43	9.20	.....	11.16	.....	12.15

N 8. The altitude of the measuring point of this well was incorrectly given in all previous reports as 28.40 feet above mean sea level. The correct altitude is 28.35 feet above mean sea level. Thus all water levels given for this well in previous reports are 0.05 foot too high. Measurements discontinued Dec. 28, 1940. Observations in well N 1613 ending in the same formation about 1,500 feet distant, indicate that there are only minor differences between the fluctuations of water level in the two wells.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	21.93	Mar. 9	22.36	May 11	23.02	July 13	22.83
13	21.91	16	22.46	18	23.01	20	22.70
20	22.11	23	22.53	25	23.01	27	22.71
27	22.04	30	22.56	June 1	23.12	Aug. 3	22.55
Feb. 3	21.89	Apr. 6	22.65	8	23.04	10	22.52
10	21.84	13	22.69	15	23.03	17	22.44
17	21.73	20	22.85	22	22.87	24	22.45
24	21.99	27	22.88	29	22.98	31	22.50
Mar. 2	21.95	May 4	23.03	July 6	22.88	Sept. 7	22.51

a Estimated.

N 8.--Continued.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept.14	22.42	Oct. 12	22.37	Nov. 9	22.37	Dec. 7	22.67
21	22.25	19	22.32	16	22.55	14	22.54
28	22.46	26	22.25	23	22.59	21	22.57
Oct. 5	22.40	Nov. 2	22.46	30	22.65	28	22.66

N 9. The altitude of the measuring point of this well was incorrectly given in all previous reports as 24.73 feet above mean sea level. The correct altitude is 24.68 feet above mean sea level. Thus, all water levels given for this well in previous reports are 0.05 foot too high.

Water level, in feet above mean sea level, 1940

Jan. 6	21.19	Apr. 6	21.70	July 6	21.83	Oct. 5	21.62
13	21.14	13	21.92	13	21.80	12	21.56
20	21.34	20	21.96	20	21.68	19	21.49
27	21.23	27	21.97	27	21.77	26	21.47
Feb. 3	21.14	May 4	22.07	Aug. 3	21.59	Nov. 2	21.83
10	21.10	11	22.15	10	21.59	9	21.62
17	21.08	18	21.96	17	21.56	16	21.86
24	21.37	25	21.94	24	21.55	23	21.83
Mar. 2	21.29	June 1	22.10	31	21.71	30	21.86
9	21.64	8	21.99	Sept. 7	21.58	Dec. 7	21.87
16	21.75	15	21.96	14	21.53	14	21.75
23	21.76	22	21.85	21	21.48	21	21.82
30	21.70	29	21.94	28	21.64	28	21.85

N 53. The altitude of the measuring point of this well was incorrectly given in all previous reports as 21.21 feet above mean sea level. The correct altitude is 21.11 feet above mean sea level. Thus, all water levels given in previous reports are 0.10 foot too high.

Water level, in feet above mean sea level, 1940

Jan. 6	12.24	Apr. 6	12.93	July 6	13.53	Oct. 5	12.69
13	12.15	13	13.01	13	13.50	12	12.60
20	12.34	20	13.15	20	13.37	19	12.58
27	12.28	28	13.46	27	13.30	26	12.49
Feb. 3	12.16	May 4	13.62	Aug. 3	13.17	Nov. 2	12.50
10	12.11	11	13.67	10	13.07	9	12.52
17	12.05	18	13.72	17	12.98	16	12.75
24	12.24	25	13.75	24	12.91	23	12.85
Mar. 2	12.24	June 1	13.80	31	12.95	30	12.89
9	12.60	8	13.85	Sept. 7	12.83	Dec. 7	12.90
16	12.68	15	13.73	14	12.74	14	12.89
23	12.79	22	13.57	21	12.63	21	12.91
30	12.79	29	13.57	28	12.81	28	12.93

N 66.

Water level, in feet above mean sea level, 1940

Jan. 6	9.53	Apr. 6	10.52	July 6	10.36	Oct. 5	9.65
13	9.49	13	10.07	13	10.16	12	9.58
20	9.88	20	8.50	20	10.15	19	9.73
27	9.99	27	10.43	27	9.36	26	9.60
Feb. 3	10.00	May 4	10.78	Aug. 3	9.64	Nov. 2	9.61
10	9.78	11	10.48	10	9.55	9	9.75
17	9.86	18	10.57	17	9.38	16	9.83
24	10.07	25	10.29	24	9.58	23	10.05
Mar. 2	10.07	June 1	10.32	31	9.68	30	10.13
9	10.50	8	10.40	Sept. 7	9.79	Dec. 7	10.15
16	8.56	15	10.28	14	9.67	14	10.02
23	10.48	22	10.48	21	9.58	21	10.09
30	9.83	29	10.42	28	9.76	28	10.06

N 67.
Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	17.98	17.69	17.44	17.52	17.97	17.94	17.29	a16.09	15.88	16.66	17.48	17.91
2	17.87	17.80	17.42	17.48	18.06	17.90	17.17	.....	15.95	16.95	17.59	17.84
3	17.72	17.81	17.49	17.46	18.22	17.85	17.07	a15.77	15.88	16.95	17.45	17.75
4	17.64	17.79	17.80	17.64	18.11	17.83	17.15	15.76	15.84	16.81	17.41	17.74
5	17.64	17.79	18.06	17.63	17.95	17.82	17.04	15.74	15.84	16.74	17.50	17.92
6	17.55	17.81	18.04	17.54	17.88	17.81	16.94	15.75	15.83	16.81	17.66	a17.80
7	17.49	18.03	18.03	17.47	17.95	17.77	16.96	15.69	15.87	16.95	17.63	a17.80
8	17.56	17.83	18.07	17.51	17.87	17.71	16.95	15.65	15.97	17.05	17.53	17.96
9	17.58	17.74	18.03	17.82	17.97	17.69	16.94	15.58	16.14	16.98	17.49	17.88
10	17.55	17.76	17.83	17.59	17.95	17.59	16.89	15.48	16.22	16.95	17.47	17.89
11	17.61	17.99	17.61	17.54	17.97	17.62	16.91	15.39	16.13	17.00	17.47	17.72
12	17.73	17.89	17.52	17.71	17.96	17.63	16.83	15.38	16.15	17.05	17.52	17.72
13	17.74	17.83	17.47	17.86	18.03	17.69	16.75	15.45	16.10	17.06	17.52	17.75
14	17.75	17.91	17.53	17.79	17.97	17.58	16.65	15.53	16.04	17.02	17.67	17.69
15	18.12	17.84	17.82	17.75	17.91	17.66	16.67	15.42	16.10	17.09	17.89	17.68
16	17.89	17.70	17.77	17.74	17.90	17.48	16.68	15.40	16.29	17.04	17.89	17.78
17	17.88	17.57	17.70	17.67	17.97	17.36	16.56	15.47	16.22	17.13	17.80	17.84
18	17.81	17.57	17.70	17.75	17.88	17.44	16.50	15.54	16.14	17.30	17.48	17.79
19	17.84	17.68	17.84	17.75	17.84	17.61	16.52	15.70	16.15	17.25	a17.43	17.76
20	17.85	18.15	17.82	17.82	17.85	17.47	16.55	15.55	16.23	17.34	17.54	17.88
21	17.86	17.91	17.75	18.20	17.79	17.33	16.51	15.49	16.32	17.17	17.53	18.09
22	17.65	17.79	17.78	18.11	17.84	17.29	16.42	15.48	16.40	17.09	17.63	18.10
23	17.62	17.65	17.73	17.96	18.00	17.38	16.37	15.49	16.36	17.16	17.60	17.98
24	17.74	17.61	17.59	17.92	18.08	17.49	16.37	15.42	16.45	17.31	17.67	17.98
25	17.88	17.69	17.56	17.89	18.02	17.56	16.34	15.37	16.58	17.30	17.65	18.14
26	17.87	17.58	17.41	17.80	17.97	17.57	16.28	15.52	16.42	17.32	17.66	18.24
27	17.83	17.60	17.40	17.73	17.94	17.46	16.21	15.49	16.40	17.32	17.99	18.37
28	17.75	17.81	17.39	17.71	17.99	17.38	16.12	15.56	16.45	17.29	a17.79	18.44
29	17.71	17.63	17.40	17.73	17.82	17.48	16.04	15.59	16.48	17.26	a17.79	18.69
30	17.73	.....	17.51	17.83	17.77	17.37	16.08	15.68	16.52	17.35	17.88	18.49
31	17.69	.....	17.77	.....	17.88	.....	16.09	15.74	.....	17.50	.....	18.21

N 125. Measurements discontinued Apr. 6, 1940.
Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	7.10	Feb. 3	7.11	Mar. 2	7.30	Mar. 23	7.96
13	7.02	10	6.96	9	8.77	30	7.63
20	7.17	24	7.40	16	8.22	Apr. 6	7.62
27	7.10						

N 157. Measuring point raised 0.99 foot Sept. 28, 1940. New measuring point, top of instrument shelf, 0.99 foot above 6-inch flange, 1.2 feet above land surface, and 219.67 feet above mean sea level. Water level, Sept. 29, 1940, 133.01 feet below measuring point and 86.66 feet above mean sea level.

Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	88.34	.....	.....	a87.60	a87.36	87.12	86.65	86.72	86.93	a86.71	86.41	86.21
2	88.23	.....	a87.50	.....	.....	87.09	86.60	86.62	86.85	a86.71	a86.74	86.13
3	88.11	.....	87.69	.....	.....	87.05	86.60	86.70	86.77	a86.69	a86.38	86.10
4	88.07	.....	a88.01	a87.66	87.13	87.07	86.68	.....	86.75	a86.61	a86.38	86.09
5	88.10	.....	.....	a87.38	87.02	87.08	86.62	.....	86.75	86.47	86.53	86.29
6	87.98	.....	.....	.....	87.00	87.06	86.57	.....	86.76	86.57	86.58	86.04
7	87.86	.....	.....	.....	87.14	87.00	86.68	86.88	86.78	86.81	86.51	86.21
8	88.07	.....	.....	.....	87.09	a87.00	86.82	86.82	86.82	86.73	86.29	86.27
9	87.93	.....	a87.78	.....	87.22	.....	86.79	86.81	86.97	a86.63	86.23	86.16
10	87.93	.....	a87.75	.....	87.18	.....	86.79	86.77	86.92	a86.63	86.28	86.17
11	88.10	.....	.....	.....	87.16	.....	86.82	86.76	.....	a86.63	86.34	85.96
12	88.25	.....	.....	.....	87.16	.....	86.67	86.77	.....	86.66	86.32	85.99
13	88.06	.....	.....	a87.50	87.22	.....	86.66	86.94	.....	a86.67	86.30	86.04
14	88.06	.....	a87.75	a87.40	87.06	.....	86.67	86.93	a86.57	86.59	86.48	85.99
15	88.27	.....	a88.02	a87.35	87.04	a86.84	86.79	a86.81	86.65	86.55	86.61	86.04
16	88.14	.....	a87.69	a87.28	87.10	86.52	86.89	.....	a86.70	86.41	86.52	86.24
17	88.14	a87.64	87.65	a87.24	87.13	86.51	86.82	a86.88	86.70	86.51	86.40	85.90
18	88.04	87.70	87.65	a87.29	87.10	86.66	86.83	86.91	a86.67	86.60	86.02	85.90
19	88.13	87.94	87.78	.....	87.09	.....	86.92	a87.00	86.68	86.52	86.02	85.98

a Estimated.

N 157.--Continued.
Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
20	a88.13	a88.31	.....	a87.68	87.10	86.64	87.06	.....	a86.72	86.63	86.32	86.18
21	.....	.....	.....	87.61	87.03	86.58	87.02	.....	a86.91	86.37	86.32	86.27
22	.....	.....	.....	a87.23	87.06	86.59	86.98	.....	a86.91	86.34	86.40	86.24
23	.....	.....	a87.51	a87.14	87.20	.....	86.95	a86.78	.....	86.48	86.24	86.03
24	.....	a87.70	a87.51	.....	87.20	86.99	86.98	86.72	.....	86.65	86.33	86.03
25	.....	a87.95	a87.51	.....	87.08	86.86	86.96	86.76	a86.92	86.61	86.17	86.24
26	.....	.....	a87.50	.....	87.05	86.80	86.92	86.83	.....	86.51	86.16	86.25
27	.....	a87.97	a87.50	a87.14	87.05	86.65	86.90	86.83	.....	86.51	86.59	86.15
28	.....	a88.08	a87.50	a87.14	87.10	a86.80	86.83	86.81	a86.62	86.45	86.09	86.15
29	.....	a88.08	a87.50	87.18	86.87	86.80	86.84	86.78	86.66	86.44	86.07	a86.23
30	.....	.....	87.58	87.30	86.87	86.70	86.93	86.78	86.70	a86.44	86.18	85.86
31	a88.12	.....	87.66	.....	87.05	.....	86.95	86.85	.....	86.45	.....	85.75

N 844. Long Island Railroad. About 60 feet east of Jerusalem Avenue and 110 feet north of railroad tracks, Hicksville. Abandoned well, diameter 10 inches, measured depth 263.0 feet below measuring point. Measuring point, top of casing, 0.6 foot above land surface and 149.16 feet above mean sea level. Water level, June 27, 1938, 69.09 feet below measuring point and 80.07 feet above mean sea level. Records from June 27, 1938, to Sept. 8, 1939, furnished by Nassau County Department of Public Works; records thereafter by Federal Geological Survey.
Lowest daily water level, in feet above mean sea level, 1938
(from recorder charts)

Day	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	80.01	79.90	80.34	80.93	82.57	82.72
2	.....	80.00	79.91	80.34	80.95	82.57	82.68
3	.....	79.99	79.92	80.35	80.97	82.51	82.68
4	.....	79.98	79.94	80.37	80.97	82.46	82.68
5	.....	79.97	79.94	80.37	81.00	82.41	82.69
6	.....	79.96	79.95	80.37	81.06	82.42	82.71
7	.....	79.95	79.96	80.37	81.14	82.43	82.73
8	.....	79.95	79.96	80.42	81.20	82.46	82.72
9	.....	79.95	79.98	80.44	81.23	82.49	82.71
10	.....	79.95	79.99	80.47	81.24	82.48	82.70
11	.....	79.93	80.00	80.48	81.31	82.44	82.69
12	.....	79.93	80.01	80.47	81.51	82.41	82.67
13	.....	79.93	80.01	80.49	81.64	82.41	82.64
14	.....	79.92	80.01	80.50	81.82	82.40	82.62
15	.....	79.91	80.02	80.52	81.87	82.43	82.59
16	.....	79.91	80.03	80.53	81.96	82.52	82.57
17	.....	79.91	80.03	80.55	81.97	82.58	82.55
18	.....	79.90	80.06	80.56	82.13	82.61	82.53
19	.....	79.90	80.07	80.55	82.23	82.65	82.52
20	.....	79.90	80.09	80.55	82.27	82.71	82.51
21	.....	79.89	80.10	80.55	82.31	82.86	82.50
22	.....	79.89	80.11	80.57	82.30	82.94	82.49
23	.....	79.89	80.12	80.67	82.23	82.95	82.48
24	.....	79.88	80.14	80.72	82.18	82.96	82.47
25	.....	79.86	80.16	80.71	82.14	82.96	82.47
26	.....	79.85	80.18	80.72	82.15	82.95	82.46
27	80.07	79.85	80.19	80.82	82.24	82.90	82.46
28	80.05	79.85	80.21	80.87	82.26	82.83	82.48
29	80.04	79.87	80.21	80.86	82.47	82.78	82.49
30	80.02	79.88	80.23	80.86	82.62	82.76	82.49
31	.....	79.90	80.31	.....	82.60	.....	82.50

Lowest daily water level, in feet above mean sea level, 1939
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	82.51	82.36	82.53	83.03	84.00	84.92	85.26	85.44	85.22	.....	84.30	83.99
2	82.51	82.35	82.54	83.06	84.05	84.94	85.27	85.45	85.20	.....	.....	83.99
3	82.53	82.35	82.55	83.08	84.07	84.96	85.27	85.47	85.19	a84.55	.....	84.02
4	82.53	82.35	82.56	83.11	84.11	84.98	85.27	84.47	85.18	84.56	a84.18	83.98
5	82.54	82.35	82.60	83.16	84.14	85.00	85.27	85.48	85.18	84.57	84.19	83.97
6	82.54	82.35	82.64	83.22	84.17	85.01	85.28	85.47	85.17	84.57	84.23	83.95
7	82.54	82.35	82.66	83.25	84.21	85.03	85.28	85.45	85.17	84.54	84.22	83.95
8	82.54	82.35	82.67	83.29	84.25	85.04	85.28	85.46	a85.16	84.54	84.19	83.95

a Estimated.

N 844.--Continued.
Lowest daily water level, in feet above mean sea level, 193?
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
9	82.54	82.36	82.69	83.35	84.28	85.06	85.29	85.46	.....	84.53	84.17	83.93
10	82.54	82.36	82.70	83.39	84.32	85.08	85.29	85.44	.....	84.54	84.17	83.95
11	82.54	82.37	82.71	83.42	84.36	85.09	85.30	85.44	.....	84.51	84.16	83.90
12	82.54	82.38	82.72	83.48	84.39	85.11	85.30	85.47	.....a	84.51	84.16	83.90
13	82.53	82.39	82.73	83.51	84.42	85.12	85.30	85.44	.....	.....	84.15	83.90
14	82.52	82.39	82.74	83.54	84.45	85.13	85.30	85.43	.....	.....	84.14	83.87
15	82.51	82.40	82.75	83.56	84.48	85.14	85.30	85.42	.....	.....	84.14	83.86
16	82.50	82.42	82.76	83.58	84.51	85.15	85.31	85.41	.....a	84.43	84.14	83.86
17	82.49	82.42	82.77	83.60	84.54	85.16	85.31	85.41	.....	84.39	84.14	83.88
18	82.48	82.42	82.78	83.63	84.57	85.18	85.31	85.40	.....	84.35	84.13	83.84
19	82.47	82.43	82.79	83.65	84.59	85.19	85.30	85.40	.....	84.36	84.10	83.84
20	82.47	82.45	82.80	83.68	84.62	85.19	85.29	85.37	.....	84.37	84.09	83.84
21	82.46	82.46	82.81	83.71	84.65	85.20	85.29	85.35	.....	84.37	84.09	83.86
22	82.45	82.47	82.83	83.74	84.68	85.21	85.28	85.35	.....	84.41	84.07	83.83
23	82.44	82.48	82.84	83.76	84.70	85.21	85.28	85.33	.....	84.34	84.06	83.77
24	82.43	82.48	82.86	83.79	84.73	85.23	85.28	85.31	.....	84.30	84.02	83.77
25	82.42	82.50	82.88	83.81	84.75	85.24	85.27	85.31	.....	84.30	84.00	a83.74
26	82.41	82.50	82.90	83.84	84.78	85.24	85.28	85.29	.....	84.30	84.00	.....
27	82.40	82.51	82.92	83.87	84.80	85.24	85.34	85.27	.....	84.33	84.00	.....
28	82.39	82.52	82.94	83.90	84.82	85.25	85.33	85.25	.....	84.32	84.00	.....
29	82.38	.....	82.96	83.93	84.85	85.25	85.34	85.24	.....	84.29	83.99	.....
30	82.37	.....	82.98	83.97	84.87	85.25	85.44	85.23	.....	84.29	83.99	.....
31	82.37	.....	83.00	.....	84.90	.....	85.43	85.23	.....	84.33	.....	.....

Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	83.40	.....	83.27	.....	83.20	83.03	82.97	82.83	82.66	82.39	82.06
2	.....	83.39	83.15	83.25	.....	83.20	83.00	82.94	82.81	82.66	82.40	82.05
3	.....	83.37	83.17	83.25	.....	83.20	83.00	82.94	82.80	82.62	82.38	a82.05
4	.....	83.36	83.24	83.31	a83.13	83.21	83.00	82.97	82.79	82.60	82.37	.....
5	.....	83.35	83.26	83.25	83.11	83.22	82.98	82.96	82.78	82.57	82.38	.....
6	a83.62	83.35	83.29	83.23	83.11	a83.17	82.98	82.96	82.78	82.57	82.36	.....
7	83.61	83.34	83.31	83.23	83.11	a83.07	83.00	82.95	82.78	82.60	82.34	a82.07
8	83.61	a83.33	83.33	83.24	83.11	83.01	83.03	82.94	82.78	82.57	82.31	82.03
9	83.60	.....	83.32	83.24	83.13	83.01	83.02	82.92	82.80	82.55	82.28	82.00
10	83.59	83.37	83.30	83.20	83.12	83.00	83.02	82.92	82.76	82.54	82.27	82.00
11	83.59	83.29	83.25	83.19	83.12	83.01	83.03	82.90	82.74	82.54	82.27	81.97
12	83.59	83.30	83.23	83.22	83.12	83.03	83.00	82.90	82.73	82.52	82.24	81.97
13	83.58	83.28	83.22	83.26	83.13	83.04	83.00	82.92	82.73	82.52	82.23	81.95
14	83.58	83.31	83.23	83.23	83.11	83.02	83.00	82.90	82.70	82.51	82.24	81.94
15	83.59	83.24	83.26	83.20	83.10	83.03	83.04	82.88	82.72	82.51	82.24	81.94
16	83.59	83.22	83.26	83.18	83.11	82.99	83.08	82.88	82.71	82.50	82.22	81.95
17	83.58	83.21	83.25	83.17	83.12	82.98	83.07	82.88	82.70	82.52	82.21	81.91
18	83.58	83.22	83.27	83.18	83.12	83.00	a83.09	82.88	82.70	82.52	82.16	81.90
19	83.58	83.25	83.28	83.17	83.12	83.07	.....	82.88	82.69	82.51	82.16	81.90
20	83.57	83.29	83.27	83.18	83.12	83.04	.....	82.86	82.70	82.50	82.17	81.92
21	a83.54	83.23	83.27	83.24	83.12	83.03	.....	82.86	82.71	82.46	82.16	81.91
22	.....	83.21	83.31	83.16	83.12	83.03	a83.04	82.86	82.68	82.46	82.15	81.90
23	.....	83.20	83.29	83.13	83.15	83.06	83.04	82.84	82.68	82.47	82.14	a81.89
24	.....	83.21	83.28	83.13	83.16	83.10	83.05	82.82	82.68	82.46	82.14	.....
25	.....	83.21	83.29	83.11	83.15	83.09	83.04	82.82	82.67	82.46	82.10	.....
26	.....	83.20	83.26	83.10	83.15	83.08	83.03	82.83	82.65	82.43	82.11	.....
27	a83.47	83.15	83.26	83.09	83.15	83.04	83.03	82.81	82.66	82.42	82.14	.....
28	83.44	a83.14	83.25	83.09	83.18	83.04	83.01	82.81	82.65	82.41	82.07	a81.87
29	83.43	a83.17	83.25	a83.09	83.14	83.06	83.00	82.81	82.65	82.41	82.07	81.86
30	83.42	.....	83.29	a83.09	83.15	83.05	83.01	82.81	82.63	82.42	82.06	81.81
31	83.40	.....	83.34	.....	83.18	.....	83.00	82.81	.....	82.39	.....	81.79

N 1101.
Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	44.54	Apr. 29	45.20	Aug. 2	44.53	Nov. 1	44.28
Mar. 1	44.63	May 31	45.20	30	44.48	29	44.52
29	44.88	June 28	45.01	Sept.27	44.31	Dec. 27	44.34

a Estimated.

N 1102.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	57.96	Apr. 29	57.42	Aug. 2	56.92	Nov. 1	56.50
Mar. 1	57.50	May 31	57.49	30	56.89	29	56.49
29	57.47	June 28	57.24	Sept.27	56.65	Dec. 27	56.29

N 1103.

Water level, in feet above mean sea level, 1940

Feb. 2	58.92	Apr. 29	58.35	Aug. 2	57.98	Nov. 1	57.56
Mar. 1	58.51	May 31	58.34	30	57.91	29	57.43
29	58.42	June 28	58.17	Sept.27	57.73	Dec. 27	57.32

N 1104.

Water level, in feet above mean sea level, 1940

Feb. 2	58.62	Apr. 29	57.99	Aug. 2	57.83	Nov. 1	57.37
Mar. 1	58.26	May 31	57.89	30	57.74	29	57.32
29	58.17	June 28	57.85	Sept.27	57.58	Dec. 27	57.20

N 1105.

Water level, in feet above mean sea level, 1940

Feb. 2	55.77	Apr. 29	55.10	Aug. 2	55.28	Nov. 1	54.71
Mar. 1	55.41	May 31	55.39	30	55.18	29	54.67
29	55.39	June 28	55.46	Sept.27	54.98	Dec. 27	54.52

N 1106.

Water level, in feet above mean sea level, 1940

Jan. 6	51.50	Apr. 6	50.74	July 6	51.44	Oct. 5	50.75
13	51.38	13	50.85	13	51.43	12	50.69
20	51.32	20	50.91	20	51.37	19	50.60
27	51.23	27	50.94	27	51.29	26	50.52
Feb. 3	51.10	May 4	50.99	Aug. 3	51.20	Nov. 2	50.44
10	50.98	11	51.04	10	51.15	9	50.39
17	50.87	18	51.10	17	51.07	16	50.39
24	50.82	25	51.17	24	51.05	23	50.34
Mar. 2	50.72	June 1	51.24	31	51.07	30	50.28
9	50.83	8	51.34	Sept. 7	51.00	Dec. 7	50.20
16	50.81	15	51.38	14	50.92	14	50.13
23	50.83	22	51.35	21	50.84	21	50.09
30	50.79	29	51.43	28	50.82	28	50.02

N 1107.

Water level, in feet above mean sea level, 1940

Feb. 2	43.86	Apr. 29	43.93	Aug. 2	44.02	Nov. 1	43.24
Mar. 1	43.49	May 31	44.23	30	43.75	29	43.12
29	43.67	June 28	44.28	Sept.27	43.56	Dec. 27	42.95

N 1108.

Water level, in feet above mean sea level, 1940

Feb. 2	38.88	Apr. 29	39.10	Aug. 2	39.25	Nov. 1	38.44
Mar. 1	38.58	May 31	39.55	30	38.95	29	38.32
29	38.90	June 28	39.56	Sept.27	38.74	Dec. 27	38.17

N 1109.

Water level, in feet above mean sea level, 1940

Feb. 2	26.12	Apr. 29	27.41	Aug. 2	27.16	Nov. 1	26.33
Mar. 1	26.22	May 31	27.49	30	26.83	29	26.65
29	27.00	June 28	27.50	Sept.27	26.59	Dec. 27	26.51

N 1110.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	19.19	Apr. 29	20.31	Aug. 2	19.75	Nov. 1	19.51
Mar. 1	19.34	May 31	20.22	30	19.70	29	19.99
29	19.95	June 28	20.07	Sept.27	19.61	Dec. 27	19.81

N 1111.

Water level, in feet above mean sea level, 1940

Feb. 2	13.38	Apr. 29	12.55	Aug. 2	13.76	Nov. 1	13.88
Mar. 1	13.69	May 31	13.90	30	14.01	29	14.00
29	13.87	June 28	13.96	Sept.27	14.04	Dec. 27	13.34

N 1112.

Water level, in feet above mean sea level, 1940

Jan. 6	7.93	Apr. 6	8.68	July 6	9.06	Oct. 5	8.85
13	7.74	13	9.13	13	8.97	12	8.77
20	8.00	20	9.18	20	8.81	19	8.66
27	7.95	28	9.16	27	9.04	26	8.60
Feb. 3	7.72	May 4	9.08	Aug. 3	8.87	Nov. 2	9.03
10	7.56	11	9.11	10	8.67	9	9.01
17	7.48	18	9.07	17	8.45	16	9.48
24	7.67	25	9.16	24	8.37	23	9.27
Mar. 2	7.95	June 1	9.45	31	8.67	30	9.23
9	8.46	8	9.26	Sept. 7	8.65	Dec. 7	9.14
16	8.54	15	9.08	14	8.56	14	9.03
23	8.55	22	8.90	21	8.46	21	9.19
30	8.52	29	9.09	28	8.86	28	9.14

N 1113.

Water level, in feet above mean sea level, 1940

Feb. 2	4.91	Apr. 29	6.31	Aug. 2	5.32	Nov. 1	5.19
Mar. 1	5.48	May 31	6.12	30	5.33	29	6.13
29	5.87	June 28	5.40	Sept.27	5.29	Dec. 27	5.66

N 1114.

Water level, in feet above mean sea level, 1940

Feb. 2	8.32	Apr. 29	9.84	Aug. 2	9.72	Nov. 1	8.80
Mar. 1	8.40	May 31	10.11	30	9.38	29	8.97
29	9.19	June 28	10.03	Sept.27	9.09	Dec. 27	9.08

N 1115.

Water level, in feet above mean sea level, 1940

Feb. 2	8.85	Apr. 29	10.89	Aug. 2	10.55	Nov. 1	9.38
Mar. 1	9.16	May 31	10.81	30	10.19	29	9.81
29	10.11	June 28	10.75	Sept.27	9.94	Dec. 27	9.71

N 1126.

Water level, in feet above mean sea level, 1940

Jan. 6	57.48	Apr. 6	57.37	July 6	58.37	Oct. 5	57.44
13	57.40	13	57.47	13	58.33	12	57.36
20	57.35	20	57.55	20	58.22	19	57.25
27	57.26	27	57.70	27	58.15	26	57.14
Feb. 3	57.14	May 4	57.94	Aug. 3	58.02	Nov. 2	57.08
10	57.03	11	58.09	10	57.96	9	57.01
17	56.90	18	58.20	17	57.88	16	57.06
24	56.96	25	58.27	24	57.85	23	56.91
Mar. 2	56.85	June 1	58.32	31	57.86	30	56.88
9	57.20	8	58.34	Sept. 7	57.75	Dec. 7	56.85
16	57.26	15	58.36	14	57.64	14	56.79
23	57.35	22	58.28	21	57.56	21	56.76
30	57.36	29	58.40	28	57.57	28	56.72

N 1132.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	6.64	Apr. 6	7.42	July 6	7.51	Oct. 5	7.59
13	6.51	13	7.60	13	7.50	12	7.48
20	6.71	20	7.62	20	7.37	19	7.42
27	6.59	28	7.80	27	7.37	26	7.32
Feb. 3	6.49	May 4	7.96	Aug. 3	7.18	Nov. 2	7.48
10	6.42	11	8.00	10	7.17	9	7.51
17	6.37	18	7.82	17	7.10	16	7.73
24	6.06	25	7.90	24	7.20	23	7.82
Mar. 2	6.65	June 1	7.85	31	7.34	30	7.88
9	7.26	8	7.82	Sept. 7	7.48	Dec. 7	7.84
16	7.26	15	7.74	14	7.46	14	7.70
23	7.39	22	7.44	21	7.32	21	7.76
30	7.28	29	7.56	28	7.52	28	7.83

N 1140.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	60.53	Apr. 6	60.54	July 6	61.44	Oct. 5	60.39
13	60.44	13	60.63	13	61.34	12	60.32
20	60.37	20	60.73	20	61.25	19	60.27
27	60.28	27	60.83	27	61.12	26	60.21
Feb. 3	60.15	May 4	61.06	Aug. 3	60.99	Nov. 2	60.19
10	60.04	11	61.33	10	60.85	9	60.17
17	60.06	18	61.50	17	60.74	16	60.13
24	59.93	25	61.60	24	60.75	23	60.07
Mar. 2	59.94	June 1	61.72	31	60.80	30	60.03
9	60.08	8	61.66	Sept. 7	60.77	Dec. 7	59.99
16	60.23	15	61.61	14	60.73	14	59.91
23	60.37	22	61.49	21	60.59	21	59.84
30	60.46	29	61.44	28	60.44	28	59.78

N 1147.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	16.95	Apr. 6	17.47	July 6	17.66	Oct. 5	17.03
13	16.84	13	17.56	13	17.68	12	16.93
20	17.09	20	17.73	20	17.48	19	16.87
27	16.98	28	17.97	27	17.41	26	16.83
Feb. 3	17.13	May 4	17.82	Aug. 3	17.29	Nov. 2	16.86
10	17.12	11	17.85	10	17.23	9	16.94
17	17.08	18	17.85	17	17.14	16	17.13
24	17.26	25	17.83	24	17.11	23	17.30
Mar. 2	17.06	June 1	17.87	31	17.18	30	17.33
9	17.37	8	17.81	Sept. 7	17.09	Dec. 7	17.30
16	17.41	15	17.75	14	17.02	14	17.24
23	17.48	22	17.65	21	16.93	21	17.27
30	17.51	29	17.64	28	17.09	28	17.29

N 1160.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	65.23	Apr. 6	65.80	July 6	66.28	Oct. 5	65.24
13	65.10	13	65.90	13	66.22	12	65.17
20	65.31	20	66.08	20	66.14	19	65.06
27	65.25	27	66.28	27	66.05	26	64.94
Feb. 3	65.11	May 4	66.54	Aug. 3	65.95	Nov. 2	64.88
10	65.02	11	66.60	10	65.85	9	64.84
17	64.88	18	66.60	17	65.74	16	64.98
24	65.17	25	66.56	24	65.63	23	65.11
Mar. 2	65.13	June 1	66.56	31	65.65	30	65.06
9	65.61	8	66.67	Sept. 7	65.54	Dec. 7	64.98
16	65.77	15	66.63	14	65.44	14	64.85
23	65.94	22	66.44	21	65.35	21	64.80
30	65.94	29	66.38	28	65.38	28	64.77

N 1167.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	10.32	Apr. 6	11.16	July 6	11.19	Oct. 5	10.47
13	10.26	13	11.22	13	11.12	12	10.43
20	10.51	20	11.41	20	11.02	19	10.37
27	10.52	27	11.66	27	10.91	26	10.34
Feb. 3	10.43	May 4	11.79	Aug. 3	10.78	Nov. 2	10.40
10	10.37	11	11.70	10	10.67	9	10.51
17	10.34	18	11.58	17	10.56	16	10.63
24	10.58	25	11.53	24	10.50	23	10.81
Mar. 2	10.65	June 1	11.54	31	10.60	30	10.86
9	10.93	8	11.46	Sept. 7	10.54	Dec. 7	10.85
16	11.04	15	11.38	14	10.44	14	10.84
23	11.14	22	11.27	21	10.34	21	10.88
30	11.18	29	11.22	28	10.46	28	10.87

N 1177. Nassau County Department of Public Works. On east side of Hitchcock Lane, 100 feet south of Powell Lane, Old Westbury. Diameter 4 inches, measured depth 146.2 feet below measuring point. Measuring point, top of coupling, 0.4 foot above land surface and 182.88 feet above mean sea level. Water level Sept. 27, 1940, 96.71 feet below measuring point and 86.17 feet above mean sea level. Water levels, in feet above mean sea level, 1940: Sept. 27, 86.17; Nov. 1, 85.96; Nov. 29, 85.94; Dec. 27, 85.61.

N 1179. Nassau County Department of Public Works. On west side of School Street, 300 feet south of Old Country Road, Westbury. Diameter 1¼ inches, measured depth 37.7 feet below measuring point. Measuring point, top of pipe, 0.2 foot above land surface and 104.24 feet above mean sea level. Water level Apr. 29, 1940, 28.33 feet below measuring point and 75.91 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Apr. 29	75.91	Aug. 2	75.87	Sept.27	75.17	Nov. 29	74.47
May 31	76.30	30	75.55	Nov. 1	74.75	Dec. 27	74.36
June 28	76.20						

N 1180.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	67.69	Apr. 6	68.17	July 6	68.31	Oct. 5	67.43
13	67.60	13	68.34	13	68.26	12	67.35
20	68.01	20	68.41	20	68.18	19	67.26
27	67.83	27	68.54	27	68.17	26	67.16
Feb. 3	67.67	May 4	68.62	Aug. 3	68.04	Nov. 2	67.26
10	67.56	11	68.61	10	67.96	9	67.08
17	67.43	18	68.59	17	67.88	16	67.28
24	67.85	25	68.55	24	67.81	23	67.26
Mar. 2	67.89	June 1	68.63	31	67.80	30	67.19
9	68.21	8	68.57	Sept. 7	67.69	Dec. 7	67.12
16	68.59	15	68.53	14	67.61	14	67.03
23	68.39	22	68.41	21	67.52	21	67.04
30	68.30	29	68.42	28	67.57	28	67.02

N 1181. Nassau County Department of Public Works. On north side of Fulton Street, 400 feet east of Merrick Avenue, East Meadow. Diameter 1¼ inches, measured depth 38.0 feet below measuring point. Measuring point, top of pipe, 0.2 foot above land surface and 82.85 feet above mean sea level. Water level Apr. 29, 1940, 24.01 feet below measuring point and 58.84 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Apr. 29	58.84	Aug. 2	58.29	Sept.27	57.72	Nov. 29	57.46
May 31	58.85	30	58.00	Nov. 1	57.34	Dec. 27	57.40
June 28	58.68						

N 1182. Nassau County Department of Public Works. At northeast corner of Spring Street and Merrick Avenue, East Meadow. Diameter 1¼ inches, measured depth 37.8 feet below measuring point. Measuring point, top of pipe, 0.2 foot above land surface and 70.91 feet above mean sea level. Water level Mar. 5, 1938, 20.44 feet below measuring point and 50.47 feet above mean sea level.

Water level, in feet above mean sea level, 1938, 1940

Date	Water level	Date	Water level	Date	Water level
Mar. 5, 1938	50.47	July 8, 1938	50.43	Nov. 11, 1938	51.79
12	50.52	15	50.45	18	51.65
19	50.54	22	50.59	25	51.62
26	50.56	29	51.64	Dec. 2	51.55
Apr. 2	50.55	Aug. 5	51.78	9	51.67
9	50.57	12	51.73	16	51.79
16	50.58	19	51.58	23	51.83
23	50.58	26	51.42	30	51.78
30	50.58	Sept. 2	51.27	Apr. 29, 1940	51.46
May 7	50.51	9	51.11	May 31	51.26
14	50.41	16	51.01	June 28	51.00
21	50.37	23	52.52	Aug. 2	50.62
28	50.33	30	53.15	30	50.36
June 4	50.26	Oct. 7	52.78	Sept.27	50.12
11	50.32	14	52.54	Nov. 1	49.75
17	50.31	21	52.34	29	50.02
24	50.21	28	52.14	Dec. 27	49.88
July 1	50.36	Nov. 4	51.95		

N 1183. Nassau County Department of Public Works. On north side of William Street, 50 feet east of Jerusalem Avenue, North Merrick. Diameter 1¼ inches, measured depth 32.6 feet below measuring point. Measuring point, top of pipe, about level with land surface and 50.17 feet above mean sea level. Water level Apr. 29, 1940, 12.44 feet below measuring point and 37.73 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 29	37.73	Aug. 2	36.39	Sept.27	35.87	Nov. 29	36.05
May 31	37.26	30	36.09	Nov. 1	35.57	Dec. 27	36.05
June 28	36.89						

N 1184. Nassau County Department of Public Works. At northeast corner of Meader Avenue and Camp Avenue, North Merrick. Diameter 1¼ inches, measured depth 27.6 feet below measuring point. Measuring point, top of pipe, 0.4 foot above land surface and 33.17 feet above mean sea level. Water level Apr. 29, 1940, 9.87 feet below measuring point and 23.30 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Apr. 29	23.30	Aug. 2	21.67	Sept.27	21.42	Nov. 29	21.90
May 31	22.56	30	21.50	Nov. 1	21.26	Dec. 27	21.92
June 28	22.18						

N 1185.

Water level, in feet above mean sea level, 1940

Jan. 6	11.92	Apr. 6	12.42	July 6	12.34	Oct. 5	11.95
13	11.79	13	12.87	13	12.16	12	12.02
20	12.44	20	13.11	20	12.05	19	12.02
27	12.15	27	13.55	27	11.88	26	12.02
Feb. 3	11.92	May 4	13.39	Aug. 3	11.72	Nov. 2	12.12
10	11.70	11	13.19	10	11.60	9	12.25
17	11.58	18	12.94	17	11.50	16	12.64
24	12.03	25	12.86	24	11.89	23	12.80
Mar. 2	11.93	June 1	12.92	31	11.81	30	12.79
9	12.67	8	12.70	Sept. 7	11.87	Dec. 7	12.69
16	12.70	15	12.54	14	11.67	14	12.61
23	12.79	22	12.30	21	11.47	21	12.85
30	12.58	29	12.29	28	11.76	28	12.70

N 1186. Nassau County Department of Public Works. At northwest corner of Merrick Road and Central Parkway, Merrick. Diameter 1-1/8 inches, measured depth 23.1 feet below measuring point. Measuring point, top of pipe, about level with land surface and 9.90 feet above mean sea level. Water level Apr. 29, 1940, 4.65 feet below measuring point and 5.25 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 29	5.25	Aug. 2	4.14	Sept. 27	4.84	Nov. 29	5.54
May 31	4.89	30	4.53	Nov. 1	4.70	Dec. 27	5.15
June 28	4.33						

N 1198.

Water level, in feet above mean sea level, 1940

Jan. 6	66.75	Apr. 6	66.93	July 6	66.91	Oct. 5	66.04
13	66.65	13	66.86	13	66.90	12	65.97
20	66.64	20	66.80	20	66.84	19	65.89
27	66.60	27	66.77	27	66.79	26	65.80
Feb. 3	66.53	May 4	66.86	Aug. 3	66.73	Nov. 2	65.71
10	66.45	11	66.94	10	66.67	9	65.62
17	66.36	18	67.00	17	66.57	16	65.54
24	66.50	25	67.05	24	66.53	23	65.47
Mar. 2	66.52	June 1	67.05	31	66.45	30	65.42
9	67.62	8	67.07	Sept. 7	66.37	Dec. 7	65.39
16	67.20	15	67.07	14	66.31	14	65.33
23	67.10	22	67.03	21	66.22	21	65.30
30	67.00	29	67.00	28	66.13	28	65.27

N 1204.

Water level, in feet above mean sea level, 1940

Jan. 6	5.88	Apr. 6	6.19	July 6	10.24	Oct. 5	10.64
13	5.77	13	6.46	13	10.06	12	10.72
20	6.08	20	6.91	20	10.11	19	10.73
27	6.04	27	7.71	27	10.34	26	10.78
Feb. 3	5.82	May 4	7.94	Aug. 3	9.89	Nov. 2	10.83
10	5.70	11	7.81	10	9.30	9	10.83
17	5.58	18	8.00	17	8.96	16	11.15
24	5.78	25	9.93	24	8.71	23	11.11
Mar. 2	5.73	June 1	10.83	31	9.31	30	11.04
9	6.26	8	11.11	Sept. 7	10.17	Dec. 7	11.00
16	6.27	15	11.06	14	10.29	14	10.94
23	6.32	22	10.82	21	10.40	21	10.54
30	6.28	29	10.45	28	10.70	28	9.81

N 1216.

Water level, in feet above mean sea level, 1940

Jan. 6	65.87	Apr. 6	65.87	July 6	66.04	Oct. 5	65.13
13	65.77	13	65.91	13	65.99	12	65.07
20	65.81	20	65.86	20	65.95	19	64.98
27	65.70	27	65.83	27	65.91	26	64.88
Feb. 3	65.71	May 4	65.99	Aug. 3	65.83	Nov. 2	64.81
10	65.53	11	66.07	10	65.76	9	64.71
17	65.38	18	66.15	17	65.68	16	64.63
24	65.55	25	66.20	24	65.62	23	64.54
Mar. 2	65.42	June 1	66.24	31	65.55	30	64.49
9	65.85	8	66.24	Sept. 7	65.47	Dec. 7	64.41
16	65.93	15	66.23	14	65.39	14	64.36
23	65.97	22	66.14	21	65.31	21	64.30
30	65.96	29	66.17	28	65.22	28	64.24

N 1222.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	1.64	Apr. 6	2.43	July 6	4.72	Oct. 5	6.03
13	1.54	13	2.55	13	4.13	12	6.76
20	1.66	20	3.10	20	3.59	19	7.28
27	1.60	27	4.00	27	3.08	26	7.66
Feb. 3	1.52	May 4	4.52	Aug. 3	2.91	Nov. 2	8.02
10	1.46	11	4.68	10	2.53	9	8.24
17	1.40	18	4.71	17	2.25	16	8.63
24	1.62	25	6.42	24	1.95	23	8.68
Mar. 2	1.64	June 1	7.60	31	1.88	30	8.74
9	2.03	8	8.14	Sept. 7	2.90	Dec. 7	8.80
16	2.14	15	8.04	14	4.29	14	8.71
23	2.31	22	6.41	21	5.13	21	8.89
30	2.39	29	5.45	28	5.13	28	8.56

N 1234.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	62.66	Apr. 6	62.73	July 6	63.31	Oct. 5	62.10
13	62.53	13	62.95	13	63.29	12	62.06
20	62.48	20	63.07	20	63.29	19	61.94
27	62.41	27	63.07	27	63.18	26	61.86
Feb. 3	62.34	May 4	63.29	Aug. 3	63.04	Nov. 2	61.83
10	62.30	11	63.41	10	62.94	9	61.60
17	62.06	18	63.49	17	62.86	16	61.61
24	62.09	25	63.55	24	62.74	23	61.47
Mar. 2	61.97	June 1	63.60	31	62.67	30	61.44
9	62.37	8	63.57	Sept. 7	62.57	Dec. 7	61.47
16	62.52	15	63.62	14	62.44	14	61.27
23	62.65	22	63.43	21	62.41	21	61.31
30	62.81	29	63.52	28	62.23	28	61.30

N 1240.

Water level, in feet with reference to mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	-0.08	Apr. 6	+1.01	July 6	+2.90	Oct. 5	+7.27
13	-.18	13	+1.15	13	+2.09	12	+8.06
20	-.05	20	+2.30	20	+1.36	19	+8.56
27	-.10	27	+3.23	27	+.84	26	+8.93
Feb. 3	-.05	May 4	+3.71	Aug. 3	+1.18	Nov. 2	+9.29
10	-.30	11	+3.85	10	+.47	9	+9.54
17	-.36	18	+5.00	17	+.28	16	+9.91
24	-.31	25	+7.58	24	-.06	23	+10.02
Mar. 2	-.29	June 1	+8.51	31	+.70	30	+10.10
9	+.15	8	+9.33	Sept. 7	+3.71	Dec. 7	+10.19
16	+.63	15	+7.69	14	+5.48	14	+10.13
23	+.87	22	+5.04	21	+5.85	21	+10.30
30	+1.00	29	+3.87	28	+5.08	28	+8.72

N 1242.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	27.36	Apr. 29	27.41	Aug. 2	27.19	Nov. 1	27.18
Mar. 1	27.32	May 31	27.48	30	27.24	29	27.17
29	27.31	June 28	27.25	Sept. 27	27.15	Dec. 27	27.09

N 1243. Nassau County Department of Public Works. On south side of Velsor-Stillwell Road, about 250 feet west of Cold Spring Harbor Road, about two miles south of Cold Spring Harbor. Diameter 1¼ inches, measured depth 16.0 feet below measuring point. Measuring point, top of pipe, 0.8 foot above land surface and 64.61 feet above mean sea level. Water level, Nov. 3, 1939, 6.45 feet below measuring point and 58.16 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Nov. 3, 1939	58.16	Mar. 29, 1940	58.05	Aug. 30, 1940	57.42
Dec. 1	58.22	Apr. 29	58.05	Sept.27	57.35
29	58.10	May 31	57.82	Nov. 1	57.26
Feb. 2, 1940	58.01	June 28	57.72	29	57.36
Mar. 1	57.92	Aug. 2	57.52	Dec. 27	57.23

N 1244. Nassau County Department of Public Works. On north side of Jericho Turnpike, 60 feet west of Avery Road, about 2½ miles east of Syosset. Diameter 4 inches, measured depth 259.0 feet below measuring point. Measuring point, top of pipe, 0.5 foot above land surface and 248.89 feet above mean sea level. Water level May 31, 1940, 172.39 feet below measuring point and 76.50 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 31	76.50	Aug. 2	76.21	Sept.27	76.01	Nov. 29	75.75
June 28	76.34	30	76.11	Nov. 1	75.88	Dec. 27	75.60

N 1245. Nassau County Department of Public Works. On west side of Plainview-Cold Spring Harbor Road, about one mile south of Jericho Turnpike, about two miles northeast of Plainview. Diameter 2½ inches, measured depth 202.3 feet below measuring point. Measuring point, top of pipe, 0.4 foot above land surface and 259.93 feet above mean sea level. Water level Feb. 2, 1940, 177.05 feet below measuring point and 82.88 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Feb. 2	82.88	Apr. 29	81.95	Aug. 2	81.07	Nov. 1	80.66
Mar. 1	82.47	May 31	81.75	30	81.04	29	80.67
29	82.19	June 28	81.47	Sept.27	80.83	Dec. 27	80.48

N 1246. Nassau County Department of Public Works. On east side of Plainview-Melville Road, just west of Suffolk County line. Diameter 4 inches, measured depth 124.7 feet below measuring point. Measuring point, top of pipe, 0.7 foot above land surface and 185.10 feet above mean sea level. Water level May 31, 1940, 102.98 feet below measuring point and 82.12 feet above mean sea level.

Water level, in feet above mean sea level, 1940

May 31	82.12	Aug. 2	81.61	Sept.27	81.45	Nov. 29	81.19
June 28	81.93	30	81.66	Nov. 1	81.22	Dec. 27	80.85

N 1247.

Water level, in feet above mean sea level, 1940

Feb. 2	75.25	Apr. 29	74.59	Aug. 2	74.58	Nov. 1	73.95
Mar. 1	74.67	May 31	74.88	30	74.57	29	73.65
29	74.59	June 28	74.76	Sept.27	74.24	Dec. 27	73.46

N 1248.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	60.71	Apr. 6	61.33	July 6	61.63	Oct. 5	60.16
13	60.58	13	61.44	13	61.54	12	60.08
20	60.51	20	61.62	20	61.43	19	59.97
27	60.49	27	62.02	27	61.34	26	59.85
Feb. 3	60.37	May 4	62.26	Aug. 3	61.21	Nov. 2	59.73
10	60.36	11	62.24	10	61.05	9	59.64
17	60.35	18	62.11	17	60.90	16	59.56
24	60.29	25	62.07	24	60.78	23	59.58
Mar. 2	60.30	June 1	62.11	31	60.67	30	59.66
9	60.80	8	61.90	Sept. 7	60.57	Dec. 7	59.65
16	61.12	15	61.91	14	60.48	14	59.58
23	61.25	22	61.81	21	60.37	21	59.51
30	61.31	29	61.74	28	60.27	28	59.44

N 1249. Nassau County Department of Public Works. At northeast corner of Secatogue Avenue and Wall Street, Farmingdale. Diameter 1¼ inches, measured depth 34.0 feet below measuring point. Measuring point, top of pipe, about level with land surface and 67.84 feet above mean sea level. Water level Apr. 21, 1939, 9.66 feet below measuring point and 58.18 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Apr. 21,1939	58.18	Dec. 1, 1939	53.64	June 28, 1940	54.35
28	57.97	29	53.18	Aug. 2	53.72
June 2	56.79	Feb. 2, 1940	52.89	30	53.24
30	55.98	Mar. 1	52.91	Sept.27	52.78
July 28	55.05	29	53.95	Nov. 1	52.13
Sept. 1	54.39	Apr. 29	54.99	29	52.43
29	53.75	May 31	54.77	Dec. 27	52.16
Nov. 3	53.46				

N 1250.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	45.37	Apr. 29	47.58	Aug. 2	46.04	Nov. 1	44.59
Mar. 1	45.39	May 31	47.06	30	45.61	29	45.08
29	46.49	June 28	46.73	Sept.27	45.18	Dec. 27	44.92

N 1251.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	37.33	Apr. 29	39.33	Aug. 2	37.98	Nov. 1	36.48
Mar. 1	37.44	May 31	38.83	30	37.43	29	37.20
29	38.49	June 28	38.54	Sept.27	36.97	Dec. 27	37.26

N 1252. Nassau County Department of Public Works. At southwest corner of County Line Road and Smith Street, about one mile north of Amityville. Diameter 1¼ inches, measured depth 23.5 feet below measuring point. Measuring point, top of pipe, about level with land surface and 27.29 feet above mean sea level. Water level Apr. 21, 1939, 1.10 feet below measuring point and 26.19 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Apr. 21, 1939	26.19	Dec. 1, 1939	23.89	June 28, 1940	25.01
28	26.01	29	23.55	Aug. 2	24.37
June 2	25.34	Feb. 2, 1940	23.59	30	24.05
30	24.89	Mar. 1	23.59	Sept.27	23.49
July 28	24.26	29	24.59	Nov. 1	23.35
Sept. 1	23.73	Apr. 29	25.37	29	24.20
29	23.32	May 31	25.42	Dec. 27	24.34
Nov. 3	23.41				

N 1253.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	12.05	Apr. 6	13.20	July 6	14.17	Oct. 5	13.15
13	11.96	13	13.36	13	13.88	12	13.36
20	12.14	20	13.83	20	13.57	19	13.57
27	12.06	27	14.20	27	13.23	26	13.73
Feb. 3	12.03	May 4	14.42	Aug. 3	12.94	Nov. 2	13.90
10	11.94	11	14.38	10	12.69	9	14.15
17	11.89	18	14.25	17	12.46	16	14.44
24	12.18	25	14.43	24	12.25	23	14.75
Mar. 2	12.16	June 1	14.70	31	12.20	30	14.86
9	12.77	8	15.00	Sept. 7	12.30	Dec. 7	14.91
16	12.92	15	15.11	14	12.58	14	14.87
23	13.10	22	14.74	21	12.82	21	14.98
30	13.19	29	14.45	28	12.99	28	15.02

N 1254. Nassau County Department of Public Works. At southeast corner of County Line Road and Merrick Road, West Amityville. Diameter 1¼ inches, measured depth 28.7 feet below measuring point. Measuring point, top of pipe, 0.2 foot above land surface and 14.04 feet above mean sea level. Water level Apr. 21, 1939, 10.01 feet below measuring point and 4.03 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Apr. 21, 1939	4.03	Dec. 1, 1939	3.09	June 28, 1940	3.41
28	4.08	29	2.82	Aug. 2	3.16
June 2	3.51	Feb. 2, 1940	2.55	30	3.07
30	3.35	Mar. 1	3.02	Sept. 27	2.92
July 28	3.11	29	2.73	Nov. 1	3.57
Sept. 1	3.56	Apr. 29	3.47	29	3.47
29	3.10	May 31	3.74	Dec. 27	3.74
Nov. 3	2.83				

N 1255. On May 11, 1940, observations were started in a new well constructed by the Nassau County Department of Public Works to replace the old New York City well, about one foot distant. Diameter of new well 1¼ inches, measured depth 34.6 feet below measuring point. Measuring point, top of pipe, 0.2 foot above land surface, and 79.36 feet above mean sea level. Water level May 11, 1940, 17.50 feet below measuring point and 61.86 feet above mean sea level. Measurements in both wells over a period of eight months indicate only minor differences of water level.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	60.58	Apr. 6	61.15	July 6	61.64	Oct. 5	60.54
13	60.49	13	61.24	13	61.53	12	60.46
20	60.47	20	61.59	20	61.42	19	60.31
27	60.53	27	61.82	27	61.34	26	60.18
Feb. 3	60.47	May 4	61.97	Aug. 3	61.19	Nov. 2	60.17
10	60.38	11	61.86	10	61.06	9	60.09
17	60.27	18	61.83	17	60.96	16	60.30
24	60.33	25	61.80	24	60.90	23	60.42
Mar. 2	60.34	June 1	61.89	31	60.99	30	60.32
9	60.47	8	61.86	Sept. 7	60.85	Dec. 7	60.25
16	60.71	15	61.82	14	60.75	14	60.14
23	61.04	22	61.61	21	60.62	21	60.09
30	61.16	29	61.68	28	60.65	28	60.08

N 1256. On May 4, 1940, observations were started in a new well constructed by the Nassau County Department of Public Works to replace the old New York City well, about one foot distant. Diameter of new well 1¼ inches, measured depth 50.5 feet below measuring point. Measuring point, top of pipe, 0.2 foot above land surface and 112.34 feet above mean sea level. Water level May 4, 1940, 34.00 feet below measuring point and 78.34 feet above mean sea level. Measurements in both wells over a period of 8 months indicate only minor differences in water level.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	78.38	Apr. 6	78.07	July 6	78.26	Oct. 5	77.55
13	78.25	13	78.12	13	78.26	12	77.50
20	78.21	20	78.18	20	78.22	19	77.41
27	78.11	27	78.22	27	78.16	26	77.33
Feb. 3	78.01	May 4	78.34	Aug. 3	78.10	Nov. 2	77.26
10	77.93	11	78.37	10	78.04	9	77.20
17	77.90	18	78.36	17	77.97	16	77.15
24	77.73	25	78.36	24	77.90	23	77.07
Mar. 2	77.66	June 1	78.33	31	77.87	30	77.06
9	78.32	8	78.36	Sept. 7	77.82	Dec. 7	77.00
16	78.20	15	78.37	14	77.75	14	76.93
23	78.21	22	78.32	21	77.69	21	76.88
30	78.17	29	78.35	28	77.61	28	76.82

N 1257.

Water level, in feet above mean sea level, 1940

Jan. 6	6.18	Apr. 6	7.41	July 6	7.30	Oct. 5	6.71
13	6.10	13	7.69	13	7.28	12	6.63
20	6.57	20	7.92	20	7.06	19	6.52
27	6.47	28	8.24	27	7.00	26	6.41
Feb. 3	6.31	May 4	8.25	Aug. 3	6.94	Nov. 2	6.54
10	6.21	11	8.31	10	6.84	9	6.71
17	6.29	18	7.85	17	6.71	16	7.05
24	6.83	25	7.83	24	6.65	23	7.28
Mar. 2	6.93	June 1	7.95	31	6.79	30	7.31
9	7.48	8	7.88	Sept. 7	6.71	Dec. 7	7.25
16	7.59	15	7.69	14	6.59	14	7.08
23	7.70	22	7.43	21	6.46	21	7.25
30	7.55	29	7.37	28	6.69	28	7.24

N 1258.

Water level, in feet above mean sea level, 1940

Jan. 6	36.22	Apr. 6	37.30	July 6	37.31	Oct. 5	35.87
13	36.14	13	37.63	13	37.20	12	35.79
20	36.42	20	38.04	20	37.12	19	35.69
27	36.50	27	38.22	27	37.00	26	35.60
Feb. 3	36.35	May 4	38.09	Aug. 3	36.86	Nov. 2	35.58
10	36.21	11	37.89	10	36.71	9	35.63
17	36.11	18	37.76	17	36.56	16	35.82
24	36.39	25	37.69	24	36.42	23	36.26
Mar. 2	36.50	June 1	37.73	31	36.37	30	36.31
9	37.17	8	37.85	Sept. 7	36.29	Dec. 7	36.26
16	37.32	15	37.69	14	36.16	14	36.16
23	37.44	22	37.52	21	36.04	21	36.22
30	37.46	29	37.42	28	35.95	28	36.43

N 1259.

Water level, in feet above mean sea level, 1940

Jan. 6	52.13	Apr. 6	52.64	July 6	52.95	Oct. 5	51.74
13	52.03	13	52.69	13	52.91	12	51.64
20	52.04	20	52.76	20	52.82	19	51.56
27	51.98	27	52.92	27	52.74	26	51.46
Feb. 3	51.90	May 4	53.17	Aug. 3	52.64	Nov. 2	51.37
10	51.83	11	53.32	10	52.54	9	51.29
17	51.74	18	53.38	17	52.44	16	51.23
24	51.88	25	53.36	24	52.33	23	51.23
Mar. 2	51.86	June 1	53.28	31	52.24	30	51.27
9	52.24	8	53.22	Sept. 7	52.14	Dec. 7	51.29
16	52.38	15	53.17	14	52.04	14	51.25
23	52.53	22	53.08	21	51.94	21	51.23
30	52.61	29	53.05	28	51.84	28	51.20

N 1260. On May 25, 1940, observations were started in a new well constructed by the Nassau County Department of Public Works to replace the old New York City well, about 36 feet distant. Diameter of new well 1¼ inches, measured depth 29.3 feet below measuring point. Measuring point, top of pipe, 0.2 foot above land surface and 33.14 feet above mean sea level. Water level May 25, 1940, 12.84 feet below measuring point and 20.30 feet above mean sea level. Measurements in both wells over a period of 7 months indicate only minor differences in water level.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	18.13	Apr. 6	19.47	July 6	20.33	Oct. 5	18.55
13	18.05	13	19.62	13	20.17	12	18.60
20	18.23	20	20.21	20	19.98	19	18.65
27	18.38	27	20.53	27	19.76	26	18.74
Feb. 3	18.37	May 4	20.64	Aug. 3	19.54	Nov. 2	18.84
10	18.12	11	20.45	10	19.32	9	19.06
17	18.06	18	20.32	17	19.10	16	19.28
24	18.13	25	20.30	24	18.90	23	19.74
Mar. 2	18.70	June 1	20.41	31	18.76	30	19.93
9	18.89	8	20.73	Sept. 7	18.64	Dec. 7	20.03
16	19.14	15	20.79	14	18.50	14	20.09
23	19.38	22	20.60	21	18.42	21	20.19
30	19.50	29	20.49	28	18.51	28	20.36

N 1261. Measurements discontinued Apr. 20, 1940.

Water level, in feet above mean sea level, 1940

Jan. 6	3.71	Feb. 3	2.92	Mar. 2	2.75	Mar. 30	3.13
13	3.52	10	2.65	9	3.42	Apr. 6	3.15
20	3.80	17	2.49	16	3.41	13	3.58
27	3.30	24	2.94	23	3.42	20	3.68

N 1262.

Water level, in feet above mean sea level, 1940

Jan. 6	34.19	Apr. 6	34.75	July 6	34.68	Oct. 5	34.15
13	34.17	13	35.18	13	34.62	12	34.06
20	34.39	20	35.26	20	34.44	19	34.00
27	34.25	27	35.16	27	34.53	26	33.98
Feb. 3	34.16	May 4	35.29	Aug. 3	34.30	Nov. 2	34.34
10	34.14	11	35.02	10	34.23	9	34.07
17	34.14	18	34.96	17	34.25	16	34.53
24	34.50	25	34.89	24	34.28	23	34.41
Mar. 2	34.37	June 1	35.08	31	34.47	30	34.45
9	34.90	8	34.75	Sept. 7	34.25	Dec. 7	34.37
16	35.01	15	34.68	14	34.16	14	34.27
23	34.90	22	34.54	21	34.03	21	34.34
30	34.83	29	34.72	28	34.30	28	34.42

N 1263. On May 11, 1940, observations were started in a new well constructed by the Nassau County Department of Public Works to replace the old New York City well, about 15 feet distant. Diameter of new well 1¼ inches, measured depth 32.2 feet below measuring point. Measuring point, top of pipe, 0.2 foot above land surface, and 65.97 feet above mean sea level. Water level, May 11, 1940, 14.37 feet below measuring point and 51.60 feet above mean sea level. Measurements in both wells over a period of 8 months indicate only minor differences of water level.

Water level, in feet above mean sea level, 1940

Jan. 6	50.51	Apr. 6	51.17	July 6	51.17	Oct. 5	49.93
13	50.40	13	51.27	13	51.10	12	49.85
20	50.65	20	51.35	20	51.02	19	49.77
27	50.47	27	51.49	27	50.92	26	49.67
Feb. 3	50.34	May 4	51.65	Aug. 3	50.82	Nov. 2	49.59
10	50.24	11	51.60	10	50.72	9	49.53
17	50.19	18	51.59	17	50.61	16	49.56
24	50.78	25	51.54	24	50.51	23	49.60
Mar. 2	50.51	June 1	51.54	31	50.43	30	49.59
9	51.07	8	51.48	Sept. 7	50.33	Dec. 7	49.56
16	51.36	15	51.42	14	50.23	14	49.53
23	51.24	22	51.31	21	50.13	21	49.48
30	51.23	29	51.26	28	50.03	28	49.47

N 1264.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	4.06	Apr. 6	3.42	July 6	7.39	Oct. 5	7.74
13	3.85	13	3.79	13	7.13	12	7.72
20	4.04	20	3.87	20	7.07	19	7.66
27	3.55	27	5.66	27	7.25	26	7.65
Feb. 3	3.18	May 4	5.80	Aug. 3	6.90	Nov. 2	7.90
10	2.88	11	5.79	10	6.57	9	7.83
17	2.70	18	5.91	17	6.34	16	8.78
24	3.06	25	6.93	24	6.21	23	8.14
Mar. 2	2.93	June 1	7.66	31	6.74	30	8.10
9	3.56	8	7.88	Sept. 7	6.44	Dec. 7	7.98
16	3.57	15	7.73	14	7.26	14	7.86
23	3.64	22	7.52	21	7.34	21	7.78
30	3.41	29	7.43	28	7.81	28	7.15

N 1265. Nassau County Department of Public Works. At southwest corner of Albany Avenue and Merrick Road, Freeport. Diameter 1¼ inches, depth 14.1 feet below measuring point. Measuring point, top of pipe, about level with land surface and 5.85 feet above mean sea level. Water level, Mar. 9, 1939, 2.04 feet below measuring point and 3.81 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Mar. 9, 1939	3.81	Nov. 1, 1939	4.23	May 31, 1940	3.87
14	4.14	Dec. 1	3.16	July 1	3.05
Apr. 21	3.73	Jan. 2, 1940	2.95	Aug. 1	2.91
June 10	3.10	31	2.78	Sept. 3	3.35
July 14	3.02	Feb. 29	3.02	Oct. 1	3.31
Aug. 1	2.99	Apr. 1	2.81	31	3.65
Sept. 2	3.41	May 1	3.23	Dec. 2	3.25
Oct. 1	3.29				

N 1266. Nassau County Department of Public Works. At southwest corner of Albany Avenue and Merrick Road, 2.6 feet south of well N 1265, Freeport. Diameter 1¼ inches, depth 47.3 feet below measuring point. Measuring point, top of pipe, about level with land surface and 5.82 feet above mean sea level. Water level, Mar. 9, 1939, 0.17 foot below measuring point and 5.65 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Mar. 9, 1939	5.65	Nov. 1, 1939	5.46	May 31, 1940	5.41
14	5.84	Dec. 1	4.85	July 1	4.85
Apr. 21	5.68	Jan. 2, 1940	4.49	Aug. 1	4.65
June 10	5.01	31	4.26	Sept. 3	5.04
July 14	4.83	Feb. 29	4.36	Oct. 1	5.17
Aug. 1	4.79	Apr. 1	4.16	31	5.39
Sept. 2	5.24	May 1	5.09	Dec. 2	5.08
Oct. 1	5.04				

N 1269. Nassau County Department of Public Works. At southwest corner of Babylon Turnpike and Poplar Street, Merrick. Diameter 1¼ inches, depth 14.2 feet below measuring point. Measuring point, top of pipe, about level with land surface and 12.98 feet above mean sea level. Water level, Mar. 9, 1939, 3.58 feet below measuring point and 9.40 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Mar. 9, 1939	9.40	Nov. 1, 1939	7.06	May 31, 1940	6.31
14	9.57	Dec. 1	7.28	July 1	6.53
Apr. 21	9.12	Jan. 2, 1940	6.90	Aug. 1	6.41
June 10	7.25	31	6.24	Sept. 3	6.62
July 14	6.67	Feb. 29	5.78	Oct. 1	6.68
Aug. 1	6.33	Apr. 1	5.79	31	6.67
Sept. 2	6.84	May 1	7.35	Dec. 2	7.57
Oct. 1	6.55				

N 1270. Nassau County Department of Public Works. At southwest corner of Babylon Turnpike and Poplar Street, 2.6 feet west of well N 1269, Merrick. Diameter 1¼ inches, depth 60.2 feet below measuring point. Measuring point, top of pipe, about level with land surface and 13.01 feet above mean sea level. Water level, Mar. 9, 1939, 3.34 feet below measuring point and 9.67 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Mar. 9, 1939	9.67	Nov. 1, 1939	8.49	May 31, 1940	7.61
14	9.82	Dec. 1	8.35	July 1	8.24
Apr. 21	9.63	Jan. 2, 1940	7.54	Aug. 1	7.96
June 10	8.57	31	6.81	Sept. 3	8.24
July 14	8.17	Feb. 29	6.65	Oct. 1	8.32
Aug. 1	7.92	Apr. 1	6.55	31	8.41
Sept. 2	8.42	May 1	8.75	Dec. 2	8.55
Oct. 1	8.10				

N 1271. Nassau County Department of Public Works. At northeast corner of Beach Drive and Florence Street, Merrick. Diameter 1¼ inches, depth 14.3 feet below measuring point. Measuring point, top of pipe, about level with land surface and 4.63 feet above mean sea level. Water level, Mar. 9, 1939, 1.74 feet below measuring point and 2.89 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Mar. 9, 1939	2.89	Nov. 1, 1939	2.87	May 31, 1940	2.61
14	3.49	Dec. 1	1.99	July 1	1.79
Apr. 21	2.74	Jan. 2, 1940	1.76	Aug. 1	1.42
June 10	1.52	31	1.82	Sept. 3	1.98
July 14	1.29	Feb. 29	2.28	Oct. 1	2.03
Aug. 1	1.23	Apr. 1	1.99	31	2.07
Sept. 2	2.19	May 1	2.33	Dec. 2	2.38
Oct. 1	1.80				

N 1273. Nassau County Department of Public Works. At northwest corner of Cypress Street and Walters Avenue, Wantagh. Diameter 1¼ inches, depth 13.5 feet below measuring point. Measuring point, top of pipe, about level with land surface and 15.11 feet above mean sea level. Water level, Nov. 1, 1939, 10.50 feet below measuring point and 4.61 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Nov. 1, 1939	4.61	Feb. 29, 1940	4.58	Aug. 1, 1940	5.73
Dec. 1	4.79	Apr. 1	5.21	Sept. 3	5.51
4	4.78	May 1	6.07	Oct. 1	5.66
Jan. 2, 1940	4.34	31	5.87	31	5.75
31	4.38	July 1	6.01	Dec. 2	6.42

N 1274. Nassau County Department of Public Works. At northwest corner of Cypress Street and Walters Avenue, 1.9 feet west of well N 1273, Wantagh. Diameter 1¼ inches, depth 44.7 feet below measuring point. Measuring point, top of pipe, about level with land surface and 15.13 feet above mean sea level. Water level, Nov. 1, 1939, 9.47 feet below measuring point and 5.66 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Nov. 1, 1939	5.66	Feb. 29, 1940	4.60	Aug. 1, 1940	5.81
Dec. 1	4.83	Apr. 1	5.25	Sept. 3	5.54
4	5.13	May 1	6.10	Oct. 1	5.67
Jan. 2, 1940	4.38	31	5.78	31	5.73
31	4.41	July 1	6.05	Dec. 2	6.45

N 1275. Nassau County Department of Public Works. At northeast corner of Byron Street and Willow Street, Wantagh. Diameter 1¼ inches, depth 13.2 feet below measuring point. Measuring point, top of pipe, about level with land surface and 9.31 feet above mean sea level. Water level, Nov. 1, 1939, 6.80 feet below measuring point and 2.51 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Nov. 1, 1939	2.51	Apr. 1, 1940	2.60	Sept. 3, 1940	2.36
Dec. 1	2.41	May 1	3.35	Oct. 1	2.35
Jan. 2, 1940	1.96	31	3.07	31	2.29
31	2.11	July 1	2.40	Dec. 2	2.82
Feb. 29	2.77	Aug. 1	2.16		

N 1276. Nassau County Department of Public Works. At northeast corner of Byron Street and Willow Street, 2.2 feet east of well N 1275, Wantagh. Diameter 1¼ inches, depth 44.4 feet below measuring point. Measuring point, top of pipe, about level with land surface and 9.34 feet above mean sea level. Water level, Nov. 1, 1939, 6.83 feet below measuring point and 2.51 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Nov. 1, 1939	2.51	Apr. 1, 1940	2.60	Sept. 3, 1940	2.36
Dec. 1	2.41	May 1	3.35	Oct. 1	2.33
Jan. 2, 1940	1.96	31	3.04	31	2.29
31	2.08	July 1	2.40	Dec. 2	2.84
Feb. 29	2.75	Aug. 1	2.20		

N 1278. Nassau County Department of Public Works. At southeast corner of Nassau Street and Bay Drive, Massapequa. Diameter 1¼ inches, depth 14.3 feet below measuring point. Measuring point, top of pipe, about level with land surface and 13.16 feet above mean sea level. Water level, Nov. 3, 1939, 7.66 feet below measuring point and 5.50 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Nov. 3, 1939	5.50	Feb. 29, 1940	5.45	Aug. 1, 1940	5.53
Dec. 1	5.58	Apr. 1	5.75	Sept. 3	5.33
4	5.57	May 1	6.59	Oct. 1	5.23
Jan. 2, 1940	5.11	31	6.32	31	5.39
31	5.12	July 1	5.99	Dec. 2	6.12

N 1279. Nassau County Department of Public Works. At southeast corner of Nassau Street and Bay Drive, 1.9 feet east of well N 1278, Massapequa. Diameter 1¼ inches, depth 45.3 feet below measuring point. Measuring point, top of pipe, about level with land surface and 13.21 feet above mean sea level. Water level, Nov. 3, 1939, 7.70 feet below measuring point and 5.51 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Nov. 3, 1939	5.51	Feb. 29, 1940	5.54	Aug. 1, 1940	5.57
Dec. 1	5.59	Apr. 1	5.76	Sept. 3	5.35
4	5.58	May 1	6.60	Oct. 1	5.25
Jan. 2, 1940	5.12	31	6.33	31	5.40
31	5.13	July 1	6.01	Dec. 2	6.13

N 1280. Nassau County Department of Public Works. At northwest corner of Park Boulevard and Harmony Drive, Massapequa. Diameter 1¼ inches, measured depth 28.6 feet below measuring point. Measuring point, top of pipe, 0.2 foot above land surface and 19.77 feet above mean sea level. Water level, Jan. 2, 1940, 16.63 feet below measuring point and 3.14 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	3.14	Apr. 1	4.06	July 1	6.70	Oct. 1	5.50
31	2.96	May 1	5.49	Aug. 1	4.54	31	7.28
Feb. 29	2.68	31	6.70	Sept. 3	3.57	Dec. 2	8.70

N 1281. Nassau County Department of Public Works. At northwest corner of Park Boulevard and Harmony Drive, 2.1 feet south of well N 1280, Massapequa. Diameter 1¼ inches, depth 46.1 feet below measuring point. Measuring point, top of pipe, about level with land surface and 19.77 feet above mean sea level. Water level, Nov. 3, 1939, 16.86 feet below measuring point and 2.91 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Nov. 3, 1939	2.91	Feb. 29, 1940	2.70	Aug. 1, 1940	4.54
Dec. 1	3.62	Apr. 1	4.08	Sept. 3	3.56
4	3.57	May 1	5.52	Oct. 1	5.50
Jan. 2, 1940	3.17	31	6.90	31	7.27
31	3.00	July 1	6.73	Dec. 2	8.67

N 1282. Nassau County Department of Public Works. On west side of Wantagh State Parkway, 0.9 mile south of Merrick Road, Wantagh. Diameter 1¼ inches, depth 19.9 feet below measuring point. Measuring poirt, top of pipe, 0.2 foot above land surface and 7.43 feet above mean sea level. Water level, Nov. 1, 1939, 5.69 feet below measuring point and 1.74 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Nov. 1, 1939	1.74	Apr. 1, 1940	0.34	Sept. 3, 1940	1.74
Dec. 1	1.70	May 1	1.19	Oct. 1	2.32
Jan. 2, 1940	1.15	31	1.96	31	2.33
31	.87	July 1	.86	Dec. 2	1.61
Feb. 29	1.52	Aug. 1	1.01		

N 1283. Nassau County Department of Public Works. On west side of Wantagh State Parkway, 0.9 mile south of Merrick Road, 2.5 feet north of N 1282, Wantagh. Diameter 1¼ inches, measured depth 38.5 feet below measuring point. Measuring point, top of pipe, 0.2 foot above land surface and 7.38 feet above mean sea level. Water level, Nov. 1, 1939, 5.64 feet below measuring point and 1.74 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Nov. 1, 1939	1.74	Apr. 1, 1940	0.35	Sept. 3, 1940	1.77
Dec. 1	1.73	May 1	1.20	Oct. 1	2.33
Jan. 2, 1940	1.16	31	1.96	31	2.31
31	.87	July 1	.87	Dec. 2	1.62
Feb. 29	1.54	Aug. 1	1.02		

N 1285. Nassau County Department of Public Works. At northwest corner of Spruce Street and Melvin Street, Wantagh. Diameter 1¼ inches, depth 19.0 feet below measuring point. Measuring point, top of pipe, about level with land surface and 6.69 feet above mean sea level. Water level, Nov. 1, 1939, 3.60 feet below measuring point and 3.09 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Nov. 1, 1939	3.09	Apr. 1, 1940	2.37	Sept. 3, 1940	2.77
Dec. 1	2.48	May 1	2.84	Oct. 1	2.76
Jan. 2, 1940	2.15	31	3.29	31	2.84
31	2.12	July 1	2.57	Dec. 2	2.90
Feb. 29	2.68	Aug. 1	2.38		

N 1286. Nassau County Department of Public Works. At northwest corner of Spruce Street and Melvin Street, 2.1 feet north of well N 1285, Wantagh. Diameter 1¼ inches, depth 38.7 feet below measuring point. Measuring point, top of pipe, about level with land surface and 6.71 feet above mean sea level. Water level, Nov. 1, 1939, 3.63 feet below measuring point and 3.08 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Nov. 1, 1939	3.08	Apr. 1, 1940	2.38	Sept. 3, 1940	2.78
Dec. 1	2.48	May 1	2.85	Oct. 1	2.78
Jan. 2, 1940	2.16	31	3.29	31	2.85
31	2.13	July 1	2.57	Dec. 2	2.91
Feb. 29	2.68	Aug. 1	2.40		

N 1288. Nassau County Department of Public Works. On west side of Bay View Avenue at St. Regis Street, Wantagh. Diameter 1¼ inches, depth 18.9 feet below measuring point. Measuring point, top of pipe, about level with land surface and 9.98 feet above mean sea level. Water level, Nov. 1, 1939, 7.36 feet below measuring point and 2.62 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Nov. 1, 1939	2.62	Apr. 1, 1940	2.89	Sept. 3, 1940	2.77
Dec. 1	2.73	May 1	3.74	Oct. 1	2.73
Jan. 2, 1940	2.21	31	3.43	31	2.62
31	2.28	July 1	2.90	Dec. 2	3.16
Feb. 29	2.91	Aug. 1	2.65		

N 1289. Nassau County Department of Public Works. On west side of Bay View Avenue at St. Regis Street, 4.7 feet north of N 1288, Wantagh. Diameter 1¼ inches, measured depth 33.4 feet below measuring point. Measuring point, top of pipe, about level with land surface and 9.89 feet above mean sea level. Water level, Nov. 1, 1939, 7.23 feet below measuring point and 2.66 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Nov. 1, 1939	2.66	Apr. 1, 1940	2.93	Sept. 3, 1940	2.81
Dec. 1	2.76	May 1	3.77	Oct. 1	2.77
Jan. 2, 1940	2.26	31	3.46	31	2.67
31	2.31	July 1	2.94	Dec. 2	3.21
Feb. 29	3.03	Aug. 1	2.73		

N 1290. Nassau County Department of Public Works. On west side of Bay View Avenue at St. Regis Street, 3.9 feet north of well N 1289, Wantagh. Diameter 1¼ inches, depth 51.5 feet below measuring point. Measuring point, top of pipe, about level with land surface and 9.89 feet above mean sea level. Water level, Nov. 1, 1939, 7.29 feet below measuring point and 2.60 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Nov. 1, 1939	2.60	Apr. 1, 1940	3.58	Sept. 3, 1940	3.74
Dec. 1	4.94	May 1	3.91	Oct. 1	3.66
Jan. 2, 1940	4.33	31	4.04	31	3.64
31	3.82	July 1	4.03	Dec. 2	3.71
Feb. 29	3.51	Aug. 1	3.95		

N 1613. Replaces well N 8. Citizens Water Supply Co. abandoned well, Valley Stream 5, 96 feet north of Southern State Parkway, about 1,500 feet west of Corona Avenue, and about 1,500 feet west of well N 8, North Valley Stream. Diameter 6 inches, measured depth 497.0 feet below measuring point. Measuring point, top edge of hole in 6½-inch plug, 1.1 feet above land surface and 25.46 feet above mean sea level. Water level, June 8, 1940, 1.98 feet below measuring point and 23.48 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 8	23.48	Aug. 3	22.98	Sept.28	22.85	Nov. 16	22.93
15	23.49	10	22.96	Oct. 5	22.80	23	22.97
22	23.33	17	22.90	12	22.76	30	23.03
29	23.45	24	22.86	19	22.71	Dec. 7	23.05
July 6	23.34	31	22.92	26	22.65	14	22.91
13	23.28	Sept. 7	22.84	Nov. 2	22.81	21	22.97
20	23.15	14	22.72	9	22.75	28	23.00
27	23.17	21	22.68				

N 1614. New York City Department of Water Supply, Gas, and Electricity. On west side of Herricks Road, about 150 feet north of Florence Road, Mineola. Diameter 1⅛ inches, measured depth 35.8 feet below measuring point. Measuring point, top of pipe, 0.3 foot above land surface and 107.58 feet above mean sea level. Water level, Apr. 2, 1913, 31.60 feet below measuring point and 68.98 feet above mean sea level. Measurements from beginning of record on Apr. 2, 1913, to Oct. 31, 1935, inclusive, by New York City, measurements thereafter by Federal Geological Survey.

Water level, in feet above mean sea level, 1913-17, 1932-35, 1940

Date	Water level	Date	Water level	Date	Water level
Apr. 2, 1913	68.98	Nov. 7, 1913	68.43	Nov. 11, 1914	67.98
21	69.78	19	68.33	Dec. 1	67.88
May 8	70.48	Dec. 5	68.18	24	67.90
27	70.48	30	67.98	Mar. 8, 1915	70.38
June 5	70.38	May 1, 1914	71.03	Apr. 13	69.48
23	70.08	15	70.93	28	69.38
July 8	69.88	June 8	70.93	May 7	69.43
24	69.73	July 3	70.68	25	69.33
Aug. 22	69.33	22	70.13	June 5	69.03
Sept. 8	68.98	Aug. 11	69.88	23	68.93
29	68.68	Sept. 7	69.48	Sept. 3	68.43
Oct. 21	68.48	18	69.38	15	68.28

N 1614.--Continued.
Water level, in feet above mean sea level, 1913-17, 1932-35, 1940

Date	Water level	Date	Water level	Date	Water level
Oct. 4, 1915	68.08	Aug. 10, 1932	63.10	May 11, 1940	68.98
19	68.18	31	62.85	18	69.14
Nov. 2	68.08	Oct. 6	62.36	25	69.16
17	67.93	28	62.16	June 1	69.26
Dec. 9	67.68	Dec. 7	62.27	8	69.43
30	67.93	Jan. 23, 1933	62.02	15	69.47
Jan. 31, 1916	67.83	Feb. 27	61.90	22	69.34
Mar. 29	68.13	Apr. 18	63.53	29	69.36
June 22	68.28	June 28	63.89	July 6	69.34
July 14	68.18	July 1	63.92	13	69.30
Aug. 10	67.93	21	63.75	20	69.20
22	67.68	Sept.11	63.46	27	69.08
Sept. 7	67.38	27	64.45	Aug. 3	68.93
22	67.18	Oct. 27	64.38	10	68.79
Oct. 13	65.98	Nov. 24	64.10	17	68.64
27	65.73	Jan. 8, 1934	63.69	24	68.55
Nov. 6	65.58	Mar. 6	63.96	31	68.51
24	65.43	Apr. 20	66.31	Sept. 7	68.46
Dec. 8	65.23	June 11	66.60	14	68.33
Feb. 23, 1917	65.53	July 12	66.23	21	68.20
Apr. 5	65.58	Aug. 1	66.02	28	68.15
23	66.28	23	65.66	Oct. 5	68.07
May 9	66.33	Sept.18	66.08	12	68.04
24	66.23	Oct. 5	66.98	19	67.93
June 7	66.13	Dec. 5	66.83	26	67.86
28	66.03	Jan. 3, 1935	67.08	Nov. 2	67.83
Aug. 1	65.83	Feb. 25	67.72	9	67.85
Oct. 4	65.58	Apr. 5	68.64	16	67.93
23	65.43	May 22	68.08	23	67.92
Nov. 7	65.78	July 1	67.45	30	67.88
26	65.98	Sept.17	66.24	Dec. 7	67.83
Dec. 20	65.88	Oct. 31	65.70	14	67.76
May 26, 1932	63.75	Apr. 27, 1940	68.59	21	67.72
July 20	63.48	May 4	68.84	28	67.71

N 1615. New York City Department of Water Supply, Gas, and Electricity. On east side of Merrick Avenue, 324 feet north of Luddington Road, East Meadow. Diameter 1½ inches, measured depth 25.6 feet below measuring point. Measuring point, top of pipe, 0.7 foot above land surface and 62.75 feet above mean sea level. Water level, Mar. 17, 1913, 18.45 feet below measuring point and 44.30 feet above mean sea level. Measurements from beginning of record on Mar. 17, 1913, to Mar. 1, 1940, inclusive, by New York City, measurements thereafter by Federal Geological Survey.

Water level, in feet above mean sea level, 1913-15, 1932-40

Mar. 17, 1913	44.30	Mar. 17, 1914	45.40	Feb. 11, 1915	46.05
Apr. 4	45.20	31	45.80	Mar. 1	46.00
18	46.15	Apr. 13	45.75	15	46.00
May 9	46.35	May 1	45.70	31	45.65
17	46.10	15	44.90	Apr. 13	45.40
June 3	45.70	June 1	45.65	28	45.25
13	45.40	15	45.40	May 11	45.05
30	45.00	30	45.05	21	44.90
July 9	44.80	July 10	44.85	June 5	44.80
21	44.55	21	44.65	15	44.65
Aug. 4	44.15	Aug. 4	44.40	29	44.50
15	44.00	12	44.25	July 10	44.40
Sept.26	43.35	28	43.95	20	44.25
Oct. 15	43.15	Sept.11	43.70	Aug. 5	44.25
29	43.25	Oct. 6	43.30	14	44.30
Nov. 15	43.20	20	43.10	25	44.10
27	43.05	30	43.00	Sept. 3	44.00
Dec. 9	43.00	Nov. 16	42.80	Oct. 2	43.70
27	42.95	27	42.75	14	43.55
Jan. 10, 1914	43.35	Dec. 11	42.60	25	43.45
22	43.65	24	42.65	Nov. 4	43.35
Feb. 6	44.15	Jan. 14, 1915	43.10	18	43.25
21	44.50	27	44.65	27	43.15

N 1615.--Continued.
Water level, in feet above mean sea level, 1913-15, 1932-40

Date	Water level	Date	Water level	Date	Water level
Dec. 8, 1915	43.10	Sept.19, 1934	43.63	Mar. 8, 1938	44.15
25	43.25	Oct. 4	43.55	Apr. 25	44.19
June 20, 1932	42.96	Nov. 9	43.45	June 1	43.83
Aug. 10	42.37	Dec. 7	43.25	Sept.22	45.51
30	42.11	Jan. 8, 1935	43.79	Nov. 22	45.06
Oct. 5	41.65	Mar. 11	45.35	Feb. 20, 1939	46.20
27	41.49	25	45.46	Mar. 28	47.17
Dec. 5	42.10	May 23	44.41	May 9	46.94
Jan. 25, 1933	42.31	Aug. 1	43.33	June 1	46.10
Feb. 27	42.63	Sept.17	42.75	July 24	44.77
Apr. 10	43.75	Oct. 29	42.31	Aug. 29	44.07
June 26	43.57	Dec. 18	41.99	Oct. 10	43.53
July 20	43.27	Mar. 19, 1936	44.11	Nov. 21	43.67
Aug. 9	42.81	May 18	44.59	Mar. 1, 1940	43.38
Sept.26	43.78	Sept.14	42.83	Apr. 29	45.17
Oct. 25	43.46	Jan. 14, 1937	44.68	May 31	44.86
Nov. 23	43.05	Mar. 16	45.18	June 28	44.57
Jan. 3, 1934	42.78	Apr. 29	44.66	Aug. 2	44.02
Apr. 18	45.23	June 25	44.56	30	43.61
June 7	45.18	Aug. 2	43.79	Sept.27	43.29
July 3	44.70	Oct. 4	43.15	Nov. 1	42.98
30	44.05	Dec. 1	43.30	29	43.33
Aug. 22	43.57	Jan. 20, 1938	43.90	Dec. 27	43.25

N 1616. New York City Department of Water Supply, Gas, and Electricity. On east side of Post Avenue at Argyle Road, Westbury. Diameter 1½ inches, measured depth 48.4 feet below measuring point. Measuring point, top of pipe, about level with land surface, and 122.80 feet above mean sea level. Water level, Mar. 17, 1913, 41.65 feet below measuring point and 81.15 feet above mean sea level. Measurements from beginning of record on Mar. 17, 1913, to Nov. 21, 1939, inclusive, by New York City, measurements thereafter by Federal Geological Survey.
Water level, in feet above mean sea level, 1913-15, 1932-40

Mar. 17, 1913	81.15	Sept.11, 1914	82.30	Aug. 10, 1932	75.24
Apr. 4	81.30	Oct. 6	82.00	30	75.21
18	81.50	20	81.80	Oct. 5	74.98
May 9	82.35	30	81.65	27	74.80
17	82.60	Nov. 16	81.40	Dec. 5	74.55
June 3	82.85	27	81.25	Jan. 25, 1933	74.25
13	82.85	Dec. 11	81.05	Feb. 27	74.05
30	82.75	24	80.90	Apr. 10	74.20
July 9	82.70	Jan. 14, 1915	80.70	June 26	75.37
21	82.60	27	80.70	July 20	75.68
Aug. 4	82.45	Feb. 11	81.00	Aug. 9	75.07
15	82.35	Mar. 1	81.55	Sept.26	75.45
Sept.26	81.90	15	81.85	Oct. 25	75.63
Oct. 15	81.70	31	82.00	Nov. 23	75.60
29	81.55	Apr. 13	82.10	Jan. 3, 1934	75.26
Nov. 15	81.40	28	82.10	Apr. 18	75.95
27	81.30	May 11	82.05	June 7	77.40
Dec. 9	81.25	21	82.00	July 3	77.80
27	81.10	June 5	81.90	30	77.70
Jan. 10, 1914	81.00	15	81.80	Aug. 22	77.60
22	80.95	29	81.70	Sept.19	77.57
Feb. 6	81.10	July 10	81.70	Oct. 4	77.65
21	81.20	20	81.65	Nov. 9	77.57
Mar. 17	82.05	Aug. 5	81.60	Dec. 7	77.55
31	82.50	14	81.60	Jan. 8, 1935	77.74
Apr. 13	82.75	25	81.55	Mar. 11	78.59
May 1	82.95	Sept. 3	81.50	25	78.82
15	83.00	Oct. 2	81.40	May 23	79.58
June 1	83.05	14	81.30	Aug. 1	79.25
15	83.05	25	81.25	Sept.17	78.82
30	82.95	Nov. 4	81.20	Oct. 29	78.47
July 10	82.90	18	81.05	Dec. 18	77.79
21	82.80	27	80.95	Mar. 19, 1936	77.77
Aug. 4	82.70	Dec. 8	80.80	May 18	78.89
12	82.65	25	80.70	Sept.14	79.44
28	82.45	June 20, 1932	75.65	Jan. 14, 1937	78.31

N 1616.--Continued.
Water level, in feet above mean sea level, 1913-15, 1932-40

Date	Water level	Date	Water level	Date	Water level
Mar. 16, 1937	79.58	Feb. 17, 1940	82.73	July 27, 1940	83.05
Apr. 29	80.21	24	82.59	Aug. 3	82.96
June 25	80.69	Mar. 2	82.49	10	82.91
Aug. 2	80.38	9	82.74	17	82.85
Oct. 4	80.23	16	82.70	24	82.80
Dec. 1	79.75	23	82.73	31	82.78
Jan. 20, 1938	79.50	30	82.78	Sept. 7	82.70
Mar. 8	79.50	Apr. 6	82.65	14	82.61
Apr. 25	79.73	13	82.69	21	82.57
June 1	79.98	20	82.72	28	82.49
Sept.22	81.49	27	82.73	Oct. 5	82.41
Nov. 22	82.43	May 4	82.86	12	82.37
Feb. 20, 1939	82.52	11	82.94	19	82.27
Mar. 28	83.55	18	83.02	26	82.21
May 9	85.03	25	83.11	Nov. 2	82.14
June 1	85.42	June 1	83.19	9	82.05
July 24	85.06	8	83.20	16	82.04
Aug. 29	84.70	15	83.23	23	81.90
Oct. 10	84.25	22	83.18	30	81.83
Nov. 21	83.73	29	83.26	Dec. 7	81.77
Jan. 27, 1940	82.92	July 6	83.14	14	81.65
Feb. 3	82.79	13	83.13	21	81.62
10	82.76	20	83.10	28	81.56

N 1617. 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. Diameter 2 inches, measured depth 20.9 feet below measuring point. Measuring point, top of pipe, 0.6 foot above land surface, and 15.62 feet above mean sea level. Water level, Nov. 26, 1903, 11.77 feet below measuring point and 3.85 feet above mean sea level. Measurements from beginning of record on Nov. 26, 1903, to Apr. 25, 1940, inclusive, by New York City, measurements thereafter by Federal Geological Survey.
Water level, in feet above mean sea level, 1903-16, 1933, 1935-40

Nov. 26, 1903	3.85	May 17, 1904	4.35	Nov. 18, 1904	3.80
Dec. 1	3.90	22	4.30	24	3.90
6	3.90	27	4.20	Dec. 1	3.85
11	3.95	June 1	4.15	6	3.75
16	3.75	6	4.10	12	3.70
21	3.85	11	4.25	19	3.80
26	3.85	16	4.20	26	3.80
31	3.75	21	4.25	Jan. 2, 1905	4.10
Jan. 6, 1904	3.85	26	4.20	10	4.60
13	3.90	July 1	4.10	16	4.40
18	3.90	6	4.00	21	4.30
23	4.20	11	4.00	30	4.20
28	4.25	17	4.05	Feb. 7	4.15
Feb. 2	4.15	22	3.95	15	4.20
7	3.95	28	3.95	22	4.00
12	3.90	Aug. 2	3.90	Mar. 1	4.05
17	3.95	8	3.90	8	4.00
22	4.10	13	4.05	15	4.10
27	4.00	19	4.75	22	4.25
Mar. 3	4.25	24	4.60	29	4.40
8	4.30	30	4.40	Apr. 3	4.35
13	4.20	Sept. 4	4.35	9	4.50
18	4.05	10	4.20	14	4.55
23	4.10	15	4.20	22	4.60
28	4.10	21	4.05	27	4.20
Apr. 2	4.20	26	3.95	May 3	4.10
7	4.20	Oct. 2	3.95	9	4.00
12	4.55	7	3.85	15	3.95
17	4.70	13	4.00	20	4.10
22	4.50	18	3.85	26	3.95
27	4.35	25	3.90	31	3.90
May 2	4.65	30	3.80	June 10	3.85
7	4.55	Nov. 5	3.80	17	3.85
12	4.45	11	3.75	22	3.95

N 1617.--Continued.
Water level, in feet above mean sea level, 1903-16, 1933, 1935-40

Date	Water level	Date	Water level	Date	Water level
June 28, 1905	3.85	Sept. 5, 1906	3.85	Oct. 14, 1907	3.35
July 4	3.85	11	3.80	19	3.30
10	3.85	15	3.80	24	3.25
15	3.80	21	3.80	29	3.30
21	3.80	27	3.75	Nov. 4	3.30
26	3.80	Oct. 3	3.70	11	3.55
Aug. 1	3.85	9	3.65	15	3.60
7	3.85	13	3.65	21	3.55
13	3.75	18	3.70	29	3.95
19	3.90	23	4.10	Dec. 6	4.05
26	3.85	29	4.05	12	3.95
Sept. 5	4.00	Nov. 5	4.80	18	4.05
10	3.95	10	3.90	26	4.10
17	3.95	15	3.95	Jan. 1, 1908	4.00
23	3.90	21	3.80	9	4.20
30	3.85	27	3.70	16	4.30
Oct. 7	3.80	Dec. 4	3.65	23	4.20
14	3.90	8	3.55	30	4.20
21	3.70	14	3.60	Feb. 5	4.25
28	3.80	20	3.55	13	4.30
Nov. 3	3.85	26	3.70	19	4.55
10	3.80	Jan. 4, 1907	4.15	27	4.50
17	3.75	9	4.20	Mar. 5	4.30
24	3.60	15	4.30	11	4.20
Dec. 1	3.65	20	4.40	18	4.20
8	3.70	25	4.30	25	4.15
16	3.90	Feb. 4	4.30	Apr. 1	4.15
23	4.05	8	4.10	8	4.05
Jan. 4, 1906	4.15	14	4.00	15	3.90
13	4.20	19	3.90	23	3.90
19	4.30	25	3.80	30	4.00
24	4.40	Mar. 4	3.90	May 8	4.05
30	4.40	8	3.90	14	3.90
Feb. 5	4.20	13	3.85	21	3.95
9	4.15	18	4.45	28	3.85
15	4.20	22	4.60	June 4	3.95
21	4.00	28	4.50	11	3.85
27	4.10	Apr. 3	4.35	18	3.85
Mar. 5	4.25	8	4.25	25	3.70
9	4.65	12	4.40	July 2	3.55
14	4.45	17	4.60	9	3.40
19	4.35	23	4.35	16	3.40
23	4.25	29	4.30	24	3.35
28	4.20	May 3	4.25	30	3.30
Apr. 3	4.35	8	4.20	Aug. 6	3.30
13	4.50	14	4.30	13	3.25
18	4.55	18	4.40	20	3.15
24	4.50	24	4.30	27	3.20
28	4.40	29	4.35	Sept. 3	3.10
May 4	4.30	June 5	4.35	10	3.00
10	4.25	11	4.35	17	3.00
16	4.10	17	4.25	24	2.85
21	4.00	21	4.15	Oct. 1	2.80
26	4.00	27	4.15	8	2.80
June 1	4.00	July 3	4.15	15	2.75
7	4.00	9	4.00	22	2.75
12	4.05	15	3.90	29	2.85
18	3.95	20	3.85	Nov. 5	2.60
22	4.00	26	3.85	12	2.65
28	3.90	Aug. 2	3.80	19	2.50
July 6	4.00	8	3.70	26	2.50
11	4.00	13	3.60	Dec. 3	2.40
17	3.90	20	3.60	11	2.45
21	3.85	28	3.45	15	2.40
27	4.00	Sept. 4	3.45	24	2.55
Aug. 2	4.05	11	3.40	30	2.40
8	4.10	19	3.30	Jan. 6, 1909	2.45
17	3.85	24	3.45	13	2.45
23	3.80	Oct. 3	3.35	20	2.50
28	3.95	9	3.40	27	2.60

N 1617.--Continued.
Water level, in feet above mean sea level, 1903-16, 1933, 1935-40

Date	Water level	Date	Water level	Date	Water level
Feb. 3, 1909	2.50	June 30, 1910	3.45	Dec. 1, 1911	4.10
11	2.65	July 8	3.50	8	4.20
18	2.60	14	3.30	14	4.05
24	3.05	Aug. 4	3.10	21	4.20
Mar. 3	3.50	11	3.05	Jan. 6, 1912	4.12
10	3.35	19	2.95	13	4.02
17	3.25	25	2.85	18	3.92
24	3.40	Sept. 2	2.80	25	3.92
31	3.70	8	2.80	Feb. 2	4.02
Apr. 10	3.70	15	2.65	9	3.87
16	3.75	22	2.75	16	3.67
23	4.05	29	2.65	22	3.97
29	4.20	Oct. 6	2.50	29	3.87
May 7	4.40	13	2.45	Mar. 9	3.77
13	4.30	21	2.60	16	4.02
20	4.25	27	2.55	23	4.27
28	4.05	Nov. 4	2.80	28	4.57
June 4	3.95	11	2.65	Apr. 6	4.77
11	3.95	17	2.60	11	4.57
17	4.00	24	2.60	20	4.52
25	3.80	Dec. 1	2.70	27	4.42
July 2	3.70	9	2.50	May 11	4.42
9	3.60	15	2.50	23	4.57
16	3.55	22	2.50	June 8	4.12
22	3.40	29	2.65	22	3.92
Aug. 6	3.35	Jan. 6, 1911	2.85	July 4	3.62
13	3.10	12	3.10	17	3.57
20	3.35	20	3.00	Aug. 16	3.37
26	3.10	26	2.80	31	3.22
Sept. 2	3.15	Feb. 3	2.80	Sept.19	3.22
10	3.00	9	3.00	28	3.12
16	2.90	16	3.10	Oct. 10	2.97
24	2.90	24	2.90	25	2.92
30	3.00	Mar. 2	2.95	Nov. 8	2.87
Oct. 7	2.85	9	3.10	23	2.62
15	2.80	18	3.00	Dec. 7	2.52
22	2.60	23	2.95	21	2.32
28	2.60	31	3.20	Jan. 4, 1913	3.22
Nov. 5	2.55	Apr. 7	3.45	18	3.02
11	2.50	13	3.70	31	3.22
19	2.45	21	3.70	Mar. 27	3.77
26	2.40	27	3.55	Apr. 24	4.72
Dec. 2	2.60	May 4	3.50	May 10	4.22
10	2.50	11	3.30	22	4.02
17	2.65	18	3.20	June 20	3.62
23	2.50	26	3.15	July 5	3.62
Jan. 8, 1910	3.10	June 1	3.20	19	3.42
22	3.55	9	3.20	Aug. 10	3.22
28	3.65	16	3.25	30	3.02
Feb. 5	3.50	22	3.10	Sept.13	3.02
11	3.40	29	3.20	27	2.92
19	3.55	July 6	3.00	Oct. 6	3.12
26	3.45	13	3.00	Nov. 5	2.97
Mar. 5	3.55	20	2.90	22	2.77
12	3.60	Aug. 3	2.80	Dec. 5	2.67
18	3.60	10	2.90	19	2.62
25	3.45	17	2.75	Jan. 3, 1914	3.22
31	3.35	24	2.70	Feb. 26	3.37
Apr. 8	3.30	Sept. 1	3.00	Mar. 11	3.87
15	3.30	7	3.15	25	3.67
22	3.40	14	3.10	Apr. 8	3.72
29	3.35	21	3.15	24	3.72
May 5	3.30	28	3.00	May 19	3.92
12	3.40	Oct. 6	3.05	June 5	3.62
20	3.20	12	3.10	19	3.47
27	3.30	26	3.55	July 3	3.42
June 4	3.20	Nov. 2	3.50	15	3.37
9	3.30	10	3.50	Aug. 11	3.02
18	3.35	16	3.55	29	2.92
23	3.40	23	3.65	Sept.10	2.72

N 1617.--Continued.
Water level, in feet above mean sea level, 1903-16, 1933, 1935-40

Date	Water level	Date	Water level	Date	Water level
Sept.22, 1914	2.72	June 2, 1916	3.32	Nov. 24, 1939	3.32
Oct. 6	2.62	16	3.22	Mar. 14, 1940	3.31
Nov. 4	2.52	28	3.17	Apr. 25	3.88
18	2.62	July 12	3.02	May 11	3.42
Dec. 19	2.77	27	3.02	18	3.41
Jan. 26, 1915	4.27	Aug. 11	2.97	25	3.41
Feb. 11	4.52	Sept. 7	2.77	June 1	3.43
27	4.02	19	2.72	8	3.44
Mar. 10	4.02	Oct. 4	2.72	15	3.46
27	3.72	20	2.62	22	3.45
Apr. 10	3.52	31	2.62	29	3.44
22	3.42	Nov. 14	2.52	July 6	3.40
May 6	3.42	Dec. 1	2.52	13	3.35
26	3.42	13	2.52	20	3.31
June 3	3.52	28	2.52	27	3.26
16	3.42	Sept.25, 1933	4.02	Aug. 3	3.21
July 3	3.47	Mar. 18, 1935	3.78	10	3.15
13	3.27	May 24	3.37	17	3.08
Aug. 10	3.22	Sept.24	2.64	24	3.03
25	3.12	Oct. 29	2.35	31	3.01
Sept. 8	3.42	May 18, 1936	3.45	Sept. 7	2.97
25	3.12	Sept.14	2.71	14	2.95
Oct. 6	3.07	Jan. 28, 1937	4.15	21	2.92
23	3.22	Mar. 18	3.66	28	2.90
Nov. 3	2.92	May 6	3.99	Oct. 5	2.91
20	2.92	July 1	3.27	12	2.94
Dec. 4	2.82	Sept. 1	2.92	19	2.95
20	2.97	Oct. 14	2.90	26	2.93
30	3.12	Dec. 2	3.82	Nov. 2	2.92
Jan. 15, 1916	3.22	Feb. 10, 1938	4.02	9	2.96
29	3.97	Mar. 22	4.12	16	3.03
Feb. 10	3.92	May 2	3.72	23	3.09
26	3.52	Sept.23	4.78	30	3.14
Mar. 25	3.22	Dec. 19	3.55	Dec. 7	3.19
Apr. 19	3.72	Mar. 29, 1939	4.41	14	3.21
May 4	3.62	June 2	3.57	21	3.20
18	3.42	Sept.12	3.12	28	3.24

N 1621. Nassau County Department of Public Works. On south side of Jericho Turnpike, about 100 feet east of 225th Street, Bellerose. Diameter 1¼ inches, measured depth 60.1 feet below measuring point. Measuring point, top of pipe, 0.2 foot above land surface and 85.81 feet above mean sea level. Water level, Apr. 19, 1940, 46.08 feet below measuring point and 39.73 feet above mean sea level. Measurements discontinued Nov. 9, 1940.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 19	39.73	June 15	39.99	Aug. 10	39.57	Sept.28	39.08
28	39.78	22	39.92	17	39.51	Oct. 5	39.03
May 4	39.87	29	39.97	24	39.44	12	39.00
11	39.91	July 6	39.87	31	39.38	19	38.81
18	39.94	13	39.84	Sept. 7	39.29	26	38.81
25	39.93	20	39.78	14	39.22	Nov. 2	38.81
June 1	39.94	27	39.73	21	39.14	9	38.84
8	39.99	Aug. 3	39.63				

N 1672. U. S. War Department, Camp Mills No. 6. About 0.5 mile south of Commercial Avenue and about 0.5 mile east of Clinton Road, Garden City. Diameter 10 inches, depth about 63 feet. Measuring point, top of metal plate on instrument shelf, about level with land surface and 65.87 feet above mean sea level. Water level, Oct. 4, 1940, 9.05 feet below measuring point and 56.82 feet above mean sea level.

Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 4	a 56.82	Oct. 20	56.69	Nov. 3	56.67	Nov. 17	57.02
6	a 56.89	21	56.67	4	56.73	18	57.07
7	a 56.89	22	56.65	5	56.75	19	57.08
8	56.88	23	56.64	6	56.75	20	57.10
9	56.86	24	56.63	7	56.73	21	57.11
10	56.84	25	56.61	8	56.69	22	57.10
11	56.83	26	56.59	9	56.65	23	57.07
12	56.82	27	56.57	10	56.63	24	57.07
13	56.80	28	56.55	11	56.61	25	a 57.05
14	56.79	29	56.54	12	56.60	30	a 57.02
15	56.77	30	56.54	13	56.59	Dec. 7	a 56.94
16	56.76	31	56.54	14	56.68	14	a 56.78
17	56.75	Nov. 1	56.53	15	56.85	21	a 56.82
18	56.73	2	56.53	16	56.96	28	a 56.77
19	56.71						

N 1682. Nassau County Department of Public Works. At southwest corner of Crocus Avenue and Elm Avenue, Bellerose. Diameter 1¼ inches, measured depth 54.9 feet below measuring point. Measuring point, top of pipe, 0.2 foot above land surface, and 83.11 feet above mean sea level. Water level, Nov. 30, 1940, 40.33 feet below measuring point and 42.78 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level
Nov. 30	42.78	Dec. 14	42.76	Dec. 28	42.67
Dec. 7	42.81	21	42.71		

N 1683. Nassau County Department of Public Works. At northwest corner of Sixth Street and Stewart Avenue, New Hyde Park. Diameter 1¼ inches, measured depth 43.9 feet below measuring point. Measuring point, top of pipe, 0.2 foot above land surface and 83.03 feet above mean sea level. Water level Dec. 3, 1940, 27.96 feet below measuring point and 55.07 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Dec. 3	55.07	Dec. 14	54.95	Dec. 28	54.87
7	55.02	21	54.93		

N 1684. Nassau County Department of Public Works. About 630 feet north of Stewart Avenue and about 150 feet west of Madison Avenue, Garden City. Diameter 1¼ inches, measured depth 48.0 feet below measuring point. Measuring point, top of pipe, 0.5 foot above land surface, and 83.53 feet above mean sea level. Water level, Nov. 30, 1940, 31.31 feet below measuring point and 58.22 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Nov. 30	58.22	Dec. 14	57.13	Dec. 28	56.93
Dec. 7	57.38	21	57.01		

a Estimated.

Q 248. Rubel Ice Corp. On south side of Jamaica Avenue, between 183rd Street and 184th Street, Hollis. Diameter 6 inches, reported depth 100 feet. Measuring point, top of 6-inch flange, about 2.5 feet above land surface and 55.39 feet above mean sea level. Water level, Sept. 14, 1939, 30.40 feet below measuring point and 24.99 feet above mean sea level. Measurements discontinued Nov. 9, 1940.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Sept. 14, 1939	24.99	Feb. 10, 1940	23.23	July 6, 1940	23.51
16	24.99	17	23.16	13	23.46
30	23.89	24	23.16	20	23.35
Oct. 7	23.87	Mar. 2	23.12	27	23.32
21	23.80	9	23.24	Aug. 3	23.24
28	23.75	16	23.17	10	23.14
Nov. 4	23.71	23	23.18	17	23.07
11	23.87	30	23.21	24	22.96
18	23.87	Apr. 6	23.18	31	22.89
25	23.81	13	23.28	Sept. 7	22.82
Dec. 2	23.78	20	23.36	14	22.73
9	23.71	May 4	23.58	21	22.62
16	23.67	11	23.63	28	22.61
23	23.61	25	23.58	Oct. 5	22.59
30	23.55	June 1	23.66	12	22.55
Jan. 6, 1940	23.48	8	23.67	19	22.40
13	23.43	15	23.61	26	22.44
20	23.41	22	23.52	Nov. 2	22.45
27	23.36	29	23.52	9	22.36
Feb. 3	23.31				

Q 268.
Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	a15.78	15.67	15.76	16.02	16.68	15.98	15.24	14.78	14.76	15.15	15.51	15.70
2	.....	15.77	15.74	16.02	16.65	15.96	15.20	14.74	14.65	15.23	15.55	15.67
3	.....a	15.73	15.83	16.02	16.64	15.88	15.19	14.74	14.60	15.29	15.60	15.62
4	.....	15.63	16.04	16.25	16.51	15.82	15.19	14.76	14.61	15.26	15.59	15.62
5	.....	15.67	16.24	16.02	16.37	15.81	15.17	14.79	14.63	15.16	15.68	15.70
6	15.58	15.70	16.31	16.00	16.28	15.71	15.15	14.78	14.63	15.25	15.71	15.61
7	15.52	15.65	16.31	16.02	15.98	15.62	15.17	14.81	14.67	15.33	15.69	15.70
8	.....	15.54	16.29	16.07	15.91	15.61	15.21	14.79	14.74	15.23	15.57	15.74
9	.....	15.59	16.19	16.38	15.83	15.60	15.20	14.74	14.86	15.27	15.54	15.68
10	.....	15.61	16.08	16.33	15.76	15.53	15.18	14.73	14.76	15.18	15.55	15.68
11	.....	15.60	15.96	16.33	16.06	15.53	15.17	14.72	14.66	15.29	15.56	15.58
12	.....	15.60	15.96	16.48	16.15	15.53	15.15	14.72	14.71	15.30	15.56	15.58
13	15.63	15.62	15.94	16.63	16.02	15.52	15.12	14.73	14.71	15.32	15.56	15.60
14	15.63	15.71	15.98	16.61	15.76	15.41	15.12	14.76	14.65	15.22	15.64	15.56
15	15.96	15.47	16.27	16.59	15.72	15.40	15.12	14.70	14.81	15.29	15.76	15.58
16	15.92	15.47	16.27	16.54	15.70	.....	15.09	14.70	14.90	15.24	a15.92	15.69
17	15.91	15.51	a16.26	16.49	15.76	.....	15.06	14.70	14.86	15.30	15.86	15.63
18	15.86	15.54	.....	16.49	15.78	.....	15.04	14.71	14.88	15.29	15.63	15.63
19	15.88	15.69	.....	16.48	15.78	.....	15.04	14.76	14.93	15.29	15.63	15.68
20	15.88	15.95	.....	16.50	15.70	15.26	15.05	14.68	14.92	15.38	15.74	15.76
21	15.88	15.88	.....	16.73	15.66	15.21	15.04	14.66	14.95	15.32	15.74	15.87
22	15.82	15.85	.....	16.73	15.66	15.21	15.01	14.66	14.87	15.30	15.77	15.86
23	15.68	15.86	a16.16	16.60	15.67	15.26	14.99	14.63	14.87	15.38	15.70	15.70
24	15.74	15.86	16.15	16.65	15.69	15.36	14.98	14.59	15.01	15.51	15.73	15.70
25	15.78	15.95	16.17	16.66	15.65	15.36	14.98	14.55	15.09	15.48	15.65	15.84
26	15.79	15.90	16.10	16.61	15.62	15.36	14.93	14.59	15.02	15.40	15.65	15.88
27	15.77	15.91	16.10	16.58	15.62	15.33	14.91	14.57	15.05	15.40	15.90	15.85
28	15.72	15.96	16.08	16.57	15.64	15.30	14.90	14.57	15.07	15.38	15.64	15.85
29	15.68	15.85	16.08	16.57	15.51	15.37	14.90	14.64	15.13	15.37	15.64	15.98
30	15.72	.....	16.17	16.61	15.51	15.31	14.90	14.67	15.13	15.42	15.67	15.85
31	15.70	.....	16.16	.....	15.57	.....	14.88	14.70	.....	15.52	.....	15.76

a Estimated.

Q 273.
Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.68	6.32	....	5.91	6.99	6.18	5.86	5.61	5.60	5.61	5.70	5.66
2	6.60	6.38	a6.02	5.80	7.06	6.13	5.79	5.50	5.63	5.79	5.73	5.61
3	6.52	6.38	6.03	5.79	7.11	6.09	5.76	5.48	5.58	5.87	5.80	5.52
4	6.46	6.32	6.22	5.91	7.02	6.06	5.83	5.52	5.55	5.78	5.78	5.50
5	6.47	6.31	6.32	5.92	6.90	6.04	5.80	5.56	5.52	5.72	5.80	5.57
6	6.45	6.31	6.26	5.83	6.86	6.02	5.76	5.61	5.51	5.72	5.92	5.53
7	6.37	6.39	6.22	5.79	6.92	5.96	5.78	5.71	5.52	5.79	5.90	5.54
8	6.38	6.24	6.20	5.80	6.92	5.93	5.83	5.72	5.53	5.84	5.79	5.60
9	6.37	6.21	6.13	6.05	6.89	5.94	5.84	5.70	5.61	5.72	5.68	5.52
10	6.35	a6.21	6.03	5.88	6.72	5.92	5.83	5.63	5.67	5.67	5.62	5.52
11	6.38	....	5.92	5.82	6.60	5.93	5.83	5.57	5.57	5.66	5.62	5.42
12	6.49	....	5.87	5.85	6.53	5.99	5.79	5.56	5.55	5.69	5.66	5.42
13	6.51	....	5.85	6.05	6.53	6.02	5.70	5.62	5.49	5.70	5.63	5.49
14	6.51	....	5.87	5.94	6.46	5.97	5.67	5.70	5.47	5.66	5.68	5.41
15	6.73	....	6.09	5.88	6.37	5.98	5.70	5.61	5.47	5.68	5.80	5.41
16	6.64	....	6.11	5.82	6.34	5.88	5.77	5.57	5.54	5.60	5.79	5.47
17	6.60	6.05	6.02	5.76	6.41	5.82	5.73	5.59	5.50	5.60	5.73	5.62
18	6.58	6.06	6.01	5.78	6.35	5.84	5.69	5.61	5.47	5.64	5.53	5.50
19	6.57	6.13	6.06	5.82	6.31	5.94	5.70	5.69	5.47	5.59	5.47	5.49
20	6.56	6.39	6.02	5.91	6.29	5.92	5.73	5.63	5.49	5.59	5.49	5.52
21	6.53	6.28	5.93	6.26	6.22	5.81	5.74	5.56	5.54	5.52	5.64	5.68
22	6.42	6.12	5.94	6.52	6.22	5.78	5.74	5.55	5.55	5.47	5.66	5.68
23	6.37	6.05	5.93	6.53	6.29	5.80	5.74	5.53	5.52	5.48	5.64	5.52
24	6.39	6.05	5.88	6.54	6.32	5.91	5.74	5.50	5.52	5.68	5.64	5.50
25	6.45	6.13	5.88	6.60	6.25	6.00	5.76	5.48	5.63	5.73	5.63	5.53
26	6.43	6.07	5.83	6.65	6.21	6.00	5.77	5.53	5.54	5.68	5.60	5.60
27	6.43	6.07	5.82	6.81	6.20	5.93	5.74	5.56	5.51	5.61	5.72	5.60
28	6.36	....	5.82	6.84	6.22	5.90	5.70	5.57	5.53	5.55	5.67	a5.61
29	6.32	a6.10	5.82	6.83	6.10	5.98	5.67	5.54	5.55	5.54	5.66	....
30	6.34	....	5.86	6.88	6.07	5.90	5.71	5.54	5.56	5.56	5.65	....
31	6.34	....	6.08	....	6.09	....	5.73	5.58	....	5.71	....	a5.50

Q 287.
Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	a5.85	....	5.55	6.45	7.72	7.50	6.56	5.70	a5.25	....	6.59	7.36
2	a6.05	4.14	5.69	6.52	7.81	7.50	6.45	5.48	a5.34	....	a6.78	7.24
3	a6.00	4.60	6.03	6.50	7.88	7.37	6.36	5.29	a5.10	....	....	7.35
4	6.14	5.07	6.78	6.81	a7.78	7.33	6.41	5.24	a5.05	....	....	7.50
5	6.34	4.98	6.40	6.62	7.66	7.33	6.19	5.21	a5.17	a6.05	....	7.83
6	6.21	4.10	6.43	6.48	7.47	7.30	6.07	a5.17	a5.22	a6.31	....	7.62
7	6.20	3.08	6.41	a6.30	7.51	7.23	6.06	....	5.36	a6.59	....	7.89
8	6.56	1.95	a6.48	6.36	7.41	7.25	6.11	....	5.78	a6.73	....	7.76
9	6.48	1.23	a6.58	6.81	7.45	7.25	6.14	....	5.84	a6.65	a7.14	7.75
10	6.39	1.27	6.29	6.48	7.50	7.17	6.16	....	5.90	a6.56	7.08	7.66
11	6.40	.82	6.09	6.44	7.52	7.14	6.27	....	a5.80	a6.58	7.13	7.54
12	6.75	.46	6.00	6.80	a8.72	7.09	6.30	....	5.60	6.59	7.17	7.55
13	6.82	.35	6.23	6.95	8.89	7.13	6.15	....	5.54	a6.54	6.95	7.52
14	7.05	.79	6.31	6.90	8.87	6.99	5.98	....	5.53	a6.53	7.16	7.44
15	6.82	1.90	6.51	6.93	8.77	7.12	6.02	....	a5.80	a6.65	7.29	7.44
16	6.43	3.01	6.41	6.98	8.75	6.85	6.08	....	a5.91	a6.65	7.23	7.61
17	....	3.57	6.60	6.84	....	6.73	5.95	a5.36	a5.34	a6.83	7.08	7.64
18	....	4.20	6.72	6.82	....	6.80	5.80	5.34	a5.59	a6.86	6.83	7.52
19	....	5.05	6.54	6.62	7.20	6.93	5.79	5.64	....	6.69	6.90	7.64
20	....	3.87	6.50	6.76	7.30	6.71	5.86	a5.45	....	6.91	7.05	7.88
21	....	3.21	6.15	7.27	7.24	6.60	5.96	5.45	a6.13	6.60	7.02	7.96
22	....	2.85	6.20	7.11	7.26	6.50	5.90	5.38	a6.09	6.67	7.34	8.11
23	....	2.37	6.00	6.93	7.57	6.60	5.92	5.48	a6.23	6.71	7.28	7.88
24	....	2.50	5.73	6.94	7.68	6.86	5.98	5.35	a6.34	6.84	7.35	7.80
25	6.82	3.70	5.79	6.98	7.68	7.17	6.01	....	a6.06	6.90	7.08	7.89
26	6.58	4.06	5.84	6.96	7.68	7.10	5.95	....	a6.38	6.63	7.22	8.02
27	....	4.67	5.99	7.08	7.52	6.81	5.91	....	a6.07	6.63	7.57	8.15
28	....	5.35	6.18	a7.10	7.60	6.74	5.84	....	a5.85	6.43	7.16	a8.14
29	....	5.50	6.24	7.35	7.59	6.98	5.80	....	a5.87	6.43	6.90	....
30	....	....	6.50	7.50	7.44	6.68	5.89	....	a6.00	6.54	7.19	....
31	....	....	6.73	....	7.77	....	5.72	a5.25	....	6.75	....	a7.75

a Estimated.

Q 337. New York City Department of Water Supply, Gas, and Electricity, Baisley pumping station. About 1,400 feet west of 150th Street, about 200 feet north of Belt Parkway, and 63 feet east of well Q 1237, Baisley Park. Diameter 8 inches, measured depth 210.7 feet below measuring point. Measuring point, top of pipe, about 0.5 foot above land surface and 18.01 feet above mean sea level. Water level, Feb. 10, 1939, 13.77 feet below measuring point and 4.24 feet above mean sea level. Measurements discontinued July 20, 1940, when instrumental observations were started on a nearby well (Q 1237) ending in the same formation. Measurements in both wells indicate only minor differences of water level.

Lowest daily water level, in feet above mean sea level, 1939
(Record from Feb. 10, 1939, through May 11, 1939, from recorder charts; record after May 11, 1939, from tape measurements.)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	4.24	Mar. 10	3.68	Apr. 7	4.86	May 7	4.26
11	4.38	11	3.68	8	4.83	8	4.16
12	4.28	12	3.73	9	4.86	9	4.16
13	4.23	13	4.12	10	4.86	10	4.48
14	4.18	14	4.29	11	4.89	11	4.58
15	4.28	15	4.38	12	4.81	July 29	1.55
16	4.06	16	4.53	13	4.56	Aug. 5	1.07
17	3.97	17	4.35	14	4.51	12	.20
18	4.03	18	4.12	15	4.56	19	.13
19	4.04	19	3.97	16	4.50	26	1.82
20	4.11	20	3.97	17	4.51	Sept. 2	2.88
21	4.08	21	4.04	18	4.57	9	3.82
22	4.17	22	4.00	19	4.78	16	3.84
23	4.01	23	4.00	20	4.81	23	3.78
24	4.01	24	3.99	21	4.78	30	3.96
25	3.93	25	3.92	22	4.81	Oct. 7	4.13
26	3.93	26	3.92	23	4.76	14	4.07
27	4.12	27	3.99	24	4.74	21	3.76
28	3.90	28	4.06	25	4.75	28	3.97
Mar. 1	3.80	29	4.13	26	4.76	Nov. 4	3.76
2	3.47	30	4.10	29	4.98	11	3.97
3	3.45	31	4.09	30	5.03	18	3.89
4	3.49	Apr. 1	4.24	May 1	5.01	25	4.02
5	3.60	2	4.59	2	4.91	Dec. 2	2.63
6	3.64	3	4.70	3	4.90	9	3.15
7	3.42	4	4.68	4	5.03	16	3.28
8	3.24	5	4.68	5	4.96	23	3.08
9	3.45	6	4.72	6	4.79	30	3.07

Water level, in feet with reference to mean sea level, 1940

Jan. 6	+2.87	Mar. 2	-0.07	Apr. 20	-0.94	June 8	+3.11
13	+3.45	9	+.41	28	+3.96	15	+2.93
20	+3.15	16	-.20	May 4	+4.27	22	+2.24
27	+3.11	23	+.19	11	+3.83	29	+3.73
Feb. 3	+2.18	30	-.99	18	+3.98	July 6	+3.60
10	+2.76	Apr. 6	+2.98	25	+4.42	13	+2.98
17	+2.31	13	-1.59	June 1	+4.32	20	+1.97
24	+.72						

Q 350.
Water level, in feet with reference to mean sea level, 1940

Jan. 6	-0.09	Apr. 6	+0.81	July 6	+0.72	Oct. 5	+0.67
13	+.12	13	+.73	13	+.72	12	+.74
20	+.39	20	+.80	20	+.34	19	+.22
27	+.32	28	+.54	27	+.34	26	+.43
Feb. 3	+.30	May 4	+.57	Aug. 3	+.10	Nov. 2	+.53
10	+.42	11	+.58	10	+.31	9	+.68
17	+.45	18	+.54	17	-.05	16	+.73
24	+.47	25	+.79	24	+.47	23	+.12
Mar. 2	+.43	June 1	+1.04	31	+.78	30	+.30
9	+.65	8	+.27	Sept. 7	+.47	Dec. 7	+.01
16	+.75	15	-.04	14	+.32	14	-.06
23	+.81	22	+.44	21	-.15	21	+.04
30	+.71	29	+.97	28	+.50	28	-.10

Q 470. Measuring point lowered 0.65 foot Aug. 4, 1940. New measuring point, top of metal plate on instrument shelf, 0.8 foot above 8-inch casing, 1.4 feet above land surface and 14.19 feet above mean sea level. Water level, Aug. 5, 1940, 10.59 feet below measuring point and 3.60 feet above mean sea level.

Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2.64	3.06	2.58	2.46	3.94	5.28	4.63	a4.00	4.08	....	a4.44	5.23
2	2.61	3.00	2.53	2.40	4.03	5.35	4.64	....	4.13	....	a4.41	5.23
3	a2.56	2.97	2.51	2.36	4.12	5.42	4.64	....	4.20	....	....	5.23
4	2.51	2.92	2.51	2.35	4.23	5.47	4.64	....	4.24	....	....	5.22
5	2.48	2.88	2.59	2.34	4.34	5.50	4.63	a3.60	4.22	....	....	5.23
6	2.46	2.86	2.63	2.28	4.40	5.52	4.61	3.51	4.20	....	....	5.23
7	2.45	2.87	2.62	2.23	4.52	5.41	4.61	3.44	4.19	....	....	5.23
8	2.47	2.84	2.60	2.22	4.68	5.29	4.62	3.42	4.19	....	....	5.26
9	2.55	2.79	2.60	2.24	4.86	5.19	4.61	3.37	4.20	....	a4.74	5.28
10	2.58	2.78	2.60	2.28	4.82	5.10	4.58	3.35	4.23	....	4.76	5.28
11	a2.62	2.78	2.62	2.25	4.67	5.03	4.53	3.32	4.26	....	4.80	5.26
12	2.70	2.82	2.64	2.25	4.48	4.95	4.49	3.32	4.26	a4.65	4.84	5.24
13	2.81	2.82	2.59	2.31	4.32	4.90	4.45	3.33	4.23	a4.65	4.89	5.24
14	2.88	2.81	2.57	2.38	4.21	4.83	4.42	3.34	4.19	a4.66	4.91	5.22
15	3.04	2.88	2.57	2.42	4.03	4.80	4.43	3.31	4.17	4.68	4.96	5.21
16	3.07	2.96	2.58	2.51	3.86	4.79	4.43	3.30	4.17	4.69	a5.00	5.21
17	2.96	2.91	2.58	2.59	3.75	4.74	4.43	3.31	4.18	4.69	5.04	5.26
18	2.89	2.85	2.59	2.72	3.69	4.71	4.41	3.34	4.15	4.70	5.02	5.32
19	2.89	2.84	2.73	2.80	3.67	4.71	4.40	3.42	4.12	4.66	4.99	5.34
20	2.93	2.89	2.73	2.87	3.67	4.70	4.39	3.51	4.11	4.65	4.99	5.34
21	2.95	2.93	2.66	2.91	3.63	4.66	4.38	3.57	4.10	4.63	4.97	5.36
22	3.05	2.92	2.63	2.97	3.63	4.60	4.37	3.62	4.09	4.60	4.97	5.40
23	3.25	2.89	2.56	3.03	3.65	4.58	4.35	3.67	4.09	a4.58	a4.99	5.42
24	3.41	2.84	2.50	3.10	3.76	4.58	4.32	3.72	4.10	a4.58	....	5.43
25	3.54	2.81	2.50	3.23	3.93	4.58	4.26	3.75	4.11	a4.59	a5.17	5.43
26	3.40	2.74	2.49	3.33	4.31	4.60	4.20	3.78	4.09	a4.60	5.16	5.44
27	3.23	2.72	2.47	3.45	4.57	4.59	4.16	3.84	4.09	4.61	5.17	5.47
28	3.20	2.69	2.47	3.60	4.78	4.59	4.12	3.88	a4.09	4.63	5.24	5.49
29	3.17	2.65	2.45	3.73	4.96	4.60	4.10	3.93	....	4.59	5.22	5.55
30	3.16	....	2.45	3.84	5.08	4.63	4.10	3.99	a4.16	4.56	5.22	5.59
31	3.13	....	2.46	....	5.15	....	4.06	4.05	....	4.51	....	5.56

Q 471. New York City Department of Water Supply, Gas, and Electricity, Bayside well 11. About 310 feet south of Northern Boulevard, about 110 feet west of Belt Parkway, and 15 feet northwest of well Q 470, Bayside. Diameter 8 inches, measured depth 114.3 feet below measuring point. Measuring point, top of 8-inch flange, about 4 feet above land surface and 17.67 feet above mean sea level. Water level, Mar. 31, 1939, 3.98 feet below measuring point and 13.69 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Mar. 31, 1939	13.69	Dec. 23, 1939	14.70	May 4, 1940	15.41
Aug. 18	15.03	30	14.60	11	15.19
25	14.05	Jan. 6, 1940	14.65	18	15.20
Sept. 1	14.21	13	14.83	25	15.99
8	14.37	20	14.93	June 1	16.25
16	14.23	27	14.80	8	15.97
23	14.06	Feb. 3	14.90	15	16.47
30	14.25	10	14.79	22	15.92
Oct. 7	14.27	17	14.83	29	15.92
14	14.59	24	14.95	July 6	15.99
21	14.36	Mar. 2	14.80	13	15.97
28	14.43	9	14.89	20	16.01
Nov. 4	14.55	16	14.58	27	15.95
11	14.94	23	14.52	Aug. 3	15.91
18	14.59	30	14.66	10	15.84
25	14.58	Apr. 6	14.60	17	15.89
Dec. 2	14.43	13	14.79	24	15.91
9	14.52	20	15.12	31	15.97
16	14.57	27	15.31	Sept. 7	15.98

a Estimated.

Q 471.--Continued.
Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Sept. 14, 1940	15.86	Oct. 26, 1940	16.01	Nov. 30, 1940	16.04
21	15.99	Nov. 2	15.95	Dec. 7	16.08
28	15.95	9	15.86	14	15.98
Oct. 5	16.16	16	16.11	21	16.09
12	16.00	23	16.03	28	16.04
19	15.99				

Q 503.
Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	10.33	Apr. 6	10.05	July 20	9.99	Oct. 12	9.70
13	10.28	13	10.20	27	9.94	19	9.63
20	10.34	May 4	10.23	Aug. 3	9.87	26	9.60
27	10.27	11	10.15	10	9.97	Nov. 2	9.61
Feb. 3	10.21	18	10.12	17	9.88	9	9.52
10	10.25	25	10.08	24	9.85	16	9.58
17	10.05	June 1	10.18	31	9.90	23	9.51
24	10.13	8	10.28	Sept. 7	9.86	30	9.46
Mar. 2	10.07	15	10.18	14	9.81	Dec. 7	9.48
9	10.20	21	10.17	21	9.82	14	9.36
16	10.09	29	10.10	28	9.78	21	9.39
23	10.13	July 6	10.01	Oct. 5	9.73	28	9.39
30	10.11	13	10.00				

Q 543.
Lowest daily water level, in feet with reference to mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	+6.61	-13.28	a+5.71	.....	+8.01	+6.79	+6.00	+5.50	+6.45	+6.97	+7.76
2	a+6.65	-13.28	.....	a+8.38	+7.98	+6.54	+5.84	+5.64	.....	a+7.29	+7.65
3	+6.45	+5.04	.....	+8.16	+7.84	+6.53	+5.55	+5.34	.....	.....	+7.84
4	+6.70	+5.79	.....	+8.11	+7.83	+6.50	+5.36	+5.31	.....	.....	+8.02
5	+6.87	-22.40	.....	+7.75	+7.85	+6.28	+5.45	+5.50	a+6.70	.....	+8.37
6	a+6.75	-25.05	.....	+7.67	+7.82	+6.15	+5.38	+5.58	+6.72	.....	+8.16
7	+6.77	-25.94	.....	+7.73	+7.72	+6.11	+5.42	a+5.77	+6.53	.....	+8.36
8	+7.36	-27.72	.....	+7.64	+7.84	+6.15	+5.50	.....	+7.23	.....	+8.27
9	+7.12	-27.84	.....	+7.74	+7.84	+6.27	+5.55	.....	+7.19	a+7.44	+8.24
10	+6.97	-27.33	.....	+7.79	+7.79	+6.50	+5.50	.....	+7.09	+7.40	+8.15
11	+7.07	-27.97	.....	+7.88	+7.72	+6.49	+5.50	.....	+7.11	+7.37	+7.95
12	+7.65	-28.28	.....	+7.97	+7.62	+6.57	+5.55	.....	+7.07	+7.49	+8.03
13	+7.70	-28.36	.....	+8.09	+7.70	+6.42	+5.73	.....	+6.97	+7.26	+7.69
14	+8.06	-27.83	.....	+8.02	+7.51	+6.23	+5.82	a+5.98	+6.95	+7.47	+7.92
15	a+8.61	+1.27	.....	+7.85	+7.68	+6.29	+5.67	+5.98	+7.22	+7.61	+7.93
16	a+6.94	+2.98	.....	+7.83	+7.30	+6.37	+5.66	+6.37	+7.05	+7.51	+8.24
17	a+7.50	+3.62	.....	+7.80	+7.21	+6.30	+5.67	+5.94	+7.37	+7.27	+8.06
18	a+7.50	+4.32	.....	+7.51	+7.23	+6.11	+5.71	+5.55	+7.45	+7.07	+8.05
19	.....	-10.47	.....	+7.35	+7.21	+6.11	+6.06	+5.79	+7.22	+7.22	+8.27
20	.....	-12.10	.....	+7.57	+6.71	+6.16	+5.79	+5.97	+7.42	+7.31	+8.55
21	.....	-13.35	.....	+7.50	+6.83	+6.25	+5.67	a+6.57	+6.98	+7.33	+8.48
22	.....	-13.58	.....	+7.49	+6.67	+6.23	+5.60	.....	+7.08	+7.76	+8.64
23	.....	-14.13	.....	+8.12	+6.83	+6.34	+5.68	.....	+7.11	+7.75	+8.33
24	a+7.85	+1.46	.....	+8.33	+7.19	+6.36	+5.57	.....	+7.23	+7.74	+8.18
25	+7.57	+3.50	.....	+8.25	+7.60	+6.41	+5.62	.....	+7.24	+7.32	+8.32
26	+7.27	+3.88	.....	+8.27	+7.50	+6.27	+5.95	.....	+6.85	+7.55	+8.50
27	+6.82	+4.64	.....	+7.98	+7.01	+6.10	+5.82	.....	+6.82	+7.77	+8.75
28	+7.12	+5.54	.....	+8.03	+6.99	+6.16	+5.91	.....	+6.53	+7.27	+8.80
29	-9.39	+5.64	.....	+8.10	+7.27	+6.15	+5.78	+6.34	+6.48	+6.97	+9.13
30	-12.05	.....	.....	+7.87	+6.93	+6.14	+5.54	+6.32	+6.66	+7.44	+8.61
31	-12.83	.....	.....	+8.35	.....	+6.01	+5.50	.....	+7.05	.....	+8.11

a Estimated.

Q 1078. John R. Murray & Son. On east side of Beach 79th Street, about 150 feet north of Long Island Railroad tracks, Hammels. Diameter 5 inches, measured depth 393.4 feet below measuring point. Measuring point, top of instrument shelf, 3.0 feet above land surface and 11.32 feet above mean sea level. Water level, July 24, 1939, 5.62 feet below measuring point and 5.70 feet above mean sea level.

Lowest daily water level, in feet above mean sea level, 1939
(from recorder charts)

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	....	5.62	4.97	4.86	4.94	17	....	5.40	5.01	4.68	4.69	4.74
2	....	....	5.53	4.96	4.76	5.01	18	....	5.38	4.90	4.59	4.76	4.57
3	....	....	5.52	5.09	4.69	a5.08	19	....	5.39	4.96	4.58	4.76	4.59
4	....	....	5.48	5.15	4.64	4.92	20	....	5.63	4.93	4.57	4.81	4.60
5	....	....	5.48	5.04	4.72	4.88	21	....	a5.53	5.05	4.62	4.89	4.54
6	....	....	5.39	4.97	4.99	4.85	22	....	5.46	4.92	4.77	5.00	4.41
7	....	a5.50	5.33	4.86	4.88	4.85	23	....	5.41	4.92	4.61	4.99	4.38
8	....	5.43	5.27	4.82	4.79	4.70	24	a5.70	5.35	4.94	4.52	4.95	4.33
9	....	5.42	5.28	4.77	4.61	4.60	25	5.62	5.34	4.94	4.50	4.98	4.39
10	....	5.38	5.22	4.77	4.56	4.54	26	a5.57	5.35	4.94	4.56	5.13	4.36
11	....	5.37	5.17	4.87	4.65	4.68	27	a5.58	5.35	4.91	4.59	5.13	4.35
12	....	5.36	5.12	4.78	4.54	4.73	28	a5.58	5.37	5.04	4.68	5.05	4.41
13	....	a5.36	5.03	4.83	4.59	4.90	29	a5.63	5.45	4.91	4.52	5.02	4.41
14	....	a5.34	4.95	4.80	4.55	4.83	30	a5.64	a5.59	4.90	4.55	4.98	4.52
15	....	5.36	5.08	4.65	4.53	4.69	31	a5.65	5.65	....	4.77	....	4.60
16	....	a5.38	4.93	4.60	4.65	4.71							

Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.54	4.58	4.46	4.49	5.10	5.48	5.79	....	5.25	4.84	5.21	4.99
2	4.47	4.58	4.44	4.50	5.11	5.38	a5.76	....	5.34	5.34	5.34	4.88
3	4.35	a4.50	4.49	4.50	5.16	5.30	a5.73	a5.28	5.24	5.35	5.28	4.85
4	4.35	4.50	4.72	4.59	5.17	5.28	a5.81	5.28	5.13	5.26	5.15	4.84
5	4.39	4.54	5.14	4.69	5.08	5.26	a5.82	5.27	5.07	5.18	5.11	4.95
6	4.43	4.54	5.09	4.62	5.00	5.29	a5.82	5.24	5.08	5.09	5.05	4.89
7	4.32	4.75	5.01	4.53	5.00	5.26	a5.79	5.28	5.10	5.05	4.96	4.95
8	4.39	4.56	5.00	4.53	4.97	5.31	a5.82	5.28	5.12	4.98	4.88	4.90
9	4.50	4.44	4.96	4.90	5.00	5.30	a5.83	5.28	5.03	4.88	4.88	4.89
10	4.49	4.46	4.82	4.79	5.04	5.30	a5.86	5.22	5.04	4.83	4.86	4.87
11	4.52	4.56	4.60	4.75	5.18	5.29	....	5.21	4.96	4.81	4.85	4.76
12	4.60	4.43	4.51	4.83	5.13	5.59	....	5.20	4.96	4.79	4.91	4.78
13	4.69	4.32	4.51	4.94	5.15	5.63	a5.53	5.24	4.85	4.76	4.84	4.78
14	4.75	4.44	4.54	4.91	5.13	5.61	5.47	5.20	4.78	4.69	4.96	4.73
15	5.10	4.44	4.80	4.90	5.08	5.70	5.46	5.20	a4.75	4.73	5.23	4.72
16	4.86	4.34	4.75	4.91	5.04	a5.73	5.42	5.19	....	4.69	5.21	4.76
17	4.83	4.26	....	4.84	5.10	a5.74	5.40	5.22	....	4.75	5.06	4.91
18	4.76	4.29	a4.80	4.88	5.09	a5.60	5.37	5.29	....	4.89	4.81	4.81
19	4.71	4.36	4.77	4.81	5.01	a5.66	5.41	5.40	....	4.81	4.76	4.83
20	4.76	4.84	4.77	4.82	5.14	a5.52	5.44	5.34	....	4.84	4.77	4.94
21	4.72	4.80	4.68	5.41	5.17	a5.79	5.45	5.24	a4.72	4.83	4.70	4.96
22	4.52	4.75	4.70	5.54	5.26	a5.80	5.48	5.19	4.69	4.73	4.76	5.01
23	4.50	4.67	4.65	5.42	5.45	5.92	5.52	5.22	a4.66	4.69	4.70	4.94
24	4.55	4.56	4.43	5.35	5.62	5.97	5.52	5.14	....	4.69	4.78	4.94
25	4.85	4.61	4.39	5.28	5.62	a5.86	5.53	5.17	....	4.72	4.67	4.99
26	4.77	4.51	4.32	5.16	5.58	a5.85	5.50	5.20	....	4.66	4.67	5.04
27	4.68	4.52	4.34	5.10	5.49	a5.85	a5.44	5.15	....	4.66	4.85	5.27
28	4.60	4.61	4.39	5.05	5.45	a5.97	....	5.22	4.65	4.65	5.02	5.46
29	4.60	4.55	4.41	5.04	5.39	5.86	....	5.19	4.63	4.60	4.85	5.71
30	4.60	....	4.49	5.04	5.30	5.80	....	5.21	4.60	4.65	4.87	5.74
31	4.58	....	4.63	....	5.42	....	....	5.23	....	5.06	....	5.43

Q 1090. Measurements discontinued July 13, 1940.
Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	3.41	Feb. 24	3.16	Apr. 13	3.57	June 1	4.04
13	3.31	Mar. 2	3.18	20	3.66	8	4.07
20	3.31	9	3.39	28	3.80	15	4.00
27	3.25	16	3.44	May 4	3.85	22	3.83
Feb. 3	3.18	23	3.49	11	3.89	29	3.86
10	3.12	30	3.50	18	3.94	July 6	3.78
17	3.07	Apr. 6	3.47	25	4.00	13	3.73

a Estimated.

Q 1092.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	7.54	Mar. 30	7.71	July 20	8.31	Oct. 12	8.38
13	7.42	Apr. 6	7.74	27	8.30	19	8.31
20	7.56	13	7.88	Aug. 3	8.30	26	8.27
27	7.52	20	7.92	10	8.27	Nov. 2	8.27
Feb. 3	7.40	28	8.07	17	8.22	9	8.31
10	7.40	May 4	8.11	24	8.22	16	8.41
17	7.32	11	8.14	31	8.25	23	8.42
24	7.42	18	8.14	Sept. 7	8.24	30	8.44
Mar. 2	7.41	June 22	8.21	14	8.19	Dec. 7	8.42
9	7.62	29	8.25	21	8.13	14	8.41
16	7.66	July 6	8.26	28	8.41	21	8.42
23	7.73	13	8.26	Oct. 5	8.43	28	8.42

Q 1222. New York City Department of Water Supply, Gas, and Electricity, Whitestone well 9. About 200 feet east of 142nd Street and about 850 feet north of 20th Avenue, Whitestone. Diameter 6 inches, measured depth 195.7 feet below measuring point. Measuring point, top of 10-inch coupling on 10-inch casing that overlaps 6-inch casing, 0.4 foot above land surface and 7.58 feet above mean sea level. Water level, Apr. 1, 1940, 6.07 feet below measuring point and 1.51 feet above mean sea level.

Lowest daily water level, in feet above mean sea level, 1940

(Record from Apr. 1 through Sept. 23 from recorder charts; record after Sept. 23 from tape measurements.)

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	a1.51	2.60	2.84	2.35	2.14	2.15	....	....	....
2	1.40	2.74	2.76	2.26	2.09	2.15	....	2.81	....
3	1.40	2.88	2.68	2.23	2.08	2.15	....	....	....
4	1.46	3.00	2.63	2.23	2.06	2.13	....	....	....
5	1.66	3.04	2.62	2.26	2.04	2.12	2.64	....	....
6	1.50	3.03	2.61	2.22	2.04	2.12	....	....	....
7	1.35	3.01	2.59	2.20	a2.04	2.14	....	....	2.64
8	1.34	2.99	2.58	2.19	....	2.16	....	....	....
9	1.51	2.99	2.59	2.19	....	2.20	....	2.66	....
10	1.59	3.04	2.60	2.20	a1.91	2.25	....	....	....
11	1.52	3.08	2.63	2.21	1.86	2.29	....	....	....
12	1.52	3.12	2.67	2.27	1.85	2.28	2.67	....	....
13	1.68	3.13	2.66	2.36	1.85	2.23	....	....	....
14	1.69	3.11	2.59	2.32	1.85	2.16	....	....	2.53
15	1.61	3.04	2.57	2.28	1.87	2.16	....	....	....
16	1.61	2.98	2.49	2.26	1.87	2.18	....	2.99	....
17	1.63	2.96	2.43	2.25	1.87	2.28	....	....	....
18	1.63	2.84	2.42	2.23	1.91	2.17	....	....	....
19	1.74	....	2.43	2.21	1.97	2.11	2.76	....	....
20	1.75	....	2.45	2.21	2.08	2.10	....	....	....
21	1.87	....	2.38	2.23	2.03	2.11	....	....	2.68
22	2.19	....	2.33	2.24	2.00	2.15	....	....	....
23	....	....	2.33	2.25	2.00	a2.14	....	2.55	....
24	....	....	2.33	2.27	1.97	....	....	....	....
25	....	a2.84	2.42	2.28	1.92	....	....	....	....
26	....	2.82	2.55	2.28	1.91	....	2.52	....	....
27	a2.35	2.79	2.59	2.25	1.93	....	....	....	....
28	2.38	2.78	2.52	2.21	1.94	2.09	....	....	3.14
29	2.41	2.73	2.51	2.18	2.01	....	....	....	....
30	2.49	2.69	2.43	2.18	2.08	....	....	2.59	....
31	....	2.69	....	2.18	2.15	....	....	....	....

a Estimated.

Q 1223. New York City Department of Water Supply, Gas, and Electricity. At northeast corner of Rockaway Boulevard and 142nd Place, South Ozone Park. Diameter 2 inches, measured depth 32.0 feet below measuring point. Measuring point, top of pipe, about level with land surface, and 26.41 feet above mean sea level. Water level, Jan. 28, 1933, 20.30 feet below measuring point and 6.11 feet above mean sea level. Measurements from beginning of record on Jan. 28, 1933, to Apr. 16, 1940, inclusive, by New York City, measurements thereafter by Federal Geological Survey.

Water level, in feet above mean sea level, 1933-40

Date	Water level	Date	Water level	Date	Water level
Jan. 28, 1933	6.11	July 2, 1936	7.94	June 8, 1940	7.51
Mar. 3	6.60	Aug. 3	7.10	15	7.51
Apr. 20	7.78	Sept.28	7.01	22	7.38
May 23	7.82	Dec. 28	7.76	29	7.43
June 28	7.57	Mar. 23, 1937	8.73	July 6	7.40
July 25	7.05	June 21	8.42	13	7.40
Aug. 29	6.80	Aug. 24	7.62	20	7.33
Sept.27	7.36	Sept.27	7.70	27	7.47
Nov. 1	7.17	Nov. 23	7.49	Aug. 3	7.43
21	6.98	Jan. 10, 1938	8.09	10	7.31
Dec. 12	6.68	Feb. 25	8.11	17	7.18
Jan. 9, 1934	6.77	Apr. 19	8.11	24	7.09
Feb. 19	6.51	May 16	7.86	31	7.11
Mar. 23	6.81	June 17	7.84	Sept. 7	7.03
Apr. 11	6.93	Sept.12	8.46	14	6.96
June 12	7.58	Dec. 20	8.91	21	6.84
July 26	6.66	Feb. 21, 1939	9.43	28	7.00
Aug. 27	6.31	Apr. 4	10.23	Oct. 5	6.98
Sept.21	7.46	May 29	9.54	12	6.94
Oct. 8	8.61	July 24	8.47	19	6.85
Dec. 6	8.08	Aug. 29	7.89	26	6.80
19	7.61	Oct. 24	7.36	Nov. 2	6.78
Jan. 11, 1935	7.79	Nov. 30	7.31	9	6.94
Feb. 20	8.21	Mar. 12, 1940	6.47	16	7.05
Mar. 21	8.36	Apr. 16	6.88	23	7.15
May 29	7.69	May 3	7.23	30	7.22
July 2	7.17	11	7.30	Dec. 7	7.22
Sept.16	6.17	18	7.31	14	7.18
Dec. 12	5.78	25	7.31	21	7.21
Mar. 10, 1936	6.74	June 1	7.39	28	7.20
May 19	8.03				

Q 1224. New York City Department of Water Supply, Gas, and Electricity. On north side of 102nd Avenue, about 100 feet east of Van Wyck Boulevard, Jamaica. Diameter 2 inches, measured depth 47.5 feet below measuring point. Measuring point, top of pipe, 0.5 foot below land surface and 47.09 feet above mean sea level. Water level, Apr. 20, 1933, 39.43 feet below measuring point and 7.66 feet above mean sea level. Measurements from beginning of record on Apr. 20, 1933, to Apr. 16, 1940, inclusive, by New York City, measurements thereafter by Federal Geological Survey.

Water level, in feet above mean sea level, 1933-34, 1936-40

Apr. 20, 1933	7.66	Sept.12, 1938	10.11	Aug. 3, 1940	8.81
May 29	8.04	Dec. 20	10.95	10	8.85
June 28	8.23	Feb. 21, 1939	11.09	17	8.74
July 25	7.78	Apr. 4	11.74	24	8.67
Aug. 29	7.70	May 29	12.41	31	8.64
Sept.27	7.84	July 24	11.59	Sept. 7	8.65
Nov. 1	7.93	Aug. 29	10.83	14	8.65
21	7.56	Oct. 24	9.79	21	8.65
Dec. 22	7.70	Nov. 30	9.33	28	8.60
Jan. 9, 1934	7.12	Mar. 12, 1940	8.62	Oct. 5	8.60
Mar. 23	7.71	Apr. 16	8.63	12	8.60
Apr. 11	7.80	May 3	8.67	19	8.59
Dec. 28, 1936	7.64	11	8.79	26	8.58
Mar. 22, 1937	8.73	18	8.86	Nov. 2	8.58
June 21	8.94	25	8.86	9	8.55
Aug. 24	8.22	June 1	8.85	16	8.56
Sept.27	7.72	8	8.98	23	8.55
Nov. 23	7.99	15	9.01	30	8.54
Jan. 10, 1938	8.31	22	8.96	Dec. 7	8.52
Mar. 3	8.38	29	8.92	14	8.52
Apr. 19	8.73	July 6	8.95	21	8.51
May 16	8.74	20	8.90	28	8.46
June 17	8.22	27	8.86		

Q 1225. New York City Department of Water Supply, Gas, and Electricity. At southeast corner of 109th Avenue and 200th Street, Hollis. Diameter 2 inches, measured depth 32.0 feet below measuring point. Measuring point, top of pipe, about level with land surface, and 49.26 feet above mean sea level. Water level, Apr. 20, 1933, 20.80 feet below measuring point and 28.46 feet above mean sea level. Measurements from beginning of record on Apr. 20, 1933, to Apr. 16, 1940, inclusive, by New York City, measurements thereafter by Federal Geological Survey.

Water level, in feet above mean sea level, 1933-40

Date	Water level	Date	Water level	Date	Water level
Apr. 20, 1933	28.46	Mar. 10, 1936	28.31	June 1, 1940	29.71
June 8	28.81	Apr. 19	29.21	8	29.74
28	28.60	July 2	29.01	15	29.60
July 25	28.40	Aug. 3	28.66	22	29.56
Aug. 8	29.11	Sept.28	28.51	29	29.48
29	28.37	Dec. 28	28.86	July 6	29.56
Sept.27	28.91	Mar. 11, 1937	30.00	13	29.55
Nov. 1	28.99	June 21	29.97	20	29.46
24	28.94	Aug. 24	29.61	27	29.36
Dec. 22	28.55	Sept.27	29.59	Aug. 3	29.29
Jan. 9, 1934	28.49	Oct. 14	29.43	10	29.26
Feb. 19	27.99	Nov. 23	29.31	17	29.09
Mar. 23	28.26	Jan. 10, 1938	29.66	24	29.25
Apr. 11	28.46	Mar. 3	29.73	31	29.21
June 13	29.03	Apr. 19	29.58	Sept. 7	29.21
July 27	28.66	June 21	29.43	14	28.86
Aug. 27	28.60	Sept.12	30.18	21	28.75
Sept.21	29.41	Dec. 20	31.98	28	29.06
Oct. 5	30.66	Feb. 21, 1939	32.14	Oct. 5	29.07
Nov. 8	30.91	Apr. 4	32.19	12	28.78
Dec. 5	30.56	May 29	32.09	19	28.83
18	30.14	July 24	30.88	26	28.76
Jan. 14, 1935	30.20	Aug. 29	30.56	Nov. 2	28.69
Feb. 20	30.10	Oct. 24	30.91	9	28.84
Mar. 21	30.38	Nov. 30	30.72	16	28.60
Apr. 5	30.35	Mar. 12, 1940	28.98	23	28.62
May 29	29.95	Apr. 16	29.15	30	28.26
July 2	29.48	May 3	29.08	Dec. 7	28.39
Sept.16	28.64	11	29.44	14	28.69
Oct. 31	28.29	18	29.54	21	28.36
Dec. 11	27.85	25	29.57	28	28.23

Q 1237. Replaces well Q 337. New York City Department of Water Supply, Gas, and Electricity, Baisley pumping station. About 1,450 feet west of 150th Street, about 200 feet north of Belt Parkway, and 63 feet west of well Q 337, Baisley Park. Diameter 8 inches, measured depth 230 feet below measuring point. Measuring point, top of metal plate on instrument shelf, 0.66 foot above 8-inch coupling, 1.2 feet above land surface and 18.74 feet above mean sea level. Water level, July 25, 1940, 16.54 feet below measuring point and 2.20 feet above mean sea level.

Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.	Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	1.54	3.67	3.08	3.39	3.34	17	....	2.29	3.05	3.18	3.44	3.24
2	....	1.44	3.49	3.20	3.55	3.28	18	....	2.97	2.78	3.20	3.11	3.20
3	....	1.40	3.27	3.07	3.54	3.16	19	....	3.19	2.65	3.15	3.12	3.20
4	....	1.45	3.15	3.17	3.38	3.16	20	....	3.26	2.67	3.15	3.20	3.22
5	....	1.42	2.90	3.24	3.38	3.25	21	....	3.20	2.70	3.07	3.18	3.27
6	....	1.45	2.84	3.25	3.34	3.22	22	....	3.23	2.64	3.00	3.20	3.27
7	....	1.75	2.79	3.27	3.27	3.21	23	....	3.24	2.61	3.00	3.20	3.26
8	....	2.41	2.77	3.27	3.25	3.22	24	....	2.78	2.70	2.94	3.20	3.26
9	....	2.02	a2.84	3.23	3.12	3.20	25	a2.20	2.87	2.86	2.92	3.31	3.26
10	....	1.67	a3.08	3.23	3.12	3.20	26	2.11	a2.98	2.94	2.99	3.29	3.36
11	....	1.68	3.11	3.24	3.22	3.22	27	2.04	a2.98	2.94	3.03	3.44	3.57
12	....	1.70	3.13	3.22	3.33	3.19	28	1.91	3.07	2.96	3.08	3.47	3.66
13	....	1.66	3.00	3.23	3.37	3.15	29	1.69	3.49	3.01	3.07	3.38	3.83
14	....	1.81	2.95	3.20	3.49	3.07	30	1.66	3.64	3.04	3.15	3.28	3.82
15	....	1.70	2.97	3.20	3.60	3.11	31	1.65	3.68	....	3.40	....	3.40
16	....	1.79	3.11	3.17	3.52	3.16							

a Estimated.

Q 1248. New York City Department of Water Supply, Gas, and Electricity. At 100th Road and Belt Parkway, Queens Village. Diameter 1½ inches, measured depth 48.9 feet below measuring point. Measuring point, top of pipe, about level with land surface and 76.64 feet above mean sea level. Water level, Oct. 12, 1940, 41.09 feet below measuring point and 35.55 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 12	35.55	Nov. 2	35.48	Nov. 23	35.72	Dec. 14	35.69
19	35.52	9	35.60	30	35.73	21	35.68
26	35.44	16	35.70	Dec. 7	35.74	28	35.67

Q 1249. New York City Department of Water Supply, Gas, and Electricity. At northwest corner of 106th Avenue and 216th Street, Queens Village. Diameter 1½ inches, measured depth 49.3 feet below measuring point. Measuring point, top of pipe, about level with land surface and 72.28 feet above mean sea level. Water level, Oct. 19, 1940, 40.29 feet below measuring point and 31.99 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Oct. 19	31.99	Nov. 9	31.86	Nov. 30	31.91	Dec. 21	31.80
26	31.89	16	31.89	Dec. 7	31.87	28	31.77
Nov. 2	31.85	23	31.90	14	31.88		

Q 1250. New York City Department of Water Supply, Gas, and Electricity. At southwest corner of Liberty Avenue and Camden Avenue, Hollis. Diameter 1½ inches, measured depth 26.0 feet below measuring point. Measuring point, top of pipe, about level with land surface, and 37.58 feet above mean sea level. Water level, Oct. 19, 1940, 16.03 feet below measuring point and 21.55 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Oct. 19	21.55	Nov. 9	21.61	Nov. 30	21.48	Dec. 21	21.14
26	21.42	16	21.46	Dec. 7	21.51	28	21.11
Nov. 2	21.62	23	21.61	14	21.22		

Q 1251. New York City Department of Water Supply, Gas, and Electricity. At northwest corner of 107th Avenue and 172nd Street, Jamaica. Diameter 1½ inches, measured depth 38.2 feet below measuring point. Measuring point, top of pipe, about level with land surface and 42.72 feet above mean sea level. Water level, Oct. 19, 1940, 29.70 feet below measuring point and 13.02 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Oct. 19	13.02	Nov. 9	12.64	Nov. 30	12.37	Dec. 21	12.01
26	12.83	16	12.39	Dec. 7	12.27	28	11.88
Nov. 2	12.57	23	12.55	14	12.45		

Q 1252. New York City Department of Water Supply, Gas, and Electricity. At northeast corner of Liberty Avenue and 157th Street, Jamaica. Diameter 1½ inches, measured depth 28.2 feet below measuring point. Measuring point, top of pipe, about level with land surface and 31.08 feet above mean sea level. Water level, Oct. 26, 1940, 17.53 feet below measuring point and 13.55 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Oct. 26	13.55	Nov. 16	13.55	Dec. 7	13.45	Dec. 21	13.37
Nov. 2	13.53	23	13.49	14	13.36	28	13.40
9	13.48	30	13.46				

Q 1253. New York City Department of Water Supply, Gas, and Electricity. At northeast corner of 101st Avenue and 121st Street, Richmond Hill. Diameter 1½ inches, measured depth 53.8 feet below measuring point. Measuring point, top of pipe, about level with land surface and 49.06 feet above mean sea level. Water level, Nov. 2, 1940, 44.93 feet below measuring point and 4.13 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Nov. 2	4.13	Nov. 23	4.24	Dec. 7	3.99	Dec. 21	4.13
9	4.08	30	4.03	14	4.17	28	4.13
16	3.89						

Q 1254. New York City Department of Water Supply, Gas, and Electricity. At northwest corner of 101st Avenue and 108th Street, Richmond Hill. Diameter 1½ inches, measured depth 53.7 feet below measuring point. Measuring point, top of pipe, about level with land surface and 45.38 feet above mean sea level. Water level, Oct. 26, 1940, 45.87 feet below measuring point and 0.49 foot below mean sea level.

Water level, in feet below mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 26	0.49	Nov. 16	0.54	Dec. 7	0.29	Dec. 21	0.20
Nov. 2	.51	23	.52	14	.25	28	.17
9	.52	30	.38				

Q 1256. New York City Department of Water Supply, Gas, and Electricity. At southeast corner of 95th Avenue and 82nd Street, Woodhaven. Diameter 1½ inches, measured depth 37.6 feet below measuring point. Measuring point, top of pipe, about level with land surface and 24.03 feet above mean sea level. Water level, Oct. 26, 1940, 27.41 feet below measuring point and 3.38 feet below mean sea level.

Water level, in feet below mean sea level, 1940

Oct. 26	3.38	Nov. 16	3.33	Dec. 7	3.18	Dec. 21	3.07
Nov. 2	3.40	23	3.29	14	3.13	28	3.01
9	3.38	30	3.21				

S 28.

Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	95.09	94.78	94.49	94.53	94.45	94.87	94.78	94.80	94.47	94.24	93.86	93.51
2	95.07	94.77	94.48	94.53	94.53	94.80	94.76	94.80	94.41	94.24	93.86	93.50
3	95.06	94.76	94.48	94.55	94.51	94.83	94.77	94.61	94.45	94.25	93.83	93.53
4	95.04	94.75	94.48	94.57	94.54	94.85	94.78	94.53	94.47	94.23	93.81	93.50
5	95.04	94.74	94.48	94.59	94.46	94.84	94.80	94.51	94.48	94.19	93.80	93.56
6	95.01	94.73	94.35	94.58	94.48	95.05	94.71	94.59	94.46	94.14	93.79	93.52
7	95.00	94.72	94.46	94.59	94.55	95.10	94.64	94.65	94.40	94.17	93.78	93.54
8	94.98	94.70	94.49	94.59	94.54	94.87	94.69	94.72	94.33	94.20	93.75	93.56
9	94.97	94.69	94.50	94.41	94.62	94.69	94.77	94.65	94.39	94.21	93.75	93.54
10	94.96	94.69	94.50	94.35	94.63	94.76	94.72	94.54	94.40	94.24	93.73	93.53
11	94.95	94.67	94.49	94.41	94.79	94.84	94.76	94.48	94.40	94.20	93.71	93.50
12	94.94	94.67	94.49	94.39	94.59	94.85	94.79	94.51	94.40	94.11	93.70	93.67
13	94.93	94.66	94.49	94.56	94.59	94.85	94.75	94.54	94.34	94.08	93.69	93.60
14	94.94	94.66	94.49	94.36	94.59	94.90	94.72	94.53	94.26	94.09	93.69	93.58
15	94.93	94.63	94.52	94.36	94.58	94.71	94.78	94.47	94.17	94.13	93.67	93.51
16	94.92	94.61	94.51	94.37	94.69	94.59	94.82	94.45	94.18	94.12	93.67	93.52
17	94.91	94.61	94.51	94.52	94.71	94.59	94.86	94.46	94.14	94.12	93.65	93.50
18	94.90	94.61	94.52	94.57	94.68	94.66	94.88	94.44	94.15	94.12	93.63	93.48
19	94.90	94.62	94.35	94.47	94.61	94.64	94.85	94.49	94.22	94.09	93.63	93.49
20	94.90	94.61	94.34	94.60	94.64	94.60	94.79	94.42	94.23	94.05	93.63	93.51
21	94.90	94.58	94.32	94.45	94.69	94.60	94.67	94.48	94.23	94.06	93.61	93.50
22	94.89	94.57	94.32	94.45	94.73	94.61	94.72	94.53	94.17	94.06	93.60	93.45
23	94.88	94.56	94.31	94.59	94.89	94.46	94.75	94.53	94.15	94.05	93.60	93.47
24	94.87	94.56	94.47	94.62	94.93	94.51	94.77	94.48	94.18	94.01	93.59	93.53
25	94.86	94.55	94.36	94.64	94.97	94.70	94.80	94.43	94.27	93.99	93.57	93.43
26	94.85	94.53	94.43	94.53	94.99	94.75	94.81	94.49	94.27	93.97	93.56	93.43
27	94.83	94.53	94.34	94.44	94.82	94.79	94.76	94.49	94.25	93.94	93.55	93.60
28	94.82	94.52	94.32	94.38	94.83	94.79	94.69	94.50	94.19	93.92	93.53	93.45
29	94.81	94.51	94.32	94.38	94.83	94.79	94.73	94.56	94.16	93.91	93.54	93.46
30	94.80	.....	94.33	94.44	94.89	94.73	94.79	94.58	94.19	93.91	93.52	93.60
31	94.78	.....	94.50	.....	94.90	.....	94.79	94.53	.....	93.89	.....	93.55

S 38. The altitude of the measuring point of this well was incorrectly given in Water-Supply Papers 840 and 886. The correct altitude is 0.29 foot higher than that given in those reports. Thus, all the water levels given in Water-Supply Papers 840, 845, and 886 are 0.29 foot too low. Present measuring point, same as described in Water-Supply Paper 886, 34.48 feet above mean sea level. Measurements discontinued Oct. 24, 1940, when instrumental observations were started on a nearby well (S 2455) ending in the same formation. Measurements in both wells indicate only minor differences of water level.

Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1	21.15	21.53	21.64	22.80	23.76	23.13	22.73	22.12	21.48	20.99
2	21.14	21.52	21.66	22.77	23.73	23.22	22.70	22.08	21.47	20.98
3	21.14	21.50	21.69	22.76	23.70	23.32	22.67	22.07	21.44	20.97
4	21.13	21.48	21.71	22.76	23.64	23.40	22.67	a22.03	21.43	20.95
5	21.13	21.47	22.02	22.76	23.60	23.45	22.70	a22.00	21.40	20.94
6	21.12	21.46	22.21	22.75	23.57	23.47	22.69	a21.98	21.38	20.94
7	21.11	21.44	22.31	22.75	23.54	23.45	22.68	a21.95	21.36	20.93
8	21.11	21.41	22.38	22.76	23.51	23.42	a22.67	a21.93	21.34	20.91
9	21.10	21.39	22.42	22.84	23.49	23.39	a22.66	a21.90	21.32	20.90
10	21.09	21.38	22.47	22.87	23.45	23.35	a22.64	21.87	21.30	20.88
11	21.09	21.39	22.49	22.90	23.43	23.32	a22.63	21.84	21.28	20.87
12	21.09	21.39	22.50	22.98	23.41	23.29	22.61	21.82	21.26	20.86
13	21.08	21.37	22.51	23.07	23.39	23.26	22.59	21.79	21.25	20.85
14	21.08	21.37	22.51	23.15	23.35	23.21	22.57	21.76	21.23	20.83
15	21.09	21.33	22.53	23.22	23.33	23.20	22.55	21.73	21.21	20.82
16	21.20	21.31	22.57	23.32	23.30	23.15	22.53	21.70	21.19	20.80
17	21.25	21.30	22.63	23.40	23.29	23.12	22.50	21.69	21.17	20.79
18	21.28	21.29	22.68	23.44	23.27	23.09	22.48	21.66	21.15	20.78
19	21.32	21.29	22.73	23.47	23.26	23.06	22.45	21.64	21.14	20.78
20	21.35	21.33	22.76	23.48	23.23	23.02	22.44	21.61	21.11	20.77
21	21.40	21.40	22.79	23.51	23.20	22.98	22.42	21.59	21.10	20.76
22	21.43	21.43	22.80	23.54	23.18	22.95	22.39	21.56	21.09	20.74
23	21.45	21.47	22.83	23.59	23.18	22.93	22.36	21.54	21.06	a20.74
24	21.48	21.50	22.84	23.69	23.16	22.92	22.34	21.53	21.05	a20.72
25	21.50	21.51	22.85	23.78	23.14	22.90	22.31	21.50	21.04	.....
26	21.52	21.54	22.86	23.83	23.12	22.88	22.29	21.49	21.05	.....
27	21.53	21.57	22.86	23.84	23.11	22.85	22.27	21.47	21.04	.....
28	21.54	21.60	22.85	23.82	23.09	22.83	22.23	21.47	21.03	.....
29	21.54	21.63	22.85	23.81	23.07	22.80	22.21	21.49	21.02	.....
30	21.54	.....	22.85	23.79	23.05	22.77	22.18	21.50	21.00	.....
31	21.53	.....	22.85	.....	23.06	.....	22.15	21.50	.....	.....

S 201.

Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	29.35	28.05	28.02	a28.45	28.68	28.30	28.37	27.92	27.75	27.98	27.80	27.55
2	28.28	29.11	28.75	28.39	28.73	28.38	28.24	27.91	27.65	27.99	27.72	27.52
3	29.27	28.11	29.62	29.46	28.77	28.34	28.16	27.90	27.61	28.00	27.76	27.60
4	28.26	29.08	a28.91	28.41	28.76	28.32	28.15	27.89	27.60	27.99	27.71	27.61
5	29.25	29.12	.....	28.43	29.84	28.32	28.14	27.90	27.59	27.89	27.73	27.64
6	29.24	28.14	.....	28.45	28.82	28.32	28.13	27.89	27.60	27.98	27.73	27.55
7	29.24	29.11	.....	29.46	28.84	28.30	28.14	27.86	27.60	27.72	27.80	27.73
8	28.25	28.04	.....	28.44	28.85	28.30	28.17	27.88	28.01	27.52	27.84	28.86
9	28.11	29.05	.....	.....	28.76	28.31	28.16	27.86	28.02	27.48	27.76	27.82
10	28.86	28.11	.....	.....	28.75	28.30	28.15	27.85	28.05	27.45	27.68	27.87
11	29.22	29.07	.....	.....	28.67	28.29	28.13	27.84	28.04	27.44	27.65	28.94
12	28.23	28.10	.....	28.21	28.64	28.29	28.13	27.85	a28.04	27.40	27.60	27.88
13	29.03	29.01	a28.17	28.14	28.58	28.53	28.13	27.85	27.91	27.40	27.61	28.99
14	29.29	28.06	28.09	28.15	28.54	28.35	28.15	27.83	27.81	27.40	27.60	27.94
15	28.63	29.02	28.05	28.18	28.52	28.30	28.17	27.80	27.81	27.31	27.59	28.97
16	28.22	28.13	28.05	28.16	28.51	28.22	28.15	27.79	27.88	27.30	27.78	28.08
17	29.26	28.13	29.03	28.15	28.49	28.21	28.15	27.80	27.86	27.46	27.89	27.99
18	28.23	29.01	28.28	28.18	28.46	28.22	28.38	27.80	27.86	27.45	27.81	28.97
19	28.17	28.21	29.30	28.18	28.47	28.25	28.19	27.75	27.93	27.42	27.96	28.01
20	28.01	29.08	28.25	28.17	28.45	28.21	28.15	27.71	27.95	27.52	27.91	29.03
21	27.97	28.05	29.32	29.41	28.45	28.22	28.13	27.72	28.09	27.48	27.96	27.85
22	27.93	29.00	29.41	28.40	28.44	28.49	28.11	27.75	28.09	27.48	27.96	29.02

a Estimated.

S 201.--Continued.
Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
23	27.91	28.02	28.33	28.49	28.45	28.54	28.10	27.74	28.07	27.51	27.92	27.93
24	28.00	27.99	29.36	28.50	28.44	28.55	28.08	27.73	28.09	27.64	28.02	27.96
25	28.90	29.03	28.41	28.54	28.42	28.55	28.07	27.73	28.03	a27.64	27.92	28.98
26	29.00	28.04	29.39	28.55	28.41	28.58	28.04	27.81	27.99	a27.51	27.95	27.94
27	28.03	29.00	28.44	28.58	28.41	28.53	28.03	27.98	27.92	27.63	27.97	27.92
28	29.09	27.91	28.47	29.63	28.41	28.55	28.02	27.96	27.89	27.62	27.93	a28.02
29	29.13	29.00	29.43	28.66	28.37	28.44	28.01	27.93	27.92	27.63	27.85	.....
30	28.10	.....	28.48	28.66	28.38	28.37	27.94	27.82	27.86	27.53	27.59	.....
31	29.10	.....	29.48	.....	28.39	.....	27.94	27.76	.....	27.48	.....	.....

S 202. Measuring point raised 1.56 feet July 11, 1940. New measuring point, top of 2 by 2-inch steel angle attached to steel recorder shelter, 1.6 feet above land surface and 70.64 feet above mean sea level. Water level, July 12, 1940, 30.64 feet below measuring point and 40.00 feet above mean sea level.
Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	40.25	39.93	39.88	40.03	40.33	40.06	40.01	39.91	39.99	39.76	39.83	39.68
2	40.15	40.02	39.89	40.00	40.38	40.01	39.90	39.84	40.02	39.91	39.84	39.67
3	40.07	40.01	40.08	40.02	40.38	40.00	39.92	39.86	39.91	39.98	39.89	39.64
4	39.99	39.97	39.85	40.36	40.29	39.99	39.99	39.92	39.91	39.89	39.86	39.64
5	40.01	40.01	39.80	40.24	40.25	39.99	39.93	39.97	39.86	39.89	39.88	39.72
6	39.93	40.04	39.69	40.11	40.19	39.96	39.91	39.98	39.83	39.94	39.93	39.65
7	39.87	40.18	39.69	40.10	40.22	39.93	39.95	40.01	39.86	40.04	39.88	39.67
8	39.90	39.95	39.77	40.11	40.19	39.92	39.97	39.98	39.91	39.99	39.80	39.76
9	39.89	39.92	39.73	40.19	40.21	39.96	39.98	39.91	39.97	39.80	39.74	39.69
10	39.91	39.96	39.73	40.04	40.23	39.93	39.97	39.86	40.09	39.77	39.74	39.70
11	39.96	40.11	39.71	40.04	40.20	40.01	40.01	39.85	39.98	39.78	39.78	39.52
12	40.06	40.00	39.70	40.13	40.18	39.97	40.00	39.90	39.87	39.77	39.92	39.52
13	40.00	39.95	39.74	40.41	40.25	40.02	39.94	39.95	39.81	39.77	39.90	39.53
14	40.01	40.01	39.83	40.37	40.22	39.92	39.96	39.95	39.81	39.69	39.92	39.46
15	40.25	39.90	40.02	40.33	40.20	39.99	40.00	39.92	39.85	39.71	39.96	39.47
16	40.09	39.87	39.93	40.22	40.25	39.87	40.02	39.88	39.90	39.63	39.94	39.56
17	40.09	39.86	39.93	40.17	40.27	39.83	39.97	39.92	39.90	39.63	39.80	39.64
18	40.02	39.90	39.97	40.03	40.15	39.88	39.96	40.00	39.82	39.76	39.50	39.57
19	40.07	39.98	40.01	39.95	40.15	40.01	39.99	40.04	39.83	39.76	39.48	39.58
20	40.09	40.22	40.00	39.97	40.17	39.90	40.05	39.92	39.85	39.89	39.49	39.63
21	40.10	40.01	39.95	40.20	40.08	39.84	40.05	39.87	39.88	39.70	39.62	39.69
22	39.97	39.93	39.99	40.17	40.09	39.86	40.00	39.89	39.87	39.64	39.66	39.68
23	39.98	39.94	39.94	40.04	40.09	39.93	39.98	39.94	39.79	39.66	39.55	39.55
24	40.08	39.95	39.93	40.05	40.09	40.06	40.00	39.94	39.82	39.76	39.58	39.56
25	40.06	40.04	39.96	40.12	40.04	40.02	40.01	39.87	39.89	39.72	39.59	39.64
26	40.07	39.95	39.96	40.06	40.00	40.03	40.05	39.91	39.78	39.73	39.59	39.70
27	40.04	39.98	39.99	40.08	39.99	39.97	40.07	39.86	39.79	39.72	39.66	39.65
28	39.99	40.07	39.96	40.09	40.03	39.98	39.97	39.90	39.82	39.69	39.64	a39.66
29	39.98	39.97	39.97	40.16	39.88	40.02	39.94	39.90	39.79	39.69	39.64	.....
30	40.00	.....	40.01	40.23	39.92	39.97	39.98	39.94	39.76	39.77	39.65	.....
31	39.92	.....	40.05	.....	39.99	.....	40.03	39.96	.....	39.86	.....	a39.50

S 203. The altitude of the measuring point of this well was incorrectly given in Water-Supply Paper 840 as 203.15 feet above mean sea level. The correct altitude is 203.45 feet above mean sea level. Thus, all water levels given for this well in previous reports are 0.30 foot too low.
Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	76.67	76.39	76.25	76.23	76.09	75.79	76.08	76.19	76.15	75.99	75.85
2	.....	76.73	76.39	76.24	76.23	76.09	75.76	76.04	76.16	76.21	76.04	75.83
3	.....	76.67	76.47	76.24	76.25	76.08	75.76	76.06	76.13	76.12	75.96	75.79
4	.....	76.63	76.63	76.40	76.13	76.09	.....	76.12	76.13	76.05	75.95	75.79
5	.....	76.67	76.60	76.22	76.06	76.11	.....	76.14	76.12	76.04	76.02	75.86
6	76.73	76.67	76.56	76.20	76.06	76.12	a75.75	76.15	76.12	76.06	76.09	75.78
7	76.68	76.65	76.55	76.19	76.07	76.10	75.79	76.13	76.14	76.17	76.05	75.86
8	76.78	76.56	76.55	76.20	76.09	a76.09	75.83	76.12	76.16	76.16	75.95	75.86

a Estimated.

S 203.--Continued.
Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
9	76.69	76.59	76.49	76.24	76.10	.....	75.85	76.09	76.24	76.10	75.90	75.81
10	76.69	76.61	76.41	76.15	a76.10	.....	75.85	76.07	76.17	76.06	75.92	75.80
11	76.74	76.61	76.35	76.15	76.07	.....	75.88	76.05	76.12	76.09	75.92	75.72
12	76.82	76.60	76.35	76.26	76.07	.....	75.85	76.06	76.13	76.11	75.90	75.74
13	76.72	76.60	76.34	76.29	76.10	.....	75.83	76.13	76.08	76.08	75.90	75.73
14	76.73	76.66	76.37	76.24	76.06	.....	75.84	76.14	76.04	76.03	75.98	75.71
15	76.87	76.50	76.46	76.22	76.04	a75.77	75.88	76.10	76.08	76.03	76.06	75.72
16	76.81	76.50	76.43	76.18	76.07	75.66	75.97	76.10	76.14	75.99	76.02	75.80
17	76.80	76.52	76.38	76.16	76.08	75.66	75.97	76.13	76.10	76.05	75.97	75.67
18	76.76	76.52	76.39	76.18	76.07	75.72	75.98	76.16	76.08	76.07	75.79	75.67
19	76.80	76.61	76.39	76.17	76.07	75.86	76.03	76.20	76.11	76.05	76.79	75.70
20	76.80	76.74	76.35	76.22	76.06	75.77	76.14	76.11	76.15	76.08	75.91	75.78
21	76.82	76.55	76.33	76.35	76.05	75.75	76.14	76.10	76.18	75.95	75.90	a75.85
22	76.70	76.50	76.35	76.17	76.07	75.75	76.12	76.11	76.14	75.94	75.93	.....
23	76.68	76.47	76.30	76.14	76.12	75.83	76.12	76.12	76.13	76.00	75.88	.....
24	76.80	76.47	76.31	a76.14	76.12	75.93	76.15	76.09	76.15	76.06	75.91	.....
25	76.77	76.51	76.32	.....	76.07	75.89	76.15	76.09	76.13	76.06	75.83	.....
26	76.77	76.49	76.28	.....	76.06	75.87	76.14	76.13	76.05	76.02	75.83	.....
27	76.74	76.49	76.28	a76.09	76.06	75.80	76.11	76.12	76.06	76.02	76.03	.....
28	76.69	76.53	76.28	76.10	76.10	75.79	76.10	76.12	76.08	75.98	75.80	.....
29	76.68	76.45	76.28	76.10	76.00	75.85	76.10	76.09	76.09	75.98	75.80	.....
30	76.70	.....	76.37	76.16	76.00	75.82	76.15	76.11	76.07	75.93	75.84	a75.67
31	76.67	.....	76.41	.....	76.08	.....	76.16	76.14	.....	76.00	.....	75.61

S 1803.
Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	15.58	Apr. 6	16.38	July 6	16.12	Oct. 5	15.34
13	15.52	13	16.76	13	15.96	12	15.27
20	15.93	20	16.91	20	15.85	19	15.22
27	15.85	27	17.08	27	15.72	26	15.19
Feb. 3	15.71	May 4	16.79	Aug. 3	15.59	Nov. 2	15.37
10	15.63	11	16.59	10	15.48	9	15.56
17	15.62	18	16.41	17	15.36	16	16.05
24	16.11	25	16.31	24	15.35	23	16.22
Mar. 2	16.02	June 1	16.45	31	15.59	30	16.10
9	16.66	8	16.41	Sept. 7	15.50	Dec. 7	15.98
16	16.80	15	16.22	14	15.36	14	15.91
23	16.70	22	16.06	21	15.27	21	16.06
30	16.50	29	16.04	28	15.40	28	16.08

S 1804.
Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	10.29	Apr. 6	10.58	July 6	10.65	Oct. 5	10.36
13	10.39	13	10.77	13	10.64	12	10.36
20	10.36	20	10.86	20	10.55	19	10.38
27	10.33	27	10.86	27	10.51	26	10.38
Feb. 3	10.29	May 4	10.89	Aug. 3	10.45	Nov. 2	10.54
10	10.29	11	10.78	10	10.42	9	10.45
17	10.34	18	10.75	17	10.39	16	10.65
24	10.57	25	10.74	24	10.36	23	10.64
Mar. 2	10.43	June 1	10.83	31	10.45	30	10.68
9	10.61	8	10.76	Sept. 7	10.32	Dec. 7	10.71
16	10.65	15	10.72	14	10.31	14	10.71
23	10.61	22	10.64	21	10.31	21	10.75
30	10.59	29	10.68	28	10.38	28	10.77

a Estimated.

S 1805. Measurements discontinued July 20, 1940.
Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	41.41	Mar. 2	41.28	Apr. 20	43.49	June 8	43.94
13	41.29	9	41.92	27	43.86	15	43.91
20	41.40	16	42.17	May 4	44.06	22	43.68
27	41.42	23	42.38	11	43.95	29	43.58
Feb. 3	41.33	30	42.57	18	43.83	July 6	43.40
10	41.23	Apr. 6	42.60	25	43.72	13	43.29
17	41.11	13	42.87	June 1	43.71	20	43.12
24	41.18						

S 1806.
Water level, in feet above mean sea level, 1940

Jan. 6	56.44	Apr. 6	57.04	July 6	58.03	Oct. 5	56.16
13	56.37	13	57.09	13	57.94	12	56.03
20	56.23	20	57.22	20	57.81	19	55.89
27	56.15	27	57.78	27	57.67	26	55.76
Feb. 3	56.06	May 4	58.20	Aug. 3	57.49	Nov. 2	55.65
10	55.97	11	58.40	10	57.33	9	55.51
17	56.03	18	58.44	17	57.19	16	55.42
24	55.95	25	58.36	24	57.02	23	55.39
Mar. 2	55.91	June 1	58.41	31	56.89	30	55.57
9	56.23	8	58.16	Sept. 7	56.74	Dec. 7	55.70
16	56.41	15	58.17	14	56.58	14	55.69
23	56.68	22	58.17	21	56.44	21	55.67
30	56.89	29	58.16	28	56.30	28	55.58

S 1807.
Water level, in feet above mean sea level, 1940

Jan. 6	21.26	Apr. 6	21.97	July 6	21.79	Oct. 5	21.21
13	21.28	13	22.36	13	21.73	12	21.12
20	21.53	20	22.48	20	21.55	19	21.06
27	21.62	27	22.54	27	21.52	26	21.08
Feb. 3	21.50	May 4	22.44	Aug. 3	21.44	Nov. 2	21.32
10	21.44	11	22.21	10	21.40	9	21.24
17	21.38	18	22.10	17	21.25	16	21.64
24	21.69	25	22.00	24	21.27	23	21.63
Mar. 2	21.63	June 1	22.18	31	21.45	30	21.61
9	22.17	8	22.05	Sept. 7	21.28	Dec. 7	21.56
16	22.31	15	21.94	14	21.20	14	21.49
23	22.17	22	21.82	21	21.13	21	21.57
30	22.05	29	21.84	28	21.28	28	21.71

S 1808.
Water level, in feet above mean sea level, 1940

Jan. 6	10.38	Apr. 6	11.14	July 6	11.11	Oct. 5	10.30
13	10.36	13	11.81	13	10.78	12	10.15
20	10.92	20	11.53	20	10.49	19	10.08
27	10.65	27	11.52	27	10.36	26	10.03
Feb. 3	10.48	May 4	11.30	Aug. 3	10.14	Nov. 2	10.48
10	10.45	11	11.05	10	10.06	9	10.55
17	10.65	18	11.05	17	9.91	16	11.64
24	10.82	25	11.12	24	10.06	23	10.99
Mar. 2	10.88	June 1	11.62	31	10.59	30	11.00
9	11.62	8	10.99	Sept. 7	10.25	Dec. 7	10.81
16	11.75	15	10.77	14	10.09	14	10.75
23	11.33	22	10.53	21	9.95	21	10.98
30	11.06	29	10.99	28	10.37	28	10.94

S 1809.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	27.23	Apr. 6	28.93	July 6	29.37	Oct. 5	27.45
13	27.20	13	29.04	13	29.28	12	27.33
20	27.37	20	29.65	20	29.18	19	27.21
27	27.58	27	29.95	27	29.04	26	27.16
Feb. 3	27.62	May 4	30.20	Aug. 3	28.87	Nov. 2	27.04
10	27.54	11	30.01	10	28.68	9	26.97
17	27.42	18	29.76	17	28.50	16	27.09
24	27.45	25	29.74	24	28.32	23	27.58
Mar. 2	27.67	June 1	29.68	31	28.16	30	27.74
9	28.23	8	30.00	Sept. 7	28.01	Dec. 7	27.75
16	28.57	15	29.93	14	27.87	14	27.64
23	28.78	22	29.69	21	27.72	21	27.63
30	28.91	29	29.56	28	27.58	28	27.75

S 1810.

Water level, in feet above mean sea level, 1940

Jan. 6	51.53	Apr. 6	51.82	July 6	53.32	Oct. 5	52.03
13	51.41	13	51.84	13	53.31	12	51.94
20	51.39	20	52.18	20	53.27	19	51.79
27	51.29	27	52.41	27	53.19	26	51.67
Feb. 3	51.22	May 4	52.52	Aug. 3	53.08	Nov. 2	51.54
10	51.09	11	53.17	10	52.97	9	51.41
17	51.05	18	53.40	17	52.89	16	51.31
24	51.01	25	53.50	24	52.76	23	51.23
Mar. 2	50.95	June 1	53.51	31	52.66	30	51.20
9	51.21	8	53.48	Sept. 7	52.54	Dec. 7	51.21
16	51.24	15	53.50	14	52.42	14	51.14
23	51.26	22	53.39	21	52.32	21	51.18
30	51.29	29	53.44	28	52.16	28	51.18

S 1811. The altitude of the measuring point of this well was incorrectly given in Water-Supply Papers 840 and 886. The correct altitude is 3.78 feet lower than that given in those reports. Thus, all the water levels given in Water-Supply Papers 840, 845, and 886 are 3.78 feet too high. Measuring point lowered 0.20 foot Aug. 26, 1940, when water-stage recorder was installed. New measuring point, top of metal plate on instrument shelf, 58.95 feet above mean sea level. Lake level, Aug. 27, 1940, 4.26 feet below measuring point, and 54.69 feet above mean sea level.

Lowest daily lake level, in feet above mean sea level, 1940

(Record from Jan. 6 through Aug. 24 from tape measurements; record after Aug. 24 from recorder charts.)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	.....	.....	.....	55.47	.....	.....	54.92	54.75	54.64	54.93
2	.....	.....	55.07	.....	.....	.....	.....	.....	54.92	54.75	54.64	54.92
3	.....	54.90	.....	.....	.....	.....	.....	54.81	54.90	54.82	54.76	54.90
4	.....	.....	.....	.....	55.52	.....	.....	.....	54.89	54.82	54.76	54.90
5	.....	.....	.....	.....	.....	.....	.....	.....	54.87	54.82	54.76	54.90
6	54.79	.....	.....	55.44	.....	.....	55.14	.....	54.85	54.81	54.74	54.91
7	.....	.....	.....	.....	.....	.....	.....	.....	54.83	54.79	54.72	54.91
8	.....	.....	.....	.....	.....	55.36	.....	.....	54.82	54.78	54.71	54.92
9	.....	.....	55.40	.....	.....	.....	.....	.....	54.81	54.77	54.71	54.92
10	.....	54.89	.....	.....	.....	.....	.....	54.83	54.80	54.75	54.70	54.91
11	.....	.....	.....	.....	55.45	.....	.....	.....	54.79	54.74	54.70	54.91
12	.....	.....	.....	.....	.....	.....	.....	.....	54.79	54.75	54.71	54.90
13	54.80	.....	.....	55.52	.....	.....	55.09	.....	54.77	54.75	54.79	54.91
14	.....	.....	.....	.....	.....	.....	.....	.....	54.75	54.75	54.86	54.90
15	.....	.....	.....	.....	.....	55.21	.....	.....	54.73	54.73	54.98	54.89
16	.....	.....	55.43	.....	.....	.....	.....	.....	54.72	54.71	54.98	54.89
17	.....	55.04	.....	.....	.....	.....	.....	54.67	54.70	54.69	54.96	54.95
18	.....	.....	.....	.....	55.36	.....	.....	.....	54.70a	54.67	54.95	54.96
19	.....	.....	.....	.....	.....	.....	.....	.....	54.69	54.65	54.94	54.95
20	54.98	.....	.....	55.56	.....	.....	55.15	.....	54.68	54.63	54.94	54.95
21	.....	.....	.....	.....	.....	.....	.....	.....	54.66	54.61	54.93	54.95
22	.....	.....	.....	.....	.....	55.03	.....	.....	54.67	54.60	54.93	54.94

a Estimated.

S 1811.--Continued.
Lowest daily lake level, in feet above mean sea level, 1940
(Record from Jan. 6 through Aug. 24 from tape measurements; record after Aug. 24 from recorder charts.)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
23	.....	.....	55.34	.....	.....	.....	.....	.....	54.66	54.59	54.93	54.93
24	.....	51.13	.....	.....	.....	.....	.....	54.76	54.63	54.58	54.94	54.93
25	.....	.....	.....	.....	55.30	.....	.....	.....	54.63	54.57	54.93	54.93
26	.....	.....	.....	.....	.....	.....	.....	.....	54.82	54.58	54.92	54.93
27	54.95	.....	.....	55.50	.....	.....	54.97	54.69	54.81	54.58	54.94	54.93
28	.....	.....	.....	.....	.....	.....	.....	.....	54.69	54.79	54.56a	54.95	54.93
29	.....	.....	.....	.....	.....	55.15	.....	54.87	54.79	54.56a	54.95	55.00
30	.....	.....	55.48	.....	.....	.....	.....	54.88	54.77	54.56	54.94	55.02
31	.....	.....	.....	.....	.....	.....	.....	54.92	.....	54.64	.....	54.99

S 1812. The altitude of the measuring point of this well was incorrectly given in Water-Supply Papers 840 and 845. The correct altitude is 3.78 feet lower than that given in those reports. Thus, all the water levels given in Water-Supply Papers 840, 845, and 886 are 3.78 feet too high. Present measuring point, same as described in Water-Supply Paper 845, 69.03 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	47.71	Apr. 6	47.99	July 6	49.30	Oct. 5	48.30
13	47.63	13	48.02	13	49.30	12	48.20
20	47.60	20	48.29	20	49.24	19	48.09
27	47.50	27	48.40	27	49.18	26	47.99
Feb. 3	47.43	May 4	48.61	Aug. 3	49.06	Nov. 2	47.94
10	47.36	11	48.75	10	48.97	9	47.79
17	47.26	18	48.89	17	48.90	16	47.81
24	47.22	25	48.99	24	48.82	23	47.76
Mar. 2	47.15	June 1	49.12	31	48.79	30	47.70
9	47.64	8	49.18	Sept. 7	48.68	Dec. 7	47.67
16	47.70	15	49.24	14	48.58	14	47.58
23	47.80	22	49.25	21	48.50	21	47.56
30	47.91	29	49.32	28	48.40	28	47.53

S 1813. U. S. Geological Survey. On south side of Johnson Avenue, about 1.5 miles west of Ocean Avenue, Ronkonkoma. Diameter 1¼ inches, measured depth 39.5 feet below measuring point. Measuring point, top of pipe, 0.3 foot above land surface and 58.75 feet above mean sea level. Water level, Nov. 4, 1939, 19.83 feet below measuring point and 38.92 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Nov. 4, 1939	38.92	Mar. 30, 1940	38.69	Aug. 17, 1940	39.07
11	39.03	Apr. 6	38.65	24	39.03
18	38.91	13	38.87	31	39.10
25	38.79	20	39.04	Sept. 7	38.99
Dec. 2	38.71	27	39.15	14	38.92
9	38.66	May 4	39.23	21	38.86
16	38.65	11	39.21	28	38.81
23	38.49	18	39.24	Oct. 5	38.75
30	38.45	25	39.26	12	38.71
Jan. 6, 1940	38.34	June 1	39.39	19	38.64
13	38.26	8	39.63	26	38.57
20	38.34	15	39.64	Nov. 2	38.57
27	38.25	22	39.49	9	38.53
Feb. 3	38.18	29	39.49	16	38.71
10	38.14	July 6	39.42	23	38.77
17	38.07	13	39.40	30	38.65
24	38.10	20	39.34	Dec. 7	38.59
Mar. 2	38.04	27	39.30	14	38.49
9	38.65	Aug. 3	39.22	21	38.47
16	38.65	10	39.16	28	38.46
23	38.66				

a Estimated.

S 1814. U. S. Geological Survey. At northwest corner of Suffolk Avenue and Lowells Avenue, Central Islip. Diameter 1¼ inches, measured depth 48.7 feet below measuring point. Measuring point, top of pipe, 0.3 foot above land surface, and 79.63 feet above mean sea level. Water level, Nov. 4, 1939, 42.09 feet below measuring point and 37.54 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Nov. 4, 1939	37.54	Mar. 30, 1940	37.08	Aug. 17, 1940	37.82
11	37.53	Apr. 6	37.11	24	37.73
18	37.48	13	37.15	31	37.69
25	37.40	20	37.28	Sept. 7	37.64
Dec. 2	37.33	27	37.44	14	37.56
9	37.25	May 4	37.67	21	37.50
16	37.23	11	37.84	28	37.40
23	37.05	18	37.95	Oct. 5	37.32
30	36.97	25	38.00	12	37.24
Jan. 6, 1940	36.85	June 1	38.05	19	37.15
13	36.76	8	38.16	26	37.06
20	36.69	15	38.26	Nov. 2	36.97
27	36.63	22	38.27	9	36.89
Feb. 3	36.57	29	38.28	16	36.87
10	36.51	July 6	38.21	23	36.93
17	36.41	13	38.19	30	36.97
24	36.38	20	38.15	Dec. 7	36.96
Mar. 2	36.34	27	38.09	14	36.86
9	36.75	Aug. 3	37.99	21	36.83
16	36.91	10	37.89	28	36.79
23	37.00				

S 1815. Federal Geological Survey. At northwest corner of Suffolk Avenue and Eastern Avenue, Brentwood. Diameter 1¼ inches, measured depth 39.2 feet below measuring point. Measuring point, top of pipe, about level with land surface, and 72.14 feet above mean sea level. Water level, Dec. 2, 1939, 24.75 feet below measuring point and 47.39 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Dec. 2, 1939	47.39	Apr. 13, 1940	46.57	Aug. 24, 1940	47.49
9	47.28	20	46.62	31	47.42
16	47.12	27	46.74	Sept. 7	47.32
23	47.00	May 4	46.97	14	47.22
30	46.90	11	47.20	21	47.17
Jan. 6, 1940	46.74	18	47.38	28	47.08
13	46.62	25	47.51	Oct. 5	46.98
20	46.54	June 1	47.55	12	46.89
27	46.42	8	47.64	19	46.79
Feb. 3	46.30	15	47.71	26	46.68
10	46.20	22	47.72	Nov. 2	46.57
17	46.08	29	47.81	9	46.48
24	46.06	July 6	47.78	16	46.47
Mar. 2	45.85	13	47.77	23	46.32
9	46.50	20	47.74	30	46.29
16	46.41	27	47.73	Dec. 7	46.27
23	46.44	Aug. 3	47.61	14	46.17
30	46.51	10	47.53	21	46.16
Apr. 6	46.50	17	47.47	28	46.13

S 1816. U. S. Geological Survey. At northeast corner of Brentwood Road and Commack Road, Deer Park. Diameter 1¼ inches, measured depth 37.5 feet below measuring point. Measuring point, top of pipe, 0.4 foot above land surface and 85.21 feet above mean sea level. Water level, Dec. 2, 1939, 27.01 feet below measuring point and 58.20 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Dec. 2, 1939	58.20	Apr. 13, 1940	58.44	Aug. 24, 1940	59.00
9	58.14	20	58.68	31	58.92
16	58.07	27	59.04	Sept. 7	58.76
23	57.97	May 4	59.42	14	58.62
30	57.91	11	59.75	21	58.50
Jan. 6, 1940	57.80	18	59.87	28	58.36
13	57.68	25	59.90	Oct. 5	58.21
20	57.66	June 1	59.93	12	58.08
27	57.56	8	59.79	19	57.93
Feb. 3	57.50	15	59.88	26	57.79
10	57.46	22	59.87	Nov. 2	57.67
17	57.38	29	59.92	9	57.51
24	57.42	July 6	59.77	16	57.44
Mar. 2	57.37	13	59.71	23	57.38
9	57.72	20	59.62	30	57.50
16	57.88	27	59.54	Dec. 7	57.59
23	58.05	Aug. 3	59.50	14	57.57
30	58.23	10	59.26	21	57.58
Apr. 6	58.38	17	59.15	28	57.52

S 1817. U. S. Geological Survey. At southeast corner of Long Island Avenue and 18th Street, Wyandanch. Diameter 1¼ inches, measured depth 23.6 feet below measuring point. Measuring point, top of pipe, 0.6 foot above land surface and 58.93 feet above mean sea level. Water level, Dec. 2, 1939, 6.69 feet below measuring point and 52.24 feet above mean sea level.

Water level, in feet above mean sea level, 1939-40

Date	Water level	Date	Water level	Date	Water level
Dec. 2, 1939	52.24	Apr. 13, 1940	52.96	Aug. 24, 1940	51.96
9	52.29	20	53.41	31	52.47
16	52.15	27	53.56	Sept. 7	52.04
23	52.33	May 4	53.61	14	51.84
30	52.08	11	53.33	21	51.68
Jan. 6, 1940	51.94	18	53.33	28	51.98
13	51.81	25	53.25	Oct. 5	51.78
20	52.41	June 1	53.95	12	51.63
27	52.13	8	53.28	19	51.51
Feb. 3	51.94	15	53.09	26	51.40
10	51.84	22	52.85	Nov. 2	51.82
17	51.85	29	53.02	9	51.76
24	52.48	July 6	53.09	16	52.62
Mar. 2	52.19	13	52.89	23	52.13
9	52.96	20	52.61	30	52.03
16	53.61	27	52.61	Dec. 7	51.96
23	53.05	Aug. 3	52.28	14	51.86
30	52.83	10	52.15	21	52.07
Apr. 6	52.91	17	52.00	28	52.00

S 2020. Mrs. R. V. Ingersoll. On narrow neck of land in about center of Duck Island in Northport Bay. Diameter 6 inches, measured depth 618.7 feet below measuring point. Measuring point, top of metal plate on instrument shelf, 1.05 feet above top of 6-inch casing, 1.8 feet above land surface, and 15.84 feet above mean sea level. Water level, Apr. 21, 1940, 5.76 feet below measuring point and 10.08 feet above mean sea level.

Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	10.00	10.01	9.87	9.90	9.69	9.80	9.60	9.38
2	.....	10.08	9.99	9.77	9.76	9.56	9.95	9.91	9.49
3	.....	10.20	9.84	9.58	9.48	9.53	9.75	9.43	9.25
4	.....	10.17	9.74	9.73	9.38	9.54	9.70	9.37	9.37
5	.....	9.87	9.77	9.52	9.45	9.58	9.61	9.84	9.72
6	.....	9.64	9.79	9.36	9.43	9.63	9.60	9.77	9.75
7	.....	9.69	9.70	9.34	9.46	9.80	9.79	9.82	9.65
8	.....	9.54	9.84	9.44	9.52	9.90	9.94	9.89	9.93
9	.....	9.63	9.73	9.53	9.58	9.98	9.95	9.87	9.79
10	.....	9.65	9.74	9.57	9.55	10.21	9.95	9.82	9.83
11	.....	9.73	9.78	9.71	9.56	10.09	9.87	9.82	9.43
12	.....	9.87	9.71	9.86	9.58	9.98	9.88	9.78	9.57
13	.....	10.02	9.87	9.79	9.63	9.88	9.85	9.67	9.35
14	.....	9.92	9.68	9.66	9.77	9.77	9.70	9.79	9.24
15	.....	9.88	9.79	9.64	9.78	9.88	9.92	9.85	9.22
16	.....	9.80	9.76	9.70	9.69	10.19	9.80	9.75	9.52
17	.....	9.86	9.51	9.70	9.73	9.44	10.13	9.53	9.15
18	.....	9.59	9.53	9.59	9.82	9.41	10.05	9.29	9.28
19	.....	9.48	9.73	9.59	10.14	9.65	9.76	9.44	9.44
20	.....	9.56	9.77	9.71	9.95	9.80	10.06	9.35	9.60
21	10.08	9.58	9.53	9.83	9.84	9.97	9.69	9.42	9.65
22	9.84	9.56	9.54	9.84	9.87	10.04	9.48	9.51	9.65
23	9.62	9.94	9.61	9.86	9.99	10.03	9.60	9.51	9.74
24	9.57	9.99	9.97	9.98	9.80	10.03	9.65	9.91	9.65
25	9.52	10.07	10.32	10.04	9.77	10.00	9.78	9.39	9.57
26	9.47	9.99	10.28	10.01	9.80	9.74	9.85	9.42	9.89
27	9.52	9.90	10.09	10.06	9.90	9.66	9.61	9.99	9.93
28	9.52	10.01	10.07	10.16	9.87	9.50	9.47	9.08	9.99
29	9.70	10.07	10.27	10.07	9.93	9.45	9.36	9.07	10.28
30	9.83	9.84	9.99	10.03	9.85	9.52	9.51	9.23	9.70
31	....	10.04	....	10.05	9.59	....	9.58	....	9.32

S 2454. Long Island Railroad. On south side of railroad tracks, about 80 feet east of Deer Park Avenue, Babylon. Diameter 10 inches, measured depth 68.8 feet below measuring point. Measuring point, top of metal plate at hole in wood plug in 10-inch coupling, about level with land surface and 13.07 feet above mean sea level. Water level, Sept. 21, 1940, 6.05 feet below measuring point and 7.02 feet above mean sea level.

Water level, in feet above mean sea level, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 21	7.02	Oct. 19	7.05	Nov. 16	8.01	Dec. 14	7.26
28	7.28	26	6.99	23	7.49	21	7.48
Oct. 5	7.19	Nov. 2	7.48	30	7.47	28	7.49
12	7.06	9	7.25	Dec. 7	7.34		

S 2455. Replaces well S 38. Federal Geological Survey. About 4,000 feet southeast of intersection of Udalls Road and Hunter Avenue, about 7 feet south of well S 38, and about 2 miles west of Bayshore. Diameter 10 inches, measured depth 20.0 feet below measuring point. Measuring point, top of pipe, 2.2 feet above land surface and 35.29 feet above mean sea level. Water level, Oct. 25, 1940, 14.58 feet below measuring point and 20.71 feet above mean sea level.

Lowest daily water level, in feet above mean sea level, 1940
(from recorder charts)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 25	20.71	Nov. 11	20.85	Nov. 28	21.76	Dec. 15	21.55
26	20.69	12	20.86	29	21.76	16	21.54
27	20.68	13	20.87	30	21.75	17	21.57
28	20.67	14	20.89	Dec. 1	21.74	18	21.57
29	20.66	15	20.94	2	21.73	19	21.57
30	20.65	16	21.02	3	21.71	20	21.59
31	a 20.66	17	21.20	4	21.70	21	21.62
Nov. 1	20.65	18	21.39	5	21.68	22	21.63
2	20.65	19	21.50	6	21.67	23	21.66
3	20.69	20	21.59	7	21.67	24	21.66
4	20.74	21	21.65	8	21.65	25	21.69
5	20.76	22	21.69	9	21.63	26	21.71
6	20.79	23	21.72	10	21.62	27	21.73
7	20.81	24	21.74	11	21.60	28	21.74
8	20.83	25	21.75	12	21.59	29	21.77
9	20.84	26	21.76	13	21.58	30	21.79
10	20.84	27	21.77	14	21.55	31	21.80

a Estimated.

OHIO

BUTLER AND HAMILTON COUNTIES

By F. H. Klaer, Jr.

The investigations of ground-water conditions in Butler and Hamilton Counties, Ohio, begun in June 1938, was continued during 1940 by the Federal Geological Survey in financial cooperation with the Boards of County Commissioners of Butler and Hamilton Counties. The detailed work of the investigation was essentially completed by July 1, 1940, but measurements of water levels in selected observation wells have been continued through December 31, 1940. It is hoped to continue a program of water level measurements through 1941. A description of the investigation and measurements of water levels made in observation wells in 1938 and 1939 are given on pages 370-383, Water-Supply Paper 845, and on pages 556-587, Water-Supply Paper 886. A progress report on the investigation was released in manuscript form in February 1940, accompanied by a mimeographed press release.1/ A more complete abstract of the report was mimeographed and distributed locally to interested persons by the Mill Creek Valley Conservation Association. A complete report of the investigation is now being prepared by the Geological Survey.

At the end of 1940, water levels were being measured weekly in 62 wells and monthly in 20 wells as a part of the investigation. During the year about 8,400 measurements were made by H. F. Pittman and C. L. Elliott, local observers for the Geological Survey. During 1940 measurements of water level in 21 observation wells were discontinued and measurements were made in 17 new observation wells.

During the year, 15 automatic water-stage recorders were maintained on wells, most of which are in areas of heavy pumping where fluctuations of water level are of sufficient magnitude to make weekly measurements of little value. Throughout the year, 10 recorders were maintained continuously on the same wells and 5 recorders were installed on 9 different wells for shorter periods.

In January 1940, water levels in both deep and shallow water-bearing beds were generally low and in many wells continued to decline until April.

1/ Municipal and industrial water supplies from wells in Butler and Hamilton Counties, in the Cincinnati region, Ohio: U. S. Dept. Interior Press memo. 91647, 2 pp. February 19, 1940.

A severe storm during the week of April 17 to 24, during which about 4.5 inches of rain was recorded near Sharonville, caused Mill Creek to overflow its banks and to flood many of the adjacent fields. Recharge following the storm was particularly great in the Mill Creek Valley north of Lockland. In several shallow wells water levels rose between 16 and 18 feet in a few days. The rise of water level in deep wells was generally smaller. In the Mill Creek Valley south from Lockland, although the water levels in several shallow wells rose considerably, no rise in water level in deep wells that could be attributed directly to recharge from the April storm was observed. During the remainder of the year, except for small rises during the first week of June, water levels in both deep and shallow wells continued to decline, so that in many wells the water level in December 1940 was one foot to several feet lower than in December 1939.

In Middletown, the water level in the shallow water-bearing beds was low in January and rose during February, March and April, except for a short period in March. The highest level reached in April was slightly lower than the highest level reached during 1939. The water level declined generally during the remainder of the year, except for a short rise during the first week in June. In December 1940, the water level was from 1 to 5.5 feet lower than in December 1939. The water level in the deep water-bearing beds at Middletown declined generally throughout the year and in December 1940 it was about 5 feet lower than in December 1939. The decline during 1940 was considerably less than that during 1939.

In Hamilton, the water level rose irregularly from January to April, and except for a short rise in June, declined during the rest of the year. On December 31, 1940, the water level in well 89-3 (23) was about 1 foot higher than on December 31, 1939. In well 104-1 (117), farther away from the Miami River, the water level declined about 1 foot during the year.

Water levels in the Miami Valley south of Hamilton rose almost continuously from January to April and declined from May to December. The net decline during the year was about one foot.

In the divide area between the Miami Valley and Mill Creek Valley and in the upper part of Mill Creek Valley, water levels declined until late February, rose slowly during March and rapidly during April. The highest level was reached generally in May and water levels declined continuously from May to December. The net decline for the year ranged from about half a foot to as much as five feet.

Water levels in the shallow water-bearing beds in Mill Creek Valley between Sharon Avenue and Lockland declined during January, and rose slowly during February and March and rapidly during April. The highest level in April 1940 in wells that were directly affected by the flooding of adjacent fields was generally several feet higher than the highest level of April 1939. Water levels generally declined throughout the rest of the year. The average net decline for the year was about one foot.

The water level in the deeper water-bearing beds in the Mill Creek Valley north of Lockland rose generally from March to May and declined from May to December. The net decline was about one foot.

In the industrial area in Wyoming, Lockland, and Reading, the fluctuations of water level in the deep water-bearing beds corresponds to changes in pumpage. The water level in well 237-5 (13) at the Wyoming waterworks, where pumpage from nearby wells is fairly constant, declined more or less continuously throughout the year, the rate of decline increasing during September, October, and November. The level in December 1940 was about 4 feet lower than that in December 1939 and almost 2 feet lower than in December 1938. At the Gardner Richardson Company plant, where pumpage from wells varies considerably, the water level declined during January and February and rose during March and April. From May to September, the water level declined more or less regularly, reaching the lowest stage during the period of record September 26, 1940. This low stage was almost 2.5 feet lower than the lowest stages reached during 1938 and 1939. Part of this decline is due to heavy industrial and municipal pumpage during September, October, and November.

Water levels in the Ivorydale area declined more or less continuously throughout the year and in December 1940 were about 3 feet lower than in December 1939. The lowest level reached during 1940 was about 1.5 feet lower than the lowest level of 1939 and nearly 3 feet below the lowest

level reached during 1938. Measurements of water level in this area have failed to show fluctuations that may be attributed to recharge and apparently much of the water pumped is being taken from storage.

In the Norwood area, the water level had a net decline of about 1 foot during 1940. The major part of the public supply for the city of Norwood was taken from 5 new wells in a new field about 1,000 feet from the old well field. Wells in the old field are pumped only occasionally to augment the supply.

Precipitation at the Abbe Observatory station of the United States Weather Bureau during 1940 was 3.90 inches below normal. Rainfall was above normal only during February, April, May, June, and November. The deficiency in precipitation during the summer of 1940 was about the same as that during the summer of 1939. A severe storm occurred on April 17-21, 1940, during which 4.74 inches of rain were recorded at the Abbe Observatory, 6.35 inches near Mount Healthy, 4.43 inches near Sharonville, 6.16 inches at Hamilton and 4.25 inches at Middletown. Many of the fields adjacent to Mill Creek were flooded, the Miami River rose to high stages, and water levels rose rapidly.

In December 1940, water levels in most wells, both deep and shallow, in Butler and Hamilton Counties were at extremely low stages and at the end of the year the water levels were still declining. The lowest stages following the summer of 1938 were generally reached in January, 1939; the lowest stages following the summer of 1939 were generally reached in February and March. Since the water levels in many wells are as low or lower than on corresponding dates in 1938 and 1939, it is expected that they will reach stages in 1941 which will be lower than at any time during the period of record.

Ohio suffered major droughts in 1930, when the precipitation was only 70 percent of normal, and in 1934, when the precipitation was only 69 percent of normal. The principal deficiencies in both 1930 and 1934 occurred during the winter and spring when recharge to the underground reservoir is usually greatest. While accurate records of water levels prior to 1938 are scarce, it is reported that water levels declined more or less continuously from 1930 to 1936. Heavy rains during January 1937, which resulted in a disastrous flood on the Ohio River at Cincinnati, caused a considerable amount of recharge to the water-

bearing beds and water levels rose rapidly. It is believed that the low stages reached during the fall and winter of 1938-39 were generally higher than the low stages of 1936. During the present investigation of only two and one-half years, the water levels have fluctuated within wide limits. In general, the lowest stages of water levels in most wells during the winter of 1939-40 were as high or higher than those during the winter of 1938-39. Although the lowest stages during the winter of 1940-41 were not reached by December 31, 1940, it is believed that they will be considerably lower than the lowest stages of 1938-39 and 1939-40, but not as low as those of 1936.

In the following tables, water levels in wells are given in feet below the measuring points, and water levels in open gravel pits are given in feet above the zero readings of staff gages. If water-level measurements for a well were given on pages 370-383 of Water-Supply Paper 845, or on pages 560-587 of Water-Supply Paper 886, the descriptions of the wells and the measuring points, if unchanged, are omitted. For wells on which automatic water-stage recorders have been installed, the lowest water level reached each day, as determined from recorder charts, is given.

The numbers of wells have been changed to conform to a regular system of numbering, based on geographic location. The new number is followed by the old number used in Water-Supply Papers 845 and 886 in parenthesis. The wells are grouped by townships, beginning in the northern part of Butler County.

Butler County

Madison Township

12 (131). Village of Trenton, 2.3 miles west from Excello.
Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 16	15.41	Apr. 23	12.35	July 16	13.42	Oct. 15	15.54
23	a 15.30	26	10.73	23	13.64	22	15.65
Feb. 6	15.35	30	10.82	30	13.88	29	15.73
13	14.99	May 7	11.47	Aug. 6	14.07	Nov. 25	15.79
20	15.43	14	11.99	13	14.26	12	a 17.07
27	14.36	21	12.41	20	14.46	19	15.90
Mar. 5	14.67	28	12.64	27	a 15.22	26	16.00
12	13.46	June 4	12.12	Sept. 3	14.71	Dec. 3	16.03
19	13.75	11	12.32	10	14.86	10	16.65
26	13.92	18	12.50	17	15.00	17	16.14
Apr. 2	15.26	25	12.69	24	15.14	24	16.06
9	14.35	July 2	12.92	Oct. 1	15.29	31	16.06
16	13.94	9	13.20	8	a 16.00		

a Pumping.

Butler County--Continued.

Lemon Township

29-1 (158). Young Men's Christian Association, Manchester Avenue and Broad Street.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	26.45	Apr. 9	20.41	July 9	19.98	Oct. 8	26.55
9	26.52	16	19.22	16	21.28	15	26.67
16	26.82	23	12.35	23	22.14	22	26.90
23	26.55	26	12.74	30	23.00	29	27.18
30	26.13	30	13.38	Aug. 6	22.75	Nov. 5	27.09
Feb. 6	26.74	May 7	14.42	13	23.70	12	27.37
13	26.65	14	15.09	20	24.51	19	27.27
20	25.77	21	16.80	27	25.02	26	27.35
27	25.38	28	17.58	Sept. 3	25.23	Dec. 3	26.98
Mar. 5	23.79	June 4	17.32	10	25.51	10	26.52
12	19.95	11	17.67	17	26.42	17	26.19
19	20.25	18	18.34	24	25.32	24	26.24
26	21.24	25	19.02	Oct. 1	25.87	31	25.66
Apr. 2	21.57	July 2	20.00				

33-1 (132). Wardlow-Thomas Company, Vanderveer and Fifth Avenues. Depth 46.5 feet; erroneously given as 45.2 feet in Water-Supply Paper 886.

Lowest daily water level, in feet below measuring point, 1940
(from recorder charts)

Date	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	43.32	.....	40.00	36.51	38.48	40.60	43.37	45.00	45.45	(e)	(e)
2	.....	43.40	.....	39.91	36.20	38.15	40.85	43.50	44.79	45.64	(e)	(e)
3	.....	43.42	.....	39.94	35.93	38.12	41.03	43.53	44.65	45.81	(e)	(e)
4	.....	43.20	.....	40.07	35.75	38.34	41.01	43.34	44.83	45.92	(e)	(e)
5	.....	43.17	b43.04	40.18	35.55	38.52	40.66	43.25	45.02	45.93	(e)	(e)
6	.....	43.35	.....	40.25	35.24	38.66	40.30	43.52	45.13	45.57	(e)	(e)
7	.....	43.49	.....	40.26	35.03	38.81	39.95	43.71	45.17	45.54	(e)	(e)
8	.....	43.62	.....	40.22	34.92	38.86	39.75	43.90	44.95	45.65	(e)	(e)
9	42.49	a43.69	.....	40.25	34.86	38.55	39.76	44.08	44.93	45.83	(e)	(e)
10	42.46	.....	.....	40.32	34.93	38.53	39.80	44.13	45.10	46.00	(e)	(e)
11	42.42	....	....	40.38	34.94	38.77	40.07	43.90	45.27	46.13	(e)	(e)
12	42.37	.....	c42.17	40.45	34.88	39.00	40.55	43.85	45.45	46.17	(e)	(e)
13	42.35	b43.53	42.27	40.48	35.00	39.27	40.81	44.00	45.56	45.72	(e)	(e)
14	42.29	.....	42.31	40.48	35.24	39.46	40.77	44.20	45.58	45.80	(e)	(e)
15	42.23	.....	42.36	40.50	35.45	39.54	40.48	44.35	45.27	46.06	(e)	(e)
16	42.19	.....	42.36	40.88	35.70	39.25	40.88	44.50	45.10	46.31	(e)	(e)
17	42.17	.....	41.90	41.20	35.95	39.25	41.22	44.54	45.20	46.45	(e)	(e)
18	42.15	.....	41.62	41.50	36.00	39.55	41.52	44.32	45.33	46.52	(e)	(e)
19	42.14	.....	41.66	41.65	35.68	39.78	41.78	44.25	45.48	46.53	(e)	(e)
20	42.12	b43.32	41.40	41.66	35.85	40.00	41.86	44.37	45.60	46.10	(e)	(e)
21	42.10	.....	41.20	41.21	36.14	40.20	41.60	44.55	45.62	46.15	(e)	(e)
22	42.45	.....	41.04	40.60	36.42	40.25	41.67	44.64	45.32	46.33	(e)	(e)
23	42.65	.....	40.93	40.50	36.75	39.90	42.05	44.75	45.19	46.50	(e)	(e)
24	42.85	.....	40.81	40.18	37.08	39.94	42.32	44.78	45.31	46.52	(e)	(e)
25	43.00	.....	40.57	39.83	37.20	40.18	42.56	44.53	45.53	46.53	(e)	46.40
26	43.16	.....	40.34	39.42	36.93	40.41	42.79	44.40	45.66	(d)	(e)	46.25
27	43.20	b43.09	40.25	39.05	37.20	40.64	42.85	44.64	45.74	46.32	(e)	46.03
28	42.94	.....	40.17	38.27	37.58	40.78	42.62	44.86	45.76	(e)	(e)	45.91
29	42.91	.....	40.14	37.53	37.87	40.85	42.68	44.89	45.40	(e)	(e)	45.77
30	43.14	.....	40.15	36.90	38.14	40.55	42.95	45.00	45.30	(e)	(e)	46.15
31	43.23	.....	40.13	.....	38.40	.....	43.18	45.00	.....	(e)	.....	46.28

a Recorder removed.
b Tape measurement.
c Recorder reinstalled.
d Dry.
e Dry from Oct. 28 to Dec. 24.

Butler County--Continued.

36-13 (23-13). American Rolling Mill Company, East end plant.
Lowest daily water level, in feet below measuring point, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	109.70	114.33	110.25	106.50	105.58	108.46
2	109.58	114.59	110.10	106.30	105.95	107.90
3	109.73	114.62	109.53	106.74	106.36	108.40
4	109.89	114.12	109.00	106.72	106.52	108.92
5	110.83	114.39	109.03	106.49	106.32	109.48
6	111.41	114.69	109.38	106.09	105.58	109.89
7	111.81	114.63	109.68	105.51	105.38	110.30
8	112.27	114.20	109.82	104.90	105.79	110.49
9	112.41	114.12	109.60	105.10	106.13	110.00
10	111.68	113.90	109.20	105.82	106.10	108.82
11	110.76	113.11	108.61	106.15	105.70	109.35
12	110.56	112.70	108.05	105.73	105.00	109.71
13	110.81	112.66	108.19	105.00	104.25	110.09
14	111.21	112.85	108.52	104.40	104.35	110.50
15	111.94	112.90	108.79	103.53	104.75	110.81
16	112.43	112.45	108.96	104.83	105.18	110.20
17	112.82	111.80	108.72	105.06	105.54	110.64
18	113.17	111.02	107.84	105.02	105.69	111.00
19	113.31	110.30	107.30	105.28	105.60	111.40
20	112.71	109.72	107.18	105.63	105.32	111.65
21	111.80	109.77	107.45	105.50	106.00	112.00
22	112.08	110.10	107.80	104.74	106.19	112.13
23	112.68	110.20	107.80	104.81	106.50	111.00
24	113.15	110.46	107.50	105.25	107.00	110.42
25	113.52	110.40	106.87	105.40	107.15	109.90
26	113.83	109.80	106.38	105.70	107.32	110.00
27	114.11	109.50	105.71	105.88	106.80	110.50
28	114.22	109.84	105.37	105.80	107.43	110.90
29	113.80	109.95	105.80	105.30	107.74	111.28
30	113.61	.....	106.20	105.20	108.02	111.70
31	114.05	.....	106.50	.....	108.26	.....

Lowest daily water level, in feet below measuring point, 1940
(from recorder charts)

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	112.10	110.65	115.80	115.54	115.81	116.16
2	112.44	111.41	115.20	115.94	115.75	115.71
3	112.81	112.03	114.25	116.33	115.71	115.50
4	112.61	112.31	114.35	116.68	115.09	115.73
5	112.10	111.82	114.57	116.80	115.62	116.10
6	111.40	111.78	115.15	116.68	115.97	116.41
7	110.30	112.42	115.34	115.83	116.10	116.60
8	110.32	112.80	114.75	115.25	116.30	116.40
9	110.72	113.21	113.95	115.20	115.57	115.80
10	111.19	113.51	114.52	115.38	114.71	116.30
11	111.69	113.00	114.97	115.30	115.15	116.33
12	112.11	112.40	115.41	115.20	115.46	116.40
13	112.20	112.90	115.80	115.00	115.82	116.21
14	111.20	113.24	115.88	114.00	116.10	116.03
15	110.70	113.80	115.22	114.10	116.30	115.82
16	111.29	114.12	114.80	114.32	115.50	115.17
17	111.73	114.29	115.00	115.01	114.57	115.81
18	112.11	113.68	115.17	115.45	114.40	116.14
19	112.52	112.85	115.50	115.51	114.70	116.37
20	112.68	113.49	115.78	115.12	115.05	116.69
21	111.83	113.80	115.89	115.30	115.14	116.79
22	111.18	114.39	115.75	115.40	115.40	116.98
23	110.78	114.62	115.36	115.68	115.74	117.11
24	110.68	114.81	115.67	115.80	115.55	117.17
25	110.76	114.27	116.08	115.80	114.73	115.72
26	111.00	114.46	116.22	115.39	115.21	114.30
27	111.26	114.83	116.31	115.20	115.63	113.43
28	111.13	115.20	116.47	114.80	115.93	114.09
29	110.40	115.42	116.31	114.91	116.22	114.30
30	109.73	115.70	115.56	114.61	116.39	114.71
31	110.19	115.77	.....	115.47	.....	114.98

Butler County--Continued.

Pit J. Moorman Sand and Gravel Company gravel pit, Columbia Avenue, Middletown, Lemon Township.

Water level, in feet with reference to zero of staff gage, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	-0.60	Apr. 2	+3.03	June 25	+5.20	Oct. 1	-1.35
9	-1.14	9	+3.20	July 2	+4.46	8	-1.35
16	-1.15	16	+4.68	9	+3.59	15	-1.23
17	-1.04	17	+4.90	16	+2.80	22	-1.40
23	- .80	23	+9.62	23	+2.07	29	-1.38
30	- .27	26	+14.28	30	+1.25	Nov. 5	-1.30
Feb. 6	- .30	30	+12.30	Aug. 6	+ .95	12	-1.13
13	+ .27	May 7	+9.56	13	+ .50	19	-1.00
20	+1.52	14	+7.68	20	+ .07	26	- .83
27	+2.12	21	+6.24	27	+ .10	Dec. 2	- .65
Mar. 5	+4.96	28	+5.36	Sept. 3	- .18	10	- .45
12	+5.76	June 4	+6.36	10	- .29	17	- .50
19	+4.92	11	+6.38	17	- .67	24	- .23
26	+4.00	18	+6.00	24	-1.20	31	+ .10

Pit L. Smith Farm Gravel pit, abandoned, 0.3 miles north from Middletown, Lemon Township.

Water level, in feet with reference to zero of staff gage, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	-.65	Apr. 2	+1.79	June 25	+3.25	Oct. 1	-1.40
9	-.71	9	+1.52	July 2	+2.78	8	-1.58
16	-.85	16	+1.53	9	+2.38	15	-1.65
17	-.80	17	+1.66	16	+1.95	22	-1.84
23	-.29	23	+8.60	23	+1.43	29	-1.90
30	-.85	26	+8.24	30	+ .94	Nov. 5	-1.94
Feb. 6	-.85	30	+7.92	Aug. 6	+ .43	12	-1.87
13	-.75	May 7	+6.82	12	.00	19	-1.97
20	-.40	14	+5.88	20	- .33	26	-1.84
27	+.05	21	+5.10	27	- .60	Dec. 3	-1.90
Mar. 5	+.41	28	+4.36	Sept. 3	- .85	10	-1.80
12	+1.26	June 4	+3.88	10	- .96	17	-1.75
19	+1.92	11	+3.88	17	-1.37	24	-1.91
26	+1.90	18	+3.57	24	-1.31	31	-1.52

Pit P. South Middletown Sand and Gravel Company, gravel pit, southwest corner Middletown corporation lines, 0.1 mile west from 2100 South Main Street, Middletown, Lemon Township. Staff gage installed Feb. 6, 1940, southeast corner of pit. Top of staff gage 10.16 feet.

Water level, in feet above zero of staff gage, 1940

Date							
Feb. 6	0.94	Apr. 23	(a)	July 16	3.06	Oct. 15	0.80
9	1.37	26	(a)	23	2.76	22	.68
13	2.87	30	8.60	30	2.52	29	.72
20	3.42	May 7	6.38	Aug. 6	2.20	Nov. 5	.82
27	3.15	14	5.14	13	2.00	12	.72
Mar. 5	8.48	21	4.52	20	1.87	19	.61
12	6.10	28	4.38	27	1.62	26	.67
19	4.78	June 4	6.80	Sept. 3	1.57	Dec. 3	.70
26	3.98	11	5.45	10	1.48	10	.56
Apr. 2	3.46	18	5.20	17	1.26	17	.72
9	3.60	25	4.46	24	1.14	24	.90
16	4.96	July 2	3.98	Oct. 1	1.04	31	1.50
17	4.98	9	3.40	8	.90		

47-1 (156-1). Butler County Canning Factory, Oakland. No measurements made in 1940.

47-2 (156-2). Butler County Canning Factory, Oakland. No measurements made in 1940.

48 (157). Monroe Lumber Company, Oakland. No measurements made in 1940.

a Gage submerged.

Butler County--Continued.

Fairfield Township

85-7 (109). City of Hamilton, new well field, 0.9 mile north from Hamilton on U. S. Highway 127.

Lowest daily water level, in feet below measuring point, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	24.39	25.34	24.72	23.91	19.46	20.20	23.32	26.40	23.87	24.40	23.94	24.21
2	24.90	25.81	23.96	23.06	19.68	19.93	23.25	26.25	23.84	24.27	23.03	24.24
3	25.57	25.92	23.57	22.74	20.02	20.08	23.19	26.12	23.97	24.10	23.05	23.66
4	25.63	26.31	22.17	22.87	19.92	20.06	23.30	25.88	24.03	23.98	23.32	23.77
5	25.66	26.25	21.35	23.32	19.98	20.95	24.85	25.35	24.73	23.86	23.97	24.11
6	.....	26.20	21.72	.....	20.12	21.18	24.57	25.24	24.95	23.63	23.89	24.20
7	.....	25.72	21.96	.....	20.30	21.60	23.31	25.06	24.91	24.34	24.49	24.25
8	.....	25.72	22.01	.....	20.50	21.29	25.69	25.27	24.52	24.30	23.65	25.02
9	25.63	25.01	21.76	22.85	20.76	21.22	24.97	25.28	24.75	24.30	23.76	25.43
10	25.67	25.68	22.34	23.00	20.94	21.37	22.59	25.27	24.14	24.42	23.72	25.54
11	25.66	25.50	22.48	23.35	21.10	21.72	23.16	24.84	24.04	24.01	23.75	25.54
12	25.07	25.25	23.27	23.06	20.96	22.00	23.47	24.74	24.21	23.65	23.10	26.50
13	25.35	24.28	23.61	23.05	21.10	22.15	23.41	25.02	24.12	23.45	23.06	26.75
14	25.12	24.25	23.93	22.95	21.28	22.26	23.27	25.16	24.05	23.92	23.28	26.90
15	25.07	24.83	22.90	22.95	21.89	22.11	23.60	25.25	24.03	23.73	23.37	26.85
16	25.09	25.18	23.88	23.32	21.73	22.09	23.58	25.42	24.33	23.86	23.25	26.87
17	25.09	25.03	23.95	22.99	21.61	22.08	23.62	25.53	24.20	24.25	.....	26.79
18	24.42	24.91	24.12	22.97	21.67	22.47	23.56	25.50	24.26	24.02	.....	26.84
19	.....	23.90	23.35	22.17	21.74	22.62	24.82	24.67	24.13	23.75	23.72	26.72
20	.....	23.59	23.65	17.87	22.04	22.33	24.50	24.30	23.90	23.71	23.98	26.65
21	.....	23.95	23.71	.....	22.11	22.43	24.53	24.86	24.02	23.59	24.05	25.91
22	.....	23.95	24.15	.....	22.25	22.51	24.69	25.00	24.74	23.35	.....	25.75
23	24.94	23.98	24.16	15.97	22.69	22.96	24.83	25.08	24.80	23.37	.....	26.06
24	24.86	.....	24.17	16.31	22.15	22.80	26.17	24.74	25.60	23.48	.....	25.88
25	25.15	24.05	23.63	16.98	22.19	22.85	26.38	24.20	24.37	23.37	.....	25.21
26	25.24	24.07	23.65	17.55	22.07	22.68	25.72	24.28	23.68	23.13	23.85	25.34
27	25.67	24.20	23.89	18.30	22.17	22.63	25.71	24.32	23.49	23.15	23.72	25.58
28	25.68	24.67	24.30	18.55	22.09	22.72	25.86	24.43	24.08	23.75	24.21	25.67
29	25.66	24.73	24.60	19.00	22.15	22.77	25.56	24.33	24.19	25.02	24.07	25.11
30	24.90	.....	24.06	19.00	22.08	23.07	26.41	24.11	24.43	23.91	24.16	24.81
31	25.26	.....	23.86	.....	20.96	.....	26.71	24.04	.....	23.79	.....	24.76

86-7 (108-7). City of Hamilton, old well field, 0.2 mile north from Hamilton on U. S. Highway 127. Recorder removed Sept. 9, 1940.

Lowest daily water level, in feet below measuring point, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	16.70	17.20	16.36	15.92	11.03	11.47	11.92	13.16	14.33
2	16.72	17.24	16.34	15.94	11.02	11.33	11.95	13.20	.....
3	16.76	17.23	16.23	15.90	11.08	11.24	12.00	13.24	14.42
4	16.79	17.25	15.96	15.94	11.14	11.28	12.04	13.22	14.46
5	16.85	17.26	15.75	15.97	11.17	11.29	12.10	13.25	14.52
6	16.89	17.25	15.62	15.96	11.26	11.28	12.14	13.32	14.57
7	16.87	17.18	15.57	15.89	11.27	11.34	12.15	13.35	14.59
8	16.93	17.16	15.55	15.87	11.34	11.30	12.21	13.38	14.58
9	16.96	17.13	15.56	15.90	11.41	11.28	12.26	13.41	14.65
10	16.97	17.09	15.57	15.86	11.46	11.40	12.29	13.45	14.64
11	17.00	16.99	15.54	15.80	11.53	11.37	12.36	13.46	.....
12	17.05	16.84	15.55	15.73	11.51	11.33	12.39	13.46	.....
13	17.08	16.77	15.58	15.60	11.53	11.34	12.41	13.46	.....
14	17.05	16.65	15.60	15.52	11.57	11.36	12.40	13.49	.....
15	17.02	16.63	15.61	15.48	11.65	11.39	12.44	13.58	.....
16	16.98	16.61	15.62	15.49	11.69	11.43	12.48	13.60	.....
17	16.92	16.59	15.61	15.45	11.71	11.49	12.52	13.64	14.87
18	16.94	16.57	15.65	15.34	11.71	11.51	12.54	13.68	.....
19	16.95	16.42	15.66	15.21	11.69	11.53	12.59	13.75	.....
20	16.91	16.38	15.71	14.06	11.73	11.58	12.63	13.82	.....
21	16.99	16.34	15.69	12.67	11.72	11.63	12.65	13.85	.....
22	16.99	16.32	15.74	11.99	11.78	11.64	12.69	13.90	.....
23	17.00	16.31	15.75	11.65	11.79	11.73	12.72	13.96	.....

Butler County--Continued.

86-7 (108-7).--Continued.

Lowest daily water level, in feet below measuring point, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
24	17.04	16.30	15.76	11.33	11.80	11.67	12.75	14.00	15.12
25	17.07	16.33	15.78	11.26	11.84	11.79	12.81	14.07	.....
26	17.09	16.35	15.79	11.26	11.87	11.79	12.86	14.09	.....
27	17.12	16.29	15.82	11.23	11.91	11.77	12.91	14.16	.....
28	17.12	16.34	15.85	11.19	11.92	11.80	12.94	14.29	.....
29	17.11	16.36	15.91	11.14	11.88	11.86	12.98	14.26	.....
30	17.17	.....	15.90	11.06	11.85	11.86	13.05	14.33	.....
31	17.19	.....	15.92	.....	11.70	.....	13.10	14.33	.....

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 1	15.30	Oct. 29	15.80	Nov. 26	16.00	Dec. 17	16.57
8	15.44	Nov. 5	15.83	Dec. 3	16.20	24	16.63
15	15.59	12	15.91	10	16.39	31	16.66
22	15.72	19	15.95				

108-C. City of Hamilton, old well field, 0.2 mile north from Hamilton on U. S. Highway 127. Measurements discontinued Dec. 19, 1939.

89-3 (22). General Machinery Company (Niles Tool Works), Hamilton.

Lowest daily water level, in feet below measuring point, 1940

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	42.80	.....	.....	40.72	35.00	33.80	37.37	39.60	39.95	40.42	40.99	.....
2	42.84	.....	.....	40.72	35.28	32.40	37.51	39.63	39.80	40.52	40.72	.....
3	42.77	.....	.....	40.72	35.60	33.19	37.62	39.69	40.10	40.58	40.71	.....
4	42.72	.....	.....	40.73	35.89	33.84	37.63	39.53	40.21	40.60	40.80	.....
5	42.60	.....	33.83	40.75	36.08	34.48	37.80	39.63	40.25	40.55	40.80	.....
6	42.60	41.68a	.....	40.73	36.35	34.90	37.96	39.71	40.28	40.42	40.76	.....
7	42.54	.....	.....	40.60	36.50	35.30	37.88	39.77	40.21	40.30	40.77	.....
8	42.54	.....	.....	40.42	36.60	35.48	38.20	39.79	40.10	40.46	40.84	.....
9	42.45	.....	.....	40.44	36.75	35.49	38.37	39.79	39.89	40.42	40.82	.....
10	42.34	.....	.....	40.30	36.90	35.72	38.49	39.80	40.01	40.43	40.84	41.45
11	42.29	.....	.....	39.90	37.02	35.90	38.59	39.70	40.12	40.40	40.74	41.42
12	42.00	.....	37.47	39.37	37.00	36.04	38.70	39.52	40.22	40.38	40.66	41.42
13	42.00	37.53	.....	36.93	37.21	36.00	38.73	39.63	40.32	40.32	40.62	41.36
14	42.02	.....	.....	36.69	37.40	36.09	38.60	39.72	40.33	40.58	40.64	41.43
15	41.68	.....	38.73	36.87	37.58	36.13	38.81	39.82	40.25	40.75	40.56	41.44
16	41.18	.....	39.01	37.17	37.69	36.26	38.92	39.90	40.39	40.79	40.66	41.46
17	40.66	.....	39.20	37.22	37.80	36.32	39.00	39.91	40.54	40.80	40.79	41.39
18	40.56	.....	39.36	37.12	37.88	36.40	39.05	39.78	40.61	40.80	40.90	41.20
19	40.79	.....	39.58	35.00	37.76	36.47	39.03	39.83	40.63	40.80	40.89	41.13
20	40.96	37.09	39.78	31.82	37.82	36.63	39.03	39.92	40.60	40.80	40.90	41.14
21	41.20	.....	39.90	29.23	37.90	36.80	38.91	40.00	40.50	40.74	40.85	41.15
22	41.30	.....	40.04	29.20	37.96	36.88	39.07	40.10	40.29	40.82	41.06	41.17
23	41.33	.....	40.16	29.92	38.00	36.79	39.14	40.13	40.08	40.80	41.06	41.30
24	41.39	.....	40.22	30.86	38.02	36.90	39.20	40.16	40.14	40.80	41.00	41.32
25	41.57	.....	40.28	31.90	38.08	37.10	39.30	40.02	40.13	40.80	40.86	41.22
26	41.67	.....	40.34	32.77	37.92	37.21	39.38	40.09	40.21	40.79	.....	41.32
27	41.69	39.93	40.36	33.44	37.90	37.25	39.39	40.18	40.24	40.70	.....	41.36
28	41.81	.....	40.48	33.90	37.90	37.20	39.20	40.19	40.23	40.82	.....	41.32
29	41.75	.....	40.60	34.30	37.88	37.27	39.41	40.12	40.12	40.98	.....	41.30
30	41.67	.....	40.62	34.68	37.60	87.17	39.51	40.20	40.30	41.00	.....	41.10
31	.....	.....	40.70	.....	37.04	.....	39.54	40.15	.....	41.01	.....	40.92

a Tape measurement.

Butler County--Continued.

104-1 (117). McGreevy Dairy Company, Dixie Highway and Laurel Avenue, Hamilton.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	39.28	Apr. 12	38.50	June 25	33.74	Oct. 8	37.74
9	39.45	16	38.24	July 2	34.02	15	37.75
16	39.40	20	34.30	9	34.26	22	38.14
23	39.50	21	32.32	16	34.51	29	38.40
30	39.85	23	30.72	23	34.70	Nov. 5	38.63
Feb. 6	40.02	25	30.46	30	35.01	8	38.73
13	39.96	26	30.52	Aug. 6	35.35	12	38.94
20	39.09	30	30.90	13	35.54	19	39.02
27	39.64	May 7	31.92	20	35.93	26	39.25
Mar. 5	39.02	14	32.64	27	36.14	Dec. 3	39.46
12	38.55	21	33.22	Sept. 3	36.08	10	39.67
19	38.38	28	33.61	10	36.72	17	39.80
26	38.38	June 4	33.59	17	37.01	24	39.82
Apr. 2	38.45	11	33.52	24	37.20	31	39.97
9	38.64	18	33.61	Oct. 1	37.48		

Pit D. Paul Benninghofen gravel pit, (Symmes Lake), 2.1 miles west from Symmes.

Water level, in feet above zero of staff gage, 1940

Jan. 2	1.45	Mar. 5	5.42	Apr. 30	7.21	July 9	3.46
9	1.40	12	4.72	May 7	5.81	16	3.22
16	1.70	19	3.76	14	5.00	23	3.00
23	1.45	26	3.24	21	4.66	30	2.78
30	1.61	Apr. 2	2.88	28	4.57	Aug. 16	2.42
Feb. 6	1.30	9	3.10	June 4	6.20	Sept. 18	2.08
13	2.78	16	4.15	11	5.06	Oct. 16	1.82
17	2.91	17	4.20	18	4.75	Nov. 8	1.90
20	3.27	23	(a)	25	4.25	16	1.90
27	3.30	26	9.32	July 2	3.94	Dec. 14	1.75

110 (3). Joe Conrad, 2.2 miles west and 0.7 miles south from Symmes. Measurements discontinued Nov. 8, 1940.

Water level, in feet below measuring point, 1940

Jan. 17	20.52	Mar. 16	17.46	May 15	16.03	Nov. 8	20.57
Feb. 17	19.17	Apr. 17	17.72	June 18	16.90		

114 (151). George Groh, 1.4 miles west from Symmes. Measurements discontinued Dec. 14, 1940.

Water level, in feet below measuring point, 1940

Feb. 17	18.22	May 15	13.59	Oct. 16	18.46	Dec. 14	18.90
Mar. 16	16.69	June 18	14.59	Nov. 8	18.64		
Apr. 17	16.54	Aug. 16	17.23	Nov. 16	18.70		

117 (82). Anna Magie, 0.7 mile northwest from Symmes.

Water level, in feet below measuring point, 1940

Jan. 2	29.04	Apr. 9	27.65	July 2	24.45	Oct. 1	28.16
9	29.40	16	27.67	9	24.89	8	28.35
16	29.48	23	21.37	16	25.26	15	28.45
23	29.42	25	21.46	23	25.57	22	28.72
30	29.65	26	21.53	30	25.90	Nov. 5	28.98
Feb. 6	29.73	30	21.76	Aug. 6	26.25	8	29.04
13	29.36	May 7	22.42	13	26.55	12	29.11
20	29.06	14	22.95	16	26.66	19	20.20
27	28.82	21	23.46	20	26.83	26	29.38
Mar. 5	28.27	28	23.77	27	27.05	Dec. 3	29.48
12	27.84	June 4	23.73	Sept. 3	27.32	10	29.59
19	27.76	11	23.74	10	27.52	17	29.67
26	27.46	18	23.88	17	27.74	24	29.70
Apr. 2	27.88	25	24.20	24	27.98	31	29.76

a Gage submerged.

Butler County--Continued.

121 (159). Edward Hieb, NE¼SW¼ sec. 5, R. 2, T.1, 0.5 miles west and 1.3 miles north from Symmes. Domestic dug and drilled well, diameter 4 inches, depth 48 feet. Measuring point, top of iron rim around well, 0.7 foot above land surface.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 17	28.46	Apr. 16	27.36	June 11	25.53	Sept.18	29.08
20	28.10	23	19.09	18	25.78	Oct. 16	29.59
27	28.15	25	20.37	25	26.21	Nov. 8	29.90
Mar. 5	27.38	30	22.21	July 2	26.62	16	29.81
12	26.98	May 7	24.19	9	27.03	Dec. 3	29.78
19	27.64	14	25.35	16	27.35	10	30.02
26	28.04	21	25.98	23	27.60	17	30.08
Apr. 2	28.34	28	26.26	30	27.90	24	29.68
9	28.28	June 4	25.07	Aug. 16	28.39	31	29.66

T-50. Mary Gerber, River Road, 0.5 mile south from Hamilton. United States Geological Survey test well.

Water level, in feet below measuring point, 1940

Jan. 16	16.45	Apr. 16	14.82	July 2	13.58	Oct. 1	15.90
17	16.39	17	14.82	9	13.86	8	16.03
23	16.29	21	9.85	16	14.13	15	16.12
30	16.39	23	9.55	23	14.32	22	16.21
Feb. 6	16.36	25	9.53	30	14.54	Nov. 5	16.38
13	15.96	26	9.59	Aug. 6	14.72	8	16.38
17	15.74	30	10.21	13	14.91	12	16.44
20	15.46	May 7	11.28	16	14.96	19	16.48
27	15.36	14	12.09	20	15.00	26	16.56
Mar. 5	15.02	21	12.69	27	15.22	Dec. 3	16.59
12	14.49	28	13.07	Sept. 3	15.37	10	16.65
19	14.73	June 4	12.79	10	15.49	17	16.68
26	14.94	11	12.94	17	15.69	24	16.59
Apr. 2	16.86	18	13.12	24	15.77	31	16.60
9	15.89	25	13.36				

T-51. Miami Conservancy District, River Road, 0.2 mile south from Hamilton. U. S. Geological Survey test well.

Water level, in feet below measuring point, 1940

Jan. 16	16.65	Apr. 16	14.80	July 2	16.69	Oct. 8	18.31
17	16.67	17	14.74	9	17.17	15	18.33
23	17.54	21	6.72	16	17.35	22	18.37
30	17.92	23	8.64	23	17.63	29	18.30
Feb. 6	17.09	25	11.27	30	17.70	Nov. 5	18.13
13	15.20	26	12.20	Aug. 6	17.82	8	18.32
17	15.80	30	14.08	13	17.94	12	18.20
20	14.64	May 7	15.47	16	18.01	19	18.24
27	16.38	14	16.27	20	17.90	26	18.23
Mar. 5	12.57	21	16.48	27	18.04	Dec. 3	18.17
12	15.38	28	16.20	Sept. 3	18.03	10	18.30
19	16.10	June 4	14.26	10	18.06	17	17.83
26	16.73	11	15.45	17	18.24	24	17.89
Apr. 2	15.15	18	15.45	24	18.33	31	16.86
9	15.24	25	16.35	Oct. 1	18.27		

Pit E. South Hamilton Sand and Gravel Company gravel pit, 1.4 miles north from Symmes and 0.4 miles east from U. S. Highway 127, Fairfield Township.

Water level, in feet above zero of staff gage, 1940

Jan. 2	10.40	Mar. 12	9.60	Apr. 26	12.58	June 24	16.22
9	10.20	19	9.77	30	13.74	July 2	15.94
16	10.04	26	9.80	May 7	14.90	9	15.70
23	9.70	Apr. 2	9.95	14	15.50	16	15.50
30	9.65	9	10.08	21	15.88	23	15.30
Feb. 6	9.65	16	10.27	28	16.04	30	14.93
13	9.40	20	10.92	June 4	16.10	Aug. 6	14.62
20	9.42	23	11.62	11	16.20	13	14.28
27	9.30	25	12.34	18	16.20	20	13.95
Mar. 5	9.40						

Butler County--Continued.

Pit E.--Continued.

Water level, in feet above zero of staff gage, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 27	13.62	Oct. 1	12.04	Nov. 5	10.83	Dec. 3	9.94
Sept. 3	13.34	8	11.98	8	10.67	10	9.76
10	13.05	15	11.55	12	10.60	17	9.67
17	12.65	22	11.28	19	10.35	24	9.52
25	12.42	29	11.02	26	10.27	31	9.40

128. (153). George Shearer, Schenck.

Water level, in feet below measuring point, 1940

Jan. 2	49.80	Apr. 9	50.02	June 18	43.01	Sept. 24	47.35
9	50.02	12	50.03	25	43.08	Oct. 8	47.95
16	50.21	16	49.91	July 2	43.40	15	48.35
23	50.39	20	49.34	9	43.58	22	48.62
30	50.62	23	47.66	16	43.94	29	48.81
Feb. 6	50.76	25	46.82	23	44.24	Nov. 5	49.17
13	50.83	26	46.46	30	44.58	8	49.31
20	50.83	30	45.18	Aug. 6	44.99	12	49.57
27	50.66	May 7	44.03	13	45.31	19	49.70
Mar. 5	50.63	14	43.43	20	45.72	Dec. 3	50.18
12	50.35	21	43.25	27	46.00	10	50.39
19	50.17	28	43.23	Sept. 3	46.27	17	50.63
26	50.08	June 4	43.01	10	46.72	24	50.73
Apr. 2	50.01	11	42.95	17	47.10	31	50.97

133 (77). J. E. Ryan, 0.7 mile south from Schenck.

Water level, in feet below measuring point, 1940

Jan. 2	37.12	Apr. 16	37.35	July 2	29.46	Oct. 8	35.01
16	37.45	20	36.31	9	29.74	15	35.44
23	37.73	23	33.59	16	30.59	22	35.69
30	38.05	25	32.46	23	30.74	29	36.01
Feb. 6	38.10	26	32.04	30	31.29	Nov. 5	36.31
13	38.00	30	30.20	Aug. 6	31.45	8	36.53
20	38.42	May 7	29.40	13	31.86	12	36.90
27	38.04	14	28.60	20	32.36	19	36.93
Mar. 5	38.10	21	28.74	27	32.59	26	36.93
12	37.74	28	28.82	Sept. 3	33.17	Dec. 3	37.53
19	37.50	June 4	28.80	10	33.57	10	37.85
26	37.04	11	28.54	17	33.98	17	38.14
Apr. 2	37.45	18	28.69	24	34.20	24	38.11
9	37.54	25	29.00	Oct. 1	34.62	31	38.48
12	37.48						

134 (66). Michael Diefel, 1 mile southeast from Schenck. Measurements discontinued Nov. 8, 1940.

Water level, in feet below measuring point, 1940

Jan. 17	7.65	Mar. 16	3.99	May 15	3.58	Nov. 8	8.98
Feb. 17	6.89	Apr. 17	2.49	June 18	4.36		

136-2 (71). Fairfield School, 1.4 miles south from Schenck. Measurements discontinued July 16, 1940.

Water level, in feet below measuring point, 1940

Jan. 16	71.70	Feb. 27	72.34	Apr. 9	73.07	May 14	72.71
23	71.90	Mar. 5	72.28	16	72.93	21	72.24
30	72.22	12	72.35	23	72.38	June 4	70.74
Feb. 6	71.63	19	72.90	30	72.49	11	69.90
13	71.79	26	73.08	May 7	73.09	July 16	67.04
20	71.98	Apr. 2	73.00				

Butler County--Continued.

Pit G. Fred Bantel gravel pit, abandoned, 1.3 miles west from Flockton, Fairfield Township.

Water level, in feet above zero of staff gage, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	8.85	Apr. 2	9.41	June 4	18.60	Aug. 16	13.25
9	8.80	9	9.41	11	18.45	Sept.18	11.13
16	8.55	12	9.29	18	18.04	Oct. 16	9.75
23	8.70	16	9.35	25	17.50	Nov. 8	9.04
30	8.40	23	(a)	July 2	17.00	16	8.95
Mar. 5	9.25	May 7	19.90	9	16.32	Dec. 2	8.52
12	10.22	14	19.50	16	15.72	14	9.55
19	9.97	21	19.30	23	15.12	24	8.31
26	9.65	28	19.08	30	14.55	31	8.35

146-1 (59). J. A. and L. N. Jaquemin, NE¼SE¼ sec. 23, R. 2, T. 2, 0.8 mile northwest from Flockton. Domestic drilled well, diameter 6 inches, depth 123 feet. Measuring point, top of 6-inch casing, 1.6 feet above land surface.

Water level, in feet below measuring point, 1940

Mar. 7	89.02	Apr. 23	74.64	June 11	76.72	Sept.18	87.20
12	88.80	25	74.34	18	77.72	Oct. 16	88.24
19	88.68	26	74.34	25	78.76	Nov. 8	89.46
26	88.81	30	74.42	July 2	79.68	16	89.81
Apr. 2	88.83	May 7	75.31	9	80.54	Dec. 3	90.23
9	88.89	14	76.07	16	81.33	17	91.32
12	88.89	21	76.89	23	82.08	24	91.50
16	88.59	28	77.22	30	82.82	31	91.89
20	80.57	June 4	76.19	Aug. 16	84.22		

150-2 (53). Harry A. Morris, Flockton.

Water level, in feet below measuring point, 1940

Jan. 2	13.38	Apr. 12	2.15	June 25	5.63	Oct. 8	16.88
9	15.58	16	2.92	July 9	6.73	15	16.86
16	15.65	18	1.95	16	8.52	22	16.55
23	15.77	22	2.05	23	10.10	29	16.38
30	15.81	25	2.49	30	11.26	Nov. 5	16.25
Feb. 6	15.74	26	2.69	Aug. 6	12.96	8	16.15
13	15.55	30	3.03	13	13.42	12	16.03
20	13.98	May 7	3.53	20	15.69	19	16.05
27	12.92	14	4.82	27	16.02	26	15.92
Mar. 5	2.17	21	4.93	Sept. 3	15.98	Dec. 3	15.78
12	3.07	28	4.36	10	17.63	10	15.72
19	3.07	June 4	2.94	17	17.45	16	15.55
26	3.85	11	3.74	24	17.48	24	15.63
Apr. 2	3.47	18	5.00	Oct. 1	17.12	31	15.14
9	3.63						

151-1. U. S. Geological Survey test well on property of Harry A. Morris, SW¼SE¼ sec. 17, R. 2, T. 2, Flockton. Observation test well, diameter 6 inches, depth 227 feet. Measuring point, top of 6-inch casing, 1.2 feet above land surface. Automatic water-stage recorder installed Mar. 3, 1940.

Lowest daily water level, in feet below measuring point, 1940
(from recorder charts)

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	20.81	6.22	8.68	11.56	15.15	17.56	19.50	21.15	22.65
2	.....	20.84	6.36	8.61	11.72	15.25	17.67	19.56	21.22	22.70
3	21.73	20.77	6.71	8.45	11.85	15.34	17.76	19.63	21.26	22.75
4	21.70	20.87	6.89	8.20	12.04	15.41	17.84	19.69	21.29	22.75
5	21.51	20.94	6.97	8.28	12.18	15.50	17.90	19.75	21.35	22.85
6	21.39	20.94	7.07	8.37	12.25	15.63	17.96	19.75	21.40	22.85
7	21.23	20.87	7.13	8.41	12.33	15.69	18.00	19.81	21.45	22.91
8	21.06	20.84	7.22	8.53	12.48	15.77	18.01	19.89	21.51	22.96
9	20.98	20.95	7.34	8.52	12.60	15.85	18.04	19.96	21.53	22.97

a Gage submerged April 19 to May 7.

Butler County--Continued.

151-1.--Continued.

Lowest daily water level, in feet below measuring point, 1940 (from recorder charts)

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
10	20.92	20.97	7.47	8.57	12.69	15.95	18.19	20.01	21.55	23.04
11	20.88	20.96	7.68	8.75	12.79	16.05	18.29	20.05	21.65	23.06
12	20.85	20.98	7.74	8.88	13.04	16.10	18.36	20.10	21.72	23.11
13	20.77	20.84	7.83	9.05	13.17	16.12	18.40	20.17	21.77	23.17
14	20.77	20.69	7.99	9.13	13.22	16.20	18.46	20.18	21.80	23.21
15	20.74	20.55	8.22	9.30	13.30	16.28	18.54	20.28	21.85	23.21
16	20.72	20.53	8.41	9.52	13.45	16.38	18.61	20.32	21.85	23.27
17	20.69	20.51	8.53	9.65	13.58	16.44	18.70	20.38	21.95	23.41
18	20.65	20.48	8.59	9.75	13.69	16.51	18.76	20.42	22.01	23.43
19	20.65	20.39	8.60	9.94	13.78	16.67	18.81	20.45	22.09	23.45
20	20.68	17.50	8.76	10.22	13.90	16.77	18.86	20.52	22.13	23.49
21	20.66	10.35	8.85	10.37	14.00	16.81	18.91	20.60	22.15	23.53
22	20.69	7.22	8.88	10.44	14.10	16.90	18.96	20.67	22.25	23.58
23	20.73	6.07	8.92	10.45	14.15	17.02	18.99	20.70	22.26	23.60
24	20.74	5.72	8.94	10.65	14.23	17.06	19.03	20.76	22.33	23.57
25	20.79	5.62	8.99	10.80	14.34	17.07	19.21	20.81	22.35	23.59
26	20.78	5.65	9.15	10.96	14.49	17.14	19.26	20.87	22.35	23.66
27	20.70	5.74	9.24	11.05	14.61	17.20	19.30	20.91	22.46	23.67
28	20.73	5.76	9.28	11.13	14.71	17.29	19.37	20.96	22.50	23.71
29	20.74	5.82	9.24	11.36	14.80	17.36	19.44	20.99	22.54	23.81
30	20.74	5.91	9.15	11.40	14.90	17.46	19.46	21.05	22.57	23.90
31	20.78	.....	8.95	.....	15.04	17.50	.....	21.07	.....	23.95

151-2. U. S. Geological Survey test well on property of Harry A. Morris, SW¼SE¼ sec. 17, R. 2, T. 2, Flockton. Observation test well, diameter 6 inches, depth 92 feet. Measuring point, top of 6-inch casing, 1.5 feet above land surface. Automatic water-stage recorder installed Mar. 3, 1940.

Lowest daily water level, in feet below measuring point, 1940 (from recorder charts)

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	19.25	5.63	7.88	10.52	14.02	16.55	18.50	20.15	21.55
2	.....	19.28	5.75	7.75	10.63	14.11	16.66	18.56	20.20	21.60
3	20.45	19.20	6.06	7.61	10.75	14.19	16.75	18.64	20.25	21.63
4	20.41	19.27	6.23	7.52	10.94	14.23	16.82	18.69	20.27	21.64
5	20.15	19.33	6.33	7.63	11.06	14.36	16.89	18.75	20.32	21.71
6	20.02	19.34	6.44	7.71	11.12	14.55	16.95	18.78	20.37	21.74
7	19.87	19.29	6.48	7.78	11.21	14.63	17.00	18.83	20.42	21.79
8	19.71	19.23	6.56	7.91	11.34	14.71	17.03	18.90	20.48	21.84
9	19.62	19.37	6.68	7.82	11.52	14.81	17.07	18.96	20.50	21.86
10	19.54	19.39	6.81	7.95	11.61	14.90	17.21	19.00	20.54	21.90
11	19.49	19.39	7.02	7.98	11.73	14.99	17.30	19.05	20.62	21.94
12	19.41	19.38	7.08	8.13	11.95	15.05	17.37	19.11	20.66	21.99
13	19.37	19.23	7.19	8.27	12.06	15.12	17.42	19.17	20.72	22.04
14	19.34	19.12	7.32	8.34	12.11	15.21	17.49	19.20	20.75	22.08
15	19.28	19.00	7.54	8.49	12.22	15.29	17.56	19.28	20.80	22.10
16	19.27	18.98	7.72	8.66	12.35	15.38	17.63	19.32	20.80	22.14
17	19.23	18.96	7.85	8.80	12.47	15.45	17.67	19.38	20.90	22.25
18	19.18	18.91	7.91	8.85	12.60	15.55	17.72	19.43	20.95	22.29
19	19.18	18.84	7.93	9.11	12.69	15.67	17.78	19.46	20.97	22.31
20	19.16	12.44	8.10	9.30	12.78	15.73	17.84	19.53	21.02	22.35
21	19.15	8.03	8.17	9.43	12.90	15.77	17.89	19.60	21.05	22.40
22	19.16	6.08	8.25	9.48	12.99	15.82	17.95	19.63	21.12	22.44
23	19.17	5.37	8.27	9.50	13.05	15.99	17.98	19.70	21.16	22.47
24	19.20	5.13	8.30	9.68	13.15	16.05	18.01	19.75	21.21	22.47
25	19.23	5.11	8.35	9.80	13.26	16.06	18.16	19.80	21.25	22.49
26	19.23	5.20	8.50	9.96	13.37	16.12	18.20	19.85	21.26	22.54
27	19.17	5.31	8.59	10.07	13.50	16.18	18.25	19.90	21.35	22.55
28	19.19	5.33	8.62	10.11	13.61	16.26	18.33	19.95	21.41	22.59
29	19.21	5.35	8.57	10.31	13.70	16.34	18.38	19.98	21.43	22.63
30	19.19	5.40	8.46	10.35	13.79	16.44	18.41	20.04	21.47	22.70
31	19.21	.....	8.24	.....	13.90	16.49	.....	20.06	.....	22.73

Butler County--Continued.

Union Township

160-1. Orin James, NW¼SE¼ sec. 11, R. 2, T. 2, 0.9 mile east from Flockton. Domestic drilled well, diameter 6 inches, depth 68.4 feet. Measuring point, top of 6-inch casing, at land surface.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 2	23.68	May 7	12.72	July 9	16.80	Oct. 21	24.67
9	a 27.79	14	13.37	16	a 18.70	Nov. 12	25.76
12	23.89	21	14.21	23	a 18.85	19	25.96
16	23.48	28	14.65	Aug. 13	a 20.36	26	24.10
20	19.07	June 4	14.17	Sept. 3	a 21.96	Dec. 3	a 27.39
23	14.08	11	14.05	10	21.69	10	a 26.84
25	13.00	18	a 17.17	24	23.75	17	a 27.24
26	13.24	25	15.32	Oct. 1	a 27.34	24	a 27.30
30	12.05	July 2	16.25	8	23.86	31	a 27.71

160-2 (49). Orin James, 0.7 mile east from Flockton.

Water level, in feet below measuring point, 1940

Jan. 17	15.63	May 7	3.23	July 30	8.25	Oct. 22	15.22
Feb. 17	15.90	14	4.21	Aug. 6	8.92	29	15.69
Mar. 16	4.13	21	4.82	13	9.57	Nov. 5	16.17
Apr. 2	4.40	28	4.32	20	10.18	8	16.40
9	4.24	June 4	2.99	27	10.77	12	16.66
12	2.54	11	3.84	Sept. 3	11.39	19	17.12
16	3.00	18	4.70	10	11.95	26	17.54
20	1.10	25	5.36	17	12.55	Dec. 3	17.98
23	2.36	July 2	5.40	24	13.10	10	18.38
25	2.66	9	6.14	Oct. 1	13.69	17	18.77
26	2.89	16	6.82	8	14.18	24	19.15
30	3.19	23	7.52	15	14.69	31	19.45

161-2 (48). Timothy Hoelle, 0.9 mile east from Flockton. Measurements discontinued Nov. 8, 1940.

Water level, in feet below measuring point, 1940

Jan. 17	14.87	Mar. 16	11.65	Apr. 25	9.95	June 18	11.27
Feb. 17	13.12	Apr. 17	11.19	May 15	11.20	Nov. 8	17.45

165-2 (44). E. C. Shepherd, Princeton Pike, 0.7 mile north from Port Union.

Water level, in feet below measuring point, 1940

Jan. 2	16.72	Apr. 12	13.90	July 2	10.15	Oct. 8	17.98
9	16.67	16	13.78	9	10.68	15	18.27
16	16.82	20	9.29	16	11.21	22	18.69
23	17.06	23	10.00	23	11.76	29	18.80
30	17.11	25	9.54	30	12.20	Nov. 5	19.04
Feb. 6	17.24	26	8.90	Aug. 6	12.66	8	19.17
13	15.40	30	8.07	13	13.53	12	19.14
20	15.35	May 7	8.40	20	13.94	19	19.25
27	15.57	14	8.64	27	14.38	26	19.40
Mar. 5	14.92	21	8.85	Sept. 3	14.37	Dec. 3	19.40
12	15.08	28	9.10	10	15.16	10	19.55
18	15.27	June 4	8.65	17	15.96	17	19.73
26	14.90	18	9.39	24	17.63	24	19.86
Apr. 2	14.66	25	9.68	Oct. 1	17.78	31	20.09
9	14.26						

168. M. Haughbers, SW¼SW¼ sec. 4, R. 2, T. 2, Port Union. Domestic well, diameter 6 inches, depth 6.5 feet. Measuring point, top of 6-inch casing, 3.4 feet below land surface.

a Well pumped about ½ hour before measurement.

Butler County--Continued.

168.--Continued.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 27	19.32	Apr. 16	17.95	May 14	17.24	July 16	19.18
Mar. 5	17.17	18	17.50	21	17.64	23	19.65
12	17.88	20	15.68	28	17.73	30	20.27
19	18.23	23	16.16	June 4	16.79	Nov. 8	24.26
26	18.76	25	16.23	11	17.13	Dec. 10	25.45
Apr. 2	19.09	26	16.17	25	17.83	17	24.74
9	19.21	30	16.39	July 2	18.17	24	25.03
12	17.77	May 7	16.85	9	19.13	31	24.90

173 (20). Margaret Bramble Estate, Rialto.

Water level, in feet below measuring point, 1940

Jan. 17	8.41	Apr. 16	3.17	May 21	4.60	July 23	6.75
Feb. 17	4.00	18	2.67	28	4.40	30	7.25
Mar. 5	2.40	23	2.25	June 4	3.23	Aug. 16	8.38
12	3.40	25	2.63	11	3.85	Sept.18	9.60
18	3.55	26	2.77	18	4.12	Oct. 16	10.20
26	4.34	30	3.00	25	4.97	Nov. 8	10.64
Apr. 2	4.35	May 7	3.33	July 2	5.30	16	10.69
9	4.38	14	4.20	9	5.90	Dec. 4	12.10
12	2.32			16	6.30		

175 (25). J. W. Margonett, Rialto.

Water level, in feet below measuring point, 1940

Jan. 2	12.53	Mar. 12	6.62	Apr. 30	6.29	July 9	11.02
9	12.73	18	6.80	May 7	7.10	16	11.44
16	12.25	26	7.84	14	9.24	23	11.12
23	11.95	Apr. 2	7.99	21	8.71	30	13.67
30	11.88	9	7.82	28	8.11	Aug. 16	11.79
Feb. 6	11.80	12	5.62	June 4	6.70	Sept.18	12.62
13	10.13	16	6.46	11	7.69	Oct. 16	11.77
17	9.04	18	5.79	18	7.95	Nov. 8	12.85
20	6.95	23	5.84	25	8.92	16	12.68
27	7.09	25	6.27	July 2	10.07	Dec. 14	11.03
Mar. 5	5.85	26	6.32				

179-1 (37). Ben Kohls, 1.1 miles northeast from Crescentville. Measurements discontinued Mar. 12, 1940.

Water level, in feet below measuring point, 1940

Jan. 9	25.39	Jan. 30	24.79	Feb. 20	21.48	Mar. 5	19.48
16	25.05	Feb. 6	24.74	27	21.32	12	19.93
23	24.80	13	22.73				

180 (19). Fox Paper Company, Crescentville.

Water level, in feet below measuring point, 1940

Jan. 2	17.17	Apr. 8	11.34	May 21	11.69	Sept.17	15.25
9	17.48	9	11.72	28	11.33	24	16.09
16	17.32	12	10.23	June 4	9.63	Oct. 1	16.44
23	16.87	15	9.05	11	10.35	8	16.60
30	16.58	16	9.24	18	10.86	15	16.94
Feb. 6	16.55	17	9.05	25	11.62	22	17.24
13	14.54	18	9.27	July 2	11.22	29	17.17
20	12.79	20	7.45	9	12.19	Nov. 5	17.20
27	11.91	22	6.00	16	12.93	8	17.55
Mar. 4	10.31	23	7.19	23	13.50	12	17.77
5	9.87	24	7.29	30	14.20	19	17.85
6	9.52	25	7.49	Aug. 6	14.40	26	17.17
11	9.63	26	7.63	13	14.69	Dec. 3	18.08
12	9.66	29	8.04	20	15.28	10	17.94
18	9.87	30	8.13	27	15.28	17	18.29
19	10.20	May 7	9.66	Sept. 3	15.72	24	19.15
26	11.54	14	10.74	10	15.69	31	18.15
Apr. 2	11.47						

Hamilton County

Sycamore Township

T-75. Frederick Hauck, NW¼NE¼ sec. 31, R. 2, T. 3, Crescentville Road, 0.1 mile east from Crescentville. U. S. Geological Survey bored and driven test well, diameter 1½ inches, depth 29.9 feet. Measuring point, top of 1½-inch pipe, 2.8 feet above land surface.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 26	10.12	Apr. 12	7.40	May 13	9.94	July 29	11.13
Mar. 3	5.45	15	8.65	20	10.17	Aug. 16	11.74
4	6.37	17	8.38	27	10.14	Sept.18	12.60
5	6.88	18	7.88	June 3	8.67	Oct. 16	13.17
6	7.63	19	3.79	10	9.59	Nov. 8	13.60
7	8.00	20	4.20	17	9.95	16	13.61
11	9.19	22	6.57	24	10.19	Dec. 2	13.81
12	9.29	24	7.48	July 1	10.14	9	13.83
18	9.72	25	7.81	8	10.39	16	13.83
25	10.20	27	8.45	15	10.60	23	13.90
Apr. 1	10.21	29	8.80	22	10.84	30	13.18
8	10.16	May 6	9.57				

T-74. Frederick Hauck, NE¼NE¼ sec. 31, R. 2, T. 3, Crescentville Road, 0.5 mile east from Crescentville, U. S. Geological Survey bored and driven test well, diameter 1½ inches, depth 29.2 feet. Measuring point, top of 1½-inch pipe, 2.1 feet above land surface.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 26	10.89	Apr. 12	7.54	May 13	8.92	July 29	11.22
Mar. 3	8.25	15	8.15	20	9.27	Aug. 16	12.10
4	7.81	17	8.20	27	9.41	Sept.18	13.19
5	7.82	18	9.00	June 3	8.34	Oct. 16	13.89
6	7.93	19	4.26	10	8.76	Nov. 8	14.36
7	7.92	20	4.15	17	9.20	16	14.54
11	8.64	22	5.55	24	9.40	Dec. 2	14.68
12	8.73	24	6.09	July 1	9.57	9	14.80
18	9.67	25	6.35	8	9.80	16	14.80
25	9.63	27	6.95	15	10.15	23	14.95
Apr. 1	9.68	29	7.30	22	10.70	30	14.17
8	9.67	May 6	8.38				

204-4 (30). Albert Sorter Estate, 0.2 mile north from Kemper Road, 100 feet east from Mill Creek.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	13.01	Apr. 1	10.20	June 17	9.49	Sept.30	12.46
9	13.12	8	10.24	24	9.70	Oct. 7	12.55
16	12.94	12	8.49	July 1	9.87	14	12.67
23	13.08	15	8.95	8	10.24	21	12.81
30	13.18	18	8.54	15	10.52	28	12.90
Feb. 5	13.23	22	5.86	22	10.78	Nov. 4	12.98
12	12.46	24	6.89	29	11.02	8	13.07
19	11.92	25	7.22	Aug. 5	11.24	9	13.10
26	11.75	27	7.75	12	11.43	13	13.16
Mar. 4	7.28	29	8.07	19	11.59	18	13.22
5	7.78	May 6	8.88	26	11.73	25	13.30
6	8.31	13	9.27	31	11.82	Dec. 2	13.35
7	8.39	20	9.50	Sept. 4	11.92	9	13.43
11	9.31	27	9.59	9	11.99	16	13.47
12	9.38	June 3	8.45	16	12.17	23	13.40
18	9.72	10	9.03	23	12.28	30	13.28
25	10.06						

Hamilton County--Continued.

T-68. Emmit Ferris, NE¼NE¼ sec. 31, R. 1, T. 4, Kemper Road, 30 feet east from Mill Creek. U. S. Geological Survey bored and driven test well, diameter 1½ inches, depth 23.0 feet. Measuring point, top of 1½-inch pipe, 1.2 foot above land surface.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	10.45	Mar. 11	8.42	Apr. 27	8.35	July 22	10.18
9	10.49	12	8.54	29	8.68	29	10.26
16	10.25	18	8.78	May 6	9.16	Aug. 16	10.38
23	10.51	25	9.24	13	9.35	Sept.18	10.51
30	10.58	Apr. 1	9.20	20	9.54	Oct. 16	10.51
Feb. 5	10.63	8	9.29	27	9.43	Nov. 8	10.56
12	9.22	12	6.57	June 3	8.25	16	10.57
19	8.55	17	7.23	10	9.00	Dec. 2	10.70
26	9.20	18	6.50	17	9.46	9	10.70
Mar. 3	3.58	20	1.95	24	9.67	14	10.74
4	5.45	22	6.06	July 1	9.78	16	10.64
5	6.29	24	7.52	8	9.93	23	10.77
6	7.15	25	7.87	15	10.06	30	10.38
7	7.51						

T-67. Emmit Ferris, NW¼NW¼ sec. 30, R. 1, T. 4, Kemper Road, 0.2 mile east from Mill Creek. U. S. Geological Survey bored and driven test well, diameter 1½ inches, depth 16.6 feet. Measuring point, top of 1½-inch pipe, 0.5 foot above land surface.

Water level, in feet below measuring point, 1940

Jan. 2	8.79	Mar. 11	3.42	Apr. 25	2.58	July 22	6.20
9	8.89	12	3.57	27	3.25	29	6.58
16	8.80	18	3.72	29	3.51	Aug. 16	7.39
23	8.92	25	4.12	May 6	3.90	Sept.18	8.17
30	8.98	Apr. 1	4.03	13	4.03	Oct. 16	8.56
Feb. 5	9.02	8	4.02	20	4.14	Nov. 8	8.84
12	7.80	12	1.99	27	4.16	16	8.88
19	4.80	15	2.69	June 3	3.40	Dec. 2	8.91
26	5.54	17	2.24	10	3.93	9	9.03
Mar. 3	1.75	18	2.03	17	4.34	14	9.07
4	1.94	19	1.53	24	4.74	16	9.02
5	2.03	20	.74	July 1	4.83	23	9.05
6	2.28	22	2.14	8	5.33	30	8.78
7	2.43	24	2.39	15	5.77		

T-46. L. Smizer, Sharon Avenue, 0.5 mile east from Mostellar Road.

Water level, in feet below measuring point, 1940

Jan. 2	23.33	Apr. 8	23.88	June 17	18.77	Sept.30	21.64
9	23.55	12	23.77	24	18.85	Oct. 7	21.85
15	23.73	15	23.70	July 1	19.02	14	22.05
22	23.95	18	23.69	8	19.17	21	22.28
29	24.09	20	23.10	15	19.32	28	22.45
Feb. 5	24.34	22	22.20	22	19.46	Nov. 4	22.69
12	24.50	24	21.55	29	19.67	8	22.83
19	24.63	25	21.29	Aug. 5	19.90	9	22.87
26	24.68	27	20.79	12	20.16	13	22.99
Mar. 4	24.68	29	20.40	19	20.37	18	23.17
5	24.64	May 6	19.55	26	20.54	25	23.37
6	24.56	13	19.13	31	20.72	Dec. 2	23.65
7	24.50	20	18.98	Sept. 4	20.84	9	23.84
11	24.38	27	19.05	9	20.94	16	24.04
18	24.07	June 3	18.94	16	21.20	23	24.25
26	23.97	10	18.76	23	21.40	30	24.42
Apr. 1	23.80						

207-4 (18-A). Village of Glendale, municipal water plant, Sharon Avenue, 0.2 mile east from Mostellar Road. Shallow well. Well destroyed and replaced by well 207-5 Jan. 15, 1940. Water levels, in feet below measuring point, 1940: Jan. 2, 16.76; Jan. 9, 16.97.

Hamilton County--Continued.

207-5. Village of Glendale, municipal water plant, Sharor Avenue, 0.2 mile east from Mostellar Road. U. S. Geological Survey bored and driven test well, 2 feet east of well 207-4, which was destroyed. Diameter 1½ inches, depth 23.3 feet. Measuring point, top of 1½-inch pipe, 3.3 feet above land surface.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 15	20.12	Apr. 12	18.72	June 10	13.59	Sept.23	16.75
22	19.31	15	18.17	17	13.95	30	16.99
29	19.53	18	18.12	24	14.15	Oct. 7	17.18
Feb. 5	19.75	19	17.84	July 1	14.27	14	17.40
12	19.84	20	7.28	8	14.50	21	17.67
19	19.91	22	9.92	15	14.30	28	16.90
26	19.92	23	10.34	22	14.90	Nov. 4	18.10
Mar. 3	19.63	24	10.80	29	15.09	8	18.26
4	18.87	25	11.08	Aug. 5	15.28	9	18.27
5	18.50	27	11.67	12	15.50	13	18.43
6	18.22	29	11.95	19	15.72	18	18.58
7	18.12	May 6	12.80	26	15.92	25	18.77
11	18.16	13	13.33	31	16.03	Dec. 2	19.03
18	18.27	27	13.94	Sept. 4	16.15	9	19.19
25	18.47	30	13.70	9	16.31	23	19.64
Apr. 1	18.62	June 3	13.46	16	16.53	30	19.79
8	18.70						

207-3 (18). Village of Glendale, municipal water plant, Sharon Avenue, 0.2 mile east from Mostellar Road. Measuring point, changed Sept. 6, 1940. New measuring point, top of recorder platform, 5.45 feet above land surface and 3.10 feet above old measuring point.

Lowest daily water level, in feet below measuring point, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	35.41	36.41	35.89	34.51	32.34	28.92	30.26	31.20	33.18	36.52	37.30	39.22
2	35.58	36.43	35.83	34.77	32.52	29.88	29.99	31.64	32.27	36.48	37.74	38.81
3	35.52	36.50	35.00	34.48	31.91	29.29	29.59	31.64	32.21	36.71	37.78	38.47
4	35.38	36.50	35.51	34.70	32.58	28.83	29.61	31.82	32.28	36.80	37.88	39.10
5	35.90	36.66	35.38	34.54	29.50	29.00	29.85	31.19	32.24	36.78	37.71	39.20
6	35.72	36.40	34.95	34.89	32.47	29.37	29.87	31.43 a35.69	36.62	37.54	39.06
7	36.12	36.02	35.22	35.40	32.30	29.46	30.60	32.26	35.77	36.80	37.90	38.87
8	35.78	36.51	35.10	34.82	32.72	28.91	.....	31.35	35.73	36.65	38.11	40.08
9	35.88	36.59	34.86	34.49	33.12	29.75	.....	31.78	35.62	36.73	38.15	39.18
10	35.72	36.35	35.69	34.52	28.75	29.32	.....	31.67	35.70	36.90	38.95	39.01
11	35.73	37.50	35.13	34.66	32.58	29.17	.....	31.38	35.67	36.90	38.36	39.27
12	35.77	36.58	34.78	34.81	32.37	29.28	.....	31.88	35.58	37.08	38.21	39.00
13	35.91	36.49	34.71	34.83	31.45	29.16	.....	31.73	35.59	37.80	38.02	39.26
14	34.80	36.32	34.70	34.32	29.17	29.52	.....	31.58	35.81	37.21	38.92	39.19
15	35.88	36.22	34.70	34.05	29.50	29.16	30.62	31.30	36.71	36.70	38.71	39.51
16	35.92	36.50	34.86	34.49	28.25	29.02	30.22	31.77	36.93	37.00	39.11	39.05
17	35.39	36.53	34.86	34.08	28.78	29.14	29.98	31.80	35.87	36.83	38.93	39.38
18	35.98	35.96	34.98	34.21	29.35	29.41	30.31	32.39	37.06	37.00	38.63	39.79
19	36.08	36.50	34.61	33.99	29.60	29.16	30.69	32.00	36.12	36.97	38.67	39.08
20	35.97	36.11	34.76	.....	28.52	29.53	30.65	31.75	36.20	37.05	38.21	.....
21	36.33	35.80	34.98	29.70	29.00	30.88	31.55	31.35	36.31	37.23	38.68	.....
22	36.15	36.30	34.70	29.60	28.88	29.57	30.78	31.61	36.12	36.93	38.73	.....
23	36.10	36.38	34.83	32.80	29.38	29.70	30.88	31.97	36.20	37.05	38.50	.....
24	36.20	36.31	35.66	33.25	29.42	30.27	30.99	32.16	35.82	37.40	39.58	.....
25	36.40	37.43	35.10	32.89	29.29	29.52	31.09	31.70	36.03	37.44	38.70	.....
26	35.76	36.41	34.42	32.66	29.30	29.17	31.20	31.91	35.96	37.42	38.60	.....
27	36.02	35.78	34.51	33.03	29.61	29.38	31.31	32.82	36.03	38.35	39.01	.....
28	37.26	35.68	34.69	33.19	28.79	29.51	30.81	31.70	36.16	37.75	39.29	.....
29	36.45	35.65	34.61	32.50	28.93	29.60	31.20	31.71	37.41	37.57	39.50	.....
30	36.36	.....	34.70	32.76	28.95	29.42	31.40	31.96	36.22	37.50	38.83	.....
31	36.31	.....	34.50	.....	28.64	.....	31.10	32.20	.....	37.53	.....	39.69

a Measuring point raised 3.10 feet.

Hamilton County--Continued.

T-47. Drackett Chemical Company, Sharon Avenue, 0.1 mile west from Mostellar Road. U. S. Geological Survey test well.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	15.19	Apr. 1	14.42	June 10	10.26	Sept. 30	13.45
9	15.21	8	14.48	24	10.95	Oct. 7	13.62
15	15.29	12	10.59	July 1	11.07	14	13.78
22	15.47	15	12.52	8	11.32	21	14.03
29	15.54	18	12.81	15	11.52	28	14.20
Feb. 5	15.80	20	2.05	22	11.70	Nov. 4	14.36
12	15.56	22	4.19	29	11.87	8	14.51
19	15.40	24	5.68	Aug. 5	12.02	9	14.56
26	15.51	25	6.35	12	12.18	13	14.69
Mar. 4	7.80	27	7.62	19	12.42	18	14.74
5	9.86	29	8.15	26	12.58	25	14.92
6	11.38	May 6	9.51	31	12.65	Dec. 2	15.07
7	11.86	13	10.09	Sept. 4	12.77	9	15.23
11	13.07	20	10.71	9	12.80	16	15.39
18	13.75	27	10.78	16	13.09	23	15.39
25	14.21	June 3	9.50	23	13.24	30	15.55

T-14. Johns-Manville Corporation, 0.35 mile north from Glendale-Milford Road on south bank of Mill Creek. U. S. Geological Survey test well.

Water level, in feet below measuring point, 1940

Jan. 5	18.15	Apr. 8	16.40	June 17	10.40	Sept. 30	15.32
8	18.35	12	14.49	24	10.66	Oct. 7	15.84
15	18.52	15	14.99	July 1	10.87	14	16.14
16	18.49	18	14.77	8	11.14	21	16.62
22	18.78	19	11.17	15	11.28	28	16.83
29	19.05	22	4.19	22	11.40	Nov. 4	17.04
Feb. 5	19.34	24	5.69	29	11.54	9	17.35
12	19.03	25	6.20	Aug. 5	11.74	13	17.90
19	18.08	27	7.13	12	12.30	18	17.76
26	18.37	29	7.56	19	12.58	25	18.01
Mar. 4	14.72	May 6	8.65	26	13.42	Dec. 2	18.29
6	15.25	13	9.29	31	13.35	9	18.48
11	15.62	20	9.87	Sept. 4	13.67	16	18.65
18	15.72	27	10.24	9	14.11	23	18.89
25	16.06	June 3	9.45	16	14.62	30	18.80
Apr. 1	16.93	10	9.99	23	15.11		

212-1 (56). Johns-Manville Corporation, 0.1 mile north from Glendale-Milford Road.

Lowest daily water level, in feet below measuring point, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	36.07	37.09	36.83	35.74	27.85	28.66	a30.09	31.27	32.28	34.03	35.00	36.34
2	35.62	36.83	36.37	35.54	28.26	.....	.....	31.60	32.15	.....	35.48	36.25
3	36.02	37.23	36.11	35.40	28.31	28.70	.....	31.66	32.45	.....	35.25	36.11
4	35.75	36.90	36.26	35.67	28.52	28.90	.....	31.27	32.60	.....	35.46	36.47
5	36.00	36.98	36.02	35.84	28.05	28.94	.....	31.37	32.61	.....	35.22	36.51
6	36.18	37.16	35.87	.....	28.31	28.98	.....	31.61	32.97	.....	35.23	36.34
7	36.31	36.87	35.64	.....	28.33	29.08	.....	31.81	32.68	.....	35.31	36.35
8	36.03	37.31	35.63	35.58	28.41	28.95	a29.75	31.75	32.54	.....	35.46	36.68
9	36.35	37.64	35.60	35.90	28.69	28.92	.....	31.99	32.80	.....	35.60	36.83
10	36.13	37.34	35.73	35.72	28.25	29.02	.....	31.82	32.90	.....	35.65	36.60
11	36.20	37.37	35.71	35.56	28.45	29.20	.....	31.56	32.97	.....	35.45	37.19
12	35.95	36.90	35.81	35.74	28.63	29.27	.....	32.01	33.00	.....	36.15	36.87
13	36.46	36.96	35.79	35.74	28.44	29.32	.....	31.89	33.31	.....	35.65	36.77
14	36.12	36.79	36.01	35.25	28.09	29.46	.....	31.88	32.95	34.16	35.71	37.02
15	36.30	37.18	35.85	35.70	28.08	29.10	a30.36	31.90	.....	34.21	35.77	36.72
16	36.17	36.89	35.87	35.30	27.91	29.29	30.26	31.97	33.30	34.37	36.05	36.60
17	35.97	36.94	35.50	35.43	28.03	29.66	30.46	31.92	33.34	34.45	36.26	36.78
18	36.74	36.75	35.84	35.35	28.90	29.43	30.38	31.89	33.40	34.63	35.95	36.56
19	36.43	36.51	35.67	35.03	28.12	29.32	30.50	32.15	33.26	34.35	33.95	36.35
20	35.95	36.62	36.03	32.94	28.68	29.50	30.34	32.16	33.46	34.44	36.02	36.48

a Tape measurement.

Hamilton County--Continued.

212-1 (56).--Continued.

Lowest daily water level, in feet below measuring point, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	36.90	36.49	35.92	28.44	28.79	29.71	30.46	32.04	33.38	34.62	35.95	36.71
22	36.23	37.49	35.83	28.29	28.50	29.62	30.90	32.06	33.67	34.93	36.33	37.13
23	36.88	36.83	35.83	29.02	28.87	.....	30.76	32.52	33.57	34.58	35.96	37.11
24	36.47	36.55	35.68	28.42	28.60	29.55	30.80	32.31	33.32	34.79	36.24	36.66
25	36.79	36.66	35.97	28.30	28.68	29.75	31.56	32.34	33.47	34.97	36.34	36.68
26	36.83	36.86	35.75	28.53	28.50	.....	31.52	32.33	33.51	34.86	35.85	36.80
27	36.58	36.53	35.65	28.34	28.95	.....	30.95	32.35	33.57	34.98	35.97	36.67
28	37.30	36.55	35.83	28.35	28.68	.....	30.75	32.25	34.04	35.10	35.99	36.57
29	36.80	36.76	35.72	28.50	28.94	.....	30.94	32.23	.....	34.95	36.35	37.09
30	36.80	.....	35.80	28.05	28.57	.....	30.97	32.27	33.67	34.94	36.06	36.82
31	36.81	.....	35.38	.....	28.57	.....	31.15	32.40	.....	35.08	.....	36.73

212-2 (56A). Johns-Manville Corporation, 0.1 mile north from Glendale-Milford Road. U. S. Geological Survey bored test well, diameter 8 inches, depth 23.2 feet. Measuring point, top of 8-inch casing, 3.1 feet above land surface.

Water level, in feet below measuring point, 1939-40

Date	Water level	Date	Water level	Date	Water level
Nov. 16, 1939	21.58	Apr. 20, 1940	4.05	Aug. 5, 1940	17.90
20	21.66	22	6.46	12	18.29
27	21.82	24	8.40	19	18.98
Dec. 4	22.15	25	9.01	26	19.15
11	22.34	27	10.10	31	19.26
18	22.64	29	10.81	Sept. 4	19.45
22	22.78	May 6	12.44	9	19.70
29	23.12	13	13.52	16	20.11
Jan. 5, 1940	23.22	20	14.27	23	20.50
8	(a)	27	14.85	30	21.00
Mar. 11	21.83	June 3	14.74	Oct. 7	21.18
18	22.15	10	15.10	14	21.58
25	22.08	17	15.42	21	22.00
Apr. 1	22.10	24	15.90	28	22.44
8	22.17	July 1	16.24	Nov. 4	22.75
12	22.21	8	16.57	8	23.03
15	21.28	15	16.83	13	23.23
18	21.70	22	17.10	18	(b)
19	21.62	29	17.46		

T-8. Saint Rita School for Deaf Children, Glendale-Milford Road, and Pennsylvania Railroad. U. S. Geological Survey test well.

Water lebel, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	18.57	Apr. 8	18.72	June 17	11.47	Sept.30	16.04
15	18.70	12	18.67	24	11.76	Oct. 7	16.36
16	18.73	15	18.69	July 1	12.06	14	16.67
22	18.82	18	18.63	8	12.37	21	16.99
29	18.90	19	18.63	15	12.66	28	17.28
Feb. 5	19.04	20	7.47	22	12.97	Nov. 4	17.58
12	18.74	22	7.70	29	13.24	9	17.80
19	18.34	24	8.20	Aug. 5	13.53	13	17.95
26	18.65	25	8.37	12	13.82	16	18.06
Mar. 4	18.75	27	8.62	19	13.86	18	18.12
5	18.77	29	8.71	26	14.42	25	18.32
6	18.75	May 6	9.20	31	14.64	Dec. 2	18.53
7	18.73	13	9.71	Sept. 4	14.84	9	18.67
11	18.73	20	10.20	9	15.03	16	18.79
18	18.68	27	10.77	16	15.39	23	18.86
25	18.70	June 3	11.04	23	15.77	30	19.02
Apr. 1	18.67	10	11.22				

a Well dry Jan. 8 to Mar. 11.
b Well dry Nov. 18 through Dec. 31.

Hamilton County--Continued.

T-8A. Johns-Manville Corporation, Glendale-Milford Road, 0.1 mile east from Pennsylvania Railroad. U. S. Geological Survey test well.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	22.81	Mar. 7	23.68	Apr. 24	6.93	June 24	14.95
8	22.96	11	23.34	25	7.47	July 1	15.31
15	23.32	18	22.83	27	8.31	8	15.64
22	23.59	25	22.66	29	8.90	15	15.99
29	23.79	Apr. 1	22.60	May 6	10.55	22	16.32
Feb. 5	24.06	8	22.64	13	11.74	29	16.56
12	24.29	12	22.68	20	12.69	Aug. 16	17.40
19	24.20	15	22.54	27	13.50	Sept.18	19.18
26	24.01	18	22.35	June 3	13.93	Oct. 16	20.72
Mar. 4	23.89	19	22.42	10	14.14	Nov. 16	22.45
5	23.84	20	2.20	17	14.57	Dec. 14	23.66
6	23.76	22	4.86				

214-3 (99). Tennessee Corporation, Glendale-Milford Road and Big Four Railroad, rear of old office.

Water level, in feet below measuring point, 1940

Jan. 5	25.83	Apr. 1	25.09	June 10	17.36	Sept.23	22.80
8	25.93	8	25.12	17	17.72	30	23.15
15	26.27	12	25.14	24	18.18	Oct. 7	23.53
22	26.35	15	24.89	July 1	18.53	14	23.90
29	26.66	18	24.78	8	18.87	21	24.31
Feb. 5	26.99	20	5.88	15	19.19	28	24.70
12	26.98	22	8.37	22	19.47	Nov. 4	25.04
19	26.80	24	10.03	29	19.84	13	25.53
26	26.62	25	10.59	Aug. 5	20.25	18	25.69
Mar. 4	26.21	27	11.52	12	20.63	25	26.02
5	25.97	29	12.19	19	21.02	Dec. 2	26.00
6	25.85	May 6	14.00	26	21.46	9	26.28
7	25.96	13	15.20	31	21.60	16	26.55
11	25.50	20	16.07	Sept. 4	21.72	23	26.62
18	25.17	27	16.77	9	21.98	30	26.68
25	25.08	June 3	17.03	16	22.41		

T-9. P. Froehlich, Glendale-Milford Road, 500 feet west from Mill Creek. U. S. Geological Survey test well.

Water level, in feet below measuring point, 1940

Jan. 5	22.83	Apr. 8	21.50	June 10	14.49	Sept.23	20.11
8	22.98	12	21.19	17	14.79	30	20.35
15	23.08	15	20.76	24	15.32	Oct. 7	20.78
22	22.75	18	20.64	July 1	15.66	14	21.20
29	23.27	19	20.24	8	15.98	21	21.60
Feb. 5	23.74	20	5.10	15	16.25	28	21.98
12	23.15	22	7.11	22	16.47	Nov. 4	22.35
19	22.98	24	8.25	29	17.04	9	22.54
26	22.75	25	8.68	Aug. 5	17.45	13	22.49
Mar. 4	22.04	27	9.56	12	17.96	18	22.73
5	21.82	29	10.23	19	18.41	25	22.88
6	21.62	May 6	11.80	26	18.80	Dec. 2	22.76
7	21.60	13	12.78	31	18.62	9	23.02
11	21.49	20	13.48	Sept. 4	18.89	16	23.14
18	21.28	27	14.10	9	19.18	23	23.13
25	21.32	June 3	14.19	16	19.69	30	23.09
Apr. 1	21.34						

T-10. H. Burwinkle, Glendale-Milford Road and Mill Creek, east bank. U. S. Geological Survey test well. Measuring point raised 0.6 foot on Feb. 19, 1940. Measurements discontinued Dec. 14, 1940.

Water level, in feet below measuring point, 1940

Jan. 22	19.80	Feb. 26	18.10	Mar. 7	16.47	Apr. 8	17.20
29	20.70	Mar. 3	16.06	11	16.76	12	15.96
Feb. 5	21.60	4	16.15	18	16.77	15	16.28
12	17.31	5	16.35	25	17.10	18	15.75
19	17.50	6	16.49	Apr. 1	17.05	20	6.27

Hamilton County--Continued.

T-10.--Continued.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 22	12.86	May 13	14.70	June 24	14.36	Aug. 16	17.10
24	13.33	20	14.80	July 1	14.66	Sept.18	19.01
25	13.44	27	14.69	8	14.78	Oct. 16	20.74
27	13.57	June 3	14.13	15	14.83	Nov. 16	20.98
29	13.62	10	14.07	22	15.18	Dec. 14	19.11
May 6	14.55	17	14.29	29	16.30		

T-3. Harry F. Pittman, Jackson Road, 1.3 miles north from Lockland. U. S. Geological Survey test well. Measurements discontinued Dec. 14, 1940.

Water level, in feet below measuring point, 1940

Jan. 17	25.68	Mar. 17	27.85	Aug. 16	19.89	Nov. 16	24.48
Feb. 17	26.95	Apr. 22	27.11	Sept.18	21.27	Dec. 14	26.01
Mar. 16	27.52	June 17	18.60	Oct. 16	22.69		

215-1 (93A). Harry F. Pittman, Jackson Road. Domestic drilled well, diameter 6 inches, depth 107 feet. Measuring point, top of 6-inch reducing coupling, 6.5 feet below land surface.

Water level, in feet below measuring point, 1940

Mar. 4	34.55	Apr. 29	28.60	July 29	29.40	Oct. 21	32.75
18	34.40	May 6	28.28	Aug. 5	29.80	28	33.17
Apr. 1	34.50	13	27.95	12	30.37	Nov. 4	33.53
8	34.30	20	27.74	19	30.50	9	33.86
12	34.80	27	28.09	26	30.67	13	34.29
15	34.31	June 3	28.03	31	30.87	18	34.40
20	30.79	10	28.06	Sept. 4	31.16	25	34.51
21	30.02	17	28.46	9	31.04	Dec. 2	34.65
22	29.63	24	28.20	16	31.48	9	35.78
23	29.50	July 1	28.80	23	31.64	16	34.35
24	29.51	8	28.64	30	32.09	23	35.35
25	29.14	15	28.84	Oct. 7	32.24	30	35.45
27	29.11	22	29.24	14	32.50		

215-2 (93). Harry F. Pittman, Jackson Road.

Water level, in feet below measuring point, 1940

Jan. 5	26.88	Apr. 8	28.96	June 10	20.03	Sept.23	23.74
8	27.01	12	28.98	17	20.18	30	24.08
16	27.33	15	28.98	24	20.28	Oct. 7	24.37
22	27.61	20	28.30	July 1	20.48	14	24.70
29	27.87	21	22.85	8	20.67	21	25.00
Feb. 5	28.23	22	20.92	15	20.86	28	25.31
12	28.28	23	20.20	22	21.08	Nov. 4	25.62
17	28.39	24	19.77	29	21.31	9	25.87
19	28.51	25	19.60	Aug. 5	21.56	13	26.06
26	28.64	27	19.38	12	21.85	18	26.27
Mar. 4	28.74	29	19.23	19	22.13	25	26.64
11	28.01	May 6	19.20	26	22.44	Dec. 2	26.93
16	28.87	13	19.34	31	22.67	9	27.22
18	28.88	20	19.52	Sept. 4	22.86	16	27.50
25	28.91	27	19.71	9	23.02	23	27.82
Apr. 1	28.93	June 3	19.90	16	23.34	30	28.11

T-58. Wright Aeronautical Corporation, (formerly Mary I. Jackson Estate), 0.5 mile north from Lockland and 0.1 mile west from Big Four Railroad. U. S. Geological Survey test well. Measurements discontinued and well destroyed Dec. 2, 1940.

Water level, in feet below measuring point, 1940

Jan. 16	26.13	Mar. 18	26.05	Apr. 22	9.97	May 13	15.38
17	26.18	25	26.39	24	10.88	20	16.09
Feb. 17	27.35	Apr. 1	26.64	25	11.35	27	16.75
26	26.63	8	26.85	27	12.20	June 3	17.11
Mar. 4	24.92	12	26.65	29	12.89	10	17.56
11	25.43	15	26.04	May 6	14.45	17	17.99

Hamilton County--Continued.

T-58.--Continued.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 24	18.34	Aug. 12	20.51	Sept.16	21.99	Oct. 2?	23.93
July 1	18.67	19	20.79	23	22.28	Nov. 4	24.28
8	19.00	26	21.08	30	22.63	9	24.60
15	19.28	31	21.30	Oct. 7	22.89	13	24.82
22	19.59	Sept. 4	21.45	14	23.24	18	25.11
29	19.72	9	21.67	21	23.60	25	25.57
Aug. 5	20.22						

T-59. Mary I. Jackson Estate, 0.6 mile north from Lockland, at Big Four Railroad. U. S. Geological Survey test well.

Water level, in feet below measuring point, 1940

Jan. 8	26.23	Apr. 12	23.06	July 1	19.54	Oct. 7	23.09
16	26.31	15	23.01	8	19.90	14	23.22
17	26.30	22	10.07	15	20.20	21	23.40
22	26.36	24	11.18	22	20.52	28	23.65
29	26.46	25	11.64	29	20.73	Nov. 4	23.78
Feb. 5	26.45	27	12.45	Aug. 5	21.72	9	23.93
17	26.59	29	13.15	12	21.22	13	24.02
19	26.57	May 6	14.64	19	21.44	18	24.20
26	26.19	13	15.76	26	21.69	25	24.86
Mar. 4	26.00	20	16.59	31	21.85	Dec. 2	25.74
11	24.62	27	17.37	Sept. 4	22.00	9	25.81
18	23.70	June 3	17.98	9	22.16	16	26.03
25	23.29	10	18.29	16	22.48	23	26.17
Apr. 1	23.15	17	18.69	23	22.68	30	26.27
8	23.11	24	19.08	30	22.88		

T-19. Mary I. Jackson Estate, 0.5 mile north from Lockland, along Mill Creek. U. S. Geological Survey test well. Measurements discontinued Aug. 31, 1940.

Water level, in feet below measuring point, 1940

Jan. 5	11.20	Mar. 4	6.68	Apr. 24	4.93	June 10	8.23
8	11.28	11	8.70	25	5.24	17	8.60
15	10.50	18	9.05	27	5.83	24	8.95
16	10.53	25	9.44	29	6.23	July 1	9.23
22	10.94	Apr. 1	9.49	May 6	6.89	8	9.50
29	11.16	8	9.52	13	7.40	15	9.77
Feb. 5	11.18	12	7.02	20	7.84	22	9.94
12	9.62	15	8.21	27	8.23	29	10.11
19	8.69	18	7.45	June 3	7.79	Aug. 31	10.60
26	9.61	22	4.19				

218-3 (91). Joslin-Schmidt Corporation, 0.4 mile north from Reading. Automatic water-stage recorder installed Mar. 3, 1940

Lowest daily water level, in feet below measuring point, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	.....	56.90	53.40	49.87	49.12	52.40	51.16	53.80	54.75	55.73
2	.....	.....	.....	56.96	53.18	48.97	49.14	52.45	50.98	54.03	54.88	.....
3	.....	.....	56.40	56.95	53.60	50.62	49.18	52.26	52.84	54.25	54.20	.....
4	.....	.....	56.79	57.55	53.28	51.21	49.24	50.15	53.42	54.92	54.13	57.71
5	a54.61	a54.67	57.13	57.83	51.44	51.56	48.99	52.08	53.50	54.62	54.60	58.21
6	.....	.....	57.19	57.55	51.85	51.71	49.28	52.63	53.64	52.32	54.82	58.56
7	.....	.....	57.07	55.40	53.00	51.45	49.00	52.83	53.63	53.45	54.90	57.82
8	a54.04	.....	57.04	56.75	52.87	51.04	49.22	52.89	51.37	54.08	55.08	56.17
9	.....	.....	57.30	57.63	53.10	48.90	51.50	52.90	52.73	54.77	55.08	57.82
10	.....	.....	55.37	57.28	52.41	50.57	51.29	53.00	53.29	54.35	52.97	58.38
11	.....	.....	56.85	57.22	52.34	51.45	51.38	50.30	53.55	54.21	54.18	58.33
12	.....	a55.00	56.93	57.28	50.46	51.61	51.48	52.85	53.60	53.60	56.04	58.26
13	.....	.....	57.13	57.17	51.63	51.87	51.51	52.90	53.64	51.88	56.79	58.97
14	.....	.....	57.21	56.18	52.21	51.18	49.45	53.01	53.47	52.96	56.94	58.72
15	a54.35	.....	57.22	56.48	52.32	51.22	51.11	53.10	51.40	53.45	57.07	56.63

a Tape measurement.

Hamilton County--Continued.

218-3 (91).--Continued.

Lowest daily water level, in feet below measuring point, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	.....	.....	56.80	56.90	52.53	49.10	51.48	53.63	53.01	53.78	57.05	58.28
17	.....	.....	56.62	56.85	51.90	50.92	51778	53.28	53.40	53.88	56.64	59.17
18	.....	.....	56.68	57.52	51.77	51.52	51.75	51.02	53.62	54.10	57.25	59.22
19	.....	a54.97	57.05	56.88	49.90	51.28	51.70	52.65	53.78	53.95	57.16	58.95
20	.....	.....	57.18	54.80	50.05	51.25	51.76	53.13	53.65	53.44	57.16	59.11
21	.....	.....	57.10	54.46	.....	51.36	49.58	53.20	53.46	53.58	55.35	58.66
22	a55.15	.....	57.37	54.15	.....	51.36	51.36	53.34	51.42	53.82	55.45	.....
23	.....	.....	57.52	55.19	.....	49.02	51.67	53.50	53.01	54.04	55.65	58.31
24	.....	.....	57.01	54.95	.....	50.31	51.81	53.88	53.41	54.56	55.25	59.02
25	.....	.....	57.25	55.02	.....	51.82	51.93	51.10	53.80	54.68	56.95	56.35
26	.....	a55.25	57.28	55.57	49.14	51.86	52.04	52.56	53.85	54.81	57.06	57.73
27	.....	.....	57.01	55.65	51.58	51.14	51.81	52.96	53.85	53.93	57.27	58.36
28	.....	.....	57.08	52.75	51.63	50.95	49,82	53.37	53.77	54.00	57.36	58.09
29	a54.66	.....	57.14	53.48	51.78	51.24	51.71	53.34	51.70	54.41	57.58	58.38
30	.....	.....	57.07	53.60	49.42	49.30	52.12	53.51	53.30	54.65	57.70	58.65
31	.....	.....	56.57	.....	49.79	.....	52.18	53.49	.....	54.77	.....	58.79

T-20. Wright Aeronautical Company, (formerly Bliss Realty Company), Shepherd Road and Big Four Railroad, Lockland. U. S. Geological Survey test well.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	42.42	Apr. 15	41.36	June 24	37.43	Sept.30	41.04
8	42.49	19	41.09	July 1	37.80	Oct. 7	41.24
15	42.60	20	34.80	8	38.07	14	41.46
16	42.64	22	29.11	15	38.31	21	41.68
22	42.74	24	29.82	22	38.56	28	41.94
29	42.88	25	30.31	29	38.78	Nov. 4	42.14
Feb. 5	42.98	27	31.32	Aug. 5	39.05	9	42.32
12	43.04	29	31.87	12	39.40	13	42.47
19	42.98	May 6	33.54	19	39.64	18	42.57
26	42.83	13	34.64	26	39.92	25	42.73
Mar. 4	42.32	20	35.61	31	40.07	Dec. 2	42.71
11	41.09	27	36.37	Sept. 4	40.19	9	42.90
25	41.53	June 3	36.77	9	40.29	16	42.97
Apr. 1	41.68	10	36.18	16	40.56	23	43.09
8	41.59	17	37.29	23	40.76	31	43.16
12	41.74						

T-66. B. Riesenberg and Sons, Koenig Street, Reading. U. S. Geological Survey test well. Measurements discontinued Sept. 18, 1940.

Water level, in feet below measuring point, 1940

Jan. 17	19.74	Apr. 17	18.82	May 27	15.52	July 8	16.77
Feb. 17	19.87	22	12.26	June 3	15.81	15	16.94
Mar. 4	19.54	24	12.65	17	16.19	22	17.10
11	19.30	25	12.83	24	15.36	29	17.24
16	19.16	May 6	14.10	July 1	16.56	Sept.18	18.14

220-4 (92-4). City of Reading, municipal water plant, Walnut Street, Reading.

Water level, in feet below measuring point, 1940

Jan. 5	83.19	Mar. 11	85.12	May 13	83.42	July 15	81.86
8	83.33	18	84.68	20	83.20	22	81.97
15	83.55	25	85.36	27	83.02	29	82.28
22	83.70	Apr. 1	85.06	June 3	82.68	Aug. 16	82.60
29	83.59	8	84.59	10	83.43	Sept.18	83.50
Feb. 5	83.85	15	84.74	17	82.37	Oct. 7	83.72
12	84.19	22	84.96	24	81.74	16	84.24
19	84.04	29	84.30	July 1	82.12	Nov. 16	85.14
26	84.74	May 6	84.01	8	81.87	Dec. 14	86.34
Mar. 4	84.77						

a Tape measurement.

Hamilton County--Continued.

223 (175). Emery Theater, Benson Street, Reading. Automatic water-stage recorder in operation Jan. 25 to Mar. 2, 1940. Well put back into use and measurements discontinued May 6, 1940.

Lowest daily water level, in feet below measuring point, 1940 (from recorder charts)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	a 80.00	Feb. 2	81.04	Feb. 16	81.95	Feb. 28	81.71
8	a 79.98	5	80.81	17	81.84	29	81.86
15	a 80.53	6	80.81	18	81.41	Mar. 1	81.85
22	a 80.60	7	81.24	19	81.17	2	a 81.85
25	80.78	8	81.31	20	81.65	4	a 81.77
26	80.77	9	81.26	21	81.76	11	a 82.02
27	80.75	10	81.22	22	82.04	18	a 81.59
28	80.78	11	81.26	23	82.06	25	a 82.09
29	80.70	12	81.44	24	81.72	Apr. 1	a 81.78
30	80.88	13	81.44	25	81.88	8	a 81.34
31	80.98	14	81.68	26	81.86	15	a 81.34
Feb. 1	80.98	15	81.98	27	81.47	22	a 81.48

226 (173). W. S. Burkhardt property, 500 feet north from Clark Road and 300 feet east from Mill Creek.

Water level, in feet below measuring point, 1940

Jan. 5	65.05	Apr. 12	65.71	June 24	58.76	Sept.30	64.30
8	65.13	15	65.18	July 1	59.42	Oct. 7	64.42
15	65.17	20	64.33	8	59.60	14	64.95
16	65.48	22	63.83	15	59.99	21	65.43
22	65.56	24	62.94	22	60.26	28	65.58
29	65.79	25	62.92	29	60.59	Nov. 4	66.18
Feb. 5	66.41	27	62.61	Aug. 5	61.00	9	66.32
12	66.65	29	61.93	12	61.47	13	66.76
19	66.88	May 6	60.88	19	61.82	18	66.90
26	66.55	13	60.07	26	62.20	25	67.11
Mar. 4	66.13	20	59.77	31	62.47	Dec. 2	67.13
11	65.91	27	59.70	Sept. 4	62.68	9	67.38
18	65.53	June 3	59.46	9	63.68	16	67.30
25	65.81	10	58.93	16	63.38	23	67.77
Apr. 1	65.61	17	59.10	23	63.74	30	67.95
8	65.36						

Pit I. Reading Sand and Gravel Company pit, Granite and Jefferson Streets, Reading. Staff gage.

Water level, in feet above zero of staff gage, 1940

Jan. 5	1.54	Mar. 11	2.38	Apr. 25	6.68	June 24	4.84
8	1.54	18	2.62	27	6.82	July 1	4.67
15	1.67	25	2.58	29	6.90	8	4.44
22	1.43	Apr. 1	2.54	May 6	6.98	15	4.37
29	1.42	8	2.57	13	6.54	22	4.34
Feb. 5	1.20	12	2.72	20	6.00	29	3.82
12	1.59	15	2.75	27	5.58	Sept.18	2.72
19	1.51	20	3.60	June 3	5.32	Oct. 16	2.18
26	1.76	22	5.77	10	5.15	Nov. 16	1.82
Mar. 4	2.16	24	6.60	17	5.08	Dec. 14	1.86

228 (123). Dr. William Bragg, Walnut Street, Reading. Measurements discontinued May 15, 1940.

Water level, in feet below measuring point, 1940

Jan. 17	13.33	Mar. 4	10.30	Apr. 17	10.40	May 15	10.92
Feb. 17	12.54	16	10.71	22	8.28		

T-80. W. S. Burkhardt property, east bank of East Fork of Mill Creek, 250 feet north from Amity Road, Arlington Heights. U. S. Geological Survey bored and driven test well, diameter 1¼ inches, depth 55.0 feet. Measuring point, top of 1¼-inch pipe, 0.4 foot above land surface.

Water level, in feet below measuring point, 1940

Aug. 12	46.10	Sept. 4	47.33	Sept.30	50.08	Oct. 28	52.43
19	46.81	9	48.00	Oct. 7	50.64	Nov. 4	52.90
26	47.65	16	48.89	14	51.25	9	53.30
31	46.34	23	49.59	21	51.78	13	53.36

a Tape measurement.

Hamilton County--Continued.

T-80.--Continued.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 18	53.83	Dec. 2	53.54	Dec. 16	54.90	Dec. 30	54.13
25	54.34	9	54.55	23	54.90		

T-54. W. S. Burkhardt property, 100 feet east of east fork of Mill Creek along Amity Road, Reading. U. S. Geological Survey test well.

Water level, in feet below measuring point, 1940

Jan. 5	15.52	Apr. 8	13.64	June 10	13.40	Sept. 9	14.12
8	15.68	12	13.49	17	13.54	16	14.21
15	16.45	15	13.27	24	13.58	23	14.25
16	16.30	19	12.20	July 1	13.63	30	14.33
22	16.37	20	8.32	8	13.16	Oct. 7	14.34
29	16.39	22	11.82	15	13.78	14	14.38
Feb. 5	16.40	24	12.30	22	13.77	21	14.48
12	17.05	25	12.49	29	13.80	28	14.54
19	16.88	27	12.77	Aug. 5	13.88	Nov. 4	14.56
26	16.00	29	12.90	12	13.93	9	14.65
Mar. 4	13.73	May 6	13.25	19	13.99	13	14.72
11	13.52	13	13.40	26	14.02	18	14.78
18	13.49	20	12.77	31	14.06	25	14.79
25	13.57	27	13.62	Sept. 4	14.10	Dec. 14	15.26
Apr. 1	13.45	June 3	13.44				

Springfield Township

237-5 (13). Village of Wyoming, municipal water plant, Vine and Water Streets, Wyoming.

Lowest daily water level, in feet below measuring point, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	119.34	120.20	120.43	120.31	120.18	120.42
2	119.68	120.35	120.41	120.15	120.09	116.75
3	119.87	120.50	116.75	120.29	120.34	120.47
4	119.90	120.31	119.96	120.12	120.57	120.57
5	119.86	120.32	120.17	120.52	117.15	120.66
6	120.14	119.70	120.38	120.50	120.37	120.75
7	120.03	119.87	120.13	119.71	120.46	120.76
8	119.70	120.15	120.19	120.04	120.50	120.70
9	120.15	120.14	120.32	120.75	120.48	.....
10	120.07	119.89	119.93	120.77	120.46	120.90
11	119.67	119.82	120.55	120.57	120.56	120.77
12	119.60	119.76	120.51	120.85	120.26	120.86
13	119.76	120.08	120.41	120.72	120.12	120.94
14	119.17	120.07	120.52	116.45	120.17	121.00
15	119.75	120.46	120.55	119.87	120.55	120.69
16	120.07	120.66	120.81	120.45	120.50	117.22
17	119.66	120.60	117.45	120.20	120.70	120.69
18	119.93	120.14	120.13	120.72	120.25	120.83
19	120.14	119.50	120.37	120.38	115.60	120.96
20	119.92	119.79	120.65	119.68	120.08	121.15
21	120.04	120.18	120.44	115.87	120.45	121.27
22	120.05	120.47	120.70	120.33	120.43	120.72
23	120.08	120.76	120.68	120.43	120.26	117.60
24	120.03	120.35	116.65	120.70	120.23	120.28
25	120.33	120.53	120.78	120.69	120.32	120.56
26	120.28	120.42	120.56	120.82	119.13	120.86
27	120.26	119.97	120.40	120.80	120.37	120.93
28	120.35	120.04	120.44	116.60	120.58	120.78
29	120.37	120.62	120.27	120.26	120.62	120.96
30	120.03	.....	120.16	120.22	120.41	116.90
31	120.29	.....	115.95	.....	120.40	.....

Hamilton County--Continued.

237-5 (13).--Continued.

Lowest daily water level, in feet below measuring point, 1940
(from recorder charts)

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	120.71	121.64	121.09	122.80	123.00	123.63
2	120.81	121.68	121.46	122.93	123.00	123.85
3	121.02	121.69	121.50	123.06	122.41	123.87
4	121.10	121.67	121.71	123.14	122.87	123.44
5	121.24	121.73	121.80	123.10	122.83	123.51
6	121.10	121.85	121.85	122.62	123.28	123.50
7	121.00	121.86	121.87	122.76	123.46	123.32
8	120.69	121.65	121.75	122.42	123.55	123.55
9	120.86	121.68	120.81	123.00	123.21	123.36
10	120.85	121.70	121.29	123.05	122.99	123.46
11	120.87	121.70	121.56	123.11	123.16	123.72
12	121.16	121.50	121.78	122.58	123.38	123.55
13	121.28	121.52	121.80	121.68	123.36	123.85
14	121.19	121.53	121.73	122.39	123.26	123.90
15	121.06	121.58	121.48	122.98	123.11	123.57
16	121.11	121.69	121.65	122.86	123.18	122.83
17	121.21	121.71	121.78	122.80	123.55	123.62
18	121.23	121.63	121.82	122.86	123.77	123.75
19	121.13	121.83	121.80	122.39	123.68	123.71
20	121.16	121.88	121.80	121.84	123.41	123.49
21	121.18	121.92	122.25	122.62	123.46	123.52
22	120.92	121.70	121.93	122.63	123.69	123.46
23	120.92	121.85	121.99	122.65	123.62	123.06
24	120.93	121.94	121.84	121.54	123.68	123.21
25	121.00	121.87	122.24	122.51	123.85	122.98
26	121.08	121.30	122.37	122.77	123.26	122.57
27	121.20	121.48	122.15	122.68	123.10	122.63
28	121.41	121.54	122.63	122.47	123.54	122.56
29	121.47	121.56	122.60	122.81	123.16	122.71
30	121.40	121.76	122.72	122.96	123.31	123.00
31	121.49	121.32	.....	123.00	.....	123.31

240-10 (14). Gardner-Richardson Company, South Cooper Avenue, Lockland.

Lowest daily water level, in feet below measuring point, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	117.48	122.52	121.90	118.22	118.93	123.35
2	118.51	123.06	121.53	118.54	118.82	123.42
3	119.50	122.98	120.70	118.06	118.66	123.10
4	119.78	121.90	121.48	118.96	118.79	123.15
5	120.47	121.05	122.19	118.82	118.80	123.25
6	120.83	122.00	122.33	118.84	118.76	123.34
7	120.43	122.95	121.75	117.75	118.52	123.45
8	119.95	123.48	121.07	117.04	119.25	123.52
9	120.43	123.70	121.10	117.55	119.54	123.53
10	120.51	123.69	120.66	117.66	119.64	123.10
11	120.60	123.25	120.41	118.35	119.75	123.35
12	120.94	122.65	120.25	119.51	119.82	123.55
13	121.14	122.30	120.04	119.91	119.37	123.74
14	120.00	122.33	120.03	119.51	120.30	123.82
15	120.34	122.38	119.86	118.31	120.92	123.91
16	120.38	122.49	120.01	118.44	121.05	123.95
17	120.76	122.18	119.72	119.20	120.88	123.88
18	121.39	121.67	118.93	120.34	120.93	123.91
19	121.90	121.98	119.17	120.74	120.80	123.92
20	121.80	122.92	119.45	121.50	120.77	124.02
21	121.00	123.20	119.25	121.62	121.58	124.10
22	121.18	122.79	119.02	120.87	122.07	124.06
23	121.80	122.75	119.00	120.34	122.39	123.90
24	122.10	122.34	118.80	120.10	122.69	123.19
25	122.64	122.31	118.95	119.93	122.82	123.44
26	122.71	121.97	118.74	119.87	122.16	123.67
27	122.39	121.92	118.40	119.84	121.38	123.74
28	121.75	122.20	118.42	119.50	121.52	123.63
29	121.15	122.17	118.35	118.50	122.22	123.76
30	121.92	.....	118.47	118.68	122.65	123.73
31	122.41	.....	118.00	.....	123.10	.....

Hamilton County--Continued.

240-10 (14).--Continued.

Lowest daily water level, in feet below measuring point, 1940
(from recorder charts)

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	123.43	125.03	126.10	124.50	122.80	123.15
2	123.37	125.15	125.18	123.81	123.20	122.86
3	123.43	125.21	124.75	123.25	122.78	122.63
4	123.16	125.04	125.21	122.60	122.43	122.06
5	121.81	.....	125.50	122.60	121.96	122.10
6	121.09	123.95	125.65	122.96	121.96	121.95
7	120.40	124.19	125.76	123.54	121.73	121.60
8	119.84	124.41	125.77	124.26	121.66	121.83
9	119.45	124.66	125.15	124.74	121.92	121.35
10	119.16	124.94	125.73	124.99	122.48	121.83
11	120.55	125.05	125.94	125.28	122.45	121.93
12	121.80	124.33	126.09	125.51	123.09	121.74
13	122.32	124.77	126.14	125.64	122.50	121.60
14	122.65	125.15	126.18	125.20	121.88	121.66
15	123.10	125.45	126.24	125.78	121.58	121.55
16	123.29	125.70	125.90	125.87	121.52	121.40
17	123.10	125.78	126.14	126.09	121.15	121.54
18	123.60	125.77	126.26	126.19	121.71	121.74
19	123.82	125.40	126.31	126.09	121.37	121.61
20	123.93	125.46	126.37	126.32	121.00	121.35
21	124.10	125.56	126.42	125.78	120.92	121.17
22	123.70	125.72	126.44	126.00	120.86	120.96
23	123.96	125.95	125.77	126.13	121.46	120.70
24	124.25	126.00	126.05	125.55	121.13	120.26
25	124.58	125.93	126.58	124.90	121.37	119.68
26	124.73	125.36	126.63	124.30	121.78	119.05
27	124.92	125.68	126.56	123.85	123.10	118.90
28	125.02	125.88	126.59	123.62	123.57	118.55
29	124.25	126.02	125.66	123.29	124.13	118.40
30	124.46	126.20	124.67	123.20	124.17	118.48
31	124.82	125.98	.....	122.85	.....	118.51

243-2 (26). City Ice and Fuel Company, Wayne and Cooper Avenues, Lockland.

Lowest daily water level, in feet below measuring point, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	133.35	134.66	134.58	133.40	133.20	138.16
2	133.65	134.99	134.55	133.52	133.21	138.05
3	133.77	134.96	134.15	133.43	133.40	138.08
4	133.74	134.48	134.34	134.18	133.55	138.16
5	134.03	134.00	134.55	133.72	133.64	138.23
6	134.20	134.02	134.58	133.82	133.36	138.37
7	134.03	134.59	134.44	133.93	133.40	138.33
8	133.92	134.75	134.32	132.78	133.70	138.42
9	134.23	134.79	134.44	133.28	133.91	138.37
10	134.20	134.64	134.37	133.37	133.87	138.30
11	133.97	134.51	134.33	133.56	133.94	138.48
12	134.06	134.44	134.30	133.90	133.93	138.64
13	134.07	134.43	134.25	133.88	a 134.25	138.94
14	133.54	134.68	134.29	133.67	133.77	139.00
15	134.25	134.96	134.23	132.87	a 134.76	139.12
16	134.28	135.00	134.25	133.31	136.40	138.97
17	134.25	134.81	134.20	133.48	136.57	138.97
18	134.54	134.39	133.78	134.12	136.60	139.12
19	134.63	134.10	133.85	134.13	136.22	139.31
20	134.48	134.67	134.05	134.15	136.16	139.51
21	134.20	134.87	133.96	134.17	137.53	139.66
22	134.38	135.00	133.97	133.80	137.56	139.30
23	134.37	135.03	134.00	133.80	137.67	138.87
24	134.65	134.75	134.03	134.05	137.60	138.84
25	134.81	134.84	134.10	134.06	137.60	138.65
26	134.76	134.65	133.94	134.16	137.52	138.91
27	134.75	134.20	133.50	134.10	137.78	138.97
28	134.57	134.45	133.61	133.94	137.83	137.82
29	134.30	134.60	133.65	133.44	137.88	137.90
30	134.58	.....	133.35	133.25	138.00	137.65
31	134.72	.....	133.26	.....	137.91	.....

a Pumping at plant.

Hamilton County--Continued.

243-2 (26).--Continued.

Lowest daily water level, in feet below measuring point, 1940
(from recorder charts)

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	135.70	139.41	139.67	136.75	136.84	137.03
2	135.76	139.50	139.54	136.58	137.03	137.00
3	135.81	139.55	139.62	136.66	137.04	137.10
4	137.72	139.45	139.77	136.68	136.75	136.75
5	135.74	139.16	139.82	136.70	136.58	136.91
6	135.44	139.28	139.89	136.68	136.68	136.85
7	135.05	139.41	139.81	136.50	136.65	136.64
8	136.46	139.42	139.57	136.73	136.71	136.70
9	137.67	139.52	139.16	136.98	136.65	136.56
10	137.72	139.64	139.57	137.09	136.61	136.79
11	134.83	139.67	138.72	137.03	136.62	136.85
12	135.21	139.30	139.52	137.03	136.98	136.70
13	135.33	139.41	139.75	137.01	136.88	136.93
14	135.25	139.49	139.68	136.78	136.82	136.99
15	135.06	139.67	139.67	137.09	136.57	136.85
16	135.18	139.83	139.68	137.16	136.50	136.34
17	135.37	139.90	139.80	137.19	136.54	136.80
18	135.50	139.80	139.85	137.27	136.75	136.85
19	135.55	139.80	139.88	137.11	136.65	136.75
20	135.56	140.01	139.87	137.10	136.44	136.48
21	135.53	140.04	139.85	137.25	136.35	136.58
22	135.34	140.02	139.84	137.32	136.40	136.46
23	135.32	140.14	139.62	137.25	136.51	136.44
24	135.40	140.07	139.71	137.09	136.42	136.25
25	135.51	139.71	140.43	137.03	136.51	135.90
26	137.50	139.36	140.45	137.04	136.30	135.60
27	138.83	139.41	140.30	136.98	136.77	135.60
28	138.95	139.65	140.21	136.75	137.06	135.37
29	137.99	139.77	139.20	136.70	137.00	135.61
30	139.05	139.82	137.12	136.83	136.99	136.08
31	139.24	139.88	.....	136.81	.....	136.18

244 (160). George Waldmann, 320 Elliott Avenue, Arlington Heights. Water level, in feet below measuring point, 1940: Mar. 16, dry; Apr. 22, 25.28; Apr. 24, 25.08. Measurements discontinued.

245 (161). A Tieman, Cherry Hill Road, Hartwell.
Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	28.94	Apr. 25	26.04	June 3	26.13	July 22	26.80
Feb. 17	28.82	27	25.94	10	26.15	29	26.94
Mar. 4	28.55	29	25.84	17	26.25	Aug. 16	27.29
16	28.26	May 6	25.74	24	26.38	Sept.18	27.68
Apr. 17	28.10	13	25.34	July 1	26.47	Oct. 16	28.04
20	27.79	20	25.88	8	26.53	Nov. 16	28.49
22	26.79	27	26.07	15	26.67	Dec. 14	28.85
24	26.15						

T-57. Waldmann Estate, west end of property, rear of 406 Elliott Avenue, Arlington Heights. U. S. Geological Survey test well.
Water level, in feet below measuring point, 1940

Jan. 5	(a)	May 6	42.10	June 24	43.67	Aug. 12	48.97
Apr. 20	48.69	13	42.34	July 1	44.25	19	49.75
22	44.50	20	42.92	8	44.47	26	50.37
24	43.27	27	43.03	15	45.09	31	50.53
25	42.93	June 3	42.76	22	46.69	Sept. 4	50.72
27	42.50	10	42.20	29	47.44	9	50.92
29	42.07	17	43.00	Aug. 5	48.30	16	(b)

a Well dry Jan. 5 to Apr. 20.
b Well dry Sept. 16 to Dec. 30.

Hamilton County--Continued.

T-55. Waldmann Estate, west side of West Fork of Mill Creek, Amity Road, Arlington Heights. U. S. Geological Survey test well.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	(a)	May 6	37.37	June 24	38.80	Aug. 5	43.56
Apr. 20	41.10	13	38.03	July 1	39.41	12	44.25
22	37.97	20	38.55	8	40.08	19	44.98
24	37.28	27	38.75	15	41.03	26	45.61
25	37.06	June 3	37.73	22	41.99	31	45.58
27	36.85	10	36.98	29	42.74	Sept. 4	(b)
29	36.65	17	37.97				

T-64. Mrs. Ann Frank, 8033 Woodbine Avenue, Hartwell. U. S. Geological Survey test well.

Water level, in feet below measuring point, 1940

Jan. 17	18.53	Apr. 24	14.54	June 3	16.82	July 22	17.56
Feb. 17	18.47	25	14.75	10	16.92	29	17.72
Mar. 4	18.08	29	15.42	17	17.09	Aug. 16	17.85
16	17.70	May 6	16.09	24	17.20	Sept.18	18.09
Apr. 17	17.60	13	16.49	July 1	17.26	Oct. 16	18.27
19	17.19	20	16.76	8	17.32	Nov. 16	18.43
20	15.70	27	16.97	15	17.50	Dec. 14	18.53
22	14.28						

T-16. Hamilton County Agricultural Society, Carthage Fair Grounds, Vine Street and Mill Creek, Carthage. U. S. Geological Survey test well. Measurements discontinued July 29, 1940.

Water level, in feet below measuring point, 1940

Jan. 5	16.27	Mar. 4	14.18	Apr. 20	9.38	June 3	13.95
8	16.28	11	16.09	22	10.95	10	14.52
15	15.92	18	15.32	24	12.60	17	14.77
16	16.08	25	15.48	25	12.83	24	15.03
22	16.29	Apr. 1	15.38	29	13.53	July 1	15.12
29	16.27	8	15.47	May 6	14.00	8	15.36
Feb. 5	16.26	15	14.94	13	14.32	15	15.46
12	15.47	18	14.25	20	14.73	22	15.55
19	15.05	19	9.62	27	14.63	29	15.66
26	15.64						

Pit H. North Cincinnati Sand and Gravel Company, Fair Park Avenue and Vine Street, Carthage: Measurements discontinued and gage removed Dec. 11, 1939.

T-63. Lunkenheimer Valve Company, North Bend Road and Baltimore and Ohio Railroad, Carthage. U. S. Geological Survey test well.

Water level, in feet below measuring point, 1940

Jan. 5	23.46	Mar. 18	23.32	May 20	22.32	Aug. 5	22.66
8	23.49	25	23.45	27	22.40	12	22.72
15	23.45	Apr. 1	23.53	June 3	22.29	19	22.80
16	23.47	8	23.68	10	22.27	26	22.83
22	23.58	15	23.40	17	22.27	31	22.65
29	23.63	20	22.22	24	22.31	Sept. 4	22.79
Feb. 5	23.73	22	22.08	July 1	22.24	9	22.89
12	23.52	24	22.09	8	22.38	18	23.07
19	23.49	25	22.10	15	22.47	Oct. 16	23.47
26	23.46	29	22.29	22	22.50	Nov. 16	23.85
Mar. 4	23.28	May 6	22.19	29	22.62	Dec. 14	24.08
11	23.24	13	22.26				

Mill Creek Township

252 (104). Flintkote Company, Seventy-fifth Street and Longview Avenue, Carthage.

a Well dry Jan. 5 to Apr. 20.
b Well dry Sept. 4 to Dec. 30.

Hamilton County--Continued.

252 (104).--Continued.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	95.80	Apr. 8	97.15	July 15	95.07	Oct. 14	96.05
8	95.94	15	97.04	22	95.48	21	96.45
15	96.19	22	96.82	29	95.86	28	96.64
22	96.25	29	96.60	Aug. 5	96.08	Nov. 4	96.77
29	96.15	May 6	96.62	12	96.37	9	96.97
Feb. 5	96.40	13	96.42	19	96.84	13	97.24
12	96.41	20	96.47	26	96.80	18	97.30
19	96.32	27	96.45	31	96.62	25	97.39
26	96.43	June 3	96.40	Sept. 4	96.43	Dec. 2	97.47
Mar. 4	96.64	10	96.55	9	96.09	9	97.55
11	96.86	17	96.47	16	95.94	16	97.33
18	96.77	24	95.96	23	95.64	23	97.17
25	97.00	July 1	95.69	30	95.52	30	97.09
Apr. 1	97.06	8	95.32	Oct. 7	95.79		

253 (143). Pollak Steel Company, Morton Road and Mill Creek, Cincinnati. Measurements discontinued June 17, 1940.

Water level, in feet below measuring point, 1940

Jan. 16	74.68	Mar. 4	74.86	Apr. 17	75.30	May 15	74.92
17	74.49	16	74.96	22	75.05	June 17	75.35
Feb. 17	74.92						

T-15. City of Elmwood Place, Township Avenue, and Mill Creek, Elmwood Place. U. S. Geological Survey test well. Measuremerts discontinued July 29, 1940.

Water level, in feet below measuring point, 1940

Jan. 5	14.96	Feb. 26	13.00	Apr. 20	12.13	June 10	15.30
8	14.99	Mar. 4	10.63	22	14.11	17	15.30
15	14.54	11	13.10	29	15.42	24	15.28
22	14.69	18	14.74	May 6	14.54	July 1	15.17
29	14.87	25	14.97	13	14.81	8	15.37
Feb. 5	14.97	Apr. 1	15.02	20	15.05	15	15.42
12	13.95	8	15.09	27	15.20	22	15.45
17	13.92	15	14.67	June 3	15.29	29	15.36
19	13.05						

Pit K. George L. Rack Sand and Gravel Company pit, Este and Township Avenues, Elmwood Place. Staff gage. Measurements discontinued June 17, 1940.

Water level, in feet above zero of staff gage, 1940

Jan. 17	11.40	Mar. 4	12.92	Apr. 17	14.58	June 17	14.46
Feb. 17	11.60	16	13.46	20	16.10		

265 (105). Cities Service Oil Company, Laidlaw Avenue and Norfolk and Western Railroad, Cincinnati.

Water level, in feet below measuring point, 1940

Jan. 17	120.89	Mar. 25	121.56	May 6	121.74	July 22	122.38
Feb. 17	121.24	Apr. 1	121.24	13	121.60	Sept.18	123.09
Mar. 4	121.18	8	120.90	20	121.86	Oct. 16	123.32
11	121.47	15	121.03	27	122.05	Nov. 16	123.03
16	121.23	22	121.59	June 3	122.08	Dec. 14	123.81
18	120.96	29	121.50	July 15	122.16		

270-25 (17-T). Procter and Gamble Company, Ross Run well field, Vine Street and Big Four Railroad. Well is in bed of abandoned Miami and Erie Canal, 500 feet south from Murray Road, Ivorydale. Automatic water-stage recorder in operation Aug. 31, 1939 to Mar. 1, 1940.

Daily lowest water level, in feet below measuring point, 1940
(from recorder charts)

Jan. 1	114.00	Jan. 9	114.46	Jan. 17	114.53	Jan. 25	114.48
2	114.06	10	114.44	18	114.71	26	114.45
3	114.14	11	114.25	19	114.73	27	114.38
4	114.16	12	114.40	20	114.64	28	114.38
5	114.38	13	114.43	21	114.61	29	114.29
6	114.50	14	114.11	22	114.58	30	114.46
7	114.42	15	114.59	23	114.54	31	114.60
8	114.30	16	114.66	24	114.42	Feb. 1	114.60

a Tape measurement.

Hamilton County--Continued.

270-25 (17-T).--Continued.
Lowest daily water level, in feet below measuring point, 1940
(from recorder charts)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	114.79	Feb. 21	114.87	May 13	a114.94	Sept.16	a116.29
3	114.79	22	115.04	20	a115.15	23	a116.25
4	114.50	23	115.09	27	a115.37	30	a116.36
5	114.32	24	114.76	June 3	a115.12	Oct. 7	a116.23
6	114.32	25	114.69	10	a115.25	14	a116.44
7	114.68	26	114.69	17	a115.49	16	a116.80
8	114.76	27	114.34	24	a115.16	21	a116.65
9	114.69	28	114.57	July 1	a115.36	28	a116.59
10	114.64	29	114.72	8	a114.75	Nov. 4	a116.59
11	114.58	Mar. 4	a114.43	15	a114.95	9	a116.95
12	114.60	11	a114.66	22	a115.44	13	a117.16
13	114.67	18	a114.27	29	a115.75	18	a117.05
14	114.84	25	a114.70	Aug. 5	a115.81	25	a116.70
15	114.97	Apr. 1	a114.53	12	a115.93	Dec. 2	a116.85
16	114.98	8	a114.17	19	a116.08	9	a116.87
17	114.92	15	a114.45	26	a115.85	16	a116.50
18	114.52	22	a115.00	31	a116.32	23	a117.10
19	114.33	29	a114.97	Sept. 4	a116.11	30	a117.22
20	114.69	May 6	a115.04	9	a115.92		

270-A4 (17-2). Procter and Gamble Company well A-4, Ross Run well field, south side of Ross Run, Vine Street at Big Four Railroad, Ivorydale.
Lowest daily water level, in feet below measuring point, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	88.32	89.45	90.14	91.58	91.46	91.25	89.98	91.42	91.45	91.79	92.03	91.57
2	88.60	89.68	90.12	91.64	91.55	90.04	89.68	91.46	91.60	91.94	92.11	91.85
3	88.68	89.62	88.89	91.56	91.27	90.45	89.46	91.50	91.18	92.04	91.61	92.03
4	88.72	88.85	88.85	91.80	91.25	90.89	88.75	91.04	91.47	92.09	91.68	92.00
5	89.00	89.04	89.02	91.87	90.34	91.15	88.84	91.16	91.62	92.10	91.95	92.40
6	89.11	89.38	89.20	91.88	90.75	91.30	88.76	91.42	91.70	91.65	92.03	92.38
7	88.06	89.70	90.00	90.20	91.06	91.44	89.03	91.50	91.75	91.45	92.03	92.41
8	88.55	89.75	90.63	90.96	91.31	91.50	89.65	91.56	91.15	91.77	92.12	91.94
9	88.75	89.75	90.82	91.66	91.40	91.15	89.97	91.60	90.71	91.92	92.07	91.40
10	88.77	89.68	89.78	91.76	91.48	91.26	90.15	91.66	91.29	91.99	91.40	92.05
11	88.74	89.10	90.42	92.02	91.60	91.34	90.35	91.35	91.51	91.95	91.30	92.13
12	88.99	89.25	90.75	92.12	91.00	91.39	90.63	91.47	91.60	91.95	91.63	92.35
13	88.96	89.40	91.07	92.02	90.77	91.43	90.70	91.54	91.66	91.47	91.76	92.51
14	88.28	89.92	91.19	91.45	91.01	91.43	90.42	91.65	91.70	91.10	91.81	92.56
15	88.92	90.02	91.32	91.58	91.28	91.40	90.51	91.69	91.17	91.65	91.89	91.95
16	88.94	90.00	91.33	92.00	91.39	91.00	90.70	91.75	91.02	91.72	91.89	91.84
17	89.09	89.95	90.50	92.00	91.45	91.06	90.85	91.76	91.34	91.89	91.72	92.25
18	89.25	89.17	90.65	92.26	91.50	91.14	90.98	91.26	91.50	91.97	91.93	92.33
19	89.08	89.32	90.89	92.24	90.90	91.30	91.08	91.53	91.60	91.93	91.98	92.31
20	89.07	89.80	91.31	92.14	91.00	91.37	91.15	91.64	91.69	91.50	91.99	92.45
21	88.92	89.95	91.37	91.86	91.32	91.45	90.95	91.69	91.74	91.32	92.00	92.56
22	89.15	90.26	91.57	91.10	91.46	91.38	90.68	91.74	91.20	91.48	91.60	92.03
23	89.17	90.29	91.62	91.94	91.53	89.85	90.95	91.84	91.10	91.64	90.71	91.50
24	89.43	90.09	90.25	92.15	91.67	90.00	91.13	91.86	91.46	91.75	90.40	91.78
25	89.49	89.94	90.69	92.13	91.71	90.42	91.29	90.93	91.90	91.89	90.58	91.39
26	89.15	89.72	90.86	92.22	91.25	90.67	91.36	91.02	91.95	91.96	91.00	91.45
27	89.35	89.62	91.14	92.18	91.40	90.90	91.44	91.32	91.90	91.48	91.57	91.67
28	89.06	89.95	91.30	91.32	91.45	91.05	91.12	91.51	91.94	91.32	91.80	91.84
29	88.91	90.06	91.49	90.82	91.48	91.22	90.91	91.62	91.50	91.62	91.94	90.72
30	89.30	.....	91.48	91.03	91.50	90.98	91.15	91.75	91.60	91.80	91.94	91.37
31	89.39	.....	91.42	.....	91.18	.....	91.30	91.76	.....	91.85	.....	91.66

306-1. United States Engineer Office, War Department, test hole, NE¼SE¼ sec. 30, F.R. 1, T. 3, 310 feet east from Evans Street and 270 feet south from Eighth Street Viaduct, Mill Creek Valley. Test well, diameter 3⅛ inches, depth 7.26 feet. Measuring point, top of 3⅛-inch casing, 3.6 feet above land surface. Automatic water stage recorder installed Sept. 12, 1940.

a Tape measurement.

Hamilton County--Continued.

306-1.--Continued.
Lowest daily water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 12	46.79	Oct. 10	47.86	Nov. 7	48.69	Dec. 5	48.20
13	46.83	11	47.90	8	48.72	6	48.19
14	46.88	12	47.93	9	48.74	7	48.15
15	46.92	13	47.97	10	48.76	8	48.15
16	46.96	14	48.00	11	48.78	9	48.15
17	47.00	15	48.03	12	48.78	10	48.16
18	47.04	16	48.06	13	48.78	11	48.18
19	47.08	17	48.09	14	48.78	12	48.21
20	47.12	18	48.12	15	48.74	13	48.24
21	47.16	19	48.16	16	48.68	14	48.24
22	47.20	20	48.18	17	48.61	15	48.22
23	47.24	21	48.22	18	48.58	16	48.20
24	47.29	22	48.25	19	48.59	17	48.19
25	47.33	23	48.28	20	48.60	18	48.14
26	47.37	24	48.31	21	48.63	19	48.10
27	47.41	25	48.34	22	48.66	20	48.08
28	47.45	26	48.37	23	48.69	21	48.08
29	47.48	27	48.40	24	48.72	22	48.08
30	47.52	28	48.43	25	48.74	23	48.02
Oct. 1	47.56	29	48.45	26	48.73	24	48.00
2	47.60	30	48.48	27	48.72	25	47.96
3	47.63	31	48.51	28	48.68	26	47.94
4	47.67	Nov. 1	48.53	29	48.60	27	47.95
5	47.70	2	48.56	30	48.55	28	47.98
6	47.74	3	48.59	Dec. 1	48.51	29	48.01
7	47.77	4	48.61	2	48.47	30	48.03
8	47.80	5	48.63	3	48.38	31	48.03
9	47.84	6	48.66	4	48.29		

Columbia Township

315-3 (15). Globe-Wernicke Company, Norwood and Carthage Avenues, Norwood.
Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	181.49	Apr. 8	180.84	July 15	181.19	Oct. 14	181.77
8	181.20	15	180.95	22	181.50	21	182.01
15	181.00	22	181.32	29	181.60	28	181.95
22	181.27	29	181.35	Aug. 5	181.61	Nov. 4	182.12
29	181.07	May 6	181.41	12	181.74	9	182.39
Feb. 5	180.84	13	181.32	19	181.66	13	182.52
12	180.79	20	181.25	26	181.60	18	182.55
19	180.70	27	181.53	31	182.10	25	182.20
26	181.35	June 3	181.65	Sept. 4	182.03	Dec. 2	182.30
Mar. 4	180.88	10	181.55	9	181.57	9	182.20
11	181.30	17	181.56	16	181.84	16	181.84
18	180.79	24	181.10	23	181.74	23	182.45
25	181.69	July 1	181.63	30	182.12	30	181.22
Apr. 1	181.25	8	181.71	Oct. 7	181.56		

316-14 (16-5). City of Norwood, municipal water plant, old well field, Harris and Forrest Avenues, Norwood. Automatic water-stage recorder in operation since July 12, 1938.

Lowest daily water level, in feet below measuring point, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	190.60	190.35	189.84	189.75	189.38	184.07
2	190.70	190.54	189.84	189.77	189.38	184.12
3	190.77	190.50	189.57	189.53	189.65	184.12
4	190.74	190.22	189.59	189.75	189.80	184.05
5	.....	189.97	189.59	190.06	187.05	184.08
6	.....	189.81	189.64	190.09	188.68	184.10
7	.....	190.09	189.63	189.81	188.70	184.01
8	190.89	190.10	189.50	189.36	188.10	185.86
9	191.03	190.03	189.63	189.85	188.20	183.96
10	190.92	189.82	189.73	189.93	188.28	183.98
11	190.62	189.36	189.83	189.82	188.32	184.04
12	190.10	189.87	189.80	.....	185.70	184.06
13	190.17	189.88	189.65	.....	187.54	184.12
14	190.02	190.08	189.68	.....	187.50	186.85

Hamilton County--Continued.

316-14 (16-5).--Continued.

Lowest daily water level, in feet below measuring point, 1940
(from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June
15	.....	190.30	189.70	189.34	187.50	184.68
16	.....	190.37	189.57	189.52	187.35	184.35
17	.....	190.33	189.58	.....	187.52	184.35
18	.....	190.05	189.38	.....	184.98	184.22
19	.....	189.52	189.47	.....	184.60	184.15
20	.....	189.77	189.60	.....	187.22	184.31
21	.....	189.98	189.61	.....	186.75	184.40
22	190.50	190.28	189.66	189.55	187.42	184.32
23	190.43	190.34	189.65	189.50	187.25	184.05
24	190.64	190.06	189.76	189.69	187.30	183.75
25	190.60	190.20	190.06	189.75	184.55	183.78
26	190.54	190.13	190.06	189.90	184.27	183.83
27	190.56	189.75	189.77	190.03	184.28	186.55
28	190.52	189.72	189.76	189.98	184.26	187.25
29	190.38	189.84	189.66	189.76	184.15	184.90
30	190.35	.....	189.65	189.57	184.09	184.67
31	190.41	.....	189.60	.....	183.93	.....

Lowest daily water level, in feet below measuring point, 1940
(from recorder charts)

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	184.44	189.80	190.90	187.46	186.50	191.68
2	184.43	189.88	191.40	186.85	190.56	188.80
3	184.45	190.08	188.22	186.63	191.47	187.72
4	184.56	190.67	187.20	186.54	188.55	187.23
5	184.65	189.55	186.77	190.55	187.29	186.89
6	184.57	187.15	186.55	191.25	186.93	186.87
7	184.44	186.56	189.87	188.45	186.79	190.50
8	184.62	189.18	190.61	187.13	186.74	191.53
9	184.75	189.21	188.04	186.85	190.44	188.80
10	184.84	186.95	186.60	189.79	191.13	187.27
11	187.57	186.31	186.52	187.00	188.04	187.24
12	188.77	186.11	186.43	190.44	187.19	189.94
13	189.26	189.07	186.35	191.16	187.10	187.88
14	186.70	186.75	190.33	188.25	186.93	191.05
15	185.56	186.05	191.37	187.03	186.64	191.58
16	185.15	188.75	188.80	190.82	190.18	188.26
17	185.05	187.50	187.37	191.41	191.21	187.48
18	185.04	185.95	186.93	188.28	188.40	187.44
19	187.79	185.83	186.66	190.75	.....	187.14
20	185.72	185.90	186.47	191.54	.....	189.15
21	185.07	185.84	190.50	188.45	.....	190.95
22	187.76	185.74	191.45	190.33	.....	191.62
23	187.61	185.81	188.75	187.60	.....	188.62
24	187.31	190.00	187.08	186.98	.....	189.90
25	187.95	190.60	186.85	186.76	188.62	190.90
26	188.20	187.55	186.88	190.66	187.85	188.15
27	188.16	186.52	188.93	191.54	187.02	187.10
28	185.95	186.15	190.79	190.17	187.15	180.25
29	188.08	186.00	191.73	187.65	186.79	191.32
30	188.75	185.94	189.10	187.05	190.35	188.60
31	189.10	189.70	.....	186.87	.....	188.05

316-2 (16-2). City of Norwood, municipal water plant well 2, Harris and Forest Avenues, Norwood. Automatic water-stage recorder in operation July 31, 1939 to Jan. 5, 1940. Measurements discontinued June 10, 1940.

Hamilton County--Continued.

316-2 (16-2).--Continued.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	a 191.44	Jan. 29	191.49	Mar. 18	190.79	May 6	190.25
2	a 191.57	Feb. 5	191.17	25	191.27	13	189.27
3	a 191.66	12	190.93	Apr. 1	191.09	20	188.53
4	a 191.66	19	190.74	8	190.86	27	188.30
5	a 191.60	26	191.43	15	190.99	June 3	188.07
15	191.08	Mar. 4	190.79	22	191.18	10	187.85
22	191.50	11	191.16	29	191.41		

326. Cincinnati Milling Machine Company, Madison and Marburg Roads, Oakley, SW¼NE¼ sec. 28, F. R. 2, T. 4. Abandoned drilled well, diameter 6 inches, depth 213 feet. Measuring point, top of 6-inch casing, 1.0 foot above land surface.

Water level, in feet below measuring point, 1940

Aug. 12	161.20	Sept. 16	162.27	Oct. 28	162.02	Dec. 2	162.65
19	161.03	23	161.55	Nov. 4	161.65	9	161.89
26	161.03	30	162.44	9	162.01	16	161.23
31	161.30	Oct. 7	161.79	13	162.78	23	161.74
Sept. 4	161.47	14	162.23	18	162.51	31	161.95
9	161.00	21	162.15	25	162.65		

CITY OF CANTON

By A. N. Sayre

The water levels in wells in Canton declined materially in 1940. The decline was due partly to the decreased recharge to the water-bearing beds, which resulted from considerably less-than-normal precipitation, and partly to the greatly increased pumpage, which resulted from the great increase in industrial activity that occurred during the year. The amount of the increase in pumpage is not known. Figures for the pumpage from the municipal wells are available for only the first eight months of the year. They indicate that the pumpage during that part of the year was nearly a third greater than during the same months of the preceding year.

Water levels in the municipal wells are available for about the beginning of each month from January to September. Water levels in two wells, the Republic Steel Co. test well and the Ohio Power Co. well, are available for the entire year. The Republic Steel Co. well is measured with a steel tape at weekly intervals. The Ohio Power Co. well has a continuous water-stage recorder established over it.

A total of 176 individual measurements of water level were made in 10 observation wells in 1939.

a Lowest daily water level, in feet below measuring point, determined from recorder charts.

2. City of Canton.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	51	Apr. 1	51	June 3	46	July 29	48
29	54	May 6	46	July 8	46	Sept. 2	50
Mar. 4	54						

3. City of Canton.

Water level, in feet below measuring point, 1940

Jan. 1	43	Apr. 1	44	June 3	39	July 29	41
29	47	May 6	39	July 8	39	Sept. 2	43
Mar. 4	47						

4. City of Canton.

Water level, in feet below measuring point, 1940

Jan. 1	46	Apr. 1	49	June 3	44	July 29	51
29	51	May 6	44	July 8	43	Sept. 2	48
Mar. 4	52						

5. City of Canton.

Water level, in feet below measuring point, 1940

Jan. 1	45	Apr. 1	45	June 3	40	July 29	43
29	47	May 6	41	July 8	40	Sept. 2	44
Mar. 4	48						

6. City of Canton. Measurements discontinued.

8. City of Canton.

Water level, in feet below measuring point, 1940

Jan. 1	44	Apr. 1	44	June 3	39	July 29	42
29	46	May 6	41	July 8	40	Sept. 2	44
Mar. 4	47						

9. City of Canton.

Water level, in feet below measuring point, 1940

Jan. 1	43	Apr. 1	44	June 3	40	July 29	42
29	47	May 6	40	July 8	39	Sept. 2	43
Mar. 4	47						

10. City of Canton.

Water level, in feet below measuring point, 1940

Jan. 1	45	Apr. 1	45	June 3	40	July 29	42
29	47	May 6	41	July 8	40	Sept. 2	45
Mar. 4	47						

11. City of Canton.

Water level, in feet below measuring point, 1940

Jan. 1	39	Apr. 1	39	June 3	34	July 29	36
29	41	May 6	33	July 8	33	Sept. 2	38
Mar. 4	42						

20. Lippert Street and Wormer Road, N. E.

Water level, in feet below measuring point, 1940

Jan. 2	35.21	Apr. 2	35.00	July 8	35.75	Oct. 9	38.15
10	35.42	9	35.08	16	35.96	16	38.33
16	35.50	16	35.25	25	36.17	22	38.46
23	35.71	23	34.87	30	36.25	29	38.62
29	35.79	30	34.71	Aug. 6	36.56	Nov. 5	38.75
Feb. 6	36.00	May 7	34.69	13	36.77	12	38.87
13	36.00	14	34.94	21	37.04	19	39.04
20	36.12	22	34.92	27	37.21	28	39.21
27	36.25	27	34.83	Sept. 4	37.35	Dec. 3	39.33
Mar. 5	34.85	June 4	34.83	10	37.54	11	39.50
12	34.79	11	35.06	17	37.75	17	39.58
19	34.92	18	35.15	24	37.92	24	39.73
26	35.08	July 1	36.54	Oct. 1	38.04		

Ohio Power Co.

Water level, in feet below measuring point, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	10.27	Apr. 8	10.22	July 8	10.96	Oct. 7	13.33
8	10.38	15	10.22	15	11.16	15	13.67
15	10.49	22	10.01	21	11.32	22	13.95
22	10.60	29	10.65	29	11.49	29	14.19
29	10.75	May 6	9.69	Aug. 6	11.67	Nov. 4	14.36
Feb. 5	10.87	13	9.85	12	11.82	11	14.35
12	10.90	20	10.04	20	12.02	18	14.32
21	10.97	27	10.20	27	12.21	25	14.31
28	11.02	June 3	10.27	Sept. 1	12.27	Dec. 2	14.69
Mar. 5	10.82	10	10.50	9	12.45	9	15.01
11	10.10	17	10.48	16	12.54	17	15.01
18	10.10	24	10.64	23	12.88	23	14.97
25	10.19	July 1	10.82	30	13.02	31	14.90
Apr. 1	10.26						

PENNSYLVANIA

By R. C. Baker

The program of observing ground-water levels in Pennsylvania, which was started in 1931, was continued in 1940 in cooperation with the Topographic and Geologic Survey of the Pennsylvania State Department of Internal Affairs. At the end of the year weekly measurements of ground-water levels were being made in 26 wells. An automatic water-stage recorder and rain gage were continued in use at well 100. A total of about 1,520 measurements of water level were made during the year.

During 1940 observations on five wells were discontinued. Measurements in well 26, at Dayton, and well 30, at Nebraska, were discontinued because the wells are situated within flood-control reservoirs. Well 5, at Greenville, was filled. No measurements have been reported for well 108, at Smethport, since December 22, 1937. Well 107, at Conrad, was abandoned because the measurements were inaccurate. Although the loss of these wells seriously impairs the observation-well program, it has not been possible to replace them.

In 1940 the water levels in 7 wells reached new high stages for the period of record--5 in April, 1 in June and 1 in August--and the water levels in 5 wells reached new low stages--2 in February, 1 in March, 1 in September and 1 in October. It is unusual for ground-water levels in Pennsylvania to reach low stages in February and March or high stages in June and August. These unusual stages are depicted by figure 9, which shows graphs of the weekly average for 1940, a composite of the averages from 1932 to 1939 and the highest and lowest weekly averages prior to 1940. The monthly precipitation for 1940 and the 53-year monthly normal precipitation are also shown for comparison. The relation between the 1940 average and the composite average is roughly comparable to the relation between the 1940 precipitation and the normal precipitation.

The weekly average on January 6, 1940, was 10.95 feet. On February 3, the average was 10.91 feet--the lowest average stage of the year. This low stage was followed by a rapid and continuous rise to April 20, when the average reached 17.54 feet--the highest average stage in 1940 and the second highest on record. The average water levels for February and for a part of March were below the corresponding composite averages even though the precipitation was above normal in both months. This was

because much of the precipitation occurred in the form of snow and ice which remained on the ground and was, therefore, not immediately available for recharging the underground reservoirs. Later, the melting snow and ice waters, together with the heavy precipitation, produced much recharge and the water levels rose to the highest average stage ever recorded in April. Throughout May, June, July and August the general trend of the water levels was downward, and on August 24 the level was at 11.08 feet, which was the lowest average reached in the last half of 1940. The levels rose slightly in September but dropped an average of about half a foot in October in response to the subnormal precipitation in that month. The average of ground-water levels was 2.5 feet above the composite average in April and continued above it until the latter part of August. The decline of the ground-water levels was only slightly more than the normal seasonal decline, which correlates with the slightly subnormal precipitation for the same period. In November and December, the levels rose much faster than the composite average. This rise was in response to the above-normal precipitation for these months.

The average water level on December 28 was 15.37 feet--0.75 foot higher than on comparable dates in any other year of record and 4.16 feet higher than in the last week of 1939. The range of 6.63 feet in 1940 was the second largest of record, being exceeded only by the range of 7.87 feet in 1936. Figure 9 shows that the average levels in January and February were the lowest recorded for those months, being nearly 2 feet below the composite average for previous years. Throughout most of April, June and July the averages were the highest averages of record for these months. Furthermore, during the entire period from the first of April to the end of 1940 except for one week in August and one week in October, the averages of the levels were higher than the composite averages for the same time in previous years of record.

Early in the decade ending with the year 1940, the systematic measurement of ground-water levels in Pennsylvania was begun. Measurements were made in a group of wells that covered the State in a fairly representative way. Figure 10 shows the weekly average from December 1, 1931, to December 31, 1940, and the monthly precipitation. It will be noted that the ground-water level is nearly always moving up or down and is rarely stationary. The water table is always higher in the late winter and spring than it is in the summer and fall. This normal seasonal fluctuation, as indicated by the composite curve, appears to have an amplitude of about 4 feet.

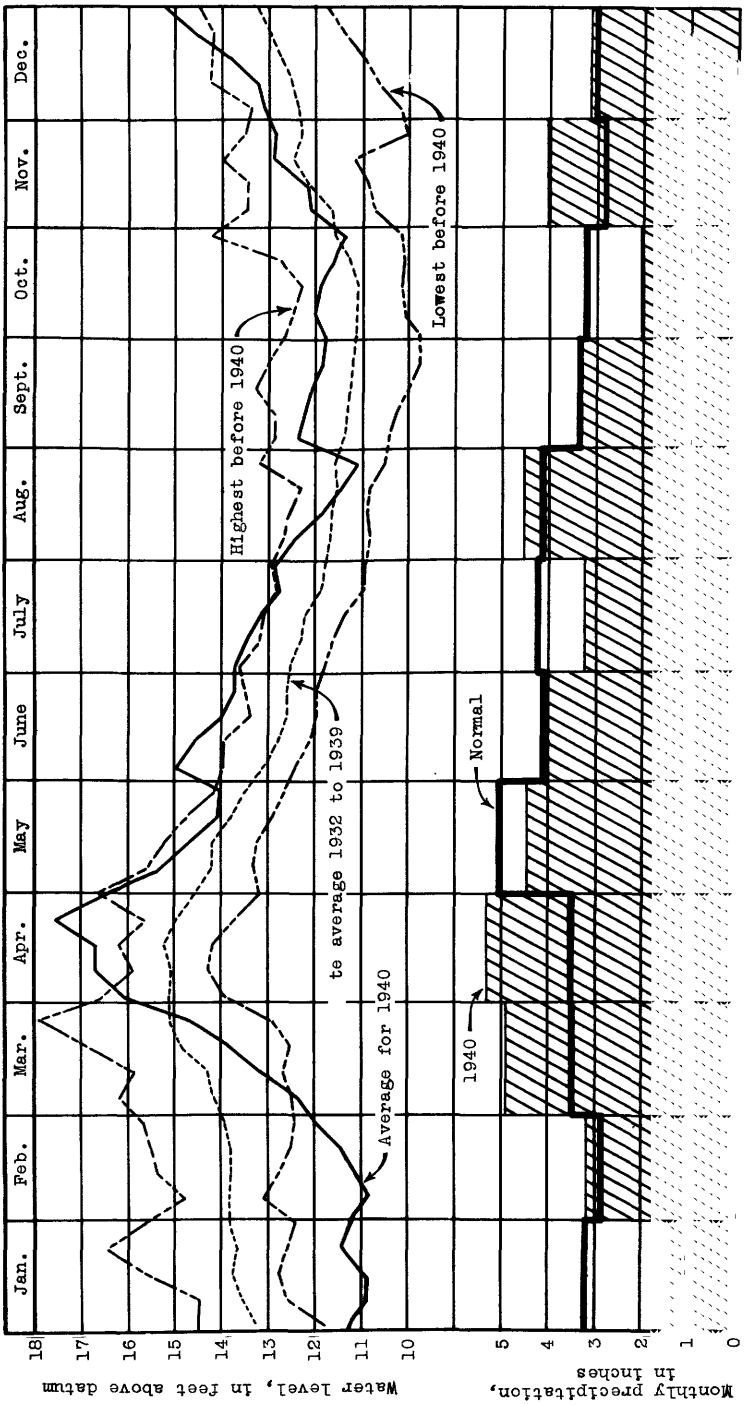


Figure 9.--Graphs showing comparison between ground-water levels and precipitation in Pennsylvania in 1940 with ground-water levels and precipitation in previous years.

The specific yield of the water-bearing formations in Pennsylvania is not large, and therefore departures from normal precipitation cause relatively large fluctuations of the water table. These fluctuations in average stage range in amplitude from less than a foot to about 2 feet. In general, a given excess of precipitation above the normal will cause a greater rise of the water table in the winter and spring than it will in the summer; a given deficiency of precipitation below normal will cause a greater decline of the water table in summer than it will in the winter or spring. These differences occur largely because in the summer evaporation from the soil and transpiration from plants reduce the amount of precipitation available for recharge.

Except for normal seasonal fluctuations, changes in ground-water level in Pennsylvania are hardly more predictable than the weather, even for a short period, because the fluctuations of water level follow the variations in precipitation so closely. This is illustrated by a comparison of fluctuations of ground-water levels in 1939 and 1940. The levels were lower in January, 1939, than in any previous January of record. In February, March and April they were intermittently the highest recorded up to that time but were followed in the summer and fall with the longest period of low water levels on record. In January and February 1940, the water levels were the lowest on record for those months but during the rest of the year they were relatively high.

The records from December 1, 1931, through 1940 do not give any indication of a long-term trend in ground-water levels. Such a long-term trend in Pennsylvania would depend chiefly on a similar trend in precipitation. The period of record is, however, too short to give any conclusive evidence as to whether such a trend exists.

In the following tables the water levels are expressed in feet above an assumed datum plane at each well. None of the wells is greatly affected by pumping. The table of weekly averages includes all wells except well 115.

Weekly average of water levels in observation wells in Pennsylvania, in feet above assumed datum planes, in 1940.

Date	Number of wells	Water level	Date	Number of wells	Water level
Jan. 6	29	10.95	July 6	28	13.45
13	29	10.93	13	28	13.13
20	29	11.37	20	28	12.70
27	29	11.16	27	28	12.81
Feb. 3	29	10.91	Aug. 3	28	12.44
10	29	11.13	10	28	11.85
17	28	11.40	17	28	11.41
24	28	11.95	24	28	11.08
Mar. 2	28	12.31	31	26	12.30
9	28	13.13	Sept. 7	27	12.18
16	28	13.77	14	27	12.01
23	28	14.68	21	27	11.81
30	27	16.10	28	27	11.77
Apr. 6	28	16.70	Oct. 5	25	11.99
13	28	16.63	12	24	11.89
20	28	17.54	19	24	11.56
27	28	16.43	26	24	11.31
May 4	28	15.27	Nov. 2	22	12.08
11	28	14.57	9	22	12.18
18	28	14.02	16	23	12.88
25	28	13.93	23	23	12.86
June 1	28	14.93	30	23	13.09
8	28	14.58	Dec. 7	23	13.25
15	28	13.97	14	23	13.82
22	28	13.68	21	23	14.67
29	28	13.68	28	23	15.37

Armstrong County

26. Near Milton. Measurements discontinued because of location within flood-control reservoir.

Water level, in feet above assumed datum, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	8.18	Mar. 16	10.60	May 25	9.70	Aug. 3	8.59
13	8.39	23	10.58	June 1	10.40	10	8.50
20	8.70	30	11.60	8	10.30	17	8.11
27	8.80	Apr. 6	10.80	15	10.20	24	5.81
Feb. 3	9.40	13	10.70	22	10.10	31	7.30
10	9.60	20	12.77	29	9.90	Sept. 7	5.48
17	9.99	27	10.52	July 7	10.00	14	5.41
24	10.16	May 4	9.98	13	9.73	21	5.99
Mar. 2	10.42	11	9.90	20	9.60	28	6.39
9	10.54	18	9.70	27	9.30		

Bedford County

45. West Saxton.

Water level, in feet above assumed datum, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	11.08	Mar. 20	18.56	June 1	14.11	Aug. 17	13.43
13	10.77	23	18.58	8	13.68	24	13.20
20	11.43	30	17.07	15	14.05	31	13.78
27	11.97	Apr. 6	25.56	22	14.16	Sept. 7	12.96
Feb. 3	11.52	13	22.95	29	14.46	14	12.48
10	11.60	20	22.11	July 6	13.86	21	11.97
16	12.30	27	23.88	13	13.87	28	11.84
17	12.41	May 2	20.02	20	13.41	Oct. 5	11.28
24	12.73	4	18.46	27	13.76	12	10.77
Mar. 2	12.62	11	15.62	31	14.47	19	10.44
9	15.80	18	14.67	Aug. 3	13.98	27	10.28
16	17.00	25	14.11	10	13.34		

Berks County

114. Bally.

Water level, in feet above assumed datum, 1940

Jan. 5	9.56	Apr. 5	12.66	July 5	11.53	Oct. 4	11.02
12	9.56	12	12.96	12	11.16	11	10.83
19	9.56	19	14.24	19	10.92	18	10.74
26	9.46	26	15.46	26	10.64	25	10.45
Feb. 2	9.16	May 3	14.54	Aug. 2	10.62	Nov. 1	10.16
9	a 8.95	10	14.86	9	10.42	8	9.85
16	9.16	17	14.35	16	10.24	15	10.75
23	9.45	24	14.24	23	10.06	22	11.03
Mar. 1	9.64	31	13.86	30	10.25	29	11.84
8	11.16	June 7	13.55	Sept. 6	10.69	Dec. 6	11.79
15	13.05	14	12.84	13	10.25	13	11.56
22	12.94	21	12.56	20	9.96	20	11.96
29	12.56	28	11.95	27	10.63	27	12.03

Bradford County

81. Monroeton.

Water level, in feet above assumed datum, 1940

Jan. 6	10.64	Apr. 21	13.38	July 14	11.81	Oct. 13	12.55
14	10.48	28	12.15	21	11.58	20	12.57
18	11.11	May 5	12.23	28	10.94	27	12.49
21	10.61	7	12.18	Aug. 4	10.64	Nov. 3	12.70
28	10.56	12	12.07	5	10.64	10	12.50
Feb. 4	10.54	19	12.13	11	10.61	13	12.47
11	10.49	26	12.52	18	10.50	17	12.91
Mar. 10	11.73	June 2	12.51	25	10.27	24	12.52
17	12.15	9	11.99	Sept. 1	12.15	Dec. 1	12.37
24	12.28	16	12.02	8	12.02	8	12.47
25	12.31	18	11.96	15	12.05	15	12.34
31	13.27	23	11.58	22	12.11	18	12.37
Apr. 7	12.32	30	11.95	29	12.55	22	12.32
14	12.11	July 7	11.48	Oct. 6	12.50	29	12.62

a Lowest stage of record.

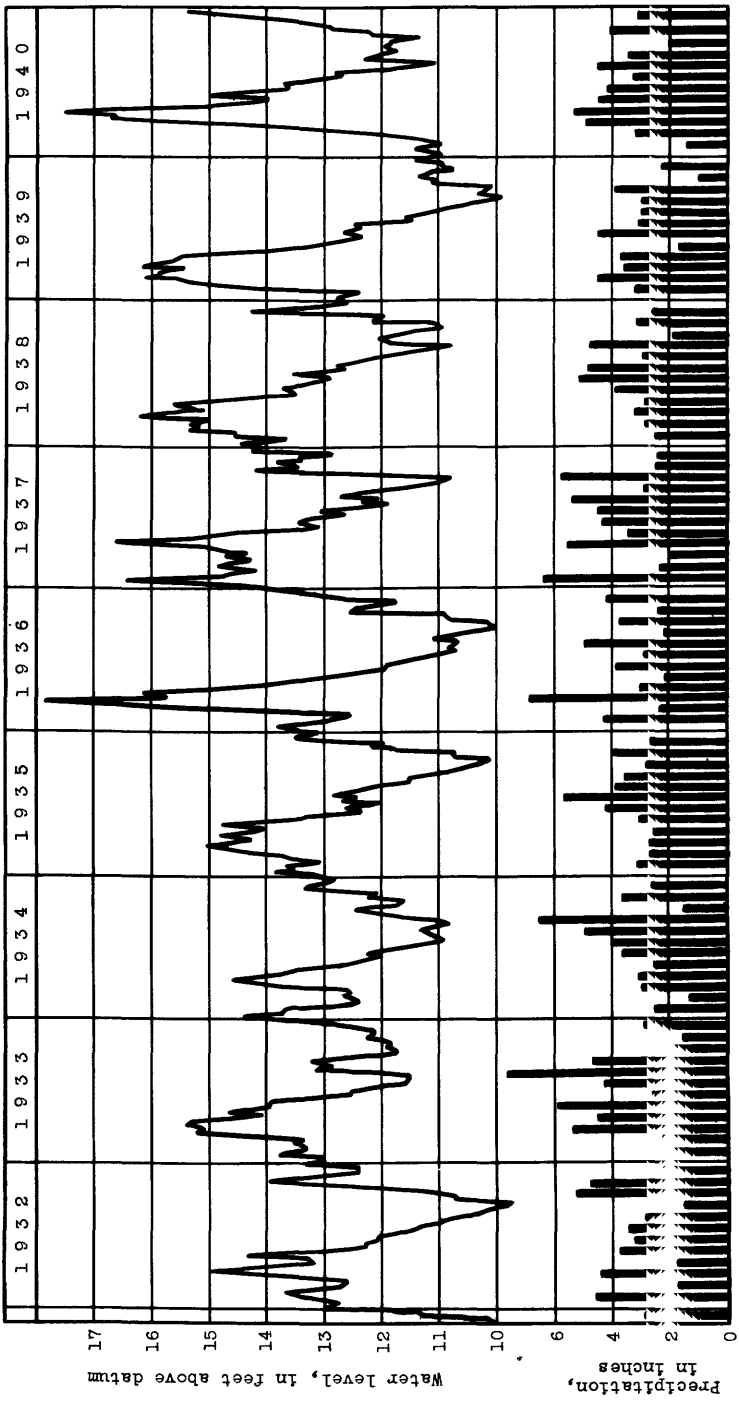


Figure 10.--Average weekly ground-water levels and average monthly precipitation in Pennsylvania

Bradford County--Continued.

82. East Towanda.

Water level, in feet above assumed datum, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	9.73	Apr. 20	30.98	July 14	19.90	Oct. 13	11.16
13	9.40	27	34.60	20	18.51	20	10.64
20	8.88	May 4	30.17	27	18.17	27	10.12
27	8.40	8	30.33	Aug. 3	18.08	Nov. 3	9.71
Feb. 3	8.00	12	27.64	6	17.00	10	9.65
10	8.04	18	25.02	11	16.46	13	10.34
17	7.27	26	23.35	18	15.82	17	11.15
24	6.86	June 2	35.99	25	15.20	24	12.68
Mar. 2	a 6.38	8	32.42	Sept. 1	14.58	Dec. 1	13.38
9	8.62	16	27.27	8	13.94	8	14.20
16	11.54	18	26.18	15	13.36	15	17.18
23	23.48	23	24.44	22	12.73	19	18.88
30	34.96	29	22.82	29	12.18	22	19.98
Apr. 6	31.41	July 7	20.98	Oct. 6	11.67	29	22.63
13	33.57						

Centre County

38. Central City

Water level, in feet above assumed datum, 1940

Jan. 6	10.82	Apr. 6	12.64	July 6	11.10	Oct. 5	11.06
13	10.80	13	12.42	13	11.06	12	11.00
20	11.00	20	12.24	20	11.00	19	10.96
27	10.94	27	11.88	27	11.05	26	10.95
Feb. 3	10.80	May 4	11.50	Aug. 3	10.72	Nov. 2	11.40
10	11.05	11	11.28	10	10.37	9	11.28
17	11.24	18	11.34	17	10.25	16	11.52
24	11.36	25	11.24	24	10.08	23	11.28
Mar. 2	11.48	June 1	11.36	31	10.68	30	11.34
9	11.68	8	11.44	Sept. 7	10.60	Dec. 7	11.22
16	11.82	15	11.32	14	10.99	14	11.52
23	11.75	22	11.18	21	11.02	21	11.55
30	11.88	29	11.32	28	11.16	28	12.00

Clarion County

103. Clarion.

Water level, in feet above assumed datum, 1940

Jan. 6	7.87	Mar. 30	12.11	June 22	11.59	Oct. 12	5.99
13	6.92	Apr. 6	12.90	29	11.85	19	5.79
20	9.44	13	13.84	Aug. 3	8.34	26	a 5.60
27	8.64	20	14.39	10	7.66	Nov. 2	5.61
Feb. 3	7.44	27	13.02	17	7.14	9	6.94
10	8.16	May 4	11.99	24	6.92	16	7.34
17	10.63	11	10.88	31	6.97	23	7.57
24	11.64	18	10.12	Sept. 7	6.99	30	8.13
Mar. 2	10.86	25	9.61	14	6.95	Dec. 7	9.52
9	12.51	June 1	11.22	21	6.44	14	11.21
16	11.42	8	11.37	28	6.39	21	12.09
23	12.69	15	10.14	Oct. 5	6.22	28	11.02

a Lowest stage of record.

Clearfield County

111. Near Bower.

Water level, in feet above assumed datum, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	10.05	Mar. 30	15.71	June 8	13.31	Sept.21	12.15
20	9.64	Apr. 1	15.49	15	13.04	28	11.77
27	10.47	6	15.19	22	12.75	Oct. 5	11.99
Feb. 6	10.59	15	15.97	29	12.93	Nov. 16	13.15
6	10.87	20	a16.68	July 19	12.29	20	12.98
10	10.84	25	15.84	Aug. 10	12.18	23	12.91
17	11.53	27	15.20	17	12.10	30	13.34
24	12.39	May 11	13.93	24	11.69	Dec. 7	13.56
Mar. 2	12.17	18	13.44	26	11.92	14	14.39
9	13.69	25	13.96	31	11.88	21	14.74
16	14.20	June 1	13.64	Sept.10	10.70	28	15.31
23	14.62	6	13.31	14	10.60		

Columbia County

75. Fernville.

Water level, in feet above assumed datum, 1940

Jan. 6	11.13	Apr. 6	14.58	July 20	12.30	Oct. 12	13.98
13	10.83	13	14.40	27	12.23	19	12.83
20	11.58	27	14.53	Aug. 3	11.88	26	11.83
27	11.83	May 4	14.08	10	11.47	Nov. 2	13.38
Feb. 3	10.36	11	14.79	17	11.16	11	13.46
10	10.19	18	13.64	24	10.80	16	13.23
17	10.38	25	13.87	31	13.70	23	13.87
24	10.88	June 1	13.88	Sept. 7	13.60	30	13.28
Mar. 2	10.81	8	13.66	14	14.20	Dec. 7	13.70
9	13.86	15	13.13	22	13.27	14	13.46
16	14.88	22	13.01	28	12.26	21	13.26
23	14.08	29	13.83	Oct. 4	12.96	28	13.23
30	15.38	July 6	13.43				

Erie County

1. Near Carters Corners

Water level, in feet above assumed datum, 1940

Jan. 7	10.98	Feb. 25	12.05	May 12	12.65	July 14	8.57
14	11.79	Mar. 3	12.23	20	8.87	Aug. 10	7.49
20	10.90	17	14.93	26	7.59	Sept. 1	8.18
Feb. 3	9.83	31	14.23	June 9	5.81	11	8.15
10	10.55	Apr. 14	a16.65	23	8.92	Oct. 24	7.75
18	9.61	21	16.59	30	6.11		

Forest County

30. Nebraska. Measurements discontinued because of location within flood control reservoir.

Water level, in feet above assumed datum, 1940

Jan. 6	10.29	Mar. 9	10.64	May 18	9.62	July 27	9.16
13	9.99	16	10.25	25	11.42	Aug. 3	8.70
20	10.26	23	10.42	June 1	10.57	10	8.57
27	9.87	30	11.03	8	9.77	17	8.49
Feb. 3	9.60	Apr. 6	a13.09	15	9.48	24	8.38
10	9.34	13	11.97	22	9.30	31	8.73
17	10.67	20	11.83	29	9.57	Sept.10	8.63
24	10.57	27	10.32	July 6	9.24	14	8.74
Mar. 2	10.13	May 4	10.09	13	9.23	21	8.53
7	10.88	11	9.63	20	8.94	29	9.05

a Highest stage of record.

Huntingdon County

47. Near Trexler Bridge.

Water level, in feet above assumed datum, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	10.87	Apr. 6	23.66	July 6	14.72	Oct. 5	12.83
13	10.71	13	20.39	13	14.11	12	12.71
20	12.75	20	a32.60	20	13.72	19	12.19
27	12.19	27	20.89	27	16.54	26	11.70
Feb. 3	11.67	May 4	17.64	Aug. 3	14.99	Nov. 2	13.76
10	14.72	11	15.71	10	14.09	9	13.15
17	12.25	18	16.69	17	13.67	16	14.91
24	15.50	25	15.24	24	13.53	23	14.01
Mar. 2	14.21	June 1	17.76	31	15.07	30	13.43
9	16.27	8	18.73	Sept. 7	14.09	Dec. 7	13.21
16	19.27	15	15.67	14	13.45	14	13.66
23	18.51	22	15.55	21	12.93	21	15.68
30	28.60	29	15.59	28	12.68	28	21.72

50. Near Petersburg

Water level, in feet above assumed datum, 1940

Jan. 6	9.92	Apr. 6	13.65	July 6	11.61	Oct. 5	9.63
13	9.76	13	13.63	13	11.26	12	9.45
20	9.61	20	13.86	20	10.01	19	9.31
27	8.26	27	13.41	27	10.71	26	9.22
Feb. 3	8.21	May 4	13.81	Aug. 3	10.61	Nov. 2	9.73
10	9.15	11	12.61	10	10.27	9	9.81
17	10.56	18	12.41	17	10.01	16	10.80
24	11.21	25	12.51	24	9.71	23	10.63
Mar. 2	13.76	June 1	12.52	31	9.86	30	10.33
9	13.21	8	12.51	Sept. 7	9.66	Dec. 7	10.63
16	13.51	15	12.01	14	9.71	14	10.84
23	13.52	23	12.16	21	9.64	21	13.33
30	13.81	29	12.07	28	b7.95	28	13.83

Lackawanna County

101. Waverly.

Water level, in feet above assumed datum, 1940

Jan. 6	12.05	Apr. 6	15.19	July 6	14.38	Oct. 12	13.25
13	11.83	13	14.58	13	14.18	19	13.11
20	11.55	20	14.61	20	12.95	26	13.01
27	11.33	27	14.35	27	12.41	Nov. 2	12.73
Feb. 3	12.01	May 5	14.03	Aug. 3	12.14	9	12.09
10	12.45	11	14.11	10	11.24	16	12.48
17	12.61	18	13.71	17	11.11	23	12.61
24	12.68	25	13.38	24	11.05	29	12.96
Mar. 2	12.54	June 1	14.96	31	11.30	Dec. 7	13.11
9	12.43	8	14.38	Sept. 7	11.35	14	13.31
16	13.01	15	14.26	14	11.61	21	14.06
23	14.06	22	14.15	21	12.38	28	14.85
30	(c)	29	14.50	Oct. 5	13.11		

a Highest stage of record.
b Lowest stage of record.
c Well flooded.

Lackawanna County--Continued.

102. Near Carbondale.

Water level, in feet above assumed datum, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	12.20	Apr. 7	16.73	July 7	14.69	Oct. 6	14.00
14	11.73	14	17.07	14	13.73	13	14.53
21	11.73	21	18.83	21	13.43	20	14.07
28	11.29	28	15.23	28	12.95	27	13.13
Feb. 4	10.95	May 5	13.97	Aug. 4	13.95	Nov. 3	16.27
11	10.93	12	14.51	11	12.70	10	15.93
18	10.93	19	13.60	18	11.75	17	16.03
25	10.93	26	15.51	25	10.93	24	15.43
Mar. 3	11.13	June 2	15.63	Sept. 1	16.40	Dec. 1	14.65
10	11.13	9	14.61	8	14.96	8	14.20
17	12.61	16	13.33	15	13.83	15	15.18
24	13.95	23	12.58	22	13.07	22	15.21
31	16.23	30	15.45	28	14.37	29	17.81

Lancaster County

104. Near Safe Harbor.

Water level, in feet above aseumed datum, 1940

Jan. 6	14.78	Apr. 6	13.69	July 6	16.56	Oct. 5	17.37
13	14.65	13	13.70	13	17.48	12	17.19
20	14.52	20	13.71	20	17.80	19	17.02
27	14.43	27	13.72	27	18.03	26	16.86
Feb. 3	14.36	May 4	13.81	Aug. 3	18.13	Nov. 2	16.69
10	14.27	11	13.92	10	18.22	9	16.55
17	14.17	18	14.19	17	18.24	16	16.40
24	14.07	25	14.45	24	18.20	23	16.26
Mar. 2	13.98	June 1	14.72	31	18.10	30	16.13
9	13.92	8	15.07	Sept. 7	17.99	Dec. 7	16.01
16	13.84	15	15.55	14	17.82	14	15.89
23	13.77	22	16.08	21	17.67	21	15.80
30	13.69	29	16.62	28	17.51	28	15.75

Luzerne County

76. Near Wapwallopen.

Water level, in feet above assumed datum, 1940

Jan. 1	14.18	Mar. 31	16.73	June 30	14.28	Oct. 6	14.23
8	13.93	Apr. 9	16.38	July 7	14.03	21	14.38
11	13.92	14	16.13	14	13.78	29	13.88
16	13.68	22	18.08	21	13.73	Nov. 4	14.73
21	13.88	28	15.48	28	13.93	10	14.73
30	13.68	May 5	14.73	Aug. 5	13.68	18	16.08
Feb. 4	13.73	13	14.33	11	13.28	25	14.88
11	13.63	17	14.13	19	9.98	Dec. 2	14.43
18	13.68	20	14.13	25	10.18	8	14.73
25	13.68	27	14.38	Sept. 2	16.18	10	13.77
Mar. 3	13.58	June 2	14.23	9	14.73	17	15.48
12	14.08	9	14.63	16	14.58	22	15.58
17	14.83	16	14.33	23	14.18	30	15.58
25	14.73	23	14.14	30	14.15		

McKean County

108. Smethport. Measurements discontinued.

Mercer County

5. Greenville. Well filled; measurements discontinued.

Water level, in feet above assumed datum, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	10.88	Jan. 27	11.19	Feb. 10	11.02	Feb. 25	13.27
13	10.68	Feb. 3	10.78	17	12.41	Mar. 3	13.11
20	11.54						

Northumberland County

57. Sunbury.

Water level, in feet above assumed datum, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	9.77	Apr. 14	15.46	July 6	13.62	Oct. 13	11.59
13	9.73	21	15.49	14	13.33	19	11.54
20	9.71	28	14.81	20	13.05	27	11.48
28	9.69	May 5	14.14	28	12.93	Nov. 3	11.40
Feb. 4	9.70	12	14.19	Aug. 4	12.72	10	11.34
11	9.72	13	15.21	11	12.52	17	11.37
17	a9.60	19	14.80	18	12.37	24	11.44
24	9.75	26	14.68	25	12.21	Dec. 1	11.39
Mar. 3	10.00	June 1	14.65	Sept. 1	12.30	8	11.37
9	10.01	8	14.61	8	12.38	15	11.52
16	10.26	16	14.55	15	12.10	18	11.57
23	10.42	23	14.34	22	12.13	22	11.77
30	10.99	24	13.91	29	12.11	29	11.66
Apr. 7	16.11	30	14.02	Oct. 6	11.75		

Perry County

61. Newport.

Water level, in feet above assumed datum, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	12.85	Mar. 29	15.01	July 19	12.77	Oct. 26	11.09
13	12.80	Apr. 5	16.17	26	12.56	Nov. 2	11.03
19	12.78	13	18.10	Aug. 3	12.21	9	10.97
26	12.78	19	18.05	8	12.06	16	11.14
Feb. 2	12.76	27	19.45	17	11.84	22	11.32
5	12.75	May 4	13.78	24	11.63	23	11.32
9	12.74	10	13.20	30	11.53	30	11.52
16	12.72	June 7	b19.11	Sept. 7	11.50	Dec. 7	11.59
24	13.11	14	18.51	14	11.42	13	11.50
Mar. 1	13.20	22	17.88	20	11.42	22	11.67
8	13.65	28	17.72	28	11.38	29	12.07
13	13.86	July 6	13.08	Oct. 5	11.39		
15	14.10	12	13.04	12	11.36		
22	14.63	15	12.92	19	11.22		

110. Near Millerstown.

Water level, in feet above assumed datum, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	9.77	Apr. 6	12.29	June 29	11.29	Oct. 5	11.50
13	9.94	13	11.87	July 6	11.17	12	11.31
20	10.24	20	b12.40	13	11.04	19	11.13
27	9.78	21	12.33	15	11.04	26	11.17
Feb. 3	9.54	27	11.92	20	11.81	Nov. 2	11.56
5	7.77	May 3	11.94	27	10.77	9	11.70
10	9.91	4	11.80	Aug. 3	10.54	16	11.74
17	9.98	11	11.94	10	10.60	18	12.06
24	10.94	18	12.02	17	10.49	23	11.92
Mar. 2	11.00	25	12.12	24	10.37	30	12.05
9	11.37	June 1	11.76	31	10.86	Dec. 7	12.10
13	11.81	3	12.10	Sept. 7	10.76	14	12.02
16	11.44	8	11.67	13	11.60	21	12.13
23	11.27	15	11.37	20	11.66	28	12.37
30	12.27	22	11.43	28	11.53		

a Lowest stage of record. b Highest stage of record.

Potter County

107. Conrad. Measurements discontinued August 24, 1940.

Water level, in feet above assumed datum, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	11.35	Mar. 9	13.23	May 11	12.92	July 13	11.04
13	11.33	16	12.64	18	12.90	20	10.54
20	11.36	23	12.60	25	11.91	27	10.50
27	11.39	30	12.66	June 1	11.56	Aug. 4	10.37
Feb. 3	11.43	Apr. 6	13.21	8	11.51	10	10.22
10	11.46	13	13.13	15	11.11	17	10.17
17	11.76	20	13.06	22	11.10	24	10.07
24	12.51	27	12.97	29	11.06		
Mar. 2	12.56	May 4	13.12	July 6	11.04		

Schuykill County

72. Near Pine Grove.

Water level, in feet above assumed datum, 1940

Jan. 6	12.76	Mar. 30	19.91	July 13	14.34	Oct. 5	16.50
13	17.32	Apr. 6	22.05	20	13.76	12	16.42
20	20.56	13	21.31	27	13.94	19	16.27
27	19.60	20	22.97	Aug. 1	13.49	26	15.73
Feb. 3	18.68	May 9	18.65	12	13.31	Nov. 2	17.99
10	17.96	18	17.77	17	13.04	16	22.44
17	17.48	25	17.02	24	12.70	23	21.51
24	21.73	June 1	21.75	31	a31.13	Dec. 7	19.07
Mar. 2	20.59	10	19.37	Sept. 7	19.68	15	18.67
10	21.01	15	18.47	16	17.88	21	21.21
16	22.32	28	16.07	21	17.14	28	19.39
23	21.10	July 6	14.94	30	16.78		

Somerset County

16. Markleton.

Water level, in feet above assumed datum, 1940

Jan. 6	9.43	Apr. 6	11.82	July 6	12.05	Oct. 5	10.29
13	9.66	13	12.04	13	11.72	12	10.09
20	9.62	20	13.06	20	11.30	19	9.86
27	9.65	27	12.12	27	11.06	26	9.76
Feb. 3	9.63	May 4	11.53	Aug. 3	10.91	Nov. 2	10.66
10	10.88	11	11.41	10	10.51	9	10.50
17	10.55	18	10.96	17	10.20	16	10.72
25	10.66	25	11.18	24	9.88	23	10.66
Mar. 2	11.55	June 1	11.96	31	10.60	30	10.99
9	10.70	8	11.50	Sept. 7	10.40	Dec. 7	11.25
16	10.80	15	12.08	14	10.69	15	11.38
23	10.94	22	12.11	21	10.38	21	11.52
30	11.90	29	12.45	28	10.57	29	11.95

115. Near Trent.

Water level, in feet above assumed datum, 1940

Jan. 5	13.85	Mar. 29	14.88	June 21	15.18	Sept. 17	14.16
12	13.80	Apr. 5	15.00	28	15.26	26	14.07
20	13.88	11	15.00	July 5	15.11	Oct. 4	14.06
26	13.75	22	15.35	13	15.11	11	13.85
Feb. 1	13.85	27	14.85	22	15.05	21	14.11
9	13.85	May 3	14.55	29	14.82	25	14.33
16	14.00	13	15.28	Aug. 5	14.61	Nov. 4	13.90
23	14.00	17	15.18	12	14.35	12	13.91
Mar. 1	13.80	24	15.11	16	14.21	18	13.60
8	13.65	31	15.39	24	14.09	25	14.00
14	13.75	June 7	15.12	29	14.19	Dec. 4	14.10
21	14.65	14	15.21	Sept. 9	14.80		

a Highest stage of record.

Sullivan County

105. Near Millview.

Water level, in feet above assumed datum, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	9.25	Apr. 6	13.20	July 6	10.25	Oct. 5	10.46
13	9.19	13	12.35	13	9.82	12	10.38
20	9.29	20	14.02	20	9.49	19	10.20
27	9.21	27	13.49	27	10.94	26	9.99
Feb. 3	9.23	May 4	12.42	Aug. 3	10.29	Nov. 2	10.04
10	9.27	11	11.47	10	9.61	9	10.01
17	9.25	18	11.41	17	9.52	16	10.78
24	9.21	25	11.52	24	9.34	23	11.27
Mar. 2	9.19	June 1	12.31	31	11.99	30	11.24
9	9.54	8	11.75	Sept. 7	11.41	Dec. [illegible]	11.19
16	10.46	15	11.22	14	10.91	14	11.46
23	11.44	22	10.39	21	10.68	21	11.15
30	12.00	29	10.51	28	10.49	28	12.41

Susquehanna County

100. Montrose.

Water level at end of day, in feet above assumed datum, 1940 (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	12.70	12.59	11.87	16.90	15.45	13.88	12.00	11.32	10.97	11.54	12.53	.....
2	12.69	12.55	11.86	17.15	15.36	13.92	12.03	11.28	11.04	11.57	13.00	.....
3	12.69	12.46	11.84	17.05	15.26	13.93	12.07	11.26	11.11	11.58	13.23	.....
4	12.69	12.39	11.91	18.19	15.17	13.94	12.12	11.22	11.19	11.59	13.38	.....
5	12.68	12.33	11.94	17.56	15.07	13.93	12.15	11.18	11.26	11.58	13.51	.....
6	12.68	12.28	11.94	17.14	14.98	13.90	12.17	11.15	11.33	11.58	13.62	.....
7	12.66	12.23	11.94	16.80	14.90	13.84	12.18	11.12	11.40	11.62	13.69	15.44
8	12.64	12.16	11.94	17.24	14.79	13.80	12.20	11.08	11.44	11.78	13.74	.....
9	12.59	12.09	11.94	16.84	14.71	13.73	12.21	11.05	11.48	11.91	13.75	.....
10	12.53	12.08	11.93	16.35	14.61	13.63	12.21	11.02	11.52	12.04	13.75	.....
11	12.49	12.52	11.92	16.13	14.46	13.53	12.21	11.00	11.54	12.20	13.76	.....
12	12.44	13.08	11.89	16.02	14.34	13.42	12.19	10.97	11.55	12.31	13.77	.....
13	12.39	13.14	11.87	15.94	14.25	13.31	12.17	10.94	11.55	12.41	13.77	.....
14	12.59	13.05	11.87	15.87	14.13	13.17	12.14	10.92	11.57	12.50	13.83	15.20
15	13.41	12.93	12.01	15.78	14.00	13.05	12.11	10.89	11.57	12.59	.....	15.22
16	13.42	12.81	12.06	15.70	13.92	12.90	12.07	10.86	11.56	12.64	15.17	15.35
17	13.39	12.67	12.09	15.62	13.82	12.77	12.02	10.82	11.56	12.70	.....	16.23
18	13.37	12.58	12.24	15.57	13.72	12.64	11.97	10.80	11.54	12.76	.....	16.19
19	13.32	12.52	12.58	15.54	13.62	12.54	11.92	10.78	11.42	12.76	.....	16.01
20	13.29	12.45	12.87	17.15	13.55	12.44	11.85	10.75	11.51	12.78	.....	15.87
21	13.23	12.37	13.07	17.22	13.46	12.32	11.82	10.73	11.50	12.78	.....	15.82
22	13.19	12.30	13.18	16.98	13.39	12.22	11.76	10.70	11.50	12.78	.....	.....
23	13.16	12.22	13.25	16.88	13.33	12.14	11.72	10.68	11.50	12.77	15.38	.....
24	13.14	12.17	13.29	16.73	13.28	12.12	11.68	10.67	11.50	12.76	.....	.....
25	13.14	12.12	13.32	16.40	13.23	12.06	11.63	10.66	11.50	12.73	.....	.....
26	13.13	12.08	13.32	16.13	13.22	12.04	11.58	10.65	11.50	12.69	.....	.....
27	13.09	12.04	13.33	15.92	13.19	12.00	11.52	10.63	11.50	12.66	.....	.....
28	12.92	12.00	13.39	15.76	13.51	11.98	11.47	10.63	11.50	12.61	.....	16.71
29	12.79	11.95	13.64	15.63	13.64	11.98	11.45	10.62	11.50	12.56	.....	.....
30	12.71	.....	17.86	15.53	13.72	11.98	11.41	10.62	11.52	12.56	15.89	.....
31	12.65	.....	17.95	.....	13.80	.....	11.37	10.89	.....	12.54	.....	16.63

Tioga County

106. Gaines.

Water level, in feet above assumed datum, 1940

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	10.64	Apr. 6	21.14	July 6	12.79	Oct. 5	10.12
13	9.62	13	20.75	13	12.82	12	8.98
20	12.01	20	19.84	20	11.83	19	8.40
27	11.02	27	19.21	27	11.17	26	8.06
Feb. 3	9.74	May 4	17.53	Aug. 3	11.28	Nov. 2	8.23
10	10.11	11	15.42	10	10.53	9	7.72
17	11.60	18	14.09	17	10.23	16	9.31
24	10.94	25	15.49	24	9.48	23	9.63
Mar. 2	9.95	June 1	17.03	31	10.65	30	9.22
9	12.62	8	17.33	Sept. 7	9.63	Dec. 7	9.47
16	12.34	15	16.03	14	8.91	14	14.04
23	18.04	22	14.17	21	9.86	21	17.21
30	18.27	29	14.16	28	11.25	28	15.76

Washington County

112. Amity.

Water level, in feet above assumed datum, 1940

Jan. 6	12.09	Apr. 6	31.70	July 6	30.04	Oct. 5	16.07
13	11.10	13	31.15	13	27.12	12	14.10
20	11.11	20	34.08	20	25.07	19	11.10
27	12.09	27	29.61	27	28.09	26	12.20
Feb. 3	12.08	May 4	30.06	Aug. 3	25.40	Nov. 2	12.18
10	12.10	11	28.07	10	22.11	9	13.04
17	12.07	18	27.11	17	18.81	16	13.11
24	12.13	25	26.13	24	18.04	23	13.11
Mar. 2	23.08	June 1	29.78	31	23.05	30	19.07
9	26.07	8	27.81	Sept. 7	22.20	Dec. 7	21.06
16	27.12	15	26.10	14	22.04	14	22.12
23	28.07	22	26.11	21	19.10	21	25.08
30	27.13	29	28.05	28	18.08	29	27.12

Wayne County

83. Near Hawley.

Water level, in feet above assumed datum, 1940

Jan. 6	11.90	Apr. 6	16.97	July 6	15.25	Oct. 5	12.24
13	12.29	13	20.45	13	14.72	12	12.18
20	12.15	20	20.00	20	14.37	19	12.14
27	11.98	27	19.81	27	13.79	26	11.99
Feb. 2	11.79	May 4	18.74	Aug. 3	13.25	Nov. 2	12.78
10	11.74	11	17.72	10	12.51	9	12.79
17	11.91	18	17.34	17	12.01	16	13.60
24	12.05	25	17.21	24	11.88	23	13.91
Mar. 2	12.72	June 1	17.15	31	12.91	30	13.81
9	12.94	8	16.65	Sept. 7	12.98	Dec. 7	13.83
16	13.11	15	16.17	14	13.08	14	13.92
23	14.81	22	15.97	21	12.78	21	14.27
30	18.87	29	15.29	28	12.31	28	15.79

O