

Water Levels and Artesian Pressures in Observation Wells in the United States in 1952

Part 1. Northeastern States

Prepared under the direction of A. N. SAYRE, Chief, Ground Water Branch

GEOLOGICAL SURVEY WATER-SUPPLY PAPER 1221

*Prepared in cooperation with the States
of Connecticut, Delaware, Indiana,
Massachusetts, Michigan, New Jersey,
New York, Ohio, Pennsylvania, and
Rhode Island, and with other agencies*



UNITED STATES DEPARTMENT OF THE INTERIOR

Douglas McKay, *Secretary*

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PREFACE

This report was prepared by the Geological Survey in cooperation with the States of Connecticut, Delaware, Indiana, Massachusetts, Michigan, New Jersey, New York, Ohio, Pennsylvania, and Rhode Island, and with other agencies, by personnel of the Water Resources Division under the direction of:

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WATER LEVELS AND ARTESIAN PRESSURES
IN OBSERVATION WELLS IN THE UNITED STATES
IN 1952

Part 1. NORTHEASTERN STATES

INTRODUCTION

By A. N. Sayre

The publication of records of water levels and artesian pressures annually in the United States was begun by the Geological Survey in 1935. Prior to 1940 the records for each year were published in a single volume--1935, 777; 1936, 817; 1937, 840; 1938, 845; 1939, 886. Since 1940 records have been published in six volumes, covering the northeastern, southeastern, north-central, south-central, northwestern, and southwestern sections of the country. Hawaii is included in the southwestern section. The following table gives the numbers of Water-Supply Papers from 1940 through 1952.

Year	North-eastern (1)	South-eastern (2)	North-central (3)	South-central (4)	North-western (5)	South-western (6)
1940	906	907	908	909	910	911
1941	936	937	938	939	940	941
1942	944	945	946	947	948	949
1943	986	987	988	989	990	991
1944	1016	1017	1018	1019	1020	1021
1945	1023	1024	1025	1026	1027	1028
1946	1071	1072	1073	1074	1075	1076
1947	1096	1097	1098	1099	1100	1101
1948	1126	1127	1128	1129	1130	1131
1949	1156	1157	1158	1159	1160	1161
1950	1165	1166	1167	1168	1169	1170
1951	1191	1192	1193	1194	1195	1196
1952	1221	1222	1223	1224	1225	1226

The objectives of the observation-well program are to provide a day-to-day evaluation of available ground-water supplies, to facilitate the prediction of trends in ground-water levels that will indicate the probable status of important ground-water supplies in the future, to delineate present or potential areas of detrimentally high or low ground-water levels, to aid in the prediction of the base flow of streams, to determine the several forces that act on a ground-water body, and to demonstrate the interplay of those forces in the ground-water regimen, to furnish information for use in basic research, and to provide long-term continuous records of fluctuations of water levels in representative wells. These selected records serve as a framework to which many short-term records collected during an intensive investigation may be related.

Water levels in wells are seldom stationary but move up or down a fraction of an inch or many feet within a short time. Water-table wells may be influenced by direct recharge from precipitation, withdrawals from wells or springs, evapotranspiration by vegetation, evaporation from the soil, and changes in atmospheric pressure. Artesian wells are influenced over large areas by changes in the rate of pumping from other wells, changes in atmospheric pressure, earthquakes, ocean tides, earth tides, and recharge from precipitation, although the recharge may not be noticeable immediately. When accurate comparisons of water levels are made it is desirable to apply corrections for these influences, several of which may be compensating or additive depending upon the conditions at those particular times.

Water-level measurements are given in feet with reference to land-surface datum or sea-level datum. Land-surface datum is a precise datum plane that is approximately at land surface at each well. Mean sea level (msl) is the datum plane on which the national network of precise levels is based. When some measurements in a table are above and others are below the plane of reference, a plus (+) or minus (-) sign is placed immediately preceding the first entry in each column. Readings between minus signs are below the plane of reference and those between plus signs are above the plane of reference.

For the most part, discussions of precipitation in this report are based on data furnished by the United States Weather Bureau.

Measurements of water levels and artesian pressures in wells were made under the direction of the district supervisors of the Ground Water Branch in the several States.

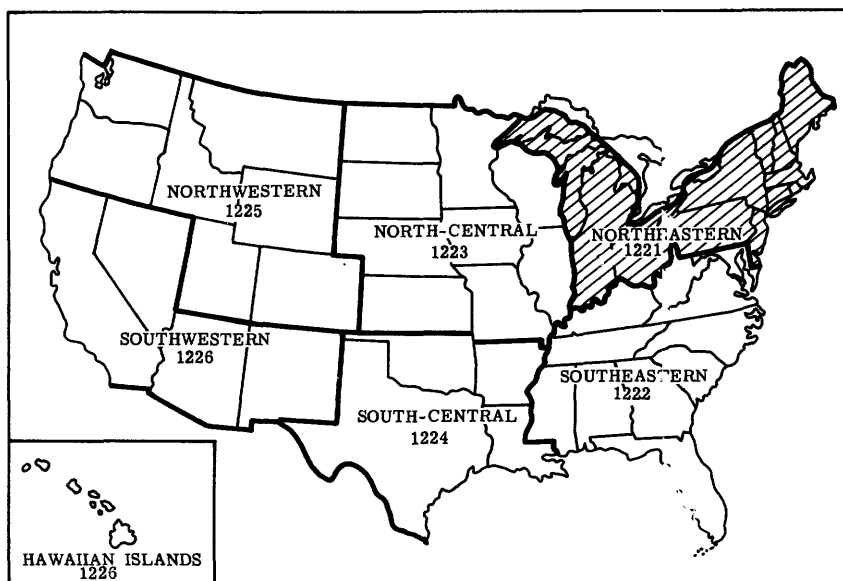


Figure 1. --Outline map of the United States showing areas included in each of the six water supply papers on water levels and artesian pressures in observation wells in 1952. The shaded area indicates the States included in this volume.

Penn Livingston had general charge of the nation-wide observation-well program; Verda M. Dougherty edited the reports; and Rodney Hart and Marie H. Adler edited the illustrations. This volume was typed by Charlotte Parker and completed by Bettie H. Morton.

CONNECTICUT

By R. V. Cushman

Scope of Water-Level Program

The observation-well program in Connecticut was continued in 1952 in cooperation with the State Water Commission. The overall program of work included collection of water-level data by means of a statewide network of observation wells and areal surveys of ground-water conditions. The plan of study for the areal surveys consists of a reconnaissance investigation of the entire State to be followed by more intensive work in areas of particular need or interest. As the reconnaissance investigations are extended to new areas, the observation-well program is expanded to include the areas of interest. Measurements were made in 33 wells in 1952. The location of the observation wells in Connecticut is shown on figure 2.

Precipitation

The average annual precipitation for Connecticut for 1952 was 50.37 inches which was 4.87 inches above normal but 1.35 inches less than in 1951. The 17-station average was about 10 percent above the 65-year average, and at only 4 of the 17 stations was the total annual precipitation less than the average. The 4 stations are scattered throughout the State and show no significant pattern with respect to water supplies. Above-normal precipitation was recorded for all months except February, July, September, October, and November, with heavy amounts in April and August. The greatest monthly deficiencies were in July and October when rainfall was about half the normal amount. The July rainfall fell mostly during one storm on the 10th. The year was unusually warm, with only May and October having subnormal average temperatures. July had the highest average temperature of any month of record.

Pumpage

The most heavily pumped ground-water areas are at Waterbury, New Haven, Naugatuck, and Bridgeport. Records of ground-water pumpage in Connecticut are not available for all sources of withdrawal. Estimates based upon pumpage figures obtained from the Connecticut State Department of Health, industrial concerns, and private well owners indicate that ground water was withdrawn in the State in 1952 at the rate of about 54 million gallons per day. The average amount used daily for various purposes during the year is estimated as follows: industrial (excluding water from municipal supplies) 40 million gallons per day; municipal 9 mgd; rural (domestic and stock but excluding irrigation) 4 mgd; irrigation 1 mgd.

Interpretation of Water-Level Fluctuations

Water levels in Connecticut, when not affected by pumping, follow cyclical seasonal trends in response to natural recharge and discharge. The usual yearly trend of water levels consists of a rise during the nongrowing season when usage by vegetation and losses by evaporation are at a minimum. The rising trend usually extends for a short time into the growing season. Peak levels are generally reached in April or May but occasionally are reached as late as June or early July. After the growing season starts, evaporation and transpiration rates are higher and less water is available for recharge to ground water. Natural discharge to surface-water bodies from springs and seeps continues, and as a result ground-water levels decline steadily until recharge from precipitation is again greater than discharge. Minimum levels are usually reached in November. Over half the observation wells in Connecticut are in stratified sand and gravel of glacial origin. The remaining wells penetrate glacial till with the exception of well Wil 1. in Willimantic, which penetrates bedrock. The water levels in wells penetrating till in Connecticut normally show greater ranges in fluctuation from season to season than do water levels in wells in stratified drift or bedrock. This condition is in part a function of the specific yield of the water-bearing formations and of the topographic location of the observation well, as wells on the upper slopes of drainage basins are commonly in till.

With precipitation somewhat less than last year's amount, there was a decrease in underground storage in Connecticut in 1952. Water levels in nearly all observation wells showed a decline at the year's end from the high levels recorded at the beginning of 1952. Precipitation was above normal in January, and water levels continued to rise and were at record seasonal

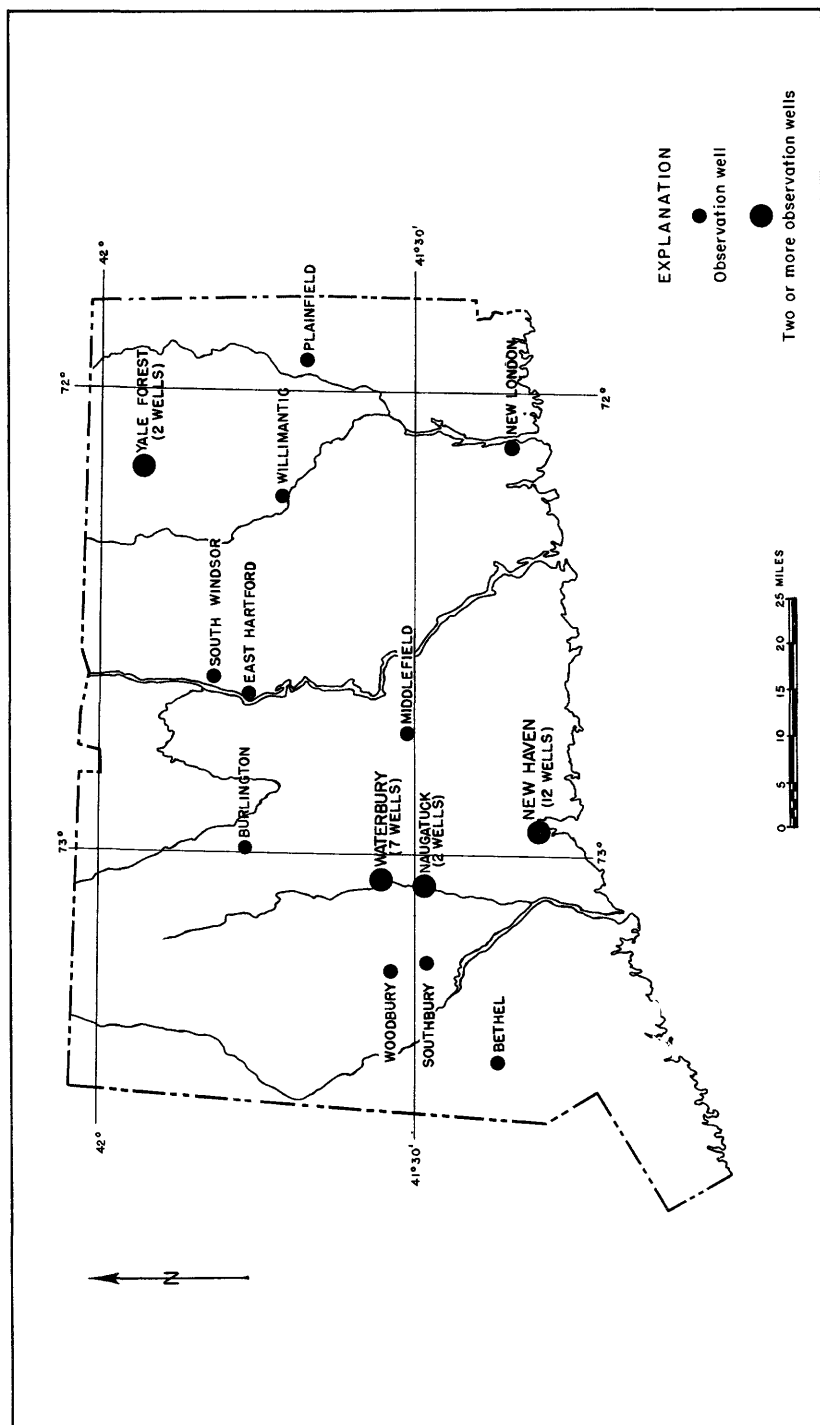


Figure 2. --Location of observation wells in Connecticut, 1952.

highs for the third consecutive month by January. A general rise continued until May when peak stages were reached in most observation wells. As precipitation was in excess of normal throughout the spring, the peak stages were reached generally a month later than usual; as a result water levels were above last year's levels and were at a record or near-record high stage for the season. Record high levels were reached in 6 observation wells (NHn110, NHn183, NHn250, NHn 270, BU 2, and U3) during the first half of the year. Rainfall was above normal in June, but water levels declined under the influence of evapotranspiration demands. The decline continued generally until late November, but favorable antecedent conditions maintained water levels at above-normal stages and above the levels of 1951 until late October. By that time the effects of two periods of near-drought in July and October had offset the beneficial effects of plentiful rainfall early in the year, and November-end levels were generally below normal and below the levels of 1951. A small rise in December was not sufficient to alter conditions greatly, and the year ended with water levels in general slightly below normal and below those recorded at the end of December 1951.

In the residential area of New Haven, where pumping is at a minimum, water-level fluctuations showed the same general pattern as elsewhere in the State. The peak stages were reached at the end of June and were in most cases the highest levels of record since 1939. The year-end levels in this area showed a decline for the 12-month period but they were about half a foot above the 13-year normal. In the pumped areas of New Haven, the major fluctuations of the water table are the result of changes in the rate and distribution of pumping as well as variations in the amount of precipitation. Water levels in these areas followed the same general pattern as the residential area levels but there were several modifications which resulted from changes in the pattern of withdrawal. Peak levels in the air-conditioning and cold storage areas were reached at an earlier date and reflected the increase in seasonal withdrawals. Similarly, minimum levels were recorded earlier than in the residential area as the seasonal rise commenced by late September with the decrease in pumping. The water table in the industrial area of New Haven reached a natural peak stage in June, but this was followed in July by a second and higher peak which resulted from a decrease in withdrawal during the normal July vacation period at several large industrial plants.

Well-Numbering System

In the well-numbering system in Connecticut a letter prefix followed by the well number is used. A letter or combination of two or three letters is used to indicate the town, or "township" and the wells are then numbered consecutively in each town. For example, the letters "F" are prefixed to all well numbers in Bethel.

Well Descriptions and Water-Level Measurements

Water levels are in feet below land-surface datum unless otherwise indicated. When some measurements in a table are above and others below the plane of reference, a plus (+) or minus (-) sign is placed immediately preceding the first entry in each column of each mixed table. Readings between minus (-) signs are below the plane of reference, and those between plus (+) signs are above the plane of reference. Water levels in the city of New Haven are referred to mean sea level.

City of New Haven

NHn 108. Leonard Marenga. 14 Whiting St., New Haven. Lat. 41°18'10", long. 72°55'30". Driven unused water-table well in glacial sand, diameter 2 inches, depth 38 feet, screen setting 36-38. Land-surface datum is 15.86 feet above msl. Nearby well being pumped. Highest water level 1.26 above msl, May 8, 1940; lowest 3.40 below msl, Aug. 26, 1946. Records available: 1939-52. Feb. 25, +1.18; May 1, +1.01; July 25, -0.26; Sept. 26, -0.45; Nov. 25, -0.06; Dec. 30, +0.20.

NHn 110. Federal Packing Co. 149 State St., New Haven. Lat. 41°18'10", long. 72°55'30". Driven unused water-table well in glacial sand, diameter 2 inches, depth 20 feet, screen setting 18-20. Land-surface datum is 11.44 feet above msl. Nearby well being pumped. Highest water level 1.04 above msl, Mar. 28, 1952; lowest 2.20 below msl, Oct. 27, 1944. Records available: 1939-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	+0.74	May 1	+0.69	July 25	-0.41	Oct. 27	-0.34
Feb. 25	+1.00	June 2	+0.70	Aug. 28	-.53	Nov. 25	-.28
Mar. 28	+1.04	20	+0.41	Sept. 26	-.63	Dec. 30	+0.07

NHn 131. New Haven Clock Co. 133 Hamilton St., New Haven. Lat. 41°18'30", long. 72°54'45". Driven unused water-table well in glacial sand, diameter 2½ inches, depth 40 feet. Land-surface datum is 17.23 feet above msl. Nearby well being pumped. Highest water level 0.38 below msl, May 26, 1949; lowest 5.65 below msl, May 26, 1944. Records available: 1939-52.

NHn 131--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	-1.74	May 1	-1.41	July 25	-1.02	Oct. 27	-1.36
Feb. 25	-1.51	June 2	-.98	Aug. 28	-.95	Nov. 25	-1.76
Mar. 28	-1.56	29	-1.05	Sept. 26	-1.10	Dec. 30	-1.68

NHn 138. Associated Realty Co. Green and East Sts., New Haven. Lat. 41°18'20", long. 72°54'40". Driven unused water-table well in glacial sand, diameter 2 inches, depth 31 feet. Land-surface datum is 17.75 feet above msl. Nearby well being pumped. Highest water level 0.13 above msl, May 26, 1949; lowest 5.70 below msl, June 23, 1944. Records available: 1940-52.

Jan. 28	-0.88	May 1	-0.53	Sept. 26	-0.55	Nov. 25	-1.12
Feb. 25	-.64	Aug. 28	-.40	Oct. 27	-.87	Dec. 30	-.83
Mar. 28	-.63						

NHn 170. Yale University. Grove and College Sts. Lat. 41°18'40", long. 72°55'37". Driven unused water-table well in glacial sand, diameter 2 inches, depth 14 feet. Land-surface datum is 41.09 feet above msl. Highest water level 18.63 above msl, June 25, 1948; lowest 15.64 above msl, Jan. 14, 1942. Records available: 1939-52.

Jan. 28	+17.09	May 1	+18.06	Sept. 26	+17.39	Nov. 25	+16.89
Feb. 25	+17.49	July 25	+18.04	Oct. 27	+17.14	Dec. 30	+16.70
Mar. 28	+17.79	Aug. 28	+17.69				

NHn 175. Monarch Laundry. Derby Ave. and Ellsworth St. Lat. 41°18'40", long. 72°57'10". Drilled unused water-table well in glacial sand, diameter 6 inches, depth 54 feet. Land-surface datum is 32.84 feet above msl. Highest water level 4.51 above msl, June 23, 1939; lowest 2.27 above msl, Dec. 17, 1941. Records available: 1939-52.

Jan. 28	+3.84	May 1	+4.62	July 25	+4.75	Oct. 27	+4.10
Feb. 25	+4.19	June 2	+4.72	Aug. 28	+4.51	Nov. 25	+3.92
Mar. 28	+4.44	20	+4.84	Sept. 26	+4.31	Dec. 30	+3.83

NHn 178. Atlantic Tire and Steel Co. Grand Ave. and Haven St. Lat. 41°18'30", long. 72°54'20". Driven unused water-table well in glacial sand, diameter 3 inches, depth 74 feet. Land-surface datum is 13.76 feet above msl. Nearby well being pumped. Highest water level 0.04 above msl, June 12, 1940; lowest 7.12 below msl, Nov. 25, 1952. Records available: 1939-52.

Jan. 28	-6.06	May 1	-5.86	July 25	-5.07	Oct. 27	-6.62
Feb. 25	-5.84	June 2	-5.28	Aug. 28	-5.86	Nov. 25	-7.12
Mar. 28	-6.05	20	-5.58	Sept. 26	-6.24	Dec. 30	-6.24

NHn 183. Frank X. Hald Storage Co. 370-376 Davenport Ave. Lat. 41°18'00", long. 72°56'45". Driven unused water-table well in glacial sand, diameter 2 inches, depth 24 feet. Land-surface datum is 23.94 feet above msl. Highest water level 6.16 above msl, June 28, 1952; lowest 2.67 above msl, Dec. 3, 1941. Records available: 1939-52.

Jan. 28	+5.21	May 1	+5.95	July 25	+5.46	Oct. 27	+4.66
Feb. 25	+5.55	June 2	+6.07	Aug. 28	+5.11	Nov. 25	+4.54
Mar. 28	+5.81	20	+6.16	Sept. 26	+4.91	Dec. 30	+4.44

NHn 235. C. Cowles & Co. Chestnut and Water Sts. Lat. 41°18'05", long. 72°54'55". Drilled unused water-table well in glacial sand, diameter 8 inches, depth 39 feet, screen setting 28-38. Land-surface datum is 14.80 feet above msl. Nearby well being pumped. Highest water level 1.24 above msl, May 26, 1949; lowest 3.59 below msl, Feb. 1, 1945. Records available: 1940-52.

Jan. 28	+0.59	May 1	+0.57	Sept. 26	-0.06	Nov. 25	-0.51
Feb. 25	+.37	July 25	-.10	Oct. 27	-.26	Dec. 30	-.47

NHn 250. I. Newman & Sons. 43 Oak St. Lat. 41°18'10", long. 72°55'50". Dug unused water-table well in glacial sand, diameter 10 feet, depth 13 feet, lined with brick. Land-surface datum is 14.93 feet above msl. Nearby well being pumped. Highest water level 5.56 above msl, June 2, 1952; lowest 0.67 above msl, Sept. 25, 1947. Records available: 1940-52.

Jan. 28	+4.70	May 1	+5.03	July 25	+4.34	Oct. 27	+4.68
Feb. 25	+5.45	June 2	+5.56	Aug. 28	+3.98	Nov. 25	+4.38
Mar. 28	+5.45	20	+4.65	Sept. 26	+4.14	Dec. 30	+4.18

CONNECTICUT, LITCHFIELD COUNTY

7

NHn 270. Carl E. Altmann. 53 Auburn St. Lat. $41^{\circ}18'20''$, long. $72^{\circ}56'45''$. Dug unused water-table well in glacial sand, diameter 33 inches, depth 37 feet, lined with stone. Land-surface datum is 38.18 feet above msl. Highest water level 7.62 above msl, June 20, 1952; lowest 3.78 above msl, Dec. 17, 1941. Records available: 1941-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	+6.15	May 1	+7.07	July 25	+7.26	Oct. 27	+6.31
Feb. 25	+6.47	June 2	+7.32	Aug. 28	+6.91	Nov. 25	+6.01
Mar. 28	+6.79	20	+7.62	Sept. 26	+6.85	Dec. 30	+5.69

Fairfield County

Be 1. Frederick J. Andrews. 248 Greenwood Ave., Bethel. Lat. $41^{\circ}22'20''$, long. $73^{\circ}25'10''$. Dug unused water-table well in glacial sand and gravel, diameter 36 inches, depth 26 feet, lined with stone. Land-surface datum is about 380 feet above msl. Highest water level 17.20 below lsd, Mar. 30, 1948; lowest 24.40 below lsd, Dec. 15, 1949. Records available: 1946-52.

Jan. 3	19.00	Feb. 7	18.00	Mar. 6	19.20	Apr. 3	18.50
10	18.90	14	18.10	13	18.40	May 2	17.68
17	19.00	21	18.20	20	17.90	Nov. 28	21.15
24	18.70	28	18.90	27	18.30	Dec. 23	18.45
31	18.50						

Hartford County

Bu 2. E. E. Edman. Burlington. Lat. $41^{\circ}46'15''$, long. $72^{\circ}53'20''$. Dug unused water-table well in glacial till, diameter 36 inches, depth 38 feet, lined with stone. Land-surface datum is about 880 feet above msl. Highest water level 14.00 below lsd, June 8, 1952; lowest 37.41 below lsd, Dec. 22, 1948. Records available: 1946-52.

Jan. 1	18.22	May 17	15.36	Aug. 24	22.78	Nov. 16	25.11
13	16.91	June 8	14.00	Sept. 2	20.29	24	25.99
27	15.64	15	16.47	8	19.79	30	25.49
Feb. 29	16.51	30	17.19	13	19.48	Dec. 8	23.90
Mar. 16	15.66	July 22	19.51	Oct. 4	20.24	14	22.09
Apr. 1	14.55	28	20.19	16	20.00	22	20.08
11	14.39	Aug. 8	21.96	Nov. 2	23.21	27	19.48
19	14.18						

EH 21. Burnside Ice Co. 790 Tolland St., East Hartford. Lat. $41^{\circ}47'$, long. $72^{\circ}36''$. Dug unused water-table well in glacial sand, diameter 30 inches, depth 20 feet, lined with brick. Land-surface datum is about 90 feet above msl. Highest water level 11.14 below lsd, Dec. 12, 1938; lowest 19.60 below lsd, Sept. 22, 1949. Records available: 1934-39, 1946-52.

Jan. 31	15.80	June 3	15.02	Aug. 29	17.06	Nov. 26	18.30
Mar. 27	15.43	19	15.48	Sept. 25	17.68	Dec. 29	17.73
Apr. 30	15.19	July 29	16.94	Oct. 29	18.40		

SW 64. H. F. Church. Station 37, South Windsor. Lat. $41^{\circ}49'$, long. $72^{\circ}37'30''$. Dug unused water-table well in glacial sand, diameter 24 inches, depth 18 feet, lined with brick. Land-surface datum is about 40 feet above msl. Highest water level 7.15 below lsd, Mar. 30, 1936; lowest 13.84 below lsd, Dec. 31, 1949. Records available: 1934-39, 1946-52.

Jan. 31	10.43	June 3	9.83	July 29	11.93	Oct. 29	12.91
Feb. 26	11.01	19	10.60	Aug. 29	12.21	Nov. 26	13.18
Mar. 27	10.11	July 1	11.11	Sept. 25	12.55	Dec. 29	12.97
Apr. 30	9.87						

Litchfield County

Wy 1. George H. Wadsworth. Main St., Woodbury. Lat. $41^{\circ}32'$, long. $73^{\circ}12'30''$. Dug unused water-table well in glacial sand and gravel, diameter 30 inches, depth 34 feet, lined with stone. Land-surface datum is about 270 feet above msl. Highest water level 19.89 below lsd, Mar. 30, 1948; lowest 31.00 below lsd, Oct. 10, 1914. Records available: 1913-16, 1944-52.

Feb. 1	20.80	May 2	20.34	Sept. 30	23.38	Nov. 28	26.91
28	21.22	June 20	21.18	Oct. 31	25.72	Dec. 23	23.68
Apr. 3	20.95	Sept. 9	22.60				

Middlesex County

Mf 1. Lyman Gun Sight Corp. Near Baileyville. Lat. 41°30'30", long. 72°43'20". Dug unused water-table well in glacial till, diameter 24 inches, depth 22 feet, lined with stone. Land-surface datum is about 260 feet above msl. Highest water level 3.12 below lsd, Apr. 3, 1951; lowest 12.95 below lsd, Oct. 27, 1949. Records available: 1946-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	3.27	May 1	3.72	Sept. 9	9.00	Nov. 28	11.75
Feb. 28	5.87	June 9	5.05	30	10.38	Dec. 31	7.67
Mar. 28	4.80	Aug. 8	10.43	Oct. 31	11.57		

New Haven County

Na 10. Naugatuck Water Co. Beacon Valley Rd., Naugatuck. Lat. 41°28', long. 73°00'40". Driven unused water-table well in glacial sand and gravel, diameter 2 inches, depth 94 feet. Land-surface datum is about 340 feet above msl. Highest water level 3.90 below lsd, Mar. 30, 1948; lowest 16.45 below lsd, Oct. 24, 1947. Records available: 1946-50, 1952. Apr. 3, 4.15; Sept. 30, 6.36.

Na 11. Naugatuck Water Co. Beacon Valley Rd., Naugatuck. Lat. 41°28', long. 73°00'40". Driven unused water-table well in glacial sand and gravel, diameter 2 inches, depth 36 feet. Land-surface datum is about 340 feet above msl. Highest water level 3.86 below lsd, Mar. 30, 1948; lowest 16.64 below lsd, Oct. 24, 1947. Records available: 1946-52. Apr. 3, 4.19; Nov. 28, 6.27; Dec. 31, 5.55.

Sb 1. Francis Bower. Near South Britain. Lat. 41°28'50", long. 73°15'30". Dug unused water-table well in glacial sand and gravel, diameter 24 inches, depth 23 feet, lined with stone. Land-surface datum is about 190 feet above msl. Highest water level 12.68 below lsd, Sept. 9, 1952; lowest 18.40 below lsd, Oct. 14, 1916. Records available: 1913-16, 1944-52.

Feb. 1	13.84	May 2	12.77	Sept. 30	13.00	Nov. 26	12.94
28	13.95	June 20	12.73	Oct. 31	13.35	Dec. 23	13.01
Apr. 3	13.53	Sept. 9	12.68				

Wb 1. Waterbury Ash Removal Co. Thomaston Ave., Waterbury. Lat. 41°34', long. 73°03'30". Drilled unused water-table well in glacial sand and gravel, diameter 6 inches, depth 82 feet. Land-surface datum is about 270 feet above msl. Highest water level 6.85 below lsd, Mar. 23, 1948; lowest 10.99 below lsd, Sept. 11, 1944. Records available: 1943-52.

Jan. 10	9.23	Apr. 16	8.30	July 14	9.70	Sept. 30	10.25
30	8.15	24	8.68	23	10.19	Oct. 9	10.32
Feb. 9	8.66	May 1	8.25	29	10.37	22	10.50
20	9.37	12	8.85	Aug. 9	10.09	30	10.58
27	9.62	21	8.98	16	10.00	Nov. 18	10.60
Mar. 8	9.70	June 2	7.55	25	9.54	26	9.21
17	8.45	10	8.30	Sept. 2	9.50	Dec. 9	9.39
24	8.29	25	9.70	16	10.09	19	9.08
31	8.74	July 1	9.89	24	10.05	29	9.68
Apr. 7	8.05						

Wb 93. Mrs. William Nichols, Sr. 118 Pearl Lake Rd., Waterbury. Lat. 41°31'30", long. 73°02'30". Dug unused water-table well in glacial gravel, diameter 4 feet, depth 33 feet, lined with stone. Land-surface datum is about 320 feet above msl. Highest water level 24.99 below lsd, Apr. 4, 1951; lowest 28.39 below lsd, Aug. 29, 1944. Records available: 1944-52.

Feb. 1	25.23	May 2	26.08	Sept. 9	27.34	Nov. 28	26.97
28	26.24	June 20	26.68	30	27.66	Dec. 31	27.69
Apr. 3	25.80	Aug. 8	27.60	Oct. 31	27.85		

Wb 119. James O'Connor. 947 Pearl Lake Rd., Waterbury. Lat. 41°32', long. 73°01'15". Dug unused water-table well in glacial till, diameter 24 inches, depth 26 feet, lined with stone. Land-surface datum is about 440 feet above msl. Highest water level 2.68 below lsd, Nov. 5, 1951; lowest 13.85 below lsd, Oct. 27, 1948. Records available: 1944-52. Feb. 1, 4.15. Measurement discontinued.

Wb 176. Mrs. Frank Bergin. 535 Scott Rd., Waterbury. Lat. 41°32', long. 72°59'. Dug unused water-table well in glacial till, diameter 30 inches, depth 16 feet, lined with stone. Land-surface datum is about 650 feet above msl. Highest water level 2.80 below lsd, Apr. 4, 1951; lowest 15.20 below lsd, Nov. 26, 1949. Records available: 1944-52. Feb. 28 6.17; Apr. 3, 4.97; Sept. 9, 10.15; Sept. 30, 11.80; Oct. 31, 13.39; Nov. 28, 7.91; Dec. 31, 5.88.

Wb 198. E. L. Bronson. Pierpont Rd., Waterbury. Lat. 41°32'45", long. 72°58'45". Dug domestic water-table well in glacial till, diameter 30 inches, depth 31 feet, lined with stone. Land-surface datum is about 540 feet above msl. Highest water level 5.49 below lsd, Jan. 10, 1946; lowest 21.00 below lsd, Nov. 26, 1949. Records available: 1944-52. Feb. 28, 9.82; Apr. 3, 8.18; May 2, 6.30; Aug. 8, 13.33; Sept. 9, 13.88; Dec. 31, 12.76.

Wb 336. The Bristol Co. Platts Mills Rd., Waterbury. Lat. 41°31', long. 73°03'30". Drilled unused water-table well in glacial sand and gravel, diameter 8 inches, depth 57 feet, screen setting 37-57. Land-surface datum is about 215 feet above msl. Nearby well being pumped. Highest water level 11.14 below lsd, May 1, 1947; lowest 20.40 below lsd, Aug. 29, 1944. Records available: 1944-52. Feb. 28, 12.42; Apr. 3, 11.23; June 20, 12.07; Aug. 8, 16.27; Sept. 30, 16.12; Nov. 28, 15.03; Dec. 31, 14.06.

Wb 340. Connecticut Light and Power Co. Eagle St., Waterbury. Lat. 41°32'10", long. 73°03'30". Driven unused water-table well in glacial sand and gravel, diameter 2 inches, depth 40 feet. Land-surface datum is about 250 feet above msl. Nearby well being pumped. Records available: 1944-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 28	19.47	June 20	19.95	Sept. 30	20.57	Nov. 28	17.22
May 2	18.69	Aug. 8	21.07	Oct. 31	20.67	Dec. 31	17.45

EHv 70. H. A. Doolittle. Silver Sands Rd., East Haven. Lat. 41°15'00", long. 72°52'45". Dug unused water-table well in glacial sand and gravel, diameter 36 inches, depth 16 feet, lined with stone. Land-surface datum is about 30 feet above msl. Highest water level 7.32 below lsd, Mar. 19, 1936; lowest 16.03 below lsd, Nov. 22, 1935. Records available: 1935-39, 1951-52. Feb. 25, 9.40; May 1, 9.13; Aug. 28, 10.30; Oct. 27, 12.93; Nov. 25, 12.99; Dec. 30, 12.53.

New London County

NL 10. New London Historical Society. 11 Blinman St., New London. Lat. 41°21', long. 72°06'. Dug unused water-table well in glacial sand and gravel, diameter 36 inches, depth 22 feet, lined with stone. Land-surface datum is about 10 feet above msl. Highest water level 12.88 below msl, Feb. 26, 1948; lowest 17.99 below msl, Aug. 16, 1937. Records available: 1937-39, 1946-52. Feb. 26, 14.43; Dec. 11, 16.57; Dec. 30, 15.72.

Tolland County

U 3. Yale University Forest. Union. Lat. 41°57'40", long. 72°09'45". Dug unused water-table well in glacial till, diameter 36 inches, depth 25 feet, lined with stone. Land-surface datum is about 780 feet above msl. Highest water level 13.92 below lsd, Jan. 31, 1952; lowest dry Dec. 1, 1949. Records available: 1946-52.

Jan. 31	13.92	Mar. 27	14.30	June 19	15.87	Nov. 26	22.19
Feb. 26	15.85	Apr. 30	14.52	Oct. 29	21.70	Dec. 29	21.17

Windham County

Af 1. Yale University Forest. Near Westford, in Ashford township. Lat. 41°55'00", long. 72°09'00". Dug unused water-table well in glacial till, diameter 30 inches, depth 15 feet, lined with stone. Land-surface datum is about 650 feet above msl. Highest water level 3.83 below lsd, Mar. 29, 1948; lowest dry Oct. 27, 1949. Records available: 1946-52.

Jan. 31	4.32	Mar. 27	4.35	June 19	5.75	Nov. 26	12.88
Feb. 26	6.03	Apr. 30	3.88	Oct. 29	12.58	Dec. 29	7.63

Pl 1. W. P. Lewis. Pleasant St., Plainfield. Lat. 41°40'50", long. 71°55'20". Dug unused water-table well in glacial sand and gravel, diameter 36 inches, depth 34 feet, lined with stone. Land-surface datum is about 180 feet above msl. Highest water level 28.10 below lsd, Apr. 27, 1948; lowest 31.72 below lsd, Feb. 3, 1944. Records available: 1942-52.

Jan. 31	29.16	Apr. 30	29.00	Aug. 1	30.34	Oct. 28	31.27
Feb. 26	28.70	May 29	29.38	29	30.76	Nov. 26	31.54
Mar. 27	28.42	July 1	29.69	Sept. 29	30.96	Dec. 30	31.42

Well 1. American Thread Co. 322 Main St., Willimantic. Lat. $41^{\circ}42'3''$, long. $72^{\circ}12'15''$. Drilled unused water-table well in gneiss, diameter 6 inches, depth 83 feet. Land-surface datum is about 190 feet above msl. Highest water level 5.45 below lsd, Mar. 29, 1948; lowest 8.90 below lsd, Oct. 27, 1947. Records available: 1946-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	5.72	Apr. 30	5.98	Sept. 29	7.43	Nov. 26	7.65
Feb. 26	6.47	Aug. 1	7.36	Oct. 29	7.63	Dec. 30	7.12
Mar. 27	6.02						

DELAWARE

By I. W. Marine

Scope of Water-Level Program

Investigation of the ground-water resources of the State in cooperation with the Delaware Geological Survey was continued through 1952. From 1943 to 1950, the U. S. Geological Survey cooperated with the towns of Lewes and Rehoboth. The initial purpose of this investigation was to study the encroachment of salt water into the fresh-water aquifers of that area, but after development of the new well field inland, the program was confined to determining fluctuations in the water surface. In December 1949, the State of Delaware, through the Agricultural Extension Service of the University of Delaware and the Highway Department, cooperated for the purpose of making a preliminary study of the ground-water resources within the State. In July 1951, the Delaware Geological Survey became the cooperating State agency and has continued in that capacity through 1952. Cooperation was also established with the Delaware Geological Survey, representing the City of Newark, for a detailed study of the Newark area. An additional observation well, Cb 123, was established in the course of this program.

Throughout the State there are 16 shallow wells which are measured with a steel tape at the end of every month. Thirteen of these wells were installed in September and October 1950. Measurement of the water level of well Cb 123 was begun on June 4, 1951. The Soil Conservation Service of the U. S. Department of Agriculture maintains recording gages on wells R¹ 1 and R² 2. However, the tape measurements published in this report were made by the U. S. Geological Survey. Weekly recording gages were operated in the municipal well field of the towns of Lewes, New Castle, and Newark. A recording gage was installed at the Governor Bacon Health Center, Delaware City, and water-level records began on March 9, 1952. The total number of wells, for which water levels are published in 1952, is 20.

Two well-field tests were run during 1952 on the aquifer at Newark. A report entitled, "Ground-water problems in highway construction and maintenance," by William C. Rasmussen and Leon B. Haigler was released to the open file in 1952. Although this report does not give any water-level measurements, it does list quicksand areas in Delaware that represent zones of seeps and springs. A problem in road subdrainage near Laurel, Sussex County, is described and illustrated in the report. Observation well Qc 4 was established at this site at the edge of the road to observe the rise and fall of water level beneath the road. Records in the table presented here show that in March 1952 the water level rose to within 0.19 foot of the land surface in this well, or within $3\frac{1}{2}$ feet of the crown of the road. It is probable that part of the capillary zone extended to the road course at this time. It appears that the present tile drains, beneath the ditch on the south side of the road, may not be intercepting sufficient ground water to keep the road dry. A late frost or ground freeze while the water table is high could damage the road.

Precipitation

The year of 1952 was one of high precipitation in Delaware with a total of 51.03 inches, which was 7.00 inches above average for eleven stations throughout the State. Only 3 months, February, September, and October, had rainfall below average. Of these, October was the driest with 2.31 inches below average and reflected the regional drought experienced throughout the central and eastern United States. November was the month of greatest departure with 2.54 inches above average. March, April, and May had a combined above-average departure of 5.19 inches.

Pumpage

The average daily pumpage at the Governor Bacon Health Center, a State home for the aged, orphans, and infirm, was 74,500 gallons per day in 1952. There are 360 patients at this institution. The major part of the daily average pumpage at Lewes, which was 362,600 gallons per day in 1952, was produced from the well field in which well Ni 3 is situated. The daily average pumpage at Newark was 636,500 gallons per day on 1952. This was augmented by an average of 146,580 gallons per day from a private water company using a surface source.

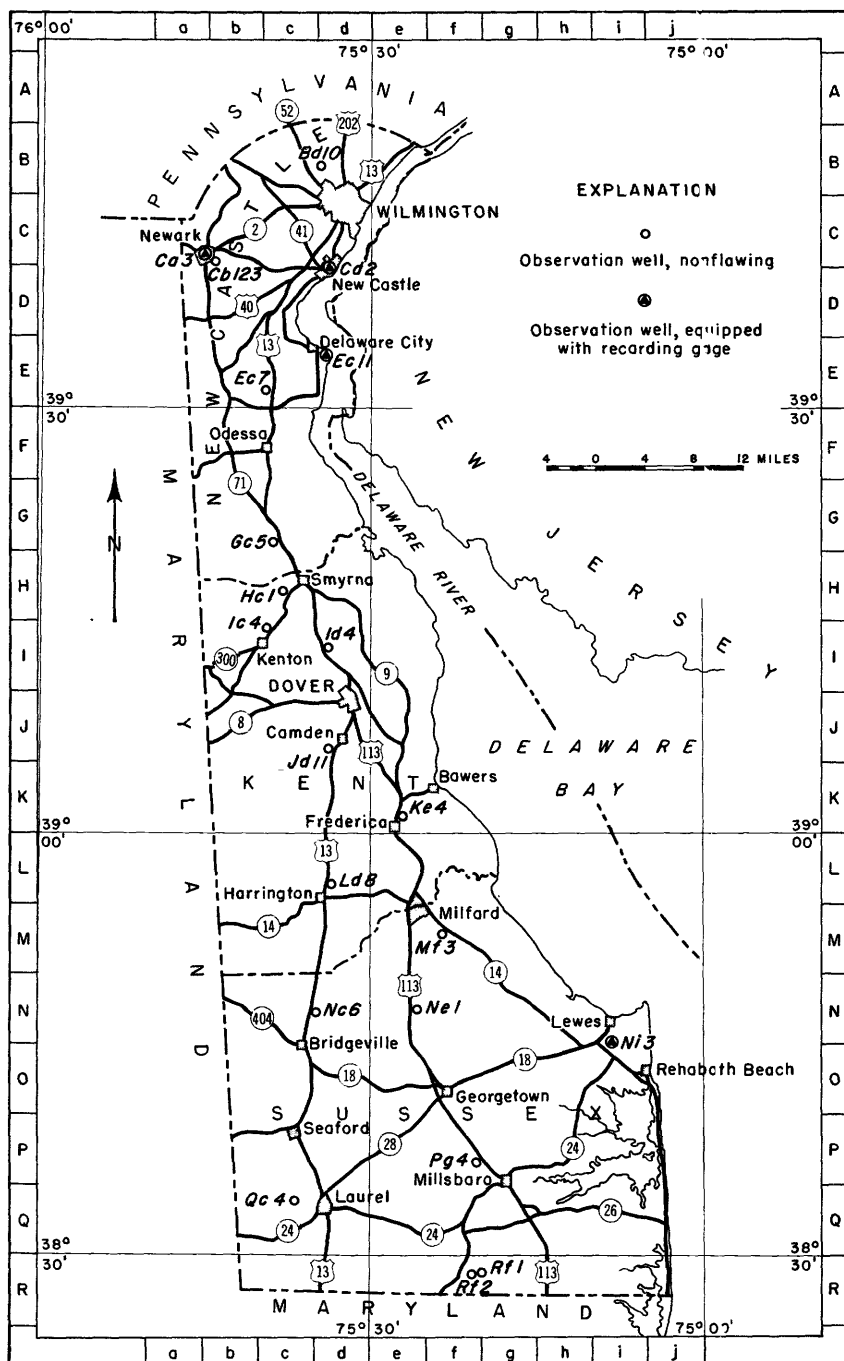


Figure 3. --Location of observation wells in Delaware, 1952.

The well field at New Castle produced an average of 533,700 gallons per day of which approximately 6.3 percent was for industrial usage.

Interpretation of Water-Level Fluctuations

During 1952 the average water level of 13 water-table wells throughout the State fluctuated sympathetically with the State average precipitation. There was a general rise of the average water level from the beginning of the year until April when the water level began to decline. A low point was reached in October after which the water level rose through the month of December. This repeats the general pattern followed in 1951; however, the average water level for the year 1951 was 7.60 feet below average land-surface datum whereas that for 1952 was 6.29 feet, a rise of 1.31 feet. The Bacon Health Center is supplied by three wells, of which two are about 150 feet from observation well Ec 11 and are of equal capacity. One of the closer wells was being pumped at about 100 gallons per minute for about 9 hours a day until April 27, 1952 when both of the closer wells, pumping an aggregate of 180 gallons per minute, started. The two wells continued to pump simultaneously for about 9 hours a day for the rest of the year. The water level in Ec 11 reflected this change in regimen of the well field. The high water level of May 27, 1952 is caused by a 48 hour recovery after 24 hours of continuous pumping. The third well, which has a capacity of 30 gallons per minute, is about 1,100 feet from the observation well and affects the water level in Ec 11 to only a small degree. The water level in observation well Ni 3 in Lewes, averaged about 17 feet below land surface for 1952. During the period of record, there is no apparent trend. The well faithfully records the fall of water level in response to pumping the nearby city wells, and the recovery after pumping ceases. The daily envelope curves of high and low water level follow, in a general way, the rainfall pattern for the year. At Newark during the period of water-level record, there is no apparent upward or downward trend in observation well Ca 3. The normal pumping regimen of the Newark well field was disturbed during a period from March 8 to May 9 due to the operation of two well field tests within that period. Well Cb 123, about 2,100 feet from the city well field, departed from its natural fluctuations during the 8½-day full capacity pump test, which ended May 8, 1952, by recording a steady decline during the latter part of that period, reaching a total drawdown of 0.7 foot. At New Castle in the summer of 1952, a new well 132 feet deep was ready for production and was used intermittently for the remainder of the year. The general rise in water level in well Cd 2 reflects the diminished pumpage from the shallow aquifer when this deeper well is pumping. Since the shallow aquifer is recharged locally, the water level also reflects the precipitation in the area.

Acknowledgments

The recording gage at New Castle is voluntarily checked each week by Oliver Henderson, Chemist, under the direction of Joseph S. Benton, Water Superintendent. The recording gage chart at Lewes is changed weekly by the plant operator, Clyde F. House. The recording gage at the Governor Bacon Health Center, Delaware City, is maintained by Carl Jorgenson, plant operator.

Well-Numbering System

The State of Delaware is divided into 5-minute quadrangles of latitude and longitude as shown in figure 3. To designate the wells, the quadrangles are lettered north to south with uppercase letters and west to east with lowercase letters. A quadrangle is indicated by two letters with the capital letter being given first. Within the quadrangles the wells were numbered in the order they were scheduled.

Well Descriptions and Water-Level Measurements

(Water-level measurements are in feet below lsd, unless otherwise indicated.)

Kent County

Ic 4. State Highway Department. Lat. 39°14', long. 75°39'. Driven observation water-table well, diameter 1 inch, depth 12 feet. Land-surface datum is about 60 feet above msl. Highest water level 2.44 below lsd, May 1, 1952; lowest 5.54 below lsd, Oct. 1, 1951. Records available: 1950-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	3.17	May 1	2.44	July 28	4.23	Oct. 30	5.04
Feb. 29	3.76	30	3.63	Sept. 3	4.25	Nov. 26	4.35
Mar. 31	3.34	June 30	4.19	Oct. 1	4.80	Dec. 29	4.40

Id 4. State Highway Department. Lat. 39°13', long. 75°34'. Near Cheswold. Driven observation water-table well, diameter 1 inch, depth 14 feet. Land-surface datum is about 40 feet above msl. Highest water level 2.48 below lsd, May 1, 1952; lowest 8.61 below lsd, Oct. 10, 1950. Records available: 1950-52.

Id 4--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	2.65	May 1	2.48	July 28	5.73	Oct. 30	6.96
Feb. 27	3.64	30	3.56	Sept. 3	4.56	Nov. 26	5.58
Mar. 31	3.23	June 30	5.18	Oct. 1	5.93	Dec. 29	4.22

Jd 11. State Highway Department. Lat. 39°06', long. 75°33'. Near Camden. Driven observation water-table well, diameter 1 inch, depth 15 feet. Land-surface datum is about 50 feet above msl. Highest water level 3.08 below lsd, June 2, 1952; lowest 9.16 below lsd, Oct. 30, 1951. Records available: 1950-52.

Jan. 30	4.81	Apr. 29	3.37	July 28	4.65	Dec. 1	5.60
Feb. 27	4.77	June 2	3.08	Aug. 28	4.19	29	5.06
Apr. 1	4.19	30	4.14	Oct. 30	5.59		

Ke 4. State Highway Department. Lat. 39°01', long. 75°27'. Near Frederica. Driven observation water-table well, diameter 1 inch, depth 17 feet. Land-surface datum is about 22 feet above msl. Highest water level 4.13 below lsd, June 2, 1952; lowest 12.89 below lsd, Dec. 1, 1950. Records available: 1950-52.

Jan. 30	7.05	Apr. 29	4.58	July 30	6.97	Oct. 30	8.87
Feb. 29	6.75	June 2	4.13	Aug. 28	5.70	Dec. 1	9.49
Apr. 4	5.20	30	7.09	Oct. 1	7.50	29	8.41

Ld 8. State Highway Department. Lat. 38°56', long. 75°34'. Driven observation water-table well, diameter 1 inch, depth 13 feet. Land-surface datum is about 57 feet above msl. Highest water level 1.28 below lsd, June 2, 1952; lowest 7.26 below lsd, Oct. 1, 1951. Records available: 1950-52.

Jan. 30	2.62	May 2	1.94	July 28	4.91	Oct. 30	6.13
Feb. 27	2.86	June 2	1.28	Aug. 28	4.07	Dec. 1	4.88
Apr. 1	2.27	30	4.22	Oct. 2	5.27	29	3.75

New Castle County

Bd 10. F. B. Crowninshield. Lat. 39°47', long. 75°34'. Dug unused water-table well in weathered gabbro, diameter 42 inches, depth 23 feet, curbed with stone. Land-surface datum is about 250 feet above msl. Highest water level 10.30 below lsd, May 2, 1952; lowest 15.44 below lsd, Oct. 29, 1951. Records available: 1950-52.

Jan. 28	11.77	May 2	10.30	July 28	11.20	Oct. 30	13.75
Feb. 28	12.64	30	10.75	Sept. 3	12.08	Nov. 26	13.30
Mar. 31	11.40	June 30	12.00	Oct. 1	13.25	Dec. 29	13.26

Ca 3. City of Newark. Lat. 39°40', long. 75°45'. Academy St. and Water Works Lane. Drilled unused artesian well in Patuxent formation, diameter 8 inches, depth 67 feet. Land-surface datum is about 100 feet above msl. Highest water level 20.60 below lsd, Apr. 28, 1952; lowest 33.56 below lsd, Jan. 20, 1951. Records available: 1950-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	29.88	29.07	27.44	25.86	27.90	27.77	28.78	28.61	.....	29.98	30.74	30.78
2	29.88	28.99	27.39	25.68	29.09	27.77	28.78	28.67	27.64	30.06	30.89	.....
3	29.93	28.91	27.34	25.64	29.86	27.95	28.81	28.41	.....	30.20	31.00	.....
4	29.95	28.87	27.18	25.61	30.48	27.84	28.74	28.02	.....	30.35	31.10	.....
5	29.84	29.00	27.21	25.52	30.83	27.75	28.62	28.30	28.15	30.26	31.03	.....
6	29.88	28.93	27.28	25.39	31.16	27.77	28.60	28.47	28.25	30.07	31.20	30.96
7	29.85	28.79	27.27	25.39	31.48	27.84	28.73	28.53	28.37	30.29	31.14	e31.06
8	29.89	28.64	27.26	25.37	31.59	27.77	28.77	28.41	28.55	30.43	31.14	e31.19
9	29.91	28.48	27.24	25.33	30.49	27.75	e28.77	28.04	28.75	30.48	30.99	.....
10	29.93	28.63	27.12	25.26	.....	27.83	.....	27.98	28.93	30.38	31.10	.....
11	29.93	28.61	26.98	25.15	.....	27.79	28.42	.....	29.34	30.22	31.20	.....
12	29.96	28.50	27.04	25.15	.....	27.81	28.57	.....	29.61	30.28	31.30	31.59
13	29.86	28.31	27.00	25.09	.....	27.81	28.47	.....	29.62	30.30	31.46	31.66
14	29.85	28.03	26.76	24.96	27.97	27.88	28.31	.....	29.35	30.51	31.38	31.53
15	29.86	28.21	26.73	24.92	28.20	27.91	28.36	.....	29.42	30.64	31.12	31.47
16	29.80	28.32	26.58	24.94	28.04	28.14	28.43	.....	29.52	30.71	31.10	31.49
17	29.80	28.09	26.47	24.92	28.09	28.21	28.34	.....	29.63	30.71	31.22	31.45
18	29.80	27.57	26.47	24.85	28.05	e28.55	28.47	.....	29.65	30.55	31.38	31.55
19	29.87	27.72	26.43	e24.81	28.08	.....	28.40	.....	29.66	30.71	31.34	31.46
20	29.84	27.80	26.29	e24.78	28.01	.....	28.41	.....	29.55	30.72	31.38	31.22

Ca 3--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	29.70	27.80	26.21	24.75	28.12	28.35	28.32	.....	29.65	30.87	31.38	31.00
22	29.71	27.75	26.10	24.73	28.16	28.33	28.41	28.09	29.47	30.95	31.36	30.79
23	29.61	27.67	26.02	24.65	.....	28.39	28.46	28.23	29.53	30.95	31.24	30.89
24	29.66	27.44	25.91	24.67	.....	28.37	28.51	28.26	29.68	31.02	31.36	30.88
25	29.59	27.08	25.89	25.14	.....	28.34	28.61	28.02	29.79	31.02	31.50	30.84
26	29.52	27.31	26.32	.....	.....	29.01	28.43	28.09	29.75	31.10	31.60	30.52
27	29.41	27.47	27.40	.....	27.81	29.37	28.47	28.21	29.66	31.16	31.62	30.44
28	29.14	27.43	27.97	20.60	28.05	29.49	28.45	28.29	29.76	31.16	30.46	30.60
29	29.24	27.42	27.83	21.77	28.32	29.08	28.56	28.33	29.82	31.12	30.54	30.37
30	29.29	.....	26.14	25.81	28.39	28.83	28.65	.....	29.94	31.20	30.67	.....
31	29.33	.....	26.07	.....	28.17	.....	28.56	.....	.....	30.79	.....	.....

e Estimated.

Cb 123. University of Delaware, Agricultural Experiment Station. Lat. 39°40', long. 75°44'. Near Newark. Driven observation water-table well, diameter 1½ inches, depth 26 feet. Land-surface datum is about 90 feet above msl. Highest water level 6.50 below lsd, May 1, 1952; lowest 11.25 below lsd, Oct. 29, 1951. Records available: 1951-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	7.80	May 1	6.50	July 28	10.04	Oct. 30	10.60
Feb. 28	7.94	30	6.95	Sept. 3	9.08	Nov. 26	9.87
Mar. 31	7.13	June 30	8.41	Oct. 1	9.65	Dec. 29	9.55

Cd 2. City of New Castle. Lat. 39°40', long. 75°34'. Dug unused water-table well in sand of Pleistocene age, size 12 by 13 feet, depth 23 feet. Land-surface datum is 9.21 feet above msl. Highest water level 2.66 below msl, Sept. 19, 1952; lowest 13.09 below msl, Aug. 1, 1950. Records available: 1950-52.

Daily lowest water level, below msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	8.09	7.45	6.69	6.34	6.79	5.03	5.66	5.31	4.83	5.86	6.84	6.33
2	8.15	7.46	6.35	6.38	6.73	5.04	5.79	5.39	4.84	6.06	6.89	6.75
3	8.15	7.45	6.31	6.50	6.56	5.23	5.89	5.03	5.21	6.23	6.89	7.09
4	8.19	6.97	6.46	6.54	6.39	5.30	5.94	4.81	5.43	5.94	4.95	7.26
5	8.21	7.07	6.68	6.52	6.46	5.54	5.63	4.94	5.69	5.94	5.79	7.36
6	8.19	7.09	6.79	6.49	6.35	5.73	5.54	4.89	5.73	.....	6.09	7.13
7	7.89	6.99	6.83	6.19	6.33	5.66	5.39	4.94	5.84	.....	6.57	7.15
8	8.19	7.03	6.81	6.14	6.41	5.69	5.69	4.92	5.89	.....	6.71	6.93
9	8.09	6.81	6.84	6.19	6.37	5.25	5.74	4.95	5.94	.....	6.79	7.16
10	8.19	6.59	6.58	6.21	6.24	5.42	5.67	4.75	6.09	.....	6.90	7.31
11	8.18	6.09	6.74	6.31	6.14	5.54	5.65	4.57	6.23	5.34	7.01	7.34
12	8.27	6.39	6.79	6.34	6.05	5.65	5.72	4.71	6.31	5.71	7.19	7.34
13	8.30	6.60	6.81	6.31	6.29	5.71	5.68	4.75	6.46	6.21	7.30	6.14
14	8.09	6.87	6.85	5.86	6.32	5.81	5.31	4.76	6.54	6.52	7.37	6.04
15	8.24	6.89	6.84	6.05	6.24	5.81	5.75	4.88	6.44	6.69	7.39	6.19
16	8.48	6.93	6.83	6.15	6.50	5.65	5.75	4.95	4.64	6.84	7.43	6.63
17	8.56	6.96	6.60	6.19	6.51	5.61	5.65	5.24	3.64	6.97	7.04	6.89
18	8.72	6.56	6.69	6.16	6.51	5.33	5.54	5.24	3.45	6.95	7.24	6.94
19	8.69	6.62	6.70	6.31	6.59	5.17	5.75	4.86	2.66	6.40	7.29	7.22
20	8.51	6.87	6.74	6.19	6.45	5.19	5.92	4.79	3.55	6.46	4.90	7.35
21	8.40	6.96	6.76	6.49	6.36	5.42	6.04	4.74	4.34	6.53	3.82	7.36
22	8.54	6.94	6.78	6.40	6.61	5.51	6.09	4.64	4.74	6.57	4.70	6.91
23	8.56	6.77	6.76	6.73	6.79	5.25	5.94	5.01	5.11	6.59	4.81	7.24
24	8.49	6.79	6.17	6.95	6.72	5.34	6.04	5.31	5.34	4.03	5.01	7.41
25	8.52	6.24	6.34	7.05	6.59	5.03	6.14	5.09	5.44	4.86	5.34	7.07
26	8.20	6.41	6.40	6.99	6.49	4.88	6.19	4.89	5.59	5.23	5.56	6.61
27	7.93	6.52	6.65	6.77	6.40	4.93	6.21	4.84	5.69	5.41	5.64	6.54
28	7.74	6.58	6.77	6.59	6.62	5.24	5.87	4.83	5.79	5.79	6.43	6.44
29	7.73	6.67	6.61	6.55	6.19	5.41	5.57	4.76	5.51	6.04	6.26	6.57
30	7.58	.....	6.59	6.76	6.17	5.47	5.44	5.06	5.73	6.33	6.10	6.79
31	7.70	.....	6.51	.....	6.04	.....	5.36	5.18	.....	6.59	.....	7.12

Ec 7. State Highway Department. Lat. 39°31', long. 75°39'. Driven observation water-table well, diameter 1 inch, depth 11 feet. Land-surface datum is about 35 feet above msl. Highest water level 0.60 below lsd, May 1, 1952; lowest 2.79 below lsd, July 30, 1951. Records available: 1950-52.

Ec 7--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	1.28	May 1	0.60	July 28	1.10	Oct. 30	1.47
Feb. 29	1.27	30	.80	Sept. 3	.99	Nov. 26	1.33
Mar. 31	.97	June 30	.92	Oct. 1	1.28	Dec. 29	1.52

Ec 11. Governor Bacon Health Center. Lat. 39°34', long. 75°35'. In well field compound of Governor Bacon Health Center, 125 feet south of pumphouse. Drilled unused artesian well in sand of Cretaceous age, diameter 6 inches, depth 157 feet, cased to 157. Land-surface datum is about 15 feet above msl. Highest water level 25.2 below lsd, May 27, 1952; lowest 64.2 below lsd, July 2, 1952. Records available: 1952.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	37.1	46.8	51.1	60.5	61.1	57.4	51.3	51.6	49.2
2	37.5	46.8	49.3	64.2	58.8	58.2	51.4	54.5	52.0
3	37.2	44.4	52.5	58.7	55.7	58.6	49.7	53.6	49.7
4	36.0	46.8	52.5	60.4	58.3	59.5	51.0	52.7	51.4
5	35.3	39.7	51.6	57.2	55.0	59.5	52.1	55.6	50.7
6	37.3	44.1	e53.0	58.2	58.9	59.9	50.3	52.4	52.4
7	40.0	e44.4	50.1	60.7	58.6	55.2	51.8	54.2	50.7
8	41.0	e44.4	51.8	60.6	....	61.5	51.3	43.8	54.0
9	39.6	43.0	47.5	55.0	59.2	57.8	60.6	53.5	52.0	53.5
10	39.6	39.0	47.1	58.8	57.1	53.0	58.0	52.4	48.0	57.1
11	40.4	46.9	44.0	....	60.2	59.0	54.3	52.8	51.3	60.5
12	36.2	47.3	54.0	60.5	58.7	57.5	52.1	52.7	55.0
13	38.2	34.6	48.7	54.3	....	52.6	55.7	53.0	48.2	51.7
14	38.0	33.9	46.9	55.3	e55.8	60.3	54.3	53.4	53.6	53.2
15	36.4	35.0	47.9	54.1	54.8	60.1	56.1	52.1	52.1	53.0
16	35.4	35.4	50.4	57.0	58.8	55.8	54.3	52.8	50.2	50.9
17	36.1	35.5	45.5	47.9	62.0	55.2	55.3	53.7	52.4	51.1
18	36.3	36.3	44.8	56.9	62.0	54.2	57.2	52.8	53.7	53.2
19	35.6	35.3	47.8	57.8	61.2	58.5	....	51.1	52.5	54.8
20	36.9	35.1	42.3	57.8	59.6	60.4	53.8	52.8	45.5	51.8
21	35.7	35.6	51.3	56.3	59.8	....	55.4	54.3	52.1	51.5
22	35.6	36.5	49.1	50.7	60.2	....	56.4	53.0	50.7	51.4
23	35.8	36.9	50.2	47.7	60.0	....	56.2	53.0	51.8	51.9
24	36.0	35.2	44.5	56.2	59.6	48.1	51.5	54.7	52.4	49.5
25	36.9	36.4	54.2	58.0	60.7	57.0	56.4	53.4	52.0	49.1
26	36.4	35.1	58.6	60.3	61.1	59.2	55.5	51.2	52.4	50.6
27	37.1	47.1	25.2	59.1	58.1	58.3	e49.0	51.8	50.7	47.9
28	36.4	47.6	46.0	56.5	59.7	....	....	54.5	50.2	37.2
29	37.1	48.0	44.1	57.9	60.6	60.2	....	52.0	51.5	45.0
30	36.5	47.0	44.4	59.8	61.8	54.2	53.6	53.8	47.3	49.6
31	36.2	....	47.5	....	60.2	57.3	....	55.0	....	49.8

e Estimated.

Gc 5. State Highway Department. Lat. 39°21', long. 75°38'. Near Blackbird. Driven observation water-table well, diameter 1 inch, depth 10 feet. Land-surface datum is about 40 feet above msl. Highest water level 0.12 below lsd, May 1, 1952; lowest 3.20 below lsd, Oct. 30, 1952. Records available: 1950-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	0.22	May 1	0.12	July 28	2.36	Oct. 30	3.20
Feb. 29	1.43	30	1.38	Sept. 3	1.46	Nov. 26	1.64
Mar. 31	.68	June 30	2.36	Oct. 1	2.77	Dec. 29	1.66

Sussex County

Mf 3. State Highway Department. Lat. 38°53', long. 75°23'. Driven observation water-table well, diameter 1 inch, depth 27 feet. Land-surface datum is about 40 feet above msl. Highest water level 13.45 below lsd, June 2, 1952; lowest 20.87 below lsd, Dec. 1, 1950. Records available: 1950-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	17.27	Apr. 29	14.02	July 30	14.00	Oct. 30	16.72
Feb. 29	15.61	June 2	13.45	Aug. 28	14.52	Dec. 1	17.92
Apr. 4	14.28	30	13.72	Oct. 1	15.75	29	18.06

Nc 6. P. H. Cannon. Lat. 38°46', long. 75°35'. Near Greenwood. Driven observation water-table well, diameter 1 inch, depth 15 feet. Land-surface datum is about 43 feet above msl. Highest water level 6.67 below lsd, Jan. 30, 1952; lowest 9.71 below lsd, Oct. 2, 1951. Records available: 1950-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	6.67	May 2	7.73	July 28	9.51	Oct. 30	9.66
Feb. 27	8.11	June 2	8.36	Aug. 28	8.53	Dec. 1	8.92
Apr. 1	7.48	30	9.16	Oct. 2	9.45	29	8.38

Ne 1. State Highway Department. Lat. 38°47', long. 75°26'. Driven observation water-table well, diameter 1 inch, depth 14 feet. Land-surface datum is about 50 feet above msl. Highest water level 1.13 below lsd, Apr. 29, 1952; lowest 6.23 below lsd, Oct. 31, 1950. Records available: 1950-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	1.32	Apr. 29	1.13	July 30	4.84	Oct. 30	5.49
Feb. 29	1.78	June 2	1.37	Aug. 28	2.92	Dec. 1	2.79
Apr. 4	1.87	30	4.04	Oct. 1	4.91	29	2.06

Ni 3. City of Lewes. Lat. 38°45', long. 75°09'. Drilled observation artesian well, diameter 6 inches, depth 84 feet. Land-surface datum is about 20 feet above msl. Highest water level 14.27 below lsd, May 3, 1952; lowest 21.74 below lsd, Sept. 25, 1947. Records available: 1947-48, 1950-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	18.57	17.70	17.55	16.57	15.87	16.33	16.66	17.67	16.87	.....	15.80	17.50
2	18.55	17.58	17.47	16.58	15.72	16.27	16.85	17.27	16.72	17.90	17.32	17.23
3	18.65	17.49	17.37	16.56	14.27	16.39	16.87	17.07	17.29	17.46	17.70	16.94
4	18.67	17.27	17.37	16.57	15.82	16.44	17.11	.....	17.57	17.69	17.62	17.38
5	18.45	17.43	17.30	16.62	15.82	16.49	16.94	.....	17.75	17.98	17.67	17.29
6	18.39	17.38	17.19	16.57	15.76	16.49	16.87	.....	17.32	17.90	17.60	17.18
7	18.45	17.47	17.27	16.56	14.30	16.67	16.72	.....	17.28	17.83	17.61	17.25
8	18.39	17.57	17.38	16.57	15.98	16.14	16.77	.....	17.30	17.49	17.50	.....
9	18.36	17.57	17.17	16.61	14.39	16.67	16.68	.....	17.30	17.57	17.45	.....
10	18.31	17.50	17.27	16.53	16.20	16.33	14.89	.....	17.66	.....	17.49	.....
11	18.31	17.40	17.06	16.63	16.09	16.35	15.27	.....	17.73	.....	17.11	.....
12	18.28	17.47	16.97	16.56	16.45	16.54	15.52	.....	17.63	.....	17.57	17.11
13	18.17	17.37	16.97	16.40	16.38	16.39	15.05	.....	17.28	.....	17.56	16.70
14	18.17	17.29	17.03	16.33	16.44	16.69	15.47	.....	16.97	.....	17.63	17.29
15	18.13	.....	17.04	16.65	16.61	16.47	15.29	.....	17.56	.....	17.68	17.50
16	18.13	.....	17.09	16.57	16.17	16.37	15.35	.....	17.47	17.79	17.50	17.36
17	18.17	.....	17.07	16.70	16.37	16.16	15.40	.....	17.88	17.76	17.38	17.21
18	18.12	.....	17.07	16.22	16.37	16.26	15.69	.....	17.20	17.90	17.63	17.30
19	18.12	.....	17.01	16.84	16.52	16.40	15.83	.....	.....	17.28	17.67	17.30
20	18.07	.....	17.12	16.86	16.50	16.37	14.84	.....	.....	17.77	17.46	15.50
21	18.18	17.86	17.11	16.97	16.76	16.42	17.17	17.13	.....	17.70	17.22	17.15
22	18.04	17.94	17.17	16.86	16.75	16.25	17.29	17.15	.....	17.02	17.45	16.93
23	18.35	17.51	17.20	16.65	16.79	16.28	17.44	17.29	.....	17.42	17.25	17.32
24	18.04	17.69	17.20	16.68	16.71	16.53	17.43	16.99	.....	17.10	17.48	17.19
25	17.95	17.46	16.87	16.48	16.52	16.72	17.36	17.23	.....	17.50	.....	17.05
26	17.77	17.41	16.73	16.57	16.63	16.70	17.35	17.14	.....	17.42	.....	17.37
27	17.83	17.36	16.67	16.56	16.67	16.54	17.19	17.21	.....	17.41	.....	17.42
28	17.87	17.67	16.56	16.48	16.68	16.97	17.27	17.44	.....	17.00	.....	.....
29	17.86	17.67	16.61	16.61	16.79	16.59	17.45	17.19	.....	17.45	17.79	.....
30	17.84	.....	16.67	16.61	16.64	16.61	17.58	16.97	.....	17.61	17.10	.....
31	17.77	.....	16.61	.....	16.48	.....	17.62	17.03	.....	17.50	.....	.....

Pg 4. State Highway Department. Lat. 38°36', long. 75°19'. Near Millsboro. Driven observation water-table well, diameter 1 inch, depth 22 feet. Land-surface datum is about 30 feet above msl. Highest water level 13.88 below lsd, Apr. 4, 1952; lowest 16.65 below lsd, Nov. 30, 1950. Records available: 1950-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	15.04	Apr. 25	14.07	July 30	14.71	Oct. 30	15.38
Feb. 29	14.20	June 2	14.25	Aug. 28	14.79	Dec. 1	15.46
Apr. 4	13.88	30	14.43	Oct. 1	14.52	29	15.28

Qc 4. State Highway Department. Lat. $38^{\circ}33'$, long. $75^{\circ}36'$. Driven observation water-table well, diameter 1 inch, depth 8 feet. Land-surface datum is about 15 feet above msl. Highest water level 0.19 below lsd, Apr. 1, 1952; lowest 3.04 below lsd, Oct. 2, 1951. Records available: 1950-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	1.15	Apr. 25	0.65	July 28	1.76	Oct. 30	2.34
Feb. 27	.73	June 2	.78	Aug. 28	1.41	Dec. 1	2.27
Apr. 1	.19	30	1.21	Oct. 2	1.85	29	2.03

Rf 1. Harvey Collins. Lat. $38^{\circ}28'$, long. $75^{\circ}20'$. Gumboro-Selbyville Rd. Driven observation water-table well, diameter 12 inches, depth 6 feet. Land-surface datum is 39.0 feet above msl. Highest water level 38.9 above msl, Aug. 4, 1948; lowest dry, summers 1947-52. Records available: 1947-52.

Jan. 30	+36.02	Apr. 25	+33.52	July 30	(f)	Oct. 30	(f)
Feb. 29	+34.71	June 2	+35.81	Aug. 28	(f)	Dec. 1	+33.58
Apr. 4	+34.90	30	+33.36	Oct. 1	(f)	29	+34.31

f Dry.

Rf 2. Harvey Collins. Lat. $38^{\circ}28'$, long. $75^{\circ}20'$. Near Gumboro-Selbyville Rd. Driven observation water-table well, diameter 12 inches, depth 9 feet. Land-surface datum is 36.7 feet above msl. Highest water level 36.7 above msl, Mar. 8, 1948; lowest 30.76 above msl, Oct. 30, 1952. Records available: 1947-52.

Jan. 30	+34.50	Apr. 25	+32.86	July 30	+31.61	Oct. 30	+30.76
Feb. 29	+33.75	June 2	+34.70	Aug. 28	+32.26	Dec. 1	+33.82
Apr. 4	+33.82	30	+32.51	Oct. 1	+31.35	29	+34.05

INDIANA

By B. W. Swartz and Porter E. Ward

Scope of Water-Level Program

A continuing program of water-level measurements has been in operation since 1935. Observation wells are measured and maintained in cooperation with the Indiana Department of Conservation, Division of Water Resources, as part of the statewide investigation of ground-water resources. During the year, measurements were made in 163 wells, 43 of which were equipped with recording gages; 32 were selected as representative or key wells and only these latter wells appear in this report. Key wells were selected on the basis of the geographical location and proximity to weather stations, the geological conditions of occurrence, and the length and quality of the record. The key wells Marion 2, Marion 10, and St. Joseph 1 are affected to various degrees by nearby pumping. Data from the remaining key wells are believed to be indicative of the ground-water changes at each location and in the nearby areas. The location of key wells in Indiana is shown in figure 4.

Precipitation

The winter months of 1952 were mild with above-normal temperatures in January and February. There were no periods of severe freezing. Precipitation for the State averaged 38.50 inches, which was 0.73 inch below normal. Precipitation averages for the State were below normal in the months of May, July, August, and October through December; the remaining months were above normal. The U.S. Weather Bureau has divided Indiana into three nearly equal divisions. These three divisions are followed in the explanation of major trends in ground-water levels. The accumulated departures from normal precipitation for these three divisions of the State in 1952 were as follows: northern division 0.43 inch above normal, central division 0.11 inch above normal, and southern division 0.73 inch below normal. Declining water-level trends were recorded in the extreme southern and southeastern part of the State during the latter half of the year; the result of a gradual deficiency of rainfall which was intensified by some very hot days during July. Widespread drought conditions throughout this area were prevented by scattered rainfall. By October wooded areas in southern Indiana were so dry that many forest fires occurred. Moderate to heavy snowfall covered much of Indiana the first of December. This snowfall had but little effect upon the water levels in the northern division of the State. This was probably in part owing to frozen ground. In the central division, however, a reversal of the downward trends in water levels was noted in some wells during December. A reversal of water levels in some wells was noted in the southern division in December, but owing to the short duration of the snow, rapid runoff, and extreme dryness of the soil, these reversals were only temporary at a number of locations.

Interpretation of Water-Level Fluctuations

In general, water levels in rock wells were slightly below the levels of last year. Seasonal recoveries at the end of the year were not recorded in the majority of the key wells, especially in the southern division where most water levels had not been reversed and were still continuing downward at the end of the year. Some wells, completed in unconsolidated materials that reached levels well below those of 1951 started a late but slow seasonal recovery in the fall. The reversal of water levels in these observation wells was primarily due to a deficiency in rainfall during the latter part of 1952.

The records of a number of wells indicate that the water levels are still on a downward trend from the highs reached in 1949-50, the peak of the upward trend in water levels which started about 1949. Although the water levels in many wells are below those recorded during the past 2 or 3 years, these water levels are about normal and if precipitation is seasonably normal during the early part of 1953 these water levels should recover to be near normal for the coming year. Figure 5 graphically shows the fluctuations of water level in three representative shallow wells completed in unconsolidated materials and not affected by pumping. Well Steuben 1 is situated in the northern division; Montgomery 1 is in the central division; and Clark 1 is in the southern division. Figure 6 is a graph of the water levels of two wells in the downtown Indianapolis area that are affected by nearby pumping. The graph plot is a comparison between the water level in a gravel well (Marion 2) and a limestone well (Marion 10).



Figure 4. --Location of observation wells in Indiana, 1952.

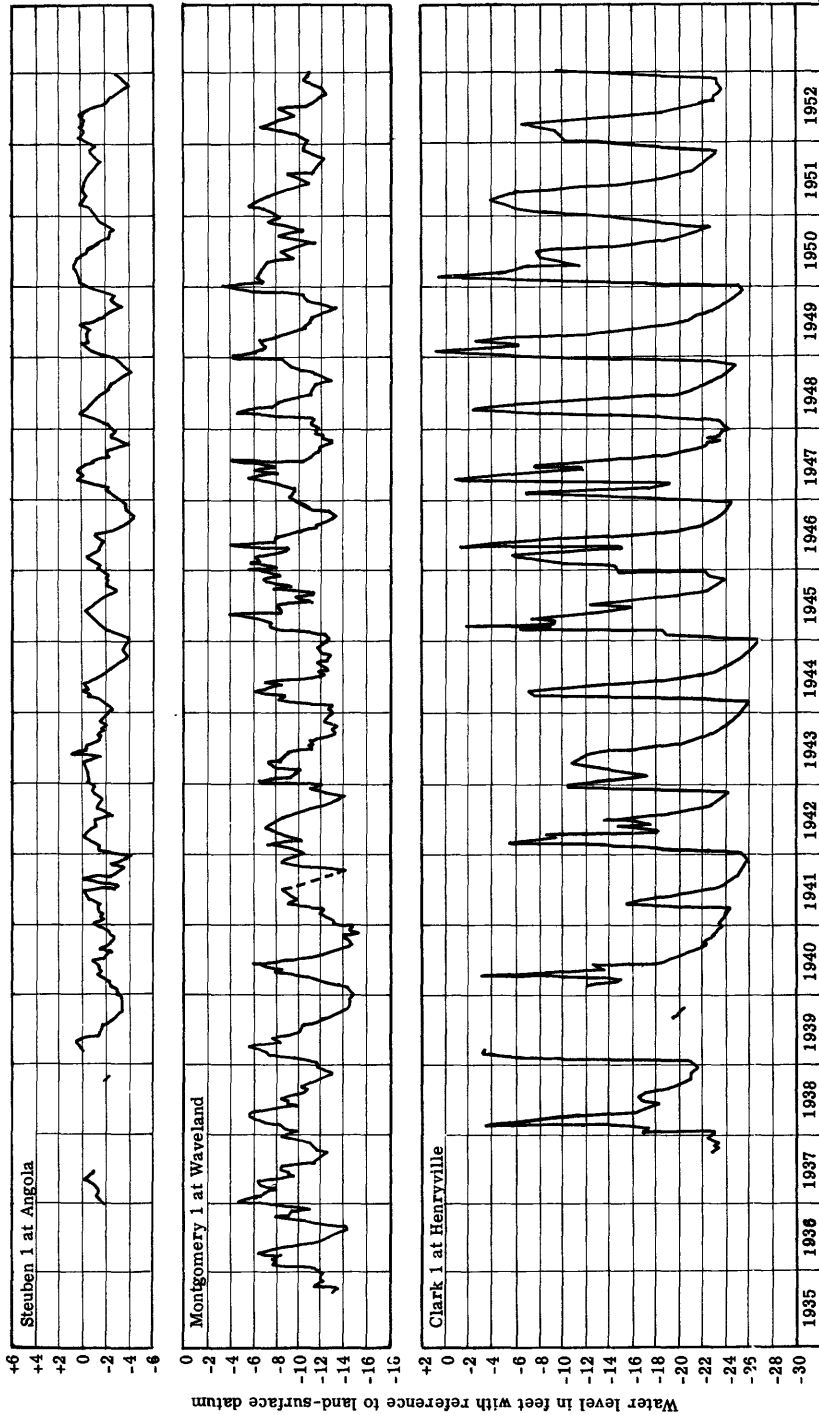


Figure 5.--Water levels in wells Steuben 1, Montgomery 1, and Clark 1, Indiana.

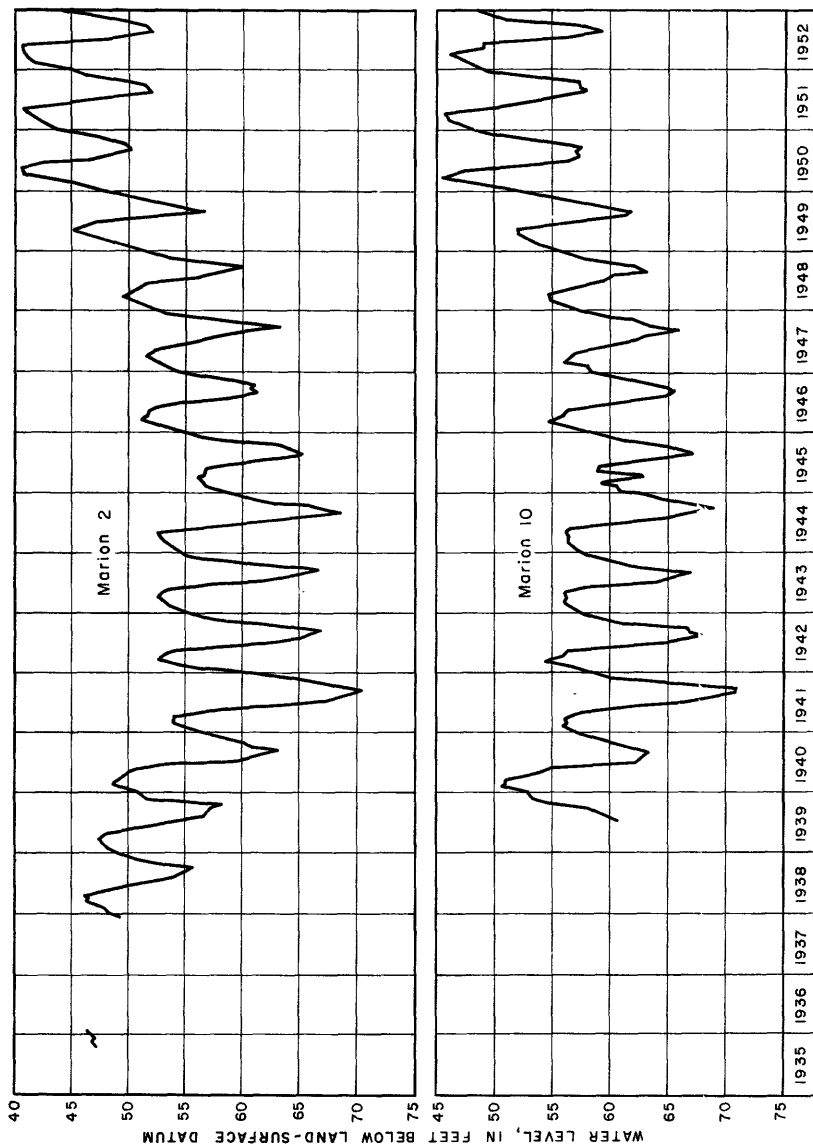


Figure 6. --Water levels in wells Marion 2 and 10 in downtown area, Indianapolis, Ind.

Well-Numbering System

Observation wells in Indiana are designated by a 2-letter symbol corresponding to the county name in which the well is situated, followed by a number for successive wells. For example, Ma 10 is well 10 in Marion County.

Well Descriptions and Water-Level Measurements

Water levels are in feet below land-surface datum unless otherwise indicated. When some measurements in a table are above and others below the plane of reference, a plus (+) or minus (-) sign is placed immediately preceding the first entry in each column of each mixed table. Readings between minus (-) signs are below the plane of reference, and those between plus (+) signs are above the plane of reference.

Allen County

Al 3. City of Fort Wayne. Lawton Park. Clinton and East Fourth Sts. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 36, T. 13 N., R. 12 E. Drilled unused artesian well in limestone, diameter 8 inches, reported depth 400 feet. Highest water level 4.62 below lsd, Apr. 8, 1950; lowest 12.72 below lsd, Sept. 6, 1946. Records available: 1944-52.

Daily 2 a.m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	9.71	6.96	8.44	7.90	8.20	7.67	9.24	9.86	10.61	11.28	11.37	11.16
2	9.48	7.03	8.51	7.98	8.25	7.76	9.28	9.87	10.60	11.31	11.36	11.13
3	9.31	7.10	8.52	8.03	8.35	7.78	9.33	9.91	10.65	11.34	11.37	11.15
4	9.19	7.00	8.49	8.11	8.40	7.87	9.36	9.92	10.71	11.34	11.36	11.14
5	9.08	7.08	8.65	8.02	8.42	7.97	9.43	9.96	10.75	11.34	11.31	11.12
6	9.03	7.13	8.69	8.07	8.49	8.02	9.48	10.01	10.77	11.36	11.30	11.13
7	9.00	7.19	8.72	8.11	8.60	8.11	9.50	10.04	10.82	11.37	11.33	11.12
8	8.95	7.20	8.74	8.13	8.61	8.18	9.55	10.07	10.85	11.37	11.35	11.11
9	8.97	7.28	8.71	8.15	8.69	8.25	9.59	10.10	10.88	11.37	11.33	11.11
10	9.03	7.30	8.70	8.12	8.63	8.32	9.63	10.11	10.92	11.39	11.33	11.11
11	9.11	7.23	8.52	8.22	8.69	8.42	9.67	10.14	10.95	11.39	11.34	11.14
12	9.09	7.38	8.28	8.20	8.73	8.50	9.74	10.12	10.96	11.37	11.33	11.13
13	9.09	7.44	7.97	8.12	8.80	8.51	9.79	10.16	10.98	11.35	11.33	11.15
14	9.09	7.50	7.83	8.07	8.85	8.31	9.83	10.18	10.99	11.39	11.37	11.15
15	9.06	7.58	7.66	8.08	8.84	8.40	9.87	10.32	10.98	11.39	11.30	11.15
16	9.13	7.63	7.54	8.10	8.94	8.44	9.93	10.31	11.00	11.38	11.30	11.16
17	8.82	7.67	7.54	8.07	8.97	8.50	9.97	10.28	11.03	11.38	11.30	11.16
18	8.68	7.79	7.55	8.05	8.98	8.60	10.00	10.30	11.06	11.38	11.30	11.16
19	8.59	7.87	7.44	8.03	9.00	8.65	10.01	10.34	11.06	11.33	11.27	11.20
20	8.32	7.89	7.53	8.04	8.99	8.71	10.03	10.37	11.08	11.36	11.26	11.18
21	8.11	7.95	7.54	8.08	9.02	8.74	10.04	10.38	11.10	11.38	11.27	11.16
22	7.90	8.06	7.53	8.12	9.07	8.78	10.08	10.40	11.08	11.36	11.26	11.15
23	7.86	8.11	7.52	8.18	9.10	8.82	9.49	10.43	11.08	11.35	11.22	11.13
24	7.95	8.14	7.55	8.01	8.83	8.86	9.54	10.43	11.12	11.37	11.23	11.14
25	7.92	8.20	7.59	7.98	....	8.92	9.58	10.44	11.14	11.39	11.21	11.13
26	7.87	8.25	7.63	8.00	7.93	8.98	9.61	10.46	11.15	11.39	11.13	11.11
27	7.27	8.28	7.70	7.99	7.80	....	9.65	10.49	11.18	11.34	11.16	11.10
28	6.80	8.31	7.75	7.97	7.70	9.09	9.66	10.52	11.20	11.36	11.16	11.16
29	6.71	8.37	7.80	8.05	7.69	9.12	9.71	10.54	11.22	11.39	11.17	11.13
30	6.84		7.86	8.12	7.68	9.16	9.74	10.59	11.26	11.38	11.15	11.13
31	6.90		7.87		7.64		9.81	10.60		11.36		11.14

Bartholomew County

Ba 2. V. E. Sprouse Co. Inc. 1804 East 22d St., Columbus. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 18, T. 9 N., R. 6 E. Drilled unused well in gravel, diameter 6 inches, depth 52 feet. Highest water level 9.49 below lsd, Feb. 18, 1950; lowest 17.39 below lsd, Dec. 26-28, 31, 1952. Records available: 1948-52.

Daily 2 a.m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	14.97	14.14	13.95	13.14	13.69	13.00	13.82	14.84	15.80	16.46	17.06	.....
2	14.94	14.07	13.99	13.20	13.72	13.02	13.82	14.88	15.83	16.49	17.08	.....
3	14.91	14.00	14.01	13.23	13.76	13.03	13.84	14.92	15.83	16.51	17.09	.....
4	14.88	13.93	14.00	13.26	13.79	13.09	13.88	14.95	15.84	16.54	17.10	.....
5	14.85	13.88	14.06	13.26	13.81	13.14	13.90	14.98	15.87	16.57	17.10	.....

Ba 2--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	14.83	13.83	14.09	13.27	13.84	13.18	13.92	15.01	15.89	16.60	.....	.....
7	14.81	13.78	14.11	13.28	13.87	13.24	13.94	15.04	15.92	16.61	.....	.....
8	14.78	13.73	14.13	13.28	13.90	13.30	13.95	15.08	15.94	16.63	.....	.....
9	14.76	13.70	14.15	13.28	13.92	13.35	13.98	15.11	15.96	16.64	.....	.....
10	14.76	13.69	14.17	13.30	13.95	13.40	14.01	15.15	15.98	16.66	.....	.....
11	14.77	13.63	14.07	13.35	13.99	13.44	14.03	15.18	16.00	16.68	.....	17.27
12	14.77	13.63	14.05	13.36	14.02	13.49	14.06	15.21	16.03	16.71	.....	17.28
13	14.78	13.63	13.97	13.36	14.05	13.50	14.09	15.24	16.06	16.74	.....	17.30
14	14.78	13.64	13.92	13.37	14.07	13.52	14.11	15.27	16.08	16.76	.....	17.30
15	14.76	13.67	13.85	13.38	14.10	13.54	14.14	15.30	16.10	16.77	.....	17.30
16	14.78	13.68	13.80	13.40	14.13	13.56	14.17	15.34	16.12	16.79	.....	17.29
17	14.79	13.70	13.75	13.42	14.15	13.58	14.19	15.37	16.14	16.81	.....	17.29
18	14.82	13.74	13.72	13.44	14.18	13.62	14.23	15.40	16.16	16.84	.....	17.30
19	14.83	13.75	13.67	13.46	14.21	13.65	14.27	15.42	16.18	16.86	.....	17.32
20	14.82	13.75	13.68	13.49	14.23	13.70	14.30	15.44	16.19	16.88	.....	17.33
21	14.84	13.76	13.68	13.50	14.26	13.75	14.34	15.47	16.20	16.89	.....	17.34
22	14.79	13.79	13.67	13.51	14.28	13.80	14.38	15.50	16.22	16.90	.....	17.35
23	14.80	13.80	13.61	13.52	14.31	13.80	14.42	15.54	16.24	16.94	.....	17.35
24	14.82	13.82	13.54	13.55	13.95	13.81	14.49	15.57	16.25	16.96	.....	17.36
25	14.82	13.85	13.42	13.57	13.59	13.84	14.53	15.60	16.28	16.98	.....	17.38
26	14.81	13.87	13.31	13.59	13.42	13.87	14.58	15.62	16.29	16.99	.....	17.39
27	14.74	13.88	13.22	13.61	13.22	13.91	14.62	15.65	16.33	17.00	.....	17.39
28	14.66	13.89	13.17	13.63	13.13	13.94	14.67	15.68	16.39	17.01	.....	17.39
29	14.54	13.92	13.14	13.65	13.05	13.91	14.71	15.71	16.42	17.02	.....	17.38
30	14.38		13.14	13.67	13.01	13.85	14.74	15.74	16.44	17.03	.....	17.38
31	14.25		13.14		13.00		14.80	15.78		17.05		17.39

Blackford County

Bf 1. John L. and Katherine Wise. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 2, T. 24 N., R. 10 E. Dug unused well, diameter 42 inches, depth 18 feet, cribbed with brick. Land-surface datum is 921 feet above msl. Highest water level 0.69 below lsd, Feb. 9, 1952; lowest 7.98 below lsd, Dec. 28, 1946. Records available: 1945-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	4.39	Apr. 12	1.07	July 12	4.42	Oct. 11	6.27
12	4.12	19	1.37	19	4.71	18	5.38
19	2.03	26	1.29	26	4.98	25	6.81
26	1.07	May 3	2.29	Aug. 2	5.32	Nov. 1	6.92
Feb. 2	.89	10	2.69	9	5.63	8	6.99
9	.69	17	2.96	16	5.20	15	7.19
16	1.45	24	3.07	23	5.46	22	7.07
23	1.38	31	2.37	30	5.69	29	7.00
Mar. 1	1.49	June 7	3.27	Sept. 6	5.81	Dec. 6	6.87
8	1.58	14	3.19	13	5.97	13	6.94
15	.73	21	3.38	20	5.67	20	6.17
29	1.37	28	3.82	27	5.84	27	5.38
Apr. 5	1.47	July 5	4.12	Oct. 4	6.11		

Clark County

C1 1. State of Indiana. Clark County State Forest. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 36, T. 2 N., R. 6 E. Dug unused well, diameter 4 feet, depth 35 feet, cribbed with stone. Measurements made by Kenneth E. Cook. Highest water level 0.65 below lsd, Jan. 24, 1949, Jan. 14, 1951; lowest 26.69 below lsd, Dec. 31, 1944. Records available: 1936-52.

Daily 2 a.m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	10.45	9.90	.....	.....	13.75	18.65	21.25	22.75	23.50	24.05	24.60	25.05
2	10.95	1.75	.....	9.55	13.95	18.80	21.30	22.80	23.50	24.05	24.60	25.05
3	1.60	1.70	.....	9.80	14.15	18.95	21.40	22.80	23.50	24.05	24.65	25.05
4	4.75	1.30	.....	10.05	14.30	19.05	21.45	22.80	23.55	24.10	24.65	25.05
5	1.50	2.35	.....	8.45	14.45	19.15	21.50	22.80	23.60	24.10	24.65	25.05
6	3.35	.....	.....	7.85	14.60	19.25	21.60	22.85	23.60	24.10	24.65	25.05
7	5.50	.....	.....	8.05	14.80	19.35	21.65	22.85	23.65	24.15	24.70	25.05
8	6.75	.....	.....	8.40	14.95	19.40	21.70	22.90	23.70	24.15	24.70	25.10
9	7.40	.....	.....	8.80	15.15	19.50	21.75	22.90	23.70	24.20	24.70	25.10
10	8.10	.....	.....	9.15	15.30	19.60	21.80	22.90	23.70	24.20	24.75	.....

Cl 1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	8.95	.....	.....	9.65	15.45	19.65	21.85	22.95	23.70	24.20	24.70	.....
12	9.65	.....	.....	9.90	15.65	19.75	21.90	22.95	23.75	24.25	24.75	.....
13	10.30	h9.56	.....	10.05	15.80	19.80	21.95	23.00	23.75	24.25	24.75	.....
14	10.95	.....	.....	8.20	15.95	19.90	22.00	23.00	23.80	24.25	24.75	.....
15	11.45	.....	.....	8.05	16.10	20.00	22.05	23.05	23.80	24.25	24.75	.....
16	12.00	.....	.....	8.25	16.25	20.10	22.10	23.05	23.80	24.30	24.80	.....
17	12.35	.....	.....	8.60	16.40	20.20	22.15	23.10	23.80	24.30	24.80	25.15
18	10.25	.....	.....	8.95	16.60	20.30	22.20	23.10	23.80	24.35	24.80	25.15
19	9.60	.....	h7.43	9.40	16.75	20.35	22.30	23.15	23.80	24.40	24.80	25.20
20	9.40	.....	.....	9.85	16.90	20.45	22.30	23.15	23.80	24.40	24.80	25.20
21	9.50	.....	.....	10.30	17.05	20.55	22.35	23.20	23.85	24.40	24.80	25.20
22	9.80	.....	.....	10.70	17.25	20.65	22.40	23.20	23.85	24.45	24.80	25.25
23	9.40	.....	.....	11.15	17.40	20.70	22.45	23.25	23.90	24.50	24.85	25.25
24	9.60	.....	.....	11.55	17.55	20.80	22.50	23.30	23.95	24.50	24.85	25.25
25	10.10	.....	.....	11.90	17.70	20.85	22.55	23.30	23.95	24.50	24.90	25.25
26	10.15	.....	h6.27	12.30	17.80	20.95	22.60	23.35	24.00	24.55	24.85	25.30
27	8.15	.....	.....	12.65	18.00	21.00	22.60	23.40	24.00	24.55	24.90	25.35
28	7.55	.....	.....	12.95	18.10	21.10	22.65	23.40	24.00	24.55	24.00	25.35
29	8.00	.....	.....	13.25	18.25	21.15	22.65	23.40	24.05	24.55	24.95	25.35
30	8.55	.....	.....	13.55	18.40	21.20	22.70	23.45	24.05	24.60	25.00	25.40
31	9.25	.....	.....	.....	18.55	.....	22.70	23.45	.....	24.60	.....	25.35

h Tape measurement.

Dubois County

Du 2. State of Indiana. Ferdinand State Forest. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 18, T. 3 S., R. 3 W.
 Drilled unused well in limestone, diameter 6 inches, depth 33 feet. Measurements made by
 Henry Huff. Highest water level 4.51 below lsd, Feb. 22, 1950; lowest 18.45 below lsd,
 Nov. 13, 1944. Records available: 1936-37, 1942-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	11.92	Apr. 7	11.28	July 7	15.70	Oct. 6	16.90
14	13.17	16	11.11	14	15.82	13	16.86
21	11.67	21	11.92	21	16.11	22	16.96
28	11.83	28	12.83	28	16.08	26	16.55
Feb. 4	10.05	May 5	13.51	Aug. 4	16.27	Nov. 10	17.05
11	11.96	15	14.48	11	16.49	18	17.11
18	12.19	19	13.47	18	16.49	24	17.03
25	11.69	26	13.69	25	16.66	Dec. 1	17.02
Mar. 3	12.17	June 2	14.67	Sept. 3	16.65	8	16.67
11	8.17	9	14.54	8	16.52	15	16.74
19	9.20	16	14.68	15	16.61	23	16.81
24	8.81	23	14.82	22	16.53	29	16.85
Apr. 1	11.72	30	15.28	30	16.72	.....	.....

Fountain County

Fo 1. Merchants and Farmers Telephone Co. Hillsboro. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 12, T. 19 N.,
 R. 7 W. Drilled unused well in rock, diameter 4 inches, depth 59 feet. Land-surface datum is
 708 feet above msl. Highest water level 33.28 below lsd, Mar. 7, 1950; lowest 42.45 below lsd,
 Feb. 14, 1945. Records available: 1944-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	40.23	Apr. 8	38.88	July 9	38.26	Oct. 7	40.63
8	39.73	16	38.82	15	38.22	14	40.72
15	40.16	22	38.34	22	38.40	21	40.73
22	39.90	29	38.36	29	38.40	28	40.71
29	40.20	May 6	38.39	Aug. 5	39.28	Nov. 4	40.52
Feb. 5	39.87	13	38.52	12	39.46	11	40.72
12	39.42	20	38.42	19	39.56	18	40.81
19	39.22	June 3	38.48	26	39.75	25	40.50
26	39.32	10	38.50	Sept. 2	39.90	Dec. 3	40.82
Mar. 4	39.41	17	38.50	9	40.15	9	40.72
11	39.73	25	38.22	17	40.05	16	40.85
19	39.18	July 1	38.24	23	40.44	23	40.83
25	38.85	8	38.18	30	40.52	30	40.85
Apr. 1	38.81	.....	.....	.....	.....	.....	.....

Harrison County

Hr 3. State of Indiana. Harrison County State Forest. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 2, T. 4 S., R. 2 E. Dug unused well, diameter 5 feet, depth 25 feet, cribbed with stone. Measurements made by Max Parker. Highest water level 2.00 below lsd, Mar. 21, 1939; lowest 7.80 below lsd, Sept. 30, 1941. Records available: 1938-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	2.47	Apr. 5	2.74	July 5	6.00	Oct. 4	7.47
12	2.97	12	2.88	12	6.19	11	7.53
19	2.60	19	2.98	19	6.39	18	7.55
26	2.20	26	3.15	26	6.55	25	7.58
Feb. 2	2.07	May 3	3.50	Aug. 2	6.71	Nov. 1	7.62
9	2.86	10	4.23	9	6.86	8	7.65
16	2.83	17	4.52	16	6.96	15	7.65
23	2.78	24	4.80	23	7.05	22	7.69
Mar. 1	2.86	31	5.05	30	7.07	29	7.68
8	2.75	June 7	5.32	Sept. 6	7.17	Dec. 6	7.61
15	2.65	14	5.53	13	7.23	13	7.23
22	2.65	21	5.55	20	7.28	20	6.76
29	2.98	28	5.72	27	7.37	27	4.73

Hendricks County

Hd 1. Brocia A. and Anna M. Smith. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 14, T. 14 N., R. 1 W. Drilled unused well, diameter 4 inches, depth 46 feet. Land-surface datum is 842 feet below msl. Highest water level flowing 0.30 above lsd, Apr. 17, 24, 1944; lowest 8.46 below lsd, Jan. 29, 1945. Records available: 1944-52.

Jan. 7	1.14	Apr. 7	0.25	July 7	2.68	Oct. 13	6.70
14	1.48	14	.18	14	3.38	20	6.90
21	1.00	21	.54	21	3.67	27	7.00
28	.52	28	.92	28	4.11	Nov. 3	7.13
Feb. 4	.30	May 5	1.77	Aug. 5	4.60	10	7.08
11	.45	12	2.35	11	4.99	17	7.32
18	1.14	19	2.90	18	5.25	24	7.42
25	1.60	26	2.20	25	5.48	Dec. 1	7.46
Mar. 3	2.03	June 1	2.00	Sept. 1	5.76	8	7.30
10	2.18	9	2.70	8	6.00	15	7.02
17	1.05	16	2.30	15	6.10	22	7.00
24	.24	23	2.62	22	6.22	29	6.85
31	.87	30	2.06	Oct. 6	6.55		

Howard County

Ho 4. Howard L. and Earl M. Shenk. Formerly John A. Moore. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T. 24 N., R. 4 E. Dug unused well, diameter 42 inches, depth 18 feet. Land-surface datum is 835 feet above msl. Highest water level 0.96 below lsd, Apr. 10, 1948; lowest 15.22 below lsd, Jan. 25, 1947. Records available: 1945-52.

Jan. 5	5.82	Apr. 5	3.03	July 5	6.17	Oct. 4	11.19
12	4.64	12	2.65	12	6.56	11	11.47
19	3.75	19	2.17	19	7.02	18	11.79
26	3.05	26	1.65	26	7.44	25	12.12
Feb. 2	2.49	May 3	2.86	Aug. 2	7.80	Nov. 1	12.49
9	1.60	10	3.82	9	8.33	8	12.82
16	2.26	17	4.40	16	8.61	15	13.18
23	2.30	24	3.52	23	9.04	22	13.41
Mar. 1	2.70	31	2.66	30	9.46	29	13.64
8	2.42	June 7	3.87	Sept. 6	9.79	Dec. 6	13.84
15	1.60	14	4.57	13	10.21	13	14.07
22	1.74	21	5.15	20	10.40	20	14.23
29	2.59	28	5.68	27	10.80	28	14.33

Jackson County

Jk 2. Ralph Fish. Formerly Hiram H. Martin. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 24, T. 6 N., R. 2 E. Drilled unused well in rock, diameter 6 inches, depth 92 feet. Land-surface datum is 864 feet above msl. Highest water level 10.18 below lsd, Apr. 23, 1951; lowest 20.32 below lsd, Dec. 29, 1952. Records available: 1944-52.

Jk 2--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	12.05	Apr. 7	10.75	July 7	12.81	Oct. 6	18.05
14	11.60	14	10.67	14	13.00	13	18.24
21	11.58	21	10.61	20	13.09	20	18.79
28	11.37	28	10.40	28	13.42	27	18.75
Feb. 4	10.44	May 5	10.62	Aug. 3	13.46	Nov. 3	19.20
11	10.63	12	10.82	11	14.09	10	19.30
18	10.82	19	11.10	17	14.37	17	19.54
25	10.88	26	11.73	25	15.00	24	19.78
Mar. 3	11.05	June 2	12.12	Sept. 1	15.02	Dec. 1	19.41
10	11.11	8	12.23	8	15.71	8	20.08
17	10.78	15	12.58	15	15.95	15	20.17
24	10.41	22	12.05	22	16.34	22	20.14
31	10.54	30	12.52	29	16.78	29	20.32

Jefferson County

Jf 2. State of Indiana. Clifty Falls State Park. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 20, T. 4 N., R. 10 E. Drilled unused well in limestone, diameter 6 inches, depth 69 feet. Measurements made by Lewis Summers. Land-surface datum is 810 feet above msl. Highest water level 15.33 below lsd, Apr. 1, 1946; lowest 32.5 below lsd, Aug. 16, 1943. Records available: 1937-52.

Jan. 12	26.94	Mar. 12	26.03	June 9	27.15	Aug. 3	27.72
19	26.94	24	26.75	19	27.26	28	28.46
28	26.93	Apr. 8	26.21	27	27.30		28.49
Feb. 11	26.14	15	b27.03	July 11	27.55		28.69
18	26.14	May 2	26.26	24	27.81	Sept. 25	28.50
25	26.15	June 2	26.80	31	27.92	26	28.82
Mar. 4	26.16						

b Pumped recently.

Kosciusko County

Ko 2. State of Indiana. Wawasee State Fish Hatchery. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 25, T. 34 N., R. 7 E. Driven unused artesian well in glacial drift, diameter 1 $\frac{1}{2}$ inches, reported depth 87 feet. Measurements made by C. R. Silvens. Land-surface datum is 865 feet above msl. Highest water level 3.25 above lsd, May 1, 1944; lowest 1.35 above lsd, Nov. 3, 1938. Records available: 1938-39, 1941-52.

Jan. 5	+2.69	Apr. 19	+3.04	July 19	+2.77	Oct. 11	+2.13
12	2.68	26	2.83	26	2.83	18	2.12
19	2.71	May 3	2.94	Aug. 2	2.77	25	2.08
26	2.86	10	2.88	9	2.83	Nov. 1	2.04
Feb. 2	2.90	17	2.94	16	2.75	8	1.98
9	2.94	24	2.92	23	2.50	15	1.94
Mar. 1	2.88	31	3.08	30	2.79	22	2.04
8	2.78	June 7	2.96	Sept. 6	2.67	29	1.90
15	2.83	14	2.98	13	2.66	Dec. 6	1.89
22	3.04	21	2.94	20	2.28	13	1.91
29	3.00	28	2.98	27	2.25	20	1.99
Apr. 5	2.83	July 5	2.73	Oct. 4	2.25	27	1.89
12	2.88	12	2.75				

La Porte County

Lp 2. State of Indiana. Kankakee State Game Preserve. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 33 N., R. 3 W. Drilled unused well in sand and gravel, diameter 6 inches, reported depth 115 feet. Measurements made by Frank Burger. Land-surface datum is 671 feet above msl. Highest water level 0.34 below lsd, Apr. 8, 1950; lowest 7.22 below lsd, Oct. 11, 1946. Records available: 1942-52.

Jan. 5	3.13	Feb. 23	3.32	Apr. 12	3.72	May 31	3.92
12	3.25	Mar. 1	3.72	19	3.40	June 7	4.34
19	2.70	8	4.00	26	3.34	14	4.14
26	2.70	15	3.82	May 3	3.72	21	4.06
Feb. 2	2.66	22	3.56	10	4.04	28	4.48
9	2.56	29	3.70	17	4.24	July 5	5.02
16	2.84	Apr. 5	3.86	24	4.14	12	5.30

Lp 2--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 19	5.46	Sept. 13	6.78	Oct. 25	6.80	Nov. 29	6.45
Aug. 9	6.06	20	6.84	Nov. 1	6.78	Dec. 6	6.40
16	6.14	27	6.88	8	6.76	13	6.34
23	6.32	Oct. 4	6.98	15	6.76	20	6.28
30	6.48	11	6.92	22	6.60	27	6.12
Sept. 6	6.64	18	6.80				

Madison County

Md 7. State of Indiana. Mounds State Park. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 16, T. 19 N., R. 8 E. Driven unused well, diameter 1 $\frac{1}{4}$ inches, depth 18 feet. Measurements made by Jesse E. Little. Highest water level flowing 0.50 above lsd, Jan. 30-Mar. 12, 1950, Apr. 14, 21, 1952; lowest 13.9 below lsd, Aug. 7, 1946. Records available: 1935-36, 1938-52.

Jan. 7	6.58	Apr. 14	0.50	July 14	4.23	Oct. 6	6.05
14	7.43	21	.50	17	4.19	13	6.12
21	7.17	28	.53	21	5.12	20	6.30
28	5.27	May 5	1.27	28	4.72	27	7.23
Feb. 4	4.36	12	1.20	Aug. 4	4.92	Nov. 3	6.45
11	3.74	19	2.14	11	4.86	10	6.74
19	3.70	26	2.30	16	4.74	17	6.79
25	3.60	June 2	2.59	25	4.97	24	6.79
Mar. 3	4.43	9	2.90	Sept. 1	5.19	Dec. 1	8.10
9	3.58	16	3.19	8	5.69	8	7.09
17	1.93	23	4.00	15	6.15	15	6.84
31	1.70	30	3.71	22	5.74	22	6.94
Apr. 7	.46	July 8	4.07	29	5.98	30	6.91

Marion County

Ma 2. Indiana National Bank. 130 East Washington St., Indianapolis. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 1, T. 15 N., R. 3 E. Drilled unused well in gravel, diameter 8 inches, depth 90 feet. Land-surface datum is 712.27 feet above msl. Nearby well being pumped. Highest water level 40.43 below lsd, Apr. 18, 1950; lowest 70.55 below lsd, Sept. 21, 1941. Records available: 1935-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	44.22	43.09	42.07	41.44	43.79	45.21	49.49	51.21	52.29	51.10	47.18	45.64
2	44.26	43.03	42.15	41.52	44.25	45.25	49.51	51.32	52.10	51.26	47.25	45.45
3	44.20	42.98	42.00	41.58	44.93	45.25	49.65	51.46	51.84	51.20	47.20	45.43
4	44.18	42.82	41.84	41.62	45.25	45.74	49.78	51.36	51.63	50.97	47.05	45.39
5	44.04	42.82	42.01	41.58	45.14	46.21	49.77	51.28	51.50	50.74	46.82	45.29
6	44.04	42.87	42.06	41.60	45.28	46.41	49.64	51.28	51.45	50.50	46.70	45.27
7	43.98	42.91	42.04	41.53	45.50	46.90	49.27	51.35	51.59	50.16	46.67	45.25
8	43.85	42.86	41.99	41.47	45.32	47.27	49.24	51.44	51.58	49.87	46.59	45.16
9	43.77	42.86	41.86	41.47	45.21	47.19	49.34	51.60	51.37	49.69	46.47	45.14
10	43.81	42.83	41.70	41.50	45.15	47.20	49.51	51.76	51.38	49.54	46.35	45.34
11	43.90	42.68	41.51	41.65	44.99	47.45	49.65	51.73	50.56	49.42	46.23	45.50
12	43.80	42.71	41.76	41.59	44.42	47.63	49.81	51.65	50.78	49.23	46.15	45.44
13	43.70	42.67	41.68	41.46	43.90	47.77	49.94	51.65	51.01	49.00	46.14	45.42
14	43.54	42.63	41.69	41.34	43.62	48.05	49.68	51.73	51.21	48.83	46.13	45.32
15	43.53	42.67	41.77	41.36	43.44	48.30	49.71	51.85	51.23	48.69	46.11	45.19
16	43.67	42.62	41.71	41.38	44.09	48.19	49.75	51.98	52.16	48.63	46.19	45.10
17	43.55	42.53	41.60	41.40	44.28	48.17	49.88	52.14	52.07	48.60	46.22	45.04
18	43.58	42.50	41.50	41.49	44.13	48.29	50.04	52.08	52.06	48.63	46.26	44.99
19	43.65	42.46	41.34	41.70	43.80	48.53	50.22	52.02	52.07	48.56	46.39	45.03
20	43.46	42.36	41.45	42.17	43.45	48.78	50.34	52.01	52.12	48.41	46.50	44.95
21	43.50	42.37	41.46	42.2	43.24	48.93	50.30	52.10	52.08	48.20	46.49	44.92
22	43.33	42.44	41.54	42.30	43.49	50.02	50.26	52.26	51.99	47.94	46.35	.....
23	43.22	42.42	41.57	42.84	44.15	48.86	50.30	52.38	51.70	47.73	46.26	44.79
24	43.29	42.35	41.54	43.05	44.73	48.77	50.51	52.29	51.40	47.64	46.16	44.85
25	43.25	42.26	41.47	42.77	45.35	48.80	50.71	52.10	51.18	47.71	45.96	44.87
26	43.12	42.21	41.46	42.60	45.42	49.01	50.88	51.82	51.02	47.78	45.83	44.74
27	43.15	42.13	41.56	42.51	45.22	49.27	51.03	51.81	51.06	47.66	46.09	44.65
28	43.15	42.08	41.56	42.35	45.54	49.47	50.95	51.91	51.07	47.60	46.01	44.66
29	43.11	42.07	41.56	42.66	45.71	49.65	50.88	52.06	51.04	47.53	45.88	44.54
30	43.14		41.61	43.30	45.55	49.55	50.92	52.22	51.04	47.37	45.75	44.41
31	43.14		41.53		45.11		51.06	52.34		47.19		44.41

Ma 10. Federal Building. Meridian and Ohio Sts., Indianapolis. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 1, T. 15 N., R. 3 E. Drilled unused artesian well in limestone, diameter 8 inches, reported depth 304 feet. Land-surface datum is 717.51 feet above msl. Nearby well being pumped. Highest water level 45.46 below lsd, Apr. 16, 1951; lowest 70.78 below lsd, Aug. 29, 1941. Records available: 1939-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	48.80	Mar. 31	46.77	July 14	57.28	Oct. 6	55.07
7	48.24	Apr. 7	46.98	21	57.15	13	52.02
14	48.23	14	46.66	28	57.92	20	51.62
21	47.89	21	48.80	Aug. 4	58.34	27	51.43
28	48.20	28	49.12	11	58.53	Nov. 3	51.17
Feb. 4	47.76	May 5	49.41	18	58.98	10	51.83
11	47.81	12	49.65	25	59.43	17	53.26
19	47.25	19	48.79	Sept. 2	59.77	24	50.06
25	47.24	26	49.11	9	59.98	Dec. 1	49.36
Mar. 3	46.71	June 2	50.52	15	59.64	8	49.00
10	46.63	9	54.35	22	59.14	15	49.15
17	46.45	July 1	57.53	22	57.86	22	48.85
24	46.22	7	57.16	29	56.62	29	49.19

Ma 28. Manuel W. Rabourn. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 17, T. 14 N., R. 5 E. Dug unused well in glacial drift, diameter 42 inches, depth 24 feet, cribbed with brick. Land-surface datum is 819 feet above msl. Highest water level 1.29 below lsd, Jan. 27, 1950; lowest 14.64 below lsd, Nov. 25, 1952. Records available: 1947-52.

Daily 2 a.m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	8.18	4.75	6.24	4.53	5.96	8.93	9.21	11.46	13.31	13.88	14.40	14.59
2	8.02	4.61	6.41	4.42	6.11	8.98	9.24	11.55	13.32	13.92	14.42	14.58
3	7.90	4.31	6.54	4.49	6.28	9.02	....	11.65	13.31	13.95	14.43	14.57
4	7.80	3.14	6.63	4.60	6.44	9.07	9.25	11.74	13.32	....	14.45	14.57
5	7.72	2.98	6.74	3.80	6.59	9.12	9.29	11.81	13.33	....	14.45	14.53
6	7.63	3.05	6.84	3.54	6.74	9.17	9.33	11.89	13.35	....	14.46	14.51
7	7.60	3.01	6.95	3.53	6.90	9.23	9.37	11.97	13.37	....	14.46	14.48
8	7.60	3.23	7.05	3.62	7.06	9.29	9.43	12.05	13.38	....	14.46	14.43
9	7.59	....	7.13	3.76	7.20	9.36	9.46	12.13	13.41	14.07	14.50	14.39
10	7.62	....	7.21	3.93	7.31	9.42	9.51	12.20	13.44	14.08	14.51	14.32
11	7.68	....	6.35	4.10	7.43	9.48	9.58	12.27	13.46	14.10	14.52	14.26
12	7.73	....	5.65	4.23	7.55	9.57	9.66	12.33	13.50	14.11	14.53	14.19
13	7.78	....	....	4.08	7.68	9.22	9.75	12.39	13.54	14.13	14.55	14.11
14	7.81	4.53	....	3.47	7.80	9.23	9.83	12.46	13.58	14.14	14.56	14.04
15	7.75	4.47	....	3.29	7.91	9.25	9.90	12.51	13.58	14.15	14.57	13.96
16	7.53	4.55	....	3.30	8.02	9.27	9.97	12.50	13.59	14.19	14.58	13.90
17	7.36	4.65	....	3.39	8.13	9.28	10.04	12.53	13.61	14.20	14.59	13.84
18	7.20	4.80	....	3.56	8.24	....	10.09	12.57	13.63	14.22	14.60	13.79
19	7.13	4.97	....	3.76	8.35	9.35	10.17	12.60	13.62	14.23	14.60	13.74
20	7.08	5.12	5.42	3.98	8.44	9.40	10.25	12.64	13.63	14.24	14.61	13.70
21	7.08	5.12	5.33	4.21	....	9.45	10.34	12.70	13.65	14.26	14.62	13.64
22	7.10	5.21	4.77	4.45	8.62	9.46	10.43	12.74	13.66	14.28	14.63	13.60
23	....	5.34	3.91	4.68	8.71	9.45	10.54	12.79	13.67	14.29	14.62	13.54
24	7.16	5.45	3.80	4.88	8.76	9.44	10.63	12.84	13.69	14.30	14.63	13.49
25	7.22	5.57	3.89	5.03	8.77	9.42	10.74	12.90	13.72	14.31	14.64	13.45
26	7.24	5.71	4.02	5.17	8.79	9.42	10.84	12.96	13.75	14.32	14.58	13.39
27	4.21	5.83	4.19	5.32	8.82	9.23	10.95	13.03	13.77	14.33	14.59	13.32
28	3.98	5.97	4.37	5.47	8.83	9.21	11.05	13.10	13.70	14.34	14.58	13.26
29	4.03	6.10	4.55	5.62	8.85	9.20	11.15	13.16	13.82	14.36	14.58	13.21
30	4.25	....	4.76	5.79	8.87	9.20	11.24	13.21	13.85	14.38	14.58	13.14
31	4.50	....	4.94	....	8.90	....	11.34	13.26	....	14.39	....	13.09

Martin County

Mt 3. John Ketcham. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 12, T. 4 N., R. 5 W. Dug unused well in rock, diameter 42 inches, depth 32 feet, cribbed with stone. Land-surface datum is 621 feet above msl. Highest water level 18.02 below lsd, June 2, 1947; lowest 22.71 below lsd, Feb. 15, 1945. Records available: 1944-52.

Mt 3--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	20.24	Apr. 14	19.49	July 14	20.99	Oct. 13	21.83
14	20.28	21	19.84	21	21.09	20	21.88
21	20.31	28	20.03	Aug. 4	21.33	27	21.95
28	20.26	May 5	20.06	11	21.38	Nov. 3	22.01
Feb. 11	19.61	12	20.27	18	21.47	10	22.08
18	19.97	19	20.32	25	21.49	17	22.24
25	20.03	26	20.44	Sept. 1	21.51	24	22.27
Mar. 3	20.12	June 2	20.46	8	21.62	Dec. 1	22.29
10	19.59	9	20.61	15	21.63	8	22.29
17	19.61	16	20.71	22	21.65	15	21.31
25	19.69	23	20.73	29	21.73	23	22.36
31	19.96	30	20.78	Oct. 6	21.76	29	22.41
Apr. 7	19.64	July 7	20.91				

Montgomery County

My 1. Byron Banta. Formerly Marshall A. Fuller. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 33, T. 17 N., R. 6 W. Dug unused well in glacial drift, diameter 36 inches, depth 18 feet. cribbed with brick. Land-surface datum is 770 feet above msl. Highest water level 3.37 below lsd, Jan. 4, 1950; lowest 15.45 below lsd, Nov. 16, 1940. Records available: 1935-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.77	7.39	9.57	7.66	8.31	9.51	7.90	11.39	11.91	12.69	13.29	.....
2	7.96	7.38	9.80	7.91	8.43	9.70	8.27	11.40	11.86	12.70	13.33	12.04
3	8.06	7.10	9.73	8.06	8.62	9.76	8.62	11.45	11.71	12.82	13.37	12.22
4	8.23	6.58	9.59	8.22	8.79	9.87	8.70	11.48	11.74	12.85	13.38	12.24
5	8.19	6.32	9.86	7.50	8.89	10.00	8.81	11.55	11.76	12.85	13.19	11.38
6	8.49	6.37	9.91	6.41	9.01	10.10	8.99	11.66	11.78	12.93	13.13	11.10
7	8.77	6.48	9.88	6.30	9.22	10.23	9.17	11.71	11.83	12.99	13.26	10.97
8	8.77	6.49	9.82	6.50	9.37	10.34	9.35	11.74	11.93	13.00	13.33	10.96
9	8.85	6.85	9.65	6.71	9.36	10.44	9.05	11.74	11.99	12.99	13.29	10.97
10	9.16	7.03	9.54	6.86	9.35	10.53	8.83	11.77	12.04	13.02	13.26	10.48
11	9.50	7.11	9.05	.....	9.43	10.63	.....	11.86	12.10	13.07	13.27	10.17
12	9.48	7.52	7.34	.....	9.51	10.73	9.19	11.80	12.14	13.06	13.28	.....
13	9.52	7.65	6.54	.....	9.67	10.71	9.40	11.78	12.20	13.05	13.30	10.23
14	9.53	7.79	6.69	.....	9.80	10.73	9.51	11.79	12.25	13.12	13.29	10.32
15	9.56	8.06	6.93	.....	9.73	10.30	9.61	11.60	12.25	13.12	13.25	10.44
16	9.86	8.16	7.07	.....	9.92	10.06	9.78	11.31	12.27	13.07	13.29	10.59
17	9.77	8.23	7.27	.....	10.04	10.03	9.91	11.13	12.26	13.08	13.33	10.68
18	9.80	8.52	7.37	.....	10.14	10.21	9.94	11.14	12.30	13.14	13.33	10.79
19	9.93	8.63	6.55	6.76	10.19	10.33	9.99	11.20	12.33	13.10	13.27	11.00
20	9.71	8.62	6.20	6.98	10.19	10.48	.....	11.23	12.37	13.14	13.10	10.96
21	10.08	8.79	6.25	7.23	10.13	10.53	.....	11.27	12.40	13.26	13.00	10.85
22	9.89	9.04	6.35	7.41	10.20	10.52	10.37	11.33	12.42	13.23	12.95	10.80
23	9.91	9.12	5.79	7.56	10.20	8.15	10.52	11.41	12.41	13.17	12.90	10.61
24	10.23	9.15	5.90	7.50	10.23	7.84	10.68	11.44	12.46	13.17	13.01	10.69
25	10.19	9.29	6.19	7.48	9.52	8.12	10.82	11.50	12.50	13.18	12.98	10.76
26	9.99	9.38	6.58	7.58	9.10	8.57	10.89	11.56	12.51	13.23	12.55	10.77
27	7.79	9.35	6.92	7.68	9.01	9.03	10.98	11.62	12.54	13.20	12.39	.....
28	6.86	9.34	7.14	7.80	9.05	7.16	11.01	11.67	12.58	13.21	12.34	.....
29	6.77	9.43	7.29	7.95	9.19	7.21	11.11	11.72	12.63	13.32	12.30	10.78
30	6.98	.....	7.56	8.15	9.30	7.48	11.18	11.81	12.68	13.33	12.22	10.71
31	7.20	.....	7.66	.....	9.36	.....	11.27	11.85	.....	13.27	.....	10.80

Morgan County

Mg 3. State of Indiana. Morgan-Monroe State Forest. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 27, T. 11 N., R. 1 E. Drilled unused artesian well in rock, diameter 8 inches, depth 45 feet. Land-surface datum is 670 feet above msl. Measurements by Victor McGee. Highest water level 1.75 below lsd, Dec. 18, 1950; lowest 9.21 below lsd, Oct. 28, 1952. Records available: 1945-52.

Mg 3--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	5.57	Apr. 8	5.69	July 15	6.46	Oct. 7	8.08
8	5.52	15	5.56	22	6.88	14	8.17
15	6.03	22	5.86	29	6.75	21	9.20
22	5.60	May 13	6.30	Aug. 5	7.40	28	9.21
29	5.66	20	6.44	12	7.60	Nov. 13	8.84
Feb. 5	5.58	27	5.70	19	6.70	18	8.85
12	5.39	June 3	6.39	26	7.38	28	6.60
19	5.81	10	6.49	Sept. 2	7.42	Dec. 1	6.38
26	5.76	17	5.75	9	7.60	9	6.18
Mar. 4	5.88	24	5.60	16	7.74	16	6.27
18	5.61	July 1	6.17	23	7.40	23	6.24
25	5.64	8	6.15	30	7.77	31	6.40
Apr. 1	5.60						

Owen County

Ow 5. David R. Bronson. Formerly Ed. Laudig. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 30, T. 12 N., R. 4 W. Dug unused well, diameter 26 inches, depth 19 feet, cribbed with stone. Highest water level 1.06 below lsd, Jan. 14, 1950; lowest 13.39 below lsd, Aug. 3, 1946. Records available: 1946-52.

Jan. 6	1.74	Mar. 29	2.77	July 7	6.06	Oct. 5	10.75
12	2.07	Apr. 6	1.45	12	6.88	12	9.83
19	1.86	19	2.17	19	7.98	19	10.78
26	2.03	28	2.41	27	6.63	26	10.47
Feb. 2	1.56	May 3	4.37	Aug. 3	9.85	Nov. 9	9.95
9	1.79	11	4.77	9	4.93	15	11.08
16	2.83	19	6.48	17	9.09	22	11.09
24	3.06	24	4.57	24	9.09	29	10.57
27	2.53	June 2	4.47	31	9.48	Dec. 7	9.05
Mar. 1	3.06	7	4.93	Sept. 8	9.75	13	9.33
8	2.79	14	5.91	21	8.27	21	10.61
15	2.06	21	6.99	27	10.07	28	10.55
22	1.07	28	3.36				

Pike County

Pi 1. A. J. Heuring. Lafayette and Main Sts., Winslow. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 32, T. 1 S., R. 7 W. Dug and drilled unused well, diameter 36 to 6 inches, depth 25 feet. Land-surface datum is 468 feet above msl. Highest water level 3.25 below lsd, Mar. 20, 1951; lowest 12.94 below lsd, Dec. 30, 1944. Records available: 1936-52.

Jan. 7	6.22	Apr. 7	5.46	July 7	7.49	Oct. 6	9.28
14	6.22	14	5.47	14	7.74	13	9.39
21	6.41	21	5.59	21	7.88	20	9.59
28	6.33	28	6.03	28	8.34	27	10.08
Feb. 4	6.11	May 5	6.48	Aug. 4	8.43	Nov. 3	10.13
11	5.32	12	6.68	11	8.53	10	10.26
18	5.74	19	6.69	18	8.64	17	10.33
25	5.68	26	6.66	25	8.78	24	10.27
Mar. 3	5.80	June 2	6.67	Sept. 1	8.87	Dec. 1	10.43
10	6.12	9	6.66	8	8.67	8	10.02
17	5.52	16	6.50	15	8.79	15	9.46
24	3.79	23	6.79	22	8.79	22	9.38
31	5.08	30	7.09	29	9.13	29	9.54

Posey County

Py 2. Mary M. Wade. Formerly Warren Wade Estate. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 5, T. 5 S., R. 12 W. Drilled unused well, diameter 6 inches, depth 236 feet. Highest water level 3.03 below lsd, June 4, 1952; lowest 12.24 below lsd, Dec. 10, 1952. Records available: 1947-52.

Jan. 2	6.89	Feb. 20	5.07	Apr. 23	3.43	June 11	4.21
9	6.43	Mar. 5	4.29	30	3.21	18	4.22
16	6.13	12	4.04	May 7	3.31	25	4.67
23	5.66	19	3.98	14	3.23	July 2	4.63
30	5.22	26	3.61	21	3.81	16	5.41
Feb. 6	4.87	Apr. 9	3.73	28	3.14	23	5.93
13	4.63	16	3.56	June 4	3.03	30	6.47

Py 2--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 6	6.77	Sept. 17	8.47	Oct. 22	9.81	Dec. 3	12.19
13	7.16	24	8.43	29	10.13	10	12.24
20	6.93	Oct. 1	9.69	Nov. 5	11.23	17	12.14
27	7.31	8	9.64	12	11.61	24	12.07
Sept. 3	7.61	15	9.57	19	11.66	31	12.03
10	8.22						

Pulaski County

Pu 1. State of Indiana. Jasper-Pulaski State Game Preserve. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T. 31 N., R. 4 W. Drilled unused artesian well in rock, diameter 4 inches, reported depth 149 feet, cased to 60. Measurements made by Cecil H. Rowe. Land-surface datum is 706 feet above msl. Highest water level 5.31 below lsd, Apr. 10, 1950; lowest 12.14 below lsd, Dec. 1, 1935. Records available: 1935-42, 1944-52.

Jan. 7	6.45	Apr. 7	6.48	July 7	6.10	Oct. 6	9.09
14	6.38	14	6.48	14	6.97	13	9.47
21	6.32	21	6.42	21	6.94	20	9.59
28	6.24	28	6.40	28	7.19	26	9.78
Feb. 4	6.26	May 5	6.40	Aug. 4	7.45	Nov. 3	9.90
11	6.29	12	6.46	11	7.51	10	9.88
18	6.27	19	6.42	18	7.48	17	9.50
25	6.24	26	5.99	25	7.24	24	9.75
Mar. 3	6.47	June 2	6.02	Sept. 1	6.98	Dec. 1	9.64
10	6.49	9	6.20	8	8.53	8	9.60
17	6.55	16	5.98	15	8.64	15	9.23
24	6.56	23	6.00	22	8.64	22	9.13
31	6.48	30	6.04	29	8.94	29	9.09

Randolph County

Ra 1. Artie V. Keys. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 26, T. 20 N., R. 14 E. Drilled domestic artesian well in limestone, diameter 4 inches, depth 157 feet, cased to 148. Measurements made by Artie V. Keys. Highest water level 12.08 below lsd, Jan. 31, 1949; lowest 18.43 below lsd, Jan. 31, 1945. Records available: 1942-52.

Jan. 15	13.56	Apr. 15	12.57	July 15	15.64	Oct. 15	16.41
31	12.80	30	13.04	31	16.13	31	16.60
Feb. 15	13.10	May 15	13.94	Aug. 15	16.10	Nov. 15	16.85
29	13.34	30	13.78	31	16.03	30	16.63
Mar. 15	12.89	June 15	14.72	Sept. 15	16.42	Dec. 15	15.49
31	13.11	30	15.25	30	16.15	31	14.98

St. Joseph County

Sj 1. City of Mishawaka. Mishawaka Water and Light Dept. Virgil and Linden Sts. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 11, T. 37 N., R. 3 E. Driven unused well in sand, diameter 1 $\frac{1}{2}$ inches, depth 40 feet. Measurements made by personnel of Mishawaka Water and Light Dept. Nearby well being pumped. Highest water level 4.46 below lsd, May 25, 1943; lowest 14.60 below lsd, Oct. 2, 1952. Records available: 1935-52.

Jan. 5	7.84	Apr. 2	8.84	July 1	9.92	Oct. 2	14.60
16	6.92	15	8.00	16	10.50	15	12.60
Feb. 3	6.86	May 2	8.75	Aug. 3	10.50	Nov. 2	11.50
17	8.17	16	10.43	19	11.42	15	11.42
Mar. 2	8.50	June 1	7.50	Sept. 2	10.83	Dec. 1	11.08
16	7.92	17	10.34	16	12.33	15	13.08

Spencer County

Sp 6. State of Indiana. Lincoln State Park. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 5, T. 5 S., R. 5 W. Drilled unused artesian well in rock, diameter 4 inches, reported depth 83 feet. Measurements made by personnel of Lincoln State Park. Highest water level 21.52 below lsd, Mar. 21, 1951; lowest 30.25 below lsd, Nov. 22, Dec. 20, 1944. Records available: 1944-52.

Jan. 2	24.78	Jan. 23	22.90	Feb. 13	22.42	Mar. 5	22.50
9	23.36	30	22.85	20	22.37	12	22.29
16	23.24	Feb. 6	22.42	27	22.34	19	22.17

Sp 6--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 26	22.08	June 11	25.10	Aug. 20	28.15	Oct. 29	29.34
Apr. 2	22.27	18	25.53	27	28.38	Nov. 5	29.45
9	22.35	24	26.07	Sept. 3	28.44	12	29.45
16	22.27	July 2	26.51	10	28.64	19	29.32
23	22.34	9	26.79	17	28.72	26	29.32
30	22.71	16	27.06	24	28.90	Dec. 3	29.32
May 7	23.26	23	27.27	Oct. 1	28.89	10	28.80
14	23.79	30	27.62	8	29.07	17	28.53
20	24.17	Aug. 6	27.69	15	29.21	24	28.46
28	24.35	13	27.93	22	29.31	31	28.20
June 4	25.64						

Steuben County

Sb 1. State of Indiana. Pokagon State Park. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 33, T. 38 N., R. 13 E. Driven unused artesian well in gravel, diameter 1 $\frac{1}{2}$ inches, depth 14 feet. Measurements made by personnel of Pokagon State Park. Land-surface datum is 1,004 feet above msl. Highest water level 1.01 above lsd, Apr. 1, 1950; lowest 4.6 below lsd, Oct. 12, 19, 26, Nov. 1, 1946. Records available: 1935-52.

Jan. 5	-0.19	Apr. 5	+0.08	July 5	-1.98	Oct. 4	-3.98
12	-.37	12	.16	12	1.88	11	4.05
19	+.42	19	.29	19	1.93	18	4.10
26	.40	26	+.17	26	2.15	25	4.12
Feb. 2	.17	May 3	-.12	Aug. 2	2.43	Nov. 1	4.12
9	.25	10	.03	9	2.68	8	4.16
16	+.07	17	-.28	16	2.54	15	4.16
23	.00	24	+.46	23	2.90	22	3.80
Mar. 1	-.13	31	-.05	30	3.12	29	3.86
8	-.20	June 7	.50	Sept. 6	3.20	Dec. 6	3.75
15	+.09	14	.48	13	3.42	13	3.64
22	+.20	21	.97	20	3.60	20	3.64
29	-.05	28	1.27	27	3.78	27	3.18

Switzerland County

Sw 1. Walker Estate. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 8, T. 2 N., R. 1 W. Dug domestic well, diameter 4 feet, depth 24 feet. Highest water level 2.45 below lsd, Mar. 2, 1945; lowest 21.90 below lsd, Dec. 2, 15, 1944. Records available: 1944-52.

Jan. 4	7.25	Apr. 19	9.85	July 27	18.20	Oct. 10	18.90
11	7.80	25	12.25	Aug. 1	18.10	17	18.80
19	9.70	May 16	15.90	8	18.35	24	18.85
28	7.40	24	16.10	15	18.85	31	19.00
Feb. 1	8.30	30	16.75	22	18.45	Nov. 8	19.00
8	4.90	June 7	17.00	29	18.50	15	19.20
15	8.70	14	16.85	Sept. 6	18.50	23	19.20
22	9.75	20	17.10	12	18.60	29	18.90
Mar. 1	11.90	28	17.30	19	18.80	Dec. 5	17.85
22	7.80	July 4	17.50	27	18.80	12	15.30
28	6.60	11	17.75	Oct. 4	19.0	27	14.70
Apr. 4	10.85	18	17.90				

Tippecanoe County

Tc 7. State of Indiana. Purdue University. Purdue Research Housing Project. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 23 N., R. 5 W. Drilled unused well, diameter 8 inches, depth 207 feet. Land-surface datum is 679 feet above msl. Highest water level 159.61 below lsd, May 15, 1950; lowest 166.25 below lsd, Jan. 17, 22, 1947. Records available: 1945-52.

Daily 2 a.m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	162.70	162.33	161.81	161.34	161.17	160.56	159.97	160.30	160.52	161.02	161.72	162.11
2	162.82	162.31	161.92	.....	161.12	160.53	159.96	160.17	160.50	161.17	161.67	161.97
3	162.85	162.22	.....	.....	161.21	160.35	159.93	160.18	160.70	161.31	161.87	162.16
4	162.71	162.07	161.53	161.54	161.13	160.46	160.00	160.03	160.80	161.20	161.76	162.09
5	162.67	162.26	.....	161.42	161.00	160.37	.....	160.26	160.80	161.23	161.67	162.04

Tc 7--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	.....	162.23	.....	161.57	161.04	160.33	.....	160.31	160.76	161.29	161.71	162.11
7	162.73	162.35	.....	161.60	161.11	160.36	.....	160.32	160.80	161.38	161.87	161.99
8	162.46	162.10	161.94	161.60	160.90	160.28	.....	160.29	160.79	161.34	161.88	162.01
9	162.55	162.34	161.78	161.52	160.92	160.31	.....	160.23	160.82	161.30	161.76	162.03
10	162.68	162.23	161.68	161.46	160.87	160.27	.....	160.27	160.82	161.38	161.80	162.02
11	162.79	162.08	161.50	161.63	160.92	160.33	.....	160.28	160.84	161.38	161.83	162.18
12	162.61	162.27	161.97	161.40	160.88	160.27	160.00	160.34	160.84	161.26	161.86	162.09
13	162.52	162.16	161.58	161.20	160.96	160.23	159.97	160.43	160.85	161.26	161.87	162.20
14	162.54	162.09	161.95	161.39	160.93	160.16	159.89	160.33	160.84	161.42	161.85	162.18
15	162.52	162.20	161.93	161.52	160.80	160.24	159.90	160.35	160.84	161.40	161.82	162.15
16	162.66	162.09	.....	161.62	160.92	160.13	160.00	160.28	160.85	161.47	161.88	162.21
17	162.37	162.00	.....	161.55	160.90	160.12	160.06	160.17	160.77	161.47	161.84	162.20
18	162.61	162.14	161.73	161.49	160.88	160.21	160.05	160.44	160.80	161.61	161.85	162.31
19	162.43	162.06	161.51	161.41	160.81	160.13	160.05	160.49	160.96	161.38	161.84	162.33
20	162.51	161.87	161.76	161.37	160.65	160.18	159.95	160.47	161.06	161.64	161.90	162.15
21	162.82	161.97	161.78	161.37	160.74	160.07	159.91	160.47	161.04	161.72	161.99	162.21
22	162.29	162.10	161.63	161.36	160.75	160.11	160.03	160.62	160.99	161.59	161.87	162.19
23	162.55	162.00	161.56	161.36	160.66	160.08	160.01	160.63	161.05	161.55	162.01	162.07
24	162.83	161.88	161.59	161.37	160.60	160.00	160.19	160.58	161.13	161.58	162.07	162.25
25	162.47	161.94	161.58	161.34	160.55	159.97	160.16	160.55	161.10	161.63	161.90	162.26
26	162.34	161.85	161.64	161.33	160.68	160.00	160.14	160.59	161.02	161.60	161.72	162.24
27	162.47	161.75	161.66	161.28	160.69	160.05	160.14	160.60	161.11	161.48	162.16	162.18
28	162.40	161.58	161.63	161.22	160.65	160.05	159.98	160.58	161.05	161.64	162.15	162.23
29	162.46	161.75	161.55	161.22	160.64	159.98	160.14	160.58	161.07	161.76	162.15	162.12
30	162.50	.....	161.63	161.24	160.56	159.95	160.12	160.62	161.13	161.70	162.13	162.04
31	162.42	.....	161.48	.....	160.48	.....	160.27	160.54	.....	161.65	.....	162.04

Vanderburgh County

Va 1. Flora Buente. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 8, T. 5 S., R. 11 W. Dug unused well, diameter 42 inches, depth 20 feet, cribbed with brick. Highest water level 0.19 below lsd, Mar. 18, 1951; lowest 11.25 below lsd, Dec. 28, 1952. Records available: 1947-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	4.40	Apr. 6	2.07	July 6	8.90	Oct. 12	9.93
13	4.53	13	2.62	13	8.59	19	10.09
20	4.57	20	2.70	20	8.66	26	10.28
27	4.48	27	3.09	27	8.86	Nov. 2	10.47
Feb. 3	1.23	May 4	3.80	Aug. 3	8.87	9	10.57
10	2.22	11	4.34	10	8.94	16	10.72
17	2.83	18	4.72	24	8.96	23	10.79
24	2.45	25	5.47	31	9.12	30	10.83
Mar. 2	2.13	June 1	6.35	Sept. 7	9.21	Dec. 7	10.89
9	2.25	8	7.45	14	9.40	14	10.91
16	2.02	15	7.85	21	9.44	21	11.09
23	.52	22	8.23	28	9.68	28	11.25
30	2.41	29	8.38	Oct. 5	9.74		

Wayne County

We 1. C. E. Rodenberg. Pershing. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T. 16 N., R. 12 E. Dug unused well in gravel, diameter 42 inches, depth 33 feet, cribbed with brick. Land-surface datum is 957 feet above msl. Highest water level 24.60 below lsd, Feb. 27, 1950; lowest 31.84 below lsd, Dec. 17, 1946. Records available: 1945-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	30.82	Mar. 31	27.07	July 14	29.02	Oct. 14	30.94
14	30.68	Apr. 8	26.97	21	29.20	27	31.18
22	30.47	21	26.96	30	29.47	Nov. 4	31.19
28	29.96	28	27.02	Aug. 12	29.80	10	31.27
Feb. 11	27.64	May 12	27.28	18	29.96	18	31.36
18	27.35	27	27.66	19	29.96	Dec. 3	31.46
25	27.26	June 2	27.85	26	30.10	9	31.49
Mar. 3	26.31	17	28.32	Sept. 22	30.60	22	31.55
11	27.44	23	28.49	Oct. 1	30.75	30	31.59
24	27.27						

MAINE

By Walter MacDonald, Jr.

Scope of Water-Level Program

The observation-well program was continued in 1952. Five wells were measured weekly throughout the year. Three of these, at Amherst (H 1), Cornish (Y 1), and Mercer (Sm 1), are in the southern part of the State; two, at Portage (Ar 1) and Sherman Mills (Ar 2), are in the northern part of the State. See figure 7 for locations.

Precipitation

Precipitation for the State as a whole during 1952 was 38.17 inches, 2.05 inches below normal and 12.49 inches less than in 1951. July was the driest month and December the wettest.

Interpretation of Water-Level Fluctuations

Water-level fluctuations in Maine follow a seasonal pattern in response to climatological conditions. The water levels decline gradually from January through February in southern Maine and until middle or late March in the northern sections. With the spring thawing and melting of the snow cover, the water levels rise abruptly until the advent of the growing season, which is normally in middle April in the south and about 2 weeks later in the north. Normal plant growth then causes a decline in water levels until mid-September. The levels then rise abruptly until the ground is frozen in late October or early November in the north and interior sections and somewhat later in the southern and coastal sections, after which a gradual decline sets in. The water levels in 1952 were above normal at the beginning of the year as a result of higher than normal amounts of precipitation during 1951. Levels followed the normal yearly patterns in general until midsummer when, owing to insufficient rainfall, they dropped considerably below the yearly average. This dry condition extended through November, delaying the usual rise at the end of the growing season until early December when they rose abruptly due to unseasonal heavy rainfall and mild temperatures. Water levels rose generally to or close to the seasonal average but still represented a net loss in ground-water storage for the year.

Well-Numbering System

Wells in Maine are numbered on a county basis in the numerical order that they are inventoried.

Well Descriptions and Water-Level Measurements

(Water-level measurements are in feet below land-surface datum.)

Aroostook County

Ar 1. H. L. Stevens. Portage Lake. Lat. 46°46'19", long. 68°28'04". Dug unlined water-table well in sand, diameter 28 inches, depth 11 feet. Land-surface datum is about 930 feet above msl. Highest water level 0.60 below lsd, Apr. 21, 1952; lowest dry several times in 1947, 1948, 1950 and 1952. Records available: 1942-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	4.85	Mar. 26	5.31	June 25	3.85	Sept. 19	9.30
10	6.00	Apr. 7	1.68	July 2	5.43	Oct. 6	7.55
19	4.80	21	.60	15	6.58	21	6.70
31	5.9	28	1.67	24	6.90	Nov. 5	3.23
Feb. 5	6.13	May 5	2.23	29	5.70	13	4.25
14	6.60	13	2.15	Aug. 9	7.45	20	4.92
23	7.08	19	2.68	15	7.78	28	2.75
29	7.18	26	2.78	22	8.08	Dec. 4	3.48
Mar. 5	7.28	June 2	1.97	28	8.43	12	4.06
12	7.03	12	1.82	Sept. 3	8.85	19	3.20
21	6.55	19	2.7	11	9.40	27	3.70

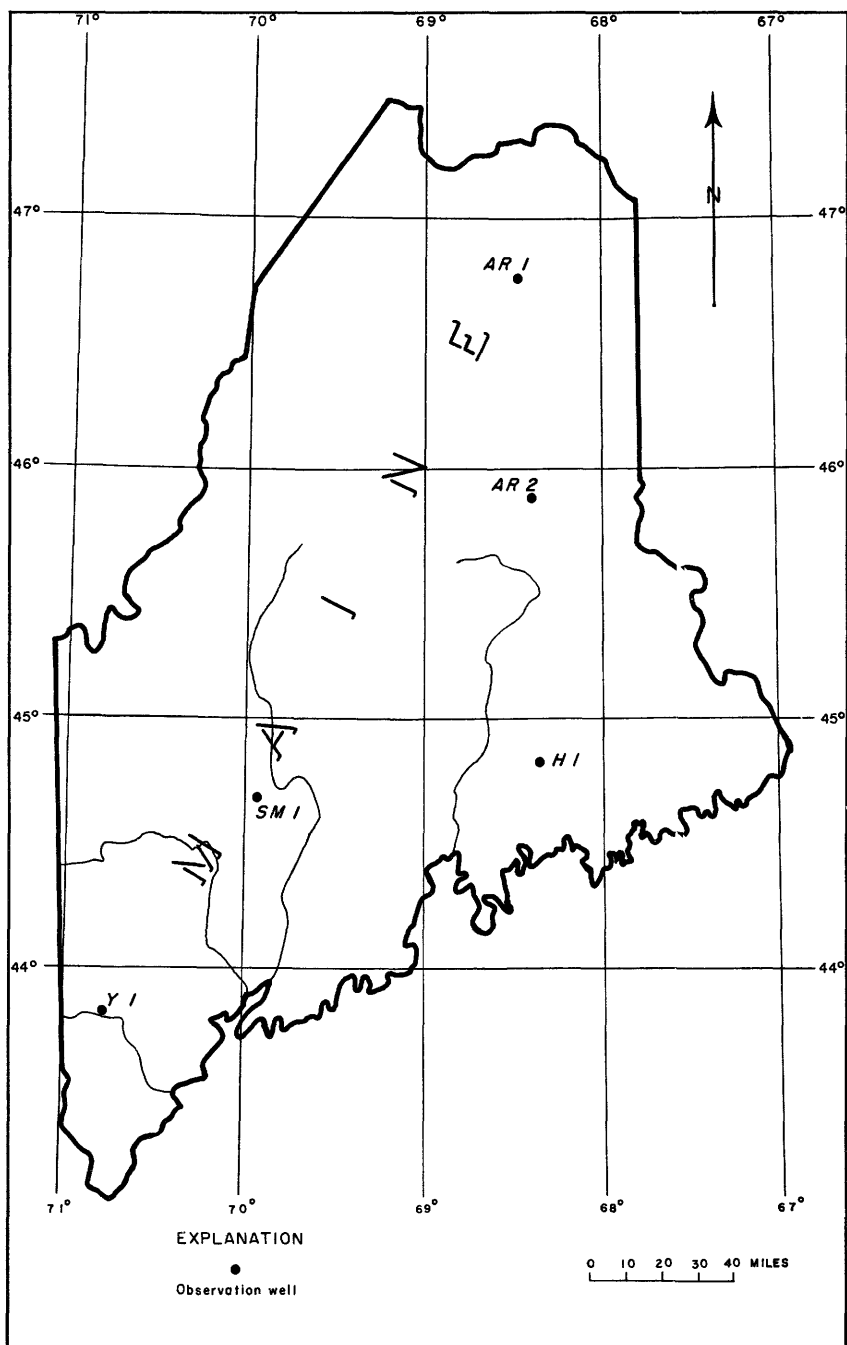


Figure 7.--Location of observation wells in Maine, 1952.

Ar 2. C. C. Young. Sherman. Lat. $45^{\circ}55'01''$, long. $68^{\circ}20'04''$. Dug and drilled unused water-table well 12 feet in sand, 19 feet in bedrock, diameter 28 to 8 inches, depth 31 feet. Land-surface datum is about 710 feet above msl. Highest water level 0.66 below lsd, Dec. 10, 1950; lowest 16.52 below lsd, Nov. 16, 1952. Records available: 1939-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	9.17	Apr. 6	0.70	July 6	9.80	Oct. 5	15.72
13	10.30	13	.67	13	11.50	19	16.04
20	3.80	20	.67	20	12.93	26	16.44
27	3.99	27	.76	27	13.20	Nov. 2	16.39
Feb. 3	5.29	May 4	1.10	Aug. 3	13.65	9	16.46
10	7.90	11	2.66	10	14.01	16	16.52
17	9.54	18	3.02	17	14.38	23	16.44
24	11.22	25	3.79	24	14.62	30	16.08
Mar. 2	12.10	June 1	1.82	31	14.72	Dec. 7	16.33
9	12.40	8	.80	Sept. 7	14.96	14	11.88
16	9.80	15	2.88	14	15.16	21	14.12
23	9.01	22	3.40	21	15.40	28	14.61
30	6.49	29	7.16	28	15.61		

Hancock County

H 1. George C. Orcutt. Amherst. Lat. $44^{\circ}49'50''$, long. $68^{\circ}22'06''$. Dug unused water-table well in glacial drift, diameter 18 inches, depth 14 feet. Land-surface datum is about 330 feet above msl. Dry Sept. 28 - Nov. 30, 1952. Highest water level 2.81 below lsd, Nov. 27, 1950; lowest dry several times in 1944, 1948, 1949, and 1952. Records available: 1943-52.

Jan. 6	5.04	Apr. 6	4.92	July 6	8.77	Oct. 6	(f)
13	5.68	13	5.24	13	9.66	12	(f)
20	3.43	20	5.35	20	10.33	19	(f)
27	3.91	27	5.99	27	10.88	26	(f)
Feb. 3	5.15	May 4	6.33	Aug. 3	11.58	Nov. 2	(f)
10	5.46	11	6.60	10	12.16	9	(f)
17	5.76	18	6.28	17	12.64	16	(f)
24	6.40	25	6.30	25	12.81	23	(f)
Mar. 2	6.80	June 1	6.51	31	13.08	30	(f)
10	6.80	8	5.81	Sept. 7	13.36	Dec. 7	(f)
16	5.90	15	6.27	14	13.59	14	12.70
23	5.45	22	6.98	21	13.86	21	10.27
30	5.25	29	7.76	28	(f)	28	8.66

f Dry.

Somerset County

Sm 1. J. Harrison Farrand. Mercer. Lat. $44^{\circ}42'10''$, long. $69^{\circ}55'12''$. Dug unused water-table well in sand, diameter 5 feet, depth 14 feet. Land-surface datum is about 270 feet above msl. Highest water level 4.30 below lsd, Mar. 24, 1946; lowest dry Oct. 26 - Dec. 21, 1952. Records available: 1942-52.

Jan. 6	5.75	Apr. 6	4.65	July 6	7.56	Oct. 12	12.95
12	5.80	13	4.46	13	8.01	19	13.00
19	5.55	20	4.78	19	8.37	26	(f)
27	5.45	27	5.30	27	8.99	Nov. 2	(f)
Feb. 3	5.50	May 2	5.57	Aug. 2	9.40	9	(f)
12	5.57	10	5.76	9	9.83	16	(f)
17	5.54	18	5.05	17	10.33	23	(f)
24	5.50	25	5.30	24	10.70	30	(f)
Mar. 2	5.82	June 1	5.35	Sept. 1	11.20	Dec. 7	(f)
9	6.15	8	5.70	7	11.46	13	(f)
16	5.40	15	6.30	13	11.80	21	(f)
25	5.10	22	6.78	21	12.18	28	11.02
30	4.84	29	7.14	Oct. 5	12.75		

f Dry.

York County

Y 1. J. P. Small. Cornish. Lat. 43°48'22", long. 70°48'25". Dug unused water-table well in sandy glacial drift, diameter 36 inches, depth 24 feet. Land-surface datum is about 370 feet above msl. Highest water level 7.90 below lsd, Apr. 6, 1952; lowest 18.40 below lsd, Nov. 14, 1948. Records available: 1943-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	11.10	Apr. 6	7.90	July 6	11.90	Oct. 5	16.10
13	11.60	13	8.10	13	11.75	12	15.60
20	11.40	20	8.60	20	11.75	19	16.10
27	9.60	27	9.30	27	12.70	26	15.30
Feb. 3	9.10	May 4	9.90	Aug. 3	13.55	Nov. 2	16.10
10	9.60	11	10.60	10	13.80	9	16.30
17	10.40	18	9.30	17	14.40	16	16.80
24	11.20	25	9.10	24	14.80	23	17.10
Mar. 2	11.80	June 1	9.60	31	15.30	30	17.30
9	11.90	8	9.10	Sept. 7	15.60	Dec. 7	17.40
16	9.20	15	10.55	14	15.80	14	8.50
23	8.80	22	11.20	21	16.20	21	9.50
30	8.80	29	11.40	28	15.90	28	9.40

MASSACHUSETTS

By H. N. Halberg

Scope of Water-Level Program

The observation-well program in Massachusetts, begun in 1938, was continued in 1952 in cooperation with the Massachusetts Department of Public Works. Measurements were made in 44 wells, including those equipped with recording gages at Leominster and Winchendon. Measurements were made in 31 wells in Middlesex County in the vicinity of Lowell, in the Aberjona Valley, and in the vicinity of Fresh Pond, Cambridge; 3 wells each in Barnstable, Berkshire, and Worcester Counties, 2 in Hampden County, and 1 each in Bristol and Franklin Counties. (See fig. 8.)

Precipitation

Precipitation for the State as a whole was above normal from January through June except during March, very low in July, and high in August. It was far below normal the rest of the year except during December when it was slightly above normal. Precipitation for the State as a whole was 41.58 inches or 1.32 inches below normal and 6.36 inches less than in 1951. Boston received 40.60 inches (1.84 inches above normal), Fitchburg received 47.55 inches (5.52 inches above normal), and Stockbridge received 42.11 inches (1.63 inches below normal).

Interpretation of Water-Level Fluctuations

Water levels throughout Massachusetts which at the beginning of 1952 were high for the time of year continued well above average through May. They rose in January, declined in February, and rose to high seasonal levels in March or early April. They then declined during the growing season and until November, except for a rise in August, with deficient precipitation from July through November except for heavy rain in August. Water levels rose in November and December, with above-normal precipitation during the latter month accentuating the rise. There was, however, insufficient precipitation to raise water levels to the high stages of the beginning of the year and there was an appreciable loss in ground-water storage during 1952. At the end of the year water levels were below average in northeastern, north-central, and western Massachusetts and were above average elsewhere in the State.

The following table shows the net change in water levels in wells in which readings were made throughout the year. There were net declines during the year in all but one of the wells.

Net change in feet in water levels in observation wells

Well	Net change	Well	Net change
Arlington 174	-1.81	Sterling 1	-0.01
Brimfield 12	-2.54	Truro 1	+ .4
Cambridge 667	-4.11	Wilmington 10	-3.45
Cambridge 798	-3.08	Wilmington 29	-1.07
Chelmsford 68	-1.22	Wilmington 56	-2.15
Chelmsford 69	-1.19	Wilmington 58	-3.33
Cheshire 2	-3.43	Wilmington 78	-2.17
Fall River 67	-.24	Winchendon 13	-4.98
Great Barrington 1	-1.55	Winchester 14	-4.12
Great Barrington 2	-3.91	Winchester 18	a9.7
Leominster 11	-2.65	Woburn 1	-1.31
Lowell 14	-5.37	Woburn 4	-.86
Lowell 41	-3.78	Woburn 17	-1.94
Lowell 43	-1.82	Woburn 19	-1.22
Montague 5	-1.19	Woburn 38	-6.01
Reading 1	-5.57	Woburn 49	-2.97
Reading 3	-1.25		

a Well dry Dec. 30.

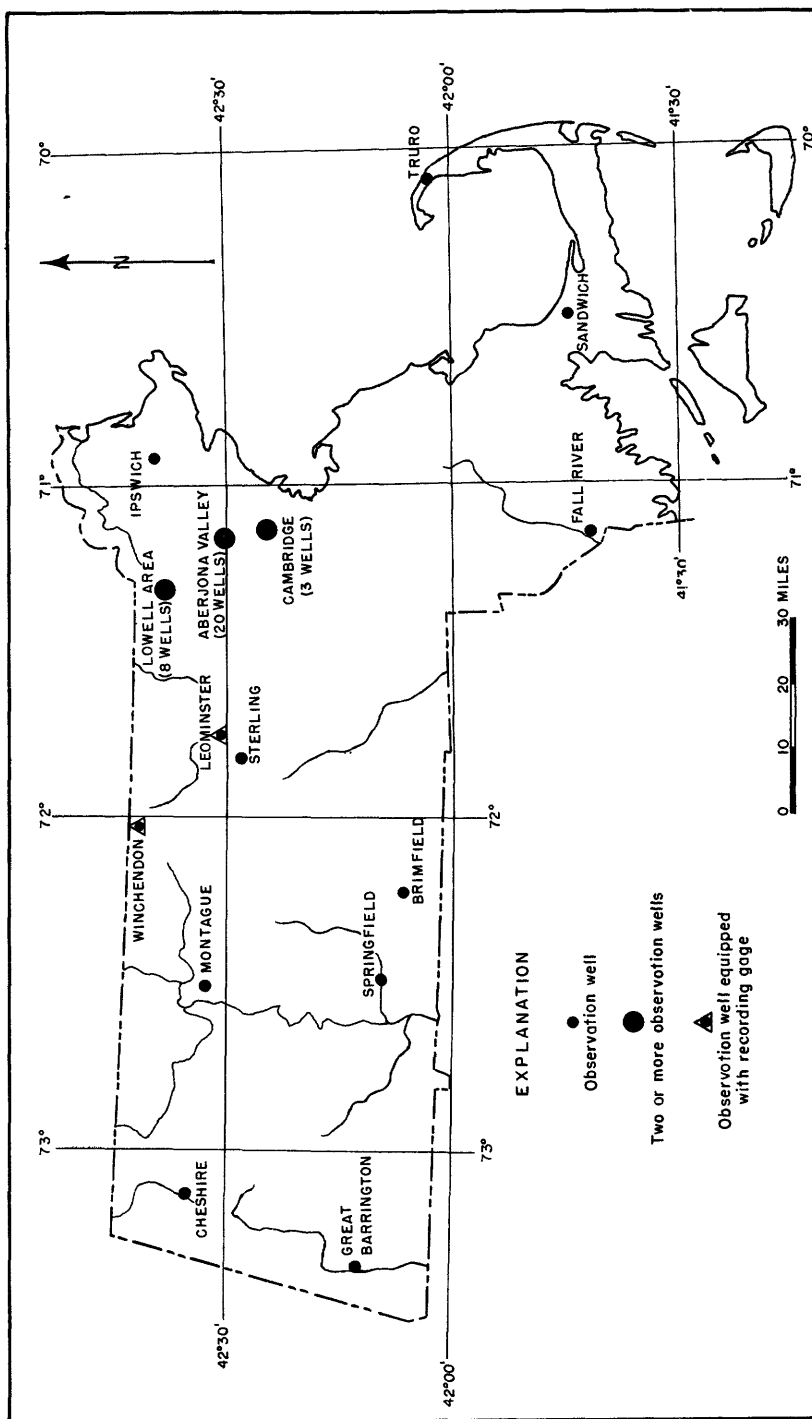


Figure 8. -- Location of observation wells in Massachusetts, 1952.

Well-Numbering System

Wells in Massachusetts are numbered by the city or town in which they are situated. The first well in a city or town for which data are collected is number one (Woburn 1). The only geographical significance to the well number is that the well is in the municipality named.

Well Descriptions and Water-Level Measurements

Water levels are in feet below land-surface datum unless otherwise indicated. When some measurements in a table are above and others below the plane of reference, a plus (+) or minus (-) sign is placed immediately preceding the first entry in each column of each mixed table. Readings between minus (-) signs are below the plane of reference, and those between plus (+) signs are above the plane of reference.

Barnstable County

Falmouth 5. Town of Falmouth. Lat. $41^{\circ}34'49''$, long. $70^{\circ}32'24''$. Driven unused water-table well in glacial drift, diameter $2\frac{1}{2}$ inches, depth 50 feet. Land-surface datum is about 8 feet above msl. Highest water level 3.7 below lsd, Mar. 24, 1951; lowest 5.46 below lsd, Sept. 2, 1950. Records available: 1950-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 9	4.07	July 24	5.08	Aug. 21	4.95	Sept. 18	5.23
July 3	4.59	Aug. 1	5.20	28	5.05	Oct. 27	5.40
10	4.84	7	4.96	Sept. 4	5.18	Nov. 28	5.43
17	4.96	14	4.90	11	5.17	Dec. 27	5.20

Sandwich 117. Town of Sandwich, Wing School. Lat. $41^{\circ}45'05''$, long. $70^{\circ}29'47''$. Driven unused well in glacial drift, diameter 2 inches, depth 52 feet. Land-surface datum is about 50 feet above msl. Highest water level 27.73 below lsd, May 2, 1952; lowest 28.75 below lsd, Nov. 3, 1950. Records available: 1950-52. May 2, 27.73; May 20, 27.85; June 18, 28.91. Measurement discontinued.

Truro 1. Town of Provincetown. Lat. $42^{\circ}02'39''$, long. $70^{\circ}06'20''$. Driven unused water-table well in glacial drift, diameter $1\frac{1}{4}$ inches, depth 68 feet. Land-surface datum is about 25 feet above msl. Highest water level 10.5 below lsd, Mar. 21, 1951, May 14, 1952; lowest 11.6 below lsd several times in 1950, 1951, and 1952. Records available: 1950-52.

Jan. 2	10.9	Apr. 2	10.7	July 2	11.3	Oct. 1	11.4
9	11.0	9	10.6	9	11.6	8	11.3
16	11.1	16	11.0	16	11.5	15	11.3
23	11.2	23	10.9	23	11.4	29	11.1
30	11.0	30	10.8	30	11.5	Nov. 5	11.1
Feb. 6	11.1	May 7	10.7	Aug. 6	11.4	12	11.1
13	11.1	14	10.5	13	11.3	26	11.2
20	10.9	22	10.7	20	11.5	Dec. 3	11.2
27	10.9	28	10.9	27	11.6	10	11.0
Mar. 5	10.8	June 4	11.3	Sept. 3	11.6	17	11.0
12	10.8	11	11.2	10	11.6	24	10.9
19	10.7	18	11.0	24	11.5	31	10.9
26	10.6	25	11.1				

Berkshire County

Cheshire 2. John Jayko. Wells and Jenks Rds. Lat. $42^{\circ}35'03''$, long. $73^{\circ}07'54''$. Dug unused water-table well in glacial drift, depth 22 feet. Land-surface datum is about 1,210 feet above msl. Highest water level 0.09 below lsd, Jan. 19, 1952; lowest 9.67 below lsd, Nov. 8, 1952. Records available: 1951-52.

Jan. 5	0.96	Mar. 29	0.98	June 21	5.16	Sept. 13	9.11
12	2.29	Apr. 5	.48	28	5.92	27	8.87
19	.09	12	.23	July 5	6.62	27	7.47
26	.36	19	2.48	12	6.98	Oct. 4	7.29
Feb. 5	1.41	26	2.38	19	7.44	11	8.64
9	1.26	May 3	2.78	26	8.54	18	8.25
16	1.37	10	4.36	Aug. 2	8.94	25	8.79
23	4.47	19	1.34	9	9.24	Nov. 8	9.67
Mar. 1	4.84	24	.98	16	8.84	Dec. 13	3.88
8	6.54	31	1.03	23	7.66	27	5.38
15	3.55	June 7	2.66	30	7.65	27	4.98
22	.96	17	4.94				

Great Barrington 1. Mrs. Dora A. Campbell. North Plains Rd. and Division St. Lat. $42^{\circ}13'38''$, long. $73^{\circ}21'52''$. Dug unused well in glacial drift, diameter 34 inches, depth 22 feet. Land-surface datum is 732.11 feet above msl. Highest water level 15.51 below lsd, Aug. 1, 1945; lowest 22.89 below lsd, Sept. 29, 1947. Records available: 1936-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 20	20.06	May 12	18.45	Aug. 3	20.24	Oct. 20	21.90
28	20.04	19	18.82	11	20.50	27	21.90
Feb. 6	19.42	25	18.90	17	20.70	Nov. 3	22.07
13	19.30	June 1	19.04	24	20.93	11	22.10
Mar. 17	19.64	8	17.70	31	21.00	18	22.14
24	19.09	15	18.44	Sept. 7	20.98	24	22.10
30	18.77	22	18.50	14	21.28	Dec. 2	22.18
Apr. 6	18.75	29	18.95	21	21.34	7	22.05
13	18.31	July 6	18.90	28	21.46	15	21.87
21	18.27	21	19.40	Oct. 5	21.64	24	21.88
May 4	18.50	28	19.88	12	21.81		

Great Barrington 2. Austin Holian. Lat. $42^{\circ}13'15''$, long. $73^{\circ}21'28''$. Dug unused water-table well in glacial drift, diameter 36 inches, depth 15 feet. Land-surface datum is about 725 feet above msl. Highest water level 6.75 below lsd, Nov. 9, 1951; lowest 13.24 below lsd, Nov. 28, 1952. Records available: 1951-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	6.98	Apr. 4	7.98	July 4	11.34	Oct. 3	13.04
11	7.02	11	7.28	11	11.07	10	13.09
18	6.77	18	7.91	18	11.79	17	13.09
25	7.72	25	9.15	25	12.49	24	13.10
Feb. 1	8.40	May 2	8.95	Aug. 1	12.88	31	13.11
8	8.11	9	10.09	8	12.73	Nov. 7	13.13
15	9.49	16	9.59	15	12.76	14	13.16
22	10.59	23	9.90	22	12.97	21	13.21
29	10.37	30	10.21	29	13.04	28	13.24
Mar. 7	10.37	June 6	8.62	Sept. 5	12.48	Dec. 5	13.21
14	8.98	13	10.35	12	12.88	12	10.68
21	7.96	20	10.28	19	12.98	19	11.55
28	7.23	27	11.09	26	12.96	26	12.06

Bristol County

Fall River 67. Bristol County Superior Courthouse. North Main and Walnut Sts. Lat. $41^{\circ}42'28''$, long. $71^{\circ}09'15''$. Dug unused well in glacial drift, diameter 30 inches, depth 12 feet. Land-surface datum is about 135 feet above msl. Highest water level 6.42 below lsd, June 7, 1948; lowest dry Oct. 30 - Nov. 20, 1950. Records available: 1948-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	8.02	Apr. 7	7.21	July 7	8.68	Oct. 6	8.47
14	8.87	14	8.57	14	8.67	13	8.84
21	8.86	21	8.86	21	8.77	20	10.00
28	8.29	30	8.85	28	9.89	27	9.14
Feb. 4	8.18	May 5	8.88	Aug. 4	9.87	Nov. 3	9.35
11	8.19	12	8.89	11	9.67	10	9.53
18	8.06	19	8.58	18	8.89	17	9.79
25	8.89	26	8.08	25	9.71	24	9.96
Mar. 3	8.19	June 2	9.18	Sept. 1	8.43	Dec. 1	9.14
10	7.85	9	8.18	9	8.22	8	8.97
17	5.85	16	8.08	15	8.06	15	9.96
24	7.33	23	8.38	22	8.08	22	9.48
31	7.76	30	8.49	29	8.09	29	9.11

Essex County

Ipswich 1. Massachusetts Department of Conservation. Near Ipswich. Lat. $42^{\circ}41'06''$, long. $70^{\circ}54'01''$. Dug unused well in gravel, diameter 34 inches, depth 18 feet. Land-surface datum is about 85 feet above msl. Highest water level 7.98 below lsd, Mar. 22, 1948; lowest 17.65 below lsd, Nov. 13, 1950. Records available: 1947-51. Measurement discontinued.

Ipswich 2. Massachusetts Department of Conservation. Near Ipswich. Lat. $42^{\circ}39'43''$, long. $70^{\circ}54'52''$. Dug unused well in gravel, diameter 4 feet, depth 12 feet. Land-surface datum is about 60 feet above msl. Highest water level 5.07 below lsd, Mar. 22, 1948; lowest 11.89 below lsd, Oct. 16, 23, 30, 1950. Records available: 1947-51. Measurement discontinued.

Franklin County

Montague 5. C. A. Kurtyka. Near Montague. Lat. 42°33'05", long 72°32'03". Dug unused well in glacial drift, diameter 38 inches, depth 7 feet. Land-surface datum is about 240 feet above msl. Highest water level 0.78 below lsd, Apr. 27, 1944; lowest 6.04 below lsd, Oct. 9, 1950. Records available: 1936-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	2.46	Apr. 7	1.88	July 7	2.68	Oct. 6	3.58
14	2.64	14	1.84	14	2.48	13	3.76
21	1.85	21	2.24	21	3.20	20	3.92
28	1.50	28	1.68	28	3.26	27	3.87
Feb. 4	1.63	May 5	2.34	Aug. 4	3.70	Nov. 3	3.94
11	1.87	12	1.48	12	2.32	10	3.88
19	2.10	19	2.24	18	2.64	17	3.90
25	2.08	26	1.88	25	3.40	24	3.34
Mar. 3	2.26	June 2	1.50	Sept. 1	2.64	Dec. 1	3.80
10	1.90	9	1.80	8	3.65	8	3.00
17	1.85	16	2.26	15	3.70	15	2.41
24	1.70	23	2.49	22	3.62	22	2.63
31	1.87	30	2.44	29	3.81	29	3.14

Hampden County

Brimfield 12. Norman Goodrich. Near Brimfield. Lat. 42°07'06", long. 72°14'24". Dug unused well in glacial drift, diameter 22 inches, depth 16 feet. Land-surface datum is about 740 feet above msl. Highest water level 4.35 below lsd, Mar. 30, 1948; lowest dry many times. Records available: 1936-52.

Jan. 6	11.49	Apr. 13	8.02	July 13	10.17	Oct. 12	13.51
13	11.71	20	8.19	20	10.51	19	13.66
20	11.69	27	8.68	28	11.06	26	13.79
27	9.88	May 4	7.02	Aug. 3	11.51	Nov. 2	14.07
Feb. 3	7.72	11	7.79	10	11.68	9	14.21
10	7.88	18	8.39	17	12.03	16	14.44
17	8.69	25	8.75	24	12.09	23	14.58
24	9.53	31	8.79	31	12.32	30	14.73
Mar. 2	10.15	June 8	6.42	Sept. 7	12.51	Dec. 7	14.79
9	10.56	15	7.42	14	12.69	14	15.02
16	8.78	22	8.39	21	12.78	21	14.16
23	8.69	30	9.05	28	13.06	28	14.02
30	8.01	July 6	9.76	Oct. 5	13.31		

Springfield 4028. Chapman Valve Co. Pinevale and Essex Sts. Lat. 42°09'20", long. 72°30'04". Driven unused well in glacial drift, diameter 2 inches, depth 22 feet. Land-surface datum is about 210 feet above msl. Highest water level 8.92 below lsd, Mar. 6, 1950; lowest 12.41 below lsd, Nov. 20, 1950. Records available: 1948-52. Measurement discontinued.

Jan. 3	11.34	Feb. 4	11.22	Mar. 10	11.11	Apr. 14	11.12
7	11.26	11	11.15	17	11.12	21	11.02
14	11.24	18	11.13	24	11.09	28	11.16
21	11.23	25	11.16	31	11.04	May 5	11.17
28	11.20	Mar. 3	11.11	Apr. 7	11.24		

Middlesex County

Arlington 174. Massachusetts Department of Public Health. Margaret and Dorothy Rds. Lat. 42°24'09", long. 71°08'50". Driven observation well in coarse gravel and sand, diameter 2½ inches, depth 176 feet. Land-surface datum is 9.44 feet above msl. Highest water level 5.82 below lsd, Mar. 12, 1945; lowest 14.51 below lsd, Dec. 29, 1950. Records available: 1944-52.

Feb. 2	11.70	May 3	10.30	Aug. 2	9.28	Nov. 1	10.88
Mar. 1	11.83	31	8.08	31	9.50	28	11.83
29	10.01	June 29	8.17	Sept. 28	9.79	Dec. 30	12.57

Cambridge 667. Cambridge Water Department. Blanchard Rd. and Concord Ave. Lat. 42°23'16", long. 71°09'25". Drilled unused well in sand and gravel, diameter 8 inches, depth 129 feet. Land-surface datum is 11.63 feet above msl. Highest water level 5.71 below lsd, May 18, 1945; lowest 23.82 below lsd, Dec. 29, 1950. Records available: 1944-52.

Cambridge 667--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	21.03	May 3	16.54	Aug. 2	9.52	Nov. 1	15.33
Mar. 2	19.45	31	8.99	31	10.88	28	18.14
29	16.68	June 29	6.95	Sept. 28	12.91	Dec. 30	20.75

Cambridge 798. Massachusetts Department of Public Health. Concord Ave. and Blanchard Rd. Lat. 42°23'20", long. 71°09'17". Driven observation water-table well, diameter 2½ inches, depth 31 feet. Land-surface datum is 6.61 feet above msl. Highest water level 0.93 below lsd, May 18, 1945; lowest 18.29 below lsd, Dec. 29, 1950. Records available: 1944-52.

Feb. 2	15.75	May 3	11.50	Aug. 2	4.75	Nov. 1	10.34
Mar. 2	14.40	31	4.13	31	6.08	28	13.14
29	11.55	June 29	2.10	Sept. 28	7.98	Dec. 30	15.62

Chelmsford 68. Harold Blackie. Middlesex St., near Vinal Square. Lat. 42°38'45", long. 71°23'14". Drilled unused well in glacial drift, diameter 6 inches, depth 50 feet. Land-surface datum is 100.83 feet above msl. Highest water level 5.60 below lsd, Mar. 1, 1952; lowest 11.07 below lsd, Sept. 2, 1950. Records available: 1939-52.

Feb. 2	6.31	May 3	6.27	Aug. 2	9.71	Nov. 1	10.12
Mar. 1	5.60	31	7.26	31	9.60	28	8.57
29	6.74	June 29	8.38	Sept. 27	9.90	Dec. 30	8.52

Chelmsford 69. City of Lowell, Washington test well 2. Chelmsford St. and Ecuador Rd. Lat. 42°36'34", long. 71°19'26". Driven unused water-table well in glacial drift, diameter 2½ inches, depth 45 feet. Land-surface datum is 103.62 feet above msl. Highest water level 0.04 above lsd, Feb. 2, 1952; lowest 6.05 below lsd, Aug. 23, 1941. Records available: 1939-52.

Feb. 2	+0.04	May 3	-0.53	Aug. 2	-3.19	Nov. 1	-2.63
Mar. 1	-.62	31	-.74	31	-2.27	28	-2.02
29	-.35	June 29	-2.13	Sept. 27	-2.50	Dec. 30	-2.10

Lowell 4. General Electric Co. Marginal and Pawtucket Sts. Lat. 42°38'21", long. 71°20'22". Dug unused well in glacial drift, diameter 12 feet, depth 22 feet. Land-surface datum is 102.26 feet above msl. Highest water level 7.56 below lsd, May 7, 1940; lowest 12.55 below lsd, Oct. 31, 1947. Records available: 1939-52. Sept. 27, 10.51.

Lowell 14. Rogers Hall School. Rogers St. and Fort Hill Ave. Lat. 42°38'12", long. 71°17'48". Dug unused well in glacial drift, diameter 24 inches, depth 30 feet. Land-surface datum is 157.78 feet above msl. Highest water level 8.43 below lsd, Mar. 29, 1952; lowest 22.46 below lsd, Nov. 7, 1939. Records available: 1939-52.

Feb. 2	8.58	May 3	8.87	Aug. 2	13.30	Nov. 1	15.68
Mar. 1	9.03	31	9.79	31	13.23	28	16.43
29	8.43	June 29	11.13	Sept. 27	14.52	Dec. 30	15.72

Lowell 26. Alfred Cimon (well 1). Pawtucket Blvd. Extension and East Ave. Lat. 42°38'39", long. 71°22'34". Driven unused water-table well in glacial drift, diameter 1½ inches, depth 15 feet. Land-surface datum is 102.26 feet above msl. Highest water level 1.97 below lsd, Apr. 2, May 7, 1940; lowest 13.01 below lsd, Sept. 30, 1950. Records available: 1939-52. Sept. 27, 11.84.

Lowell 33. Thomas Varnum. Varnum Ave. and West Meadow Rd. Lat. 42°38'35", long. 71°20'55". Dug unused well in glacial drift, diameter 27 inches, depth 13 feet. Land-surface datum is 101.83 feet above msl. Highest water level 6.29 below lsd, Mar. 1, 1945; lowest 11.33 below lsd, Oct. 4, 1941. Records available: 1939-52. Sept. 27, 9.47.

Lowell 41. City of Lowell (Cook test well 3). Plain and Manufacturers Sts. Lat. 42°37'20", long. 71°19'12". Driven unused well in glacial drift, diameter 2 inches, depth 13 feet. Land-surface datum is 105.63 feet above msl. Highest water level 4.66 below lsd, Feb. 15, 1941; lowest 20.95 below lsd, Sept. 2, 1950. Records available: 1939-52.

Feb. 2	9.04	May 3	11.26	Aug. 2	17.03	Nov. 1	15.64
Mar. 1	13.30	31	9.47	31	14.12	28	15.00
29	10.87	June 29	14.16	Sept. 27	14.64	Dec. 30	14.58

Lowell 43. City of Lowell, test well 26. Pawtucket Blvd. and Boulevard Ave. Lat. 42°38'19", long. 71°22'02". Driven unused well in sand and gravel, diameter 2½ inches, depth 32 feet. Land-surface datum is 101.06 feet above msl. Highest water level 10.62 below lsd, June 4, 1940; lowest 25.76 below lsd, Dec. 30, 1948. Records available: 1940-52.

Lowell 43--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	17.00	May 3	15.55	Aug. 2	19.09	Nov. 1	20.32
Mar. 1	18.80	31	15.58	31	19.50	28	19.48
29	18.13	June 29	16.86	Sept. 27	19.36	Dec. 30	19.90

Reading 1. William Kelch. West and Willow Sts. Near Reading. Lat. 42°31'40", long. 71°07'43". Dug unused well in glacial drift, diameter 36 inches, depth 22 feet. Land-surface datum is 107.94 feet above msl. Highest water level 13.02 below lsd, Apr. 3, 1948; lowest dry, Dec. 26, 1941. Records available: 1939-52.

Feb. 2	14.84	May 3	16.18	Aug. 2	20.15	Nov. 1	21.72
Mar. 1	16.51	31	16.57	31	20.58	28	21.91
29	13.95	June 29	18.24	Sept. 27	21.08	Dec. 30	21.72

Reading 3. M. W. Farr. 1.2 miles southwest of Reading. Lat. 42°30'43", long. 71°07'16". Driven unused well in gravel, diameter 2½ inches, depth 10 feet. Land-surface datum is 159.28 feet above msl. Highest water level 1.14 below lsd, Nov. 30, 1944; lowest 5.63 below lsd, Nov. 1, 1941. Records available: 1940-52.

Feb. 2	1.43	May 3	1.67	Aug. 2	3.98	Nov. 1	4.27
Mar. 1	1.70	31	1.54	31	3.18	28	3.37
29	1.54	June 29	2.38	Sept. 27	3.70	Dec. 30	2.60

Wilmington 10. L. Chisholm. Hopkins St. and Shawsheen Ave. Lat. 42°33'29", long. 71°12'25". Dug unused water-table well in sand, diameter 36 inches, depth 9 feet. Land-surface datum is 113.63 feet above msl. Highest water level 0.73 below lsd, Nov. 30, 1944; lowest dry, Dec. 13, 1941. Records available: 1940-52.

Feb. 2	0.97	May 3	1.27	Aug. 2	6.39	Nov. 1	7.38
Mar. 1	1.73	31	1.24	31	5.92	28	7.23
29	1.11	June 29	4.10	Sept. 27	6.75	Dec. 30	4.43

Wilmington 29. O. R. Surette. Andover and Woburn Sts. Near Wilmington Center. Lat. 42°35'28", long. 71°08'50". Dug unused water-table well in coarse gravelly sand, diameter 36 inches, depth 13 feet. Land-surface datum is 99.99 feet above msl. Highest water level 8.40 below lsd, Mar. 28, 1942; lowest 11.70 below lsd, Aug. 30, Sept. 27, 1949. Records available: 1940-52.

Feb. 2	8.42	May 3	9.82	Aug. 2	11.17	Nov. 1	11.24
Mar. 1	9.95	31	9.90	31	10.98	28	11.00
29	9.38	June 29	10.40	Sept. 27	11.18	Dec. 30	10.71

Wilmington 56. D. P. Falkner. Woburn and Lowell Sts. Near Wilmington Center. Lat. 42°32'30", long. 71°08'59". Dug unused water-table well in sand and gravel, diameter 36 inches, depth 11 feet. Land-surface datum is 89.75 feet above msl. Highest water level 2.06 below lsd, Mar. 1, 1945; lowest 8.11 below lsd, Aug. 30, 1949. Records available: 1940-52.

Feb. 2	2.85	May 3	3.45	Aug. 2	7.59	Nov. 1	6.34
Mar. 1	3.87	31	2.90	31	5.73	28	5.23
29	3.31	June 29	5.84	Sept. 27	6.18	Dec. 30	4.48

Wilmington 58. Mrs. R. Malatesta. Butters Row and Main St. Near Wilmington Center. Lat. 42°32'07", long. 71°10'12". Drilled unused well in bedrock, diameter 8 inches, depth 70 feet. Land-surface datum is 109.10 feet above msl. Highest water level 2.77 below lsd, Mar. 23, 1942; lowest 12.65 below lsd, Nov. 1, 1941. Records available: 1940-52.

Feb. 2	5.14	May 3	6.17	Aug. 2	11.31	Nov. 1	11.49
Mar. 1	7.18	31	6.26	31	9.76	28	11.25
29	4.79	June 29	9.00	Sept. 27	10.79	Dec. 30	8.86

Wilmington 78. Town of Wilmington. Whitefield School, Middlesex Ave. Lat. 42°34'01", long. 71°09'38". Dug observation well in sand, diameter 42 inches, depth 12 feet. Land-surface datum is about 80 feet above msl. Highest water level 5.43 below lsd, Mar. 23, 1952; lowest 10.04 below lsd, Nov. 16, 1952. Records available: 1951-52.

Jan. 6	6.63	Feb. 24	6.48	Apr. 13	6.08	June 1	6.51
13	6.89	Mar. 1	6.68	20	6.35	15	7.22
20	6.31	2	6.75	28	6.61	22	7.40
28	6.11	9	6.43	May 3	6.27	29	7.73
Feb. 2	5.96	16	6.46	4	6.31	July 6	7.11
3	6.01	23	5.43	18	6.82	13	8.46
10	5.81	30	5.70	25	7.90	21	8.80
17	6.12	Apr. 6	6.00	31	6.79	28	9.80

Wilmington 78--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 2	9.29	Sept. 7	9.25	Oct. 12	9.70	Nov. 9	10.00
3	9.40	14	9.35	19	9.78	16	10.04
10	9.43	21	9.60	26	9.81	23	10.00
17	9.00	27	9.61	Nov. 1	9.84	28	9.88
24	9.00	28	9.70	6	9.85	Dec. 30	8.85
31	9.07	Oct. 5	9.81				

Winchester 4. Town of Winchester, test well AA. Royal and Pond Sts. Lat. 42°27'37", long. 71°09'05". Driven unused well in glacial drift, diameter 2½ inches, depth 22 feet. Land-surface datum is 43.97 feet above msl. Highest water level 6.67 below lsd, Apr. 3, 1948; lowest dry, Dec. 27, 1941. Records available: 1939-52. Feb. 2, 8.45; Mar. 1, 9.98; Mar. 29, 7.66; May 3, 8.84; May 31, 8.43.

Winchester 14. K. W. B. Cox. 224 Forest St. Lat. 42°28'18", long. 71°07'00". Dug unused water-table well in glacial drift, diameter 36 inches, depth 17 feet. Land-surface datum is 116.29 feet above msl. Highest water level 5.62 below lsd, Mar. 23, 1942; lowest 14.99 below lsd, Dec. 14, 1941. Records available: 1940-52.

Feb. 2	7.50	May 3	7.90	Aug. 2	13.02	Nov. 1	14.22
Mar. 1	9.74	31	8.86	31	13.16	28	14.45
29	7.66	June 29	11.48	Sept. 27	13.67	Dec. 30	12.41

Winchester 18. T. N. Vinson. Ridge and High Sts. Near Winchester. Lat. 42°26'36", long. 71°10'26". Dug unused well in gravel, diameter 24 inches, depth 14 feet. Land-surface datum is 253.30 feet above msl. Highest water level 1.15 below lsd, Mar. 23, 1942; lowest dry several times 1941-52. Records available: 1940-52.

Feb. 2	4.78	May 3	6.69	Aug. 2	13.17	Nov. 1	(f)
Mar. 1	8.98	31	8.59	31	(f)	28	(f)
29	4.16	June 29	11.18	Sept. 27	(f)	Dec. 30	(f)

f Dry.

Woburn 1. E. P. Fox. Green and Highland Sts. Near Woburn. Lat. 42°28'27", long. 71°08'54". Driven unused well in glacial drift, diameter 2½ inches, depth 26 feet. Land-surface datum is 91.45 feet above msl. Highest water level 4.47 below lsd, Nov. 30, 1944; lowest 9.73 below lsd, Sept. 29, 1943. Records available: 1939-52.

Feb. 2	6.04	May 3	6.03	Aug. 2	8.04	Nov. 1	8.50
Mar. 1	6.75	31	5.97	31	7.36	28	8.01
29	6.08	June 29	6.84	Sept. 27	8.19	Dec. 30	7.23

Woburn 3. New England Dressed Poultry Co. Ashburton Ave. and Boston & Maine Railroad tracks. Near Woburn. Lat. 42°31'01", long. 71°09'18". Driven unused well in glacial drift, diameter 2½ inches, depth 20 feet. Land-surface datum is 72.58 feet above msl. Highest water level 0.71 above lsd, Mar. 23, 1942; lowest 2.41 below lsd, Aug. 16, 1941. Records available: 1939-52. Sept. 27, 0.33.

Woburn 4. Consolidated Chemical Industries, Inc., well 10. Merrimac and New Boston Sts. Near Woburn. Lat. 42°31'11", long. 71°08'54". Driven unused well in glacial drift, diameter 2 inches, depth 25 feet. Land-surface datum is 68.15 feet above msl. Highest water level 0.73 above lsd, Feb. 28, 1948; lowest 2.57 below lsd, Sept. 26, 1939. Records available: 1939-52.

Feb. 2	0.10	May 3	0.86	Aug. 2	1.79	Nov. 1	1.76
Mar. 1	1.10	31	.18	31	1.55	28	1.50
29	.25	June 29	1.49	Sept. 27	1.70	Dec. 30	1.32

Woburn 5. Consolidated Chemical Industries, Inc. Merrimac and New Boston Sts. Near Woburn. Lat. 42°30'52", long. 71°08'42". Driven unused well in glacial drift, diameter 2½ inches, depth 32 feet. Land-surface datum is 59.55 feet above msl. Highest water level 0.22 above lsd, Dec. 24, 1942; lowest 1.00 below lsd, Sept. 19, 1939. Records available: 1939-52. Sept. 27, 0.13.

Woburn 17. J. D. Coakley. Montvale Ave and Ingalls St., near Woburn. Lat. 42°29'01", long. 71°08'12". Dug unused well in gravelly sand, diameter 6 feet, depth 11 feet. Land-surface datum is 180.75 feet above msl. Highest water level 4.13 below lsd, Nov. 30, 1944; lowest dry Dec. 26, 1941. Records available: 1940-52.

Feb. 2	4.82	May 3	4.96	Aug. 2	8.37	Nov. 1	8.60
Mar. 1	5.70	31	4.93	31	7.77	28	8.75
29	4.86	June 29	6.80	Sept. 27	7.83	Dec. 30	6.74

Woburn 19. Tanner's Degreasing Co., Inc. Montvale Ave. and Albany St., East Woburn. Lat. 42°28'43", long. 71°07'09". Driven unused well in glacial drift, (revised) diameter 2½ inches, depth 70 feet. Land-surface datum is 38.65 feet above msl. Highest water level 4.69 below lsd, Dec. 31, 1951; lowest 14.85 below lsd, Oct. 18, 1941. Records available: 1940-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	4.98	May 3	5.30	Aug. 2	6.97	Nov. 28	7.44
Mar. 1	5.28	31	5.43	Sept. 27	6.02	Dec. 30	5.91
29	4.86	June 29	6.11	Nov. 1	6.68		

Woburn 23. F. H. Bowser. Main and Elm Sts. North Woburn. Lat. 42°30'03", long. 71°09'35". Driven unused well in sand and gravel, diameter 2½ inches, depth 25 feet. Land-surface datum is 95.77 feet above msl. Highest water level 0.53 below lsd, Mar. 1, 1945; lowest 18.15 below lsd, Sept. 27, 1941. Records available: 1940-52. Sept. 27, 1.27.

Woburn 38. City of Woburn. Woburn Parkway, Near Woburn. Lat. 42°27'57", long. 71°09'38". Driven unused well in glacial drift, diameter 2½ inches, depth 21 feet. Land-surface datum is 51.66 feet above msl. Highest water level 7.62 below lsd, Mar. 2, 1945; lowest 18.15 below lsd, Dec. 14, 1941. Records available: 1940-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	9.07	May 3	9.15	Aug. 2	12.48	Nov. 1	14.08
Mar. 1	10.01	31	8.65	31	11.69	28	15.20
29	8.71	June 29	10.18	Sept. 27	12.68	Dec. 30	14.48

Woburn 49. Leo Pias. Locust St. and Cambridge Rd. Near Woburn. Lat. 42°28'28", long. 71°10'45". Driven unused well in gravel, diameter 6 inches, depth 12 feet. Land-surface datum is 63.25 feet above msl. Highest water level 2.00 above lsd, June 29, 1952; lowest 4.25 below lsd, Dec. 5, 1941. Records available: 1940-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	+1.78	May 3	+1.76	Aug. 2	+0.38	Nov. 1	-2.87
Mar. 1	+1.78	31	+1.72	31	+1.17	28	-3.41
29	+1.79	June 29	+2.00	Sept. 27	-1.19	Dec. 30	-1.38

Woburn 53. P. Flowers. Kilby and Hart Sts. Near Woburn. Lat. 42°29'11", long. 71°09'30". Dug unused well in glacial drift, diameter 4 feet, depth 12 feet. Land-surface datum is 105.96 feet above msl. Highest water level 7.93 below lsd, Mar. 23, 1942; lowest dry, Sept. 27, 1952. Records available: 1940-52. Sept. 27, dry.

Worcester County

Leominster 11. C. S. Pierce. Nashua St. and Boston & Maine Railroad tracks. Near North Leominster. Lat. 42°31'55", long. 71°44'06". Dug unused water-table well in glacial drift, diameter 4 feet, depth 11 feet. Land-surface datum is 363.18 feet above msl. Highest water level 0.65 below lsd, Apr. 3, 1951; lowest 9.35 below lsd, Oct. 28-30, 1949. Records available: 1939-52.

Daily noon water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.00	2.17	3.24	2.43	1.91	3.00	5.21	7.56	6.07	6.88	7.61	6.07
2	.89	1.76	3.30	2.04	2.21	1.96	5.33	7.49	5.85	6.93	7.65	6.09
3	1.06	1.82	3.34	2.09	2.44	1.85	5.50	7.50	5.58	6.93	7.68	6.13
4	1.38	1.39	3.34	2.32	2.60	2.32	5.67	7.54	5.58	6.83	7.71	6.18
5	1.62	1.04	3.27	2.45	2.78	2.57	5.68	7.57	5.67	6.66	7.74	6.21
6	1.88	1.50	2.95	1.32	2.93	2.80	5.69	7.58	5.74	6.56	7.76	5.76
7	2.05	1.89	2.50	1.85	3.01	3.04	5.81	7.59	5.86	6.53	7.78	5.00
8	2.15	2.17	2.49	2.18	3.15	3.30	5.92	7.59	6.00	6.53	7.82	4.75
9	2.26	2.14	2.60	2.36	3.30	3.55	6.02	7.57	6.08	6.55	7.85	4.65
10	2.35	2.18	2.61	2.46	3.47	3.74	6.11	7.56	6.15	6.60	7.87	4.55
11	2.47	2.27	1.73	2.58	3.61	3.90	6.00	7.39	6.24	6.66	7.89	4.46
12	2.52	2.30	.81	2.72	1.41	4.05	5.77	7.04	6.32	6.71	7.92	3.28
13	2.58	2.56	1.00	2.81	2.08	4.19	5.76	6.69	6.38	6.77	7.94	2.85
14	2.61	2.75	1.03	1.70	2.46	4.34	5.90	6.00	6.47	6.84	7.97	2.91
15	2.63	2.93	1.13	1.74	2.72	4.46	6.13	5.66	6.52	6.92	7.99	3.01
16	2.23	3.05	1.25	2.12	2.65	4.61	....	5.58	6.55	6.96	8.01	3.14
17	2.14	3.10	1.48	2.39	2.93	4.72	....	5.36	6.62	7.03	8.03	3.28
18	.83	3.09	1.26	2.56	2.87	4.76	....	5.11	6.70	7.07	8.05	3.38
19	1.24	3.15	1.16	2.74	2.99	4.87	....	5.12	6.74	7.10	8.07	3.49
20	1.24	3.18	1.45	2.86	3.19	4.98	....	5.19	6.67	7.16	8.09	3.62
21	1.11	3.18	1.09	3.05	2.39	5.11	....	5.28	6.53	7.21	8.10	3.70
22	1.73	3.19	1.01	3.17	2.48	5.22	....	5.29	6.45	7.25	8.12	3.78
23	.68	3.21	1.11	3.28	2.80	5.31	....	5.28	6.44	7.29	8.03	3.82
24	1.23	3.22	.97	3.41	3.07	5.41	....	5.36	6.48	7.31	7.70	3.79
25	1.93	3.22	1.23	3.51	3.25	5.52	....	5.47	6.53	7.36	7.16	3.55

Leominster 11--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	1.59	3.23	1.45	2.40	2.44	5.61	....	5.56	6.57	7.41	6.69	3.35
27	.82	3.21	1.64	2.40	2.70	5.53	....	5.66	6.64	7.44	6.42	3.32
28	.79	3.19	1.91	1.10	3.05	5.44	....	5.74	6.72	7.47	6.21	e3.46
29	1.12	3.24	2.12	1.01	3.30	5.51	....	5.82	6.78	7.49	6.10	e3.69
30	1.63		2.28	1.46	3.15	5.26	....	5.91	6.83	7.55	6.04	3.82
31	2.02		2.37		3.33		7.44	6.01		7.58		3.91

e Estimated.

Sterling 1. Nunzio Lanciani. Justice Hill and South Nelson Rds. Near Sterling.
 Lat. 42°28'05", long. 71°48'08". Dug unused well in glacial drift, diameter 24 inches, depth 15 feet. Land-surface datum is about 710 feet above msl. Highest water level 2.08 below lsd, Dec. 21, 1951; lowest 13.01 below lsd, Oct. 21, 1949. Records available: 1947-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	3.12	Apr. 4	3.11	July 4	6.12	Oct. 3	8.35
11	3.22	11	3.24	11	6.73	10	7.88
18	2.67	18	3.25	18	7.45	17	8.61
25	3.21	25	3.55	25	8.53	24	9.15
Feb. 1	3.19	May 2	3.22	Aug. 1	8.76	31	9.56
8	3.17	9	3.51	8	8.25	Ncv. 7	9.85
15	3.38	16	3.18	15	4.54	14	10.16
22	3.28	23	3.18	22	5.18	21	10.44
29	3.29	30	3.09	29	6.45	28	6.89
Mar. 7	3.16	June 6	3.17	Sept. 5	5.55	Dec. 5	6.95
14	2.59	13	4.06	12	7.01	12	2.85
21	3.09	20	4.96	19	7.79	19	3.44
28	2.82	27	5.58	26	7.76	26	3.21

Winchendon 13. W. B. Hart. Forristall and Crosby Rds. Near Winchendon.
 Lat. 42°42'04", long. 72°01'52". Dug unused water-table well in glacial drift, diameter 24 inches, depth 12 feet. Land-surface datum is 1,209.36 feet above msl. Highest water level 1.86 below lsd, Mar. 20, 1948; lowest 12.76 below lsd, Nov. 21-23, 1947. Records available: 1939-52.

Daily noon water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	3.39	....	4.48	2.73	3.64	4.34	7.98	10.11	10.96	11.45	12.08	12.54
2	2.66	3.74	....	2.33	3.84	3.12	8.04	10.17	10.98	11.47	12.09	12.56
3	2.73	3.71	....	2.53	4.04	3.53	8.11	10.23	10.99	11.49	12.10	12.57
4	3.04	3.63	....	2.61	4.17	3.89	8.20	10.30	11.00	11.51	12.12	12.59
5	3.12	3.27	....	2.49	4.32	4.11	8.30	10.36	11.01	11.53	12.14	12.60
6	3.35	3.27	....	2.31	4.43	4.33	8.40	10.43	11.02	11.55	12.16	12.59
7	3.52	3.42	....	2.63	4.52	4.53	8.50	10.49	11.02	11.57	12.17	12.60
8	3.63	3.59	....	2.81	4.62	4.77	8.57	10.55	11.02	11.59	12.19	12.61
9	3.78	3.71	....	2.98	4.72	4.98	8.67	10.60	11.03	11.61	12.21	12.62
10	3.92	3.87	....	3.06	4.82	5.15	8.74	10.65	11.03	11.64	12.23	12.62
11	4.09	3.93	....	3.14	4.92	5.31	8.82	10.70	11.03	11.66	12.24	12.63
12	4.18	....	....	3.30	4.62	5.46	8.85	10.76	11.04	11.68	12.26	12.63
13	4.27	....	....	3.42	4.32	5.62	8.85	10.77	11.09	11.70	12.28	12.62
14	4.34	4.37	....	3.00	4.32	5.79	8.87	10.81	11.10	11.72	12.29	12.59
15	4.39	....	....	2.80	4.49	5.92	8.90	10.85	11.12	11.74	12.31	12.52
16	3.87	....	....	3.05	4.51	6.09	8.96	10.85	11.13	11.76	12.32	12.41
17	3.82	....	....	3.26	4.63	6.22	9.03	10.86	11.15	11.77	12.34	12.24
18	3.36	....	....	3.42	4.71	6.35	9.10	10.87	11.17	11.77	12.36	12.04
19	3.22	....	....	3.60	4.75	6.52	9.16	10.87	11.18	11.81	12.37	11.81
20	3.14	....	....	3.72	4.86	6.69	9.23	10.87	11.20	11.82	12.39	11.56
21	....	....	4.31	3.91	4.78	6.85	9.31	10.87	11.21	11.82	12.41	11.29
22	....	....	4.16	4.02	4.62	6.99	9.38	10.87	11.23	11.83	12.42	10.99
23	3.32	....	3.98	4.12	4.69	7.13	9.46	10.86	11.25	11.92	12.43	10.65
24	....	....	3.74	4.27	4.87	7.23	9.54	10.86	11.27	11.92	12.45	10.30
25	....	....	3.80	4.37	4.99	7.35	9.62	10.85	11.32	11.94	12.46	9.96
26	3.16	....	3.63	3.95	4.63	7.47	9.70	10.85	11.34	11.92	12.48	9.64
27	2.22	....	2.88	3.75	4.61	7.60	9.78	10.85	11.36	11.93	12.49	9.34
28	2.41	....	2.74	3.74	4.81	7.74	9.85	10.87	11.38	11.92	12.50	9.10
29	....	....	2.90	3.27	5.02	7.84	9.91	10.89	11.40	12.01	12.51	8.88
30	....	....	3.00	3.40	4.41	7.92	9.98	10.91	11.43	12.03	12.53	8.70
31	....	....	2.80		4.41		10.05	10.94		12.05		8.60

MICHIGAN

By P. R. Giroux and J. G. Rulison

Scope of Water-Level Program

The observation-well program in the Southern Peninsula of Michigan was continued during 1952 in cooperation with the Geological Survey Division of the State Department of Conservation. This program includes the maintenance of a network of observation wells to provide basic data on changes in storage of principal ground-water reservoirs. Measurements of water levels were made in 255 observation wells, 44 of which were equipped with recording gages. In those areas in the southern part of the Southern Peninsula which are under intensive study, records of a few representative wells are being published. In other parts of the Southern Peninsula, water-level records have been selected for publication in the annual water-level report on the basis of best representation in terms of location, usefulness, and length of record. Water-level data omitted from the water-level report will be published in project reports or special reports from time to time. Figure 9 shows the location of the wells for which records are published in this report. A report entitled, "Water resources of the Detroit area, Michigan," by C. O. Wisler, G. J. Stramel, and L. B. Laird, was published as U. S. Geological Survey Circular 183.

A program to observe ground-water temperatures in the Southern Peninsula was continued during 1952. Also, many samples of ground and surface water were collected for chemical analysis by the Michigan Department of Health to determine quality, trends in quality, and correlation between ground and surface waters.

Precipitation

The year 1952 was the driest since 1948, with a statewide average precipitation of 29.88 inches. This was 0.81 inch below average. However, this year of deficient precipitation was preceded by 2 wet years, 1951 being the wettest year of record. The month of February brought to an end 8 consecutive months of above-normal precipitation. The period January through April had near-average precipitation and above-normal temperatures, creating favorable conditions for ground-water recharge. As a result, water levels in observation wells, already high from the previous wet years, reached record or near-record highs. Normal seasonal declines were temporarily halted by heavy precipitation in July. Following this period of recharge, water levels generally continued to decline to the end of the year. The period September through December, normally favorable to ground-water recharge, had an overall deficiency of precipitation of over 3 inches and consequently there was little recharge to the ground-water reservoir. For the most part, end of the year levels were considerably lower than those observed at the end of 1951.

Pumpage

Records of ground-water withdrawals by municipalities are discussed under the various county headings. Generally, ground-water withdrawals reflected higher demands by industry, increased population in urban and suburban areas, wider use of water-consuming appliances, and air-conditioning use. Considerably more water is being used in air conditioning and a large part of this increased use is not reflected by municipal pumping records because of the use of privately owned wells.

Interpretation of Water-Level Fluctuations

In the northern part of the Southern Peninsula, well CrGr 6, near Grayling, is used as an index of the trends in ground-water level in water-table aquifers of this area. Figure 10 illustrates the water-level fluctuations for well CrGr 6, along with precipitation and extremes of temperature for the year, on a day-by-day basis. Warm fronts with melting snow and rain in late March and early April contributed recharge to the ground-water table so that by April 14 ground-water levels were at their peak for the year. Unusually warm weather in April and May and a deficiency of precipitation in the latter half of April and for the month of May, started an early seasonal decline which continued to late June. Heavy rains during late June, July, and early August amounted to an excess of more than 6 inches above the average, contributing considerable recharge to the ground-water reservoir. September and October, normally favorable to ground-water recharge, were both extremely dry and water levels declined steadily from about

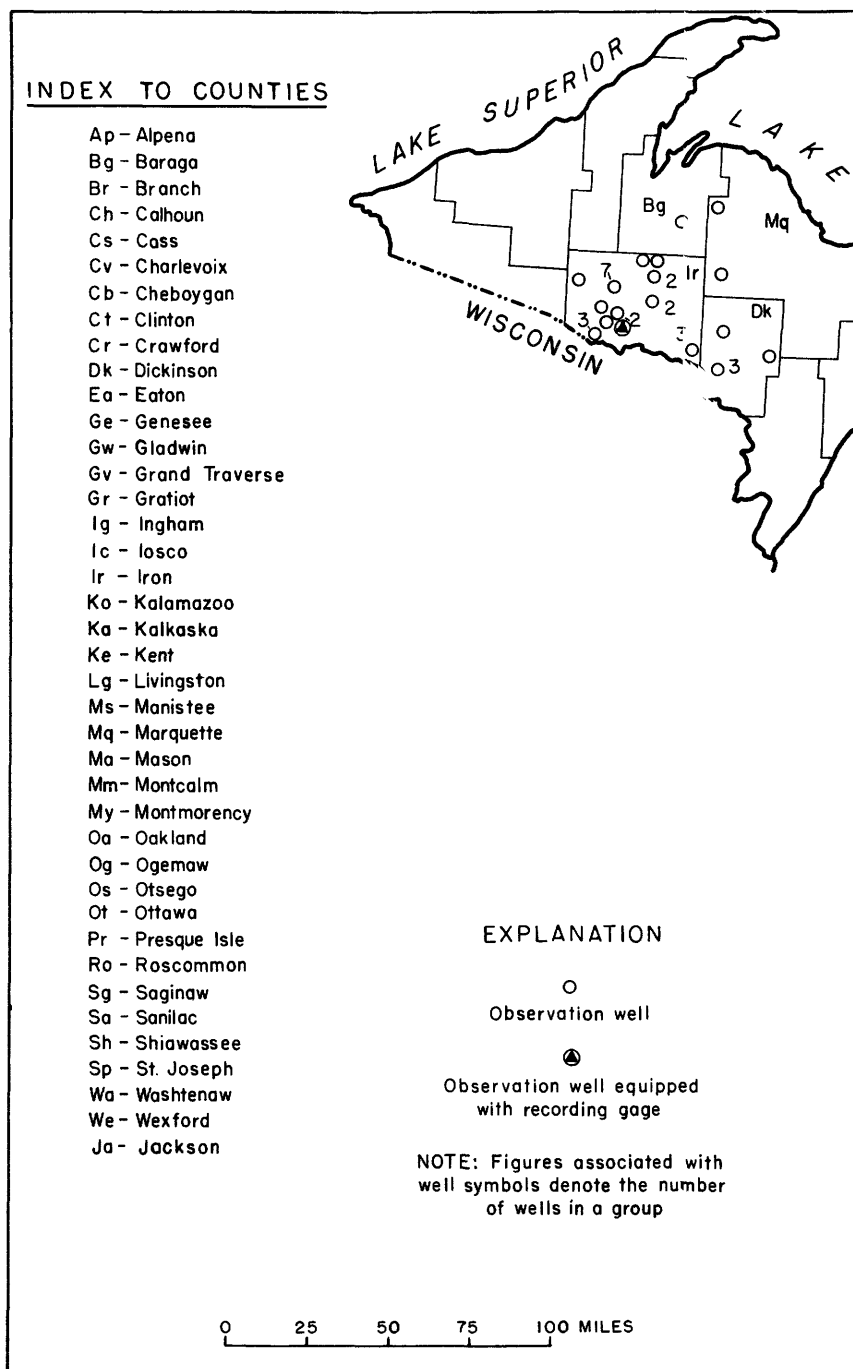
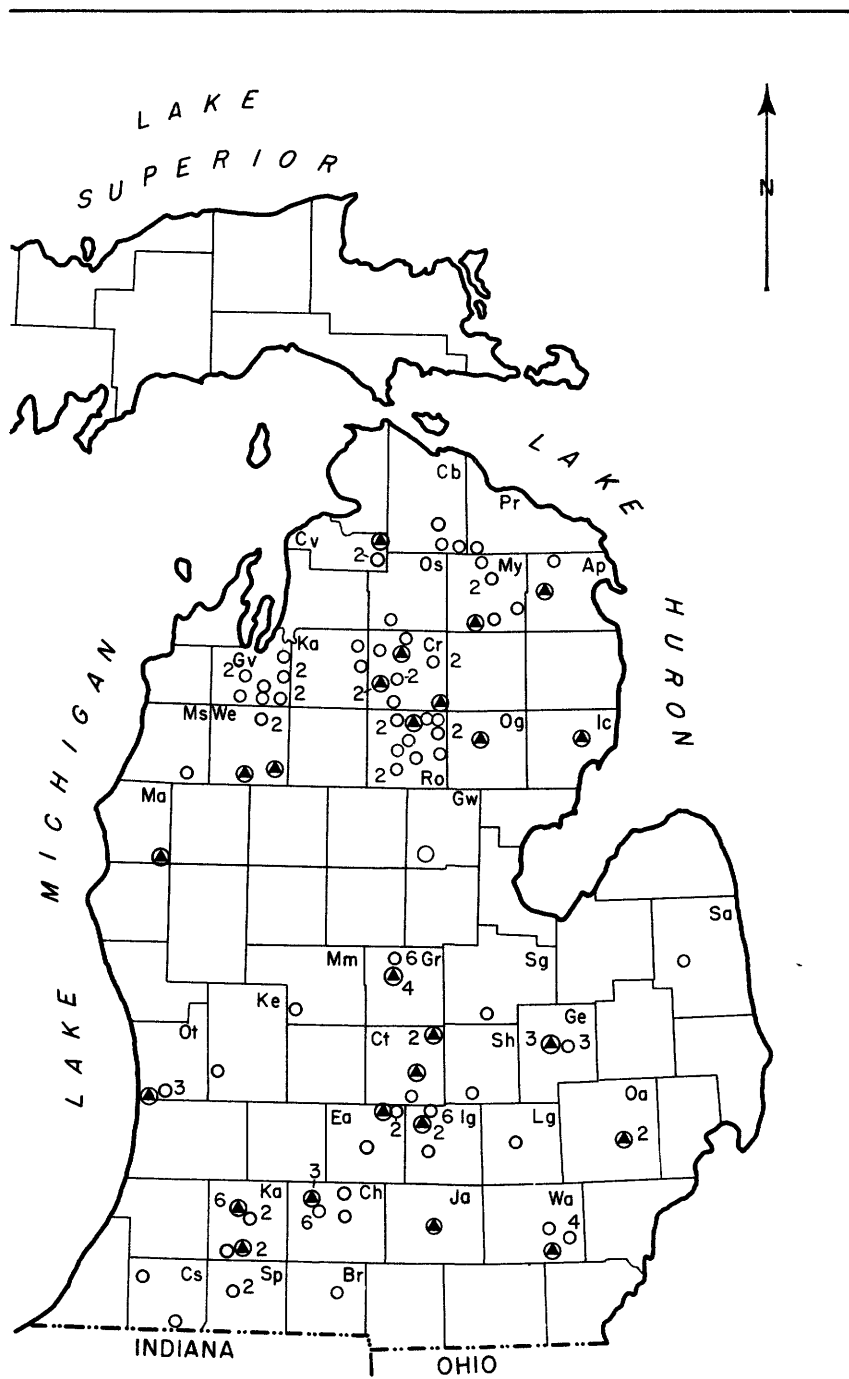


Figure 9. --Location of observation wells in Michigan, 1952.



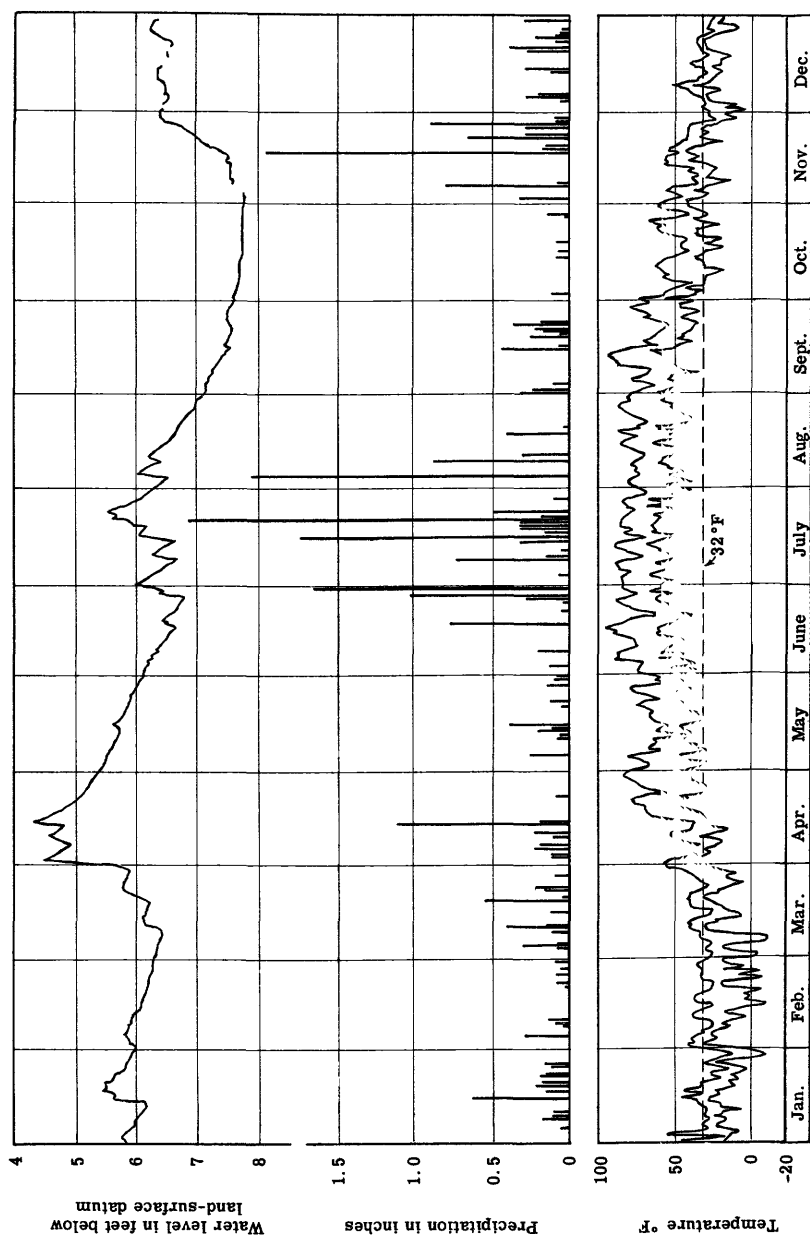


Figure 10. --Water level in well CrGr 6, daily precipitation, and maximum and minimum temperatures at Grayling, Crawford County, Mich., 1952.

mid-August to early November. At this time, above-average temperatures and precipitation resulted in recovery of ground-water levels. Precipitation for the year in this area was about 4 inches above average but most of the excess occurred during the summer months when conditions are not as favorable for ground-water recharge. Some of the summer precipitation fell in the form of heavy storms which resulted in rapid runoff to surface streams. Net loss in water levels during the year amounted to about half a foot. Mid-December measurements of water levels in 41 shallow wells in the north-central part of the Southern Peninsula indicated that the average ground-water stage for the month was 0.69 foot below last year's record December high, but still 0.29 foot above the 10-year average December stage. Figure 11 illustrates correlation between statewide precipitation, ground-water levels in four scattered observation wells in the Southern Peninsula, and the levels of Lakes Michigan-Huron, during the period 1934 through 1952.

Branch County, City of Coldwater --The observation well in Coldwater is finished in the glacial drift and is affected by withdrawals of ground water by the municipal wells also finished in the drift. Total precipitation for the year was more than an inch below average. Above-normal temperatures and precipitation in January resulted in recharge to the ground-water reservoir, so that by the end of January water levels reached their high for the year. Following this peak, water levels declined until early March. Precipitation in March and early April brought a second rise in ground-water levels. From mid-April levels declined steadily to the end of the year. The period September through December, usually favorable to ground-water recharge, was deficient in precipitation. Year-end water levels established a new record low and were about 2 feet lower than those at the end of 1951. Average daily municipal withdrawals of ground water ranged from 0.9 million gallons in November to 1.5 million gallons in July and averaged 1.1 million gallons for the year.

Calhoun County, City of Battle Creek--Observation wells in Battle Creek and vicinity are finished in the Marshall formation or the glacial drift. Municipal and industrial supplies are drawn chiefly from the Marshall formation. Total precipitation for the year at Battle Creek was more than 3 inches below average. The period January through May had above-average precipitation, accompanied by frequent thaws and warm fronts in January and February, and created favorable conditions for ground-water recharge. The highest water levels of the year occurred during this time. Below-average precipitation during June started a decline which continued until late in the fall and in some wells to the end of the year. The period August through December had a deficiency of precipitation of almost 4 inches, and as a result, little or no recharge was observed during this period. Year-end observations indicated a net average decline of about 1½ feet in 16 observation wells maintained in the area. Average daily municipal withdrawals of ground water during the year ranged from 5 million gallons in February to 8 million gallons in July and averaged 6 million gallons for the year.

City of Marshall--The observation well in the city of Marshall is finished in the Marshall formation, which is also the source of the municipal water supply. Average daily municipal withdrawals of ground water during the year ranged from 0.76 million gallons in January to 1.05 million gallons in June and averaged 0.9 million gallons for the year.

Cass County, City of Dowagiac--The observation well at the waterworks plant in Dowagiac is finished in the glacial drift and is affected by nearby municipal pumping from the drift. Weekly water-level measurements by city waterworks personnel during 1952 are being withheld from this year's report pending further study. Water levels were high during the winter and early spring, after which a decline began which continued more or less through the remainder of the year. Total precipitation for the year was about 3 inches below average. The period August through December had a deficiency of precipitation of nearly 4 inches. Water levels at the end of the year were about 3 feet below those at the end of 1951, owing to increased municipal withdrawals of ground water and a smaller amount of recharge from precipitation during the period August through December. Average daily municipal withdrawals of ground water during the year ranged from 0.57 million gallons in January to 1.24 million gallons in October and averaged 1 million gallons for the year. In comparison, average daily withdrawals in 1951 were 0.67 million gallons.

Clinton County, Village of Elsie--In Elsie, observation well CTES 1 is finished in the Saginaw formation and CTES 3 is finished in the glacial drift. Water for municipal use is obtained from two wells finished in the glacial drift and one well finished in the Saginaw formation. CTES 1 reflects changes of water level caused by municipal pumping from the sandstone. Its low stage occurred in July and coincided with the peak of municipal pumping from the rock aquifer. High levels were observed during the winter months, the period of minimum municipal withdrawal from the rock well. A net decline in water level of about 8 feet was observed during the year mostly due to increased pumping during the last half of 1952. CTES 3 reflects changes of water level caused by municipal pumping from the two drift wells. Highest water levels occurred in May and November, with the minimum in October. Year-end water levels in the drift were slightly higher than those at the end of 1951. Average daily municipal withdrawals from all three municipal wells ranged from 350,000 gallons in January to 770,000 gallons in August and averaged about 520,000 gallons for the year.

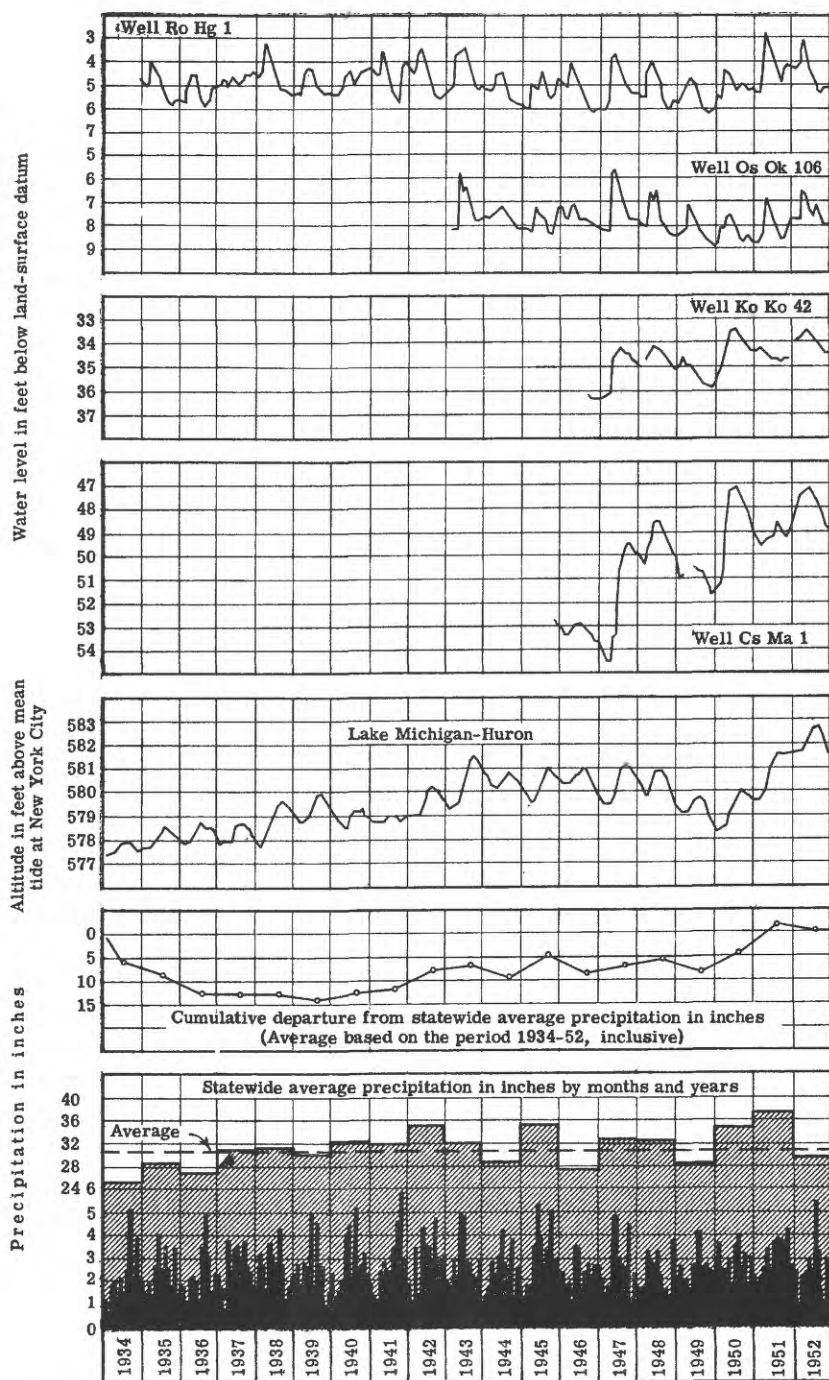


Figure 11. --Water levels in selected wells, levels of Lakes Michigan and Huron, and statewide precipitation, Michigan.

Eaton County, City of Charlotte--The observation well in Charlotte is finished in glacial drift, which is also the source of municipal supply. Water levels were high during the January through May period after which they declined till the end of October, when the low for the year occurred. A dry fall season brought little recovery and water levels at the end of the year were about 2 feet below those at the close of 1951. Municipal withdrawals of ground water averaged 570,000 gallons daily for the year, and ranged from 500,000 gallons daily in November to 633,000 gallons daily in June. The peak daily demand was 870,000 gallons on August 27.

City of Grand Ledge--The observation well in Grand Ledge is finished in the Saginaw formation, the source of the municipal water supply. Precipitation was more than 2 inches below normal for the year according to records maintained at the U. S. Weather Bureau station at Lansing Municipal Airport. Water levels rose steadily from January through early June and declined throughout the remainder of the year. Despite a near record high in the early June period, water levels at the end of the year were only slightly higher than those at the end of 1951. The period September through December had a deficiency of almost 3 inches of precipitation. Increased withdrawals of ground water by the city averaged 710,000 gallons daily for the year as compared with a daily average of 560,000 for 1951. Average daily withdrawals ranged from 410,000 gallons in November to 900,000 gallons in June.

Genesee County, City of Flint--Observation wells in the Flint area are finished either in the glacial drift or Saginaw formation. Burton Township and most industrial well users obtain water from the Saginaw formation. The city of Flint obtains its municipal water supply from the Flint River. Total precipitation for the year was about an inch more than the average. Above-average precipitation occurring during the period January through May combined with above-average temperatures during the winter months, creating favorable conditions for ground-water recharge and high water levels prevailed during this period. With deficient precipitation and increased pumping in June, water levels began a decline which lasted until the fall months. The months August through October had a cumulative deficiency of precipitation of about 3 inches. End-of-the-year levels averaged approximately a foot below those observed at the end of 1951. Average daily withdrawals of ground water from the Saginaw formation by Burton Township were 315,000 gallons.

Gratiot County, City of Alma--Observation wells in this area are finished in surficial or buried outwash aquifers. Municipal and industrial water supplies are obtained from wells in the buried outwash aquifer. One municipal well, infrequently used, is finished in the Saginaw formation. Total precipitation for the year was more than 4 inches below average. January, July, August, November, and December had above-average precipitation. Observation wells finished in the surficial outwash generally were at their highest levels in the March-April period, with most of the lows occurring in October. The average decline of ground-water levels, in these wells, was about $1\frac{1}{2}$ feet. In observation wells finished in the buried outwash high and low water levels were scattered throughout the year, owing to changes in distribution of municipal and industrial pumping loads during the year. At the end of the year water levels averaged about 3 feet higher than at the end of 1951. This gain was evidently a result of decreased municipal withdrawals of ground water during the period October through December. Pumpage records indicated 34 million gallons less for this period than for the same period in 1951. Average daily municipal withdrawals of ground water ranged from 1.82 million gallons in July to 1.11 million gallons in December and averaged 1.42 million gallons for the year.

City of St. Louis--The observation well in St. Louis is finished in the glacial drift and reflects changes in water level caused by withdrawals of ground water from the nearby industrial and municipal wells in the same formation. Maximum water level for the year occurred in September with the minimum in November. The minimum was a new low of record for this observation well. The year-end observed water level was about 14 feet below the level at the end of 1951. Municipal withdrawals of ground water averaged 950,000 gallons daily for the year.

Ingham County, Lansing area--Observation wells in the Lansing area are finished in the Saginaw formation and a few in the glacial drift. With few exceptions, municipal, industrial, and township wells are finished in the Saginaw formation and the Parma sandstone of Pennsylvanian age. Total precipitation for the year was more than 2 inches below the average. Most high ground-water levels occurred in the April-May period with lows in the October through December months. The months September through December had a cumulative deficiency of precipitation of almost 3 inches. Water levels in 16 observation wells finished in the sandstone of the Saginaw formation averaged about 3 feet lower, and those finished in the glacial drift about 2 feet lower, than corresponding levels at the end of 1951. Records of municipal withdrawals of ground water by Lansing, East Lansing, Leland Metropolitan District, and Michigan State College, indicate that the average daily withdrawals for the year ranged from 19.2 million gallons in February to 22.2 million gallons in July, and averaged 20.1 million gallons daily for the year.

City of Mason--The observation well in Mason is finished in the Saginaw formation and the municipal wells are finished in the glacial drift. After high levels in the winter months, a decline started in March, continuing more or less to the end of the year. A dry fall which brought little and late recovery of ground-water levels resulted in a net decline for the year of about 2 feet. Average daily municipal withdrawals of ground water from the drift ranged from

300,000 gallons in November to 580,000 gallons in March and averaged 410,000 gallons for the year.

Jackson County, City of Jackson--The observation well in Jackson is finished in sandstone at the city's Belden Road well field and reflects changes in water level caused by withdrawals by municipal wells finished in the same formation. Total precipitation for the year was about 5 inches below average. High water levels occurred during the months of April and May, with lows in December. The period September through December, normally favorable to ground-water recharge, had an accumulated deficiency of precipitation of more than 3 inches. As a result, water levels declined steadily during this period. Year-end water levels were several feet below those observed at the beginning of the year. Average daily municipal withdrawals of ground water ranged from 8.8 million gallons in January to 11.9 million gallons in July and averaged about 10 million gallons for the year.

Kalamazoo County, City of Kalamazoo--Observation wells in this area are finished in the glacial drift, as are municipal and industrial wells. Total precipitation for the year was more than $4\frac{1}{2}$ inches below average. Water levels reached highs in January, April, and May, with lows occurring in August and the months October through December. The period August through December had a deficiency of precipitation of over 5 inches, and as a result year-end water levels were generally lower than those at the end of 1951, averaging about 0.7 foot decline for the year. Average daily municipal withdrawals of ground water ranged from 7.2 million gallons in January to 11.9 million gallons in July and 8.2 million gallons for the year.

Oakland County, City of Pontiac--The observation well in Pontiac is finished in the glacial drift as are municipal and most industrial supplies. All months, except January, September, and November, were below average in precipitation. Total annual precipitation was more than 5 inches below average. Observation well OaPT 1 at the Walnut Street pumping station reflects changes in water level caused by municipal withdrawals of ground water from the drift. High water levels for the year occurred in January and February. The low for the year, in August, was the lowest of record for any month since the start of record in 1939. Maximum and minimum water levels coincided generally with low and peak municipal withdrawals of ground water. Average daily withdrawals of ground water by the city of Pontiac ranged from 10.5 million gallons in January and November to 15.3 million gallons in June and averaged 11.9 million gallons for the year.

Ottawa County, City of Holland--Observation wells in this area are finished in the glacial drift. The city of Holland obtains its municipal water supplies from wells finished in the shallow and deeper aquifers of the glacial drift. Industrial supplies are also obtained mostly from the drift. Total annual precipitation was more than 2 inches above average. However, February, April, September, and October, months usually favorable to ground-water recharge, had a total deficiency of precipitation of almost 5 inches. The period July and August was wet with almost 10 inches of precipitation recorded, but some of this rainfall occurred in the form of heavy storms which resulted in rapid runoff to surface streams. High water levels for the year occurred in April and June, with lows in November and December. In areas of large municipal withdrawals, water levels showed a net decline for the year of from 5 to 6 feet. In other areas, net changes ranged from a decline of about $3\frac{1}{2}$ feet to a gain of $3/10$ ths of a foot. Average daily municipal withdrawals of ground water ranged from 1.98 million gallons in January to 3.84 million gallons in July, and averaged 2.66 million gallons for the year.

Well-Numbering System

The first pair of letters consists of an uppercase and a lowercase letter indicating the county in which the well is situated. The second pair of letters indicates the city or the civil township. Uppercase letters are used for cities, villages, or towns. An uppercase followed by a lowercase letter is used for the township designation.

Well Descriptions and Water-Level Measurements

Water levels are in feet below land-surface datum unless otherwise indicated. When some measurements in a table are above and others below the plane of reference, a plus (+) or minus (-) sign is placed immediately preceding the first entry in each column of each mixed table. Readings between minus (-) signs are below the plane of reference, and those between plus (+) signs are above the plane of reference.

Alpena County

Green Township

ApGn 1. Robert E. James. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T. 30 N., R. 6 E. Dug unused water-table well in deposits of Pleistocene age, diameter 18 inches, depth 19 feet, cribbed with rock to open bottom. Highest water level 0.90 below lsd, Apr. 13, 1952; lowest 9.52 below lsd, Dec. 11-15, 1949. Records available: 1948-52.

ApGn 1--Continued.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2.47	2.46	3.39	1.17	3.26	4.23	4.88	3.96	4.90	5.77	6.42	....
2	1.87	1.92	3.44	1.25	3.34	4.27	4.90	4.00	4.94	5.78	6.45	6.59
3	1.93	1.65	3.50	1.42	3.41	4.28	4.91	4.06	4.95	5.82	6.47	6.59
4	2.16	1.51	3.53	1.62	3.48	4.33	4.94	4.11	5.00	5.84	6.49	6.59
5	2.27	1.23	3.57	1.75	3.52	4.36	4.99	3.75	5.05	5.86	6.49	6.57
6	2.35	1.36	3.61	1.70	3.41	4.38	5.03	3.52	5.08	5.89	6.50	6.54
7	2.40	1.55	3.63	1.73	3.46	4.42	5.07	3.49	5.14	5.92	6.53	6.51
8	2.40	1.69	3.63	1.67	3.52	4.46	5.10	3.55	5.18	5.95	6.55	6.48
9	2.42	1.84	3.62	1.28	3.58	4.45	4.98	3.63	5.21	5.96	6.57	6.45
10	2.45	1.94	3.62	1.16	3.63	4.45	4.87	3.66	5.24	6.00	6.60	6.42
11	2.52	1.93	3.43	1.34	3.67	4.47	4.67	3.66	5.28	6.02	6.62	6.38
12	2.47	2.13	3.17	1.44	3.68	4.49	4.46	3.66	5.31	6.03	6.64	6.35
13	2.52	2.27	2.69	1.50	3.59	4.52	4.37	3.57	5.34	6.04	6.66	6.32
14	2.47	2.44	2.36	1.08	3.37	4.54	4.32	....	5.36	6.06	6.68	6.29
15	2.19	2.62	2.17	1.20	3.32	4.58	4.22	....	5.39	6.09	6.68	6.27
16	1.57	2.78	2.03	1.42	3.23	4.60	3.97	3.84	5.41	6.10	6.70	6.25
17	1.67	2.89	2.03	1.65	3.31	4.57	3.88	3.92	5.43	6.13	6.73	6.24
18	1.24	3.00	1.81	1.87	3.44	4.58	3.89	4.01	5.45	6.16	6.73	6.23
19	1.57	3.11	1.53	2.02	3.55	4.59	3.90	4.10	5.48	6.16	6.74	6.24
20	1.73	3.20	1.32	2.18	3.65	4.63	3.93	4.18	5.51	6.19	6.76	6.24
21	1.99	3.23	1.24	2.34	3.71	4.66	3.83	4.24	5.55	6.22	6.78	6.23
22	2.09	3.30	1.23	2.42	3.80	4.69	3.20	4.34	5.58	6.24	6.80	6.23
23	2.02	3.33	1.35	2.47	3.88	4.72	3.09	4.42	5.60	6.26	....	6.23
24	2.23	3.34	1.51	2.62	3.93	4.74	2.72	4.48	5.62	6.28	....	5.96
25	2.29	3.35	1.70	2.70	3.94	4.76	2.87	4.54	5.64	6.30	....	4.80
26	2.25	3.35	1.70	2.80	3.97	4.78	3.05	4.61	5.65	6.33	....	4.04
27	2.28	3.37	1.67	2.88	4.03	4.84	3.26	4.68	5.68	6.33	....	3.64
28	2.30	3.38	1.50	2.99	4.07	4.88	3.44	4.74	5.70	6.35	....	3.47
29	2.33	3.37	1.42	3.10	4.12	4.89	3.61	4.79	5.72	6.38	....	3.37
30	2.42		1.40	3.19	4.17	4.87	3.75	4.84	5.76	6.39	....	3.37
31	2.45		1.29		4.20		3.88	4.87		6.40		3.41

Long Rapids Township

ApLr 1. Harlo Mellon. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 16, T. 32 N., R. 6 E. Drilled stock artesian well in Thunder Bay limestone, diameter 6 inches, depth 53 feet. Highest water level 5.69 below lsd, Apr. 19, 1951; lowest 16.67 below lsd, Nov. 12, 1948. Records available: 1948-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 18	7.39	June 19	10.08	Sept. 17	12.87	Nov. 14	14.90
Apr. 21	5.89	July 16	11.04	Oct. 15	13.90	Dec. 19	15.28
May 15	7.81	Aug. 21	11.96				

Branch County

City of Coldwater

BrCW 3. City of Coldwater. Park Ave. and Bennett St., Coldwater. Drilled unused artesian well in sand and gravel of Pleistocene age, diameter 8 to 6 inches, depth 130 feet, screen 80-130. Measurements made by Board of Public Works. Highest water level 10.0' below lsd, Apr. 8, 1950; lowest 14.64 below lsd, Dec. 19, 1952. Records available: 1949-52.

Jan. 4	11.70	Mar. 27	11.96	June 13	12.40	Aug. 28	14.03
11	11.63	Apr. 3	11.97	20	12.60	Sept. 5	13.70
18	11.46	10	11.80	July 1	12.99	12	13.94
25	11.04	17	11.15	7	13.00	18	14.00
Feb. 1	11.02	24	11.15	10	13.10	25	14.04
7	11.20	30	11.41	17	13.15	Oct. 2	14.13
14	11.45	May 8	11.73	24	13.17	9	14.25
21	11.71	15	11.99	31	13.36	Nov. 3	14.46
28	11.80	22	11.90	Aug. 7	13.43	21	14.58
Mar. 6	12.04	29	11.70	14	13.49	Dec. 19	14.64
13	11.87	June 5	12.00	21	13.55	31	14.50
20	11.90						

Calhoun County

City of Battle Creek

ChBC 160. Post Products Corp. Angell and Lafayette Sts. Drilled unused artesian well in Marshall formation, diameter 10 inches, depth 92 feet, cased to 45. Land-surface datum is 818.99 feet above msl. Highest water level 4.75 below lsd, Apr. 9, 1947; lowest 9.50 below lsd, Oct. 25, 1947. Records available: 1946-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.00	6.59	7.30	6.77	6.85	6.48	7.78	8.07	8.27	8.72	8.87	....
2	7.05	6.62	7.20	6.84	6.93	6.50	7.81	8.07	8.20	8.78	8.74	8.43
3	7.24	6.52	7.17	6.89	6.98	6.69	7.86	8.03	8.23	8.77	8.69	8.55
4	7.34	6.42	7.23	6.91	6.89	6.75	7.88	8.03	8.27	8.73	8.80	8.50
5	7.37	6.48	7.25	6.85	6.88	6.84	7.75	8.05	8.32	8.70	8.85	8.42
6	7.28	6.53	7.25	6.69	7.10	6.88	7.73	8.11	8.38	8.57	8.88	8.41
7	6.86	6.55	7.27	6.62	7.17	6.98	7.70	8.14	8.37	8.74	8.89	8.36
8	6.87	6.57	7.25	6.66	7.13	6.93	7.88	8.16	8.19	8.78	8.91	....
9	6.91	6.63	7.11	6.62	7.16	6.93	7.83	8.19	8.39	8.79	8.82	....
10	7.00	6.56	7.04	6.64	7.19	7.08	7.88	8.12	8.44	8.78	8.69	8.51
11	7.03	6.51	7.01	6.71	7.12	7.18	7.96	8.00	8.56	8.79	8.80	8.56
12	7.03	6.68	6.98	6.63	7.08	7.21	7.99	8.17	8.59	8.76	8.89	8.61
13	6.96	6.73	6.91	6.37	7.24	7.28	7.90	8.20	8.66	8.64	8.91	8.47
14	6.89	6.78	6.91	6.14	7.29	7.33	7.87	....	8.62	8.81	8.92	....
15	6.78	6.84	6.86	6.14	7.29	7.31	7.98	....	8.43	8.80	8.89	....
16	6.69	6.87	6.76	6.13	7.32	7.26	8.01	....	8.62	8.77	8.77	....
17	6.57	6.79	6.75	6.16	7.35	7.45	8.05	....	8.65	8.80	8.71	8.65
18	6.52	6.81	6.85	6.17	7.26	7.52	8.08	....	8.71	8.81	8.65	8.67
19	6.45	6.97	6.75	6.23	7.22	7.58	7.48	....	8.68	8.68	8.68	8.71
20	6.18	6.96	6.70	6.19	7.33	7.63	....	8.39	8.70	8.77	....	8.61
21	6.14	7.05	6.68	6.21	7.33	7.61	....	....	8.64	8.79	....	....
22	6.20	7.15	6.63	6.40	7.39	7.53	....	....	8.47	8.79	....	....
23	6.25	7.12	6.46	6.49	7.28	7.48	7.70	....	8.57	8.75	....	....
24	6.35	7.02	6.43	6.55	7.14	7.47	7.63	....	8.62	8.90	....	8.47
25	6.37	7.00	6.55	6.58	6.63	7.53	7.68	....	8.68	8.82	....	....
26	6.35	7.15	6.61	6.62	6.47	7.64	....	....	8.67	8.67	8.38	....
27	6.22	7.18	6.66	6.55	6.51	7.73	....	8.59	8.69	8.85	....	....
28	6.21	7.28	6.73	6.53	6.53	7.76	....	8.59	8.63	8.90	....	....
29	6.37	7.29	6.74	6.72	6.50	7.70	....	8.57	8.62	8.94	....	....
30	6.48	....	6.66	6.79	6.54	7.71	8.05	8.58	8.70	8.88	....	8.56
31	6.54	....	6.61	....	6.46	....	8.03	8.41	....	8.88	....	8.52

ChBC 173. Kellogg Co. Porter and Stiles Sts., Battle Creek. Drilled unused artesian well in Marshall formation, diameter 8 inches, depth 104 feet, cased to about 40. Land-surface datum is 847.33 feet above msl. Highest water level 33.04 below lsd, Apr. 16, 1950; lowest 46.40 below lsd, Aug. 4, 1951. Records available: 1950-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July
1	....	40.4	41.8	....	42.0	35.6	44.5
2	....	40.5	41.7	41.5	42.4	35.6	44.8
3	39.11	39.1	39.7	41.4	42.4	40.5	44.9
4	39.85	37.0	41.1	40.8	39.1	41.3	45.0
5	40.28	39.7	41.6	40.8	37.6	41.8	38.2
6	38.79	39.2	41.9	37.0	41.7	42.0	40.6
7	....	39.8	42.0	36.3	42.5	42.5	41.2
8	....	39.7	42.0	39.6	42.8	41.5	43.1
9	38.56	39.7	39.4	40.0	43.0	40.0	43.5
10	....	39.5	36.7	40.3	43.2	42.3	44.0
11	....	36.4	38.4	40.5	41.2	42.9	44.3
12	e38.26	39.9	38.6	40.5	38.0	43.3	44.6
13	37.55	40.3	40.9	37.5	42.2	43.3	43.6
14	37.23	39.5	41.1	35.2	42.9	43.7	42.9
15	38.18	40.0	41.5	39.0	43.3	43.6	44.8
16	38.54	40.2	39.3	39.2	43.5	41.4	44.9
17	....	39.3	37.7	39.1	43.8	43.4	....
18	....	36.0	40.6	39.3	43.0	44.3	....
19	....	39.3	41.0	39.5	41.8	44.4	....
20	....	40.2	41.5	36.8	42.6	44.4	....

ChBC 173--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July
21	.....	40.7	41.8	35.0	44.0	44.4	....
22	.....	40.6	41.7	38.6	44.3	42.2	....
23	38.94	41.3	39.9	38.4	44.3	41.4	....
24	.....	40.7	38.3	39.2	43.5	43.7	....
25	.....	40.3	41.0	39.4	43.0	44.2	....
26	.....	41.2	41.3	39.6	41.9	44.6	....
27	.....	41.2	41.4	39.4	43.7	44.7	....
28	.....	41.5	41.6	39.0	43.7	44.7	....
29	.....	....	41.7	40.8	43.6	44.5	....
30	40.26		40.3	41.5	42.8	42.5	....
31	40.1		....		36.7		....

e Estimated.

City of Marshall

ChMA 2. City of Marshall. East Michigan Ave. and East Drive. Drilled unused artesian well in Marshall formation, diameter 6 inches, depth 59 feet. Land-surface datum is about 904.85 feet above msl. Measurements made by the City Waterworks. Highest water level 5.46 below lsd, May 9, 1950; lowest 7.72 below lsd, Oct. 16, 1951. Records available: 1950-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 15	6.43	May 8	6.51	June 5	6.41	June 26	6.71
24	6.39	21	6.54	20	6.72	July 24	5.93
30	6.45						

Battle Creek Township

ChBc 50. E. H. Arnett. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 3, T. 2 S., R. 8 W. Driven unused water-table well in sand and gravel of Pleistocene age, diameter 1 $\frac{1}{2}$ inches, depth 25 feet. Land-surface datum is 882.14 feet above msl. Highest water level 2.52 below lsd, May 22, 1948; lowest 6.84 below lsd, Oct. 11, 1946. Records available: 1946-52.

Jan. 26	2.75	May 3	3.64	Aug. 2	5.37	Nov. 1	6.07
Feb. 29	3.64	31	3.05	30	5.97	28	6.11
Mar. 28	2.94	June 28	4.54	Sept. 27	5.99		

ChBc 137. City of Battle Creek. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 14, T. 2 S., R. 8 W. Drilled unused artesian well in sand of Pleistocene age, diameter 26 inches, depth 89 feet, screen 49-89. Land-surface datum is 914.97 feet above msl. Highest water level 6.22 below lsd, May 29, 1950; lowest 12.86 below lsd, Oct. 18, 1946. Records available: 1945-52.

Jan. 26	8.02	May 3	6.52	Aug. 2	7.08	Nov. 1	8.36
Feb. 29	7.08	31	6.23	30	7.48	28	8.64
Mar. 28	6.79	June 28	6.62	Sept. 27	7.82		

Emmett Township

ChEm 10. C. W. Cronkhite. 1302 E. Michigan Ave. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 10, T. 2 S., R. 7 W. Drilled unused artesian well in Marshall formation, diameter 6 inches, depth 84 feet. Land-surface datum is 884.94 feet above msl. Highest water level 11.42 below lsd, May 29, 1950; lowest 15.54 below lsd, Mar. 7, 1947. Records available: 1946-52.

Jan. 26	12.60	Aug. 1	12.55	Sept. 24	13.17	Dec. 2	13.71
Feb. 29	13.46	28	12.86	Oct. 31	13.52	30	13.88
July 1	12.21						

ChEm 60. City of Battle Creek. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 1, T. 2 S., R. 7 W. Drilled unused artesian well in Marshall formation, diameter 2 inches, depth 87 feet, cased to 56. Land-surface datum is 832.49 feet above msl. Highest water level 0.22 above lsd, May 22, 1947; lowest 3.24 below lsd, Sept. 21, 1949. Records available: 1945-52.

Feb. 29	0.94	May 31	0.27	Aug. 30	2.08	Nov. 1	2.00
Mar. 28	.48	June 28	1.11	Sept. 27	2.06	28	1.91
May 3	.66	Aug. 2	.71				

Pennfield Township

ChPf 1. City of Battle Creek. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 32, T. 1 S., R. 7 W. Drilled unused artesian well in Marshall formation, diameter 8 inches, depth 127 feet, cased to 103. Land-surface datum is 830.79 feet above msl. Highest water level 0.7 below lsd, Apr. 26, 27, 1950; lowest 10.85 below lsd, July 3, 1952. Records available: 1939-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1	5.75	4.40	4.26	4.18	4.75	4.38	7.12	5.95
2	4.00	4.38	5.37	4.28	4.37	3.97	7.87	....
3	4.48	4.13	4.56	4.30	4.71	3.96	....	....
4	4.70	3.42	....	4.39	4.97	3.95	....	....
5	5.15	4.21	....	4.40	4.98	4.29	....	....
6	3.92	3.75	4.56	4.37	4.95	4.32	....	....
7	4.25	4.25	....	4.44	4.72	5.36	....	....
8	4.00	4.00	....	3.92	3.89	5.13	....	....
9	4.50	4.60	....	3.92	4.43	4.97	6.71	....
10	4.52	4.70	....	4.76	4.65	5.65	6.25	....
11	4.34	3.30	....	4.44	4.89	4.92	6.92	....
12	4.71	4.41	....	4.19	4.33	4.76	6.10	....
13	3.95	3.80	....	4.28	4.62	4.74	6.81	....
14	4.17	....	....	4.03	4.49	5.09	7.68	....
15	4.05	....	....	4.10	4.24	5.10	6.45	....
16	4.47	....	....	3.74	4.41	5.25	6.32	....
17	3.70	....	....	3.83	4.77	6.16	6.22	....
18	4.55	....	....	4.01	4.65	5.20	5.55	....
19	4.00	....	....	4.49	4.26	....	5.67	....
20	3.99	4.47	....	3.85	4.57	....	5.69	....
21	3.84	3.78	....	3.48	4.68	....	4.70	....
22	4.06	3.76	....	4.55	4.78	....	5.39	....
23	3.71	4.39	....	3.62	4.69	....	5.79	....
24	3.95	3.87	....	4.80	4.22	....	5.20	....
25	4.16	3.93	....	4.70	4.10	6.97	6.57	....
26	3.75	4.59	....	5.50	4.21	5.55	5.02	....
27	4.15	4.00	....	4.24	4.19	6.12	5.32	....
28	4.16	5.81	4.77	4.75	3.83	5.32	6.22	....
29	3.68	4.05	4.25	4.26	3.97	7.03	6.26	....
30	4.13	....	4.22	5.28	4.10	7.83	5.10	....
31	3.80	....	4.13	....	4.40	....	5.52	....

ChPf 58. City of Battle Creek. Roosevelt Ave. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 31, T. 1 S., R. 7 W. Drilled unused artesian well in Marshall formation, diameter 2 inches, depth 140 feet, cased to 83. Land-surface datum is 838.92 feet above msl. Highest water level 0.07 above lsd, May 23, 1950; lowest 4.06 below lsd, Nov. 15, 1946. Records available: 1945-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	0.65	May 3	0.28	Aug. 2	1.11	Nov. 1	1.74
Feb. 29	.52	31	.18	30	.89	28	1.82
Mar. 28	.39	June 28	.60	Sept. 27	1.57		

ChPf 102. Kenneth N. Sabin. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 10, T. 1 S., R. 7 W. D-g stock water-table well in deposits of Pleistocene age, diameter 15 inches, depth 8 feet. Land-surface datum is 907.99 feet above msl. Highest water level 0.89 below lsd, Mar. 28, 1950; lowest 4.98 below lsd, Jan. 10, 1947. Records available: 1946-52.

Jan. 2	3.59	Apr. 9	2.95	July 10	3.52	Oct. 8	4.17
9	3.67	16	2.65	16	3.60	15	4.22
16	b4.30	23	2.66	23	3.40	22	4.19
23	3.10	30	2.76	30	3.63	29	4.21
30	3.05	May 7	2.92	Aug. 6	3.73	Nov. 4	4.37
Feb. 6	1.75	14	2.09	13	3.73	12	4.39
13	2.12	21	3.04	20	3.79	19	4.47
20	3.14	28	2.86	27	3.85	26	4.37
27	3.12	June 3	3.04	Sept. 3	3.93	Dec. 3	4.39
Mar. 6	2.69	10	3.18	10	3.97	10	4.49
12	2.49	17	3.30	17	4.02	17	4.55
19	2.89	25	3.25	24	4.07	24	4.49
26	2.73	July 2	3.44	Oct. 1	4.10	31	4.55
Apr. 2	2.99						

b Pumped recently.

Cass County

Mason Township

CsMa 1. Ted Little. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 17, T. 8 S., R. 14 W. Dug unused water-table well in deposits of Pleistocene age, diameter 28 inches, depth 55 feet, cribbed with brick to open bottom. Highest water level 46.20 below lsd, July 16, 1950; lowest 55.03 below lsd, Mar. 10, 1947. Records available: 1945-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	49.08	Apr. 6	47.74	July 6	47.17	Oct. 5	47.96
13	49.02	13	47.48	13	47.15	12	47.94
20	49.03	20	47.58	20	47.14	19	48.22
28	48.73	27	47.44	27	47.29	26	48.09
Feb. 3	48.55	May 4	47.36	Aug. 3	47.33	Nov. 2	48.30
10	48.35	11	47.33	10	47.40	9	48.35
17	48.26	18	47.39	17	47.60	16	48.39
24	48.14	25	47.28	24	47.40	23	48.59
Mar. 2	48.01	June 1	47.38	31	47.52	30	48.66
9	47.81	8	47.17	Sept. 7	47.70	Dec. 7	48.72
16	47.86	15	47.22	14	47.68	14	48.80
23	47.76	22	47.28	21	47.80	21	48.96
30	47.74	29	47.14	28	47.80	28	48.98

Charlevoix County

Chandler Township

CvCh 1. State Dept. of Conservation. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 2, T. 33 N., R. 4 W. Drilled unused artesian well in deposits of Pleistocene(?) age, diameter 6 inches, depth 94 feet. Highest water level 70.85 below lsd, July 19, 1952; lowest 74.97 below lsd, Apr. 10, 1949. Records available: 1948-52.

Daily 2 a. m. water level from recorder graph

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	71.03	71.45	71.90	72.49	72.97
2	.....	71.02	71.45	71.97	72.49	72.98
3	.....	71.05	71.49	71.99	72.53	73.01
4	.....	71.03	71.51	71.96	72.53	73.02
5	.....	e71.06	71.53	72.01	72.54	73.03
6	.....	71.09	71.55	72.03	72.53	73.04
7	.....	71.10	71.57	72.06	72.57	73.07
8	.....	71.11	71.58	72.07	72.59	73.07
9	.....	71.09	71.60	72.10	72.60	73.09
10	.....	e71.12	71.61	72.12	72.63	73.11
11	.....	e71.15	71.62	72.13	72.62	73.13
12	.....	e71.17	71.64	72.13	72.66	73.14
13	.....	71.18	71.65	72.16	72.66	73.15
14	.....	71.19	71.66	72.18	72.68	73.18
15	.....	71.20	71.68	72.19	72.70	73.19
16	.....	71.20	71.69	72.20	72.72	73.21
17	.....	71.24	71.70	72.23	72.73	73.24
18	70.87	e71.26	71.70	72.24	72.74	73.26
19	70.85	e71.27	71.74	72.25	72.76	.....
20	70.86	71.28	71.76	72.29	72.78	.....
21	70.86	71.28	71.78	72.30	72.82	.....
22	70.90	e71.33	71.80	72.31	72.83	.....
23	70.86	71.34	71.81	72.33	72.83	.....
24	70.95	71.35	71.84	72.34	72.87	.....
25	e70.94	71.36	71.85	72.37	72.87	.....
26	.....	71.37	71.87	72.38	72.83	.....
27	.....	71.38	71.88	72.39	72.91	.....
28	.....	71.38	71.90	72.41	72.92	.....
29	71.00	71.40	71.92	72.43	72.93	.....
30	70.96	71.42	71.94	72.45	72.97	.....
31	71.03	71.42	.....	72.46	.....	.....

e Estimated.

Hudson Township

CvHu 33. State Dept. of Conservation. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 32 N., R. 4 W. Jetted observation water-table well in deposits of Pleistocene age, diameter 2 inches, depth 19 feet, open bottom. Highest water level 1.19 below lsd, Mar. 30, 1938; lowest 5.20 below lsd, Oct. 17, 1949. Records available: 1934-41, 1948-52. Oct. 17, 4.37.

Cheboygan County

Forest Township

CbFr 5. State Dept. of Conservation. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 27, T. 33 N., R. 1 E. Jetted observation water-table well in deposits of Pleistocene age, diameter 2 inches, depth 15 feet, open bottom. Highest water level 1.90 below lsd, Mar. 30, 1939; lowest 5.21 below lsd, Oct. 18, 1949. Records available: 1939-44, 1948-52. Oct. 17, 2.72.

Nunda Township

CbNd 2. State Dept. of Conservation. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, T. 33 N., R. 1 W. Jetted observation water-table well in deposits of Pleistocene age, diameter 2 inches, depth 16 feet, open bottom. Highest water level 3.99 below lsd, Aug. 12, 1942; lowest 7.44 below lsd, Oct. 18, 1949. Records available: 1935-44, 1948-52. Oct. 17, 4.85.

Walker Township

CbWk 33. State Dept. of Conservation. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 26, T. 34 N., R. 1 W. Jetted observation water-table well in deposits of Pleistocene age, diameter 2 inches, depth 17 feet, open bottom. Highest water level 3.90 below lsd, Mar. 28, 1938; lowest 7.37 below lsd, Oct. 18, 1949. Records available: 1935-44, 1948-52. Oct. 17, 6.04.

Clinton County

Village of Elsie

CtES 1. Village of Elsie. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 13, T. 8 N., R. 1 W. Drilled unused artesian well in Saginaw formation, diameter 12 inches, depth 298 feet. Highest water level 3.78 above lsd, June 3, 1950; lowest 35.97 below lsd, Sept. 16, 1947. Records available: 1947-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0.13	2.00	0.20	3.70	4.99	9.44	.....	.....	.....	.....	.....	.....
2	.18	1.64	.20	3.80	.....	9.34	.....	.....	.....	.....	.....	.....
3	.10	1.30	.34	3.81	.....	13.49	.....	.....	.....	.....	.....	.....
4	.21	.....	.28	3.85	.....	13.90	.....	.....	.....	.....	.....	.....
5	.06	.33	.57	3.86	.....	14.25	.....	.....	.....	.....	.....	.....
6	.41	.29	.54	4.20	.....	14.09	14.04	.....	.....	.....	.....	.....
7	.58	.07	.31	4.05	.....	14.30	14.06	.....	.....	.....	.....	.....
8	.55	.08	.43	4.34	.....	14.49	14.85	.....	.....	.....	.....	.....
9	.52	.83	.58	4.73	.....	14.45	15.57	.....	.....	.....	.....	.....
10	.76	.45	.41	4.60	.....	14.62	14.58	.....	.....	.....	.....	.....
11	1.20	.39	.66	4.74	.....	15.52	14.55	.....	.....	.....	.....	.....
12	1.21	.....	.50	5.07	.....	15.39	14.60	.....	.....	.....	.....	.....
13	.33	.....	.46	4.85	.....	14.89	15.02	.....	.....	.....	.....	.....
14	.....	.....	.59	.....	.....	14.50	.....	.....	.....	.....	.....	.....
15	.....	.....	.35	.....	.....	13.93	.....	.....	.....	.....	.....	.....
16	1.55	.....	.64	.....	.....	13.97	.....	.....	.....	.....	.....	.....
17	1.63	.44	.87	.....	.....	14.20	.....	.....	.....	.....	.....	.....
18	.56	.58	1.02	.....	.....	13.03	.....	.....	.....	.....	.....	.....
19	1.73	.57	1.19	.....	.....	11.10	.....	.....	.....	.....	.....	.....
20	1.61	.31	1.78	.....	.....	9.62	.....	.....	.....	.....	.....	.....
21	.....	.54	2.00	6.10	.....	8.82	.....	.....	.....	.....	.....	.....
22	.....	.57	2.15	6.30	.....	.....	.....	.....	.....	.....	.....	.....
23	.....	.73	2.13	5.78	.....	.....	.....	.....	.....	.....	.....	.....
24	.....	1.06	.....	5.15	.....	.....	.....	.....	.....	.....	.....	.....
25	.....	1.36	.....	5.03	.....	.....	.....	.....	.....	.....	.....	.....
26	.....	.81	.....	5.19	12.53	.....	.....	.....	.....	.....	10.82	.....
27	.....	.67	2.16	5.34	12.88	.....	.....	21.27	.....	.....	.....	.....
28	1.85	.75	2.24	5.30	12.37	.....	.....	.....	.....	.....	.....	.....
29	1.99	.50	2.45	5.23	11.51	.....	.....	.....	19.52	15.85	.....	18.26
30	2.06	.....	3.14	5.05	10.87	.....	.....	.....	.....	.....	.....	.....
31	2.12	.....	3.34	.....	9.97	.....	12.78	.....	.....	.....	.....	.....

e Estimated.

CtES 3. Village of Elsie. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 13, T. 8 N., R. 1 W., Elsie. Drilled unused artesian well in gravel of Pleistocene age, diameter 12 inches, depth 45 feet. Highest water level 8.3 below lsd, Apr. 5, 1950; lowest 26.4 below lsd, Oct. 11, 1949. Records available: 1947-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	18.2	18.5	18.1	17.5	14.5	....	....	....	....	....	....
2	....	17.9	18.5	17.0	....	14.6	....	....	....	....	....	....
3	....	17.6	18.5	17.0	....	15.70	....	....	....	....	....	....
4	....	16.8	18.4	17.2	....	....	....	....	....	....	....	....
5	....	16.40	18.3	17.2	....	....	....	....	....	....	....	....
6	18.49	....	18.1	17.2	....	....	16.95	....	....	....	....	....
7	18.5	....	18.3	17.4	....	....	17.0	....	....	....	....	....
8	18.7	....	18.0	17.3	....	....	17.5	....	....	....	....	....
9	18.7	....	18.2	16.9	....	....	17.0	....	....	....	....	....
10	18.7	....	18.3	16.5	....	....	17.1	....	....	....	....	....
11	....	....	18.0	16.5	....	....	17.0	....	....	....	....	....
12	....	....	17.6	16.5	....	....	17.0	....	....	....	....	....
13	18.51	17.6	17.9	16.3	....	....	17.1	....	....	....	....	....
14	18.7	17.8	17.7	....	....	....	....	....	....	....	....	....
15	18.6	17.8	17.4	....	....	....	....	....	....	....	....	....
16	18.4	17.3	17.0	....	....	15.7	....	....	....	....	....	....
17	18.3	17.6	17.8	....	....	15.6	....	....	....	....	....	....
18	17.8	17.8	17.9	....	....	16.5	....	....	....	....	....	....
19	17.9	16.4	18.0	....	....	17.0	....	....	....	....	....	....
20	....	18.0	17.7	....	....	17.3	....	....	....	....	....	....
21	....	18.1	17.7	16.70	....	17.1	....	....	....	....	....	....
22	....	18.4	17.7	16.4	....	17.0	....	....	....	....	....	....
23	....	18.8	17.6	16.6	....	....	....	....	....	....	....	....
24	....	19.1	....	17.3	....	....	....	....	....	....	....	....
25	....	18.9	....	17.3	....	....	....	....	....	....	....	....
26	....	18.2	....	17.4	13.49	....	....	....	....	....	14.64	....
27	18.21	18.3	17.06	17.5	16.1	....	....	16.90	....	....	....	....
28	18.1	18.4	17.1	17.3	14.7	....	....	....	....	....	....	....
29	18.2	18.4	18.1	17.5	14.6	....	....	....	16.79	19.28	....	16.77
30	18.2	....	18.2	17.5	14.4	....	16.94	....	....	....	....	....
31	18.3	....	18.2	....	14.4	....	....	....	....	....	....	....

De Witt Township

CtDw 159. State Dept. of Health. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 32, T. 5 N., R. 2 W. Drilled unused artesian well in Saginaw formation, diameter 6 to 4 inches, depth 135 feet. Highest water level 42.02 below lsd, Sept. 14, 1944; lowest 63.11 below lsd, July 30, 1952. Records available: 1944-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	60.75	Apr. 26	60.85	July 30	63.11	Oct. 25	62.69
Mar. 1	60.39	June 2	61.68	Aug. 26	62.60	Nov. 24	62.40
29	60.82	25	62.73	Sept. 27	62.68	Dec. 22	62.67

Olive Township

CtOe 1. State Highway Dept. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T. 6 N., R. 2 W. Drilled unused water-table well in gravel of Pleistocene age, diameter 14 inches, depth 23 feet, open bottom. Highest water level 14.59 below lsd, Apr. 19, 1952; lowest 18.46 below lsd, Jan. 10, 1949. Records available: 1948-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	16.93	15.98	15.95	15.51	14.80	15.33	16.00	16.56	16.91	17.26	17.61	17.83
2	16.93	....	16.04	15.51	14.82	15.39	16.01	16.54	16.91	17.28	17.61	17.77
3	16.87	....	16.02	15.50	14.89	15.34	16.00	16.56	16.94	17.36	17.65	17.80
4	16.84	....	15.93	15.55	14.90	15.38	16.03	16.50	17.01	17.32	17.67	17.81
5	16.72	....	16.05	15.46	14.89	15.40	16.08	16.55	17.04	17.35	17.60	17.71
6	16.75	....	16.12	15.44	14.90	15.39	16.11	16.60	17.03	17.38	17.58	17.70
7	16.76	....	16.16	15.51	15.03	15.43	16.12	16.62	17.07	17.42	17.65	17.70
8	16.70	15.76	16.15	15.50	15.02	15.44	16.10	16.63	17.09	17.42	17.69	17.73
9	16.63	15.81	16.07	15.40	15.04	15.44	16.11	16.61	17.10	17.41	17.67	17.70
10	16.64	15.79	16.00	15.19	15.02	15.47	16.15	16.57	17.10	17.46	17.71	17.68

CtOe--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	16.75	15.68	15.85	15.18	.....	15.53	16.16	16.62	17.11	17.46	17.70	17.71
12	16.68	.....	16.00	15.10	.....	15.55	16.21	16.65	17.12	17.42	17.72	17.72
13	16.67	.....	15.90	14.91	15.13	15.57	16.24	16.68	17.13	17.40	17.72	17.75
14	16.61	.....	15.92	14.66	15.15	15.57	16.24	16.69	17.12	17.45	17.73	17.74
15	16.50	15.87	15.93	14.63	15.07	15.62	16.20	16.69	17.12	17.46	17.71	17.75
16	16.54	15.82	15.88	14.66	15.22	15.63	16.29	16.66	17.13	17.45	17.75	17.76
17	16.38	15.79	15.90	14.64	15.27	15.62	16.31	16.70	17.11	17.51	17.75	17.78
18	16.30	15.85	15.89	14.62	15.31	15.68	16.33	16.73	17.07	17.53	17.68	17.82
19	16.29	15.91	15.74	14.61	15.35	15.69	16.28	16.77	17.14	17.46	17.68	17.86
20	16.13	15.87	15.79	14.60	15.33	15.77	16.29	16.78	17.20	17.56	17.70	17.82
21	16.25	15.82	15.77	14.64	15.29	15.77	16.28	16.77	17.23	17.60	17.74	17.75
22	16.10	15.61	15.76	14.62	15.38	15.79	16.33	16.84	.....	17.57	17.73	17.77
23	16.01	15.96	15.63	14.65	15.42	15.81	16.33	16.87	17.24	17.54	17.66	17.73
24	16.16	15.96	15.64	14.69	15.31	15.81	16.40	16.88	17.27	17.54	17.76	17.76
25	16.16	15.99	15.66	14.67	15.23	15.80	16.43	16.89	17.27	17.58	17.75	17.78
26	16.04	15.98	15.64	14.69	15.25	15.82	16.43	16.91	17.23	17.58	17.60	17.78
27	16.06	15.95	15.67	14.69	15.30	15.90	16.45	16.91	17.28	17.53	17.70	17.77
28	16.01	15.92	15.66	14.67	15.28	15.94	16.44	16.91	17.27	17.56	17.75	17.81
29	15.99	15.93	15.65	14.72	15.31	15.93	16.49	16.90	17.28	17.61	17.79	17.76
30	16.02	.....	15.68	14.77	15.33	15.95	16.47	16.93	17.31	17.60	17.80	17.74
31	16.02	.....	15.59	.....	15.32	.....	16.53	16.92	.....	17.57	.....	17.78

Crawford County

City of Grayling

CrGr 3. State Fish Hatchery. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 8, T. 26 N., R. 3 W., Grayling. Driven observation water-table well in sand of Pleistocene age, diameter 1 $\frac{1}{2}$ inches, depth 8 feet, screen 5-8. Highest water level 2.62 below lsd, Apr. 18, 1952; lowest 3.44 below lsd, Oct. 13, 1949. Records available: 1949-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 15	3.09	Apr. 18	2.62	July 15	2.93	Oct. 20	3.06
Feb. 18	3.21	May 14	3.10	Aug. 20	2.76	Nov. 13	3.17
Mar. 19	3.01	June 16	2.98	Sept. 17	2.96	Dec. 19	3.13

Beaver Creek Township

CrBc 1. State Dept. of Conservation. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 28, T. 25 N., R. 3 W. Jetted observation water-table well in deposits of Pleistocene age, diameter 1 $\frac{1}{2}$ inches, depth 13 feet, screen 11-13. Land-surface datum is 1,175.14 feet above msl. Highest water level 8.70 below lsd, June 15, 1943; lowest 10.85 below lsd, Nov. 11, 1949, Feb. 15, 1951. Records available: 1934-37, 1939-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	9.99	Apr. 17	9.16	July 14	9.68	Oct. 13	10.12
Feb. 14	9.98	May 13	9.19	Aug. 19	9.81	Nov. 12	10.20
Mar. 17	10.08	June 17	9.48	Sept. 15	10.05	Dec. 19	10.25

Frederic Township

CrFr 1. State Dept. of Conservation. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 2, T. 27 N., R. 4 W. Jetted observation water-table well in deposits of Pleistocene age, diameter 2 inches, depth 13 feet, screen 10-13. Land-surface datum is 1,194.18 feet above msl. Highest water level 3.84 below lsd, Apr. 17, 1947; lowest 7.08 below lsd, Mar. 14, 1951. Records available: 1934-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 15	5.24	Apr. 18	4.25	July 15	5.03	Oct. 14	5.35
Feb. 15	5.38	May 14	4.74	Aug. 20	4.95	Nov. 13	5.41
Mar. 19	5.43	June 17	5.10	Sept. 15	5.28	Dec. 15	5.11

Grayling Township

CrGr 3. State Dept. of Conservation. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 12, T. 26 N., R. 3 W. Jetted observation water-table well in deposits of Pleistocene age, diameter 1 $\frac{1}{2}$ inches, depth 16 feet, screen 14-16. Highest water level 4.04 below lsd, Mar. 21, 1938; lowest 9.39 below lsd, Feb. 15, 1951. Records available: 1935-52.

CrGr 3--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 15	8.00	Apr. 18	7.10	July 15	7.62	Oct. 14	7.98
Feb. 15	8.07	May 14	6.92	Aug. 20	7.36	Nov. 13	8.21
Mar. 19	8.24	June 17	7.38	Sept. 16	7.74	Dec. 15	8.26

CrGr 6. State Dept. of Conservation. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 26 N., R. 4 W. Dug unused water-table well in deposits of Pleistocene age, diameter 15 inches, depth 10 feet, open bottom. Land-surface datum is 1,144.09 feet above msl. Highest water level 4.03 below lsd, June 1, 1943; lowest 8.33 below lsd, Sept. 8-9, 1946. Records available: 1942-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.80	5.94	6.27	4.86	5.38	6.10	6.05	6.32	7.10	7.57	7.72	6.42
2	5.74	5.86	6.29	4.47	5.41	6.12	6.16	6.38	7.10	7.58	7.73	....
3	5.76	5.87	6.30	4.58	5.44	6.15	6.26	6.44	7.11	7.60	7.71	6.47
4	5.81	5.85	6.31	4.72	5.48	6.17	6.33	6.51	7.13	7.61	7.68	6.49
5	5.84	5.77	6.32	4.78	5.50	6.20	6.42	6.00	7.16	7.62	....	6.49
6	5.89	5.82	6.35	4.86	5.51	6.23	6.50	6.05	7.19	7.63	....	6.47
7	5.94	5.84	6.36	4.96	5.55	6.26	6.57	6.16	7.22	7.64	7.56	6.47
8	5.96	5.86	6.37	4.77	5.58	6.30	6.64	6.26	7.24	7.64	7.54	6.47
9	5.98	5.90	6.38	4.59	5.61	6.32	6.27	6.34	7.27	7.65	7.51	6.46
10	6.02	5.93	6.38	4.57	5.64	6.35	6.25	6.19	7.31	7.66	7.50	6.35
11	6.06	5.92	6.12	4.67	5.66	6.39	6.34	6.22	7.35	7.67	7.48	6.32
12	6.07	5.98	6.09	4.74	5.68	6.43	6.42	6.27	7.38	7.67	7.48	6.33
13	6.09	6.01	6.07	4.83	5.71	6.47	6.51	6.32	7.42	7.68	7.48	6.35
14	6.09	6.03	6.08	4.29	5.72	6.50	6.60	6.39	7.46	7.68	7.47	6.37
15	5.58	6.05	6.11	4.48	5.62	6.54	6.52	6.45	7.42	7.69	7.48	6.40
16	5.60	6.05	6.12	4.60	5.61	6.58	5.98	6.50	7.40	7.69	7.48	....
17	5.62	6.07	6.15	4.68	5.68	6.54	6.03	6.54	7.43	7.70	7.46	....
18	5.43	6.09	6.18	4.78	5.73	6.36	6.12	6.58	7.47	7.70	7.28	6.49
19	5.47	6.12	6.18	4.86	5.77	6.42	6.14	6.61	7.49	7.70	7.12	6.52
20	5.48	6.13	5.98	4.94	5.79	6.52	5.92	6.65	7.50	7.70	7.05	....
21	5.62	6.14	5.87	5.01	5.81	6.58	5.84	6.68	7.51	7.71	7.01	....
22	5.64	6.16	5.79	5.05	5.84	6.63	5.61	6.71	7.51	7.71	6.99	6.57
23	5.65	6.18	5.74	5.10	5.87	6.66	5.67	6.76	7.46	7.71	6.93	6.57
24	5.75	6.20	5.76	5.14	5.90	6.69	5.53	6.80	7.43	7.71	6.82	6.40
25	5.79	6.21	5.80	5.18	5.91	6.73	5.68	6.84	7.43	7.71	6.77	6.28
26	5.79	6.22	e5.82	5.21	5.93	6.76	5.81	6.88	7.46	7.72	6.71	6.23
27	5.83	6.23	e5.84	5.24	5.97	6.35	5.94	6.93	7.49	7.72	6.46	6.22
28	5.85	6.24	e5.86	5.27	5.99	6.39	6.03	6.97	7.52	7.72	6.39	6.24
29	5.87	6.25	5.87	5.31	6.02	6.26	6.11	7.02	7.54	7.72	6.38	6.26
30	5.90	.....	5.77	5.35	6.05	5.97	6.18	7.05	7.56	7.72	6.39	6.29
31	5.93	.....	5.48	.....	6.08	.....	6.25	7.08	.....	7.72	.....	6.33

e Estimated.

CrGr11. State of Michigan, National Guard Camp. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 28, T. 26 N., R. 4 W. Drilled unused water-table well in deposits of Pleistocene age, diameter 3 inches, depth 31 feet. Highest water level 19.70 below lsd, May 14-21, 1952; lowest 22.39 below lsd, July 23, 1949. Records available: 1949-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	20.70	20.85	21.00	20.94	19.86	19.89	.....	20.08	20.38	20.50	20.77	20.74
2	20.70	20.86	21.00	20.82	19.84	19.90	.....	20.11	20.38	20.51	20.77	20.73
3	20.70	20.86	21.01	20.69	19.82	19.91	.....	20.11	20.38	20.52	20.77	20.73
4	20.71	20.86	21.00	20.60	19.81	19.94	20.31	20.13	20.39	20.53	20.78	20.73
5	20.71	20.86	21.01	20.53	19.79	19.96	20.33	20.13	20.40	20.54	20.78	20.71
6	20.72	20.86	21.03	20.49	19.77	19.96	20.34	20.13	20.40	20.54	20.78	20.71
7	20.73	20.87	21.04	20.45	19.76	.....	20.34	20.14	20.40	20.55	20.79	20.71
8	20.73	20.87	21.05	20.42	19.75	.....	20.35	20.14	20.40	20.56	20.82	20.71
9	20.75	20.89	21.05	20.40	19.74	.....	20.35	20.15	20.40	20.57	20.82	20.71
10	20.75	20.89	21.04	20.36	19.72	.....	20.36	20.15	20.41	20.59	20.82	20.71
11	20.79	.....	21.04	20.36	19.72	.....	20.36	20.15	20.41	20.61	20.82	20.71
12	20.80	.....	21.05	20.34	19.71	.....	20.38	20.15	20.42	20.61	20.82	20.71
13	20.80	.....	21.04	20.32	19.71	20.09	20.39	20.16	20.42	20.61	20.83	.....
14	20.80	.....	21.05	20.31	19.70	20.09	20.40	20.16	20.42	20.63	20.83	.....
15	20.80	20.92	21.05	20.30	19.70	20.10	20.40	20.18	20.42	20.63	20.83	.....

CrGr 11--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	20.81	20.93	21.05	20.27	19.70	20.10	20.40	20.20	20.42	20.64	20.84	.....
17	20.80	20.93	21.05	20.25	19.70	20.11	20.38	20.22	20.43	20.65	20.84	20.72
18	20.80	20.93	21.05	20.23	19.70	20.12	20.37	20.23	20.43	20.66	20.84	20.73
19	20.80	20.94	21.05	20.19	19.70	20.13	20.36	20.24	20.43	20.66	20.82	20.75
20	20.77	20.94	21.05	20.16	19.70	20.14	20.35	20.25	20.44	20.67	20.82	20.78
21	20.79	20.94	21.05	20.13	19.70	20.17	20.33	20.25	20.45	20.68	20.81	20.77
22	20.78	20.95	21.04	20.08	19.71	20.17	20.29	20.29	20.45	20.68	20.82	20.78
23	20.77	20.97	20.99	20.07	19.73	20.17	20.20	20.29	20.45	20.69	20.82	20.78
24	20.80	20.97	20.98	20.04	19.74	20.17	20.18	20.30	20.45	20.69	20.82	20.78
25	20.81	20.97	20.98	20.00	19.74	20.18	20.14	20.31	20.45	20.72	20.82	20.78
26	20.81	20.97	20.98	19.97	19.76	20.20	20.08	20.34	20.45	20.73	20.79	20.77
27	20.82	20.97	20.98	19.95	19.79	20.21	20.08	20.34	20.48	20.73	20.77	20.77
28	20.82	20.98	20.98	19.92	19.80	.....	20.07	20.36	20.48	20.73	20.77	20.77
29	20.83	20.98	21.00	19.90	19.82	.....	20.06	20.37	20.49	20.74	20.76	20.77
30	20.84		21.00	19.88	19.84	.....	20.06	20.37	20.50	20.74	20.74	20.77
31	20.84		21.00		19.87		20.06	20.38		20.75		20.78

Lovells Township

CrLv 2. State Dept. of Conservation. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 22, T. 27 N., R. 1 W. Jetted observation water-table well in deposits of Pleistocene age, diameter 2 inches, depth 13 feet, screen 10-13. Highest water level 3.51 below lsd, Apr. 18, 1952; lowest 6.19 below lsd, Mar. 12, 1947. Records available: 1934-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 15	4.72	Apr. 18	3.51	July 15	4.46	Oct. 14	5.32
Feb. 15	4.92	May 14	3.95	Aug. 20	4.77	Nov. 13	5.48
Mar. 19	5.02	June 16	4.47	Sept. 16	5.13	Dec. 15	5.52

South Branch Township

CrSb 1. State Dept. of Conservation, Huron National Forest. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 25 N., R. 1 W. Drilled unused artesian well in deposits of Pleistocene age, diameter 6 inches, depth 56 feet. Highest water level 29.88 below lsd, June 16, 1952; lowest 35.97 below lsd, Apr. 4-6, 1951. Records available: 1948-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	32.72	32.58	32.58	.....	31.65	30.00	30.14	30.52	30.82	31.15	31.58	31.95
2	32.79	32.59	32.62	.....	31.55	.....	30.13	30.49	30.83	31.21	31.58	31.92
3	32.75	32.59	32.61	.....	31.47	29.93	30.11	30.53	30.86	31.27	31.61	31.96
4	32.75	32.55	32.56	32.64	31.36	29.99	30.14	30.49	30.90	31.20	31.61	31.97
5	32.68	32.57	32.62	32.62	31.25	.....	30.19	30.55	30.92	31.25	31.56	31.89
6	32.71	32.61	32.66	32.59	31.17	29.92	30.20	30.58	30.90	31.29	31.56	31.93
7	32.72	32.60	32.66	32.61	31.12	29.95	30.20	30.58	30.95	31.31	31.64	31.98
8	32.68	32.58	32.64	32.63	31.02	29.92	30.17	30.59	30.94	31.30	31.67	32.00
9	32.66	32.59	32.60	32.62	30.93	29.93	30.20	30.56	30.94	31.32	31.63	31.98
10	32.68	32.59	32.59	32.55	30.85	29.91	30.24	30.58	30.95	31.35	31.69	32.00
11	32.73	32.53	32.54	32.59	30.76	29.95	30.24	30.60	30.97	31.33	31.67	32.02
12	32.67	32.61	32.63	32.55	30.69	29.94	30.25	30.63	30.97	31.31	31.70	32.03
13	32.67	32.63	32.60	32.50	30.64	29.94	30.29	30.64	31.01	31.32	31.71	32.05
14	32.66	32.63	32.63	32.46	30.59	29.91	30.28	30.65	31.01	31.37	31.72	32.04
15	32.60	32.63	32.63	32.46	30.50	29.95	30.26	30.64	31.02	31.38	31.72	32.07
16	32.70	32.59	32.61	32.46	30.50	29.92	30.34	30.63	31.03	31.36	31.75	32.08
17	32.63	32.58	32.63	32.43	30.46	29.90	30.34	30.69	31.03	31.42	31.76	32.10
18	32.63	32.60	32.64	32.40	30.41	29.95	30.35	30.68	31.03	31.43	31.74	32.13
19	32.65	32.62	32.57	32.37	30.37	29.95	30.34	30.72	31.06	31.38	31.74	32.17
20	32.58	32.59	32.61	32.35	30.30	30.01	30.35	30.71	31.11	31.48	31.78	.....
21	32.69	32.55	32.63	32.32	30.25	30.00	30.32	30.70	31.12	31.48	31.80	.....
22	32.61	32.61	32.65	32.27	30.25	30.00	30.38	30.77	31.13	31.45	31.81	.....
23	32.58	32.62	32.58	32.25	30.22	30.01	30.34	30.78	31.13	31.46	31.78	32.16
24	32.67	32.60	32.60	32.20	30.19	29.98	30.40	30.77	31.16	31.47	31.87	32.17
25	32.65	32.61	32.64	32.13	30.12	29.98	30.41	30.78	31.16	31.52	31.86	32.19

CrSb 1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	32.59	32.59	32.65	32.07	30.13	29.99	30.40	30.80	31.14	31.51	31.73	32.20
27	32.62	32.58	32.66	31.98	30.11	30.09	30.41	30.80	31.18	31.47	31.83	32.22
28	32.61	32.57	32.66	31.90	.....	30.11	30.42	30.80	31.17	31.52	31.90	32.24
29	32.60	32.57	.....	31.82	.....	30.05	30.49	30.81	31.20	31.56	31.92	32.21
30	32.61	.....	.....	31.74	30.04	30.10	30.46	30.83	31.22	31.53	31.91	32.23
31	32.60	.....	.....	.....	30.00	.....	30.52	30.82	.....	31.52	.....	32.26

Eaton County

City of Charlotte

EaCh 1. City of Charlotte. U. S. Highway 27 and Territorial Road, Charlotte. Dug unused water-table well in deposits of Pleistocene age, diameter 20 feet, depth 25 feet, cribbed with brick to open bottom. Highest water level 8.04 below lsd, Apr. 7, 1947; lowest 15.77 below lsd, Jan. 2, 1948. Records available: 1947-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	10.64	Apr. 30	10.67	Aug. 1	12.87	Dec. 2	13.82
Feb. 28	11.47	May 28	10.76	Sept. 24	14.61	30	13.92
Apr. 2	10.72	June 25	12.24				

City of Grand Ledge

EaGL 1. Layne-Northern Co., Inc. Perry and Jefferson Sts., Grand Ledge. Drilled unused artesian well in Saginaw formation, diameter 12 inches, depth 376 feet, cased to 22. Measurements made by Water Dept. Highest water level 21.34 below lsd, May 5, 14, 1950; lowest 28.79 below lsd, Dec. 3, 1949. Records available: 1948-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	25.58	24.70	23.62	22.26	21.72	22.47	.....	23.36	23.98	24.91	26.08
2	26.29	25.54	24.92	23.82	22.23	21.77	22.47	.....	23.35	24.15	24.91	25.85
3	26.26	25.43	24.70	23.84	22.27	21.64	22.44	.....	.....	.....	25.10	26.00
4	26.27	25.12	24.40	24.04	22.19	21.72	22.51	22.83	23.78	.....	25.74	25.97
5	26.06	25.23	24.90	23.70	22.09	21.67	22.61	23.04	23.74	.....	25.45	25.70
6	26.18	25.39	24.94	23.83	22.12	21.58	22.64	23.12	23.62	.....	25.42	25.80
7	26.25	25.37	24.91	24.02	22.30	21.68	22.62	23.11	23.84	24.55	25.72	25.80
8	26.09	25.24	24.80	24.08	.....	21.64	22.50	23.10	23.87	24.47	25.73	25.88
9	26.04	25.29	24.58	24.01	.....	21.68	22.60	22.98	23.83	24.43	25.63	25.81
10	.....	25.21	24.47	23.65	.....	21.71	22.66	23.00	23.80	24.59	25.73	25.74
11	.....	24.92	25.11	23.94	.....	21.90	22.67	23.12	23.83	24.52	25.71	25.85
12	.....	25.22	24.62	23.69	.....	21.86	22.74	23.19	.....	24.34	25.73	25.84
13	.....	25.20	24.10	23.34	22.11	21.92	22.77	23.26	.....	24.35	25.73	25.86
14	.....	25.13	24.43	23.21	22.15	21.88	22.72	23.21	.....	24.59	25.74	25.86
15	.....	25.15	24.36	23.16	21.97	21.98	22.64	23.18	23.96	24.50	25.67	25.92
16	.....	24.96	24.21	23.15	22.27	22.01	22.83	23.05	23.92	24.54	25.80	25.95
17	25.92	24.87	24.26	23.02	22.28	21.98	22.81	23.25	23.83	24.73	25.73	25.99
18	25.92	25.01	24.16	22.94	22.34	22.13	22.81	23.22	23.70	24.75	25.67	26.06
19	25.95	25.04	24.79	22.84	22.34	22.11	22.74	23.38	23.92	24.39	25.61	26.17
20	25.59	24.82	24.09	22.77	22.18	22.27	22.72	23.30	24.12	24.90	25.67	26.06
21	26.02	24.74	24.08	22.75	22.24	22.20	22.68	23.21	24.12	24.93	25.81	25.99
22	25.71	25.00	24.05	22.69	22.33	22.17	22.84	23.50	24.15	24.71	25.73	26.18
23	25.58	25.00	23.74	22.73	22.31	22.18	22.77	23.50	24.02	24.62	25.74	26.07
24	25.96	24.91	23.89	22.66	22.10	22.12	22.98	23.43	24.28	24.68	25.97	26.14
25	25.86	24.96	24.01	22.56	21.85	22.05	22.98	23.43	24.16	24.86	25.85	26.18
26	25.61	24.85	23.97	22.50	21.88	22.11	22.89	23.54	23.95	24.81	25.42	26.18
27	25.75	24.73	24.05	22.41	21.86	22.31	22.98	23.52	24.22	24.61	25.83	26.16
28	25.72	24.61	24.02	22.29	21.77	22.40	22.90	23.48	24.15	24.79	25.91	26.22
29	25.73	24.72	23.99	22.34	21.79	22.30	23.05	23.42	24.17	25.00	25.97	26.10
30	25.80	.....	24.08	22.33	21.77	22.36	22.95	23.53	24.30	24.84	25.95	26.05
31	25.69	.....	23.78	.....	21.67	.....	.....	23.37	.....	24.74	.....	26.15

Delta Township

EaDt 214. John Schneeberger. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 10, T. 4 N., R. 3 W. Drilled unused artesian well in Saginaw formation, diameter 3 inches, depth 121 feet. Land-surface datum about 860 feet above msl. Highest water level 31.28 below lsd, May 27, 1948; lowest 34.78 below lsd, Dec. 29, 1949. Records available: 1944-52.

EaDt 214--Cont.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	33.38	June 2	32.45	Aug. 26	33.42	Oct. 25	34.05
Mar. 1	33.16	25	32.56	Sept. 27	33.73	Nov. 24	34.41
29	33.00	July 30	33.01	Oct. 9	33.87	Dec. 22	34.35
Apr. 26	32.32						

EaDt 215. Bernard B. Bosworth. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 9, T. 4 N., R. 3 W. Dug unused water-table well in deposits of Pleistocene age, diameter 4 feet, depth 18 feet, cribbed with brick to open bottom. Land-surface datum is about 855 feet above msl. Highest water level 5.55 below lsd, Apr. 26, 1952; lowest 16.15 below lsd, Jan. 18, 1947. Records available: 1944-52.

Jan. 30	6.84	Apr. 26	5.55	July 30	11.61	Oct. 25	14.43
Mar. 1	8.60	June 2	6.37	Aug. 26	12.59	Nov. 24	14.81
29	7.00	25	9.30	Sept. 27	13.61	Dec. 22	15.11

Genesee County

City of Flint

GeFL 353. City of Flint. Brandon St. and Barney Ave. Drilled unused artesian well in deposits of Pleistocene age, diameter 3 inches, depth 74 feet. Highest water level 52.95 below lsd, June 9, 1947; lowest 57.22 below lsd, Oct. 5, 1948. Records available: 1946-52.

Jan. 28	54.21	Apr. 28	54.15	July 30	56.57	Oct. 28	56.71
Feb. 25	54.69	May 27	54.74	Aug. 27	57.18	Nov. 25	56.45
Mar. 27	54.11	June 23	56.22	Sept. 29	56.95	Dec. 31	56.30

GeFL 354. City of Flint. Atherton Road and Day St. Drilled unused artesian well in deposits of Pleistocene age, diameter 2 inches, depth 169 feet. Land-surface datum is 751.43 feet above msl. Highest water level 1.09 below lsd, Apr. 26, 1950; lowest 6.88 below lsd, July 30, 1952. Records available: 1947-52.

Jan. 28	2.90	Apr. 28	2.89	July 30	6.88	Oct. 28	5.10
Feb. 25	3.11	May 27	3.04	Aug. 27	6.87	Nov. 25	4.58
Mar. 27	3.04	June 23	5.44	Sept. 29	5.75	Dec. 31	4.44

GeFL 491. Consumers Power Co. Franklin and Sunnyside Aves. Drilled unused artesian well in Saginaw formation, diameter 12 inches, depth 222 feet. Highest water level 24.23 below lsd, Feb. 12, 1950; lowest 32.76 below lsd, Sept. 14, 1952. Records available: 1946-52.

Daily 2 a.m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	26.70	26.11	26.40	25.63	25.75	26.13	.....	32.30	32.48	30.49	28.17	27.72
2	26.62	26.10	26.54	25.75	25.80	26.18	.....	32.18	32.46	30.42	28.16	27.51
3	26.42	26.07	26.42	25.86	26.03	26.14	.....	32.24	32.49	30.55	28.15	27.56
4	26.41	25.84	26.22	25.99	25.99	26.25	.....	32.15	32.47	30.42	28.12	27.75
5	26.18	25.88	26.39	25.89	26.02	26.47	.....	31.91	32.38	30.35	.....	27.48
6	26.24	26.05	26.45	25.78	26.02	26.48	.....	32.07	32.56	30.32	.....	27.42
7	26.19	26.03	.....	25.81	26.20	26.76	.....	32.12	32.68	30.24	.....	.....
8	26.03	26.09	.....	25.79	26.22	27.01	.....	32.07	32.54	30.13	.....	.....
9	25.94	26.22	.....	25.63	26.25	27.34	.....	31.97	32.24	30.02	.....	27.17
10	26.07	26.18	.....	25.56	26.25	27.61	.....	32.09	32.16	30.02	.....	27.11
11	26.35	25.89	25.96	25.75	26.21	28.08	.....	32.10	32.22	29.93	27.82	27.14
12	26.23	26.09	26.05	25.74	26.21	28.09	.....	31.87	32.40	29.81	27.82	27.22
13	26.26	26.12	25.92	25.52	26.14	28.09	.....	31.90	32.49	29.61	27.75	27.28
14	26.12	.....	26.03	25.33	.....	28.16	.....	31.85	32.68	29.57	27.70	27.28
15	25.99	.....	26.10	25.42	.....	28.65	.....	31.66	32.70	29.47	27.67	27.27
16	26.20	.....	26.04	25.55	.....	29.11	.....	31.89	32.50	29.32	27.74	27.24
17	25.98	.....	26.05	25.52	.....	29.30	.....	32.17	32.34	29.35	27.69	27.29
18	25.90	.....	26.08	25.49	.....	29.69	.....	.....	32.18	29.27	27.50	27.37
19	26.04	26.10	25.86	25.42	.....	.....	.....	.....	32.18	29.00	27.54	27.50
20	25.76	26.06	25.92	25.45	.....	.....	.....	.....	32.19	29.06	27.60	27.47
21	26.07	26.06	26.04	25.54	25.97	.....	.....	32.03	32.21	29.01	27.69	27.35
22	25.89	26.27	26.10	25.49	26.01	.....	.....	32.31	32.33	28.80	27.63	27.38
23	25.84	26.41	25.88	25.50	26.02	30.34	.....	32.46	32.13	28.63	27.56	27.25
24	26.19	26.38	25.86	.....	25.83	30.33	.....	32.43	32.00	28.56	27.71	27.32
25	26.15	26.37	25.86	.....	25.79	30.50	.....	32.30	31.78	28.59	27.59	27.33

GeFL 491--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	26.09	26.30	.....	.....	26.03	30.81	.....	32.09	.....	28.57	27.31	27.29
27	26.12	.....	25.93	.....	26.09	31.18	.....	32.01	31.28	28.38	27.53	27.20
28	26.02	26.27	25.97	25.67	26.08	31.29	.....	32.00	31.06	28.34	27.63	27.33
29	26.08	26.34	25.93	25.70	26.23	31.31	.....	32.15	30.86	28.39	27.68	27.19
30	26.17	.....	25.97	25.73	26.24	31.43	32.25	32.37	30.62	28.25	27.63	27.09
31	26.18	.....	25.77	.....	26.17	.....	32.27	32.52	.....	28.14	.....	27.19

GeFL 500. Consumers Power Co. East Court St. and Dort Highway. Drilled unused artesian well in Saginaw formation, diameter 12 inches, depth 288 feet. Highest water level 17.50 below lsd, Apr. 11, 1948; lowest 26.76 below lsd, Sept. 29, 1952. Records available: 1946-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	21.17	20.70	20.89	20.15	20.59	21.15	.....	.....	.....	.....	.....	.....
2	21.29	20.75	20.94	20.22	.....	21.10	.....	.....	.....	.....	.....	.....
3	21.17	20.72	20.78	20.27	.....	21.13	.....	.....	.....	.....	.....	.....
4	21.04	20.47	20.66	20.41	20.84	21.21	.....	.....	.....	.....	.....	.....
5	21.07	20.51	20.82	20.37	20.68	21.36	.....	.....	.....	.....	.....	.....
6	20.98	20.55	20.89	20.23	20.80	21.46	.....	.....	.....	.....	.....	.....
7	20.89	20.63	20.90	20.18	.....	21.62	.....	.....	.....	.....	.....	.....
8	20.82	20.61	20.92	20.23	.....	21.62	.....	.....	.....	.....	.....	.....
9	20.93	20.66	20.80	.....	21.03	21.48	.....	.....	.....	.....	.....	.....
10	21.08	20.60	20.62	.....	21.07	21.68	.....	.....	.....	.....	.....	.....
11	21.07	20.39	20.45	.....	21.00	21.98	.....	.....	.....	.....	.....	.....
12	21.03	20.55	20.62	.....	20.88	22.09	.....	.....	.....	.....	.....	.....
13	20.90	.....	20.57	.....	20.90	22.27	.....	.....	.....	.....	.....	.....
14	20.86	.....	20.58	.....	21.18	22.36	.....	.....	.....	.....	.....	.....
15	21.00	.....	20.63	19.89	21.21	22.41	.....	.....	.....	.....	.....	.....
16	20.92	.....	20.51	19.91	21.35	22.34	.....	.....	.....	.....	.....	.....
17	20.84	.....	20.42	19.98	21.43	22.48	.....	.....	.....	.....	.....	.....
18	20.96	.....	20.44	20.06	21.41	22.68	.....	.....	.....	.....	.....	.....
19	20.67	20.68	20.36	20.08	21.26	.....	.....	.....	.....	.....	.....	.....
20	20.77	20.65	20.48	20.01	21.27	.....	.....	.....	.....	.....	.....	.....
21	.....	20.61	20.53	19.94	21.32	.....	.....	.....	.....	.....	.....	.....
22	20.44	20.75	20.55	19.98	21.39	.....	.....	.....	.....	.....	.....	.....
23	20.51	20.85	20.33	20.09	21.50	23.23	.....	.....	.....	.....	.....	.....
24	20.75	20.78	20.23	20.13	21.33	23.25	.....	.....	.....	.....	.....	.....
25	20.76	20.68	20.21	20.23	21.13	23.36	.....	.....	.....	.....	23.06	.....
26	20.67	20.67	.....	20.31	21.01	23.53	.....	.....	.....	.....	.....	.....
27	20.67	20.73	20.30	20.33	21.14	23.75	.....	25.93	.....	.....	.....	.....
28	20.55	20.73	20.32	20.18	21.20	23.94	.....	.....	.....	24.32	.....	.....
29	20.52	20.79	20.33	20.28	21.35	23.95	.....	.....	26.76	.....	.....	.....
30	20.61	.....	20.34	.....	21.45	23.87	25.32	.....	.....	.....	.....	.....
31	20.69	.....	20.19	.....	21.30	.....	.....	.....	.....	.....	.....	22.53

Burton Township

GeBu 301. City of Flint. Hemphill Rd. and Saginaw St. Drilled unused artesian well in sand and gravel of Pleistocene age, diameter 2 inches, depth 153 feet. Land-surface datum is 781.45 feet above msl. Highest water level 20.63 below lsd, June 2, 1947; lowest 28.73 below lsd, Aug. 27, 1952. Records available: 1947-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	25.93	Apr. 28	24.27	July 30	28.66	Oct. 28	26.60
Feb. 25	24.20	May 27	24.44	Aug. 27	28.73	Nov. 25	26.01
Mar. 27	24.25	June 23	27.04	Sept. 29	27.12	Dec. 31	25.68

GeBu 303. Fred Kreft. 2287 East Bristol Rd. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 29, T. 7 N., R. 7 E. Eng unused water-table well in deposits of Pleistocene age, diameter 18 inches, depth 8 feet, open bottom. Land-surface datum is about 785 feet above msl. Highest water level 0.20 above lsd, June 29, 1948; lowest 5.37 below lsd, Oct. 17, 1946. Records available: 1946-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0.18	.....	2.05	0.69	2.19	1.88	3.23	3.10	1.61	3.39	3.41	1.90
2	.54	1.16	2.05	.75	2.23	2.08	3.34	3.18	1.19	3.45	3.44	1.92
3	.....	1.16	2.13	.....	2.34	2.21	3.34	3.22	1.51	3.54	3.45	1.96
4	.....	.70	2.00	.....	2.48	1.81	3.26	2.70	2.12	3.57	3.42	1.97
5	1.24	.57	1.32	.46	2.41	2.02	3.35	2.41	2.40	3.56	3.32	.30

GeBu 303--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	1.25	0.80	1.42	0.36	2.46	2.16	3.47	2.66	2.59	3.66	3.31	....
7	1.31	.93	1.53	....	2.56	2.35	3.52	....	2.70	3.68	3.41	....
8	1.37	1.09	....	....	2.59	2.40	3.55	....	2.86	3.65	3.47	....
9	1.44	1.26	....	....	2.46	2.35	3.54	....	2.98	3.66	3.37	1.35
10	1.45	1.32	....	....	2.51	2.51	3.57	....	3.06	3.69	3.41	1.35
11	1.59	....	....	....	2.57	2.65	3.66	....	3.11	3.68	3.40	1.48
12	1.64	1.29	.85	.46	2.62	2.73	3.70	2.91	3.20	3.62	3.41	1.62
13	1.63	1.28	.88	.24	2.65	2.77	3.79	....	3.26	3.65	3.44	1.69
14	1.45	1.41	1.08	.04	2.70	2.85	3.79	3.32	3.34	3.68	3.44	1.75
15	.34	1.57	1.24	.34	2.34	2.91	3.76	e3.36	3.33	3.66	3.39	1.83
16	.60	....	....	.65	2.32	2.94	3.75	e3.37	3.41	2.90	3.38	1.82
17	.51	....	....	.78	2.49	2.96	3.75	e2.29	3.45	3.16	3.38	1.90
18	....	....	....	.94	2.57	3.01	3.79	2.34	3.52	3.25	.76	1.97
19	.95	....	....	1.09	2.66	3.06	3.04	....	2.33	3.24	.70	2.07
20	.34	2.26	.80	1.23	2.70	3.17	....	....	2.79	3.35	1.03	2.10
21	....	2.33	.75	1.38	2.02	3.13	....	....	2.99	3.40	1.45	.96
22	....	2.42	.77	1.46	1.85	3.12	e2.04	....	3.14	3.39	e1.20	.90
23	e.76	2.40	.59	1.14	2.12	3.15	2.24	....	2.15	3.39	e.30	.65
24	e.81	2.29	.83	1.45	.54	3.17	2.54	....	2.63	3.41	....	.77
25	....	2.22	....	1.57	.65	3.22	2.72	3.37	2.81	3.42	.49	1.05
26	....	2.06	e.87	1.73	.77	3.24	2.88	3.40	2.98	3.42	.18	1.23
27	....	2.03	.92	1.80	1.13	3.26	2.90	3.46	3.13	3.36	1.09	1.41
28	.89	2.02	.95	1.93	1.41	3.34	3.02	3.47	3.20	3.37	1.44	1.71
29	....	2.03	1.02	2.00	1.30	3.33	2.50	3.57	3.32	3.44	1.64	1.84
30	....	....	1.06	2.08	1.64	3.18	2.73	3.62	3.39	3.42	1.79	1.89
31	....	....	.83	....	1.87	....	2.95	3.62	....	3.38	....	1.90

e Estimated.

Gladwin County

City of Beaverton

GwBV 1. City of Beaverton. Third and Main Sts. Drilled unused artesian well in deposits of Pleistocene age, diameter 12 inches, depth 93 feet. Measurements made by City Engineer. Highest water level 29.13 below lsd, Dec. 18, 1952; lowest 49.35 below lsd, June 26, 1950. Records available: 1950-52.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	32.69	43.64	32.44	32.05	37.20	....	40.72	39.43	31.96	36.21	32.53	38.34
2	43.50	32.02	....	41.80	41.00	32.08	32.32	39.59	31.94	32.39	....	34.35
3	....	....	32.34	....	40.59	31.76	40.69	....	....	34.39	32.18	32.06
4	32.45	43.27	32.40	30.20	....	39.32	40.81	31.50	39.43	32.07	36.13	38.20
5	32.90	31.60	43.80	40.31	35.81	39.98	40.76	39.47	39.44	....	32.10	38.05
6	....	42.93	32.69	....	41.10	40.84	....	31.88	36.60	36.35	32.18	38.25
7	43.20	42.79	43.34	35.05	41.09	40.90	32.27	39.53	....	38.39	32.60	....
8	40.61	31.68	43.33	33.17	40.40	....	40.70	31.75	35.42	39.07	38.97	36.50
9	43.20	42.84	....	30.55	36.18	32.11	43.66	32.10	39.81	38.67	....	32.00
10	39.20	....	....	30.53	40.92	31.93	31.97	....	39.69	39.10	33.16	38.05
11	43.70	31.88	42.98	41.10	....	32.00	40.45	39.32	32.39	39.07	38.97	38.14
12	....	31.81	39.02	30.70	....	32.02	32.07	....	34.34	....	32.39	32.03
13	....	43.14	33.60	....	40.82	31.93	....	39.45	39.64	39.03	38.97	37.95
14	33.10	43.07	42.64	39.94	....	31.88	40.55	39.45	....	36.84	32.15	....
15	35.78	43.08	37.04	39.04	....	....	40.20	31.70	32.19	32.54	37.97	38.12
16	40.69	43.08	....	29.92	....	32.02	40.11	39.54	39.35	32.87	....	....
17	35.36	....	38.47	40.34	....	32.00	31.92	....	32.07	38.40	38.80	....
18	32.10	43.12	37.78	40.44	....	31.98	31.89	39.57	32.24	38.89	38.58	29.13
19	42.89	40.13	32.17	40.75	36.64	31.99	39.75	31.94	36.20	....	31.82	32.17
20	....	42.56	41.73	....	35.24	40.80	....	31.89	35.44	38.93	38.21	38.07
21	38.38	43.23	40.26	40.90	....	40.75	31.75	31.95	....	38.97	38.39	....
22	36.43	32.42	33.23	40.78	36.28	....	38.41	38.40	32.05	31.22	37.89	32.05
23	....	43.12	....	38.51	31.79	40.83	39.10	32.90	32.12	35.39	....	31.96
24	35.90	....	40.57	31.00	41.12	40.83	30.48	....	33.97	32.17	32.00	31.75
25	31.95	43.01	37.54	30.77	....	40.83	30.66	39.00	36.42	32.22	31.94	31.59
26	32.33	43.01	37.40	40.69	40.93	38.14	38.96	39.66	37.87	....	36.40	31.52
27	....	40.03	36.11	....	....	....	32.12	32.12	32.21	32.02	29.82	31.77
28	43.70	32.41	37.40	40.92	41.07	40.35	31.13	39.71	....	32.50	29.94	....
29	32.05	....	38.59	31.97	31.50	....	39.39	39.70	....	32.17	38.18	31.78
30	39.59	....	....	38.20	31.95	32.15	31.33	39.74	38.09	39.03	....	38.76
31	32.09	....	35.92	....	40.07	....	36.57	....	....	33.79	....	31.90

Grand Traverse County

Blair Township

GvBr 2. State Dept. of Conservation. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 27, T. 26 N., R. 11 W. Jetted observation water-table well in deposits of Pleistocene age, diameter 2 inches, depth 15 feet, open bottom. Land-surface datum is 914.25 feet above msl. Highest water level 1.32 below lsd, Oct. 30, 1951; lowest 4.02 below lsd, Aug. 18, 1936. Records available: 1935-37, 1941-44, 1948-52. Oct. 16, 2.46.

Fife Lake Township

GvFf 27. State Dept. of Conservation. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 34, T. 25 N., R. 9 W. Jetted observation water-table well in deposits of Pleistocene age, diameter 2 inches, depth 18 feet, open bottom. Land-surface datum is 1,025.34 feet above msl. Highest water level 10.86 below lsd, Aug. 6, 1943; lowest 14.38 below lsd, Feb. 22, 1949. Records available: 1934-37, 1941-44, 1948-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 16	12.66	Apr. 16	12.70	July 7	12.20	Oct. 9	11.81
Feb. 6	12.77	May 9	11.85	Aug. 12	11.30	Nov. 11	12.12
Mar. 12	12.88	June 6	11.34	Sept. 9	11.57	Dec. 10	12.36

Mayfield Township

GvMy 19. State Department of Conservation. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 2, T. 25 N., R. 11 W. Jetted observation water-table well in sand and gravel of Pleistocene age, diameter 2 inches, depth 14 feet, cased to open bottom. Land-surface datum is 1,058.81 feet above msl. Highest water level 2.21 below lsd, Oct. 30, 1951; lowest 6.40 below lsd, Nov. 14, 1935. Records available: 1935-37, 1943-44, 1948-52. Oct. 16, 5.15.

Paradise Township

GvPr 25. State Dept. of Conservation. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 2, T. 25 N., R. 10 W. Jetted observation water-table well in sand of Pleistocene age, diameter 2 inches, depth 20 feet, cased to open bottom. Land-surface datum is 945.27 feet above msl. Highest water level 0.29 below lsd, Sept. 3, 1942; lowest 1.68 below lsd, July 1, 1937. Records available: 1936-37, 1941-44, 1948-52. Oct. 16, 1.29.

Union Township

GvUn 2. State Dept. of Conservation. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 13, T. 26 N., R. 9 W. Jetted observation water-table well in sand of Pleistocene age, diameter 2 inches, depth 14 feet, cased to open bottom. Land-surface datum is 961.78 feet above msl. Highest water level 5.11 below lsd, Dec. 10, 1934; lowest 7.87 below lsd, Oct. 11, 1949. Records available: 1934-37, 1941-44, 1948-52. Oct. 16, 6.79.

Whitewater Township

GvWw 1. State Dept. of Conservation. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 35, T. 27 N., R. 9 W. Jetted observation water-table well in sand and gravel of Pleistocene age, diameter 2 inches, depth 17 feet, cased to open bottom. Land-surface datum is 906.11 feet above msl. Highest water level 11.84 below lsd, Oct. 16, 1952; lowest 15.62 below lsd, Sept. 10, 1937. Records available: 1934-37, 1941-44, 1948-52. Oct. 16, 11.84.

Gratiot County

City of Alma

GrAL 54. Leonard Refineries. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 2, T. 11 N., R. 3 W. Drilled unused artesian well in sand and gravel of Pleistocene age, diameter 8 inches, depth 130 feet, screen 120-130. Land-surface datum is about 745 feet above msl. Highest water level 25.0 below lsd, Apr. 29, 1948; lowest 72.5 below lsd, Aug. 26, 1950. Records available: 1947-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	68.3	68.4	68.6	68.2	69.0	67.2	69.3	.....	.....	.....	.....	.....
2	68.9	68.6	68.9	68.1	68.8	67.1	69.2	.....	.....	.....	.....	.....
3	68.8	68.4	68.6	68.1	68.7	66.9	69.0	.....	.....	.....	.....	.....
4	68.7	68.0	68.0	68.2	68.5	67.1	69.0	.....	.....	.....	.....	.....
5	68.3	68.1	68.6	68.5	68.9	67.2	69.3	.....	.....	.....	.....	.....

GrAL 54--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	68.6	68.5	68.8	68.7	68.3	67.2	69.1	.....	.....	.....	.....	.....
7	68.7	68.6	68.8	.....	68.6	67.8	68.8	.....	.....	.....	.....	.....
8	68.5	68.5	68.6	.....	68.4	67.4	68.7	.....	.....	.....	.....	.....
9	68.1	68.6	68.0	69.0	68.3	67.3	68.5	.....	.....	.....	.....	.....
10	68.5	68.4	68.1	68.5	.....	.....	.....	.....	.....	.....	.....	.....
11	69.0	68.0	67.7	68.7	.....	.....	.....	.....	.....	.....	.....	.....
12	68.4	68.7	68.6	68.3	68.2	.....	.....	.....	.....	.....	.....	.....
13	68.6	68.9	68.2	67.8	68.3	.....	.....	.....	.....	.....	.....	.....
14	68.4	68.8	68.7	67.6	68.3	67.8	.....	.....	.....	.....	.....	.....
15	68.0	68.8	68.8	67.8	68.1	67.9	.....	.....	.....	.....	.....	.....
16	68.8	68.5	68.7	68.5	68.4	68.0	68.0	.....	.....	.....	.....	.....
17	65.3	68.4	68.8	68.6	68.4	68.3	68.0	.....	.....	.....	.....	.....
18	67.58	68.7	68.9	68.7	68.4	68.4	68.1	.....	.....	.....	.....	.....
19	68.0	68.9	68.4	69.0	68.2	68.4	68.0	.....	.....	.....	.....	.....
20	67.6	68.6	68.9	69.2	67.9	68.8	68.0	.....	.....	.....	.....	.....
21	68.6	68.4	69.0	69.3	67.8	68.9	67.8	.....	.....	.....	.....	.....
22	67.7	68.9	69.1	69.3	67.9	69.1	67.9	.....	.....	.....	.....	.....
23	67.7	68.7	68.6	.....	68.0	.....	67.5	.....	.....	.....	.....	.....
24	68.6	68.6	68.9	.....	67.6	68.8	67.8	.....	.....	.....	.....	.....
25	68.4	68.6	69.2	.....	67.5	.....	67.8	.....	.....	.....	.....	.....
26	68.1	68.2	69.2	69.1	67.4	.....	67.5	.....	59.25	.....	50.10	.....
27	68.5	68.1	69.4	68.9	67.5	.....	67.4	.....	.....	.....	.....	.....
28	68.3	68.4	69.3	68.6	67.3	.....	67.0	.....	.....	.....	.....	.....
29	68.4	68.5	69.4	68.8	67.2	.....	67.1	66.80	.....	55.84	.....	56.76
30	68.6	.....	69.6	69.2	67.3	.....	66.9	.....	.....	.....	.....	.....
31	68.6	.....	69.1	.....	67.1	.....	67.1	.....	.....	.....	.....	.....

GrAL 135. Thomas Thompson. 118 Wheeler Ave. Drilled unused artesian well in gravel of Pleistocene age, diameter 2 inches, depth 59 feet. Land-surface datum is 743.27 feet above msl. Highest water level 24.35 below lsd, Apr. 26, 1948; lowest 45.64 below lsd, Oct. 27, 1948. Records available: 1947-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	41.03	Apr. 21	42.40	July 31	45.07	Oct. 29	37.13
Feb. 27	43.61	May 26	40.55	Aug. 29	44.32	Nov. 26	35.28
Mar. 28	44.28	June 24	45.34	Sept. 26	40.45	Dec. 29	35.92

GrAL 240. C. V. Peet. 335 Pleasant Ave. Driven unused water-table well in lake sand of Pleistocene age, diameter 1½ inches, depth 15 feet. Land-surface datum is 750.24 feet above msl. Highest water level 1.69 below lsd, June 10, 1947; lowest 11.37 below lsd, Nov. 28, 1949. Records available: 1947-52.

Jan. 29	8.08	Apr. 21	7.82	July 31	9.58	Oct. 29	10.41
Feb. 27	8.42	May 26	8.53	Aug. 29	9.81	Nov. 26	10.35
Mar. 28	8.11	June 24	9.08	Sept. 26	10.04	Dec. 29	9.97

GrAL 255. Mrs. Mattie J. Patterson. 525 River Ave., Alma. Drilled unused artesian well in deposits of Pleistocene age, diameter 2 inches, depth 76 feet. Land-surface datum is 727.19 feet above msl. Highest water level 5.17 below lsd, Apr. 26, 1948; lowest 31.05 below lsd, June 28, 1950. Records available: 1946-52.

Jan. 29	16.35	Apr. 21	27.87	July 31	27.40	Oct. 29	21.60
Feb. 27	18.70	May 26	24.58	Aug. 29	27.78	Nov. 26	22.11
Mar. 28	29.41	June 24	28.84	Sept. 26	23.72	Dec. 29	22.76

GrAL 258. E. H. Waber. (Formerly Joel R. McCartney). 219 Prospect Ave., Alma. Drilled unused artesian well in deposits of Pleistocene age, diameter 2 inches, depth 49 feet. Land-surface datum is about 732.2 feet above msl. Highest water level 7.64 below lsd, Feb. 27, 1951; lowest 32.72 below lsd, July 26, 1951. Records available: 1946-52.

Jan. 29	26.55	Apr. 21	22.76	July 31	28.55	Oct. 29	23.14
Feb. 27	28.25	May 26	22.39	Aug. 29	26.94	Nov. 26	22.29
Mar. 28	27.43	June 24	29.74	Sept. 26	25.43	Dec. 29	22.43

GrAL 360. Reed Excavating Co. Bridge Ave. and Washington St., Alma. Dug unused water-table well in deposits of Pleistocene age, depth 20 feet, diameter 3½ inches, open bottom. Land-surface datum is 738.78 feet above msl. Measurements made by Alma Water Dept. Highest water level 13.74 below lsd, Apr. 7, 1950; lowest 17.76 below lsd, Nov. 16, 17, 1952. Records available: 1950-52.

GrAL 360--Continued.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	15.66	14.89	15.48	14.71	15.02	15.89	16.83	16.29	.....	17.40	17.67	.....
2	15.59	14.73	15.52	14.74	15.07	15.93	16.85	16.37	.....	17.43	17.68	.....
3	15.49	14.55	15.53	14.73	15.12	15.96	16.87	16.46	.....	17.45	17.68	.....
4	15.43	14.45	15.55	14.75	15.17	15.99	16.90	16.51	.....	17.47	17.69	.....
5	15.36	14.31	15.60	14.71	15.21	16.01	16.93	16.33	.....	17.49	17.69	.....
6	15.36	14.25	15.61	14.71	15.27	16.02	16.96	16.27	17.00	17.50	17.69	17.02
7	15.37	14.23	15.62	14.78	15.34	16.07	16.98	16.22	17.04	17.52	17.70	.....
8	15.36	14.24	15.63	14.74	15.37	16.10	17.00	16.20	17.08	17.53	17.71	.....
9	15.38	14.33	15.64	14.66	15.42	16.15	17.03	16.22	17.12	17.54	17.71	.....
10	15.44	14.43	15.66	14.63	15.45	16.18	17.05	16.28	17.15	17.55	17.71	.....
11	15.51	14.48	15.49	14.63	15.48	16.23	17.06	16.34	17.17	17.55	17.72	.....
12	15.51	14.63	15.12	14.55	15.52	16.26	17.08	16.36	17.19	17.56	17.73	.....
13	15.55	14.70	14.90	14.49	15.57	16.30	17.10	16.39	17.21	17.57	17.73	16.90
14	15.59	14.74	14.82	14.29	15.62	16.32	17.12	16.45	17.24	17.58	17.74	.....
15	15.55	14.82	14.77	14.21	15.63	16.36	17.13	16.52	17.25	17.58	17.74	.....
16	15.41	14.88	14.74	14.16	15.59	16.38	17.14	16.57	17.25	17.60	17.75	.....
17	15.19	14.94	14.77	14.12	15.65	16.41	17.13	16.65	17.25	.....	17.75	.....
18	15.02	15.02	14.81	14.10	15.72	16.45	17.13	16.69	17.27	17.61	17.60	.....
19	14.74	15.09	14.79	14.17	15.71	16.49	17.00	16.74	17.28	17.61	17.45	.....
20	14.63	15.13	14.59	.....	15.81	16.53	16.92	16.78	17.29	17.62	17.37	17.15
21	14.56	15.18	14.51	14.37	15.85	16.56	16.74	.....	17.30	17.62	17.32	.....
22	14.45	15.27	14.45	14.39	15.89	16.57	16.56	.....	17.31	17.62	17.29	.....
23	14.42	15.31	14.38	14.49	15.91	16.61	16.46	16.90	17.31	17.62	17.27	.....
24	14.50	15.33	14.37	14.57	15.85	16.63	16.36	16.92	17.32	17.63	17.23	.....
25	14.54	15.39	14.40	14.63	15.73	16.65	16.29	16.95	.....	17.64	17.19	.....
26	14.56	15.42	14.42	14.70	15.68	16.68	16.26	16.98	17.33	17.65	17.15	.....
27	14.65	15.46	14.47	14.76	15.65	16.71	16.24	17.02	17.34	17.65	.....	16.71
28	14.68	15.46	14.52	14.82	15.64	16.73	16.19	17.04	17.35	17.66	.....	16.71
29	14.69	15.48	14.57	14.90	15.71	16.78	16.14	17.07	17.37	17.67	17.00	16.80
30	14.74	.....	14.73	14.96	15.78	16.81	16.13	17.10	17.40	17.67	.....	16.84
31	14.80	.....	14.70	.....	15.82	.....	16.21	.....	.....	17.67	.....	16.89

Village of Ithaca

GrIH 1. Village of Ithaca. Center and Maple Sts. Drilled unused artesian well in Saginaw formation, Parma sandstone, and Bayport limestone, diameter 10 to 8 inches, reported depth 785 feet, cased to 379. Land-surface datum is about 803 feet above msl. Highest water level 78.25 below lsd, Jan. 22, 1952; lowest 83.96 below lsd, Sept. 4, 1949. Records available: 1947-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	78.73	78.65	.....	78.50	.....	78.84	79.70	.....	.....	.....	.....	.....
2	79.15	78.67	.....	78.51	.....	78.86	79.66	.....	.....	.....	.....	.....
3	79.08	78.70	.....	78.52	.....	.....	79.57	.....	.....	.....	.....	.....
4	79.10	78.36	.....	78.71	.....	78.83	79.59	.....	.....	.....	.....	.....
5	78.78	78.42	.....	78.56	.....	.....	79.69	.....	.....	.....	.....	.....
6	78.94	78.66	.....	78.47	78.93	78.78	.....	.....	.....	.....	.....	.....
7	79.02	.....	.....	78.65	79.02	.....	.....	.....	.....	.....	.....	.....
8	78.85	.....	.....	78.76	.....	.....	79.60	.....	.....	.....	.....	.....
9	78.65	.....	.....	78.84	.....	79.15	79.57	.....	.....	.....	.....	.....
10	78.78	.....	.....	78.63	.....	79.02	79.64	.....	.....	.....	.....	.....
11	79.12	.....	.....	78.95	.....	79.18	79.63	.....	.....	.....	.....	.....
12	78.93	.....	.....	78.88	.....	79.10	79.70	.....	.....	.....	.....	.....
13	78.93	.....	.....	78.69	78.93	.....	79.79	.....	.....	.....	.....	.....
14	78.70	.....	.....	78.43	.....	.....	.....	.....	.....	.....	.....	.....
15	e78.43	.....	.....	78.64	78.59	.....	79.77	.....	.....	.....	.....	.....
16	78.96	.....	.....	78.83	78.94	79.77	79.77	.....	.....	.....	.....	.....
17	78.70	.....	.....	78.78	79.00	.....	79.78	.....	.....	.....	.....	.....
18	78.66	.....	78.68	78.75	79.08	.....	79.83	.....	.....	.....	.....	.....
19	78.82	.....	78.39	78.72	79.08	.....	79.77	.....	.....	.....	.....	.....
20	78.40	.....	78.65	78.70	78.97	.....	79.77	.....	.....	.....	.....	.....
21	78.94	.....	78.69	78.70	.....	79.82	79.76	.....	.....	.....	.....	.....
22	78.61	.....	78.78	78.71	.....	.....	79.88	.....	.....	.....	.....	.....
23	78.37	.....	78.48	79.01	.....	.....	79.78	.....	.....	.....	.....	.....
24	78.92	.....	78.58	.....	.....	79.82	79.95	.....	.....	.....	.....	.....
25	78.95	.....	78.72	.....	.....	80.37	80.03	.....	.....	.....	.....	.....

GrIH 1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	78.59	.....	78.73	.....	78.82	79.69	.....	.....	80.63	.....	80.58	.....
27	.....	78.61	78.82	.....	78.82	79.78	79.99	.....	.....	.....	.....	.....
28	.....	.....	78.81	.....	78.74	.....	79.87	.....	.....	.....	.....	.....
29	78.74	.....	78.76	78.93	78.82	79.65	79.99	80.43	.....	80.98	.....	80.29
30	78.83	.....	78.91	.....	78.84	79.61	79.92	.....	.....	.....	.....	.....
31	78.77	.....	e78.70	.....	78.74	.....	80.10	.....	.....	.....	.....	.....

e Estimated.

Village of Perrinton

GrPE 1. Glenn Corson. South and Robinson Sts., Perrinton. Dug unused water-table well in deposits of Pleistocene age, diameter 30 inches, depth 31 feet, open bottom. Highest water level 1.82 below lsd, Jan. 17, 1952; lowest 21.23 below lsd, Dec. 16, 17, 1949. Records available: 1947-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	10.04	12.50	8.73	11.23	13.64	16.00	17.26	17.64	17.85	19.28	16.56
2	.....	4.00	12.63	9.03	11.42	13.67	16.10	17.32	17.65	17.86	19.32	16.75
3	.....	4.70	12.76	9.31	11.61	13.69	16.18	17.34	17.67	17.95	19.36	16.86
4	.....	2.80	12.85	9.63	11.78	13.69	16.24	17.33	17.76	18.03	19.44	16.99
5	.....	2.24	12.51	9.94	11.93	13.74	16.34	17.23	17.86	18.06	19.44	17.09
6	10.91	.....	12.71	10.10	12.06	13.77	16.46	17.26	17.92	18.12	19.34	16.91
7	10.98	.....	12.89	9.90	12.23	13.81	16.55	17.29	17.99	18.20	19.37	16.80
8	11.10	.....	13.01	8.58	12.37	13.87	16.61	17.31	18.06	18.29	19.45	16.78
9	11.15	.....	13.09	7.17	12.51	13.92	16.66	17.31	18.12	18.35	19.50	16.78
10	11.25	7.35	13.14	6.88	12.62	13.98	16.73	17.20	18.16	18.42	19.55	16.77
11	11.42	7.68	12.99	6.66	12.72	14.05	16.80	17.19	18.21	18.50	19.60	16.66
12	11.50	8.17	12.75	7.06	12.88	14.15	16.87	17.21	18.26	18.53	19.62	16.62
13	11.60	8.59	12.42	7.06	12.97	14.25	16.97	17.27	18.30	18.52	19.68	16.62
14	11.63	9.01	12.02	4.83	13.11	14.34	17.03	17.33	18.33	.....	.....	16.62
15	11.35	9.45	11.72	4.30	13.23	14.45	16.89	17.35	15.51	.....	.....	16.62
16	5.08	9.85	11.48	4.19	13.39	14.59	16.93	17.36	15.77	.....	.....	16.64
17	4.74	10.23	11.42	5.09	13.58	14.63	17.02	17.33	16.06	.....	.....	16.66
18	2.16	10.57	11.43	.....	13.76	14.71	17.10	17.38	.....	.....	.....	16.69
19	3.81	10.92	11.24	.....	13.93	14.81	e16.77	17.42	.....	.....	.....	16.79
20	2.41	11.20	9.97	.....	14.07	14.94	16.78	17.46	.....	.....	.....	16.87
21	3.03	11.40	8.63	.....	14.17	15.06	16.76	17.49	.....	.....	.....	16.08
22	.....	11.63	7.54	.....	14.31	15.16	16.75	17.50	17.07	.....	.....	16.03
23	.....	11.86	6.83	.....	14.47	15.25	16.81	17.57	17.16	.....	.....	15.92
24	.....	12.05	6.53	.....	14.54	15.34	16.81	17.63	17.30	.....	.....	15.43
25	.....	12.23	6.78	.....	14.37	15.40	16.91	17.67	17.44	.....	.....	15.26
26	.....	12.29	6.98	.....	14.10	15.46	16.98	17.71	17.50	.....	.....	15.15
27	8.43	12.10	7.06	10.37	13.97	15.56	17.04	17.75	17.59	.....	.....	15.08
28	8.53	12.26	7.25	10.50	13.86	15.69	17.12	17.78	17.66	.....	.....	15.09
29	8.85	12.37	7.63	10.77	13.76	15.80	17.05	17.80	17.71	19.26	.....	15.10
30	9.23	.....	8.22	11.01	13.71	15.89	17.11	17.83	17.79	19.28	16.55	15.12
31	9.65	.....	8.40	.....	13.66	.....	17.16	17.86	.....	19.28	.....	15.18

City of St. Louis

GrST 1. City of St. Louis. North and Mill Sts. Drilled unused artesian well in deposits of Pleistocene age, diameter 8 inches, depth 196 feet. Highest water level 21.2 below lsd, Dec. 20, 1948, Jan. 24, 1949; lowest 58.15 below lsd, Nov. 26, 1952. Records available: 1947-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	43.96	Apr. 21	37.93	July 31	53.86	Oct. 29	46.26
Feb. 27	42.28	May 26	42.52	Aug. 29	44.01	Nov. 26	58.15
Mar. 28	43.21	June 24	53.87	Sept. 26	32.21	Dec. 29	53.28

Hillsdale County

City of Hillsdale

HdHD 1. City of Hillsdale. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 23, T. 6 S., R. 3 W. Drilled unused artesian well in sand and gravel of Pleistocene age, diameter 5 inches, depth 70 feet. Measurements made by Hillsdale Board of Public Works. Highest water level 3.25 below lsd, Apr. 21, 1952, lowest 4.42 below lsd, Feb. 25, Mar. 17, 1952. Records available: 1952.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 11	4.41	Apr. 28	3.38	July 14	c17.05	Oct. 6	c19.65
18	3.65	May 5	3.55	21	c17.03	13	c19.95
25	4.42	12	3.65	28	c17.41	20	c19.87
Mar. 3	3.73	19	3.75	Aug. 4	c17.70	27	c20.12
10	3.72	26	3.55	11	c18.55	Nov. 3	c20.35
17	4.42	June 2	3.72	18	c18.23	10	c20.60
24	3.72	9	3.81	25	c18.52	17	c21.04
31	3.60	16	3.88	Sept. 2	c18.60	24	c21.22
Apr. 7	3.60	23	c13.15	8	c18.88	Dec. 1	c21.35
14	3.46	30	c15.02	15	c19.07	8	c21.68
21	3.25	July 7	c16.24	29	c19.45	15	c21.28

c Nearby well being pumped.

Ingham County

City of Lansing

IgLS 6. City of Lansing. Lapeer and Logan Sts. Drilled unused artesian well in Saginaw formation, diameter 20 inches, depth 424 feet. Highest water level 34.34 below lsd, Dec. 1929; lowest 139.27 below lsd, Oct. 25, 1952. Records available: 1929, 1931, 1933-52.

Jan. 30	135.02	Apr. 26	137.02	July 30	137.10	Oct. 25	139.27
Mar. 1	137.13	June 2	134.00	Aug. 26	136.67	Nov. 24	136.98
29	137.04	25	137.40	Sept. 27	136.34	Dec. 22	135.97

IgLS 7. City of Lansing. N. Grand River and Josephine St. Drilled unused artesian well in Saginaw formation, diameter 14 inches, depth 395 feet, cased to 49. Highest water level 15.63 below lsd, Mar. 26, 1931; lowest 141.19 below lsd, Sept. 27, Dec. 22, 1952. Records available: 1919, 1929-52.

Jan. 31	131.63	June 2	124.42	Aug. 26	134.50	Nov. 24	137.01
Mar. 1	135.54	25	138.61	Sept. 27	141.19	Dec. 22	141.19
29	134.92	July 30	136.66	Oct. 25	139.24		

IgLS 8. City of Lansing. Townsend St. and Olds Ave. Drilled unused artesian well in Saginaw formation, diameter 14 inches, depth 423 feet, cased to 37. Highest water level 12.12 below lsd, Jan. 1919; lowest 47.55 below lsd, Oct. 25, 1952. Records available: 1919, 1929-52.

Jan. 30	43.25	Apr. 26	44.15	July 30	46.20	Oct. 25	47.55
Mar. 1	44.35	June 2	44.26	Aug. 26	46.68	Nov. 24	44.97
29	44.68	25	46.80	Sept. 27	47.07	Dec. 22	45.73

IgLS 9. City of Lansing. South Cedar and Jay Sts. Drilled unused artesian well in Saginaw formation, diameter 12 inches, depth 417 feet. Highest water level 42.01 below lsd, Mar. 11, 1946; lowest 67.0 below lsd, Aug. 22, 1949. Records available: 1945-52.

Daily 2 a.m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	52.11	52.58	52.48	53.76	53.31	51.36	53.57	53.41	52.56	53.27	53.62	53.15
2	52.26	52.65	52.75	54.03	53.30	51.38	53.29	53.26	52.50	53.47	53.34	53.18
3	52.44	52.29	52.57	54.07	53.34	51.94	53.60	53.27	52.67	53.74	53.26	53.49
4	52.61	51.80	52.71	54.26	52.97	52.33	53.70	52.91	53.25	53.58	53.45	53.54
5	52.48	52.25	53.45	54.09	52.75	52.40	53.41	53.22	53.44	53.31	53.38	53.38
6	52.29	52.61	53.62	53.92	53.01	52.50	53.17	53.28	53.52	53.14	53.46	53.54
7	52.09	52.68	53.78	53.84	53.19	52.75	53.12	53.38	53.33	53.40	53.75	53.30
8	52.18	52.36	53.87	54.07	53.08	52.49	53.29	53.50	53.06	53.48	53.81	53.24
9	52.33	52.42	53.47	54.18	53.10	52.47	53.42	53.46	53.27	53.54	53.42	53.32
10	52.59	51.85	53.26	54.07	53.04	52.64	53.51	53.26	53.45	53.69	52.94	53.37
11	52.91	51.26	53.22	54.38	52.75	52.85	53.61	52.64	53.63	53.68	53.31	53.57
12	52.65	51.86	53.96	54.37	51.91	52.83	53.76	52.94	53.74	53.25	53.55	53.62
13	52.57	51.98	53.74	53.90	52.60	52.92	53.64	53.15	53.82	52.53	53.64	53.70
14	52.40	52.00	54.16	53.52	52.85	52.92	53.59	53.31	53.53	53.14	53.72	53.40
15	52.32	52.07	54.18	53.93	52.70	52.77	53.61	53.40	53.33	53.32	53.70	53.25

IgLS 9--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	52.87	51.95	53.74	54.15	53.08	52.64	53.84	53.41	53.53	53.41	53.54	53.46
17	52.57	51.77	53.55	54.10	53.09	52.79	53.71	52.89	53.50	53.58	53.35	53.60
18	52.76	51.81	53.75	54.07	52.58	53.08	53.68	52.30	53.52	53.63	53.49	53.75
19	52.84	51.91	53.61	54.04	51.80	53.13	53.55	53.04	53.72	53.08	53.53	53.87
20	52.45	51.83	54.11	53.72	52.44	53.31	52.91	53.25	53.88	53.04	53.65	53.74
21	52.64	51.87	54.17	53.54	52.67	53.19	52.74	53.31	53.54	53.30	53.81	53.44
22	52.30	52.03	54.27	53.63	52.91	52.40	53.22	53.65	53.27	53.32	53.72	53.36
23	52.42	52.04	53.73	53.76	52.97	51.75	53.30	53.61	53.44	53.36	53.02	53.45
24	52.85	51.86	53.62	53.69	52.89	52.52	53.60	52.72	53.70	53.45	52.77	53.67
25	52.76	51.77	53.94	53.66	52.10	52.77	53.60	52.15	53.73	53.61	53.24	53.63
26	52.55	51.76	54.03	53.64	51.65	52.98	53.64	52.91	53.65	53.27	53.17	52.95
27	52.37	51.79	54.21	53.26	52.38	53.26	53.60	53.20	53.83	52.93	53.46	53.06
28	52.03	51.80	54.24	53.02	52.55	53.40	53.45	53.35	53.46	53.20	53.36	53.17
29	52.28	51.95	54.28	53.29	52.65	53.26	53.71	53.46	53.20	53.48	53.28	53.00
30	52.51		54.06	53.33	52.71	53.38	53.39	53.64	53.38	53.46	53.15	53.21
31	52.55		53.61		51.78		53.51	53.34		53.45		53.48

City of Mason

IgMS 30. City of Mason. Jefferson Ave. and Okemos St. Drilled unused artesian well in Saginaw formation, diameter 6 inches, depth 150 feet. Measurements made by Water Dept. Highest water level 0.08 below lsd, June 29, 1949; lowest 4.95 below lsd, Sept. 22, 1948. Records available: 1948-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	2.00	Apr. 5	1.70	July 5	3.60	Oct. 4	3.90
12	2.30	12	2.00	12	3.80	11	3.78
15	2.08	19	2.40	19	3.40	18	3.92
26	1.49	26	2.58	26	2.80	25	3.97
Feb. 2	1.49	May 3	2.55	Aug. 2	3.70	Nov. 1	3.79
9	1.61	10	2.50	9	4.30	8	3.48
16	1.65	17	2.28	16	3.90	15	4.19
23	1.30	24	2.39	23	4.30	22	3.79
Mar. 1	1.17	31	2.45	30	3.70	29	3.32
8	.89	June 7	3.09	Sept. 6	3.14	Dec. 6	3.35
15	1.01	14	3.48	13	3.22	13	3.29
22	1.38	21	2.83	20	3.38	20	3.38
29	1.80	28	3.00	27	3.26	27	3.56

Lansing Township

IgLS 35. Tank Bros. Dairy. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, T. 4 N., R. 2 W. Drilled unused artesian well in Saginaw formation, diameter 3 inches, depth 107 feet. Highest water level 53.94 below lsd, Nov. 2, 1944; lowest 69.53 below lsd, Nov. 24, 1952. Records available: 1944-52.

Jan.	Mar.	Apr.	June	July	Aug.	Oct.	Nov.	Dec.
30	68.87	26	68.76	30	68.95	25	69.39	
1	68.81	2	68.85	26	69.20	24	69.53	
29	68.96	25	68.72	27	69.21	22	69.22	

IgLS 265. Frank Clever. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T. 4 N., R. 2 W. Drilled unused artesian well in Saginaw formation, diameter 10 inches, depth 453 feet. Land-surface datum is about 865 feet above msl. Highest water level 25.47 below lsd, Mar. 25, 1946; lowest 61.00 below lsd, Sept. 4, 1948. Records available: 1945-52.

Daily 2 a.m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	43.96	51.83	51.89	42.70	51.63	49.26	55.37	50.19	51.35	52.39	53.25	47.00
2	44.20	50.65	51.63	42.57	52.01	49.01	55.60	49.98	49.30	52.70	52.97	46.59
3	44.07	48.90	51.02	42.65	52.56	48.55	57.00	50.28	47.97	52.83	52.40	47.77
4	44.22	47.80	50.98	43.10	52.42	46.02	57.50	50.05	46.94	52.71	52.15	48.65
5	43.97	47.33	51.62	43.32	51.99	46.06	57.07	49.88	46.50	52.57	51.82	48.69
6	44.29	49.25	51.12	43.31	51.77	47.44	55.80	49.78	46.37	52.50	51.47	49.04
7	45.05	50.88	51.33	43.19	52.80	48.22	54.66	46.54	45.95	52.32	51.40	49.40
8	45.39	51.35	51.49	43.36	53.14	48.51	54.30	49.42	45.20	52.27	51.10	49.40
9	45.33	51.96	50.89	43.94	53.50	48.75	55.28	49.23	44.47	52.21	50.82	49.33
10	45.87	51.79	50.20	44.26	53.41	48.82	55.30	49.27	44.45	52.20	50.63	49.50

IgLS 265--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	46.49	51.10	50.15	44.71	52.57	49.02	55.25	48.77	45.65	52.20	50.44	49.56
12	46.58	51.62	50.78	44.79	51.83	49.68	55.60	46.80	46.58	52.22	50.47	49.38
13	46.75	51.60	50.26	44.17	51.31	50.08	55.62	47.80	47.23	51.52	50.57	49.03
14	46.65	51.45	50.34	43.50	51.22	50.20	55.70	48.30	47.88	51.72	50.70	48.41
15	46.52	51.45	50.73	43.46	50.98	50.14	55.55	48.52	47.88	51.87	50.78	48.21
16	46.88	51.81	50.73	44.06	51.49	49.92	55.96	49.47	47.67	51.86	50.65	48.19
17	46.74	51.47	50.29	44.37	51.53	49.77	55.71	51.04	47.77	52.00	50.72	48.39
18	46.80	51.24	50.26	44.63	51.17	51.88	55.31	51.15	48.17	51.98	50.51	47.93
19	46.96	51.53	49.98	44.76	50.65	53.16	54.85	51.17	48.52	51.87	50.68	48.90
20	46.67	51.38	50.28	44.56	50.61	54.90	53.90	50.16	48.73	51.90	50.73	48.90
21	46.96	51.53	48.68	45.12	50.81	55.68	52.91	48.47	48.50	52.00	50.79	48.75
22	46.62	51.46	47.05	46.98	51.21	54.59	52.58	48.30	47.45	51.83	50.61	48.20
23	46.48	51.83	45.84	48.58	51.50	53.83	52.86	47.90	49.34	51.88	50.57	47.70
24	46.79	51.49	44.97	49.35	51.27	52.73	52.52	47.40	51.08	52.34	50.45	47.72
25	46.80	51.03	44.56	50.00	50.73	52.44	51.99	46.40	51.64	52.94	50.42	47.68
26	48.79	51.19	43.98	50.59	50.53	53.79	51.47	45.90	51.71	53.52	50.27	47.27
27	50.59	51.52	43.64	51.12	50.20	55.84	51.48	46.65	52.13	51.05	50.55	47.07
28	51.26	51.23	43.33	50.91	50.00	56.60	51.37	49.45	52.07	51.35	50.50	46.56
29	51.23	51.55	43.17	50.74	49.94	56.26	51.26	52.12	51.95	52.44	49.41	45.98
30	51.17		43.13	51.12	49.85	55.67	50.83	54.18	51.97	52.75	47.91	45.75
31	51.72		42.68		49.57		50.53	54.95		52.55		45.65

IgLS 271. Harry DeLaere. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 31, T. 4 N., R. 2 W. Drilled unused artesian well in Saginaw formation, diameter 3 inches, depth 204 feet. Highest water level 18 92 below lsd, Apr. 26, 1952; lowest 24.39 below lsd, Nov. 8, 1944. Records available: 1944-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	20.28	June 2	19.36	Aug. 26	22.07	Oct. 25	22.92
Mar. 1	20.58	25	20.33	Sept. 27	22.50	Nov. 24	23.25
29	20.00	July 30	21.41	Oct. 9	22.69	Dec. 22	23.26
Apr. 26	18.92						

Iosco County

Wilbur Township

IcWr 1. U. S. Forest Service. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 7, T. 23 N., R. 7 E. Drilled unused artesian well, diameter 6 (?) inches, depth 341 feet. Highest water level 25.13 below lsd, Aug. 3, 1952; lowest 27.94 below lsd, Jan. 8, 10, 1950. Records available: 1948-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	25.94	25.92	25.96	25.85	25.90	25.61	25.55	25.38	25.28	25.42	25.60	25.67
2	26.13	25.92	26.03	25.84	25.88	25.62	25.57	25.34	25.23	25.38	25.64	25.62
3	26.11	25.95	.....	25.86	25.89	25.55	25.52	25.30	25.24	25.46	25.64	25.63
4	26.13	25.83	.....	25.93	25.88	25.57	25.55	25.23	25.32	25.44	25.68	25.65
5	26.02	25.80	.....	25.92	25.85	25.59	25.55	25.18	25.36	25.43	25.59	.....
6	26.07	25.91	26.08	25.78	25.79	25.55	25.57	25.25	25.33	25.50	.....	.....
7	26.10	25.93	26.10	25.84	25.88	25.54	25.56	25.27	25.40	25.54	25.62	.....
8	26.07	25.88	26.09	25.92	25.88	25.56	25.51	25.28	25.42	.....	25.65	.....
9	25.97	25.90	26.04	25.94	25.84	25.50	25.48	25.25	25.40	.....	25.62	.....
10	25.99	25.91	25.97	25.86	25.80	25.51	25.50	25.17	25.40	25.57	25.65	.....
11	26.14	25.78	25.82	25.97	25.75	25.54	25.50	25.20	25.41	25.57	25.64	25.49
12	26.06	25.95	.....	25.98	25.74	25.57	25.52	25.22	25.42	25.50	25.63	25.51
13	26.07	26.01	25.90	25.91	25.72	25.57	25.55	25.25	25.42	25.44	25.66	25.53
14	26.00	26.04	25.93	25.73	25.76	25.56	25.53	25.27	25.42	25.47	25.65	25.50
15	25.88	26.05	25.97	25.78	25.67	25.56	25.43	25.25	25.36	25.51	25.64	25.51
16	26.05	25.99	25.94	25.86	25.74	25.55	25.46	25.22	25.36	25.48	25.67	25.53
17	26.00	25.96	25.95	25.86	25.77	25.48	25.48	25.26	25.35	25.56	25.69	25.57
18	25.88	25.98	25.97	25.86	25.79	25.49	25.47	25.29	25.33	25.59	25.62	25.59
19	25.99	26.03	25.85	25.85	25.79	25.49	25.35	25.33	25.30	25.49	25.57	25.68
20	25.80	26.01	25.82	25.83	25.75	25.55	25.34	25.34	25.37	25.59	25.57	25.67
21	26.03	25.90	26.00	25.88	25.67	25.57	25.29	25.30	25.40	.....	25.61	25.58
22	25.97	26.00	25.97	25.86	25.72	25.56	25.29	25.39	25.42	.....	25.61	25.58
23	25.78	26.05	25.80	25.89	25.75	25.56	25.28	25.42	25.40	.....	25.48	25.55
24	26.01	26.03	25.79	25.94	25.72	25.50	25.31	25.41	.....	25.61	25.59	25.45
25	26.03	26.04	25.86	25.92	25.62	25.47	25.36	25.41	.....	25.65	25.62	25.53

IcWr 1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	25.89	26.00	25.89	25.92	25.62	25.46	25.32	25.42	25.44	25.67	25.42	25.54
27	25.92	25.96	25.91	25.90	25.65	25.55	25.34	25.42	25.44	25.57	25.45	25.53
28	25.93	25.95	25.92	25.86	25.61	25.58	25.32	25.41	25.42	25.56	25.54	25.61
29	25.93	25.93	25.93	25.89	25.62	25.52	25.31	25.40	25.42	25.64	25.60	25.54
30	25.97		25.98	25.90	25.63	25.53	25.30	25.41	25.47	25.62	25.57	25.53
31	25.95		25.91		25.62		25.35	25.38		25.56		25.58

Jackson County

City of Jackson

JaJA 2. City of Jackson. Elm Ave. extended and N. Y. C. R. R. tracks. Drilled unused artesian well in sandstone, diameter 12 inches, reported depth 165 feet, cased to about 80. Measurements made by city Dept. of Water Supply. Highest water level 12.9 below lsd, June 1, 1952; lowest 34.3 below lsd, Nov. 21, 1952. Records available: 1952.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	21.8	19.1	17.7	19.1	13.7	20.7	20.6	19.8	24.3	25.7	24.9
2	....	21.2	16.7	18.7	17.7	15.6	18.9	19.4	20.3	25.6	22.5	26.9
3	....	19.2	17.1	18.5	17.8	18.1	19.2	19.3	21.5	25.8	23.6	28.0
4	....	16.7	17.8	19.4	16.5	17.9	18.1	19.2	21.4	24.8	25.4	27.5
5	....	18.1	18.8	19.3	17.1	17.4	16.8	....	....	22.3	25.7	27.9
6	....	19.1	20.6	16.4	17.4	17.7	16.8	....	....	21.5	26.0	28.0
7	....	19.4	19.7	17.4	18.9	18.3	17.7	....	....	....	27.1	26.0
8	....	20.2	19.4	20.5	20.1	17.5	20.1	....	....	....	27.2	25.0
9	....	19.6	17.1	19.2	19.4	16.5	20.5	....	....	....	24.2	26.0
10	....	16.8	15.8	18.9	18.1	18.6	20.0	....	....	....	24.1	26.2
11	....	16.9	18.3	19.3	17.0	19.0	20.5	22.8	....	....	26.3	28.0
12	....	17.3	19.3	18.2	15.3	19.4	21.1	20.3	....	....	27.0	28.0
13	....	20.0	19.6	16.3	17.0	18.8	20.3	20.0	....	27.2	27.0	27.0
14	24.2	19.5	19.5	14.8	18.0	19.3	19.7	22.0	....	25.7	27.5	26.4
15	21.2	20.1	19.7	16.6	17.7	17.3	21.7	20.9	....	25.0	27.3	24.6
16	21.2	19.8	17.2	16.6	17.6	18.4	21.3	20.0	....	24.2	24.5	30.0
17	21.0	17.7	16.6	18.5	17.7	23.4	21.2	19.0	....	24.8	23.9	28.8
18	20.6	16.6	18.3	17.8	17.5	23.3	20.8	19.4	....	24.7	27.0	28.4
19	19.1	18.6	19.3	16.5	17.0	23.0	21.5	20.6	....	21.4	27.0	28.0
20	17.9	18.6	18.9	14.6	17.3	22.7	....	21.1	....	21.3	27.6	26.1
21	16.6	19.0	18.8	13.9	18.5	20.5	20.6	21.4	....	23.6	28.4	e24.0
22	19.5	19.3	17.7	16.2	19.0	17.3	20.9	21.5	25.3	24.6	27.6	....
23	22.7	18.6	17.5	16.2	18.3	21.2	22.4	21.7	23.5	24.7	24.7	....
24	22.8	17.1	16.7	18.2	18.6	18.3	21.0	20.1	24.4	24.4	23.0	....
25	22.8	14.6	18.2	17.2	18.1	19.5	20.4	20.6	24.4	24.7	27.0	....
26	20.0	17.4	18.1	16.8	17.3	20.5	19.6	....	24.6	22.3	28.2	....
27	17.4	16.8	18.6	15.8	16.7	19.9	18.5	....	24.5	21.3	26.0	....
28	20.8	20.7	18.6	14.8	17.7	20.7	19.1	....	22.2	25.0	24.6	....
29	18.8	19.4	18.0	18.1	18.3	18.7	21.1	....	22.0	24.7	25.3	31.2
30	19.9		15.9	16.9	16.2	19.0	21.4	....	23.7	26.8	25.5	e25.8
31	21.3		17.1		15.1		20.0	....		26.3		27.5

e Estimated.

Kalamazoo County

City of Kalamazoo

KoKO 114. City of Kalamazoo. Burdick and Wall Sts. Drilled unused artesian well in deposits of Pleistocene age, diameter 6 inches, depth 115 feet. Land-surface datum is 777.45 feet above msl. Measurements made by City Light and Water Utilities. Highest water level 11.22 below lsd, Mar. 11, 1952; lowest 29.36 below lsd, Aug. 9, 1946. Records available: 1946-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	14.03	12.94	12.76	12.58	13.10	12.50	13.82	14.99	16.17	16.48	16.24	16.17
2	13.97	12.97	12.84	12.83	13.35	12.50	14.29	14.96	15.95	16.62	16.23	16.07
3	13.91	12.89	12.73	....	13.49	12.50	15.29	14.98	15.80	16.68	16.19	16.15
4	13.86	12.82	12.72	....	13.32	12.61	14.91	14.90	15.73	16.83	16.19	16.19
5	13.83	12.79	12.88	12.98	13.28	12.64	14.50	14.90	15.69	16.64	16.45	16.15

KoKO 114--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	e13.85	12.77	12.91	12.95	13.71	12.89	14.38	14.94	15.70	16.49	16.35	16.26
7	e13.80	12.69	12.94	12.88	13.89	13.28	14.49	14.96	15.69	16.41	16.36	16.25
8	13.72	12.65	11.86	12.83	13.59	13.13	15.69	15.01	15.61	16.36	16.37	16.22
9	13.80	12.70	11.64	12.81	13.45	13.49	14.84	15.04	15.59	16.35	16.26	16.15
10	13.78	12.63	11.40	12.83	13.36	13.27	14.62	15.03	15.71	16.73	16.21	16.14
11	13.93	12.53	11.24	12.94	13.29	13.27	14.52	14.95	.....	16.64	16.20	16.12
12	13.81	12.62	.....	12.92	13.25	13.26	14.96	14.94	.....	16.60	16.19	16.19
13	13.82	12.60	.....	12.71	13.27	13.26	14.73	14.94	17.16	16.57	16.18	16.14
14	13.71	12.58	.....	12.54	13.27	13.28	15.04	14.94	17.18	16.55	16.19	16.15
15	13.61	12.62	12.76	12.42	13.24	13.25	15.08	15.01	16.71	16.57	16.19	16.09
16	13.60	12.63	12.80	12.45	13.34	13.20	14.88	14.99	16.92	16.55	16.19	16.07
17	13.54	12.54	12.80	12.40	13.31	13.76	14.82	15.04	16.66	16.57	16.13	16.01
18	13.34	12.57	12.82	12.42	13.26	13.78	14.76	15.01	16.53	16.53	16.12	16.36
19	13.32	12.58	12.67	12.39	13.20	13.81	14.70	14.99	16.44	16.51	16.15	16.25
20	13.23	12.53	12.74	12.43	13.19	13.71	14.62	15.04	16.42	16.49	16.16	16.45
21	.....	12.57	12.91	12.40	13.21	13.64	14.56	15.07	16.36	16.44	16.30	16.22
22	.....	12.94	12.79	12.40	13.27	13.59	14.90	15.13	.....	16.38	16.35	16.09
23	.....	12.78	12.73	12.53	13.19	13.53	15.00	15.18	.....	16.34	16.31	15.96
24	.....	12.72	12.68	12.53	12.85	13.46	14.77	15.18	16.24	16.37	16.30	15.94
25	.....	12.68	12.64	12.49	12.56	13.43	14.72	15.12	16.22	16.40	16.24	15.89
26	13.05	12.64	12.66	12.55	12.44	13.81	14.70	15.18	16.20	16.36	16.19	15.81
27	13.04	12.59	12.72	12.51	12.40	14.07	14.70	15.40	16.22	16.27	16.24	15.76
28	12.95	12.55	12.77	12.52	12.44	13.90	14.66	15.77	16.20	16.26	.....	15.75
29	12.96	12.71	12.73	12.61	12.49	13.82	.....	16.13	16.17	16.28	16.15	.....
30	13.00	.....	12.78	12.69	12.52	13.78	.....	16.97	16.15	.....	16.13	15.65
31	12.95	.....	12.65	.....	12.46	.....	.....	16.58	.....	16.20	.....	15.74

e Estimated.

KoKO 227. Hanselman Bldg. Corp. North Burdick St. and West Michigan Ave., Kalamazoo. Drilled unused artesian well in deposits of Pleistocene age, diameter 4 inches, depth 80 feet. Land-surface datum is 781.27 feet above msl. Highest water level 20.15 below lsd, June 4, 1948; lowest 27.04 below lsd, Oct. 17, 1946. Records available: 1946-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	22.24	Apr. 30	21.34	Aug. 1	21.32	Oct. 31	23.46
Feb. 28	21.62	May 28	21.64	28	23.99	Dec. 2	24.14
Apr. 2	21.87	June 25	23.05	Sept. 24	23.86	30	23.38

KoKO 240. Reed Land Co. Factory St. and Lane Blvd., Kalamazoo. Drilled unused artesian well in deposits of Pleistocene age, diameter 6 inches, depth 41 feet. Land-surface datum is 773.71 feet above msl. Measurements made by City Light and Water Utilities. Highest water level 3.63 below lsd, Apr. 26, 1950; lowest 8.96 below lsd, Oct. 20, 21, 1947. Records available: 1947-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.82	5.72	6.28	6.00	6.04	.....	6.58	6.99	7.49	7.78	8.00	7.52
2	5.60	5.70	.....	5.96	6.08	5.71	6.62	7.02	7.48	7.80	8.00	7.53
3	5.67	5.71	.....	6.00	6.13	5.75	6.66	7.06	7.48	7.83	8.00	7.57
4	5.75	5.61	.....	6.07	6.16	5.67	6.69	7.00	7.49	7.83	8.00	7.61
5	5.82	5.33	.....	6.01	6.17	5.77	6.73	6.93	7.52	7.84	7.99	7.54
6	5.91	5.43	.....	5.84	6.24	5.83	6.76	6.98	7.53	7.88	8.00	7.45
7	5.98	5.51	.....	5.71	6.30	5.92	6.80	7.03	7.56	7.88	8.01	7.42
8	6.00	5.56	6.34	5.67	6.26	5.97	6.83	7.06	7.57	7.89	8.01	7.41
9	6.04	5.68	6.33	5.71	6.24	6.03	6.59	7.09	7.59	7.90	8.00	7.40
10	6.10	5.72	6.29	5.73	6.24	6.09	6.65	7.09	7.61	7.91	8.00	7.39
11	6.18	5.69	6.07	5.72	6.26	6.18	6.73	7.12	7.64	7.91	8.01	7.04
12	6.17	5.81	5.99	5.73	6.30	6.20	6.81	7.12	7.66	7.92	8.01	7.01
13	6.19	5.85	5.95	5.49	6.35	6.21	6.84	7.13	7.69	7.91	.....	7.05
14	6.16	5.90	6.04	5.09	6.39	6.24	6.87	7.15	7.69	7.92	.....	7.06
15	5.70	5.94	6.04	5.14	6.30	6.26	6.85	7.17	7.70	7.91	8.08	.....
16	5.41	5.95	6.01	5.27	6.30	6.29	6.88	7.19	7.73	7.86	8.09	7.12
17	5.35	5.98	6.05	5.35	6.36	6.36	6.89	7.20	7.75	7.89	8.09	7.15
18	5.21	6.04	6.07	5.41	6.39	6.34	6.93	7.23	7.70	7.91	7.91	7.17
19	5.35	6.07	5.86	5.50	6.41	6.40	6.73	7.26	7.61	7.90	7.89	7.21
20	5.06	6.06	5.65	5.57	6.40	6.46	6.70	7.28	7.63	7.96	7.85	7.06

KoKO 240--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	5.19	6.09	5.67	5.63	6.37	6.45	6.73	7.25	7.65	7.95	7.87	6.92
22	5.24	6.14	5.71	5.68	....	6.47	....	7.33	7.68	7.95	7.88	6.83
23	5.36	6.16	5.67	5.72	....	6.49	6.71	7.35	7.68	7.95	7.69	6.80
24	5.54	6.17	5.74	5.76	4.81	6.09	6.69	7.37	7.65	7.96	7.64	6.80
25	5.58	6.18	5.80	5.80	....	6.12	6.69	7.39	7.67	7.97	7.64	6.81
26	5.56	6.19	5.85	5.85	5.06	6.25	6.70	7.40	7.69	7.98	7.55	6.85
27	5.39	6.20	5.90	5.88	5.20	6.38	6.76	7.41	7.73	7.96	7.49	6.92
28	5.39	6.23	5.93	5.90	5.31	6.46	6.81	7.43	7.73	7.98	....	6.94
29	5.50	6.26	5.97	5.96	5.25	6.51	6.88	7.46	7.74	7.99	....	6.97
30	5.62	....	6.01	6.01	5.42	6.55	6.91	7.48	7.77	7.99	7.50	7.02
31	5.69	....	6.00	....	5.54	....	6.96	7.49	....	7.99	....	7.08

KoKO 242. Kalamazoo Creamery. Portage and Lake Sts., Kalamazoo. Drilled unused artesian well in deposits of Pleistocene age, diameter 12 inches, depth 61 feet. Land-surface datum is 773.19 feet above msl. Measurements made by City Light and Water Utilities. Highest water level 13.98 below lsd, May 3, 4, 1950; lowest 27.42 below lsd, Dec. 5, 6, 1946. Records available: 1946-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	17.33	15.47	15.68	15.65	15.34	15.03	16.03	17.60	18.28	19.07	20.15	20.30
2	17.30	15.41	15.78	15.57	15.36	15.00	16.03	17.57	18.31	19.10	20.17	20.20
3	17.20	15.55	15.74	....	15.45	15.25	16.17	17.75	18.35	19.15	20.23	20.21
4	17.15	15.46	15.65	....	15.53	15.31	16.10	17.75	18.40	19.10	20.18	20.13
5	17.20	15.35	....	15.80	15.52	15.30	16.12	17.53	18.43	19.17	20.10	20.05
6	17.06	15.35	....	15.85	15.57	15.29	16.13	17.54	18.44	19.18	20.15	20.07
7	17.02	15.31	....	15.88	15.70	15.40	16.46	17.58	18.47	19.21	20.25	20.06
8	17.05	15.25	15.85	15.86	15.65	15.12	16.48	17.58	18.48	19.22	20.27	20.18
9	16.93	15.29	15.84	15.63	15.72	15.17	16.52	17.60	18.50	19.23	20.00	20.10
10	16.94	....	15.82	15.53	15.75	15.45	16.62	17.68	18.52	19.27	20.02	20.07
11	16.98	....	15.67	15.61	15.82	15.56	16.65	17.73	18.55	19.28	19.97	20.10
12	16.87	....	15.87	15.53	15.86	15.54	16.72	17.68	18.57	19.28	19.98	20.05
13	16.86	....	15.83	15.58	15.90	15.63	16.88	17.71	18.59	19.31	20.21	20.06
14	16.85	....	15.82	....	15.78	15.60	16.60	17.72	18.62	19.35	20.25	20.12
15	16.90	....	15.77	....	....	15.43	16.90	17.83	18.65	19.35	20.27	20.12
16	16.76	15.37	15.75	....	....	15.51	16.99	17.83	18.67	19.38	20.45	20.01
17	16.60	15.43	15.75	....	e 16.07	15.76	17.05	17.83	18.68	19.40	20.47	20.00
18	16.57	15.51	15.70	....	16.12	15.87	17.07	17.85	18.69	19.50	20.36	20.04
19	16.45	15.44	15.53	15.08	16.15	15.91	17.09	17.96	18.74	19.45	20.35	....
20	16.40	15.38	15.60	15.26	15.95	15.98	16.81	17.98	18.78	19.54	20.38	....
21	16.36	15.41	15.57	15.25	15.98	15.98	16.86	18.00	18.83	19.55	20.40	....
22	16.10	15.53	15.52	15.20	16.22	15.76	17.17	18.08	18.85	19.57	20.35	....
23	16.03	15.54	....	15.25	16.15	15.79	17.15	18.12	18.85	19.50	20.35	....
24	16.01	15.60	....	15.03	15.90	15.70	17.21	18.15	18.91	19.80	20.40	....
25	15.87	15.64	....	15.04	15.39	15.79	17.24	18.18	18.90	19.87	20.35	....
26	15.75	15.60	....	15.03	15.29	16.25	17.23	18.12	18.89	....	20.29	....
27	15.73	15.58	....	14.90	15.56	16.00	17.36	18.14	18.95	....	20.32	e 20.00
28	15.78	15.55	....	14.83	15.53	15.96	17.38	18.14	18.98	....	20.31	19.95
29	15.61	15.65	15.80	15.10	15.43	16.20	17.43	18.17	19.00	....	20.28	20.02
30	15.58	....	15.81	15.17	15.41	16.10	17.45	18.22	19.03	....	20.26	19.91
31	15.54	....	15.72	....	15.04	....	17.58	18.26	....	20.09	....	19.90

e Estimated.

KoKO 284. Bryant Paper Co. Alcott and Portage Sts., Kalamazoo. Drilled unused artesian well in sand and gravel of Pleistocene age, diameter 12 inches, depth 113 feet, screen 83-113. Land-surface datum is 802.59 feet above msl. Measurements made by City Light and Water Utilities. Highest water level 34.46 below lsd, May 5, 1950; lowest 64.37 below lsd, Sept. 1, 1946. Records available: 1946-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	36.19	35.56	35.62	35.24	35.36	34.96	35.73	37.51	37.30	38.30	38.71	38.53
2	36.21	35.61	35.48	35.34	35.40	34.93	e 35.83	36.86	37.26	38.44	38.36	38.57
3	36.19	35.40	35.29	35.41	35.34	35.09	35.85	36.79	37.52	38.47	38.35	38.71
4	....	35.24	35.34	35.52	35.16	35.26	35.70	36.63	37.65	38.28	38.44	38.68
5	36.12	35.50	35.47	35.50	35.09	35.19	35.69	36.95	37.71	38.25	38.47	38.66

KoKo 284--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	36.08	35.51	35.47	35.30	35.33	35.17	35.74	36.93	37.76	38.19	38.60	38.65
7	36.05	35.52	35.57	35.22	35.49	35.16	35.73	36.99	37.55	38.37	38.64	38.56
8	36.02	35.50	35.69	35.50	35.48	35.18	36.05	36.98	37.48	38.36	38.60	38.48
9	36.04	35.55	35.64	35.51	35.49	35.05	36.18	36.98	37.68	38.35	38.40	38.59
10	36.08	35.43	35.34	35.42	35.50	35.27	36.21	36.89	37.96	38.43	38.36	38.64
11	36.11	35.16	35.40	35.65	35.37	35.37	36.25	36.86	37.88	38.53	38.52	38.72
12	36.01	35.48	35.62	35.55	35.31	35.40	36.37	37.07	37.91	38.30	38.67	38.54
13	36.02	35.53	35.47	35.23	35.56	35.47	36.26	37.10	38.17	38.26	38.63	38.56
14	35.92	35.94	35.64	35.05	35.60	35.50	36.21	37.11	37.80	38.46	38.66	38.48
15	35.96	35.67	35.71	35.18	35.58	35.47	36.36	37.12	37.75	38.50	38.68	38.36
16	36.05	36.06	35.50	35.36	35.71	35.35	36.46	37.15	38.07	38.58	38.63	38.58
17	35.86	35.54	35.41	35.36	35.68	35.59	36.47	37.02	38.13	38.61	38.45	38.60
18	35.97	35.51	35.57	35.52	35.59	35.74	.....	36.96	38.11	38.55	38.60	38.67
19	36.06	35.63	35.44	35.39	35.49	35.77	37.47	37.24	38.18	38.39	38.60	38.73
20	35.79	35.44	35.57	35.20	35.59	35.82	36.67	37.26	38.29	38.41	38.69	38.68
21	35.74	35.48	35.53	35.11	35.60	35.73	36.47	37.31	38.13	38.54	38.75	38.68
22	35.71	35.56	35.50	35.29	35.71	35.57	36.67	37.36	37.98	38.55	38.68	38.49
23	35.80	35.55	35.28	35.38	35.75	35.50	36.66	37.30	38.21	38.64	38.78	38.56
24	35.96	35.38	35.23	35.39	35.72	35.51	36.64	37.21	38.28	38.63	38.88	38.63
25	35.83	35.35	35.37	35.34	.....	35.51	36.60	37.12	38.27	38.61	38.79	38.53
26	35.70	35.46	35.41	35.45	.....	35.53	36.57	37.27	38.21	38.44	38.61	38.39
27	35.86	35.54	35.49	35.12	.....	35.59	36.56	37.42	38.35	38.35	38.82	38.37
28	35.45	35.48	35.49	34.99	35.28	35.65	36.48	37.63	38.11	38.54	38.67	38.35
29	35.61	35.57	35.42	35.26	35.20	35.62	36.67	37.55	38.02	.....	38.54	38.26
30	35.69	.....	35.30	35.36	35.16	35.54	36.67	37.61	38.24	.....	38.57	38.45
31	35.56	.....	35.15	.....	34.95	.....	36.80	37.38	.....	38.71	.....	38.50

e Estimated.

City of Parchment

KoPt 50. Kalamazoo Vegetable Parchment Co. Riverview Ave. and Robert Lane. Drilled unused artesian well in sand and gravel of Pleistocene age, diameter 12 inches, depth 36 feet. Land-surface datum is 774.05 feet above msl. Measurements made by Maintenance Dept. Highest water level 19.60 below lsd, Apr. 20, 1952; lowest 23.63 below lsd, Aug. 29, 1952. Records available: 1951-52.

Daily 2 a.m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	20.77	20.91	21.65	20.42	21.10	19.96	21.45	22.73	22.55	23.06	22.90	22.10
2	20.95	20.97	21.21	20.50	21.30	19.65	21.50	22.84	22.25	.....	22.60	22.50
3	21.20	20.30	21.33	20.55	21.40	20.72	21.50	22.60	22.72	.....	22.55	22.58
4	21.22	20.18	21.54	20.60	20.97	20.87	21.44	22.26	22.71	.....	22.75	22.60
5	21.23	20.72	21.68	20.62	21.00	20.97	.....	22.77	22.84	.....	22.57	22.59
6	20.75	20.79	21.62	20.26	21.70	21.07	.....	22.68	22.96	.....	22.93	22.60
7	20.54	20.83	21.64	20.17	21.80	21.24	22.24	22.78	22.68	.....	22.17	22.12
8	20.87	20.86	21.63	20.47	21.73	20.48	22.38	22.83	22.85	.....	22.65	22.00
9	21.05	20.89	21.00	20.55	21.77	20.35	22.25	22.90	22.87	.....	22.40	22.40
10	21.15	20.30	20.95	20.55	21.47	21.33	22.27	22.20	23.03	.....	22.30	22.40
11	21.29	20.26	21.27	20.47	20.82	21.49	22.46	22.10	23.15	.....	22.53	22.30
12	21.35	20.84	21.44	20.42	20.75	21.71	22.55	22.33	23.26	.....	22.75	22.32
13	20.78	20.94	21.33	20.08	21.46	21.65	22.43	22.68	23.31	.....	22.99	22.34
14	20.72	21.03	21.34	19.88	20.60	21.74	22.23	22.61	23.17	.....	22.90	22.06
15	21.16	21.10	21.26	20.05	21.62	21.35	22.67	22.80	22.65	.....	22.92	21.97
16	21.25	21.23	20.62	20.03	21.66	21.34	22.70	22.80	23.10	.....	22.55	22.27
17	21.07	20.71	20.56	19.95	21.61	21.92	22.67	22.55	23.20	.....	22.37	22.35
18	20.97	21.55	21.07	19.87	20.97	21.96	22.73	22.19	23.25	.....	22.69	22.40
19	20.90	21.17	21.14	19.79	21.20	22.11	22.67	22.73	23.15	.....	22.62	22.42
20	20.31	21.27	21.16	19.62	21.24	22.19	22.52	22.79	23.10	.....	22.58	22.43
21	20.13	21.35	21.13	19.65	21.30	22.13	22.10	22.84	22.83	.....	22.60	21.99
22	20.36	21.47	21.05	19.96	21.34	21.80	22.60	22.90	22.33	.....	22.59	21.78
23	20.43	21.48	.....	20.09	21.26	21.35	22.43	22.85	22.86	.....	22.28	22.18
24	20.54	20.88	.....	20.17	21.20	21.74	22.41	22.35	22.91	.....	22.28	22.20
25	20.48	20.76	.....	20.20	.....	21.87	22.50	22.27	23.02	.....	22.63	21.62
26	20.54	21.30	.....	20.23	.....	22.00	22.58	22.89	23.03	.....	22.54	21.43
27	19.96	21.45	.....	19.93	.....	22.14	22.26	23.04	23.06	.....	22.55	21.30
28	19.87	21.50	20.95	19.89	20.77	22.17	22.10	23.20	22.70	.....	22.50	21.27
29	20.58	21.65	20.90	20.28	20.70	22.00	22.51	23.35	22.40	.....	22.50	21.45
30	20.73	.....	20.23	20.63	20.68	21.56	22.55	23.35	22.89	.....	22.22	21.87
31	20.86	.....	20.15	.....	20.04	.....	22.60	23.05	.....	22.98	.....	21.99

Village of Vicksburg

KoVB 6. Lee Paper Co. Washington St. and Mill Pond. Drilled unused artesian well in deposits of Pleistocene age, diameter 12 inches, depth 144 feet. Measurements made by Lee Paper Co. Highest water level 2.08 above lsd, Apr. 7, 1947; lowest 10.15 below lsd, Sept. 9, 1946. Records available: 1946-52.

Daily 2 a. m. water level, above and below lsd, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	-0.70	-0.20	-0.80	....	-0.24	+0.98	....	+0.86	-0.01	-1.10	-1.30	-0.96
2	.70	-.25	+.19	....	.15	1.04	....	.71	+.10	1.28	.49	.90
3	.40	+.76	+.32	....	.15	.35	-0.44	.76	-.62	1.17	.36	1.05
4	.39	+.85	....	....	-.25	.29	+.27	.75	.77	1.26	1.08	1.18
5	....	-.03	....	....	+.60	....	.38	+.75	.73	.48	1.22	1.04
6	....	....	....	....	-.77	....	.42	-.77	.83	.33	1.17	1.04
7	....	....	....	....	.71	....	.45	.85	.93	1.06	1.25	1.07
8	....	.20	....	....	.65	....	.41	.85	.07	1.12	1.26	1.07
9	.39	.33	....	....	.32	....	.62	-.90	1.13	....	1.25	1.05
10	.52	.35	....	....	-.47	....	.60	+.05	1.33	....	.47	1.07
11	.55	.34	....	-0.62	+.47	.11	....	+.15	1.55	....	....	1.10
12	.63	.45	....	.55	+.55	.12	....	-.51	1.45	....	....	1.15
13	.55	.43	....	-.57	-.20	.03	....	.79	1.45	....	....	1.10
14	.53	.45	....	+.75	.28	.00	....	.67	1.54	....	....	1.15
15	.50	.50	....	-.20	.25	-.04	....	.62	1.55	....	....	.36
16	.45	....	....	.25	.40	+.73	....	.67	1.60	....	....	1.10
17	.40	....	....	.26	.50	-.25	....	.69	1.67	....	1.02	1.25
18	-.35	....	....	.37	....	.25	....	.65	1.67	....	1.18	1.05
19	+.80	....	....	.35	.31	....	....	.75	1.65	....	1.24	1.15
20	+.90	....	-.96	.31	.35	....	....	.80	1.65	1.32	1.02	1.18
21	-.15	....	.85	.34	.33	....	-.35	....	.44	1.41	1.22	1.10
22	.00	....	.85	.40	.40	....	.30	....	.27	1.43	1.17	1.10
23	.05	....	.85	.40	.36	....	.35	.16	.60	1.56	1.10	....
24	....	....	.85	.40	-.20	....	.35	-.10	.55	1.55	1.10	....
25	....	+.20	.80	.40	+.82	....	.41	+.05	.55	1.64	....	....
26	....	-.80	.78	-.45	-1.00	....	.45	-.83	.57	1.65	....	....
27	....	+.25	.83	+.73	.36	....	-.73	.83	1.00	.65	....	....
28	....	-.73	....	+.80	.38	....	+.30	.95	1.11	1.15	....	....
29	.06	.78	....	-.03	.35	....	-.86	.93	1.10	1.18	....	.66
30	.17	....	....	.13	.30	....	.81	.90	1.20	1.20	....	.80
31	.15	....	....	....	.15	....	.65	.11	....	1.20	....	.88

KoVB 7. Lee Paper Co. Washington St. and Mill Pond, Vicksburg. Drilled unused artesian well in deposits of Pleistocene age, diameter 12 inches, depth 48 feet. Measurements made by Lee Paper Co. Highest water level 0.55 below lsd, July 8, 1950; lowest 9.72 below lsd, Sept. 14, 1946. Records available: 1946-52.

Daily 2 a. m. water level from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	3.70	4.35	....	4.40	1.05	....	5.25	1.70	5.17	5.40	4.00
2	....	3.70	2.25	....	4.35	.62	....	5.05	1.40	5.20	2.75	4.35
3	....	1.40	1.50	....	4.35	3.90	5.10	5.15	4.00	5.18	2.30	4.56
4	....	.82	....	....	4.50	3.83	2.52	5.15	4.35	5.20	4.65	4.75
5	....	2.90	....	....	1.43	4.10	1.64	5.17	4.55	2.70	4.79	4.85
6	....	....	....	....	5.34	4.35	1.25	5.25	4.68	2.12	4.81	4.95
7	....	....	....	....	5.35	4.47	1.00	5.35	4.85	4.40	5.00	4.97
8	....	3.45	....	....	5.55	1.17	.85	5.35	2.13	4.67	5.10	5.05
9	2.69	3.68	....	....	5.05	.70	.65	5.50	5.15	4.84	5.02	5.08
10	2.85	3.85	....	....	4.80	3.65	.63	2.25	5.65	4.92	2.57	5.10
11	2.95	4.25	....	4.68	1.72	4.05	....	1.67	3.37	5.00	....	5.13
12	3.10	4.50	....	4.85	1.24	4.24	....	4.11	5.70	....	....	5.15
13	3.10	3.93	....	1.15	4.05	4.33	....	4.87	5.70	....	....	5.15
14	2.98	4.10	....	.70	4.37	4.43	....	4.69	5.77	....	....	5.21
15	2.90	4.10	....	4.16	4.37	4.55	....	4.60	5.90	....	....	2.52
16	....	....	....	4.45	4.65	1.45	....	4.67	5.95	....	....	4.75
17	2.77	....	....	4.55	4.92	4.60	....	4.68	6.10	....	4.21	4.75
18	2.85	....	....	4.75	....	4.86	....	4.73	6.15	....	4.65	4.95
19	2.83	....	....	4.85	4.85	....	....	4.80	6.05	....	5.00	5.00
20	1.13	....	2.52	4.80	5.05	....	....	4.80	6.10	5.21	5.10	5.00

KoVB 7--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	0.74	....	2.48	5.15	5.00	....	4.56	....	2.66	5.55	4.98	4.85
22	2.05	....	2.47	5.00	5.20	....	4.65	....	2.10	6.07	5.10	4.80
23	3.00	....	2.38	4.95	5.00	....	4.79	3.01	4.30	6.35	4.95	5.13
24	3.35	....	2.39	5.00	4.70	....	4.73	2.20	4.65	6.65	4.96	5.10
25	....	2.68	2.45	5.20	1.37	....	4.85	1.68	4.70	6.95	....	2.85
26	....	3.18	2.45	5.20	.75	....	4.85	4.30	4.80	7.10	....	2.00
27	....	2.20	2.50	1.24	3.67	....	4.95	4.87	4.97	3.28	....	1.55
28	....	3.90	....	.83	3.75	....	1.77	4.80	5.05	5.10	....	1.35
29	3.34	4.16	....	3.85	3.87	....	5.70	4.78	5.10	5.25	....	1.18
30	3.50	....	....	4.21	4.00	....	3.11	5.15	5.15	5.35	....	3.92
31	3.73	....	....	....	4.35	....	4.74	2.20	....	5.35	....	4.10

Kalamazoo Township

KoKo 42. Western Michigan College of Education. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 20, T. 2 S., R. 11 W. Drilled unused artesian well in deposits of Pleistocene age, diameter 8 inches, depth 78 feet. Land-surface datum is 868.68 feet above msl. Highest water level 33.44 below lsd, June 19, 1950; lowest 36.43 below lsd, Dec. 5, 1946. Records available: 1946-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	34.07	Apr. 30	33.69	Aug. 1	33.82	Oct. 31	34.33
Feb. 28	33.95	May 28	33.52	28	33.95	Dec. 2	34.47
Apr. 2	33.86	June 25	33.62	Sept. 24	34.11	30	34.54

Schoolcraft Township

KoSc 4. H. H. Chamberlain. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T. 4 S., R. 11 W. Driven unused water-table well in deposits of Pleistocene age, diameter 1 $\frac{1}{2}$ inches, depth 19 feet. Highest water level 9.23 below lsd, May 9, 1950; lowest 15.79 below lsd, Mar. 10, 1947. Records available: 1945-52.

Jan. 2	11.64	Mar. 25	10.99	June 24	10.60	Sept. 25	11.98
8	11.56	Apr. 1	10.86	July 1	10.76	30	12.07
15	11.55	8	10.99	10	10.83	Oct. 7	12.15
23	11.12	15	10.77	16	10.96	15	11.24
29	10.75	22	10.63	23	11.02	22	12.39
Feb. 5	10.66	29	10.57	30	11.12	Nov. 6	12.58
12	10.70	May 6	10.47	Aug. 6	11.20	12	12.68
20	10.72	13	10.76	13	11.30	18	12.76
26	10.80	21	10.87	20	11.41	Dec. 2	12.97
Mar. 4	10.87	26	10.68	27	11.64	9	13.02
11	10.77	June 2	10.48	Sept. 2	11.66	23	13.16
18	11.07	10	10.40	16	11.85	30	13.25

Kalkaska County

Blue Lake Township

KaBk 22. State Dept. of Conservation. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 35, T. 28 N., R. 5 W. Driver observation water-table well in sand of Pleistocene age, diameter 2 inches, depth 14 feet, open bottom. Highest water level 9.22 below lsd, May 14, 1952; lowest 11.77 below lsd, Dec. 14, 1949. Records available: 1949-51.

Jan. 15	10.01	Apr. 18	9.38	July 15	9.97	Oct. 14	10.35
Feb. 15	10.18	May 14	9.22	Aug. 20	9.64	Nov. 13	10.48
Mar. 19	10.35	June 16	9.71	Sept. 16	10.05	Dec. 15	10.30

Clearwater Township

KaCw 100. State Dept. of Conservation. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 36, T. 27 N., R. 5 W. Jetted observation water-table well in deposits of Pleistocene age, diameter 1 $\frac{1}{2}$ inches, depth 16 feet, screen 14-16. Highest water level 11.12 below lsd, July 11, 1943; lowest 14.69 below lsd, Mar. 12, 1940. Records available: 1939-52.

Jan. 15	12.84	Apr. 18	12.23	July 15	12.42	Oct. 14	12.87
Feb. 15	12.96	May 14	11.83	Aug. 20	12.31	Nov. 13	13.11
Mar. 19	13.12	June 17	12.13	Sept. 16	12.61	Dec. 15	13.20

Kent County

City of Grandville

KeGV 13. Jervis Corp. Formerly Winters & Crampton Co. Wallace and 30th Sts., Grandville. Drilled observation water-table well in gravel of Pleistocene age, diameter $1\frac{1}{4}$ inches, depth 20 feet, screen 17-20. Land-surface datum is 608.26 feet above msl. Measurements made by Jervis Corp. Highest water level 9.09 below lsd, May 5, 1950; lowest 15.18 below lsd, Dec. 1, 1950. Records available: 1950-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	11.60	Apr. 3	10.36	July 3	11.50	Oct. 2	13.33
10	11.50	10	10.39	10	11.74	9	13.47
17	11.30	17	10.02	17	11.95	16	13.64
24	10.69	24	9.56	24	11.91	23	13.85
31	10.26	May 1	9.47	31	12.21	30	13.96
Feb. 2	10.19	8	9.65	Aug. 7	12.29	Nov. 6	14.16
7	9.95	15	9.86	14	12.41	13	14.15
14	9.94	22	10.10	21	12.49	20	14.30
21	9.94	29	10.30	28	12.48	28	14.30
Mar. 6	10.35	June 5	10.44	Sept. 4	12.65	Dec. 5	14.50
13	10.36	12	10.77	11	12.82	12	14.55
20	10.56	19	10.99	18	12.89	19	14.60
27	10.52	26	11.28	25	12.97	26	14.50

Livingston County

City of Howell

LgHO 12. City of Howell. Michigan Ave. and Pere Marquette Railroad. Drilled unused artesian well in deposits of Pleistocene age, diameter 8 inches, depth 58 feet. Measurements made by Dept. of Public Works. Highest water level 8.60 below lsd, May 14, 1951; lowest 16.80 below lsd, Dec. 3, 1951. Records available: 1949-52. Measurement discontinued.

Jan. 7	11.85	Jan. 28	11.06	Feb. 18	11.15	Mar. 3	10.45
14	11.85	Feb. 4	10.75	25	10.85	10	10.85
21	10.85	11	10.85				

Manistee County

Norman Township

MsNr 1. State of Michigan. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 21 N., R. 14 W. Drilled unused artesian well in deposits of Pleistocene age, diameter 6 inches, depth 62 feet. Highest water level 12.54 below lsd, May 8, 1951; lowest 16.12 below lsd, Dec. 19, 1949. Records available: 1949-52.

Jan. 10	14.30	June 6	12.97	Sept. 9	14.56	Nov. 11	15.40
Feb. 7	13.98	July 7	13.70	Oct. 9	14.98	Dec. 10	15.73
May 9	12.62	Aug. 12	14.07				

Mason County

Logan Township

MaLo 1. State Dept. of Conservation. U. S. Forest Service, Manistee National Forest. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, T. 17 N., R. 15 W. Drilled unused water-table well in deposits of Pleistocene age, diameter 6 inches, depth 32 feet. Highest water level 14.44 below lsd, May 15, 1952; lowest 18.50 below lsd, Feb. 28, Mar. 1, 1951. Records available: 1948-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	16.62	16.38	16.21	16.16	14.69	14.61	15.05	15.50	15.84	16.38	16.88	.....
2	16.64	16.37	16.23	16.14	14.66	14.63	15.07	15.49	15.85	16.40	16.89	17.32
3	16.62	16.36	16.23	16.10	14.60	14.60	15.09	15.50	15.86	16.42	16.90	.....
4	16.62	16.33	16.20	16.07	14.59	14.65	15.11	15.49	15.88	16.43	16.91	.....
5	16.60	16.32	16.24	16.01	14.57	14.65	15.14	15.51	15.90	16.45	16.92	.....
6	16.61	16.31	16.27	15.95	14.55	14.65	15.16	15.52	15.91	16.48	16.93	.....
7	16.60	16.30	16.28	15.89	14.55	14.68	15.19	15.53	15.93	16.49	16.95	.....
8	16.60	16.29	16.27	15.82	14.53	14.68	15.20	15.53	15.95	16.50	16.96	.....
9	16.59	.....	16.26	15.76	14.51	14.69	15.22	15.54	15.96	16.52	.....	.....
10	16.59	16.25	16.25	15.69	14.50	14.70	15.24	15.55	15.98	16.54	.....	.....

MaLo 1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	16.61	16.25	16.24	15.65	14.47	14.73	15.26	15.56	16.00	16.55	.....	17.43
12	16.59	16.27	16.29	15.58	14.46	14.74	15.29	15.57	16.02	16.56	.....	.....
13	16.59	16.25	16.26	15.52	14.46	14.75	15.31	15.58	16.05	16.60	.....	.....
14	16.58	16.25	16.30	15.47	14.46	14.75	15.33	15.59	16.06	16.62	.....	.....
15	16.57	16.25	.....	15.43	14.44	14.78	15.34	15.60	16.08	16.63	.....	.....
16	16.61	16.24	.....	15.38	14.48	14.79	15.37	15.60	16.10	16.64	.....	.....
17	16.57	16.23	.....	15.34	14.48	14.79	15.39	15.62	16.12	16.66	.....	.....
18	16.58	16.23	.....	15.29	14.48	14.82	15.40	15.63	16.14	16.67	.....	.....
19	16.57	16.23	.....	15.24	14.48	14.83	15.42	15.65	16.16	16.68	.....	.....
20	16.55	16.22	.....	15.19	14.47	14.85	15.43	15.66	16.18	16.71	.....	.....
21	16.58	16.21	16.28	15.14	14.46	14.87	15.44	15.66	16.20	16.72	.....	.....
22	16.54	16.23	16.27	15.08	14.49	14.89	15.46	15.69	16.22	16.74	.....	.....
23	16.53	16.23	16.22	15.04	14.51	14.90	15.46	15.70	16.24	16.75	.....	.....
24	16.53	16.22	16.22	14.99	14.50	14.91	15.48	15.71	16.26	16.76	.....	.....
25	16.51	16.22	16.22	14.94	14.49	14.92	15.49	.....	16.28	16.78	.....	.....
26	16.48	16.21	16.21	14.88	14.53	14.94	15.48	.....	16.29	16.79	.....	.....
27	16.47	16.20	16.21	14.83	14.55	14.98	15.49	.....	16.31	16.81	.....	.....
28	16.46	16.20	16.21	14.78	14.55	14.99	15.48	.....	16.33	16.82	.....	.....
29	16.44	16.21	16.21	14.75	14.57	15.00	15.49	15.81	16.35	16.84	.....	.....
30	16.43	.....	16.21	14.73	14.58	15.02	15.48	15.81	16.37	16.85	.....	.....
31	16.40	.....	16.19	.....	14.58	.....	15.50	15.82	.....	16.86	.....	.....

Montcalm County

City of Greenville

MmGV 9. City of Greenville. Fairplain St. and Pere Marquette Railroad. Drilled unused artesian well in gravel of Pleistocene age, diameter 12 inches, depth 65 feet, screen 45-65. Measurements made by City Water Works. Highest water level 11.40 below lsd, Apr. 1, 1950; lowest 15.42 below lsd, July 9, 1952. Records available: 1950-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	13.18	Apr. 2	12.96	July 2	14.30	Oct. 1	13.44
9	13.59	9	13.07	9	15.42	8	14.45
16	13.58	16	12.42	16	14.42	15	14.40
23	12.87	23	13.13	23	13.42	22	14.56
30	12.93	30	13.69	30	13.42	29	14.55
Feb. 6	12.86	May 7	14.31	Aug. 6	13.42	Nov. 5	14.38
13	13.31	14	14.40	13	13.66	12	14.68
20	13.66	21	14.01	20	13.91	19	14.14
27	13.86	28	13.64	27	14.79	26	14.03
Mar. 5	13.73	June 4	13.96	Sept. 3	13.76	Dec. 3	13.77
12	13.25	11	14.27	10	14.15	10	13.92
19	12.91	18	13.63	17	14.19	17	14.31
26	12.42	25	14.81	24	14.31	24	13.93

Montmorency County

Albert Township

MyAb 1. State Dept. of Conservation. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 22, T. 29 N., R. 2 E. Drilled unused artesian well in deposits of Pleistocene age, diameter 6 inches, depth 64 feet. Highest water level 5.82 above lsd, Aug. 21, 1952; lowest 4.95 below lsd, Jan. 29, 1949. Records available: 1948-52.

Daily 2 a.m. water level, above and below lsd, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	+0.20	+0.32	.....	.....	+4.11	+4.34	+4.63	.....	.....	.....	.....	.....
2	.06	.31	.....	.....	4.18	4.31	4.68	.....	.....	.....	.....	.....
3	.10	.30	+0.55	.....	4.23	4.37	4.65	.....	.....	.....	.....	.....
4	.10	.37	.43	+1.83	4.33	4.31	4.70	.....	.....	.....	.....	.....
5	.19	.38	.43	1.89	4.42	4.31	4.70	.....	.....	.....	.....	.....
6	.14	.31	.34	2.15	4.51	4.33	4.73	.....	.....	.....	.....	.....
7	.11	.36	.33	2.17	4.48	4.31	4.79	.....	.....	.....	.....	.....
8	.14	.34	.38	2.26	4.53	4.33	4.86	.....	.....	.....	.....	.....
9	.21	.32	.44	2.34	4.50	4.42	4.92	.....	.....	.....	.....	.....
10	.17	.35	.....	2.49	4.49	4.38	4.91	.....	.....	.....	.....	.....

MyAb 1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	+0.06	+0.44	....	+2.49	+4.50	+4.34	+4.96	....	....	....	....	....
12	.15	.32	....	2.55	4.49	4.33	4.99	....	....	....	....	....
13	.11	.29	....	2.66	4.49	4.33	5.02	....	....	....	....	....
14	.17	.28	....	2.82	4.51	4.36	5.07	....	....	....	+5.75	....
15	.27	.29	....	2.83	4.49	4.36	5.07	....	....	+5.62	....	....
16	.12	.35	....	2.91	4.40	4.42	5.11	....	....	....	....	....
17	.20	.38	....	3.00	4.37	4.47	5.14	....	+5.75	....	....	....
18	.27	.34	....	3.17	4.33	4.42	5.18	....	....	....	....	....
19	.20	.31	....	3.31	4.31	4.43	5.26	....	....	....	....	....
20	.36	.31	+0.96	....	4.34	4.40	....	....	....	....	....	....
21	.19	.35	....	....	4.39	4.42	....	+5.82	....	....	....	....
22	.25	....	....	....	4.34	4.45	....	....	....	....	....	....
23	.38	....	1.20	....	4.31	4.47	....	....	....	....	....	....
24	.21	....	....	3.64	4.32	4.50	....	....	....	....	....	....
25	.21	....	....	3.71	4.38	4.54	....	....	....	....	....	....
26	.31	....	....	3.76	4.34	4.56	....	....	....	....	....	....
27	.28	....	....	3.82	4.31	4.53	....	....	....	....	....	....
28	.28	....	....	3.92	4.33	4.54	....	....	....	....	....	....
29	.29	....	....	3.96	4.31	4.62	....	....	....	....	....	....
30	.28	....	....	4.03	4.31	4.64	....	....	....	....	....	....
31	.29	....	....	....	4.34	....	....	....	....	....	....	....

Briley Township

MyBr 6. State Dept. of Conservation. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 11, T. 31 N., R. 2 E. Jetted observation water-table well in sand and gravel of Pleistocene age, diameter 2 inches, depth 13 feet, open bottom. Highest water level 7.40 below lsd, Mar. 29, 1938, Apr. 21, 1952; lowest dry, Oct. 27, 1939. Records available: 1934-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 16	9.67	Apr. 21	7.40	July 16	9.26	Oct. 15	10.64
Feb. 18	9.67	May 15	8.32	Aug. 21	9.71	Nov. 14	10.83
Mar. 20	9.76	June 19	9.15	Sept. 17	10.27	Dec. 19	10.68

Hillman Township

MyHm 22. State Dept. of Conservation. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 9, T. 31 N., R. 3 E. Jetted observation water-table well in deposits of Pleistocene age, diameter 2 inches, depth 14 feet, open bottom. Highest water level 2.85 below lsd, Apr. 21, 1952; lowest 7.76 below lsd, Dec. 15, 1949. Records available: 1936-44, 1948-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 16	5.10	Apr. 21	2.85	July 16	4.94	Oct. 15	6.34
Feb. 18	5.15	May 15	3.52	Aug. 21	5.41	Nov. 14	6.58
Mar. 20	5.29	June 19	4.44	Sept. 17	5.97	Dec. 19	6.75

Loud Township

MyLd 6. State Dept. of Conservation. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 21, T. 29 N., R. 3 E. Jetted observation water-table well in sand of Pleistocene age, diameter 2 inches, depth 24 feet, open bottom. Highest water level 2.63 below lsd, May 15, 1952; lowest 5.86 below lsd, Dec. 15, 1949. Records available: 1945-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 16	4.35	Apr. 21	2.67	July 16	3.37	Oct. 15	4.31
Feb. 18	4.26	May 15	2.63	Aug. 21	3.64	Nov. 14	4.57
Mar. 20	4.25	June 19	3.08	Sept. 17	3.98	Dec. 29	4.72

Montmorency Township

MyMy 1. State Dept. of Conservation. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 34, T. 32 N., R. 2 E. Drilled unused water-table well in deposits of Pleistocene age, diameter 2 inches, depth 24 feet. Highest water level 17.41 below lsd, May 15, 1952; lowest 20.97 below lsd, Aug. 17, 1949. Records available: 1948-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 16	18.71	June 19	17.54	Sept. 17	17.86	Nov. 14	18.45
Apr. 21	17.76	July 16	17.52	Oct. 15	18.17	Dec. 19	18.57
May 15	17.41	Aug. 21	17.58				

Rust Township

MyRs 18. State Dept. of Conservation. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 26, T. 30 N., R. 4 E. Jetted observation water-table well in sand of Pleistocene age, diameter 2 inches, depth 10 feet, open bottom. Highest water level 0.78 above lsd, July 2, 1945; lowest 2.33 below lsd, Sept. 23, 1948. Records available: 1935-37, 1945-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 16	+0.12	Apr. 21	+0.01	July 16	0.00	Oct. 15	-1.02
Feb. 18	+0.08	May 15	+0.13	Aug. 21	-.93	Nov. 14	-.51
Mar. 20	+0.15	June 19	-.43	Sept. 17	-1.26	Dec. 19	-.22

Oakland County

City of Bloomfield Hills

OaBH 2. Cranbrook School. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 2 N., R. 10 E. Drilled unused artesian well in sand and gravel, diameter 6 inches, depth 65 feet, screen 58-65. Measurements made by Water Dept. Highest water level 11.67 below lsd, Apr. 17, 1952; lowest 16.47 below lsd, Oct. 14, 1952. Records available: 1950-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	13.89	12.93	13.35	12.45	12.34	13.56	14.65	15.33	15.80	16.30	16.20	15.22
2	13.82	12.83	13.37	12.48	12.39	13.55	14.70	15.40	15.74	16.32	16.12	15.27
3	13.72	12.76	13.31	12.52	12.42	13.59	14.60	15.40	15.75	16.33	16.00	15.32
4	13.65	12.60	13.38	12.56	12.45	13.60	14.85	15.35	15.74	16.35	15.90	15.32
5	13.59	12.42	13.32	12.52	12.44	13.60	14.83	15.35	15.72	16.38	15.90	15.33
6	13.56	12.51	13.26	12.47	12.57	13.63	14.92	15.36	15.77	16.36	15.80	15.32
7	13.52	12.57	13.26	12.39	12.70	13.65	15.00	15.40	15.77	16.38	15.80	15.24
8	13.55	12.66	13.24	12.45	12.79	13.69	15.12	15.40	15.75	16.40	15.85	15.16
9	13.58	12.75	13.22	12.50	12.73	13.68	15.20	15.45	15.83	16.40	15.78	15.20
10	13.64	12.77	13.17	12.54	12.70	13.75	15.24	15.43	15.86	16.38	15.70	15.22
11	13.70	12.67	13.09	12.59	12.66	13.90	15.26	15.40	15.90	16.43	15.68	15.24
12	13.69	12.84	12.74	12.57	12.65	13.84	15.30	15.45	15.96	16.42	15.70	15.25
13	13.70	12.90	12.67	12.52	12.72	13.80	15.35	15.45	15.98	16.37	15.68	15.32
14	13.62	12.95	12.75	12.06	12.85	13.95	15.35	15.50	16.00	16.43	15.67	15.27
15	13.70	13.00	12.76	11.76	12.90	14.05	15.36	15.56	15.96	16.45	15.70	15.18
16	13.55	13.07	12.79	11.74	12.87	14.05	15.20	15.58	16.02	16.40	15.68	15.25
17	13.45	13.07	12.75	11.70	13.13	14.20	15.15	15.57	16.06	16.40	15.62	15.30
18	13.21	13.06	12.85	11.76	13.24	14.34	15.15	15.49	16.14	16.35	15.62	15.31
19	13.10	13.15	12.81	11.79	13.33	14.47	15.16	15.49	16.15	16.40	15.60	15.32
20	13.00	13.18	12.65	11.85	13.43	14.44	15.12	15.02	16.16	16.39	15.58	.....
21	12.90	13.24	12.55	11.79	13.40	14.35	15.00	15.04	16.17	16.41	15.56	.....
22	12.87	13.28	12.47	11.88	13.48	14.25	14.97	15.05	16.15	16.40	15.48	15.09
23	12.86	13.25	12.37	11.93	13.50	14.10	14.96	15.55	16.18	16.35	15.45	15.09
24	12.95	13.26	12.27	11.91	13.48	14.15	14.98	15.55	16.19	16.30	15.30	15.06
25	12.95	13.22	12.33	12.00	13.37	14.31	14.92	15.53	16.22	16.28	15.37	15.02
26	12.93	13.26	12.38	12.05	13.29	14.42	14.99	15.60	16.24	16.18	15.35	14.97
27	12.80	13.31	12.41	12.05	13.33	14.50	15.01	15.68	16.27	16.06	15.33	14.95
28	12.70	13.33	12.41	12.05	13.39	14.58	15.03	15.75	16.26	16.02	15.30	14.95
29	12.80	13.35	12.40	12.13	13.46	14.62	15.07	15.80	16.23	15.99	15.30	14.90
30	12.86	.....	12.45	12.22	13.47	14.60	15.13	15.83	16.26	16.10	15.20	14.97
31	12.93	.....	12.37	.....	13.51	.....	15.22	15.86	.....	16.24	.....	14.98

City of Pontiac

OaPT 1. City of Pontiac. Walnut and Wessen Sts. Drilled unused artesian well in sand and gravel of Pleistocene age, diameter 8 inches, depth 160 feet. Land-surface datum is 919.15 feet above msl. Measurements made by Dept. of Water Supply. Highest water level 59.55 below lsd, Apr. 22, 1940; lowest 117.7 below lsd, Aug. 29, 1952. Records available: 1939-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	110.0	.....	.....	.....	.....	114.4	116.0	114.6	114.5	114.2	110.0
2	110.0	.....	.....	.....	.....	115.9	.....	113.7	115.6	112.3	111.2
3	107.5	.....	.....	.....	112.77	116.1	.....	114.8	115.4	111.0	112.2
4	106.1	.....	.....	.....	111.70	115.9	.....	115.3	114.5	.....	111.9
5	114.5	.....	115.6	113.7	.....	111.4

OaPT 1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	.....	.....	.....	.....	.....	.....	114.6	.....	116.0	113.8	.....	113.1
7	.....	.....	.....	.....	.....	.....	.....	.....	114.3	113.5	114.35	112.4
8	.....	.....	.....	.....	.....	.....	.....	.....	114.7	114.0	114.5	110.9
9	.....	.....	.....	.....	.....	113.99	114.51	.....	115.6	113.7	113.4	111.8
10	.....	.....	.....	.....	.....	.....	113.3	.....	115.2	115.45	.....	111.9
11	.....	.....	.....	.....	.....	114.25	114.4	114.30	116.1	114.8	.....	113.3
12	.....	.....	.....	.....	.....	114.4	114.7	114.6	116.4	114.3	.....	113.8
13	.....	.....	.....	.....	.....	114.6	115.0	115.5	116.6	113.0	113.88	112.8
14	110.19	.....	.....	.....	.....	115.0	114.4	116.0	116.7	114.4	112.2	111.4
15	109.1	.....	.....	.....	.....	115.5	115.3	116.6	114.8	113.9	113.8	110.7
16	109.9	.....	.....	.....	.....	115.1	114.9	116.3	115.9	114.0	113.8	111.6
17	110.1	.....	.....	.....	.....	115.3	115.0	115.4	115.2	114.5	113.8	112.1
18	110.1	109.60	.....	.....	.....	115.8	115.90	113.7	115.2	114.3	112.7	.....
19	110.3	109.8	.....	.....	.....	115.9	115.1	115.0	.....	113.2	.....	114.31
20	106.7	110.3	.....	.....	.....	116.1	113.6	115.6	.....	113.0	.....	113.5
21	.....	.....	.....	.....	.....	115.0	112.7	116.3	.....	114.2	114.48	111.6
22	.....	.....	.....	.....	.....	113.5	113.3	116.8	.....	113.2	.....	110.8
23	.....	.....	.....	.....	.....	114.2	114.0	116.6	.....	113.7	.....	112.2
24	.....	.....	.....	.....	.....	115.1	114.4	.....	114.3	114.2	.....	112.9
25	.....	.....	.....	.....	.....	115.7	115.4	.....	115.5	115.3	.....	111.1
26	.....	.....	.....	.....	.....	116.1	115.5	116.71	114.2	114.7	.....	109.9
27	.....	.....	.....	.....	112.12	116.5	114.9	117.7	114.7	113.8	.....	111.6
28	108.32	.....	.....	.....	112.23	115.0	114.6	116.9	114.3	114.3	111.8	110.1
29	107.9	.....	.....	110.67	111.90	116.0	115.2	117.2	114.0	114.4	112.0	110.1
30	110.0	.....	.....	.....	111.35	114.4	115.6	117.5	115.5	114.3	110.7	111.8
31	110.8	.....	.....	.....	.....	.....	115.7	117.3	.....	113.90	.....	112.9

Ogemaw County

Klacking Township

OgKa 1. Charles Hudson. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 2, T. 23 N., R. 2 E. Dug unused water-table well in deposits of Pleistocene age, size 36 by 48 inches, depth 6 feet, plank to open bottom. Highest water level 0.37 below lsd, May 5, 1952; lowest 3.29 below lsd, Nov. 13, 1952. Records available: 1951-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.68	1.95	1.92	1.37	0.55	0.81	1.58	2.00	2.06	2.74	3.17	....
2	1.92	1.81	1.93	1.34	.54	.86	1.60	2.02	2.11	2.70	3.19	....
3	1.95	1.88	1.93	1.40	.54	.87	1.61	1.92	2.18	2.75	3.04	2.90
4	1.97	1.83	1.92	1.39	.53	.91	1.64	1.87	2.24	2.77	3.09	....
5	1.96	1.85	1.94	1.32	.53	.93	1.68	1.83	2.30	2.80	3.14	....
6	1.98	1.88	1.95	1.25	.56	.94	1.70	1.92	2.34	2.82	3.16	....
7	1.98	1.89	1.94	1.20	.57	.99	1.73	1.96	2.35	2.83	3.18	....
8	1.97	1.89	1.93	1.14	.56	1.01	1.75	1.99	2.38	2.84	3.20	....
9	1.96	1.90	1.93	1.10	.56	1.04	1.69	2.01	2.40	2.86	3.22	....
10	1.97	1.90	1.92	1.05	.56	1.07	1.76	1.91	2.43	2.88	3.23	2.76
11	1.99	1.89	1.66	1.05	.55	1.10	1.76	2.01	2.46	2.89	3.25	2.75
12	1.98	1.91	1.78	1.00	.56	1.12	1.79	2.00	2.48	2.90	e3.27	2.78
13	1.99	1.91	1.80	.91	.56	1.14	1.82	2.04	2.51	2.91	3.29	2.81
14	1.97	1.92	1.85	.79	.59	1.16	1.85	2.07	2.54	2.93	....	2.84
15	1.62	1.92	1.84	.83	.45	1.20	1.69	2.08	2.38	2.95	....	2.86
16	1.87	1.92	1.86	.83	.61	1.22	1.84	2.10	2.48	2.96	....	2.87
17	1.90	1.92	1.88	.81	.62	1.18	1.86	2.11	2.52	2.98	....	2.89
18	1.79	1.93	1.82	.79	.62	1.29	1.86	1.72	2.56	3.00	....	2.90
19	1.89	1.93	1.84	.77	.63	1.20	1.75	2.02	2.46	3.00	....	2.94
20	1.89	1.93	1.65	.75	.64	1.33	1.82	2.10	2.49	3.01	2.94	2.98
21	1.94	1.91	1.67	.72	.63	1.33	1.75	2.11	2.53	3.03	2.97	....
22	1.94	1.93	1.68	.69	.67	1.35	1.80	2.16	2.55	3.04	3.02	....
23	1.93	1.93	1.75	.68	.68	1.38	1.81	2.18	2.50	3.05	2.83	....
24	1.96	1.93	1.76	.64	.62	1.39	1.81	2.20	2.55	3.06	2.87	e2.62
25	1.96	1.93	1.78	.61	.68	1.43	....	2.22	2.58	3.08	2.93	e2.61
26	1.94	1.93	1.78	.59	.72	1.46	....	2.25	2.61	3.09	2.64	....
27	1.94	1.92	1.78	.58	.74	1.50	1.93	2.27	2.65	3.10	2.70	....
28	1.94	1.92	1.76	.57	.69	1.52	1.95	2.30	2.67	3.12	....	....
29	1.94	1.91	1.73	.56	.78	1.18	1.90	2.33	2.71	3.13	....	....
30	1.95	.....	1.66	.56	.79	1.53	1.94	2.32	2.73	3.14	....	....
31	1.95	.....	1.48	.....	.80	.....	1.93	2.33	.....	3.16	.....	2.76

e Estimated.

Otsego County

Otsego Lake Township

OsOk 106. State Dept. of Conservation. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 29, T. 29 N., R. 3 W. Jetted observation water-table well in gravel of Pleistocene age, diameter 2 inches, depth 14 feet, screen 12-14. Highest water level 5.56 below lsd, May 14, 1947; lowest 9.68 below lsd, Sept. 16, 1941. Records available: 1933-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 15	7.83	Apr. 18	6.58	July 15	7.66	Oct. 14	7.84
Feb. 15	7.84	May 14	6.68	Aug. 20	7.10	Nov. 13	8.03
Mar. 19	7.97	June 17	7.34	Sept. 16	7.55	Dec. 15	8.04

Ottawa County

City of Holland

OthO 12. City of Holland. Cleveland Ave., and 26th St. Drilled unused artesian well in gravel of Pleistocene age, diameter 18 inches, depth 29 feet. Measurements made by Board of Public Works. Highest water level 2.20 below lsd, Apr. 25, 1950; lowest 5.35 below lsd, Nov. 17, 18, 1949. Records available: 1949-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	3.48	3.87	3.63	3.67	3.67	4.26	4.29	4.35	4.48	4.66	4.15
2	3.34	3.15	3.89	3.69	3.70	3.71	4.26	4.30	4.14	4.50	4.66	4.16
3	3.19	3.10	3.91	3.71	3.73	3.73	4.27	4.32	4.13	4.51	4.67	4.19
4	3.27	3.06	3.94	3.76	3.75	3.67	4.29	4.26	4.13	4.51	4.67	4.19
5	3.33	2.97	3.96	3.76	3.78	3.68	4.31	4.21	4.13	4.53	4.65	4.18
6	3.41	3.07	3.96	3.73	3.80	3.71	4.33	4.20	4.15	4.54	4.67	4.17
7	3.48	3.15	3.96	3.68	3.84	3.78	4.35	4.20	4.19	4.55	4.68	4.13
8	3.49	3.21	3.96	3.64	3.82	3.80	4.37	4.21	4.21	4.55	4.69	4.14
9	3.53	3.30	3.94	3.60	3.82	3.85	4.36	4.23	4.23	4.55	4.69	4.15
10	3.58	3.34	3.91	3.61	3.83	3.88	4.37	4.22	4.25	4.57	4.70	4.14
11	3.63	3.33	3.84	3.59	3.85	3.92	4.38	4.25	4.28	4.57	4.70	4.16
12	3.63	3.40	3.73	3.57	3.87	3.93	4.41	4.28	4.31	4.57	4.71	4.17
13	3.65	3.45	3.66	3.34	3.89	3.95	4.43	4.31	4.33	4.58	4.71	4.19
14	3.67	3.49	3.73	2.83	3.92	3.97	4.44	4.33	4.35	4.59	4.71	4.19
15	3.16	3.52	3.73	2.94	3.89	4.01	4.38	4.34	4.37	4.59	4.72	4.19
16	2.96	3.54	3.72	3.04	3.91	4.03	4.38	4.35	4.38	4.59	4.73	4.19
17	3.00	3.57	3.75	3.09	3.92	4.05	4.39	4.11	4.39	....	4.73	4.19
18	3.06	3.60	3.67	....	3.94	4.06	4.38	4.06	4.40	....	4.60	4.21
19	3.14	3.63	3.52	....	3.95	4.08	4.16	4.06	4.42	....	4.51	4.22
20	2.94	3.65	3.38	....	3.96	4.11	4.06	4.06	4.43	....	4.46	4.20
21	3.05	3.67	3.37	....	3.97	4.09	4.05	4.07	4.44	4.54	4.45	4.10
22	3.08	3.73	....	3.38	4.00	4.12	4.09	4.12	4.45	4.62	4.45	4.00
23	3.17	3.74	....	3.42	3.98	4.13	4.12	4.15	4.45	4.62	4.40	3.90
24	3.30	3.76	....	3.45	3.88	4.13	4.16	4.17	4.45	4.63	4.34	3.77
25	3.32	3.78	3.47	3.48	3.46	4.15	4.19	4.20	4.45	4.63	4.29	3.73
26	3.33	3.79	3.48	3.52	3.35	4.17	4.22	4.23	4.45	4.64	4.23	3.75
27	3.35	3.81	3.52	3.55	3.40	4.20	4.22	4.26	4.47	4.63	4.15	3.77
28	3.33	3.82	3.55	3.57	3.47	4.21	4.23	4.28	4.47	4.65	4.12	3.81
29	3.36	3.85	3.59	3.62	3.52	4.23	4.23	4.31	4.48	4.66	4.12	3.83
30	3.43	....	3.62	3.65	3.57	4.24	4.24	4.33	4.49	4.64	4.13	3.85
31	3.46	....	3.62	....	3.62	....	4.26	4.35	....	4.64	....	3.90

Holland Township

OthO 9. City of Holland. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 28, T. 5 N., R. 15 W. Drilled unused artesian well in deposits of Pleistocene age, diameter 1 $\frac{1}{2}$ inches, depth 108 feet. Measurements made by Board of Public Works. Highest water level 56.44 below lsd, Aug. 8, 1946; lowest 93.06 below lsd, Dec. 30, 1952. Records available: 1946-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	87.22	Jan. 29	87.10	Feb. 26	87.68	Mar. 25	87.71
8	86.20	Feb. 5	87.43	Mar. 4	87.29	Apr. 1	86.83
15	86.87	12	88.31	11	87.16	8	87.69
22	85.88	19	88.12	18	86.99	15	87.67

OtHo 9--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 22	88.09	July 1	85.97	Sept. 2	92.38	Nov. 4	89.24
29	88.37	8	87.15	9	92.04	11	91.12
May 6	88.51	15	87.68	16	90.45	18	90.45
13	89.17	22	89.42	23	91.65	26	91.26
20	88.30	29	88.52	30	91.03	Dec. 2	92.23
27	89.28	Aug. 5	91.21	Oct. 7	92.23	9	89.86
June 3	89.71	12	90.31	14	92.22	16	90.06
10	87.03	19	91.43	21	91.15	23	91.75
17	85.56	26	91.58	28	90.76	30	93.06
24	84.65						

OtHo 22. City of Holland. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 34, T. 5 N., R. 15 W. Drilled unused artesian well in sand and gravel of Pleistocene age, diameter 1 inch, depth 70 feet. Land-surface datum is 640.58 feet above msl. Measurements made by Board of Public Works. Highest water level 5.72 above lsd, May 11, 1948; lowest 1.25 below lsd, Oct. 4, 1949. Records available: 1946-52.

Jan. 15	+0.21	May 13	+1.67	Aug. 5	+2.60	Oct. 21	+1.76
Feb. 5	.27	20	1.76	12	2.53	28	1.60
26	1.92	27	2.09	19	2.65	30	1.44
Mar. 11	1.17	June 3	2.23	26	2.54	Nov. 4	1.29
18	1.20	10	2.21	Sept. 2	2.55	11	1.08
25	.96	17	2.23	9	2.44	18	1.13
Apr. 1	.89	24	2.25	16	2.23	26	1.14
8	.89	July 1	2.19	23	2.38	Dec. 9	.89
15	1.27	8	2.14	30	2.27	16	.81
22	1.41	15	2.29	Oct. 7	2.17	23	.71
29	1.50	22	2.47	14	2.01	30	.64
May 6	1.54	29	2.49				

Presque Isle County

Allis Township

PrAs 18. State Dept. of Conservation. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 30, T. 33 N., R. 2 E. Jetted observation water-table well in deposits of Pleistocene age, diameter 2 inches, depth 14 feet, open bottom. Highest water level 1.80 below lsd, May 23, 1938; lowest 5.62 below lsd, Oct. 18, 1949. Records available: 1934-44, 1948-52. Oct. 17, 3.18.

Roscommon County

Au Sable Township

RoAs 30. State Dept. of Conservation. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 34, T. 24 N., R. 1 W. Jetted observation water-table well in sand and gravel of Pleistocene age, diameter 2 inches, depth 19 feet, screen 16-19. Highest water level 14.40 below lsd, June 15, 1943; lowest dry, Nov. 6, 1939-May 2, 1940. Records available: 1934-52.

Jan. 14	16.31	Apr. 17	15.30	July 14	15.52	Oct. 13	16.46
Feb. 14	16.26	May 13	14.86	Aug. 19	15.76	Nov. 12	16.35
Mar. 17	16.40	June 17	15.15	Sept. 15	16.16	Dec. 18	16.82

Backus Township

RoBk 15. State Dept. of Conservation. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 17, T. 22 N., R. 2 W. Jetted observation water-table well in sand of Pleistocene age, diameter 2 inches, depth 12 feet, screen 9-12. Land-surface datum is 1,165.46 feet above msl. Highest water level 1.34 below lsd, Apr. 1, 1938; lowest 5.38 below lsd, Nov. 9, 1949. Records available: 1934-52.

Jan. 14	2.85	Apr. 17	1.48	July 14	3.48	Oct. 13	3.70
Feb. 14	2.73	May 13	2.23	Aug. 19	2.90	Nov. 2	3.88
Mar. 20	2.82	June 17	2.87	Sept. 15	3.36	Dec. 18	3.12

Denton Township

RoDt 7. State Dept. of Conservation. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 22, T. 22 N., R. 3 W. Jetted observation water-table well in sand of Pleistocene age, diameter 2 inches, depth 13 feet, screen 11-13. Land-surface datum is 1,170.58 feet above msl. Highest water level 3.25 below lsd, Apr. 17, 1952; lowest 8.25 below lsd, Dec. 13, 1949. Records available: 1934-52.

RoDt 7--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	5.07	Apr. 17	3.25	July 14	4.78	Oct. 13	5.63
Feb. 14	5.07	May 13	3.53	Aug. 19	4.39	Nov. 12	5.93
Mar. 20	5.20	June 17	4.10	Sept. 15	5.06	Dec. 18	5.69

Gerrish Township

RoGr 1. State Dept. of Conservation. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 24, T. 24 N., R. 3 W. Jetted observation water-table well in sand of Pleistocene age, diameter 2 inches, depth 15 feet, screen 12-15. Land-surface datum is 1,162.42 feet above msl. Highest water level 5.95 below lsd, July 9, 1943; lowest 11.62 below lsd, Dec. 13, 1949. Records available: 1934-52.

Jan. 14	8.16	Apr. 17	7.25	July 14	7.94	Oct. 13	8.99
Feb. 14	7.94	May 13	6.60	Aug. 19	8.11	Nov. 12	9.31
Mar. 20	8.31	June 17	7.26	Sept. 15	8.52	Dec. 18	9.42

Higgins Township

RoHg 1. State Dept. of Conservation. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 20, T. 24 N., R. 2 W. Jetted observation water-table well in sand of Pleistocene age, diameter 8 inches, depth 14 feet, open bottom. Land-surface datum is 1,145.30 feet above msl. Highest water level 2.78 below lsd, May 3, 1951; lowest 6.23 below lsd, Dec. 6-11, 1949. Records available: 1934-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.29	4.30	4.46	3.92	3.08	3.70	4.40	4.68	4.93	5.25	5.40	5.14
2	4.31	4.31	4.47	3.68	3.11	3.72	4.42	4.71	4.88	5.27	5.41	5.13
3	4.30	4.31	4.47	3.58	3.15	3.73	4.45	4.73	4.89	5.27	5.41	5.13
4	4.32	4.28	4.47	3.54	3.16	3.75	4.47	4.74	4.92	5.28	5.41	5.14
5	4.29	4.27	4.49	3.51	3.18	3.77	4.51	4.60	4.94	5.29	5.41	5.14
6	4.33	4.30	4.51	3.49	3.20	3.78	4.55	4.64	4.95	5.30	5.41	5.14
7	4.34	4.30	4.51	3.49	3.26	3.81	4.58	4.67	4.96	5.30	5.42	5.15
8	4.34	4.30	4.52	3.49	3.27	3.83	4.61	4.70	4.97	5.30	5.42	5.13
9	4.33	4.31	4.51	3.47	3.29	3.84	4.56	4.72	4.99	5.31	5.42	5.13
10	4.36	4.32	4.51	3.42	3.31	3.87	4.60	4.63	5.01	5.32	5.43	5.14
11	4.38	4.28	4.38	3.39	3.32	3.90	4.63	4.63	5.03	5.32	5.43	5.14
12	4.37	4.34	4.39	3.36	3.34	3.92	4.65	4.62	5.04	5.32	5.43	5.14
13	4.39	4.35	4.36	3.32	3.36	3.94	4.67	4.64	5.06	5.32	5.44	5.15
14	....	4.37	4.39	3.19	3.39	3.96	4.70	4.65	5.08	5.33	5.45	5.15
15	4.30	4.37	4.41	3.14	3.39	4.00	4.71	4.67	5.09	5.32	5.45	5.16
16	4.26	4.37	4.42	3.09	3.43	4.01	4.72	4.69	5.11	5.33	5.46	5.16
17	4.24	4.37	4.45	3.05	3.45	4.04	4.73	4.71	5.12	5.34	5.43	5.17
18	4.19	4.39	4.42	3.01	3.47	4.07	4.72	4.73	5.14	5.35	5.34	5.18
19	4.21	4.40	4.40	2.99	3.49	4.09	4.69	4.74	5.15	5.35	5.33	5.19
20	4.18	4.40	4.31	2.98	3.50	4.12	4.68	4.75	5.16	5.35	5.32	5.20
21	....	4.38	4.22	2.98	3.50	4.14	4.65	4.75	5.17	5.35	5.33	5.20
22	....	4.42	4.19	2.96	3.54	4.16	4.47	4.77	5.18	5.36	5.33	5.20
23	....	4.43	4.15	2.98	3.56	4.19	4.47	4.79	5.18	5.36	5.32	5.20
24	....	4.43	4.15	2.99	3.56	4.21	4.41	4.81	5.18	5.36	5.31	5.17
25	....	4.44	4.17	2.98	3.57	4.23	4.42	4.82	5.19	5.37	5.30	5.16
26	....	4.44	4.18	3.00	3.59	4.26	4.44	4.84	5.21	5.37	5.25	5.16
27	4.27	4.44	4.20	3.00	3.62	4.30	4.49	4.86	5.22	5.38	5.20	5.15
28	....	4.44	4.19	3.01	3.63	4.33	4.53	4.88	5.23	5.38	5.17	5.16
29	4.29	4.45	4.18	3.04	3.65	4.35	4.56	4.90	5.24	5.39	5.15	5.15
30	4.30	....	4.16	3.06	3.67	4.37	4.60	4.91	5.25	5.39	5.14	5.15
31	4.30	....	4.08	....	3.68	....	4.64	4.92	....	5.39	....	5.15

Markey Township

RoMk 5. State Dept. of Conservation. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 25, T. 23 N., R. 3 W. Jetted observation water-table well in sand of Pleistocene age, diameter 2 inches, depth 14 feet, open bottom. Land-surface datum is 1,154.29 feet above msl. Highest water level 3.44 below lsd, Apr. 17, 1952; lowest 6.76 below lsd, Aug. 14, 1936. Records available: 1934-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	4.68	Apr. 17	3.44	July 14	5.45	Oct. 13	5.58
Feb. 14	4.29	May 13	4.29	Aug. 19	4.88	Nov. 12	5.53
Mar. 20	4.61	June 17	4.99	Sept. 15	5.46	Dec. 18	5.12

Richfield Township

RoRf 50. State Dept. of Conservation. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 3, T. 23 N., R. 1 W. Jetted observation water-table well in sand of Pleistocene age, diameter 2 inches, depth 12 feet, screen 10-12. Highest water level 0.93 below lsd, Jan. 12, 1942; lowest 7.31 below lsd, Dec. 14, 1949. Records available: 1939-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	3.94	Apr. 17	2.07	July 14	4.22	Oct. 13	5.13
Feb. 14	3.75	May 13	2.81	Aug. 19	4.05	Nov. 12	5.54
Mar. 20	4.09	June 17	3.47	Sept. 15	4.63	Dec. 18	4.92

Roscommon Township

RoRo 15. State Dept. of Conservation. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 5, T. 21 N., R. 3 W. Jetted observation water-table well in sand and gravel of Pleistocene age, diameter 2 inches, depth 15 feet, open bottom. Land-surface datum is 1,147.86 feet above msl. All measurements starting Sept. 23, 1938 through 1950 should have 1.30 feet added. Highest water level 9.61 below lsd, June 15, 1943; lowest 11.81 below lsd, Nov. 11, 1949. Records available: 1934-52.

Jan. 14	11.06	Apr. 17	10.22	July 14	10.89	Oct. 13	10.92
Feb. 14	11.02	May 13	10.44	Aug. 19	10.68	Nov. 12	10.97
Mar. 20	11.06	June 17	10.73	Sept. 15	10.90	Dec. 19	10.90

Saginaw County

City of Chesaning

SgCH 9. August Bauer. Clark and W. Broad Sts., Chesaning. Drilled unused artesian well in Saginaw formation, diameter 2 inches, depth 71 feet. Highest water level 39.66 below lsd, Nov. 23, 1951; lowest 68.26 below lsd, July 12, 1952. Records available: 1950-52.

Jan. 5	40.95	Apr. 7	50.33	Aug. 4	66.06	Oct. 19	54.56
14	43.03	15	51.81	9	64.32	25	58.97
19	50.66	22	49.83	17	59.96	Nov. 2	56.86
26	46.66	28	48.28	25	63.38	10	54.29
Feb. 9	44.34	May 5	48.08	Sept. 1	65.99	18	52.16
16	43.92	12	53.10	8	63.54	24	48.87
23	43.94	18	58.01	13	61.36	Dec. 1	49.20
Mar. 1	45.05	24	55.89	21	55.86	8	47.24
8	47.31	June 1	60.10	27	61.12	17	54.85
15	40.27	July 12	68.26	Oct. 6	61.14	23	55.09
22	45.24	20	63.25	13	59.28	29	61.40
31	46.16	26	62.23				

St. Joseph County

City of Three Rivers

SpTR 1. City of Three Rivers. Spring and West Michigan Sts. Driven unused artesian well in sand and gravel of Pleistocene age, diameter 6 inches, depth 59 feet, screen 39-59. Land-surface datum is 790.52 feet above msl. Measurements made by City of Three Rivers. Highest water level 2.83 above lsd, Mar. 29, 1940; lowest 5.50 below lsd, Sept. 27, 1947. Records available: 1939-52.

Feb. 1	+1.62	Apr. 25	+1.22	July 11	+3.10	Sept. 26	+1.22
8	.90	May 2	+.10	18	2.48	Oct. 3	.10
22	.28	9	-.80	25	.63	10	.70
29	.00	16	+1.74	Aug. 1	2.28	17	1.10
Mar. 7	+1.75	23	1.60	8	1.10	24	2.28
14	-.06	30	1.55	15	1.68	31	+.40
21	+.20	June 6	+.40	22	.70	Nov. 7	-.50
28	.80	13	-2.20	29	1.10	14	-1.30
Apr. 4	.30	20	+.05	Sept. 5	3.10	21	+.65
11	.55	27	+.70	12	1.35	Dec. 5	-.98
18	1.70	July 4	-.60	19	.77	12	-.75

Sanilac County

Moore Township

Samr 1. State Highway Dept. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 33, T. 12 N., R. 13 E. Driven unused artesian well in lower Marshall formation, diameter 3 inches, depth 150 feet, cased to 53. Highest water level 15.45 below lsd, Apr. 25, 1951; lowest 23.00 below lsd, Jan. 10, 1949. Records available: 1948-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	18.21	Apr. 9	15.70	July 9	18.55	Oct. 8	20.90
9	17.34	16	15.58	16	18.88	15	21.00
16	17.30	23	16.16	23	18.70	22	21.20
23	17.26	30	16.15	Aug. 1	18.85	29	21.32
30	17.15	May 7	16.88	6	18.89	Nov. 5	21.34
Feb. 6	17.10	14	16.88	13	19.07	12	21.64
13	17.04	21	17.30	20	19.10	19	21.60
20	16.98	28	16.76	27	19.70	26	21.75
27	17.36	June 4	16.75	Sept. 3	19.68	Dec. 3	21.35
Mar. 5	17.50	11	17.65	10	19.95	10	21.20
12	17.12	18	17.38	17	20.09	17	21.10
19	16.76	25	17.90	24	20.06	24	21.94
26	16.45	July 2	18.30	Oct. 1	20.76	31	21.82
Apr. 2	16.17						

Shiawassee County

Village of Perry

ShPR 8. Arthur B. Cobb. 115 W. 2nd St., Perry. Driven unused water-table well in deposits of Pleistocene age, diameter 1 $\frac{1}{2}$ inches, depth 26 feet. Measurements made by owner. Highest water level 17.28 below lsd, May 3, 1950; lowest 20.90 below lsd, Dec. 19, 1949. Records available: 1948-52.

Jan. 7	19.80	Mar. 8	18.60	July 4	18.80	Sept. 29	21.35
24	19.60	31	18.18	12	18.90	Nov. 11	21.80
Feb. 21	18.65	June 16	18.25	28	19.40		

Washtenaw County

City of Ypsilanti

WaYP 44. City of Ypsilanti. Park St. and Michigan Ave. Drilled unused water-table well in gravel of Pleistocene age, diameter 6 inches, depth 97 feet, screen 90-95. Measurements made by Dept. of Public Utilities. Highest water level 29.12 below lsd, Nov. 5, 1945; lowest 42.17 below lsd, Sept. 6, 1952. Records available: 1944-46, 1948-52.

Jan. 5	35.65	Mar. 8	35.00	June 14	38.92	Sept. 13	42.17
12	35.65	29	34.82	21	38.44	27	39.93
19	35.70	Apr. 7	34.02	28	39.10	Oct. 4	39.75
27	34.61	12	35.87	July 19	39.32	11	39.85
Feb. 2	35.67	26	34.62	Aug. 2	40.69	25	39.65
9	36.68	May 3	35.01	9	40.91	Nov. 1	38.18
16	36.66	17	34.19	23	39.67	22	39.17
23	36.62	June 7	38.87	Sept. 6	39.40	Dec. 13	38.82
Mar. 1	34.80						

Pittsfield Township

WaPf 2. City of Ann Arbor. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 16, T. 3 S., R. 6 E. Dug unused artesian well in gravel of Pleistocene age, diameter 16 feet, depth 23 feet, open bottom. Measurements made by Board of Water. Highest water level 2.00 above lsd, June 30, 1951; lowest 13.27 below lsd, July 30, 1952. Records available: 1948-52.

Feb. 1	+1.89	June 8	-1.60	Sept. 15	-2.81	Nov. 8	-3.05
Mar. 1	1.34	30	3.68	30	13.20	30	3.00
Apr. 1	1.62	July 8	7.60	Oct. 8	9.84	Dec. 8	3.24
May 1	+1.43	30	13.27	30	4.86	28	3.22

York Township

WaYk 22. Ypsilanti State Hospital. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 10, T. 4 S., R. 6 E. Drilled unused artesian well in gravel of Pleistocene age, diameter 6 inches, depth 173 feet. Measurements made by Ypsilanti State Hospital. Highest water level 69.24 below lsd, June 8, 1948; lowest 80.67 below lsd, July 25, 1947. Records available: 1946-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	71.72	71.71	71.74	70.93	70.45	.....	70.31	71.67	72.10	71.82	71.84	71.68
2	71.94	71.65	71.87	70.89	70.41	70.12	70.35	71.66	72.05	71.76	71.88	71.59
3	71.95	71.63	71.84	70.87	70.48	70.02	70.34	71.68	72.08	71.83	71.89	71.58
4	72.03	71.38	71.70	70.91	70.48	70.02	70.32	71.67	72.18	71.81	71.96	71.62
5	71.82	71.40	71.86	70.71	70.43	70.03	70.41	71.74	72.19	71.75	71.81	71.46
6	71.94	71.50	72.02	70.65	70.41	69.98	70.48	71.87	72.16	71.78	71.71	71.41
7	72.04	71.49	72.08	70.74	70.55	69.46	70.51	71.93	72.16	71.78	71.80	71.47
8	71.99	71.43	72.09	70.78	70.55	69.99	70.51	71.98	72.17	71.78	71.88	71.49
9	71.87	71.46	72.00	70.79	70.50	69.89	70.50	71.97	72.14	71.76	71.83	e71.45
10	71.96	71.48	71.89	70.65	70.41	69.91	70.59	71.94	72.08	71.78	71.82	71.39
11	72.16	71.33	71.58	70.73	70.37	69.93	70.69	72.02	.....	71.77	71.82	e71.40
12	72.09	71.53	71.85	70.70	70.38	69.95	70.75	72.05	72.01	71.74	71.75	71.49
13	72.09	71.60	71.75	70.52	70.38	69.96	70.84	72.12	.....	71.65	71.77	.....
14	71.97	71.66	71.73	70.35	70.44	69.97	70.86	72.17	.....	71.74	71.73	.....
15	71.86	71.72	71.78	70.41	70.27	69.99	70.85	72.15	.....	71.74	71.64	.....
16	72.03	71.69	71.71	e70.57	70.38	70.00	70.96	72.04	.....	71.72	71.66	.....
17	71.92	71.64	71.70	e70.59	70.41	69.94	71.04	72.07	.....	71.81	71.61	.....
18	71.78	71.73	71.68	e70.57	70.40	69.98	71.10	72.14	.....	.....	71.58	71.82
19	71.90	71.84	71.42	70.52	70.39	69.98	71.06	72.20	e71.70	.....	71.48	.....
20	71.54	71.83	71.48	70.50	70.27	70.07	71.09	72.20	71.77	.....	71.44	.....
21	71.85	71.75	71.46	70.53	70.14	70.09	71.08	72.13	71.81	.....	71.47	.....
22	71.75	71.88	71.47	70.51	70.22	70.10	.....	72.18	71.84	.....	71.40	.....
23	71.59	.....	71.27	70.46	70.25	70.11	.....	72.28	71.81	.....	71.34	.....
24	71.83	.....	71.28	70.51	.....	70.10	.....	72.28	71.88	71.92	71.51	.....
25	71.88	.....	71.28	70.46	.....	70.08	71.39	72.28	71.90	71.93	71.51	.....
26	71.68	.....	71.24	70.45	.....	70.10	71.38	72.30	71.83	71.94	71.26	71.96
27	71.70	.....	71.26	70.43	.....	70.23	71.41	72.29	71.87	71.85	71.37	.....
28	71.69	.....	71.23	70.39	.....	70.27	71.42	72.26	71.85	71.80	71.49	.....
29	71.69	71.75	71.19	70.40	.....	70.26	71.47	72.20	71.84	71.88	71.58	.....
30	71.77	.....	71.22	70.44	.....	70.23	71.49	72.20	71.88	71.90	71.54	.....
31	71.77	.....	71.08	.....	.....	.....	71.58	72.15	.....	71.84	.....	.....

e Estimated.

Ypsilanti Township

WaYp 8. Ford Motor Co. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T. 3 S., R. 7 E. Drilled unused water-table well in sand of Pleistocene age, diameter 4 inches, depth 87 feet, screen 77-80. Land-surface datum is 665.56 feet above msl. Measurements made by Water Filtration Plant. Highest water level 5.79 below lsd, Jan. 5, 1950; lowest 14.80 below lsd, Nov. 13, 1952. Records available: 1949-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 15	11.76	Apr. 2	12.38	June 24	13.01	Sept. 5	12.78
23	11.65	8	12.49	July 9	12.88	15	12.89
29	11.65	16	12.34	16	13.21	26	12.76
Feb. 9	11.84	29	12.53	23	12.90	Oct. 2	12.72
12	11.83	May 6	12.54	Aug. 1	13.06	28	12.84
20	12.10	14	12.79	6	12.74	Nov. 6	14.25
26	12.13	26	12.49	12	12.72	13	14.80
Mar. 5	12.40	June 4	12.53	19	12.55	20	14.00
12	11.98	10	12.77	27	12.68	Dec. 10	13.04
19	12.47	18	13.10				

Wexford County

City of Cadillac

WeCD 1. City of Cadillac. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 4, T. 21 N., R. 9 W. Drilled unused artesian well in deposits of Pleistocene age, diameter 8 to 6 inches, reported depth 277 feet. Measurements made by Water Dept. Highest water level 20.12 below lsd, Sept. 1, 1952; lowest 23.24 below lsd, Feb. 14, 1951. Records available: 1949-52.

WeCD 1--Continued.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	21.51	.....	21.59	21.36	21.03	20.50	20.60	20.41	20.12	20.51	20.85	20.78
2	21.64	.....	21.54	21.42	21.02	20.47	20.60	20.36	20.13	20.54	20.67	20.98
3	21.69	.....	21.48	21.46	21.02	20.59	20.57	20.32	20.25	20.67	20.77	21.05
4	21.71	21.59	21.48	21.52	20.78	20.71	20.58	20.26	20.32	20.55	20.91	21.08
5	21.64	21.53	21.61	21.45	20.70	20.71	20.52	20.35	20.35	20.44	20.56	20.98
6	21.65	21.64	21.69	21.26	20.88	20.68	20.48	20.40	20.32	20.54	20.82	21.00
7	21.59	21.64	21.67	21.30	20.99	20.72	20.44	20.41	20.28	20.71	20.94	20.79
8	21.61	21.61	21.64	21.41	20.94	20.51	20.55	20.40	20.25	20.70	20.98	20.75
9	21.59	21.64	21.45	21.39	20.93	20.41	20.56	20.34	20.34	20.71	20.64	21.00
10	21.68	21.51	21.40	21.32	20.87	20.65	20.59	20.25	20.30	20.70	20.84	21.05
11	21.78	21.37	21.43	21.43	20.67	20.72	20.63	20.27	20.39	20.65	20.90	21.09
12	21.71	21.65	21.63	21.34	20.60	20.70	20.58	20.37	20.40	.....	20.96	21.04
13	21.60	21.69	21.55	21.15	20.80	20.71	20.50	20.39	20.38	20.54	20.97	21.04
14	21.51	21.70	21.59	21.06	20.82	20.67	20.45	20.37	20.27	20.66	20.97	20.79
15	21.49	21.69	21.60	21.24	20.76	20.49	20.48	20.35	20.23	20.70	20.75	20.79
16	21.74	21.53	21.48	21.30	20.88	20.43	20.57	20.32	20.36	20.66	20.70	21.00
17	21.63	21.46	21.48	21.25	20.88	20.56	20.57	20.29	20.37	20.48	20.67	21.12
18	21.63	21.48	21.52	21.23	20.67	20.70	20.58	20.27	20.33	20.44	20.82	21.18
19	21.70	21.61	21.40	21.21	20.58	20.65	20.52	20.31	20.41	20.43	20.85	21.23
20	21.42	21.57	21.53	21.06	20.75	20.74	20.41	20.27	20.46	20.56	20.74	21.18
21	21.60	21.54	21.58	21.04	20.75	20.72	20.31	20.23	20.35	20.78	21.04	20.83
22	21.60	21.66	21.60	21.07	20.81	20.49	20.45	20.31	20.32	20.76	21.03	20.99
23	21.55	21.57	21.34	21.13	20.84	20.45	20.31	20.29	20.47	20.76	20.77	21.07
24	21.77	21.48	21.37	21.12	20.78	20.58	20.45	20.25	20.56	20.71	20.89	21.12
25	21.74	21.48	21.53	21.09	20.53	20.55	20.46	20.23	20.54	20.78	20.89	20.96
26	21.64	21.57	21.54	21.08	20.55	20.58	20.38	20.26	20.53	20.59	20.67	20.90
27	21.56	21.58	21.57	20.90	20.75	20.69	20.39	20.23	20.56	20.61	20.73	20.88
28	21.51	21.57	21.59	20.84	20.71	20.57	20.32	20.20	20.38	20.74	20.75	20.91
29	21.64	21.59	21.58	21.04	20.74	20.43	20.42	20.19	20.43	20.87	20.76	20.81
30	.....	.....	21.47	21.05	20.64	20.48	20.40	20.20	20.59	20.84	20.73	20.99
31	.....	.....	21.34	.....	20.45	.....	20.43	20.15	.....	20.82	.....	21.14

Greenwood Township

WeGw 3. State Dept. of Conservation. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 28, T. 24 N., R. 10 W. Jetted observation water-table well in sand of Pleistocene age, diameter 2 inches, depth 18 feet, open bottom. Land-surface datum is 1,005.49 feet above msl. Highest water level 5.20 below lrd, Aug. 6, 1943; lowest 8.89 below lsd, Jan. 15, 1936. Records available: 1935-37, 1941-44, 1948-52. Oct. 16, 7, 28.

Henderson Township

WeHn 1. State Dept. of Conservation. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 21 N., R. 11 W. Drilled unused water-table well in deposits of Pleistocene age, diameter 6 inches, depth 62 feet. Measurements made by U. S. Forest Service. Highest water level 46.28 below lsd, June 5, 1952; lowest 49.65 below lsd, Mar. 25, 1951. Records available: 1948-52.

Daily 2 a. m. water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	48.25	48.26	48.31	48.33	47.57	46.57	46.34	46.46	46.45	46.65	46.93	.....
2	48.26	48.28	48.34	48.37	47.53	46.55	46.33	46.43	46.45	46.68	46.94	.....
3	48.21	48.26	48.30	48.36	47.50	46.50	46.32	46.43	46.48	46.73	46.96	47.25
4	48.23	48.22	48.28	48.37	47.43	46.52	46.33	46.39	46.51	46.68	46.96	47.24
5	48.20	48.27	48.38	48.33	47.37	46.49	46.35	46.43	46.53	46.71	46.92	47.23
6	48.24	48.29	48.34	48.32	47.35	46.46	46.36	46.44	46.51	46.73	46.94	47.25
7	48.23	48.27	48.34	48.33	47.33	.....	46.35	46.43	46.55	46.75	47.00	47.26
8	48.21	48.28	48.32	48.32	47.25	.....	46.34	46.43	46.55	46.75	47.00	47.26
9	48.22	48.31	48.30	48.29	47.22	46.42	46.35	46.40	46.55	46.75	46.98	47.26
10	48.26	48.30	48.30	48.25	47.18	46.42	46.36	46.39	46.55	46.78	47.01	47.27
11	48.24	48.25	48.28	48.30	47.14	46.42	46.38	46.40	46.56	46.77	47.01	47.31
12	48.22	48.31	48.38	48.24	47.11	46.40	46.41	46.42	46.57	46.76	47.02	47.31
13	48.23	48.29	48.30	48.19	47.08	46.39	46.41	46.42	46.57	46.76	47.03	47.32
14	48.24	48.29	48.37	48.20	47.04	46.37	46.40	46.42	46.57	46.79	47.04	47.33
15	48.17	48.30	48.34	48.20	46.97	46.38	46.39	46.41	46.57	46.80	47.04	47.34

WeHn 1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep ^a .	Oct.	Nov.	Dec.
16	48.30	48.28	48.33	48.19	46.99	46.36	46.44	46.39	46.57	46.78	.....	47.35
17	48.15	48.27	48.35	48.14	46.94	46.34	46.44	46.43	46.57	46.82	.....	47.36
18	48.28	48.30	48.34	48.12	46.91	46.36	46.45	46.42	46.56	46.83	.....	47.38
19	48.24	48.31	48.28	48.09	46.87	46.34	46.44	46.44	46.59	46.79	.....	47.38
20	48.24	48.27	48.37	48.06	46.83	46.36	46.44	46.43	46.62	46.86	47.09	47.38
21	48.30	48.26	48.37	48.04	46.80	46.34	46.43	46.41	46.63	46.86	.....	47.38
22	48.17	48.33	48.35	47.98	46.80	46.34	46.48	46.46	46.64	46.84	.....	47.39
23	48.26	48.31	48.28	47.97	46.77	46.34	46.44	46.47	46.63	46.84	.....	e47.40
24	48.29	48.30	48.36	47.91	46.73	46.31	46.51	46.46	46.66	46.86	.....	e47.43
25	48.25	48.32	48.38	47.85	46.70	46.31	46.51	46.46	46.65	46.88	.....	47.45
26	48.21	48.29	48.37	47.82	.....	46.31	46.47	46.46	46.63	46.88	47.09	47.45
27	48.27	48.30	48.37	47.76	.....	46.35	46.49	46.46	46.67	46.86	.....	47.46
28	48.26	48.29	48.37	47.71	.....	46.35	46.45	46.46	46.66	46.89	.....	47.49
29	48.26	48.32	48.37	47.68	46.61	46.30	46.48	46.46	46.67	46.92	.....	47.48
30	48.27		48.38	47.63	46.60	46.32	46.44	46.47	46.69	46.90	.....	47.48
31	48.26		48.32		46.57		46.47	46.46		46.90		47.50

e Estimated.

Liberty Township

WeLb 38. State Dept. of Conservation. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 19, T. 24 N., R. 9 W. Jetted observation water-table well in sand of Pleistocene age, diameter 2 inches, depth 11 feet, open bottom. Land-surface datum is 994.16 feet above msl. Highest water level 0.94 below lsd, Apr. 10, 1951; lowest 3.74 below lsd, Aug. 19, 1936. Records available: 1935-57, 1941-44, 1949-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	1.35	Apr. 16	1.07	July 7	2.34	Oct. 9	2.61
Feb. 6	1.29	May 9	1.48	Aug. 12	1.34	Nov. 11	2.21
Mar. 12	1.21	June 6	1.65	Sept. 9	2.13	Dec. 10	1.35

MENOMINEE RIVER BASIN

By H. C. Boback

Scope of Water-Level Program

Periodic depth-to-water measurements were continued during 1952 in 32 observation wells of the Menominee River basin in the Northern Peninsula of Michigan. During the year depth-to-water measurements in one observation well --IrCf 1, W.M.P. No. 22-- were discontinued and a recording gage was installed on well IrIr 2, W.M.P. No. 25. The depth-to-water measurements included in this report, except measurements in wells IrIr 1, IrIr 2, and MqRe 1, have been made by the personnel of the Wisconsin-Michigan Power Company and furnished to the U. S. Geological Survey. The abbreviation W.M.P. refers to Wisconsin-Michigan Power Company and is followed by their well number. Example: W.M.P. No. 6.

Precipitation

The total 1952 precipitation for the Menominee River basin was 27.79 inches. This was 2.36 inches below the normal annual precipitation for the 44 years of precipitation records collected by the Wisconsin-Michigan Power Company.

Interpretation of Water-Level Fluctuations

Low air temperatures and frozen ground terminated ground-water recharge causing ground-water levels of the Menominee River basin to decline gradually from November 1951 to March 1952.

With increasing air temperatures and the melting of 55 inches of snow cover ground-water levels rose an average of 2.5 feet during April. Because of only normal precipitation during the first three months of 1952 and below-normal precipitation during April, water levels began another decline in May and continued through June.

During July precipitation was abnormally high, a total of 8.50 inches of rain fell on the basin and resulted in a new monthly record high for 44 years of record. As a result of the large amount of rain, ground-water levels rose an average of 0.7 of a foot. Following the high precipitation of July a period of below-normal precipitation began in August and continued through most of November, and as a result ground-water levels began a decline in August that continued to the end of the year. The average decline from July to December was 2.6 feet, and the December 1952 level was about 2 feet lower than the December 1951 level.

Well-Numbering System

The first pair of letters consists of an uppercase and a lowercase letter indicating the county in which the well is situated. The second pair of letters indicates the city or the civil township. Uppercase letters are used for cities, villages, or towns. An uppercase letter followed by a lowercase letter is used for the township designation.

Well Descriptions and Water-Level Measurements

(Water levels are in feet below land-surface datum unless otherwise indicated.)

Baraga County

Covington Township

BgCv 1. W. M. P. No. 14. State Highway Dept. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 12, T. 48 N., R. 32 W., U. S. Highway 41, Nestoria. Driven observation water-table well in sand and gravel, diameter 1 $\frac{1}{2}$ inches, depth 10 feet, screen 7-10. Highest water level 4.19 below lsd, May 3, 1951; lowest 6.72 below lsd, Mar. 15, 1949. Records available: 1948-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	5.58	Apr. 30	5.31	July 30	5.09	Oct. 31	5.37
28	5.78	May 27	5.23	Aug. 28	5.26	Dec. 1	5.35
Feb. 28	5.97	June 30	5.06	Sept. 29	5.31	29	5.69
Mar. 28	5.95						

Dickinson County

Breen Township

DkBe 1. W. M. P. No. 10. E. W. LaFreniere. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 33, T. 42 N., R. 27 W. Near Foster City. Dug domestic water-table well in sand and gravel, diameter 36 inches depth 12 feet. Highest water level 4.22 below lsd, May 3, 1951; lowest 10.00 below lsd, Mar. 15, 1948. Records available: 1945-46, 1948-52.

Jan.	7.81	Apr. 30	4.32	July 30	4.82	Oct. 31	8.99
28	8.41	May 27	6.82	Aug. 28	6.74	Dec. 1	8.78
Feb. 28	9.02	June 30	7.68	Sept. 29	8.67	29	8.84
Mar. 28	9.45						

Breitung Township

DkBg 1. W. M. P. No. 1. Dickinson County Road Commission. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 25, T. 41 N., R. 30 W., Merriman. Driven observation water-table well in glacial till, diameter 1 $\frac{1}{2}$ inches, depth 20 feet, screen 17-20. Highest water level 3.51 below lsd, Oct. 30, 1951; lowest 16.05 below lsd, Mar. 15, 1949. Records available: 1948-52.

Jan.	8.56	Apr. 30	4.80	July 30	5.42	Oct. 31	11.18
28	9.59	May 27	8.36	Aug. 28	7.58	Dec. 1	12.08
Feb. 28	10.44	June 30	8.54	Sept. 29	10.01	29	12.04
Mar. 28	11.12						

DkBg 2. W. M. P. No. 2. William Carrolo. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 25, T. 41 N., R. 30 W., Merriman. Dug domestic and stock water-table well in glacial till, diameter 36 inches, depth 16 feet, cribbed with wood. Highest water level 2.61 below lsd, Oct. 30, 1951; lowest 13.95 below lsd, Feb. 15, Mar. 15, 1949. Records available: 1945-46, 1948-52.

DkBg 2--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	6.05	Apr. 30	2.97	July 30	3.89	Oct. 31	8.83
28	6.87	May 27	5.31	Aug. 28	5.24	Dec. 1	9.56
Feb. 28	7.64	June 30	4.12	Sept. 29	7.98	29	9.91
Mar. 28	8.17						

DkBg 3. W. M. P. No. 3. Oscar Martinson. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T. 41 N., R. 30 W., Merriman. Dug domestic and stock water-table well in glacial till, size 4 by 4 feet, depth 13 feet, concrete lined. Highest water level 1.81 below lsd, Sept. 23, 1951; lowest dry Nov., 1948 to April, 1949. Records available: 1945-46, 1948-52.

Jan. 3	5.44	Apr. 30	2.25	July 30	3.47	Oct. 31	7.73
28	6.15	May 27	4.72	Aug. 28	4.85	Dec. 1	7.67
Feb. 28	6.58	June 30	3.26	Sept. 29	6.70	29	8.77
Mar. 28	7.25						

Felch Township

DkFe 1. W. M. P. No. 11. Dickinson County Road Commission. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 32, T. 43 N., R. 29 E. Driven observation water-table well in glacial till, diameter 1 $\frac{1}{2}$ inches, depth 13 feet, screen 10-13. Highest water level 5.12 below lsd, Apr. 18, 1951; lowest dry Oct. 12, 1948. Records available: 1948-52.

Jan. 3	8.61	Apr. 30	6.51	July 30	7.30	Oct. 31	9.87
28	8.92	May 27	8.57	Aug. 28	8.78	Dec. 1	9.92
Feb. 28	9.12	June 30	8.76	Sept. 29	9.64	29	9.45
Mar. 28	9.24						

Iron County

Crystal Falls Township

IrCf 1. W. M. P. No. 22. George Mechon, Sr. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 15, T. 44 N., R. 33 W. Near Amasa. Dug and drilled domestic water-table well in sand and gravel, size 4 by 4 feet to 15 feet, diameter 6 inches to 20 feet, depth 20 feet, concrete lined to 15 feet. Highest water level 2.98 below lsd, May 15, 1950; lowest dry, Jan. 28, 1947. Records available: 1945-52. Jan. 3, 7.55; Jan. 28, 8.94; Feb. 28, 10.12; Mar. 28, 10.93. Measurement discontinued.

Hematite Township

IrHm 1. W. M. P. No. 20. Basilio Prandi. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 8, T. 45 N., R. 33 W. Triangle Ranch Road. Dug domestic and stock water-table well in glacial till, diameter 36 inches, depth 33 feet, cribbed with wood. Highest water level 23.39 below lsd, Oct. 30, 1951; lowest 32.16 below lsd, Mar. 15, 1949. Records available: 1945-52.

Jan. 3	23.90	Apr. 30	23.68	July 30	25.05	Oct. 31	26.21
28	24.34	May 27	24.27	Aug. 28	25.52	Dec. 1	26.70
Feb. 28	24.93	June 30	24.78	Sept. 29	25.76	29	27.03
Mar. 28	25.35						

IrHm 2. W. M. P. No. 19. William Bonifas Lumber Co. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 10, T. 45 N., R. 33 W. Triangle Ranch. Driven observation water-table well in sand and gravel, diameter 1 $\frac{1}{2}$ inches, depth 7 feet, screen 4-7. Highest water level 2.01 below lsd, Sept. 28, 1951; lowest 4.23 below lsd, Mar. 12, 1949. Records available: 1948-52.

Jan. 3	2.74	Mar. 28	3.28	June 30	2.94	Sept. 29	3.63
28	3.00	Apr. 30	2.41	July 30	3.11	Oct. 31	3.79
Feb. 28	3.16	May 27	2.84	Aug. 28	3.35	Dec. 1	3.77

IrHm 3. W. M. P. No. 21. Iron County Road Commission. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 10, T. 44 N., R. 33 W. Driven observation water-table well in glacial till, diameter 1 $\frac{1}{2}$ inches, depth 8 feet, screen 3-8. Highest water level 2.28 below lsd, May 15, 1950; lowest 7.94 below lsd, Jan. 12, 1951, Dec. 29, 1952. Records available: 1948-52.

Jan. 3	5.25	Apr. 30	4.27	July 30	4.00	Oct. 31	7.38
28	5.74	May 27	4.86	Aug. 28	5.56	Dec. 1	7.80
Feb. 28	5.99	June 30	5.09	Sept. 29	6.74	29	7.94
Mar. 28	6.09						

IrHm 4. W.M.P. No. 17. Michigan State Highway Department. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 18, T. 46 N., R. 33 W. Park Siding Road and U. S. Highway 141. Driven observation water-table well in glacial till, diameter 1 $\frac{1}{2}$ inches, depth 12 feet, screen 9-12. Highest water level 2.80 below lsd, Apr. 18, 1949; lowest 8.90 below lsd, Feb. 15, 1949. Records available: 1948-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	5.38	Apr. 30	4.32	July 30	5.52	Oct. 31	7.00
28	5.72	May 27	5.17	Aug. 28	5.91	Dec. 1	7.15
Feb. 28	5.87	June 30	5.43	Sept. 29	6.75	29	7.32
Mar. 28	5.81						

IrHm 5. W.M.P. No. 18. Luke and Carlson Co. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 14, T. 46 N., R. 34 W. Park Siding depot. Dug unused water-table well in glacial till, size 4 by 4 feet, depth 10 feet, wood cribbed. Highest water level 4.04 below lsd, July 3, 1951; lowest 8.60 below lsd, Mar. 15, 1949. Records available: 1945-52.

Jan.	3	6.22	Apr. 30	5.18	July 30	5.93	Oct. 31	7.20
	28	6.62	May 27	5.93	Aug. 28	6.43	Dec. 1	7.55
	Feb. 28	7.43	June 30	6.06	Sept. 29	6.86	29	7.62
	Mar. 28	7.32						

Iron River Township

Irr 1. W.M.P. No. 23. Joseph J. Javoroski. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 11, T. 43 N., R. 35 W. Near Mineral Hills. Dug domestic and stock water-table well in glacial till, diameter 36 inches, depth 47 feet. Highest water level 39.33 below lsd, Jan. 14, 1952; lowest 47.08 below lsd, Aug. 15, 1949. Records available: 1945-52.

Jan. 3	40.82	Apr. 11	g39.98	July 14	g40.34	Oct. 15	g40.22
14	g39.33	30	40.09	30	40.34	31	40.55
28	41.30	May 13	g40.10	Aug. 15	g40.26	Nov. 14	g40.45
Feb. 15	g39.46	27	40.17	28	40.28	Dec. 1	40.52
28	39.46	June 13	g40.25	Sept. 15	g40.18	15	g40.69
Mar. 14	g39.73	30	40.29	29	40.26	29	40.74
28	39.86						

g By Geological Survey.

Irr 2. W.M.P. No. 25. Mrs. Bernard Henriksen. Formerly Nash School. SW $\frac{1}{4}$ S $\frac{1}{4}$ sec. 20, T. 43 N., R. 35 W. Dug unused water-table well in glacial till, diameter 36 inches, depth 48 feet. Recording gage installed Aug. 15, 1952. Highest water level 43.00 below lsd, Nov. 29, 1951; lowest 48.29 below lsd, Aug. 15, 1949. Records available: 1945-52.

Daily noon water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	43.66	43.71	43.93	h44.10
2	43.69	43.80	43.93	e44.12
3	h43.09	.....	.....	.....	.....	.....	.....	.....	43.69	43.72	43.95	e44.10
4	43.66	43.76	43.88	e44.16
5	43.71	43.77	43.87	e44.10
6	43.70	43.80	43.96	e44.12
7	hg43.61	.....	.....	.....	.....	.....	.....	.....	43.66	43.78	43.95	e44.08
8	43.67	43.76	43.93	e44.11
9	43.68	43.81	43.98	e44.16
10	43.69	43.78	43.95	e44.13
11	hg43.21	.....	.....	.....	.....	43.68	43.77	43.96	e44.12
12	43.68	43.74	43.97	e44.17
13	hg43.80	hg43.96	.....	.....	43.65	43.78	43.97	e44.16
14	hg43.61	.....	hg44.00	.....	.....	.....	hg44.06	.....	43.69	43.82	43.98	e44.13
15	hg43.84	.....	.....	.....	.....	hg43.61	hg43.69	43.76	44.01	44.19	
16	43.66	43.70	43.87	44.01	e44.21
17	43.67	43.68	43.88	44.00	e44.24
18	43.64	43.69	43.81	43.98	e44.22
19	43.62	43.73	43.87	44.02	e44.18
20	43.66	43.74	43.91	44.03	e44.20
21	43.72	43.74	43.85	44.06	e44.23
22	43.67	43.74	43.84	44.04	e44.26
23	43.65	43.75	43.87	44.06	e44.20
24	43.67	43.73	43.88	44.07	e44.21
25	43.66	43.68	43.90	44.02	e44.23

Irr 2--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	43.65	43.75	43.85	44.05	e44.28
27	h43.88	.....	.....	43.65	43.71	43.87	44.10	e44.26
28	h43.90	h44.17	.....	.....	.....	.....	43.69	43.70	43.92	e44.09	e44.24
29	43.65	43.77	43.87	e44.04	e44.29
30	h43.74	.....	h44.07	h44.03	43.63	43.71	43.86	e44.06	e44.32
31	43.65	.....	h43.89	.....	e44.30

e Estimated.

g By Geological Survey.

h Tape measurement.

Irr 3. W.M.P. No. 27. Iron County Road Commission. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, T. 43 N., R. 36 W. Near Iron River. Driven observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$ inches, depth 9 feet, screen 6-9. Highest water level 7.02 below lsd, Feb. 15, 1949; lowest 9.02 below lsd, June 30, 1952. Records available: 1948-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	7.78	Apr. 30	7.61	July 30	7.44	Oct. 31	8.08
28	7.78	May 27	7.96	Aug. 28	8.12	Dec. 1	8.13
Feb. 28	7.83	June 30	9.02	Sept. 29	8.13	29	7.92
Mar. 28	7.88						

Irr 4. W.M.P. No. 29. U. S. Forest Service, Ottawa National Forest. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 23, T. 45 N., R. 36 W. Dug unused water-table well in glacial till, size 4 by 4 feet, depth 22 feet, wood cribbed. Highest water level 14.01 below lsd, Nov. 29, 1951; lowest 23.21 below lsd, May 16, 1949. Records available: 1945-46, 1948-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	14.49	Apr. 30	15.44	July 30	14.87	Oct. 31	16.36
28	15.10	May 27	15.79	Aug. 28	14.70	Dec. 1	17.24
Feb. 28	15.71	June 27	15.61	Sept. 29	14.79	29	17.98
Mar. 28	16.46						

Irr 5. W.M.P. Paint River Profile well 1. U. S. Forest Service, Ottawa National Forest. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 6, T. 44 N., R. 35 W. Driven observation water-table well in sand, diameter 1 $\frac{1}{4}$ inches, depth 6 feet, screen 3-6. Land-surface datum is 1,468.15 feet above msl. Highest water level 0.10 above lsd, May 2, 1951; lowest 2.26 below lsd, Nov. 15, 1948. Records available: 1948-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	1.75	Apr. 29	0.87	July 30	1.01	Oct. 31	1.83
28	1.60	May 29	1.76	Aug. 28	1.78	Dec. 1	1.84
Feb. 28	1.57	June 30	1.74	Sept. 29	1.79	29	1.86
Mar. 28	1.62						

Irr 6. W.M.P. Paint River Profile well 2. U. S. Forest Service, Ottawa National Forest. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 6, T. 44 N., R. 35 W. Driven observation water-table well in sand, diameter 1 $\frac{1}{4}$ inches, depth 13 feet, screen 10-13. Land-surface datum is 1,475.14 feet above msl. Highest water level 5.36 below lsd, May 2, 1951; lowest 8.92 below lsd, Nov. 15, 1948. Records available: 1948-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	7.96	Apr. 29	6.69	July 30	6.95	Oct. 31	8.41
28	8.07	May 29	8.00	Aug. 28	8.09	Dec. 1	8.41
Feb. 28	8.15	June 30	8.17	Sept. 29	8.31	29	8.60
Mar. 28	8.15						

Irr 7. W.M.P. Paint River Profile well 3. U. S. Forest Service, Ottawa National Forest. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 6, T. 44 N., R. 35 W. Driven observation water-table well in sand, diameter 1 $\frac{1}{4}$ inches, depth 12 feet, screen 9-12. Land-surface datum is 1,468.15 feet above msl. Highest water level 4.54 below lsd, May 15, 1950; lowest 9.20 below lsd, Nov. 15, 1948. Records available: 1948-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	7.89	Apr. 29	6.11	July 30	6.51	Oct. 31	8.56
28	8.10	May 29	7.68	Aug. 28	7.85	Dec. 1	8.61
Feb. 28	8.36	June 30	8.23	Sept. 29	8.38	29	8.66
Mar. 28	8.41						

Irr 8. W.M.P. Paint River Profile well 4. U. S. Forest Service, Ottawa National Forest. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, T. 44 N., R. 35 W. Near Gibbs City. Driven observation water-table well in sand, diameter 1 $\frac{1}{4}$ inches, depth 4 feet, screen 1-4. Land-surface datum is 1,468.28 feet above msl. Highest water level 1.12 below lsd, May 2, 1951; lowest 3.51 below lsd, Sept. 14, 1949. Records available: 1948-52.

IrIr 8--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	3.00	Apr. 29	2.18	July 30	2.37	Oct. 31	3.20
28	2.88	May 29	3.03	Aug. 28	3.23	Dec. 1	3.11
Feb. 28	2.95	June 30	2.98	Sept. 29	3.28	29	3.15
Mar. 28	2.90						

IrIr 9. W. M. P. Paint River Profile well 5. U. S. Forest Service, Ottawa National Forest. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, T. 44 N., R. 35 W. Driven observation water-table well in sand, diameter 1 $\frac{1}{2}$ inches, depth 13 feet, screen 10-13. Land-surface datum is 1,471.25 feet above msl. Highest water level 2.63 below lsd, May 2, 1951; lowest 9.44 below lsd, Oct. 26, 1948. Records available: 1948-52.

Jan. 3	4.78	Apr. 29	3.74	July 30	3.92	Oct. 31	5.14
28	4.68	May 29	4.68	Aug. 28	4.78	Dec. 1	5.05
Feb. 28	4.77	June 30	4.74	Sept. 29	5.44	29	5.08
Mar. 28	4.73						

IrIr 10. W. M. P. Paint River Profile well 6. U. S. Forest Service, Ottawa National Forest. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, T. 44 N., R. 35 W. Near Gibbs City. Driven observation water-table well in sand, diameter 1 $\frac{1}{2}$ inches, depth 17 feet, screen 14-17. Land-surface datum is 1,479.30 feet above msl. Highest water level 8.46 below lsd, May 2, 1951; lowest 13.40 below lsd, Oct. 26, 1948. Records available: 1948-52.

Jan. 3	12.70	Apr. 29	10.80	July 30	10.94	Oct. 31	12.61
28	12.05	May 29	11.82	Aug. 28	11.95	Dec. 1	12.09
Feb. 28	12.16	June 30	11.98	Sept. 29	12.42	29	12.50
Mar. 28	12.18						

IrIr 11. W. M. P. well 34. Michigan State Highway Dept. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 33, T. 45 N., R. 35 W. Near Iron River. Driven observation water-table well in sand and gravel, diameter 1 $\frac{1}{2}$ inches, depth 12 feet, screen 9-12. Highest water level 2.17 below lsd, Aug. 1, 1951; lowest 8.44 below lsd, Mar. 15, 1949. Records available: 1948-52.

Jan. 3	3.43	Apr. 30	3.10	July 30	2.76	Oct. 31	4.20
28	3.75	May 27	3.29	Aug. 28	3.15	Dec. 1	4.59
Feb. 28	4.12	June 30	3.61	Sept. 29	3.77	29	4.91
Mar. 28	4.48						

Mastodon Township

IrMt 1. W. M. P. No. 7. Iron County Road Commission. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 33, T. 42 N., R. 31 W. Driven observation water-table well in glacial till, diameter 1 $\frac{1}{2}$ inches, depth 8 feet, screen 5-8. Highest water level 0.59 below lsd, Apr. 13, 1950; lowest 6.28 below lsd, Oct. 13, 1948. Records available: 1948-52.

Jan. 3	2.59	Apr. 30	1.56	July 30	2.28	Oct. 31	4.34
28	2.60	May 27	2.37	Aug. 28	3.20	Dec. 1	3.46
Feb. 28	3.00	June 30	2.03	Sept. 29	3.98	29	4.25
Mar. 28	2.66						

IrMt 2. W. M. P. No. 8. Joseph Giachino. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 33, T. 42 N., R. 31 W. Dug domestic water-table well in glacial till, diameter 15 inches, depth 12 feet, tile cased. Highest water level 1.89 below lsd, Oct. 30, 1951; lowest 11.51 below lsd, Feb. 15, 1951. Records available: 1945-52.

Jan. 3	5.91	Apr. 30	4.34	July 30	2.92	Oct. 31	9.48
28	8.10	May 27	6.59	Aug. 28	5.70	Dec. 1	10.26
Feb. 28	8.20	June 30	5.99	Sept. 29	8.32	29	10.37
Mar. 28	8.96						

IrMt 3. W. M. P. No. 5. Iron County Road Commission. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 10, T. 41 N., R. 31 W. Driven observation water-table well in sand and gravel, diameter 1 $\frac{1}{2}$ inches, depth 17 feet, screen 14-17. Highest water level 8.47 below lsd, July 3, 1952; lowest dry Dec. 15, 1948, February - July, 1949, Sept. 29, Oct. 31, 1952. Records available: 1948-52.

Jan. 3	8.47	Apr. 30	11.02	July 30	9.58	Oct. 31	(f)
28	11.49	May 27	10.27	Aug. 28	10.79	Dec. 1	13.54
Feb. 28	12.42	June 30	10.48	Sept. 29	(f)	29	13.45
Mar. 28	12.98						

Stambaugh Township

IrSt 1. W. M. P. No. 28. U. S. Forest Service, Ottawa National Forest. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 23, T. 45 N., R. 37 W. Driven observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$ inches, depth 8 feet, screen 5-8. Highest water level 0.75 below lsd, Aug. 31, 1951; lowest 4.72 below lsd, Sept. 11, 1948. Records available: 1948-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	2.02	Apr. 30	1.29	July 30	1.74	Oct. 31	3.07
28	2.21	May 27	1.89	Aug. 28	2.81	Dec. 1	2.69
Feb. 28	2.27	June 30	1.77	Sept. 29	3.28	29	2.69
Mar. 28	2.28						

IrSt 2. W. M. P. Brule River Profile well 1. State Highway Dept. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 15, T. 42 N., R. 36 W. State Highway at Brule River. Driven observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$ inches, depth 6 feet, screen 3-6. Land-surface datum is 1,543.92 feet above msl. Highest water level 1.25 below lsd, Apr. 13, 1950; lowest 3.17 below lsd, Oct. 26, 1948. Records available: 1948-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	2.09	Apr. 30	1.61	July 30	1.71	Oct. 31	2.85
28	1.79	May 27	1.94	Aug. 28	2.54	Dec. 1	2.64
Feb. 28	1.74	June 30	1.89	Sept. 29	2.85	29	2.58
Mar. 28	1.79						

IrSt 3. W. M. P. Brule River Profile well 2. State Highway Dept. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 15, T. 42 N., R. 36 W. State Highway 73 and Brule River. Driven observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$ inches, depth 7 feet, screen 4-7. Land-surface datum is 1,545.60 feet above msl. Highest water level 0.55 below lsd, July 3, 1951; lowest 3.10 below lsd, Oct. 26, 1948. Records available: 1948-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	1.77	Apr. 30	1.01	July 30	1.10	Oct. 31	2.51
28	1.69	May 27	1.09	Aug. 28	1.94	Dec. 1	2.36
Feb. 28	1.67	June 30	1.43	Sept. 29	2.39	29	2.45
Mar. 28	1.57						

IrSt 4. W. M. P. Brule River Profile well 3. William Young Estate. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 15, T. 42 N., R. 36 W. Near Brule River. Driven observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$ inches, depth 14 feet, screen 11-14. Land-surface datum is 1,554.36 feet above msl. Highest water level 4.08 below lsd, Apr. 18, 1951; lowest 8.29 below lsd, Oct. 26, 1948. Records available: 1948-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	6.33	Apr. 30	4.71	July 30	5.15	Oct. 31	7.14
28	6.56	May 27	5.85	Aug. 28	6.19	Dec. 1	7.01
Feb. 28	6.73	June 30	6.01	Sept. 29	6.93	29	7.20
Mar. 28	6.82						

Marquette County

Michigamme Township

MqMc 1. W. M. P. No. 13. Marquette County Road Commission. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 22, T. 49 N., R. 30 W. Champion. Driven observation water-table well in sand and gravel, diameter 1 $\frac{1}{4}$ inches, depth 17 feet, screen 14-17. Highest water level 0.64 below lsd, May 3, 1951; lowest 13.32 below lsd, Sept. 2, 1948. Records available: 1948-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	9.79	Apr. 30	7.05	July 30	10.16	Oct. 31	11.06
28	10.18	May 27	9.78	Aug. 28	10.72	Dec. 1	10.49
Feb. 28	10.52	June 30	10.09	Sept. 29	11.02	29	10.57
Mar. 28	10.67						

Republic Township

MqRe 1. W. M. P. No. 4. Arnold Janofski. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 1, T. 45 N., R. 30 W. Dug unused water-table well in glacial till, diameter 36 inches, depth 30 feet corrugated metal pipe cased. Highest water level 24.38 below lsd, Dec. 13, 1951; lowest 29.28 below lsd, Mar. 15, 1949. Records available: 1945-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	24.40	Apr. 11	g24.56	July 14	g24.79	Oct. 15	g25.39
14	g24.57	30	24.76	30	24.84	31	25.53
28	24.71	May 13	g24.60	Aug. 15	g24.90	Nov. 13	g25.72
Feb. 15	g24.87	27	24.52	28	25.02	Dec. 1	25.79
28	24.96	June 13	g24.56	Sept. 15	g25.15	15	g26.91
Mar. 14	g25.08	30	24.69	29	25.27	29	26.01
28	25.18						

g By Geological Survey.

NEW HAMPSHIRE

By Walter MacDonald, Jr.

Scope of Water-Level Program

The observation-well program in New Hampshire inaugurated in 1942 was continued in 1952. Three wells were utilized for measurements: two, Hill 1 and New London 1, in Merrimack County, measured weekly; and one, Auburn 8, in Rockingham County, equipped with a recording gage. See figure 12 for locations.

Precipitation

Precipitation for the State as a whole during 1952 was 41.97 inches, 2.48 inches above normal and 7.40 inches less than in 1951. Precipitation was close to or above normal except from July through November. October was the driest month and December the wettest.

Interpretation of Water-Level Fluctuations

The water levels in New Hampshire follow a seasonal pattern. Water levels remain constant through February with occasional deviations depending on local periods of thawing and freezing. They then rise during March and early April until plant growth commences, resulting in a decline which continues through October. During the remainder of the year water levels generally rise until the ground is frozen. In 1952 water levels were at or slightly above average at the beginning of the year. They then followed the seasonal pattern until October with a rise in March and April and a decline from then on. The levels were somewhat below the average in southernmost New Hampshire but elsewhere approximated the seasonal pattern. The decline continued through November due to deficient rainfall and the normal rise in levels was delayed until December when abnormally high precipitation brought the levels up to normal. Water levels were approximately the same at year's end as in 1951, resulting in no net loss or gain in ground-water storage.

Acknowledgments

The Manchester Water Works continued periodic measurements of water levels at Auburn 8 and maintained the recording gage installed on this well.

Well-Numbering System

Wells in New Hampshire are numbered on a town basis in the order that the wells are inventoried.

Well Descriptions and Water-Level Measurements

(Water-level measurements are in feet below land-surface datum.)

Merrimack County

Hill 1. J. E. Norcross. Lat. 43°33'54", long. 71°44'50". Dug unused water-table well in sandy glacial till, diameter 18 inches, depth 11 feet. Land-surface datum is about 500 feet above msl. Highest water level 2.43 below lsd, Apr. 13, 1952; lowest dry several times in 1947, 1948, 1949, and 1950. Records available: 1942-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	8.36	Feb. 24	7.45	Apr. 13	2.43	May 31	6.44
12	8.14	Mar. 2	8.42	20	3.37	June 15	7.41
20	7.44	9	8.41	27	4.41	22	8.36
27	7.96	16	6.45	May 4	6.43	29	8.37
Feb. 3	7.42	23	7.36	11	7.42	July 6	9.38
10	6.44	30	6.45	18	7.42	17	8.43
18	7.43	Apr. 6	3.37	29	7.42	20	8.38

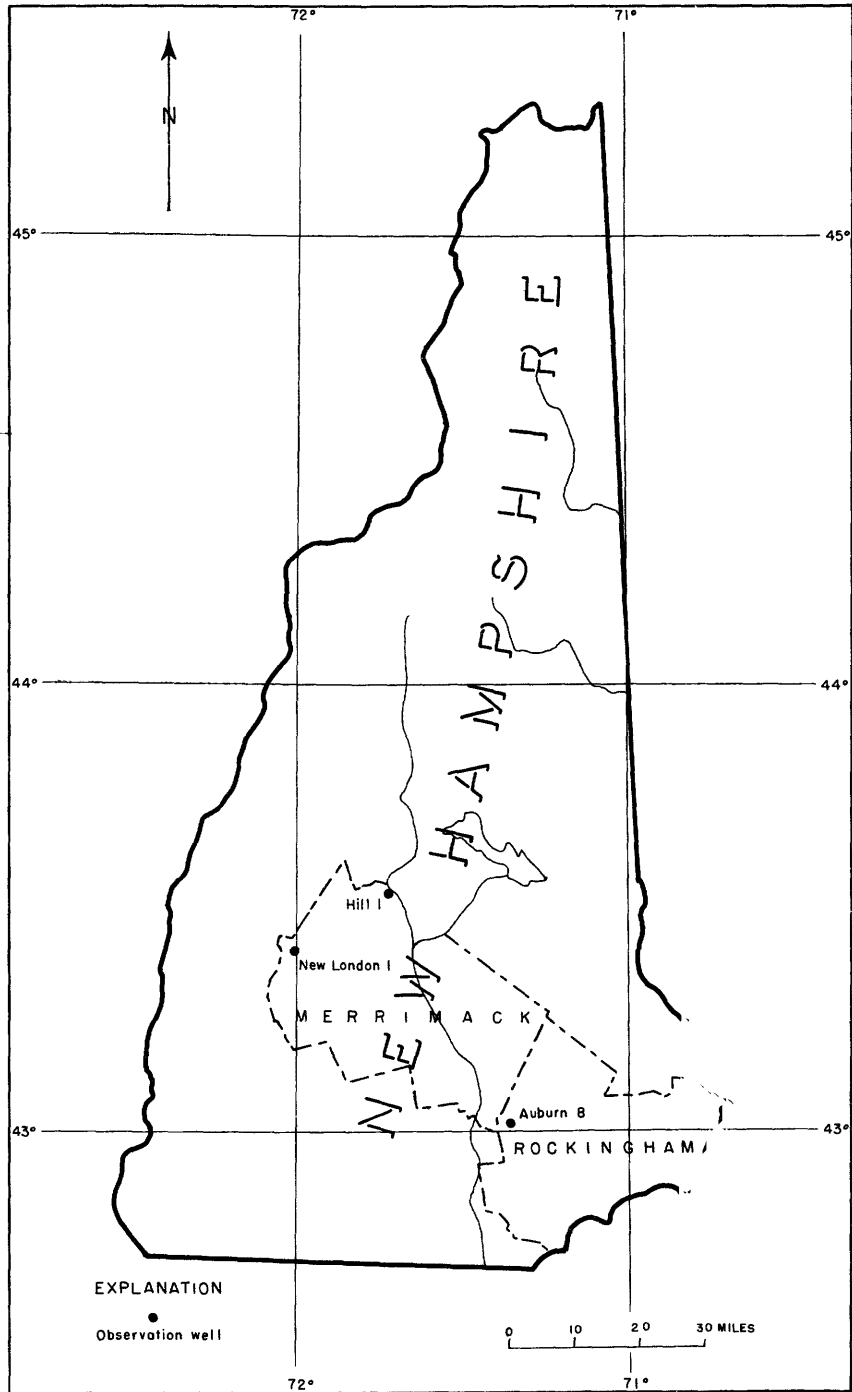


Figure 12. --Location of observation wells in New Hampshire, 1952.

Hill 1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 27	8.43	Aug. 31	9.37	Oct. 5	9.43	Nov. 23	10.56
Aug. 3	9.36	Sept. 7	9.40	12	9.43	30	10.36
10	9.37	14	9.41	26	10.46	Dec. 7	10.63
17	8.45	21	9.39	Nov. 2	9.95	14	7.45
24	9.37	28	9.40	9	9.44		

New London 1. W. S. Mariner. Lat. 43°23'46", long. 71°57'09". Dug unused water-table well in sandy glacial till, diameter 36 inches, depth 21 feet. Land-surface datum is about 1,020 feet above msl. Highest water level 0.87 below lsd, Apr. 6, 1952; lowest 16.43 below lsd, Feb. 8, 1948. Records available: 1947-52.

Jan. 6	6.46	Apr. 6	0.87	July 6	9.57	Oct. 5	13.87
13	6.91	13	1.65	13	10.08	12	13.91
20	7.15	20	3.03	20	10.73	19	14.39
27	6.59	27	4.66	27	10.97	26	14.56
Feb. 3	6.09	May 4	5.87	Aug. 3	11.36	Nov. 2	14.79
10	5.71	11	6.44	10	11.78	9	14.91
17	5.83	18	6.46	17	11.99	16	15.06
24	5.87	25	7.04	24	12.05	23	15.26
Mar. 2	6.16	June 1	7.05	31	12.67	30	15.40
9	7.41	8	6.93	Sept. 7	12.89	Dec. 7	15.51
16	7.21	15	6.86	14	13.07	14	12.36
23	7.26	22	8.11	21	13.31	21	9.21
30	5.00	29	8.97	28	13.47	28	9.24

Rockingham County

Auburn 8. Manchester Water Works. Lat. 43°00'21", long. 71°18'46". Dug unused water-table well, diameter 32 inches, depth 7 feet. Land-surface datum is about 300 feet above msl. Highest water level 0.50 below lsd, Mar. 22, 1948; lowest 7.22 below lsd, Oct. 11, 1950. Records available: 1942-52.

Daily noon water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.51	1.49	1.78	1.59	1.68	1.78	2.50	5.31	4.59	5.12	5.23	3.55
2	1.53	1.56	1.79	1.42	1.71	1.69	2.69	5.34	4.05	5.17	5.31	3.55
3	1.54	1.56	1.81	1.46	1.73	1.82	2.89	5.41	....	4.95	5.32	3.56
4	1.58	1.35	1.82	1.46	1.75	1.87	3.03	5.43	....	4.57	5.33	3.58
5	1.59	1.44	1.82	1.45	1.77	1.80	3.14	5.52	....	4.48	5.34	3.56
6	1.60	1.50	1.68	1.17	1.79	1.87	3.28	4.73	....	4.48	5.33	2.53
7	1.62	1.52	1.71	1.36	1.75	1.91	3.42	4.43	....	4.52	5.34	2.55
8	1.62	1.54	1.75	1.43	1.81	1.96	3.53	4.35	4.46	4.49	5.38	2.67
9	1.63	1.55	1.76	1.47	1.84	1.95	3.65	4.36	4.54	4.50	5.39	2.73
10	1.64	1.56	1.77	1.49	1.87	1.98	3.74	4.43	4.60	4.55	5.38	2.77
11	1.64	1.56	....	1.52	1.85	1.96	3.01	4.17	4.69	4.61	5.37	2.78
12	1.64	1.58	1.42	1.55	1.47	1.99	3.04	4.04	4.77	4.65	5.31	....
13	1.65	1.61	1.40	1.59	1.69	2.06	3.30	2.73	4.83	4.70	5.29	....
14	1.67	1.62	1.46	1.30	1.74	2.12	3.53	2.93	4.92	4.74	5.25	....
15	1.67	1.63	....	1.49	1.76	2.16	3.75	3.22	4.97	4.78	5.23	2.08
16	1.62	1.69	....	....	1.74	2.26	3.90	3.45	4.99	....	5.19	2.10
17	1.62	1.70	1.70	....	1.80	2.27	4.04	2.17	5.06	....	5.09	2.17
18	1.55	1.69	1.70	....	1.80	2.31	4.18	2.53	5.13	....	4.98	2.19
19	1.61	1.70	1.70	....	1.84	2.28	4.26	2.83	5.15	....	4.89	2.23
20	1.51	1.72	1.70	....	1.86	2.43	4.34	3.05	4.79	5.02	4.85	2.25
21	1.57	1.72	1.68	1.71	1.69	2.51	4.95	3.24	4.70	5.05	4.81	2.28
22	1.60	1.73	1.68	1.72	1.78	2.51	4.48	3.37	4.72	5.08	4.77	2.29
23	1.44	1.74	1.65	1.74	1.86	2.61	4.58	3.54	4.77	5.10	4.13	2.07
24	1.55	1.74	1.65	1.77	1.89	2.68	4.68	3.70	4.80	5.13	3.68	1.90
25	1.57	1.74	1.62	1.77	1.76	2.46	4.81	3.87	4.80	5.17	3.67	1.91
26	1.53	1.75	1.63	1.57	1.72	2.62	4.91	4.02	4.80	5.21	3.67	1.94
27	1.38	1.76	1.58	1.69	1.84	2.59	5.00	4.15	4.85	5.21	3.56	1.99
28	1.37	1.76	1.58	1.47	1.89	2.76	5.06	4.27	4.94	5.22	3.48	2.06
29	1.45	1.78	1.59	1.57	1.92	2.81	5.14	4.36	5.00	5.25	3.51	2.09
30	1.48	....	1.59	1.65	1.86	2.25	5.22	4.46	5.07	5.26	3.53	2.10
31	1.50	....	1.60	....	1.89	....	5.29	4.53	....	5.27	....	2.12

NEW JERSEY

By Charles R. Austin

Scope of Water-Level Program

The observation-well program in New Jersey was continued in 1952 in cooperation with the State Department of Conservation and Economic Development, Division of Water Policy and Supply. Measurements were made in 200 wells. Measurements were made monthly or less frequently in some wells, weekly in others, and several times a day in those which were being observed during pumping tests. At the end of the year, continuous records from recording gages were being obtained from 88 wells. Figure 13 shows the location of the wells, the records of which are given in this report, except for those in Middlesex County and the western portion of Salem County. Figures 14 and 15 show the wells reported in these areas.

Precipitation

Precipitation for the year 1952 averaged 54.70 inches and it was for the State as a whole the wettest year since 1903. The northern quarter of the State received the greatest rainfall. This area includes Bergen and Essex Counties, in which are wells whose water levels are reported in this section. During the year, rainfall was normal or above normal each month throughout the State except during October. The result of this continuously high precipitation caused many wells to show record highs and generally higher average levels than in the last few years.

Interpretation of Water-Level Fluctuations

Atlantic County. -- In the Atlantic City area, the artesian pressure in the Atlantic City Water Works well (36.13.2.9.1) at Pleasantville, which taps the Atlantic City 800-foot sand unit of the Kirkwood formation, showed a seasonal trend similar to previous years. Owing to increased pumping from these sands, the level until June 5 was approximately one-half foot below that of 1951. Above-average rainfall brought these levels up in June to those of 1951 and continued the same as 1951 for the balance of the year. In the Longport well (30.23.1.9.6), which also taps the Atlantic City 800-foot sand unit of the Kirkwood formation, the water levels followed the same general pattern as in preceding years, which is a seasonal decline during the months of June, July, and August, and the recovery which starts immediately after Labor Day, at which time most of the hotels in this area close for the season. The levels in this well were approximately the same during 1952 as in 1951. On January 1, 1952, the level was 43.8 feet below msl and on December 31, 1952, the reading was 44.7 feet below msl, compared with 43.5 feet below msl on January 1, 1951, and 44.0 feet below msl on December 31, 1951. In general water levels in the Atlantic City area have been declining during the last few years owing to increased pumping. The above-average rainfall of 1952 may have checked this decline to some extent and a decrease in pumping in some sections may also be a contributing factor.

Bergen County. -- The water level in the Baker well (26.3.1.4.3) at East Paterson has been rising since 1950. During 1951 the average was 10 feet higher than in 1950, and in 1952 the average was about 8 feet higher than in 1951. The water level on January 1, 1952, was 39.8 feet above msl compared with 21.9 feet above msl on January 1, 1950; and on December 31, 1952, the level was 41.8 feet above msl compared with 30.0 feet above msl on the same date in 1950. This increase can be attributed to the excessive rainfall in the northern counties of the State. The same trend was also observed in the Garfield well (26.3.1.7.3) until May 15, 1952, on which date the level dropped to about the same as those of 1951 and remained approximately the same for the balance of the year. Increased industrial usage near this well might be the reason for this decline.

Burlington County. -- A number of record highs were recorded in the Penn State Forest well (32.23.6.6.8) from January through August. This can be attributed to above-normal rainfall.

Camden County. -- In the Camden area, water levels were slightly below those of 1951. A low of 30.5 feet below msl was observed in the New Jersey Water Company well 10 (31.2.4.5.1) on June 28, 1952, in comparison with the record low of 31.2 feet below msl recorded on August 18, 1951. These lows can be attributed mainly to increased pumping in this area.

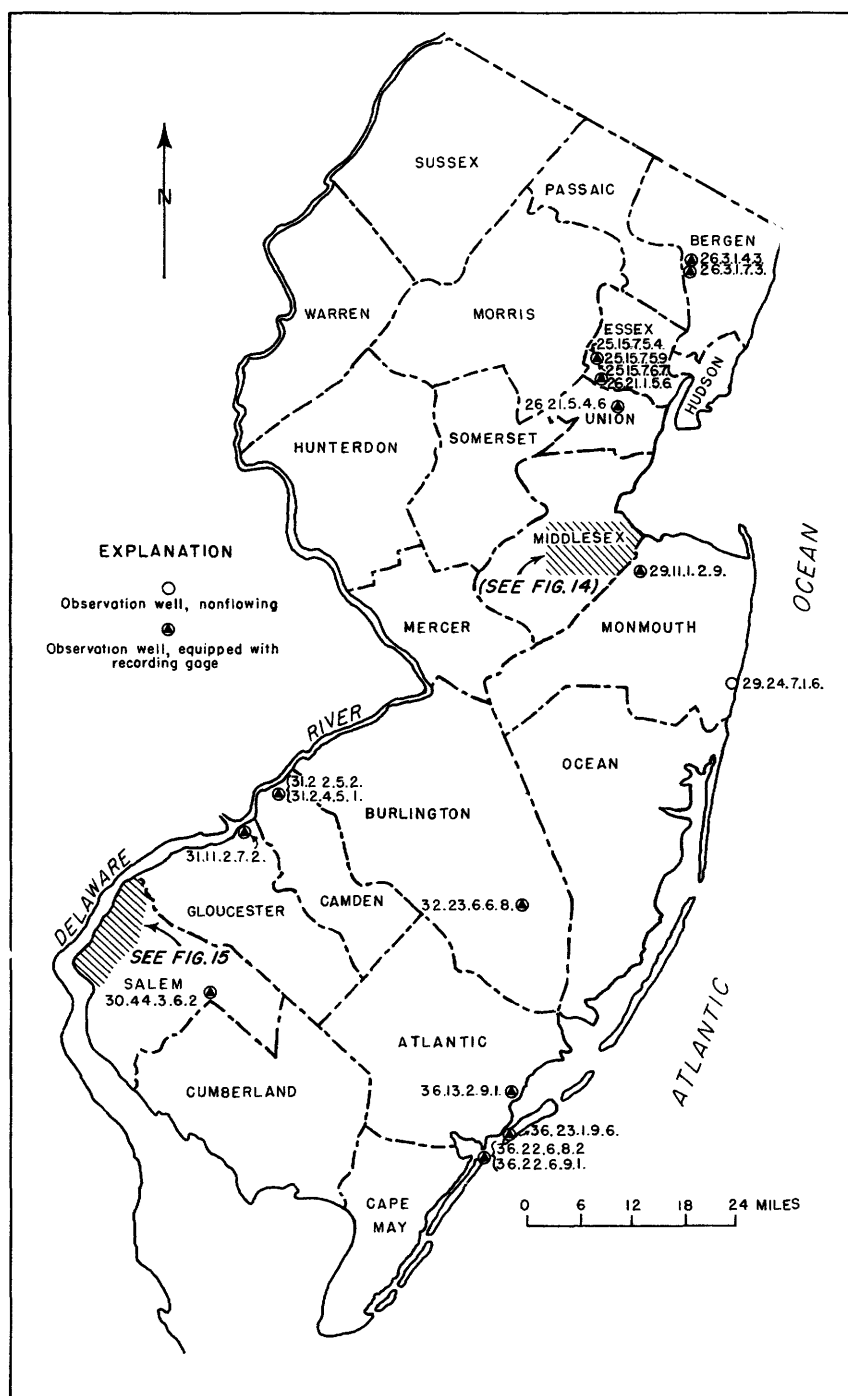


Figure 13. --Location of observation wells in New Jersey, 1952.

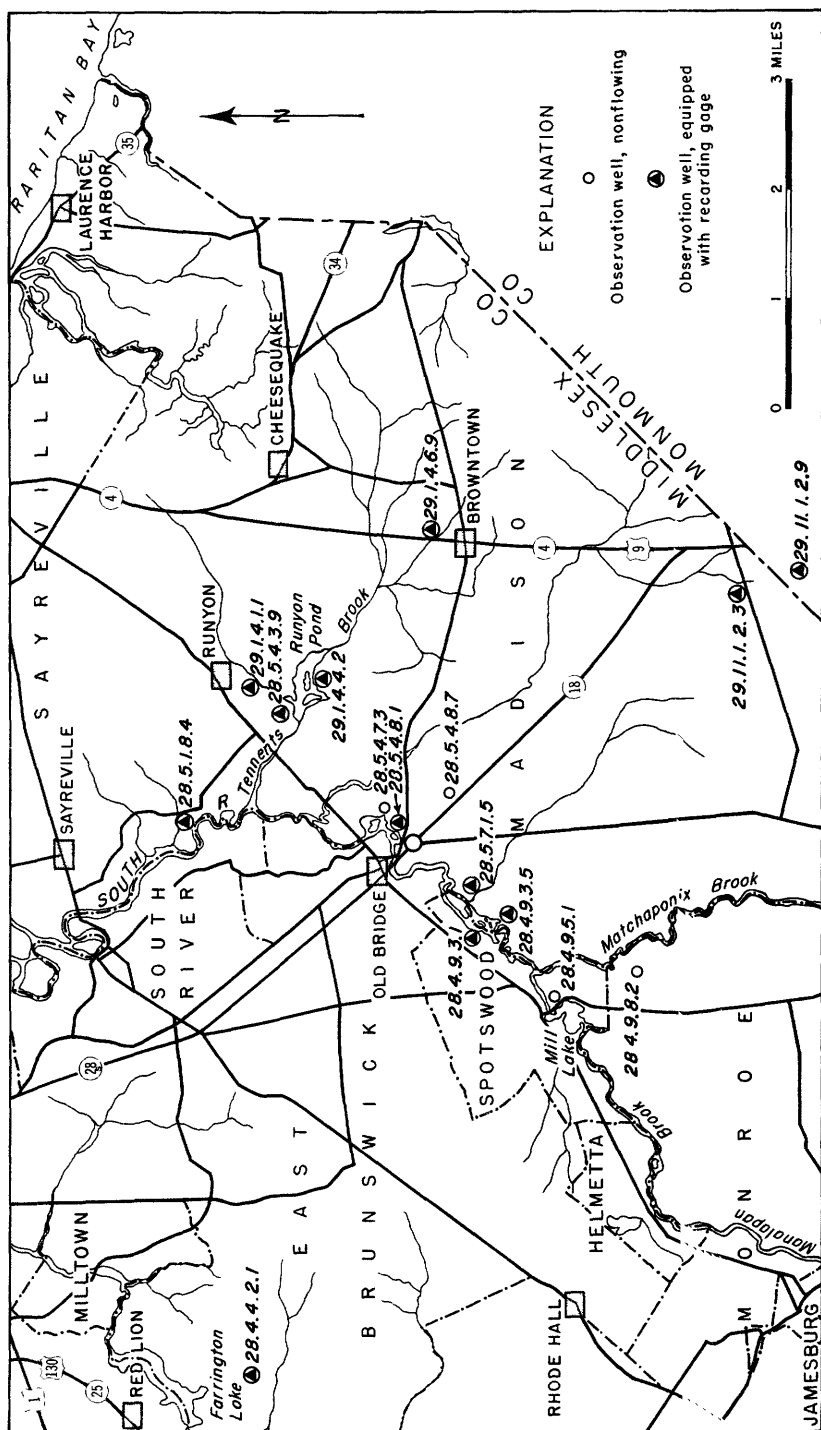


Figure 14. --Location of observation wells in Middlesex County, N. J., 1952.

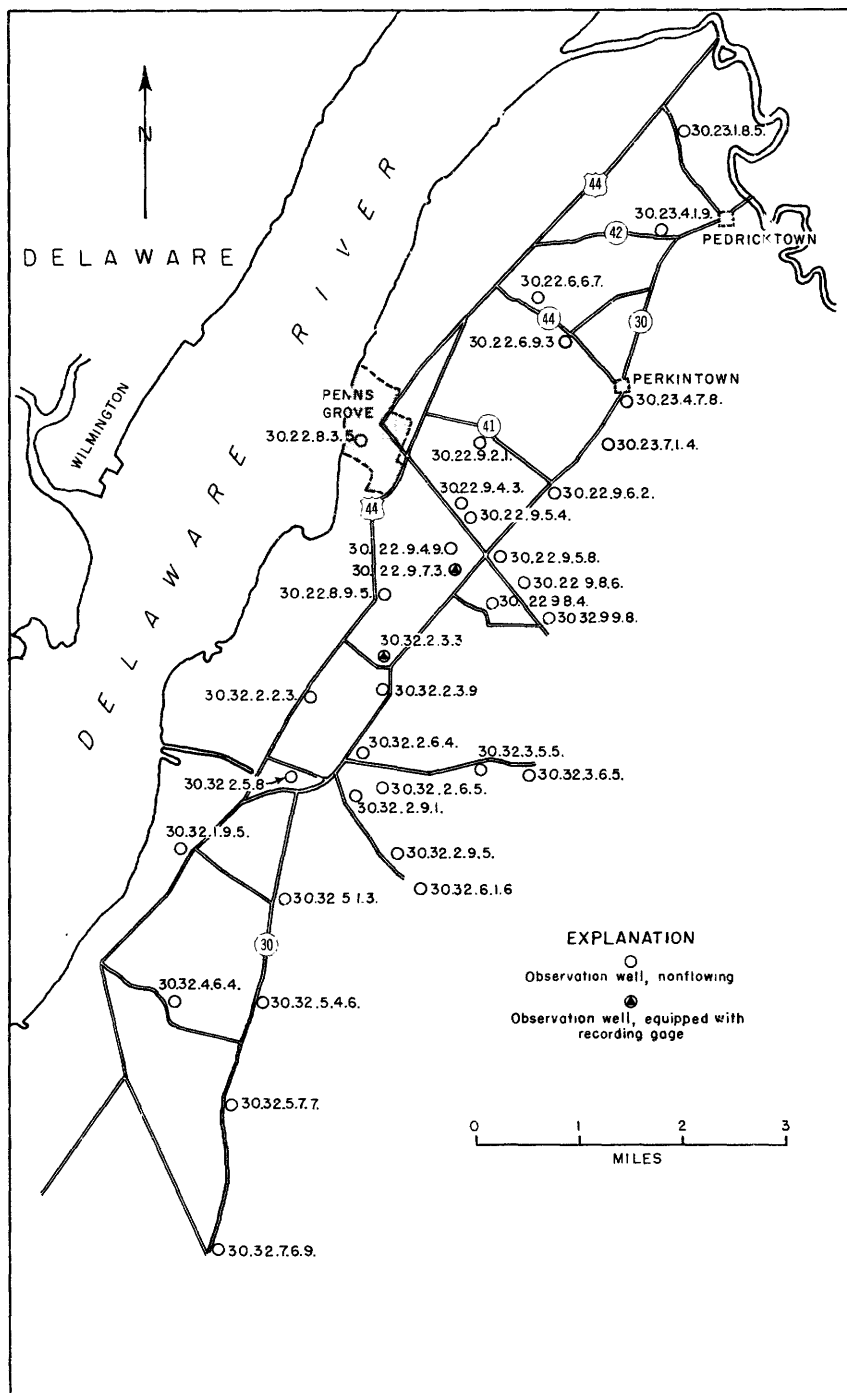


Figure 15. --Location of observation wells in Salem County, N. J., 1952.

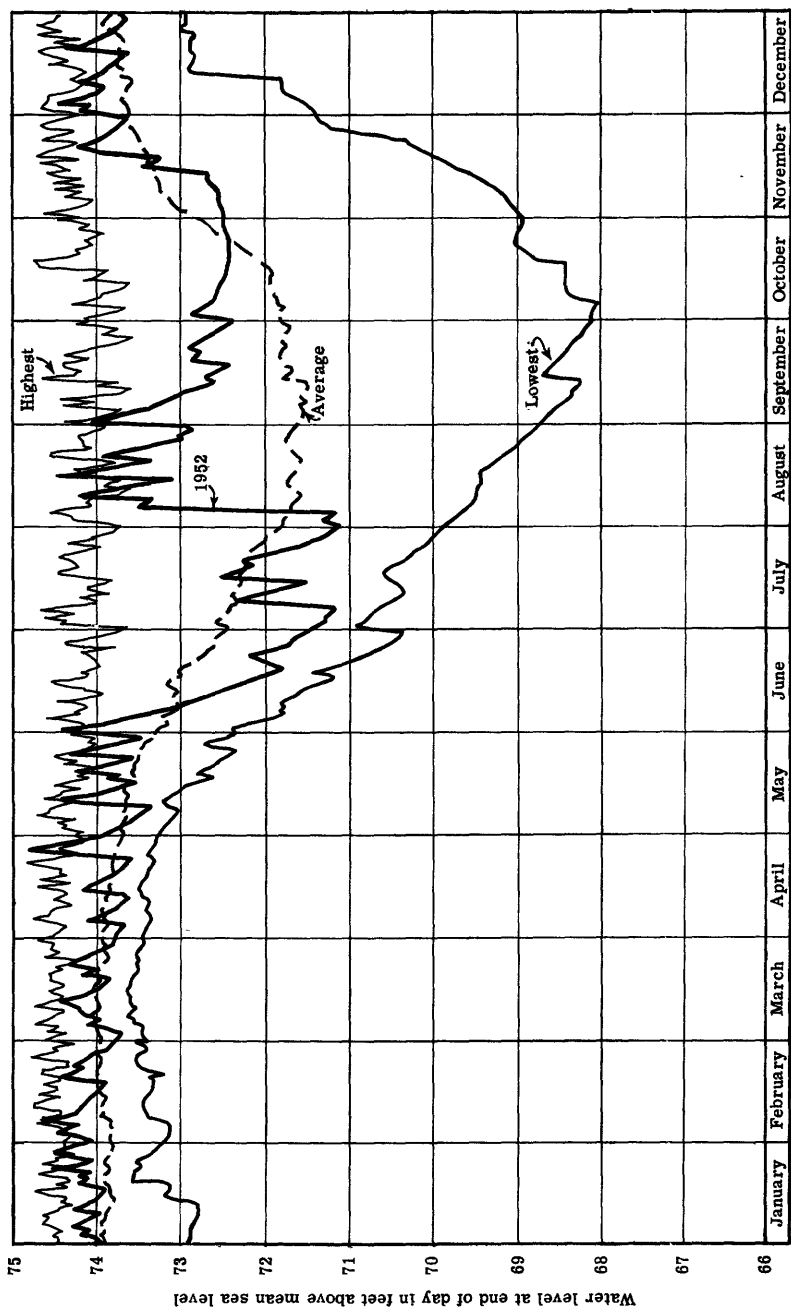


Figure 16. -- Water level in 1952 and highest, lowest, and average from 1923 to 1951 in well 29.11.2.3, Middlesex County, N. J.

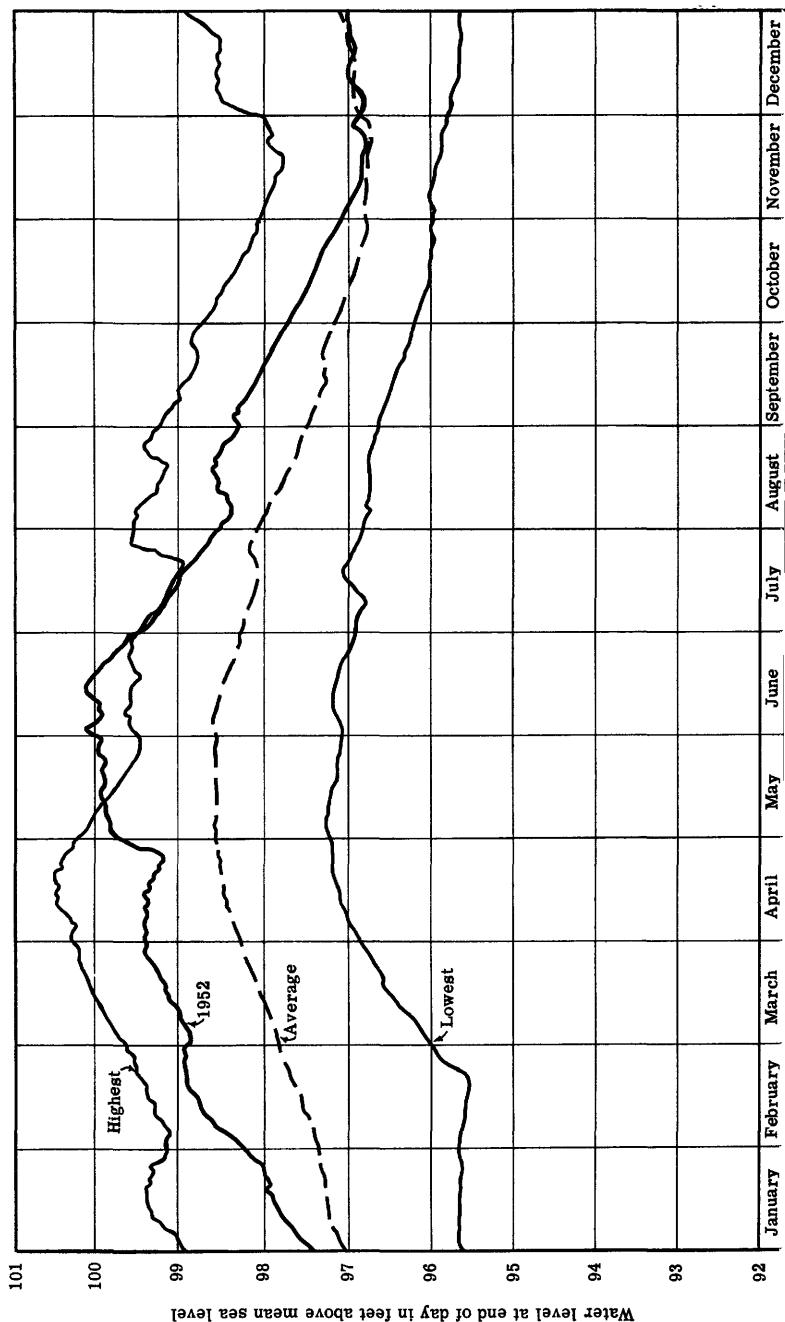


Figure 17. --Water level in 1952 and highest, lowest, and average from 1936 to 1952 in well 29.11.1.2.9, Monmouth County, N. J.

Cape May County. --The water level in the American Ice Company well (36.22.6.8.2) was approximately 5 feet higher throughout the year than in 1951. This can be attributed partly to a slight decline in usage due to increased rainfall during the lawn sprinkling season.

The Normandie Hotel well (36.22.6.9.1) maintained a level comparative with the years of 1950 and 1951. These levels at the beginning and end of each year were about 35 feet below msl. The extreme of range during the pumping season of June, July, and August was approximately 62.5 feet below msl for the past 3 years.

Middlesex County. --The Joseph Morrell well (29.11.1.2.3), near Old Bridge in Middlesex County, is considered to be a reliable index of the amount of water stored in the ground, particularly during the growing season. This well responds quickly to precipitation and is so situated that it is not affected by pumping. During the year 1952 this well showed levels slightly higher than average except during the months of April, May, July, and November. Water levels began their usual seasonal decline on June 1, and on June 9 fell to below average where they stayed, with the exception of July 17-20, until August 6. Heavy rainfall on this date caused the levels to rise abruptly to approximately 2 feet above average and further rainfall maintained these levels above average for the balance of the year except for the period from October 25 to November 19. Figure 16 is a composite hydrograph which shows the highest, lowest, and average water levels at the end of each day from 1923 to 1951. The 1952 record has been plotted as a separate line to show its relation to the average and record highs and lows. In the Runyon area (see fig. 14) water levels were generally higher than last year, when a number of record lows were recorded. This rise in the water level can be attributed to above average rainfall during the year.

Monmouth County. --The Rulif Hulsart well (29.11.1.2.9) is a reliable index of ground-water levels in this area. A composite hydrograph (figure 17) showing the highest, lowest, and average end-of-day water levels for the years 1936 to 1952, indicates the seasonal trends. Throughout the year, except the month of December, water levels were approximately 1 foot higher than average. For the period of May 11 to June 30 record highs for these days were recorded. The levels followed the usual seasonal pattern and during the month of December were closely following the annual average.

Salem County. --Record highs were observed in 15 wells in Salem County (see fig. 15): 14 occurred in February and 1 in May. Fourteen of these wells were driven for observation purposes and all but 2 tap the Cape May formation, one of which is in the Magothy and Raritan formation and the other in Cohansey sand. Levels at the end of the year were above average in nearly all wells in this county.

Union County. --A record high was observed in the Union County Park Commission well (26.21.5.4.6) on June 2 when the reading was 65.94 feet above msl. The previous high occurred on December 31, 1945, when the level was 65.02 feet above msl. The water level in this well was above average from January through June; during the last half of July and the first week in August the level was about average; the last 3 weeks in August, all of September, and the first half of October, was above average; the rest of October was average; November fell below average due to deficient rainfall in October; and the level was about average in December.

Well-Numbering System

The well-numbering system is based upon the State topographic atlas sheets. The first segment of the number is that of the atlas sheet on which the well location may be found. The second refers to the 6-minute rectangle in which the well is situated. The third refers to the 2-minute rectangle into which the 6-minute rectangle is subdivided. Each of the 2-minute rectangles is divided into nine equal rectangles which are numbered from 1 to 9, beginning in the upper left corner and numbering to the right. These divisions are again divided into nine equal rectangles and numbered in the same way.

Well Descriptions and Water-Level Measurements

Water levels are in feet below mean sea level unless otherwise indicated. When some measurements in a table are above and others are below the plane of reference a plus (+) or minus (-) sign is placed immediately preceding the first entry in each column of each mixed table. Readings that are between minus (-) signs are below the plane of reference and those between plus (+) signs are above the plane of reference.

Atlantic County

36.13.2.9.1. (A.C. 600-foot) Atlantic City Water Dept. At pumping station between Absecon and Pleasantville. Drilled unused artesian well in Atlantic City 807-foot sand unit of Kirkwood formation, diameter 10 inches, depth 692 feet. Land-surface datum is 12.58 feet above msl. Highest water level 3.05 below msl, Mar. 28, 1925; lowest 28.2 below msl, Oct. 4, 1951. Records available: 1925-52.

36.13.2.9.1--Continued.

Water level at end of day from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	25.1	24.3	23.4	22.8	22.4	22.5	23.1	25.1	26.7	27.9	27.9	27.5
2	25.1	24.3	23.4	22.8	22.4	22.5	23.1	25.1	26.8	27.9	27.9	26.6
3	25.1	24.3	23.4	22.8	22.4	22.5	23.2	25.2	26.8	27.9	27.8	26.5
4	25.1	24.1	23.3	22.8	22.4	22.5	23.2	25.3	26.9	27.9	27.8	26.5
5	25.0	24.0	23.3	22.8	22.3	22.5	23.3	25.4	26.9	27.9	27.7	26.5
6	24.9	24.0	23.3	22.8	22.3	22.5	23.3	25.4	27.0	28.0	27.7	26.5
7	24.9	24.0	23.3	22.8	22.3	22.6	23.4	25.5	27.0	28.0	27.6	26.4
8	24.8	24.0	23.3	22.8	22.3	22.6	23.4	25.5	27.1	28.0	27.6	26.4
9	24.8	24.0	23.3	22.8	22.3	22.6	23.5	25.6	27.1	28.0	27.6	26.4
10	24.7	24.0	23.2	22.8	22.3	22.6	23.5	25.6	27.2	28.0	27.6	26.4
11	24.7	24.0	23.1	22.8	22.3	22.6	23.6	25.7	27.2	28.0	27.6	26.4
12	24.7	24.0	23.1	22.8	22.3	22.6	23.7	25.7	27.3	28.0	27.5	26.4
13	24.7	24.0	23.1	22.8	22.3	22.6	23.8	25.8	27.3	28.0	27.5	26.4
14	24.7	24.0	23.0	22.7	22.4	22.6	23.8	25.8	27.4	28.0	27.5	26.3
15	24.7	23.9	23.0	22.7	22.4	22.7	23.9	25.8	27.4	28.0	27.5	26.3
16	24.7	23.9	23.0	22.7	22.4	22.7	24.0	25.9	27.5	28.0	27.5	26.3
17	24.7	23.8	23.0	22.7	22.4	22.7	24.1	25.9	27.5	28.0	27.5	26.2
18	24.6	23.8	23.0	22.6	22.4	22.7	24.1	26.0	27.5	28.0	27.5	26.2
19	24.6	23.8	23.0	22.6	22.4	22.7	24.2	26.1	27.6	28.0	27.5	26.2
20	24.6	23.8	23.0	22.6	22.4	22.8	24.2	26.1	27.6	28.0	27.5	26.2
21	24.6	23.8	23.0	22.6	22.4	22.8	24.3	26.2	27.6	28.0	27.5	26.1
22	24.5	23.8	23.0	22.6	22.4	22.8	24.3	26.2	27.7	28.0	27.5	26.0
23	24.5	23.7	22.9	22.6	22.4	22.8	24.4	26.3	27.7	28.0	27.5	25.9
24	24.5	23.7	22.9	22.6	22.5	22.8	24.4	26.3	27.7	28.0	27.5	25.8
25	24.5	23.7	22.8	22.6	22.5	22.8	24.5	26.4	27.8	28.0	27.5	25.8
26	24.5	23.7	22.8	22.6	22.5	22.9	24.6	26.4	27.8	28.0	27.5	25.7
27	24.4	23.6	22.8	22.5	22.5	22.9	24.6	26.5	27.8	28.0	27.5	25.7
28	24.3	23.5	22.8	22.4	22.5	22.9	24.7	26.6	27.8	27.9	27.5	25.7
29	24.3	23.5	22.8	22.4	22.5	23.0	24.9	26.6	27.9	27.9	27.5	25.7
30	24.3		22.8	22.4	22.5	23.0	24.9	26.7	27.9	27.9	27.5	25.6
31	24.3		22.8		22.5		25.0	26.7		27.9		25.6

36.23.1.9.6. Borough of Longport. Northwest end of 14th Ave. Drilled unused artesian well in Atlantic City 800-foot sand unit of Kirkwood formation, diameter 6 inches, depth 803 feet, length of screen 50 feet. Land-surface datum is 5 feet above msl. This well is affected by tidal fluctuations. Highest water level 19 above msl when drilled in 1895; lowest 67.5 below msl, Sept. 2, 1951. Records available: 1924-52.

Daily average water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	43.8	43.1	....	41.0	....	....	57.6	....	66.2	58.3	52.0	47.4
2	43.9	42.9	41.3	40.6	....	44.9	58.4	....	65.8	57.9	52.2	46.8
3	44.0	42.5	41.4	40.5	....	45.1	59.2	....	65.3	57.5	52.0	46.1
4	44.0	41.6	40.7	40.9	....	45.5	60.4	....	64.9	57.1	51.6	46.3
5	43.8	42.2	41.3	40.6	42.9	45.6	....	....	64.7	57.0	50.9	46.4
6	43.6	42.5	41.2	....	42.7	45.7	....	63.8	64.7	56.8	50.8	46.4
7	42.7	42.4	40.9	....	42.9	46.6	....	62.9	64.9	56.4	51.2	46.5
8	42.8	41.2	41.1	....	43.4	47.9	....	62.2	....	55.9	51.1	46.1
9	43.2	42.2	41.2	....	43.4	48.8	....	61.7	63.9	55.7	50.6	45.9
10	43.2	42.2	41.2	....	43.9	48.5	....	61.9	63.7	54.9	50.2	45.8
11	43.4	....	40.6	....	44.1	48.0	....	62.0	63.6	54.1	49.9	45.5
12	43.6	....	41.4	....	43.9	48.5	....	62.3	63.4	54.3	49.9	45.9
13	43.4	42.5	41.3	....	43.7	49.2	....	62.1	63.3	54.5	49.6	46.2
14	43.2	....	....	....	43.8	50.7	....	62.1	63.7	54.6	49.7	46.2
15	42.9	....	41.1	....	43.8	52.1	....	62.2	62.9	54.3	....	46.1
16	43.3	....	41.5	....	44.3	53.1	....	62.5	61.8	53.9	....	46.3
17	43.1	....	41.1	....	44.8	53.7	....	63.0	61.7	53.7	48.4	46.2
18	43.1	....	40.9	....	44.6	53.8	....	63.7	61.6	53.8	48.0	46.1
19	e43.3	....	40.5	....	44.3	55.0	....	64.3	61.2	54.1	47.7	45.9
20	e43.1	....	40.7	....	43.7	56.0	....	64.4	60.4	53.9	47.3	45.8
21	43.4	....	40.8	....	43.3	57.1	....	64.6	60.5	53.7	....	45.2
22	42.8	....	40.6	....	43.8	....	....	64.2	60.3	53.6	47.2	44.3
23	42.9	....	40.4	....	44.3	....	....	64.4	59.4	53.4	47.7	44.6
24	43.5	....	40.4	....	45.0	....	....	64.9	58.7	53.5	48.2	45.5
25	43.4	....	40.6	....	44.6	....	....	65.3	58.6	53.1	48.1	45.6

36.23.1.9.6--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	42.9	....	40.7	....	44.1	....	....	65.6	58.5	52.7	47.8	45.7
27	43.1	....	40.6	....	....	57.0	....	65.9	58.3	52.7	47.7	45.5
28	e42.5	....	40.7	....	....	57.8	....	65.7	58.7	52.4	47.7	45.5
29	e42.2	....	40.8	....	44.6	58.2	....	65.8	58.9	52.4	47.6	45.3
30	42.6	....	41.1	....	44.8	57.7	....	....	58.5	52.7	47.6	45.5
31	42.9	....	41.1	....	....	....	....	66.1	....	52.4	....	44.7

Bergen County

26.3.1.4.3. William Wanke. 77 Rosemont Ave., East Paterson. Drilled unused artesian well in Brunswick formation of Triassic system, diameter 6 inches, depth 110 feet, cased to rock. Land-surface datum is 70 feet above msl. Highest water level 58.81 above msl, Oct. 26, 1947; lowest 21.8 above msl, Jan. 5, 1950. Records available: 1926-52.

Daily lowest water level, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	39.8	....	43.7	44.5	45.9	46.5	45.0	44.2	....	43.2	42.0	40.0
2	40.6	....	43.5	44.9	46.1	46.9	44.6	44.4	....	43.3	42.0	39.5
3	40.6	....	43.5	44.7	45.9	46.8	44.5	44.6	....	43.5	....	39.5
4	40.5	....	43.7	44.6	....	47.1	45.1	44.7	44.1	43.6	....	39.3
5	40.6	42.8	43.8	44.8	....	47.1	45.6	44.6	44.1	43.7	....	38.9
6	40.7	42.7	43.6	44.9	....	47.2	45.5	44.6	44.1	41.6	40.2	39.0
7	40.9	42.9	43.6	45.1	....	47.0	45.3	44.7	44.3	41.6	39.9	38.9
8	40.7	43.0	43.6	44.9	....	46.7	45.3	44.7	43.2	41.7	39.7	39.1
9	40.8	43.3	43.4	45.0	....	46.5	45.6	44.7	42.9	41.5	39.5	40.1
10	40.9	43.1	43.5	45.1	....	47.2	46.0	45.0	42.4	41.6	39.5	40.6
11	40.8	43.4	43.5	45.1	46.7	47.1	46.0	44.8	41.9	41.9	40.7	40.9
12	40.9	43.3	43.3	45.0	46.5	47.3	45.9	44.8	41.6	41.9	41.0	41.2
13	40.9	43.3	43.4	45.0	46.5	46.5	45.4	44.8	41.4	41.9	41.0	41.4
14	41.1	43.4	43.6	45.6	46.4	46.1	45.3	44.8	41.4	42.5	41.1	41.4
15	41.0	43.4	43.6	45.7	46.4	45.9	45.1	44.8	41.9	42.7	41.1	41.2
16	41.0	43.3	43.7	45.6	46.3	45.6	45.0	44.8	43.6	41.9	41.2	40.9
17	40.8	43.6	43.9	45.3	46.2	45.6	44.9	44.9	43.7	42.7	40.1	40.3
18	41.1	43.5	43.7	45.4	46.1	45.5	45.2	45.0	43.7	42.7	39.7	40.3
19	40.9	43.4	43.9	45.2	46.3	45.3	45.2	43.5	43.7	42.8	39.5	40.4
20	40.9	43.6	44.2	45.0	46.2	45.3	45.2	43.2	43.9	42.0	39.4	40.2
21	40.8	43.7	44.2	45.0	46.6	45.4	44.7	43.1	44.0	....	39.1	40.5
22	40.8	43.7	44.2	44.4	46.3	46.1	43.7	42.7	42.6	....	39.2	40.8
23	41.1	43.6	44.3	44.0	46.1	46.9	43.2	42.8	42.2	41.2	39.0	....
24	40.9	43.6	44.5	43.9	45.9	46.1	42.9	43.1	42.0	41.0	39.3	....
25	40.8	43.5	44.4	44.3	45.8	45.0	42.9	42.5	41.8	40.6	40.1	....
26	41.1	43.4	44.4	45.4	46.4	44.9	44.0	42.1	41.8	40.3	40.5	42.6
27	41.1	43.8	44.5	45.5	46.3	45.6	43.2	42.0	41.8	40.5	40.8	42.7
28	41.5	43.8	44.6	45.8	46.1	....	43.3	42.2	....	41.7	40.8	42.8
29	41.7	43.6	44.6	45.8	46.1	45.6	42.8	41.7	....	41.9	40.8	42.5
30	41.8	....	44.4	46.0	46.0	45.5	42.5	41.5	42.9	42.1	41.0	41.8
31	....	....	44.6	....	46.1	....	42.8	41.5	....	42.1	....	41.8

26.3.1.7.3. City of Garfield. East Paterson. Drilled unused artesian well in Brunswick formation, casing 0-30 extends 3 feet into sandstone of Triassic system, 30-353 open rock hole, diameter 12 inches, depth 353 feet. Land-surface datum is 65 feet above msl. Highest water level 56.2 above msl, Mar. 8, 1926; lowest 8.9 below msl, Sept. 26, 1949. Records available: 1926-52.

Daily lowest water level, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	26.8	27.6	28.2	30.6	39.5	39.6	21.5	11.4	27.3	10.5	6.0	12.1
2	27.8	28.0	28.2	30.4	38.2	25.6	19.8	11.3	14.8	10.2	9.0	11.0
3	27.1	28.2	28.3	30.1	39.4	25.7	18.3	13.8	13.2	9.3	9.0	12.1
4	27.0	29.6	28.4	30.1	40.1	25.0	18.2	12.6	12.6	7.7	9.8	9.2
5	27.0	28.9	28.0	30.1	40.3	27.2	17.7	13.4	12.2	7.4	10.1	7.6
6	27.2	28.9	27.9	30.5	40.4	26.0	17.7	11.6	12.3	7.0	9.7	6.8
7	26.9	28.9	27.8	30.6	40.5	28.2	17.3	11.6	13.2	8.8	10.0	12.7
8	26.8	29.0	27.8	30.5	40.5	28.7	16.8	11.9	12.8	9.3	11.3	10.4
9	26.7	29.1	27.8	30.5	40.6	28.6	....	12.9	11.8	7.5	19.1	8.8
10	26.5	29.1	28.0	30.6	40.5	26.4	19.0	19.6	11.7	6.6	13.6	8.0

26.3.1.7.3--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	26.5	30.2	27.9	30.5	40.6	27.5	17.1	13.6	10.9	5.8	13.6	12.4
12	26.5	29.5	27.8	30.5	40.7	24.2	17.3	11.6	10.4	5.3	11.6	7.8
13	26.5	29.5	27.8	30.7	40.7	23.5	17.6	12.4	10.4	5.1	10.4	6.4
14	27.5	29.5	28.2	31.4	40.7	25.3	16.0	12.2	16.2	4.8	8.6	6.8
15	27.2	29.5	28.2	31.3	38.6	26.3	15.1	11.8	12.4	5.1	13.7	10.5
16	26.6	29.4	28.7	31.3	29.4	23.3	15.6	12.6	11.9	5.1	23.1	9.5
17	26.3	29.4	29.0	33.3	32.8	24.4	14.7	11.6	11.4	4.9	13.7	9.2
18	26.3	29.4	28.9	33.9	40.3	22.9	15.2	12.6	12.6	4.3	12.8	9.3
19	26.3	29.2	29.0	34.7	26.9	22.2	14.1	12.4	18.8	4.2	10.9	8.6
20	29.3	29.2	29.4	35.0	33.0	21.2	13.4	12.4	20.2	4.2	12.0	6.7
21	28.4	29.0	29.4	36.4	28.3	20.9	13.8	12.6	20.6	4.6	12.0	11.4
22	27.4	28.9	29.4	37.3	24.7	25.5	15.3	12.2	20.9	5.6	20.3	11.7
23	26.3	28.8	29.6	37.6	24.5	21.3	14.2	12.4	22.2	6.6	25.2	11.8
24	26.0	29.1	29.9	37.7	24.2	20.1	13.4	19.6	12.9	6.8	13.6	11.7
25	26.0	28.9	29.8	38.0	24.2	20.1	13.2	22.8	11.9	6.0	12.9	19.5
26	26.1	28.8	29.8	38.4	....	20.3	12.3	23.7	11.5	5.7	11.3	16.2
27	26.4	28.9	29.9	38.8	22.9	19.1	12.3	23.3	11.6	4.6	11.1	13.4
28	26.6	28.6	30.0	39.0	22.6	19.1	17.5	22.7	12.6	6.7	10.7	11.5
29	27.3	28.5	30.1	39.1	22.3	30.0	14.4	22.2	11.2	7.2	12.0	11.9
30	27.3		30.2	39.4	22.3	23.0	12.9	22.2	10.6	7.8	20.0	13.3
31	27.4		30.5		37.3		12.1	24.1		7.6		13.6

Burlington County

32.23.6.6.8. U. S. Geol. Survey. Penn State Forest. Drilled observation water-table well in Cohansey sand, diameter 6 inches, depth 10 feet. Land-surface datum is 79 feet above msl. Highest water level 78.67 above msl, Feb. 3, 1939; lowest 73.18 above msl, Oct. 7, 1951. Records available: 1936-52.

Water level at end of day, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	77.46	e78.08	77.48	77.84	78.02	78.42	76.61	75.62	77.35	.....	75.45	.....
2	77.75	e78.15	77.40	77.80	77.97	78.14	76.55	75.79	77.26	.....	75.44	.....
3	77.80	e78.22	77.59	77.75	77.91	78.02	76.49	75.94	77.20	.....	75.42	.....
4	77.66	78.29	78.41	77.71	77.88	77.94	76.44	75.89	77.04	.....	75.43	.....
5	78.09	78.02	78.36	78.25	e77.86	77.90	76.39	.....	76.91	.....	75.42	.....
6	77.86	77.90	78.14	77.99	77.84	77.81	76.30	.....	76.83	.....	75.42	.....
7	77.71	77.82	78.06	77.87	77.76	77.71	76.24	.....	76.79	.....	75.39	.....
8	77.64	77.81	78.00	77.80	77.75	77.64	76.22	.....	76.70	75.95	75.37	.....
9	77.60	77.73	77.92	77.75	77.71	77.80	76.75	.....	76.64	75.93	75.37	.....
10	78.15	77.70	77.89	77.72	77.67	77.77	76.73	.....	76.58	75.91	75.37	.....
11	77.85	77.70	78.51	77.66	78.35	77.59	76.59	.....	76.51	75.90	.....	.....
12	77.75	77.63	78.18	77.64	78.18	77.50	76.45	77.83	76.46	75.87	.....	.....
13	77.68	77.60	78.33	77.76	78.01	77.43	76.35	77.76	76.40	75.84	.....	.....
14	77.62	77.57	78.10	77.95	77.92	77.37	76.24	77.64	76.38	75.80	.....	.....
15	77.60	77.53	78.02	78.26	77.85	77.32	76.15	77.53	.....	75.80	.....	.....
16	77.51	77.57	77.97	78.04	77.76	77.26	76.08	77.80	.....	75.80	.....	.....
17	77.50	78.27	77.90	77.87	77.70	77.21	76.01	77.55	.....	75.78	.....	.....
18	77.92	77.96	77.85	77.78	78.06	77.14	75.98	77.43	.....	75.77	.....	.....
19	77.75	77.83	78.51	77.71	77.89	77.07	75.94	77.34	.....	75.74	.....	.....
20	77.80	77.79	78.21	77.65	78.24	77.03	75.89	77.25	.....	75.71	.....	.....
21	77.61	77.73	78.07	77.57	77.99	77.05	76.23	77.22	.....	75.70	.....	.....
22	78.15	77.68	78.01	77.55	77.81	77.11	76.46	77.12	.....	75.68	.....	.....
23	78.03	77.65	78.35	77.56	77.73	77.20	76.38	77.04	.....	75.66	.....	.....
24	77.80	77.62	78.54	77.71	77.69	77.21	76.20	76.96	.....	75.64	.....	.....
25	77.71	77.60	78.25	78.02	78.40	77.05	76.08	76.88	.....	75.59	.....	.....
26	78.15	77.55	78.10	78.13	78.27	76.95	75.97	76.82	.....	75.58	.....	.....
27	78.26	77.77	78.02	78.65	78.04	76.87	75.91	76.75	.....	75.58	.....	.....
28	78.34	77.52	78.00	78.38	77.92	76.83	75.85	76.75	.....	75.56	.....	.....
29	78.15	77.48	77.93	78.24	77.83	76.79	75.78	76.73	.....	75.52	.....	.....
30	e78.11		77.88	78.11	78.24	76.71	75.74	76.67	.....	75.51	.....	.....
31	e78.01		77.84		78.35		75.69	76.64		75.50	.....	.....

e Estimated.

Camden County

31.2.2.5.2. City of Camden. Morris Station. Drilled unused artesian well in sand of Raritan formation, diameter 6 inches, depth 103 feet. Land-surface datum is 6 feet above msl. This well is affected by pumping in nearby well field. Highest water level 0.3 below msl, Mar. 19, 1936; lowest 35.84 below msl, June 14, 1926. Records available: 1924-42, 1945-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	...	4.6	...	...	...	2.1	3.8	4.7	2.9	4.7	5.0	4.3
2	4.7	4.7	...	...	...	2.6	4.0	4.0	3.7	4.6	3.9	4.3
3	...	3.9	...	...	...	2.8	4.1	2.9	4.1	4.8	4.8	4.4
4	...	3.9	...	...	...	2.9	3.4	4.1	4.2	4.2	5.1	4.3
5	...	...	...	...	...	3.2	3.3	4.4	4.2	3.6	5.0	4.0
6	...	...	...	...	...	3.3	3.2	4.2	4.3	4.4	4.8	3.9
7	...	...	...	...	...	3.0	4.1	4.0	4.1	4.6	5.2	3.5
8	...	...	...	...	...	2.2	3.9	4.2	3.6	4.5	5.2	4.3
9	...	...	...	...	...	3.2	3.5	3.5	3.8	4.4	4.8	4.3
10	...	...	...	...	...	3.4	...	2.7	4.2	4.4	4.8	4.4
11	...	...	...	...	...	3.6	3.4	3.6	4.5	4.4	5.2	4.3
12	...	...	...	...	...	3.6	2.9	3.8	4.6	3.4	5.4	4.3
13	...	...	...	...	...	3.5	...	4.2	4.6	4.3	5.4	3.8
14	...	...	4.0	...	3.1	3.5	...	4.3	4.4	4.7	5.5	3.2
15	...	...	3.6	...	3.1	2.3	...	4.5	4.0	4.7	5.0	4.0
16	5.2	...	...	...	3.0	3.3	...	3.9	4.5	4.8	4.0	4.5
17	5.2	...	...	...	2.9	3.8	...	3.0	4.5	4.9	5.0	4.5
18	5.0	...	...	...	2.4	4.0	...	3.9	4.5	4.6	5.1	4.6
19	...	...	...	...	2.7	3.9	...	4.5	4.5	4.0	5.0	4.8
20	4.3	...	...	...	2.7	4.0	...	4.5	4.6	4.8	4.3	4.7
21	5.3	...	...	...	2.9	3.1	...	4.4	4.6	4.9	4.3	4.0
22	4.9	...	...	...	3.3	2.6	...	4.7	3.9	4.9	3.6	4.1
23	4.9	...	...	...	3.3	3.4	...	4.7	4.3	4.9	2.5	4.2
24	5.2	...	...	...	3.0	3.6	...	4.4	4.6	4.9	3.5	4.3
25	5.2	...	...	...	2.6	3.9	...	4.3	4.6	4.7	3.9	3.9
26	4.4	...	...	...	2.6	4.1	...	4.5	4.7	3.9	3.9	3.9
27	3.9	...	...	...	2.6	4.0	...	4.7	4.5	4.3	3.5	3.6
28	...	...	...	...	2.7	3.2	3.9	4.8	4.4	4.7	4.1	3.9
29	...	...	...	...	2.7	2.7	4.2	4.9	4.2	5.1	4.0	4.7
30	4.5	...	...	...	2.7	3.6	4.4	4.9	4.7	5.2	3.3	4.8
31	...	...	...	...	2.2	...	4.6	4.5	...	5.4	...	...

31.2.4.5.1. New Jersey Water Co. well 10. Near pumping station on Cleveland Ave., Camden. Drilled unused artesian well in sand of Raritan formation, diameter 12 inches, depth about 185 feet. Land-surface datum is 11 feet above msl, measuring point is top of casing 11.90 feet above msl. Highest water level 1.26 above msl, Mar. 19, 1933; lowest 35.1 below msl, July 2, 1951. Records available: 1932-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	25.4	25.9	...	23.1	26.8	19.3	27.9	....	25.7	27.2	25.1	26.2
2	21.2	...	23.0	23.4	26.4	25.2	29.6	....	28.1	26.8	....	26.3
3	25.5	...	...	23.5	25.9	25.9	29.8	....	27.3	28.7	....	26.3
4	...	25.4	...	23.6	24.8	27.1	30.1	....	27.2	26.3	....	26.6
5	...	...	24.7	21.7	25.4	26.2	27.2	....	27.3	25.9	....	26.3
6	...	...	...	22.3	27.9	27.7	26.3	....	26.9	26.8	25.2	26.2
7	...	23.3	23.8	25.1	27.8	27.1	29.0	....	26.4	26.3	27.0	25.9
8	...	...	...	...	26.8	26.1	30.2	....	26.8	26.8	26.2	26.2
9	...	25.8	22.8	...	28.5	28.4	26.5	....	26.9	26.3	26.3	26.5
10	...	24.9	...	...	27.9	28.8	27.6	....	27.1	26.6	26.4	26.4
11	...	24.0	...	...	...	27.8	26.4	28.0	28.7	26.0	26.4	26.3
12	...	24.7	23.9	...	25.4	...	27.7	27.2	28.9	25.8	26.3	26.8
13	...	25.1	23.6	20.8	26.5	29.3	27.6	27.3	28.9	26.4	24.8	26.2
14	...	24.2	24.1	24.9	25.7	28.1	29.1	27.3	26.7	26.8	25.2	26.8
15	25.9	23.3	25.1	22.0	25.8	29.1	29.6	27.3	26.5	26.7	25.2	26.5
16	26.3	26.0	23.1	23.7	26.0	29.9	29.7	26.9	28.4	26.6	24.7	27.7
17	...	25.2	25.7	24.1	25.7	30.3	29.3	26.1	27.4	27.0	24.9	26.9
18	24.1	26.3	24.1	26.8	24.4	30.2	29.4	27.2	27.4	26.4	24.9	26.7
19	...	...	22.0	26.4	24.8	30.3	28.5	27.3	27.2	25.9	24.9	27.0
20	24.4	25.9	23.9	24.1	24.7	29.4	28.4	27.5	26.9	26.3	25.0	26.3

31. 2. 4. 5. 1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	....	....	22.6	....	23.9	29.9	30.1	27.2	26.2	26.8	24.9	26.0
22	23.7	25.3	22.1	28.8	25.6	24.7	29.2	27.3	26.7	26.9	26.4	26.9
23	....	24.0	....	25.8	25.3	21.2	30.0	27.0	26.7	26.9	25.7	26.9
24	....	23.2	24.3	25.2	24.7	21.3	29.9	26.2	26.9	26.9	26.5	26.9
25	....	23.8	24.8	21.9	23.8	27.8	30.3	27.3	26.9	26.8	26.3	26.2
26	25.0	24.0	25.2	25.2	24.4	29.9	29.9	29.2	27.2	26.3	26.4	26.4
27	23.7	....	24.9	21.7	25.4	30.2	29.7	29.2	26.8	26.7	26.6	26.3
28	....	....	24.1	25.3	25.7	30.5	....	27.4	26.3	26.7	26.3	26.3
29	....	24.6	23.4	25.3	25.8	29.9	....	27.3	27.8	26.9	26.3	26.8
30	23.7	....	21.9	25.9	23.8	27.2	....	28.4	....	26.9	25.8	26.9
31	24.3	....	22.8	....	20.1	....	....	26.0	....	25.4	....	26.8

Cape May County

36. 22. 6. 8. 2. American Ice Co. Ocean City. Drilled unused artesian well in Atlantic City 800-foot sand unit of Kirkwood formation, diameter 6 inches, depth about 860 feet. Land-surface datum is 4.74 feet above msl. Highest water level 1.3 below msl, Dec. 29, 1945; lowest 72.1 below msl, Aug. 19, 1951. Records available: 1936-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	38.8	37.4	....	....	31.5	41.9	53.8	59.8	60.9	44.9	....	36.5
2	38.8	37.7	....	....	31.5	41.7	54.3	62.0	60.9	44.5	....	35.8
3	38.7	36.5	....	....	31.8	40.0	55.5	60.4	59.4	44.4	....	35.2
4	38.5	35.1	34.6	....	32.0	40.9	60.8	62.4	60.0	44.5	39.6	35.6
5	38.3	....	35.4	....	32.0	39.7	62.1	62.0	59.3	44.6	39.0	35.5
6	37.5	....	34.9	....	32.3	39.0	61.4	60.4	57.4	44.1	38.9	36.1
7	37.1	....	34.5	....	....	42.8	61.7	57.2	55.8	43.7	39.5	....
8	36.9	....	34.9	....	....	44.1	56.0	56.6	52.8	....	39.3	....
9	37.4	....	35.1	....	....	44.9	52.2	....	53.6	....	38.9	35.6
10	37.2	....	35.2	....	....	43.1	55.0	....	54.6	....	38.8	35.3
11	37.5	....	34.7	....	32.8	40.6	55.8	....	54.2	....	38.5	35.2
12	38.1	....	35.7	....	32.8	43.2	61.9	59.3	54.3	....	....	35.5
13	37.6	....	35.2	....	32.7	44.6	62.7	58.9	54.8	....	....	35.4
14	37.2	....	35.2	....	33.2	46.4	60.2	58.8	54.7	....	....	35.1
15	36.7	....	35.6	....	32.5	48.1	59.4	59.6	51.6	....	....	35.0
16	37.6	....	36.1	....	33.0	48.5	61.9	62.3	52.9	....	....	35.5
17	36.8	....	35.2	....	33.1	49.5	58.8	63.1	52.8	....	....	35.5
18	38.1	....	35.3	....	33.1	49.7	61.0	63.7	53.0	....	....	35.5
19	38.0	....	34.8	....	33.2	50.5	60.8	63.1	51.3	....	....	35.3
20	38.0	....	35.0	....	33.2	50.7	59.0	60.2	52.5	....	37.1	35.3
21	38.1	....	34.6	....	32.6	49.8	60.3	60.6	52.7	....	37.0	34.8
22	36.8	....	34.6	....	33.0	47.5	57.7	60.2	50.4	....	36.6	34.8
23	37.3	....	34.4	....	33.0	47.3	57.7	60.6	48.9	....	37.4	34.4
24	37.8	35.5	34.5	....	33.4	44.7	59.7	61.5	49.8	....	37.4	35.1
25	37.6	35.7	34.9	....	33.1	48.1	58.4	61.5	49.4	....	37.1	34.9
26	37.5	35.2	34.1	....	33.0	49.7	65.0	61.5	48.5	....	37.0	34.7
27	37.4	35.1	35.4	....	32.1	52.2	61.7	61.4	49.2	....	37.0	34.5
28	36.8	35.4	35.1	....	36.7	52.7	62.2	61.3	50.4	....	36.9	34.5
29	36.8	....	35.3	....	37.0	53.4	62.0	61.4	47.4	....	36.6	....
30	37.2	....	35.2	....	40.3	51.7	60.2	61.6	45.4	....	36.6	....
31	37.4	....	....	....	42.2	....	60.4	61.6	....	....	....	....

36. 22. 6. 9. 1. Mr. Schwartz. Ocean City. Drilled unused artesian well in Atlantic City 800-foot sand unit of Kirkwood formation, diameter $4\frac{1}{2}$ inches, depth 800+ feet. Land-surface datum is 9 feet above msl. This well is affected by tides and nearby pumping up to $7\frac{1}{2}$ feet with seasonal fluctuations owing to pumping up to 30 feet. Highest water level 19.0 below msl, Mar. 5, 1941; lowest 63.1 below msl, July 26, 1952. Records available: 1928-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	35.4	34.9	32.2	....	....	39.6	53.4	59.7	....	46.7	42.2	37.8
2	35.6	34.9	32.7	....	....	39.9	54.0	60.4	....	46.2	42.1	37.1
3	35.6	33.9	32.5	....	....	38.8	54.5	59.4	....	46.2	41.9	36.5
4	35.5	33.0	31.7	....	....	39.6	58.6	60.5	....	46.2	41.4	36.9
5	35.3	33.4	32.5	....	....	38.3	60.0	60.7	....	46.3	40.5	36.7

36. 22. 6. 9. 1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	34.3	33.3	31.9	....	33.1	37.5	59.4	....	....	45.9	40.4	37.4
7	33.7	33.2	31.7	....	33.4	41.0	59.6	57.0	57.3	45.4	41.0	37.2
8	33.5	32.9	32.0	....	33.7	42.1	55.9	56.5	55.2	45.2	40.8	37.0
9	34.2	33.7	32.2	....	33.8	43.3	52.0	60.1	54.9	44.5	40.3	37.0
10	34.1	....	32.3	....	33.8	41.5	54.8	59.0	55.9	43.9	40.2	36.7
11	34.5	....	31.8	....	33.9	39.8	55.6	59.9	55.4	43.5	40.0	36.7
12	35.1	....	....	....	....	41.4	59.7	58.9	55.5	44.0	40.2	37.0
13	34.5	....	....	....	....	43.6	60.4	58.4	55.7	44.0	39.9	36.8
14	34.3	....	32.3	....	....	46.1	58.2	58.3	55.8	44.0	40.0	36.5
15	33.7	....	....	....	33.6	47.5	58.3	59.2	52.9	44.0	39.4	36.4
16	34.6	....	33.1	....	34.0	47.8	59.8	60.0	54.3	43.6	39.1	36.9
17	....	....	32.4	....	34.1	48.8	57.9	60.8	54.2	43.5	39.0	36.9
18	34.8	....	32.9	....	34.2	48.8	59.1	61.5	54.4	43.5	38.9	36.9
19	34.8	....	32.6	....	34.3	49.9	58.5	61.0	53.0	43.4	38.2	36.7
20	34.7	....	32.3	....	33.7	50.0	57.9	59.9	53.9	43.3	38.1	36.7
21	35.0	....	31.6	....	33.9	48.9	58.7	60.4	54.1	43.1	38.0	35.2
22	33.8	....	30.3	....	34.1	47.2	57.6	60.0	51.9	43.0	37.9	35.1
23	34.4	....	31.1	....	34.4	47.6	57.6	60.4	50.3	42.8	38.8	35.8
24	34.6	30.3	30.4	....	34.5	....	58.5	61.3	51.0	42.7	38.8	36.5
25	34.7	31.2	....	....	34.2	48.6	58.3	61.4	50.5	42.4	38.6	36.4
26	34.5	32.4	....	....	34.1	49.5	63.1	61.4	49.7	42.3	38.3	36.2
27	34.4	32.2	....	....	33.3	52.1	60.2	61.2	50.3	42.3	38.5	35.9
28	33.9	32.5	....	....	35.8	52.5	60.5	61.0	51.5	42.0	38.4	35.8
29	34.4	33.0	....	....	35.6	53.0	60.4	61.3	49.0	42.6	38.0	35.8
30	34.7	....	....	....	38.2	51.2	60.2	61.3	47.0	42.7	38.0	35.9
31	34.9	....	32.4	....	40.2	....	60.5	....	....	42.7	....	35.2

Essex County

25. 15. 7. 5. 4. Commonwealth Water Co. Well 30 on Canoe Brook. About 0.3 mile north of the Canoe Brook pumping station, 0.8 mile west of White Oak Ridge pumping station of East Orange Water Dept. Drilled unused artesian well in Wisconsin terminal moraine, diameter 10 inches, depth 130 feet. Land-surface datum is 170 feet above msl. Daily water-level fluctuations from less than 1 foot to as much as 17 feet are caused by pumping of nearby wells. Highest water level 162.8 above msl, Aug. 25, 1931; lowest 109.0 above msl, Sept. 23, 1949. Records available: 1925-52.

Daily lowest water level, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	117.5	121.0	133.1	122.3	122.5	123.9	115.0	120.2	121.3	116.1	110.9	....
2	119.3	120.1	134.3	121.2	122.5	125.9	114.5	120.1	118.1	114.9	110.9	....
3	118.9	120.1	134.0	120.9	122.5	124.3	114.1	121.3	117.5	111.9	110.8	....
4	118.0	....	134.0	120.7	122.4	123.6	114.1	121.4	117.3	111.5	111.3	114.8
5	117.4	123.0	135.4	120.6	121.8	123.5	114.6	121.3	116.7	111.8	111.1	114.8
6	118.8	121.3	134.6	120.9	121.4	122.3	118.2	120.5	116.7	111.8	111.3	....
7	117.4	121.1	134.6	....	121.4	122.2	119.4	120.1	116.2	111.9	111.1	....
8	116.9	121.1	134.6	120.5	121.4	122.2	119.5	120.3	116.4	111.3	111.2	....
9	116.7	....	134.6	120.3	121.3	123.0	123.1	120.7	116.3	111.8	111.3	....
10	116.7	....	134.8	120.2	121.1	124.5	125.9	120.8	116.5	111.6	111.7	....
11	116.7	133.9	134.5	120.3	121.1	124.3	125.0	121.0	115.9	111.5	110.8	....
12	116.6	132.4	134.2	120.1	123.3	124.2	123.8	118.3	115.8	111.8	110.7	....
13	116.7	132.4	127.1	120.1	122.7	120.8	123.3	117.4	115.6	112.1	110.5	....
14	117.8	132.8	123.3	122.1	122.3	120.1	122.9	116.9	115.5	112.0	110.5	....
15	117.6	133.1	122.0	121.8	121.5	119.7	122.1	116.9	116.8	111.6	110.4	....
16	116.9	133.0	121.5	121.7	121.2	119.1	119.6	116.9	116.8	111.4	110.3	....
17	116.6	135.8	121.5	115.4	121.1	117.4	119.4	117.4	116.0	111.5	110.7	....
18	119.8	135.0	121.8	....	121.2	116.0	120.5	117.0	116.1	111.5	e111.2	....
19	119.3	134.4	122.1	117.6	121.9	115.3	119.5	116.9	116.0	111.3	e111.2	....
20	120.7	134.5	122.3	120.6	121.5	115.4	118.8	116.8	116.0	111.6	e111.3	....
21	121.1	134.6	121.6	121.0	121.8	115.7	120.2	116.7	115.9	112.1	e111.2	....
22	121.1	134.2	121.9	120.0	121.5	....	121.0	116.2	116.6	111.7	111.8	....
23	....	134.3	122.5	119.2	121.4	121.9	121.2	115.9	116.1	110.7	....	113.4
24	125.1	134.4	122.9	119.5	121.3	120.2	119.8	115.9	115.8	110.5	....	111.9
25	120.4	135.2	121.4	119.7	121.5	118.0	119.6	118.4	115.6	110.9	111.8	111.8

25. 15. 7. 5. 4--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	120.3	133.7	121.1	120.9	123.5	116.0	119.7	117.0	116.3	110.9	111.8	112.6
27	134.0	133.6	121.7	122.3	123.4	115.3	120.0	116.4	116.3	111.0	111.9	.....
28	127.3	133.7	121.7	123.3	123.0	114.7	120.3	116.0	116.4	111.4	112.1	.....
29	122.2	133.1	121.8	122.9	122.9	114.6	120.1	116.0	117.3	111.3	112.2	.....
30	121.1		122.0	122.7	122.9	114.9	119.6	116.3	116.4	111.0	.....	.....
31	121.0		124.1		123.9		120.6	116.3		110.9	.....	.....

e Estimated.

26. 21. 1. 5. 6. (Well 10) Commonwealth Water Co. Short Hills. Drilled unused water-table well in Wisconsin terminal moraine, diameter 3 inches, depth 50 feet. Land-surface datum is 93 feet above msl. Highest water level 91.78 above msl, Jan. 12, 1934; lowest 64.14 above msl, Nov. 2, 1950. Records available: 1930-52. Measurement discontinued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 11	+67.45	Mar. 10	+64.76	May 14	+68.68	July 25	+70.92
Feb. 14	+64.61	Apr. 11	+67.32	June 17	+70.63	Aug. 18	+73.64

25. 15. 7. 5. 9. (Neutral Zone Well) East Orange Water Dept. Canoe Brook and Parsonage Hill Rd. Drilled unused artesian well in Wisconsin terminal moraine, diameter 6 inches, depth about 64 feet. Land-surface datum is 182 feet above msl. Highest water level 174.80 above msl, Oct. 25, 1927; lowest 139.55 above msl, Aug. 10, 1936. Records available: 1925-52.

Daily lowest water level, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	125.85	156.95	153.85	154.00	155.25	151.45	152.25	154.40	.....	148.50	151.30
2	152.45	152.60	158.05	153.00	153.95	157.05	151.15	152.20	150.75	.....	148.40	151.15
3	152.40	153.10	156.85	152.85	153.90	155.65	.....	154.30	.....	149.20	148.35	151.25
4	151.15	155.55	157.55	152.30	153.95	155.15	.....	153.45	.....	149.05	147.95	151.45
5	151.15	154.50	.....	152.25	153.95	155.05	152.25	152.90	.....	149.05	147.80	151.75
6	154.10	153.30	157.45	153.00	153.75	154.85	153.05	152.10	.....	.....	147.80	151.65
7	152.80	153.20	157.20	154.35	153.80	154.55	152.10	152.65	.....	.....	147.65	151.40
8	.....	153.05	157.30	152.95	153.75	154.55	152.10	151.75	.....	.....	147.60	151.15
9	.....	153.85	157.20	152.70	153.70	155.35	155.25	152.20	151.10	.....	147.65	151.10
10	.....	.....	157.85	152.65	153.55	156.00	155.45	153.95	150.85	.....	147.95	151.10
11	.....	.....	157.65	152.85	153.50	154.95	154.15	153.80	150.60	.....	148.70	152.10
12	.....	156.30	157.55	152.80	154.85	154.95	153.45	152.30	150.65	.....	148.45	151.40
13	.....	156.30	157.50	152.80	154.15	154.50	153.20	151.70	.....	.....	148.25	151.15
14	.....	157.65	155.20	154.10	153.55	154.40	153.60	151.45	.....	.....	148.20	151.15
15	.....	157.05	154.45	153.85	153.00	154.35	153.85	151.40	151.70	.....	148.20	151.15
16	150.80	156.95	154.20	153.30	152.85	153.30	152.70	151.40	150.05	.....	148.10	150.70
17	150.75	160.50	153.65	150.65	152.80	.....	152.25	152.80	.....	.....	148.30	149.95
18	.....	158.20	153.35	.....	152.85	.....	152.30	151.25	.....	.....	148.20	149.45
19	151.30	157.35	153.35	150.65	.....	.....	151.90	150.75	.....	.....	148.10	149.45
20	153.45	157.35	154.15	152.20	.....	.....	151.65	.....	.....	.....	147.95	149.95
21	152.55	157.50	153.30	152.65	.....	150.65	152.05	.....	.....	.....	147.95	150.30
22	148.10	157.05	153.30	152.35	153.95	154.00	152.35	.....	.....	147.75	148.45	150.85
23	147.40	157.25	154.60	152.10	153.75	157.70	152.15	.....	.....	147.15	148.55	150.75
24	146.50	158.60	154.75	152.05	153.70	155.15	151.20	.....	.....	147.00	148.60	149.95
25	150.40	.....	153.60	152.20	153.85	154.10	151.15	152.10	.....	147.70	149.10	149.80
26	147.30	.....	153.40	153.50	155.55	152.75	151.25	151.20	.....	147.80	149.10	150.45
27	142.45	.....	153.75	155.20	154.75	152.10	151.50	150.85	.....	147.80	149.30	150.05
28	144.35	157.25	153.95	154.90	154.35	151.65	151.70	.....	.....	148.85	149.40	149.90
29	143.80	156.75	154.30	154.30	154.25	151.60	152.00	.....	150.80	148.55	149.75	149.50
30	145.60	.....	155.45	154.10	154.30	151.75	151.90	150.65	150.65	148.25	151.30	.....
31	152.85	.....	155.30	.....	155.25	.....	152.60	150.65	.....	148.25	.....	.....

25. 15. 7. 6. 7. (Downstream test well) East Orange Water Dept. Canoe Brook below Parsonage Hill Rd. Drilled unused water-table well in Wisconsin terminal moraine, diameter 8 inches, depth 62 feet. Land-surface datum is 180 feet above msl. Highest water level 179.59 above msl, May 12, 1947; lowest 169.45 above msl, Apr. 26, 1944. Records available: 1931-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	+178.29	Apr. 11	+178.48	July 25	+176.46	Oct. 21	+176.02
Feb. 14	+178.45	May 14	+178.34	Aug. 18	+176.48	Nov. 25	+176.13
Mar. 10	+178.45	June 17	+178.09	Sept. 26	+176.62	Dec. 18	+177.79

Gloucester County

31.11.2.7.2. (Well 3) The Texas Co. Eagle Point, Westville. Drilled observation artesian well in Magothy and Raritan formations, diameter 8 inches 0-86, 6 inches 86-245, depth 298 feet, 6-inch screen at 225-245, well cased to rock. Land-surface datum is 22 feet above msl. Highest water level 15.7 below msl, Nov. 25, 1950; lowest 39.0 below msl, Mar. 10, 1950, and Aug. 17, 1951. Records available: 1949-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	29.6	....	....	29.8	32.7	28.7	33.8	36.0	31.3	29.7	34.7	26.7
2	30.6	....	....	29.8	31.9	29.1	35.4	35.5	33.2	28.8	33.5	27.8
3	32.2	....	31.9	....	31.9	29.2	35.7	34.8	35.0	27.5	33.2	28.8
4	32.5	30.6	32.0	....	30.0	29.6	34.9	33.6	35.0	26.2	32.4	31.5
5	32.3	32.0	33.2	....	29.5	30.5	31.7	34.8	35.8	25.0	30.5	32.4
6	31.3	33.9	....	....	31.4	31.5	30.8	34.6	34.5	26.5	29.5	32.6
7	31.1	33.6	....	....	32.7	31.6	32.6	35.2	33.5	27.2	29.9	32.4
8	31.6	33.6	....	....	32.3	29.9	33.1	35.2	32.5	27.4	29.9	35.4
9	32.8	33.2	....	....	33.9	29.6	31.7	34.7	....	27.4	27.9	35.9
10	33.4	....	30.7	....	34.2	31.3	32.6	33.1	....	27.2	25.8	35.5
11	....	31.2	31.5	....	32.9	32.5	34.1	34.5	33.9	26.9	25.2	35.2
12	....	32.9	32.0	....	30.2	32.5	34.1	34.8	34.1	24.9	26.0	34.5
13	....	33.3	31.6	....	30.9	32.8	32.9	34.8	34.9	26.7	26.8	34.4
14	32.9	34.1	32.8	24.6	31.5	32.9	33.5	35.6	34.1	28.1	26.5	33.2
15	34.4	34.2	31.9	25.2	31.2	34.4	35.1	35.9	34.4	30.1	26.6	32.4
16	35.2	33.6	30.1	25.6	31.2	34.4	36.2	34.8	35.4	31.8	25.7	34.0
17	35.1	31.4	29.9	26.6	30.1	35.6	36.0	33.5	35.9	33.0	25.4	34.7
18	34.8	31.0	31.0	27.7	28.8	37.3	35.9	34.7	34.0	32.1	26.5	35.5
19	34.2	31.3	31.4	28.8	29.9	37.5	35.5	35.8	34.6	31.3	25.6	35.2
20	31.7	31.9	32.0	29.9	....	37.8	33.9	35.0	33.9	31.5	24.2	34.3
21	32.0	31.9	32.2	29.8	....	37.5	34.0	....	32.7	32.2	24.5	33.3
22	32.7	32.5	32.1	30.6	....	34.0	36.4	....	32.3	32.7	23.6	33.3
23	33.3	31.8	29.7	31.4	....	33.3	36.7	....	33.5	32.6	22.1	33.4
24	34.0	....	30.3	31.1	....	34.6	36.8	....	33.9	33.1	24.7	33.2
25	34.6	31.4	31.4	31.0	....	36.2	36.5	34.7	34.3	33.2	26.6	32.3
26	33.8	31.9	31.8	30.4	30.1	36.6	35.3	35.5	34.6	31.7	26.2	30.2
27	33.0	32.6	32.3	28.7	32.2	37.3	35.3	35.7	34.6	31.7	25.6	30.2
28	31.0	32.9	....	29.5	32.8	37.2	33.8	35.6	33.2	33.0	24.6	....
29	31.8	34.0	....	29.8	33.9	36.9	36.5	35.4	32.3	33.1	24.5	31.0
30	....	....	....	32.9	33.7	34.1	36.7	35.2	30.7	34.3	23.9	32.2
31	....	....	29.7	....	31.4	....	35.7	34.0	....	35.7	....	32.4

Middlesex County

29.1.4.6.9. Clyde Bowne. Browntown. Drilled observation artesian well in Old Bridge sand member of Raritan formation, diameter 6 inches, depth 71 feet, gauze-covered perforated pipe 66-71. Land-surface datum is 31 feet above msl. Affected by pumping at the Perth Amboy Water Works. Highest water level 28.14 above msl, Apr. 9, 10, 1939; lowest 21.83 above msl, Nov. 18, 1932. Records available: 1932-52.

Water level at end of day, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	24.77	25.39	....	25.99	26.53	27.00	26.49	25.80	....	25.38	24.84	24.32
2	24.78	25.39	....	25.99	26.53	27.19	26.45	25.78	25.54	25.37	24.82	24.32
3	24.79	25.39	....	25.99	26.52	27.20	26.41	25.75	25.54	25.36	24.80	24.32
4	24.79	25.54	....	25.98	26.52	27.20	26.38	25.62	25.54	25.35	24.78	24.32
5	24.87	25.65	....	25.95	26.52	27.20	26.36	....	....	25.33	....	24.32
6	24.90	25.65	....	25.95	26.51	27.20	26.33	....	25.54	25.32	....	24.32
7	24.91	25.65	....	25.95	26.50	27.49	26.30	....	25.54	25.31	....	24.32
8	24.91	25.65	25.57	25.94	26.48	27.48	26.27	....	25.54	25.29	24.70	24.32
9	24.91	25.65	25.58	25.93	26.47	27.47	26.26	25.54	25.54	25.27	24.68	24.32
10	24.91	25.65	25.59	25.92	26.46	27.45	26.25	25.53	25.54	25.25	24.66	24.32
11	24.91	25.64	25.82	25.92	26.45	27.44	26.24	25.52	25.53	25.23	24.64	24.34
12	24.91	25.63	25.87	25.91	26.45	27.36	26.23	25.52	25.53	25.21	24.63	24.35
13	24.91	25.54	25.96	25.90	26.45	27.36	26.22	25.51	25.53	25.20	....	24.36
14	24.91	....	25.98	25.90	26.45	27.29	26.20	25.50	25.53	25.18	24.58	24.36
15	24.91	....	25.98	25.90	26.45	27.26	26.19	25.48	25.52	25.17	24.57	24.36

29. 1. 4. 6. 9--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	24.91	25.53	25.98	25.90	26.45	27.20	26.17	.....	25.52	25.15	24.56	24.37
17	24.90	25.55	25.98	25.89	26.45	27.09	26.15	.....	25.52	25.13	24.54	24.37
18	24.94	25.58	25.96	25.89	26.44	26.96	26.14	.....	25.51	25.11	24.52	24.37
19	24.94	25.58	25.95	25.88	26.44	26.73	26.12	.....	25.50	25.10	24.51	24.37
20	25.00	25.58	25.95	25.87	26.44	26.78	26.11	.....	25.50	25.07	24.50	24.37
21	25.09	25.58	25.95	25.87	26.44	26.77	26.09	.....	25.50	.....	24.48	24.37
22	.....	25.58	25.95	25.86	26.44	26.74	26.08	.....	25.49	.....	24.42	24.40
23	.....	25.58	25.96	25.85	26.44	26.71	26.05	25.55	25.48	.....	24.41	24.42
24	.....	25.57	25.99	25.84	26.44	26.68	26.03	25.55	25.47	.....	24.40	24.44
25	.....	25.56	26.00	25.83	26.49	26.67	26.01	25.55	25.46	24.96	24.39	24.45
26	25.13	25.55	26.01	.....	26.66	26.65	25.98	25.55	25.45	.....	24.38	24.46
27	25.23	25.55	26.01	.....	26.68	26.61	25.95	25.55	25.43	.....	24.38	24.51
28	25.35	25.55	26.02	26.31	26.69	26.58	25.91	25.55	25.43	.....	24.37	24.51
29	25.40	25.55	26.01	26.47	26.69	26.55	25.89	25.54	25.42	.....	24.37	24.51
30	.....	.....	26.01	26.53	26.68	26.52	25.85	.....	25.40	.....	24.36	24.51
31	.....	.....	26.00	.....	26.68	.....	25.82	.....	.....	.....	.....	24.51

28. 5. 4. 8. 1. Duhernal Water System. Well 1. Drilled observation water-table well in Old Bridge sand member of Raritan formation, diameter 6 inches, depth 67 feet. Land-surface datum is 18.7 feet above msl. Highest water level 7.67 above msl, July 31, 1945; lowest 3.74 above msl, Dec. 31, 1949. Records available: 1938-52.

Water level at end of day, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.45	5.60	5.95	6.15	6.31	6.60	6.24	5.41	5.39	....	4.56	4.40
2	5.48	5.61	5.89	6.12	6.40	6.70	6.19	5.39	5.42	....	4.56	4.45
3	5.47	5.67	5.86	6.08	6.49	6.75	6.14	5.38	5.44	....	4.55	4.49
4	5.47	5.75	5.91	6.06	6.55	6.78	6.10	5.37	5.45	....	4.51	4.51
5	5.49	5.79	5.84	6.09	6.60	6.79	6.05	5.36	5.47	....	4.51	4.55
6	5.50	5.83	5.81	6.07	6.64	.....	6.02	5.40	5.49	....	4.48	4.53
7	5.54	5.86	5.82	6.02	6.65	.....	6.00	5.42	5.49	5.03	4.44	4.50
8	5.57	5.91	5.81	5.98	6.67	.....	.....	5.42	5.49	5.01	4.41	4.50
9	5.58	5.92	5.79	5.99	6.67	.....	.....	5.44	5.48	4.99	4.38	4.49
10	5.57	5.94	5.81	5.99	6.69	.....	.....	5.45	5.43	4.97	4.36	4.50
11	5.54	5.97	5.90	5.96	6.71	7.19	.....	5.42	5.38	4.96	4.34	4.52
12	5.53	5.95	5.90	5.96	6.70	7.10	.....	5.38	5.33	4.94	4.31	4.50
13	5.52	5.92	5.95	6.00	6.67	7.02	.....	5.35	5.29	4.92	....	4.49
14	5.51	5.92	5.92	6.03	6.62	6.96	.....	5.32	5.29	4.89	....	4.50
15	5.52	5.92	5.94	5.98	6.58	6.90	5.83	5.30	5.31	4.88	....	4.50
16	5.48	5.97	5.91	5.96	6.50	6.85	5.80	5.35	5.28	4.86	....	4.49
17	5.50	6.02	5.90	5.92	6.47	6.84	5.78	5.33	5.26	4.85	....	4.50
18	5.44	5.99	5.94	5.89	6.43	6.78	5.76	5.32	5.25	4.84	4.30	4.50
19	5.43	5.98	6.04	5.88	6.40	6.74	5.73	.....	5.24	4.82	4.34	4.52
20	5.43	5.98	6.07	5.86	6.45	6.68	5.71	.....	5.23	4.81	4.37	4.56
21	5.38	6.01	6.10	5.84	6.39	6.65	5.69	.....	5.21	4.77	4.48	4.62
22	5.43	6.01	6.13	5.82	6.35	6.63	5.67	.....	5.20	4.75	4.58	4.69
23	5.40	6.02	6.17	5.79	6.34	6.60	5.65	.....	5.19	4.73	4.58	4.71
24	5.37	6.05	6.21	5.80	6.33	6.57	5.62	.....	5.17	4.70	4.55	4.72
25	5.39	6.06	6.21	5.82	6.39	6.52	5.59	.....	5.16	4.68	4.55	4.70
26	5.46	6.05	6.24	5.84	6.38	6.48	5.55	5.28	6.14	4.67	4.52	4.68
27	5.50	6.07	6.25	5.92	6.35	6.43	5.53	5.27	5.13	4.65	4.49	4.66
28	5.56	6.07	6.25	6.06	6.34	6.38	5.50	5.26	5.12	4.62	4.46	4.64
29	5.58	6.00	6.23	6.15	6.32	6.35	5.49	5.25	5.10	4.60	4.44	4.63
30	5.59	.....	6.18	6.21	6.31	6.29	5.46	5.24	.....	4.57	4.41	4.63
31	5.59	.....	6.16	.....	6.36	.....	5.43	5.29	.....	4.57	.....	4.69

28. 5. 4. 8. 7. Duhernal Water System well 2. Drilled observation water-table well in Old Bridge sand member of Raritan formation, diameter 6 inches, depth 95 feet. Land-surface datum is 29 feet above msl. Highest water level 15.65 above msl, Apr. 11, 1939; lowest 8.09 above msl, Oct. 30, 1951. Records available: 1938-42, 1944, 1950-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	+10.81	Feb. 12	+12.19	Mar. 25	+12.14	May 6	+13.19
8	11.10	19	12.14	Apr. 1	12.64	13	13.10
15	11.14	26	12.14	8	12.31	20	12.96
22	11.22	Mar. 4	11.99	15	12.29	27	13.15
29	11.52	11	12.36	22	12.08	June 3	14.10
Feb. 5	11.99	18	12.27	29	12.90	10	14.17

28.5.4.8.7--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 17	+13.66	Aug. 12	+11.24	Sept. 30	+9.62	Nov. 18	+9.10
24	13.29	19	11.19	Oct. 7	10.37	25	9.08
July 1	12.71	26	11.24	14	10.19	Dec. 2	8.47
8	12.71	Sept. 2	11.27	21	9.92	9	9.22
15	12.36	9	11.08	28	9.78	16	9.38
22	13.21	16	11.02	Nov. 4	9.50	23	9.49
29	11.94	23	10.79	11	9.36	30	9.54
Aug. 5	11.29						

28.4.9.3.5. Duhernal Water System well 4. Drilled observation water-table well in Old Bridge sand member of Raritan formation, diameter 6 inches, depth 75 feet. Land-surface datum is 23.0 feet above msl. Highest water level 11.75 above msl, Apr. 20, 1949; lowest 4.90 below msl, Oct. 9, 1951. Records available: 1938-52.

Water level at end of day, above and below msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	+1.85	....	+0.50	+1.70	+5.50	+5.00	+0.80	-0.05	+0.35	-2.15	....	-3.70
2	+1.10	....	.55	1.40	4.95	4.65	.55	+0.05	+0.05	2.30	....	3.85
3	-.30	....	.45	1.25	....	4.60	.45	+0.15	-1.10	1.95	....	3.95
4	.30	....	.00	.80	....	4.20	1.30	-.25	.15	1.85	-3.50	4.10
5	-.20	+0.65	.20	1.35	....	3.85	1.70	.50	.25	1.80	3.60	4.20
6	+.45	.85	-.40	2.05	4.95	3.70	1.95	.40	-.25	2.20	3.45	3.75
7	.00	1.15	-.40	1.05	5.65	4.15	1.35	.10	+1.15	2.00	3.65	3.30
8	-.30	1.55	+.65	.80	5.55	4.90	.85	-.10	-.20	2.35	3.80	3.75
9	+1.10	1.55	1.05	.50	4.85	3.55	1.15	+.25	-.25	2.45	3.40	3.85
10	-.35	2.25	.80	.35	5.65	3.30	1.45	.35	+.05	2.55	3.65	4.00
11	-.45	1.40	.95	1.55	6.15	2.95	1.10	.15	+1.10	2.60	3.75	3.95
12	+.40	1.00	.45	2.15	5.60	2.60	1.45	+1.10	-.35	2.35	3.85	4.10
13	.75	.65	+.20	2.75	5.40	2.40	1.85	-.05	.55	2.65	3.90	3.80
14	.35	.20	-.05	2.15	5.20	2.00	1.20	-.05	.05	2.75	3.95	3.30
15	+.05	.00	+1.30	1.15	5.15	2.45	....	+1.10	.30	2.90	4.00	3.45
16	-.05	.60	1.65	.95	5.00	2.00	1.95	.35	.60	3.05	3.95	3.40
17	+.15	1.10	1.15	1.35	5.70	1.85	1.50	.50	.70	3.15	4.05	3.65
18	-.50	.75	.50	1.35	5.90	2.35	1.70	.70	.85	3.20	4.05	3.80
19	.00	.70	.30	1.50	5.25	2.05	1.40	.20	.85	2.90	4.10	3.00
20	+.70	.30	.10	2.10	5.25	1.50	1.40	.05	1.05	3.20	4.20	2.35
21	-.10	.20	.30	1.55	5.65	2.00	.90	+.35	.60	3.30	4.10	1.80
22	.30	2.20	1.15	....	5.50	2.30	1.00	-.05	.70	3.35	4.05	1.90
23	-.50	2.60	1.80	....	5.40	1.70	.90	+1.10	1.15	3.40	3.65	3.05
24	+.50	3.65	1.50	.95	5.00	1.90	.60	.10	1.35	3.45	3.75	1.95
25	1.55	2.95	.85	.50	5.50	1.60	.60	.05	1.50	3.50	3.80	1.15
26	2.75	1.85	.60	.25	5.60	1.40	.40	+.05	1.60	3.55	3.80	.85
27	3.35	1.40	.70	.15	3.80	1.15	.70	-.20	1.75	3.60	3.50	.90
28	1.20	1.00	.95	....	3.15	.90	.20	.10	1.85	....	3.70	.40
29	.85	.40	1.55	....	2.75	1.65	+.20	.40	1.95	....	3.75	.50
30	....	....	1.85	4.55	4.15	.85	-.25	-.25	2.10	....	3.55	1.45
31	....	....	1.70	....	4.45	....	-.30	+.05	....	....	....	.80

28.5.7.1.5. Duhernal Water System well 5. Drilled observation water-table well in Old Bridge sand member of Raritan formation, diameter 6 inches, depth 72 feet. Land-surface datum is 21 feet above msl. Highest water level 14.94 above msl, Apr. 7-8, 1939; lowest 0.74 above msl, Dec. 14, 1949, Oct. 7-8, 1951. Records available: 1939-52.

Water level at end of day, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.67	7.77	7.08	8.21	9.57	11.08	7.82	6.02	5.85	4.32	2.52	2.28
2	7.39	7.80	7.24	7.96	9.47	10.91	7.71	6.17	5.83	4.24	2.50	2.31
3	7.12	8.11	7.31	8.07	9.46	10.99	7.60	6.25	5.76	4.18	2.43	2.30
4	7.26	8.22	7.28	8.02	9.42	10.89	7.57	6.05	5.74	4.15	2.38	2.35
5	7.10	8.21	7.19	7.98	9.24	10.77	7.53	5.80	5.72	4.06	2.39	2.40
6	7.47	8.38	7.18	7.98	....	10.72	7.52	5.82	5.81	4.00	2.33	2.49
7	7.28	8.25	7.26	7.95	9.07	10.83	7.44	5.82	5.73	3.97	2.25	2.57
8	7.19	8.76	7.43	7.90	9.08	10.71	7.34	5.89	5.70	3.91	2.20	2.60
9	7.07	8.80	7.50	7.85	9.01	10.32	7.40	5.97	5.69	3.83	2.11	2.63
10	6.91	8.92	7.56	7.92	9.06	10.22	7.37	5.92	5.61	3.76	2.21	2.67

28.5.7.1.5--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	7.02	8.32	8.29	8.00	9.42	9.93	7.35	6.00	5.59	3.70	2.20	2.68
12	6.95	8.76	8.06	8.47	9.32	9.74	7.43	5.97	5.51	3.66	2.10	2.74
13	6.85	8.77	8.27	8.93	9.27	9.62	7.40	5.85	5.44	3.60	2.05	2.79
14	7.07	8.34	8.04	8.55	9.14	9.56	7.27	5.77	5.45	3.50	2.10	2.86
15	6.82	8.08	8.50	8.15	9.15	9.88	7.18	5.71	5.44	3.44	2.22	2.91
16	6.68	8.34	8.78	8.11	8.99	9.46	7.23	5.90	5.40	3.36	2.28	2.92
17	6.98	8.45	8.35	8.13	9.06	9.28	7.13	5.89	5.26	3.31	2.19	2.93
18	6.63	8.08	8.26	8.02	9.33	9.18	7.06	5.94	5.20	3.29	2.11	2.90
19	6.90	8.02	8.30	8.06	9.11	9.08	6.95	5.86	5.17	3.25	2.05	2.91
20	6.81	7.96	8.24	8.12	9.23	8.87	6.85	5.84	5.08	3.14	2.05	2.98
21	6.66	7.92	8.19	8.02	9.06	8.92	6.81	5.84	5.17	3.00	2.05	3.02
22	6.98	7.85	8.66	8.07	9.18	8.94	6.73	5.89	5.12	2.96	2.03	3.04
23	6.70	7.90	8.63	8.07	9.25	8.91	6.64	5.95	4.96	2.92	2.07	3.07
24	6.63	7.98	8.57	8.17	9.16	8.80	6.49	5.92	4.90	2.86	2.05	3.12
25	6.87	7.70	8.46	8.18	9.35	8.67	6.43	5.89	4.81	2.79	2.06	3.19
26	7.10	7.67	8.34	7.96	9.38	8.48	6.52	5.83	4.73	2.79	2.08	3.23
27	7.30	7.61	8.15	8.44	9.38	8.24	6.50	5.75	4.62	2.76	2.10	3.22
28	7.60	7.46	8.09	9.12	9.33	8.13	6.41	5.77	4.52	2.71	2.11	3.28
29	7.56	7.24	8.20	9.47	9.17	8.24	6.20	5.71	4.47	2.65	2.16	3.31
30	7.56		8.62	9.55	9.43	7.90	6.09	5.64	4.39	2.59	2.24	3.29
31	7.67		8.36		e10.17		6.05	5.71		2.56		3.35

e Estimated.

28.4.9.5.1. Duhernal Water System well 9. Spotswood. Drilled observation water-table well in Old Bridge sand member of Raritan formation, diameter 6 inches, depth 80 feet. Land-surface datum is 15 feet above msl. Highest water level 14.85 above msl, June 1, 1940; lowest 8.45 above msl, Sept. 29, Oct. 13-14, 1943. Records available: 1939-44, 1950-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	+11.79	Apr. 8	+12.10	July 8	+11.63	Oct. 7	+11.19
8	12.09	15	12.17	15	11.62	14	11.32
15	12.05	22	12.05	22	11.42	21	10.27
22	12.07	29	13.01	29	11.40	28	10.78
29	12.81	May 6	12.32	Aug. 5	11.19	Nov. 4	10.32
Feb. 5	12.85	13	11.76	12	11.07	11	9.98
12	12.45	20	12.35	19	11.95	18	9.96
19	12.40	27	12.66	26	11.58	25	11.26
26	12.07	June 3	13.44	Sept. 2	12.03	Dec. 2	11.46
Mar. 4	12.07	10	12.54	9	11.37	9	11.95
11	12.60	17	11.79	16	11.28	16	11.77
18	12.36	24	11.95	23	11.61	23	11.85
25	12.07	July 1	11.80	30	11.29	30	11.51
Apr. 1	12.31						

28.4.9.3.1. Duhernal Water System well 11. Drilled observation water-table well in Old Bridge sand member of Raritan formation, diameter 6 inches, depth 72 feet. Land-surface datum is 36.5 feet above msl. Highest water 14.23 above msl, June 1, 1940; lowest 1.54 below msl, Aug. 10, Oct. 7, 1951. Records available: 1939-52.

Water level at end of day, above and below msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	...	+1.5	+1.4	+5.4	+3.3	...	...	+2.7	+7.9	+5.4	+3.7	+3.8
2	...	1.1	1.3	...	3.3	...	+6.4	2.9	...	5.4	3.8	3.9
3	...	1.2	1.2	...	3.4	...	3.4	3.0	3.3	5.4	3.8	3.9
4	...	1.1	1.1	...	3.5	+2.2	7.4	3.0	3.1	5.4	3.8	3.9
5	...	1.1	1.2	...	3.3	1.8	4.0	3.6	2.6	5.2	3.8	4.0
6	...	1.1	1.0	...	3.3	1.8	3.8	3.7	3.3	5.1	3.8	4.1
7	...	1.1	1.0	...	2.9	1.9	3.7	3.6	6.2	5.0	3.7	4.1
8	...	1.6	1.1	...	2.7	1.9	3.9	6.3	6.3	5.0	3.7	4.0
9	...	1.5	1.1	6.8	2.6	1.8	...	6.4	6.5	5.0	3.8	4.1
10	...	1.7	1.0	6.1	2.7	1.6	...	6.5	6.3	4.9	3.7	4.0
11	...	1.1	1.1	...	2.9	1.4	...	6.5	6.3	4.9	3.8	4.1
12	...	1.0	1.0	...	2.6	1.4	...	e6.5	6.2	4.9	3.7	4.1
139	.9	...	2.5	1.3	...	6.6	6.1	4.8	3.7	4.1
148	.8	2.2	2.4	1.2	...	6.7	6.2	4.7	3.6	4.2
15	...	1.0	1.0	1.6	2.4	1.4	...	6.7	6.1	4.7	3.6	4.1

28. 4. 9. 3. 1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	+0.9	+1.1	+1.0	+1.7	+2.3	+1.3	+3.1	+7.0	+6.0	+4.5	+3.7	+4.1
17	1.0	1.2	6.2	1.7	2.3	...	3.0	7.1	6.0	4.5	3.7	4.1
18	1.0	1.5	.2	5.8	2.3	1.7	3.0	7.2	6.0	4.4	3.7	4.1
19	1.2	1.6	.0	6.0	2.0	1.6	2.6	4.4	6.1	4.4	3.7	4.0
20	1.2	1.2	.3	6.1	1.9	1.5	2.6	4.1	6.1	4.3	3.7	4.1
21	1.0	1.1	.2	6.1	1.8	1.5	2.6	4.0	6.1	4.3	3.8	4.3
22	1.1	1.3	.3	6.2	1.7	1.7	2.6	4.0	6.1	4.3	3.9	4.3
23	1.0	1.4	+.5	2.7	1.4	1.6	2.6	4.3	5.9	4.3	4.0	4.2
24	1.0	1.6	...	2.3	1.3	1.7	2.5	6.4	5.8	4.2	4.0	4.3
25	1.2	1.4	...	2.2	2.0	1.7	2.5	5.3	5.8	4.1	3.9	5.4
26	1.4	1.5	-.1	2.7	1.9	1.7	2.4	5.4	5.7	4.1	3.9	4.8
27	1.6	1.4	+.7	3.0	1.7	7.2	2.4	5.4	5.7	4.0	4.0	4.6
28	1.5	1.3	.7	2.8	2.0	...	2.4	5.5	5.6	4.0	3.9	4.6
29	...	1.3	.7	3.1	1.4	...	2.4	7.0	5.6	3.9	3.9	4.6
30	1.4		.7	2.9	...	...	2.3	7.0	5.5	3.9	3.9	4.5
31	1.5		6.1		...		3.0	7.1		3.8		5.5

e Estimated.

28. 4. 4. 2. 1. Robert D. Fischer. Dug observation water-table well in Farrington sand member of Raritan formation, diameter $4\frac{1}{2}$ feet, depth 17 feet, cased with concrete well blocks. Land-surface datum is 73 feet above msl. Highest water level 64.12 above msl, Apr. 26, 27, 1939; lowest 56.55 above msl, Jan. 28, 1950. Records available: 1936-52.

Water level at end of day, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	58.74	59.38	60.03	60.39	60.76	61.37	61.60	60.58	59.93	59.27	58.58	.....
2	58.79	59.42	59.99	60.40	60.79	61.49	61.57	60.56	59.84	59.25	58.56	.....
3	58.81	59.46	60.00	60.39	60.81	61.60	61.55	60.53	59.80	59.22	58.54	.....
4	58.84	59.53	60.05	60.40	60.84	61.68	61.52	60.48	59.77	59.20	58.52	.....
5	58.87	59.54	60.00	60.44	60.85	61.76	61.47	60.45	59.75	59.18	58.51	.....
6	58.89	59.56	59.98	60.45	60.88	61.81	61.43	60.56	59.74	59.15	58.49	.....
7	58.91	59.60	59.97	60.43	60.89	61.85	61.40	60.46	59.54	59.11	58.46	.....
8	58.93	59.66	59.97	60.42	60.92	61.90	61.39	60.42	59.68	59.09	58.43	.....
9	58.95	59.70	59.96	60.42	60.94	61.94	61.48	60.39	59.67	59.06	58.42	.....
10	58.97	59.74	59.96	60.44	60.96	61.99	61.37	60.36	59.66	59.04	58.40	.....
11	58.97	59.79	60.09	60.42	60.98	62.00	61.31	60.32	59.65	59.01	58.38	.....
12	59.00	59.81	60.02	60.42	60.99	62.02	61.27	60.29	59.63	59.00	58.36	.....
13	59.02	59.83	60.09	60.45	60.99	62.03	61.24	60.25	59.61	58.98	58.33	.....
14	59.03	59.86	60.09	60.48	60.99	62.05	61.21	60.22	59.59	58.96	58.31	.....
15	59.06	59.88	60.14	60.44	60.99	62.06	61.17	60.19	59.59	58.94	58.30	.....
16	59.06	59.92	60.17	60.41	60.96	62.06	61.13	60.18	59.56	58.91	58.28	.....
17	59.09	59.97	60.17	60.40	60.96	62.07	61.09	60.15	59.54	58.89	58.25	.....
18	59.09	59.96	60.17	60.39	60.95	62.04	61.07	60.11	59.52	58.88	58.24	.....
19	59.10	59.97	60.21	60.39	60.94	61.99	61.05	60.08	59.50	58.86	58.22	.....
20	59.12	59.99	60.22	60.37	61.03	61.93	61.01	60.05	59.48	58.82	58.21	.....
21	59.11	60.01	60.23	60.34	60.98	61.92	60.96	60.03	59.46	58.81	58.21	.....
22	59.16	60.01	60.23	60.36	60.93	61.88	60.93	60.07	59.44	58.79	58.24	.....
23	59.15	60.01	60.26	60.33	60.91	61.87	60.90	60.02	59.41	58.78	58.19	.....
24	59.14	60.02	60.26	60.31	60.92	61.87	60.85	59.98	59.39	58.76	58.16	.....
25	59.16	60.03	60.27	60.33	61.07	61.82	60.81	59.95	59.37	58.72	58.14	.....
26	59.22	60.03	60.28	60.34	61.06	61.78	60.79	59.92	59.36	58.71	.....	.....
27	59.23	60.05	60.29	60.41	61.09	61.74	60.76	59.90	59.33	58.70	.....	.....
28	59.26	60.06	60.30	60.51	61.13	61.70	60.73	59.88	59.31	58.68	.....	.....
29	59.26	60.04	60.31	60.64	61.16	61.68	60.69	59.86	59.29	58.65	.....	.....
30	59.28		60.32	60.72	61.17	61.62	60.65	59.82	59.28	58.62	.....	.....
31	59.33		60.35		61.20		60.62	59.80		58.61	.....	.....

29. 11. 1. 2. 3. Joseph Morrell. Near Moerls Corner. Dug observation water-table well in Englishtown sand, diameter 17 inches, depth 9.17 feet, cased with precast concrete rings. Land-surface datum is 76 feet above msl. Highest water level 75.08 above msl, Mar. 28, 1932; lowest 68.05 above msl, Oct. 6, 1932. Records available: 1923-52.

Water level at end of day, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	73.91	74.37	e73.75	73.77	73.90	74.44	71.49	71.14	74.10	72.42	72.50	73.60
2	74.15	74.45	e73.73	73.73	73.85	74.11	71.41	71.20	73.83	72.48	72.51	74.00
3	74.17	e74.38	73.73	73.69	73.77	73.89	71.32	71.33	73.78	72.87	72.51	74.18
4	74.09	e74.30	e73.96	73.67	73.68	73.70	71.29	71.26	73.57	72.85	72.52	74.06
5	74.28	e74.70	e74.10	74.12	73.62	73.60	71.32	71.18	73.43	72.74	72.55	74.45

29. 11. 1. 2. 3--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	74.13	e74.55	e73.97	73.98	73.57	73.42	71.25	72.59	73.28	72.67	72.56	74.20
7	74.05	e74.38	e74.15	73.89	73.50	73.23	71.18	73.43	73.22	72.64	72.55	74.07
8	73.98	e74.24	e74.16	73.81	73.46	73.09	71.20	73.48	73.13	72.61	72.54	73.98
9	73.94	e74.18	e74.17	73.76	73.40	73.01	71.78	73.36	73.05	72.61	72.55	73.92
10	74.25	e74.15	e74.20	73.73	73.37	72.88	72.36	74.19	72.95	72.57	72.63	73.89
11	74.08	e74.11	e74.34	73.67	74.53	72.78	72.21	73.88	72.84	72.57	72.67	74.28
12	74.03	e74.07	e74.46	73.64	74.19	72.67	72.03	73.71	72.73	72.53	72.68	74.11
13	73.99	e74.02	74.24	73.67	74.02	72.55	71.84	73.50	72.63	72.50	72.68	74.00
14	73.94	e73.99	e74.11	74.10	73.87	72.43	71.67	73.26	72.69	72.47	72.68	73.92
15	73.94	e73.95	e74.04	74.19	73.77	72.31	71.52	73.07	72.72	72.48	73.18	73.86
16	73.89	e73.91	e73.98	74.07	73.63	72.18	71.76	74.43	72.57	72.46	73.44	73.79
17	74.06	e73.87	e73.92	73.97	73.53	72.08	72.53	73.99	72.47	72.44	73.32	73.75
18	74.20	e74.29	e73.90	73.87	73.87	71.98	72.47	73.76	72.45	72.45	73.27	73.70
19	74.12	e74.39	e73.85	73.79	73.71	71.88	72.34	73.57	72.85	72.44	73.24	73.66
20	74.18	e74.25	e74.20	73.73	74.27	71.78	72.17	73.43	72.88	72.43	73.81	73.64
21	74.06	e74.19	e74.08	73.66	74.03	71.87	72.23	73.36	72.82	72.43	74.10	74.36
22	74.50	e74.35	e74.00	73.63	73.82	72.02	72.26	73.97	72.78	72.45	74.24	74.20
23	74.23	e74.24	e74.32	73.58	73.66	72.15	72.12	73.72	72.91	72.46	74.06	74.08
24	74.10	e74.10	e74.23	73.57	73.56	72.21	71.97	73.49	72.87	72.46	73.96	73.99
25	74.04	e74.00	e74.15	74.21	74.37	72.01	71.77	73.31	72.80	72.43	73.88	73.92
26	74.40	e73.95	e74.06	74.42	74.17	71.78	71.62	73.15	72.73	72.45	73.84	73.86
27	74.50	e73.90	e74.00	74.83	73.92	71.70	71.57	73.00	72.64	72.49	73.77	73.78
28	74.44	e73.82	73.92	74.37	73.72	71.70	71.43	73.06	72.56	72.50	73.70	73.72
29	74.23	e73.78	73.86	74.20	73.56	71.66	71.31	72.93	72.51	72.50	73.66	73.68
30	74.10		73.81	74.07	73.48	71.56	71.24	72.85	72.44	72.50	73.63	73.64
31	74.04		73.78		73.98		71.18	72.99		72.50		73.71

e Estimated.

28. 5. 4. 3. 9. (Old deep 1) Perth Amboy Water Dept. Runyon. Drilled unused artesian well in Farrington sand member of Raritan formation, diameter 8 inches, depth 290 feet. Land-surface datum is 19 feet above msl. This well is affected by pumping of nearby wells. Highest water level 12.8 above msl, Mar. 1, 1943, Mar. 26, 1944; lowest 54.9 below msl, Sept. 26, 27, 1947. Records available: 1930-52.

Daily lowest water level, above and below msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	...	+9.0	+8.2	-6.8	+7.1	+11.4	-26.7	-33.0	....	-36.6	....	....
2	...	9.0	7.9	+7.7	7.6	11.8	28.4	33.0	35.2	36.7	....	....
3	...	9.0	7.9	...	8.2	11.8	29.1	32.8	35.4	36.8	....	....
4	...	9.1	8.2	...	+8.7	11.8	29.3	33.0	35.6	36.8	....	....
5	...	8.9	8.1	...	-2.4	11.7	29.4	...	....	36.8	....	....
6	...	8.7	8.1	...	5.4	11.7	29.4	...	....	36.9	....	....
7	+8.6	8.6	8.1	...	6.9	11.8	30.2	...	....	36.9	....	....
8	8.8	8.6	7.9	...	7.7	+11.8	30.5	...	....	36.9	....	....
9	9.1	8.6	7.8	...	8.3	-1.4	30.6	...	....	36.9	....	....
10	9.2	8.5	7.8	...	8.7	4.1	31.1	...	....	36.9	....	....
11	9.2	8.6	8.1	...	9.0	5.6	31.0	...	....	36.8	....	....
12	9.2	8.4	7.7	...	-9.1	6.5	30.9	...	....	33.8	....	....
13	9.5	8.4	7.7	...	+2.4	7.5	30.9	...	....	35.4	....	....
14	9.4	8.5	7.4	...	5.5	8.1	31.5	...	34.8	35.8	....	....
15	9.4	7.8	7.4	...	6.8	8.4	32.0	...	34.6	36.2	....	....
16	9.6	7.2	7.3	...	7.7	9.1	32.4	...	35.4	36.4	....	....
17	9.7	5.2	7.1	...	8.3	10.1	32.9	...	35.6	36.4	....	....
18	10.0	5.7	6.9	...	+8.8	19.0	33.0	...	35.6	36.3	....	....
19	10.0	6.9	7.0	...	-2.4	13.0	33.2	...	36.2	36.5	....	....
20	10.2	7.3	7.0	...	-3.4	13.5	33.3	...	36.1	36.5	....	....
21	9.8	7.8	6.9	...	+8.2	13.2	33.0	...	38.1	....	....	....
22	9.8	7.7	6.9	...	...	12.3	32.8	...	37.8	....	....	....
23	10.2	7.7	6.9	...	...	11.8	32.9	...	37.6	....	....	....
24	10.2	7.8	7.2	...	...	12.0	32.9	...	37.1	....	....	....
25	9.5	8.1	7.2	...	10.2	12.5	32.9	...	37.0	....	....	....
26	9.5	8.6	7.3	...	10.8	13.2	32.9	...	37.0	....	-36.6	....
27	10.0	8.8	7.4	...	10.9	27.2	32.8	...	36.8	....	....	....
28	9.3	8.8	7.5	...	10.9	28.4	32.9	...	36.8	....	....	....
29	9.2	8.4	7.6	...	10.8	30.4	32.9	...	36.6	....	....	....
30	9.3		7.6	...	10.9	12.0	33.0	...	36.4	....	....	....
31	9.0		+1.1		11.1		33.0	...	....	....	....	....

29. 1. 4. 1. 1. (Old deep 8) Perth Amboy Water Dept. Runyon. Drilled unused artesian well in Farrington sand member of Raritan formation, diameter 8 to 6 inches, depth 290 feet, screen at 260-290. Land-surface datum is 18.5 feet above msl. This well is affected by pumping in nearby wells and by regional pumping from the Farrington sand member. Highest water level 12.2 above msl, Apr. 8, 1943; lowest 48.3 below msl, Sept. 15, 1947. Records available: 1929-52.

Daily lowest water level, above and below msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	+7.8	+8.9	...	-5.7	+6.2	....	-16.5	-23.4	....	....	-26.0	-17.6
2	8.3	8.9	...	6.7	7.0	....	18.1	23.4	-24.5	....	26.0	22.7
3	8.3	9.0	...	7.4	7.7	....	18.8	23.2	24.7	....	26.1	23.6
4	8.4	8.9	...	8.0	+7.9	....	19.0	21.9	24.9	-26.5	26.1	24.2
5	8.6	8.8	...	7.9	-1.6	....	....	23.2	....	27.0	19.8	24.3
6	7.3	8.8	...	8.2	4.6	....	....	23.5	....	26.9	23.6	24.6
7	7.6	8.7	...	8.6	6.0	....	....	23.8	....	26.8	24.5	24.7
8	8.3	8.6	...	9.0	6.8	....	....	....	....	26.7	25.1	24.9
9	8.7	8.6	...	9.4	...	-10.3	....	23.8	....	26.7	25.1	25.0
10	8.8	8.5	...	9.6	7.8	12.0	....	23.8	....	26.7	25.4	25.0
11	8.8	8.5	...	9.9	8.2	13.5	....	24.3	....	26.7	25.6	25.0
12	...	8.4	...	10.0	-8.3	15.5	....	24.5	....	26.6	25.8	14.8
13	...	8.4	...	.2	+ .9	16.5	21.0	e24.7	21.6	23.5	26.0	12.8
14	...	8.4	...	6.6	e4.5	....	21.0	e24.9	25.5	24.9	26.1	11.8
15	...	...	+7.2	-7.6	5.9	....	21.5	24.8	25.0	25.4	26.2	10.8
16	...	...	7.2	+1.7	e6.9	....	21.9	....	25.5	25.8	26.2	10.3
17	...	...	7.0	4.4	7.4	....	22.3	....	25.5	26.0	26.2	5.6
18	...	...	6.8	5.3	+8.0	....	22.8	....	25.4	26.0	26.2	3.7
19	...	...	6.8	6.1	-.9	....	22.9	....	26.3	26.0	26.2	-2.6
20	...	...	6.9	6.8	-2.6	....	23.2	....	26.0	26.1	26.1	....
21	...	...	...	7.2	+7.2	11.7	23.0	....	29.2	26.2	26.0	....
22	...	...	6.9	7.4	8.3	11.4	22.9	....	28.7	26.5	26.0	....
23	...	7.5	6.9	7.6	+8.8	11.0	23.1	24.8	27.7	26.5	26.0	....
24	...	7.7	7.2	+7.9	...	10.9	23.1	24.8	27.2	26.6	25.2	....
25	8.7	7.8	7.2	-4.3	...	11.3	23.1	24.9	27.0	26.6	25.8	....
26	8.8	8.4	7.3	...	...	11.9	23.2	24.9	26.9	17.3	25.9	....
27	...	8.6	7.4	...	...	16.2	23.2	25.0	26.8	23.5	25.9	+1.9
28	8.3	8.7	7.4	+3.8	...	17.5	23.1	25.1	26.7	24.9	16.7	+2.0
29	8.6	8.3	7.4	5.0	...	20.5	23.1	25.1	26.4	25.5	14.1	-8.5
30	8.9	...	+7.3	5.3	...	11.7	23.3	25.1	26.4	25.8	11.1	11.5
31	8.9	...	-2.9	...	...	...	23.3	....	...	25.9	...	12.8

e Estimated.

29. 1. 4. 4. 2. (Runyon 50) Perth Amboy Water Dept. Drilled observation water-table well in Old Bridge sand member of Raritan formation, diameter 6 inches, depth 55 feet. Land-surface datum is 15 feet above msl. Highest water level 12.4 above msl, July 26, 1938; lowest 1.3 below msl, Sept. 26-27, 1929. Records available: 1923-52.

Daily lowest water level, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	...	9.3	8.2	9.7	10.0	....	6.4	5.0	8.8	7.2	...	4.1
2	8.8	9.3	8.0	9.8	10.0	10.6	7.1	5.6	9.4	7.2	...	4.6
3	8.9	9.3	7.9	9.8	9.9	10.5	7.1	5.2	9.9	7.3	...	5.1
4	9.0	9.4	7.9	9.7	9.8	10.4	7.1	5.1	10.0	7.3	...	5.3
5	9.0	9.6	7.9	9.8	9.7	10.4	7.1	5.4	10.0	7.2	...	5.7
6	9.2	9.5	8.6	9.9	10.2	10.3	7.1	5.4	9.9	6.6	...	6.3
7	9.2	9.5	8.9	9.9	10.2	10.1	7.0	5.5	9.8	6.3	...	7.6
8	9.1	9.4	9.0	10.0	10.2	10.0	7.0	5.8	9.3	6.2	...	8.2
9	9.0	9.3	9.0	10.0	10.1	10.0	7.1	6.1	8.5	6.3	...	8.5
10	9.0	9.3	9.0	10.0	10.1	10.3	7.5	6.3	8.0	6.2	...	8.7
11	9.0	9.2	9.0	9.9	10.1	10.2	8.0	6.5	7.7	6.1	...	8.4
12	9.0	9.1	...	9.5	10.2	10.1	8.1	6.9	7.8	5.4	...	8.5
13	8.9	9.0	9.4	9.3	10.0	9.9	8.1	7.1	8.3	5.1	...	8.6
14	8.8	8.9	9.4	9.3	9.9	9.8	7.6	7.2	8.2	5.5	...	8.6
15	8.8	8.7	9.4	9.5	9.8	9.6	7.3	6.9	8.2	5.5	...	8.6
16	8.7	8.6	9.3	9.4	9.7	9.4	7.2	6.8	8.1	5.4	...	8.1
17	8.6	8.6	9.2	9.4	9.6	9.2	7.1	7.2	8.1	5.3	...	7.9
18	8.7	8.9	9.1	9.3	9.6	9.0	7.0	8.6	8.0	5.3	...	7.5
19	8.8	9.1	9.1	9.2	9.7	8.8	6.8	8.8	8.0	5.2	...	7.2
20	9.0	9.1	9.2	9.0	9.8	8.5	6.7	8.6	7.9	5.2	...	7.0

29.1.4.4.2--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	9.0	9.1	9.3	8.8	9.9	8.4	6.7	8.5	7.8	5.1	...	6.9
22	9.0	9.1	9.3	8.6	9.9	8.3	7.0	8.5	7.7	5.1	...	7.1
23	9.2	9.0	9.3	8.3	9.8	8.2	7.0	9.3	7.6	5.0	...	...
24	9.2	9.0	9.4	8.1	9.7	8.1	6.9	9.5	7.5	5.0	...	...
25	9.2	8.8	9.4	8.0	9.7	8.0	6.8	9.5	7.5	5.0	...	...
26	9.2	8.7	9.4	8.7	...	7.9	6.7	9.5	7.4	5.0	5.2	...
27	9.3	8.7	9.4	9.3	...	7.6	6.6	9.3	7.4	5.0	5.0	...
28	9.4	8.6	9.4	9.7	...	7.4	6.0	9.2	7.3	5.0	4.8	...
29	9.5	8.4	9.3	10.0	...	7.2	5.6	9.0	6.9	5.0	4.4	...
30	9.5	...	9.2	10.1	...	6.5	5.4	8.9	7.3	...	4.1	...
31	9.4	...	9.2	...	...	...	5.2	8.8	...	...	...	...

28.5.4.7.3. (Runyon 123) Perth Amboy Water Dept. Drilled unused artesian well in Old Bridge sand member of Raritan formation, diameter 8 inches, depth about 60 feet. Land-surface datum is 3.5 feet above msl. Daily tidal fluctuation about 3 feet. Highest water level 6.14 (flooded) above msl, Sept. 22, 1938; lowest 0.53 above msl, Jan. 23, 1940. Records available: 1938-47, 1949-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	+3.07	Apr. 1	+2.32	July 1	+1.88	Oct. 1	+2.31
Feb. 1	+2.65	May 1	+1.74	Aug. 4	+2.36	Nov. 26	+1.68
Mar. 13	+3.31	June 2	+3.00	Sept. 2	+2.70		

28.5.1.8.4. Borough of Sayreville. Drilled unused artesian well in Farrington sand member of Raritan formation, diameter 6 inches, depth 160 feet, screen at 148-160. Land-surface datum is 11.0 feet above msl. Fluctuations caused mainly by regional pumping. Highest water level 11.55 above msl, Mar. 27, 1944; lowest 32.9 below msl, Oct. 25, 1935. Records available: 1931-52.

Daily lowest water level, above and below msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	+7.70	+8.09	+5.26	+2.22	+6.60	+10.40	.....	-10.66	-10.78	.....	-12.43	-8.52
2	6.87	8.11	4.77	2.69	7.36	10.46	.....	10.28	10.95	.....	12.04	9.04
3	7.39	8.03	4.72	2.11	7.79	10.60	.....	9.89	10.87	.....	12.18	10.14
4	7.95	8.11	4.87	1.65	8.20	10.44	.....	8.83	11.18	.....	12.04	10.74
5	8.14	8.14	5.09	1.49	7.45	10.29	.....	10.03	11.43	.....	9.24	10.83
6	6.49	7.59	5.19	1.31	5.16	10.34	.....	10.74	11.82	.....	9.36	11.11
7	7.25	7.72	5.11	.81	3.87	10.35	.....	10.87	11.21	-13.35	10.53	10.74
8	7.88	7.79	4.75	.35	3.25	10.36	-7.65	10.25	11.02	13.34	11.16	11.17
9	8.10	7.81	4.75	+0.01	2.42	7.90	7.43	10.29	9.90	13.27	10.92	11.74
10	8.17	7.36	4.69	-.13	2.07	5.35	8.10	9.77	7.20	13.30	11.47	11.45
11	8.15	7.43	5.05	.35	1.82	3.93	8.13	11.28	4.55	13.15	11.89	11.03
12	8.32	7.31	4.74	-.55	1.68	3.11	8.11	.....	5.34	12.85	12.07	9.17
13	8.42	7.42	4.58	+7.6	2.78	1.87	8.04	.....	7.90	10.35	12.07	7.51
14	7.68	7.73	4.45	3.06	5.65	1.59	9.26	.....	12.90	11.60	12.36	6.55
15	7.70	6.24	4.29	1.75	6.75	2.17	9.65	.....	10.45	11.87	12.46	5.71
16	8.35	5.10	4.29	3.80	7.31	+8.7	10.21	.....	.....	12.41	12.32	5.30
17	8.59	1.24	4.05	5.06	7.70	-.30	10.36	.....	.....	12.53	12.43	3.03
18	8.76	2.72	3.73	5.85	8.18	1.89	11.04	.....	.....	12.68	12.50	1.66
19	8.83	5.22	3.84	6.46	7.42	....	10.82	.....	.....	12.41	12.42	.89
20	8.99	4.66	3.83	6.82	6.62	....	11.26	.....	.....	12.75	12.34	-.15
21	7.79	5.20	3.79	6.73	7.90	3.25	10.73	.....	.....	12.88	12.22	+8.1
22	8.00	5.11	3.74	5.95	8.51	1.30	9.94	.....	.....	13.12	12.03	.70
23	8.76	4.85	4.18	6.92	8.78	1.00	10.19	.....	13.31	13.19	11.57	.82
24	8.77	4.84	4.24	7.54	8.97	1.89	10.16	.....	13.24	13.40	11.52	1.18
25	8.15	5.85	4.45	6.45	9.50	2.56	10.27	.....	13.16	12.86	12.08	1.46
26	8.40	6.42	4.60	4.59	9.69	2.62	10.47	11.45	13.14	11.10	12.13	1.85
27	8.50	6.51	4.65	1.26	9.64	....	9.81	11.58	12.85	10.64	11.98	2.55
28	6.80	6.12	4.77	3.37	9.78	....	9.95	11.62	12.23	11.64	10.55	2.57
29	7.85	5.54	4.76	5.33	9.43	....	10.51	11.66	12.79	12.25	8.54	+1.47
30	8.03	...	4.77	5.88	9.73	....	10.75	11.34	.....	12.44	11.59	-1.10
31	8.07	...	3.75	...	9.91	...	10.53	10.93	...	12.47	...	2.20

Monmouth County

29.24.7.1.6. (Well 1) Borough of Avon by the Sea. Drilled public-supply artesian well in Mount Laurel and Wenonah sands, diameter 18 inches, depth 506 feet. Land-surface datum is 28.0 feet above msl. Highest water level 4.46 below msl, Apr. 12, 1937; lowest 132.0 below msl, Aug. 4, 1925. Records available: 1924-52. Jan. 9, 26.49; Apr. 7, 22.87; Dec. 29, 33.42.

29.11.1.2.9. Rulif Hulsart. Dug observation water-table well in Errolishtown sand, diameter $4\frac{1}{2}$ feet, depth 21 feet, cased with concrete well blocks. Land-surface datum is 113 feet above msl. Highest water level 100.40 above msl, Apr. 19, 1939; lowest 95.47 above msl, Feb. 18, 1940. Records available: 1936-52.

Water level at end of day, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	97.51	98.32	98.86	99.40	99.73	100.04	e99.45	98.49	98.29	97.68	97.02	96.81
2	97.55	98.37	98.83	e99.40	99.77	100.10	e99.40	98.46	98.34	97.64	97.01	96.81
3	97.59	98.44	98.85	e99.38	99.79	100.02	e99.35	98.41	98.30	97.61	96.98	96.80
4	97.61	98.50	e98.87	99.39	99.82	99.98	e99.33	98.40	98.29	97.60	96.97	96.80
5	97.65	98.52	e98.89	99.40	99.82	99.96	99.03	98.37	98.27	97.58	96.96	96.83
6	97.69	98.59	e98.92	99.40	99.82	99.91	99.26	98.36	98.24	97.56	96.93	96.83
7	97.72	98.61	98.93	99.38	99.82	99.92	99.21	98.39	98.20	97.52	96.90	96.87
8	97.74	98.68	98.96	99.35	99.84	99.93	99.20	98.39	98.19	97.50	96.88	96.89
9	97.76	98.69	98.96	99.36	99.86	99.93	99.20	98.40	98.17	97.49	96.87	96.90
10	97.80	98.72	98.98	99.39	99.86	99.93	99.19	98.42	98.14	97.47	96.83	96.92
11	97.82	98.73	98.99	99.34	99.88	99.99	99.12	98.50	98.11	97.46	e96.82	96.93
12	97.83	98.77	99.02	99.35	99.90	100.02	99.10	98.53	98.09	97.43	e96.82	96.94
13	97.84	98.78	99.10	99.40	99.92	100.09	99.08	98.52	98.08	97.42	e96.82	96.94
14	97.86	98.80	99.09	99.40	99.92	100.11	99.03	98.50	98.03	97.40	e96.81	96.95
15	97.88	98.81	99.12	99.36	99.92	100.10	99.00	98.49	98.02	97.40	e96.81	96.96
16	97.89	98.87	99.17	99.35	99.89	100.07	98.98	98.57	98.00	97.37	e96.81	96.95
17	97.95	98.89	99.13	99.35	99.88	100.05	99.00	98.60	97.98	97.35	e96.81	96.94
18	97.89	98.89	99.15	99.32	99.88	100.00	99.00	98.60	97.97	97.33	e96.80	96.91
19	97.94	98.90	99.19	99.31	99.87	99.96	98.96	98.57	97.93	97.30	e96.79	96.90
20	97.96	98.92	99.21	99.29	99.91	99.90	98.90	98.53	97.91	97.28	e96.78	96.91
21	97.96	98.92	99.22	99.23	99.91	99.87	98.87	98.55	97.90	97.27	e96.77	96.92
22	98.00	98.92	99.25	99.25	99.89	99.82	98.82	98.50	97.89	97.24	e96.75	96.93
23	97.99	98.92	99.28	99.19	99.88	99.80	98.80	98.50	97.84	97.22	e96.78	96.97
24	98.00	98.93	99.30	99.16	99.87	99.79	98.74	98.48	97.82	97.20	e96.80	96.98
25	98.07	98.92	99.31	99.18	99.92	99.73	98.70	98.44	97.81	97.18	e96.81	96.99
26	98.10	98.93	99.34	99.21	99.95	99.69	98.69	98.40	97.80	97.16	96.91	96.99
27	98.15	98.96	99.37	99.32	99.95	99.62	98.66	98.38	97.77	97.14	96.91	96.98
28	98.19	98.95	99.38	99.48	99.97	99.59	98.62	98.36	97.73	97.11	96.89	96.98
29	98.21	98.90	99.37	99.60	99.94	99.57	98.59	98.31	97.72	97.09	96.88	96.98
30	98.27		99.38	99.67	99.92	99.50	98.54	98.29	97.70	97.07	96.83	96.97
31	98.30		99.40		99.98		98.50	98.28		97.06		96.97

e Estimated.

Salem County

Penns Grove area

(The following wells are owned by the State of New Jersey.)

30.23.1.8.5. Penns Grove well 6. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{4}$ inches, depth 31.5 feet. Land-surface datum is 6 feet above msl. Highest water level 2.93 above msl, Dec. 22, 1951; lowest 0.19 above msl, Sept. 27, 1941. Records available: 1940-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	+2.89	Apr. 16	+2.35	July 29	+1.67	Oct. 24	+1.19
25	+2.21	May 22	+2.10	Aug. 15	+2.02	Nov. 25	+2.32
Mar. 25	+2.59	June 24	+1.85	Sept. 27	+1.44	Dec. 30	+1.92

30.23.4.1.9. Penns Grove well 7. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{4}$ inches, depth 12.3 feet. Land-surface datum is 14 feet above msl. Highest water level 11.09 above msl, Aug. 14, 1942; lowest 6.84 above msl, Nov. 22, 1941. Records available: 1940-52.

30.23.4.1.9--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	+10.87	Apr. 16	+10.07	July 29	+9.73	Oct. 24	+8.35
25	+10.09	May 22	+9.96	Aug. 15	+9.89	Nov. 25	+9.75
Mar. 25	+10.34	June 24	+9.85	Sept. 27	+8.99	Dec. 30	+9.89

30.22.6.6.7. Penns Grove well 9. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{2}$ inches, depth 11 feet. Land-surface datum is 26.5 feet above msl. Highest water level 24.18 above msl, Feb. 5, 1952; lowest 19.80 above msl, Sept. 25, 1943. Records available: 1940-52.

Feb. 5	+24.18	Apr. 16	+23.27	July 29	+22.01	Oct. 24	+20.86
25	+23.10	May 22	+22.99	Aug. 15	+22.57	Nov. 25	+22.72
Mar. 25	+23.62	June 24	+22.48	Sept. 27	+21.49	Dec. 30	+22.70

30.22.6.9.3. Penns Grove well 10. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{2}$ inches, depth 12 feet. Land-surface datum is 25.5 feet above msl. Highest water level 24.30 above msl, Dec. 22, 1951; lowest 18.84 above msl, Oct. 24, 1943. Records available: 1940-52.

Feb. 5	+24.14	Apr. 16	+23.34	July 29	+21.85	Nov. 25	+22.97
25	+23.09	May 22	+22.90	Aug. 15	+22.52	Dec. 30	+22.93
Mar. 25	+23.74	June 24	+22.16				

30.23.4.7.8. Penns Grove well 11. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{2}$ inches, depth 20 feet. Land-surface datum is 29.5 feet above msl. Highest water level 25.10 above msl, Feb. 13, 1951; lowest 18.44 above msl, Feb. 7, 1950. Records available: 1940-52.

Feb. 5	+22.15	Apr. 16	+24.02	July 29	+24.02	Oct. 24	+22.44
25	+23.37	May 22	+24.28	Aug. 15	+23.78	Nov. 25	+21.76
Mar. 25	+23.83	June 24	+24.32	Sept. 27	+23.03	Dec. 30	+21.54

30.22.8.3.5. Penns Grove well 12. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{2}$ inches, depth 20 feet. Land-surface datum is 3.5 feet above msl. Highest water level 4.59 above msl, Feb. 5, 1952; lowest 1.22 above msl, Oct. 11, 1941. Records available: 1940-52.

Feb. 5	+4.59	Apr. 16	+3.84	July 29	+2.98	Oct. 24	+2.26
25	+3.86	May 22	+3.42	Aug. 15	+3.00	Nov. 25	+3.13
Mar. 25	+4.25	June 24	+3.02	Sept. 27	+2.42	Dec. 30	+3.34

30.22.9.2.1. Penns Grove well 13. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{2}$ inches, depth 16 feet. Land-surface datum is 22 feet above msl. Highest water level 21.45 above msl, Feb. 5, 1952; lowest 15.01 above msl, Oct. 24, 1943. Records available: 1940-52.

Feb. 5	+21.45	Apr. 16	+20.55	July 29	+18.53	Oct. 24	+16.55
25	+20.19	May 22	+19.70	Aug. 15	+18.87	Nov. 25	+18.69
Mar. 25	+20.97	June 24	+18.74	Sept. 27	+17.28	Dec. 30	+19.48

30.22.9.6.2. Penns Grove well 14. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{2}$ inches, depth 17 feet. Land-surface datum is 25.5 feet above msl. This well is possibly affected by pumping of two wells $1\frac{1}{2}$ miles distant. Highest water level 23.24 above msl, Feb. 5, 1952; lowest 16.55 above msl, Oct. 24, 1943. Records available: 1940-52.

Feb. 5	+23.24	Apr. 16	+21.48	July 29	+20.08	Oct. 24	+18.09
25	+21.39	May 22	+20.92	Aug. 15	+20.24	Nov. 25	+20.32
Mar. 25	+22.38	June 24	+20.19	Sept. 27	+18.76	Dec. 30	+20.68

30.22.9.5.8. Penns Grove well 15. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{2}$ inches, depth 27 feet. Land-surface datum is 23.5 feet above msl. This well is affected by pumping from large-diameter wells, one about $\frac{1}{2}$ mile west and another about $\frac{7}{8}$ mile southwest. Highest water level 12.00 above msl, June 10, 1947; lowest 1.33 above msl, Feb. 7, 1950. Records available: 1941-52.

Feb. 5	+7.04	Apr. 16	+10.27	Aug. 15	+8.09	Nov. 25	+3.86
25	+8.73	May 22	+10.57	Sept. 27	+5.98	Dec. 30	+3.99
Mar. 25	+9.97	June 24	+9.67	Oct. 24	+5.03		

30.22.9.4.9. Penns Grove Water Co. well 22. Drilled observation water-table well in Cape May formation, diameter 4 inches, depth 20 feet. Land-surface datum is 20 feet above msl. This well is affected by pumping from nearby well. Highest water level 14.42 above msl, Aug. 18, 1939; lowest dry various dates, 1942-45, 1949, 1951-52. Records available: 1939-49, 1951-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	(f)	Apr. 16	+1.94	July 29	+1.30	Oct. 24	(f)
25	(f)	May 22	+2.10	Aug. 15	+1.14	Nov. 25	(f)
Mar. 25	+1.52	June 24	+1.88	Sept. 27	(f)	Dec. 30	(f)

f Dry.

30.22.9.7.3. Penns Grove well 24. Drilled observation water-table well in sands of Magothy and Raritan formations, diameter 6 inches, depth 51 feet, screen at 46-51, $5\frac{1}{2}$ inches - 25/10,000 slot. Land-surface datum is 18 feet above msl. Highest water level 7.83 above msl, June 14, 1947; lowest 6.48 below msl, Feb. 18, 1950. Records available: 1941-52.

Water level at end of day, above and below msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	-2.10	....	+2.70	+4.37	....	+5.05	+3.86	+3.51	+2.08	+0.23	-1.42	-2.56
2	2.01	....	2.69	4.34	...	5.04	3.82	3.49	2.01	.15	1.46	2.55
3	1.97	+0.30	2.78	4.34	....	5.08	3.77	3.46	1.93	.07	1.50	2.60
4	1.85	.49	....	4.42	+5.33	5.11	3.72	3.43	1.86	+.02	1.55	2.60
5	1.76	.59	....	4.45	5.37	5.14	3.64	3.37	1.80	-.03	1.56	2.58
6	1.68	.79	....	4.46	5.44	5.20	3.56	3.34	1.78	.07	1.62	2.65
7	1.61	.96	....	4.46	5.44	5.17	3.51	3.29	1.67	.15	1.71	2.68
8	1.51	1.25	....	4.46	5.50	5.13	3.50	3.26	1.61	.20	1.76	2.70
9	1.42	1.35	2.85	4.49	5.53	5.12	3.70	3.26	1.57	.26	1.78	2.72
10	1.39	....	2.96	4.58	5.56	5.12	3.85	3.22	1.51	.31	1.84	2.68
11	1.33	....	2.91	4.52	5.58	4.99	3.93	3.17	1.46	.36	1.86	2.75
12	1.25	....	....	4.57	5.44	4.93	3.99	3.13	1.41	.39	1.93	2.77
13	1.14	2.34	....	4.67	5.43	4.87	4.04	3.06	1.35	.44	1.97	2.79
14	1.09	2.41	....	4.70	5.40	4.83	4.08	3.02	1.28	.49	2.01	2.79
15	1.02	2.47	....	4.61	5.42	4.79	4.09	2.99	1.24	.52	2.04	2.79
16	1.00	2.58	3.46	4.60	5.32	4.75	4.07	2.97	1.19	.59	2.09	2.81
17	.97	2.63	3.49	4.64	5.30	4.71	4.05	2.90	1.10	.63	2.14	2.82
18	....	2.55	3.56	4.66	5.26	4.63	4.07	2.85	1.04	.64	2.16	2.85
19	....	2.59	3.65	4.66	5.25	4.55	4.08	2.78	.97	.66	2.18	2.86
20	.93	2.67	3.73	4.65	5.34	4.46	4.04	2.73	.85	.71	2.20	2.82
21	....	2.67	3.81	4.59	5.22	4.40	4.01	2.71	.82	....	2.25	2.83
22	....	2.68	3.86	4.64	5.15	4.35	3.95	2.61	.76	.96	2.30	2.87
23	....	2.71	3.94	4.50	5.09	4.32	3.94	2.56	.66	.97	2.34	2.86
24	....	2.74	3.96	4.47	5.08	4.30	3.84	2.50	.62	1.03	2.37	2.87
25	....	2.73	4.01	4.52	5.08	4.25	3.78	2.44	.55	1.10	2.38	2.86
26	....	2.78	4.06	4.54	5.02	4.19	3.76	2.39	.51	1.14	2.37	2.85
27	....	2.82	4.09	....	5.00	4.09	3.75	2.32	.44	1.13	2.42	2.86
28	....	2.85	4.14	....	5.05	4.03	3.73	2.26	.38	1.19	2.46	2.87
29	....	2.82	4.15	....	5.00	4.03	3.66	2.21	.34	1.28	2.48	2.83
30	-.07	....	4.19	....	5.00	3.93	3.61	2.15	.28	1.32	2.54	2.83
31	+.10	....	4.30	....	5.05	....	3.55	2.11	....	1.35	....	2.79

30.32.2.2.3. Penns Grove well 31. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{4}$ inches, depth 22 feet. Land-surface datum is 5.0 feet above msl. Highest water level 3.09 above msl, Feb. 8, 1949; lowest 4.23 below msl, Nov. 22, 1941, Oct. 24, 1943. Records available: 1940-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	+2.21	Apr. 16	+1.37	July 29	+0.25	Oct. 24	-2.09
25	+1.26	May 22	+1.20	Aug. 15	-.11	Nov. 25	-1.29
Mar. 25	+1.72	June 24	-.37	Sept. 27	-1.82	Dec. 30	-.22

30.22.8.9.5. Penns Grove well 32. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{4}$ inches, depth 12 feet. Land-surface datum is 4 feet above msl. Highest water level 2.84 above msl, Feb. 5, 1952; lowest 1.06 below msl, Nov. 22, 1941. Records available: 1940-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	+2.84	Apr. 16	+1.73	July 29	+1.17	Oct. 24	-0.21
25	+1.50	May 22	+1.42	Aug. 15	+.96	Nov. 25	+.74
Mar. 25	+2.16	June 24	+1.18	Sept. 27	+.19	Dec. 30	+.64

30.22.9.8.6. Penns Grove well 35. Driven observation water-table well in Magothy and Paritan formations, diameter $1\frac{1}{4}$ inches, depth 31 feet. Land-surface datum is 20.5 feet above msl. Highest water level 18.66 above msl, Nov. 29, 1940; lowest 0.35 above msl, Oct. 9 1942. Records available: 1940-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	+6.94	Apr. 16	+7.80	July 29	+7.89	Oct. 24	+4.18
25	+7.20	May 22	+8.24	Aug. 15	+7.00	Nov. 25	+3.82
Mar. 25	+7.90	June 24	+8.05	Sept. 27	+5.25	Dec. 30	+4.06

30.22.9.8.4. Penns Grove well 36. Driven observation water-table well in Magothy and Paritan formations, diameter $1\frac{1}{4}$ inches, depth 43 feet. Land-surface datum is 26.5 feet above msl. Highest water level 5.58 above msl, June 10, 1947; lowest 9.39 below msl, Dec. 4, 1942. Records available: 1940-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	-1.40	Apr. 16	+1.88	July 29	+1.74	Oct. 24	+2.93
25	+.43	May 22	+2.47	Aug. 15	+.69	Nov. 25	+4.02
Mar. 25	+1.18	June 24	+1.58	Sept. 27	-1.87	Dec. 30	+4.43

30.32.2.3.6. Penns Grove well 41. Drilled observation water-table well in Cape May formation, diameter 6 inches, depth 25 feet, 5.5-inch screen, 25/10,000 slot at 20-25. Land-surface datum is 10 feet above msl. Highest water level 11.89 above msl, Feb. 4, 1952; lowest 4.66 above msl, Oct. 15, 1943. Records available: 1941-52.

Water level at end of day, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	10.89	11.26	10.47	11.13	11.26	11.37	8.73	8.99	8.96	7.58	6.61	8.74
2	11.06	11.24	10.50	.....	11.11	11.21	8.67	9.02	9.03	7.58	6.60	8.83
3	11.05	11.26	10.61	.....	10.99	11.06	8.59	8.99	9.09	7.59	6.59	8.92
4	11.01	11.88	11.01	.....	10.90	10.95	8.52	8.90	8.99	7.54	6.54	8.92
5	11.25	11.63	11.14	.....	10.81	10.83	8.45	8.82	8.90	7.50	6.53	9.28
6	11.21	11.49	11.10	.....	10.75	10.71	8.39	9.09	8.83	7.46	6.50	9.30
7	11.04	11.32	11.00	.....	10.60	10.57	8.33	9.32	8.71	7.40	6.48	9.30
8	10.99	11.28	10.92	.....	10.58	10.44	8.42	9.54	8.63	7.38	6.44	9.30
9	10.95	11.23	10.84	.....	10.50	10.35	10.10	9.58	8.57	7.35	6.43	9.30
10	11.11	11.23	10.82	.....	10.46	10.29	10.40	9.70	8.48	7.30	6.43	9.40
11	11.00	11.20	11.64	.....	10.50	10.10	10.40	9.62	8.40	7.30	6.43	9.80
12	10.98	11.14	11.47	.....	10.50	9.99	10.37	9.57	8.36	7.28	6.40	9.89
13	10.94	11.12	11.49	.....	10.40	9.88	10.30	9.50	8.30	7.23	6.39	9.89
14	10.89	11.11	11.29	.....	10.32	9.80	10.20	9.39	8.24	7.20	6.36	9.88
15	10.89	10.71	11.23	.....	10.29	9.70	10.09	9.30	8.22	7.19	6.50	9.84
16	10.88	10.80	11.23	10.80	10.17	9.60	10.12	9.45	8.17	7.12	6.56	9.80
17	10.92	11.10	11.22	10.71	10.10	9.52	10.11	9.36	8.09	7.09	6.56	9.77
18	11.02	10.98	11.22	10.63	10.19	9.40	10.02	9.24	8.05	7.08	6.56	9.69
19	10.99	10.90	11.31	10.57	10.13	9.30	10.23	9.12	8.08	7.04	6.56	9.64
20	11.02	10.83	11.29	10.49	10.48	9.20	10.27	9.04	8.02	6.99	6.81	9.65
21	10.89	10.79	11.23	10.40	10.47	9.20	10.19	9.00	7.99	6.96	7.55	9.99
22	11.19	10.70	11.22	10.37	10.36	9.20	10.01	8.89	7.95	6.90	8.38	10.04
23	11.19	10.69	11.31	10.35	10.24	9.37	9.92	8.80	7.93	6.88	8.59	10.04
24	11.01	10.68	11.37	10.49	10.21	9.33	9.76	8.71	7.90	6.83	8.69	10.04
25	10.96	10.60	11.29	10.89	10.92	9.22	9.60	8.65	7.86	6.79	8.78	10.02
26	11.40	10.58	11.21	11.21	11.21	9.11	9.50	8.58	7.76	6.78	8.80	9.99
27	11.56	10.57	11.20	11.61	11.05	9.01	9.41	8.50	7.70	6.77	8.80	9.89
28	11.81	10.53	11.19	11.82	10.92	8.96	9.33	8.50	7.66	6.72	8.79	9.80
29	11.59	10.48	11.18	11.65	10.80	8.91	9.22	8.49	7.63	6.69	8.78	9.77
30	11.32		11.18	11.42	10.72	8.82	9.18	8.40	7.60	6.67	8.78	9.71
31	11.27		11.17		10.88		9.08	8.37		6.65		9.81

30.32.2.3.9. Penns Grove well 51. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{4}$ inches, depth 26 feet. Land-surface datum is 13.7 feet above msl. Highest water level 11.24 above msl, Feb. 5, 1952; lowest 3.94 above msl, Oct. 24, 1943. Records available: 1940-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	+11.24	Apr. 16	+10.69	July 29	+8.02	Oct. 24	+5.89
25	+10.33	May 22	+9.43	Aug. 15	+8.06	Nov. 25	+7.99
Mar. 25	+10.94	June 24	+8.01	Sept. 27	+6.54	Dec. 30	+9.44

30.32.2.6.5. Penns Grove well 54. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{4}$ inches, depth 12 feet. Land-surface datum is 12.5 feet above msl. Highest water level flowing Mar. 13, 1941; lowest 5.63 above msl, Oct. 2, 1943. Records available: 1940-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	+12.43	Apr. 16	+11.37	July 29	+9.61	Oct. 24	+7.16
25	+11.18	May 22	+10.76	Aug. 15	+9.32	Nov. 25	+8.30
Mar. 25	+12.02	June 24	+9.89	Sept. 27	+7.92	Dec. 30	+9.80

30.32.3.5.5. Penns Grove well 55. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{4}$ inches, depth 12 feet. Land-surface datum is 8.0 feet above msl. Highest water level 7.28 above msl, Feb. 8, 1949, Feb. 5, 1952; lowest 1.93 above msl, Oct. 20, 24, 1943. Records available: 1940-52.

Feb. 5	+7.28	Apr. 16	+6.25	July 29	+4.59	Oct. 24	+3.04
25	+6.03	May 22	+5.89	Aug. 15	+5.05	Nov. 25	+5.33
Mar. 25	+6.76	June 24	+5.00	Sept. 27	+3.55	Dec. 30	+5.78

30.32.2.5.8. Penns Grove well 62. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{4}$ inches, depth 30 feet. Land-surface datum is 10 feet above msl. This well is affected by pumping from well 0.25 mile northwest. Highest water level 3.56 above msl, Feb. 8, 1949; lowest 10.55 below msl, Feb. 13, 1942. Records available: 1940-52.

Feb. 5	+3.42	Apr. 16	+2.78	July 29	-0.39	Oct. 24	-3.27
25	+2.52	May 22	+2.10	Aug. 15	-1.48	Nov. 25	-3.22
Mar. 25	+3.33	June 24	-1.11	Sept. 27	-2.69	Dec. 30	-1.31

30.32.2.9.1. Penns Grove well 63. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{4}$ inches, depth 17 feet. Land-surface datum is 18 feet above msl. Highest water level 15.76 above msl, Feb. 5, 1952; lowest 8.09 above msl, Oct. 24, 1943. Records available: 1941-52.

Feb. 5	+15.76	Apr. 16	+14.44	July 29	+11.91	Oct. 24	+9.48
25	+14.05	May 22	+13.62	Aug. 15	+11.47	Nov. 25	+10.28
Mar. 25	+15.11	June 24	+12.28	Sept. 27	+10.15	Dec. 30	+12.29

30.32.2.9.5. Penns Grove well 64. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{4}$ inches, depth 17 feet. Land-surface datum is 5 feet above msl. Highest water level 2.89 above msl, Dec. 22, 1951; lowest 1.42 below msl, Sept. 25, 1943. Records available: 1940-52.

Feb. 5	+2.04	Apr. 16	+1.55	July 29	+1.30	Oct. 24	+1.10
25	+1.56	May 22	+1.47	Aug. 15	+1.55	Nov. 25	+1.76
Mar. 25	+1.94	June 24	+1.05	Sept. 27	+1.07	Dec. 30	+1.47

30.32.6.1.6. Penns Grove well 65. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{4}$ inches, depth 12 feet. Land-surface datum is 11 feet above msl. Highest water level 9.23 above msl, Feb. 8, 1949; lowest 1.88 above msl, Oct. 24, 1943. Records available: 1940-52.

Feb. 5	+7.86	Apr. 16	+8.62	July 29	+5.57	Oct. 24	+3.26
25	+8.30	May 22	+8.13	Aug. 15	+5.58	Nov. 25	+4.52
Mar. 25	+8.50	June 24	+6.42	Sept. 27	+3.92	Dec. 30	+6.15

30.32.1.9.5. Penns Grove well 71. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{4}$ inches, depth 16 feet. Land-surface datum is 12 feet above msl. Highest water level 8.94 above msl, Feb. 5, 1952; lowest 1.33 above msl, Dec. 6, 1941. Records available: 1940-52.

Feb. 5	+8.94	Apr. 16	+8.17	July 29	+6.75	Oct. 24	+3.90
25	+7.83	May 22	+7.60	Aug. 15	+6.14	Nov. 25	+4.12
Mar. 25	+8.60	June 24	+7.02	Sept. 27	+4.76	Dec. 30	+5.46

30.32.5.1.3. Penns Grove well 72. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{4}$ inches, depth 17 feet. Land-surface datum is 8 feet above msl. Highest water level 6.53 above msl, Feb. 5, 1952; lowest 0.70 below msl, Oct. 24, 1943. Records available: 1940-52.

Feb. 5	+6.53	Apr. 16	+5.20	July 29	+3.17	Oct. 24	+1.00
25	+4.94	May 22	+4.49	Aug. 15	+2.69	Nov. 25	+2.21
Mar. 25	+5.88	June 24	+3.56	Sept. 27	+1.53	Dec. 30	+3.77

30.32.4.6.4. Penns Grove well 73. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{4}$ inches, depth 12 feet. Land-surface datum is 3.5 feet above msl. Highest water level 2.82 above msl, Dec. 22, 1951, Feb. 5, 1952; lowest 2.01 below msl, Sept. 25, 1943. Records available: 1940-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	+2.82	Apr. 16	+2.42	July 29	+0.82	Oct. 24	-0.27
25	+2.13	May 22	+2.05	Aug. 15	+ .95	Nov. 25	+1.68
Mar. 25	+2.49	June 24	+1.57	Sept. 27	+ .07	Dec. 30	+1.76

30.32.5.4.6. Penns Grove well 74. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{4}$ inches, depth 16 feet. Land-surface datum is 8 feet above msl. Highest water level 7.07 above msl, Dec. 3, 1940; lowest 0.37 above msl, Oct. 24, 1943. Records available: 1940-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	+5.01	Apr. 16	+3.39	July 29	+1.78	Oct. 24	+0.56
25	+3.26	May 22	+3.07	Aug. 15	+1.61	Nov. 25	+2.15
Mar. 25	+4.08	June 24	+2.39	Sept. 27	+ .94	Dec. 30	+2.54

30.32.5.7.7. Penns Grove well 84. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{4}$ inches, depth 12 feet. Land-surface datum is 11.5 feet above msl. Highest water level 11.56 above msl, Mar. 20, 1951; lowest 4.74 above msl, Oct. 24, 1943. Records available: 1940-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	+11.52	Apr. 16	+11.40	July 29	+8.08	Oct. 24	+5.83
25	+10.69	May 22	+10.77	Aug. 15	+8.13	Nov. 25	+6.89
Mar. 25	+11.40	June 24	+9.04	Sept. 27	+6.42	Dec. 30	+10.03

30.32.7.6.9. Penns Grove well 92. Driven observation water-table well in Cape May formation, diameter $1\frac{1}{4}$ inches, depth 16 feet. Land-surface datum is 17.2 feet above msl. Highest water level 15.66 above msl, Feb. 5, 1952; lowest 5.33 above msl, Dec. 6, 1941. Records available: 1940-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	+15.66	Apr. 16	+13.30	July 29	+9.89	Oct. 24	+6.51
25	+12.80	May 22	+11.43	Aug. 15	+8.85	Nov. 25	+6.20
Mar. 25	+14.83	June 24	+10.25	Sept. 27	+7.16	Dec. 30	+7.81

30.22.9.4.3. Penns Grove well E-14. Logwood Inn. Driven unused water-table well in Cape May formation, diameter $1\frac{1}{4}$ inches, depth 20 feet. Land-surface datum is 21 feet above msl. This well is affected by pumping of well 0.35 mile south. Highest water level 16.69 above msl, May 24, 1940; lowest 9.05 above msl, Dec. 22, 1949. Records available: 1940-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	+15.56	Apr. 16	+15.42	July 29	+13.85	Oct. 24	+10.94
25	+14.64	May 22	+14.82	Aug. 15	+13.37	Nov. 25	+10.78
Mar. 25	+15.94	June 24	+14.03	Sept. 27	+11.83	Dec. 30	+12.51

30.22.9.5.4. Penns Grove well E-15. George Schmid. Driven unused water-table well in Cape May formation, diameter $1\frac{1}{4}$ inches, depth 18 feet. Land-surface datum is 20 feet above msl. This well is affected by pumping from well about 0.25 mile southwest. Highest water level 15.12 above msl, Apr. 23, 1940; lowest 4.82 above msl, Dec. 22, 1949. Records available: 1940-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	+9.92	Apr. 16	+11.52	July 29	+10.32	Oct. 24	+7.17
25	+10.48	May 22	+11.46	Aug. 15	+9.78	Nov. 25	+6.54
Mar. 25	+11.45	June 24	+10.94	Sept. 27	+8.26	Dec. 30	+7.42

30.32.2.6.4. Penns Grove well E-16. Seven Bros. Dug unused water-table well in Cape May formation, diameter 2 feet, depth 6 feet, well curbed with brick. Land-surface datum is 15 feet above msl. Highest water level 14.85 above msl, Mar. 14, 1943; lowest 10.21 above msl, Oct. 24, 1943. Records available: 1940-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	+14.63	Apr. 16	+14.61	July 29	+12.63	Oct. 24	+10.78
25	+14.31	May 22	+13.75	Aug. 15	+12.21	Nov. 25	+11.68
Mar. 25	+14.61	June 24	+12.71	Sept. 27	+11.25	Dec. 30	+13.15

30.32.9.9.8. Penns Grove well R-5. Swaverly Cabins. Drilled unused water-table well in Merchantville(?) clay, diameter 3 inches, depth 50 feet. Land-surface datum is 10 feet above msl. This well is possibly affected by pumping from a well 1 mile west. Highest water level 10.30 above msl, Apr. 24, 1940; lowest 4.10 above msl, Oct. 24, 1943. Records available: 1940-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	+9.64	Apr. 16	+8.97	July 29	+8.10	Oct. 24	+6.37
25	+8.39	May 22	+8.90	Aug. 15	+8.16	Dec. 30	+7.76
Mar. 25	+9.36	June 24	+8.45	Sept. 27	+6.99		

30.23.7.1.4. Penns Grove Water Supply Co. R-7. Drilled unused water-table well in Magothy and Raritan formations, diameter 2 inches, depth 50 feet. Highest water level 24.08 above msl, Feb. 5, 1952; lowest 18.82 above msl, Oct. 20, 1943. Records available: 1940-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	+24.08	Apr. 16	+23.25	July 29	+22.12	Oct. 24	+20.47
25	+23.21	May 22	+22.91	Aug. 15	+22.48	Nov. 25	+22.57
Mar. 25	+23.63	June 24	+22.25	Sept. 27	+21.19	Dec. 30	+22.73

30.32.3.6.5. Penns Grove Water Supply Co. R-8. Drilled unused water-table well in Merchantville(?) clay, diameter 5 inches, depth 55 feet. Land-surface datum is 8.5 feet above msl. Highest water level 8.93 above msl, Mar. 20, 1951; lowest 2.09 above msl, Oct. 10, 1943. Records available: 1940-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	+8.86	Apr. 16	+8.77	July 29	+5.91	Oct. 24	+4.07
25	+6.32	May 22	+7.77	Aug. 15	+6.14	Nov. 25	+6.79
Mar. 25	+8.82	June 24	+6.91	Sept. 27	+4.59	Dec. 30	+7.56

30.44.3.6.2. (Thornthwaite well) Seabrook Farms. At Shirley. Dug unused water-table well in Cohansey sand, diameter 48 to 36 inches, depth about 24 feet. Land-surface datum is 144 feet above msl. Highest water level 132.92 above msl, May 6, 1952; lowest 127.35 above msl, Sept. 12, 1950. Records available: 1949-52.

Water level at end of day, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	128.88	.....	131.28	.....	132.74	132.50	131.67	130.86	130.94	130.18	129.35	128.85
2	128.92	.....	131.24	.....	132.79	132.60	131.65	130.85	130.93	130.16	129.33	128.87
3	128.94	.....	131.29	132.40	132.84	132.68	131.63	130.82	130.87	130.11	129.31	128.83
4	129.00	.....	131.33	132.46	132.89	132.74	131.59	130.80	130.84	130.09	129.28	128.82
5	129.05	.....	131.27	132.49	132.85	132.75	131.54	130.77	130.82	130.06	129.29	128.89
6	129.07	.....	131.30	132.45	132.85	132.80	131.49	130.78	130.83	130.04	129.25	128.83
7	129.12	.....	131.33	132.39	132.77	132.72	131.48	130.74	130.77	130.00	129.20	128.83
8	129.17	.....	131.37	132.34	132.80	132.70	131.47	130.78	130.74	129.99	129.17	128.84
9	129.22	.....	131.37	132.34	132.78	132.65	131.46	130.85	130.73	129.95	129.17	128.86
10	129.26	.....	131.47	132.43	132.81	132.67	131.40	130.95	130.70	129.92	129.14	128.93
11	129.28	.....	131.52	132.32	132.81	.....	131.35	131.07	130.65	129.90	129.13	128.93
12	129.34	.....	131.60	132.33	132.67	132.47	131.32	131.18	130.67	129.88	129.09	128.91
13	129.39	.....	131.73	132.47	132.63	132.40	131.30	131.23	130.63	129.86	129.06	128.93
14	129.42	.....	131.74	132.48	132.62	132.39	131.29	131.28	130.61	129.83	129.03	128.95
15	129.48	.....	131.87	132.30	132.58	132.35	131.26	131.34	130.55	129.81	129.02	128.99
16	129.50	.....	131.93	132.24	132.49	132.31	131.22	131.39	130.57	129.78	128.98	129.02
17	129.58	.....	131.89	132.24	132.48	132.29	131.20	131.37	130.55	129.75	128.95	129.04
18	129.56	.....	131.93	132.21	132.40	132.22	131.20	131.36	130.51	129.74	128.93	129.04
19	129.61	131.36	131.98	132.19	132.39	132.17	131.19	131.33	130.47	129.72	128.92	129.03
20	129.62	131.46	132.05	132.15	132.48	132.09	131.17	131.32	130.45	129.66	128.91	129.06
21	129.62	131.42	132.08	132.10	132.36	132.07	131.15	131.33	.....	129.62	129.21	129.08
22	129.75	131.40	132.10	132.15	132.31	132.03	131.12	131.24	130.40	129.61	128.87	129.07
23	129.67	131.40	132.17	132.04	132.27	132.00	131.12	131.20	130.36	129.60	128.85	129.08
24	129.68	131.42	132.18	132.01	132.30	132.02	131.05	131.16	130.33	129.58	128.84	129.10
25	129.74	131.38	132.24	132.05	132.40	131.98	131.03	131.12	130.32	129.53	128.87	129.11
26	129.82	131.44	132.30	132.09	132.32	131.92	131.02	131.09	130.31	129.51	128.92	129.13
27	129.89	131.47	132.33	132.31	132.30	131.84	131.01	131.06	130.27	129.52	128.90	129.15
28	130.03	131.49	132.37	132.41	132.33	131.81	131.02	131.03	130.25	129.49	128.87	129.15
29	130.00	131.40	132.37	132.56	132.29	131.81	130.98	131.00	130.23	129.43	128.89	129.17
30	130.08	.....	.....	132.65	132.26	131.71	130.93	130.96	130.21	129.40	128.87	129.18
31	130.19	.....	.....	.....	132.50	.....	130.90	130.93	.....	129.39	.....	129.20

e Estimated.

26.21.5.4.6. Union County Park Comm. Drilled unused artesian well in Brunswick shale, diameter 6 inches, depth 290 feet. Land-surface datum is 69.0 feet above msl. Highest water level 65.94 above msl, June 2, 1952; lowest 61.18 above msl, Dec. 9, 1949. Records available: 1943-52.

Water level at end of day, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	e64.30	64.26	e63.95	64.84	64.69	65.40	63.92	62.82	e64.05	63.02	62.55	62.62
2	64.13	64.55	e63.98	64.75	64.59	65.82	63.84	63.14	64.20	62.98	62.85	62.46
3	63.95	64.63	64.01	64.60	64.81	65.51	63.85	63.37	63.86	62.84	62.61	62.36
4	63.84	64.70	63.93	64.58	e64.95	65.33	64.12	63.18	63.74	63.12	62.43	62.36
5	63.97	64.57	63.94	64.84	e64.72	65.18	64.19	62.96	63.66	e63.37	62.32	62.69

26.21.5.4.6--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	64.06	64.37	63.92	e64.95	e64.45	65.15	e64.20	63.06	63.90	63.13	62.22	63.02
7	63.94	64.22	63.91	64.76	e64.29	65.12	64.18	63.10	64.08	62.94	62.13	e63.24
8	63.85	64.24	64.17	64.52	e64.50	65.23	64.21	63.21	63.87	62.87	62.44	63.08
9	63.73	64.38	e64.24	64.37	e64.20	65.03	64.37	63.45	63.68	62.78	e62.82	62.95
10	63.65	e64.48	64.30	64.32	e64.40	64.88	64.38	e63.75	63.54	62.67	62.59	62.92
11	63.60	64.45	64.51	64.25	e64.54	64.69	64.30	63.83	63.42	62.84	62.44	62.94
12	63.87	64.25	64.53	64.49	64.65	64.52	64.29	63.59	63.32	e63.09	62.22	62.96
13	64.05	64.14	64.50	64.77	64.51	64.36	64.33	63.38	63.46	e63.00	62.17	63.08
14	63.81	64.06	64.37	64.79	64.40	64.54	63.77	63.21	e63.74	62.70	62.11	e63.27
15	63.76	64.01	e64.65	64.68	64.36	e64.63	63.25	63.09	63.64	62.60	62.43	63.10
16	63.61	64.33	e64.75	64.38	64.19	64.40	62.85	63.59	63.45	62.45	e62.61	62.94
17	63.73	e64.55	64.54	64.32	64.40	64.18	62.63	e63.75	63.21	62.40	62.43	62.84
18	63.81	64.43	64.36	64.22	64.63	64.01	62.85	63.61	63.15	62.58	62.22	62.69
19	e64.00	64.17	64.45	64.40	64.41	63.90	63.27	63.38	63.11	62.86	62.20	62.60
20	e63.90	64.13	64.50	e64.40	64.32	63.80	e63.61	63.24	63.36	e62.56	62.22	62.88
21	63.80	64.05	64.43	64.40	64.18	63.96	e63.46	63.30	63.67	62.47	62.30	63.13
22	63.89	64.12	64.65	64.28	64.01	e64.11	e63.25	e63.45	63.51	62.44	62.71	63.02
23	63.81	64.39	e64.85	64.14	63.95	64.07	e63.14	e63.65	63.28	e62.41	e62.91	62.94
24	63.71	e64.35	64.95	64.07	64.15	63.95	e63.06	e63.90	63.11	e62.36	62.81	63.08
25	63.68	64.31	64.79	64.11	e64.25	63.75	63.01	e64.15	63.06	e62.59	62.65	63.43
26	64.11	64.14	64.71	64.41	64.33	63.56	63.22	e64.00	63.07	e62.51	62.59	63.36
27	e64.34	64.05	64.57	e64.75	64.22	63.23	63.46	e63.83	63.25	e62.45	62.89	63.43
28	e64.42	63.96	64.45	65.00	64.02	63.70	63.30	e63.69	e63.48	e62.38	62.70	e63.45
29	64.23	e63.90	64.63	64.97	63.95	e64.00	63.09	e63.59	63.32	62.34	62.79	e63.43
30	64.16		e64.80	64.85	64.20	63.94	62.94	e63.48	63.13	62.31	62.87	e63.48
31	64.17		64.84		64.62		62.82	e63.72		62.28		e63.52

e Estimated.

NEW YORK

Long Island

By J. J. Geraghty

Scope of Water-Level Program

The observation-well program in Long Island was continued in 1952 in cooperation with the Nassau County Department of Public Works, the Suffolk County Board of Supervisors, the Suffolk County Water Authority, and the New York State Water Power and Control Commission. Measurements were made in about 650 observation wells, 41 of which were equipped with recording gages. Water-level data for 183 of these wells, including daily readings at 24 recording gages, are included in this report. Figures 18-22 show the location of observation wells on Long Island. Additional water-level measurements for previous years, 1947 through 1950, are included in U. S. Geological Survey Circular 167, "The recovery of ground-water levels in Brooklyn, N. Y., from 1947 to 1950," by N. J. Lusczynski. Published and unpublished water-level data may be inspected at the offices of the U. S. Geological Survey on Long Island and also at the offices of the cooperating agencies.

Precipitation

Precipitation on Long Island in 1952 averaged about 49 inches at 23 stations operated by the U. S. Weather Bureau and other agencies, and was approximately 5 inches above normal in most parts of the island. Thus the above-normal precipitation of 9 inches during the past 2 years largely counteracted the 10-inch deficiency of 1949 and 1950. Precipitation during 1952 ranged from 40.94 inches at Patchogue in southern Suffolk County to 60.92 inches at the Lake Ronkonkoma station in west-central Suffolk County. The Battery Station in New York City (longest continuous record near the western end of Long Island) recorded 46.71 inches of precipitation, 3.72 inches above normal; the Setauket station (longest continuous record in eastern Long Island), 44.09 inches, 1.00 inch below normal; the Mineola station in central Nassau County, 47.73 inches, 4.08 inches above normal; and the Riverhead Research station in eastern Suffolk County, 44.61 inches, 2.26 inches above normal. In general, precipitation was above normal in Long Island during the first half of the year, but was somewhat deficient in the latter half.

Pumpage

The gross withdrawal of ground water on Long Island averaged about 230 million gallons daily in 1952, according to information furnished by the New York State Water Power and Control Commission, the Nassau County Department of Public Works, and other sources. About 130 million gallons daily were used for public supply, about 70 million gallons daily for industrial uses, and the remainder for agricultural and miscellaneous uses. Pumpage on Long Island during 1952 was about 15 million gallons daily more than that in 1951. This increase reflects the continuing growth of population in Nassau and Suffolk Counties, and the gradual increase in the use of ground water for supplemental irrigation in eastern Suffolk County. Included in the total amount is the withdrawal by the city of New York from its pumping installations in Nassau and Queens Counties which averaged only 2½ million gallons daily during the year, a decrease of about 1½ million gallons daily from the amount withdrawn in 1951. Total ground-water withdrawals from Long Island by the city of New York averaged as high as about 55 million gallons daily in 1949 and about 50 million gallons daily in 1950 during the so-called water-shortage emergency. By counties, the greatest withdrawal in 1952, amounting to about 40 percent of the total, was made in Nassau. Of the remainder, about 24 percent was made in Queens, about 25 percent in Suffolk, and about 11 percent in Kings. By aquifers, about 55 percent of the withdrawals were made from deposits of late Pleistocene age, about 5 percent from the Jameco gravel, about 30 percent from the sands of the Magothy(?) formation, and about 10 percent from the Lloyd sand member of the Raritan formation. Recharge of used water to underground formations in 1952 averaged about 115 million gallons daily. Of this amount it is estimated that about 75 million gallons daily were returned by cesspools, septic tanks, and leaching basins, and about 40 million gallons daily by wells. As a result, net withdrawals in 1952 on Long Island were about 115 million gallons daily, or about half the gross withdrawals.

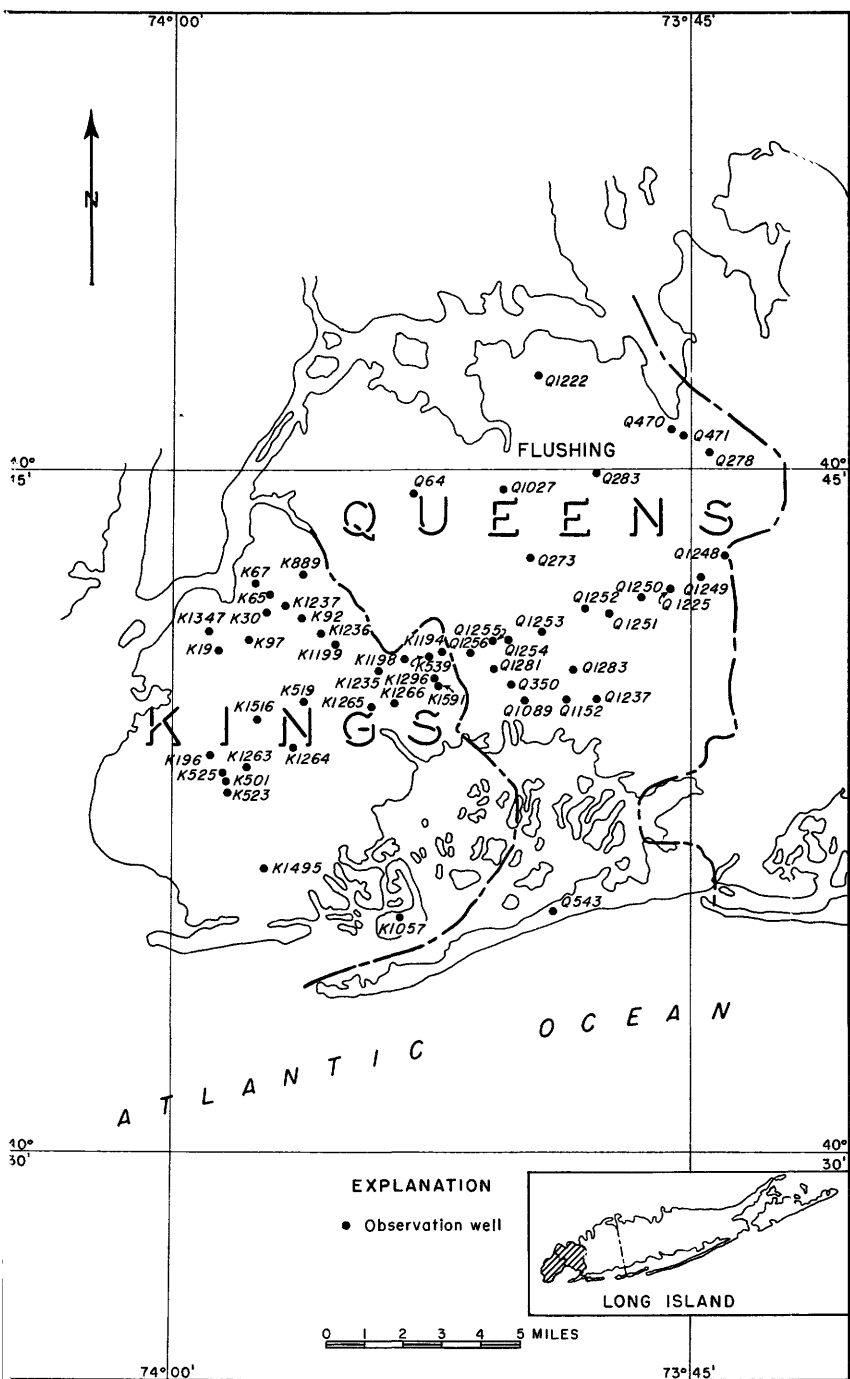


Figure 18. --Location of observation wells in Kings and Queens Counties, Long Island, N. Y., 1952.

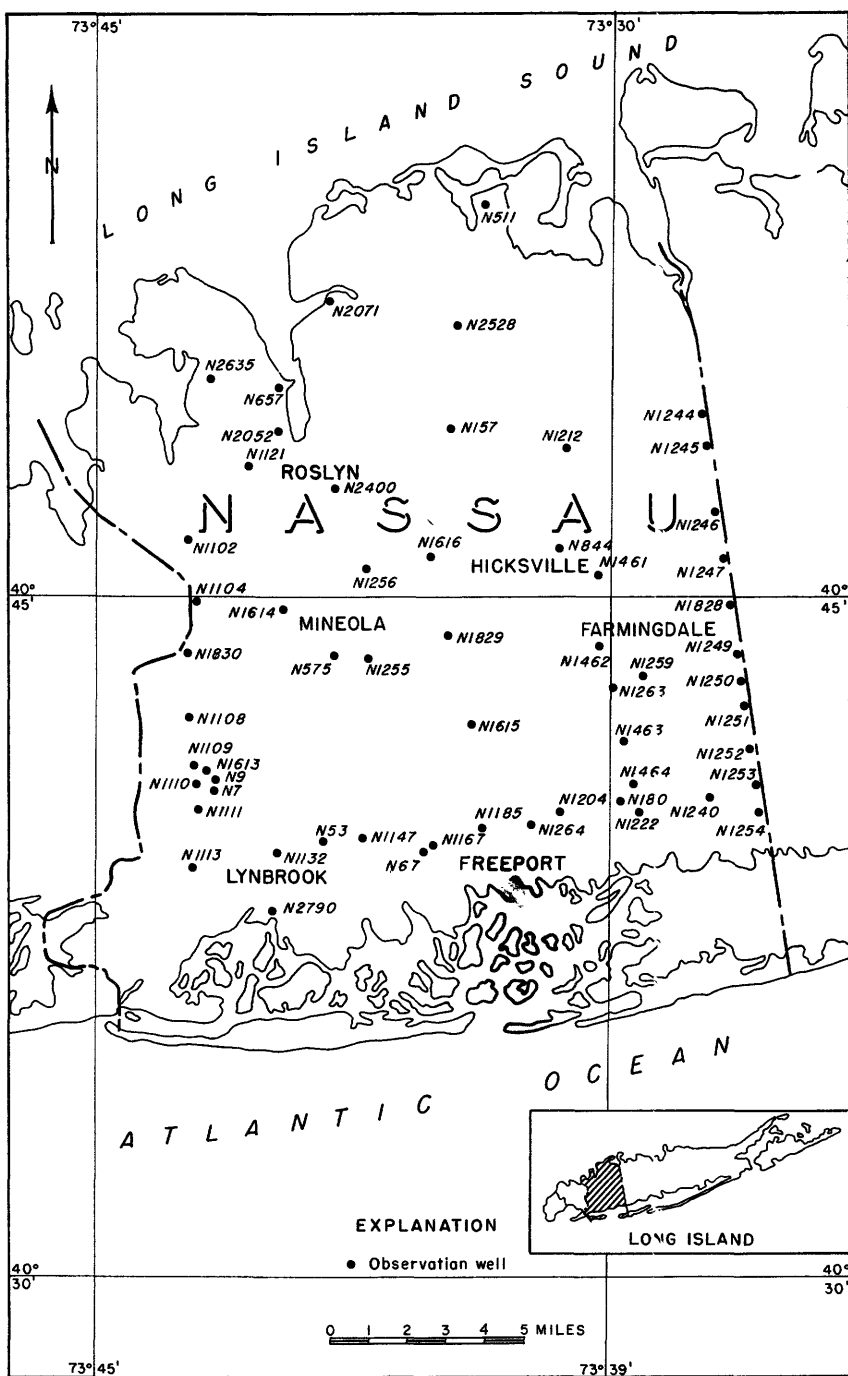


Figure 19. --Location of observation wells in Nassau County, Long Island, N. Y., 1952.

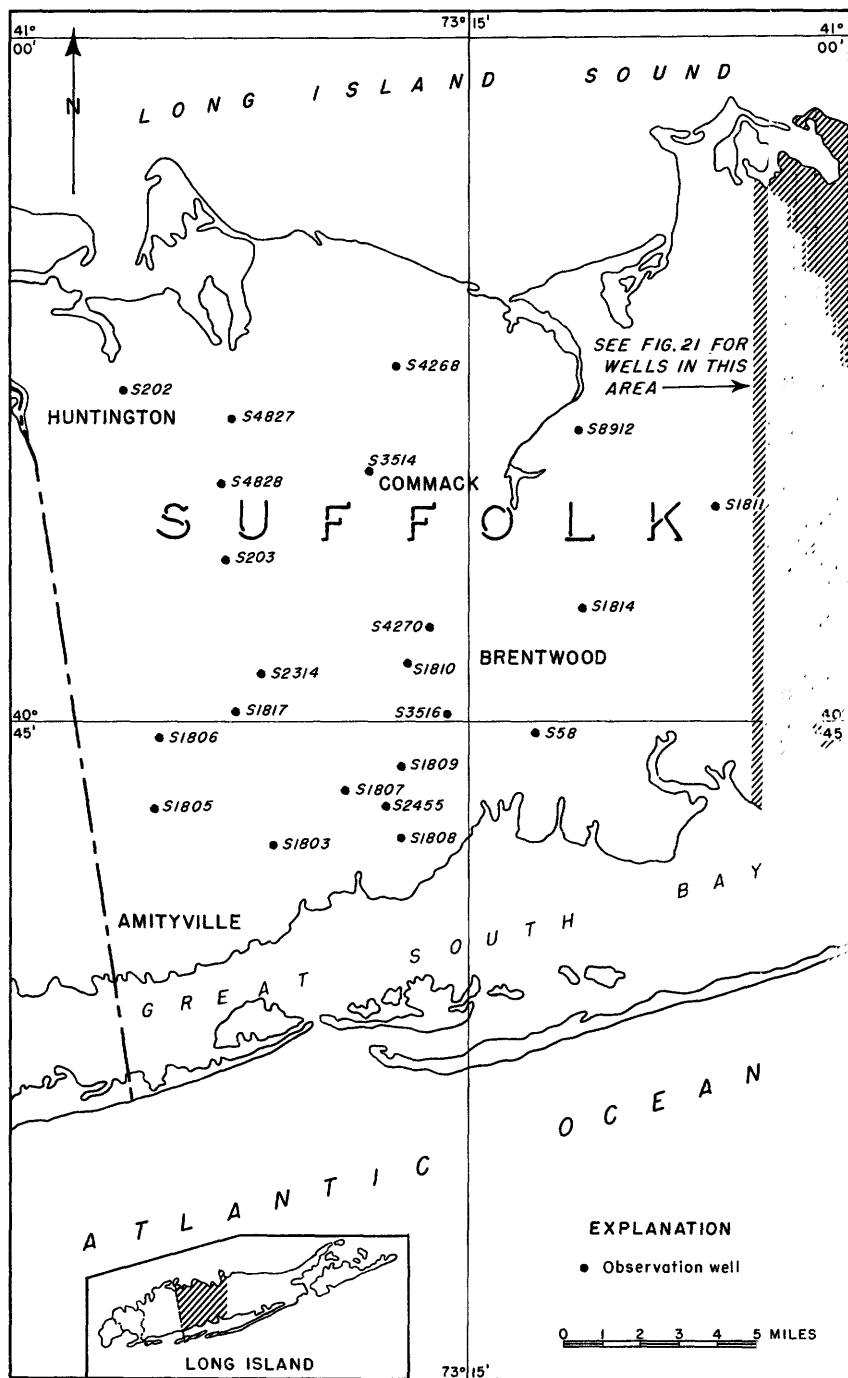


Figure 20. --Location of observation wells in western Suffolk County, Long Island, N. Y., 1952.

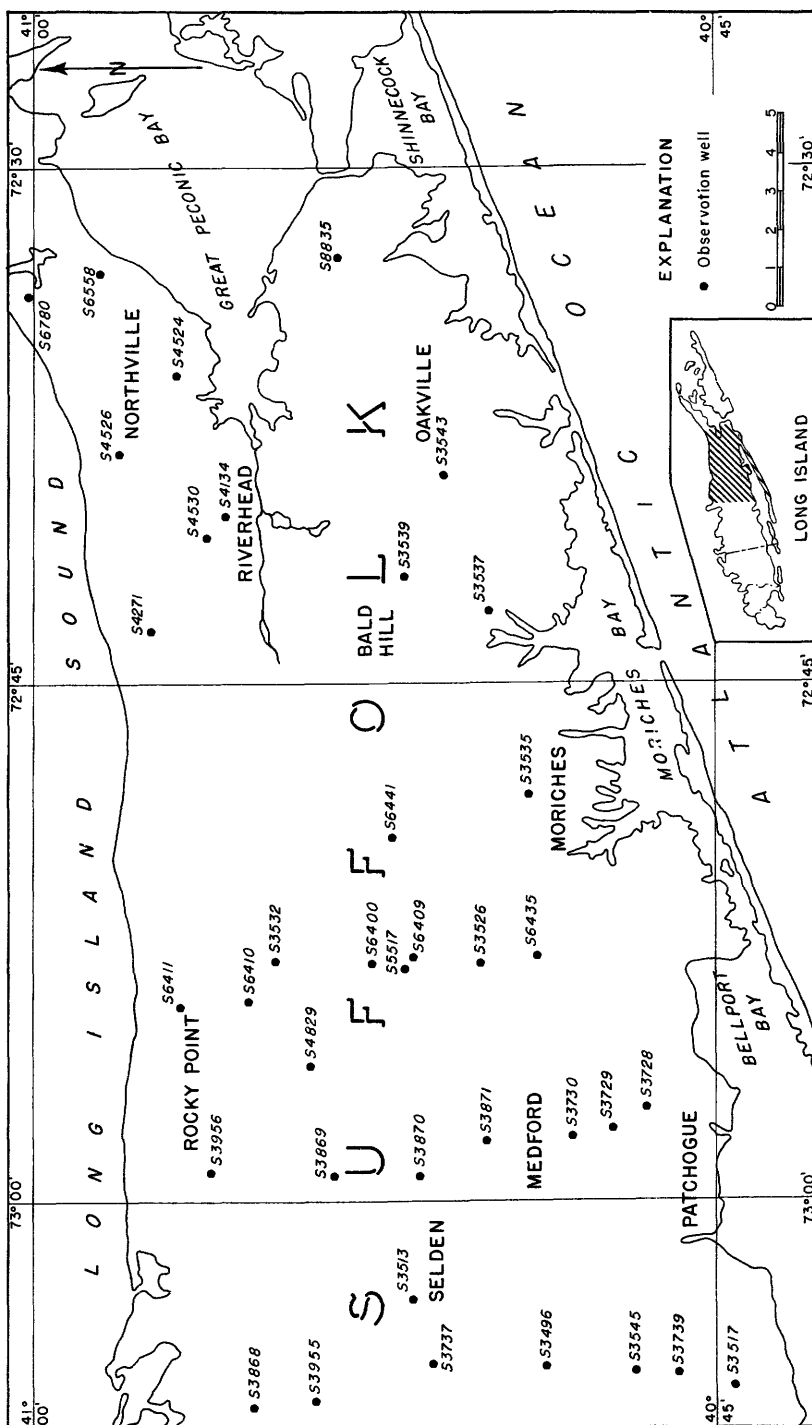


Figure 21. --Location of observation wells in central Suffolk County, Long Island, N. Y., 1952.

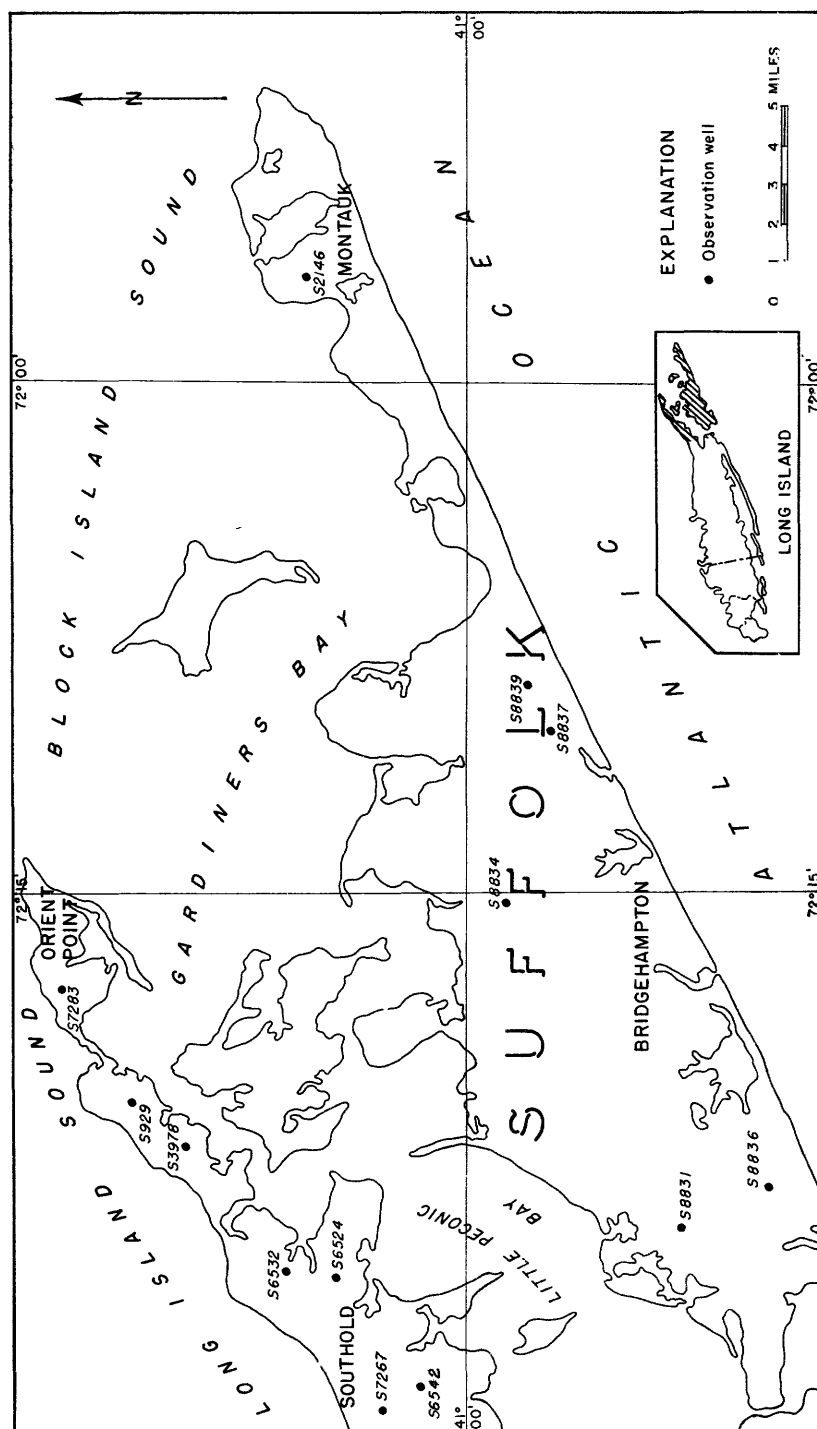


Figure 22. --Location of observation wells in eastern Suffolk County, Long Island, N. Y., 1952.

Interpretation of Water-Level Fluctuations

There are four main aquifers that yield large supplies of ground water on Long Island. The upper and most productive of these consists of extensive outwash deposits of late Pleistocene age, which, in some places, are overlain by impervious material. The second aquifer, the Jameco gravel, which is an earlier outwash deposit of Pleistocene age, has been identified so far only in the western part of the island and is thought to be covered in most places by the Gardiners clay, an interglacial deposit. The third aquifer, the Magothy(?) formation of Late Cretaceous age, consists of widespread beds of sand, gravel, and clay. Over most of the island, this formation is in direct contact with the overlying beds of outwash of Pleistocene age, but in the western part, is covered by either the Gardiners clay or the Jameco gravel. Except for a persistent coarse zone in the lower part of the formation, no other widespread water-bearing zones are recognized, though productive wells have been screened at various other depths throughout the remainder of the formation. The fourth and lowermost aquifer, the Lloyd sand member of the Raritan formation, also of Late Cretaceous age, lies just above the bedrock floor of the island and is covered almost everywhere by the thick clay member of the Raritan formation. The Lloyd sand member consists of beds of sand, gravel, and clay.

The shallow-lying outwash of late Pleistocene age constitutes a vast reservoir into which water derived from precipitation can readily sink and from which water can be readily and economically withdrawn. The fluctuation of the water table in these deposits chiefly reflects changes in the rate of precipitation. However, in localities where the safe withdrawal has been exceeded, water-level fluctuations are more the result of changes in rates of pumping than of changes in the rate of precipitation. In contrast, the water in the deeper sands is under artesian pressure and is recharged (through relatively small intake areas) by water percolating down from the overlying formations. Fluctuations of water levels in the deeper sands, therefore, are controlled chiefly by changes in the rate of pumping. Thus, the safe withdrawal from the deposits of late Pleistocene age is governed primarily by the precipitation rate, whereas the safe withdrawal from the deeper beds is limited by the capacity of the beds to receive and transmit water from the area of recharge to points of withdrawal. Fluctuations of water levels in the water-table and artesian formations on Long Island express changes in storage resulting from variations in the difference between replenishment and discharge, both natural and artificial. When recharge exceeds discharge, storage increases and water levels rise. Conversely, when discharge exceeds recharge, storage decreases and water levels decline.

The configuration of the water table in Long Island may be divided into two main hydrologic provinces, namely, (1) western Long Island and (2) central and eastern Long Island. In western Long Island, excessive pumping during years prior to 1947 lowered the water table below sea level in a large area of Kings County and adjacent parts of Queens County. However, in central and eastern Long Island, perennial recharge exceeds withdrawals substantially, and, consequently, the water table continues to remain above sea level at all but a few places along the shore line where local overdevelopment has occurred. During 1952, the water table was as high as 83 feet above sea level in central Nassau County. In the overdeveloped area in western Long Island the major fluctuations of the water table reflect changes in the amounts and distribution of pumpage as well as the over-all rate of withdrawal, whereas in other parts of the island, the major fluctuations are chiefly the result of variations in precipitation, evaporation, and transpiration. In Kings County (Brooklyn) in western Long Island, the water table and artesian levels recovered in 1952 at faster rates than in the previous 3 years, with rises of as much as 5 feet being measured during the year in some areas. This upward trend of water levels in Brooklyn has been more or less continuous since 1947 when a private company shut down permanently its entire plant, from which about 27 million gallons daily had been previously pumped. Before 1947 ground-water levels were above sea level only in the extreme southern sections of the county. In December 1952 the water table was above sea level, by as much as 5 feet in places, in more than the entire southern half of Brooklyn. The recovery during the past 5½ years ranged from 12 to 18 feet in the northern sections and averaged more than 19 feet in central Brooklyn. At well K30 (fig. 23) in the heart of the industrialized northwestern section of Brooklyn, the recovery of water levels totaled 5.5 feet in 1952, and 18.0 feet since June 1947.

The water table in central and eastern Long Island was slightly above normal in December 1952 and about 1 foot above the previous year's levels. Ground-water levels in these sections were somewhat higher than in 1946 and 1947, indicating a small net increase in storage during the intervening six years. The general trend of ground-water levels in central Long Island is expressed satisfactorily by the average water level of 14 selected wells in Nassau and Suffolk Counties (fig. 23). These wells are N1255, N1256, N1259, N1263, N1614, N1615, and N1616 in Nassau County, and S1803, S1805, S1806, S1807, S1808, S1809, and S1810 in Suffolk County. During 1952 the average water level in these wells rose 0.80 foot to a stage of 47.26 feet above mean sea level, which is slightly above normal for December. The net rise in the average level since December 1947 was 0.50 foot for the 14 selected wells. In general, water levels in the north and south forks of eastern Suffolk County were slightly higher in 1952 than in 1951. A gradual upward trend in water levels has been noted in both forks since 1949 and 1950.

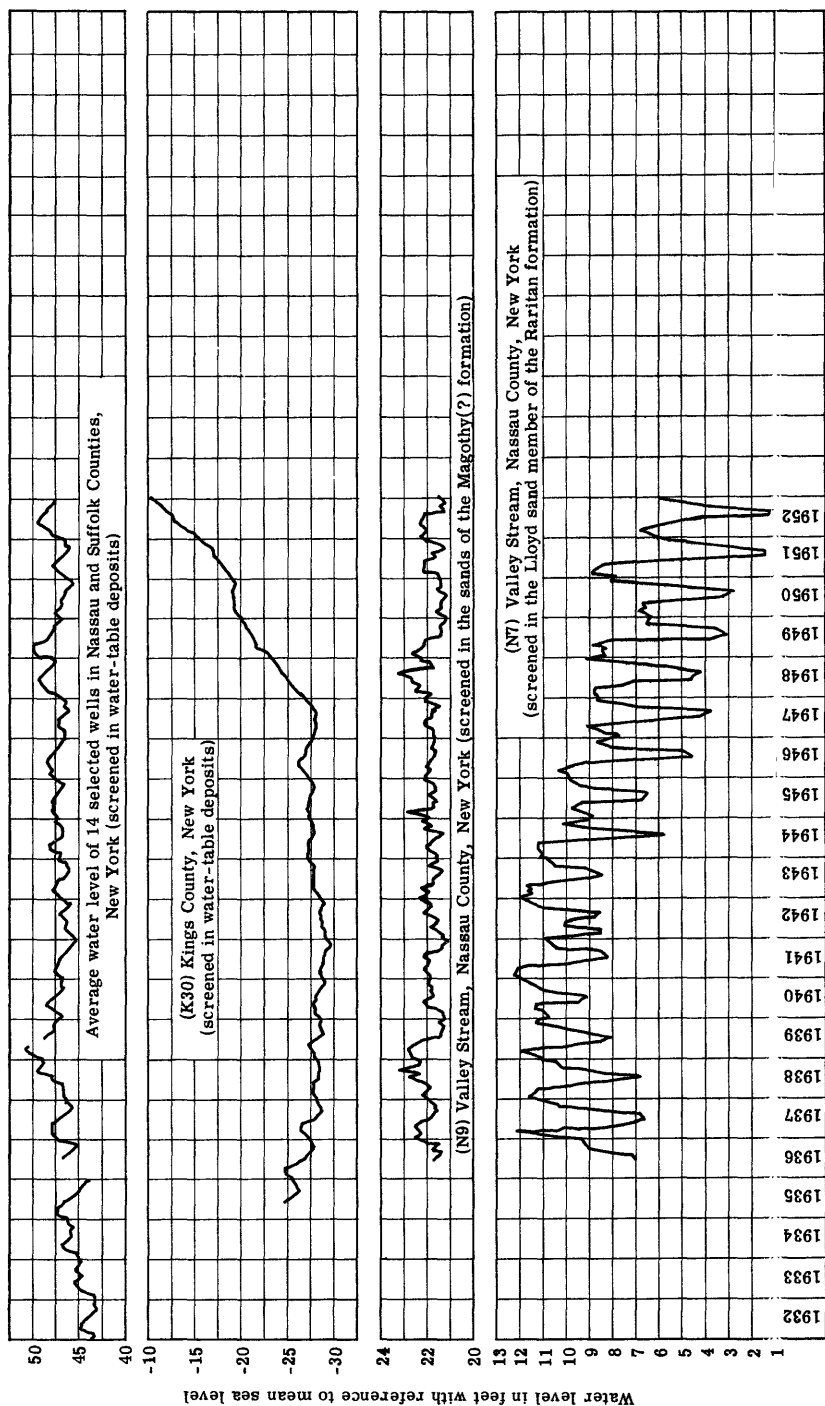


Figure 23. -- Composite average water level of 14 selected wells in Nassau and Suffolk Counties and hydrographs of selected water-table and artesian wells in Kings and Nassau Counties, N. Y.

There are approximately 100 artesian observation wells on Long Island. Of these, 44 are now used only for periodic observational purposes. The remainder are public-water supply, industrial, and agricultural wells in which measurements are made when the wells are not in use; at these wells, systematic readings cannot be obtained conveniently. In general, water levels rose during 1952 in all artesian formations, as well as in the water table. However, at well N7 (fig. 23), screened in the Lloyd sand member of the Raritan formation, a downward trend in water levels, though interrupted at times, has been apparent since about 1944. A similar trend has been noted at well N1613, which is in the vicinity of well N7, but is screened in the lower part of the Magothy(?) formation. At well N9 (fig. 23), screened in the shallower sands of the Magothy(?) formation in this same general location, water levels have shown no long-range rise or decline since observations were begun in 1936. Readings have been taken at the following artesian wells which were either unused or constructed primarily for observational purposes:

Jameco gravel	Sands of the Magothy (?) formation			Lloyd sand member of the Raritan formation	
*K19	N9	N1245	*N2790	*K1057	Q278
*K519	N157	N1461	Q471	*N7	Q283
K523	*N180	N1613	*S58	N67	*Q470
K525	N575	N2052	S203	N511	*Q543
K1591	N844	N2400	S2314	*N657	*Q1027
Q350	*N1212	*N2528	*S4134	*Q64	Q1222
Q1152	N1244	*N2635	S4828	*Q273	S202
*Q1237					*S6409

* Equipped with recording gage.

Acknowledgments

Acknowledgment is hereby made to the Superintendent of the Riverhead Water Supply for maintaining a recording gage at well S4134 at Riverhead, and for taking periodic water-level readings at well S4271 at Baiting Hollow; and to the Superintendent of the Village of Greenport Water Supply for water-level readings at several wells in the vicinity of Greenport.

Well-Numbering System

Observation wells on Long Island are numbered by the New York State Water Power and Control Commission. The letter prefixing the number is the initial letter of the county in which the well is situated; the number has no geographical significance in that Long Island wells are numbered more or less with respect to the order of drilling since about 1933.

The following tables include a summary of data pertaining to ground-water levels for Long Island and the net change in water levels during 1952:

Summary of data on ground-water levels on Long Island, 1952
(in feet with reference to mean sea level)

Well no.	Date of first measurement	Highest water level	Date	Lowest water level	Date	Water level on last date of record in 1952
K19	Sept. 10, 1940	-5.52	Dec. 27, 1952	-26.80	Sept. 26, 1941	-5.56
K30	June 14, 1935	-10.05	Dec. 25, 1952	-29.75	Nov. 8, 1941	-10.05
K65	Nov. 8, 1937	-10.41	Dec. 18, 1952	-28.34	Aug. 25, 1939	-10.41
K67	Nov. 8, 1937	-8.77	Dec. 23, 1952	-20.91	Sept. 15, 1947	-8.77
K92	Dec. 11, 1937	-6.98	Dec. 24, 1952	-29.69	Dec. 11, 1937	-6.98
K97	Apr. 5, 1944	-7.43	Dec. 23, 1952	-26.58	Oct. 27, 1944	-7.43
K196	Sept. 12, 1942	+6.47	Nov. 3, 1952	-4.76	Mar. 5, 1944	+6.29
K501	June 30, 1947	+5.28	Sept. 23, 1952	-4.80	June 30, 1947	+4.98
K519	June 24, 1947	+1.49	Dec. 27, 1952	-18.78	June 30, 1947	+1.43
K523	Mar. 6, 1944	+4.90	Aug. 26, 1952	-1.91	Feb. 6, 1945	+4.50
K525	Dec. 13, 1945	+6.27	Aug. 26, 1952	+4.46	Mar. 10-13, 1947	+5.88
K539	May 3, 1932	+1.71	Aug. 25, 1952	-8.28	Feb. 21, 1942	+1.39
K889	June 4, 1945	-10.14	Dec. 24, 1952	-39.01	Jan. 25, 1947	-10.14
K1194	Nov. 2, 1940	+7.0	June 23, 1952	-8.36	Feb. 28, 1942	+3.35
					Mar. 7, 1942	
K1198	Nov. 2, 1940	+1.61	Sept. 23, 1952	-8.45	May 14, 1942	+1.52
K1199	Nov. 16, 1940	-.96	Dec. 24, 1952	-17.17	Jan. 1, 1944	-.96
K1235	Jan. 25, 1941	+5.9	Dec. 23, 1952	-10.65	June 27, 1942	+5.59

Summary of data on ground-water levels on Long Island, 1952--Cont'd.

Well no.	Date of first measurement	Highest water level	Date	Lowest water level	Date	Water level on last date of record in 1952
K1236	Jan. 25, 1941	-3.54	Dec. 24, 1952	-19.42	Oct. 4, 1941	-3.54
K1237	Jan. 18, 1941	-12.99	Dec. 24, 1952	-36.53	Jan. 24, 1947	-12.99
K1263	Apr. 21, 1933	+4.82	Sept. 23, 1952	-11.97	July 21, 1936	+4.56
K1264	Apr. 21, 1933	+3.49	Sept. 23, 1952 Nov. 3, 1952	-15.56	Apr. 3, 1947 May 7, 1947	+3.36
K1265	Apr. 21, 1933	+2.72	Aug. 26, 1952	-11.55	Aug. 22, 1942	+2.50
K1266	Apr. 21, 1933	+2.49	July 25, 1952	-7.49	June 27, 1942	+1.97
K1296	Sept. 6, 1941	+2.77	May 26, 1952	-8.27	Mar. 7, 1942	+2.10
N1347	Oct. 15, 1942	-7.17	Dec. 23, 1952	-24.16	Sept. 10, 1945	-7.17
K1495	Nov. 5, 1936	+4.27	Aug. 26, 1952	+1.80	Aug. 13, 1947	+3.69
N1516	June 30, 1947	+1.99	Dec. 22, 1952	-21.56	Dec. 17, 1947	+1.99
N1591	June 27, 1947	+2.43	June 23, 1952	-2.10	June 30, 1947 Oct. 27, 28, 1947	+1.87
N7	July 24, 1936	+12.75	Mar. 9, 1941	+85	Aug. 4, 1952	+6.23
N9	July 3, 1936	+23.57	Sept. 23, 1938	+20.99	Sept. 11, 1936	+21.42
N53	Jan. 21, 1934	+16.49	Apr. 15, 1939	+12.05	Feb. 17, 1940	+13.40
N67	Mar. 16, 1932	+15.51	Dec. 5, 1946	+8.77	Sept. 4, 1952	+11.93
N157	Sept. 22, 1932	+88.84	Oct. 31, 1939	+75.71	May 5, 1933	+84.65
N180	Oct. 30, 1945	+21.08	June 6, 1952	+17.28	Dec. 25, 1949 Jan. 20, 1950	+19.38
N511	Jan. 9, 1947	+21.52	Dec. 31, 1948	+18.23	Aug. 1, 1950	+20.88
N575	Nov. 30, 1946	+60.22	Apr. 26, 1949	+52.44	Aug. 1, 1950	+55.82
N657	Feb. 12, 1945	+15.51	Nov. 25, 1950	+12.95	Jan. 29, 1946	+14.56
N844	Oct. 3, 1939	+85.48	Aug. 5, 1939	+76.87	Apr. 16, 1942	+93.21
N1102	Apr. 21, 1939	+58.94	May 31, 1949	+53.81	July 31, 1942	+58.00
N1104	Apr. 21, 1939	+61.88	May 31, 1949	+55.27	May 1, 1942	+60.73
N1108	Apr. 21, 1939	+43.62	Apr. 28, 1939	+36.94	Jan. 30, 1942	+39.29
N1109	Apr. 21, 1939	+30.04	Apr. 21, 1939	+24.42	Sept. 26, 1951	+27.50
N1110	Apr. 21, 1939	+21.05	Apr. 21, 1939 June 6, 1946	+18.68	Dec. 1, 1941	+19.35
N1111	Apr. 21, 1939	+14.79	June 6, 1946	+11.62	Oct. 25, 1947	+13.44
N1113	Apr. 21, 1939	+7.99	Jan. 6, 1949	+12	June 24, 1952	+2.07
N1121	May 28, 1943	+64.68	Oct. 31, 1949	+59.13	Dec. 20, 1951	+61.15
N1132	Apr. 2, 1938	+9.77	Sept. 23, 1938	+6.06	Feb. 24, 1940	+8.17
N1147	Jan. 6, 1939	+19.72	Apr. 8, 1939	+16.48	Nov. 1, 1950	+17.27
N1167	Mar. 12, 1938	+12.12	Mar. 25, 1948	+9.34	Dec. 27, 1949	+10.31
N1185	Apr. 2, 1938	+15.39	Apr. 8, 1939	+10.01	Dec. 28, 1949	+12.25
N1204	Jan. 6, 1939	+12.56	Feb. 8, 1952	+5.07	Jan. 26, 1950	+11.88
N1212	Jan. 1, 1943	+88.94	Sept. 28, 1949	+83.72	Jan. 20, 1943	+87.37
N1222	Jan. 6, 1939	+9.68	Apr. 29, 1952	+1.27	Jan. 31, 1942	+8.25
N1240	Jan. 6, 1939	+11.29	Apr. 8, 1939	-1.08	Jan. 24, 1942	+10.56
N1244	May 31, 1940	+76.50	May 31, 1940	+71.07	June 4, 1951	+74.52
N1245	Feb. 2, 1940	+82.88	Feb. 2, 1940	+75.63	June 4, 1951	+79.53
N1246	May 31, 1940	+82.18	Aug. 29, 1949	+76.85	Apr. 24, 1951	+80.74
N1247	Apr. 21, 1939	+76.98	July 28, 1939	+70.52	July 31, 1942	+74.03
N1249	Apr. 21, 1939	+58.18	Apr. 21, 1939	+50.34	Jan. 30, 1942	+53.46
N1250	Apr. 21, 1939	+49.64	Apr. 21, 1939	+43.20	Jan. 30, 1942	+45.94
N1251	Apr. 21, 1939	+40.54	Apr. 29, 1944	+35.57	Jan. 30, 1942	+37.87
N1252	Apr. 21, 1939	+26.29	June 5, 1946 May 30, 1948	+22.48	Jan. 30, 1942	+24.79
N1253	Jan. 6, 1939	+16.89	Apr. 8, 1939	+11.31	Jan. 31, 1942	+15.08
N1254	Apr. 21, 1939	+4.68	July 20, 1948	+2.35	Dec. 29, 1949	+4.14
N1255	May 12, 1913	+85.59	Apr. 15, 1939	+58.39	Oct. 30, 1951	+59.62
N1256	May 12, 1913	+80.97	May 20, 1939	+70.30	Feb. 27, 1933	+77.61
N1259	Feb. 5, 1909	+56.99	June 23, 1952	+47.83	Jan. 24, 1933	+53.05
N1263	Nov. 3, 1911	+55.24	June 23, 1952	+46.22	Oct. 31, 1932	+51.22
N1264	Mar. 7, 1932	+9.41	Apr. 8, 1939	+2.70	Feb. 17, 1940	+8.91
N1461	Apr. 27, 1943	+79.97	June 6, 1949	+74.34	Oct. 10, 1943	+78.20
N1462	May 6, 1943	+67.31	June 25, 1952	+61.26	Nov. 1, 1947	+64.31
N1463	May 6, 1943	+42.91	June 7, 1952	+36.61	Oct. 28, 1947 Nov. 3, 1947	+37.79
N1464	May 13, 1943	+17.59	Apr. 29, 1944	+12.22	Jan. 26, 1950	+16.10
N1613	June 8, 1940	+24.56	July 28, 1948	+20.83	Sept. 26, 1951	+21.50
N1614	Apr. 2, 1913	+72.48	May 31, 1949	+61.90	Feb. 27, 1933	+67.62
N1615	Mar. 17, 1913	+47.17	Mar. 28, 1939	+41.49	Oct. 27, 1932	+46.50

Summary of data on ground-water levels on Long Island, 1952--Cont'd.

Well no.	Date of first measurement	Highest water level	Date	Lowest water level	Date	Water level on last date of record in 1952
N1616	Mar. 17, 1913	+85.42	June 1, 1939	+74.05	Feb. 27, 1933	+82.33
N1828	Jan. 7, 1939	+63.29	May 31, 1949	+57.80	Dec. 19, 1950	+60.19
N1829	Mar. 5, 1938	+69.39	Sept. 15, 1944	+66.00	Jan. 29, 1951	+67.59
N1830	Jan. 6, 1939	+54.23	May 31, 1949	+49.05	June 7, 1942	+51.98
N2052	Mar. 14, 1946	+34.95	Nov. 5, 1952	+29.71	Mar. 14, 1946	+34.62
N2071	Feb. 12, 1946	+14.62	Mar. 15, 1946	+5.37	June 28, 1949	(1)
N2400	July 7, 1947	+74.10	Sept. 30, 1949	+70.04	Feb. 28, 1951	+71.84
N2528	Dec. 4, 1947	+72.16	June 5, 6, 1949	+68.03	Jan. 22, 30, 1951	+70.19
N2635	July 16, 1948	+27.30	May 23, 1949	+23.77	Jan. 22, 23, 1951	+26.29
N2790	Feb. 11, 1950	+5.95	Mar. 14, 1951	+3.00	July 4, 1950	+4.83
Q64	Mar. 26, 1947	-.32	Apr. 5, 6, 1952	-68.90	Nov. 2, 1947	-1.37
Q273	Mar. 15, 1935	+8.47	Apr. 20, 1939	+1.12	Mar. 21, 1942	+4.70
Q278	June 4, 1946	+5.11	Nov. 29, 1946	-6.86	July 25, 1951	-2.32
Q283	June 10, 1946	-2.73	Feb. 28, 1951	-10.26	Sept. 3, 1947	-7.34
Q350	Mar. 17, 1937	+3.51	Apr. 29, 1939	-.74	Sept. 27, 1951	
					Feb. 7, 10, 11, 1948	+1.57
Q470	Sept. 21, 1933	+6.78	Jan. 8, 1938	-12.75	July 15, 1937	-.66
Q471	Mar. 31, 1939	+17.45	Sept. 30, 1946	+13.69	Mar. 31, 1939	+16.23
Q1027	Jan. 1, 1942	+8.30	May 7, 1949	+4.08	Mar. 20, 1942	+7.56
Q1089	Oct. 10, 1911	+4.04	Sept. 23, 1938	-.42	Oct. 17, 1932	+2.25
Q1152	June 27, 1947	+2.24	Dec. 29, 1952	-6.12	Mar. 28, 1950	+2.24
Q1222	Apr. 1, 1940	+4.35	Dec. 1, 1945	-9.19	Feb. 28, 1942	+1.27
Q1225	Apr. 20, 1933	+32.19	Apr. 4, 1939	+23.91	Feb. 26, 1951	+24.90
Q1237	Feb. 10, 1939	+5.03	Apr. 30, 1939	-6.92	Mar. 26, 1950	+2.12
			May 4, 1939			
Q1248	Oct. 12, 1940	+38.16	May 31, 1949	+33.10	Oct. 30, 1951	+34.80
Q1249	Oct. 19, 1940	+33.41	Sept. 26, 1946	+26.07	Oct. 30, 1951	+27.55
Q1250	Oct. 19, 1940	+22.52	Aug. 31, 1948	+17.33	Dec. 19, 1950	+18.08
Q1251	Oct. 19, 1940	+14.25	Feb. 24, 1949	+8.57	Dec. 8, 29, 1952	+8.57
Q1252	Oct. 26, 1940	+13.92	Nov. 2, 1948	+9.66	Nov. 28, 1950	+10.31
Q1253	Nov. 2, 1940	+4.58	Apr. 26, 1941	+5.3	Feb. 26, 1951	+7.71
Q1254	Oct. 26, 1940	+2.9	Apr. 12, 1941	-5.34	Jan. 31, 1951	-2.38
Q1255	Oct. 12, 1911	+12.03	May 12, 1914	-6.30	Nov. 3, 1947	-3.37
Q1256	Oct. 26, 1940	-.75	June 24, 1952	-6.98	Mar. 14, 1942	-1.20
Q1281	Oct. 11, 1911	-8.59	June 4, 1913	-3.62	Mar. 7, 1942	-1.12
Q1283	Oct. 12, 1911	+13.33	Nov. 10, 1911	+1.75	Dec. 30, 1948	+3.67
S58	Aug. 14, 1944	+24.94	Jan. 10, 1949	+22.32	Oct. 6, 1951	+23.16
S202	Nov. 25, 1936	+47.17	Apr. 10, 1937	+36.93	Feb. 1, 1939	+42.27
S203	Nov. 13, 1936	+77.13	Oct. 31, 1939	+69.14	Apr. 22, 1952	+72.88
S929	Sept. 29, 1949	+2.86	Mar. 27, 1952	+.98	June 27, 1950	+1.46
S1803	Oct. 18, 1912	+18.19	Apr. 22, 1913	+14.93	Oct. 25, 1941	+15.91
S1805	Oct. 16, 1912	+47.01	Apr. 8, 1939	+37.90	Oct. 27, 1932	+41.80
S1806	Oct. 18, 1912	+61.69	Apr. 22, 1939	+50.61	Jan. 5, 1933	+55.83
S1807	Oct. 19, 1912	+23.48	Oct. 14, 1938	+20.59	Sept. 12, 1932	+21.01
S1808	Oct. 21, 1912	+12.94	Sept. 23, 1938	+9.45	Sept. 12, 1932	+11.16
S1809	Oct. 21, 1912	+32.56	Apr. 15, 1939	+25.00	Nov. 2, 1932	+27.65
S1810	Oct. 21, 1912	+56.19	Apr. 29, 1939	+45.24	Feb. 23, 1933	+51.08
S1811	Feb. 28, 1937	+55.56	Apr. 20, 1940	+51.41	Aug. 28, 1941	+53.44
S1814	Nov. 4, 1939	+38.96	July 29, 1948	+34.50	Jan. 25, 1951	+36.51
S1817	Dec. 2, 1939	+53.95	June 1, 1940	+49.66	Oct. 30, 1951	+51.69
S2146	Aug. 31, 1950	+3.65	May 22, 1952	+2.50	Jan. 11, 1951	+3.21
S2314	Mar. 27, 1943	+61.68	May 25, 1949	+57.63	Dec. 17, 1951	+59.77
S2455	June 23, 1933	+24.85	Sept. 23, 1938	+19.98	Nov. 6, 1937	+21.55
S3496	Nov. 2, 1942	+50.76	July 7, 1949	+45.79	Feb. 21, 1951	+48.95
					Mar. 27, 1951	
S3513	Apr. 24, 1942	+64.19	July 4, 5, 1949	+59.86	Feb. 15, 21, 23, 1948	+62.49
S3514	May 15, 1942	+68.54	Dec. 5, 1952	+64.23	Mar. 18, 26, 1951	+68.38
S3516	Mar. 5, 1907	+40.26	June 29, 1948	+35.29	Dec. 21, 1950	+36.78
S3517	Apr. 2, 1907	+14.02	Mar. 28, 1949	+11.60	Dec. 4, 1909	+12.16

Summary of data on ground-water levels on Long Island, 1952--Cont'd.

Well no.	Date of first measurement	Highest water level	Date	Lowest water level	Date	Water level on last date of record in 1952
S3526	Jan. 30, 1943	+30.52	Dec. 30, 1948	+25.73	Jan. 25, 1951	+28.39
S3532	Apr. 21, 1907	+51.95	June 8, 1908	+45.23	Feb. 23, 1951	+47.87
S3535	Aug. 13, 1907	+21.84	May 11, 1949	+17.51	Feb. 23, 1951	+19.56
S3537	Jan. 11, 1908	+16.72	Mar. 28, 1949	+14.09	Jan. 23, 1951	+15.25
S3539	Apr. 12, 1907	+26.72	June 5, 1908	+21.33	Mar. 28, 1951	+24.44
S3543	Mar. 18, 1907	+19.65	May 23, 1949	+15.18	Feb. 27, 1951	+18.00
S3545	Mar. 12, 1907	+38.41	Apr. 27, 1949	+33.51	Jan. 25, 1951	+35.42
S3728	May 28, 1943	+23.67	Mar. 30, 1949	+19.41	Dec. 21, 1951	+21.84
S3729	Sept. 10, 1943	+31.40	Apr. 27, 1949	+27.34	Apr. 4, 1947	+28.30
			May 24, 1949			
S3730	Sept. 21, 1943	+37.67	May 24, 1949	+33.04	Feb. 26, 1951	+34.94
S3737	Aug. 17, 1943	+58.82	July 28, 1949	+54.33	Feb. 20, 1951	+57.54
S3739	July 20, 1943	+30.61	June 23, 1952	+26.33	Dec. 29, 1950	+27.83
S3868	June 26, 1944	+40.13	Dec. 4, 1949	+36.21	Jan. 22, 1951	+39.54
S3869	June 22, 1944	+57.24	July 5, 1949	+52.97	Jan. 22, 1951	+55.47
S3870	June 16, 1944	+56.85	July 6, 1949	+52.84	Feb. 20, 1951	+55.17
S3871	June 15, 1944	+50.19	July 26, 1949	+45.84	Feb. 26, 1951	+48.46
S3955	May 31, 1944	+55.78	Aug. 25, 1949	+51.40	Mar. 28, 1951	+55.29
S3956	May 31, 1944	+33.77	Sept. 22, 1952	+30.29	Mar. 28, 1951	+33.34
S3978	Sept. 29, 1949	+1.28	Jan. 31, 1952	- 30	Dec. 29, 1949	+ 72
S4134	Mar. 10, 1945	+13.83	Apr. 7, 1949	+11.33	Nov. 23, 1950	+12.56
S4268	Aug. 2, 1945	+50.89	Nov. 3, 1952	+46.65	Mar. 27, 1951	+50.87
S4270	Aug. 1, 1945	+55.41	May 25, 1949	+49.86	Feb. 19, 1951	+53.00
S4271	Aug. 2, 1945	+11.41	June 2-6, 1949	+9.12	Sept. 10-12, 1950	+10.94
S4524	Aug. 2, 1945	+8.61	Mar. 31, 1949	+5.52	Nov. 2, 1950	+6.92
S4526	Aug. 2, 1945	+10.73	May 28, 1952	+7.47	Dec. 28, 1950	+9.56
S4530	Aug. 2, 1945	+18.44	May 28, 1952	+13.91	Dec. 28, 1950	+16.08
S4827	Dec. 4, 1946	+58.16	Nov. 29, 1949	+54.23	May 28, 1951	+57.66
S4828	Dec. 4, 1946	+69.45	Jan. 30, 1950	+65.17	Jan. 24, 1952	+68.18
S4829	Sept. 30, 1946	+40.60	Aug. 24, 1949	+36.74	Apr. 4, 1951	+39.65
S5517	Apr. 28, 1948	+45.27	May 23, 27, 28, 1949	+39.60	Feb. 4-6, 8, 9, 1951	+42.21
S6400	July 28, 1948	+47.00	June 6, 1949			
S6409	Feb. 2, 1949	+34.68	May 12, 1949	+40.97	Jan. 26, 1951	+43.08
S6410	Nov. 4, 1948	+47.38	June 22, 1949	+31.46	Feb. 15, 1951	+33.89
			July 14, 1949	+42.59	Feb. 25, 26, 28, 1951	+45.69
					Mar. 1-7, 1951	
S6411	Nov. 5, 1948	+31.51	Sept. 22, 1949	+28.39	Apr. 4, 1951	+31.10
S6435	Jan. 24, 1949	+22.11	June 8, 1949	+19.05	Feb. 26, 1951	+20.44
S6441	Jan. 26, 1949	+38.46	Mar. 16, 1949	+34.42	Nov. 24, 1950	+36.34
S6524	July 13, 1949	+2.85	Mar. 27, 1952	+ 66	Feb. 1, 1950	+1.92
S6532	Aug. 15, 1949	+4.53	Apr. 25, 1952	+1.95	Feb. 27, 1950	+2.86
S6542	July 14, 1949	+6.63	Apr. 25, 1952	+3.22	Nov. 2, 1950	+5.02
S6558	July 14, 1949	+5.24	Mar. 27, 1952	+2.78	June 27, 1950	+3.88
S6780	Sept. 6, 1949	+5.03	May 28, 1952	+2.77	June 26, 1950	+3.98
S7267	July 14, 1949	+6.93	May 28, 1952	+3.58	Aug. 30, 1950	+5.46
S7283	Jan. 11, 1949	+3.91	Mar. 27, 1952	+1.28	Jan. 28-31, 1950	+1.81
					Feb. 1-2, 1950	
S8831	Aug. 15, 1950	+7.71	Jan. 28, 1952	+6.23	Oct. 31, 1950	+7.11
S8834	Aug. 16, 1950	+12.83	Aug. 27, 1952	+9.58	Dec. 26, 1950	+11.62
S8835	Aug. 31, 1950	+9.73	June 27, 1952	+6.95	Jan. 23, 1951	+8.25
S8836	July 31, 1950	+7.58	Mar. 26, 1952	+5.61	Jan. 23, 1951	+6.50
S8837	Aug. 1, 1950	+8.77	May 28, 1952	+6.92	Dec. 26, 1950	+7.83
S8839	Aug. 16, 1950	+8.34	May 28, 1952	+6.29	Jan. 23, 1951	+7.10
S8912	Oct. 30, 1947	+35.61	Mar. 30, 1949	+32.90	Jan. 27, 1948	+33.97

j No measurement made in 1952.

Net change in water level in wells on Long Island, 1952

Well no.		Net change (feet)	Well no.		Net change (feet)	Well no.		Net change (feet)	Well no.		Net change (feet)
K19	J	+4.24	N1121		+2.02	Q470	L	+0.09	S3539		+2.56
K30		+5.65	N1132		+1.17	Q471	M	+1.07	S3543		+1.92
K65		+5.55	N1147		-1.06	Q543	L	+1.39	S3545		+1.13
K67		+4.37	N1167		-.83	Q1027	L	+1.16	S3728		+2.43
K92		+5.01	N1185		-.61	Q1089		-.21	S3729		+1.93
K97		+4.72	N1204		-.36	Q1152	J	+2.73	S3730		+1.30
K196		+1.40	N1212	M	+3.20	Q1222	L	+1.42	S3737		+2.12
K501		+1.05	N1222		-.13	Q1225		+1.13	S3739		+1.39
K519	J	+2.33	N1240		-.14	Q1237	J	+2.26	S3868		+2.01
K523	J	+1.70	N1244	M	+2.86	Q1248		+1.66	S3869		+1.82
K525	J	+1.69	N1245	M	+3.32	Q1249		+1.26	S3870		+1.83
K539		+1.15	N1246		+3.39	Q1250		-.91	S3871		+1.09
K889		+6.84	N1247		+3.32	Q1251		-1.96	S3955		+1.93
K1057	L	+1.28	N1249		+1.22	Q1252		-.05	S3956		+1.44
K1194		+1.96	N1250		+1.94	Q1253		-.52	S3978		+1.24
K1198		+1.32	N1251		+1.52	Q1254		+1.97	S4134	M	-.21
K1199		+3.96	N1252		-.14	Q1255		-.40	S4268		+2.71
K1235		+2.26	N1253		-.33	Q1256		+1.57	S4270		+2.33
K1236		+4.21	N1254		+1.11	Q1281		+1.21	S4271		+1.86
K1237		+8.09	N1255		+1.71	Q1283		-.13	S4524		+1.25
K1263		+1.29	N1256		+1.90	S58	M	-.99	S4526		+1.93
K1264		+1.65	N1259		+1.96	S202	L	+2.16	S4530		+1.43
K1265		+1.66	N1263		+1.43	S203	M	+2.96	S4827		+2.97
K1266		+1.97	N1264		+1.06	S929		-.11	S4828	M	+2.96
K1296		-.00	N1461	M	+2.76	S1803		-.62	S4829		+2.11
K1347		+6.54	N1462		+1.09	S1805		+1.02	S5517		+1.95
K1495		+1.02	N1463		-1.30	S1806		+1.99	S6400		+1.40
K1516		+2.67	N1464		-.43	S1807		-.78	S6409	L	.....
K1591	J	+1.35	N1613	M	-1.33	S1808		-.29	S6410		+2.46
N7	L	+1.20	N1614		+1.70	S1809		-.15	S6411		+1.98
N9	M	-.66	N1615		+2.53	S1810		+1.44	S6435		+1.84
N53		-.66	N1616		+2.48	S1811		+1.94	S6441		-.25
N67	L	.....	N1828		+1.69	S1814		+1.04	S6524		+1.17
N157	M	+2.57	N1829		+1.62	S1817		+1.06	S6532		+1.10
N180	M	-.49	N1830		+1.83	S2146		+1.26	S6542		+1.77
N511	L	+1.20	N2052	M	+1.76	S2314	M	+2.14	S6558		+1.06
N575	M	+1.75	N2071	L	.....	S2455		-.50	S6780		+1.28
N657	L	+1.01	N2400	M	.....	S3496		+1.96	S7267		+1.74
N844	M	+3.09	N2528	M	+1.29	S3513		+1.76	S7283		-.56
N1102		+2.86	N2635	M	+1.97	S3514		+2.63	S8831		-.12
N1104		+2.43	N2790	M	-.02	S3516		+1.62	S8834		+1.29
N1108		+1.72	Q64	L	+1.52	S3517		-.34	S8835		+1.68
N1109		+1.27	Q273	L	+1.12	S3526		+1.87	S8836		+1.23
N1110		-.83	Q278	L	+4.13	S3532		+2.19	S8837		+1.17
N1111		-.26	Q283	L	+1.66	S3535		+1.44	S8839		-.04
N1113		-3.77	Q350	J	-.40	S3537		+1.56	S8912		+1.13

J Jameco gravel.

L Lloyd sand member of Raritan formation.

M Sands of Magothy(?) formation.

All other wells screened in deposits of late Pleistocene age.

Well Descriptions and Water-Level Measurements

Water levels are in feet with reference to mean sea level (Sandy Hook datum) as indicated. When some measurements in a table are above and others below the plane of reference a plus (+) or minus (-) sign is placed immediately preceding the first entry in each column. Readings between minus (-) signs are below the plane of reference and those between plus (+) signs are above the plane of reference.

Kings County

K19. Comtone Co. Formerly Kew Pacific Garage. 604 Pacific St. Lat. 40°41'00", long. 73°58'35". Drilled unused artesian well in Jameco gravel, diameter 8 to 6 inches, depth 186 feet. Land-surface datum is 45.3 feet above msl. Highest water level 5.52 below msl, Dec. 27, 1952; lowest 26.80 below msl, Sept. 26, 1941. Records available: 1940-52.

K19--Continued.

Daily mean water level, below msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	9.75	9.42	8.98	8.56	8.14	7.43	7.59	7.47	....	6.91	6.51	6.05
2	9.76	9.38	9.04	8.57	8.11	7.46	7.58	7.38	....	6.90	6.48	6.01
3	9.79	9.37	8.99	8.62	8.10	7.50	7.56	7.33	....	6.97	6.39	6.00
4	9.84	9.26	8.93	8.64	8.04	7.49	7.50	7.34	....	6.92	6.37	6.00
5	9.74	9.33	8.97	8.49	8.04	7.50	7.45	7.37	7.20	6.84	6.35	5.88
6	9.75	9.41	9.00	8.47	8.02	7.51	7.44	7.38	7.09	6.80	6.33	5.85
7	9.72	9.36	8.99	8.51	8.04	7.51	7.47	7.40	7.06	6.87	6.41	5.88
8	9.71	9.33	8.96	8.55	8.01	7.48	7.50	7.40	7.11	6.88	6.48	5.87
9	9.69	9.29	8.91	8.54	....	7.46	7.48	....	7.11	6.84	6.38	5.87
10	9.68	9.26	8.90	8.47	....	7.48	7.50	....	7.10	6.86	6.30	5.83
11	9.80	9.17	8.80	8.48	....	7.49	7.57	....	7.11	6.80	6.31	5.77
12	9.74	9.26	8.96	8.49	....	7.50	7.53	....	7.12	6.74	6.30	5.83
13	9.66	9.27	8.87	....	....	7.54	7.47	....	7.05	6.72	6.33	5.78
14	9.62	9.24	8.85	8.34	....	7.50	7.46	....	7.01	6.76	6.31	5.75
15	9.63	9.25	8.83	8.39	....	7.40	7.49	....	6.98	6.78	6.23	5.71
16	9.65	9.21	8.72	8.44	....	7.42	7.52	....	6.97	6.78	6.20	5.72
17	9.60	9.07	8.76	8.44	....	7.44	7.56	....	6.98	6.81	6.23	5.72
18	9.55	9.11	8.85	....	....	7.51	7.52	....	7.02	6.73	6.24	5.74
19	9.64	9.20	8.76	....	....	7.51	7.43	7.19	7.01	6.63	6.18	5.79
20	9.49	9.18	8.75	....	....	7.56	7.38	7.19	7.02	6.67	6.15	5.72
21	9.59	9.12	8.73	8.33	....	7.53	7.38	7.17	6.99	6.72	6.16	5.62
22	9.55	9.14	8.72	8.33	....	7.42	7.46	7.17	6.99	6.68	6.15	5.62
23	9.51	9.12	8.65	8.32	7.73	7.41	7.49	7.17	7.02	6.64	6.15	5.65
24	9.60	9.06	8.64	8.38	7.67	7.42	7.51	7.12	7.04	6.64	6.16	5.64
25	9.61	9.03	8.68	8.31	7.58	7.47	7.56	7.14	7.03	6.65	6.17	5.59
26	9.45	9.05	8.68	8.26	7.55	7.53	7.49	7.15	6.97	6.60	6.12	5.55
27	9.38	8.98	8.67	8.19	7.60	7.60	7.37	7.17	6.93	6.49	6.06	5.52
28	9.36	8.99	8.67	8.14	7.59	7.59	7.34	7.17	6.89	6.48	6.04	5.56
29	9.43	9.00	8.67	8.16	7.60	7.48	7.39	....	6.87	6.54	6.04	5.53
30	9.50	....	8.65	8.15	7.59	7.49	7.44	....	6.89	6.58	6.00	5.56
31	9.49	....	8.60	....	7.50	....	7.46	....	....	6.54	....	5.56

K30. Detecto Scales, Inc. Formerly Tagliabue Manufacturing Co. Park and Nostrand Aves. Lat. 40°41'50", long. 73°57'15". Drilled unused water-table well in deposits of late Pleistocene age, diameter 8 inches, depth 56 feet. Land-surface datum is 17.8 feet above msl. Highest water level 10.05 below msl, Dec. 25, 1952; lowest 29.75 below msl, Nov. 8, 1941. Records available: 1935-52.

Daily mean water level, below msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	15.69	15.23	14.63	14.18	13.72	13.32	12.91	12.60	12.08	11.88	11.43	10.70
2	15.66	15.14	14.64	14.13	13.71	13.28	12.92	12.59	12.03	11.88	11.42	10.65
3	15.63	15.13	14.64	14.14	13.71	13.26	12.91	12.56	12.03	11.89	11.34	10.62
4	15.63	15.01	14.60	14.17	13.69	13.24	12.89	12.54	12.07	11.91	11.37	10.64
5	15.62	15.00	14.58	14.16	13.66	13.22	12.87	12.53	12.11	11.91	11.22	10.55
6	15.62	15.07	14.59	14.10	13.63	13.21	12.86	12.52	12.11	11.90	11.19	10.48
7	15.59	15.07	14.60	14.07	13.63	13.18	12.83	12.52	12.06	11.83	11.18	10.50
8	15.57	15.07	14.60	14.09	13.64	13.17	12.80	12.51	12.07	11.83	11.22	10.50
9	....	15.01	14.58	14.11	13.63	13.14	12.77	12.48	12.06	11.83	11.21	10.49
10	15.48	15.01	14.56	14.12	13.61	13.12	12.74	12.43	12.03	11.83	11.14	10.42
11	15.61	14.93	14.43	14.11	13.58	13.09	12.74	12.41	12.02	11.83	11.12	10.33
12	15.55	14.93	14.52	14.10	13.54	13.09	12.76	12.41	12.03	11.81	11.09	10.33
13	15.48	14.96	14.50	14.09	13.55	13.11	12.75	12.41	12.03	11.75	11.11	10.34
14	15.43	14.97	14.43	....	13.57	13.13	12.72	12.41	12.02	11.71	11.10	10.35
15	15.42	14.97	14.47	13.91	13.57	13.09	12.69	12.40	11.99	11.69	11.07	10.29
16	15.46	14.96	14.45	13.96	13.56	13.05	12.68	12.36	11.93	11.69	11.06	10.22
17	15.43	14.86	....	13.95	13.59	13.01	12.69	12.31	11.93	....	11.05	10.23
18	15.39	14.81	14.39	13.91	13.57	12.99	12.68	12.31	11.95	....	11.04	10.23
19	15.47	14.85	14.38	13.91	13.53	12.99	12.66	12.30	11.96	....	10.92	10.23
20	15.34	14.87	14.36	13.87	13.50	13.00	12.63	12.29	11.97	....	10.88	10.25
21	15.39	14.83	14.34	13.86	13.45	13.03	12.62	12.25	11.98	....	10.87	10.24
22	15.36	14.84	14.34	13.84	13.46	13.03	12.61	12.23	11.96	....	10.88	10.15
23	15.28	14.85	14.31	13.82	13.49	12.99	12.62	12.25	11.93	....	10.89	10.11
24	15.38	14.82	14.28	13.89	13.50	12.95	12.62	12.25	11.95	11.54	10.88	10.08
25	15.43	14.73	14.27	13.88	13.47	12.91	12.65	12.21	11.96	11.54	10.87	10.05

K30--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	15.31	14.70	14.27	13.84	13.41	12.90	12.67	12.19	11.97	11.55	10.81	.....
27	15.24	14.64	14.26	13.79	13.40	12.92	12.66	12.18	11.96	11.49	10.76	.....
28	15.18	14.62	14.26	13.75	13.40	12.94	12.62	12.18	11.96	11.38	10.75	.....
29	15.18	14.62	14.26	13.74	13.38	12.93	12.58	12.18	11.94	11.39	10.74	.....
30	15.27		14.26	13.72	13.38	12.90	12.58	12.16	11.89	11.42	10.69	.....
31	15.29		14.23		13.38		12.59	12.16		11.44		.....

K65. A. Ludwig Co. 123 Middleton St. Lat. 40°42'15", long. 73°57'15". Drilled unused water-table well in deposits of late Pleistocene age, diameter 6 to 6 inches, depth 63 feet. Land-surface datum is 17.3 feet above msl. Highest water level 10.41 below msl, Dec. 18, 1952; lowest 28.34 below msl, Aug. 25, 1939. Records available: 1937-52.

Water level below msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	14.67	Apr. 29	13.64	July 23	12.75	Nov. 3	11.24
Feb. 20	14.88	May 27	13.34	Aug. 25	12.18	Dec. 18	10.41
Mar. 24	14.18	June 24	12.99	Sept. 22	11.98		

K67. Young Mens Christian Association. 179 Marcy Ave. Lat. 40°42'30", long. 73°57'30". Drilled unused water-table well in deposits of late Pleistocene age, diameter 4 to 3 inches, depth 70 feet. Land-surface datum is 47.0 feet above msl. Highest water level 8.77 below msl, Dec. 23, 1952; lowest 20.91 below msl, Sept. 15, 1947. Records available: 1937-52.

Water level below msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	12.74	Apr. 29	11.60	July 23	10.92	Nov. 3	9.45
Feb. 20	12.48	May 27	11.28	Aug. 25	10.52	Dec. 5	8.99
Mar. 24	12.02	June 24	11.04	Sept. 22	10.08	23	8.77

K92. St. Johns University. 75 Lewis Ave. Lat. 40°41'45", long. 73°56'15". Drilled unused water-table well in deposits of late Pleistocene age, diameter 60 to 6 inches, reported depth 110 feet. Land-surface datum is 69.1 feet above msl. Highest water level 6.96 below msl, Dec. 24, 1952; lowest 29.69 below msl, Oct. 11, 1937. Records available: 1937-52.

Water level below msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	11.64	Apr. 29	10.64	July 23	9.64	Nov. 3	8.23
Feb. 20	11.37	May 27	10.33	Aug. 25	9.25	Dec. 5	7.35
Mar. 24	10.95	June 24	9.99	Sept. 22	8.82	24	6.98

K97. Formerly The Borden Co. 32 Lexington Ave. Lat. 40°41'15", long. 73°57'50". Drilled unused water-table well in deposits of late Pleistocene age, diameter 8 inches, depth 124 feet. Land-surface datum is 64.2 feet above msl. Highest water level 7.43 below msl, Dec. 23, 1952; lowest 26.58 below msl, Oct. 27, 1944. Records available: 1944-52.

Water level below msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	11.46	Apr. 29	10.25	July 23	9.26	Dec. 5	7.72
Feb. 20	11.24	May 27	9.92	Sept. 22	8.75	23	7.43
Mar. 24	10.73	June 24	9.54				

K196. Formerly Knickerbocker Ice Co. 12th Ave. and 37th St. Lat. 40°38'40", long. 73°58'20". Drilled unused water-table well in deposits of late Pleistocene age, diameter 10 inches, depth 128 feet. Land-surface datum is 79.7 feet above msl. Highest water level 6.47 above msl, Nov. 3, 1952; lowest 4.76 below msl, Mar. 5, 1944. Records available: 1942-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	5.11	Apr. 28	5.57	July 25	6.19	Nov. 3	6.47
Feb. 19	5.12	May 26	5.76	Aug. 26	6.25	Dec. 1	6.29
Mar. 20	5.31	June 23	6.07	Sept. 23	6.42		

K501. Formerly New York Water Service Corp. 363 Dahill Rd. Lat. 40°38'20", long. 73°58'45". Drilled unused water-table well in deposits of late Pleistocene age, diameter 24 inches, depth 103 feet, screen 63-103. Land-surface datum is 46.0 feet above msl. Highest water level 5.28 above msl, Sept. 23, 1952; lowest 4.80 below msl, June 30, 1947. Records available: 1947-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	4.16	Apr. 28	4.57	July 25	5.02	Dec. 2	5.03
Feb. 19	4.15	May 26	4.74	Aug. 26	5.22	22	4.98
Mar. 19	4.34	June 23	5.03	Sept. 23	5.28		

K519. Formerly New York Water Service Corp. 543-45 Troy Ave. Lat. 40°39'40", long. 73°56'10". Drilled unused artesian well in Jameco gravel, diameter 28 to 18 inches, depth 239 feet, screen 196-239. Land-surface datum is 30.7 feet above msl. Highest water level 1.49 above msl, Dec. 27, 1952; lowest 18.78 below msl, June 30, 1947. Records available: 1947-52.

Daily mean water level, above and below msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	-0.87	-0.67	-0.36	-0.07	+0.14	+0.50	+0.44	+0.66	+1.00	+1.09	+1.16	+1.23
2	.88	.60	.46	.08	.16	.43	.47	.74	.94	1.14	1.15	1.28
3	.89	.61	.42	.15	.14	.42	.52	.75	.90	....	1.25	1.27
4	.95	.49	.33	.18	.20	.40	.57	.74	.80	....	1.23	1.22
5	.83	.56	.36	.01	.18	.39	.58	.73	.81	1.10	1.26	1.39
6	.87	.68	.42	.03	.22	.37	.56	.73	.88	1.12	1.30	1.39
7	.86	.62	.41	.09	.16	.39	.56	.73	.89	1.12	1.20	1.32
8	.83	.61	.38	.14	.21	.39	.57	.73	.89	1.10	1.10	1.30
9	.81	.55	.34	.16	.23	.43	.66	.80	.92	1.11	1.19	1.31
10	.80	.56	.34	.07	.25	....	.61	.87	.95	1.12	1.24	1.36
11	.95	.46	.18	-.06	.29	....	.53	.80	.89	....	1.22	1.46
12	.90	.58	.38	....	.29	....	.55	.78	.88	1.19	1.23	1.36
13	.82	.60	.28	....	.20	.36	.61	.81	.93	1.20	1.16	1.37
14	.87	.56	.28	....	.19	.37	.62	.81	.94	1.16	....	1.36
15	.78	.58	.28	+.02	.25	.45	.62	.81	1.06	1.06	....	1.40
16	.82	.55	.17	-.05	.22	.44	.59	.87	1.09	1.14	1.27	1.40
17	.78	.39	.23	.05	.18	.45	.56	.84	1.06	1.09	1.20	1.37
18	.69	.47	.34	.00	.26	.45	.62	.82	1.01	1.15	1.19	1.35
19	.83	.57	.25	.00	.26	.45	.70	.81	1.04	1.23	1.27	1.28
20	.66	.55	.24	.06	.32	.39	.70	.79	.96	1.16	1.31	1.32
21	.81	.46	.21	.03	.35	.46	.70	.84	.97	1.08	1.29	1.44
22	.73	.50	.21	.03	.29	.57	.64	.87	1.02	1.13	1.32	1.41
23	.68	.50	.16	.07	.25	.57	.63	.90	1.02	1.18	1.27	1.42
24	.81	.45	.14	.09	.29	.52	.60	.88	.98	1.19	1.23	1.42
25	.84	.41	.20	.07	.41	.52	.56	.85	1.00	1.14	1.20	1.45
26	.65	.42	.20	.10	.41	.49	.62	.84	1.06	1.14	1.27	1.48
27	.59	.34	.17	.15	.36	.45	.71	.84	1.07	1.25	1.32	1.49
28	.55	.35	.19	.17	.37	.44	.73	.85	1.08	1.28	1.30	1.42
29	.65	.38	.19	.13	.37	.53	.71	.88	1.11	1.18	1.27	....
30	.76		.20	-.15	.36	.51	.66	.88	1.11	1.12	1.32	....
31	.75		.14		.42		.66	.90		1.17		1.43

K523. Formerly New York Water Service Corp. 267 Newkirk Ave. Lat. 40°38'00", long. 73°58'15". Drilled unused artesian well in Jameco gravel, diameter 28 to 18 inches, depth 268 feet, screen 202-268. Land-surface datum is 42.7 feet above msl. Highest water level 4.90 above msl, Aug. 26, 1952; lowest 1.91 below msl, Feb. 6, 1945. Records available: 1944-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	4.02	Apr. 28	4.44	July 25	4.74	Nov. 3	4.70
Feb. 19	4.08	May 26	4.63	Aug. 26	4.90	Dec. 19	4.50
Mar. 20	4.26	June 23	4.83	Sept. 22	4.86		

K525. Formerly New York Water Service Corp. 363 Dahill Rd. Lat. 40°38'20", long. 73°38'45". Drilled unused artesian well in Jameco gravel, diameter 28 to 18 inches, depth 300 feet, screen 260-300. Land-surface datum is 46.0 feet above msl. Highest water level 6.27 above msl, Aug. 26, 1952; lowest 0.46 above msl, Mar. 10-13, 1947. Records available: 1945-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	5.38	Apr. 28	5.74	July 25	6.10	Sept. 23	6.25
Feb. 19	5.40	May 26	5.91	Aug. 26	6.27	Dec. 29	5.88
Mar. 19	5.56	June 23	6.15				

K539. City of New York, Department of Water Supply, Gas and Electricity. Atlantic Ave. and Logan St. Lat. 40°40'55", long. 73°52'30". Drilled unused water-table well in deposits of late Pleistocene age, diameter 4 inches, depth 43 feet. Land-surface datum is 32.9 feet above msl. Highest water level 1.71 above msl, Aug. 25, 1952; lowest 8.28 below msl, Feb. 21, 1942. Records available: 1932-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	0.59	Apr. 29	1.25	July 23	1.68	Nov. 4	1.44
Feb. 20	.80	May 26	1.44	Aug. 25	1.71	Dec. 4	1.26
Mar. 20	.99	June 23	1.61	Sept. 23	1.56	23	1.39

K889. Finest Steam Laundry. 199 Bogart St. Lat. 40°42'45", long. 73°56'15". Drilled unused water-table well in deposits of late Pleistocene age, diameter 8 to 6 inches, depth 72 feet, screen 62-72. Land-surface datum is 20.8 feet above msl. Highest water level 10.14 below msl, Dec. 24, 1952; lowest 39.01 below msl, Jan. 25, 1947. Records available: 1945-52.

Water level below msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	16.33	Apr. 29	14.33	July 25	12.62	Dec. 5	10.54
Feb. 20	15.88	May 27	13.84	Aug. 25	12.22	24	10.14
Mar. 24	15.09	June 24	13.11	Nov. 3	11.13		

K1057. U. S. Naval Air Station. Floyd Bennett Field. Lat. 40°35'05", long. 73°53'10". Drilled unused artesian well in Lloyd sand member of Raritan formation, diameter 6 inches, depth 720 feet. Land-surface datum is 8.1 feet above msl. Water levels affected by tidal fluctuation; extremes not determined as water levels were computed on different bases for period of record. Records available: 1939-42, 1944-52.

Daily mean water level, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	8.96	8.74	9.63	9.65	9.63	9.60	....	7.00	7.07	7.34	7.74	8.23
2	8.80	8.93	9.51	9.88	9.60	9.35	....	7.13	6.97	7.55	7.83	....
3	8.75	9.11	9.37	9.72	9.57	9.33	....	7.17	6.94	7.35	7.95	9.28
4	8.57	9.85	9.86	9.51	9.59	9.30	....	7.11	6.71	7.05	7.86	9.12
5	8.99	9.65	9.46	9.70	9.59	9.33	....	7.09	6.67	7.04	8.09	9.44
6	8.97	9.20	9.54	....	9.65	9.28	....	7.01	6.80	7.21	8.36	9.30
7	9.31	9.23	9.51	9.52	9.58	9.21	....	6.97	6.82	7.23	7.81	8.94
8	9.61	9.34	9.42	9.43	9.49	9.13	....	7.00	6.87	7.25	7.53	9.12
9	9.27	9.40	....	9.36	9.55	9.18	....	7.08	6.74	7.30	7.88	....
10	9.19	9.28	....	9.38	9.65	9.23	....	7.29	6.67	7.34	8.00	8.95
11	8.78	9.60	....	9.35	9.87	9.23	....	7.06	6.67	7.50	8.03	9.38
12	8.68	8.96	....	9.30	9.90	9.28	....	6.97	6.70	7.48	7.90	8.79
13	8.76	8.22	....	....	9.59	9.21	....	6.92	6.79	7.43	7.89	8.75
14	8.97	8.97	....	....	9.36	8.97	....	6.85	6.94	7.38	7.84	8.79
15	9.18	9.01	9.49	....	9.50	8.95	....	6.87	7.12	7.51	8.14	8.80
16	9.03	9.29	9.39	....	9.46	8.92	....	7.00	7.08	7.63	8.21	8.64
17	8.76	10.02	9.50	....	9.40	9.03	....	7.04	7.02	7.44	8.22	8.57
18	9.10	9.45	9.53	....	9.42	9.03	....	6.90	7.03	7.57	8.24	8.55
19	8.68	9.27	10.00	9.45	9.30	9.17	....	6.86	7.04	7.66	8.61	8.55
20	9.04	9.10	9.70	9.43	9.38	8.86	....	6.85	6.89	7.59	8.87	8.61
21	8.40	9.64	9.67	9.35	9.64	8.72	....	6.90	6.86	7.34	9.15	8.97
22	8.93	9.48	9.65	9.35	9.27	8.79	....	6.92	6.84	7.40	....	9.44
23	8.88	9.44	....	9.39	9.18	8.78	....	6.82	6.98	7.61	....	9.50
24	8.43	9.45	....	9.28	9.23	8.86	....	6.69	6.92	7.64	....	8.91
25	8.28	9.42	....	9.40	9.48	8.93	7.26	6.60	7.00	7.61	....	8.70
26	8.87	9.38	....	9.56	9.54	8.95	7.18	6.61	7.13	7.65	8.43	8.57
27	8.86	9.69	....	9.63	9.35	8.85	7.23	6.64	7.10	7.76	8.47	8.65
28	9.19	9.81	....	9.98	9.33	8.65	7.27	6.67	7.06	8.00	8.28	8.49
29	9.20	9.49	....	9.96	9.29	8.69	7.32	6.66	7.10	7.77	....	8.70
30	8.95	....	9.37	9.86	9.20	8.73	7.27	6.66	7.16	7.36	8.38	8.65
31	8.84	....	9.38	....	9.30	....	7.20	6.96	....	7.52	....	9.08

K1194. City of New York, Department of Water Supply, Gas and Electricity. Atlantic Ave. and Nichols St. Lat. 40°41'00", long. 73°52'05". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 48 feet, screen 46-48. Land-surface datum is 31.8 feet above msl. Highest water level 0.70 above msl, June 23, 1952; lowest 8.36 below msl, Feb. 28, Mar. 7, 1942. Records available: 1940-43, 1945-52.

Water level above and below msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	-0.17	Apr. 29	+0.34	July 23	+0.61	Nov. 4	+0.27
Feb. 20	.00	May 26	+0.52	Aug. 25	+0.50	Dec. 4	+0.20
Mar. 20	+0.18	June 23	+0.70	Sept. 23	+0.47	23	+0.35

K1198. City of New York, Department of Water Supply, Gas and Electricity. Cleveland and Fulton Sts. Lat. 40°40'50", long. 73°53'15". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 53 feet, screen 51-53. Land-surface datum is 36.8 feet above msl. Highest water level 1.61 above msl, Sept. 23, 1952; lowest 8.45 below msl, May 14, 1942. Records available: 1940-52.

K1198--Continued.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	0.07	Apr. 29	0.70	July 23	1.53	Nov. 4	1.58
Feb. 20	.24	May 26	.91	Aug. 25	1.60	Dec. 4	1.47
Mar. 20	.42	June 23	1.29	Sept. 23	1.61	23	1.52

K1199. City of New York, Department of Water Supply, Gas and Electricity. Jefferson and Howard Aves. Lat. 40°41'10", long. 73°55'15". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 76 feet, screen 74-76. Land-surface datum is 48.5 feet above msl. Highest water level 0.96 below msl, Dec. 24, 1952; lowest 17.17 below msl, Jan. 1, 1944. Records available: 1940-52.

Water level below msl

Jan. 29	4.96	Apr. 29	4.20	July 23	3.16	Nov. 3	2.31
Feb. 20	4.51	May 27	3.78	Aug. 25	2.68	Dec. 5	1.38
Mar. 24	4.44	June 24	3.47	Sept. 22	2.37	24	.96

K1235. City of New York, Department of Water Supply, Gas and Electricity. Fulton and Pennsylvania Aves. Lat. 40°40'40", long. 73°54'00". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 80 feet, screen 78-80. Land-surface datum is 60.5 feet above msl. Highest water level 0.59 above msl, Dec. 23, 1952; lowest 10.65 below msl, June 27, 1942. Records available: 1941-52.

Water level above and below msl

Jan. 29	-1.06	Apr. 29	-0.50	July 23	+0.03	Nov. 4	+0.56
Feb. 20	-1.07	May 26	-.31	Aug. 25	+.16	Dec. 4	+.51
Mar. 20	-.93	June 23	-.22	Sept. 23	+.41	23	+.59

K1236. City of New York, Department of Water Supply, Gas and Electricity. Patchen and Lexington Aves. Lat. 40°41'25", long. 73°55'40". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 82 feet, screen 80-82. Land-surface datum is 50.9 feet above msl. Highest water level 3.54 below msl, Dec. 24, 1952; lowest 19.42 below msl, Oct. 4, 1941. Records available: 1941-52.

Water level below msl

Jan. 29	8.02	Apr. 29	7.12	July 23	5.91	Nov. 3	4.82
Feb. 20	7.40	May 27	6.62	Aug. 25	5.47	Dec. 5	4.01
Mar. 24	7.37	June 24	6.27	Sept. 22	5.24	24	3.54

K1237. City of New York, Department of Water Supply, Gas and Electricity. Delmonico Place and Hopkins St. Lat. 40°42'00", long. 73°56'45". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 63 feet, screen 61-63. Land-surface datum is 18.0 feet above msl. Highest water level 12.99 below msl, Dec. 24, 1952; lowest 36.53 below msl, Jan. 24, 1947. Records available: 1941-52.

Water level below msl

Jan. 29	20.09	Apr. 29	18.25	July 23	16.80	Nov. 3	14.87
Feb. 20	19.61	May 27	17.69	Aug. 25	15.59	Dec. 5	13.71
Mar. 24	18.88	June 24	17.04	Sept. 22	15.30	24	12.99

K1263. City of New York, Department of Water Supply, Gas and Electricity. F. 16th St. and Cortelyou Rd. Lat. 40°38'30", long. 73°57'50". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 50 feet, screen 48-50. Land-surface datum is 35.9 feet above msl. Highest water level 4.82 above msl, Sept. 23, 1952; lowest 11.97 below msl, July 21, 1936. Records available: 1933-36, 1941-52.

Water level above msl

Jan. 28	3.61	Apr. 28	4.12	July 25	4.58	Nov. 3	4.73
Feb. 19	3.67	May 26	4.33	Aug. 26	4.81	Dec. 2	4.59
Mar. 20	3.85	June 23	4.56	Sept. 23	4.82	22	4.56

K1264. City of New York, Department of Water Supply, Gas and Electricity. E. 37th St. and Snyder Ave. Lat. 40°39'00", long. 73°56'35". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 67 feet, screen 65-67. Land-surface datum is 43.9 feet above msl. Highest water level 3.49 above msl, Sept. 23, Nov. 3, 1952; lowest 15.56 below msl, Apr. 3, May 7, 1947. Records available: 1933-35, 1941-52.

K1264--Continued.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	1.85	Apr. 28	2.80	July 25	3.31	Nov. 3	3.49
Feb. 19	2.19	May 26	2.90	Aug. 26	3.42	Dec. 2	3.36
Mar. 20	2.52	June 23	3.21	Sept. 23	3.49	22	3.36

K1265. City of New York, Department of Water Supply, Gas and Electricity. Riverdale Ave. and Thatford St. Lat. 40°39'40", long. 73°54'30". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 44 feet, screen 42-44. Land-surface datum is 23.2 feet above msl. Highest water level 2.72 above msl, Aug. 26, 1952; lowest 11.55 below msl, Aug. 22, 1942. Records available: 1933-35, 1941-49, 1951-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 3, 1951	0.23	Jan. 28, 1952	1.65	May 26, 1952	2.41	Sept. 23, 1952	2.65
Nov. 2	.46	Feb. 19	1.46	June 23	2.56	Nov. 4	2.46
29	.83	Mar. 20	1.79	July 25	2.48	Dec. 4	2.40
Dec. 20	.84	Apr. 28	2.14	Aug. 26	2.72	23	2.50

K1266. City of New York, Department of Water Supply, Gas and Electricity. Vermont and Livonia Sts. Lat. 40°39'55", long. 73°53'35". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 41 feet, screen 39-41. Land-surface datum is 27.7 feet above msl. Highest water level 2.49 above msl, July 25, 1952; lowest 7.49 below msl, June 27, 1942. Records available: 1933-37, 1941-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	1.03	Apr. 28	1.70	July 25	2.49	Nov. 4	2.04
Feb. 19	1.48	May 26	2.01	Aug. 26	2.47	Dec. 4	2.02
Mar. 20	1.57	June 23	2.40	Sept. 23	2.32	23	1.97

K1296. City of New York, Department of Water Supply, Gas and Electricity. Blake Ave. and Crystal St. Lat. 40°40'20", long. 73°52'20". Driven observation water-table well in deposits of late Pleistocene age, diameter 2 inches, depth 33 feet, screen 31-33. Land-surface datum is 7.3 feet above msl. Highest water level 2.77 above msl, May 26, 1952; lowest 8.27 below msl, Mar. 7, 1942. Records available: 1941-52.

Water level above msl

Jan. 28	2.28	Apr. 28	2.56	July 25	2.37	Nov. 4	1.68
Feb. 19	2.20	May 26	2.77	Aug. 26	2.48	Dec. 4	1.59
Mar. 20	2.44	June 23	2.62	Sept. 23	2.14	23	2.10

K1347. Albee Theatre. DeKalb Ave. and Fulton St. Lat. 40°41'30", long. 73°58'55". Drilled unused water-table well in deposits of late Pleistocene age, diameter 36 inches, depth 72 feet. Land-surface datum is 40.3 feet above msl. Highest water level 7.17 below msl, Dec. 23, 1952; lowest 24.16 below msl, Sept. 10, 1945. Records available: 1942-52.

Water level below msl

Jan. 29	12.93	Apr. 29	10.64	July 23	10.82	Nov. 3	8.40
Feb. 20	12.57	May 27	10.26	Aug. 25	10.77	Dec. 5	7.56
Mar. 24	11.81	June 24	10.67	Sept. 22	10.32	23	7.17

K1495. City of New York, Department of Water Supply, Gas and Electricity. Avenue S and E. 16th St. Lat. 40°36'20", long. 73°57'25". Driven observation water-table well in deposits of late Pleistocene age, diameter 2 inches, depth 28 feet, screen 26-28. Land-surface datum is 18.3 feet above msl. Highest water level 4.27 above msl, Aug. 26, 1952; lowest 1.80 above msl, Aug. 13, Dec. 17, 1947. Records available: 1936-43 (as K535), 1945-52.

Water level above msl

Jan. 28	3.95	Apr. 28	4.06	July 24	4.05	Nov. 3	3.87
Feb. 19	3.91	May 26	4.21	Aug. 26	4.27	Dec. 2	3.90
Mar. 20	4.05	June 23	4.18	Sept. 23	4.11	22	3.89

K1516. Formerly New York Water Service Corp. 311 Empire Blvd. Lat. 40°39'55", long. 73°57'15". Drilled unused water-table well in deposits of late Pleistocene age, diameter 12 inches, depth about 180 feet. Land-surface datum is 76.5 feet above msl. Highest water level 1.99 above msl, Dec. 22, 1952; lowest 21.56 below msl, June 30, 1947. Records available: 1947-52.

Water level above and below msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	-0.18	Apr. 28	+0.31	July 25	+0.99	Sept. 23	+1.43
Feb. 19	-.14	May 26	+ .53	Aug. 26	+1.20	Dec. 22	+1.99
Mar. 19	+ .01	June 23	+ .75				

K1591. City of New York, Department of Water Supply, Gas and Electricity. Blake Ave. and Crystal St. Lat. 40°40'20", long. 73°52'20". Drilled unused artesian well in Jameco gravel, diameter 6 inches, depth about 150 feet. Land-surface datum is 9.2 feet above msl. Highest water level 2.43 above msl, June 23, 1952; lowest 2.10 below msl, Oct. 27-28, 1947. Records available: 1947-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	2.03	Apr. 28	2.18	July 25	2.18	Nov. 4	1.67
Feb. 19	1.97	May 26	2.40	Aug. 26	2.27	Dec. 4	1.57
Mar. 20	2.19	June 23	2.43	Sept. 23	2.00	23	1.87

Nassau County

N7. Long Island State Park Commission. Formerly Citizens Water Supply Co. Remsen St. and Corona Ave., Valley Stream. Lat. 40°40'45", long. 73°41'25". Drilled unused artesian well in Lloyd sand member of Raritan formation, diameter 10 to 6 inches, depth 911 feet, screen 851-911. Land-surface datum is 20.8 feet above msl. Highest water level 12.75 above msl, Mar. 9, 1941; lowest 0.85 above msl, Aug. 4, 1952. Records available: 1936-52.

Daily mean water level, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.00	....	6.91	6.84	6.23	5.13	3.10	0.92	0.94	2.92	4.27	....
2	6.04	....	....	6.96	6.19	5.22	2.89	.89	1.03	3.03	4.2°	....
3	6.08	6.63	....	6.92	6.13	5.20	2.79	.98	1.10	3.12	4.2°	....
4	6.02	6.81	6.75	6.86	6.08	5.22	2.66	.85	1.08	3.13	4.27	....
5	6.15	7.01	6.92	6.92	6.02	5.26	2.48	.86	1.06	3.13	4.27	....
6	6.21	6.93	6.87	7.01	5.95	5.26	2.27	.87	1.09	3.14	4.37	....
7	6.17	6.87	6.81	6.90	5.93	5.28	2.08	.92	1.14	3.17	4.45	5.97
8	6.22	6.83	6.89	6.74	5.81	5.20	1.95	.91	1.10	3.18	4.39	5.89
9	6.32	6.89	6.77	6.56	5.75	5.15	1.87	.93	1.11	3.19	4.33	5.85
10	6.40	6.84	6.72	6.49	5.68	5.11	1.86	1.05	1.20	....	4.36	5.87
11	6.26	6.88	6.98	6.48	5.62	5.09	1.84	1.13	1.32	....	4.40	6.03
12	6.12	6.90	7.04	6.37	5.64	5.00	1.82	1.17	1.40	3.28	4.48	6.14
13	6.12	6.80	6.93	6.31	5.62	4.82	1.84	1.21	1.49	3.37	4.49	6.14
14	6.14	6.74	6.94	6.44	5.61	4.64	1.84	1.21	1.55	3.45	4.49	6.07
15	6.14	6.69	6.81	6.56	5.60	4.55	1.79	1.19	1.60	3.51	4.54	6.04
16	6.14	6.62	6.84	6.52	5.57	4.43	1.67	1.23	1.73	3.59	4.64	6.05
17	6.07	6.77	6.82	6.47	5.44	4.32	1.50	1.32	1.84	3.60	4.67	6.03
18	6.29	6.97	6.66	6.44	5.36	4.26	1.38	1.28	1.91	3.61	4.66	6.02
19	....	6.81	6.64	6.42	5.29	4.10	1.43	1.24	1.98	3.70	4.76	5.93
20	6.26	6.75	6.79	6.40	5.28	3.93	1.47	1.19	2.06	3.65	4.62	5.89
21	6.08	6.82	6.86	6.29	5.44	3.70	1.46	1.20	2.10	3.68	5.06	5.96
22	5.97	6.84	6.88	6.17	5.42	3.58	1.46	1.26	2.15	3.70	5.22	6.03
23	6.20	6.78	6.94	6.16	5.31	3.55	1.45	1.20	2.24	3.83	5.31	6.09
24	6.13	6.74	7.02	6.03	5.23	3.70	1.49	1.15	2.31	4.00	5.32	6.16
25	6.02	6.74	7.01	5.95	5.24	3.92	1.36	1.09	2.37	4.03	5.29	6.20
26	6.15	6.73	7.00	5.96	5.34	4.03	1.23	1.03	2.50	4.01	5.30	6.22
27	6.36	6.82	7.02	6.02	5.29	3.98	1.16	....	2.63	4.04	5.38	6.23
28	6.45	6.94	7.00	6.16	5.20	3.78	1.12	....	2.69	4.18	5.41	6.19
29	....	6.94	6.95	6.21	5.18	3.56	1.09	....	2.73	4.28	....	6.17
30	....	....	6.84	6.25	5.10	3.40	1.02	1.15	2.83	4.27	....	6.22
31	....	....	6.76	....	5.04	....	.98	.97	....	4.26	....	6.23

N9. Long Island State Park Commission. Corona Ave. and Remsen St., Valley Stream. Lat. 40°40'50", long. 73°41'35". Drilled unused artesian well in sands of Magothy(?) formation, diameter 6 to 4 inches, depth 137 feet. Land-surface datum is 23.2 feet above msl. Highest water level 23.57 above msl, Sept. 23, 1938; lowest 20.99 above msl, Sept. 11, 1936. Records available: 1936-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	22.30	Apr. 30	22.31	July 29	21.29	Nov. 5	21.26
29	22.04	May 26	22.26	Aug. 28	21.32	Dec. 4	21.14
Apr. 1	22.13	June 24	22.19	Sept. 25	21.50	23	21.42

N53. Village of Rockville Center. Morris and Maple Aves. Lat. 40°39'35", long. 73°38'30". Drilled unused water-table well in deposits of late Pleistocene age, diameter 8 inches, depth 50 feet. Land-surface datum is 26.1 feet above msl. Highest water level 16.49 above msl, Apr. 15, 1939; lowest 12.05 above msl, Feb. 17, 1940. Records available: 1934-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	15.19	Apr. 30	15.64	July 29	14.74	Nov. 5	13.32
27	15.22	May 27	15.54	Aug. 29	14.44	Dec. 4	13.08
Apr. 2	15.64	June 24	15.72	Sept. 25	13.99	22	13.40

N67. Village of Freeport. Sunrise Highway and Long Beach Rd. Lat. 40°39'25", long. 73°35'20". Drilled industrial artesian well in Lloyd sand member of Faritan formation, diameter 12 inches, depth 1,051 feet. Land-surface datum is 20.3 feet above msl. Measurements taken several hours after well was shut down. Highest water level 15.51 above msl, Dec. 5, 1946; lowest 8.77 above msl, Sept. 4, 1952. Records available: 1932-44, 1946-50, 1952. Feb. 29, +13.96; Apr. 3, +13.66; May 1, +13.53; May 28, +12.69; June 25, +11.55; Sept. 4, +8.77; Nov. 7, +11.93.

N157. Big Tree Farm. Post Rd., Wheatley. Lat. 40°48'45", long. 73°34'45". Drilled unused artesian well in sands of Magothy(?) formation, diameter 6 inches, depth 222 feet. Land-surface datum is 218.5 feet above msl. Highest water level 88.84 above msl, Oct. 31, 1939; lowest 75.71 above msl, May 5, 1933. Records available: 1932-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 6	82.09	May 1	81.66	July 30	82.56	Nov. 5	84.28
25	82.11	28	82.16	Aug. 29	83.35	Dec. 5	84.64
Mar. 31	81.57	June 25	82.72	Sept. 24	83.85	24	84.65

N180. City of New York, Department of Water Supply, Gas and Electricity. Sunrise Highway and Seamans Neck Rd., Seaford. Lat. 40°40'20", long. 73°29'45". Drilled unused artesian well in sands of Magothy(?) formation, diameter 4 to 6 inches, depth 762 feet. Land-surface datum is 15.3 feet above msl. Highest water level 21.08 above msl, June 6, 1952; lowest 17.28 above msl, Dec. 25, 1949, Jan. 20, 1950. Records available: 1945-52.

Daily mean water level, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	19.90	.....	19.98	20.21	20.21	20.47	20.13	19.50	19.87	18.50	19.17	19.13
2	19.89	20.05	19.87	20.21	20.22	20.69	20.06	19.55	19.89	18.55	19.16	19.20
3	19.89	20.01	19.87	20.14	20.18	20.83	19.98	19.68	19.83	18.53	19.24	19.30
4	19.83	20.26	19.98	20.08	20.20	20.92	19.92	19.68	19.74	18.46	19.21	19.31
5	19.97	20.24	20.01	20.18	20.15	21.04	19.87	19.70	19.73	18.43	19.23	19.51
6	19.94	20.14	19.93	20.24	20.20	21.08	19.75	19.71	19.77	18.43	19.32	19.53
7	19.94	20.16	19.90	20.10	20.18	21.06	19.74	19.81	19.73	18.45	19.19	19.38
8	20.05	20.14	19.95	20.00	20.14	20.98	.....	19.84	19.68	18.43	19.06	19.36
9	20.06	20.19	19.94	19.95	20.12	21.00	.....	19.87	19.71	18.43	19.09	19.38
10	20.02	20.14	19.93	19.99	.....	21.07	.....	19.99	19.71	18.40	19.14	19.45
11	19.87	20.23	20.22	19.99	20.18	21.02	.....	20.00	19.66	19.44	19.15	19.60
12	19.85	.....	20.09	19.91	20.31	20.90	19.92	19.95	19.62	19.45	19.16	19.55
13	19.84	.....	20.11	19.93	20.25	20.81	19.87	19.93	19.60	19.44	19.07	19.48
14	19.87	.....	20.10	20.11	20.20	20.77	19.80	19.88	19.52	19.40	19.09	19.45
15	19.86	.....	20.06	20.09	20.20	20.79	19.73	19.85	19.60	19.39	19.13	19.50
16	19.85	.....	20.11	20.00	20.13	20.71	19.69	19.92	19.70	19.39	19.20	19.48
17	19.84	20.18	20.00	19.95	20.04	20.72	19.69	19.97	19.66	19.35	19.16	19.43
18	19.98	20.15	19.97	19.95	20.11	20.68	19.84	19.91	19.61	19.37	19.20	19.41
19	19.82	20.00	20.11	19.90	20.09	20.62	19.91	19.87	19.64	19.39	19.28	19.34
20	19.97	.....	20.17	19.87	20.16	20.51	19.79	19.85	19.60	19.30	19.35	19.38

N180--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	19.80	20.00	20.16	19.79	20.23	20.39	19.74	19.87	19.57	19.25	19.37	19.49
22	19.85	19.98	20.13	19.80	20.13	20.48	19.85	19.92	19.55	19.26	19.52	19.55
23	19.97	19.96	20.21	19.81	20.03	20.49	19.83	19.84	19.55	19.30	19.45	19.65
24	19.83	.....	20.25	19.72	20.03	20.55	19.72	19.79	19.53	19.30	19.34	19.63
25	19.75	20.02	20.23	19.80	20.23	20.54	19.57	19.74	19.54	19.20	19.28	19.56
26	19.97	20.00	20.20	19.86	20.35	20.36	19.56	19.70	19.58	19.15	19.31	19.48
27	20.01	20.10	20.21	19.94	20.32	20.18	19.56	19.68	19.52	19.21	19.33	19.44
28	20.09	20.09	20.19	20.12	20.30	20.14	19.69	19.70	19.48	19.34	19.26	.....
29	.....	20.03	20.16	20.18	20.30	20.18	19.62	19.72	19.50	19.26	19.20	.....
30	.....		20.10	20.25	20.23	20.12	19.56	19.73	19.53	19.16	19.21	19.36
31	.....		20.12		20.25		19.55	19.70		19.17		19.38

N511. Irving Cox Estate. Clefts and Horseshoe Rds., Mill Neck. Lat. 40°53'35", long. 73°33'55". Drilled unused artesian well in Lloyd sand member of Raritan formation, diameter 3 inches, depth 330 feet, screen 300-330. Land-surface datum is 7.0 feet above msl. Readings taken at or near high tide during day. Highest water level 21.52 above msl, Dec. 31, 1948; lowest 18.23 above msl, Aug. 1, 1950. Records available: 1947-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	20.28	Apr. 30	20.48	July 29	20.43	Nov. 5	20.78
25	20.73	May 27	20.58	Sept. 3	20.48	Dec. 5	20.43
Mar. 31	20.13	June 25	20.73	25	20.53	24	20.88

N575. Abraham & Strauss Store. Formerly Frederick Loeser and Co. 833 Franklin Ave., Garden City. Lat. 40°43'45", long. 73°37'55". Drilled unused artesian well in sands of Magothy(?) formation, diameter 14 to 8 inches, depth 539 feet, screen 498-514, 534-539. Land-surface datum is 91.2 feet above msl. Water levels affected by nearby pumping. Highest water level 60.22 above msl, Apr. 26, 1949; lowest 52.44 above msl, Aug. 1, 1950. Records available: 1946-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 6	56.74	May 1	57.42	July 28	58.25	Nov. 5	55.79
25	58.12	26	58.85	Aug. 27	56.72	Dec. 9	54.87
Apr. 2	56.80	June 23	59.68	Sept. 23	57.40	24	55.82

N657. Town of North Hempstead. West Shore Rd., Bar Beach. Lat. 40°49'35", long. 73°39'30". Drilled unused artesian well in Lloyd sand member of Raritan formation, diameter 8 inches, depth 327 feet. Land-surface datum is 9.0 feet above msl. Water level affected by tidal fluctuations. Highest water level 15.51 above msl, Nov. 25, 1950; lowest 12.95 above msl, Jan. 29, 1946. Records available: 1945-52.

Daily mean water level, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	14.62	.....	14.50	14.68	14.77	15.03	14.55	14.32	15.00	15.08	.....	14.62
2	14.53	14.43	.....	14.83	14.77	14.91	14.49	14.45	14.88	15.12	.....	15.05
3	14.50	14.62	.....	14.69	14.74	14.98	14.49	14.43	14.90	14.85	14.80	15.11
4	14.33	15.00	14.62	14.54	14.77	14.93	14.55	14.47	14.82	14.65	14.63	14.90
5	14.64	14.66	14.25	14.87	14.76	15.00	14.54	14.51	14.87	14.75	.....	14.95
6	14.64	14.43	14.36	14.76	14.82	14.97	14.54	14.65	14.94	14.96	.....	14.65
7	15.08	14.54	14.37	14.51	14.73	14.95	14.49	14.70	15.00	14.97	14.46	14.56
8	14.86	14.73	14.75	14.57	14.64	14.93	14.48	14.74	15.03	14.85	14.42	14.66
9	14.55	14.57	14.27	14.50	14.73	14.95	14.58	14.87	14.83	14.90	14.64	14.66
10	14.68	14.55	14.27	14.46	14.70	14.96	14.77	15.03	14.80	14.93	14.70	14.70
11	14.29	14.88	14.62	14.42	14.94	14.97	14.60	14.84	14.76	15.00	.....	14.97
12	14.22	14.27	14.10	14.33	14.80	14.94	14.57	14.75	14.81	14.90	.....	14.53
13	14.38	14.08	14.21	14.48	14.70	14.87	14.63	14.81	14.87	14.85	.....	14.55
14	14.54	.....	.....	14.87	14.46	14.83	14.57	14.82	14.94	14.83	.....	14.64
15	14.64	.....	.....	14.78	14.63	14.85	14.52	14.80	14.95	14.95	.....	14.63
16	14.35	14.76	14.38	14.58	14.53	14.80	14.45	14.93	14.87	14.87	14.89	14.40
17	14.36	15.30	14.55	14.55	14.50	14.86	14.37	14.97	14.94	14.79	14.90	14.40
18	14.36	14.60	14.44	14.49	14.57	14.75	14.38	14.92	14.90	14.80	14.81	14.41
19	14.30	14.47	14.72	.....	14.50	14.74	14.46	14.90	14.88	14.82	15.00	14.40
20	14.52	14.27	14.60	.....	14.80	14.60	14.57	14.87	14.92	14.92	15.00	14.43
21	14.13	14.67	14.62	.....	14.75	14.60	14.60	14.90	14.93	14.60	15.19	14.70
22	14.49	14.42	14.64	.....	14.57	14.73	14.56	14.97	14.85	14.65	15.50	14.95
23	14.61	14.49	14.79	.....	14.63	14.75	14.50	14.80	15.00	14.80	14.84	14.80
24	14.08	14.49	14.75	.....	14.68	14.83	14.45	14.71	14.95	14.75	14.70	14.58
25	14.02	14.52	14.64	.....	14.82	14.90	14.30	14.68	14.98	14.80	14.66	14.49

N657--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	14.42	14.43	14.63	.....	14.88	14.90	14.26	14.64	14.97	14.78	14.70	14.49
27	14.56	14.61	14.68	14.73	14.76	14.80	14.30	14.65	15.00	14.74	14.71	14.56
28	14.70	14.50	14.61	14.97	14.74	14.67	14.34	14.64	14.97	14.95	14.60	.....
29	14.73	14.27	14.55	14.87	14.74	14.73	14.35	14.60	14.95	14.54	14.65	.....
30	.....		14.53	14.84	14.73	14.77	14.37	14.70	14.93	14.30	14.65	.....
31	.....		14.48		14.85		14.32	15.00		14.60		.....

N844. Long Island Railroad. Hicksville Station. Lat. 40°46'05", long. 73°31'30". Drilled unused artesian well in sands of Magothy(?) formation, diameter 10 inches, depth 258 feet. Land-surface datum is 149.2 feet above msl. Highest water level 85.48 above msl, Aug. 5, 1939; lowest 78.87 above msl, Apr. 16, 1942. Records available: 1939-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 6	80.44	Apr. 29	81.77	June 25	83.43	Dec. 5	83.32
25	80.69	May 28	82.26	Nov. 3	83.68	22	83.21
Mar. 31	81.34						

N1102. Nassau County Department of Public Works. Willets Rd. near Valley Rd., Lake Success. Lat. 40°46'15", long. 73°42'15". Driven observation water-table well in deposits of late Pleistocene age, diameter 2½ inches, depth 140 feet, screen 138-140. Land-surface datum is 185.8 feet above msl. Highest water level 58.94 above msl, May 31, 1949; lowest 53.81 above msl, July 31, 1942. Records available: 1939-52.

Water level above msl

Feb. 7	55.62	Apr. 30	56.42	July 29	57.33	Nov. 4	57.70
27	55.97	May 26	56.79	Aug. 29	57.49	Dec. 4	57.50
Apr. 1	56.23	June 24	57.42	Sept. 23	57.44	23	58.00

N1104. Nassau County Department of Public Works. 80th Ave. near Rhodes St., New Hyde Park. Lat. 40°45'00", long. 73°42'05". Driven observation water-table well in deposits of late Pleistocene age, diameter 2 inches, depth 77 feet, screen 75-77. Land-surface datum is 125.4 feet above msl. Highest water level 61.88 above msl, May 31, 1949; lowest 55.27 above msl, May 1, 1942. Records available: 1939-52.

Water level above msl

Feb. 7	58.67	Apr. 30	59.84	July 29	61.61	Nov. 4	61.33
27	58.89	May 26	60.19	Aug. 29	61.86	Dec. 4	61.08
Apr. 1	59.45	June 24	61.05	Sept. 23	61.79	23	60.73

N1108. Nassau County Department of Public Works. Jacob St. and Rosalind Ave., Elmont. Lat. 40°42'15", long. 73°42'15". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 47 feet, screen 45-47. Land-surface datum is 70.1 feet above msl. Highest water level 43.62 above msl, Apr. 28, 1939; lowest 36.94 above msl, Jan. 30, 1942. Records available: 1939-52.

Water level above msl

Feb. 7	38.42	Apr. 30	40.12	July 29	40.67	Nov. 4	39.39
27	38.99	May 26	40.49	Aug. 28	40.64	Dec. 4	39.24
Apr. 1	39.59	June 24	41.33	Sept. 23	40.20	23	39.29

N1109. Nassau County Department of Public Works. Dutch Broadway and Henry St., Elmont. Lat. 40°41'15", long. 73°42'10". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 38 feet, screen 36-38. Land-surface datum is 42.3 feet above msl. Highest water level 30.04 above msl, Apr. 21, 1939; lowest 24.42 above msl, Sept. 26, 1951. Records available: 1939-52. Feb. 7, +27.88; Feb. 27, +28.01; Apr. 1, +27.13; Apr. 30, +27.12; May 26, +27.50.

N1110. Nassau County Department of Public Works. Henry St. near Southern State Parkway, North Valley Stream. Lat. 40°40'45", long. 73°42'00". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 27 feet, screen 25-27. Land-surface datum is 30.9 feet above msl. Highest water level 21.05 above msl, Apr. 21, 1939, June 6, 1946; lowest 18.68 above msl, Dec. 1, 1941. Records available: 1939-52.

Water level above msl

Feb. 7	20.76	Apr. 30	20.91	July 29	19.85	Nov. 4	19.17
29	20.46	May 26	20.71	Aug. 28	19.93	Dec. 4	18.93
Apr. 1	20.75	June 24	20.71	Sept. 25	19.75	23	19.35

N1111. Nassau County Department of Public Works. Fletcher and Teneyck Aves., Valley Stream. Lat. 40°40'20", long. 73°42'00". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 28 feet, screen 25-27. Land-surface datum is 20.4 feet above msl. Highest water level 14.79 above msl, June 6, 1946; lowest 11.62 above msl, Oct. 25, 1947. Records available: 1939-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	13.85	Apr. 30	13.81	July 29	13.29	Nov. 5	13.00
29	13.38	May 26	13.69	Aug. 28	13.25	Dec. 4	13.46
Apr. 1	13.46	June 24	13.54	Sept. 25	13.17	23	13.44

N1113. Nassau County Department of Public Works. DuBois Ave. and Drew St., Gibson. Lat. 40°39'00", long. 73°42'10". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 22 feet, screen 20-22. Land-surface datum is 10.5 feet above msl. Measurements taken after Apr. 30, 1952, affected by installation of storm sewers nearby. Highest water level 7.99 above msl, Jan. 6, 1949; lowest 0.12 above msl, June 24, 1952. Records available: 1939-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	6.66	Apr. 30	5.34	July 29	3.21	Nov. 5	1.27
29	3.92	May 26	1.49	Aug. 28	3.98	Dec. 4	1.42
Apr. 1	4.57	June 24	.12	Sept. 25	2.79	23	2.07

N1121. Nassau County Department of Public Works. Northern Blvd. and Seasingtown Rd., Strathmore Village. Lat. 40°47'50", long. 73°40'30". Drilled water-table well in deposits of late Pleistocene age, diameter 2½ inches, depth 178 feet, screen 176-178. Land-surface datum is 220.1 feet above msl. Highest water level 64.68 above msl, Oct. 31, 1949; lowest 59.13 above msl, Dec. 20, 1951. Records available: 1943-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 7	59.37	Apr. 30	59.95	July 30	61.30	Nov. 5	60.81
26	59.85	May 28	61.90	Aug. 29	62.08	Dec. 23	61.15
Mar. 31	59.73	June 24	62.25	Sept. 23	60.51		

N1132. Nassau County Department of Public Works. Sunrise Highway and Lakewood Blvd., Lynbrook. Lat. 40°39'25", long. 73°39'40". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 29 feet, screen 26-28. Land-surface datum is 20.9 feet above msl. Highest water level 9.77 above msl, Sept. 23, 1938; lowest 6.06 above msl, Feb. 24, 1940. Records available: 1938-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	8.77	Apr. 30	8.91	July 29	7.87	Nov. 5	7.40
29	8.53	May 27	8.82	Aug. 28	7.95	Dec. 4	7.53
Apr. 1	8.77	June 24	8.77	Sept. 25	7.80	22	8.17

N1147. Nassau County Department of Public Works. Seaman Ave. near Knollwood Rd., Baldwin. Lat. 40°39'50", long. 73°37'15". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 23 feet, screen 21-23. Land-surface datum is 27.3 feet above msl. Highest water level 19.72 above msl, Apr. 8, 1939; lowest 16.48 above msl, Nov. 1, 1950. Records available: 1939-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	18.51	Apr. 30	18.59	July 29	17.99	Nov. 5	17.02
27	18.26	May 27	18.57	Aug. 29	17.86	Dec. 4	16.89
Apr. 2	18.60	June 24	18.67	Sept. 25	17.51	22	17.27

N1167. Nassau County Department of Public Works. North Ocean and Brooklyn Aves., Freeport. Lat. 40°39'30", long. 73°35'10". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 28 feet, screen 26-28. Land-surface datum is 23.8 feet above msl. Highest water level 12.12 above msl, Mar. 25, 1948; lowest 9.34 above msl, Dec. 27, 1949. Records available: 1938-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	11.99	Apr. 30	11.90	July 28	10.98	Nov. 5	9.73
27	11.78	May 27	11.87	Aug. 27	10.83	Dec. 4	9.78
Apr. 2	12.08	June 24	11.81	Sept. 25	10.55	22	10.31

N1185. Nassau County Department of Public Works. West Grand Ave. and Lindgren St., Merrick. Lat. 40°39'55", long. 73°33'45". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 17 feet, screen 15-17. Land-surface datum is 21.1 feet above msl. Highest water level 15.39 above msl, Apr. 8, 1939; lowest 10.01 above msl, Dec. 28, 1949. Records available: 1938-52.

Water level above msl							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	13.05	Apr. 30	13.16	July 28	12.59	Nov. 4	12.06
27	13.07	May 27	13.19	Aug. 27	12.72	Dec. 4	12.15
Apr. 2	13.05	June 24	13.16	Sept. 25	12.69	22	12.25

N1204. Nassau County Department of Public Works. Harris Ct. and John St., Bellmore. Lat. 40°40'20", long. 73°31'25". Driven observation water-table well in sands of Magothy(?) Pleistocene age, diameter 1½ inches, depth 29 feet, screen 27-29. Land-surface datum is 21.5 feet above msl. Highest water level 12.56 above msl, Feb. 8, 1952; lowest 5.07 above msl, Jan. 26, 1950. Records available: 1939-52.

Water level above msl							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	12.56	Apr. 29	12.47	July 28	11.47	Nov. 5	11.33
26	12.02	May 27	12.35	Aug. 27	11.57	Dec. 4	11.50
Apr. 2	12.28	June 23	12.10	Sept. 25	11.44	22	11.88

N1212. Nassau County Department of Public Works. Jericho Turnpike, Locust Grove. Lat. 40°48'25", long. 73°31'20". Drilled observation artesian well in sands of Magothy(?) formation, diameter 4 inches, depth 185 feet, screen 181-185. Land-surface datum is 228.2 feet above msl. Highest water level 88.94 above msl, Sept. 28, 1949; lowest 83.72 above msl, Jan. 20, 1943. Records available: 1943-52.

Daily mean water level, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	84.26	84.17	84.04	84.22	84.34	84.79	85.15	85.87	86.69	87.00	87.23	87.21
2	84.19	84.19	83.80	84.16	84.38	84.67	85.28	86.00	86.68	87.02	87.21	87.35
3	84.19	84.10	83.92	84.00	84.30	84.70	85.34	85.97	86.64	87.03	87.37	87.31
4	84.15	84.41	84.17	83.99	84.41	84.75	85.34	85.97	86.69	86.99	87.29	87.25
5	84.44	84.19	83.99	84.31	84.32	84.77	85.31	86.03	86.54	87.02	87.37	87.62
6	84.23	83.97	83.92	84.16	84.44	84.82	85.28	86.02	86.71	87.05	87.49	87.44
7	84.20	84.08	83.92	84.03	84.36	84.83	85.34	86.04	86.61	87.09	87.26	87.26
8	84.24	84.07	83.97	83.96	84.40	84.75	85.43	86.06	86.53	87.04	87.12	87.26
9	84.22	84.11	83.96	83.99	84.42	84.85	85.50	86.13	86.66	87.07	87.27	87.31
10	84.23	84.03	83.94	84.16	84.44	84.89	85.49	86.25	86.74	87.06	87.35	87.44
11	83.93	84.27	84.43	84.14	84.45	84.87	85.31	86.13	86.74	87.10	87.32	87.59
12	84.15	83.98	83.92	84.08	84.50	84.82	85.40	.....	86.76	87.13	87.36	87.37
13	84.17	83.97	84.16	84.20	84.42	84.76	85.49	.....	86.78	87.15	87.22	87.33
14	84.19	84.03	84.00	84.43	84.38	84.82	85.54	.....	86.78	87.12	87.27	87.29
15	84.22	83.95	84.05	84.23	84.50	84.97	85.57	.....	86.78	87.18	87.36	87.42
16	84.06	84.01	84.20	.....	84.38	84.91	85.53	.....	86.86	87.14	87.35	87.39
17	84.24	84.32	83.95	.....	84.35	85.07	85.52	.....	86.86	87.09	87.24	87.32
18	84.25	84.06	83.79	.....	84.45	85.00	85.65	.....	86.84	87.20	87.29	87.28
19	84.05	83.90	84.06	.....	84.43	85.01	85.75	.....	86.84	87.29	87.43	87.16
20	84.34	83.97	83.99	84.26	84.60	84.89	85.68	.....	86.84	87.11	87.45	87.25
21	83.95	84.08	84.03	84.15	84.63	84.92	85.69	.....	86.84	87.03	87.35	87.43
22	84.22	83.94	83.96	84.27	84.47	85.04	85.68	.....	86.86	87.16	87.41	87.33
23	84.22	83.95	84.05	84.31	84.45	85.06	85.76	.....	86.91	87.31	87.27	87.38
24	83.94	84.00	84.01	84.16	84.52	85.23	85.71	.....	86.86	87.30	87.23	87.37
25	83.99	84.03	83.89	84.33	84.70	85.20	85.61	.....	86.87	87.11	87.24	87.37
26	84.36	84.01	83.92	84.36	84.67	85.18	85.78	.....	86.93	87.12	87.39	87.38
27	84.27	84.23	83.99	84.40	84.54	85.08	85.90	.....	86.96	87.35	87.41	87.41
28	84.32	84.12	83.94	84.43	84.60	85.11	85.91	.....	86.93	87.44	87.33	87.24
29	84.07	84.03	83.92	84.35	84.65	85.28	.....	.....	86.95	87.20	87.30	87.34
30	83.91	.....	83.87	84.39	84.58	85.17	85.83	.....	86.99	87.12	87.37	87.37
31	84.01	.....	84.04	.....	84.68	.....	85.87	.....	.....	87.27	.....	87.37

N1222. Nassau County Department of Public Works. Cecelia Place and John St., Seaford. Lat. 40°40'25", long. 73°29'05". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 29 feet, screen 27-29. Land-surface datum is 21.2 feet above msl. Highest water level 9.68 above msl, Apr. 29, 1952; lowest 1.27 above msl, Jan. 31, 1942. Records available: 1939-52.

N1222--Continued.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 6	9.61	Apr. 29	9.68	July 28	9.00	Nov. 3	8.96
25	9.36	May 27	9.37	Aug. 27	9.15	Dec. 4	8.96
Apr. 2	9.58	June 23	9.29	Sept. 25	9.02	22	9.25

N1240. Nassau County Department of Public Works. Manhattan Ave., Massapequa Park. Lat. 40°40'40", long. 73°27'10". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 28 feet, screen 26-28. Land-surface datum is 23.0 feet above msl. Highest water level 11.29 above msl, Apr. 8, 1939; lowest 1.08 below msl, Jan. 24, 1942. Records available: 1939-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 26	10.74	May 28	10.82	Aug. 27	10.58	Dec. 4	10.21
Apr. 2	11.05	June 23	11.00	Sept. 25	10.10	22	10.56
29	10.93	July 28	10.32	Nov. 3	9.93		

N1244. Nassau County Department of Public Works. Jericho Turnpike and Avery Rd., Syosset. Lat. 40°49'15", long. 73°27'15". Drilled observation water-table well in sands of Magothy(?) formation, diameter 4 inches, depth 259 feet, screen 255-259. Land-surface datum is 248.9 feet above msl. Highest water level 76.50 above msl, May 31, 1940; lowest 71.07 above msl, June 4, 1951. Records available: 1940-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 6	71.27	Apr. 29	71.29	July 30	72.13	Nov. 3	73.72
25	71.19	May 28	71.45	Aug. 29	72.59	Dec. 5	74.21
Mar. 31	71.20	June 25	71.69	Sept. 24	73.09	24	74.52

N1245. Nassau County Department of Public Works. Plainview Rd. and Northern State Parkway, Plainview. Lat. 40°48'25", long. 73°27'00". Drilled observation artesian well in sands of Magothy(?) formation, diameter 2½ inches, depth 202 feet, screen 198-202. Land-surface datum is 259.9 feet above msl. Highest water level 82.88 above msl, Feb. 2, 1940; lowest 75.63 above msl, June 4, 1951. Records available: 1940-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 6	76.17	Apr. 29	76.10	July 30	76.81	Nov. 3	78.87
25	75.96	May 28	76.18	Aug. 29	77.40	Dec. 5	79.41
Mar. 31	75.93	June 25	76.44	Sept. 24	77.95	24	79.53

N1246. Nassau County Department of Public Works. Plainview and Melville Rds., Plainview. Lat. 40°47'00", long. 73°26'50". Drilled observation water-table well in deposits of late Pleistocene age, diameter 4 inches, depth 125 feet, screen 121-125. Land-surface datum is 185.1 feet above msl. Highest water level 82.18 above msl, Aug. 29, 1949; lowest 76.85 above msl, Apr. 24, 1951. Records available: 1940-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 6	76.97	Apr. 29	77.50	July 30	78.72	Nov. 3	80.62
25	77.16	May 28	77.72	Aug. 29	79.48	Dec. 5	80.84
Mar. 31	77.38	June 25	78.13	Sept. 24	79.92	24	80.74

N1247. Nassau County Department of Public Works. Near Motor Parkway, Bethpage. Lat. 40°45'55", long. 73°26'30". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 110 feet, screen 108-110. Land-surface datum is 157.1 feet above msl. Highest water level 76.98 above msl, July 28, 1939; lowest 70.52 above msl, July 31, 1942. Records available: 1939-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 6	70.91	Apr. 29	71.85	July 30	73.80	Nov. 3	74.36
25	71.05	May 28	72.24	Aug. 29	74.25	Dec. 5	74.33
Mar. 31	71.42	June 25	72.91	Sept. 24	74.38	24	74.03

N1249. Nassau County Department of Public Works. Secatogue Ave. and Wall St., Farmingdale. Lat. 40°43'50", long. 73°26'05". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 34 feet, screen 32-34. Land-surface datum is 67.8 feet above msl. Highest water level 58.18 above msl, Apr. 21, 1939; lowest 50.34 above msl, Jan. 30, 1942. Records available: 1939-52.

N1249--Continued.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 6	54.04	Apr. 29	54.92	July 28	55.69	Nov. 3	53.76
25	54.24	May 28	55.43	Aug. 27	55.61	Dec. 1	53.17
Apr. 2	54.92	June 23	56.66	Sept. 24	54.91	22	53.46

N1250. Nassau County Department of Public Works. Old Carmans Rd., Farmingdale. Lat. 40°43'15", long. 73°26'00". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 34 feet, screen 32-34. Land-surface datum is 62.2 feet above msl. Highest water level 49.64 above msl, Apr. 21, 1939; lowest 43.20 above msl, Jan. 30, 1942. Records available: 1939-52.

Water level above msl

Feb. 6	47.30	Apr. 29	47.80	July 28	47.95	Nov. 3	45.96
25	47.24	May 28	48.16	Aug. 27	47.88	Dec. 1	45.58
Apr. 2	47.88	June 23	48.84	Sept. 24	47.27	22	45.94

N1251. Nassau County Department of Public Works. County Line Pk. and Southern State Parkway, Farmingdale. Lat. 40°42'40", long. 73°25'50". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 29 feet, screen 27-29. Land-surface datum is 48.9 feet above msl. Highest water level 40.54 above msl, Apr. 29, 1944; lowest 35.57 above msl, Jan. 30, 1942. Records available: 1939-52.

Water level above msl

Feb. 6	39.60	Apr. 29	40.05	July 28	39.01	Nov. 3	37.63
25	39.41	May 28	40.10	Aug. 27	38.93	Dec. 1	37.24
Apr. 2	39.85	June 23	40.11	Sept. 24	38.38	22	37.87

N1252. Nassau County Department of Public Works. County Line Fd. and Smith St., Amityville. Lat. 40°41'40", long. 73°25'40". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 26 feet, screen 24-26. Land-surface datum is 29.3 feet above msl. Highest water level 26.29 above msl, June 5, 1946, May 30, 1948; lowest 22.48 above msl, Jan. 30, 1942. Records available: 1939-52.

Water level above msl

Feb. 6	26.03	Apr. 29	26.19	July 28	25.33	Nov. 3	24.36
25	25.87	May 28	26.09	Aug. 27	25.21	Dec. 4	24.24
Apr. 2	26.09	June 23	26.09	Sept. 24	24.86	22	24.79

N1253. Nassau County Department of Public Works. Clocks Blvd. and Pine St., Amityville. Lat. 40°40'55", long. 73°25'35". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 29 feet, screen 27-29. Land-surface datum is 28.5 feet above msl. Highest water level 16.89 above msl, Apr. 8, 1939; lowest 11.31 above msl, Jan. 31, 1942. Records available: 1939-52.

Water level above msl

Feb. 6	16.20	Apr. 29	16.05	July 28	15.10	Nov. 3	14.61
25	15.87	May 28	16.08	Aug. 27	15.18	Dec. 4	14.57
Apr. 2	16.14	June 23	16.00	Sept. 25	14.88	22	15.08

N1254. Nassau County Department of Public Works. County Line and Merrick Rds., Amityville. Lat. 40°40'20", long. 73°25'25". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 29 feet, screen 27-29. Land-surface datum is 14.0 feet above msl. Highest water level 4.68 above msl, July 20, 1947; lowest 2.35 above msl, Dec. 29, 1949. Records available: 1939-52.

Water level above msl

Feb. 6	4.09	Apr. 29	4.28	July 28	3.62	Nov. 3	3.56
29	4.09	May 28	4.15	Aug. 27	3.61	Dec. 4	4.00
Apr. 2	4.02	June 23	4.06	Sept. 25	3.58	22	4.14

N1255. Nassau County Department of Public Works. Clinton Rd. near St. James St., Garden City. Lat. 40°43'45", long. 73°37'10". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 35 feet, screen 33-35. Land-surface datum is 79.4 feet above msl. Highest water level 65.56 above msl, Apr. 15, 1939; lowest 58.39 above msl, Oct. 30, 1951. Records available: 1913-18, 1934-52.

Water level above msl

Feb. 6	60.88	May 1	62.14	July 28	62.39	Nov. 3	60.16
25	61.19	27	62.32	Aug. 27	61.53	Dec. 1	60.04
Mar. 31	61.81	June 23	63.16	Sept. 25	60.91	22	59.82

N1256. Nassau County Department of Public Works. Hillside Ave. and Bacon Rd., Westbury. Lat. 40°45'40", long. 73°37'05". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 51 feet, screen 49-51. Land-surface datum is 112.3 feet above msl. Highest water level 80.97 above msl, May 20, 1935; lowest 70.30 above msl, Feb. 27, 1933. Records available: 1913-18, 1932-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 6	76.40	Apr. 29	77.67	July 30	78.97	Nov. 4	78.59
25	76.84	May 28	78.08	Aug. 29	78.86	Dec. 6	78.51
Mar. 31	77.14	June 25	78.82	Sept. 24	78.96	24	77.61

N1259. U. S. Geol. Survey. Hicksville-Massapequa Rd., Plainedge. Lat. 40°43'15", long. 73°29'05". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 48 feet, screen 46-48. Land-surface datum is 78.4 feet above msl. Highest water level 56.99 above msl, June 23, 1952; lowest 47.83 above msl, Jan. 24, 1933. Records available: 1909-10, 1912-16, 1930-35, 1937-52.

Water level above msl

Feb. 4	53.56	Apr. 29	54.61	July 28	55.97	Nov. 3	53.70
25	54.20	May 27	55.13	Aug. 27	55.40	Dec. 1	53.07
Mar. 31	54.47	June 23	56.99	Sept. 24	54.75	22	53.05

N1263. Nassau County Department of Public Works. Wantagh Ave. and Miller Place, Central Park. Lat. 40°43'00", long. 73°29'55". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 29 feet, screen 27-29. Land-surface datum is 66.0 feet above msl. Highest water level 55.24 above msl, June 23, 1952; lowest 46.22 above msl, Oct. 31, 1932. Records available: 1911-15, 1931-52.

Water level above msl

Feb. 6	52.57	Mar. 31	53.17	May 27	53.89	July 28	54.04
25	52.70	Apr. 29	53.80	June 23	55.24	Dec. 24	51.22

N1264. City of New York, Department of Water Supply, Gas and Electricity. Newbridge Rd. near Sunrise Highway, Bellmore. Lat. 40°39'55", long. 73°32'20". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 26 feet, screen 24-26. Land-surface datum is 13.7 feet above msl. Highest water level 9.41 above msl, Apr. 8, 1939; lowest 2.70 above msl, Feb. 17, 1940. Records available: 1932-36, 1937-52.

Water level above msl

Feb. 8	8.82	Apr. 29	8.70	July 28	8.39	Nov. 5	8.02
26	8.80	May 27	8.69	Aug. 27	8.52	Dec. 4	8.34
Apr. 2	8.64	June 23	8.69	Sept. 25	8.49	22	8.91

N1461. Nassau County Department of Public Works. New South Rd. and Long Island Railroad, Hicksville. Lat. 40°45'25", long. 73°30'20". Drilled observation artesian well in sands of Magothy(?) formation, diameter 6 inches, depth 73 feet, screen 63-73. Land-surface datum is 129.5 feet above msl. Highest water level 79.97 above msl, June 6, 1949; lowest 74.34 above msl, Oct. 10, 1943. Records available: 1943-52.

Water level above msl

Jan. 5	75.49	Mar. 29	76.83	July 25	78.87	Oct. 18	78.53
12	75.51	Apr. 6	76.97	Aug. 1	78.76	25	78.55
19	75.61	11	77.02	8	78.63	Nov. 1	78.52
26	75.70	19	77.11	15	78.61	8	78.46
Feb. 2	75.79	May 16	77.57	22	78.56	15	78.36
9	75.80	23	77.66	29	78.55	22	78.30
16	76.02	29	77.78	Sept. 5	78.50	29	78.30
23	76.17	June 6	78.25	12	78.51	Dec. 6	78.28
Mar. 1	76.21	13	78.59	20	78.42	13	78.20
8	76.43	July 3	79.05	27	78.59	20	78.13
15	76.59	11	79.21	Oct. 4	78.45	27	78.20
22	76.72	18	79.06	11	78.52		

N1462. Nassau County Department of Public Works. Mallard Rd. and Neptune Lane, Levittown. Lat. 40°43'55", long. 73°30'20". Drilled observation water-table well in deposits of late Pleistocene age, diameter 6 inches, depth 52 feet, screen 42-52. Land-surface datum is 95.0 feet above msl. Highest water level 67.31 above msl, June 25, 1952; lowest 61.26 above msl, Nov. 1, 1947. Records available: 1943-52.

N1462--Continued.

Daily mean water level, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	64.45	64.83	65.33	.....	67.15	66.63	66.55	65.95	65.24	64.57
2	.....	63.80	64.41	64.86	65.32	.....	67.12	66.63	66.55	65.93	65.22	64.55
3	.....	63.81	64.40	64.86	65.32	67.20	67.11	66.68	66.54	65.91	65.20	64.53
4	.....	63.85	64.44	64.87	65.33	67.03	67.10	66.66	66.50	65.88	65.17	64.50
5	63.36	63.90	64.47	64.91	65.33	67.22	67.08	66.62	66.47	65.87	65.14	64.51
6	63.38	63.92	64.48	64.96	65.34	67.23	67.05	66.60	66.46	65.84	65.13	64.61
7	63.39	63.96	64.48	64.94	65.35	67.20	67.03	66.66	66.45	65.82	65.10	64.59
8	63.41	63.99	64.49	64.91	65.36	67.16	67.00	66.68	66.41	65.80	65.05	64.56
9	63.43	64.01	64.49	64.91	65.38	67.15	66.99	66.70	66.40	65.78	65.03	64.53
10	63.44	64.03	64.49	64.92	65.39	67.24	67.15	66.71	66.38	65.77	65.01	64.51
11	63.44	64.07	64.53	64.94	65.40	67.24	67.18	66.71	66.36	65.73	64.99	64.56
12	63.44	64.09	64.56	64.93	65.51	67.23	67.13	66.69	66.33	65.72	64.96	64.70
13	63.46	64.11	64.57	64.94	65.52	67.23	67.08	66.70	66.31	65.70	64.94	.....
14	63.47	64.14	64.59	65.01	65.52	67.24	67.04	66.69	66.29	65.69	64.91	.....
15	63.48	64.16	64.62	65.03	65.52	67.26	67.01	66.67	66.28	65.67	64.88	.....
16	63.48	64.19	64.63	65.02	65.51	67.27	66.97	66.70	66.27	65.64	64.87	.....
17	63.49	64.24	64.64	65.02	65.49	67.28	66.94	66.78	66.25	65.60	64.85	.....
18	.....	64.27	64.61	65.02	65.48	67.30	66.92	66.74	66.22	65.57	64.83	.....
19	.....	64.30	64.61	65.02	35.49	67.27	66.92	66.70	66.20	65.56	64.82	.....
20	63.55	64.31	64.65	65.03	65.51	67.20	66.91	66.69	66.17	65.53	64.80	64.47
21	63.55	64.35	64.67	65.02	65.56	67.19	66.89	66.69	66.15	65.50	64.77	64.47
22	63.57	64.36	64.69	65.01	65.55	67.24	66.88	66.76	66.14	65.47	64.77	64.45
23	63.59	64.38	64.70	65.03	65.53	67.26	66.86	66.75	66.12	65.46	64.78	64.44
24	63.59	64.39	64.72	65.02	65.52	67.29	66.83	66.70	66.09	65.44	64.75	64.43
25	63.60	64.41	64.73	65.03	65.57	67.31	66.78	66.65	66.06	65.40	64.72	64.41
26	63.63	64.41	64.74	65.06	65.69	67.28	66.77	66.62	66.05	65.37	64.71	64.40
27	63.66	64.44	64.76	65.08	65.70	67.23	66.75	66.61	66.02	65.36	64.69	64.37
28	63.70	64.45	64.77	65.27	65.69	67.20	66.74	66.60	66.00	65.36	64.67	64.35
29	63.72	64.45	64.77	65.36	65.68	67.19	66.72	66.58	65.99	65.33	64.61	64.34
30	63.75	.....	64.79	65.35	65.66	67.18	66.69	66.57	65.97	65.30	64.59	64.33
31	.....	.....	64.80	.....	65.66	.....	66.66	66.55	.....	65.28	.....	64.31

N1463. Nassau County Department of Public Works. Seamans Neck Rd. near Southern State Parkway, Jerusalem. Lat. 40°41'50", long. 73°29'35". Drilled observation water-table well in deposits of late Pleistocene age, diameter 6 inches, depth 31 feet, screen 21-31. Land-surface datum is 50.7 feet above msl. Highest water level 42.91 above msl, June 7, 1952; lowest 36.61 above msl, Oct. 28, Nov. 3, 1947. Records available: 1943-52.

Daily mean water level, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	39.10	39.77	39.96	40.37	40.49	40.65	41.32	39.72	39.42	38.46	37.71	37.32
2	39.12	39.83	39.92	40.38	40.50	.....	41.23	39.74	39.39	38.46	37.65	37.31
3	39.13	39.87	39.90	40.35	40.53	.....	41.17	39.75	39.37	38.45	37.68	37.30
4	39.13	39.96	39.89	40.32	40.55	.....	41.10	39.69	39.33	38.44	37.68	37.29
5	39.18	40.06	39.95	40.38	40.54	.....	41.02	39.67	39.28	38.43	37.68	37.32
6	39.18	40.09	39.90	40.39	40.57	.....	40.93	39.69	39.26	38.42	37.67	37.41
7	39.20	40.13	39.89	40.35	40.58	42.91	40.87	39.79	39.23	38.40	37.65	37.41
8	39.21	40.16	39.87	40.31	40.57	42.82	40.82	39.75	39.18	38.36	37.61	37.41
9	39.22	40.19	39.86	40.27	40.48	42.77	40.79	39.69	39.11	38.33	37.61	37.42
10	39.24	40.22	39.85	40.27	40.43	42.74	40.90	39.77	.....	38.29	37.60	37.42
11	39.23	40.25	39.99	40.25	40.47	42.68	40.79	.....	.....	38.24	37.56	37.52
12	39.23	40.25	40.04	40.22	40.59	42.60	40.74	.....	.....	38.23	37.56	37.60
13	39.24	40.25	40.07	40.21	40.57	42.49	40.70	.....	.....	38.22	37.55	37.64
14	39.26	40.26	40.09	40.28	40.55	42.38	40.66	.....	.....	38.19	37.53	37.68
15	39.28	40.24	40.10	40.24	40.53	42.35	40.59	.....	.....	38.16	37.49	37.72
16	39.28	40.23	40.12	40.18	40.49	42.25	40.53	.....	.....	38.13	37.51	37.72
17	39.29	40.30	40.13	40.15	40.43	42.17	.....	.....	.....	38.10	37.47	37.72
18	39.36	40.28	40.11	40.13	40.41	42.16	.....	.....	.....	38.08	37.45	.....
19	39.35	40.21	40.15	40.09	40.38	42.08	40.37	.....	.....	38.08	37.44	.....
20	39.10	40.17	40.22	40.08	40.43	42.02	40.33	.....	.....	38.07	37.43	.....
21	39.38	40.16	40.22	40.05	40.47	41.97	40.29	.....	38.84	38.04	37.42	.....
22	39.40	40.13	40.23	40.03	40.42	41.93	40.26	39.69	38.82	38.02	37.48	.....
23	39.45	40.09	40.27	40.02	40.38	41.88	40.21	39.62	38.80	38.00	37.44	.....
24	39.43	40.07	40.31	39.99	40.34	41.83	.....	39.60	38.77	37.96	37.40	.....
25	39.44	40.06	40.32	39.95	40.40	41.77	.....	39.57	38.75	37.89	37.38	.....

N1463--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	39.50	40.04	40.32	39.94	40.52	41.70	.....	39.52	.....	37.87	37.37	.....
27	39.53	40.03	40.33	39.99	40.55	41.60	.....	39.46	38.62	37.87	37.36	37.87
28	39.59	40.01	40.34	40.29	40.57	41.53	.....	.....	38.54	37.83	37.35	37.85
29	39.63	39.98	40.34	40.42	40.57	41.47	.....	.....	38.52	37.81	37.33	37.82
30	39.67		40.34	40.46	40.55	41.40	39.81	39.43	38.48	37.79	37.33	37.81
31	39.72		40.35		40.56		39.77	39.41		37.76		37.79

N1464. Nassau County Department of Public Works. Seaford Woods, Seaford. Lat. 40°40'50", long. 73°29'25". Drilled observation water-table well in deposits of late Pleistocene age, diameter 6 inches, depth 41 feet, perforations 31-41. Land-surface datum is 28.8 feet above msl. Highest water level 17.59 above msl, Apr. 29, 1944; lowest 12.22 above msl, Jan. 26, 1950. Records available: 1943-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 6	17.24	Apr. 29	16.95	July 28	15.93	Nov. 3	15.76
25	16.68	May 27	17.00	Aug. 27	16.08	Dec. 4	15.63
Apr. 2	16.89	June 23	17.05	Sept. 25	15.83	22	16.10

N1613. Long Island State Park Commission. Formerly Citizens Water Supply Co. North Valley Stream State Park, Valley Stream. Lat. 40°41'00", long. 73°41'20". Drilled unused artesian well in sands of Magothy(?) formation, diameter 6 inches, depth 496 feet. Land-surface datum is 24.4 feet above msl. Highest water level 24.56 above msl, July 28, 1948; lowest 20.83 above msl, Sept. 28, 1951. Records available: 1940-52.

Water level above msl

Feb. 8	23.61	Apr. 30	23.81	July 29	21.68	Nov. 5	21.46
29	23.40	May 26	23.73	Aug. 28	21.88	Dec. 4	21.06
Apr. 1	23.57	June 24	23.82	Sept. 25	22.51	23	21.50

N1614. Nassau County Department of Public Works. Formerly City of New York, Department of Water Supply, Gas and Electricity. Herricks Rd. and Sally Place, Mineo'a. Lat. 40°44'45", long. 73°39'30". Driven observation water-table well in deposits of late Pleistocene age, diameter 2 inches, depth 35 feet, screen 33-35. Land-surface datum is 100.7 feet above msl. Highest water level 72.48 above msl, May 31, 1949; lowest 61.90 above msl, Feb. 27, 1933. Records available: 1913-17, 1932-35, 1940-52.

Water level above msl

Feb. 8	67.39	May 1	69.39	July 28	70.16	Nov. 4	68.15
26	67.80	26	69.98	Aug. 28	69.87	Dec. 5	67.56
Apr. 1	68.56	June 23	71.02	Sept. 24	69.23	24	67.62

N1615. Nassau County Department of Public Works. Formerly City of New York, Department of Water Supply, Gas and Electricity. Merrick Ave. near Wilson Rd., East Meadow. Lat. 40°42'10", long. 73°34'00". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 26 feet, screen 24-26. Land-surface datum is 62.8 feet above msl. Highest water level 47.17 above msl, Mar. 28, 1939; lowest 41.48 above msl, Oct. 27, 1932. Records available: 1913-15, 1932-52.

Water level above msl

Feb. 6	45.56	Apr. 29	45.73	July 28	46.25	Nov. 3	45.21
25	45.58	May 27	45.93	Aug. 29	45.83	Dec. 1	45.09
Mar. 31	45.85	June 23	46.85	Sept. 24	45.64		

N1616. Nassau County Department of Public Works. Formerly City of New York, Department of Water Supply, Gas and Electricity. Post Ave. and Argyle Rd., Westbury. Lat. 40°45'55", long. 73°35'10". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 51 feet, screen 49-51. Land-surface datum is 122.8 feet above msl. Highest water level 85.42 above msl, June 1, 1939; lowest 74.05 above msl, Feb. 27, 1933. Records available: 1913-15, 1932-52.

Water level above msl

Feb. 6	80.08	Apr. 29	81.90	July 30	83.58	Nov. 4	82.88
25	80.48	May 27	82.45	Aug. 29	83.50	Dec. 5	82.52
Mar. 31	81.17	June 25	83.23	Sept. 24	83.30	24	82.33

N1828. Nassau County Department of Public Works. Melville Rd. and Suffolk County Line, Farmingdale. Lat. 40°44'45", long. 73°26'20". Drilled observation water-table well in deposits of late Pleistocene age, diameter 6 inches, depth 35 feet, screen 25-35. Land-surface datum is 81.9 feet above msl. Highest water level 63.29 above msl, May 31, 1949; lowest 57.80 above msl, Dec. 19, 1950. Records available: 1939-42 (as N1248), 1942-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 6	60.24	Apr. 29	61.20	July 28	62.31	Nov. 3	60.76
25	60.59	May 28	61.71	Aug. 27	62.21	Dec. 1	60.15
Mar. 31	61.09	June 23	63.17	Sept. 24	61.71	22	60.19

N1829. Nassau County Department of Public Works. Stewart Ave. near Post Ave., Westbury. Lat. 40°44'10", long. 73°34'40". Drilled observation water-table well in deposits of late Pleistocene age, diameter 6 inches, depth 27 feet, screen 17-27. Land-surface datum is 76.7 feet above msl. Highest water level 69.39 above msl, Sept. 15, 1944; lowest 66.00 above msl, Jan. 29, 1951. Records available: 1938-42 (as N1180), 1942-52.

Water level above msl

Feb. 6	67.81	Apr. 29	68.57	July 28	68.68	Nov. 3	67.74
25	68.12	May 27	68.74	Aug. 27	68.46	Dec. 1	67.44
Mar. 31	68.42	June 23	69.05	Sept. 24	68.17	22	67.59

N1830. Nassau County Department of Public Works. South Tyson Ave. near Long Island Railroad, Floral Park. Lat. 40°43'40", long. 73°42'20". Drilled observation water-table well in deposits of late Pleistocene age, diameter 6 inches, depth 65 feet, screen 55-65. Land-surface datum is 95.0 feet above msl. Highest water level 54.23 above msl, May 31, 1949; lowest 49.05 above msl, June 7, 1942. Records available: 1939-42 (as N1166), 1942-52.

Water level above msl

Feb. 7	50.55	Apr. 30	51.78	July 29	53.44	Nov. 4	52.55
27	50.77	May 26	52.22	Aug. 28	53.53	Dec. 4	52.03
Apr. 1	51.34	June 24	53.24	Sept. 23	53.22	23	51.98

N2052. Port Washington Water District. Hewlett Lane, Port Washington. Lat. 40°48'45", long. 73°39'40". Drilled municipal artesian well in sands of Magothy(?) formation, diameter 12 to 8 to 6 inches, depth 303 feet, screen 283-303. Land-surface datum is 157.9 feet above msl. Highest water level 34.95 above msl, Nov. 5, 1952; lowest 29.71 above msl, Mar. 14, 1946. Records available: 1946-52.

Water level above msl

Feb. 7	32.70	May 1	33.29	July 30	34.03	Nov. 5	34.95
27	32.81	28	34.31	Aug. 29	34.58	Dec. 5	34.71
Apr. 2	33.11	June 25	34.70	Sept. 23	34.57	23	34.62

N2071. Appleby Estate. Herb Hill Rd. near site of Columbia Ribbon & Carbon Mfg. Co., Glen Cove. Lat. 40°51'30", long. 73°38'35". Drilled unused artesian well in Lloyd sand member of Raritan formation, diameter 8 inches, depth 266 feet. Land-surface datum is 5.1 feet above msl. Highest water level 14.62 above msl, Mar. 15, 1946; lowest 5.37 above msl, June 28, 1949. Records available: 1946-51. No measurement made in 1952.

N2400. Roslyn Water District. Old Westbury Rd. and Locust Valley Lane, Roslyn. Lat. 40°47'10", long. 73°38'00". Drilled municipal artesian well in sands of Magothy(?) formation, diameter 18 inches, depth 439 feet, screen 399-439. Land-surface datum is 165.6 feet above msl. Highest water level 74.10 above msl, Sept. 30, 1949; lowest 70.04 above msl, Feb. 28, 1951. Records available: 1947-52. Apr. 3, +71.84.

N2528. Nassau County Department of Public Works. Chicken Valley and Wolver Hollow Rds., Upper Brookville. Lat. 40°51'00", long. 73°34'40". Drilled observation artesian well in sands of Magothy(?) formation, diameter 6 to 4 inches, depth 282 feet, slots 278-282. Land-surface datum is 92.5 feet above msl. Highest water level 72.16 above msl, June 5-6, 1949; lowest 68.03 above msl, Jan. 22, 30, 1951. Records available: 1947-52.

Daily mean water level, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	68.91	69.00	69.21	69.69	.....	70.58	70.95	70.98	71.00	70.77	70.49	70.23
2	68.90	69.03	69.18	69.70	70.14	70.62	70.96	70.99	71.01	70.78	70.47	70.23
3	68.90	69.04	69.18	69.69	70.17	70.66	70.98	70.99	70.98	70.75	70.49	70.22
4	68.88	69.08	69.22	69.69	70.20	70.72	70.99	70.99	70.94	70.73	70.46	70.21
5	68.92	69.09	69.22	69.73	70.23	70.77	70.98	70.99	70.92	70.72	70.47	70.26

N2528--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	68.90	69.08	69.19	69.74	70.27	70.83	70.97	70.98	70.94	70.72	70.49	70.29
7	68.89	69.11	69.19	69.74	70.29	70.86	70.96	.....	70.92	70.72	70.45	70.24
8	68.89	69.13	69.21	69.73	70.30	70.87	70.98	70.97	70.88	70.70	70.40	70.23
9	68.89	69.15	69.21	69.75	70.32	70.89	71.00	70.99	70.89	70.69	70.42	70.24
10	68.90	69.16	69.22	69.78	70.34	70.92	71.01	71.02	70.91	70.67	70.42	70.26
11	68.84	69.19	69.28	69.80	70.36	70.94	71.00	71.02	70.90	70.67	70.40	70.31
12	68.84	69.18	69.26	69.80	70.37	70.94	71.00	71.02	70.89	70.67	70.38	70.31
13	68.85	69.18	69.31	69.83	70.37	70.93	71.01	71.02	70.89	70.66	70.36	70.31
14	68.86	69.19	69.34	69.86	70.39	70.96	71.01	71.01	70.88	70.65	70.35	70.31
15	68.85	69.19	69.36	69.85	70.40	70.98	71.02	71.01	70.89	70.65	70.35	70.33
16	68.83	69.20	69.40	69.85	70.40	70.98	71.02	71.03	70.90	70.64	70.34	70.34
17	68.84	69.23	69.40	69.86	70.40	71.00	71.00	71.05	70.88	70.62	70.33	70.32
18	68.86	69.21	69.40	69.88	70.42	71.00	71.02	71.03	70.86	70.62	70.32	70.30
19	68.82	69.18	69.43	69.89	70.42	71.00	71.04	71.03	70.86	70.63	70.34	70.27
20	68.86	69.19	69.46	69.90	70.44	70.98	71.04	71.02	70.84	70.59	70.34	70.28
21	68.80	69.22	69.48	69.88	70.45	70.96	71.03	71.04	70.81	70.57	70.34	70.31
22	68.82	69.20	69.49	69.91	70.44	70.97	71.02	71.05	70.81	70.57	70.33	70.28
23	68.85	69.20	69.52	69.91	70.42	70.97	71.02	71.02	70.81	70.58	70.31	70.28
24	68.81	69.21	69.54	69.89	70.45	71.00	71.01	71.02	70.79	70.57	70.30	70.27
25	68.81	69.21	69.55	69.92	70.48	71.01	70.99	71.01	70.79	70.54	70.29	70.26
26	68.88	69.21	69.57	69.93	70.50	71.01	70.98	71.00	70.81	70.53	70.31	70.25
27	68.92	69.24	69.60	.....	70.50	70.99	70.99	71.00	70.79	70.55	70.30	70.24
28	68.94	69.23	69.61	.....	70.51	70.96	71.01	70.99	70.76	70.58	70.28	70.20
29	68.94	69.22	69.52	.....	70.53	70.97	71.02	70.99	70.76	70.53	70.26	70.20
30	68.93	.....	69.63	.....	70.53	70.98	71.01	70.98	70.76	70.50	70.26	70.20
31	68.96	.....	69.65	.....	70.55	.....	70.99	70.96	.....	70.50	.....	70.19

N2635. Nassau County Department of Public Works. Washington St. and Webster Ave., Port Washington. Lat. 40°49'40", long. 73°41'55". Drilled observation artesian well in sands of Magothy(?) formation, diameter 6 to 4 inches, depth 154 feet, slots 150-154. Land-surface datum is 40.3 feet above msl. Highest water level 27.30 above msl, May 23, 1949; lowest 23.77 above msl, Jan. 22-23, 1951. Records available: 1948-52.

Daily mean water level, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	25.32	25.52	25.66	26.07	26.50	26.90	26.96	26.99	27.05	26.78	26.53	26.36
2	25.32	25.54	25.64	26.10	26.51	26.95	26.96	27.01	27.07	26.80	26.51	26.36
3	25.34	25.54	25.62	26.08	26.51	26.97	26.97	27.04	27.07	26.80	26.53	26.39
4	25.32	25.65	25.66	26.04	26.52	27.01	26.97	27.04	27.03	26.77	26.52	26.36
5	25.39	25.66	25.69	26.12	26.51	27.03	26.98	.....	26.99	26.76	26.52	26.43
6	25.38	25.62	25.67	26.14	26.54	27.06	26.96	.....	26.99	26.75	26.54	26.47
7	25.37	25.62	25.69	26.12	26.54	27.06	26.94	27.14	26.96	26.74	26.51	.....
8	25.38	25.62	25.70	26.09	26.53	27.05	26.96	27.13	26.92	26.71	26.46	26.42
9	25.38	25.64	25.72	26.09	26.54	27.05	26.98	27.15	26.91	26.71	26.46	26.42
10	25.40	25.64	25.72	26.11	26.53	27.06	27.10	27.22	26.92	26.69	26.47	26.42
11	25.35	25.68	25.88	26.13	26.55	27.06	27.12	27.22	26.91	26.68	26.47	26.51
12	25.34	25.65	25.87	26.13	26.65	27.04	27.12	27.21	26.90	26.68	26.46	26.49
13	25.34	25.63	25.88	26.17	26.63	27.00	27.11	27.20	26.89	26.68	26.43	26.49
14	25.36	25.62	25.91	26.27	26.62	26.98	27.08	27.17	26.87	26.67	26.41	26.48
15	25.37	25.60	25.91	26.28	26.62	26.98	27.08	27.14	26.88	26.66	26.43	26.48
16	25.35	25.60	25.94	26.26	26.60	26.97	27.06	27.16	26.91	26.66	26.47	26.47
17	25.34	25.68	25.93	26.24	26.56	26.99	27.04	27.20	26.89	26.64	26.44	26.44
18	25.39	25.69	25.89	26.23	26.59	26.99	27.06	27.18	26.87	26.63	26.42	26.41
19	25.34	25.64	25.93	26.22	26.58	26.97	27.08	27.15	26.88	26.65	26.43	26.36
20	25.39	25.61	25.98	26.23	26.62	26.94	27.07	27.13	26.89	26.63	26.45	26.35
21	25.33	25.63	25.97	26.20	26.66	26.92	27.07	27.12	26.88	26.59	26.45	26.39
22	25.35	25.62	25.96	26.21	26.64	26.96	27.08	27.15	26.86	26.58	26.51	26.40
23	25.42	25.60	26.00	26.24	26.61	26.99	27.09	27.12	26.87	26.60	26.49	26.39
24	25.36	25.60	26.02	26.22	26.61	27.03	27.07	27.10	26.84	26.60	26.46	26.39
25	25.33	25.61	26.02	26.25	26.69	27.04	27.02	27.07	26.83	26.57	26.44	26.37
26	25.44	25.61	26.01	26.32	26.74	27.02	27.00	27.04	26.84	26.54	26.45	26.36
27	25.50	25.64	26.02	26.38	26.74	26.99	27.01	27.02	26.83	26.57	26.45	26.35
28	25.55	25.66	26.02	26.48	26.74	26.96	27.04	27.00	26.80	26.60	26.42	26.32
29	25.55	25.65	26.01	26.49	26.74	26.98	27.07	27.01	26.79	26.58	26.39	26.31
30	25.50	.....	26.01	26.51	26.73	26.99	27.04	27.01	26.80	26.54	26.40	26.30
31	25.49	.....	26.02	.....	26.77	.....	27.02	26.99	.....	26.54	.....	26.29

N2790. U. S. Geol. Survey and Nassau County Department of Public Works. Second Ave. near Williamson Ave., Bay Park. Lat. 40°38'05", long. 73°39'50". Drilled observation artesian well in sands of Magothy(?) formation, diameter 6 to 4 inches, depth 560 feet, screen 538-560. Land-surface datum is 4.1 feet above msl. Highest water level 5.95 above msl, Mar. 14, 1951; lowest 3.00 above msl, July 4, 1950. Records available: 1950-52.

Daily mean water level, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.90	....	5.13	5.27	5.40	....	4.69	4.38	5.21	4.80	4.40	4.50
2	4.86	4.90	....	5.33	5.35	....	4.58	4.45	5.24	4.94	4.37	4.74
3	4.84	4.90	4.97	5.23	5.27	....	4.48	4.60	5.19	4.88	4.45	4.88
4	4.74	5.35	5.24	5.15	5.23	5.87	4.44	4.73	5.07	4.74	4.41	....
5	5.00	5.29	5.22	5.35	5.16	5.84	4.50	4.78	5.03	4.71	4.55	....
6	4.95	5.09	5.19	5.38	5.19	5.86	4.46	4.75	5.07	4.74	4.62	....
7	....	5.11	5.30	5.20	5.18	5.81	4.37	4.88	5.02	4.72	4.33	4.91
8	....	5.10	5.28	5.14	5.16	5.68	4.37	4.97	5.00	4.64	....	4.95
9	....	5.18	5.25	5.14	5.09	5.62	4.67	5.08	4.98	4.65	....	4.98
10	5.13	5.09	5.24	5.18	5.06	5.65	4.94	5.26	4.90	4.66	....	5.04
11	....	5.27	5.66	5.15	5.28	5.63	4.94	5.19	4.81	4.75	....	5.27
12	....	4.96	5.30	5.07	5.56	5.56	4.84	5.14	4.74	4.78	....	5.09
13	4.83	....	5.29	5.12	5.48	5.49	4.71	5.13	4.72	4.74	4.36	5.02
14	4.90	....	5.30	5.38	5.36	5.37	4.54	5.08	4.74	4.62	4.33	4.99
15	4.98	....	5.25	5.40	5.38	5.25	4.44	5.04	4.88	4.62	4.41	5.01
16	4.78	....	5.19	5.35	5.34	5.06	4.34	5.17	4.98	4.65	4.53	4.91
17	4.75	5.39	5.11	5.25	5.25	5.09	4.38	5.22	4.93	4.58	4.56	4.81
18	4.92	5.21	5.09	5.21	5.26	5.09	4.53	5.16	4.89	4.61	4.62	4.76
19	4.73	5.12	5.34	5.17	5.25	4.92	4.76	5.09	4.95	4.60	4.80	4.74
20	4.94	4.95	5.43	5.06	5.32	4.85	4.76	5.05	4.88	....	4.90	4.81
21	4.64	5.21	5.43	4.93	5.53	4.78	4.74	5.07	4.83	....	5.03	5.00
22	....	5.06	5.45	4.88	5.34	4.99	4.86	5.11	4.79	....	5.22	5.25
23	4.88	5.18	5.55	4.86	5.30	5.14	4.89	5.05	4.81	4.53	4.96	5.42
24	....	5.16	5.58	4.80	5.26	5.26	4.74	5.00	4.80	4.47	4.82	5.14
25	....	5.26	5.47	4.92	5.42	5.26	4.57	4.90	4.82	4.43	4.74	4.99
26	4.87	5.19	5.42	5.03	5.59	5.04	4.54	4.86	4.88	....	4.74	4.87
27	4.91	5.36	5.42	5.17	5.51	4.79	4.58	4.80	4.85	....	4.77	4.85
28	5.07	5.38	5.37	5.45	5.49	4.71	4.65	4.78	4.81	....	4.62	....
29	....	5.20	5.28	5.51	5.40	4.76	4.60	4.86	4.76	....	4.59	4.76
30	....	....	5.16	5.51	5.31	4.78	4.56	4.88	4.78	4.26	4.60	4.71
31	....	....	5.19	....	....	....	4.48	5.03	....	4.33	....	4.83

Queens County

Q64. American Ice Co. 83d St. and 45th Ave., Elmhurst. Lat. 40°44'30", long. 73°52'50". Drilled unused artesian well in Lloyd sand member of Raritan formation and in bedrock, diameter 10 to 8 inches, depth 560 feet. Land-surface datum is 34.3 feet above msl. Highest water level 0.32 below msl, Apr. 5-6, 1952; lowest 68.90 below msl, Nov. 2, 1947. Records available: 1947-52.

Daily mean water level, below msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.86	1.60	1.08	0.39	0.58	0.70	0.93	1.05	1.04	1.17	1.72	1.90
2	1.89	1.50	1.22	.34	.59	.56	.91	.98	1.01	1.10	1.76	1.84
3	1.86	1.52	1.21	.44	.64	.60	.88	.99	1.04	1.13	1.68	....
4	1.93	1.25	1.07	.50	.61	.61	.89	1.01	1.15	1.20	....	....
5	1.75	1.23	1.01	.32	.65	.58	.90	.99	1.19	1.21	....	....
6	1.78	1.37	1.09	.32	.60	.55	.97	.99	1.13	1.21	1.52	....
7	1.82	1.33	1.11	.41	.64	.50	.99	.98	1.18	1.20	1.61	....
8	1.76	1.32	1.09	.53	.63	.57	.93	.99	1.27	1.24	1.76	....
9	1.73	1.26	1.07	.63	.62	.53	.83	.98	1.24	1.23	1.75	....
10	1.69	1.28	1.07	.57	.61	.50	.76	.88	1.19	1.28	1.69	1.65
11	1.88	1.14	.73	.57	.60	.50	.80	.92	1.17	1.28	1.70	1.43
12	....	1.23	.83	.62	.51	.55	.84	.94	1.15	1.24	1.68	1.48
13	....	1.29	.73	.58	.58	.65	.84	.95	1.14	1.20	1.78	1.50
14	....	1.29	.73	.36	.63	.68	.82	.98	1.16	1.21	1.79	1.54
15	....	1.34	.74	.37	.60	.63	.81	.99	1.12	1.18	1.74	1.48
16	....	1.32	.61	.49	.66	.66	.84	.89	1.04	1.19	1.71	1.49
17	....	1.12	.71	.55	.76	.58	.90	.86	1.06	1.25	1.78	1.53
18	....	1.13	.86	.52	.75	.60	.97	.94	1.11	1.23	1.80	1.55
19	....	1.29	.74	.56	.78	.63	.76	1.00	1.08	1.15	1.73	1.68
20	....	1.30	.70	.55	.69	.75	.78	1.02	1.14	1.28	1.66	1.67

Q64--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	....	1.23	0.65	0.64	0.60	0.82	0.79	1.01	1.18	1.42	1.67	1.53
22	....	1.29	.66	.63	.69	.81	.82	1.01	1.20	1.44	1.61	1.54
23	....	1.34	.56	.62	.80	.81	.82	1.09	1.20	1.41	1.68	1.50
24	1.72	1.34	.53	.75	.81	.70	.86	1.11	1.26	1.41	1.78	1.47
25	....	1.29	.57	.72	.67	.65	.99	1.15	1.25	1.56	1.83	1.46
26	1.53	1.27	.57	.67	.60	.67	1.00	1.15	1.17	1.69	1.78	1.42
27	1.45	1.10	.54	.62	.66	.75	.94	1.16	1.20	1.59	1.73	1.40
28	1.35	1.06	.55	.50	.68	.82	.89	1.15	1.24	1.48	1.78	1.49
29	1.48	1.09	.57	.55	.65	.77	.87	1.13	1.23	1.60	1.84	1.46
30	1.65		.63	.54	.73	.82	.95	1.14	1.17	1.71	1.80	1.37
31	1.69		.55		....		.98	1.18		1.68		1.37

Q273. City of New York, Department of Water Supply, Gas and Electricity. Grand Central Parkway and Van Wyck Expressway, Forest Hills. Lat. 40°42'55", long. 73°49'45". Drilled unused artesian well in Lloyd sand member of Raritan formation, diameter 24 to 12 inches, depth 438 feet, screen 308-374, 376-438. Land-surface datum is 25.6 feet above msl. Highest water level 8.47 above msl, Apr. 20, 1939; lowest 1.12 above msl, Mar. 21, 1942. Records available: 1935-52.

Daily mean water level, above msl, from recorder graph*

Day	Jan.	Feb.	Mar.	Apr.	May	June	Dec.
1	3.53	4.12	4.52	4.21	4.12	4.38	....
2	3.52	4.28	4.41	4.28	4.11	4.35	....
3	3.55	4.31	4.35	4.16	4.08	4.30	....
4	3.48	4.51	4.49	4.04	4.09	4.30	....
5	3.62	4.57	4.59	4.13	4.07	4.39	....
6	3.66	4.38	4.38	4.19	4.11	....	....
7	3.60	4.25	4.23	4.07	4.12	4.51	....
8	3.60	4.15	4.18	3.95	4.10	4.41	....
9	3.64	4.12	4.18	3.85	4.12	4.35	....
10	3.69	4.03	4.17	3.89	4.15	4.35	....
11	3.55	4.09	4.44	3.97	4.17	4.34	....
12	3.49	4.02	4.45	3.94	4.26	4.30	....
13	3.54	3.89	4.40	3.97	4.18	4.22	....
14	3.62	3.84	4.41	4.19	4.13	4.17	....
15	3.64	3.79	4.34	4.24	4.14	4.22	....
16	3.61	3.76	4.42	4.09	4.14	4.23	....
17	3.57	3.93	4.37	3.99	4.06	4.28	4.65
18	3.74	4.00	4.19	4.00	4.08	....	4.64
19	3.62	3.84	4.20	4.01	4.07	....	4.56
20	3.70	3.76	4.28	4.03	4.15	....	4.56
21	3.61	3.89	4.31	3.97	4.29	....	4.68
22	3.56	4.01	4.31	3.94	4.24	....	4.72
23	3.76	4.07	4.36	4.00	4.15	....	4.74
24	3.70	4.16	4.40	3.92	4.12	....	4.77
25	3.64	4.26	4.35	3.94	4.24	....	4.77
26	3.89	4.31	4.30	4.05	4.35	....	4.77
27	4.13	4.46	4.28	4.15	4.28	....	4.79
28	4.27	4.57	4.23	4.24	4.21	....	4.73
29	4.24	4.54	4.17	4.18	4.21	....	4.71
30	4.07		4.08	4.17	4.21	....	4.73
31	4.02		4.08		4.23		4.70

* No record for July, August, September, October, and November.

Q278. City of New York, Department of Water Supply, Gas and Electricity. Alley Pond Parkway and Horace Harding Blvd., Douglaston. Lat. 40°45'15", long. 73°44'30". Drilled unused artesian well in Lloyd sand member of Raritan formation, diameter 26 to 18 inches, depth 512 feet, screen 380-411, 427-447, 481-512. Land-surface datum is 16.0 feet above msl. Water levels affected by nearby pumping. Highest water level 5.11 above msl, Nov. 29, 1946; lowest 6.86 below msl, July 25, 1951. Records available: 1946-52. Jan. 31, -2.00; Feb. 20, -0.62; Mar. 26, -0.23; Apr. 30, -1.81; May 28, -3.30; Nov. 7, -1.97; Dec. 8, -2.32.

Q283. City of New York, Department of Water Supply, Gas and Electricity. Underhill Ave. and 171st St., Flushing. Lat. 40°44'55", long. 73°47'45". Drilled unused artesian well in Lloyd sand member of Raritan formation, diameter 26 to 12 inches, depth 409 feet, screen 309-352, 367-409. Land-surface datum is 27.0 feet above msl. Highest water level 2.73 below msl, Feb. 28, 1951; lowest 10.26 below msl, Sept. 3, 1947, Sept. 27, 1951. Records available: 1946-52.

Q283--Continued.

Water level below msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	6.04	Apr. 30	7.68	July 28	9.87	Nov. 7	8.89
Feb. 19	7.08	May 28	8.24	Aug. 27	9.87	Dec. 8	7.76
Mar. 26	6.64	June 25	8.69	Sept. 24	9.42	29	7.34

Q350. Formerly New York Water Service Corp. Rockaway Blvd. and Centerville St., Aqueduct. Lat. 40°40'15", long. 73°50'00". Drilled unused artesian well in Jameco gravel, diameter 8 to 4 inches, depth 222 feet. Land-surface datum is 31.7 feet above msl. Highest water level 3.51 above msl, Apr. 29, 1939; lowest 0.74 below msl, Feb. 7, 10-11, 1948. Records available: 1937-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	1.52	Apr. 30	2.13	July 28	1.83	Nov. 7	1.47
Feb. 21	1.75	May 27	2.32	Aug. 25	2.03	Dec. 8	1.53
Mar. 24	2.01	June 24	2.07	Sept. 24	1.74	29	1.57

Q470. City of New York, Department of Water Supply, Gas and Electricity. Northern Blvd. and Cross Island Parkway, Bayside. Lat. 40°45'40", long. 73°45'20". Drilled unused artesian well in Lloyd sand member of Raritan formation, diameter 6 inches, depth 375 feet, screen 349-375. Land-surface datum is 12.8 feet above msl. Highest water level 6.78 above msl, Jan. 8, 1938; lowest 12.75 below msl, July 15, 1937. Records available: 1933-52.

Daily mean water level, above and below msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	-0.72	-0.46	+0.12	+0.28	-0.56	-1.35	-2.48	-3.61	-3.17	-2.14	-2.00	-1.24
2	.68	.38	....	.32	.58	1.24	2.58	3.62	3.10	2.07	2.02	1.16
3	.65	.28	.07	.33	.59	1.11	2.69	3.62	3.02	2.02	2.02	1.07
4	.64	-.12	.08	.30	.62	1.00	2.81	3.55	2.99	2.03	2.04	.99
5	.63	....	.16	.24	.67	.93	2.94	3.44	2.98	2.06	2.05	.95
6	.62	....	.16	.24	.72	.89	3.05	3.36	2.98	2.07	2.02	.93
7	.60	....	.18	.24	.77	.88	3.14	3.30	2.97	2.08	1.98	.93
8	.58	....	.17	.22	.84	.92	3.24	3.25	2.97	2.14	1.97	.92
9	.60	....	.15	.15	.93	.95	3.31	3.20	2.94	2.20	1.96	.91
10	.65	....	.12	+.05	1.02	1.00	3.31	3.11	2.92	2.24	1.92	....
11	.72	....	.14	-.04	1.12	1.04	3.24	2.98	2.91	2.28	1.88	....
12	.82	+.23	.17	.17	1.16	1.11	3.16	2.88	2.91	2.28	1.84	....
13	.90	.19	.12	.28	1.16	1.19	3.06	2.81	2.90	2.25	1.80	....
14	.93	.16	.09	.34	1.14	1.30	2.96	2.77	2.91	2.21	1.79	....
15	.91	.14	.05	.33	1.13	1.45	2.95	2.74	2.90	2.18	1.75	....
16	.88	.10	.02	.33	1.13	1.58	3.04	2.71	2.82	2.17	1.70	.81
17	.87	.12	.05	.34	1.16	1.70	3.19	2.65	2.73	2.19	1.63	.78
18	.80	.15	.08	.40	1.20	1.83	3.33	2.60	2.70	2.22	1.58	.77
19	.79	.14	.09	.48	1.23	1.99	3.36	2.57	2.66	2.25	1.54	.80
20	.75	.12	.14	.54	1.20	2.17	3.35	....	2.63	2.25	1.48	.84
21	.73	.12	.20	.63	1.13	2.35	3.32	....	2.61	2.27	1.44	.86
22	.75	.14	.23	.68	1.13	2.48	3.30	....	2.56	2.28	1.38	.83
23	.71	.13	.24	.71	1.16	2.48	3.26	....	2.49	2.22	1.33	....
24	.72	.11	.28	.77	1.18	2.35	3.21	....	2.43	2.11	1.33	....
25	.78	.12	.34	.82	1.21	2.14	3.23	....	2.40	2.04	1.33	....
26	.78	.15	.40	.83	1.20	1.96	3.30	....	2.36	2.03	1.32	....
27	.72	.17	.44	.79	1.22	1.92	3.40	....	2.34	2.01	1.31	....
28	.61	.19	.45	.68	1.26	2.03	3.49	....	2.32	1.95	1.30	....
29	.50	.15	.42	.59	1.30	2.22	3.52	....	2.27	1.92	1.30	....
30	.47		.34	.55	1.35	2.36	3.55	....	2.19	1.96	1.27	.72
31	.48		.27		1.39		3.58	....		2.00		.66

Q471. City of New York, Department of Water Supply, Gas and Electricity. Northern Blvd. and Cross Island Parkway, Bayside. Lat. 40°45'40", long. 73°45'20". Drilled unused artesian well in sands of Magoghy(?) formation, diameter 6 inches, depth 117 feet. Land-surface datum is 12.8 feet above msl. Highest water level 17.45 above msl, Sept. 30, 1946; lowest 13.69 above msl, Mar. 31, 1939. Records available: 1939-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 19	15.91	May 28	16.34	Aug. 27	15.72	Dec. 8	16.32
Mar. 26	16.08	June 25	16.09	Sept. 24	15.61	29	16.23
Apr. 30	16.25	July 28	15.82	Nov. 7	16.44		

Q1027--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	7.39	7.72	8.04	....	....	....	....	....	....	....	....	....
22	7.44	7.70	8.01	....	....	....	....	....	....	....	....	....
23	7.50	7.70	8.15	....	....	....	....	....	....	....	....	....
24	7.36	7.75	8.21	....	....	....	....	....	h7.77	....	....	....
25	7.32	7.80	8.13	....	....	h8.17	....	....	....	....	....	....
26	7.55	7.81	8.09	....	....	....	....	....	....	....	....	....
27	7.63	7.91	8.09	....	....	....	....	h7.88	....	....	....	....
28	7.72	7.89	8.03	....	h8.06	....	h7.93	....	....	....	....	....
29	7.69	7.82	7.96	....	....	....	....	....	....	....	....	h7.56
30	7.58	....	8.09	h7.95	....	....	....	....	....	....	....	....
31	7.58	....	7.92	....	....	....	....	....	....	....	....	....

h Tape measurement.

Q1089. City of New York, Department of Water Supply, Gas and Electricity. North Conduit Ave. near L. I. R. R., Aqueduct. Lat. 40°40'00", long. 73°49'50". Driven observation water-table well in deposits of late Pleistocene age, diameter 2 inches, depth 32 feet, screen 30-32. Land-surface datum is 20.5 feet above msl. Highest water level 4.04 above msl, Sept. 23, 1938; lowest 0.42 below msl, Oct. 17, 1932. Records available: 1911-17, 1932-39, 1941-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	2.41	Apr. 30	2.55	July 28	2.60	Nov. 7	2.06
Feb. 21	2.48	May 27	2.88	Aug. 25	2.67	Dec. 8	2.15
Mar. 24	2.65	June 24	2.87	Sept. 24	2.42	29	2.25

Q1152. City of New York, Department of Water Supply, Gas and Electricity. Sunrise Highway and 131st St., South Ozone Park. Lat. 40°40'00", long. 73°48'30". Drilled observation artesian well in Jameco gravel, diameter 6 inches, depth 184 feet. Land-surface datum is 9.0 feet above msl. Highest water level 2.24 above msl, Dec. 29, 1952; lowest 6.12 below msl, Mar. 28, 1950. Records available: 1947-52.

Water level above and below msl

Jan. 31	-0.32	May 27	+0.18	Aug. 27	-0.51	Dec. 8	+2.21
Feb. 21	-.52	June 25	+.57	Sept. 24	+1.21	29	+2.24
Mar. 24	-.16	July 28	-.03	Nov. 7	+2.00		

Q1222. City of New York, Department of Water Supply, Gas and Electricity. 142d St. and 20th Ave., Whitestone. Lat. 40°47'05", long. 73°49'25". Drilled unused artesian well in Lloyd sand member of Raritan formation, diameter 12 to 6 inches, depth 200 feet, screen 170-200. Land-surface datum is 7.6 feet above msl. Highest water level 4.35 above msl, Dec. 1, 1945; lowest 9.19 below msl, Feb. 28, 1942. Records available: 1940-52.

Water level above msl

Feb. 19	1.76	June 3	2.08	Aug. 27	1.47	Nov. 7	1.21
Mar. 26	1.95	25	1.67	Sept. 3	1.42	Dec. 8	1.25
May 4	1.68	July 28	1.27	24	1.32	29	1.27

Q1225. City of New York, Department of Water Supply, Gas and Electricity. 109th Ave. and 200th St., Hollis. Lat. 40°42'35", long. 73°45'25". Driven observation water-table well in deposits of late Pleistocene age, diameter 2 inches, depth 32 feet, screen 30-32. Land-surface datum is 49.4 feet above msl. Highest water level 32.19 above msl, Apr. 4, 1939; lowest 23.91 above msl, Feb. 26, 1951. Records available: 1933-52.

Water level above msl

Jan. 31	24.79	May 1	25.23	July 28	25.40	Nov. 6	25.18
Feb. 21	24.84	28	25.56	Aug. 27	25.37	Dec. 8	24.95
Mar. 26	25.07	June 25	25.92	Sept. 24	25.29	29	24.90

Q1237. City of New York, Department of Water Supply, Gas and Electricity. Belt Parkway and 150th St., Baisley Park. Lat. 40°40'00", long. 73°47'35". Drilled unused artesian well in Jameco gravel, diameter 8 inches, depth 220 feet. Land-surface datum is 17.5 feet above msl. Highest water level 5.03 above msl, Apr. 30, May 4, 1939; lowest 6.92 below msl, Mar. 26, 1950. Records available: 1939-40 as Q337, 1940-52.

Q1237--Continued.

Daily mean water level, above and below msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	-0.13	+0.01	+0.30	+0.25	+0.57	+0.71	+0.26	+0.13	....	+2.03	+1.71	+2.01
2	.03	.05	.27	.32	.52	.81	.11	.05	....	2.30	1.73	2.16
3	.02	.02	.25	.30	.45	.66	.12	....	....	2.23	1.85	2.24
4	-.12	.40	.34	.24	.40	.54	.08	....	....	2.07	1.87	2.33
5	+.01	.51	.48	.34	.35	.55	.39	....	+1.52	1.98	1.92	2.47
6	-.01	.39	.34	.39	.38	.59	+.09	....	1.19	1.96	2.08	2.62
7	+.05	.35	.37	.33	.44	.53	-.11	....	.81	1.99	2.04	2.47
8	.27	.36	.42	.17	.39	.42	-.17	....	.78	1.97	1.82	2.37
9	.40	.38	.36	.06	.30	.43	+.49	.40	.86	1.95	1.78	2.38
10	.40	.24	.32	.04	.25	.45	1.47	.65	.88	1.94	1.86	2.39
11	.27	.33	.60	+.05	.35	.49	1.33	.74	.83	1.96	1.88	2.57
12	.12	.28	.65	-.04	.64	.50	1.11	.55	.64	2.02	1.83	2.55
13	.01	+.04	.45	-.05	.63	.43	.72	.53	.44	2.04	1.85	2.40
14	.00	-.11	.45	+.19	.58	.35	.42	.43	.42	2.00	1.83	2.31
15	.03	-.16	.44	.29	.53	.24	*21	.42	1.08	1.95	1.85	2.31
16	+.08	-.14	.37	.26	.53	.11	+.09	.52	.98	1.97	1.88	2.31
17	.00	+.16	....	.22	.44	.04	-.02	.66	.73	1.93	1.87	2.20
18	.00	.34	.18	.24	.44	+.01	+.12	1.04	.74	1.91	1.89	2.14
19	-.18	.17	.26	.18	.43	-.03	.25	.69	1.26	1.95	2.10	2.08
20	.10	.11	.44	.13	.45	+.31	.33	.46	1.44	1.92	2.28	2.13
21	.16	.16	.45	+.02	.72	.32	.60	.41	1.27	1.83	2.36	2.27
22	.26	.20	.44	-.05	.80	.82	.63	.77	1.23	1.79	2.55	2.44
23	.08	.16	.48	.02	.63	1.04	.49	.60	1.43	1.80	2.57	2.67
24	.22	.17	.55	.08	.41	1.32	.39	.41	1.64	1.81	2.43	2.66
25	.41	.22	.50	-.02	.43	.95	.24	.33	1.82	1.78	2.27	2.54
26	.32	.22	.43	+.18	....	.60	.23	.25	2.01	1.73	2.21	2.40
27	.20	.32	.40	.30	....	.35	.15	.10	2.02	1.83	2.23	....
28	.12	.41	.37	.53	....	.29	.49	....	2.00	1.93	2.17	....
29	.01	.40	.34	.57	....	.25	.50	.16	2.20	1.91	2.08	....
30	-.02		.26	.62	.31	.28	.59	.08	2.11	1.77	2.08	2.09
31	.00		.23		.37		.39	.57		1.68		2.12

Q1248. City of New York, Department of Water Supply, Gas and Electricity. 107th Rd. and Belt Parkway, Queens Village. Lat. 40°43'00", long. 73°43'45". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 49 feet, screen 47-49. Land-surface datum is 76.5 feet above msl. Highest water level 38.16 above msl, May 31, 1949; lowest 33.10 above msl, Oct. 30, 1951. Records available: 1940-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	33.83	May 1	34.66	July 28	35.73	Nov. 6	35.29
Feb. 21	33.63	28	35.06	Aug. 27	35.73	Dec. 8	34.93
Mar. 26	34.15	June 25	35.84	Sept. 24	35.62	29	34.80

Q1249. City of New York, Department of Water Supply, Gas and Electricity. 106th Ave. and 216th St., Queens Village. Lat. 40°42'45", long. 73°44'35". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 49 feet, screen 47-49. Land-surface datum is 72.4 feet above msl. Highest water level 33.41 above msl, Sept. 26, 1946; lowest 26.07 above msl, Oct. 30, 1951. Records available: 1940-46, 1948-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	26.65	May 1	27.46	July 28	28.10	Nov. 6	27.95
Feb. 21	26.43	28	27.88	Aug. 27	28.43	Dec. 8	27.63
Mar. 26	26.88	June 25	28.45	Sept. 24	28.26	29	27.55

Q1250. City of New York, Department of Water Supply, Gas and Electricity. Liberty and Camden Aves., Hollis. Lat. 40°42'15", long. 73°46'15". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 26 feet, screen 24-26. Land-surface datum is 37.6 feet above msl. Highest water level 22.52 above msl, Aug. 31, 1948; lowest 17.33 above msl, Dec. 19, 1950. Records available: 1940-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	19.45	May 1	19.78	July 28	19.59	Nov. 6	18.44
Feb. 21	19.74	27	19.80	Aug. 27	19.37	Dec. 8	18.09
Mar. 26	19.92	June 26	20.00	Sept. 24	19.06	29	18.08

Q1251. City of New York, Department of Water Supply, Gas and Electricity. 107th Ave. and 172d St., Jamaica. Lat. 40°42'00", long. 73°47'00". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 38 feet, screen 36-38. Land-surface datum is 42.7 feet above msl. Highest water level 14.25 above msl. Feb. 24, 1949; lowest 8.57 above msl, Dec. 8, 29, 1952. Records available: 1940-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	11.08	May 1	11.30	July 28	11.05	Nov. 6	9.22
Feb. 21	11.48	27	11.23	Aug. 27	10.81	Dec. 8	8.57
Mar. 26	11.74	June 26	11.47	Sept. 24	10.39	29	8.57

Q1252. City of New York, Department of Water Supply, Gas and Electricity. Liberty Ave. and 157th St., Jamaica. Lat. 40°42'00", long. 73°47'55". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 28 feet, screen 26-28. Land-surface datum is 31.2 feet above msl. Highest water level 13.92 above msl, Nov. 2, 1948; lowest 9.66 above msl, Nov. 28, 1950. Records available: 1940-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	11.61	May 1	11.64	July 28	11.71	Nov. 6	10.50
Feb. 21	11.15	27	11.87	Aug. 27	11.85	Dec. 8	9.92
Mar. 26	11.53	June 26	12.15	Sept. 24	11.53	29	10.31

Q1253. City of New York, Department of Water Supply, Gas and Electricity. 101st Ave. and 121st St., Richmond Hill. Lat. 40°41'30", long. 73°49'20". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 54 feet, screen 52-54. Land-surface datum is 49.2 feet above msl. Highest water level 4.58 above msl, Apr. 26, 1941; lowest 0.53 above msl, Feb. 26, 1951. Records available: 1940-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	1.40	Apr. 30	1.91	July 28	1.93	Nov. 7	1.13
Feb. 21	1.45	May 27	2.12	Aug. 27	1.63	Dec. 8	.87
Mar. 24	1.68	June 24	2.19	Sept. 24	1.42	29	.71

Q1254. City of New York, Department of Water Supply, Gas and Electricity. 101st Ave. and 108th St., Richmond Hill. Lat. 40°41'20", long. 73°50'10". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 54 feet, screen 52-54. Land-surface datum is 45.5 feet above msl. Highest water level 0.29 above msl, Apr. 12, 1941; lowest 5.34 below msl, Jan. 31, 1951. Records available: 1940-52.

Water level below msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	3.04	Apr. 30	4.09	July 28	1.32	Nov. 7	2.23
Feb. 21	4.62	May 27	2.21	Aug. 27	1.16	Dec. 8	1.68
Mar. 23	4.51	June 24	1.61	Sept. 24	1.13	29	2.38

Q1255. City of New York, Department of Water Supply, Gas and Electricity. Atlantic Ave. and Woodhaven Blvd., Woodhaven. Lat. 40°41'20", long. 73°50'55". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 53 feet, screen 51-53. Land-surface datum is 40.4 feet above msl. Highest water level 12.03 above msl, May 12, 1914; lowest 6.30 below msl, Nov. 3, 1947. Records available: 1911-17, 1932-52.

Water level below msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	3.00	Apr. 30	3.47	July 28	3.27	Nov. 7	3.21
Feb. 20	3.56	May 27	3.27	Aug. 25	3.31	Dec. 8	3.39
Mar. 23	3.53	June 24	3.03	Sept. 23	3.24	29	3.37

Q1256. City of New York, Department of Water Supply, Gas and Electricity. 95th Ave. and 82d St., Woodhaven. Lat. 40°41'05", long. 73°51'25". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 38 feet, screen 36-38. Land-surface datum is 24.0 feet above msl. Highest water level 0.75 below msl, June 24, 1952; lowest 6.98 below msl, Mar. 14, 1942. Records available: 1940-43, 1945-52.

Water level below msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	1.16	Apr. 30	1.03	July 28	1.02	Nov. 7	1.37
Feb. 20	1.16	May 27	.89	Aug. 25	1.13	Dec. 8	1.14
Mar. 24	1.12	June 24	.75	Sept. 24	1.34	29	1.20

Q1281. City of New York, Department of Water Supply, Gas and Electricity. Liberty Ave. and Woodhaven Blvd., Ozone Park. Lat. 40°40'50", long. 73°50'40". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 39 feet, screen 37-39. Land-surface datum is 28.8 feet above msl. Highest water level 8.59 above msl, June 4, 1913; lowest 3.62 below msl, Mar. 7, 1942. Records available: 1911-17, 1933, 1941-52.

Q1281--Continued.

Water level above and below msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	-0.20	Apr. 30	-0.02	July 28	+0.09	Nov. 7	-0.16
Feb. 20	-.19	May 27	+.26	Aug. 25	+.27	Dec. 8	-.18
Mar. 24	-.13	June 24	+.35	Sept. 24	+.13	29	-.12

Q1283. City of New York, Department of Water Supply, Gas and Electricity. Rockaway Blvd. and 121st St., South Ozone Park. Lat. 40°40'40", long. 73°49'05". Driven observation water-table well in deposits of late Pleistocene age, diameter 2 inches, depth 32 feet, screen 30-32. Land-surface datum is 26.7 feet above msl. Highest water level 13.33 above msl, Nov. 10, 1911; lowest 1.75 above msl, Dec. 30, 1948. Records available: 1911-16, 1933-35, 1941-52.

Water level above msl

Jan. 31	4.28	May 1	4.00	July 28	3.91	Nov. 7	3.05
Feb. 20	4.05	27	4.01	Aug. 27	3.92	Dec. 8	2.82
Mar. 24	4.12	June 24	4.05	Sept. 24	3.62	29	3.67

Suffolk County

S58. City of New York, Board of Water Supply. Grand Blvd. and 44th St., Islip. Lat. 40°44'45", long. 73°13'00". Drilled observation artesian well in sands of Magothy (?) formation, diameter 12 inches, depth 468 feet. Land-surface datum is 37.0 feet above msl. Highest water level 24.94 above msl, Jan. 10, 1949; lowest 22.32 above msl, Oct. 6, 1951. Records available: 1944-52.

Daily mean water level, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	24.12	24.47	23.98	24.36	24.28	24.57	23.72	.....	23.13	22.88	22.77	.....
2	24.08	24.51	23.96	24.34	24.39	24.57	23.69	.....	23.14	22.88	22.73	22.77
3	24.06	24.52	23.95	24.28	24.45	24.55	23.66	.....	23.12	22.88	22.73	22.77
4	24.04	24.53	23.95	24.23	24.47	24.52	23.64	.....	23.11	22.87	22.75	22.80
5	24.04	24.51	23.96	24.21	24.43	24.50	23.62	.....	23.09	22.87	22.73	22.84
6	24.03	24.47	23.98	24.17	24.40	24.47	23.58	.....	23.08	22.85	22.73	22.89
7	24.02	24.45	24.00	24.13	24.34	24.43	23.55	23.15	23.07	22.85	22.75	22.95
8	24.02	24.42	24.02	24.09	24.28	24.38	23.52	.....	23.06	22.84	22.75	22.99
9	24.01	24.40	24.04	24.06	24.23	24.35	23.49	.....	23.05	22.83	22.75	23.04
10	24.02	24.37	24.05	24.03	24.19	24.33	.....	.....	23.04	22.83	22.75	23.06
11	24.01	24.37	24.09	24.01	24.16	24.30	.....	23.24	23.03	22.82	22.75	23.08
12	24.01	24.32	24.12	23.98	24.23	24.27	.....	23.25	23.02	22.82	22.74	23.10
13	24.01	24.28	24.19	23.96	24.26	24.23	.....	23.25	23.00	22.82	22.74	23.12
14	24.01	24.25	24.25	23.96	24.26	24.19	23.42	.....	22.99	22.81	22.74	23.15
15	24.02	24.22	24.30	23.95	24.27	24.17	23.41	.....	22.98	22.81	22.73	23.17
16	24.01	24.19	24.35	23.91	24.26	24.13	23.41	.....	22.99	22.81	22.75	23.19
17	24.00	24.19	24.37	23.89	24.25	24.11	23.39	.....	22.96	22.81	22.77	23.20
18	24.01	24.17	24.36	23.87	24.25	24.10	23.37	.....	22.96	22.81	22.76	23.21
19	24.01	24.14	24.36	23.85	24.25	24.07	23.36	.....	22.96	22.81	22.76	23.21
20	24.05	24.11	24.35	23.83	24.27	24.03	23.33	.....	22.95	22.81	22.76	23.21
21	24.03	24.10	24.34	23.82	24.32	24.00	23.31	.....	22.94	22.80	.....	23.21
22	24.06	24.08	24.30	23.80	24.33	23.98	23.30	.....	22.94	22.80	.....	23.21
23	24.09	24.05	24.29	23.78	24.33	23.95	23.27	.....	22.93	22.80	.....	23.22
24	24.09	24.04	24.29	23.76	24.34	23.93	23.25	.....	22.92	.....	.....	23.22
25	24.11	24.03	24.31	23.75	24.37	23.90	23.22	.....	22.92	.....	22.88	23.23
26	24.16	24.02	24.33	23.74	24.43	23.87	23.20	.....	22.92	.....	.....	23.21
27	24.21	24.02	24.34	23.75	24.45	23.84	23.18	23.18	22.92	.....	.....	23.21
28	24.25	24.01	24.35	23.85	24.48	23.80	23.16	23.16	22.90	.....	.....	23.19
29	24.29	23.99	24.37	24.00	24.51	23.78	23.14	23.15	22.90	.....	.....	23.19
30	24.34		24.36	24.14	24.53	23.76	23.12	23.14	22.89	22.77	.....	23.17
31	24.41		24.37		24.56		.....	23.13		22.77		23.16

S202. New York Water Service Corp. State Highway 25A and Spring St., Huntington. Lat. 40°52'15", long. 73°25'10". Driven unused artesian well in Lloyd sand member of Raritan formation, diameter 12 inches, depth 600 feet. Land-surface datum is 69.0 feet above msl. Highest water level 47.17 above msl, Apr. 10, 1937; lowest 36.93 above msl, Feb. 1, 1939. Records available: 1936-52.

S202--Continued.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 1	40.34	Apr. 22	40.95	July 21	41.35	Nov. 3	42.15
25	40.60	May 26	41.33	Aug. 26	41.59	Dec. 1	42.21
Mar. 24	40.94	June 23	41.41	Sept. 23	41.96	24	42.27

S203. C. A. Gould. Wolf Hill and Caledonia Rds., Dix Hills. Lat. 40°48'40", long. 73°22'05". Drilled unused artesian well in sands of Magothy (?) formation, diameter 10 inches, depth 259 feet. Land-surface datum is 203.5 feet above msl. Highest water level 77.13 above msl, Oct. 31, 1939; lowest 69.14 above msl, Apr. 22, 1952. Records available: 1936-52.

Water level above msl

Jan. 24	69.86	Apr. 22	69.14	July 22	71.01	Nov. 3	72.65
Feb. 25	69.76	May 26	70.47	Aug. 26	71.77	Dec. 1	72.07
Mar. 24	70.07	June 23	70.73	Sept. 23	72.06	29	72.88

S929. Village of Greenport Department of Public Works. State Highway 25 and North Country Rd., East Marion. Lat. 41°07'20", long. 72°21'05". Drilled unused water-table well in deposits of late Pleistocene age, diameter 6 inches, depth 84 feet. Land-surface datum is 35.1 feet above msl. Highest water level 2.86 above msl, Mar. 27, 1952; lowest 0.98 above msl, June 27, 1950. Records available: 1949-52.

Water level above msl

Jan. 31	1.99	Apr. 25	2.69	July 24	1.19	Nov. 6	1.25
Feb. 28	2.49	May 29	2.57	Aug. 28	1.98	Dec. 4	1.38
Mar. 27	2.86	June 26	2.05	Sept. 25	1.69	23	1.46

S1803. City of New York, Department of Water Supply, Gas and Electricity. Belmont Ave. and Farmingdale Rd., Babylon. Lat. 40°42'15", long. 73°20'35". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 16 feet, screen 14-16. Land-surface datum is 21.7 feet above msl. Highest water level 18.19 above msl, Apr. 22, 1913; lowest 14.93 above msl, Oct. 25, 1941. Records available: 1912-14, 1932, 1936-52.

Water level above msl

Jan. 24	16.99	Apr. 22	16.90	July 22	16.93	Nov. 4	16.95
Feb. 25	17.06	May 26	17.05	Aug. 26	17.07	Dec. 2	15.72
Mar. 24	17.01	June 23	17.14	Sept. 24	17.00	24	15.91

S1805. City of New York, Department of Water Supply, Gas and Electricity. Farmingdale Rd. and Albany Ave., Amityville. Lat. 40°43'05", long. 73°24'05". Driven observation water-table well in deposits of late Pleistocene age, diameter 2 inches, depth 29 feet, screen 27-29. Land-surface datum is 57.2 feet above msl. Highest water level 47.01 above msl, Apr. 8, 1939; lowest 37.90 above msl, Oct. 27, 1932. Records available: 1912-14, 1932-52.

Water level above msl

Jan. 24	42.30	Apr. 22	44.01	July 22	44.64	Nov. 5	42.04
Feb. 25	43.41	May 26	44.89	Aug. 26	43.95	Dec. 3	41.43
Mar. 24	44.00	June 23	45.56	Sept. 23	43.20	22	41.80

S1806. City of New York, Department of Water Supply, Gas and Electricity. Wellwood and Long Island Aves., Pinelawn. Lat. 40°44'40", long. 73°23'55". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 40 feet, screen 38-40. Land-surface datum is 86.4 feet above msl. Highest water level 61.69 above msl, Apr. 22, 1939; lowest 50.61 above msl, Jan. 5, 1933. Records available: 1912-14, 1932-52.

Water level above msl

Jan. 24	54.35	Apr. 22	56.86	July 22	57.93	Nov. 5	57.01
Feb. 25	55.41	May 26	57.07	Aug. 26	57.93	Dec. 3	56.57
29	55.93	June 23	58.08	Sept. 23	57.39	23	55.83
Mar. 24	56.37						

S1807. City of New York, Department of Water Supply, Gas and Electricity. Higbie Lane near Hunter Ave., Babylon. Lat. 40°43'30", long. 73°18'40". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 21 feet, screen 19-21. Land-surface datum is 24.8 feet above msl. Highest water level 23.48 above msl, Oct. 14, 1938; lowest 20.59 above msl, Sept. 12, 1932. Records available: 1912-14, 1932-33, 1936-52.

S1807--Continued.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	22.05	Apr. 22	21.39	July 22	21.09	Nov. 4	20.71
Feb. 25	21.92	May 26	21.78	Aug. 26	21.22	Dec. 2	20.65
Mar. 24	22.09	June 23	21.40	Sept. 26	21.03	22	21.01

S1808. City of New York, Department of Water Supply, Gas and Electricity. Sagtikos Manor Lane near South Country Rd., Brightwaters. Lat. 40°42'25", long. 73°16'55". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 15 feet, screen 13-15. Land-surface datum is 15.9 feet above msl. Highest water level 12.94 above msl, Sept. 23, 1938; lowest 9.45 above msl, Sept. 12, 1932. Records available: 1912-14, 1932-52.

Water level above msl

Jan. 24	11.68	Apr. 22	11.00	July 22	10.36	Nov. 4	10.06
Feb. 25	11.37	May 26	11.92	Aug. 26	10.68	Dec. 2	10.42
Mar. 25	11.86	June 23	10.82	Sept. 24	10.25	24	11.16
28	11.52						

S1809. City of New York, Department of Water Supply, Gas and Electricity. Manor Lane and Muncey Rd., Brightwaters. Lat. 40°44'05", long. 73°16'55". Driven observation water-table well in deposits of late Pleistocene age, diameter 2 inches, depth 27 feet, screer 25-27. Land-surface datum is 41.5 feet above msl. Highest water level 32.56 above msl, Apr. 15, 1939; lowest 25.00 above msl, Nov. 2, 1932. Records available: 1912-14, 1932-52.

Water level above msl

Jan. 24	29.03	Apr. 22	29.89	July 22	29.65	Nov. 4	27.60
Feb. 25	29.71	May 26	30.60	Aug. 26	29.21	Dec. 2	27.23
Mar. 25	30.16	June 23	30.54	Sept. 24	28.58	22	27.65
28	30.19						

S1810. City of New York, Department of Water Supply, Gas and Electricity. Sagtikos Parkway, Pineaire. Lat. 40°46'20", long. 73°16'50". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 47 feet, screen 45-47. Land-surface datum is 90.1 feet above msl. Highest water level 56.19 above msl, Apr. 29, 1939; lowest 45.24 above msl, Feb. 23, 1933. Records available: 1912-14, 1932-52.

Water level above msl

Jan. 24	50.07	May 26	51.65	Aug. 26	53.03	Nov. 4	52.26
Feb. 25	49.83	June 23	52.59	29	52.76	Dec. 2	51.81
Mar. 24	50.59	July 21	52.66	Sept. 23	52.59	24	51.08
Apr. 22	51.20						

S1811. City of New York, Board of Water Supply. Near Smithtown Blvd., Ronkonkoma. Lat. 40°49'50", long. 73°07'50". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 22 feet, screen 20-22. Land-surface datum is 53.7 feet above msl. Highest water level 55.56 above msl, Apr. 20, 1940; lowest 51.41 above msl, Aug. 28, 1941. Records available: 1937-52.

Water level above msl

Jan. 25	52.94	Apr. 23	53.14	July 22	53.08	Nov. 3	52.90
Feb. 26	53.11	May 26	53.55	Aug. 26	53.29	Dec. 1	53.03
Mar. 28	53.33	June 24	53.37	Sept. 23	53.18	24	53.94

S1814. U. S. Geol. Survey. Suffolk and Lowell Aves., Central Islip. Lat. 40°47'40", long. 73°11'40". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 49 feet, screen 47-49. Land-surface datum is 79.6 feet above msl. Highest water level 38.96 above msl, July 29, 1948; lowest 34.50 above msl, Jan. 25, 1951. Records available: 1939-52.

Water level above msl

Jan. 24	36.16	Apr. 22	37.62	July 22	38.58	Nov. 4	37.18
Feb. 26	36.84	May 26	38.04	Aug. 26	38.33	Dec. 3	36.71
Mar. 25	37.26	June 23	38.63	Sept. 23	37.93	24	36.51

S1817. U. S. Geol. Survey. Long Island Ave. and 18th St., Wyandanch. Lat. 40°45'20", long. 73°21'45". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 26 feet, screen 24-26. Land-surface datum is 58.9 feet above msl. Highest water level 53.95 above msl, June 1, 1940; lowest 49.66 above msl, Oct. 30, 1951. Records available: 1939-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	51.69	Apr. 22	52.37	July 22	52.40	Nov. 5	51.20
Feb. 25	52.09	May 26	53.56	Aug. 26	52.76	Dec. 3	51.13
Mar. 24	52.79	June 23	53.24	Sept. 23	52.04	24	51.69

S2146. Montauk Beach Co. Golf Course, Montauk. Lat. 41°03'30", long. 71°57'00". Drilled unused water-table well in deposits of late Pleistocene age, diameter 8 inches, depth 92 feet. Land-surface datum is 49.0 feet above msl. Highest water level 3.65 above msl, May 22, 1952; lowest 2.50 above msl, Jan. 11, 1951. Records available: 1950-52.

Water level above msl

Jan. 3	3.09	Apr. 3	3.44	June 26	3.14	Sept. 25	2.89
10	3.30	10	3.46	July 3	3.11	Oct. 2	3.02
17	3.10	17	3.43	10	3.08	9	2.97
24	2.87	24	3.08	17	3.04	16	2.92
31	3.10	28	3.49	24	3.03	23	2.99
Feb. 7	3.08	May 1	3.50	31	2.95	30	3.01
14	3.03	8	3.43	Aug. 7	3.09	Nov. 5	2.92
21	3.20	15	3.63	14	3.07	6	3.02
29	3.32	22	3.65	21	3.00	13	2.97
Mar. 6	3.45	29	3.51	28	2.98	20	2.94
13	3.41	June 5	3.51	Sept. 4	2.96	27	2.92
20	3.43	12	3.42	11	2.91	Dec. 23	3.21
27	3.45	19	3.20	18	2.88		

S2314. U. S. Geol. Survey. Burr's Lane, Wyandanch. Lat. 40°46'15", long. 73°21'15". Drilled unused artesian well in sands of Magothy(?) formation, diameter 8 inches, depth 480 feet, screen 450-480. Land-surface datum is 92.8 feet above msl. Highest water level 61.68 above msl, May 25, 1949; lowest 57.63 above msl, Dec. 17, 1951. Records available: 1943-52.

Water level above msl

Jan. 24	58.18	Apr. 22	59.22	July 21	60.29	Nov. 5	59.96
Feb. 25	58.77	May 26	59.80	Aug. 26	60.41	Dec. 3	59.78
Mar. 24	59.11	June 23	60.28	Sept. 23	60.35	29	59.77

S2455. City of New York, Board of Water Supply. Sandra Ave., Bayshore. Lat. 40°43'05", long. 73°17'20". Drilled observation water-table well in deposits of late Pleistocene age, diameter 10 inches, depth 18 feet. Land-surface datum is 33.1 feet above msl. Highest water level 24.85 above msl, Sept. 23, 1938; lowest 19.98 above msl, Nov. 6, 1937. Records available: 1933-40 (as S38), 1940-52.

Water level above msl

Jan. 24	23.07	Apr. 22	23.03	July 22	22.51	Nov. 4	20.96
Feb. 25	23.13	May 26	23.50	Aug. 26	22.27	Dec. 2	20.83
29	23.11	June 23	23.19	Sept. 24	21.75	22	21.55
Mar. 25	23.31						

S3496. U. S. Geol. Survey. Coates Ave. near Long Island Railroad, Holbrook. Lat. 40°48'45", long. 73°04'55". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 76 feet, screen 74-76. Land-surface datum is 115.9 feet above msl. Highest water level 50.76 above msl, July 7, 1949; lowest 45.79 above msl, Feb. 21, Mar. 27, 1951. Records available: 1942-52.

Water level above msl

Jan. 24	46.73	Apr. 22	48.06	July 22	49.98	Nov. 4	49.87
Feb. 26	46.83	May 26	49.04	Aug. 26	50.54	Dec. 3	49.37
Mar. 25	47.34	June 23	49.52	Sept. 23	50.13	29	48.95

S3513. New York State Division of Highways. State Highway 25, Selden. Lat. 40°51'45", long. 73°02'55". Drilled unused water-table well in deposits of late Pleistocene age, diameter 8 inches, depth 65 feet, screen 63-65. Land-surface datum is 102.1 feet above msl. Highest water level 64.19 above msl, July 4-5, 1949; lowest 59.86 above msl, Feb. 15, 21, 23, 1948. Records available: 1942-52.

S3513--Continued.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	60.96	Apr. 23	62.52	July 25	63.92	Nov. 7	63.08
Feb. 26	61.40	May 27	63.04	Aug. 26	63.86	Dec. 4	62.72
Mar. 25	61.90	June 24	63.56	Sept. 26	63.56	24	62.49

S3514. Herman Jurgens. Jericho Turnpike, Commack. Lat. 40°50'35", long. 73°18'00". Dug unused water-table well in deposits of late Pleistocene age, diameter 30 inches, depth 95 feet. Land-surface datum is 154.2 feet above msl. Highest water level 68.54 above msl, Dec. 5, 1952; lowest 64.23 above msl, Mar. 18, 26, 1951. Records available: 1942-52.

Daily mean water level, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	65.73	65.70	65.82	.....	66.64	66.76	66.24	67.46	67.98	68.19	68.35
2	65.71	65.74	65.59	65.76	.....	66.57	66.56	66.29	67.41	68.04	68.20	68.40
3	65.81	65.69	65.66	65.70	.....	66.62	66.44	66.30	67.36	67.98	68.29	68.35
4	65.80	65.86	65.78	65.72	.....	66.65	66.30	66.38	67.38	67.98	68.26	68.35
5	65.92	65.72	65.67	65.89	.....	66.66	66.19	66.43	67.43	68.03	68.32	68.54
6	65.81	65.64	65.65	65.75	.....	66.70	66.09	66.45	67.52	68.06	68.33	68.38
7	65.82	65.72	65.66	65.73	.....	66.69	66.01	66.49	67.43	68.06	68.20	68.32
8	65.85	65.69	65.68	65.73	.....	66.68	66.01	66.54	67.46	68.07	68.14	68.34
9	65.84	65.70	65.67	65.77	.....	66.73	66.13	66.59	67.55	68.09	68.17	68.36
10	65.85	65.68	65.67	65.85	.....	66.77	66.22	66.87	67.58	68.07	68.14	68.44
11	65.68	65.82	65.92	65.82	.....	66.75	66.23	66.63	67.59	68.14	68.22	68.49
12	65.80	65.66	65.62	65.81	66.18	66.75	66.34	66.69	67.61	68.14	68.20	68.38
13	65.80	65.65	65.82	65.88	66.31	66.73	66.41	66.72	67.65	68.16	68.20	68.35
14	65.80	65.68	65.69	65.97	66.36	66.78	66.43	66.74	67.63	68.14	68.24	68.35
15	65.83	65.63	65.75	65.96	66.30	66.86	66.41	66.79	67.73	68.21	68.32	68.42
16	65.73	65.66	65.81	65.94	66.36	66.81	66.31	66.88	67.73	68.16	68.29	68.38
17	65.82	65.83	65.67	65.97	.....	66.93	66.23	66.86	67.70	68.16	68.27	68.37
18	65.82	65.66	65.63	66.01	.....	66.88	66.16	66.88	67.73	68.23	68.32	68.32
19	65.72	65.61	65.80	66.00	66.38	66.89	66.18	66.90	67.77	68.24	68.38	68.28
20	65.88	65.65	65.72	66.03	66.49	66.84	66.18	66.95	67.74	68.14	68.38	68.34
21	65.65	65.71	65.76	65.97	66.44	66.89	66.27	67.03	67.78	68.17	68.33	68.40
22	65.83	65.63	65.74	66.07	66.38	66.94	66.32	67.02	67.80	68.23	68.38	68.36
23	65.76	65.63	65.81	66.05	66.38	66.95	66.38	67.04	67.82	68.29	68.31	68.40
24	65.64	65.66	65.78	66.01	66.42	67.04	66.30	67.07	67.81	68.27	68.29	68.39
25	65.66	65.68	65.75	66.11	66.52	67.01	66.33	67.08	67.87	68.18	68.33	68.39
26	65.85	65.67	65.77	66.11	66.53	67.00	66.38	67.17	67.94	68.22	68.43	68.39
27	65.78	65.79	65.80	66.15	66.47	66.95	66.42	67.20	67.87	68.32	.....	68.39
28	65.81	65.72	65.78	66.14	66.51	67.00	66.36	67.24	67.90	68.32	.....	68.31
29	65.67	65.68	65.78	.....	66.53	67.08	66.32	67.29	67.96	68.21	.....	68.38
30	65.60	.....	65.77	.....	66.50	66.91	66.24	67.28	67.98	68.20	.....	68.36
31	65.69	.....	65.86	.....	66.57	.....	66.27	67.32	.....	68.26	.....	68.38

S3516. City of New York, Board of Water Supply. East 3d Ave. near Walbridge Ave., Bayshore. Lat. 40°45'15", long. 73°15'35". Driven observation water-table well in deposits of late Pleistocene age, diameter 2 inches, depth 38 feet, screen 36-38. Land-surface datum is 60.5 feet above msl. Highest water level 40.26 above msl, June 29, 1948; lowest 35.29 above msl, Dec. 21, 1950. Records available: 1907-9, 1942-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	37.45	Apr. 22	38.84	July 22	39.34	Nov. 4	37.37
Feb. 25	38.36	May 26	39.35	Aug. 27	38.68	Dec. 3	36.89
Mar. 25	38.75	June 23	39.92	Sept. 24	38.17	24	36.78

S3517. City of New York, Board of Water Supply. Lakeland Ave. and Tariff St., Sayville. Lat. 40°44'40", long. 73°05'20". Driven observation water-table well in deposits of late Pleistocene age, diameter 2 inches, depth 37 feet, screen 35-37. Land-surface datum is 31.6 feet above msl. Highest water level 14.02 above msl, Mar. 28, 1949; lowest 11.60 above msl, Dec. 4, 1909. Records available: 1907-9, 1942-52.

Water level above msl

Jan. 28	13.38	Apr. 22	13.59	July 22	13.07	Nov. 7	12.11
Feb. 26	13.71	May 26	13.69	Aug. 26	12.82	Dec. 3	11.98
Mar. 25	13.95	June 23	13.79	Sept. 23	12.48	29	12.16

S3526. City of New York, Board of Water Supply. Near Yaphank, Long Island Ave. and South Haven Rd. Lat. 40°50'10", long. 72°53'10". Driven observation water-table well in deposits of late Pleistocene age, diameter 2 inches, depth 66 feet, screen 64-66. Land-surface datum is 89.8 feet above msl. Highest water level 30.52 above msl, Dec. 30, 1948; lowest 25.73 above msl, Jan. 25, 1951. Records available: 1943-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	26.64	Apr. 29	27.59	July 28	29.41	Oct. 30	28.65
Feb. 27	26.60	June 2	28.55	Aug. 27	29.37	Nov. 25	28.75
Mar. 26	27.10	30	29.09	Oct. 1	29.02	Dec. 29	28.39

S3532. City of New York, Board of Water Supply. Whiskey and Randall Rds., Ridge. Lat. 40°54'45", long. 72°53'00". Driven observation water-table well in deposits of late Pleistocene age, diameter 2 inches, depth 70 feet, screen 68-70. Land-surface datum is 85.0 feet above msl. Highest water level 51.95 above msl, June 8, 1908; lowest 45.23 above msl, Feb. 23, 1951. Records available: 1907-9, 1942-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	46.11	Apr. 29	48.66	July 28	50.20	Oct. 31	48.92
Feb. 28	46.88	June 4	49.28	Aug. 28	49.85	Nov. 26	48.46
Mar. 28	47.65	July 1	49.95	Oct. 1	49.41	Dec. 30	47.87

S3535. City of New York, Board of Water Supply. Chichester and Brookfield Aves., Center Moriches. Lat. 40°49'10", long. 72°48'00". Driven observation water-table well in deposits of late Pleistocene age, diameter 2 inches, depth 52 feet, screen 50-52. Land-surface datum is 50.9 feet above msl. Highest water level 21.84 above msl, May 11, 1949; lowest 17.51 above msl, Feb. 23, 1951. Records available: 1907-9, 1942-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	18.62	Apr. 29	20.82	July 29	21.40	Oct. 30	20.38
Feb. 27	19.41	June 2	21.10	Aug. 27	21.14	Nov. 25	20.02
Mar. 26	20.04	30	21.40	Oct. 2	20.76	Dec. 29	19.56

S3537. City of New York, Board of Water Supply. Old Country Rd., Speonk. Lat. 40°50'00", long. 72°42'50". Driven observation water-table well in deposits of late Pleistocene age, diameter 2 inches, depth 43 feet, screen 41-43. Land-surface datum is 43.3 feet above msl. Highest water level 16.72 above msl, Mar. 28, 1949; lowest 14.09 above msl, Jan. 23, 1951. Records available: 1908-9, 1942-43, 1948-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	15.27	Apr. 24	16.27	July 23	16.14	Nov. 5	15.52
Feb. 27	15.90	May 27	16.29	Aug. 27	16.07	Dec. 4	15.36
Mar. 26	16.10	June 25	16.40	Sept. 24	15.84	29	15.25

S3539. City of New York, Board of Water Supply. Riverhead Rd., Speonk. Lat. 40°51'45", long. 72°41'50". Driven observation water-table well in deposits of late Pleistocene age, diameter 2 inches, depth 88 feet, screen 86-88. Land-surface datum is 73.3 feet above msl. Highest water level 26.72 above msl, June 5, 1908; lowest 21.33 above msl, Mar. 28, 1951. Records available: 1907-9, 1942-43, 1947-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	22.09	Apr. 23	23.74	July 23	25.02	Nov. 7	24.85
Feb. 1	22.21	May 27	24.39	Aug. 27	25.23	Dec. 4	24.64
27	23.29	June 25	24.66	Sept. 26	25.11	29	24.44
Mar. 27	23.25						

S3543. City of New York, Board of Water Supply. Suffolk Airport, Westhampton. Lat. 40°51'00", long. 72°39'00". Driven observation water-table well in deposits of late Pleistocene age, diameter 2 inches, depth 58 feet, screen 56-58. Land-surface datum is 64.4 feet above msl. Highest water level 19.65 above msl, May 23, 1949; lowest 15.18 above msl, Feb. 27, 1951. Records available: 1907-9, 1942-43, 1947-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	16.34	Apr. 23	18.06	July 23	19.01	Nov. 6	18.52
Feb. 29	17.07	May 27	18.45	Aug. 27	19.04	Dec. 2	18.20
Mar. 27	17.61	June 25	18.79	Sept. 25	18.86	22	18.00
28	17.62						

S3545. City of New York, Board of Water Supply. Lincoln Ave., West Sayville. Lat. 40°46'45", long. 73°05'00". Driven observation water-table well in deposits of late Pleistocene age, diameter 2 inches, depth 46 feet, screen 44-46. Land-surface datum is 56.6 feet above msl. Highest water level 38.41 above msl, Apr. 27, 1949; lowest 33.51 above msl, Jan. 25, 1951. Records available: 1907-9, 1942-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	35.14	Apr. 22	37.17	July 22	37.90	Nov. 4	36.31
Feb. 26	36.05	May 26	37.57	Aug. 28	37.50	Dec. 3	35.80
Mar. 24	36.54	June 23	38.05	Sept. 23	37.05	29	35.42

S3728. City of New York, Board of Water Supply. State Highway 27, Hagerman. Lat. 40°46'30", long. 72°57'15". Driven observation water-table well in deposits of late Pleistocene age, diameter 2 inches, depth 47 feet, screen 45-47. Land-surface datum is 48.1 feet above msl. Highest water level 23.67 above msl, Mar. 30, 1949; lowest 19.41 above msl, Dec. 21, 1951. Records available: 1943-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	20.44	Apr. 22	22.50	July 22	22.67	Nov. 4	21.01
Feb. 26	21.75	May 27	22.60	Aug. 27	22.18	Dec. 2	21.94
Mar. 25	21.98	June 24	22.97	Sept. 24	21.71	22	21.84

S3729. City of New York, Board of Water Supply. Barton and Dunton Aves., Hagerman. Lat. 40°47'15", long. 72°57'55". Driven observation water-table well in deposits of late Pleistocene age, diameter 2 inches, depth 39 feet, screen 37-39. Land-surface datum is 58.6 feet above msl. Highest water level 31.40 above msl, Apr. 27, May 24, 1949; lowest 27.34 above msl, Apr. 4, 1947. Records available: 1943-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	28.05	Apr. 22	29.65	July 21	30.55	Nov. 3	29.09
Feb. 26	28.80	May 27	30.15	Aug. 26	30.14	Dec. 1	28.65
Mar. 25	29.29	June 24	30.59	Sept. 23	29.72	29	28.30

S3730. City of New York, Board of Water Supply. Barton and South Haven Rds., Plainfield. Lat. 40°48'10", long. 72°58'10". Driven observation water-table well in deposits of late Pleistocene age, diameter 2 inches, depth 57 feet, screen 55-57. Land-surface datum is 80.5 feet above msl. Highest water level 37.67 above msl, May 24, 1949; lowest 33.04 above msl, Feb. 26, 1951. Records available: 1943-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	33.48	Apr. 22	35.64	July 21	36.85	Nov. 3	35.75
Feb. 26	34.26	May 27	36.15	Aug. 26	36.60	Dec. 1	35.32
Mar. 25	34.97	June 24	36.47	Sept. 23	36.31	29	34.94

S3737. U. S. Geol. Survey. Holbrook Rd., Centereach. Lat. 40°51'05", long. 73°04'50". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 64 feet, screen 62-64. Land-surface datum is 110.9 feet above msl. Highest water level 58.82 above msl, July 28, 1949; lowest 54.33 above msl, Feb. 20, 1951. Records available: 1943-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	55.42	Apr. 23	56.36	July 21	58.02	Nov. 7	57.95
Feb. 26	55.64	May 27	56.96	Aug. 26	58.35	Dec. 4	57.73
Mar. 25	55.93	June 23	57.46	Sept. 23	58.33	24	57.54

S3739. U. S. Geol. Survey. Lincoln Ave., Sayville. Lat. 40°45'50", long. 73°05'05". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 30 feet, screen 28-30. Land-surface datum is 50.3 feet above msl. Highest water level 30.61 above msl, June 23, 1952; lowest 26.33 above msl, Dec. 29, 1950. Records available: 1943-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	28.57	Apr. 22	30.18	July 22	30.15	Nov. 4	28.46
Feb. 26	29.51	May 26	30.43	Aug. 26	29.59	Dec. 3	28.08
Mar. 25	29.87	June 23	30.61	Sept. 23	29.14	29	27.83

S3868. U. S. Geol. Survey. Sheep Pasture Rd., Setauket. Lat. 40°55'10", long. 73°06'00". Driven observation water-table well in deposits of late Pleistocene age, diameter 4 to 2 inches, depth 114 feet, screen 108-114. Land-surface datum is 99.6 feet above msl. Highest water level 40.13 above msl, Dec. 4, 1949; lowest 36.21 above msl, Jan. 22, 1951. Records available: 1944-52.

S3868--Continued.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	37.41	Apr. 23	38.06	July 21	38.97	Nov. 3	39.73
Feb. 26	37.68	May 27	38.28	Aug. 26	39.29	Dec. 1	39.51
Mar. 25	37.74	June 23	38.86	Sept. 23	39.52	29	39.54

S3869. U. S. Geol. Survey. Mount Sinai Rd., Coram. Lat. 40°53'25", long. 72°59'25". Driven observation water-table well in deposits of late Pleistocene age, diameter 4 to 2 inches, depth 44 feet, screen 40-44. Land-surface datum is 84.4 feet above msl. Highest water level 57.24 above msl, July 5, 1949; lowest 52.97 above msl, Jan. 22, 1951. Records available: 1944-52.

Water level above msl

Jan. 25	53.92	Apr. 23	55.75	July 21	56.97	Nov. 3	56.12
Feb. 26	54.57	May 27	56.25	Aug. 26	56.81	Dec. 1	55.78
Mar. 25	55.07	June 23	56.72	Sept. 23	56.60	29	55.47

S3870. U. S. Geol. Survey. Mill Pond Rd., Coram. Lat. 40°51'40", long. 72°59'15". Driven observation water-table well in deposits of late Pleistocene age, diameter 4 to 2 inches, depth 44 feet, screen 40-44. Land-surface datum is 88.1 feet above msl. Highest water level 56.85 above msl, July 6, 1949; lowest 52.84 above msl, Feb. 20, 1951. Records available: 1944-52.

Water level above msl

Jan. 25	53.57	Apr. 23	54.87	July 21	55.98	Nov. 3	55.66
Feb. 26	54.05	May 27	55.26	Aug. 26	55.99	Dec. 1	55.40
Mar. 25	54.38	June 24	55.69	Sept. 23	55.84	29	55.17

S3871. U. S. Geol. Survey. Locust Ave. and Fire Rd., Plainfield Lat. 40°50'05", long. 72°58'15". Driven observation water-table well in deposits of late Pleistocene age, diameter 4 to 2 inches, depth 92 feet, screen 88-92. Land-surface datum is 128.6 feet above msl. Highest water level 50.19 above msl, July 26, 1949; lowest 45.84 above msl, Feb. 26, 1951. Records available: 1944-52.

Water level above msl

Jan. 25	46.43	Apr. 23	46.93	July 21	48.55	Nov. 3	48.95
Feb. 26	46.33	May 27	47.62	Aug. 26	49.25	Dec. 1	48.72
Mar. 25	46.56	June 24	48.11	Sept. 23	49.20	29	48.46

S3955. U. S. Geol. Survey. Pond Path and Horseblock Rd., Setauget. Lat. 40°53'55", long. 73°05'55". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 76 feet, screen 74-76. Land-surface datum is 122.4 feet above msl. Highest water level 55.78 above msl, Aug. 25, 1949; lowest 51.40 above msl, Mar. 28, 1951. Records available: 1944-52.

Water level above msl

Jan. 25	52.93	Apr. 23	53.02	July 21	54.77	Nov. 3	55.73
Feb. 26	52.70	May 27	53.74	Aug. 26	55.55	Dec. 1	55.49
Mar. 25	52.67	June 23	54.24	Sept. 22	55.68	29	55.29

S3956. U. S. Geol. Survey. Yaphank and Miller Place Rds., Miller Place. Lat. 40°56'10", long. 72°59'05". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 124 feet, screen 122-124. Land-surface datum is 145.5 feet above msl. Highest water level 33.77 above msl, Sept. 22, 1952; lowest 30.29 above msl, Mar. 28, 1951. Records available: 1944-52.

Water level above msl

Jan. 25	31.43	Apr. 23	31.72	July 21	33.19	Nov. 3	33.70
Feb. 26	31.36	May 27	32.31	Aug. 26	33.57	Dec. 1	33.51
Mar. 25	31.43	June 23	32.81	Sept. 22	33.77	29	33.34

S3978. Village of Greenport Department of Public Works. Moore's Lane, Greenport. Lat. 41°06'15", long. 72°22'25". Drilled unused water-table well in deposits of late Pleistocene age, diameter 4 inches, depth 55 feet. Land-surface datum is 15.6 feet above msl. Highest water level 1.28 above msl, Jan. 31, 1952; lowest 0.30 below msl, Dec. 29, 1949. Records available: 1949-52.

Water level above msl

Jan. 31	1.28	Apr. 25	0.60	July 24	0.21	Nov. 6	0.23
Feb. 28	1.16	May 29	1.15	Aug. 28	.85	Dec. 4	.49
Mar. 27	1.41	June 26	.65	Sept. 25	.49	23	.72

S4134. Town of Riverhead. Roanoke Ave., Riverhead. Lat. 40°55'35", long. 72°40'10". Drilled observation artesian well in sands of Magothy(?) formation, diameter 4 inches, depth 225 feet. Land-surface datum is 23.3 feet above msl. Highest water level 13.83 above msl, Apr. 7, 1949; lowest 11.33 above msl, Nov. 23, 1950. Records available: 1945-52.

Daily mean water level, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	12.76	13.04	13.30	.....	13.55	13.68	13.08	12.56	13.16	12.83	12.53	12.51
2	12.78	13.09	13.27	.....	13.55	13.74	13.01	12.55	13.19	12.80	12.50	12.49
3	12.80	13.10	13.25	.....	13.55	13.74	12.97	12.63	13.19	12.80	12.51	12.49
4	12.79	13.18	13.26	.....	13.54	13.73	12.96	12.70	13.15	12.80	12.51	12.51
5	12.84	13.24	13.34	.....	13.55	13.73	12.96	12.72	13.11	12.80	12.52	12.52
6	12.88	13.19	13.34	.....	13.54	13.72	12.92	12.74	13.09	12.80	12.53	12.59
7	12.87	13.17	13.33	.....	13.55	13.71	12.89	12.78	13.09	12.80	12.55	12.60
8	12.86	13.17	13.33	.....	13.54	13.70	12.85	12.81	13.06	12.79	12.52	12.58
9	12.85	13.19	13.33	.....	13.53	13.68	12.85	12.83	13.04	12.78	12.49	12.57
10	12.85	13.18	13.33	.....	13.52	13.68	.....	12.88	13.01	12.77	12.51	12.57
11	12.85	13.23	13.43	.....	13.50	13.68	.....	12.98	13.00	12.76	12.51	12.60
12	12.81	13.24	13.50	.....	13.55	13.67	.....	12.99	12.98	12.75	12.52	12.65
13	12.83	13.19	13.44	.....	13.56	13.64	.....	13.01	12.95	12.73	12.50	12.65
14	12.87	13.17	13.47	.....	13.55	13.57	12.94	13.01	12.93	12.70	12.48	12.63
15	12.86	13.16	13.42	.....	13.57	13.57	12.88	13.01	12.93	12.68	12.47	12.62
16	12.86	13.14	13.44	.....	13.56	13.54	12.82	13.02	12.93	12.68	12.47	12.62
17	12.85	13.23	13.46	.....	13.53	13.54	13.52	.....	13.05	12.94	12.68	12.61
18	12.93	13.37	13.40	.....	13.50	13.53	13.50	.....	13.06	12.93	12.65	12.60
19	12.89	13.29	13.39	.....	13.49	13.54	13.44	.....	13.05	12.93	12.65	12.59
20	12.92	13.25	13.48	.....	13.48	13.54	13.39	.....	13.03	12.93	12.67	12.58
21	12.90	13.25	13.49	.....	13.44	13.59	13.33	.....	13.01	12.93	12.64	12.59
22	12.84	13.26	13.47	.....	13.41	13.60	.....	12.69	13.05	12.93	12.62	12.61
23	12.95	13.23	13.50	.....	13.42	13.59	13.33	.....	13.10	12.92	12.60	12.62
24	12.92	13.21	13.57	.....	13.41	13.57	13.33	.....	13.12	12.91	12.60	12.62
25	12.86	13.25	13.57	.....	13.38	13.57	13.33	.....	13.15	12.90	12.59	12.62
26	12.89	13.25	13.54	.....	13.40	13.64	.....	12.60	13.15	12.89	12.56	12.62
27	12.99	13.29	.....	.....	13.41	13.65	.....	12.58	13.15	12.90	12.55	12.62
28	13.05	13.34	.....	.....	13.48	13.65	.....	12.61	13.15	12.88	12.57	12.61
29	13.08	13.32	.....	.....	13.52	13.65	.....	12.62	13.15	12.84	12.58	12.58
30	13.03	.....	.....	.....	13.54	13.65	.....	12.61	13.15	12.84	12.55	12.57
31	13.02	.....	.....	.....	13.65	.....	.....	12.59	13.15	.....	12.53	12.56

S4268. U. S. Geol. Survey. Town Line Rd., Northport. Lat. 40°52'55", long. 73°17'05". Drilled observation water-table well in deposits of late Pleistocene age, diameter 4 inches, depth 74 feet, screen 69-74. Land-surface datum is 111.0 feet above msl. Highest water level 50.89 above msl, Nov. 3, 1952; lowest 46.65 above msl, Mar. 27, 1951. Records available: 1945-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	48.20	Apr. 22	48.41	July 21	49.60	Nov. 3	50.89
Feb. 25	48.12	May 26	48.68	Aug. 26	50.26	Dec. 1	50.76
Mar. 24	48.55	June 23	49.19	Sept. 22	50.58	29	50.67

S4270. U. S. Geol. Survey. Wicks Ave. and Crooked Hill Rd., Pineaire. Lat. 40°47'10", long. 73°16'10". Drilled observation water-table well in deposits of late Pleistocene age, diameter 4 inches, depth 83 feet, screen 78-83. Land-surface datum is 120.2 feet above msl. Highest water level 55.41 above msl, May 25, 1949; lowest 49.86 above msl, Feb. 19, 1951. Records available: 1945-52.

Water level above msl

Jan. 24	50.66	Apr. 22	51.79	July 21	54.07	Nov. 4	53.84
Feb. 25	50.73	May 26	52.47	Aug. 29	54.22	Dec. 3	53.19
Mar. 24	51.36	June 23	53.21	Sept. 23	54.14	24	53.00

S4271. U. S. Geol. Survey. Long Island Research Farm, Riverhead. Lat. 40°57'30", long. 72°43'30". Drilled observation water-table well in deposits of late Pleistocene age, diameter 4 inches, depth 105 feet, screen 100-105. Land-surface datum is 100.3 feet above msl. Highest water level 11.41 above msl, June 2-6, 1949; lowest 9.12 above msl, Sept. 10-12, 1950. Records available: 1945-52.

Water level above msl

Jan. 30	10.25	Apr. 23	10.92	July 24	10.78	Nov. 7	11.01
Feb. 27	10.39	May 28	11.35	Aug. 28	10.99	Dec. 3	10.94
Mar. 26	10.63	June 26	11.25	Sept. 25	11.13	22	10.94

S4524. U. S. Geol. Survey. Tuthill Rd., Laurel. Lat. 40°56'50", long. 72°36'05". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 23 feet, screen 21-23. Land-surface datum is 23.5 feet above msl. Highest water level 8.61 above msl, Mar. 31, 1949; lowest 5.52 above msl, Nov. 2, 1950. Records available: 1945-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	7.57	Apr. 24	8.37	July 23	7.26	Nov. 6	7.02
Feb. 28	8.15	May 28	8.51	Aug. 28	7.87	Dec. 3	6.89
Mar. 26	8.43	June 26	8.06	Sept. 24	7.51	22	6.92

S4526. J. T. Downe. Sound Ave., Riverhead. Lat. 40°58'10", long. 72°38'15". Dug unused water-table well in deposits of late Pleistocene age, diameter 3½ inches, depth 65 feet. Land-surface datum is 67.9 feet above msl. Highest water level 10.73 above msl, May 28, 1952; lowest 7.47 above msl, Dec. 28, 1950. Records available: 1945-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	9.03	Apr. 23	10.33	July 23	10.03	Nov. 6	9.83
Feb. 28	9.42	May 28	10.73	Aug. 28	10.06	Dec. 3	9.64
Mar. 26	9.93	June 26	10.53	Sept. 24	10.13	23	9.56

S4530. U. S. Geol. Survey. Middle Country Rd. and Roanoke Ave., Riverhead. Lat. 40°56'15", long. 72°40'40". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 12 feet, screen 10-12. Land-surface datum is 21.2 feet above msl. Highest water level 18.44 above msl, May 28, 1952; lowest 13.91 above msl, Dec. 28, 1950. Records available: 1945-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	16.95	Apr. 23	18.14	July 24	17.22	Nov. 7	16.70
Feb. 27	17.63	May 28	18.44	Aug. 28	17.57	Dec. 3	16.09
Mar. 26	18.22	June 26	18.02	Sept. 25	17.22	22	16.08

S4827. U. S. Geol. Survey. Broadway, Greenlawn. Lat. 40°51'45", long. 73°21'55". Drilled observation water-table well in deposits of late Pleistocene age, diameter 4 inches, depth 199 feet, screen 194-199. Land-surface datum is 215.0 feet above msl. Highest water level 58.16 above msl, Nov. 29, 1949; lowest 54.23 above msl, May 28, 1951. Records available: 1946-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	54.79	Apr. 22	54.97	July 21	55.68	Nov. 3	57.31
Feb. 25	54.89	May 26	55.33	Aug. 26	56.25	Dec. 1	57.40
Mar. 24	54.96	June 23	55.45	Sept. 22	56.73	29	57.66

S4828. U. S. Geol. Survey. Park Ave. and Broadway, Greenlawn. Lat. 40°50'20", long. 73°22'10". Drilled observation artesian well in sands of Magothy(?) formation, diameter 4 inches, depth 141 feet, screen 136-141. Land-surface datum is 185.0 feet above msl. Highest water level 69.45 above msl, Jan. 30, 1950; lowest 65.17 above msl, Jan. 24, 1952. Records available: 1946-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	65.17	Apr. 22	65.54	July 21	66.71	Nov. 3	68.01
Feb. 25	65.31	May 26	66.00	Aug. 26	67.22	Dec. 1	67.99
Mar. 24	65.44	June 23	66.22	Sept. 22	67.62	29	68.18

S4829. U. S. Geol. Survey. Randall Rd., Shoreham. Lat. 40°56'15", long. 72°53'55". Drilled observation water-table well in deposits of late Pleistocene age, diameter 4 inches, depth 97 feet, screen 92-97. Land-surface datum is 114.0 feet above msl. Highest water level 40.60 above msl, Aug. 24, 1949; lowest 36.74 above msl, Apr. 4, 1951. Records available: 1946-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	37.39	Apr. 29	38.14	July 28	39.25	Oct. 31	39.98
Feb. 28	37.40	June 4	38.76	Aug. 28	39.69	Nov. 26	39.85
Mar. 28	37.68	July 1	39.05	Oct. 1	40.01	Dec. 30	39.65

S5517. Brookhaven National Laboratory. Upton Rd. and Princeton Ave., Brookhaven National Laboratory. Lat. 40°51'50", long. 72°53'15". Drilled observation water-table well in deposits of late Pleistocene age, diameter 4 inches, depth 91 feet, screen 85-91. Land-surface datum is 115.0 feet above msl. Highest water level 45.27 above msl, May 23, 27-28, June 6, 1949; lowest 39.60 above msl, Feb. 4-6, 8-9, 1951. Records available: 1948-52.

S5517--Continued.

Daily mean water level, above msl, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	40.29	40.83	41.73	42.57	43.23	43.65	44.41	44.30	43.99	.....	43.07	42.55
2	40.31	40.85	41.74	42.61	43.24	43.67	44.43	44.30	43.98	.....	43.06	42.53
3	40.34	40.87	41.77	42.64	43.25	43.69	44.43	44.29	43.96	.....	.....	42.52
4	40.36	40.91	41.80	42.67	43.26	43.72	44.44	44.27	43.94	43.52	.....	42.51
5	40.38	40.93	41.82	42.70	43.26	43.76	44.45	44.26	43.92	43.51	.....	.....
6	40.39	40.96	41.83	42.74	43.28	43.79	44.45	44.25	43.91	43.50	.....	.....
7	40.42	40.99	41.85	42.77	43.28	43.82	44.45	44.24	43.89	43.48	.....	.....
8	40.44	41.02	41.87	42.79	43.29	43.85	44.46	44.22	43.87	43.47	42.94	.....
9	40.46	41.06	41.89	42.81	43.30	43.89	44.47	44.21	43.86	43.45	42.93	.....
10	40.49	41.09	41.91	42.85	43.32	43.93	44.48	44.22	43.85	43.42	42.91	.....
11	40.50	41.12	41.96	42.87	43.32	43.96	44.47	44.20	43.84	43.41	42.89	.....
12	40.51	41.16	41.97	42.89	43.33	44.00	44.46	44.19	43.82	43.40	42.88	42.36
13	40.52	41.19	42.00	42.92	43.35	44.02	44.46	44.18	43.81	43.38	.....	.....
14	40.54	41.23	42.02	42.96	43.35	44.05	44.47	44.17	43.80	43.36	.....	.....
15	40.55	41.26	42.03	42.99	43.37	44.08	44.47	44.17	.....	43.34	.....	.....
16	40.56	41.30	42.06	43.01	43.38	44.11	44.46	44.17	.....	43.33	.....	.....
17	40.59	41.34	42.08	43.02	.....	44.14	44.44	44.17	.....	43.31	.....	.....
18	40.61	.....	42.11	43.04	.....	44.17	44.45	44.15	.....	43.29	.....	.....
19	40.62	.....	42.15	43.06	.....	44.20	44.47	44.13	.....	43.28	.....	.....
20	40.64	.....	42.18	43.09	.....	44.22	44.46	44.12	.....	43.25	.....	42.22
21	40.65	.....	42.21	43.10	.....	44.24	44.45	44.11	.....	43.28	42.71	42.21
22	40.68	41.49	42.24	43.12	.....	44.27	44.43	44.10	.....	43.22	42.69	.....
23	40.69	41.52	42.28	43.14	.....	44.29	44.43	44.09	.....	43.21	42.67	.....
24	40.70	41.55	42.31	43.15	43.48	44.32	44.41	44.07	.....	43.20	42.65	.....
25	40.71	41.56	42.34	43.17	43.50	44.34	44.37	44.06	.....	43.18	42.63	.....
26	40.73	41.60	42.37	43.18	43.52	44.37	44.36	44.05	.....	43.16	42.62	.....
27	40.75	41.65	42.41	43.19	43.53	44.38	44.37	44.04	.....	43.15	42.61	.....
28	40.76	41.68	42.44	43.20	43.55	44.39	44.38	44.03	.....	43.14	42.59	.....
29	40.78	41.70	42.47	43.21	43.57	44.41	44.37	44.02	.....	43.11	42.58	.....
30	40.79	.....	42.49	43.22	43.59	44.41	44.34	44.01	.....	43.09	42.57	.....
31	40.81	.....	42.52	.....	43.61	.....	44.32	43.99	.....	43.08	.....	.....

S6400. Brookhaven National Laboratory. 4th Ave. and Railroad St., Brookhaven National Laboratory. Lat. 40°52'35", long. 72°53'05". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 61 feet, screen 59-61. Land-surface datum is 90.8 feet above msl. Highest water level 47.00 above msl, May 12, 1949; lowest 40.97 above msl, Jan. 26, 1951. Records available: 1948-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	41.84	Mar. 25	44.33	Apr. 30	45.27	Oct. 3	44.64
Mar. 20	44.14	27	44.45	June 3	45.54	Dec. 31	43.08

S6409. Brookhaven National Laboratory. Yale and Upton Rds., Brookhaven National Laboratory. Lat. 40°51'40", long. 72°53'50". Drilled observation artesian well in Lloyd sand member of Raritan formation, diameter 8 inches, depth 1,434 feet, screen 1,408-1,433. Land-surface datum is 113.2 feet above msl. Recording gage discontinued July 14, 1952. Highest water level 34.68 above msl, June 22, 1949; lowest 31.46 above msl, Feb. 15, 1951. Records available: 1949-52.

Daily mean water level, above msl, from recorder graph*

Day	Jan.	Feb.	Mar.	Apr.	May	June	July
1	33.11	33.53	33.87	.....
2	32.43	.....	33.18	33.53	33.85	.....
3	32.37	.....	33.08	33.48	33.80	.....
4	32.67	.....	32.99	33.53	33.83	.....
5	32.71	.....	33.18	33.48	33.87	.....
6	32.52	.....	33.23	33.54	33.91	.....
7	32.53	.....	33.13	33.53	33.97	.....
8	32.49	.....	33.00	33.54	33.88	.....
9	32.58	.....	32.90	33.56	33.92	33.92
10	32.51	.....	33.00	33.57	33.96	34.01
11	32.69	.....	33.07	33.61	34.00	33.90
12	32.62	.....	33.02	33.75	33.93	33.84
13	32.53	.....	33.09	33.69	33.79	33.87
14	32.52	.....	33.38	33.64	33.74	33.89
15	33.40	33.68	33.83	.....

S6409--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July
16	32.25	.....	.....	33.28	33.62	33.81	.....
17	32.25	.....	.....	33.23	33.50	33.91	.....
18	32.50	.....	.....	33.28	33.53	33.95	.....
19	32.30	.....	.....	33.26	33.49	33.92	.....
20	32.52	.....	.....	33.32	33.62	33.80	.....
21	32.30	.....	.....	33.22	33.78	33.70	.....
22	32.30	.....	32.82	33.22	33.68	33.76	.....
23	32.49	.....	32.91	33.31	33.57	33.76	.....
24	32.25	.....	32.98	33.16	33.55	33.91	.....
25	32.09	.....	32.92	33.23	33.71	33.99	.....
26	32.37	.....	32.91	33.31	33.86	33.97	.....
27	.....	.....	32.96	33.39	33.77	33.87	.....
28	32.63	.....	32.94	33.55	33.74	33.79	.....
29	32.54	.....	32.90	33.52	33.77	33.87	.....
30	32.30	.....	32.84	33.56	33.69	.....	.....
31	.....	.....	32.91	.....	33.70	.....	.....

* No record for August, September, October, November, and December.

S6410. Brookhaven National Laboratory. Ridge Rd. and State Highway 25A, Ridge. Lat. 40°55'20", long. 72°54'05". Drilled observation water-table well in deposits of late Pleistocene age, diameter 4 inches, depth 88 feet, screen 83-88. Land-surface datum is 108.7 feet above msl. Highest water level 47.38 above msl, July 14, 1949; lowest 42.59 above msl, Feb. 25-26, 28, Mar. 1-7, 1951. Records available: 1948-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	43.22	Apr. 29	44.99	Aug. 28	46.89	Nov. 26	46.10
Feb. 28	43.50	June 4	45.72	Oct. 1	46.66	Dec. 30	45.69
Mar. 28	44.07	July 1	46.26	31	46.39		

S6411. Brookhaven National Laboratory. Ridge Rd. and State Highway 25A, Shoreham. Lat. 40°56'50", long. 72°54'15". Drilled observation water-table well in deposits of late Pleistocene age, diameter 4 inches, depth 149 feet, screen 143-149. Land-surface datum is 138.4 feet above msl. Highest water level 31.51 above msl, Sept. 22, 1945; lowest 28.39 above msl, Apr. 4, 1951. Records available: 1948-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	29.03	Apr. 29	29.34	July 28	30.35	Oct. 31	31.22
Feb. 28	29.05	June 4	29.72	Aug. 28	30.72	Nov. 26	31.24
Mar. 28	29.15	July 1	30.08	Oct. 1	31.08	Dec. 30	31.10

S6435. Brookhaven National Laboratory. Long Island Ave., South Haven. Lat. 40°49'00", long. 72°52'50". Driven observation water-table well in deposits of late Pleistocene age, diameter 2 inches, depth 82 feet, screen 80-82. Land-surface datum is 76.4 feet above msl. Highest water level 22.11 above msl, June 8, 1949; lowest 19.05 above msl, Feb. 26, 1951. Records available: 1949-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	19.58	Apr. 28	21.11	July 28	21.98	Oct. 30	21.19
Feb. 27	19.90	June 2	21.57	Aug. 27	21.86	Nov. 25	20.85
Mar. 27	20.45	30	21.78	Oct. 1	21.52	Dec. 30	20.44

S6441. Brookhaven National Laboratory. Wading River Rd. near North St., Manorville. Lat. 40°52'10", long. 72°49'25". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 21 feet, screen 19-21. Land-surface datum is 46.2 feet above msl. Highest water level 38.46 above msl, Mar. 16, 1949; lowest 34.42 above msl, Nov. 24, 1950. Records available: 1949-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	37.15	Apr. 29	37.56	June 30	37.23	Oct. 30	35.82
Feb. 27	37.36	May 1	37.66	July 29	36.32	Nov. 25	36.02
Mar. 26	37.85	13	37.66	Aug. 27	36.79	Dec. 8	36.23
Apr. 16	37.41	June 2	38.15	Oct. 2	36.13	29	36.34

S6524. Southold Fire Dept. Bayview Rd., Southold. Lat. 41°02'55", long. 72°26'10". Drilled fire protection water-table well in deposits of late Pleistocene age, diameter 6 inches, depth 40 feet. Land-surface datum is 5.7 feet above msl. Highest water level 2.85 above msl, Mar. 27, 1952; lowest 0.66 above msl, Feb. 1, 1950. Records available: 1949-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	2.54	Apr. 25	2.35	July 24	1.88	Nov. 6	1.64
Feb. 28	2.68	May 29	2.53	Aug. 28	2.34	Dec. 4	1.63
Mar. 27	2.85	June 26	2.22	Sept. 25	1.99	22	1.92

S6532. Conway Bros. Horton's Lane, Southold. Lat. 41°03'55", long. 72°26'10". Dug domestic water-table well in deposits of late Pleistocene age, diameter 24 inches, depth 52 feet. Land-surface datum is 45.9 feet above msl. Highest water level 4.53 above msl, Apr. 25, 1952; lowest 1.95 above msl, Feb. 27, 1950. Records available: 1949-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	3.27	Apr. 25	4.53	July 24	3.70	Nov. 6	3.19
Feb. 28	4.05	May 29	4.31	Aug. 28	3.95	Dec. 4	2.92
Mar. 27	4.33	June 26	4.10	Sept. 25	3.66	23	2.86

S6542. Cutchogue Fire Dept. Depot Lane, Cutchogue. Lat. 41°01'05", long. 72°29'25". Drilled fire protection water-table well in deposits of late Pleistocene age, diameter 6 inches, depth 36 feet. Land-surface datum is 24.4 feet above msl. Highest water level 6.63 above msl, Apr. 25, 1952; lowest 3.22 above msl, Nov. 2, 1950. Records available: 1949-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	5.14	Apr. 25	6.63	July 24	5.74	Nov. 6	5.29
Feb. 28	5.98	May 28	6.42	Aug. 28	6.20	Dec. 4	4.94
Mar. 27	6.37	June 26	6.45	Sept. 25	5.83	22	5.02

S6558. Mattituck Fire Dept. State Highway 25, Mattituck. Lat. 40°58'30", long. 72°33'10". Drilled fire protection water-table well in deposits of late Pleistocene age, diameter 6 inches, depth 37 feet. Land-surface datum is 13.9 feet above msl. Highest water level 5.24 above msl, Mar. 27, 1952; lowest 2.78 above msl, June 27, 1950. Records available: 1949-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	4.52	Apr. 24	5.10	Aug. 29	4.58	Dec. 4	3.78
Feb. 28	5.06	May 28	5.18	Sept. 25	4.28	22	3.88
Mar. 27	5.24	June 26	4.92	Nov. 6	3.98		

S6780. J. Moisa. Breakwater Rd., Mattituck. Lat. 41°00'05", long. 72°33'45". Drilled irrigation water-table well in deposits of late Pleistocene age, diameter 10 inches, depth 100 feet. Land-surface datum is 48.3 feet above msl. Highest water level 5.03 above msl, May 28, 1952; lowest 2.77 above msl, June 26, 1950. Records available: 1949-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	3.96	Apr. 24	4.83	Aug. 28	4.39	Dec. 3	3.50
Feb. 28	4.26	May 28	5.03	Sept. 24	4.42	23	3.98
Mar. 26	4.63	June 26	4.63	Nov. 6	4.07		

S7267. Cutchogue Fire Dept. North Rd., Cutchogue. Lat. 41°01'50", long. 72°33'05". Drilled fire protection water-table well in deposits of late Pleistocene age, diameter 6 inches, depth 43 feet. Land-surface datum is 18.2 feet above msl. Highest water level 6.93 above msl, May 28, 1952; lowest 3.58 above msl, Aug. 30, 1950. Records available: 1949-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	5.15	Apr. 25	6.71	July 24	6.16	Nov. 6	5.92
Feb. 28	5.71	May 28	6.93	Aug. 28	6.46	Dec. 4	5.63
Mar. 26	6.17	June 26	6.83	Sept. 25	6.34	22	5.46

S7283. W. Karcher. State Highway 25, Orient. Lat. 41°08'50", long. 72°17'40". Dug unused water-table well in deposits of late Pleistocene age, diameter 24 inches, depth 30 feet. Land-surface datum is 23.1 feet above msl. Highest water level 3.91 above msl, Mar. 27, 1952; lowest 1.28 above msl, Jan. 28-31, Feb. 1-2, 1950. Records available: 1949-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	3.16	Apr. 25	3.59	July 25	2.49	Nov. 6	1.90
Feb. 28	3.65	May 29	3.42	Aug. 28	2.87	Dec. 4	1.74
Mar. 27	3.91	June 26	3.12	Sept. 25	2.36	23	1.81

S8831. U. S. Geol. Survey. Lake Drive and North Sea Rd., Southampton. Lat. 40°55'15", long. 72°24'50". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 23 feet, screen 21-23. Land-surface datum is 18.5 feet above msl. Highest water level 7.71 above msl, Jan. 28, 1952; lowest 6.23 above msl, Oct. 31, 1950. Records available: 1950-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	7.71	Apr. 24	7.27	July 23	6.87	Nov. 5	6.72
Feb. 27	7.48	May 28	7.61	Aug. 27	7.28	Dec. 2	6.87
Mar. 26	7.66	June 25	7.21	Sept. 24	6.93	23	7.11

S8834. U. S. Geol. Survey. State Highway 114, Sag Harbor. Lat. 40°59'10", long. 72°15'30". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 23 feet, screen 21-23. Land-surface datum is 26.1 feet above msl. Highest water level 12.83 above msl, Aug. 27, 1952; lowest 9.58 above msl, Dec. 26, 1950. Records available: 1950-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	11.02	Apr. 24	11.73	July 23	11.85	Nov. 5	11.62
Feb. 27	11.35	May 28	12.28	Aug. 27	12.83	Dec. 2	11.41
Mar. 26	11.71	June 25	12.32	Sept. 24	12.25	23	11.62

S8835. U. S. Geol. Survey. State Highway 24, Hampton Bays. Lat. 40°53'10", long. 72°32'30". Driven observation water-table well in deposits of late Pleistocene age, diameter 2 inches, depth 33 feet, screen 31-33. Land-surface datum is 33.3 feet above msl. Highest water level 9.73 above msl, June 27, 1952; lowest 6.95 above msl, Jan. 23, 1951. Records available: 1950-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	8.39	Apr. 24	9.37	July 23	9.37	Nov. 5	8.53
Feb. 27	8.90	May 28	9.63	Aug. 27	9.21	Dec. 2	8.27
Mar. 26	9.20	June 27	9.73	Sept. 24	9.00	23	8.25

S8836. Southampton Fire Dept. Nugent St., Southampton. Lat. 40°53'15", long. 72°23'35". Drilled fire protection water-table well in deposits of late Pleistocene age, diameter 8 inches, depth 37 feet. Land-surface datum is 17.4 feet above msl. Highest water level 7.58 above msl, Mar. 26, 1952; lowest 5.61 above msl, Jan. 23, 1951. Records available: 1950-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	6.85	Apr. 24	7.56	July 22	7.06	Nov. 5	6.70
Feb. 27	7.26	May 28	7.54	Aug. 27	7.51	Dec. 2	6.48
Mar. 26	7.58	June 25	7.35	Sept. 24	7.27	23	6.50

S8837. East Hampton Fire Dept. State Highway 27, East Hampton. Lat. 40°58'05", long. 72°10'15". Drilled fire protection water-table well in deposits of late Pleistocene age, diameter 6 inches, depth 34 feet. Land-surface datum is 14.8 feet above msl. Highest water level 8.77 above msl, May 28, 1952; lowest 6.92 above msl, Dec. 26, 1950. Records available: 1950-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	8.17	Apr. 24	8.55	July 22	8.28	Nov. 5	7.84
Feb. 27	8.35	May 28	8.77	Aug. 27	8.44	Dec. 2	7.68
Mar. 26	8.70	June 25	8.50	Sept. 24	8.18	23	7.83

S8839. A. Toler. Windmill Lane, Amagansett. Lat. 40°58'35", long. 72°08'55". Driven observation water-table well in deposits of late Pleistocene age, diameter 1½ inches, depth 37 feet, screen 35-37. Land-surface datum is 39.3 feet above msl. Highest water level 8.34 above msl, May 28, 1952; lowest 6.29 above msl, Jan. 23, 1951. Records available: 1950-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	7.51	Apr. 24	8.22	July 23	7.90	Nov. 5	7.34
Feb. 27	7.80	May 28	8.34	Aug. 27	8.27	Dec. 2	7.13
Mar. 26	8.11	June 25	8.19	Sept. 24	7.78	23	7.10

S8912. F. Lackman. State Highways 25 and 25A, The Branch. Lat. 40°51'20", long. 73°11'15". Dug unused water-table well in deposits of late Pleistocene age, diameter 36 inches, depth 28 feet. Land-surface datum is 59.3 feet above msl. Highest water level 35.61 above msl, Mar. 30, 1949; lowest 32.90 above msl, Jan. 27, 1948. Records available: 1947-52.

Water level above msl

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	34.77	Apr. 23	35.18	July 21	35.06	Nov. 3	34.15
Feb. 26	35.27	May 27	35.18	Aug. 26	35.10	Dec. 1	33.90
Mar. 28	35.42	June 24	35.52	Sept. 22	34.61	24	33.97

UPSTATE NEW YORK

By E. S. Asselstine, F. K. Mack, and J. A. Ziarno

Scope of Water-Level Program

The observation-well program in Upstate New York (fig. 24) was continued during 1952, primarily as part of the investigation of ground-water resources in cooperation with the State Water Power and Control Commission. The program included collection of water-level data by means of a statewide network of observation wells, county surveys of ground-water conditions, and pumping tests to determine the physical properties of various aquifers. During the year, measurements of depth-to-water were made in 48 wells. Continuous records of water-level fluctuations were obtained from 14 other wells equipped with recording gages, two of which were measured by the Surface Water Branch of the Geological Survey as part of a hydrologic investigation in cooperation with the State Department of Conservation.

Ground-water reports in which water-level measurements are listed were published during the year as follows: "The ground-water resources of Wayne County, New York," and "The ground-water resources of Schenectady County, New York," as Bulletins GW-29 and GW-30 of the New York Water Power and Control Commission; "Water resources of the Buffalo-Niagara Falls region," as Circular 173 of the U. S. Geological Survey. A report on the water resources of the Rochester area and a report on the ground-water resources of Bronx, Manhattan, and Richmond Counties were prepared during the year.

Precipitation

The average precipitation in 1952 for New York, including Long Island, was 38.5 inches or 0.66 inch below normal. Precipitation was spread quite uniformly throughout the State during the early months of the year. However, for an extended period during the growing season western counties suffered from lack of rain while southern counties received abundant rain. Toward the end of the year above-normal amounts of precipitation were received in all parts of the State with the exception of the far western counties where less than normal precipitation continued.

Pumpage

Pumpage data were compiled and tabulated for the two most important areas of ground-water pumpage, the Schenectady area and the triple-cities area of Binghamton, Johnson City, and Endicott. Neither these two areas of heaviest pumpage nor any other known area in Upstate New York are believed to have undergone excessive pumpage by the end of 1952, although the Arco Corporation at Binghamton was artificially recharging its aquifers to safeguard its supply.

Interpretation of Water-Level Fluctuations

The year began with water levels above average in most wells and rising at the expected seasonal rate. During January water levels continued to rise and to hold their position relative to average. Some wells in the western part of the State reached their annual peak during this month. In February there was an abnormal reverse in trend, which was probably the result of less than normal precipitation, part remaining as unmelted snow. The seasonal upward trend of water levels was resumed in March, bringing them to near-normal stages. In April most levels dropped to below-normal stages. Exceptions were water levels in northern and eastern New York which continued rising to stages considerably above average. In many wells the downward seasonal trend began at the beginning of the growing season in May, although in northern and east-central New York water levels continued to rise. Many homes in sand-plain areas in the general vicinity of Scotia and Schenectady were troubled with flooded cellars and septic tanks. The May level in an observation well at Scotia in the lower Mohawk Valley was the highest observed in the 27 years of record. By the end of June downward trend of the water table was established in all wells, and levels in western counties were below average, a position they held till the end of the year. During July, August, and September, the declining trend throughout the State continued at a greater than average rate bringing levels in northern and eastern New York near or below normal and those in western counties far below normal. In late September the seasonal trend upward began on schedule only in northern New York. Water levels in other areas continued downward even during October and much of November; and record lows were recorded for many wells in

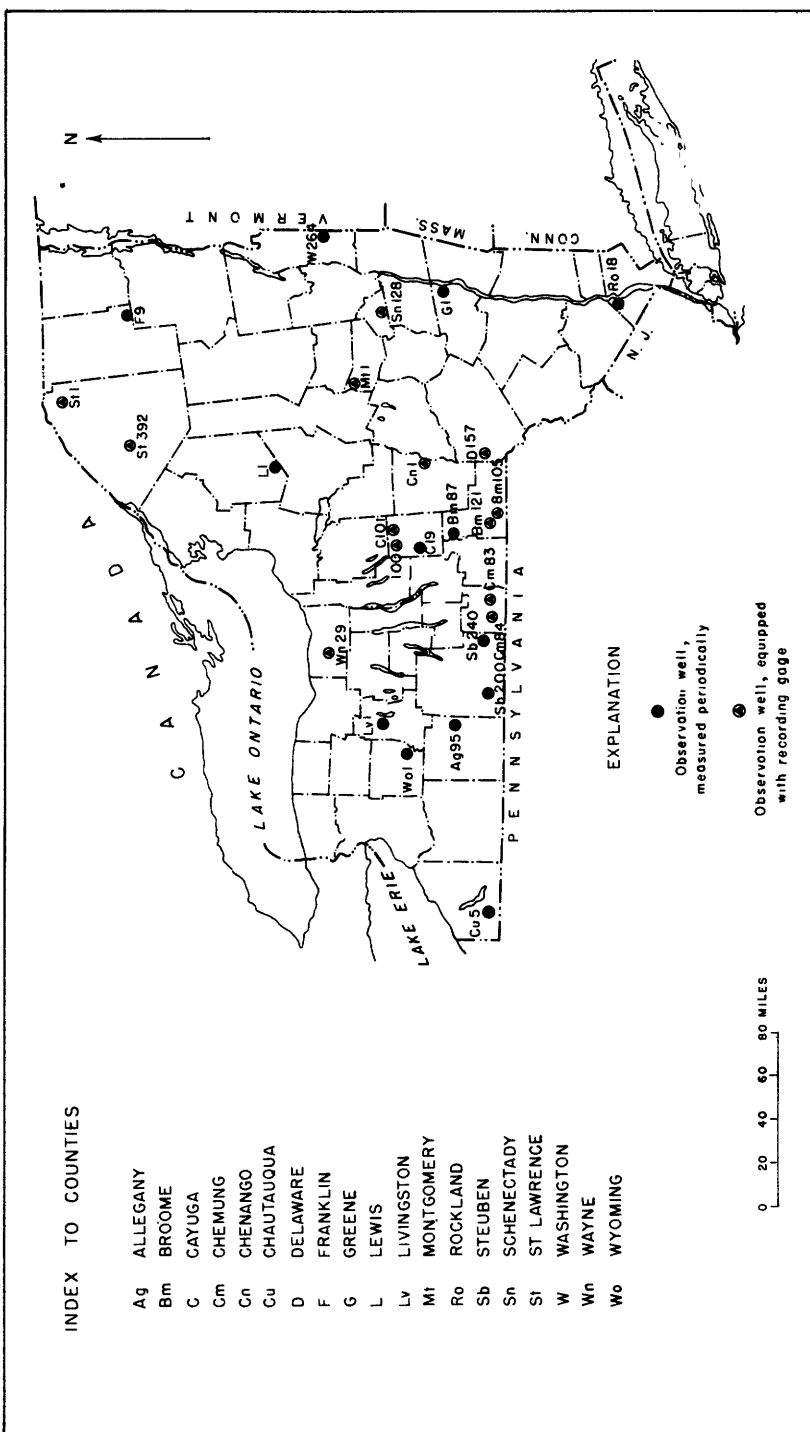


Figure 24. -- Location of observation wells in Upstate New York, 1952.



Figure 25. --Month-end water levels and average water levels for 9 years of record in wells Mt 1, Wo 1, and St 1, Upstate New York.

western and central counties. Above-normal precipitation caused water levels in all wells to trend upward at a rapid rate in December, resulting in normal stages in most wells by the end of December, although some in the western counties were still below normal. (See fig. 25.)

Well-Numbering System

Wells in Upstate New York are numbered consecutively in each county. A letter or combination of two letters from the name of the county is prefixed to the well numbers in that county. Thus, the letters "Ag" are prefixed to all well numbers in Allegany County.

Well Descriptions and Water-Level Measurements

(Water levels are in feet below land-surface datum.)

Allegany County

Ag 95. Ronald Mullikin. Near Almond. Lat. 42°20'04", long. 77°44'24". Dug domestic water-table well in glacial till, diameter 30 inches, depth 13 feet. Land-surface datum is about 1,550 feet above msl. Highest water level 0.40 below lsd, Apr. 12, 1952. Records available: 1946-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	5.36	Apr. 5	1.16	July 5	4.50	Sept. 27	11.40
12	4.71	12	.40	12	5.36	Oct. 4	11.53
19	2.78	19	2.21	19	5.75	11	11.73
26	1.98	26	4.36	26	6.70	25	11.37
Feb. 2	1.48	May 3	3.40	Aug. 2	6.76	Nov. 1	11.06
9	1.25	10	2.41	9	6.92	8	10.77
16	1.06	17	2.48	16	7.11	15	10.30
23	1.89	24	2.63	20	7.50	22	10.13
Mar. 1	1.87	31	3.11	23	7.43	29	9.50
8	1.84	June 7	3.26	30	8.00	Dec. 6	9.23
15	1.91	14	3.61	Sept. 6	8.40	13	8.74
22	1.81	21	3.81	13	9.20	20	8.01
29	1.79	28	4.13	20	9.94	27	7.46

Broome County

Bm 87. Helen Frawley. Near Center Lisle. Lat. 42°19'40", long. 76°05'58". Dug unused water-table well in glacial till, diameter 36 inches, depth 19 feet. Land-surface datum is about 1,520 feet above msl. Highest water level 0.84 below lsd, Feb. 26 1949; lowest 8.88 below lsd, Nov. 1, 1947. Records available: 1947-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 19	7.47	Sept. 24	7.67	Oct. 29	6.89	Dec. 2	6.8
26	7.58	Oct. 1	7.6	Nov. 5	6.88	9	6.5
Sept. 3	7.65	8	7.5	12	6.85	16	5.89
10	7.64	15	7.4	19	6.82	23	5.75
17	7.69	22	7.2	26	6.8	30	4.93

Bm 105. U. S. Geol. Survey. Prospect and Front Sts., Binghamton. Lat. 42°06'43", long. 75°54'39". Drilled observation artesian well in glacial outwash, diameter 6 inches, depth 143 feet. Land-surface datum is about 850 feet above msl. Water level affected by stage of Chenango River. Highest water level 8 estimated, below lsd, Mar. 29, 1950; lowest 19.87 below lsd, Oct. 2, Nov. 3-5, 1952. Records available: 1947-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	15.40	17.26	e18.7	15.99	e18.6	17.90	19.58	19.26	19.68	19.84	e19.86	18.88
2	13.73	17.13	e18.8	15.38	e18.7	17.95	19.63	19.29	19.64	19.87	e19.86	18.97
3	e14.4	16.19	e18.8	14.08	e18.7	18.17	19.67	19.35	19.58	19.80	19.87	18.99
4	e15.4	16.20	18.82	14.38	e18.8	18.33	19.67	19.40	19.50	19.71	19.87	19.03
5	e16.1	14.82	18.80	14.55	e18.9	18.46	19.67	19.40	e19.5	19.67	19.87	19.03
6	e16.6	15.26	18.64	13.36	18.94	18.53	19.70	19.30	e19.6	19.70	19.86	18.61
7	e17.2	16.07	18.66	13.59	18.97	18.54	19.72	19.29	e19.6	19.70	19.82	17.44
8	.....	16.56	18.71	14.48	19.00	18.51	19.74	19.37	e19.7	.....	19.80	17.78
9	.....	16.80	18.78	15.17	19.03	18.60	19.74	19.45	19.69	.....	19.74	17.98
10	.....	17.11	18.77	15.77	19.05	18.63	19.41	19.45	19.71	.....	19.71	17.98
11	.....	17.26	18.69	e16.2	19.05	18.77	16.18	19.50	19.73	.....	19.71	17.51
12	.....	17.48	11.93	e16.7	18.98	18.89	17.40	19.50	19.75	.....	19.68	e12.6
13	.....	e17.7	13.20	e16.7	16.79	18.96	18.15	19.27	19.75	19.66	19.63	e13.9
14	e18.0	e17.8	14.66	e16.4	16.86	19.05	18.57	19.29	e19.8	19.69	19.67	e15.2
15	17.96	e18.0	15.58	16.23	17.19	19.11	18.80	19.40	19.82	19.72	19.69	16.26

Bm 105--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	15.76	e18.1	16.28	16.59	17.19	19.17	18.91	19.44	19.79	19.72	19.70	16.90
17	16.15	e18.1	16.82	17.05	17.41	19.21	19.06	19.44	19.68	19.73	19.70	17.34
18	16.15	18.15	17.16	17.32	17.50	19.24	19.16	18.77	19.54	19.74	19.69	17.59
19	14.98	18.21	17.20	17.54	17.76	19.25	19.24	19.07	19.57	19.74	19.64	17.81
20	15.60	18.28	17.30	17.69	17.93	19.30	19.28	19.24	19.59	19.76	19.58	18.03
21	16.26	18.32	16.82	17.86	17.93	19.35	19.28	19.28	19.60	e19.78	19.50	18.11
22	.....	18.44	14.82	17.99	16.71	19.38	18.99	19.29	19.64	e19.80	18.44	18.11
23	.....	18.45	14.73	e18.1	17.12	19.39	18.52	19.29	19.69	e19.81	17.71	18.09
24	.....	18.55	14.27	e18.1	17.49	19.39	18.71	19.40	19.71	19.82	17.58	18.09
25	.....	18.58	14.37	e18.1	17.49	19.42	18.71	19.47	19.73	19.82	18.06	17.99
26	.....	e18.6	14.41	18.17	15.82	19.46	18.93	19.52	19.75	19.83	18.32	17.86
27	.....	e18.6	14.28	18.29	16.22	19.52	19.00	19.55	19.76	19.83	18.41	18.05
28	e13.6	e18.7	14.54	18.38	16.99	19.55	18.97	19.58	19.79	19.83	18.41	18.43
29	e15.0	e18.7	15.38	18.41	17.28	19.56	19.09	19.62	19.80	e19.84	18.60	18.53
30	e16.6	.....	15.92	18.47	17.59	19.56	19.09	19.66	19.83	e19.85	18.75	18.38
31	17.08	.....	15.99	.....	17.82	.....	19.17	19.68	.....	e19.86	.....	18.38

e Estimated.

Bm 121. U. S. Geol. Survey. Camden and Main Sts., Johnson City. Lat. 42°06'57", long. 75°58'35". Drilled observation artesian well in glacial outwash, diameter 6 inches, depth 51 feet. Land-surface datum is about 835 feet above msl. Highest water level 17.85 below lsd, Dec. 10, 1950; lowest 31.43 below lsd, Nov. 21-23, 1952. Records available: 1947-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	22.91	21.26	25.08	20.38	23.24	23.14	e27.1	.....	29.28	29.95	31.02	30.62
2	22.48	21.40	25.22	20.44	23.41	23.07	e27.2	.....	29.28	30.00	31.07	30.44
3	21.65	e21.5	25.30	20.45	23.59	23.00	e27.4	.....	29.25	30.06	31.04	30.30
4	20.78	21.57	25.37	20.43	23.75	23.02	e27.5	.....	29.18	30.14	31.05	30.23
5	20.41	21.60	25.45	20.33	23.84	23.12	e27.6	.....	29.13	30.21	31.07	30.23
6	20.46	21.60	25.54	20.22	23.94	23.27	e27.7	.....	29.09	30.26	31.10	30.30
7	20.57	21.60	25.61	19.99	24.07	23.45	e27.8	.....	29.07	30.27	31.13	30.36
8	20.71	21.65	25.67	19.60	24.23	23.61	27.91	.....	29.07	30.28	31.16	30.37
9	20.87	21.75	25.73	19.37	24.39	23.72	27.99	.....	29.06	30.32	31.20	30.37
10	e20.9	21.86	25.74	19.47	24.58	23.82	28.07	.....	29.02	30.35	31.21	30.35
11	e21.2	21.94	25.74	19.64	24.74	23.95	28.08	.....	29.03	30.39	31.21	30.35
12	e21.6	22.04	25.65	19.85	24.85	24.09	28.07	.....	29.07	30.44	31.21	30.35
13	e21.9	22.18	23.02	20.04	24.85	24.25	27.98	.....	29.14	30.46	31.23	29.96
14	e22.1	22.32	20.97	20.20	24.82	24.44	27.89	.....	29.22	30.49	31.27	28.10
15	22.34	22.53	20.39	20.30	24.71	24.61	27.78	.....	29.26	30.53	31.32	26.85
16	22.52	22.74	20.24	20.38	24.59	24.74	27.70	.....	29.30	30.58	31.37	26.15
17	22.64	22.93	20.25	20.50	24.51	24.87	27.71	.....	29.35	30.64	31.40	25.90
18	22.71	23.09	20.37	20.65	24.46	25.03	27.76	e29.1	e29.4	30.70	31.40	25.87
19	22.72	23.26	20.54	20.87	24.39	25.21	27.85	29.09	e29.4	30.76	31.40	25.96
20	22.72	23.41	20.75	21.09	24.26	25.40	27.96	29.04	e29.5	30.80	31.41	26.09
21	22.68	23.62	20.95	21.29	24.15	25.61	.....	29.01	e29.5	30.82	31.43	26.24
22	22.61	23.83	21.05	21.48	24.09	25.78	.....	29.02	29.57	30.86	31.43	26.37
23	22.55	24.05	21.07	21.69	24.05	25.87	.....	29.06	29.59	30.89	31.43	26.48
24	22.57	24.25	21.05	21.94	24.01	25.97	.....	e29.1	29.63	30.93	31.42	26.60
25	22.62	24.40	20.91	22.18	24.01	26.09	.....	e29.1	29.68	30.97	31.33	26.70
26	22.70	24.53	20.70	22.42	23.96	26.24	.....	29.09	29.73	30.99	31.21	26.73
27	22.71	24.65	20.57	22.63	23.78	26.43	.....	29.07	29.79	30.99	31.11	26.73
28	22.66	24.79	20.49	22.79	23.45	26.62	.....	29.10	29.86	30.98	31.03	26.71
29	21.95	24.93	20.40	22.93	23.24	26.82	.....	29.16	29.89	30.96	30.53	26.62
30	21.25	.....	20.34	23.08	23.19	e27.0	.....	29.22	29.91	30.96	30.79	26.52
31	21.14	.....	20.33	.....	23.18	.....	.....	29.27	.....	30.98	.....	26.50

e Estimated.

Chautauqua County

Cu 5. State Department of Conservation. Near Panama. Lat. 42°03'28", long. 79°29'59". Dug unused water-table well in glacial till, diameter 36 inches, depth 33 feet. Land-surface datum is about 1,770 feet above msl. Highest water level 1.61 below lsd, Jan. 26, 1952; lowest 9.41 below lsd, May 24, 1949. Records available: 1949-52.

Cu 5--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	2.38	Apr. 5	2.38	July 5	5.44	Oct. 9	7.31
12	2.61	12	2.52	12	5.88	11	7.34
19	2.08	19	2.77	19	6.36	18	7.56
26	1.61	26	3.02	26	6.63	25	7.78
Feb. 2	1.68	May 3	3.37	Aug. 2	6.80	Nov. 1	7.97
9	1.87	10	3.63	9	6.55	8	8.09
16	2.09	17	2.95	16	6.28	15	8.01
23	2.38	24	2.43	23	6.39	22	7.10
Mar. 1	2.64	31	3.02	Sept. 6	6.70	29	6.62
8	2.68	June 7	3.39	13	6.81	Dec. 6	5.03
15	2.79	14	3.81	20	7.03	20	3.74
22	2.38	21	4.32	27	7.19	27	3.20
29	2.26	28	4.84	Oct. 4	7.30		

Chemung County

Cm 83. Wallace Dailey. Near Lowman. Lat. 42°04'43", long. 76°41'01". Dug domestic water-table well in glacial till, diameter 30 inches, depth 21 feet. Land-surface datum is about 1,480 feet above msl. Highest water level 2.46 below lsd, Mar. 25, 1950; lowest 12.90 below lsd, Oct. 4, 1952. Records available: 1946-52.

Jan. 5	3.40	Apr. 5	3.35	July 5	10.38	Oct. 4	12.90
12	4.38	12	3.30	12	10.23	11	12.07
19	3.20	19	3.22	19	11.96	18	12.10
26	4.22	26	4.48	26	9.90	25	12.20
Feb. 2	3.64	May 3	5.49	Aug. 2	10.18	Nov. 1	12.23
9	3.40	10	6.76	9	10.94	8	12.30
16	4.70	17	6.00	20	11.28	15	12.40
23	6.30	24	3.37	23	11.25	22	12.36
Mar. 1	7.25	31	3.55	30	11.36	29	8.24
8	7.70	June 7	4.80	Sept. 6	11.50	Dec. 6	5.88
15	5.62	14	6.68	13	11.68	13	3.17
22	3.79	21	7.35	20	11.80	20	4.19
29	3.27	28	9.70	27	11.96		

Cm 84. Remington Rand, Inc. South Main St., Elmira. Lat. 42°04'17", long. 76°47'47". Drilled unused artesian (?) well in glacial outwash, diameter 6 inches, depth 257 feet. Land-surface datum is about 850 feet above msl. Highest water level 15.35 below lsd, Apr. 3, 1950; lowest 19.95 below lsd, Oct. 29, 1951. Records available: 1947-52.

Jan. 7	16.28	Apr. 7	15.85	July 7	16.80	Oct. 6	18.15
14	16.26	14	15.73	14	16.82	13	18.25
21	16.00	21	15.62	21	16.97	20	18.15
28	15.88	28	15.83	28	17.21	27	18.12
Feb. 4	15.90	May 4	15.90	Aug. 4	17.23	Nov. 3	18.06
11	15.94	11	16.18	11	17.25	10	18.30
18	15.97	19	16.05	18	17.27	17	18.42
25	16.00	26	15.95	25	17.04	24	18.15
Mar. 3	16.20	June 2	16.08	Sept. 2	17.30	Dec. 1	17.56
10	16.40	9	16.12	8	17.33	8	16.80
17	16.00	16	16.27	15	17.52	15	16.54
24	15.98	23	16.43	22	17.75	22	16.20
31	15.81	30	16.57	29	18.09	29	16.26

Chenango County

Cn 1. U. S. Geol. Survey. Near South New Berlin. Lat. 42°31'55", long. 75°25'30". Dug observation water-table well in glacial till, diameter 21 inches, depth 8 feet. Land-surface datum is about 1,452 feet above msl. Highest water level 0.00 many times; lowest 6.13 below lsd, Oct. 10, 1936. Records available: 1934-51. No measurement made in 1952.

Cortland County

C 19. Cortland Water Works. Broadway, Cortland. Lat. 42°35'45", long. 76°11'45". Dug unused water-table well in glacial outwash, diameter 40 feet, depth 19 feet. Land-surface datum is about 1,150 feet above msl. Highest water level 2.98 below lsd, Apr. 5, 1947; lowest 7.73 below lsd, Nov. 15, 1952. Records available: 1947-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	4.22	Apr. 5	4.02	July 5	5.01	Oct. 4	6.90
12	4.20	12	4.07	12	5.10	11	6.95
19	4.21	19	4.24	19	5.12	18	7.01
26	4.25	26	4.24	Aug. 2	5.32	25	7.15
Feb. 2	4.12	May 3	4.45	9	5.49	Nov. 1	7.37
9	4.15	10	4.45	16	5.63	6	7.51
16	3.90	17	4.46	19	5.54	15	7.73
23	3.82	24	4.46	23	5.71	22	7.29
Mar. 1	4.79	31	4.56	30	5.92	29	6.75
8	4.75	June 7	4.65	Sept. 6	5.98	Dec. 6	6.21
15	4.63	14	4.70	13	6.35	13	4.95
22	4.50	21	4.75	20	6.60	20	4.63
29	4.21	28	4.89	27	6.75	27	4.50

C 100. U. S. Geol. Survey. Near East Homer. Lat. 42°42'00", long. 76°06'50". Dug observation water-table well in glacial till, diameter 18 inches, depth 9 feet. Land-surface datum is about 1,500 feet above msl. Highest water level 0.00 many times; lowest 6.15 below lsd, Oct. 26, 1939. Records available: 1938-52.

Apr. 13	0.62	June 23	3.30	Sept. 2	3.45	Nov. 5	2.70
21	2.53	30	3.55	8	3.75	11	.45
28	2.90	July 6	3.75	13	4.00	16	2.42
May 5	3.18	14	2.95	22	4.20	23	.45
13	.20	21	1.50	30	4.50	30	2.55
19	.95	28	3.15	Oct. 6	4.55	Dec. 7	.15
26	.20	Aug. 4	3.25	14	3.10	14	.00
June 2	2.20	11	2.68	21	3.28	21	.00
10	2.75	19	2.75	27	2.95	28	.25
17	3.25	26	3.10				

C 101. U. S. Geol. Survey. Near Truxton. Lat. 42°46'00", long. 76°01'10". Dug observation water-table well in glacial till, diameter 12 inches, depth 6 feet. Land-surface datum is about 1,600 feet above msl. Highest water level 0.00 many times; lowest dry Aug. 17 - Oct. 12, 1936, Sept. 7 - Nov. 1, 1939. Records available: 1933-51. No measurement made in 1952.

Delaware County

D 157. U. S. Geol. Survey. Near China. Lat. 42°09'35", long. 75°23'35". Dug observation water-table well in glacial till, diameter 18 inches, depth 10 feet. Land-surface datum is about 1,540 feet above msl. Highest water level 0.00 many times; lowest 10.49 below lsd, Oct. 3, 1951. Records available: 1934-52.

Jan. 6	2.14	Apr. 13	3.23	July 13	2.96	Oct. 12	7.91
13	3.98	20	3.44	20	4.58	19	8.06
20	1.39	27	2.98	27	4.55	26	8.22
27	.85	May 4	3.95	Aug. 3	5.48	Nov. 2	8.36
Feb. 3	1.90	11	4.53	10	6.17	9	8.55
10	2.46	18	2.38	17	6.59	16	8.60
17	4.09	24	2.58	24	6.88	23	4.35
24	4.68	June 1	3.60	31	7.14	30	3.64
Mar. 2	5.11	8	4.36	Sept. 7	6.80	7	2.21
16	1.72	15	4.73	14	7.16	14	2.06
23	.91	22	5.39	21	7.33	21	2.99
30	1.87	29	5.95	28	7.59	28	2.57
Apr. 6	1.16	July 6	6.36	Oct. 5	7.72		

Franklin County

F 9. Arthur Fletcher. Near Bloomingdale. Lat. 44°25'36", long. 74°03'30". Dug unused water-table well in glacial till, diameter 4 feet, depth 11 feet. Land-surface datum is about 1,680 feet above msl. Highest water level 2.68 below lsd, Mar. 30, 1951; lowest 8.72 below lsd, Oct. 3, 1952. Records available: 1949-52.

F 9--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	5.13	May 16	5.11	Aug. 1	7.36	Oct. 17	8.50
11	5.66	23	4.94	8	7.90	24	8.16
18	4.53	30	4.95	16	8.11	31	8.26
25	5.42	June 6	5.39	22	8.60	Nov. 7	8.43
Mar. 28	4.70	13	5.75	29	7.96	14	8.43
Apr. 4	5.10	20	6.45	Sept. 5	8.31	21	8.46
11	4.14	27	6.32	12	8.45	28	8.55
17	4.22	July 4	6.79	19	8.61	Dec. 5	8.65
18	4.31	11	6.98	26	8.71	12	7.76
25	4.81	18	7.09	Oct. 3	8.72	19	6.73
May 2	5.33	25	7.30	10	8.11	26	6.60
9	5.60						

Greene County

G 1. Magnus Andersen. Near West Coxsackie. Lat. $42^{\circ}23'20''$, long. $73^{\circ}48'19''$. Dug domestic water-table well in glacial till(?), diameter 36 inches, depth 19 feet. Land-surface datum is about 125 feet above msl. Highest water level 1.90 below lsd, May 5, 1947, Mar. 27, 1950, Apr. 14, 1952; lowest 12.75 below lsd, Nov. 1, 1948. Records available: 1945-52.

Jan. 7	2.70	Apr. 7	2.04	July 7	7.14	Oct. 6	7.76
14	3.46	14	1.90	14	6.99	13	8.04
21	2.18	21	2.95	21	7.48	20	8.56
28	1.98	28	3.40	28	7.97	27	9.13
Feb. 4	2.90	May 5	4.05	Aug. 4	8.36	Nov. 3	9.56
11	2.60	13	3.94	11	8.72	10	10.14
18	3.90	19	3.94	18	8.76	17	10.58
25	4.68	26	3.97	26	8.93	24	9.95
Mar. 3	4.97	June 2	1.95	Sept. 1	9.44	Dec. 1	8.00
10	4.97	9	3.71	8	6.85	9	5.67
17	2.46	16	4.77	15	6.98	15	2.64
24	1.91	23	5.77	22	7.45	22	3.59
31	2.15	30	6.38	29	7.99	29	3.70

Lewis County

L 1. State Department of Conservation. Near West Leyden. Lat. $43^{\circ}29'32''$, long. $75^{\circ}27'40''$. Dug domestic water-table well in glacial till(?), diameter 36 inches, depth 19 feet. Land-surface datum is about 1,670 feet above msl. Highest water level 3.20 below lsd, Mar. 30, 1951; lowest 10.63 below lsd, Aug. 19, 1949. Records available: 1949-52.

Jan. 4	6.6	Apr. 11	3.8	July 4	7.6	Oct. 3	7.09
11	6.4	16	4.20	11	7.7	10	6.52
18	5.0	18	4.58	18	7.8	17	7.01
25	5.3	25	5.35	25	7.84	24	7.3
Feb. 1	5.02	May 2	6.2	Aug. 1	8.4	31	7.4
8	5.55	9	6.9	8	8.7	Nov. 7	7.3
15	5.9	16	5.2	15	8.5	14	7.4
22	6.55	23	5.43	22	8.68	21	7.6
29	6.8	30	5.81	29	8.8	28	7.78
Mar. 7	5.9	June 6	7.0	Sept. 5	9.0	Dec. 5	5.8
14	4.2	13	7.1	12	9.1	12	3.24
21	4.88	20	6.94	19	8.8	19	3.84
28	5.9	27	7.53	26	8.68	26	4.05
Apr. 4	4.84						

Livingston County

Lv 1. William Redmond. 33 North St., Geneseo. Lat. $42^{\circ}48'00''$, long. $77^{\circ}48'46''$. Dug unused water-table well in glacial till(?), diameter 36 inches, depth 28 feet. Land-surface datum is about 790 feet above msl. Highest water level 0.3 below lsd, Mar. 15, 1945; lowest 9.74 below lsd, Nov. 29, 1952. Records available: 1942-52.

Jan. 25	4.48	Apr. 29	4.50	July 25	6.87	Oct. 23	9.37
Feb. 25	4.59	May 27	4.70	Aug. 25	8.07	25	9.42
Mar. 25	4.00	June 26	5.75	Oct. 4	9.06	Nov. 29	9.74

Montgomery County

Mt 1. Floyd Groff. Near St. Johnsville. Lat. 43°01'43", long. 74°42'38". Dug unused water-table well in glacial till, diameter 24 inches, depth 12 feet. Land-surface datum is about 720 feet above msl. Highest water level 4.08 below lsd, Apr. 15, 1948; lowest 9.99 below lsd, Aug. 28, 1949. Records available: 1942-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.94	6.74	7.43	6.28	6.63	6.59	7.93	8.51	9.29	9.46	9.49	8.94
2	e6.84	6.78	7.46	6.25	6.68	6.59	7.97	8.55	9.27	9.47	9.50	8.94
3	6.56	6.78	7.48	6.13	6.73	6.56	8.01	8.55	9.15	9.47	9.50	8.95
4	6.39	6.77	7.48	5.97	5.79	6.56	8.05	8.56	9.05	9.43	9.51	8.96
5	6.36	6.46	7.51	5.80	6.83	6.60	8.09	8.58	e9.01	9.43	9.51	8.96
6	6.40	6.33	7.53	5.43	6.88	6.67	8.13	8.60	e9.03	9.43	9.51	8.95
7	6.46	e6.42	7.56	4.73	6.94	6.75	8.18	8.62	e9.05	9.41	9.52	8.85
8	6.51	e6.54	7.57	4.88	6.99	6.82	8.23	8.66	e9.08	9.40	9.52	8.76
9	6.58	6.58	7.58	4.98	7.03	6.88	8.24	8.69	e9.10	9.36	9.52	8.67
10	6.67	6.62	7.58	5.07	7.07	6.93	8.22	8.70	9.13	9.34	9.51	8.58
11	6.76	6.68	7.57	5.21	7.10	7.00	7.94	8.71	9.18	9.32	9.50	8.50
12	6.84	6.73	7.40	5.32	7.09	7.06	7.77	8.73	9.21	9.32	9.48	8.12
13	6.88	6.79	7.17	e5.4	7.03	7.11	7.70	8.73	9.27	9.32	9.46	7.52
14	6.95	6.86	7.02	e5.4	6.93	7.16	7.69	8.75	9.31	9.32	9.46	7.18
15	6.96	6.86	7.00	e5.5	6.85	7.22	e7.7	8.79	9.32	9.33	9.46	7.01
16	6.87	7.00	7.00	e5.6	6.78	7.27	e7.8	8.81	9.32	9.35	9.46	6.95
17	6.58	7.07	7.05	e5.6	6.70	7.31	e7.9	8.82	9.27	9.36	9.44	6.98
18	6.39	7.13	7.08	e5.7	6.68	7.36	e7.9	8.84	9.24	9.37	9.42	7.04
19	6.16	7.19	7.06	5.74	6.67	7.41	7.97	8.87	9.24	9.38	9.39	7.09
20	6.13	7.24	7.03	5.85	6.68	7.47	8.01	8.91	9.24	9.39	9.37	7.13
21	e6.2	7.28	7.01	5.95	6.68	7.50	8.08	8.95	9.25	9.40	9.36	7.17
22	e6.2	7.32	6.97	6.03	6.61	7.55	8.12	8.98	9.26	9.41	9.32	7.21
23	e6.3	7.34	6.90	6.13	6.52	7.60	8.18	9.00	9.28	9.41	9.27	7.24
24	e6.4	7.36	6.84	6.20	6.47	7.63	8.24	9.04	9.30	9.42	9.18	7.27
25	e6.5	7.37	6.68	6.29	6.47	7.67	8.27	9.07	9.33	9.44	9.11	7.28
26	6.60	7.39	6.49	6.36	6.44	7.73	8.31	9.10	9.34	9.45	9.04	7.28
27	6.60	7.39	6.33	6.42	6.37	7.78	8.34	9.14	9.36	9.45	9.00	7.28
28	6.50	7.39	6.18	6.48	6.33	7.82	8.37	9.17	9.39	9.45	8.97	7.29
29	6.46	7.42	6.23	6.52	6.41	7.85	8.39	9.19	9.41	9.47	8.96	7.31
30	6.50		6.28	6.58	6.48	7.87	8.43	9.24	9.44	9.48	8.94	7.33
31	6.53		6.28		6.57		8.47	9.27		9.49		7.36

e Estimated.

Rockland County

Ro 18. Palisades Interstate Park. In Bear Mountain section near Doodletown Rd. and Seven Lakes Dr. Lat. 41°18'02", long. 73°59'30". Drilled unused water-table well in unconsolidated glacial deposit, diameter 6 inches, depth 61 feet. Land-surface datum is about 380 feet above msl. Highest water level 11.15 below lsd, Mar. 14, 1952; lowest 24.65 below lsd, Nov. 25, 1951. Records available: 1949-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	14.97	Mar. 21	13.85	May 23	14.33	July 25	18.61
23	14.88	28	13.96	30	14.31	Aug. 1	18.53
31	12.65	Apr. 4	14.89	June 6	13.12	9	18.52
Feb. 8	12.78	11	12.86	13	14.61	15	18.65
15	14.58	19	13.92	20	16.51	22	18.43
22	15.56	26	15.20	27	16.51	29	18.39
29	15.89	May 2	12.39	July 4	17.92	Sept. 5	18.13
Mar. 6	16.26	9	12.39	11	17.73	12	18.63
14	11.15	16	15.81	18	18.36	Oct. 28	21.43

St. Lawrence County

St 1. Benjamin Compeau. Near Brasher Center. Lat. 44°51'52", long. 74°46'53". Dug unused water-table well in glacial till, diameter 34 inches, depth 21 feet. Land-surface datum is 257.13 feet above msl. Highest water level 3.00 below lsd, Apr. 6, 1947; lowest 17.8 below lsd, Oct. 1-4, 1949. Records available: 1942-52.

St 1--Continued.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.30	6.54	7.48	....	6.62	5.87	7.46	8.58	11.55	12.63	9.09	8.38
2	e4.9	6.58	7.50	....	6.71	5.93	7.37	8.68	11.62	12.60	9.09	8.36
3	e5.0	6.59	7.52	5.60	6.80	6.05	7.32	8.79	11.70	12.57	9.07	8.33
4	5.31	6.59	7.53	5.56	6.87	6.15	7.30	8.88	11.77	12.53	9.07	8.32
5	5.44	6.55	7.56	5.52	6.94	6.25	7.28	8.98	11.84	12.47	9.07	8.30
6	5.54	6.54	7.58	....	7.01	6.36	7.25	9.08	11.90	12.41	9.05	8.28
7	5.62	6.52	7.59	....	7.06	6.42	7.24	9.19	11.96	12.34	9.04	8.27
8	5.70	6.56	7.59	....	7.06	6.48	7.26	9.30	12.02	12.23	9.04	8.24
9	5.77	6.62	7.58	....	7.06	6.58	7.31	9.41	12.07	12.07	9.04	8.20
10	5.86	6.68	7.56	....	7.07	6.68	7.34	9.52	12.13	11.89	9.02	8.14
11	5.94	6.73	7.53	....	7.10	6.76	7.34	9.62	12.19	11.67	9.00	8.07
12	6.01	6.78	7.46	....	7.10	6.86	7.33	9.73	12.25	11.44	8.97	6.95
13	6.07	6.84	7.42	....	5.91	6.95	7.29	9.85	12.31	11.21	6.95	5.10
14	6.14	6.91	7.34	....	5.22	7.04	7.27	9.95	12.37	11.00	8.92	5.21
15	6.16	6.97	7.27	....	5.35	7.14	7.30	10.06	12.43	10.79	8.89	5.37
16	6.00	7.03	7.19	5.33	5.49	7.23	7.36	10.16	12.49	10.58	8.86	5.50
17	5.23	7.07	....	5.45	5.63	7.31	7.43	10.27	12.55	10.39	8.84	5.57
18	5.29	7.10	....	5.56	5.76	7.39	7.50	10.37	12.60	10.22	8.82	5.57
19	5.22	7.17	....	5.64	5.86	7.46	7.56	10.47	12.65	10.05	8.79	5.64
20	5.34	7.20	....	5.75	5.95	7.54	7.62	10.57	12.70	9.92	8.76	5.72
21	5.39	7.24	....	5.84	5.96	7.62	7.68	10.66	12.73	9.79	8.73	5.81
22	5.53	7.29	....	5.92	5.77	7.71	7.73	10.75	12.75	9.68	8.72	5.88
23	5.66	7.32	....	5.93	5.52	7.80	7.80	10.84	12.76	9.58	8.68	5.93
24	5.82	7.35	....	5.96	5.65	7.87	7.88	10.92	12.76	9.48	8.65	5.98
25	5.96	7.37	....	6.05	5.70	7.94	7.94	11.00	12.76	9.40	8.61	5.98
26	6.09	7.39	....	6.14	5.06	7.97	8.03	11.08	12.75	9.34	8.57	5.40
27	6.20	7.41	....	6.24	5.08	7.95	8.12	11.15	12.73	9.28	8.52	5.14
28	6.26	7.43	....	6.34	5.26	7.86	8.20	11.22	12.71	9.22	8.49	5.35
29	6.32	7.45	....	6.44	5.44	7.71	8.30	11.30	12.68	9.18	8.45	5.53
30	6.45	....	....	6.53	5.62	7.58	8.39	11.38	12.66	9.15	8.41	5.67
31	6.52	....	....	....	5.78	....	8.49	11.46	....	9.12	....	5.78

e Estimated.

St 392. Murray Babcock. Hermon. Lat. 44°28'10", long. 75°13'31". Dug unused water-table well in glacial outwash (?), diameter 36 inches, depth 28 feet. Land-surface datum is about 565 feet above msl. Highest water level 2.89 below lsd, May 5, 1951; lowest 16.19 below lsd, Sept. 17, 1949. Records available: 1949-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 17	3.82	Sept. 20	15.51	Oct. 25	11.59	Nov. 29	10.77
Aug. 21	13.21	27	15.67	Nov. 1	11.61	Dec. 6	10.31
23	13.90	Oct. 4	15.24	8	11.60	13	7.69
30	14.80	11	12.73	15	11.48	20	6.70
Sept. 6	14.64	18	11.76	22	11.35	27	6.67
13	15.14						

Schenectady County

Sn 128. City of Schenectady. Lat. 42°49'26", long. 73°59'22". Dug unused water-table well in glacial outwash, diameter 47 feet, depth 40 feet. Land-surface datum is 241.36 feet above msl. Water level affected by stage of Mohawk River and pumpage from city of Schenectady well field. Highest water level 21.06 below lsd, Mar. 23, 1948; lowest 37.47 below lsd, Feb. 15, 1948. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	27.65	28.40	....	33.51	....	30.49	32.18	33.95	32.61	32.45	32.83	32.30
2	26.24	28.40	....	33.50	....	29.66	32.93	33.78	32.20	32.62	32.79	32.61
3	25.70	28.24	33.75	32.30	....	30.33	32.94	33.72	32.20	32.66	32.52	32.64
4	27.26	27.50	34.13	31.64	....	30.76	32.94	33.21	32.33	32.66	32.52	32.70
5	28.14	27.10	34.34	31.67	....	30.97	32.60	33.44	32.64	32.64	32.37	32.77
6	28.74	26.76	34.54	31.31	....	31.06	32.56	33.36	32.82	32.25	32.40	32.77
7	29.13	....	34.76	28.40	....	31.02	32.84	33.49	32.84	32.32	32.50	32.45
8	29.28	....	34.95	29.64	....	30.77	32.96	33.79	32.29	32.34	32.52	32.47
9	29.12	....	34.91	31.00	....	31.22	32.91	33.63	32.44	32.34	32.33	32.58
10	28.91	....	35.04	31.57	....	31.45	32.36	33.31	32.42	32.42	32.09	32.64

Sn 128--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	29.18	30.61	35.36	31.57	.....	31.62	30.60	33.09	32.71	32.43	32.38	32.41
12	29.14	.....	35.30	31.54	.....	32.11	30.56	33.15	33.03	32.42	32.46	31.13
13	28.99	.....	33.85	31.58	.....	32.82	31.40	33.16	33.13	32.16	32.58	29.98
14	29.30	.....	33.62	31.60	.....	33.14	32.87	33.31	33.13	32.34	32.78	30.47
15	29.50	.....	34.10	31.23	.....	33.25	33.46	33.25	32.62	32.48	32.83	31.08
16	29.50	.....	34.29	31.63	.....	33.20	33.53	33.16	32.53	32.59	32.83	31.79
17	28.95	.....	34.75	31.83	31.16	33.26	e33.7	32.66	32.52	32.68	32.59	.....
18	29.55	32.55	35.10	32.08	31.13	33.24	e33.8	32.30	32.64	32.71	32.60	.....
19	29.52	32.54	35.22	32.03	31.15	33.19	e33.7	32.37	32.97	32.60	32.60	.....
20	29.92	.....	35.30	31.90	31.46	33.05	33.36	32.54	32.97	32.28	32.68	.....
21	30.39	.....	35.27	31.88	31.19	32.96	32.91	32.61	32.82	32.45	32.69	34.04
22	30.51	.....	35.15	32.50	31.01	32.44	32.96	32.60	32.31	32.64	32.86	34.16
23	30.34	.....	34.67	32.81	31.17	31.98	33.27	32.60	32.64	32.64	32.47	34.16
24	29.94	.....	33.12	33.16	31.13	32.48	33.22	32.42	32.87	32.73	32.31	34.07
25	30.21	32.58	33.74	33.36	30.90	32.86	33.35	32.61	33.10	32.75	32.46	33.98
26	30.41	32.90	33.28	33.28	29.96	33.13	33.32	32.93	33.21	32.66	32.51	33.76
27	30.38	33.15	32.90	32.02	30.46	.....	33.01	33.29	33.21	32.21	32.52	33.43
28	24.94	33.28	32.08	31.71	30.79	.....	32.64	33.64	32.97	32.40	32.54	33.59
29	26.43	33.43	32.65	.....	30.95	32.80	33.13	33.85	32.35	32.40	32.73	33.87
30	27.34	.....	32.93	.....	30.93	32.08	33.67	33.85	32.41	32.65	32.65	34.21
31	27.96	.....	33.26	.....	30.49	.....	33.90	33.45	.....	32.79	.....	34.50

e Estimated.

Steuben County

Sb 200. Roy Calkins. Near Woodhull. Lat. 42°05'34", long. 77°25'18". Dug unused water-table well in glacial till, diameter 24 inches, depth 16 feet. Land-surface datum is about 1,420 feet above msl. Highest water level 4.06 below lsd, Mar. 31, 1951; lowest 13.80 below lsd, Dec. 24, 1949. Records available: 1946-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	5.23	Apr. 12	5.69	July 19	10.41	Oct. 11	11.34
12	5.90	20	6.23	27	10.64	18	11.57
20	6.10	26	6.92	Aug. 2	10.99	24	11.58
27	5.56	May 3	7.20	9	11.13	25	11.62
Feb. 2	5.41	10	7.71	16	11.38	Nov. 1	11.70
9	5.06	17	6.85	20	11.18	8	11.79
17	5.71	24	6.27	23	11.60	15	11.83
24	6.34	31	6.70	30	11.42	22	11.73
Mar. 1	6.71	June 7	7.22	Sept. 7	11.14	29	6.60
8	7.05	14	7.90	13	10.82	Dec. 6	5.86
16	6.35	21	8.23	20	10.35	13	4.78
22	6.09	28	9.04	27	10.90	20	5.15
30	5.72	July 5	9.35	Oct. 4	11.10	27	5.80
Apr. 6	5.11	12	10.10				

Sb 240. Corning Glass Works. West Market St., Corning. Lat. 42°08'37", long. 77°03'18". Drilled unused water-table well (?) in glacial outwash, diameter 10 inches, depth 78 feet. Land-surface datum is about 940 feet above msl. Highest water level 20.60 below lsd, Apr. 2, 1951; lowest 30.35 below lsd, Nov. 17, 1952. Records available: 1943-44, 1946-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	24.01	Apr. 7	22.92	July 7	27.95	Oct. 6	29.79
8	25.50	17	23.78	14	28.70	13	29.40
14	26.25	21	24.68	21	28.00	20	29.85
21	24.34	28	25.65	27	29.10	27	30.00
28	23.55	May 5	26.58	Aug. 4	29.45	Nov. 3	30.10
Feb. 5	23.85	12	26.80	11	29.64	10	30.10
11	24.73	19	26.23	18	29.40	17	30.35
18	25.70	26	23.06	25	29.28	24	27.45
25	26.67	June 2	25.25	Sept. 3	29.56	Dec. 1	28.08
Mar. 3	27.09	9	26.80	8	29.68	8	28.80
10	27.40	16	27.75	15	30.00	15	26.00
18	27.32	23	28.19	22	29.60	22	27.00
26	23.90	30	27.90	29	29.80	29	27.50
31	24.85						

Washington County

W 264. Village of Salem. N. Main St., Salem. Lat. 43°10'27", long. 73°19'43". Dug fire protection water-table well in glacial gravel, diameter 36 inches, depth 15 feet. Land-surface datum is 485.5 feet above msl. Highest water level 7.54 below lsd, Jan. 3, 1949; lowest 11.15 below lsd, Sept. 27, 1948. Records available: 1946-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	9.10	Apr. 7	8.11	July 7	10.33	Oct. 6	10.89
14	9.39	14	8.49	14	10.37	13	10.75
21	9.30	21	8.91	21	10.40	20	10.82
28	9.27	28	9.41	28	10.59	27	10.85
Feb. 4	8.97	May 5	9.74	Aug. 4	10.70	Nov. 3	10.94
11	9.20	12	9.70	11	10.73	10	10.95
18	9.61	19	10.02	18	11.02	17	10.97
25	9.92	26	10.06	25	11.02	24	10.88
Mar. 3	9.13	June 2	9.45	Sept. 1	10.97	Dec. 1	10.88
10	9.28	9	9.64	8	10.76	8	10.71
17	8.97	16	9.60	15	10.89	15	9.52
24	8.96	23	10.03	22	10.90	22	9.56
31	8.79	30	10.30	29	10.95	29	9.81

Wayne County

Wn 29. Village of Marion. 55 Mill St., Marion. Lat. 43°08'14", long. 77°11'19". Drilled unused artesian well in Lockport dolomite, diameter 8 inches, depth 107 feet. Land-surface datum is about 460 feet above msl. Highest water level 10.03 below lsd, Mar. 30, 1950; lowest 20.83 below lsd, Sept. 11, 1952. Records available: 1947-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	17.77	17.58	17.90	17.63	18.32	18.26	19.21	19.65	20.30	20.39	19.94	19.50
2	17.64	17.44	17.96	17.60	18.35	18.37	19.22	19.64	20.28	20.33	19.94	19.49
3	17.66	17.41	17.94	17.65	18.40	18.37	19.19	19.70	20.37	20.30	19.89	19.50
4	17.66	17.31	17.89	17.69	18.53	18.38	19.18	19.71	20.44	20.27	19.89	19.50
5	17.61	17.21	17.66	17.68	18.52	18.43	19.27	19.78	20.46	20.21	19.85	19.44
6	17.69	17.32	17.62	17.32	18.51	18.43	19.31	19.82	20.48	20.21	19.76	19.29
7	17.71	17.37	17.62	17.42	18.56	18.47	19.32	19.84	20.51	20.11	19.84	19.30
8	17.71	17.39	17.62	17.50	18.53	18.50	19.32	19.87	20.51	19.99	19.87	19.30
9	17.68	17.40	17.60	17.51	18.64	18.50	19.30	19.87	20.52	20.02	19.86	19.28
10	17.81	17.45	17.60	17.49	18.62	18.51	19.29	19.89	20.72	20.04	19.82	19.25
11	17.85	17.47	17.42	17.57	18.54	18.59	19.29	19.90	20.83	e20.3	19.82	19.14
12	17.83	17.57	17.20	17.60	18.33	18.63	19.32	19.90	20.82	20.38	19.84	19.01
13	17.84	17.63	17.20	17.57	18.10	18.66	19.35	19.91	20.79	20.14	19.84	18.91
14	17.79	17.69	17.32	17.42	18.11	18.66	19.37	19.91	20.76	20.09	19.84	18.89
15	17.77	17.73	17.32	17.51	18.07	18.68	19.41	19.98	20.73	20.08	19.81	18.89
16	17.71	17.73	17.34	17.57	18.09	18.71	19.47	19.98	20.53	20.05	19.82	18.90
17	17.71	17.69	17.46	17.60	18.15	18.69	19.51	19.93	20.42	20.07	19.82	18.92
18	17.58	17.79	17.50	17.68	18.22	18.75	19.51	19.96	20.42	20.07	19.82	19.02
19	17.62	17.84	17.46	17.73	18.27	18.84	19.39	19.98	20.39	19.98	19.72	19.04
20	17.55	17.84	17.35	17.83	18.27	18.95	19.40	20.01	20.40	20.05	19.65	19.04
21	17.67	17.84	17.35	17.90	18.06	19.02	19.39	20.04	20.37	20.05	19.58	18.98
22	17.67	17.90	17.36	17.95	18.04	19.00	19.35	20.11	20.37	20.00	19.50	18.99
23	17.69	17.90	17.36	18.00	18.10	18.99	19.35	20.13	20.34	.....	19.45	18.99
24	17.80	17.90	17.37	18.12	18.08	18.95	19.43	20.17	20.34	.....	19.49	18.95
25	17.80	17.91	17.43	18.13	17.95	18.99	19.47	20.24	20.36	.....	19.48	18.95
26	17.74	17.91	17.49	18.19	17.88	19.04	19.45	20.32	20.33	.....	19.41	18.94
27	17.55	17.86	17.52	18.24	17.97	19.11	19.46	20.35	20.36	19.95	19.41	19.02
28	17.45	17.83	17.57	18.28	18.01	19.14	19.46	20.40	20.34	19.93	19.44	19.02
29	17.52	17.86	17.65	18.29	18.11	19.13	19.50	20.37	20.34	19.95	19.44	19.01
30	17.57		17.70	18.30	18.17	19.13	19.53	20.37	20.39	19.95	19.50	19.05
31	17.59		17.66		18.21		19.61	20.35		19.93		19.05

e Estimated.

Wyoming County

Wo 1. State Dept. of Conservation. In Letchworth State Park, near Castile.
 Lat. 42°37'39", long. 78°00'03". Dug unused water-table well in glacial till, diameter 24 inches,
 depth 14 feet. Land-surface datum is about 1,030 feet above msl. Highest water level 0.5 below
 lsd, Apr. 5, 1947; lowest 12.94 below lsd, Nov. 22, 1952. Records available: 1942-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	2.59	Apr. 12	2.83	July 13	7.64	Oct. 12	12.23
12	3.92	19	2.44	20	8.36	19	12.37
19	2.14	26	3.24	27	8.97	22	12.46
26	2.52	May 3	3.76	Aug. 3	9.44	25	12.52
Feb. 2	3.24	10	4.19	10	9.84	Nov. 2	12.66
9	3.09	17	3.88	16	10.17	9	12.78
16	3.10	24	3.90	24	10.56	15	12.90
26	4.09	June 1	3.37	31	10.88	22	12.94
Mar. 1	4.14	7	3.85	Sept. 7	11.15	30	12.92
8	2.54	14	4.32	13	11.39	Dec. 6	12.79
15	2.35	21	4.94	21	11.60	13	11.48
22	2.43	30	6.05	28	11.85	21	9.72
29	2.83	July 6	6.87	Oct. 5	12.00	27	9.38
Apr. 6	1.34						

OHIO

By W. C. Walton

Scope of Water-Level Program

The observation-well program in Ohio was continued during 1952 in cooperation with the Ohio Department of Natural Resources, Divisions of Water and Wildlife, the State University Engineering Experiment Station, the Commissioners of Hamilton County, and the city of Canton. During the year, water-level measurements were made in approximately 155 wells, of which 133 were equipped with recording gages. There were 9 new observation wells added to the program in 1952 and measurements in 5 wells were discontinued. The records of 83 wells are included in this report. Figures 26-31 show the location of the wells. The remainder are classified either as candidate or project wells. Bulletin 25, entitled "Ground-water levels in Ohio 1949-50," was published in July 1952 by the State Department of Natural Resources. Two reports of investigations, one describing the ground-water resources of Cuyahoga County, the other describing the physical properties of an aquifer at Ada, were prepared during the year. Water-level data were also collected by means of county well surveys, aquifer-rating tests, and extensive hydrologic studies at Canton, Newark, and in the Upper Little Miami River basin.

Precipitation

The statewide average of total precipitation in 1952 was 35.25 inches, or 2.53 inches below normal. Precipitation deficiencies occurred during the period of May through December. The principal month of departure below normal precipitation was October at 1.49 inches below normal. Water shortages were serious during October and November. The below-normal precipitation coincident with above-normal temperatures during the summer and fall of 1952 reduced ground-water storage considerably. Months most favorable for ground-water recharge in 1952 were January, March, and April. January was excessively wet with 4.95 inches or 1.98 inches above-normal precipitation.

Pumpage

In heavily pumped areas fluctuations in water levels in observation wells reflect variations in pumping rates in addition to variations in the annual recharge and discharge cycle. Pumpage from the glacial gravels at Dayton has increased from about 91 million gallons per day in 1947 to over 100 million gallons per day in 1952. As a result of this increase in withdrawal rates, the lowest yearly water levels are declining. Only a slight downward trend, however, has been detected in the highest yearly water levels. Ground-water storage is apparently reduced during periods of low streamflow and heavy pumping, but is replenished by induced infiltration from the Miami and the Mad Rivers during high flow periods. The troughs of the hydrographs have increased in size during the last few years. The trend of water levels in Mt-2 shown on figure 32 is typical of water-level conditions at Dayton. Water levels declined to new record lows in September and December. The rise of water levels during the late fall was below normal. The peak levels during February, April, and May were lowest of the period of record. A detailed quantitative study to evaluate the ground-water resources of the Dayton area was started in October 1952.

At Canton the water levels in the business and industrial sections are still recovering from record lows in 1945. Industrial and municipal pumpage from the glacial gravels in the city proper has been considerably reduced since 1945. The hydrograph of observation well St-6, figure 33, shows the rise of water levels in Canton proper. The municipal water department has spread its pumping to four scattered locations. The bulk of the water is pumped from the glacial gravels along the west and middle branches of Nimishillen Creek in the northeast and northwest well fields. Municipal pumpage averaged 17.66 mgd in 1951, and 18.51 mgd in 1952. Pumpage from the northeast well field was increased during 1952. The record of water levels in St-4, shown on figure 33, indicates that recharge is derived from induced infiltration from the middle branch of Nimishillen Creek sufficient to balance the amount of discharge. Storage in the aquifer typically is reduced during the summer and fall months but is replenished in the early spring when streamflow is high. A detailed quantitative study is being conducted to determine more about infiltration conditions along the middle branch of Nimishillen Creek. Water levels in the northwest well field along the west branch of Nimishillen Creek, shown by the hydrograph of

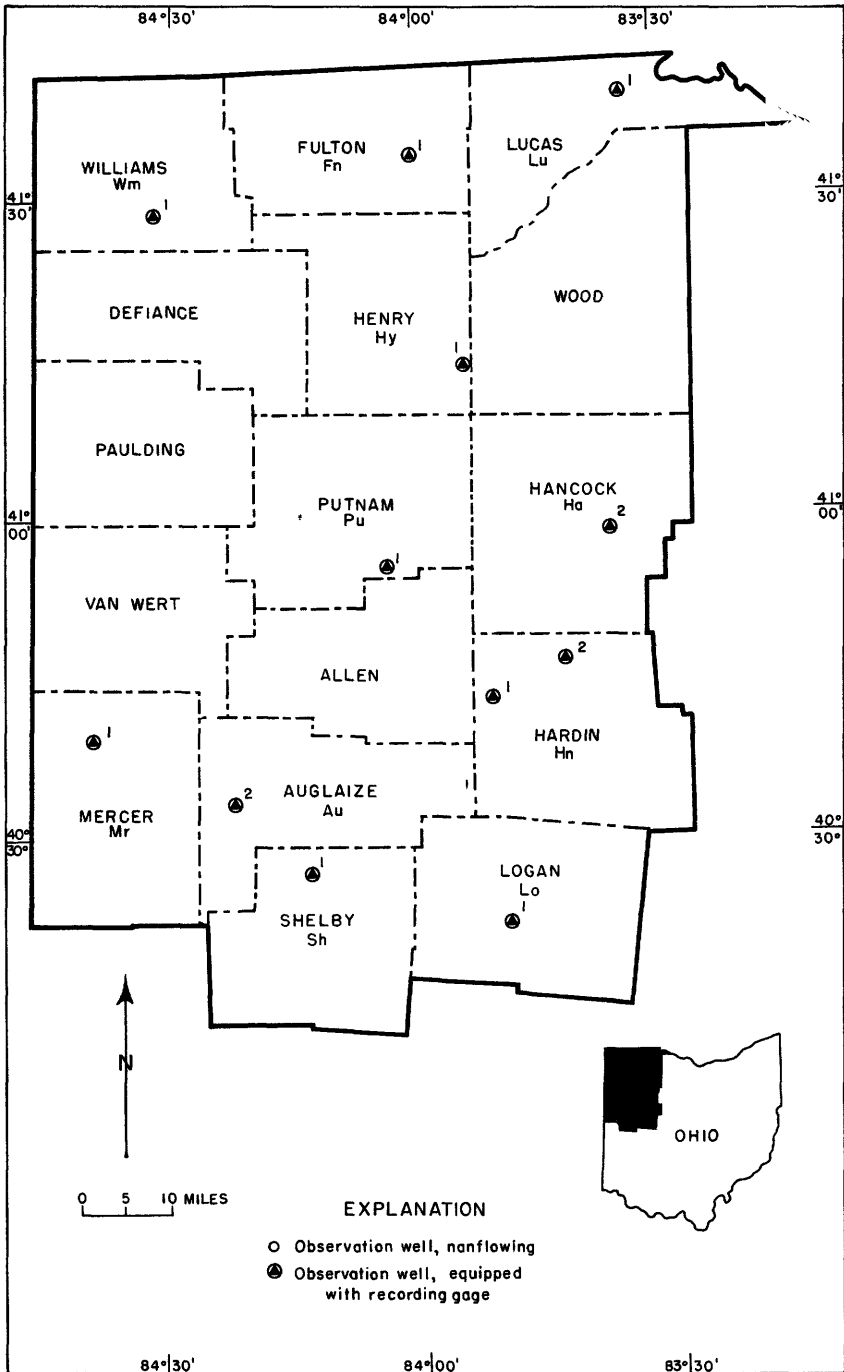


Figure 26. --Location of observation wells in northwestern Ohio, 1952.

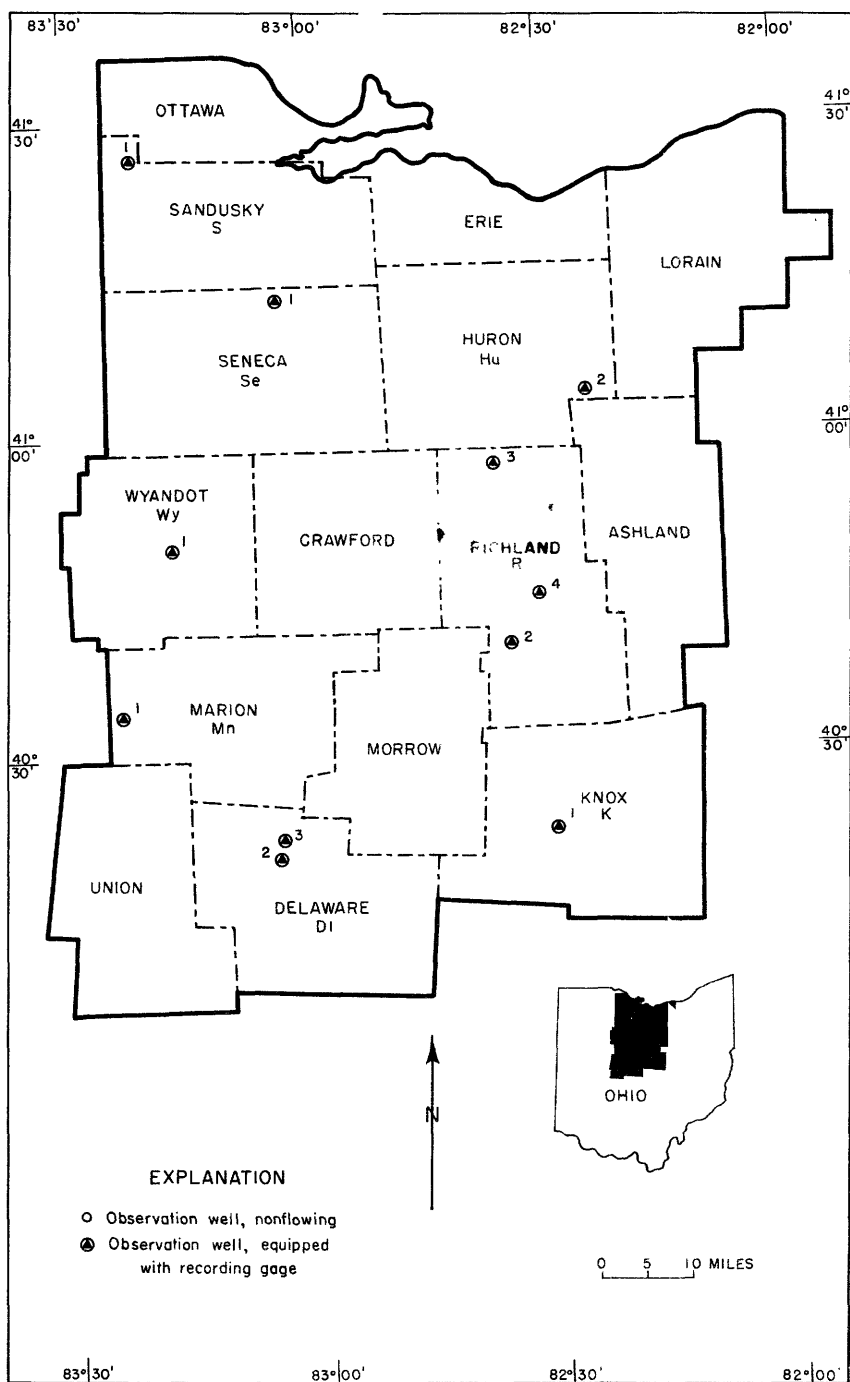


Figure 27. --Location of observation wells in north-central Ohio, 1952.

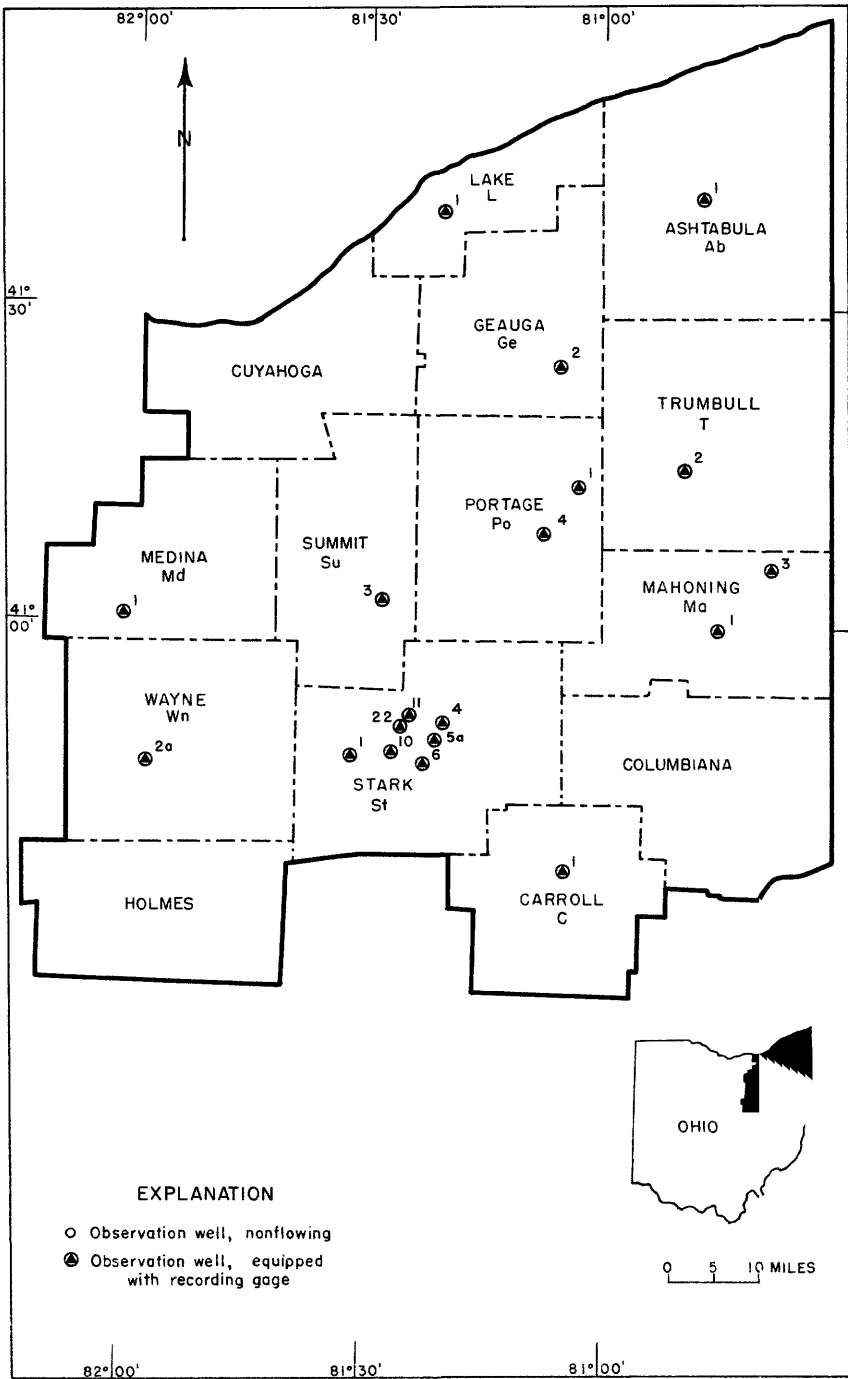


Figure 28. --Location of observation wells in northeastern Ohio, 1952.

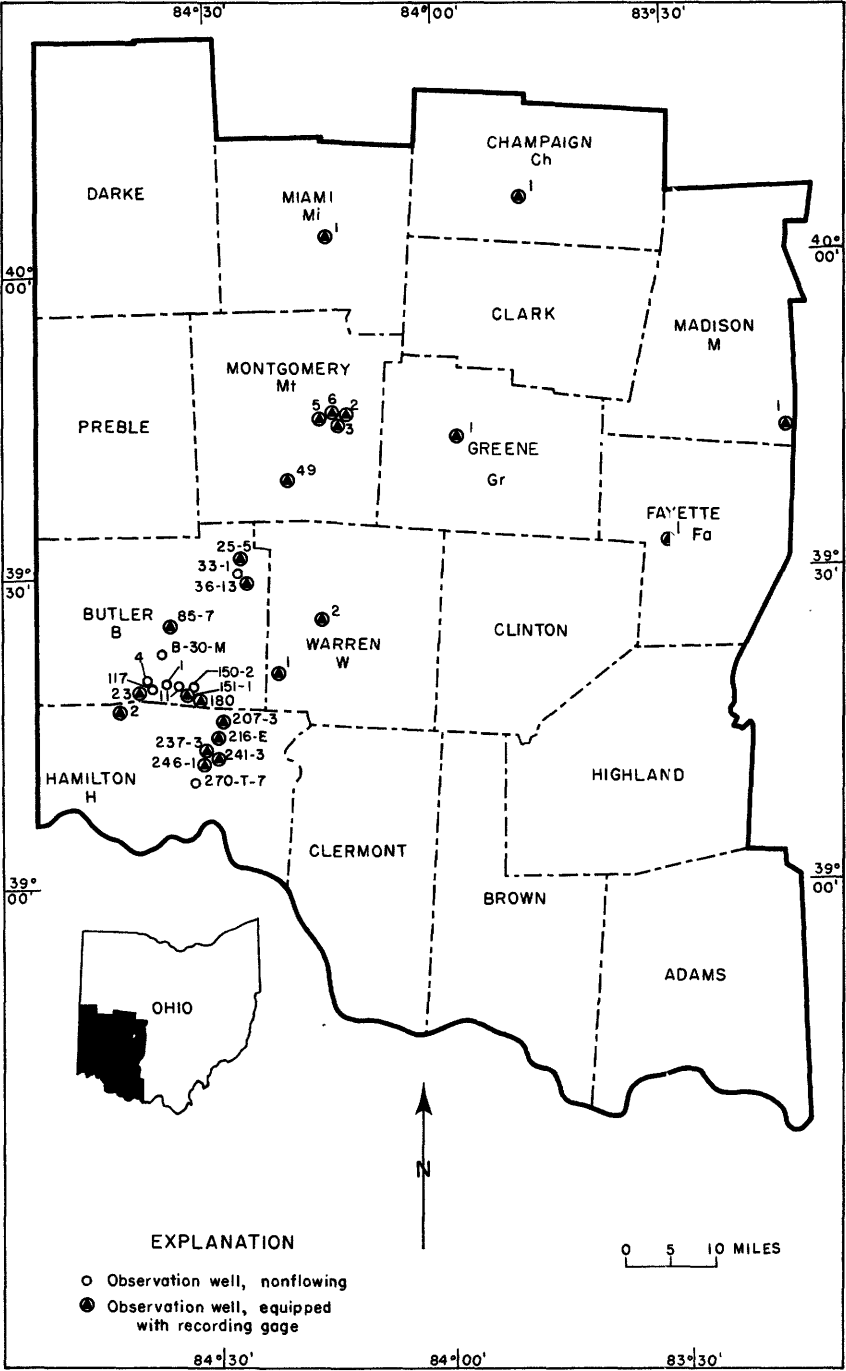


Figure 29. --Location of observation wells in southwestern Ohio, 1952.

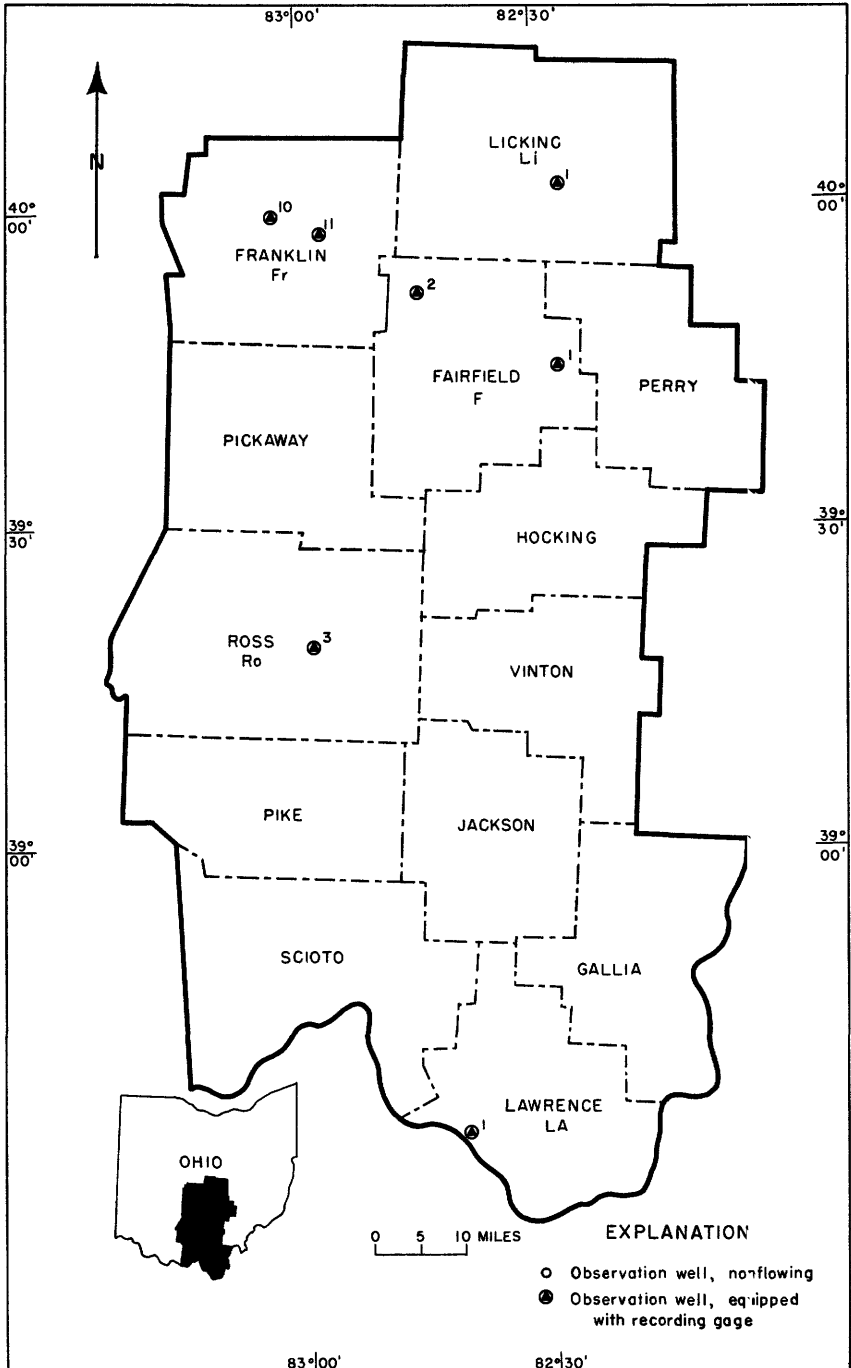


Figure 30. --Location of observation wells in south-central Ohio, 1952.

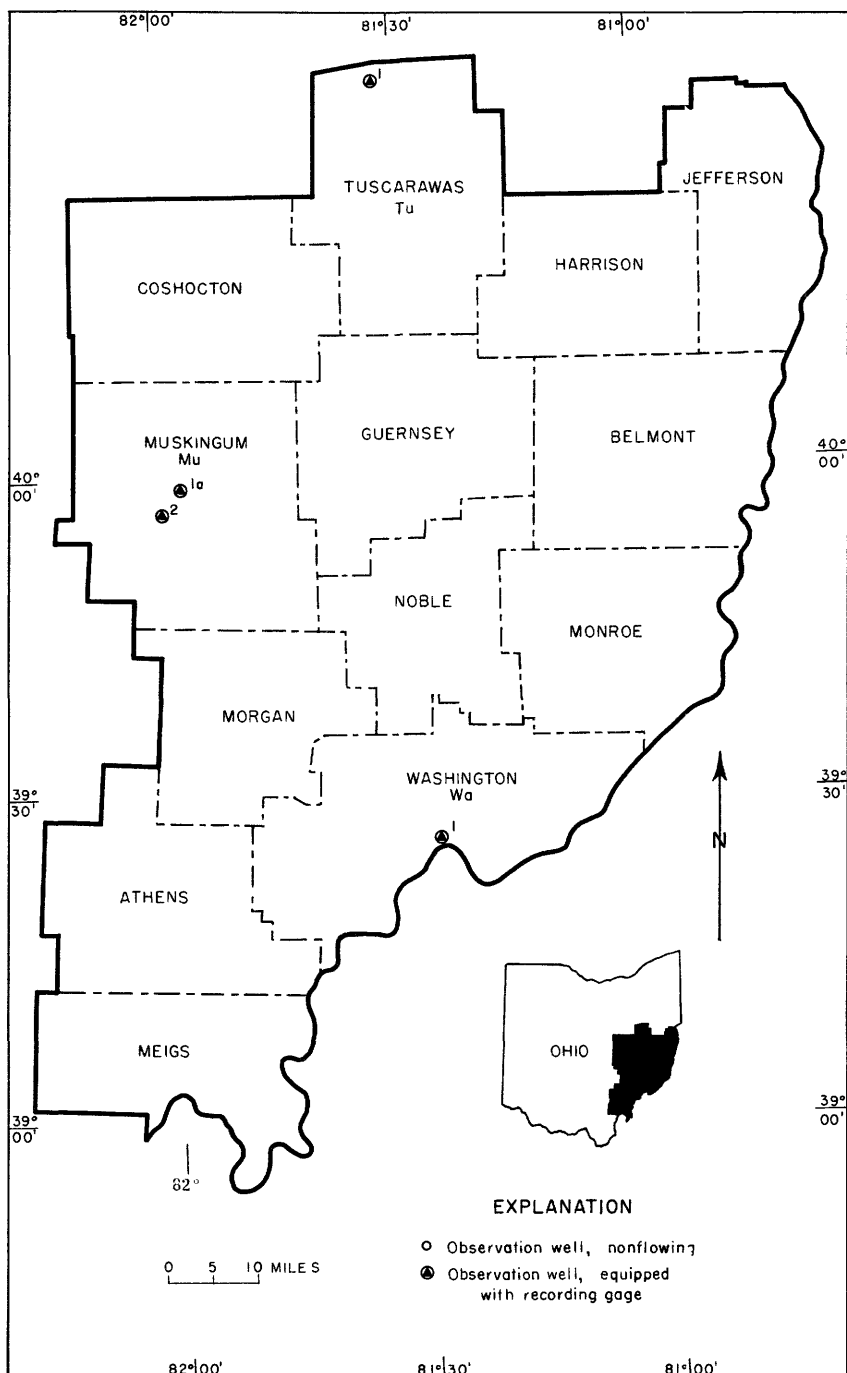


Figure 31. --Location of observation wells in southeastern Ohio, 1952.

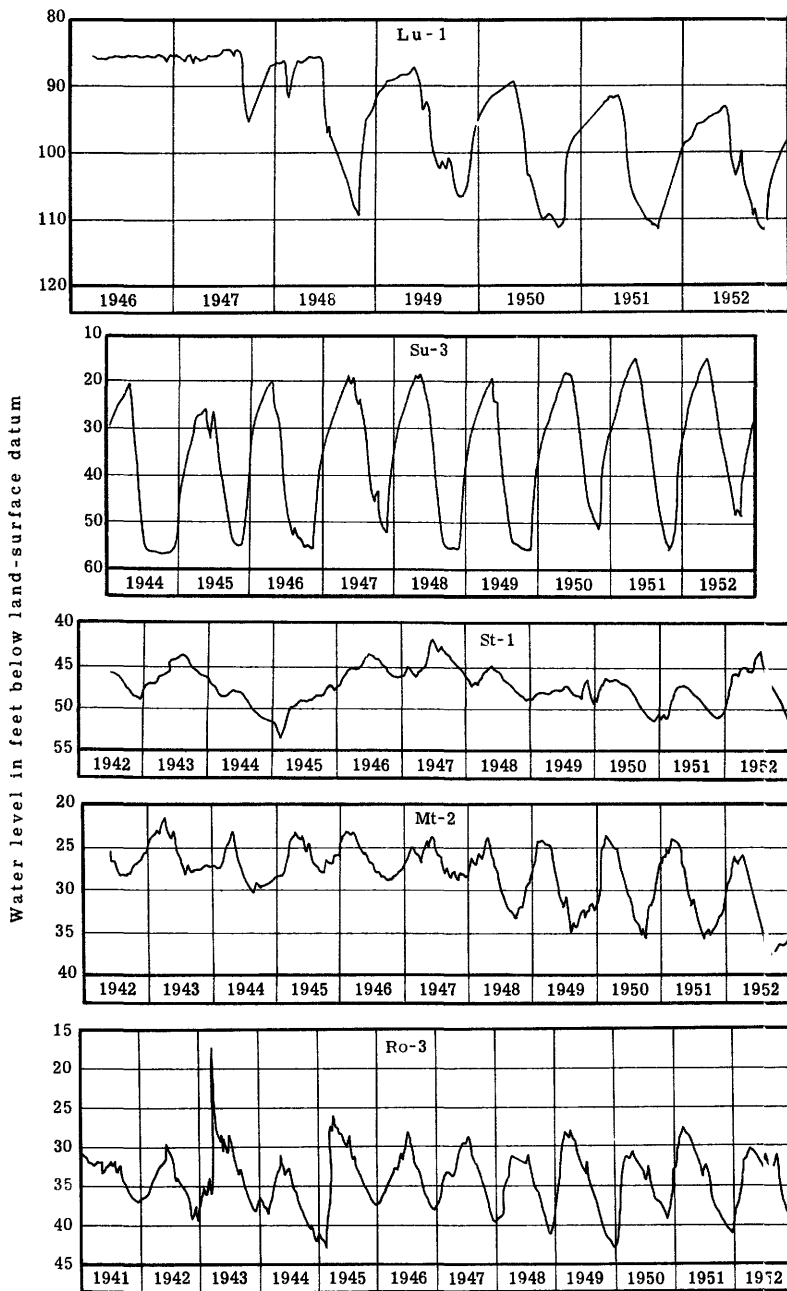


Figure 32. --Water levels in wells Lu-1, Su-3, St-1, Mt-2, and Ro-3 in heavily pumped areas of Ohio.

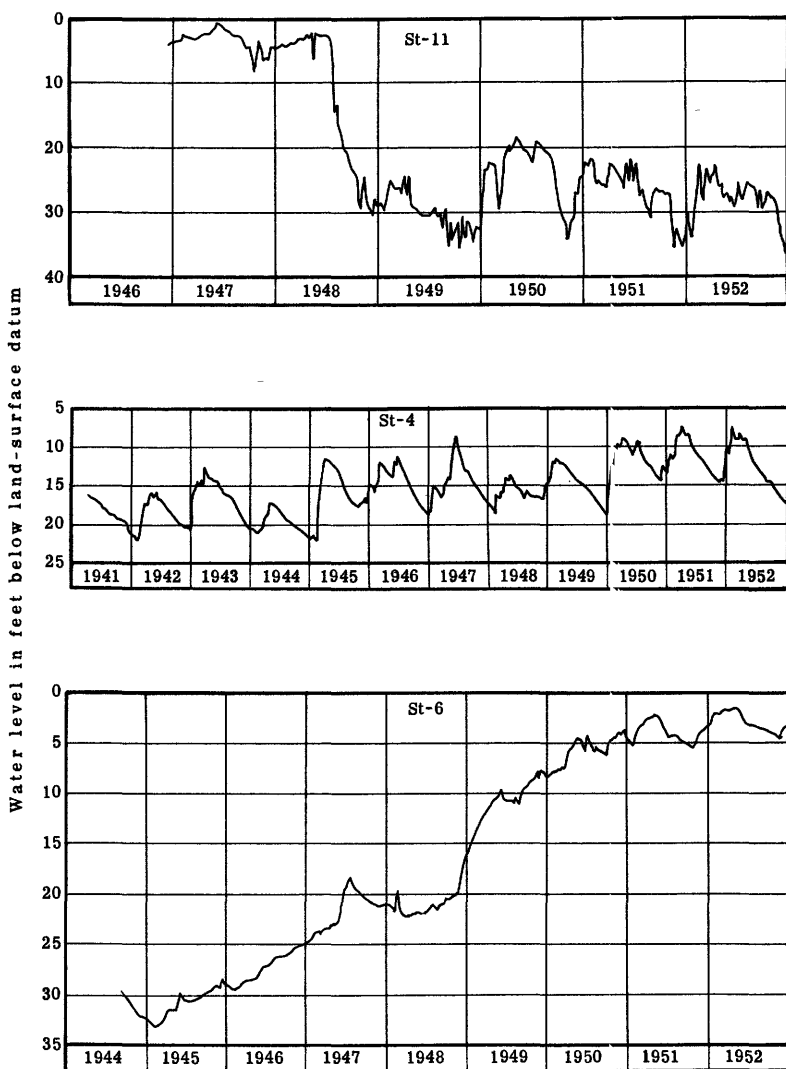


Figure 33. --Water levels in wells St-11, St-4, and St-6, Canton, Ohio.

St-11, figure 33, are declining despite a reduction in the rate of pumping. This indicates that discharge still is greater than recharge. The decline in water levels outside Canton proper was greater in 1952 than in 1951, and was continuing at the end of the year. About average peak levels occurred in February and April.

Ground-water conditions in the Mill Creek valley, in Hamilton County, north of Cincinnati, have improved since completion of the new industrial water-supply development in the Miami River valley. Twelve industries in the Mill Creek valley began purchasing water from the Southwest Ohio Water Company June 1, 1952, and reduced their rate of pumping accordingly. The Southwest Ohio Water Company presently is pumping 15 mgd from a water collector along the Miami River in Hamilton County. The hydrograph of well 270-T-7, shown in figure 34, illustrates the rise of water levels in the glacial gravels in the southern part of Mill Creek valley that resulted from the reduction in the rate of pumping. The water-level record from well 237-3, shown on figure 34, is characteristic of the trend in the central part of Mill Creek valley where the effects of the reduction in the rate of pumping were not as pronounced. Water levels in the northern part of Mill Creek valley have been only slightly affected by pumping and seasonal fluctuations are similar to those in wells in unpumped areas of Ohio. The hydrograph of well 180 in southern Butler County is typical. Water levels in the vicinity of the city of Hamilton declined to a new record low in 1952. Ground-water conditions at Middletown are revealed by the record of well 36-13. Ground-water storage in the Miami River valley in Butler County was still decreasing at the end of the year. The 1952 spring recharge was a little below normal. Peak levels occurred during February, April, and May.

Interpretation of Water-Level Fluctuations

Ground-water levels in many of the observation wells in Ohio that were unaffected by heavy pumping were lower at the end of 1952 than in all previous years of record. In about 40 percent of the observation wells the water levels declined to record lows in November and December and they were still receding at the end of the year. The seasonal declines in most wells in Ohio generally terminate by the middle of December. Water levels generally begin to rise in November and December as a result of the precipitation that normally falls after the end of the growing season when transpiration and evaporation losses are at a minimum. Peak levels in 1952 were reached in many wells during the last two weeks in April or the first two weeks of May because of the seasonal concentration of precipitation. Recharge to ground-water storage during the spring months of 1952 was about average. The decline of water levels during the summer and fall months of 1952 did not terminate in November or December but continued into 1953. Loss of storage in the ground-water reservoirs of Ohio therefore continued through December. Natural discharge exceeded recharge during that period. Less than average precipitation and relatively high temperatures during November and December were responsible for the extended decline in water levels. Because of the lack of precipitation, stream flow was sustained by a greater than average proportion of ground-water runoff. The trends of ground-water levels in Ohio, in wells unaffected by heavy pumping, are exemplified by 14 hydrographs shown in figures 35 through 38.

Well-Numbering System

The observation wells for which records are given in this report, with the exception of those in the Mill Creek valley and Miami Valley areas of Butler and Hamilton Counties, are identified by a number prefixed by letters which are abbreviations of the counties as shown in figures 26 through 31. The same prefix is used for all wells in a particular county. The wells in the areas in Butler and Hamilton Counties are identified by numbers. The wells are numbered consecutively, beginning in the northern end of Butler County, according to their geographic location.

Well Descriptions and Water-Level Measurements

Water levels are in feet below land-surface datum unless otherwise indicated. When some measurements in a table are above and others below the plane of reference, a plus (+) or minus (-) sign is placed immediately preceding the first entry in each column of each mixed table. Readings between minus (-) signs are below the plane of reference, and those between plus (+) signs are above the plane of reference.

Ashtabula County

Ab-1. K. K. Tisch. Lat. 41°41'12", long. 80°46'54". Drilled unused well in shale, diameter 4 inches, depth 40 feet. Highest water level 4.40 below lsd, Apr. 14, 1951; lowest 11.30 below lsd, Nov. 16-17, 1952. Records available: 1946-52.

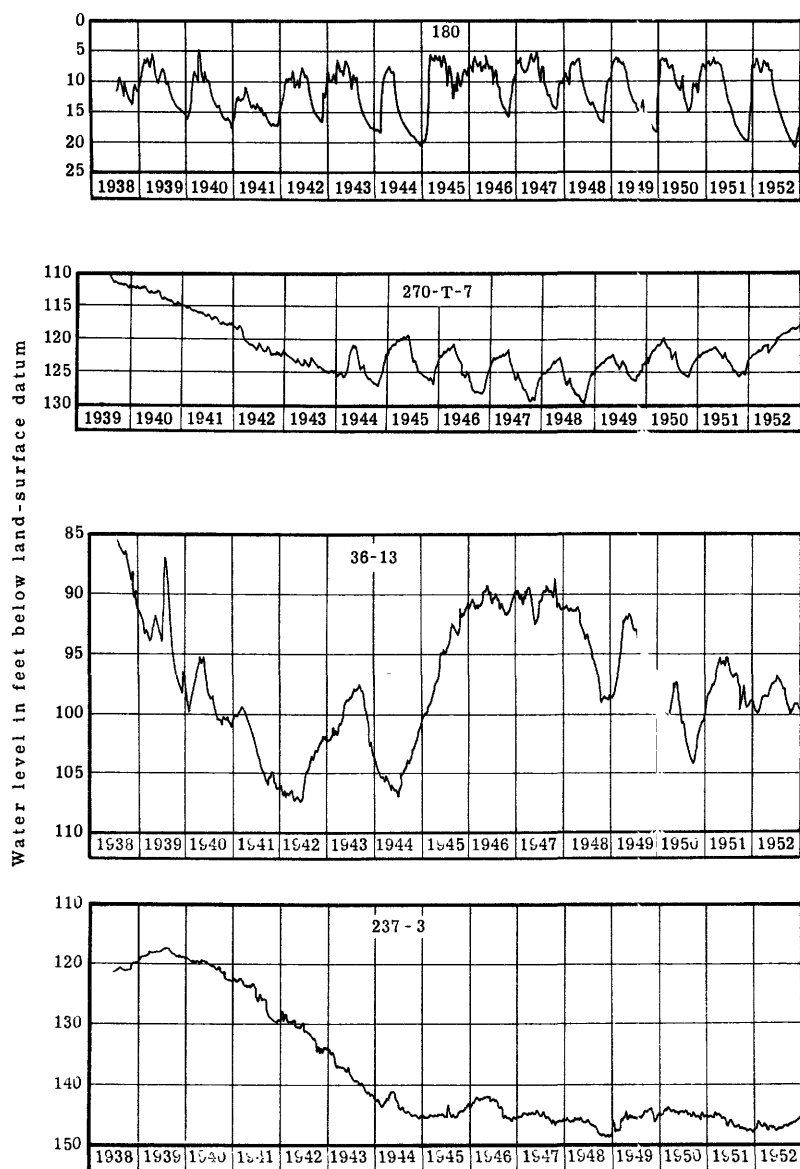


Figure 34. --Water levels in wells 180, 270-T-7, 36-13, and 237-3, Butler and Hamilton Counties, Ohio.

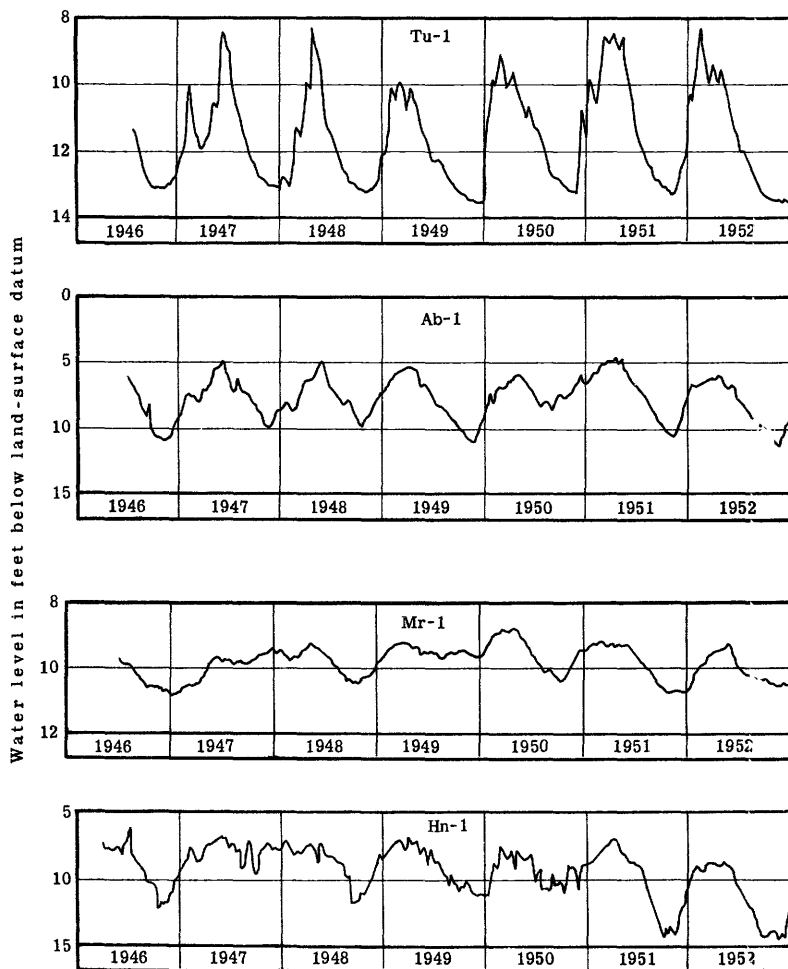


Figure 35. --Water levels in wells Tu-1, Ab-1, Mr-1, and Hn-1, Ohio, 1946-52.

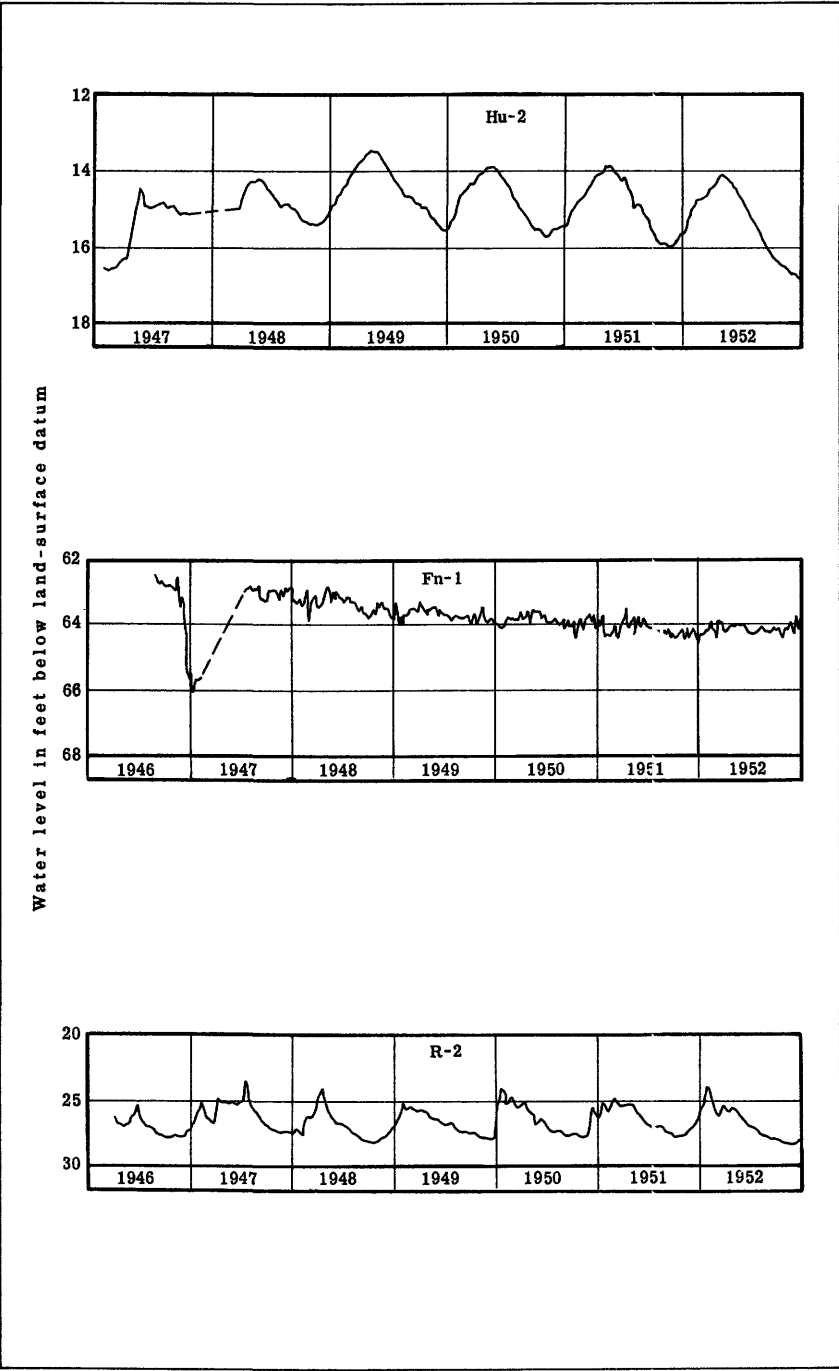


Figure 36. --Water levels in wells Hu-2, Fn-1, and R-2, Ohio.

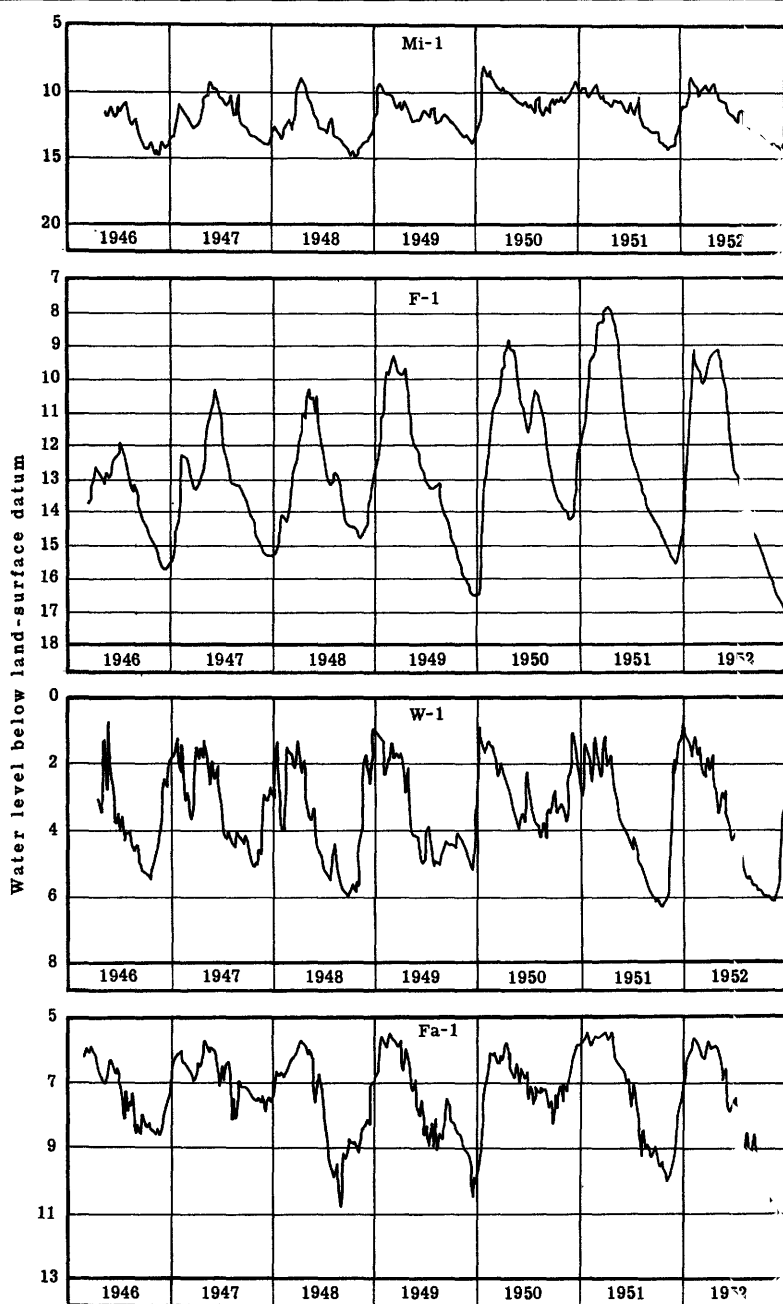


Figure 37.--Water levels in wells Mi-1, F-1, W-1, and Fa-1, Ohio, 1946-52.

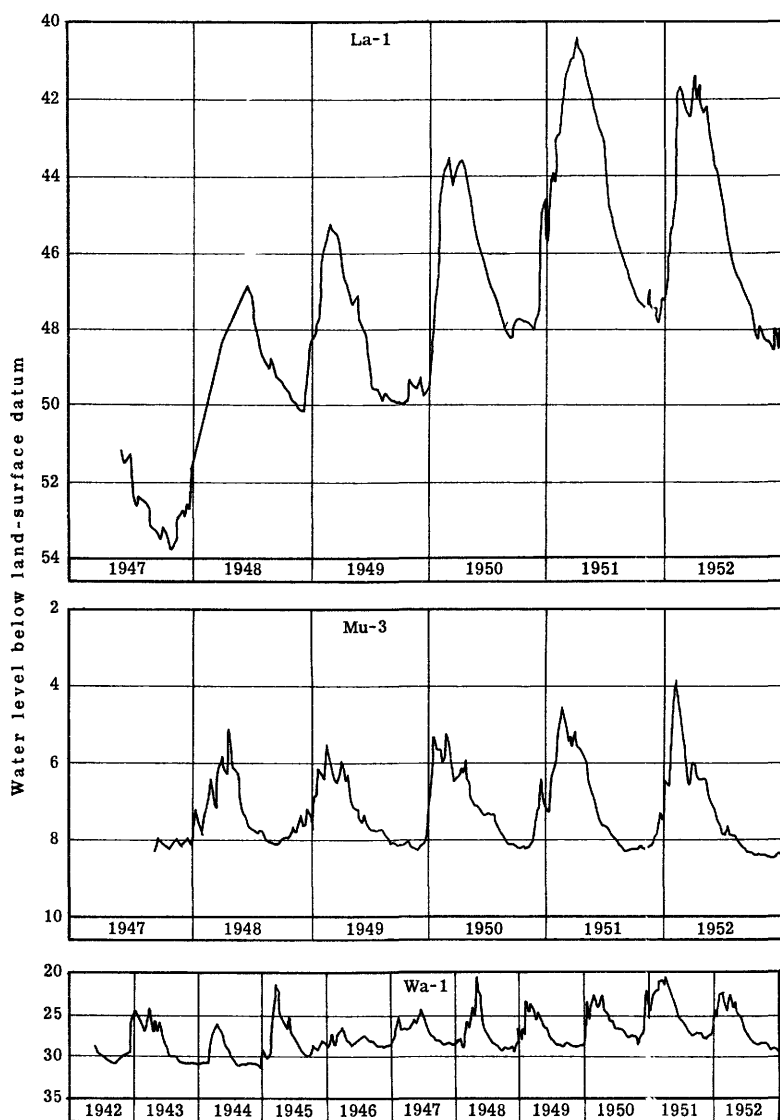


Figure 38. --Water levels in wells La-1, Mu-3, and Wa-1, Otto.

Ab-1--Continued.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	....	....	6.21	6.28	6.59	8.07	9.01	9.52	10.06	10.90	10.77
2	....	....	....	6.15	6.37	6.74	8.09	9.00	9.48	10.11	10.90	10.72
3	....	....	....	6.26	6.50	6.74	8.09	9.03	9.61	10.15	10.93	10.70
4	....	....	....	6.34	6.52	6.75	....	9.03	9.65	10.15	10.93	10.70
5	....	....	....	6.22	6.52	6.79	8.20	9.10	9.69	10.19	10.95	10.59
6	....	....	....	6.19	6.57	6.79	8.26	9.13	9.68	10.23	10.95	10.96
7	....	....	....	6.32	6.74	6.76	8.26	....	9.75	10.25	11.05	10.42
8	....	....	....	6.39	6.74	6.78	8.25	9.20	9.78	10.25	11.10	10.42
9	....	....	....	6.41	6.72	6.80	8.10	9.20	9.80	10.27	11.10	10.37
10	....	....	....	6.32	6.69	6.83	8.15	9.20	9.82	10.30	11.13	10.24
11	....	....	....	6.34	6.67	6.99	8.24	9.26	9.86	10.32	11.13	10.14
12	....	....	....	6.34	6.67	7.07	8.33	9.30	9.88	10.32	11.19	10.13
13	....	....	....	6.04	6.77	7.15	8.34	9.36	9.90	10.30	11.21	10.02
14	....	....	....	5.90	6.85	7.16	8.32	9.38	9.90	10.37	11.23	9.93
15	....	....	....	5.89	6.82	7.22	8.33	9.38	9.90	10.37	11.25	9.90
16	....	....	....	5.99	6.94	7.25	8.42	9.33	9.86	10.42	11.30	9.85
17	....	....	....	5.99	....	7.26	8.48	9.36	9.86	10.49	11.30	9.82
18	....	....	....	5.97	7.01	7.38	8.48	9.36	9.86	10.49	11.25	9.77
19	6.78	....	....	5.93	7.01	7.46	8.44	9.34	9.87	10.48	11.25	9.77
20	6.74	....	....	5.92	6.99	7.59	8.39	9.34	9.89	10.64	11.13	9.58
21	6.80	....	....	6.00	6.90	7.60	8.39	9.28	9.89	10.65	11.12	9.56
22	6.75	....	....	6.01	6.99	7.61	8.49	9.33	9.90	10.65	11.00	9.54
23	6.64	....	....	6.04	7.02	7.68	8.51	9.39	9.91	10.63	11.00	9.44
24	6.84	....	....	6.06	7.01	7.68	8.68	9.39	9.96	10.63	11.00	9.37
25	6.85	....	6.14	6.04	6.81	7.66	8.72	9.42	9.96	10.72	10.66	9.37
26	6.59	....	6.21	6.01	6.70	7.77	8.72	9.45	9.94	10.72	10.61	9.31
27	....	....	6.23	6.00	6.70	7.90	8.73	9.45	9.97	10.70	10.78	9.22
28	....	....	6.27	5.99	6.67	7.98	8.73	9.45	10.00	10.72	10.78	....
29	....	....	6.36	6.11	6.59	7.99	8.77	9.47	10.03	10.80	10.78	9.14
30	....	....	6.43	6.24	6.59	7.94	8.82	9.52	10.06	10.82	10.77	9.13
31	....	....	6.35	....	6.57	....	8.97	9.52	....	10.82	....	9.13

Auglaize County

Au-1. C. W. Manchester. Lat. 40°33'42", long. 83°54'18". Drilled unused well in limestone, diameter 4 inches, depth 96 feet. Highest water level 14.33 below lsd, Apr. 11, 1948; lowest 20.87 below lsd, Dec. 18-19, 1952. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	18.75	16.80	16.15	15.60	15.50	15.70	16.55	17.70	18.40	19.35	20.30	20.82
2	18.75	16.75	16.15	15.65	15.50	15.70	16.70	17.70	18.35	19.37	20.30	20.80
3	18.65	16.65	16.10	15.65	15.55	15.75	16.70	17.60	18.40	19.39	20.30	20.78
4	18.60	16.45	16.10	15.65	15.55	15.80	16.70	17.70	18.45	19.44	20.30	20.78
5	18.50	16.55	16.15	15.50	15.55	15.80	16.75	17.70	18.45	19.45	20.29	20.75
6	18.40	16.50	16.15	15.50	15.50	15.80	16.75	17.60	18.55	19.49	20.34	20.83
7	18.35	16.45	16.15	15.55	15.55	15.80	16.85	17.60	18.60	19.52	20.35	20.84
8	18.25	16.45	16.20	15.65	15.55	15.80	16.80	17.70	18.70	19.53	20.35	20.84
9	18.15	16.45	16.15	15.65	15.60	15.85	16.75	17.65	18.75	19.58	20.35	20.83
10	18.10	16.40	16.05	15.65	15.50	15.85	16.75	17.65	18.90	19.58	20.40	20.80
11	18.10	16.35	15.60	15.65	15.55	15.90	16.85	17.65	18.95	19.64	20.40	20.81
12	18.05	16.35	15.80	15.60	15.70	15.90	16.85	17.65	18.95	19.63	20.45	20.80
13	18.00	16.35	15.80	15.50	15.60	15.90	16.90	17.70	19.05	19.72	20.49	20.81
14	17.90	16.30	15.90	15.35	15.60	15.90	17.00	17.75	19.00	19.72	20.51	20.82
15	17.80	16.30	15.90	15.40	15.60	15.95	17.00	17.80	18.95	19.72	20.59	20.85
16	17.80	16.25	15.90	15.60	15.60	16.10	17.00	17.75	19.00	19.74	20.59	20.85
17	17.45	16.25	16.00	15.60	15.60	16.10	17.00	17.75	19.10	19.78	20.59	20.84
18	17.55	16.25	15.90	15.60	15.60	16.15	17.00	17.80	18.03	19.77	20.58	20.87
19	17.55	16.25	15.85	15.60	15.60	16.15	17.05	17.85	18.92	19.81	20.56	20.87
20	17.50	16.20	15.80	15.60	15.55	16.20	17.10	17.95	18.03	19.89	20.58	20.85
21	17.50	16.20	15.75	15.65	15.55	16.20	17.35	17.90	18.08	19.93	20.58	20.77
22	17.40	16.25	15.75	15.60	15.65	16.20	17.25	17.95	18.06	19.97	20.57	20.77
23	17.30	16.20	15.55	15.55	15.65	16.20	17.25	18.05	18.06	19.98	20.60	20.80
24	17.30	16.20	15.60	15.25	15.60	16.30	17.20	18.00	18.08	19.98	20.65	20.80
25	17.25	16.20	15.60	15.30	15.60	16.40	17.25	18.05	19.14	20.00	20.70	20.80

Au-1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	17.00	16.20	15.65	15.40	15.60	16.40	17.25	18.20	19.15	20.02	20.69	20.74
27	16.75	16.15	15.65	15.40	15.60	16.40	17.30	18.25	19.20	20.15	20.76	20.70
28	16.80	16.15	15.65	15.45	15.65	16.50	17.50	18.30	19.20	20.16	20.82	20.70
29	16.90	16.15	15.65	15.50	15.65	16.50	17.75	18.35	19.28	20.27	20.82	20.67
30	.....		15.65	15.50	15.65	16.55	17.80	18.40	19.35	20.29	20.83	20.65
31	16.85		15.65		15.70		17.80	18.35		20.29		20.65

Au-2. City of St. Marys. West Spring St. Lat. 40°33'42", long. 84°23'26". Drilled unused well in gravel, diameter 8 inches, depth 100 feet. Water level responds to changes in stage of St. Marys River. Highest water level 0.09 below lsd, Apr. 30, 1946; lowest 7.19 below lsd, Aug. 24, 1951. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.58	4.66	4.42	4.15	4.45	0.52	5.57	5.55	4.48	5.05	5.62	5.26
2	2.24	4.54	4.06	4.33	4.60	3.44	5.78	5.32	4.95	5.10	5.66	5.46
3	2.54	3.72	4.10	4.50	4.62	4.00	5.84	4.58	5.32	5.24	5.81	5.58
4	2.52	3.30	4.37	4.51	4.35	4.31	5.76	5.01	5.44	5.18	5.81	5.58
5	2.50	3.84	4.76	4.17	4.29	4.48	2.37	5.34	5.48	5.14	5.55	5.34
6	2.69	4.08	4.92	4.03	4.61	4.58	1.75	5.43	5.46	5.28	5.64	5.33
7	4.49	4.30	4.98	4.24	4.74	4.57	4.11	5.51	5.38	5.31	5.74	5.42
8	4.57	4.36	4.97	4.45	4.59	3.96	4.54	5.51	5.32	5.29	5.76	5.95
9	4.89	4.34	4.52	4.49	4.52	4.32	4.86	5.36	5.42	5.23	5.65	6.00
10	5.34	4.24	3.96	4.75	4.33	4.53	4.98	4.55	5.46	5.27	5.74	5.93
11	5.36	4.26	3.34	4.88	3.94	4.80	4.98	5.04	5.50	5.27	5.73	6.10
12	5.27	4.41	3.54	4.79	4.20	4.79	4.80	5.44	5.53	5.16	5.76	6.21
13	5.26	4.48	3.70	4.12	4.45	4.91	4.14	5.66	5.53	4.94	5.77	6.23
14	4.72	4.55	4.06	3.80	4.49	4.81	4.63	5.69	5.50	5.07	5.72	6.28
15	5.10	4.80	4.13	4.21	4.52	3.95	5.03	5.66	5.48	5.12	5.71	6.28
16	5.24	4.62	4.10	4.29	4.65	4.08	5.19	5.38	5.47	5.20	5.77	5.99
17	....	4.24	4.06	4.28	4.65	5.03	5.34	4.47	5.43	5.26	5.76	6.22
18	....	4.49	4.09	4.22	4.39	5.32	5.34	5.18	5.43	5.26	5.76	6.51
19	....	4.58	4.04	4.14	4.28	5.55	5.18	5.20	5.35	5.21	5.66	6.64
20	....	4.53	4.12	4.12	4.56	5.64	4.53	5.09	5.35	5.56	5.72	6.42
21	4.49	4.53	4.29	4.13	4.94	5.47	4.80	5.46	3.10	5.60	5.74	6.25
22	4.39	4.69	4.25	4.08	5.10	5.00	5.00	5.48	4.84	5.56	5.60	6.26
23	4.88	4.69	3.76	4.04	5.15	5.29	5.21	5.48	5.24	5.47	5.87	6.28
24	5.06	3.95	3.95	3.54	5.10	4.97	5.40	5.28	5.27	5.47	5.88	6.39
25	5.06	4.42	4.08	3.93	4.30	5.02	5.40	5.20	5.21	5.54	5.83	3.98
26	4.72	4.46	4.36	4.08	4.66	5.20	5.30	5.30	5.09	5.54	5.73	5.16
27	3.95	4.46	4.44	4.05	4.90	5.30	4.74	5.35	5.14	5.42	5.78	....
28	3.93	4.40	4.53	3.97	5.08	5.28	4.93	5.36	5.12	5.59	5.18	....
29	4.41	4.51	4.39	4.27	5.21	4.62	5.15	5.39	5.02	5.70	....	6.05
30	4.61		3.85	4.43	5.10	4.93	5.33	5.42	5.14	5.64	....	6.16
31	4.67		3.89		1.12		5.49	5.31		5.57		6.18

Butler County

B-1. State of Ohio. State Highway Dept. Lat. 39°21'03", long. 84°32'30". Drilled unused well in gravel, diameter 6 inches, depth 245 feet. Highest water level 26.50 below lsd, July 28, 1947; lowest 45.10 below lsd, Mar. 12, 1945. Records available: 1942-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	36.92	Apr. 1	33.93	July 1	32.72	Oct. 7	34.44
8	37.08	8	33.38	8	32.80	14	34.60
15	37.18	15	33.06	15	32.86	21	34.75
22	37.27	22	32.82	22	32.94	28	34.95
29	37.32	29	32.59	29	33.04	Nov. 4	35.15
Feb. 5	37.36	May 6	32.52	Aug. 5	33.15	11	35.32
12	37.37	13	32.52	12	33.25	18	35.50
19	36.25	20	32.52	26	33.48	25	35.68
26	35.60	27	32.57	Sept. 9	33.37	Dec. 2	35.87
Mar. 4	35.20	June 3	32.60	16	33.92	16	36.23
11	35.09	10	32.61	23	34.08	23	36.43
18	34.89	17	33.05	30	34.24	30	36.61
25	34.62	24	32.68				

B-4. A. H. Kollstadt. Lat. 39°20'33", long. 84°34'00". Drilled unused well in gravel, diameter 6 inches, depth 221 feet. Highest water level 17.54 below lsd, Jan. 29, 1952; lowest 32.60 below lsd, Nov. 20, 1951. Records available: 1942-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	26.72	Apr. 1	23.87	July 1	26.87	Oct. 7	29.10
8	26.00	8	24.02	8	27.38	14	29.20
15	26.72	15	23.91	15	27.73	21	29.29
22	25.61	22	24.11	22	27.75	28	29.36
29	17.54	29	24.09	29	28.12	Nov. 4	29.43
Feb. 5	20.57	May 6	25.02	Aug. 5	28.35	11	29.49
12	22.63	13	25.59	12	28.46	18	29.57
19	24.34	20	25.97	26	28.55	25	29.54
26	24.60	27	25.60	Sept. 2	28.69	Dec. 2	29.60
Mar. 4	25.39	June 3	26.13	9	28.77	9	29.40
11	25.55	10	26.56	16	28.95	16	29.07
18	23.95	17	26.85	23	28.77	23	29.28
25	22.88	24	26.97	30	28.94	30	29.31

B-11. Fred Bandtel. Lat. 39°20'48", long. 84°31'15". Drilled unused well in gravel, diameter 6 inches, depth 247 feet, casing opened at 151 feet. Highest water level 19.00 below lsd, June 11, 1947; lowest 51.50 below lsd, Oct. 17, 1944. Records available: 1942-52.

Jan. 2	35.00	Apr. 1	23.45	July 1	26.22	Oct. 7	34.78
9	32.52	8	23.52	8	26.97	14	35.02
15	32.38	15	24.05	15	28.88	21	35.56
22	31.25	22	23.92	22	28.87	28	35.85
29	29.32	29	24.00	29	29.57	Nov. 4	36.20
Feb. 5	27.20	May 6	24.72	Aug. 5	30.32	11	36.57
12	26.30	13	23.98	12	30.90	18	36.90
19	25.97	20	24.42	26	32.05	25	37.27
26	25.82	27	24.40	Sept. 2	32.48	Dec. 2	37.58
Mar. 4	26.03	June 3	24.56	9	33.05	9	37.87
11	25.90	10	25.18	16	33.40	16	38.26
18	24.75	17	25.77	23	33.94	23	38.35
25	23.65	24	26.33	30	34.25	30	38.53

B-23. Carl E. Schiering. Lat. 39°20'15", long. 84°34'56". Drilled unused well in gravel, diameter 6 inches, depth 176 feet. Highest water level 11.41 below lsd, June 5, 1947; lowest 28.10 below lsd, Dec. 26, 1944. Records available: 1943-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	23.90	18.85	19.20	18.80	20.10	21.30	22.80	23.50	.....	23.80	24.20	24.45
2	23.65	18.80	19.25	19.10	20.25	21.40	22.90	23.50	.....	23.80	24.20	24.45
3	23.65	18.65	19.30	19.30	20.30	21.65	23.00	23.50	.....	23.80	24.20	24.45
4	23.65	18.50	19.45	19.40	20.10	21.80	23.10	23.45	.....	23.80	24.20	24.45
5	23.65	18.30	19.50	19.45	20.20	21.85	.....	23.45	.....	23.85	24.20	24.45
6	23.30	18.15	19.55	19.25	20.45	21.75	.....	23.45	.....	23.85	24.25	24.45
7	23.05	18.05	19.65	19.20	20.60	21.75	.....	23.45	.....	23.85	24.25	24.40
8	23.10	17.95	19.70	19.40	20.75	21.95	23.00	23.45	.....	.....	24.25	24.35
9	22.90	17.95	19.75	19.55	20.85	22.05	22.95	.....	23.65	.....	24.25	24.35
10	22.80	17.95	19.75	19.70	20.85	21.90	22.85	.....	23.65	.....	24.25	24.35
11	23.00	18.00	19.70	19.80	20.70	21.80	22.80	.....	23.65	.....	24.30	24.30
12	23.05	18.00	19.65	19.80	20.75	21.75	22.80	23.50	23.65	.....	24.30	24.25
13	22.80	18.05	19.40	19.60	20.90	21.70	.....	23.50	.....	.....	24.30	24.20
14	22.75	18.15	19.20	19.35	21.05	21.70	.....	23.50	.....	23.95	24.30	24.15
15	22.85	18.20	19.10	19.45	21.20	21.70	22.85	23.50	.....	24.00	24.35	24.15
16	22.65	18.25	19.05	19.55	21.30	21.70	22.85	23.50	23.70	24.00	24.35	24.15
17	22.70	18.35	19.10	19.60	21.35	21.75	22.85	23.45	23.70	24.00	24.35	24.15
18	22.55	18.45	19.10	19.70	21.15	21.75	.....	23.45	23.70	24.00	24.35	24.15
19	22.30	18.50	19.15	19.75	21.15	21.75	.....	23.45	.....	24.05	24.35	24.15
20	22.05	.....	19.15	19.55	21.35	21.80	.....	.....	.....	24.05	24.35	24.15
21	21.95	.....	19.15	19.55	21.45	21.95	.....	.....	.....	24.05	24.35	24.15
22	22.05	.....	19.15	19.80	21.55	22.20	23.20	.....	.....	24.05	24.35	24.15
23	21.95	.....	19.00	19.95	21.60	22.35	23.50	.....	.....	24.05	24.35	24.15
24	21.85	.....	18.75	20.00	21.60	22.45	.....	.....	.....	24.10	24.35	24.15
25	21.75	.....	18.60	20.00	21.35	22.55	.....	.....	.....	24.10	24.40	24.15

220 WATER LEVELS AND ARTESIAN PRESSURES, 1952, NORTHEASTERN STATES

B-23--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	21.70	18.85	18.55	19.95	21.25	22.50	.....	23.50	.....	24.10	24.40	24.10
27	21.40	18.90	18.50	19.70	21.40	22.35	.....	23.55	23.75	24.10	24.40	24.10
28	20.25	18.95	18.50	19.60	21.55	22.20	.....	23.60	23.75	24.15	24.40	24.10
29	19.45	19.05	18.55	19.80	21.65	22.40	23.50	.....	23.75	24.15	24.45	24.10
30	10.10		18.55	20.00	21.70	22.60	23.50	.....	23.75	24.15	24.45	24.10
31	18.90		18.55		21.50		23.50	23.60		24.20		24.10

B-30-M. City of Hamilton. Pleasant and Marshall Aves. Drilled unused well in gravel, diameter 2 inches, depth 85 feet. Highest water level 26.64 below lsd, June 16, 1947; lowest 36.99 below lsd, Feb. 5, 1945. Records available: 1943-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	34.25	Apr. 1	29.93	July 1	30.74	Oct. 7	33.65
8	33.75	8	29.82	8	30.90	14	33.83
15	33.36	15	29.73	15	31.14	21	34.00
22	33.16	22	29.62	22	31.39	28	34.17
29	32.67	29	29.55	29	31.70	Nov. 4	34.34
Feb. 5	31.43	May 6	29.56	Aug. 5	31.95	11	34.49
12	30.70	13	29.68	12	32.19	18	34.65
19	30.63	20	29.83	26	32.60	25	34.75
26	30.49	27	29.95	Sept. 2	32.82	Dec. 2	34.85
Mar. 4	30.52	June 3	30.05	9	32.99	9	34.90
11	30.60	10	30.21	16	33.15	16	34.95
18	30.47	17	30.44	23	33.32	23	35.00
25	30.21	24	30.65	30	33.50	30	35.07

25-5. City of Middletown. Columbia Ave., Middletown. Lat. 39°32', long. 84°25'. Drilled unused well in gravel, diameter 8 inches, depth 62 feet. Highest water level 13.25 below lsd, May 4, 1947; lowest 41.10 below lsd, Sept. 25, 1941. Records available: 1941-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	30.25	16.60	23.75	23.10	23.60	25.20	27.80	30.30	31.35	32.25	33.65	34.55
2	29.75	17.35	23.85	23.20	23.75	25.20	27.90	30.40	31.35	32.30	33.65	34.55
3	29.30	17.75	23.90	23.30	23.80	25.30	28.00	30.45	31.45	32.40	33.65	34.60
4	29.00	17.45	24.10	23.40	23.85	25.35	28.05	30.45	31.75	32.45	33.75	34.65
5	28.80	18.20	24.25	23.45	23.95	25.50	28.05	30.50	31.75	32.55	33.80	34.65
6	28.70	18.50	24.35	23.45	24.10	25.65	28.10	30.60	31.75	32.55	33.80	34.65
7	28.60	18.90	24.45	23.35	24.25	25.70	28.25	30.70	31.70	32.60	33.85	34.65
8	28.55	19.30	24.60	23.30	24.40	25.75	28.40	30.85	31.70	32.60	33.85	34.60
9	28.45	19.70	24.65	23.35	24.50	25.80	28.45	30.90	31.75	32.65	33.90	34.55
10	28.50	19.90	24.65	23.45	24.60	25.90	28.50	30.90	31.80	32.75	33.90	34.50
11	28.55	20.25	24.65	23.55	24.65	26.00	28.60	30.85	31.85	32.75	33.90	34.45
12	28.65	20.55	24.60	23.60	24.65	26.15	28.65	30.85	31.90	32.85	33.95	34.45
13	28.65	20.85	23.90	23.60	24.80	26.30	28.65	30.85	32.00	32.90	34.00	34.30
14	28.65	21.15	23.50	23.50	25.00	26.40	28.75	30.85	32.00	32.90	34.05	34.20
15	28.70	21.45	23.40	23.20	25.15	26.45	28.80	30.90	32.00	32.95	34.10	34.10
16	.....	21.70	23.40	22.95	25.25	26.60	28.90	30.90	32.05	32.95	34.15	34.00
17	.....	21.95	23.45	22.95	25.35	26.65	28.95	30.90	32.10	33.05	34.20	34.00
18	.....	22.15	23.50	23.00	25.35	26.75	29.05	30.85	32.15	33.10	34.20	34.00
19	.....	22.35	23.60	23.05	25.40	26.90	29.15	30.80	32.15	33.15	34.20	34.05
20	.....	22.55	23.65	23.10	25.45	27.10	29.15	.....	32.20	33.15	34.25	34.15
21	.....	22.65	23.75	23.10	25.50	27.25	29.25	.....	32.20	33.20	34.25	34.15
22	27.55	22.70	23.75	23.20	25.50	27.25	29.45	30.95	32.15	33.20	34.30	34.20
23	27.60	22.80	23.65	23.40	25.50	27.20	29.50	.....	32.05	33.25	34.30	34.20
24	27.65	22.85	23.05	23.50	25.50	27.30	29.60	.....	.....	33.30	34.30	34.60
25	27.65	22.95	22.65	23.50	25.30	27.45	29.75	.....	.....	33.30	34.40	34.20
26	27.65	23.10	22.65	23.35	25.15	27.75	29.80	30.95	.....	33.35	34.40	34.15
27	27.55	23.25	22.75	23.30	25.15	27.85	29.75	31.00	.....	33.40	34.40	34.10
28	25.10	23.40	22.90	23.25	25.20	27.80	29.90	31.10	.....	33.45	34.40	34.10
29	18.50	23.60	23.00	23.35	25.20	27.80	30.00	31.20	.....	33.50	34.45	34.00
30	14.70		23.00	23.45	25.30	27.80	30.10	31.25	32.20	33.55	34.55	34.00
31	15.55		23.05		25.30		30.20	31.35		33.60		34.05

33-1. Prairie State Paper Mills. Vanderveer and Fifth Ave., Middletown. Dug unused well in gravel, diameter 16 feet, depth 45 feet. Highest water level 25.13 below lsd, June 17, 1947; lowest 46.78 below lsd, Nov. 7, 1944. Records available: 1939-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	40.35	Apr. 1	28.53	July 1	33.27	Oct. 7	40.70
8	40.79	8	28.32	8	33.03	14	40.88
15	39.63	15	28.55	15	33.93	21	41.02
22	39.12	22	28.46	22	35.24	28	41.85
29	36.46	29	28.63	29	36.26	Nov. 4	41.92
Feb. 5	31.88	May 6	28.47	Aug. 5	37.15	11	42.25
12	29.87	13	29.03	12	37.91	18	42.44
19	28.37	20	29.65	26	38.71	25	43.18
26	29.53	27	30.18	Sept. 2	38.79	Dec. 2	42.92
Mar. 4	29.22	June 3	29.89	9	39.08	9	43.35
11	30.11	10	30.79	16	39.95	16	43.45
18	29.88	17	31.75	23	40.17	23	43.99
25	29.56	24	32.76	30	40.50	30	42.37

36-13. American Rolling Mill Co. Crawford St. and South Ave., Middletown. Lat. 39°30'00", long. 84°23'00". Drilled unused well in gravel, diameter 26 inches, depth 183 feet. Highest water level 76.83 below lsd, Aug. 1, 1938; lowest 129.70 below lsd, June 12, 1942. Records available: 1938-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	112.25	114.55	113.75	111.30	111.05	109.70	109.05	108.95	110.25	112.95	114.70	112.05
2	112.75	114.60	112.95	111.55	111.20	109.50	109.10	109.10	110.80	113.30	114.50	112.35
3	113.05	113.80	112.40	111.75	111.20	109.50	109.15	109.10	111.35	113.55	114.40	112.50
4	113.25	113.70	112.90	111.75	110.85	109.65	109.05	109.10	111.55	113.55	114.10	112.60
5	113.45	113.95	112.95	111.90	110.50	109.75	108.15	109.15	111.20	113.50	114.00	112.85
6	113.35	114.20	113.05	111.85	110.50	109.85	107.15	109.25	110.95	113.95	113.50	112.90
7	112.75	114.45	113.35	111.80	110.55	109.90	107.30	109.30	110.85	113.60	113.40	112.90
8	113.15	114.85	113.35	111.65	110.70	109.60	107.65	109.55	110.65	113.85	113.45	112.80
9	113.40	114.80	112.25	111.70	110.75	108.70	107.90	109.60	110.95	114.10	113.10	112.80
10	113.75	114.05	111.55	111.95	110.75	108.95	108.15	109.45	111.25	114.40	112.75	113.00
11	113.80	114.10	112.05	111.95	110.45	109.15	108.35	109.25	111.60	114.40	112.95	113.10
12	113.90	114.10	112.05	111.85	110.15	109.30	108.45	109.20	111.90	114.25	113.25	113.20
13	113.75	114.25	112.20	111.70	109.95	109.45	108.30	109.40	111.95	114.00	113.20	113.25
14	113.15	114.35	112.25	111.45	109.95	109.55	108.05	109.60	111.45	114.05	113.30	113.25
15	113.60	114.40	112.20	111.40	110.15	109.40	108.05	109.70	110.95	114.35	113.35	112.95
16	113.75	114.45	111.50	111.45	110.25	108.95	108.25	109.95	111.20	114.40	113.30	113.15
17	114.05	114.40	111.10	111.50	110.25	109.40	108.40	110.00	111.75	114.45	112.60	113.30
18	114.15	113.95	111.25	111.60	110.00	109.10	108.55	110.05	112.10	114.45	112.65	113.45
19	114.15	113.85	111.50	111.60	109.60	108.85	108.65	110.15	112.30	114.15	112.90	113.55
20	113.40	114.05	111.55	111.45	109.55	108.85	108.65	110.25	112.30	113.75	113.05	113.55
21	113.10	114.15	111.60	111.15	109.70	108.80	109.00	110.45	112.00	113.70	113.05	113.40
22	113.65	114.15	111.65	111.10	109.85	108.65	108.65	110.60	111.30	113.75	113.05	113.55
23	113.95	114.15	111.00	111.20	109.95	108.45	108.65	110.60	111.55	113.75	113.05	113.75
24	114.10	113.60	110.30	111.90	109.95	108.50	108.70	110.55	111.60	113.80	112.45	113.75
25	114.20	112.90	110.65	112.10	109.75	108.70	108.70	110.45	111.90	113.80	112.30	113.30
26	114.30	113.10	111.20	111.70	109.45	109.10	108.75	110.30	112.25	113.50	112.70	112.75
27	114.30	113.30	111.35	111.50	109.30	109.10	108.70	110.40	112.30	113.50	112.90	112.75
28	113.85	113.45	111.95	111.10	109.50	109.10	108.40	110.40	112.30	113.75	113.10	112.65
29	114.20	113.60	111.85	110.95	109.65	109.05	108.60	110.20	112.30	114.10	112.80	112.75
30	114.40		111.80	111.15	109.80	109.00	108.75	110.25	112.60	114.40	112.70	113.15
31	114.50		111.35		109.85		108.90	110.15		114.65		113.60

85-7. City of Hamilton. Lat. 39°25', long. 84°32'. Drilled unused well in gravel, diameter 3 inches, depth 110 feet. Highest water level 12.45 below lsd, Apr. 23, 1940; lowest 35.65 below lsd, Dec. 24, 1952. Records available: 1939-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	18.25	23.80	23.25	25.20	25.95	30.00	34.10	.....	32.85	34.20	35.35
2	27.45	18.50	24.05	23.25	25.50	26.45	30.20	33.00	33.10	32.95	33.60	35.05
3	27.45	18.65	24.03	23.45	25.70	27.35	30.30	32.55	33.10	32.95	33.95	35.10
4	27.35	18.45	24.55	24.05	26.10	27.80	30.60	32.50	32.95	32.65	33.80	.....
5	27.00	18.75	24.55	.....	26.20	27.75	30.05	33.80	33.10	32.65	33.75	35.30

85-7--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	26.95	19.00	24.55	24.00	26.35	27.70	30.30	34.00	32.65	32.45	32.80	35.30
7	26.95	19.15	24.10	.....	26.40	27.85	30.55	33.35	32.60	32.50	32.60	35.35
8	27.10	19.50	.....	23.55	26.60	28.35	30.70	34.05	.....	32.55	32.60	35.40
9	27.20	19.70	25.60	23.65	26.85	28.60	30.65	34.25	33.10	32.60	32.60	35.45
10	27.35	19.95	.....	23.75	26.85	28.75	30.50	32.70	33.20	32.70	32.60	35.40
11	27.40	20.35	24.25	23.85	26.40	28.90	30.65	32.70	33.25	32.50	33.35	35.40
12	.....	20.75	23.95	23.90	26.50	29.50	30.80	32.55	.....	33.10	33.60	35.35
13	.....	21.20	23.10	24.20	26.65	29.25	31.15	32.60	.....	33.80	33.80	35.40
14	27.80	21.40	22.85	23.55	26.75	29.30	31.25	32.55	.....	33.90	33.35	34.90
15	27.75	21.60	23.45	22.95	26.75	29.30	31.45	33.15	.....	34.00	33.20	35.20
16	27.75	21.85	.....	22.80	27.00	29.35	31.20	32.50	33.10	34.40	33.20	34.80
17	27.50	22.20	24.00	22.95	27.05	29.45	31.05	32.40	33.05	34.05	33.65	34.85
18	27.40	22.60	24.05	23.45	.....	29.05	30.90	32.50	33.10	34.05	33.70	34.90
19	27.10	22.40	24.30	23.60	.....	29.55	31.00	32.65	33.10	34.05	33.70	35.40
20	26.70	22.50	.....	24.05	26.00	29.55	31.00	32.75	32.80	33.95	33.75	35.40
21	26.10	22.45	.....	24.80	26.00	29.55	31.10	32.90	32.55	34.45	33.80	35.50
22	26.05	22.45	24.30	24.80	25.80	29.40	31.10	32.95	32.70	34.25	33.80	35.55
23	26.25	22.65	.....	24.40	26.00	29.50	31.95	.....	32.85	34.35	33.85	35.60
24	26.35	22.85	21.70	24.25	26.00	29.50	32.65	.....	32.65	34.40	34.50	35.65
25	26.55	22.85	21.90	23.95	25.25	29.55	32.65	32.65	32.55	33.75	34.00	35.35
26	26.50	22.95	22.20	23.70	25.20	29.55	32.20	32.85	32.50	33.70	33.95	35.45
27	23.20	23.05	22.40	23.75	25.60	29.55	32.30	32.95	32.50	34.50	34.50	35.25
28	17.95	23.25	22.65	24.50	25.75	29.55	32.45	.....	32.60	34.60	33.80	35.00
29	16.40	23.35	.....	24.50	25.85	29.70	33.15	.....	32.50	34.60	33.55	35.00
30	17.20	.....	22.95	24.80	25.65	29.85	33.65	33.10	32.75	34.20	34.40	35.10
31	17.85	.....	23.15	.....	25.85	.....	33.65	.....	.....	34.20	.....	35.25

117. Anna Magie. Lat. 39°21'30", long. 84°34'56". Driven unused well in gravel, diameter 1½ inches, depth 40 feet. Highest water level 15.90 below lsd, June 10, 1947; lowest 32.57 below lsd, Dec. 4, 1951. Records available: 1938-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	27.88	Apr. 8	21.98	July 8	25.09	Oct. 7	27.20
8	26.99	15	22.03	15	25.48	14	27.33
15	26.55	22	21.93	22	25.81	21	27.48
22	26.05	29	22.00	29	26.17	28	27.63
29	24.07	May 6	22.27	Aug. 5	26.26	Nov. 11	27.88
Feb. 12	22.01	13	22.75	12	26.44	18	27.97
19	22.26	20	23.13	26	26.49	25	28.07
26	22.47	27	23.35	Sept. 2	26.61	Dec. 2	28.18
Mar. 4	22.77	June 3	23.38	9	26.75	9	28.14
11	22.99	10	23.84	16	26.84	16	28.00
18	22.51	17	24.20	23	26.95	23	27.97
25	22.14	24	24.39	30	27.03	30	27.95
Apr. 1	21.72	July 1	24.62				

150-2. Mrs. J. Wesley Morris. Lat. 39°21'01", long. 84°29'18". Dug unused well in gravel, diameter 24 inches, depth 28 feet. Highest water level 1.00 below lsd, Mar. 16, 1943; lowest 21.37 below lsd, Aug. 12, 1941. Records available: 1938-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	1.70	Apr. 8	2.77	July 8	9.62	Oct. 14	12.86
9	1.98	15	2.01	15	10.73	21	12.90
15	2.48	22	3.28	22	11.25	28	13.08
22	1.90	29	3.43	29	12.13	Nov. 4	13.30
29	1.86	May 6	4.55	Aug. 5	12.25	11	16.40
Feb. 5	1.39	13	4.07	12	12.33	18	18.83
12	2.56	20	4.72	26	12.35	25	19.62
26	3.03	27	3.15	Sept. 2	12.66	Dec. 2	19.25
Mar. 4	3.35	June 3	4.73	9	12.68	9	18.60
11	1.34	10	6.05	16	12.72	16	18.10
18	2.75	17	6.90	23	12.64	23	17.66
25	2.01	24	8.35	30	12.80	30	17.36
Apr. 1	2.32	July 1	8.99	Oct. 7	12.78		

151-1. Harry A. Morris. Lat. 39°21'00", long. 84°29'18". Drilled unused well in gravel, diameter 6 inches, depth 227 feet. Highest water level 1.45 below lsd, June 4, 1947; lowest 33.20 below lsd, Dec. 24, 1941. Records available: 1940-52.

151-1--Continued.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	19.15	11.80	9.40	6.60	6.65	7.75	9.50	13.90	16.50	18.45	20.25	21.80
2	19.00	11.50	9.40	6.70	6.85	7.85	9.65	13.95	16.65	18.55	20.30	21.85
3	18.70	11.00	9.25	6.75	6.95	7.85	9.80	14.05	16.80	18.60	20.40	21.90
4	18.40	10.25	9.55	6.75	7.00	8.00	9.95	14.20	16.85	18.65	20.40	21.90
5	17.95	9.80	9.65	6.65	6.95	8.05	10.10	14.35	16.90	18.70	20.45	21.95
6	17.60	9.65	9.70	6.80	7.25	8.10	10.50	14.45	16.95	18.80	20.55	22.00
7	17.65	9.45	9.75	6.80	7.35	8.20	.....	14.50	17.05	18.90	20.60	22.05
8	17.00	9.20	9.65	6.85	7.30	8.25	10.55	14.60	17.10	18.90	20.65	22.05
9	16.70	9.20	9.50	6.85	7.30	8.35	10.80	14.65	17.10	18.95	20.70	22.10
10	16.60	9.10	9.40	6.95	7.35	8.50	11.00	14.80	17.15	19.05	20.75	22.10
11	16.60	9.15	9.00	7.00	7.35	8.60	11.25	14.85	17.25	19.10	20.80	22.15
12	16.30	9.15	8.90	6.85	7.50	8.65	11.40	15.20	17.30	19.10	20.80	22.20
13	16.15	9.10	8.20	6.65	7.60	8.75	11.60	15.05	17.35	19.20	20.85	22.25
14	15.95	9.15	8.25	6.30	7.60	8.80	11.75	15.15	17.40	19.25	20.90	22.25
15	16.05	9.15	8.15	6.15	7.55	8.90	11.80	15.15	17.45	19.30	20.95	22.30
16	16.05	9.05	8.05	6.20	7.70	8.90	11.95	15.30	17.55	19.35	21.05	22.35
17	15.85	9.20	8.10	6.15	7.80	9.10	12.10	15.35	17.60	19.40	21.05	22.35
18	15.90	9.25	8.00	6.15	7.85	9.15	12.20	15.43	17.65	19.45	21.10	22.40
19	15.85	9.20	7.95	6.15	7.85	9.20	12.30	15.50	17.80	19.50	21.15	22.40
20	15.70	9.10	7.95	6.25	7.85	9.35	11.35	.....	17.85	19.65	21.25	22.40
21	15.70	9.25	8.00	6.30	8.05	9.40	12.55	.....	17.80	19.70	21.25	22.45
22	15.25	9.30	7.90	6.35	8.10	9.50	12.70	.....	17.95	19.70	21.30	.....
23	15.35	9.20	7.20	6.40	8.10	9.55	12.85	.....	18.05	19.75	21.40	22.60
24	15.35	9.20	6.40	6.40	8.05	9.55	13.00	.....	18.10	19.80	21.45	22.60
25	15.15	9.30	6.15	6.30	7.75	9.65	13.10	.....	18.10	19.90	21.45	22.65
26	14.85	9.25	6.35	6.30	7.65	9.85	13.20	16.10	18.20	19.90	21.55	22.65
27	14.20	9.10	6.45	6.30	7.65	9.95	13.30	16.20	18.25	19.95	21.60	22.70
28	13.30	9.05	6.55	6.35	7.60	9.50	13.40	16.25	18.30	20.05	21.65	22.70
29	12.65	9.15	6.70	6.55	7.60	9.30	13.55	16.35	18.35	20.15	21.70	22.70
30	12.40		6.75	6.65	7.60	9.20	13.70	16.40	18.40	20.15	21.80	22.75
31	12.10		6.65		7.55		13.85	16.45		20.20		22.80

180. Fox Paper Co. Crescentville. Lat. 39°18'05", long. 84°26'18". Drilled unused well in gravel, diameter 26 inches, depth 90 feet. Highest water level 3.77 below lsd, Jan. 27, 1949; lowest 20.85 below lsd, Nov. 28, 30, 1952. Records available: 1938-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	9.15	6.70	8.45	6.70	7.60	8.10	12.70	15.70	17.30	18.40	19.35	20.80
2	9.15	6.30	8.45	6.85	7.80	8.10	12.80	15.60	17.50	18.80	19.50	20.60
3	8.85	6.25	8.30	7.10	7.90	8.15	12.85	15.65	17.65	18.95	19.90	20.75
4	8.60	5.90	8.65	7.15	7.95	8.35	13.00	15.80	17.75	18.75	19.85	20.70
5	8.00	6.05	8.75	6.90	8.05	8.50	13.15	16.00	17.70	18.85	19.50	20.35
6	7.90	6.10	8.75	7.10	8.25	8.85	13.25	16.00	17.60	19.00	19.85	20.15
7	7.85	6.15	8.80	7.15	8.35	9.30	13.30	16.10	17.70	19.05	20.05	20.35
8	7.55	6.25	8.70	7.25	8.45	9.70	13.30	16.10	17.75	18.90	20.05	20.45
9	7.55	6.30	8.50	7.35	8.45	10.10	13.50	16.05	17.75	18.95	19.90	20.40
10	7.90	6.30	8.50	7.65	8.35	10.50	13.65	16.25	17.75	19.75	20.05	19.25
11	7.90	6.55	7.25	7.70	8.25	10.85	13.90	16.30	17.75	19.45	20.05	19.25
12	7.70	6.60	7.15	7.55	8.05	11.00	14.05	16.50	17.75	19.45	20.15	19.20
13	7.65	6.90	6.65	7.40	8.25	11.25	14.05	16.60	17.80	17.50	20.15	19.20
14	7.60	6.95	6.75	6.60	8.25	11.40	14.05	16.60	17.85	18.05	20.10	19.05
15	7.80	6.90	6.75	6.65	8.30	11.50	14.25	16.50	17.85	18.50	20.15	18.95
16	7.90	6.85	6.80	6.70	8.40	11.65	14.40	16.60	17.85	18.70	20.30	18.90
17	7.70	7.15	6.90	6.70	8.45	11.90	14.50	16.70	17.80	18.90	20.35	18.80
18	8.00	7.25	6.95	6.70	8.50	12.05	14.50	16.80	17.85	19.05	20.25	19.00
19	7.95	7.20	6.85	6.85	8.45	12.25	14.50	16.85	18.20	19.05	20.20	19.05
20	7.95	7.20	6.85	7.10	8.45	12.35	14.55	16.80	18.30	19.45	20.30	18.80
21	7.95	7.40	6.95	7.20	8.65	12.55	14.75	.....	18.35	19.45	20.30	18.75
22	7.75	7.45	6.90	7.25	8.70	12.70	14.85	.....	18.35	19.20	20.40	18.50
23	8.15	7.40	6.25	7.30	8.75	12.70	14.95	.....	18.45	19.05	20.70	18.10
24	8.20	7.65	6.05	7.05	8.75	12.60	15.10	18.50	19.05	20.70	18.10
25	8.05	7.80	5.85	6.95	8.40	12.50	15.15	18.45	19.15	20.40	18.00

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180--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	7.35	7.85	6.00	7.00	7.40	12.60	15.20	18.35	19.15	20.60	17.85
27	6.95	7.85	6.10	7.10	7.45	12.65	15.20	17.15	18.45	19.00	20.75	17.65
28	6.85	7.95	6.25	7.25	7.50	12.70	15.15	17.15	18.45	19.25	20.85	17.65
29	6.75	8.10	6.65	7.45	7.75	12.55	15.35	17.25	18.55	19.40	20.80	17.50
30	6.80		6.70	7.55	7.80	12.60	15.50	17.25	18.55	19.25	20.85	17.40
31	6.80		6.80		7.90		15.70	17.30		19.15		17.75

Carroll County

C-1. City of Carrollton. Lat. 40°37'26", long. 81°05'12". Drilled unused well in sandstone, diameter 10 inches, depth 60 feet. Highest water level 19.25 below lsd, May 5, 1952; lowest 37.65 below lsd, Dec. 16, 1952. Records available: 1951-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	24.65	.....	22.55	21.00	20.00	23.20	29.05	32.25	33.60	34.00	35.20	36.60
2	24.60	.....	22.50	20.95	19.90	23.10	29.20	32.85	33.95	34.10	35.20	36.55
3	24.10	.....	22.50	20.90	19.95	23.45	29.15	32.95	34.20	34.65	34.90	36.75
4	23.50	.....	22.55	21.00	19.90	23.50	29.50	33.15	34.60	34.60	35.30	36.85
5	23.55	.....	22.85	21.00	19.75	22.90	29.40	33.30	34.60	34.20	35.65	36.35
6	23.35	.....	22.90	21.00	19.95	23.75	29.45	33.85	34.40	34.25	35.70	36.70
7	23.35	.....	22.85	21.20	20.35	23.85	29.90	34.10	34.40	34.10	36.00	36.85
8	23.05	.....	22.90	21.10	20.35	24.20	30.05	34.30	33.80	34.30	36.10	37.00
9	22.95	21.70	22.40	21.15	20.60	24.80	30.30	34.30	33.80	34.70	35.80	37.00
10	23.30	21.80	22.45	21.30	21.15	25.20	30.30	33.90	33.80	34.90	35.50	37.10
11	23.25	21.75	22.90	21.20	21.20	25.50	30.55	32.70	33.75	35.20	35.85	37.25
12	22.95	21.85	22.85	21.60	21.30	25.50	30.60	32.85	33.75	35.25	36.10	37.45
13	22.75	22.15	22.20	21.85	21.30	25.75	30.00	32.85	34.00	35.50	36.30	37.50
14	22.50	22.35	22.30	22.00	21.90	26.30	29.90	32.85	34.10	35.55	36.40	37.55
15	22.75	22.35	22.30	22.00	22.05	26.30	30.00	32.45	33.80	35.50	36.45	37.60
16	22.80	22.30	21.75	21.80	22.25	27.00	29.95	31.75	34.10	35.80	36.45	37.65
17	22.50	22.20	21.80	21.80	21.85	27.50	29.80	31.70	34.15	35.95	36.45	37.60
18	22.65	22.20	21.85	21.65	21.65	28.10	29.75	32.15	33.80	36.10	36.20	37.50
19	22.20	21.85	21.95	21.65	21.35	28.35	29.65	32.20	33.75	36.30	36.45	37.20
20	22.20	21.60	21.95	21.20	21.00	28.55	29.50	31.80	34.10	36.40	36.65	37.10
21	22.10	21.55	21.80	21.10	22.10	28.40	29.30	31.85	34.10	36.40	36.80	36.80
22	22.20	21.40	21.80	21.60	22.15	28.40	29.20	31.25	34.45	36.55	36.85	35.95
23	22.20	21.35	21.45	21.60	22.55	28.30	29.50	31.70	35.00	36.45	36.50	36.00
24	22.20	21.30	21.40	21.05	22.55	.....	29.40	31.35	35.20	36.05	36.30	35.65
25	22.15	21.25	21.25	21.50	22.65	.....	29.55	32.15	35.40	35.80	36.55	35.40
26	21.95	21.35	21.60	21.50	23.00	28.40	30.15	32.40	35.40	35.95	36.55	35.15
27	.....	21.85	21.65	20.60	23.05	28.55	30.25	32.90	35.30	35.50	36.50	35.30
28	.....	21.95	21.55	19.70	23.35	29.15	30.75	33.10	34.85	35.70	36.30	35.25
29	.....	22.30	21.60	20.05	23.40	29.20	31.15	33.40	34.25	35.80	36.40	35.05
30	.....		21.00	20.00	23.25	28.95	31.60	33.55	34.25	35.45	36.60	35.20
31	.....		20.95		23.20		32.15	33.60		35.35		35.10

Champaign County

Ch-1. State of Ohio. Lat. 40°06'36", long. 83°48'00". Drilled observation well in gravel, diameter 6 inches, depth 45 feet. Highest water level 1.43 below lsd, Jan. 17, 1950; lowest 9.29 below lsd, Nov. 5-7, 12-14, 1951. Records available: 1948-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.10	6.18	7.49	7.02	7.16	7.76	8.20	8.59	8.83	8.93	9.08	....
2	7.21	6.17	7.52	7.10	7.23	7.78	8.21	8.60	8.83	8.95	9.08	....
3	7.21	6.13	7.54	7.17	7.28	7.80	8.23	8.61	8.84	8.95	9.08	9.20
4	7.22	5.59	7.56	7.20	7.33	7.78	8.25	8.62	8.85	8.95	9.08	....
5	7.34	5.85	7.62	7.19	7.36	7.77	8.26	8.63	8.85	8.96	9.08	....
6	7.44	6.06	7.67	7.14	7.31	7.80	8.28	8.64	8.86	8.96	9.09	....
7	7.51	6.25	7.70	7.17	7.33	7.82	8.29	8.65	8.87	8.97	....	....
8	7.57	6.38	7.73	7.21	7.37	7.84	8.30	8.66	8.87	8.98	9.11	....
9	7.66	6.52	7.74	7.24	7.39	7.86	....	8.67	8.88	8.98	....	....
10	7.74	6.62	7.75	7.28	7.42	7.88	....	8.67	8.88	8.99	9.12	8.94

Ch-1 --Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	7.80	6.77	7.50	7.32	7.46	7.91	8.35	8.68	8.89	8.99	9.12	8.91
12	7.86	6.87	6.32	7.32	7.50	7.91	8.37	8.69	8.90	8.99	9.13	8.89
13	7.90	6.96	6.52	7.22	7.54	7.93	8.38	8.70	8.90	9.00	9.13	8.90
14	7.90	7.05	6.69	6.39	7.56	7.93	8.38	8.70	8.91	9.01	9.14	8.93
15	7.83	7.11	6.80	6.39	7.61	7.95	8.41	8.71	8.91	9.01	9.15	8.97
16	7.71	7.19	6.91	6.50	7.62	7.97	8.41	8.71	....	9.01	....	8.98
17	7.68	7.26	7.01	6.62	7.60	7.99	8.42	8.66	8.92	9.02	....	9.00
18	7.45	7.32	7.06	6.73	7.63	8.01	8.43	8.70	....	9.02	9.15	9.02
19	7.47	7.36	7.06	6.83	7.65	8.03	8.44	8.71	8.76	9.03	9.15	9.04
20	7.51	7.36	6.98	6.92	7.65	....	8.44	8.72	8.78	9.04	9.15	9.05
21	7.52	6.94	7.05	7.00	7.67	....	8.46	8.73	8.81	9.04	9.15	9.06
22	7.53	6.97	7.05	7.06	7.70	8.07	8.48	8.75	8.82	9.04	9.16	9.07
23	7.61	7.05	5.68	7.08	7.71	8.10	8.49	8.75	8.85	9.04	9.17	9.08
24	7.67	7.11	5.92	6.71	7.70	8.10	8.52	8.76	8.86	9.04	9.17	9.08
25	7.67	7.19	6.12	6.66	7.66	8.12	8.53	8.77	8.87	9.05	9.16	9.10
26	7.60	7.24	6.34	6.76	7.65	8.14	8.54	8.79	8.89	9.05	9.17	9.10
27	4.69	7.30	6.51	6.86	7.62	8.14	8.55	8.79	8.90	9.05	9.18	9.11
28	5.16	7.35	6.66	6.95	7.66	8.15	8.56	8.80	8.91	9.06	9.19	9.12
29	5.50	7.40	6.79	7.03	7.68	8.17	8.57	8.81	8.91	9.07	9.19	9.13
30	5.78	....	6.89	7.10	7.71	8.20	8.58	8.82	8.93	9.07	9.20	9.13
31	6.03	....	6.96	....	7.73	....	8.58	8.83	....	9.07	....	9.14

Delaware County

Dl-2. U. S. Army Engineer Corps. Lat. 40°21'42", long. 83°04'25". Dug unused well in sand and gravel, diameter 24 inches, depth 31 feet. Highest water level 1.45 below lsd, Jan. 26, 1952; lowest 16.43 below lsd, Dec. 6-9, 1952. Records available: 1949-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2.70	4.65	7.25	5.76	5.52	6.90	10.75	12.40	13.67	14.43	15.43	16.33
2	2.65	4.45	7.40	5.90	5.85	7.17	10.82	12.42	13.70	14.45	15.47	16.35
3	2.85	3.10	7.45	6.07	6.19	7.38	10.87	12.45	13.75	14.50	15.53	16.40
4	3.00	2.40	7.40	6.17	6.44	7.61	10.94	....	13.80	14.53	15.55	16.42
5	2.85	2.85	7.38	6.15	6.64	7.80	11.01	....	13.84	14.56	15.55	16.42
6	3.15	3.10	7.47	4.14	6.90	8.00	11.08	....	13.86	14.61	15.55	16.43
7	3.30	3.25	7.54	3.27	7.15	8.19	11.13	....	13.90	14.65	15.60	16.43
8	3.45	3.35	7.57	3.47	7.34	8.35	11.16	....	13.93	14.66	15.63	16.43
9	3.45	3.55	7.57	3.54	7.49	8.51	11.20	....	13.96	14.68	15.66	16.43
10	3.30	3.70	7.57	4.09	7.60	8.67	11.26	....	13.99	14.70	....	16.39
11	3.60	4.00	7.75	4.33	7.74	8.82	11.34	....	14.02	14.72	....	16.36
12	3.90	4.45	3.10	4.40	7.87	8.97	11.43	....	14.05	14.73	....	16.33
13	4.15	4.85	3.23	3.12	8.03	9.10	11.50	....	14.08	14.74	....	16.31
14	4.25	5.25	3.40	2.64	8.14	9.22	11.52	....	14.10	14.75	....	16.29
15	4.15	5.60	3.67	2.75	8.25	9.32	11.56	....	14.11	14.76	....	16.27
16	3.85	5.90	4.04	3.18	8.40	9.43	11.65	....	14.11	14.80	....	16.26
17	3.85	6.15	4.17	3.48	8.48	9.52	11.72	....	14.11	14.85	15.92	16.24
18	2.80	6.55	3.85	3.85	8.57	9.65	11.77	....	14.12	14.87	15.95	16.23
19	3.00	6.85	....	4.25	8.62	9.76	11.80	....	14.15	14.90	15.97	16.24
20	3.05	6.90	....	4.65	8.62	9.89	11.82	....	14.20	14.99	15.99	16.23
21	3.30	6.00	....	5.05	8.61	9.97	11.86	....	14.24	15.06	16.00	16.21
22	3.35	5.80	....	5.37	8.65	10.07	11.97	....	14.26	15.10	16.00	16.20
23	3.35	5.95	....	5.52	8.66	10.17	11.97	....	14.29	15.12	16.05	16.18
24	3.80	6.15	3.26	2.62	8.60	10.24	12.05	....	14.33	15.15	16.09	16.15
25	4.15	6.35	3.57	3.14	7.60	10.31	12.11	13.50	14.34	15.20	16.10	16.15
26	3.60	6.55	3.97	3.49	6.80	10.38	12.17	13.55	14.35	15.22	16.10	16.14
27	2.60	6.70	4.34	3.92	5.62	10.49	12.21	13.58	14.37	15.23	16.14	16.13
28	2.90	6.85	4.72	4.34	5.82	10.57	12.24	13.60	14.39	15.26	16.20	16.13
29	3.35	7.05	5.08	4.76	6.09	10.62	12.28	13.62	14.41	15.33	16.23	16.12
30	3.80	....	5.40	5.17	6.37	10.67	....	13.65	14.43	15.36	16.29	16.10
31	4.25	....	5.59	....	6.59	....	12.35	13.66	....	15.39	....	16.08

Dl-3. U. S. Army Engineer Corps. Lat. 40°21'42", long. 83°04'00". Drilled unused well in limestone, diameter 12 inches, depth 135 feet. Highest water level 23.40 below lsd, Jan. 29, 1952; lowest 37.04 below lsd, Nov. 1, 1948. Records available: 1948-52.

DI-3--Continued.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	26.97	27.28	28.89	28.72	26.30	27.06	26.88	27.31	27.80	28.04	28.59	28.99
2	27.05	27.28	28.87	28.80	26.60	27.08	26.83	27.25	27.88	28.22	28.61	28.89
3	.....	26.82	28.75	28.83	26.75	26.98	26.70	27.27	28.00	28.29	28.68	28.96
4	.....	26.62	29.02	28.82	26.87	27.06	26.77	27.35	28.07	28.19	28.66	28.92
5	.....	27.32	29.07	28.49	27.00	27.10	26.68	27.42	28.05	28.27	28.47	28.72
6	.....	27.79	29.00	28.47	27.17	27.08	26.65	27.40	27.98	28.28	28.63	28.82
7	.....	27.85	28.95	28.37	27.22	27.15	26.64	27.43	28.04	28.29	28.73	28.83
8	.....	28.00	28.87	28.10	27.06	27.10	26.70	27.42	28.08	28.24	28.74	28.85
9	.....	27.99	28.71	27.55	27.04	27.15	26.83	27.40	28.07	28.25	28.65	28.79
10	.....	27.92	28.67	26.99	26.93	27.17	27.00	27.50	28.07	28.29	28.72	28.65
11	.....	28.25	28.03	26.94	26.96	27.27	27.07	27.51	28.12	28.30	28.69	28.58
12	.....	28.35	26.80	26.83	27.11	27.20	27.08	27.57	28.15	28.26	28.75	28.55
13	.....	28.40	26.75	26.57	27.20	27.27	27.03	27.62	28.15	28.27	28.76	28.54
14	.....	28.48	27.30	26.47	27.20	27.24	26.97	27.60	28.14	28.39	28.74	28.74
15	.....	28.48	27.47	26.06	27.21	27.26	27.07	27.55	28.12	28.35	.....	28.84
16	.....	28.44	27.96	25.40	27.25	27.22	27.08	27.56	28.10	28.39	.....	28.84
17	.....	28.63	28.26	25.52	27.13	27.25	27.08	27.63	28.11	28.41	28.81	28.85
18	26.20	28.66	28.27	25.95	27.13	27.26	27.04	27.62	28.13	28.42	28.77	28.97
19	26.22	28.67	28.14	26.17	27.02	27.27	26.99	27.64	28.21	28.45	28.69	29.00
20	.....	28.57	27.73	26.40	26.96	27.30	26.97	27.61	28.22	28.60	28.75	28.83
21	27.60	28.63	27.77	26.48	26.89	27.25	27.08	27.62	28.19	28.59	28.76	28.90
22	27.60	28.65	27.67	26.62	26.92	27.27	27.12	27.74	28.15	28.46	28.77	28.88
23	28.10	28.56	27.42	26.75	26.96	27.32	27.10	27.74	28.05	28.40	28.95	28.90
24	28.30	28.60	27.24	26.50	26.99	27.22	27.14	27.73	28.07	28.44	28.95	28.95
25	28.26	28.68	27.56	26.11	26.84	27.23	27.14	27.76	28.01	28.54	28.82	28.93
26	27.95	28.66	27.94	24.55	26.83	27.34	27.12	27.78	27.98	28.53	28.86	28.92
27	26.39	28.58	28.20	25.17	26.66	27.27	27.11	27.77	28.03	28.45	28.93	28.98
28	24.65	28.63	28.30	25.77	26.78	27.21	27.10	27.75	28.02	28.58	28.97	28.98
29	23.74	28.71	28.48	26.06	26.85	27.02	27.18	27.80	28.04	28.67	28.96	28.88
30	25.40	.....	28.50	26.18	26.87	26.93	27.23	27.82	28.04	28.61	29.00	28.86
31	26.92	.....	28.47	.....	26.90	.....	27.33	27.81	.....	28.54	.....	28.97

Fairfield County

F-1. C. E. Howdysshell. Lat. 39°46'06", long. 82°26'42". Drilled unused well in sandstone, diameter 4 inches, depth 110 feet. Highest water level 7.44 below lsd, Apr. 4, 1951; lowest 17.00 below lsd, Dec. 22, 1952. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	13.55	.....	9.93	.....	9.12	.....	12.97	.....	14.69	15.20	15.99	16.76
2	13.41	.....	9.94	.....	9.16	.....	.....	.....	.....	15.27	16.02	16.76
3	13.17	.....	9.99	.....	9.19	.....	.....	.....	.....	15.30	16.08	16.77
4	13.02	.....	10.13	.....	9.25	.....	13.09	.....	.....	14.70	15.30	16.09
5	12.67	.....	10.17	.....	9.36	.....	.....	14.10	14.71	15.32	16.06	16.74
6	12.47	.....	.....	.....	9.40	.....	.....	.....	14.73	15.34	16.09	16.74
7	12.29	.....	.....	.....	9.46	.....	13.10	.....	14.75	15.36	16.17	16.78
8	12.07	.....	10.21	.....	.....	11.72	13.10	.....	14.78	15.36	16.17	16.80
9	11.93	.....	10.21	.....	.....	11.82	13.06	.....	14.83	15.37	16.18	16.80
10	11.88	.....	10.15	9.25	9.79	.....	13.10	.....	14.83	15.40	16.22	16.80
11	11.83	9.08	10.11	9.27	.....	.....	13.14	.....	14.84	15.44	16.23	16.80
12	.....	9.11	9.99	9.22	.....	12.22	13.18	.....	.....	15.44	16.29	16.82
13	.....	9.13	9.88	9.13	9.82	.....	13.19	.....	14.91	15.46	16.33	16.85
14	.....	9.17	.....	9.21	9.87	.....	13.23	.....	.....	15.50	16.35	16.88
15	.....	9.19	.....	9.22	10.02	.....	.....	14.13	14.87	15.53	16.40	16.91
16	.....	9.20	.....	9.24	10.11	12.23	13.34	14.12	14.88	15.55	16.43	16.92
17	.....	9.26	.....	9.23	10.25	12.30	.....	.....	14.89	15.60	16.45	16.93
18	.....	9.40	.....	9.25	10.30	12.38	.....	.....	14.89	15.63	16.45	16.98
19	.....	9.44	.....	9.25	10.41	12.44	13.34	14.31	14.93	15.63	16.45	16.99
20	.....	9.56	.....	9.23	10.56	12.49	13.34	.....	14.98	15.73	16.44	16.99
21	.....	9.61	.....	9.20	.....	12.56	13.37	.....	15.00	15.75	16.45	16.99
22	.....	9.64	.....	9.18	.....	12.61	13.40	.....	15.01	15.75	16.47	17.00
23	.....	9.73	.....	9.15	.....	12.60	13.44	.....	15.05	15.75	16.57	.....
24	.....	9.74	.....	.....	.....	12.66	13.51	.....	15.07	15.75	.....	.....
25	.....	9.74	.....	.....	.....	12.72	13.51	14.51	15.08	15.80	.....	.....

F-1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	12.79	.....	.....	15.07	15.82	.....	.....
27	12.87	.....	.....	15.11	15.82	16.78	.....
28	9.80	.....	.....	.....	12.92	.....	.....	15.14	15.86	.....	.....
29	9.83	.....	.....	.....	12.93	.....	.....	15.18	15.93	.....	.....
30	9.13	.....	12.93	.....	.....	15.18	15.93	.....	.....
31	9.54	.....	.....	.....	.....	.....	15.95	.....	.....	.....

F-2. Pickerington Creamery Co. Lat. 39°53'25", long. 82°44'50". Drilled unused well in sandstone, diameter 6 inches, depth 190 feet. Highest water level 18.90 below lsd, May 29, 1946; lowest 26.40 below lsd, Oct. 26, 1951. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	24.29	23.97	23.60	23.69	23.58	23.78	24.67	24.94	25.08	24.88	23.10	21.13
2	24.30	23.88	23.60	23.72	23.63	23.75	24.73	25.00	25.04	24.86	23.02	21.06
3	24.23	23.85	23.54	23.80	23.64	23.72	24.76	25.01	25.09	24.88	22.89	21.00
4	24.22	23.68	23.43	23.80	23.65	23.69	24.74	24.98	25.09	24.84	22.78	20.97
5	24.18	23.71	23.43	23.67	23.61	23.75	24.73	24.90	25.08	24.78	22.65	20.89
6	24.20	23.75	24.43	23.72	23.58	23.85	24.69	24.92	25.08	24.72	22.52	20.81
7	24.20	23.76	23.52	23.78	23.58	24.00	24.69	24.92	25.05	24.64	22.42	20.79
8	24.16	23.78	23.57	23.85	23.56	24.02	24.67	24.91	25.00	24.59	22.39	20.76
9	24.17	23.79	23.57	23.86	23.52	23.99	24.64	24.90	24.96	24.55	22.33	20.72
10	24.26	23.77	23.53	23.85	23.50	24.01	24.62	24.77	25.00	24.68	22.22	20.63
11	24.27	23.70	23.46	23.84	23.51	24.13	24.64	24.76	25.05	24.78	22.16	20.58
12	24.30	23.72	23.47	23.82	23.50	24.17	24.65	24.78	25.10	24.78	22.07	20.56
13	24.30	23.72	23.53	23.78	23.57	24.19	24.66	24.82	25.16	24.74	22.00	20.53
14	24.27	23.83	23.55	23.71	23.60	24.20	24.62	24.84	25.18	24.67	21.89	20.50
15	24.24	23.91	23.56	23.71	23.59	24.14	24.62	24.87	25.10	24.60	21.83	20.47
16	24.25	23.93	23.69	23.79	23.59	24.10	24.69	24.90	25.04	24.58	21.77	20.45
17	24.24	23.91	23.82	23.81	23.57	24.15	24.75	24.92	24.99	24.54	21.80	20.43
18	24.17	23.87	23.88	23.78	23.58	24.21	24.77	24.91	24.99	24.44	21.80	20.47
19	24.17	23.85	23.82	23.73	23.58	24.27	24.75	24.92	24.94	24.28	21.76	20.39
20	24.08	23.80	23.81	23.67	23.54	24.37	24.70	24.94	24.91	24.13	21.69	20.34
21	24.08	23.74	23.81	23.64	23.66	24.44	24.65	24.94	24.90	24.04	21.64	20.29
22	24.01	23.73	23.80	23.66	23.70	24.49	24.68	24.93	24.85	23.92	21.51	20.28
23	23.94	23.71	23.67	23.70	23.71	24.53	24.71	24.94	24.84	23.74	21.48	20.25
24	23.94	23.65	23.67	23.61	23.70	24.60	24.78	24.93	24.87	23.69	21.46	20.24
25	24.02	23.59	23.69	23.57	23.68	24.63	24.81	24.91	24.89	23.59	21.39	20.23
26	23.98	23.57	23.72	23.61	23.84	24.66	24.97	24.91	24.91	23.51	21.31	20.21
27	23.93	23.52	23.72	23.62	23.84	24.68	24.98	24.94	24.92	23.39	21.28	20.16
28	23.92	23.46	23.70	23.60	23.84	24.70	24.98	24.97	24.91	23.28	21.25	20.16
29	23.96	23.50	23.69	23.59	23.86	24.71	24.91	25.04	24.88	23.25	21.23	20.14
30	23.97	.....	23.68	23.59	23.86	24.70	24.91	25.10	24.88	23.23	21.16	20.10
31	23.97	.....	23.70	.....	23.82	.....	24.93	25.12	.....	23.16	.....	20.07

Fayette County

Fa-1. Martha Slagle. Lat. 39°32'09", long. 83°31'50". Drilled unused well in limestone, diameter 5 inches, depth 78 feet. Highest water level 5.23 below lsd, Jan. 28, 1949; lowest 11.28 below lsd, Dec. 29, 1952. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.82	5.79	6.15	5.84	.....	7.23	7.37	8.33	8.92	9.86	10.54	11.07
2	6.60	5.72	6.07	5.84	6.08	6.87	7.33	8.47	8.70	9.68	10.58	10.98
3	6.50	5.61	6.35	5.87	6.18	7.09	7.37	8.23	8.62	9.74	10.68	11.01
4	6.40	5.67	6.12	5.90	6.17	7.04	7.32	8.93	8.65	9.79	10.68	11.01
5	6.27	5.63	6.24	5.86	6.26	6.89	7.52	8.48	8.62	9.83	10.52	10.91
6	6.21	5.62	6.23	5.89	6.24	7.04	7.60	9.12	8.75	9.83	10.53	10.95
7	6.16	5.77	6.28	6.06	6.33	7.19	7.88	8.52	8.73	9.92	10.58	10.99
8	6.06	5.63	6.36	5.86	6.33	7.89	8.46	9.15	8.94	10.10	10.60	11.02
9	6.05	5.65	6.29	5.86	6.38	7.48	7.70	8.58	8.92	10.12	10.60	11.07
10	6.15	5.66	6.36	5.86	6.30	7.31	7.47	7.93	9.43	10.18	10.62	10.98
11	6.13	5.74	6.20	5.94	6.68	7.38	8.18	8.54	9.14	10.11	10.62	11.04
12	6.39	5.70	6.21	5.86	6.36	7.04	9.24	8.17	9.62	10.02	10.64	11.06
13	6.15	5.70	6.05	5.82	6.45	7.04	8.40	8.03	9.32	10.02	10.68	11.10
14	5.97	5.87	6.12	5.85	6.41	7.02	7.96	8.01	9.15	10.06	10.63	11.12
15	6.06	5.82	6.08	5.86	6.39	7.07	7.74	7.96	9.08	10.06	10.66	11.12

Fa-1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	6.06	5.82	6.04	5.86	6.47	7.19	8.04	8.12	9.11	10.17	10.66	11.14
17	6.01	....	6.00	5.96	6.51	8.00	7.81	8.04	9.10	10.15	10.72	11.19
18	6.07	....	5.89	6.00	7.08	7.79	8.78	8.36	9.19	10.16	10.68	11.19
19	6.00	....	5.92	5.93	6.62	7.91	8.76	9.17	9.24	10.13	10.65	11.19
20	....	....	5.88	....	6.59	7.65	8.54	8.56	9.30	10.23	10.67	11.14
21	....	....	5.91	....	6.71	7.48	8.57	8.41	9.27	10.28	10.68	11.15
22	5.83	6.00	5.87	....	6.68	7.24	8.56	8.33	9.36	10.28	10.68	11.14
23	....	5.97	5.80	....	6.69	7.18	8.65	8.33	9.40	10.28	10.84	11.17
24	....	5.97	5.86	....	6.58	7.13	8.72	9.01	9.46	10.30	10.84	11.22
25	6.11	....	5.82	5.98	6.53	7.68	8.29	8.93	9.49	10.38	10.81	11.23
26	5.81	....	5.86	....	6.54	7.70	8.47	9.28	9.97	10.44	10.85	11.24
27	5.79	....	5.82	....	6.69	7.45	9.25	9.12	9.70	10.43	10.98	11.23
28	5.78	6.10	5.84	....	6.63	7.35	8.88	8.71	9.67	10.44	10.98	11.27
29	5.79	6.07	5.84	....	6.63	7.44	7.95	9.05	9.62	10.48	10.98	11.28
30	5.79	....	5.87	....	6.62	7.37	8.06	9.14	10.20	10.48	11.02	11.20
31	5.76	....	5.87	....	6.67	....	8.64	8.76	....	10.47	....	11.25

Franklin County

Fr-10. State of Ohio. Lat. 40°01'00", long. 83°02'18". Drilled unused well in gravel, diameter 4 inches, depth 75 feet. Highest water level 37.75 below lsd, Apr. 14, 1951; lowest 46.50 below lsd, Jan. 31, 1945. Records available: 1944-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	43.25	41.15	40.15	38.85	38.65	40.25	41.60	42.60	43.25	43.85	44.00	44.30
2	43.30	41.00	40.15	39.00	38.85	40.30	41.65	42.45	43.25	43.95	44.00	....
3	43.35	40.85	40.00	39.10	38.95	40.25	41.65	42.50	43.45	44.00	44.10	44.20
4	43.30	40.25	40.10	39.10	38.95	40.30	41.70	42.55	43.50	43.95	44.10	44.20
5	....	40.45	40.30	38.80	38.95	40.35	41.80	42.65	43.50	43.95	43.90	44.05
6	....	40.40	40.35	39.00	39.25	40.40	41.80	42.65	43.50	43.95	43.90	44.10
7	....	40.40	40.35	39.10	39.40	40.50	41.85	42.65	43.50	44.00	44.05	44.10
8	....	40.25	40.30	39.10	39.25	40.50	41.80	42.65	43.60	43.95	44.05	44.15
9	42.70	40.30	40.10	39.10	39.20	40.60	41.75	42.65	43.60	43.95	43.95	44.10
10	43.05	40.20	39.95	39.15	39.15	40.60	41.80	42.75	43.65	44.00	44.00	44.05
11	43.05	40.30	39.90	39.25	39.25	40.80	41.90	42.75	43.65	44.00	44.00	44.15
12	42.85	40.35	39.90	39.10	39.35	40.75	42.00	42.85	43.65	44.00	44.05	44.15
13	42.75	40.35	39.60	38.80	39.50	40.90	42.00	42.85	43.70	43.95	44.05	44.15
14	42.55	40.40	39.66	38.65	39.60	40.90	42.00	42.90	43.70	44.00	44.00	44.25
15	42.70	40.40	39.65	38.85	39.60	40.95	42.05	42.90	43.65	44.00	44.00	44.25
16	42.75	40.30	39.50	39.00	39.70	40.95	42.15	42.90	43.65	44.05	44.05	44.25
17	42.50	40.35	39.60	38.95	39.75	41.05	42.20	42.95	43.60	44.05	44.05	44.25
18	42.45	40.50	39.55	38.90	39.85	41.10	42.20	43.00	43.60	44.05	44.05	44.30
19	42.45	40.45	39.35	38.90	39.85	41.15	42.20	43.05	43.75	43.95	43.95	44.35
20	42.40	40.30	39.35	38.90	39.70	41.15	42.15	43.05	43.75	44.20	43.90	44.30
21	42.40	40.40	39.35	39.00	39.95	41.15	42.10	43.05	43.75	44.20	43.90	44.25
22	42.00	40.45	39.35	39.00	40.00	41.20	42.10	43.15	43.75	44.10	43.95	44.25
23	42.30	40.30	39.10	39.10	40.00	41.30	42.15	43.15	43.75	44.00	44.10	44.20
24	42.35	40.15	39.00	39.00	39.95	41.25	42.20	43.15	43.85	43.95	44.15	44.30
25	42.35	40.25	38.90	38.70	39.90	41.40	42.20	43.15	43.85	44.00	44.05	44.30
26	41.90	40.15	38.90	38.55	40.05	41.45	42.30	43.20	43.75	44.00	44.10	44.30
27	41.50	39.90	38.90	38.40	40.05	41.45	42.30	43.30	43.85	43.90	44.20	44.35
28	41.30	39.90	38.95	38.35	40.10	41.55	42.30	43.30	43.85	43.95	44.25	44.35
29	41.25	39.90	39.05	38.50	40.10	41.55	42.35	43.30	43.85	44.05	44.25	....
30	41.35	....	39.15	38.60	40.10	41.55	42.45	43.30	43.85	44.05	44.30	....
31	41.30	....	38.95	....	40.05	....	42.60	43.25	....	43.95	....	44.25

Fr-11. City of Columbus. Lat. 39°58'30", long. 82°56'42". Drilled unused well in gravel, diameter 6 inches, depth 85 feet. Highest water level 0.20 above lsd, Feb. 14, 1950; lowest 27.30 below lsd, Nov. 6, 1952. Records available: 1949-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	8.40	5.50	4.30	....	....	....	16.15	20.30	....	....	26.90	22.60
2	8.35	5.35	4.30	....	....	8.15	16.35	20.45	....	....	27.00	22.35
3	8.25	5.20	4.00	....	....	....	16.50	20.55	....	....	27.15	22.95
4	8.10	5.05	4.25	....	....	....	16.55	20.75	....	....	27.15	22.90
5	13.65	5.10	4.30	....	....	....	16.60	20.85	....	....	27.20	24.35

Fr-11--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	14.40	5.10	4.20	2.80	....	9.45	16.80	20.95	.....	.....	27.30	24.70
7	14.85	5.05	4.15	2.80	....	9.95	16.95	21.05	.....	.....	26.85	24.80
8	15.70	4.90	4.05	2.80	....	10.30	17.25	21.20	.....	.....	26.80	24.90
9	16.35	4.95	3.90	2.80	....	10.70	16.80	21.30	23.60	.....	.....	25.20
10	16.40	4.80	3.85	2.80	....	.....	17.25	21.45	23.70	.....	26.30	25.25
11	11.20	4.80	3.90	2.65	....	.....	17.60	21.50	25.40	.....	26.50	25.35
12	9.95	4.80	3.85	2.50	....	.....	17.70	21.65	25.65	.....	26.70	24.30
13	9.40	4.70	3.65	2.45	....	.....	17.85	21.70	24.10	.....	26.70	24.30
14	9.00	4.65	3.75	....	....	.....	18.00	21.80	24.15	.....	26.50	25.00
15	8.70	4.60	3.65	....	....	.....	18.20	21.80	25.65	.....	26.55	25.15
16	8.65	4.50	3.50	....	....	13.00	18.40	21.85	24.35	.....	26.60	25.25
17	8.30	4.55	3.55	....	....	13.35	18.55	21.95	24.45	.....	26.65	25.35
18	8.20	4.60	3.50	....	....	13.55	18.70	22.00	24.55	.....	26.65	25.50
19	8.00	4.55	3.45	....	2.90	13.75	18.80	21.80	24.70	.....	26.70	25.50
20	7.85	4.35	3.45	....	....	14.00	18.85	22.00	24.75	.....	26.70	25.55
21	7.85	4.45	3.35	....	....	14.20	19.05	22.10	24.75	.....	26.70	25.65
22	7.45	4.50	3.30	2.60	....	14.35	19.20	22.30	24.25	.....	26.65	25.70
23	7.55	4.40	3.15	2.60	....	14.40	.....	22.35	24.20	.....	26.75	25.75
24	7.55	4.30	3.10	2.45	....	14.65	.....	22.40	.....	.....	26.75	24.40
25	7.35	4.35	....	3.45	....	15.00	.....	22.55	.....	.....	26.65	23.10
26	7.00	4.30	....	2.25	....	15.40	.....	22.60	.....	.....	.....	22.10
27	6.55	4.10	....	2.15	....	15.60	19.55	22.65	.....	.....	.....	21.85
28	5.60	4.10	....	2.10	....	15.70	19.80	22.70	.....	.....	.....	.....
29	5.70	4.15	....	2.15	....	15.80	20.00	.....	.....	.....	.....	.....
30	5.70	....	....	....	....	16.00	20.05	.....	.....	.....	.....	23.45
31	5.60	....	....	....	....	.....	20.20	.....	.....	26.80	.....	24.05

Fulton County

Fn-1. City of Delta. Lat. 41°35'05", long. 84°00'12". Drilled unused well in gravel, diameter 8 inches, depth 130 feet. Highest water level 61.83 below lsd, Oct. 18, 1946; lowest 66.10 below lsd, Jan. 8, 1947. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	64.18	64.01	64.03	63.60	63.86	63.95	64.16	64.24	63.80	63.87	63.93	64.34
2	64.24	63.96	64.06	63.69	63.92	64.02	64.17	64.05	63.80	64.03	63.95	64.06
3	64.37	63.88	63.83	63.86	63.99	63.86	64.08	64.00	64.10	64.16	64.20	64.18
4	64.32	63.40	63.94	63.88	63.92	63.95	64.19	63.86	64.20	63.99	64.19	64.15
5	.....	63.75	64.27	63.49	63.74	63.92	64.28	64.05	64.24	63.97	63.70	63.69
6	.....	63.82	64.37	63.85	63.99	63.81	64.31	64.06	64.11	64.14	63.73	63.81
7	64.28	63.88	64.41	64.02	64.10	63.92	64.22	64.09	64.26	64.20	63.97	63.77
8	.....	63.75	64.34	64.12	63.88	63.88	64.07	64.04	64.30	64.13	63.99	63.79
9	.....	63.85	64.00	64.12	63.83	63.82	64.03	63.09	64.27	64.11	63.84	63.67
10	64.37	63.80	63.75	64.19	63.53	63.79	64.10	63.82	64.23	64.16	63.99	63.56
11	64.39	63.84	63.85	64.28	63.56	64.00	64.21	63.88	64.23	64.14	63.96	63.74
12	64.13	63.89	63.94	64.09	63.63	63.96	64.31	63.96	64.17	64.00	63.96	63.74
13	64.10	64.04	63.66	63.71	63.82	63.94	64.31	64.08	64.13	63.82	63.94	63.73
14	63.86	64.08	63.93	63.63	63.81	63.91	64.19	64.04	64.06	64.05	63.90	63.72
15	64.05	.....	63.92	64.01	63.82	63.98	64.18	63.90	63.97	63.98	63.82	63.77
16	64.21	64.08	63.85	64.09	63.97	63.91	64.27	63.81	63.90	64.04	63.94	63.79
17	63.91	.....	63.94	64.07	64.02	63.81	64.30	63.99	63.75	64.16	63.91	63.78
18	63.97	64.09	63.89	64.03	64.08	63.95	64.28	64.04	63.63	64.16	63.86	64.12
19	63.97	64.11	63.68	63.97	64.03	64.04	64.13	64.10	63.93	63.96	63.66	64.20
20	64.03	63.90	63.69	63.98	63.81	64.13	64.01	64.06	64.05	64.44	63.74	64.01
21	64.19	64.05	63.85	64.03	63.94	64.01	63.98	64.09	64.11	64.48	63.83	63.84
22	63.86	64.18	63.79	63.92	64.08	64.02	64.09	64.21	64.11	64.31	63.60	63.85
23	64.08	64.15	63.61	64.06	64.03	64.04	63.98	64.26	64.14	64.04	64.04	63.72
24	64.33	64.06	63.69	64.03	63.86	63.94	64.23	64.21	64.25	63.96	64.17	63.91
25	64.27	64.19	63.72	63.94	63.72	63.84	64.24	64.24	64.19	64.16	64.03	64.81
26	63.72	64.09	63.94	63.95	63.91	64.02	64.10	64.24	64.05	64.16	63.73	.....
27	63.92	63.79	63.95	63.88	63.96	64.18	64.10	64.18	64.10	63.82	64.01	64.06
28	63.85	63.70	63.99	63.77	63.91	64.24	64.03	64.09	64.02	63.97	64.19	.....
29	64.06	63.70	64.15	63.86	63.97	64.08	64.08	63.98	64.00	64.12	64.20	63.64
30	64.24	.....	64.15	63.92	63.98	64.11	64.05	64.02	64.04	64.04	64.33	63.73
31	64.16	.....	63.88	.....	63.82	.....	64.23	63.93	.....	63.83	.....	63.83

Geauga County

Ge-2. D. L. Cameron. Lat. 41°25'42", long. 81°11'56". Drilled unused well in gravel, diameter 6 inches, depth 61 feet. Highest water level 9.83 below lsd, May 29, 1947; lowest 15.71 below lsd, Nov. 16, 1952. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	12.48	11.55	12.14	11.40	11.45	11.98	13.58	14.42	15.04	15.45	15.62	15.67
2	12.48	11.42	12.15	11.51	11.65	12.05	13.61	14.46	15.03	15.45	15.63	15.67
3	12.50	11.28	12.04	11.64	11.71	12.12	13.61	14.49	15.05	15.45	15.63	15.67
4	12.44	11.03	12.09	11.67	11.76	12.25	13.66	14.49	15.07	15.45	15.62	15.67
5	12.48	11.25	12.17	11.43	11.82	12.30	13.73	14.52	15.08	15.46	15.62	15.63
6	12.60	11.26	12.10	11.58	12.02	12.37	13.76	14.53	15.11	15.46	15.64	15.67
7	12.67	11.33	12.06	11.63	12.07	12.50	13.78	14.56	15.14	15.44	15.65	15.55
8	12.56	11.35	12.03	11.62	12.02	12.52	13.79	14.59	15.16	15.45	15.65	15.55
9	12.66	11.43	11.92	11.44	12.01	12.62	13.80	14.59	15.17	15.47	15.66	15.53
10	12.91	11.41	11.93	11.31	11.98	12.67	13.83	14.60	15.20	15.47	15.66	15.52
11	12.89	11.34	11.61	11.36	12.02	12.75	13.91	14.61	15.22	15.47	15.66	15.48
12	12.75	11.24	11.60	11.26	12.09	12.79	13.94	14.61	15.24	15.48	15.68	15.44
13	12.73	11.33	11.30	11.12	12.12	12.85	13.96	14.62	15.27	15.51	15.68	15.43
14	12.69	11.43	.....	10.71	12.13	12.86	14.00	14.63	15.27	15.52	15.68	15.43
15	12.52	11.47	.....	10.58	12.09	12.91	14.05	14.63	15.27	15.52	15.69	15.45
16	12.53	11.44	11.36	10.61	12.14	12.96	14.06	14.65	15.25	15.52	15.71	15.45
17	12.31	11.68	11.46	10.61	12.15	13.07	14.08	14.67	15.28	15.53	15.70	15.45
18	11.84	11.79	11.44	10.73	12.17	13.10	14.08	14.70	15.27	15.53	15.65	15.48
19	11.82	11.83	11.20	10.83	12.18	13.21	14.07	14.73	15.27	15.55	15.64	15.48
20	11.81	11.78	11.03	11.01	12.16	13.24	14.07	14.74	15.27	15.56	15.64	15.45
21	11.83	11.76	11.09	11.11	12.20	13.27	14.10	14.75	15.29	15.55	15.64	15.45
22	11.58	11.82	11.06	11.17	12.23	13.29	14.12	14.78	15.29	15.54	15.59	15.43
23	11.85	11.79	10.87	11.26	12.24	13.23	14.18	14.80	15.31	15.55	15.61	15.42
24	11.91	11.77	10.91	11.13	12.20	13.26	14.22	14.83	15.32	15.56	15.61	15.43
25	11.87	11.86	10.95	10.94	11.68	13.35	14.24	14.86	15.32	15.58	15.60	15.42
26	11.59	11.89	11.16	10.92	11.32	13.44	14.28	14.89	15.35	15.57	15.63	15.41
27	11.16	11.83	11.23	10.99	11.36	13.49	14.28	14.92	15.36	15.60	15.63	15.46
28	11.13	11.87	11.32	11.13	11.48	13.50	14.31	14.93	15.38	15.60	15.65	15.45
29	11.38	11.99	11.47	11.29	11.63	13.52	14.34	14.97	15.41	15.61	.....	15.44
30	11.49	.....	11.50	11.40	11.69	13.54	14.38	14.99	15.42	15.60	15.67	15.45
31	11.55	.....	11.39	.....	11.77	.....	14.42	14.99	.....	15.61	.....	15.47

Greene County

Gr-1. City of Xenia. Lat. 39°44'30", long. 83°56'12". Drilled unused well in gravel, diameter 30 inches, depth 77 feet. Highest water level 2.45 above lsd, Jan 27, 1952; lowest 10.95 below lsd, Oct. 22, 1946. Records available: 1944-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.95	5.15	6.70	6.25	6.65	6.75	8.10	9.25	9.50	9.95	9.95	10.25
2	7.05	4.30	6.60	6.40	6.70	6.95	8.20	9.45	9.00	9.90	9.75	10.15
3	6.90	4.10	6.75	6.70	6.80	7.05	8.30	9.50	8.50	9.55	9.80	9.70
4	7.10	3.75	6.75	6.60	6.75	7.05	8.15	9.45	8.55	10.70	9.15	10.00
5	7.30	4.60	6.80	6.40	7.00	7.20	8.05	9.35	8.60	10.75	9.85	9.55
6	7.25	5.10	6.95	6.00	6.95	7.20	8.05	9.40	9.45	9.90	9.90	9.90
7	7.55	.....	7.05	6.15	6.90	7.35	8.30	9.65	9.00	9.00	10.00	9.90
8	7.65	.....	7.10	6.30	6.90	7.35	8.30	9.65	9.00	9.90	9.55	9.90
9	7.70	.....	6.65	6.40	6.90	7.40	8.30	9.55	9.65	9.30	9.00	9.95
10	7.75	.....	6.95	6.40	6.90	7.50	8.40	9.05	9.70	9.75	9.75	9.70
11	7.85	5.65	4.85	6.50	6.80	7.50	8.40	9.00	9.80	9.75	9.05	9.50
12	8.00	5.75	5.65	6.40	7.05	7.40	8.55	9.80	9.85	9.35	9.90	9.80
13	7.55	5.80	5.90	6.40	7.05	7.40	8.55	9.30	10.05	9.70	9.40	9.85
14	7.95	5.90	6.15	5.25	7.10	7.35	.....	9.75	9.75	9.70	9.90	9.85
15	7.85	6.00	6.35	5.60	7.10	7.10	8.60	9.80	9.05	9.45	9.50	10.05
16	7.60	6.05	6.40	5.95	6.80	7.25	.....	9.30	9.55	9.65	8.95	10.05
17	7.70	5.70	6.55	6.00	7.20	7.30	8.75	8.85	9.60	9.60	9.90	10.20
18	7.50	6.25	6.55	6.05	7.15	7.35	8.80	.....	9.55	9.65	10.00	10.20
19	7.50	6.30	6.25	6.20	7.05	7.50	8.80	.....	9.30	9.05	10.10	10.00
20	6.95	5.95	6.45	6.30	7.05	7.45	8.70	9.50	9.35	.....	9.75	9.40

Gr-1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	6.65	5.70	6.50	6.45	7.10	7.35	....	9.50	8.85	....	9.40	9.20
22	6.90	6.00	5.90	6.45	7.15	7.30	....	9.30	8.75	....	9.10	9.95
23	7.10	6.10	4.20	6.20	7.25	7.30	9.00	9.25	8.75	9.85	9.80	10.60
24	7.35	5.50	5.40	5.20	7.10	7.50	9.25	8.70	9.40	....	9.10	10.55
25	7.40	6.90	5.70	5.65	5.40	7.75	9.30	9.10	9.60	....	9.80	9.30
26	6.65	6.40	5.90	5.90	5.85	8.00	9.45	9.35	9.20	....	9.20	9.60
27	.65	6.40	6.00	6.00	6.30	7.95	9.45	9.35	9.65	9.85	9.75	.....
28	3.60	6.60	6.15	6.25	6.40	7.80	9.40	9.50	9.20	9.85	9.60	10.05
29	4.60	6.70	6.20	6.35	6.40	7.85	9.25	9.50	8.95	9.90	9.20	.....
30	4.95		6.15	6.50	6.70	8.05	9.10	9.70	9.95	9.90	9.10	9.20
31	5.20		6.35		6.60		9.10	9.70		9.90		9.20

Hamilton County

H-2. Leo Willheim. Lat. 39°18', long. 84°39'. Drilled unused well in gravel, diameter 7 inches, depth 89 feet. Highest water level 16.80 below lsd, Aug. 1-4, 1952; lowest 18.80 below lsd, Nov. 21-22, 1952. Records available: 1952.

Daily lowest water level from recorder graph

Day	Aug.	Sept.	Oct.	Nov.	Dec.	Day	Aug.	Sept.	Oct.	Nov.	Dec.
1	16.85	17.70	17.85	18.60	18.30	17	17.55	18.20	18.30	18.65	18.15
2	16.85	17.45	17.95	18.60	18.35	18	17.45	18.25	18.35	18.65	18.20
3	16.85	17.35	18.10	18.40	18.50	19	17.30	18.30	18.35	18.70	18.25
4	16.85	17.55	18.10	18.30	18.60	20	17.35	18.30	18.15	18.75	18.25
5	16.95	17.65	18.10	18.40	18.65	21	17.50	18.20	18.05	18.80	18.30
6	17.15	17.70	17.90	18.55	18.65	22	17.60	17.85	18.25	18.80	18.30
7	17.25	17.70	17.80	18.60	18.65	23	17.60	17.60	18.35	18.70	18.25
8	17.35	17.60	....	18.60	18.45	24	17.45	17.65	18.35	18.65	18.20
9	17.40	17.50	.....	18.60	18.30	25	17.30	17.75	18.35	18.55	18.15
10	17.40	17.70	18.05	18.40	18.25	26	17.50	17.85	18.35	18.60	18.05
11	17.20	17.90	18.10	18.35	18.25	27	17.65	17.85	18.25	18.65	17.85
12	17.30	18.05	18.10	18.50	18.25	28	17.80	17.85	18.15	18.60	17.75
13	17.40	18.20	18.00	18.60	18.15	29	17.85	17.65	18.30	18.50	17.75
14	17.45	18.20	18.00	18.65	18.00	30	17.85	17.65	18.40	18.75	17.85
15	17.55	18.20	18.15	18.65	18.00	31	17.85		18.55		17.95
16	17.55	18.10	18.25	18.65	18.00						

207-3. Village of Glendale. Mosteller and Sharon Rds. Lat. 39°16', long. 84°55'. Drilled unused well in gravel, diameter 8 inches, depth 167 feet. Highest water level 13.35 below lsd, Apr. 29, 1939; lowest 67.3 below lsd, Dec. 24, 1951. Records available: 1938-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	62.70	62.80	61.70	63.60	60.20	58.85	61.85	60.80	60.80	62.50	64.75	66.50
2	63.85	62.85	62.55	61.25	60.35	59.85	61.75	60.95	61.30	62.40	62.10	.....
3	64.45	63.85	61.85	61.25	60.65	60.10	61.70	60.20	61.85	62.65	65.65	.....
4	63.95	63.00	61.35	60.95	58.85	60.70	59.80	60.45	61.20	62.55	63.40	66.10
5	63.90	62.50	61.40	60.35	59.80	60.60	59.55	61.65	61.30	61.10	65.50	67.05
6	65.35	62.20	61.80	59.40	60.30	60.60	58.25	61.50	62.30	64.65	65.65	64.90
7	64.50	62.35	61.85	60.45	60.75	61.15	59.15	62.70	62.50	62.60	66.40	.....
8	63.85	62.45	62.00	61.00	60.35	60.90	60.95	61.65	60.95	62.35	64.30	60.80
9	64.20	62.70	61.90	61.90	60.30	60.70	59.70	61.50	61.65	62.45	62.80	60.40
10	64.25	61.15	62.30	63.30	59.90	61.15	59.45	61.85	61.60	62.45	63.60	.....
11	64.60	62.10	62.50	61.70	58.70	61.35	59.75	62.25	61.75	62.10	63.65	.....
12	64.20	61.90	63.20	63.50	59.45	63.25	61.00	61.05	62.00	60.90	65.00	.....
13	62.75	61.85	62.70	59.00	60.80	60.90	59.10	61.10	63.05	61.95	66.40	.....
14	64.10	62.35	62.90	62.00	60.75	61.10	59.35	61.00	60.70	62.60	66.10	.....
15	63.25	61.95	63.10	62.20	60.45	59.60	61.95	61.15	61.50	62.95	64.80	65.40
16	63.30	61.70	62.20	62.20	60.25	61.15	59.80	61.20	62.30	62.55	65.20	64.75
17	63.05	63.35	62.65	60.15	60.55	61.65	59.70	59.40	62.25	62.60	64.80	66.60
18	63.00	63.30	62.25	60.75	59.00	61.60	59.65	60.45	62.10	62.60	64.10	.....
19	63.00	61.35	62.65	60.70	59.80	61.25	59.70	.....	62.00	61.30	64.80	.....
20	62.35	61.85	61.85	59.40	59.70	61.70	58.65	.....	62.05	65.00	66.50	65.60
21	65.50	62.20	59.75	59.80	60.40	61.35	59.05	.....	62.85	63.00	66.00	64.15
22	64.55	62.10	59.35	60.20	60.40	59.95	60.00	.....	62.20	62.80	64.30	64.65
23	62.60	61.55	58.40	60.05	60.50	61.20	60.05	.....	62.35	62.95	63.00	65.05
24	63.10	60.30	59.30	60.15	60.30	61.80	60.30	.....	62.10	63.55	64.00	.....
25	62.90	61.50	59.60	60.50	58.70	62.00	59.80	61.05	62.30	62.90	64.60	65.85

216-E. Electric Auto Lite Plant. Jimson Rd. Lat. 39°14'56", long. 84°26'20". Drilled unused well in gravel, diameter 6 inches, depth 180 feet. Highest water level 42.93 below lsd, Apr. 9, 1941; lowest 79.80 below lsd, Mar. 26, 28, 1952. Records available: 1941-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	77.35	78.00	78.30	79.10	78.10	77.90	77.95	77.35	76.80	73.80	.....	77.50
2	77.50	77.75	78.35	78.85	78.10	77.95	77.95	.....	76.80	73.85	.....	77.10
3	77.60	77.55	78.00	78.85	78.20	77.80	77.90	.....	77.10	77.15	77.30	77.30
4	77.55	77.25	78.05	78.65	78.15	77.70	77.85	.....	77.25	77.20	77.30	77.25
5	77.10	77.70	78.40	78.25	77.95	77.70	77.85	.....	77.25	77.05	76.90	77.00
6	77.25	77.75	78.40	78.45	78.25	77.60	77.80	.....	77.20	77.15	77.05	77.15
7	77.30	77.85	78.35	79.10	78.35	77.75	77.70	.....	77.05	77.20	77.30	77.15
8	77.10	77.70	78.25	78.75	78.25	78.10	77.55	.....	77.10	77.15	77.30	77.20
9	76.90	77.75	77.85	78.55	78.00	78.30	77.50	.....	77.10	73.95	77.10	77.10
10	77.45	77.70	77.50	78.40	77.80	78.20	77.55	.....	77.05	73.95	77.15	77.10
11	77.50	77.95	77.65	78.45	77.90	78.05	77.60	77.05	77.00	77.05	77.15	77.30
12	77.25	78.20	77.85	78.25	78.05	77.95	77.70	77.10	77.00	77.05	77.20	77.30
13	77.10	78.35	77.50	77.80	78.20	77.90	77.65	77.25	76.95	73.95	77.20	77.35
14	76.80	78.65	77.95	77.90	78.20	78.35	77.45	77.25	76.95	76.95	77.10	77.35
15	77.10	78.75	77.95	78.20	77.95	78.50	77.40	77.20	76.90	77.00	77.05	77.40
16	77.30	78.75	77.80	78.35	78.10	78.35	77.50	77.05	76.85	77.10	77.15	77.45
17	77.20	78.45	77.80	78.35	78.10	78.10	77.50	76.95	76.75	77.10	77.20	77.40
18	77.55	78.80	77.75	78.25	78.10	78.10	77.50	77.10	76.70	77.15	77.15	77.50
19	77.55	78.80	77.50	78.15	78.05	78.05	77.40	.....	76.80	77.15	76.95	77.55
20	77.65	78.65	77.70	78.00	78.00	77.95	77.25	.....	77.10	77.45	77.05	77.40
21	77.65	78.65	79.15	77.95	78.10	.....	77.20	.....	77.15	77.50	77.10	.....
22	77.35	78.75	79.20	77.95	78.15	.....	77.30	.....	77.15	77.30	77.05	77.30
23	77.95	78.65	78.20	78.00	78.10	78.55	77.30	.....	77.05	.....	77.45	77.30
24	78.20	78.35	79.00	78.00	78.00	78.50	77.45	.....	77.15	.....	77.55	77.55
25	78.15	78.35	78.85	78.00	78.60	78.50	77.40	77.10	77.10	.....	77.35	77.55
26	77.55	78.35	79.80	78.00	78.45	78.45	77.30	77.10	77.05	.....	77.25	77.50
27	77.85	78.30	79.75	77.85	78.45	78.35	77.25	77.05	76.85	76.70	77.45	77.50
28	77.90	78.05	79.60	77.95	78.30	78.30	77.15	77.00	76.90	77.05	77.55	77.50
29	78.20	77.95	79.60	78.05	78.25	78.15	.....	76.90	76.95	77.25	77.55	77.40
30	78.35	.....	79.30	78.10	78.15	77.90	.....	76.90	76.90	.....	77.50	77.20
31	78.25	.....	79.25	.....	77.85	.....	.....	76.90	.....	.....	.....	77.30

237-3. Village of Wyoming. Vine and Water Sts., Wyoming. Lat. 39°13', long. 84°28'. Drilled unused well in gravel, diameter 8 inches, depth 194 feet. Highest water level 111.32 below lsd, May 8, 1939; lowest 148.70 below lsd, Nov. 11, 1948. Records available: 1938-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	147.25	147.00	146.80	146.20	146.75	146.95	147.55	147.35	146.75	146.40	146.15	145.75
2	147.40	146.90	146.60	146.50	146.75	147.10	147.40	147.25	147.10	146.60	146.00	145.60
3	147.65	145.90	146.35	146.60	147.10	146.90	147.55	147.15	146.45	146.65	146.20	146.05
4	147.00	145.90	146.15	146.25	146.95	147.00	147.35	147.10	147.00	146.45	146.00	145.60
5	147.30	146.20	147.10	146.50	146.85	147.00	147.45	147.30	146.95	146.40	145.55	145.70
6	147.15	146.25	147.00	146.50	147.20	147.05	147.55	147.35	146.80	146.60	145.80	145.20
7	147.30	146.35	147.00	146.75	147.20	147.15	147.40	147.30	146.75	146.50	146.10	145.10
8	146.65	146.20	147.00	146.80	146.90	147.30	147.30	147.15	147.05	146.40	146.05	145.50
9	146.90	146.30	146.45	146.75	146.60	147.55	147.45	147.20	147.00	146.20	145.70	145.30
10	147.30	146.05	146.15	145.75	146.60	147.55	147.35	147.30	146.85	146.30	146.00	145.30
11	147.40	146.30	146.45	146.05	146.55	147.55	147.50	147.05	146.85	146.35	146.00	145.45
12	147.25	146.35	146.45	146.50	146.80	147.15	147.80	146.85	146.45	146.05	146.10	144.70
13	146.85	146.35	145.70	146.10	146.85	147.10	147.75	147.15	147.00	146.05	145.70	145.15
14	146.80	146.45	146.75	146.35	146.75	147.20	147.70	146.95	146.75	146.15	145.90	145.30
15	146.90	146.50	146.45	146.60	146.65	147.05	147.40	146.70	146.80	146.20	145.95	145.65
16	147.10	146.35	146.45	147.40	146.80	147.15	147.45	146.85	146.55	146.20	145.80	145.35
17	146.55	146.35	146.65	147.65	146.90	147.30	147.35	146.85	146.40	146.15	145.95	145.15
18	147.05	146.65	146.30	147.15	146.95	147.40	147.30	.....	146.20	146.35	145.75	145.05
19	146.50	146.45	146.25	147.00	146.75	147.55	147.10	.....	146.40	145.95	145.30	145.50
20	146.80	146.65	146.25	146.90	146.50	147.40	146.75	.....	146.80	146.55	145.45	144.55
21	147.00	146.85	146.35	146.90	146.85	147.30	147.00	.....	146.60	146.60	145.30	145.10
22	146.40	146.95	146.20	146.90	146.95	147.15	147.10	.....	146.55	146.35	145.50	145.10
23	147.20	146.80	146.20	146.90	146.85	147.35	147.05	.....	146.70	146.10	146.00	145.00
24	147.35	146.75	146.35	146.60	146.70	147.15	147.05	.....	146.80	146.00	146.00	145.10
25	146.90	146.95	146.40	146.60	146.55	147.20	147.20	147.05	146.60	146.35	145.50	144.30

237-3--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	146.55	146.70	146.65	146.60	146.85	147.30	147.20	147.00	146.35	146.10	145.95	145.15
27	146.75	146.35	146.60	146.45	146.90	147.35	147.35	147.00	146.60	146.80	145.15	145.40
28	146.75	146.10	146.70	146.35	146.90	147.45	147.10	146.80	146.45	146.10	146.20	145.55
29	147.10	146.25	146.90	146.50	147.00	147.30	147.15	146.85	146.65	146.25	145.95	145.40
30	147.25		146.75	146.90	146.75	147.30	147.35	146.85	146.55	146.05	145.30	145.00
31	147.20		146.40		146.85		147.40	146.65		145.80		145.15

241-3. Gardner-Richardson Co. South Cooper Ave., Lockland. Lat. $39^{\circ}14'$, long. $84^{\circ}27'$. Drilled unused well in gravel, diameter 10 inches, depth 168 feet. Highest water level 104.70 below lsd, Jan. 30, 1939; lowest 136.80 below lsd, Nov. 9, 1947. Recrds available: 1938-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	130.20	130.05	129.90	128.85	128.80	128.75	127.00	126.35	125.45	124.55	125.00	124.20
2	130.20	129.85	129.90	129.00	128.85	128.75	127.00	126.05	125.45	124.85	125.00	123.85
3	130.40	129.70	129.50	129.05	128.90	128.65	126.90	126.05	125.65	125.00	125.10	123.95
4	130.25	129.45	129.90	129.05	128.80	128.60	126.90	126.00	125.70	124.80	125.10	123.85
5	130.05	129.80	130.05	128.90	128.55	128.55	126.90	126.10	125.65	124.75	124.60	123.65
6	130.15	130.00	130.05	129.10	128.75	128.45	126.85	126.10	125.50	124.80	124.70	123.80
7	130.15	130.10	130.10	129.15	128.85	128.35	126.75	126.15	125.50	124.85	124.90	123.75
8	129.90	130.00	129.95	129.20	128.65	128.25	126.55	126.05	125.55	124.70	124.90	123.75
9	130.00	130.10	129.60	129.15	128.65	128.10	126.65	125.95	125.45	124.65	124.65	123.60
10	130.55	129.90	129.35	129.25	128.45	127.95	126.70	125.90	125.50	124.85	124.65	123.60
11	130.60	129.85	129.75	129.25	128.45	128.00	126.75	125.90	125.45	124.90	124.60	123.80
12	130.30	129.85	129.80	128.95	128.65	127.95	126.80	125.90	125.40	124.85	124.60	123.70
13	130.10	129.85	129.60	128.55	128.75	127.90	126.70	126.00	125.40	124.65	124.60	123.70
14	129.85	130.00	129.85	128.65	128.75	127.80	126.45	126.00	125.30	124.75	124.50	123.70
15	130.20	130.00	129.85	128.55	128.65	127.70	126.45	125.80	125.15	124.75	124.55	123.65
16	130.30	129.90	129.75	129.05	128.80	127.55	126.55	125.75	125.10	124.60	124.60	123.70
17	129.95	129.90	129.65	129.05	128.75	127.60	126.55	125.85	124.95	124.85	124.60	123.55
18	130.25	130.00	129.45	128.90	128.75	127.60	126.50	125.80	124.90	125.00	124.45	123.65
19	130.20	129.90	129.30	128.80	128.65	127.55	126.35	.....	125.15	124.80	124.25	123.65
20	130.25	129.80	129.30	128.75	128.60	127.60	126.20	.....	125.25	125.30	124.40	123.40
21	130.05	130.15	129.30	128.70	128.90	127.50	126.15	.....	125.25	125.35	124.40	123.40
22	129.70	130.25	129.15	128.70	129.00	127.40	126.25	.....	125.15	125.10	124.40	123.35
23	130.35	130.10	129.20	128.75	128.95	127.40	126.30	.....	125.05	124.95	124.70	123.35
24	130.50	129.90	129.20	128.80	128.85	127.25	126.40	.....	125.10	124.95	124.70	123.50
25	130.25	129.95	129.20	128.85	128.70	127.15	126.40	125.80	125.00	125.10	124.35	123.45
26	129.75	129.85	129.40	128.85	128.90	127.15	126.25	125.90	124.80	125.10	124.35	123.35
27	129.85	129.55	129.40	128.70	129.00	127.30	126.15	125.80	124.90	124.80	124.40	123.25
28	129.80	129.40	129.40	128.55	128.95	127.25	126.05	125.65	124.85	125.00	124.45	123.25
29	130.15	129.50	129.30	128.80	129.00	127.10	126.10	125.65	124.80	125.15	124.35	123.05
30	130.30		129.30	128.90	129.00	126.90	126.20	125.65	124.70	125.05	124.25	122.85
31	130.20		129.00		128.75		126.35	125.50		124.90		122.95

246-1. National Distillers Corp. Wayne Ave. and 78th St., Carthage. Lat. $39^{\circ}12'$, long. $84^{\circ}28'$. Drilled unused well in gravel, diameter 8 inches, depth 170 feet. Highest water level 103.20 below lsd, May 28, 1945; lowest 121.58 below lsd, Nov. 10, 1950. Records available: 1944-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	111.50	110.30	110.20	111.10	114.30	110.30	109.25	108.70	108.25	107.90	107.20	105.35
2	111.50	110.15	110.40	111.20	114.65	110.30	109.25	108.55	108.25	108.10	107.30	104.95
3	111.55	110.00	110.60	111.30	113.35	110.10	109.20	108.55	108.40	108.15	107.50	105.35
4	111.45	110.10	110.65	111.35	112.50	110.10	109.20	108.60	108.45	108.00	107.45	105.15
5	111.25	110.15	111.50	111.00	112.30	110.05	109.20	108.65	108.40	108.05	107.85	104.85
6	111.25	110.20	111.40	110.95	112.05	110.00	109.20	108.60	108.30	108.10	106.85	105.20
7	111.25	110.20	111.35	111.70	112.05	109.95	109.15	108.60	108.30	108.15	107.90	104.80
8	111.00	110.15	110.60	112.00	112.00	109.90	109.00	108.55	108.30	107.90	107.30	105.05
9	110.95	110.15	110.45	112.00	111.95	109.85	109.00	108.45	108.25	107.65	107.60	104.75
10	111.20	110.00	110.30	112.10	111.85	109.80	109.00	108.50	108.25	107.80	107.50	105.05
11	111.20	110.00	111.10	112.20	111.60	109.85	109.05	108.50	108.20	107.80	107.45	104.90
12	110.95	110.00	111.30	111.80	111.75	109.85	109.10	108.55	108.15	107.80	106.50	104.85
13	110.85	109.90	111.00	111.40	112.10	109.75	109.00	108.65	108.15	107.80	107.85	105.15
14	110.70	109.90	111.20	111.70	112.20	109.70	108.00	108.70	108.15	107.60	107.65	104.80
15	110.90	109.90	111.00	112.10	112.10	109.70	108.90	108.50	108.10	107.60	107.90	105.20

246-1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	110.90	109.75	111.20	112.25	112.65	109.60	109.00	108.45	108.10	107.55	106.10	105.35
17	110.70	109.85	111.00	112.30	111.75	109.60	108.95	108.55	108.05	107.55	105.55	105.40
18	110.90	109.90	111.10	112.45	111.50	109.60	108.90	108.50	108.05	107.70	105.40	105.60
19	110.75	109.80	112.10	112.20	111.30	109.50	108.85	.....	108.20	107.70	105.75	105.60
20	110.80	109.60	111.50	111.80	111.05	109.55	108.80	.....	108.25	107.90	105.55	105.45
21	110.80	109.80	111.65	111.90	111.05	109.50	108.80	.....	108.25	107.85	105.40	105.55
22	110.45	109.85	111.40	111.60	111.00	109.45	108.80	.....	108.20	107.55	105.60	105.55
23	110.80	109.70	111.65	115.80	110.90	109.45	108.80	.....	108.20	107.35	105.70	105.60
24	110.80	109.60	111.10	113.80	110.75	109.40	108.90	.....	108.25	107.30	105.65	105.70
25	110.65	109.65	111.20	114.15	110.60	109.30	108.85	108.40	108.15	107.35	105.40	105.70
26	110.30	109.60	111.40	112.90	110.65	109.30	108.80	108.40	108.00	107.20	105.40	105.65
27	110.40	110.05	111.45	112.05	110.60	109.40	108.75	108.35	108.05	107.10	105.25	105.70
28	110.35	110.00	111.60	113.65	110.50	109.35	108.65	108.25	108.05	107.20	105.35	105.70
29	110.45	110.20	111.50	114.05	110.45	109.25	108.70	108.25	108.05	107.25	105.60	105.55
30	110.50		111.15	114.05	110.40	109.20	108.65	108.25	107.95	107.20	105.30	105.45
31	110.40		111.30		110.25		108.75	108.20		107.15		105.35

270-T-7. Procter & Gamble Co. Vine St., Ivorydale. Lat. 39°10', long. 84°29'. Drilled unused well in sand and gravel, diameter 6 inches, depth 151 feet. Highest water level 110.6 below lsd, Apr. 8, 1940; lowest 129.70 below lsd, Oct. 6, 1947. Records available: 1939-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	123.34	Apr. 7	121.54	July 14	120.46	Oct. 13	118.70
14	122.99	21	121.31	21	120.15	20	118.63
21	122.92	28	121.14	28	120.00	27	118.38
28	122.72	May 5	121.05	Aug. 4	119.67	Nov. 3	118.43
Feb. 4	122.12	12	120.90	11	119.63	10	118.43
11	122.22	19	121.87	25	119.55	17	118.45
18	122.35	26	122.37	Sept. 1	119.26	24	118.47
25	122.26	June 2	122.68	8	119.29	Dec. 1	118.46
Mar. 3	122.04	9	122.00	15	119.07	8	118.21
10	121.68	16	121.59	22	119.10	15	118.27
17	122.01	23	121.25	29	118.90	22	118.13
24	121.79	30	120.84	Oct. 6	118.85	29	118.13
31	121.64	July 7	120.76				

Hancock County

Ha-2. R. E. Ascham. Lat. 40°57'00", long. 83°46'00". Drilled unused well in limestone, diameter 6 inches, depth 27 feet. Highest water level 2.88 above lsd, Mar. 22, 1948; lowest 7.65 below lsd, Nov. 16, 17, 1952. Records available: 1947-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0.42	....	2.77	1.87	2.16	3.00	3.94	5.56	....	6.88	7.49	7.59
2	.81	....	2.78	2.10	2.40	3.00	3.96	5.56	4.92	6.94	7.48	7.59
3	1.11	....	2.70	2.27	2.51	3.03	3.74	5.58	5.54	6.94	7.48	7.65
4	1.16	....	2.44	2.31	2.58	3.13	3.96	5.63	5.99	6.94	7.48	7.65
5	1.35	....	....	1.33	2.69	3.16	4.00	5.73	6.17	6.94	7.39	5.50
6	1.54	....	....	.90	2.86	3.21	4.02	5.76	6.30	6.94	7.51	5.06
7	1.60	....	....	1.04	2.95	3.29	4.02	5.79	6.40	....	7.56	6.46
8	1.59	....	....	1.28	2.94	3.30	4.02	5.80	6.47	....	7.56	6.75
9	1.70	....	....	1.36	2.95	3.31	....	5.81	6.52	....	7.55	6.81
10	1.88	....	2.39	1.58	2.84	3.37	....	5.87	6.57	....	7.57	4.29
11	1.92	....	.36	1.65	2.93	3.45	4.30	5.91	6.60	....	7.57	4.38
12	1.98	1.45	....	1.67	3.04	3.46	....	5.87	6.64	....	7.60	4.56
13	1.98	1.59	....	1.28	3.14	3.50	4.61	5.94	6.68	....	7.61	5.56
14	1.71	1.78	....	.75	3.16	3.54	4.72	5.95	6.70	7.21	7.60	5.90
15	1.73	1.85	....	.85	3.12	3.58	4.87	5.97	6.72	....	7.63	6.05
16	1.83	1.95	....	1.19	3.18	3.58	4.97	5.94	6.74	....	7.65	6.13
17	1.24	2.20	....	1.31	3.17	3.67	5.04	5.92	6.77	....	7.65	6.28
18	.68	2.37	1.53	1.47	3.21	3.68	5.06	6.02	6.80	....	7.64	6.30
19	.79	2.44	.95	1.61	3.21	3.74	5.10	6.07	5.00	....	7.60	6.20
20	.86	2.41	1.11	1.77	3.12	3.75	5.11	6.10	5.92	7.38	6.60	5.40

Ha-2--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	1.05	2.31	1.17	1.90	3.20	3.74	5.17	6.08	6.31	7.38	7.12	4.36
22	.98	2.40	1.18	2.02	3.25	3.75	4.58	6.16	6.44	7.35	7.06	4.23
23	1.37	2.41	.78	1.85	3.25	3.76	4.48	6.19	6.51	7.34	6.51	4.25
24	1.56	2.49	1.05	.71	2.36	3.76	4.80	6.23	6.59	7.37	7.09	4.34
25	1.58	2.56	1.28	1.07	2.40	3.80	4.99	6.29	6.62	7.42	7.15	....
26	.43	2.56	1.50	1.30	2.10	3.89	5.14	6.31	6.69	7.42	7.35	....
27	.34	2.55	1.62	1.47	2.26	3.90	5.21	6.36	6.74	7.37	....	5.53
28	.84	2.59	1.73	1.66	2.43	3.90	5.28	6.36	6.80	7.44	....	5.59
29	1.30	2.66	1.92	1.84	2.58	3.91	5.36	6.42	6.86	7.45	7.48	5.63
30	1.56	....	1.96	2.02	2.69	3.93	5.45	....	6.88	7.44	7.58	5.70
31	1.70	....	1.98	....	2.79	....	5.54	....	....	7.44	....	5.82

Hardin County

Hn-1. Village of Alger. Lat. 40°42'15", long. 83°50'08". Drilled unused well in limestone, diameter 6 inches, depth 140 feet. Highest water level 4.35 below lsd, Apr. 15, 1951; lowest 14.65 below lsd, Nov. 7, 1952. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	9.90	8.70	9.10	8.75	8.50	9.00	....	11.50	13.25	14.10	13.90	14.50
2	10.00	8.65	8.70	8.65	8.55	8.60	....	11.70	13.15	14.15	14.30	14.50
3	10.25	8.70	8.65	8.70	8.55	9.00	....	11.70	13.30	14.25	14.35	14.40
4	9.95	8.70	8.90	8.50	8.60	9.05	....	11.75	13.25	14.25	14.35	14.15
5	9.70	8.90	9.10	8.65	8.55	8.85	....	11.75	13.45	14.25	14.35	14.15
6	9.55	9.00	8.85	8.75	8.65	8.95	....	11.95	13.50	13.95	14.50	14.00
7	9.60	8.75	8.85	8.85	8.75	9.20	....	12.10	13.60	14.15	14.65	14.00
8	9.55	8.65	8.75	8.90	8.80	9.25	....	12.15	13.50	14.25	14.30	13.95
9	9.40	8.80	....	8.80	8.75	9.30	....	12.10	13.75	14.20	14.40	13.75
10	9.55	8.40	....	8.70	8.70	9.30	....	11.90	13.80	14.00	14.45	13.60
11	10.00	....	....	8.75	8.70	9.40	....	11.85	13.90	14.00	14.25	13.60
12	9.60	....	....	9.05	8.65	9.30	....	11.90	14.00	13.85	14.55	13.45
13	9.40	....	....	9.05	8.70	9.40	....	12.05	14.05	13.90	14.55	13.45
14	9.30	....	....	8.70	8.65	9.40	....	12.05	14.10	13.90	14.55	12.45
15	9.40	....	....	8.70	8.65	9.45	....	11.95	13.90	13.90	14.25	13.35
16	9.25	....	7.30	8.75	8.80	9.55	....	12.10	13.90	13.95	14.25	13.35
17	9.05	9.30	8.10	9.05	8.85	9.60	....	12.10	14.00	13.90	14.20	12.90
18	9.25	9.50	8.65	9.00	8.85	9.70	....	12.15	14.10	13.85	14.20	12.90
19	9.00	9.55	8.70	8.80	8.75	10.00	....	12.20	14.00	13.75	14.05	12.90
20	9.00	9.10	8.75	8.95	8.70	10.05	....	12.20	14.00	13.95	14.10	12.85
21	9.15	9.00	8.60	8.80	8.55	9.85	....	12.40	13.90	13.85	14.15	12.75
22	9.20	9.00	8.45	8.70	8.75	9.80	....	12.55	14.00	13.90	14.05	....
23	....	8.95	8.50	8.55	8.80	9.85	....	12.80	14.10	13.95	14.05	....
24	....	8.95	8.45	8.25	8.70	9.95	....	12.80	14.15	13.80	....	....
25	....	8.95	8.45	8.40	8.75	9.95	....	12.70	14.15	13.70	....	....
26	....	8.95	8.50	8.25	8.80	10.05	....	12.75	14.05	13.85	....	....
27	9.25	8.85	8.65	8.20	8.75	10.50	....	13.05	14.05	13.60	....	....
28	9.30	8.75	8.70	8.15	8.80	10.65	....	13.15	14.10	13.75	....	....
29	....	8.80	8.95	8.40	8.90	10.70	....	13.30	13.85	13.95	....	....
30	....	....	8.50	8.45	8.70	....	11.45	13.40	14.05	13.95	14.45	12.45
31	8.90	....	8.80	....	8.85	....	11.50	13.45	....	13.90	....	12.45

Hn-2. Edw. Abaler. Lat. 40°46'56", long. 83°41'30". Drilled unused well in limestone, diameter 4 inches, depth 50 feet. Highest water level 5.61 below lsd, Apr. 28, 1952; lowest 25.10 below lsd, Dec. 29, 1946. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	11.99	8.09	7.26	6.24	5.90	....	7.45	8.32	9.80	11.37	12.79	13.72
2	....	7.95	7.28	6.33	6.16	....	7.47	8.31	9.84	11.65	12.85	13.55
3	....	7.72	7.07	6.40	6.21	6.41	7.43	8.34	10.21	11.79	13.01	13.66
4	....	7.12	6.80	6.43	6.24	6.54	....	8.35	10.34	11.36	13.01	13.60
5	....	7.22	....	6.10	6.03	6.53	....	8.52	10.39	11.75	12.65	13.37
6	....	....	....	6.35	6.29	6.46	....	8.54	10.36	11.91	12.87	13.49
7	....	....	....	6.40	6.36	6.54	7.62	....	10.50	11.97	....	13.47
8	9.34	....	....	6.47	6.14	6.51	7.47	....	10.56	11.94	13.08	13.49
9	9.52	....	....	6.47	6.13	6.52	7.58	8.52	10.60	11.95	12.96	13.43
10	9.98	....	....	6.47	5.91	6.56	7.62	....	10.62	12.03	13.11	13.39

Hn-2--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	9.97	.....	.....	6.48	5.99	.....	7.80	.....	10.66	12.03	13.00	13.54
12	9.62	.....	.....	6.40	6.14	.....	7.87	8.85	10.68	11.99	.....	13.58
13	9.54	7.70	.....	6.03	6.31	.....	7.86	8.98	10.69	12.01	.....	13.68
14	9.13	8.17	.....	6.12	6.32	.....	7.77	8.96	10.39	12.15	.....	13.73
15	9.01	8.11	.....	6.35	6.34	.....	7.84	8.90	10.68	12.11	.....	13.77
16	.....	7.72	.....	6.44	6.47	.....	7.92	8.95	10.66	12.23	.....	13.82
17	8.89	7.64	.....	6.42	6.47	6.83	7.98	9.11	10.63	12.34	.....	13.85
18	8.81	7.71	.....	6.28	6.51	6.85	7.97	9.23	10.67	12.38	13.12	14.07
19	8.73	7.71	.....	6.25	6.45	6.96	7.87	9.31	.....	12.37	13.04	14.11
20	8.68	7.49	6.68	6.15	6.21	7.01	7.82	9.28	.....	12.83	13.13	13.90
21	8.69	7.60	6.57	6.15	6.47	6.96	7.88	9.38	.....	12.83	13.20	13.97
22	8.17	7.69	6.50	6.11	6.51	7.04	7.95	9.59	11.16	12.69	13.13	13.97
23	.....	7.58	6.32	6.15	6.51	7.11	.....	9.64	11.30	12.53	13.52	13.97
24	8.91	7.41	6.31	6.00	6.40	7.03	.....	9.65	11.40	12.51	13.56	14.04
25	8.77	7.44	6.33	5.85	6.29	7.00	.....	9.73	11.41	12.67	13.36	14.03
26	8.30	7.35	6.45	5.81	6.52	7.17	.....	9.77	11.33	12.67	13.43	13.99
27	8.33	7.00	6.45	5.73	6.53	.....	.....	9.78	11.42	12.47	13.56	14.03
28	8.14	6.86	6.46	5.66	.....	.....	.....	9.72	11.38	12.71	13.66	14.03
29	8.20	6.90	6.51	5.87	.....	.....	8.19	9.75	11.42	12.85	13.65	13.84
30	8.28	.....	6.51	5.90	.....	.....	8.28	9.80	11.46	12.78	13.73	13.79
31	8.25	.....	6.39	.....	.....	.....	.....	9.75	.....	12.70	.....	13.89

Henry County

Hy-1. H. Fosnow. Lat. 41°14'26", long. 83°54'03". Drilled unused well in limestone, diameter 4 inches, depth 81 feet. Highest water level 19.59 below lsd, May 21, 1948; lowest 23.73 below lsd, Dec. 6, 1952. Records available: 1946-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	21.75	Apr. 30	20.60	July 16	21.80	Oct. 8	22.70
9	21.66	May 7	20.69	23	21.80	15	22.79
16	21.47	14	20.78	30	21.63	22	22.85
23	21.36	21	20.74	Aug. 6	21.85	29	22.99
30	21.30	26	20.70	13	22.01	Nov. 5	23.04
Feb. 6	21.16	28	20.70	20	22.03	12	23.09
13	21.09	June 4	20.75	27	22.12	22	23.00
20	21.01	11	21.00	Sept. 2	22.29	29	23.03
27	21.00	18	21.13	10	22.41	Dec. 6	23.73
Apr. 2	20.71	25	21.32	17	22.54	13	23.19
9	20.72	July 2	21.61	24	22.57	20	23.28
16	20.69	9	21.74	Oct. 1	22.61	27	23.25
23	20.63						

Huron County

Hu-2. City of New London. Lat. 41°04'54", long. 82°25'00". Drilled unused well in sandstone, diameter 4 inches, depth 105 feet. Highest water level 13.25 below lsd, May 22, 1949; lowest 16.79 below lsd, Dec. 19, 25, 1952. Records available: 1947-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	15.05	.....	14.34	14.10	14.35	.....	15.22	.....	16.02	16.40	16.72
2	14.99	.....	14.30	14.10	14.37	14.77	.....	.....	16.03	16.41	16.72
3	14.95	14.63	14.32	14.12	14.36	14.77	.....	.....	16.09	16.44	16.68
4	14.79	14.65	14.32	14.12	14.37	14.79	.....	.....	.....	16.45	16.72
5	14.84	14.72	14.23	14.10	14.38	14.83	.....	.....	.....	16.40	16.72
6	14.64	14.75	14.24	14.15	.....	14.85	.....	.....	.....	16.40	16.66
7	15.63	14.82	14.75	14.26	14.17	.....	14.86	.....	.....	16.13	16.47	16.64
8	14.75	14.33	14.16	.....	14.84	.....	15.76	16.15	16.48	16.64
9	14.70	14.33	14.14	.....	14.83	.....	15.77	16.18	16.46	16.66
10	14.66	14.32	14.08	14.41	14.88	.....	15.79	16.19	16.49	16.65
11	14.41	14.35	14.09	14.46	14.91	.....	15.81	16.17	16.48	16.59
12	14.80	14.36	14.32	14.10	14.46	14.96	15.34	15.82	16.18	16.51	.....
13	14.32	14.24	14.24	14.49	14.97	15.37	15.83	16.20	16.52	.....
14	15.50	.....	14.37	14.12	14.17	14.49	14.96	15.39	15.83	16.22	16.52	.....
15	15.51	.....	14.47	14.13	14.15	14.52	14.97	15.38	15.81	16.25	16.51	.....

Hu-2--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	15.54	.....	14.47	14.16	14.20	14.52	15.00	15.36	.....	16.28	16.55	.....
17	15.49	.....	14.51	14.17	14.22	14.53	15.02	15.41	.....	16.28	16.56	.....
18	15.27	.....	14.51	14.18	14.23	.....	15.03	15.44	15.83	16.28	16.56	16.77
19	15.28	.....	.....	14.19	14.23	.....	15.02	.....	15.86	16.38	16.54	16.79
20	15.30	.....	.....	14.19	14.20	.....	15.01	.....	15.90	16.39	16.52	16.77
21	15.32	14.75	.....	14.19	14.24	.....	15.02	.....	15.92	16.37	16.55	16.73
22	15.25	14.77	.....	14.18	14.28	.....	15.02	.....	15.93	16.36	16.47	16.75
23	15.28	14.77	.....	14.17	14.28	.....	15.02	.....	15.95	16.35	16.57	16.74
24	.....	.....	14.37	14.13	14.27	.....	15.09	.....	15.98	16.40	16.61	16.77
25	.....	.....	14.39	14.11	14.19	.....	15.12	.....	15.98	16.40	16.60	16.79
26	.....	.....	14.43	14.11	14.21	.....	15.12	.....	14.97	16.37	16.57	.....
27	.....	.....	14.43	14.10	14.24	.....	15.13	.....	16.00	16.40	16.63	.....
28	.....	.....	14.44	14.08	14.24	.....	15.12	.....	16.01	16.43	16.66	.....
29	.....	.....	14.44	14.09	14.31	.....	15.14	.....	16.02	16.39	16.68	.....
30	15.08	.....	14.44	14.10	14.33	.....	15.16	.....	16.03	16.39	16.69	.....
31	15.07	.....	14.40	.....	14.31	.....	15.19	.....	.....	16.37	.....	.....

Knox County

K-1. City of Mount Vernon. Lat. 40°23'45", long. 82°30'05". Drilled unused well in gravel, diameter 8 inches, depth 90 feet. Highest water level 1.9 above lsd, Mar. 19, 1948; lowest 14.13 below lsd, June 28, 1949. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	3.40	4.55	4.15	4.30	4.65	2.50	6.25	10.20	6.75	6.95	....	4.80
2	4.25	3.40	2.95	4.80	5.00	4.70	6.40	8.25	7.75	7.05	....	6.30
3	4.55	2.95	3.05	4.45	6.00	6.40	6.70	7.90	9.20	6.85	7.10	6.60
4	3.85	3.00	3.25	3.90	5.40	6.75	6.10	8.90	10.50	6.65	7.00	7.35
5	3.90	3.05	3.35	3.40	6.00	6.95	5.05	12.25	10.55	6.00	7.15	6.95
6	2.75	3.05	3.35	2.05	5.40	5.45	5.60	9.35	9.60	6.75	7.10	6.65
7	4.75	3.45	3.30	2.50	6.40	6.40	7.45	10.25	7.05	6.75	7.10	4.50
8	4.90	3.35	3.10	5.95	5.30	5.10	6.45	9.55	8.10	6.10	5.40	5.20
9	4.65	3.50	2.05	2.80	6.45	6.90	7.95	8.55	8.10	6.00	4.65	5.65
10	5.25	3.45	2.80	2.90	3.85	6.90	8.50	8.05	9.55	6.65	6.00	8.00
11	7.70	3.35	2.55	4.25	2.55	6.00	9.35	8.35	9.05	5.50	6.35	6.00
12	3.95	3.70	2.60	3.40	4.30	7.45	7.65	8.45	9.25	4.80	7.05	6.25
13	3.40	5.05	2.55	2.40	3.55	6.50	6.50	9.25	9.20	7.30	7.25	6.65
14	5.40	3.00	2.75	2.10	5.70	6.60	8.95	8.40	8.95	7.30	5.55	4.40
15	4.70	2.80	2.50	3.30	6.45	5.75	8.20	8.25	7.30	7.40	5.70	4.10
16	4.65	3.50	2.40	4.55	4.70	7.25	10.00	7.05	7.50	7.25	4.40	5.95
17	7.25	2.60	2.30	4.30	4.00	8.00	7.75	7.60	7.60	6.45	4.80	6.70
18	3.80	2.90	4.65	3.70	4.15	9.00	9.80	7.80	6.65	5.25	6.80	6.00
19	3.10	3.55	3.75	3.80	5.60	8.65	9.20	7.85	7.40	4.70	6.80	6.55
20	2.10	3.00	5.60	2.25	4.50	8.00	7.60	8.25	7.70	5.60	6.15	6.55
21	3.65	3.40	3.65	4.25	4.60	7.45	9.65	8.10	5.65	....	6.15	4.95
22	3.80	3.50	3.15	4.10	6.00	5.25	7.85	8.00	6.80	....	6.10	6.70
23	3.65	2.85	2.40	3.85	6.40	6.20	9.75	7.30	7.10	9.30	4.70	6.50
24	4.10	2.75	4.45	3.00	5.60	6.65	9.35	7.15	7.15	....	4.60	5.85
25	3.70	3.60	3.65	5.25	3.00	8.75	10.50	7.05	6.85	....	6.45	5.50
26	3.15	2.90	5.05	4.60	6.15	9.55	9.85	8.35	7.45	....	8.35	4.10
27	2.90	3.10	6.40	2.80	5.10	10.00	7.85	8.20	7.10	....	6.65	3.80
28	2.35	3.25	5.10	3.95	6.25	7.50	9.25	8.15	5.45	....	5.60	3.70
29	7.25	3.25	3.35	5.60	6.55	7.45	10.20	9.20	7.45	....	5.90	5.90
30	5.15	.....	2.65	5.50	4.20	5.10	10.45	8.05	7.70	....	3.85	5.90
31	4.50	.....	2.70	.....	3.25	.....	9.95	7.25	.....	....	.....	6.05

Lake County

L-1. City of Mentor. Lat. 41°41'00", long. 81°22'03". Drilled unused well in sand, diameter 8 inches, depth 32 feet. Highest water level 14.30 below lsd, Apr. 11, 1950; lowest 22.15 below lsd, Aug. 4-6, 1952. Records available: 1948-52.

L-1--Continued.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	20.00	18.40	17.80	17.40	16.95	18.80	20.55	22.05	20.10	21.45	21.50	21.25
2	19.75	18.20	17.80	17.30	17.00	19.05	20.80	22.10	20.10	21.15	21.55	21.15
3	19.80	18.05	17.80	17.25	17.05	19.15	21.00	22.10	20.10	21.20	21.60	21.20
4	19.80	17.85	17.75	17.35	17.15	19.10	20.60	22.15	20.15	20.95	21.60	21.30
5	19.70	17.95	17.75	17.30	17.10	18.95	20.40	22.15	20.05	21.10	21.50	21.20
6	19.60	17.85	17.40	17.20	17.10	19.00	20.45	22.15	19.95	21.10	21.55	21.20
7	19.55	17.95	17.50	17.25	17.05	19.30	20.50	22.00	19.95	21.10	21.35	21.30
8	19.55	17.70	17.70	17.25	16.95	19.40	20.55	21.85	20.75	21.15	21.40	21.40
9	19.45	17.75	17.75	17.20	17.00	19.35	.....	21.30	21.15	21.10	21.50	21.45
10	19.45	17.75	17.65	17.20	17.00	19.10	.....	21.30	21.05	21.20	21.60	21.15
11	19.25	17.70	17.75	17.20	17.10	19.15	20.50	21.10	21.40	21.20	21.70	21.20
12	19.20	17.70	17.65	17.10	17.05	19.05	20.60	20.90	21.00	21.05	21.50	21.10
13	19.20	17.65	17.85	17.05	17.00	19.30	21.10	20.85	20.75	21.30	21.60	21.15
14	19.10	17.55	17.90	17.00	17.10	19.40	21.30	20.85	20.85	21.35	21.50	20.85
15	19.10	17.45	17.90	17.00	17.10	19.50	21.25	20.70	21.25	21.30	21.45	21.25
16	19.00	17.60	17.90	16.95	17.15	19.45	21.00	.....	21.60	21.30	21.50	21.25
17	19.05	17.65	17.90	16.90	18.10	19.80	21.15	20.45	21.80	21.45	21.55	21.10
18	19.05	17.60	18.10	16.90	18.35	19.80	21.40	.....	21.65	21.55	21.40	21.15
19	18.95	17.45	18.10	16.95	18.45	19.95	21.50	.....	20.35	21.40	21.30	21.15
20	19.00	17.60	18.00	17.00	18.70	19.95	21.40	20.90	20.10	21.50	21.30	20.95
21	19.05	17.70	17.85	17.00	18.85	19.90	21.20	21.05	19.95	21.25	21.30	21.00
22	18.95	17.60	18.00	16.90	18.65	19.60	21.35	21.05	20.05	21.25	21.40	20.90
23	19.00	17.50	18.05	16.80	18.70	19.85	21.55	21.00	20.95	21.40	21.25	20.90
24	18.85	17.55	17.80	16.80	18.50	19.90	21.65	20.90	21.00	21.50	21.45	21.10
25	18.80	17.70	17.35	16.80	18.40	20.30	21.75	20.85	21.05	21.60	21.20	21.15
26	18.65	17.90	17.30	17.00	18.80	20.40	21.85	20.75	20.90	21.45	21.30	20.95
27	18.70	17.90	17.35	16.90	18.65	20.55	21.90	20.80	20.95	21.50	21.35	20.95
28	18.65	17.80	17.35	16.90	18.55	20.55	21.95	20.80	21.00	21.70	21.35	20.95
29	18.50	17.85	17.30	16.90	18.55	20.75	22.00	20.20	21.25	21.70	21.25	20.95
30	18.75	17.30	16.90	18.75	20.70	22.05	20.10	21.45	21.45	21.45	21.40	21.00
31	18.85	17.35	18.80	18.80	22.00	20.10	21.30	21.30	21.30	21.10	21.10	21.10

Lawrence County

La-1. Crystal Ice Co. 9th and Railroad Sts., Ironton. Lat. 38°32', long. 83°41'. Drilled unused well in gravel, diameter 16 inches, depth 77 feet. Highest water level 40.03 below lsd, Apr. 13, 1951; lowest 53.77 below lsd, Oct. 19, 1947. Records available: 1947-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	46.90	44.70	41.80	41.24	42.29	43.70	45.15	46.50	47.14	48.10	48.33	.....
2	.....	44.56	41.77	41.27	42.34	43.72	45.22	46.51	47.13	48.14	48.35	48.03
3	47.30	44.00	41.90	41.23	42.36	43.73	45.30	46.54	47.16	48.17	48.38	.....
4	.....	43.45	42.09	41.30	42.22	43.77	45.31	46.61	47.16	48.19	48.39	.....
5	47.22	.....	41.92	41.41	42.12	43.82	.....	46.63	47.15	48.25	48.03	.....
6	47.18	42.67	42.27	41.50	42.08	43.84	.....	46.66	47.15	48.26	47.87	48.01
7	47.15	42.55	41.92	41.56	42.08	43.86	.....	46.68	47.18	48.27	47.80	47.72
8	.....	42.25	42.07	41.62	41.99	43.88	45.63	.....	47.21	48.30	47.94	47.91
9	.....	42.04	41.09	41.64	42.00	43.90	.....	.....	47.23	48.31	47.63	48.29
10	.....	41.86	42.11	42.02	42.22	43.90	.....	.....	47.24	48.32	47.81	48.41
11	.....	41.56	42.42	42.06	42.41	43.90	.....	.....	47.25	48.33	47.78	48.46
12	47.05	41.51	42.41	41.78	42.53	43.93	45.64	.....	47.28	47.89	47.85	48.50
13	.....	41.40	42.41	41.53	42.62	43.93	45.67	.....	47.30	47.76	48.01	48.52
14	.....	41.35	42.38	41.55	42.66	43.93	45.72	.....	47.31	47.61	48.14	.....
15	.....	41.27	42.40	41.53	42.72	43.93	45.78	.....	47.32	47.69	48.34	.....
16	45.85	41.30	42.41	41.62	42.81	44.16	45.84	.....	.....	47.61	48.41	48.56
17	45.76	41.25	42.43	41.58	42.89	44.27	45.85	.....	.....	47.59	48.46	48.34
18	45.70	41.40	42.40	41.54	42.94	44.34	45.87	.....	47.38	47.67	48.49	48.06
19	.....	41.50	42.42	41.56	42.93	44.37	45.94	.....	.....	47.50	48.52	48.13
20	45.61	41.61	42.53	41.50	42.96	44.31	46.06	.....	.....	47.52	48.55	48.03
21	.....	41.72	42.50	41.59	43.00	44.38	46.14	46.91	.....	.....	48.55	47.87
22	45.42	41.76	42.38	41.78	42.81	44.45	46.20	46.93	47.82	47.84	48.56	48.06
23	45.32	41.76	42.05	41.94	42.64	44.56	46.24	46.94	.....	48.00	48.59	47.98
24	45.27	41.82	42.10	42.01	42.82	44.64	46.29	46.95	.....	48.09	48.60	.....
25	45.30	41.87	41.87	42.08	42.70	44.72	46.32	46.98	.....	48.14	48.34	.....

La-1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	45.40	41.67	41.92	42.12	42.92	44.80	46.34	46.99	47.84	48.16	48.09	.....
27	45.40	41.58	41.64	42.16	43.34	44.86	46.34	47.01	47.86	48.18	48.00	.....
28	45.36	41.62	41.44	42.20	43.47	44.90	46.37	47.03	47.88	48.24	.....	.....
29	45.29	41.68	41.33	42.26	43.59	45.02	.....	47.04	47.90	48.27	.....	48.55
30	.....		41.10	42.29	43.60	45.08	46.44	47.06	48.04	48.27	.....	.....
31	.....		41.11		43.64		.....	47.08		48.30		.....

Licking County

Li-1. Newark Stove Co. Lat. 40°03', long. 82°25'. Drilled unused well in sand and gravel, diameter 8 inches, depth 68 feet. Highest water level 21.50 below lsd, Feb. 8, 1952; lowest 24.10 below lsd, Dec. 18, 1952. Records available: 1951-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	23.20	22.00	22.25	21.90	21.80	22.45	22.85	23.15	23.40	23.55	23.75	24.00
2	23.20	21.95	22.25	21.95	21.90	22.45	.....	23.10	23.45	23.60	23.75	24.00
3	23.20	21.90	22.15	22.00	21.90	22.40	.....	23.15	23.45	23.65	23.75	24.05
4	23.05	21.90	22.35	22.00	21.90	22.50	22.95	23.15	23.45	23.60	23.75	24.00
5	23.10	21.90	22.35	22.00	21.90	22.50	22.95	23.20	23.45	23.65	23.75	23.95
6	23.10	21.90	22.30	22.10	21.95	22.45	22.95	23.15	23.45	23.65	23.75	24.00
7	23.05	21.85	22.30	22.10	22.00	22.50	.....	23.20	23.50	23.65	23.80	24.00
8	22.95	21.90	22.30	22.10	21.95	22.50	.....	23.20	23.50	23.60	23.80	24.00
9	23.00	21.90	22.25	22.05	21.95	22.50	.....	23.15	23.45	23.65	23.75	24.00
10	23.10	21.80	22.20	22.10	22.05	22.50	.....	23.20	23.45	23.65	23.80	24.00
11	23.10	21.90	22.40	22.10	22.05	22.55	22.95	23.20	23.45	23.65	23.75	24.05
12	22.90	21.90	22.35	22.05	22.10	22.55	23.00	23.20	23.45	23.60	23.80	24.05
13	22.85	21.85	22.20	22.00	22.15	22.60	22.95	23.25	23.50	23.65	23.80	24.05
14	22.90	21.85	22.20	22.05	22.15	22.60	22.95	23.20	23.50	23.65	23.75	24.05
15	22.95	21.85	.....	22.15	22.20	22.60	.....	23.25	23.45	23.65	23.80	24.05
16	22.95	21.80	.....	22.15	22.30	22.60	.....	23.35	23.45	23.65	23.85	24.05
17	22.90	.....	.....	22.05	22.20	22.65	.....	23.40	23.45	23.70	23.80	24.05
18	23.00	.....	.....	22.05	22.20	22.65	23.00	23.35	23.55	23.70	23.80	24.10
19	22.90	.....	.....	22.05	22.15	22.65	22.95	23.35	23.60	23.70	23.80	24.05
20	22.95	21.95	22.05	22.05	22.20	22.70	23.00	23.30	23.60	23.75	23.85	23.95
21	22.95	22.00	22.05	22.05	22.25	22.70	.....	23.35	23.55	23.75	23.90	24.00
22	22.80	22.05	22.05	22.05	22.25	22.75	.....	23.40	23.55	23.65	23.95	23.95
23	22.90	22.00	22.10	22.30	22.30	22.75	.....	23.40	23.55	23.65	24.00	24.00
24	22.90	22.00	22.00	22.05	22.35	22.70	23.10	23.35	23.60	23.70	24.00	24.00
25	22.75	22.05	22.00	21.95	22.40	22.75	23.10	23.35	23.55	23.75	23.90	24.00
26	22.70	22.00	22.05	21.95	22.45	22.80	23.10	23.40	23.55	23.75	24.00	24.00
27	22.60	22.00	21.95	21.90	22.45	22.85	23.10	23.35	23.55	23.70	24.00	24.05
28	22.50	22.10	21.95	21.85	22.40	22.85	23.10	23.35	23.55	23.75	24.00	24.05
29	22.35	22.10	22.00	21.85	22.40	22.80	23.15	23.40	23.55	23.80	24.00	23.95
30	22.25		22.00	21.85	22.40	22.85	23.15	23.40	23.55	23.75	24.00	24.00
31	22.10		21.90		22.40		23.15	23.40		23.75		24.05

Logan County

Lo-1. Ohio Grange, Bellefontaine. Lat. 40°21'45", long. 83°47'18". Drilled unused well in gravel, diameter 4 inches, depth 120 feet. Highest water level 12.68 below lsd Apr. 14, 1948; lowest 21.99 below lsd, Dec. 31, 1946. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	20.17	.....	16.73	15.54	14.99	15.85	16.88	17.72	18.65	19.44	20.34	20.95
2	19.95	.....	16.70	15.59	15.08	15.94	16.90	17.74	18.70	19.53	20.38	20.97
3	19.70	.....	16.59	15.69	15.12	15.91	16.91	17.75	18.77	19.55	20.43	20.97
4	19.59	.....	16.83	15.69	15.16	15.96	16.95	17.79	18.80	19.57	20.40	20.97
5	19.49	.....	16.85	15.51	15.16	15.97	16.98	17.82	18.80	19.60	20.43	20.96
6	19.47	.....	16.82	15.53	15.31	16.00	16.99	17.87	18.81	19.67	20.49	21.00
7	19.46	.....	16.83	15.49	15.33	16.12	16.97	17.89	18.85	19.67	20.52	21.02
8	19.38	.....	16.82	15.45	15.28	16.14	16.97	17.91	18.87	19.70	20.52	21.02
9	19.42	.....	16.70	15.45	15.27	16.17	17.07	17.94	18.89	19.75	20.55	21.02
10	19.57	.....	16.57	15.54	15.35	16.22	17.11	18.02	18.91	19.76	20.57	21.03

Lo-1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	19.56	.....	.....	15.56	15.37	16.29	17.18	18.03	18.95	19.77	20.59	21.05
12	19.49	.....	.....	15.47	15.45	16.27	17.19	18.11	18.98	19.78	20.61	21.07
13	19.46	.....	.....	15.31	15.53	16.35	17.18	18.14	18.99	19.82	20.62	21.07
14	19.46	.....	.....	14.81	15.53	16.38	17.15	18.15	19.00	19.85	20.63	21.07
15	19.29	.....	.....	14.70	15.64	16.38	17.24	18.15	19.04	19.86	.....	21.16
16	19.25	16.06	.....	14.75	15.64	16.37	17.28	18.21	19.04	19.90	.....	21.16
17	18.85	16.23	.....	14.78	15.59	16.49	17.28	18.24	19.09	19.94	20.68	21.18
18	18.56	16.25	.....	14.86	15.58	16.51	17.28	18.26	19.12	19.95	20.68	21.22
19	18.24	16.25	.....	14.92	15.53	16.54	17.28	18.29	19.17	20.02	20.70	21.22
20	18.15	16.17	15.61	15.03	.....	16.57	17.28	18.31	19.18	20.07	20.74	21.21
21	18.08	16.26	15.70	15.10	.....	16.60	17.36	18.37	19.20	20.07	20.74	21.25
22	17.98	16.25	15.65	15.13	.....	16.63	17.39	18.44	19.22	20.05	20.77	21.25
23	18.07	16.23	15.35	15.18	15.50	16.63	17.42	18.45	19.27	20.07	20.83	21.29
24	18.11	16.33	15.06	14.70	15.50	16.60	17.47	18.47	19.28	20.12	20.83	21.31
25	17.97	16.33	15.10	14.41	15.51	16.62	17.48	18.50	19.28	20.15	20.80	21.31
26	17.86	16.30	15.29	14.55	15.67	16.72	17.50	18.53	19.33	20.15	20.87	21.30
27	16.82	16.32	15.35	14.65	15.70	16.76	17.52	18.55	19.36	20.16	20.88	21.35
28	.....	16.46	15.40	14.86	15.71	16.78	17.54	18.56	19.38	20.25	20.91	21.35
29	.....	16.52	15.55	14.97	15.76	16.77	17.58	18.62	19.40	20.27	20.92	21.35
30	.....	.....	15.55	15.01	15.78	16.85	17.66	18.63	19.40	20.27	20.95	21.36
31	.....	.....	15.48	.....	15.80	.....	17.72	18.64	.....	20.31	.....	21.41

Lucas County

Lu-1. State of Ohio. Toledo State Hospital, Detroit Ave. and Arlington St., Toledo.
 Lat. 41°40'32", long. 83°36'24". Drilled unused well in limestone, diameter 12 inches, depth
 250 feet. Highest water level 84.10 below lsd, July 18, 1947; lowest 111.65 below lsd, Oct. 17,
 1952. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	96.85	95.95	94.45	94.00	93.60	102.90	105.15	107.60	111.25	104.70	.....
2	.....	96.70	95.95	94.55	94.05	93.65	103.30	104.65	107.50	111.75	104.55	.....
3	.....	.....	95.65	.....	94.15	93.50	103.50	103.50	108.45	111.80	104.35	.....
4	.....	.....	95.80	94.70	94.00	93.75	103.35	103.65	108.45	111.45	104.30	.....
5	.....	.....	96.00	.....	93.80	93.75	102.30	104.90	108.60	110.75	103.65	.....
6	.....	.....	96.00	.....	94.15	94.10	101.75	105.55	108.65	109.85	.....	99.90
7	.....	.....	96.00	.....	94.25	94.50	101.25	105.90	.....	110.60	.....	99.85
8	97.90	.....	95.85	.....	94.00	94.50	100.80	106.10	107.35	110.85	103.30	99.80
9	97.95	.....	95.45	.....	93.85	94.65	100.50	106.10	108.15	111.20	103.05	99.60
10	98.40	.....	95.20	.....	93.60	94.95	100.30	104.95	109.00	111.40	102.95	99.45
11	98.40	.....	95.45	.....	93.65	95.45	100.15	104.05	109.80	.....	102.80	99.50
12	98.05	.....	95.55	94.40	93.70	95.70	100.10	105.20	110.25	.....	.....	99.50
13	98.00	.....	95.25	94.10	93.85	96.05	100.10	105.85	110.65	110.30	.....	99.45
14	97.60	.....	95.50	94.10	93.85	98.05	99.90	106.15	110.85	111.05	.....	99.35
15	97.60	.....	95.45	94.45	93.85	98.00	99.70	106.70	109.90	111.35	.....	99.30
16	97.85	95.95	95.30	94.50	93.95	97.75	99.85	107.40	110.30	111.65	.....	99.30
17	97.20	96.05	95.35	94.40	93.90	99.65	99.80	.....	110.50	111.85	.....	99.20
18	97.65	96.15	95.25	94.25	93.90	100.70	99.65	.....	110.70	111.85	.....	99.30
19	97.60	96.10	95.05	94.20	93.80	101.50	99.50	107.60	111.15	110.95	.....	99.35
20	97.60	96.05	95.05	94.20	93.50	101.75	99.30	108.10	111.30	109.85	.....	99.10
21	97.65	96.10	95.15	94.20	93.70	100.95	100.25	108.80	111.30	109.35	.....	98.85
22	.....	96.15	95.10	94.10	93.85	100.00	101.65	109.25	110.25	108.65	101.05	98.90
23	97.55	96.10	94.85	94.30	93.75	99.25	102.80	109.25	111.35	107.80	101.30	98.65
24	.....	96.00	94.90	94.25	93.55	100.60	103.60	108.10	110.85	107.25	101.40	98.80
25	.....	96.10	94.90	94.05	.....	101.45	104.00	107.25	110.95	106.85	101.30	98.75
26	97.10	95.95	95.05	94.05	.....	102.50	104.10	108.15	111.15	106.60	100.80	98.65
27	97.10	95.70	95.05	94.00	.....	.....	103.10	108.80	111.35	105.90	100.90	98.65
28	97.00	95.60	94.95	93.85	.....	103.40	102.55	109.25	111.35	105.55	.....	98.65
29	97.00	95.80	95.05	94.00	.....	102.15	103.60	109.75	110.30	105.55	.....	98.35
30	97.15	.....	95.00	94.10	.....	101.90	104.25	109.90	111.05	105.25	.....	98.20
31	97.05	.....	94.65	.....	93.35	.....	104.90	108.85	.....	104.90	.....	98.20

Madison County

M-1. Max Chenoweth. Lat. 39°43'40", long. 83°15'35". Drilled unused well in gravel, diameter 4 inches, depth 60 feet. Highest water level 21.89 below lsd, Apr. 14, 1948; lowest 28.53 below lsd, Sept. 7, 1951. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	25.72	24.58	24.81	24.27	24.27	25.04	25.94	26.70	27.31	27.40	27.61	27.90
2	25.74	24.40	24.78	24.29	24.33	25.13	25.94	26.42	27.20	27.49	27.62	27.85
3	25.76	24.28	24.70	24.34	24.40	25.10	26.02	26.38	27.34	27.56	27.81	27.90
4	25.70	24.02	24.79	24.29	24.41	25.13	26.00	26.48	27.51	27.49	27.69	27.80
5	25.59	24.18	25.01	24.14	24.42	25.24	26.07	26.48	27.72	27.46	27.51	27.60
6	25.63	24.28	25.07	24.20	24.39	25.33	26.03	26.43	27.63	27.41	27.62	27.70
7	25.68	24.25	25.03	24.30	24.47	25.37	26.04	26.42	27.53	27.48	27.70	27.65
8	25.66	24.12	25.01	24.34	24.53	25.35	25.98	26.75	27.57	27.44	27.70	27.70
9	25.37	24.14	24.93	24.32	24.51	25.36	25.94	27.06	27.52	27.36	27.63	27.70
10	25.52	24.10	24.80	24.35	24.48	25.55	25.99	26.96	27.48	27.40	27.61	27.40
11	25.54	24.20	24.47	24.37	24.46	25.68	26.08	26.88	27.51	27.43	27.68	27.50
12	25.48	24.28	24.51	24.32	24.60	25.55	26.17	27.11	27.54	27.39	27.60	27.50
13	25.40	24.35	24.36	24.21	24.68	25.51	26.19	27.12	27.52	27.41	27.60	27.55
14	25.33	24.37	24.51	24.14	24.70	25.48	26.19	27.30	27.42	27.36	27.60	27.85
15	25.36	24.41	24.46	24.20	24.75	25.52	26.19	27.44	27.34	27.42	27.60	28.25
16	25.39	24.37	24.48	24.35	24.78	25.51	26.25	27.47	27.28	27.49	27.60	28.00
17	25.32	24.40	24.52	24.38	24.79	25.59	26.30	27.51	27.26	27.55	27.70	27.85
18	25.27	24.60	24.45	24.34	24.82	25.65	26.38	27.59	27.16	27.55	27.65	27.95
19	25.23	24.60	24.37	24.33	24.86	25.70	26.35	27.83	27.50	27.51	27.50	27.90
20	25.04	24.51	24.36	24.35	24.80	25.76	26.26	28.00	27.62	27.68	27.55	27.75
21	25.08	24.57	24.44	24.43	24.93	25.78	26.31	28.06	27.55	27.75	27.50	27.75
22	24.94	24.66	24.38	24.40	24.96	25.70	26.34	28.06	27.41	27.63	27.50	27.60
23	25.05	24.60	24.11	24.36	24.98	25.56	26.48	28.00	27.50	27.66	27.60	27.75
24	25.18	24.58	24.17	24.13	24.90	25.60	26.59	27.62	27.51	27.70	27.70	27.80
25	25.14	24.70	24.16	24.08	24.70	25.65	26.64	27.68	27.42	27.66	27.65	27.85
26	24.94	24.68	24.20	24.00	24.82	25.73	26.67	27.80	27.40	27.64	27.65	27.90
27	24.20	24.67	24.20	24.06	24.90	25.69	26.67	27.73	27.49	27.56	27.85	27.90
28	24.53	24.61	24.20	24.09	24.96	25.81	26.58	27.62	27.39	27.60	27.80	28.00
29	24.58	24.65	24.23	24.17	24.96	25.85	26.36	27.52	27.47	27.66	28.25	28.00
30	24.66		24.26	24.25	24.95	25.88	26.88	27.44	27.42	27.65	28.00	27.90
31	24.69		24.26		24.97		26.70	27.31		27.59		27.90

Mahoning County

Ma-1. City of Canfield. Lat. 41°00'46", long. 80°45'36". Drilled unused well in sandstone, diameter 8 inches, depth 300 feet. Highest water level 27.15 below lsd, May 22, 1949; lowest 110.75 below lsd, Sept. 27, 1946. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	34.21	33.24	32.55	31.85	30.75	30.80	31.35	32.25	32.85	34.70	34.45	33.85
2	34.01	33.09	32.65	31.45	30.75	30.85	31.45	32.25	32.85	34.70	34.45	33.85
3	33.59	33.13	32.35	31.85	30.70	30.80	31.45	32.30	32.90	34.65	34.45	33.80
4	33.46	33.06	32.40	31.80	30.75	30.80	31.45	32.30	33.00	34.50	34.35	33.80
5	33.25	32.92	32.30	31.65	30.70	30.85	31.55	32.30	33.00	34.35	34.35	33.80
6	33.20	33.07	32.70	31.45	30.75	30.80	31.60	32.30	32.95	34.35	34.35	33.70
7	33.17	33.10	32.60	31.25	30.75	30.85	31.65	32.35	33.00	34.35	34.25	33.70
8	33.47	33.07	32.55	31.55	30.70	30.90	31.65	32.35	33.05	34.35	34.25	33.85
9	33.60	32.92	32.50	31.40	30.70	30.95	31.60	32.40	33.05	34.25	34.25	33.90
10	33.71	33.01	32.40	31.20	30.70	30.95	31.60	32.40	33.10	34.25	34.25	33.90
11	33.82	32.94	32.30	31.25	30.65	30.95	31.65	32.50	33.15	34.35	34.25	33.85
12	33.90	33.00	32.50	31.25	30.65	30.95	31.70	32.50	33.15	34.40	34.10	33.80
13	34.00	32.89	32.40	31.05	30.70	31.00	31.70	32.45	33.25	34.40	34.15	33.65
14	34.03	33.03	32.50	30.90	30.70	31.00	31.80	32.55	33.25	34.25	34.15	33.65
15	33.73	32.89	32.45	30.85	30.70	31.00	31.80	.....	33.15	34.45	34.35	33.55
16	33.65	32.77	32.20	30.85	30.80	31.25	31.80	.....	33.15	34.45	34.35	33.55
17	33.73	32.84	32.00	30.85	30.85	31.25	31.90	.....	33.15	34.45	34.45	33.50
18	33.75	32.94	32.05	31.00	30.85	31.20	31.90	.....	33.15	34.30	34.45	33.50
19	33.76	32.64	32.15	31.00	30.85	31.20	31.90	.....	33.05	34.30	34.30	33.50
20	33.69	32.61	32.10	30.95	30.85	31.20	31.85	.....	33.05	34.25	34.30	33.45

Ma-1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	33.53	32.64	32.00	30.85	30.80	31.25	32.00	.....	33.05	34.20	34.25	33.45
22	33.48	32.69	32.00	30.80	30.85	31.20	32.05	32.60	33.05	34.20	34.20	33.50
23	33.50	32.79	32.00	30.75	30.85	31.20	32.05	32.60	33.10	34.30	34.20	33.50
24	33.49	32.75	32.30	30.70	30.85	31.35	32.10	32.60	33.70	34.40	34.15	33.50
25	33.42	32.73	32.30	30.65	30.80	31.40	32.10	32.70	33.85	34.45	34.15	33.40
26	33.34	32.70	31.85	30.60	30.80	31.40	32.15	32.75	34.05	34.40	34.25	33.35
27	33.31	32.45	31.90	30.80	30.80	31.45	32.15	32.75	34.05	34.50	34.20	33.35
28	33.34	32.55	32.10	30.80	30.80	31.45	32.15	32.75	34.10	34.50	34.05	33.35
29	33.22	32.55	32.05	30.75	30.80	31.40	32.15	32.80	34.05	34.40	33.95	33.30
30	33.37	.....	31.90	30.70	30.80	31.35	32.15	32.85	34.40	34.35	33.90	33.20
31	33.25	.....	31.90	.....	30.80	.....	32.25	32.85	.....	34.35	.....	33.25

Ma-3. Tod Hotel. 7 Market St., Youngstown. Lat. 41°06', long. 80°39'. Drilled unused well in sandstone, diameter 8 inches, depth 400 feet. Highest water level 23.35 below lsd, Apr. 14, 1951; lowest 27.91 below lsd, July 2, 1948. Records available: 1947-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	26.40	.....	.....	25.93	25.91	26.37	26.43	26.34	26.88	27.20	27.10	27.27
2	26.40	.....	.....	25.96	25.92	26.41	26.63	26.39	26.79	27.24	27.11	27.25
3	26.37	.....	.....	25.97	25.94	26.41	26.41	26.41	26.83	27.27	27.10	27.23
4	26.36	.....	.....	25.98	25.94	26.44	26.61	26.48	26.98	27.26	27.12	27.24
5	26.29	.....	.....	25.95	25.92	26.45	26.83	26.31	27.03	27.21	27.13	27.21
6	26.27	.....	.....	25.88	25.91	26.44	26.92	26.37	27.11	27.19	27.12	27.16
7	26.26	.....	.....	25.90	25.96	26.44	26.96	26.46	27.20	27.19	27.19	27.17
8	26.24	25.58	.....	25.92	25.96	26.46	27.02	26.56	27.27	27.18	27.22	27.17
9	26.17	25.57	.....	25.93	25.95	26.46	.....	26.56	27.30	27.14	27.22	27.15
10	26.19	25.56	.....	25.91	25.94	26.47	.....	26.43	27.26	27.12	27.19	27.14
11	26.24	25.50	.....	25.95	25.95	26.50	.....	26.59	27.19	27.12	27.19	27.14
12	26.24	25.47	.....	25.96	25.97	26.50	.....	26.54	27.09	27.10	27.21	27.15
13	26.20	25.45	.....	25.94	26.01	26.45	27.13	26.57	27.03	27.06	27.24	27.15
14	26.13	25.45	.....	25.87	26.05	26.45	27.08	26.65	26.94	27.06	27.27	27.15
15	26.12	25.46	.....	25.85	26.08	26.46	26.81	26.63	27.01	27.06	27.27	27.14
16	26.18	25.45	.....	25.86	26.16	26.46	26.44	26.55	27.01	27.11	27.28	27.13
17	26.18	25.44	.....	25.85	26.22	26.43	26.24	26.58	27.07	27.14	27.28	27.13
18	26.10	25.44	.....	25.80	26.24	26.48	26.23	26.68	27.11	27.15	27.27	27.13
19	26.10	25.49	.....	25.77	.....	26.51	26.20	26.73	27.17	27.13	27.25	27.16
20	26.02	25.52	.....	25.74	.....	26.61	26.06	26.80	27.26	27.13	27.22	27.16
21	26.00	25.55	.....	25.72	.....	26.68	26.10	26.89	27.26	27.16	27.23	27.12
22	25.98	.....	25.85	25.75	.....	26.68	25.97	27.02	27.24	27.15	27.21	27.12
23	25.87	.....	25.82	25.85	.....	26.64	25.88	27.16	27.23	27.12	27.24	27.10
24	.....	.....	25.79	25.86	.....	26.67	25.90	27.19	27.21	27.10	27.25	27.11
25	.....	.....	25.83	25.86	.....	26.68	26.11	27.20	27.21	27.12	27.24	27.12
26	.....	.....	25.91	25.85	26.32	26.59	26.30	27.22	27.17	27.13	27.22	27.10
27	.....	.....	25.98	25.85	26.36	26.60	26.13	27.18	27.17	27.10	27.26	27.07
28	.....	.....	26.07	25.86	26.39	26.50	26.32	27.07	27.17	27.05	27.27	27.07
29	.....	.....	26.02	25.91	26.41	26.38	26.08	26.99	27.17	27.08	27.28	27.06
30	.....	.....	26.02	25.91	26.41	26.33	26.24	26.99	27.19	27.09	27.26	27.01
31	.....	.....	25.99	.....	26.38	.....	26.26	26.85	.....	27.09	.....	27.00

Marion County

Mn-1. Village of LaRue. Lat. 40°34'50", long. 83°23'00". Drilled unused well in gravel, diameter 4 inches, depth 100 feet. Highest water level 5.55 below lsd, June 3, 1947; lowest 14.55 below lsd, Aug. 10, 1950. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.90	9.35	8.80	8.75	9.80	11.40	12.60	12.25	13.35	12.90	12.65
2	7.75	9.30	8.90	9.15	9.80	12.05	12.50	12.45	13.45	12.45	.....
3	7.40	9.35	9.00	9.00	9.95	13.05	12.45	12.50	13.65	13.00	.....
4	7.00	9.45	8.95	9.05	9.90	12.55	12.15	12.50	13.60	12.55	.....
5	6.80	9.45	8.85	9.45	9.90	11.50	12.05	12.45	13.50	12.60	.....
6	7.40	9.95	8.65	9.10	9.95	11.35	12.90	12.30	13.60	12.65	.....
7	8.05	9.70	8.60	9.70	10.00	11.20	12.90	13.15	13.50	12.80	12.90
8	8.05	9.50	8.60	9.70	10.00	11.15	12.25	12.55	13.60	12.75	12.60
9	8.30	9.50	8.65	9.60	10.00	11.20	12.10	12.90	13.45	13.00	12.70
10	8.20	9.45	8.85	9.70	10.40	11.20	11.90	13.00	13.40	12.60	12.55

Mn-1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	8.00	9.20	8.80	9.60	11.05	11.25	11.90	13.20	13.25	12.85	12.80
12	8.15	7.60	8.75	9.45	10.55	11.40	11.85	12.75	13.10	13.10	12.55
13	8.30	7.25	8.60	9.90	10.55	11.30	11.90	12.40	13.10	12.90	12.55
14	8.60	7.50	8.00	9.90	10.45	11.30	11.85	12.60	13.05	12.75	12.10
15	8.70	7.70	7.60	9.90	10.40	11.20	11.90	12.35	13.00	12.90	12.50
16	8.70	7.90	7.70	9.95	10.40	11.25	11.80	12.60	12.95	12.90	12.50
17	8.25	7.85	9.50	10.40	11.30	11.85	12.55	13.50	12.85	12.55
18	8.30	8.10	9.90	10.40	11.30	11.90	12.50	13.45	12.85	12.60
19	8.25	8.20	9.70	10.75	11.30	12.00	12.40	12.90	12.80	12.60
20	8.05	8.30	9.35	10.55	11.20	12.00	12.35	13.05	13.05	12.50
21	8.30	8.75	9.90	10.45	11.30	11.95	12.30	13.15	13.00	12.70
22	8.15	8.60	9.90	10.45	11.30	12.00	12.35	13.10	12.75	12.50
23	9.60	7.70	9.15	9.80	10.45	11.30	11.95	12.45	13.05	12.85	12.60
24	9.30	7.30	8.35	9.45	10.50	11.35	11.90	12.40	13.05	12.75	12.60
25	9.25	7.65	7.15	9.80	10.65	11.30	12.10	12.40	12.90	12.85	12.25
26	9.25	7.90	7.35	9.55	10.65	11.30	12.05	12.30	12.90	12.95	12.25
27	9.30	8.30	7.55	9.75	11.65	11.30	12.10	12.30	12.60	12.75	12.35
28	9.30	8.40	8.15	9.85	11.80	11.35	12.70	12.35	12.60	12.85	12.55
29	6.75	9.40	8.50	8.35	9.80	11.70	12.15	12.70	12.35	12.65	12.80	12.35
30	7.55	....	8.55	8.40	9.75	11.75	12.55	12.55	13.30	13.30	12.95	12.35
31	7.85	....	8.75	....	9.75	....	12.65	12.50	....	12.80	....	12.45

Medina County

Md-1. City of Lodi. Lat. 41°01'46", long. 82°01'06". Drilled unused well in gravel, diameter 6 inches, depth 65 feet. Highest water level 9.00 below lsd, Mar. 2, 1952; lowest 28.80 below lsd, Sept. 30, 1950. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	July	Aug.	Sept.
1	16.50	.....	17.40	.....	16.80	.....	.....	.....
2	16.60	16.30	.....	15.90	16.95	.....	23.70	.....
3	16.50	15.65	.....	15.90	16.60	.....	.....	20.75
4	16.05	15.60	.....	16.40	16.70	.....	24.00	.....
5	15.60	15.50	.....	16.80	16.70	.....	24.35	21.00
6	.....	16.95	.....	18.25	16.60	.....	.....	20.45
7	.....	15.80	.....	16.80	16.85	.....	.....	19.70
8	.....	15.75	17.00	16.70	16.95	.....	.....	21.65
9	.....	15.90	16.30	16.40	16.95	.....	21.95	.....
10	.....	15.40	16.35	17.75	16.85	.....	.....	.....
11	.....	15.40	16.15	19.05	16.50	.....	.....	21.75
12	.....	19.00	16.55	.....	16.80	19.55	.....	.....
13	.....	16.30	16.70	.....	17.10	19.65	23.90	.....
14	.....	17.80	16.70	16.40	17.40	19.80	23.95	.....
15	.....	16.25	16.80	16.45	17.35	19.90	.....	.....
16	.....	17.35	16.65	16.75	17.60	19.95	21.25	.....
17	15.60	17.05	16.55	16.55	17.65	19.95	21.25	.....
18	16.05	17.20	16.25	16.65	17.95	19.80	22.90	.....
19	16.20	17.10	16.55	16.55	18.00	19.85	22.40	.....
20	16.00	17.00	16.45	16.55	18.00	19.75	22.70	.....
21	16.10	17.05	16.60	16.75	17.95	19.60	.....	.....
22	15.95	17.20	16.65	16.80	18.00	19.70	.....	.....
23	16.15	16.75	16.45	16.65	18.20	19.80	20.95	.....
24	16.25	.....	16.50	16.80	17.95	19.50	22.90	.....
25	16.00	.....	16.50	16.95	.....	19.55	.....	.....
26	16.00	16.35	16.50	17.10	.....	19.50	22.95	.....
27	15.15	16.25	16.50	16.85	.....	19.60	22.70	.....
28	15.75	16.40	16.55	16.80	.....	19.60	.....	.....
29	15.90	16.60	15.80	16.90	.....	20.80	22.90	.....
30	.....	.....	.....	16.70	.....	19.30	22.70	.....
31	16.25	.....	17.10	.....	.....	.....	.....	.....

Mercer County

Mr-1. S. O. Self. Lat. 40°39'36", long. 84°38'56". Drilled unused well in limestone, diameter 4 inches, depth 130 feet. Highest water level 8.47 below lsd, Mar. 27, 1950; lowest 10.94 below lsd, Dec. 31, 1946. Records available: 1946-52.

Mr-1--Continued.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	10.69	10.21	9.91	9.54	9.45	9.40	9.93	10.21	10.33	10.33	10.50	10.56
2	10.69	10.14	9.89	9.55	9.45	9.46	10.00	10.18	10.23	10.39	10.50	10.54
3	10.72	10.11	9.80	9.60	9.45	9.37	10.01	10.18	10.33	10.39	10.53	10.56
4	10.66	10.01	9.92	9.60	9.50	9.43	9.97	10.17	10.39	10.39	10.53	10.55
5	10.63	10.13	9.93	9.44	9.42	9.46	9.98	10.25	10.35	10.39	10.41	10.42
6	10.67	10.12	9.93	9.51	9.44	9.43	10.00	10.24	10.35	10.39	10.45	10.45
7	10.62	10.07	9.92	9.54	9.50	9.50	10.00	10.25	10.35	10.39	10.50	10.46
8	10.53	10.06	9.91	9.57	9.38	9.48	9.99	10.25	10.34	10.43	10.51	10.47
9	10.54	10.06	9.78	9.54	9.38	9.50	9.99	10.24	10.34	10.46	10.49	10.43
10	10.68	10.01	9.70	9.56	9.29	9.50	10.00	10.22	10.36	10.49	10.52	10.42
11	10.68	10.02	9.71	9.58	9.30	9.61	10.05	10.25	10.39	10.49	10.51	10.43
12	10.64	10.03	9.71	9.49	9.30	9.57	10.05	10.25	10.39	10.48	10.52	10.43
13	10.52	10.05	9.66	9.48	9.38	9.54	10.05	10.28	10.39	10.49	10.53	10.43
14	10.44	10.00	9.73	9.48	9.38	9.56	10.05	10.24	10.39	10.49	10.50	10.43
15	10.52	10.00	9.73	9.49	9.40	9.57	10.05	10.28	10.34	10.43	10.52	10.43
16	10.54	9.95	9.70	9.52	9.45	9.58	10.18	10.17	10.32	10.47	10.53	10.47
17	10.38	9.96	9.70	9.50	9.37	9.56	10.17	10.24	10.29	10.46	10.52	10.50
18	10.46	10.03	9.66	9.51	9.39	9.60	10.19	10.24	10.26	10.46	10.52	10.57
19	10.44	9.97	9.61	9.50	9.35	9.63	10.19	10.26	10.24	10.47	10.47	10.57
20	10.54	9.88	9.59	9.51	9.24	9.65	10.12	10.26	10.27	10.48	10.49	10.51
21	10.51	9.92	9.59	9.53	9.31	9.65	10.13	10.25	10.27	10.47	10.50	10.53
22	10.30	9.92	9.58	9.50	9.37	9.65	10.19	10.30	10.26	10.47	10.42	10.49
23	10.48	9.92	9.53	9.47	9.32	9.66	10.01	10.30	10.29	10.45	10.51	10.49
24	10.48	9.88	9.55	9.40	9.28	9.65	10.10	10.30	10.29	10.45	10.56	10.50
25	10.43	9.91	9.56	9.41	9.21	9.74	10.09	10.30	10.29	10.49	10.50	10.51
26	10.24	9.89	9.61	9.41	9.29	9.80	10.08	10.30	10.27	10.49	10.42	10.49
27	10.24	9.78	9.62	9.40	9.29	9.85	10.08	10.31	10.33	10.44	10.49	10.52
28	10.21	9.85	9.62	9.38	9.31	9.86	10.07	10.33	10.36	10.45	10.50	10.51
29	10.25	9.88	9.63	9.41	9.31	9.89	10.14	10.33	10.35	10.55	10.50	10.47
30	10.28		9.63	9.44	9.32	9.89	10.15	10.33	10.36	10.51	10.56	10.44
31	10.27		9.56		9.31		10.21	10.33		10.48		10.50

Miami County

Mi-1. Troy Sunshade Co. 612 Grant St., Troy. Lat. 40°02', long. 84°13'. Drilled unused well in gravel, diameter 8 inches, depth 49 feet. Highest water level 7.15 below lsd, Feb. 26, 1951; lowest 14.87 below lsd, Nov. 22, 1946. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	10.95	8.85	9.70	9.35	9.65	9.40	11.50	11.40	11.60	13.25	13.35	13.80
2	11.05	8.75	9.25	9.50	9.70	10.35	11.70	11.35	12.30	13.35	13.15	13.95
3	11.10	8.25	9.55	9.65	9.15	10.55	11.80	11.30	12.55	13.35	13.35	14.05
4	11.10	8.25	9.85	9.70	8.85	10.70	11.25	11.25	12.65	12.80	13.50	14.10
5	11.05	8.35	10.35	9.60	9.50	10.75	10.95	11.35	12.75	12.50	13.60	14.05
6	10.55	8.55	10.35	9.00	9.75	10.80	10.75	11.35	12.25	13.00	13.75	13.75
7	10.60	8.60	10.20	9.25	9.90	10.25	11.40	11.40	11.90	13.20	13.80	13.50
8	10.75	8.70	10.20	9.50	9.95	9.95	11.70	11.45	12.53	13.40	13.55	13.70
9	10.85	8.75	9.65	9.60	10.00	10.65	11.80	11.45	12.75	13.05	13.30	13.90
10	10.95	8.20	9.90	9.75	9.40	10.85	11.90	11.35	12.85	13.10	13.50	13.90
11	11.00	8.60	9.80	9.85	9.10	10.95	11.90	12.00	12.90	12.80	13.75	13.95
12	10.95	8.80	9.70	9.85	9.80	10.90	11.40	12.20	13.00	12.55	13.85	14.00
13	10.35	8.95	9.75	9.30	10.00	11.00	11.05	12.35	12.45	12.80	13.85	13.70
14	10.50	9.10	9.80	9.20	10.10	10.45	11.60	12.50	12.20	12.95	13.95	13.40
15	11.10	9.15	9.75	9.25	10.30	10.05	11.85	12.50	12.70	13.05	13.70	13.65
16	10.80	9.15	9.20	9.45	10.35	10.75	11.95	12.00	12.90	13.15	13.50	13.85
17	10.80	8.65	9.45	9.50	9.85	11.05	12.00	11.55	13.00	13.20	13.70	14.00
18	10.85	9.05	9.60	9.55	9.45	11.10	12.10	12.15	13.10	12.90	13.80	14.10
19	10.80	9.25	9.65	9.55	10.15	11.30	11.60	12.35	13.10	12.70	13.95	14.15
20	10.10	9.30	9.75	9.00	10.40	11.40	11.20	12.50	12.55	12.90	14.00	13.90
21	10.75	9.40	9.80	9.20	10.50	10.85	11.85	12.60	12.25	13.10	14.05	13.60
22	11.00	9.45	9.80	9.35	10.55	10.40	12.20	12.70	12.80	13.50	13.80	14.10
23	11.00	9.40	9.05	9.40	10.55	11.00	12.30	12.15	13.00	13.25	13.50	14.35
24	10.75	8.85	8.90	9.25	10.00	11.20	12.35	11.85	13.15	13.30	13.70	14.45
25	10.75	9.20	9.10	9.25	9.60	11.35	12.35	12.40	13.25	13.00	13.90	13.95

Mi-1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	10.70	9.40	9.25	8.90	10.25	11.55	11.85	12.60	13.25	12.75	14.00	13.80
27	9.15	9.50	9.40	8.65	10.45	11.65	11.50	12.60	12.80	13.10	13.80	13.60
28	8.55	9.60	9.45	8.90	10.60	11.10	11.30	12.55	12.30	13.30	13.85	13.40
29	8.75	9.70	9.45	9.45	10.65	10.70	11.30	12.60	12.90	13.40	13.70	13.40
30	8.80		8.90	9.60	10.10	11.15	11.35	12.10	13.10	13.50	13.50	13.80
31	8.85		9.10		9.60		11.40	11.75		13.60		13.90

Montgomery County

Mt-2. Dayton Power and Light Co. 118 East Fourth St. Lat. 39°45', long. 84°11'. Drilled unused well in gravel, diameter 8 inches, depth 57 feet. Highest water level 20.97 below lsd, Mar. 25, 1943; lowest 37.85 below lsd, Sept. 19, 1952. Records available: 1942-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	30.05	27.10	26.60	25.85	.....	.....	.....	36.15	36.80	37.10	36.50	37.20
2	29.80	26.95	26.60	25.90	.....	.....	.....	36.15	.....	.....	36.40	37.25
3	29.65	26.70	26.45	.....	.....	.....	.....	36.10	.....	37.10	36.30	36.35
4	29.55	26.40	26.65	.....	.....	.....	.....	36.00	.....	37.10	36.30	37.45
5	29.45	26.35	26.70	.....	.....	.....	.....	36.10	.....	37.00	36.40	37.55
6	29.30	26.20	26.80	.....	.....	.....	.....	36.25	.....	36.70	36.45	36.55
7	29.05	26.15	26.85	.....	.....	.....	.....	36.35	.....	36.70	36.50	37.40
8	29.05	26.15	26.85	.....	.....	.....	.....	36.50	36.80	36.65	36.50	37.20
9	29.10	26.15	26.80	.....	.....	.....	.....	36.55	37.00	36.70	36.40	37.25
10	29.20	25.95	26.70	.....	.....	.....	.....	36.55	37.15	36.75	36.25	37.35
11	29.20	25.90	26.85	.....	.....	.....	.....	36.50	37.35	36.75	36.30	37.30
12	29.15	25.95	26.85	.....	.....	.....	.....	36.65	37.50	36.65	36.35	37.25
13	28.95	26.05	26.75	.....	.....	.....	.....	36.75	37.60	36.55	36.40	37.20
14	28.90	26.10	26.75	.....	.....	.....	.....	36.85	37.50	36.60	36.55	37.00
15	29.00	26.15	26.60	.....	.....	.....	.....	36.95	37.45	36.70	36.55	37.80
16	29.05	26.15	26.35	.....	.....	.....	.....	37.00	37.60	36.75	36.50	37.80
17	29.05	26.05	26.15	.....	.....	.....	.....	36.95	37.70	36.80	36.40	37.80
18	29.05	26.05	26.15	.....	.....	.....	.....	36.80	37.80	36.80	36.55	36.90
19	29.00	26.15	26.20	.....	.....	.....	.....	36.90	37.85	36.70	36.65	35.90
20	28.65	26.30	26.25	.....	.....	.....	.....	36.95	37.85	36.50	36.70	37.85
21	28.50	26.40	26.30	.....	.....	.....	.....	37.05	37.70	36.50	36.75	37.80
22	28.45	26.40	26.30	.....	.....	.....	.....	37.10	37.25	36.50	36.70	37.75
23	28.55	26.40	26.20	.....	.....	.....	.....	37.05	37.15	36.60	36.65	37.80
24	28.60	26.30	25.95	.....	.....	.....	.....	36.85	37.05	36.65	36.45	37.75
25	28.60	26.20	25.85	.....	.....	.....	35.70	36.60	36.95	36.65	36.50	37.60
26	28.60	26.30	25.85	.....	.....	.....	35.75	36.70	36.95	36.55	36.60	37.40
27	28.45	26.40	25.80	.....	.....	.....	35.65	36.85	36.95	36.35	36.60	35.40
28	28.10	26.50	25.85	.....	.....	.....	35.65	37.00	36.85	36.45	36.45	35.30
29	27.80	26.55	25.85	.....	.....	.....	35.85	37.15	.....	36.45	36.45	35.15
30	27.50		25.75	.....	.....	.....	36.05	37.15	.....	36.50	36.35	35.25
31	27.30		25.65	.....	.....	.....	36.10	37.10		36.50		35.25

Mt-3. State of Ohio. State Highway Dept. Stewart St., Patterson Blvd. and Miami River. Lat. 39°44', long. 84°12'. Drilled unused well in gravel, diameter 6 inches, depth 80 feet, reopened from 51 feet to 80 feet, Nov. 8, 1952. Highest water level 34.53 below lsd, Aug. 17, 1947; lowest 56.90 below lsd, Dec. 19, 1952. Records available: 1945-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Dec.
1	.....	45.30	46.40	44.50	45.50	44.80	.....	.....
2	47.15	45.35	46.40	44.85	45.70	44.35	.....	.....
3	47.15	44.80	45.35	45.10	45.85	44.80	.....	.....
4	47.15	44.30	45.60	45.35	45.55	45.30	.....	.....
5	47.15	44.40	45.95	45.50	44.65	45.75	.....	.....
6	47.15	44.45	46.15	45.50	45.20	46.15	.....	.....
7	46.85	44.50	46.35	44.35	45.80	46.35	.....	.....
8	46.90	44.65	46.40	44.50	46.25	46.35	.....	.....
9	47.25	44.80	46.40	44.80	46.55	45.90	.....	.....
0	47.45	44.73	45.60	45.15	46.60	46.30	48.55	.....

Mt-3--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Dec.
11	47.65	44.30	45.70	45.35	46.55	46.80	48.85	.....
12	47.75	44.65	45.65	45.40	45.80	47.20	48.90	.....
13	47.75	45.10	44.90	45.05	45.75	47.55	48.90	.....
14	47.70	45.40	45.00	43.90	45.90	47.60	48.05	.....
15	48.10	45.55	45.05	44.15	46.15	47.60	48.00	.....
16	48.20	45.55	45.00	44.25	46.30	46.95	48.30	.....
17	48.25	45.05	44.25	44.40	46.35	47.05	48.70	56.55
18	48.40	44.30	44.40	44.60	46.30	47.35	49.05	56.75
19	48.40	44.75	44.65	44.75	45.65	47.60	.....	56.90
20	48.30	45.40	45.00	44.75	45.65	47.85	.....	56.90
21	47.80	45.80	45.45	44.25	45.95	47.95	48.75	56.60
22	47.55	45.85	45.65	44.60	46.10	47.95	48.85	56.50
23	47.65	45.85	45.65	45.05	46.20	47.25	49.00	56.65
24	47.70	45.35	44.20	45.45	46.25	47.35	.....	56.80
25	47.85	44.45	44.25	45.45	45.70	47.50	.....	56.55
26	47.90	44.80	44.45	45.30	44.65	.....	.....	55.90
27	47.55	45.35	44.60	45.25	45.05	.....	.....	55.45
28	44.90	45.85	44.75	45.20	45.45	.....	.....	54.85
29	44.60	46.30	44.80	44.50	45.75	.....	.....	54.85
30	44.55	.....	44.80	45.00	45.85	.....	.....	55.15
31	44.60	.....	44.20	.....	45.65	.....	.....	55.45

Mt-5. Kuhn Bros. Foundry Co. 1800 McCall St., Dayton. Lat. 39°45', long. 84°13'. Drilled unused well in gravel, diameter 6 inches, depth 156 feet. Highest water level 33.99 below lsd, June 18, 1947; lowest 45.61 below lsd, Dec. 27, 1952. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	43.39	40.72	38.89	.....	37.48	38.35	39.69	41.04	42.56	43.68	44.52	45.23
2	43.33	40.57	38.85	.....	.....	38.40	39.73	41.09	42.53	43.70	44.52	45.27
3	43.28	40.40	38.85	37.84	.....	38.43	39.76	41.14	42.55	43.73	44.57	45.29
4	43.20	40.24	38.88	37.83	.....	.....	39.79	41.20	42.59	43.77	44.58	45.28
5	43.16	40.14	38.91	37.82	.....	.....	39.81	41.24	42.62	43.80	44.58	45.32
6	43.09	40.04	38.92	37.78	.....	.....	39.83	41.28	42.66	43.82	44.60	45.34
7	43.03	39.93	38.94	37.81	.....	.....	39.86	41.33	42.69	43.84	44.63	45.34
8	42.95	39.80	38.94	37.80	.....	.....	39.89	41.38	42.73	43.87	44.64	45.35
9	42.92	39.72	38.91	37.79	.....	.....	39.92	41.44	42.78	43.91	44.67	45.36
10	42.89	39.60	38.94	37.81	.....	38.73	39.96	41.48	.....	43.95	44.69	45.37
11	42.82	39.51	38.94	37.80	.....	38.80	40.00	41.53	42.81	43.96	44.75	45.38
12	42.75	39.42	38.90	37.77	.....	38.84	40.03	41.58	42.86	43.98	44.78	45.40
13	42.69	39.34	38.86	37.71	.....	38.89	40.06	41.63	42.90	44.04	44.80	45.39
14	42.64	39.27	38.90	37.69	.....	38.94	40.11	41.68	42.93	44.07	44.82	45.39
15	42.61	39.20	38.87	37.69	.....	38.96	.....	41.74	42.99	44.09	44.84	45.42
16	42.57	39.14	38.82	37.68	.....	39.02	40.25	.....	43.03	44.11	44.87	45.42
17	42.52	39.05	38.83	37.66	.....	39.10	40.30	41.84	43.08	44.15	44.89	45.43
18	42.52	39.06	38.79	37.63	.....	39.14	40.34	41.91	43.17	44.17	44.91	45.47
19	.....	39.01	38.77	37.61	.....	39.19	40.39	41.92	43.20	44.20	45.00	45.47
20	.....	38.98	38.75	37.56	37.97	39.25	40.43	42.00	43.22	44.22	45.01	45.48
21	42.38	38.97	38.75	37.56	38.03	39.29	40.50	42.04	43.25	44.23	45.03	45.49
22	42.35	38.96	38.70	37.54	38.06	39.31	40.57	42.09	43.35	44.25	45.07	45.51
23	42.33	38.92	38.60	37.53	38.09	39.41	40.60	42.13	43.35	44.28	45.08	45.55
24	42.28	38.87	38.44	37.50	38.11	39.44	40.65	42.17	43.39	44.32	45.10	45.51
25	42.22	38.95	38.31	37.50	38.11	39.49	40.71	42.23	43.43	44.34	45.10	45.56
26	42.16	38.86	38.25	37.49	38.17	.....	40.75	42.28	43.47	44.35	45.16	45.57
27	42.01	38.85	38.17	37.45	38.20	.....	40.79	42.32	43.50	44.41	45.16	45.61
28	41.59	38.82	38.10	37.56	38.24	.....	40.84	42.37	43.53	44.44	45.18	45.60
29	41.28	38.86	.....	37.48	38.28	.....	40.89	42.43	43.57	44.46	45.20	45.61
30	41.06	.....	.....	37.48	38.30	39.65	40.95	42.48	43.61	44.48	45.21	.....
31	40.88	.....	.....	.....	38.33	.....	41.00	42.49	.....	44.50	.....	.....

Mt-6. City of Dayton. Third and Ludlow Sts., Dayton. Lat. 39°46', long. 84°12'. Drilled unused well in gravel, diameter 8 inches, depth 60 feet. Highest water level 23.70 below lsd, Feb. 20, 1950; lowest 40.90 below lsd, Sept. 18, 1952. Records available: 1946-

Mt-6--Continued.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	31.40	27.65	28.95	28.55	30.35	31.45	.....	39.55	38.50	39.80	38.00	37.25
2	30.95	27.70	28.90	28.35	30.70	33.05	.....	39.60	39.85	39.80	37.65	37.30
3	30.65	27.60	28.90	28.45	30.80	33.35	.....	38.45	38.80	38.60	38.05	37.35
4	30.45	27.45	29.10	28.50	29.55	33.55	.....	39.35	38.40	38.50	38.00	37.45
5	30.45	27.35	29.15	28.50	31.30	33.90	.....	39.65	38.60	38.30	37.85	37.50
6	30.35	27.20	29.20	28.40	31.65	34.15	.....	39.80	39.70	37.90	38.00	37.50
7	30.30	27.25	29.30	23.20	31.55	34.40	.....	39.90	38.60	37.85	37.90	37.35
8	30.35	27.65	29.35	28.50	31.25	33.70	.....	40.05	38.60	37.85	37.90	37.50
9	30.50	27.80	29.25	28.70	31.05	34.30	.....	40.10	39.85	38.00	37.55	37.65
10	30.60	27.75	29.20	28.90	31.35	34.60	.....	38.85	40.15	37.90	37.60	37.70
11	30.60	27.90	29.30	28.45	30.95	34.65	.....	39.70	40.45	37.90	37.65	37.55
12	30.65	27.95	29.05	28.45	30.75	35.00	.....	40.00	40.80	37.80	37.45	37.50
13	30.60	27.95	29.40	28.35	31.10	35.40	.....	40.15	40.65	38.00	37.70	37.25
14	30.60	28.05	28.30	28.10	31.30	35.55	37.50	40.20	40.00	38.20	37.90	37.95
15	30.70	28.10	28.00	27.85	31.35	35.25	37.60	40.35	40.35	38.10	38.00	37.95
16	30.60	28.20	27.90	28.20	30.85	35.85	37.80	40.30	40.65	38.15	37.80	37.00
17	30.55	28.15	28.05	28.25	30.95	36.05	38.00	39.10	40.80	38.25	38.00	37.05
18	30.45	28.25	28.00	28.45	30.55	36.10	38.30	39.85	40.90	38.30	38.10	37.20
19	30.30	28.35	28.20	28.60	30.80	36.20	38.35	40.00	40.55	38.10	38.30	37.25
20	30.05	28.50	28.50	28.45	31.00	36.30	38.20	40.05	40.30	38.00	38.20	37.20
21	29.85	28.45	28.40	28.90	31.05	36.45	38.55	40.15	39.10	37.70	37.80	37.10
22	29.75	28.40	28.40	29.05	31.15	36.10	38.85	.....	38.50	37.90	37.80	37.15
23	29.90	28.40	28.25	29.10	32.40	36.60	39.00	.....	38.20	27.95	37.65	37.25
24	30.00	28.30	27.75	29.10	32.55	36.85	39.05	.....	38.10	38.20	37.85	37.25
25	30.05	28.35	27.60	29.00	31.85	37.10	39.20	39.40	38.10	38.20	38.00	37.20
26	30.10	28.45	27.70	28.90	32.40	37.80	39.05	39.60	38.10	37.80	38.10	37.00
27	29.90	28.60	27.75	28.35	32.80	36.95	38.70	39.75	38.10	38.00	37.75	36.85
28	29.15	28.70	27.90	28.70	32.90	.....	39.15	40.00	37.80	38.00	37.45	36.45
29	28.35	28.80	28.05	28.90	32.50	.....	39.30	40.25	37.90	37.55	37.40	36.55
30	27.90	.....	28.00	29.05	32.20	.....	39.45	40.25	39.45	37.80	37.30	36.70
31	27.65	.....	28.30	.....	32.80	.....	39.55	39.15	.....	37.90	.....	36.75

Mt-49. E. F. Stenger. Lat. 39°40'20", long. 84°16'30". Drilled unused well in gravel, diameter 6 inches, depth 212 feet. Highest water level 10.82 below lsd, Feb. 18, 1950; lowest 18.36 below lsd, Dec. 3, 1952. Records available: 1947-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	16.38	.....	13.50	.....	12.83	13.79	14.86	15.97	.....	.....	17.97	18.50
2	16.23	.....	13.50	.....	12.84	13.84	14.91	15.97	.....	.....	17.97	18.33
3	16.20	.....	13.56	.....	12.87	.....	14.93	15.98	.....	17.44	17.99	18.36
4	.....	.....	.....	.....	12.92	.....	14.93	16.02	.....	17.44	18.01	18.36
5	.....	.....	13.68	.....	13.00	.....	14.92	16.08	.....	17.50	18.06	18.35
6	.....	.....	.....	12.62	13.05	.....	14.93	16.14	.....	17.51	18.07	18.35
7	.....	.....	.....	12.65	13.10	.....	15.01	18.18	.....	17.52	18.10	18.30
8	.....	.....	.....	12.70	13.10	.....	15.04	16.24	.....	17.53	18.10	18.29
9	.....	.....	.....	12.74	13.12	.....	15.10	16.26	.....	17.56	18.08	18.31
10	.....	.....	.....	12.79	13.16	14.18	15.14	16.25	.....	17.60	18.10	18.27
11	.....	.....	.....	12.79	13.21	.....	15.19	16.31	.....	17.61	18.13	18.25
12	.....	.....	.....	12.77	13.27	.....	15.20	16.36	.....	17.61	18.15	18.21
13	.....	.....	13.02	.....	13.34	.....	15.20	16.39	.....	17.65	18.17	18.20
14	.....	.....	13.03	12.40	13.42	.....	15.26	16.40	.....	17.67	18.18	18.19
15	15.95	.....	13.05	12.42	.....	.....	15.32	16.41	.....	17.71	18.19	18.21
16	15.90	.....	.....	12.44	.....	.....	15.34	16.43	17.15	17.73	18.17	18.22
17	15.83	.....	.....	12.47	.....	.....	15.40	16.42	17.18	17.76	18.17	18.25
18	15.77	.....	.....	12.50	.....	14.54	15.45	16.42	17.21	17.76	18.19	18.27
19	.....	.....	.....	12.52	.....	14.60	15.46	16.45	17.21	17.75	18.19	18.28
20	.....	.....	13.16	.....	.....	14.62	15.45	16.50	17.21	17.77	18.22	18.28
21	.....	.....	13.20	.....	.....	14.64	15.55	16.54	17.16	17.78	18.23	18.28
22	.....	.....	13.19	.....	.....	14.65	15.59	16.59	17.17	17.80	18.24	18.28
23	.....	.....	12.86	.....	.....	14.60	15.65	.....	17.19	17.83	18.23	18.27
24	.....	.....	12.48	12.60	.....	14.75	15.70	.....	17.22	17.85	18.25	18.27
25	.....	.....	12.43	12.50	.....	14.80	15.74	.....	17.24	17.86	18.26	18.26
26	.....	13.28	12.43	12.51	.....	14.87	15.74	.....	17.28	17.85	18.30	18.25
27	.....	13.33	12.45	12.55	.....	14.80	15.74	.....	17.28	17.87	18.30	18.26
28	.....	13.40	12.48	12.65	.....	14.71	15.79	.....	.....	17.90	18.30	18.27
29	.....	13.45	12.52	12.72	.....	14.73	15.82	.....	.....	17.93	18.30	18.28
30	.....	.....	.....	12.77	.....	14.79	15.89	.....	.....	17.95	18.29	18.30
31	.....	.....	.....	.....	.....	.....	15.93	.....	.....	17.98	.....	18.32

Muskingum County

Mu-1a. City of Zanesville. Lat. 39°57'15", long. 81°59'30". Drilled unused well in gravel, diameter 6 inches, depth 135 feet. The record for well Mu-1a started June 4 and may be used as a continuation of the record for well Mu-1. Highest water level 11.40 below lsd, Mar. 29, 1945; lowest 35.60 below lsd, Dec. 24, 1951. Records available: 1942-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	34.60	.....	.....	22.75	22.30	.....	30.42	25.72	.....	23.72	21.42	21.62
2	34.20	.....	.....	.....	.....	.....	30.22	26.07	23.37	23.27	21.32	21.87
3	34.15	.....	.....	.....	.....	.....	30.02	25.52	23.62	23.52	21.42	22.12
4	34.05	.....	.....	.....	.....	27.62	29.72	25.62	23.67	23.82	21.52	22.12
5	33.50	.....	.....	.....	.....	28.12	29.02	25.52	23.47	23.67	20.57	21.97
6	33.25	.....	.....	.....	.....	28.52	28.87	25.52	23.62	23.32	21.17	21.87
7	33.00	.....	.....	.....	.....	29.27	28.22	25.62	23.42	23.62	21.62	21.92
8	32.60	.....	.....	.....	.....	29.47	28.37	25.62	23.12	23.37	21.42	21.97
9	32.70	.....	.....	23.75	.....	29.72	28.57	25.72	23.47	23.92	20.92	21.92
10	32.75	.....	.....	23.80	.....	29.82	27.82	25.07	23.67	23.97	20.52	21.42
11	32.45	.....	.....	.....	.....	29.82	28.32	25.02	23.57	24.12	21.47	21.62
12	32.45	.....	.....	24.10	.....	29.72	28.22	25.17	23.62	24.07	21.47	21.92
13	32.25	.....	.....	23.75	.....	30.12	27.97	24.97	23.82	24.32	20.32	21.72
14	32.20	.....	.....	23.75	.....	30.27	27.32	24.82	24.12	24.62	20.82	21.42
15	32.90	.....	.....	23.70	.....	29.92	27.32	24.82	23.47	24.22	21.12	21.27
16	33.35	.....	.....	22.80	.....	30.12	27.32	24.32	23.52	24.62	21.22	22.07
17	33.30	.....	.....	.....	.....	30.37	27.22	24.17	23.12	24.62	21.47	22.22
18	32.95	.....	.....	.....	.....	30.57	27.12	23.77	22.92	24.72	21.52	22.62
19	33.15	.....	.....	.....	.....	30.52	27.02	23.62	22.92	24.67	21.27	22.67
20	33.15	.....	.....	.....	.....	30.57	26.62	23.97	22.82	24.92	21.52	21.82
21	32.40	.....	.....	.....	.....	30.62	.....	24.02	22.82	24.92	21.32	21.87
22	32.25	.....	.....	.....	.....	30.32	.....	24.32	20.37	24.17	21.27	21.92
23	.....	.....	.....	22.15	.....	30.12	26.42	24.22	22.52	24.22	21.07	22.32
24	.....	.....	.....	.....	.....	30.27	26.97	24.02	22.52	22.72	21.12	21.97
25	.....	.....	.....	22.30	.....	30.42	27.02	23.42	22.67	22.72	21.22	22.02
26	.....	.....	.....	.....	.....	30.87	26.82	23.42	22.82	22.17	20.32	21.67
27	.....	.....	.....	.....	.....	31.12	26.57	23.67	23.52	21.92	20.97	21.82
28	.....	.....	.....	21.65	.....	31.17	26.27	23.62	23.02	21.72	20.77	21.87
29	.....	.....	22.10	21.75	.....	30.97	26.27	23.62	22.92	21.72	21.07	22.02
30	.....	.....	21.65	22.10	.....	30.52	26.32	.....	23.42	21.82	21.62	21.92
31	.....	.....	21.90	.....	.....	.....	25.72	23.42	.....	21.52	.....	22.47

Mu-2. State of Ohio. Lat. 39°57'00", long. 82°01'30". Drilled test well in gravel, diameter 6 inches, depth 54 feet. Highest water level 0.00, Jan. 27, 1952; lowest 8.48 below lsd, Nov. 16-17, 27-28, 30, Dec. 1, 1952. Records available: 1947-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.59	4.07	6.28	6.20	6.08	7.29	7.58	7.89	8.20	8.38	8.41	8.48
2	5.61	4.05	6.33	6.25	6.23	7.32	7.62	7.90	8.20	8.42	8.41	8.45
3	5.53	3.71	6.36	6.35	6.35	7.35	7.64	7.92	8.21	8.42	8.42	8.44
4	5.42	3.50	6.34	6.38	6.43	7.40	7.31	7.93	8.23	8.42	8.42	8.44
5	5.41	3.37	6.37	6.37	6.50	7.42	7.39	7.96	8.24	8.42	8.40	8.38
6	5.62	3.58	6.46	6.18	6.59	7.46	7.46	7.97	8.24	8.42	8.44	8.29
7	5.80	3.70	6.52	6.18	6.65	7.50	7.50	7.98	8.27	8.39	8.46	8.32
8	5.94	3.82	6.56	6.26	6.68	7.54	7.52	7.99	8.28	8.38	8.47	8.33
9	6.11	3.95	6.57	6.31	6.70	7.56	7.52	7.99	8.30	8.38	8.46	8.33
10	6.23	4.02	6.57	6.39	6.72	7.57	7.55	7.99	8.31	8.40	8.44	8.26
11	6.40	4.16	6.22	6.45	6.75	7.62	7.60	7.99	8.31	8.39	8.45	8.28
12	6.50	4.26	5.12	6.47	6.81	7.62	7.63	8.00	8.32	8.39	8.46	8.28
13	6.55	4.35	5.28	6.45	6.87	7.65	7.67	8.04	8.34	8.40	8.46	8.30
14	6.60	4.44	5.38	6.25	6.91	7.66	7.70	8.05	8.35	8.40	8.46	8.32
15	6.61	4.53	5.45	5.86	6.96	7.60	7.74	8.06	8.34	8.34	8.46	8.34
16	6.56	4.82	5.68	5.76	7.02	7.63	7.74	8.04	8.29	8.32	8.48	8.35
17	6.57	5.09	5.91	5.85	6.97	7.68	7.77	8.06	8.32	8.36	8.48	8.35
18	6.42	5.29	6.01	5.88	6.97	7.70	7.79	8.09	8.32	8.37	8.47	8.37
19	6.07	5.42	5.97	5.94	6.99	7.74	7.70	8.10	8.32	8.40	8.46	8.38
20	6.03	5.48	5.66	6.11	6.98	7.76	7.72	8.11	8.33	.....	8.42	8.36
21	5.62	5.48	5.76	6.23	6.99	7.76	7.79	8.12	8.34	.....	8.42	8.35
22	5.63	5.62	5.76	6.38	7.05	7.74	7.82	8.13	8.34	8.32	8.42	8.36
23	5.68	5.74	5.18	6.40	7.08	7.78	7.83	8.13	8.35	8.31	8.46	8.35
24	5.89	5.85	5.21	5.84	7.09	7.77	7.86	8.16	8.35	8.29	8.47	8.38
25	6.00	5.95	5.34	5.02	7.06	7.82	7.88	8.17	8.36	8.32	8.45	8.38

Mu-2--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	5.97	6.02	5.54	5.22	7.05	7.86	7.90	8.17	8.36	8.33	8.45	8.38
7	3.48	6.07	5.71	5.35	7.00	7.88	7.90	8.18	8.38	8.34	8.48	8.40
8	3.35	6.12	5.84	5.48	7.07	7.91	7.75	8.18	8.39	8.37	8.48	8.41
9	3.86	6.18	6.03	5.75	7.14	7.92	7.77	8.19	8.39	8.40	8.48	8.41
10	4.04		6.13	5.94	7.19	7.70	7.82	8.20	8.39	8.40	8.48	8.38
11	4.07		6.20		7.23		7.87	8.20		8.40		8.38

Portage County

Po-1. Edward Tiddle. Lat. 41°14'06", long. 81°02'48". Drilled unused well in sandstone, diameter 6 inches, depth 55 feet. Highest water level 14.49 below lsd, June 13, 1917; lowest 21.76 below lsd, Dec. 16, 1952. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	19.97	19.34	18.26	17.28	18.46	18.48	.....	19.64	20.10	20.53	20.97	21.32
2	19.97	19.33	18.26	17.28	18.74	18.48	.....	19.64	20.12	20.57	20.96	21.34
3	19.96	19.31	18.19	17.31	18.79	18.48	.....	19.64	20.16	20.58	20.98	21.35
4	19.93	19.21	18.22	17.30	18.78	18.52	.....	19.65	20.18	20.59	20.97	21.34
5	19.90	19.23	18.24	17.18	18.78	18.50	.....	19.69	20.20	20.66	20.97	21.32
6	19.89	19.23	18.21	17.26	.....	18.48	.....	19.70	20.22	20.60	21.00	.....
7	19.88	19.19	18.19	17.28	.....	18.52	19.11	19.71	20.23	20.60	21.04	.....
8	19.84	19.14	18.17	17.28	.....	18.56	19.10	19.71	20.23	20.62	21.04	.....
9	19.82	19.15	18.12	17.26	18.81	18.51	19.11	19.71	20.23	20.66	21.04	.....
10	19.88	19.09	18.08	17.84	18.82	18.43	19.18	19.73	20.25	20.67	21.06	21.37
11	19.87	19.02	18.07	17.95	18.79	18.45	19.19	19.74	20.26	20.66	21.06	21.39
12	19.80	19.04	18.06	.....	18.77	18.41	19.25	19.76	20.27	20.67	21.10	21.42
13	19.79	18.95	17.92	.....	18.83	18.42	19.27	19.76	20.28	20.71	21.13	21.46
14	19.76	18.89	17.94	.....	18.74	18.40	19.26	19.81	20.28	20.72	21.17	21.46
15	19.79	18.85	17.90	.....	18.80	18.37	19.33	19.81	20.27	20.75	21.21	21.71
16	19.78	18.78	17.82	.....	18.80	18.39	19.37	19.84	20.24	20.77	21.25	21.76
17	19.69	18.74	17.82	.....	18.58	18.55	19.39	19.86	20.29	20.77	20.24	21.75
18	19.70	18.72	17.79	18.15	18.33	18.64	19.40	19.88	20.29	20.77	21.22	21.60
19	19.69	18.69	17.70	18.12	18.75	18.66	19.42	19.91	20.26	20.77	21.21	21.60
20	19.64	18.64	17.69	17.95	18.49	18.68	19.42	19.93	20.29	20.82	21.22	21.57
21	19.64	18.58	17.65	18.06	18.54	18.67	19.41	19.95	20.30	20.81	21.21	21.59
22	19.54	18.57	17.60	18.11	18.47	18.69	19.48	19.97	20.33	20.81	21.15	21.60
23	19.59	18.53	17.54	18.13	18.45	18.70	19.50	19.98	20.39	20.83	21.19	21.67
24	19.61	18.47	17.52	18.11	18.45	18.72	19.59	19.98	20.39	20.86	21.19	21.67
25	19.58	18.45	17.49	18.14	18.41	18.74	19.58	20.02	20.39	20.87	21.19	21.64
26	19.50	18.40	17.48	18.13	18.42	18.80	19.57	20.03	20.44	20.87	21.25	21.64
27	19.43	18.33	17.45	18.11	18.45	18.88	19.54	20.06	20.46	20.87	21.27	21.66
28	19.40	18.32	17.43	18.12	18.44	18.92	19.52	20.08	20.46	20.90	21.29	21.66
29	19.39	18.27	17.43	18.12	18.45	18.91	19.58	20.12	20.50	20.93	21.29	21.65
30	19.39		17.43	18.12	18.45	18.86	19.60	20.12	20.50	20.93	21.33	21.68
31	19.36		17.32		18.45		19.64	20.12	.....			21.71

Po-4. U. S. Army Engineer Corps. Ravenna Ordnance Plant. Lat. 41°11', long. 81°06". Drilled unused well in sandstone, diameter 12 inches, depth 225 feet. Highest water level 24.15 below lsd, May 4, 1951; lowest 33.20 below lsd, Dec. 18, 1952. Records available: 1950-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	31.45	29.75	29.35	28.25	27.55	28.05	29.25	30.35	30.65	31.15	31.95	32.70
2	31.50	29.50	29.40	28.40	27.65	28.05	29.25	30.20	30.70	31.40	31.90	32.80
3	31.45	29.40	29.10	28.55	27.80	27.90	29.20	30.25	30.95	31.40	32.00	32.90
4	31.40	28.90	29.15	28.60	27.75	28.05	29.25	30.20	31.00	31.30	32.00	32.85
5	30.95	29.30	29.50	28.15	27.60	28.05	29.30	30.40	30.95	31.35	31.85	32.85
6	31.15	29.35	29.55	28.35	27.85	27.95	29.35	30.40	30.85	31.45	32.00	32.95
7	31.20	29.35	29.45	28.65	28.05	28.05	29.30	30.40	31.00	31.40	32.15	32.90
8	30.95	29.15	29.30	28.70	27.90	28.05	29.30	30.35	31.05	31.35	32.10	32.90
9	30.75	29.20	29.05	28.70	27.85	28.15	29.35	30.25	31.05	31.50	32.10	32.85
10	31.30	29.25	28.90	28.50	27.65	28.15	29.50	30.35	31.05	31.55	32.20	32.80

Po-4--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
11	31.30	29.20	28.95	28.60	.....	28.35	29.60	30.40	31.05	31.50	32.15	32.85
12	31.00	29.30	29.05	28.45	.....	28.40	29.70	30.45	31.05	31.50	32.25	32.85
13	30.95	29.35	28.75	28.05	28.05	28.40	29.65	30.55	31.05	31.50	32.25	32.90
14	30.70	29.25	28.95	.....	28.15	28.40	29.55	30.50	31.00	31.60	32.25	32.95
15	30.80	29.25	28.95	28.05	28.10	28.35	29.75	30.40	30.95	31.55	32.25	32.95
16	31.00	29.00	28.65	28.20	28.35	28.25	29.80	30.45	30.95	31.55	32.35	33.00
17	30.65	29.15	28.85	28.05	28.30	28.45	29.85	30.60	31.00	31.60	32.30	33.05
18	30.50	29.30	28.85	27.90	28.30	28.45	29.85	30.55	31.00	31.60	32.30	33.20
19	30.50	29.35	28.55	27.80	28.25	28.55	29.70	30.55	31.15	31.60	32.30	33.15
20	30.50	29.15	28.55	27.60	28.10	28.75	29.65	30.50	31.10	31.80	32.35	32.95
21	30.55	29.25	28.65	27.60	28.35	28.70	29.80	30.60	31.10	31.75	32.35	32.95
22	30.00	29.35	28.50	27.45	28.45	28.75	29.90	30.75	31.10	31.65	32.55	32.95
23	30.40	29.25	28.45	27.50	28.45	28.85	29.90	30.75	31.15	31.75	32.60	32.85
24	30.45	29.10	28.50	27.50	28.25	28.75	30.15	30.65	31.25	31.75	32.60	33.00
25	30.35	29.20	28.50	27.35	28.00	28.85	30.15	30.70	31.20	31.85	32.55	33.05
26	29.75	29.15	28.55	27.35	28.15	29.00	30.10	30.75	31.15	31.80	32.60	33.05
27	29.85	28.90	28.55	27.30	28.25	29.10	30.10	30.75	31.20	31.70	32.65	33.10
28	29.70	28.85	28.55	27.15	28.05	29.10	30.05	30.70	31.20	31.85	32.65	33.15
29	29.90	29.00	28.75	27.40	28.05	29.00	30.15	30.75	31.20	31.95	32.60	33.00
30	30.00		28.75	27.50	28.10	29.15	30.20	30.80	31.20	31.90	32.70	33.00
31	29.85		28.40		27.85		30.35	30.75		31.90		33.10

Putnam County

Pu-1. City of Columbus Grove. Lat. 40°55'10", long. 84°03'20". Drilled unused well in limestone, diameter 6 inches, depth 110 feet. Highest water level 7.34 below lsd, Jan. 7, 1950; lowest 20.70 below lsd, Aug. 31, 1951. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	11.20	10.65	11.40	11.20	12.15	13.85	.....	.....	19.15	18.80	17.50	17.35
2	11.10	10.65	11.15	11.30	13.00	14.45	.....	.....	17.45	18.75	17.30	17.35
3	11.10	10.45	11.10	11.50	13.50	13.60	.....	.....	16.75	18.85	17.20	17.30
4	10.80	10.55	11.10	11.40	12.85	14.60	.....	16.45	16.80	19.10	17.30	17.15
5	10.50	10.35	11.05	11.25	13.65	14.20	.....	.....	16.20	18.30	17.40	17.25
6	10.45	10.40	11.50	11.20	13.90	14.80	16.65	.....	16.95	18.75	17.35	17.35
7	10.70	10.40	11.40	11.35	14.05	16.50	.....	.....	16.20	18.70	17.30	16.35
8	10.60	10.55	11.30	10.65	13.90	15.05	.....	.....	16.30	18.90	17.30	17.10
9	10.65	10.65	10.80	11.20	14.30	.....	.....	.....	16.65	19.00	17.05	17.10
10	10.85	10.35	.....	11.10	14.70	.....	.....	.....	16.80	18.95	16.20	16.80
11	10.75	10.50	.....	11.30	13.85	.....	.....	.....	17.20	18.95	16.55	16.50
12	11.30	10.50	.....	11.05	14.35	.....	.....	.....	17.30	17.50	17.35	16.30
13	11.35	10.80	.....	11.30	.....	.....	.....	.....	18.05	18.35	17.40	15.75
14	11.35	10.55	10.30	11.30	14.35	.....	16.05	.....	17.10	18.45	17.45	15.30
15	10.95	10.80	10.40	11.30	14.40	.....	16.00	.....	16.95	18.25	17.45	15.85
16	11.30	10.80	10.50	11.45	14.50	.....	.....	.....	17.05	17.35	16.65	16.10
17	10.85	10.80	10.40	11.30	14.80	.....	.....	.....	17.00	17.25	17.35	16.05
18	10.95	11.25	10.45	11.20	.....	.....	18.10	17.85	16.85	17.20	17.40	16.25
19	10.85	11.15	10.60	11.50	14.20	.....	17.90	17.55	16.60	16.10	17.30	16.30
20	10.40	10.80	10.95	11.55	14.10	.....	16.50	16.80	17.00	16.95	17.35	16.30
21	10.60	10.90	10.90	11.75	.....	.....	16.25	17.50	16.45	17.20	17.30	15.95
22	10.40	11.05	10.90	11.50	14.40	.....	.....	17.75	16.40	17.20	17.50	15.90
23	10.75	11.10	10.55	11.50	14.40	.....	.....	18.05	16.45	17.35	16.20	15.70
24	10.80	11.25	10.65	11.15	.....	.....	.....	17.25	16.60	17.40	.....	15.70
25	10.70	11.10	10.80	11.20	.....	.....	.....	17.95	16.95	17.60	.....	15.05
26	10.50	10.85	10.85	11.25	.....	.....	.....	17.10	17.10	16.35	17.00	15.65
27	10.25	11.00	11.10	11.00	.....	.....	.....	18.15	17.40	17.10	17.05	15.80
28	10.20	10.80	11.10	11.10	14.15	.....	.....	18.60	16.50	17.20	17.25	15.60
29	10.70	11.20	11.60	11.15	14.25	.....	.....	19.15	17.00	17.40	17.35	15.65
30	10.85		11.45	11.30	.....	.....	.....	19.75	17.85	17.15	16.70	15.80
31	10.50		11.45		14.65	.....	.....	19.20		17.10		15.35

Richland County

R-2. City of Lexington. Lat. 40°40'42", long. 82°34'40". Drilled unused well in sandstone, diameter 6 inches, depth 129 feet. Highest water level 22.12 below lsd, June 8, 1947; lowest 28.24 below lsd, Dec. 3, 1952. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	25.31	23.80	25.85	25.42	25.54	26.21	26.91	27.46	27.60	27.96	28.14	28.23
2	25.07	23.87	25.88	25.46	25.54	26.24	26.93	27.47	27.65	27.97	28.14	28.23
3	24.87	23.94	25.92	25.54	25.54	26.26	26.94	27.49	27.70	27.98	28.15	28.24
4	24.80	23.92	25.95	25.60	25.56	26.29	26.88	27.51	27.73	27.99	28.15	28.24
5	24.77	23.93	25.98	25.62	25.59	26.32	26.80	27.52	27.76	28.00	28.15	28.23
6	24.85	24.02	26.02	25.62	25.62	26.34	26.76	27.54	27.78	27.99	28.16	28.16
7	24.91	24.13	26.06	25.67	25.67	26.38	26.84	27.55	27.80	28.00	28.17	28.15
8	24.95	24.21	26.10	25.71	25.71	26.40	26.90	27.57	27.82	28.01	28.17	28.14
9	25.06	24.30	26.13	25.71	25.73	26.41	26.92	27.58	27.84	28.02	28.17	28.14
10	25.15	24.36	26.14	25.75	25.75	26.43	26.96	27.59	27.86	28.03	28.18	28.11
11	25.22	24.46	26.05	25.77	25.78	26.46	26.99	27.61	27.88	28.04	28.18	28.06
12	25.27	24.58	25.49	25.78	25.80	26.48	27.02	27.62	27.87	28.04	28.19	28.03
13	25.22	24.70	25.31	25.77	25.82	26.52	27.04	27.63	27.88	28.05	28.19	28.03
14	25.38	24.80	25.23	25.61	25.85	26.54	27.07	27.64	27.82	28.05	28.20	28.01
15	25.40	24.90	25.20	25.48	25.88	26.57	27.09	27.65	27.85	28.07	28.21	28.01
16	25.44	24.98	25.19	25.38	25.92	26.60	27.11	27.65	27.88	28.07	28.21	28.01
17	25.44	25.08	25.28	25.33	25.94	26.62	27.13	27.64	27.80	28.08	28.21	28.01
18	24.96	25.17	25.32	25.32	25.97	26.65	27.15	27.64	27.87	28.08	28.21	28.02
19	24.44	25.25	25.30	25.35	25.98	26.68	27.17	27.66	27.85	28.10	28.21	28.03
20	24.23	25.29	25.20	25.40	26.00	26.70	27.18	27.67	27.85	28.10	28.22	28.03
21	24.27	25.36	25.15	25.44	26.01	26.73	27.22	27.67	27.87	28.10	28.22	28.03
22	24.33	25.42	25.15	25.49	26.04	26.76	27.22	27.66	27.88	28.11	28.21	28.03
23	24.45	25.47	25.13	25.51	26.07	26.79	27.22	27.67	27.89	28.11	28.22	28.03
24	24.56	25.53	25.09	25.43	26.08	26.86	27.27	27.68	27.89	28.12	28.22	28.04
25	24.62	25.57	25.09	25.32	26.08	26.93	27.30	27.69	27.86	28.12	28.21	28.04
26	24.61	25.64	25.13	25.30	26.09	26.93	27.32	27.69	27.85	28.12	28.22	28.04
27	23.76	25.69	25.18	25.33	26.11	26.88	27.34	27.63	27.90	28.12	28.23	28.04
28	22.98	25.74	25.23	25.38	26.12	26.86	27.37	27.65	27.91	28.12	28.23	28.04
29	23.14	25.79	25.29	25.44	26.14	26.89	27.40	27.62	27.93	28.13	28.23	28.05
30	23.38		25.33	25.49	26.17	26.89	27.42	27.61	27.94	28.13	28.23	28.05
31	23.62		25.37		26.19		27.45	27.60		28.14		28.02

R-3. Voisard Factory. Shiloh. Lat. 41°58'00", long. 82°36'06". Drilled unused well in gravel, diameter 8 inches, depth 150 feet. Highest water level 23.42 below lsd, June 24, 1947; lowest 29.85 below lsd, Nov. 24, 1952. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	28.05	26.50	26.35	25.40	25.35	26.20	27.55	28.20	28.60	28.70	29.40	29.75
2	28.20	26.50	26.20	25.55	25.50	26.30	27.50	28.15	28.50	28.95	29.40	29.55
3	28.15	26.30	26.20	25.60	25.45	26.25	27.50	28.15	28.70	29.00	29.65	29.65
4	27.95	25.80	26.10	25.75	25.45	26.30	27.45	28.00	28.90	28.85	29.40	29.55
5	27.70	26.15	26.65	25.55	25.40	26.30	27.60	28.25	28.80	28.95	29.25	29.25
6	27.75	26.20	26.65	25.70	25.75	26.25	27.50	28.35	28.75	29.05	29.30	29.40
7	27.90	26.20	26.65	26.05	25.70	26.40	27.70	28.30	28.80	29.15	29.40	29.40
8	27.45	25.95	26.55	26.10	25.55	26.40	27.70	28.35	28.80	28.95	29.45	29.45
9	27.50	26.10	26.25	26.10	25.55	26.55	27.55	28.25	28.85	29.00	29.35	29.30
10	27.75	26.00	26.20	25.95	25.30	26.55	27.60	28.40	28.80	29.10	29.40	29.20
11	27.90	26.10	26.10	26.20	25.45	26.60	27.80	28.45	28.80	29.00	.....	29.40
12	27.75	26.05	26.40	25.95	25.45	26.60	27.90	28.45	28.85	28.90	.....	29.40
13	27.45	26.20	25.95	25.55	25.55	26.95	27.85	28.60	28.95	29.00	.....	29.45
14	27.50	26.10	26.25	25.50	25.75	27.00	27.80	28.55	28.70	29.05	.....	29.40
15	27.45	26.15	26.20	25.75	25.60	27.00	27.80	28.40	28.70	28.95	.....	29.45
16	27.75	25.90	26.05	25.80	25.85	27.15	27.90	28.40	28.55	29.10	24.45	29.50
17	27.35	25.80	26.20	25.75	25.85	27.10	28.00	28.50	28.40	29.10	29.45	29.50
18	27.50	26.05	26.00	25.65	25.95	27.45	28.00	28.55	28.65	29.20	29.35	29.70
19	27.25	26.20	26.00	25.50	25.85	27.55	27.95	28.60	28.75	29.00	29.40	.....
20	27.15	25.90	25.90	25.55	25.75	27.45	27.80	28.55	28.95	29.40	29.35	.....
21	27.40	26.20	26.05	25.60	26.00	27.45	27.95	28.35	28.95	.....	29.40	29.25
22	26.95	26.25	25.80	25.45	26.05	27.35	27.95	28.75	28.95	.....	29.35	29.50
23	27.05	26.05	25.70	25.55	26.05	27.35	28.00	28.75	28.90	.....	29.70	29.40
24	27.30	26.25	25.80	25.40	26.00	27.25	28.15	28.75	29.05	.....	29.85	29.60
25	27.20	26.30	25.75	25.45	25.80	27.30	28.00	28.85	28.95	.....	29.55	29.60

R-3--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	26.20	25.75	25.35	26.10	27.50	28.05	28.85	28.80	29.05	29.55	29.55
27	26.80	26.05	25.80	25.35	26.20	27.60	28.00	28.85	28.95	29.05	29.65	29.70
28	25.80	25.85	25.25	26.15	27.60	27.85	28.70	28.85	29.15	.....	29.55
29	26.05	25.90	25.35	26.25	27.45	28.05	28.70	28.85	29.40	.....	29.40
30		25.85	25.45	26.20	27.45	28.00	28.75	28.85	29.40	29.55	29.40
31		25.65		26.15		28.20	28.60		29.25		29.50

R-4. City of Mansfield. Lat. 40°45'30", long. 82°31'00". Drilled unused well in gravel, diameter 14 inches, 127 feet. Highest water level 28.70 below lsd, May 31, 1949; lowest 53.80 below lsd, Mar. 30, 1945. Records available: 1942-47, 1949-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	39.05	47.80	47.90	45.20	45.50	38.20	46.20	36.50	.....	49.40	50.65	48.50
2	43.40	47.80	46.55	46.00	46.30	41.80	46.90	36.05	.....	49.90	.....	49.90
3	46.35	44.75	43.60	47.15	46.40	44.75	47.30	35.40	46.90	50.10	47.00	50.50
4	46.90	44.20	45.20	47.40	44.50	45.80	47.40	40.60	47.30	50.10	48.90	50.60
5	47.10	46.45	47.05	47.40	41.40	46.25	44.05	43.30	47.40	49.30	49.70	50.75
6	46.60	47.00	47.10	46.10	44.70	46.50	41.90	43.50	47.45	47.85	50.35	50.90
7	46.20	47.30	47.00	44.95	45.80	46.55	44.10	43.80	47.20	49.30	50.60	50.85
8	47.30	47.35	46.80	46.75	46.10	43.75	46.00	44.45	46.45	49.80	50.60	49.60
9	48.00	47.30	44.55	47.25	46.30	43.30	46.95	44.70	47.20	50.10	49.10	50.55
10	48.55	44.50	43.50	47.60	46.35	45.85	47.20	44.75	47.40	50.25	47.76	50.90
11	48.70	44.40	45.75	47.70	42.25	47.00	47.40	42.70	47.65	50.30	49.00	51.20
12	48.70	46.35	46.50	47.70	42.90	47.45	47.40	44.95	47.80	49.35	49.55	51.30
13	44.65	47.15	46.50	43.45	45.35	47.70	44.10	46.35	47.80	47.60	49.70	51.30
14	44.75	47.50	46.25	43.80	46.05	47.70	44.80	46.65	47.45	49.30	49.70	50.60
15	47.35	47.50	46.25	45.60	46.65	43.20	46.50	46.90	45.85	49.80	49.70	49.10
16	47.95	47.30	45.30	46.30	46.70	43.70	47.20	47.00	47.20	50.20	47.10	50.40
17	48.00	44.50	43.55	46.50	46.70	46.00	47.60	46.40	47.20	50.45	46.70	50.85
18	48.50	45.10	45.05	46.55	43.80	46.75	47.75	44.90	48.10	50.45	48.70	51.30
19	48.55	46.80	45.65	46.55	44.05	47.20	47.75	45.80	48.50	48.95	49.10	51.35
20	46.90	47.30	45.85	43.60	45.70	47.45	45.85	46.90	48.65	47.30	50.00	51.35
21	46.25	47.80	45.90	43.50	46.50	47.45	43.45	.....	48.15	49.30	50.50	51.20
22	47.30	47.85	45.90	45.45	46.80	45.50	45.80	.....	47.45	49.90	50.70	49.95
23	48.15	46.80	45.20	46.20	46.90	44.65	46.80	.....	48.60	50.30	48.55	50.70
24	48.45	45.30	43.65	46.45	46.90	46.25	47.35	.....	49.20	50.50	47.20	57.05
25	48.50	44.95	45.35	46.55	42.30	46.85	47.50	.....	49.45	50.50	49.45	49.80
26	48.30	46.70	46.55	46.60	43.15	47.30	47.30	.....	49.70	47.10	50.35	48.00
27	46.50	47.20	47.10	42.70	45.50	47.60	43.15	.....	49.70	46.80	50.60	49.35
28	.....	47.70	47.15	41.40	46.20	47.60	39.10	.....	48.80	49.20	49.40	49.35
29	.....	47.85	46.95	43.60	46.50	43.30	40.10	.....	47.90	50.00	49.25	47.80
30	.....		45.50	44.30	46.50	44.00	41.35	.....	49.10	50.30	48.90	49.25
31	.....		43.55		41.50		37.85	.....		50.60		49.25

Ross County

Ro-3. Mead Paper Co. Hickory St. and Baltimore & Ohio Railroad tracks, Chillicothe. Lat. 39°20', long. 82°58'. Drilled unused well in gravel, diameter 30 inches, depth 91 feet. Highest water level 17.20 below lsd, Mar. 21, 1943; lowest 42.92 below lsd, Dec. 24, 1949. Records available: 1941-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	40.10	36.20	31.50	30.55	30.55	31.35	32.75	33.25	32.15	31.70	36.00	.....
2	40.00	35.85	31.55	30.45	30.55	31.40	32.65	33.35	32.00	31.85	36.15	.....
3	39.90	35.60	31.55	30.40	.....	31.40	32.45	33.50	31.85	32.10	36.20	.....
4	39.80	35.30	31.50	30.35	.....	31.45	32.20	33.55	31.75	32.25	36.25	.....
5	39.80	35.00	31.40	30.35	.....	31.45	.....	33.65	31.70	32.45	36.55	38.30
6	39.65	34.65	31.40	30.35	.....	31.50	.....	33.75	31.60	32.50	36.40	38.40
7	39.45	34.35	31.40	30.35	.....	31.55	.....	33.85	31.55	.....	36.50	38.50
8	39.25	34.10	31.45	30.35	.....	31.55	31.10	33.95	31.50	.....	.....	38.55
9	39.05	33.90	31.45	30.30	30.80	.....	31.05	34.05	31.40	.....	36.75	38.60
10	38.85	33.75	31.50	30.30	30.85	.....	30.95	34.15	31.30	33.40	36.75	38.65

Ro-3--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	38.70	33.55	31.55	30.30	30.85	.....	30.90	34.15	31.25	33.55	36.80	38.70
12	38.55	33.30	31.55	30.30	30.85	.....	30.90	34.20	31.20	33.65	36.90	38.80
13	38.45	33.15	31.60	30.30	30.80	31.80	30.95	34.20	31.20	33.75	37.00	38.80
14	38.35	33.00	31.60	30.25	30.80	31.90	30.95	34.15	31.15	33.90	37.05	38.80
15	38.20	32.85	31.60	30.20	30.75	31.95	31.00	34.10	31.10	34.05	37.10	38.80
16	38.10	.....	31.60	30.15	30.80	32.00	31.15	33.95	31.00	34.20	37.15	38.80
17	38.00	.....	31.60	30.15	30.85	32.00	31.30	33.85	30.95	34.35	37.20	38.75
18	37.90	32.45	31.50	30.15	30.90	32.10	31.45	33.70	30.90	34.45	37.20	38.75
19	37.80	32.30	31.35	30.10	30.90	32.20	31.65	33.55	30.85	.....	37.25	38.80
20	37.75	32.10	31.30	30.15	30.90	32.35	31.85	33.40	30.65	.....	37.25	38.85
21	37.70	31.95	31.25	30.15	30.95	32.45	31.95	33.25	30.65	.....	37.30	38.90
22	37.55	31.80	31.20	30.15	31.00	32.50	32.05	33.10	30.60	.....	37.40	38.95
23	37.40	31.70	31.20	30.20	31.05	32.50	32.20	33.05	30.55	35.05	37.45	39.00
24	37.35	31.65	31.15	30.30	31.15	32.50	32.30	32.95	30.65	35.20	37.50	39.05
25	37.30	31.60	31.05	30.35	31.20	32.50	32.40	32.85	30.75	35.35	.....	39.05
26	37.25	31.50	30.95	30.40	31.20	32.55	.....	32.70	31.00	35.45	.....	39.05
27	37.20	31.45	30.90	30.45	31.15	32.60	.....	32.55	31.15	.....	.....	39.05
28	37.15	31.45	30.80	30.45	31.15	32.70	.....	32.45	31.30	.....	.....	39.00
29	37.00	31.50	30.75	30.45	31.20	32.75	.....	32.35	31.40	.....	.....	39.00
30	36.80	.....	30.70	30.50	31.30	32.75	.....	32.30	31.55	.....	.....	39.00
31	36.50	.....	30.70	.....	31.30	.....	.....	32.20	.....	35.90	.....	39.00

Sandusky County

S-1. City of Woodville. Lat. 41°27', long. 83°22". Drilled unused well in limestone, diameter 10 inches, depth 188 feet. Highest water level 8.85 below lsd, May 2, 1950; lowest 25.37 below lsd, Dec. 20, 1949. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	18.70	15.40	.....	15.05	14.35	15.70	18.00	19.45	19.95	20.25	20.75	21.20
2	18.65	15.45	.....	15.30	14.55	15.65	18.00	19.35	20.05	.....	20.75	21.20
3	18.16	15.40	.....	15.45	14.65	15.60	18.05	19.40	20.25	.....	21.05	21.40
4	18.00	15.35	.....	15.40	14.55	15.85	18.20	19.40	20.20	.....	21.00	21.15
5	17.70	15.35	.....	15.20	14.40	15.70	18.30	19.44	20.10	.....	20.70	21.15
6	17.70	15.35	.....	15.30	14.80	.....	18.30	19.60	20.10	.....	20.85	21.40
7	17.80	15.30	.....	15.35	14.90	.....	18.25	19.65	20.15	.....	21.10	21.20
8	17.65	15.30	.....	15.20	14.75	.....	18.25	19.65	20.20	.....	21.00	21.20
9	17.65	15.40	.....	15.00	14.65	.....	18.45	19.65	20.10	.....	20.80	21.25
10	17.90	15.25	.....	15.15	14.40	.....	18.50	19.60	20.20	20.45	21.05	21.25
11	17.85	15.30	.....	15.10	14.70	.....	18.65	19.75	20.25	20.40	20.95	21.40
12	17.65	15.45	.....	14.95	14.80	16.30	18.75	19.65	20.25	20.20	21.20	21.40
13	17.60	15.50	15.10	14.70	14.95	16.50	18.70	19.70	20.30	20.45	21.15	21.45
14	17.40	15.50	15.20	14.65	14.95	16.65	18.65	19.65	20.20	20.55	.....	21.45
15	17.70	15.50	15.05	14.65	15.00	16.80	18.80	19.55	20.40	20.55	.....	21.45
16	17.65	15.50	15.20	14.80	15.25	16.70	18.80	19.60	20.25	20.40	.....	21.45
17	17.25	15.80	15.25	14.55	15.20	16.85	19.05	19.85	20.20	20.50	.....	21.40
18	17.20	15.95	15.20	14.50	15.40	16.95	18.90	19.90	20.30	20.50	.....	21.55
19	16.95	15.90	15.05	14.45	15.30	17.20	18.95	19.90	20.75	20.35	.....	21.50
20	16.95	15.80	15.05	14.50	15.20	17.35	18.85	19.80	.....	20.80	.....	21.40
21	16.95	16.25	15.10	14.60	15.60	17.15	19.05	19.75	.....	20.70	21.15	21.40
22	16.15	16.25	14.95	14.45	15.70	17.30	19.25	20.00	.....	20.65	21.25	21.40
23	16.70	16.20	14.95	14.65	15.60	17.30	19.10	19.90	.....	20.65	21.30	21.40
24	16.80	16.40	14.95	14.45	15.45	17.25	19.35	19.90	.....	20.65	21.15	21.60
25	16.65	16.40	14.90	14.20	15.25	17.35	19.25	19.95	20.10	20.90	21.05	21.55
26	16.30	16.35	15.10	14.30	15.30	17.60	.....	20.00	20.45	20.80	21.25	21.45
27	16.25	16.05	15.05	14.25	15.25	17.75	.....	20.00	20.35	20.60	21.35	21.75
28	15.95	16.05	15.05	14.25	15.10	17.75	.....	19.95	20.25	20.90	21.45	21.60
29	15.35	.....	15.30	14.40	15.30	17.65	.....	19.95	20.30	20.85	21.30	21.50
30	15.35	.....	15.30	14.40	15.30	17.95	.....	20.15	20.30	20.65	21.25	21.65
31	15.30	.....	14.95	.....	15.45	.....	19.45	20.05	.....	20.70	.....	21.60

Seneca County

Se-1. City of Green Springs. Lat. 41°13'15", long. 83°03'18". D-illed unused well in limestone, diameter 10 inches, depth 88 feet. Highest water level 24.20 below lsd, June 3, 1947; lowest 35.30 below lsd, Dec. 5, 1952. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	31.90	30.75	30.90	30.25	30.20	30.45	31.20	31.75	32.60	32.80	33.10	35.20
2	32.55	30.75	30.20	31.00	29.80	30.70	31.90	32.15	31.85	32.60	33.00	35.20
3	32.60	30.95	30.85	30.25	30.10	31.00	31.30	31.80	32.85	32.35	33.35	32.90
4	32.65	29.90	30.85	30.15	30.30	30.90	31.55	31.95	32.50	32.80	32.50	34.60
5	32.60	30.00	31.40	30.00	30.30	31.15	31.35	32.60	32.30	32.70	32.85	35.30
6	32.75	33.00	30.80	29.75	30.30	30.80	31.45	32.70	32.50	33.10	32.90	34.90
7	32.60	33.70	30.90	30.05	30.50	30.80	31.80	32.85	32.30	33.00	33.10	32.90
8	32.75	30.00	30.95	29.95	30.65	30.45	31.35	33.00	32.40	32.40	33.00	33.50
9	32.65	30.55	30.90	30.35	30.40	30.75	31.30	33.65	32.50	33.45	32.90	33.10
10	32.90	30.00	30.75	30.20	30.30	30.85	31.75	32.40	32.75	32.55	33.00	33.15
11	.....	30.00	29.25	30.55	30.20	30.75	31.80	32.30	32.25	33.35	33.00	33.30
12	32.90	30.55	29.50	29.85	30.70	31.15	32.05	32.60	32.75	32.65	33.30	33.05
13	32.75	30.45	29.10	30.00	30.95	30.90	31.75	32.65	32.40	34.00	33.10	34.05
14	32.50	30.30	29.70	.....	31.40	31.20	32.10	32.60	32.40	33.80	33.50	33.20
15	32.45	30.80	30.05	.....	31.45	31.00	31.80	32.20	32.60	32.85	33.65	33.15
16	33.75	30.85	29.60	29.85	31.40	31.90	31.20	32.15	32.75	33.00	32.20	33.35
17	31.45	30.20	29.75	29.90	30.25	31.45	31.45	31.80	32.80	33.10	33.55	32.75
18	31.20	30.60	29.95	29.80	30.30	31.65	31.65	32.65	32.55	32.80	33.40	33.70
19	31.45	30.35	30.00	29.80	30.45	31.40	31.55	32.40	32.45	33.60	33.10	33.10
20	31.60	30.15	29.90	29.90	31.25	31.15	31.40	32.40	32.65	33.50	33.10	33.05
21	32.05	30.60	29.85	29.95	31.90	31.15	32.20	32.25	32.25	32.80	32.95	.....
22	31.90	30.05	29.85	29.75	31.10	31.40	31.90	32.20	33.25	33.40	33.75	.....
23	31.85	30.80	29.70	30.00	30.70	31.20	32.15	32.25	32.80	34.80	33.00	.....
24	32.80	30.80	30.00	29.70	30.50	31.50	32.10	32.20	32.40	33.70	33.40	.....
25	31.95	30.75	30.65	29.60	30.65	31.85	31.50	32.15	32.50	33.70	33.30	.....
26	30.65	30.85	30.10	30.10	31.35	31.50	31.70	32.35	32.60	32.90	33.00	.....
27	29.85	30.70	30.40	29.85	31.00	31.50	31.60	32.70	32.60	33.10	33.10	.....
28	29.65	30.75	30.45	30.10	30.90	31.90	31.85	32.80	32.35	34.25	33.00	.....
29	30.60	30.55	30.40	29.75	31.15	31.30	31.95	32.60	32.90	34.10	33.55	.....
30	30.50		30.00	30.30	30.50	31.35	32.00	32.55	32.80	33.10	33.35	.....
31	30.75		30.05		30.50		31.80	33.00		33.10		.....

Shelby County

Sh-1. John Wenger. Lat. 40°26'15", long. 84°12'06". Drilled unused well in limestone, diameter 4 inches, depth 120 feet. Highest water level 10.35 below lsd, Jan. 28, 1949; lowest 14.61 below lsd, Dec. 4, 1946. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	11.85	11.60	12.01	11.61	11.42	12.12	12.96	13.57	13.84	13.84	14.13	14.29
2	11.90	11.60	12.07	11.68	11.51	12.21	12.99	13.57	13.82	13.85	14.13	14.21
3	12.06	11.54	12.07	11.78	11.62	12.22	12.99	13.56	13.87	13.90	14.17	14.26
4	12.07	11.05	12.02	11.81	11.68	12.27	13.00	13.55	13.90	13.90	14.18	14.26
5	12.11	10.88	12.10	11.75	11.68	12.30	13.04	13.62	13.91	13.89	14.13	14.20
6	12.22	10.94	12.14	11.55	11.73	12.33	13.08	13.64	13.91	13.92	14.11	14.11
7	12.31	11.04	12.17	11.40	11.80	12.37	13.09	13.65	13.93	13.95	14.19	14.09
8	12.31	11.16	12.17	11.36	11.80	12.39	13.08	13.66	13.96	13.95	14.19	14.07
9	12.32	11.13	12.15	11.38	11.80	12.39	13.11	13.66	13.99	13.94	14.19	14.05
10	12.50	11.15	12.03	11.43	11.79	12.43	13.14	13.66	13.99	13.95	14.20	13.96
11	12.59	11.23	11.82	11.54	11.83	12.52	13.20	13.68	14.00	13.96	14.20	13.88
12	12.59	11.41	11.36	11.54	11.92	12.52	13.26	13.70	14.01	13.96	14.22	13.87
13	12.58	11.51	11.12	11.49	12.00	12.53	13.26	13.72	14.02	13.95	14.22	13.83
14	12.52	11.59	11.12	11.04	12.04	12.52	13.26	13.72	14.02	13.98	14.22	13.83
15	12.40	11.66	11.20	10.96	12.04	12.51	13.29	13.72	14.01	13.98	14.21	13.84
16	12.21	11.67	11.28	11.04	12.14	12.51	13.32	13.71	13.98	13.99	14.24	13.85
17	12.00	11.74	11.40	11.12	12.14	12.54	13.36	13.67	13.96	14.01	14.24	13.84
18	11.36	11.89	11.43	11.21	12.12	12.59	13.37	13.68	13.95	14.02	14.25	13.89
19	11.36	11.94	11.37	11.27	12.12	12.62	13.37	13.71	13.83	14.02	14.23	13.92
20	11.34	11.94	11.28	11.38	12.05	12.66	13.33	13.71	13.80	14.12	14.18	13.92

Sh-1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	11.50	11.85	11.33	11.45	11.97	12.66	13.36	13.71	13.80	14.15	14.19	13.85
22	11.50	11.81	11.33	11.54	12.00	12.69	13.36	13.76	13.80	14.15	14.18	13.85
23	11.69	11.84	11.13	11.55	12.00	12.73	13.36	13.77	13.79	14.10	14.25	13.79
24	11.86	11.84	10.99	11.28	11.99	12.72	13.43	13.78	13.84	14.08	14.29	13.80
25	11.87	11.90	10.96	11.08	11.93	12.72	13.43	13.80	13.84	14.12	14.28	13.80
26	11.83	11.92	11.16	10.91	11.98	12.79	13.44	13.83	13.82	14.12	14.15	13.80
27	11.26	11.91	11.28	10.95	12.00	12.87	13.44	13.83	13.82	14.10	14.24	13.80
28	11.20	11.89	11.39	11.03	12.01	12.91	13.44	13.83	13.83	14.09	14.29	13.81
29	11.16	11.89	11.51	11.23	12.04	12.91	13.50	13.84	13.83	14.13	14.29	13.81
30	11.39		11.60	11.35	12.07	12.91	13.50	13.85	13.84	14.13	14.29	13.78
31	11.54		11.61		12.08		13.56	13.85		14.12		13.77

Stark County

St-1. Republic Steel Corp. Oberlin Ave., Massillon. Lat. 40°47', long. 81°31'. Filled unused well in gravel, diameter 6 inches, depth 48 feet. Highest water level 41.70 below lsd, June 16, 1947; lowest 53.20 below lsd, Feb. 21, 1945. Records available: 1942-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	50.40	47.10	46.20	45.35	45.10	45.85	43.90	44.15	46.30	47.75	49.40	50.65
2	50.25	47.05	46.20	45.35	44.95	45.80	43.90	44.25	46.40	47.90	49.35	50.70
3	50.10	46.95	46.10	45.40	44.90	45.80	43.85	44.35	46.45	47.95	49.40	50.75
4	49.95	46.80	46.15	45.40	44.95	45.70	43.80	44.45	46.55	48.00	49.50	50.80
5	49.80	46.65	46.20	45.35	44.95	45.60	.....	44.55	46.60	48.00	49.55	50.85
6	49.75	46.50	46.20	45.35	45.10	45.50	.....	44.65	46.65	48.00	49.60	50.85
7	49.70	46.45	46.25	45.40	45.20	45.40	43.60	44.75	46.65	48.10	49.70	50.85
8	49.65	46.30	46.25	45.40	45.25	45.35	43.60	44.85	46.70	48.15	49.70	50.90
9	49.60	46.25	46.20	45.40	45.30	45.25	43.55	44.95	46.80	48.25	49.70	50.90
10	49.65	46.15	46.15	45.30	45.35	45.15	43.55	45.00	46.85	48.30	49.75	50.95
11	49.65	46.05	46.10	45.35	45.35	45.05	43.50	45.05	.....	48.35	49.80	50.95
12	49.60	46.00	46.05	45.30	45.35	45.00	43.50	45.20	.....	48.35	49.90	51.00
13	49.60	46.00	45.85	45.30	45.40	44.90	43.45	45.25	.....	48.35	50.00	51.00
14	49.55	46.00	45.80	45.25	45.50	44.85	43.40	45.35	.....	48.45	50.05	51.05
15	49.60	46.00	45.70	45.20	45.55	44.75	43.40	45.40	.....	48.50	50.05	51.05
16	49.60	46.00	45.60	45.15	45.60	44.70	43.40	45.50	47.10	48.60	50.10	51.10
17	49.55	45.95	45.60	45.10	45.55	44.60	43.35	45.50	47.20	48.65	50.15	51.15
18	49.50	45.95	45.55	45.15	45.55	44.55	43.35	45.60	47.25	.....	50.15	51.20
19	49.40	45.95	45.55	45.20	45.55	.....	43.35	45.65	47.25	.....	50.20	51.25
20	49.15	46.00	45.55	45.15	45.60	.....	43.30	45.70	47.25	48.75	50.25	51.25
21	49.00	46.05	45.50	45.10	45.65	.....	43.30	45.80	47.25	48.80	50.30	51.30
22	48.80	46.05	45.45	45.15	45.70	.....	43.30	45.85	47.30	48.85	50.35	51.35
23	48.70	46.05	45.40	45.20	45.75	.....	43.25	45.90	47.35	48.95	50.35	51.40
24	48.70	46.05	45.35	45.20	45.80	.....	43.25	45.95	47.40	49.00	50.40	51.45
25	48.65	46.00	45.30	45.20	45.75	.....	43.25	45.95	47.45	49.05	50.45	51.40
26	48.55	46.00	45.35	45.25	45.70	.....	43.25	46.05	47.55	49.10	50.50	51.40
27	48.45	46.05	45.35	45.15	45.75	44.10	43.30	46.10	47.60	49.10	50.50	51.45
28	48.10	46.05	45.40	45.10	45.80	44.10	43.50	46.15	47.60	49.20	50.55	51.50
29	47.75	46.15	45.40	45.20	45.85	44.05	43.70	46.20	47.60	49.25	50.60	51.55
30	47.40		45.40	45.20	45.85	43.95	43.85	46.30	47.65	49.30	50.60	51.60
31	47.25		45.35		45.85		44.00	46.30		49.35		51.60

St-4. Adessi Bros. Lat. 40°51'00", long. 81°20'00". Drilled unused well in gravel, diameter 4 inches, depth 190 feet. Highest water level 6.92 below lsd, Feb. 6, 1952; lowest 22.42 below lsd, Feb. 2, 1942. Records available: 1941-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	10.59	.....	8.93	8.69	9.27	10.94	12.24	13.26	.....	14.82	15.61	16.34
2	10.31	.....	9.01	8.77	9.34	10.97	12.27	13.28	.....	14.85	15.64	16.37
3	10.04	.....	9.02	8.85	9.43	11.01	12.32	13.31	.....	14.88	15.68	16.40
4	10.30	7.54	9.01	8.92	9.49	11.06	12.36	13.33	.....	14.90	15.70	16.43
5	10.07	7.19	9.04	8.95	9.52	11.10	12.39	13.36	.....	14.94	15.72	16.46
6	10.17	6.93	9.06	9.04	.....	11.14	12.43	13.39	.....	14.97	15.75	16.47
7	10.21	7.06	9.09	9.13	.....	11.19	12.48	13.42	.....	15.00	15.78	16.48
8	.....	7.12	9.12	9.19	.....	11.24	12.51	13.45	14.42	15.02	15.81	16.51
9	.....	7.28	9.13	9.23	.....	11.29	12.55	13.48	14.45	15.04	15.83	16.53
10	.....	7.36	9.14	9.26	.....	11.32	12.58	13.52	14.47	15.07	15.85	16.55

St-4--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	.....	7.50	9.12	9.35	.....	11.38	12.60	13.57	14.50	15.10	15.88	16.57
12	.....	7.64	8.62	9.38	9.95	11.43	12.64	13.60	14.52	15.13	15.91	16.59
13	.....	7.76	8.21	9.39	10.02	11.48	12.67	13.64	14.54	15.15	15.94	16.61
14	10.93	7.86	8.11	9.39	10.06	11.53	12.70	13.67	14.59	15.17	15.96	16.63
15	11.00	7.95	8.13	9.05	10.13	11.58	12.73	13.71	14.62	15.19	15.98	16.64
16	11.08	8.00	8.19	8.77	10.20	11.60	12.77	13.73	14.63	15.21	16.01	16.69
17	11.10	8.07	8.32	8.47	10.27	11.63	12.81	13.77	14.66	15.24	16.05	16.72
18	11.07	8.20	8.36	8.41	10.33	11.68	12.84	13.80	14.68	15.27	16.07	16.75
19	10.62	8.28	8.36	8.47	10.37	11.73	12.87	13.83	14.69	15.29	16.09	16.79
20	9.98	8.32	8.30	8.55	10.40	11.77	12.89	13.85	14.64	15.33	16.12	16.82
21	9.67	8.40	8.22	8.65	10.45	11.82	12.91	13.88	14.56	15.36	16.15	16.86
22	9.51	8.48	8.26	8.72	10.51	11.87	12.93	13.91	14.56	15.38	16.17	16.89
23	9.45	8.53	8.26	8.82	10.56	11.91	12.96	13.95	14.57	15.40	16.17	16.93
24	9.51	8.59	8.20	8.89	10.60	11.93	13.00	13.98	14.60	15.43	16.18	16.96
25	9.55	8.65	8.19	8.91	10.63	11.97	13.03	13.99	14.64	15.45	16.19	16.99
26	9.55	8.68	8.30	8.94	10.67	12.01	13.05	14.03	14.68	15.48	16.21	17.03
27	9.50	8.72	8.39	8.98	10.70	12.06	.....	14.06	14.71	15.50	16.23	17.07
28	8.21	8.74	8.47	9.05	10.75	12.10	13.12	14.08	14.74	15.52	16.26	17.12
29	7.50	8.83	8.57	9.13	10.80	12.15	13.15	.....	14.78	15.54	.....	17.13
30	.....	.....	8.65	9.20	10.85	12.20	13.18	.....	14.80	15.56	.....	17.17
31	8.03	.....	8.66	.....	10.89	.....	13.23	.....	.....	15.58	.....	17.21

St-5A. City of Canton. 30th St. and Harrisburg Rd. Lat. 40°50', long. 81°21'. Drilled unused well in gravel, diameter 12 inches, depth 132 feet. The record for this well may be used as a continuation of the record for well St-5. Highest water level 26.45 below lsd, Mar. 11, 1950; lowest 45.86 below lsd, Dec. 3, 1949. Records available: 1949-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	32.25	30.15	32.60	33.15	35.25	36.53	37.60	38.60	39.80	40.80	40.85
2	39.55	32.40	29.90	32.75	33.45	35.45	36.90	37.80	38.60	39.65	40.20	40.95
3	39.30	31.25	30.40	32.90	33.60	35.25	37.00	37.90	39.00	40.05	40.60	41.00
4	38.95	30.45	31.05	33.00	33.75	34.80	36.50	38.10	39.00	39.95	40.95	41.25
5	38.70	30.30	31.35	33.15	33.80	34.85	35.55	38.25	39.15	39.30	41.15	41.40
6	38.50	30.10	31.60	33.25	34.00	34.80	35.55	38.25	39.20	39.60	41.20	41.60
7	38.30	29.85	31.90	33.35	34.10	35.20	36.05	38.30	38.85	39.65	41.25	41.75
8	37.45	29.55	32.05	33.45	34.20	35.25	36.50	38.30	39.20	39.70	41.30	41.85
9	36.80	29.25	32.10	33.55	34.20	35.15	36.30	38.45	39.25	39.80	40.60	41.80
10	36.65	28.95	32.25	33.65	34.40	35.45	35.70	38.10	39.35	39.85	40.90	41.90
11	36.40	28.65	32.45	33.75	34.45	35.70	35.95	38.00	39.60	39.96	41.25	42.00
12	36.20	.....	32.60	33.80	34.50	35.75	36.10	38.05	39.80	39.35	41.20	42.15
13	35.90	.....	32.65	33.85	34.65	35.80	35.90	38.00	39.95	39.70	41.40	42.25
14	35.75	30.05	32.75	33.90	34.70	35.90	36.40	38.25	40.05	39.70	41.35	42.30
15	36.20	30.10	32.75	34.05	34.55	35.40	36.70	38.45	40.00	39.85	41.60	42.40
16	36.45	30.15	32.80	34.15	33.65	35.80	36.95	38.50	39.90	39.90	41.50	42.45
17	35.90	30.30	32.90	34.20	33.50	36.10	36.80	37.80	39.90	39.85	41.35	42.55
18	36.50	30.40	32.90	34.25	33.30	36.30	37.05	38.15	40.05	40.00	41.70	42.60
19	36.15	30.75	33.00	34.30	33.70	36.40	37.10	38.20	40.00	39.60	41.75	42.70
20	35.60	30.55	33.10	34.35	34.00	36.50	36.15	38.40	39.95	39.70	41.20	42.80
21	35.40	30.85	33.20	34.40	34.30	36.55	36.60	38.60	39.40	39.85	41.35	42.85
22	34.50	30.80	33.05	34.40	34.45	36.35	36.95	38.30	39.55	40.10	40.55	43.00
23	34.30	31.45	32.05	34.55	34.65	36.10	36.95	38.65	39.55	39.95	40.20	43.10
24	34.65	31.60	31.65	34.40	34.65	36.45	37.00	38.30	39.75	40.40	40.05	43.20
25	34.50	31.80	31.75	33.30	34.30	36.70	37.05	38.25	39.45	40.40	40.25	43.30
26	34.00	31.25	31.75	32.75	34.65	36.80	37.15	38.60	39.60	40.05	40.10	43.40
27	33.75	30.65	31.25	32.55	34.80	36.95	36.95	38.75	39.65	40.50	40.20	43.45
28	33.25	30.35	31.40	32.85	35.00	37.10	36.90	39.00	39.10	40.50	40.05	43.50
29	33.00	30.15	31.90	32.90	35.15	37.20	37.25	39.15	39.45	40.70	40.45	43.55
30	32.75	.....	32.20	32.60	35.20	36.75	37.15	39.30	39.75	40.75	40.60	43.60
31	32.10	.....	38.35	.....	35.20	.....	37.35	39.35	.....	40.70	.....	43.70

St-6. City of Canton. Ninth St. Pumping Station. Lat. 40°47', long. 81°23'. Drilled unused well in gravel, diameter 12 inches, depth 80 feet. Highest water level 1.10 above lsd, Jan. 27, 1952; lowest 33.11 below lsd, Feb. 21, 1945. Records available: 1944-52.

St-6--Continued.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	3.35	2.37	2.03	1.73	1.71	1.65	3.11	3.27	3.45	3.80	4.22	4.01
2	3.34	2.35	2.06	1.78	1.72	1.67	3.11	3.25	3.43	3.80	4.22	3.92
3	3.36	2.29	2.04	1.82	1.74	1.67	3.10	3.22	3.48	3.86	4.22	3.84
4	3.36	2.16	1.97	1.83	1.73	1.70	2.50	3.21	3.54	3.87	4.23	3.82
5	3.29	2.05	2.06	1.78	1.69	1.71	2.82	1.94	3.56	3.87	4.23	3.75
6	3.30	2.08	2.09	1.79	1.70	1.71	2.92	2.66	3.58	3.90	4.18	3.65
7	3.30	2.10	2.10	1.82	1.74	1.90	2.96	2.97	3.59	3.92	4.17	3.64
8	3.27	2.09	2.10	1.86	1.74	2.10	2.96	3.09	3.61	3.93	4.31	3.61
9	3.22	2.07	2.05	1.87	1.72	2.23	2.92	3.13	3.63	3.94	4.30	3.58
10	3.32	2.06	1.99	1.85	1.70	2.33	2.95	3.16	3.64	3.97	4.29	3.55
11	3.35	1.97	1.85	1.88	1.67	2.43	3.00	3.19	3.67	3.98	4.30	3.51
12	3.30	....	1.81	1.87	1.67	2.50	3.04	3.20	3.69	3.98	4.34	3.51
13	3.27	....	1.80	1.80	1.68	2.54	3.05	3.23	3.70	3.95	4.37	3.49
14	3.19	....	1.86	1.67	1.70	2.57	3.05	3.23	3.70	3.98	4.38	3.48
15	3.20	....	1.86	1.66	1.69	2.63	3.08	3.23	3.70	3.99	4.38	3.46
16	3.25	....	1.84	1.69	1.72	2.67	3.14	3.21	3.68	4.02	4.39	3.46
17	3.23	....	1.86	1.71	1.72	2.71	3.19	3.16	3.71	4.04	4.40	3.46
18	3.03	2.05	1.86	1.71	1.72	2.78	3.21	3.18	3.73	4.05	4.41	3.49
19	2.94	2.07	1.80	1.71	1.71	2.83	3.21	3.21	3.52	4.05	4.41	3.51
20	2.98	2.05	1.77	1.70	1.66	2.88	3.20	3.21	3.60	4.09	4.41	3.50
21	3.03	2.03	1.79	1.70	1.66	2.91	3.08	3.21	3.66	4.12	4.43	3.45
22	2.97	2.07	1.79	1.69	1.69	2.94	3.14	3.27	3.68	4.12	4.39	3.43
23	3.00	2.07	1.72	1.69	1.70	2.96	3.16	3.31	3.71	4.11	4.45	3.41
24	3.04	2.04	1.72	1.69	1.69	2.97	3.22	3.33	3.76	4.11	4.48	3.46
25	3.04	2.02	1.73	1.65	1.64	3.00	3.24	3.35	3.77	4.15	4.48	3.46
26	2.92	2.02	1.77	1.64	1.64	3.04	3.25	3.37	3.77	4.15	4.47	3.42
27	.96	1.98	1.78	1.63	1.67	3.10	3.25	3.39	3.78	4.12	4.52	3.37
28	1.95	1.96	1.79	1.62	1.66	3.12	3.24	3.41	3.79	4.13	4.53	3.38
29	2.26	1.97	1.80	1.66	1.69	3.12	3.23	3.44	3.79	4.19	4.29	3.40
30	2.35		1.81	1.70	1.69	3.11	3.23	3.46	3.80	4.21	4.08	3.54
31	2.37		1.77		1.67		3.26	3.46		4.21		3.65

St-10. City of Canton. Lat. 45°48'40", long. 81°27'36". Drilled unused well in gravel, diameter 12 inches, depth 188 feet. Highest water level 0.78 above lsd, Feb. 4, 1952; lowest 10.21 below lsd, Dec. 21, 1945. Records available: 1944-52.

Daily lowest water level, above and below lsd, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	-0.11	+0.65	+0.32	+0.47	+0.41	+0.08	-0.32	-0.62	-0.92	-0.92	-1.20	-1.36
2	.00	.65	.31	.45	.39	.06	.33	.62	.92	.96	1.20	1.35
3	+.13	.66	.30	.43	.36	.06	.33	.64	.94	.98	1.23	1.36
4	.19	.72	.29	.42	.36	.01	.30	.65	.96	.97	1.22	1.36
5	.24	.77	.28	.43	.34	.01	.33	.66	.96	.99	1.18	1.32
6	.23	.76	.26	.40	.33	+.02	.36	.66	.96	.99	1.22	1.26
7	.23	.74	.24	.36	.32	.00	.38	.68	.98	.98	1.24	1.25
8	.25	.71	.23	.35	.32	.00	.34	.68	.99	.97	1.24	1.27
9	.21	.70	.24	.35	.32	.00	.35	.69	.99	.98	1.23	1.26
10	.12	.68	.23	.35	.32	.01	.36	.70	1.00	.98	1.26	1.26
11	.11	.64	.32	.34	.30	.04	.39	.72	1.00	.98	1.25	1.25
12	.10	.61	.41	.34	.28	.07	.40	.74	1.01	.98	1.26	1.24
13	.10	.60	.45	.35	.26	.10	.41	.75	1.02	.99	1.27	1.24
14	.08	.58	.46	.38	.25	.05	.43	.76	1.02	1.00	1.27	1.26
15	+.02	.57	.47	.42	.23	.06	.46	.76	1.01	1.01	1.29	1.26
16	-.02	.56	.47	.45	.21	.07	.47	.76	1.00	1.03	1.30	1.27
17	+.03	.54	.46	.46	.19	.10	.49	.78	1.00	1.04	1.32	1.28
18	.27	.51	.46	.47	.18	.10	.50	.80	1.00	1.04	1.32	1.32
19	.34	.50	.48	.48	.17	.12	.49	.81	.90	1.06	1.31	1.32
20	.38	.50	.49	.46	.16	.14	.50	.82	.82	1.10	1.32	1.31
21	.39	.47	.50	.45	.15	.14	.44	.82	.80	1.10	1.32	1.33
22	.40	.45	.50	.45	.14	.16	.46	.84	.82	1.09	1.27	1.34
23	.41	.44	.52	.45	.13	.17	.48	.85	.84	1.09	1.29	1.34
24	.41	.42	.53	.45	.15	.16	.51	.86	.85	1.10	1.30	1.37
25	.41	.38	.53	.46	.17	.17	.52	.87	.85	1.13	1.27	1.38

St-10--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	+0.42	+0.38	+0.52	+0.46	+0.14	-0.19	-0.53	-0.87	-0.86	-1.13	-1.30	-1.38
27	.54	.37	.52	.46	.12	.22	.54	.88	.87	1.15	1.32	1.40
28	.65	.36	.50	.44	.07	.24	.55	.89	.88	1.17	1.34	1.40
29	.68	.35	.49	.43	.11	.28	.56	.90	.90	1.19	1.33	1.40
30	.67		.48	.42	.10	.30	.58	.91	.91	1.20	1.36	1.42
31	.65		.47		+.10		.61	.92		1.19		1.43

St-11. City of Canton. Lat. 40°51'02", long. 81°24'03". Drilled unused well in gravel, diameter 6 inches, depth 87 feet. Highest water level 0.29 below lsd, June 7, 1947; lowest 36.90 below lsd, Dec. 30, 1952. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	28.55	.....	27.85	21.60	26.25	23.75	26.00	25.40	26.00	27.10	27.65	32.55
2	28.50	.....	28.15	21.50	26.05	27.00	25.80	25.40	26.05	26.90	27.70	32.60
3	29.00	.....	25.20	24.55	24.70	27.70	27.30	25.40	26.10	26.80	27.70	33.50
4	29.50	27.95	24.65	22.80	22.80	28.10	25.55	25.45	26.10	26.80	27.70	32.90
5	30.05	27.05	24.25	21.65	25.50	28.50	25.45	25.50	26.15	26.85	27.75	33.65
6	30.50	26.60	23.95	21.50	25.70	28.90	25.40	25.50	26.20	26.85	27.80	30.30
7	30.85	26.80	23.75	21.40	25.90	28.90	25.35	25.50	26.20	26.90	27.80	30.05
8	31.30	27.00	23.60	21.35	25.95	26.05	25.30	25.50	26.20	26.90	27.85	33.65
9	31.75	27.10	23.50	21.30	22.90	25.35	25.25	25.50	26.20	26.95	27.90	34.15
10	32.15	27.15	23.40	24.40	25.15	25.15	25.20	25.55	26.25	27.00	27.95	34.20
11	32.55	27.10	23.25	22.25	25.35	25.00	25.15	25.55	26.05	27.00	28.00	34.35
12	32.70	23.85	21.55	21.55	25.35	24.80	25.15	25.60	26.90	27.00	28.05	34.40
13	33.25	23.40	20.50	21.40	23.10	27.95	25.15	25.60	27.30	27.10	28.10	32.50
14	33.60	23.15	20.40	21.15	25.80	26.15	28.05	25.60	26.70	27.15	28.10	30.85
15	33.90	23.00	20.35	20.50	26.50	27.35	25.70	25.65	26.70	27.15	28.15	34.75
16	34.15	22.90	20.45	22.15	27.00	27.95	25.35	25.65	26.70	27.20	28.20	35.00
17	34.35	22.75	20.50	22.35	27.40	28.30	25.30	25.70	26.70	27.20	28.25	35.25
18	34.15	22.70	20.50	22.70	27.65	28.20	28.00	25.70	26.70	27.20	28.30	35.30
19	31.60	22.65	20.45	22.80	27.35	27.75	25.65	25.70	26.70	27.25	31.90	36.00
20	30.90	22.55	20.15	19.90	27.40	26.10	25.40	25.75	26.30	27.30	29.40	32.25
21	30.90	22.50	22.90	23.20	27.25	27.40	25.30	25.75	26.30	27.30	28.60	33.50
22	31.25	22.35	23.70	23.30	25.05	25.20	25.30	25.80	26.30	27.35	28.60	36.10
23	31.50	22.30	23.80	23.65	27.20	27.95	25.30	28.80	26.40	27.35	28.50	36.35
24	31.75	22.25	23.85	24.20	25.50	28.15	25.30	25.85	26.40	27.40	28.50	32.35
25	32.05	25.30	24.40	24.60	24.15	28.40	25.30	25.85	26.45	27.40	28.65	31.90
26	32.20	26.10	24.90	24.95	27.05	29.10	27.95	25.90	29.35	27.40	28.60	35.30
27	31.65	26.65	25.35	25.30	25.00	29.20	26.10	25.90	26.85	27.45	28.65	36.25
28	28.70	27.10	25.50	25.60	24.05	29.20	25.45	25.95	26.75	27.50	31.95	32.15
29	.....	27.50	22.50	25.95	26.80	29.25	25.40	25.95	26.80	27.55	30.40	36.30
30	.....		22.05	26.25	26.50	26.25	25.40	26.00	29.20	27.60	.....	36.90
31	29.00		21.80		23.90		25.40	26.00		27.60		35.45

St-22. City of Canton. Lat. 50°50'56", long. 81°24'42". Drilled unused well in gravel, diameter 6 inches, depth 37 feet. Highest water level 15.50 below lsd, Apr. 15, 1948; lowest 29.35 below lsd, Jan. 4, 1950. Records available: 1947-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	26.86	23.95	23.28	22.14	22.40	23.76	24.65	24.74	25.15	25.44	26.11	26.80
2	26.64	23.97	23.43	22.15	22.50	23.76	24.67	24.76	25.16	25.46	26.14	26.83
3	26.40	23.97	23.54	22.16	22.59	23.80	24.68	24.77	25.17	25.49	26.17	26.88
4	26.15	23.91	23.59	22.19	22.64	23.85	24.68	24.78	25.18	25.51	26.19	26.93
5	25.93	23.75	23.63	22.19	22.66	23.93	24.68	24.80	25.20	25.53	26.21	26.98
6	25.84	23.39	23.64	22.20	22.71	24.02	24.68	24.80	25.21	25.56	26.23	27.04
7	25.87	23.13	23.65	22.21	22.77	24.10	24.68	24.82	25.22	25.58	26.25	27.08
8	25.89	23.06	23.65	22.22	22.82	24.18	24.67	24.82	25.23	25.60	26.27	27.11
9	25.93	23.09	23.64	22.22	22.84	24.21	24.67	24.84	25.24	25.62	26.29	27.16
10	25.98	23.12	23.63	22.22	22.86	24.24	24.65	24.85	25.25	25.64	26.31	27.22
11	26.05	23.12	23.59	22.25	22.88	24.26	24.63	24.88	25.27	25.66	26.33	27.27
12	26.13	23.12	23.46	22.26	22.90	24.26	24.61	24.88	25.29	25.68	26.35	27.33
13	26.22	23.11	22.99	22.26	22.92	24.26	24.60	24.90	25.32	25.70	26.37	27.40
14	26.33	23.08	22.55	22.20	22.95	24.28	24.59	24.92	25.35	25.73	26.40	27.46
15	26.45	23.03	22.32	22.16	23.00	24.28	24.60	24.93	25.37	25.75	26.42	27.52

St-22--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	26.58	22.98	22.14	22.07	23.08	24.28	24.61	24.94	25.39	25.77	26.44	27.58
17	26.70	22.93	22.03	21.93	23.19	24.29	24.62	24.95	25.41	25.79	26.43	27.64
18	26.71	22.90	21.95	21.78	23.31	24.32	24.62	24.96	25.43	25.81	26.49	27.71
19	26.72	22.90	21.88	21.63	23.39	24.34	24.63	24.98	25.43	25.83	26.51	27.78
20	26.69	22.88	21.80	21.58	23.47	24.36	24.64	24.98	25.43	25.85	26.54	27.86
21	26.58	22.84	21.72	21.52	23.54	24.36	24.65	25.00	25.40	26.87	26.55	27.94
22	26.39	22.82	21.64	21.50	23.59	24.36	24.66	25.01	25.36	25.90	26.54	27.99
23	26.24	22.81	21.67	21.52	23.64	24.36	24.66	25.03	25.32	25.92	26.53	28.07
24	26.16	22.78	21.68	21.58	23.67	24.37	24.67	25.04	25.31	25.94	26.62	28.15
25	26.13	22.76	21.72	21.65	23.69	24.39	24.68	25.06	25.30	25.96	26.64	28.22
26	26.12	22.81	21.80	21.74	23.70	24.43	24.68	25.08	25.31	25.98	26.63	28.28
27	26.01	22.90	21.90	21.84	23.73	24.48	24.70	25.10	25.34	26.01	26.63	28.34
28	25.69	23.00	22.01	21.96	23.74	24.54	24.70	25.11	25.36	26.03	26.70	28.39
29	24.40	23.13	22.08	22.11	23.74	24.59	24.70	25.12	25.39	26.05	26.73	28.43
30	23.95		22.12	22.26	23.76	24.62	24.72	25.12	25.42	26.07	26.75	28.49
31	23.88		22.14		23.76		24.73	25.13		26.09		28.54

Summit County

Su-3. Goodyear Tire & Rubber Co. Lat. 41°03'09", long. 81°28'00". Drilled unused well in gravel, diameter 20 inches, depth 140 feet. Highest water level 14.75 below lsd, May 16, 1951; lowest 55.87 below lsd, Oct. 18-20, 26-28, 1944. Records available: 1943-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	33.35	25.65	21.25	17.50	15.15	20.25	30.50	37.90	45.45	.....	41.50	32.45
2	33.15	25.55	21.25	17.40	15.10	20.35	30.90	38.20	45.45	.....	41.00	32.20
3	32.90	25.45	21.00	.....	15.10	20.90	31.15	38.25	45.55	46.80	40.50	32.00
4	32.70	25.30	20.85	17.15	15.05	21.45	31.25	38.25	45.70	47.05	40.10	31.85
5	32.45	25.15	20.80	17.05	15.00	21.95	31.25	38.45	45.90	47.15	39.95	31.60
6	32.25	25.05	.....	17.00	15.00	22.40	31.25	38.70	46.15	47.15	39.85	31.40
7	32.05	24.90	20.55	17.00	15.05	22.90	31.20	39.05	46.35	47.30	39.85	31.25
8	31.80	24.75	20.50	16.95	15.05	22.90	31.45	39.35	46.40	47.50	39.65	31.05
9	31.55	24.50	20.35	16.85	15.05	22.85	31.80	39.65	46.55	47.70	39.25	30.85
10	31.40	24.40	20.20	16.75	15.05	23.15	32.15	39.75	46.75	47.95	38.80	30.70
11	31.25	24.15	19.90	16.65	15.15	23.55	32.50	39.70	47.00	48.20	38.40	30.50
12	31.05	24.10	19.80	16.55	15.15	24.00	32.75	39.95	47.25	48.25	38.00	30.35
13	30.85	23.90	19.60	16.45	15.20	24.35	32.90	.....	47.55	48.20	37.60	30.20
14	30.60	23.75	19.65	16.30	15.20	24.75	33.15	.....	47.70	48.00	37.25	30.05
15	30.40	23.60	19.65	16.25	15.20	24.80	33.40	40.80	47.75	47.90	36.85	29.90
16	30.30	23.35	19.50	16.25	15.60	24.80	33.70	41.15	47.90	47.65	36.50	29.75
17	30.10	23.15	19.35	16.20	16.20	25.15	34.05	41.45	48.05	47.45	36.20	29.63
18	29.80	23.00	19.30	16.10	16.20	25.60	34.45	41.75	48.20	47.15	35.85	29.50
19	29.55	22.90	19.10	15.95	16.50	26.05	34.75	42.10	48.30	46.80	35.50	29.40
20	29.25	22.70	18.95	15.90	16.80	26.45	34.80	42.40	48.30	46.45	35.20	29.25
21	29.20	22.55	18.80	15.80	17.00	26.85	34.85	42.60	48.30	46.10	34.90	29.05
22	29.00	22.45	18.70	15.75	17.15	27.20	35.05	43.00	.....	45.70	34.60	28.95
23	28.80	22.25	18.55	15.65	17.45	27.60	35.35	43.30	.....	45.25	34.30	28.80
24	28.75	22.10	18.50	15.60	17.80	27.95	35.70	43.55	.....	44.90	34.10	28.70
25	28.55	21.95	18.40	15.50	17.85	28.35	36.05	43.75	.....	44.65	33.80	28.60
26	28.30	21.85	18.25	15.45	18.25	28.75	36.45	44.00	.....	44.50	33.50	28.50
27	28.00	21.65	18.05	15.35	18.90	29.20	36.50	44.25	.....	44.10	33.25	28.35
28	26.85	21.50	17.95	15.30	19.45	29.65	36.60	44.55	.....	43.60	33.05	28.25
29	26.25	21.35	17.85	15.20	20.10	29.95	36.90	44.80	.....	43.05	32.90	28.15
30	26.00		17.80	15.20	20.15	30.25	37.20	45.10	.....	42.55	32.65	28.00
31	25.75		17.65		20.20		37.60	45.35		42.00		27.90

Trumbull County

T-2. Copperweld Steel Co. Mahoning Ave., Warren. Lat. 41°16'00", long. 80°50'30". Drilled unused well in sandstone, diameter 10 inches, depth 124 feet. Highest water level 25.95 below lsd, June 20, 1949; lowest 56.75 below lsd, Oct. 24, 1952. Records available: 1946-52.

T-2--Continued.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	46.40	46.10	43.70	44.60	.....	46.40	.....	50.45	.....	53.45	53.95	.....
2	46.40	45.70	43.95	45.10	.....	45.85	38.90	49.30	.....	53.45	53.35	.....
3	46.25	44.95	44.40	45.25	.....	45.75	42.15	49.45	.....	53.35	52.25	54.55
4	46.10	44.75	45.05	45.30	.....	.....	43.55	49.95	53.40	53.30	52.25	54.50
5	45.90	45.25	45.65	45.60	.....	.....	45.10	50.35	53.85	52.15	52.20	54.35
6	45.70	45.50	46.20	45.50	.....	.....	45.55	50.45	53.90	50.70	52.20	54.30
7	45.30	45.55	46.45	45.85	44.95	.....	47.00	50.70	53.50	51.10	51.95	53.65
8	45.30	45.40	46.45	45.85	45.15	.....	47.90	51.10	52.15	51.75	51.95	53.25
9	45.55	45.35	46.00	45.50	45.50	.....	48.25	51.15	52.05	53.15	51.25	53.50
10	45.80	45.05	45.65	44.40	45.65	.....	48.35	50.95	52.05	53.90	51.10	53.55
11	45.85	44.30	45.55	44.65	45.45	35.60	48.80	50.95	52.35	54.00	51.90	53.15
12	45.75	44.40	44.70	44.40	45.55	35.55	48.85	51.00	52.90	54.35	52.30	52.55
13	45.55	44.30	44.20	44.05	46.15	35.15	48.75	51.15	53.20	54.95	52.20	52.30
14	45.15	.....	43.95	43.30	46.65	35.15	49.15	51.10	52.90	55.20	52.10	51.80
15	45.40	.....	44.00	43.30	46.90	34.95	50.10	51.15	52.75	55.10	50.75	51.60
16	45.80	.....	43.70	43.65	46.90	34.60	50.35	.....	52.70	55.00	49.60	51.85
17	45.75	.....	42.25	44.20	46.90	34.65	50.70	.....	52.95	55.00	49.65	52.15
18	45.55	.....	42.15	44.45	46.20	34.70	50.70	.....	52.95	55.40	50.90	52.45
19	45.40	.....	42.00	44.95	46.00	.....	50.15	.....	52.95	55.55	51.65	52.40
20	44.85	45.20	41.90	45.00	45.85	.....	50.15	48.85	52.45	56.00	51.90	52.00
21	45.30	45.15	42.15	45.50	45.65	.....	50.40	48.85	51.55	56.35	52.60	51.45
22	45.50	45.30	42.00	45.80	45.90	.....	50.55	48.85	51.45	56.45	52.70	51.30
23	45.70	45.30	41.35	45.80	46.45	.....	50.90	48.90	51.55	56.55	52.40	51.70
24	45.75	44.70	41.70	45.60	46.45	.....	50.90	49.50	51.55	56.75	53.35	51.60
25	.....	44.50	41.60	46.00	46.05	.....	50.80	51.25	51.55	56.75	53.85	51.30
26	.....	44.55	42.20	46.30	46.05	.....	50.80	52.70	51.95	56.05	54.20	51.20
27	.....	44.50	42.40	46.35	46.35	.....	50.50	53.20	52.25	55.05	54.15	51.35
28	.....	44.40	42.65	45.65	46.75	.....	50.45	54.25	52.45	54.60	54.45	51.20
29	.....	43.40	42.60	45.80	46.85	.....	50.50	54.20	53.05	54.45	.....	52.15
30	45.75	.....	42.45	45.75	46.90	.....	50.55	54.00	53.45	54.45	54.45	52.60
31	46.20	.....	43.75	.....	46.40	.....	50.55	53.25	.....	54.35	.....	52.60

Tuscarawas County

Tu-1. Everett Waltz. Lat. 40°37'09", long. 81°32'00". Drilled unused well in gravel, diameter 4 inches, depth 23 feet. Highest water level 8.03 below lsd, Feb. 8, 1952; lowest 13.54 below lsd, Dec. 11, 1949. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	10.85	8.67	9.60	.....	9.60	.....	.....	.....	.....	13.26	13.44	.....
2	10.63	8.65	9.65	.....	9.68	.....	.....	.....	.....	13.28	13.44	.....
3	10.40	8.62	9.71	.....	9.78	.....	12.04	.....	.....	13.29	13.44	13.52
4	10.23	8.50	.....	.....	9.85	.....	11.90	.....	.....	13.30	13.46	13.51
5	10.10	8.28	.....	.....	9.92	.....	11.67	.....	.....	13.30	13.46	13.51
6	10.06	8.18	.....	.....	10.01	.....	11.92	.....	.....	13.30	13.46	13.48
7	10.07	8.11	.....	.....	10.07	.....	11.96	.....	.....	13.30	13.46	13.43
8	10.09	8.08	9.93	.....	10.13	.....	12.01	.....	.....	13.30	13.47	13.41
9	10.14	8.07	9.97	.....	.....	.....	12.02	.....	.....	13.31	13.47	13.41
10	10.22	8.07	9.99	9.87	.....	11.18	.....	.....	.....	13.32	13.48	13.40
11	.....	8.12	9.96	9.91	.....	11.23	.....	.....	.....	13.33	13.48	13.40
12	10.34	8.15	9.78	9.93	.....	11.28	.....	.....	.....	13.33	13.48	13.38
13	10.40	8.20	9.55	9.93	.....	11.32	.....	.....	.....	13.34	13.49	13.36
14	10.47	8.25	9.43	9.90	.....	11.36	.....	.....	.....	13.34	13.49	13.36
15	10.50	8.27	9.37	9.78	.....	11.41	.....	.....	.....	13.34	13.49	13.37
16	10.57	8.36	.....	9.65	.....	11.44	.....	.....	.....	13.35	13.50	13.38
17	10.57	8.48	.....	9.47	.....	11.47	.....	.....	.....	13.36	13.50	13.39
18	10.50	8.60	.....	.....	.....	.....	.....	.....	.....	13.36	13.51	13.41
19	10.15	8.71	.....	.....	.....	.....	.....	.....	13.19	13.37	13.51	13.41
20	9.88	8.78	.....	.....	.....	.....	.....	.....	13.17	13.38	13.51	13.42
21	9.69	8.88	.....	9.47	.....	.....	.....	.....	13.15	.....	13.51	13.43
22	9.67	8.96	.....	9.53	.....	.....	.....	.....	13.16	.....	13.49	13.44
23	9.62	.....	.....	9.60	.....	.....	.....	.....	13.18	.....	13.48	13.44
24	9.66	.....	9.30	9.59	.....	.....	.....	.....	13.20	.....	.....	13.46
25	9.68	9.20	9.29	9.50	.....	.....	.....	.....	13.21	13.41	.....	13.46

Tu-1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	9.68	9.26	9.29	9.40	....	....	....	....	13.21	13.41	....	13.47
27	9.46	9.33	9.33	9.37	....	....	....	....	13.22	13.42	....	13.49
28	8.75	9.39	9.39	9.40	....	....	....	....	13.23	13.42	....	13.50
29	....	9.50	9.48	....	....	....	....	....	13.25	13.42	....	13.51
30	....	....	9.52	....	....	....	....	....	13.26	13.43	....	13.51
31	8.68	....	9.58	....	....	....	....	....	....	13.44	....	13.52

Warren County

W-1. Crosley Broadcasting Co. Lat. 39°20'36", long. 84°19'45". Dug unused well in gravel, diameter 4 feet, depth 50 feet. Highest water level 0.26 below lsd, Feb. 8, 1950; lowest 6.30 below lsd, Oct. 20-23, 1951. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0.80	1.40	2.15	1.90	2.65	3.05	3.70	5.20	5.75	5.85	6.05	5.80
2	.60	.50	2.10	1.25	2.85	3.25	3.85	5.20	5.70	5.90	6.05	5.80
3	.60	.50	2.10	1.60	2.95	3.35	3.90	5.25	5.60	5.95	6.05	5.75
4	.60	.50	1.90	1.70	3.10	3.50	4.00	5.30	5.60	5.95	6.05	5.75
5	.60	.70	2.10	.55	3.25	3.60	4.10	5.35	5.60	5.95	6.05	5.50
6	.80	.70	2.20	.75	3.40	3.70	4.15	5.35	5.55	6.00	6.05	5.35
7	.90	.85	2.30	1.10	3.45	3.80	4.25	5.40	5.55	6.00	6.10	5.20
8	.90	1.00	2.40	1.40	3.50	3.85	4.30	5.45	5.55	6.00	6.10	5.10
9	.80	1.20	2.35	1.70	3.55	3.90	4.40	5.45	5.60	6.00	6.10	4.95
10	1.05	1.30	2.40	1.80	2.75	3.95	4.45	5.45	5.60	6.00	6.10	4.50
11	1.10	1.60	.60	1.50	1.40	4.00	4.55	5.50	5.65	6.00	6.10	4.20
12	1.15	1.70	.80	1.50	1.25	4.00	4.60	5.50	5.70	6.00	6.15	3.95
13	1.15	1.80	1.05	1.45	1.60	4.00	4.65	5.50	....	6.00	6.15	3.80
14	1.15	1.80	1.25	.55	2.00	4.00	4.70	5.50	....	6.00	6.15	3.70
15	1.25	1.65	1.50	.60	2.40	4.05	4.75	5.40	....	5.95	6.15	3.70
16	1.30	1.30	1.70	.95	2.70	4.10	4.75	5.35	5.80	5.95	6.15	3.70
17	1.30	1.35	1.80	1.35	2.90	4.20	4.75	5.35	5.85	5.95	6.15	3.70
18	1.00	1.35	1.85	1.65	3.05	4.25	4.75	5.30	5.85	5.95	6.15	3.70
19	1.00	1.25	.80	1.95	3.10	4.30	4.70	5.30	5.80	5.95	6.15	3.70
20	.65	1.15	1.05	2.15	3.05	4.35	4.70	5.25	5.80	6.00	6.05	3.70
21	.80	1.30	1.25	2.40	2.75	4.35	4.70	5.30	5.80	6.00	6.05	3.45
22	.75	1.50	1.25	2.60	2.75	4.15	4.75	5.30	5.75	6.00	6.05	3.00
23	1.15	1.50	.70	2.65	2.95	3.25	4.80	5.35	5.70	6.00	5.95	2.80
24	1.40	1.70	.95	.70	2.95	2.60	4.85	5.40	5.70	6.00	5.95	2.70
25	1.35	1.80	1.30	.95	1.30	2.95	4.90	5.45	5.70	6.00	5.95	2.75
26	.45	1.95	1.55	1.35	1.05	3.30	4.90	5.50	5.70	6.00	5.90	2.80
27	.55	1.95	1.65	1.75	1.60	3.30	4.95	5.55	....	6.00	5.85	2.95
28	.75	2.00	1.80	2.05	1.95	3.15	5.00	5.60	....	6.00	5.85	3.05
29	1.15	2.10	2.00	2.30	2.25	3.40	5.05	5.65	5.80	6.00	5.80	3.15
30	1.55	....	2.15	2.50	2.55	3.55	5.10	5.65	5.85	6.05	5.75	3.25
31	1.70	....	2.25	2.85	....	....	5.15	5.70	....	6.05	....	3.25

W-2. City of Lebanon. Lat. 29°26'06", long. 84°13'06". Drilled unused well in gravel, diameter 6 inches, depth 100 feet. Highest water level 11.89 below lsd, June 30, 1947; lowest 21.35 below lsd, Sept. 20, 1948. Records available: 1947-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	17.30	16.35	16.40	15.65	15.30	14.95	16.60	18.70	18.10	18.55	17.80	18.00
2	17.40	16.70	16.10	15.70	15.35	15.00	17.00	19.30	18.30	18.60	17.50	17.80
3	17.10	15.95	15.85	15.35	16.10	15.75	16.60	17.60	18.05	18.50	....	18.15
4	17.20	16.20	16.40	15.30	15.35	14.75	15.90	17.80	18.05	18.35	....	17.70
5	17.20	16.80	16.00	15.75	15.30	14.90	15.80	18.75	18.20	17.60	18.85	17.90
6	16.95	16.40	16.40	15.25	15.50	14.80	15.50	17.90	17.10	18.50	18.70	17.95
7	17.25	16.65	16.00	15.60	15.30	15.20	15.75	17.90	16.95	18.55	17.80	18.20
8	16.80	16.65	16.20	15.40	15.40	15.20	16.75	17.95	18.20	18.50	18.00	17.95
9	17.30	16.60	16.05	15.50	15.00	15.30	16.95	17.90	18.30	18.65	17.50	17.80
10	17.10	16.10	15.70	15.45	15.20	15.95	17.70	18.70	18.25	18.60	17.70	18.80
11	17.30	16.35	16.25	15.45	15.10	15.35	17.15	17.70	18.30	18.55	17.60	18.65
12	16.90	16.50	15.75	15.35	15.20	15.15	17.15	17.70	18.45	18.05	18.65	18.55
13	17.15	16.15	16.15	15.10	15.55	15.40	15.60	17.70	18.30	18.45	18.00	17.90
14	17.10	16.55	16.20	15.30	14.85	15.15	17.10	17.85	18.35	18.45	18.65	18.00
15	16.95	16.05	15.65	15.10	15.20	15.00	17.00	17.85	18.35	17.85	18.00	17.70

W-2--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	17.20	16.30	15.90	15.30	15.00	15.15	17.00	17.50	18.40	18.50	17.95	18.75
17	16.75	16.05	15.70	15.90	15.20	16.20	16.85	17.40	18.45	18.65	17.70	19.30
18	17.35	16.45	15.85	15.25	14.95	16.25	17.00	18.75	18.25	18.60	17.70	18.95
19	16.90	16.40	16.10	15.35	15.15	16.65	16.85	19.65	18.40	18.25	17.60	18.85
20	17.25	16.10	15.70	15.05	14.95	16.65	16.00	18.70	18.35	18.60	17.80	17.90
21	16.60	16.55	16.00	15.80	14.85	15.20	18.10	18.80	18.30	18.45	17.60	18.85
22	16.95	16.40	15.85	15.10	15.20	15.20	18.25	18.85	18.10	18.70	17.85	18.70
23	16.85	16.10	15.75	15.50	14.85	16.35	18.40	18.70	18.35	17.75	17.75	18.75
24	17.15	16.30	15.80	15.20	15.00	16.40	18.25	18.55	18.30	.....	17.60	19.75
25	16.50	16.10	15.40	15.40	15.00	16.70	18.20	19.65	18.45	.....	17.75	19.10
26	16.70	16.35	15.90	15.35	14.60	15.70	18.20	18.90	18.60	17.70	17.80	19.85
27	16.20	15.95	15.50	14.85	15.05	16.60	17.40	19.75	18.25	18.85	18.05	19.75
28	16.25	16.30	15.60	15.30	14.70	16.80	18.35	17.95	18.35	18.75	17.65	18.60
29	16.85	15.90	15.75	15.40	15.15	18.00	18.80	18.05	20.00	18.75	17.75	19.75
30	16.45	.....	15.60	15.40	15.10	16.90	17.70	18.00	18.50	18.65	17.80	19.85
31	16.80	.....	15.60	.....	14.75	.....	19.30	18.10	.....	18.70	.....	19.90

Washington County

Wa-1. Marietta Osteopathic Clinic. Fourth and Putnam Sts. Marietta. Lat. 39°25', long. 81°27'. Drilled unused well in gravel, diameter 6 inches, depth 42 feet. Highest water level 16.57 below lsd, Mar. 25, 1945; lowest 30.70 below lsd, Sept. 9, 1942. Records available: 1942-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	26.55	.....	24.20	23.75	24.05	25.50	27.80	28.50	28.90	29.00	28.95	29.30
2	26.35	.....	24.30	23.80	24.55	25.40	27.80	28.55	28.95	28.95	29.05	29.30
3	25.90	.....	24.35	23.95	24.35	25.75	27.85	.....	28.75	28.75	29.35	29.30
4	25.15	.....	24.55	23.95	24.70	25.90	27.80	.....	28.70	28.70	29.40	29.35
5	24.50	.....	24.55	24.10	24.90	26.00	27.85	28.70	28.65	28.75	29.45	29.35
6	24.10	.....	24.60	24.20	24.90	26.25	27.95	28.60	28.65	28.75	29.50	29.40
7	24.15	.....	24.65	24.20	24.85	26.40	28.00	28.75	28.65	28.75	29.50	29.35
8	24.65	.....	24.70	24.20	24.95	26.45	28.05	28.75	28.65	28.70	29.55	29.35
9	24.75	.....	24.80	24.25	25.25	26.45	27.75	28.80	28.65	28.75	29.55	29.55
10	24.70	.....	25.15	24.30	25.15	26.60	27.70	28.85	28.65	28.75	29.55	29.40
11	24.75	.....	24.85	24.35	25.20	26.55	27.70	28.85	28.85	28.75	29.70	29.40
12	24.85	.....	24.65	24.40	25.25	26.60	27.95	28.85	28.85	28.75	29.55	29.35
13	25.00	.....	24.20	24.55	25.30	26.80	28.10	28.75	28.90	28.75	29.50	29.35
14	25.15	.....	23.70	24.55	25.30	26.80	28.15	28.75	29.05	28.75	29.50	29.30
15	29.25	.....	23.25	24.45	25.30	27.00	28.20	28.75	28.90	28.75	29.50	29.25
16	25.65	.....	23.20	24.30	25.40	27.15	28.25	28.80	28.70	28.75	29.50	29.30
17	25.30	.....	23.35	23.95	25.40	27.20	28.30	28.90	28.70	28.75	29.50	29.35
18	25.35	.....	23.50	23.55	25.40	27.25	28.35	28.80	28.70	28.75	29.70	29.65
19	25.10	22.35	23.65	23.35	25.45	27.35	28.35	28.85	28.70	28.75	29.45	29.45
20	24.50	22.55	23.60	23.30	25.55	27.30	28.40	28.80	28.70	28.75	29.45	29.50
21	24.25	22.75	23.55	23.45	25.60	27.40	28.45	28.80	28.70	28.75	29.45	29.50
22	23.65	22.85	23.40	23.75	25.55	27.55	28.50	28.70	28.65	28.75	29.45	29.50
23	23.55	22.95	23.10	24.00	25.40	27.55	28.55	28.55	28.70	28.75	29.40	29.45
24	23.50	23.15	23.00	24.05	25.25	27.60	28.50	28.55	28.70	28.80	29.40	29.85
25	23.35	23.40	22.45	24.00	25.55	27.65	28.50	28.55	28.70	28.80	29.35	29.65
26	23.30	23.90	22.40	23.80	25.35	27.75	28.60	28.55	28.70	28.80	29.40	29.60
27	23.20	23.70	22.55	23.70	25.15	27.80	28.60	28.85	28.70	28.80	29.35	29.55
28	.....	23.90	22.85	24.05	24.85	27.85	28.70	28.90	28.70	28.80	29.30	29.45
29	.....	24.00	23.10	23.80	24.65	27.90	28.50	28.85	28.70	29.10	29.30	29.55
30	.....	.....	23.90	24.75	27.85	28.50	28.50	28.85	28.70	28.85	29.30	29.55
31	.....	.....	23.80	.....	25.20	.....	28.55	28.95	.....	28.90	.....	29.80

Wayne County

Wn-2a. City of Wooster. Lat. 40°48', long. 81°59'. Drilled unused well in gravel, diameter 6 inches, depth 65 feet. Highest water level 1.55 below lsd, Jan. 27, 1952; lowest 19.45 below lsd, Oct. 21, 1952. Records available: 1951-52.

Wn-2a--Continued.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.35	8.40	8.65	10.25	12.50	16.15	....	16.80	18.20	18.00	18.35
2	7.35	8.35	8.95	10.85	13.90	16.25	....	17.35	18.00	17.55	18.60
3	6.60	8.30	9.00	10.85	13.10	18.70	....	17.80	19.10	18.25	18.85
4	5.05	9.80	9.60	10.25	13.90	16.15	....	17.40	18.20	18.35	18.85
5	4.25	8.25	9.30	11.10	13.10	16.15	....	17.50	17.80	17.75	18.70
6	8.20	9.10	11.80	14.50	15.50	....	17.40	17.85	18.80	18.50
7	9.90	9.10	11.80	14.70	16.75	....	17.35	18.10	18.60	18.00
8	8.70	9.45	11.40	14.15	16.95	17.30	17.35	....	18.10	18.50
9	8.15	9.55	11.50	14.45	16.45	17.30	17.50	....	17.20	18.50
10	6.20	8.10	9.40	11.55	14.55	16.45	16.35	18.20	18.10	18.15	18.55
11	6.70	7.30	9.70	11.05	14.90	16.45	16.35	18.00	18.10	18.15	18.50
12	6.85	3.70	9.30	10.90	15.15	16.45	16.80	18.15	17.25	18.25	18.70
13	7.00	4.85	8.05	11.80	15.20	16.30	16.10	18.65	17.95	18.45	18.45
14	7.35	6.45	6.90	12.10	15.60	17.85	17.65	18.20	18.25	18.45	18.35
15	7.40	6.35	6.90	12.15	14.95	17.90	17.60	17.90	18.60	18.05	18.50
16	7.50	6.55	7.25	11.85	16.40	18.10	16.90	17.80	19.40	17.55	18.55
17	7.60	6.80	8.00	12.20	17.10	17.25	16.35	17.85	18.20	18.20	18.60
18	7.75	7.75	8.05	11.45	17.00	17.20	16.90	17.95	17.65	18.30	18.70
19	7.80	7.80	8.30	11.80	16.50	17.05	17.00	18.00	17.45	18.40	18.80
20	7.80	6.20	8.65	13.10	15.80	16.65	17.40	18.15	....	18.10	18.65
21	7.50	8.20	8.60	13.35	15.80	18.30	17.70	17.40	19.45	18.20	18.00
22	7.70	7.35	10.05	13.00	15.80	17.40	17.70	17.60	....	17.95	18.60
23	7.75	6.50	10.45	13.00	15.55	17.40	17.00	17.95	....	17.10	18.65
24	7.70	6.55	9.85	12.55	17.75	17.25	16.00	17.75	18.60	18.15	18.55
25	8.55	7.95	8.10	8.65	12.55	17.25	17.60	17.25	17.75	18.50	19.25	18.20
26	6.85	8.00	7.90	8.70	12.40	17.85	....	17.45	18.00	17.80	18.35	18.50
27	2.40	9.05	8.25	8.30	12.90	18.65	....	17.15	17.80	18.20	17.90	18.05
28	2.35	9.70	8.35	10.30	14.75	18.70	....	17.50	17.30	18.60	17.55	18.00
29	5.20	8.60	7.75	10.30	14.20	18.70	....	....	17.75	18.45	17.40	18.50
30	7.75	9.60	14.10	18.10	....	....	17.85	18.70	17.05	18.55
31	7.70	....	12.40	....	....	16.75	....	18.30	....	18.45

Williams County

Wm-1. City of Bryan. Lat. 41°20', long. 84°33'. Drilled unused well in gravel, diameter 8 inches, depth 118 feet. Highest water level 0.95 below lsd, Feb. 25, 1952; lowest 15.70 below lsd, July 3, 1952. Records available: 1951-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	3.45	5.55	5.25	5.55	9.50	....	14.45	13.80	11.75	13.50	9.55	6.60
2	4.80	4.80	5.25	5.90	10.15	....	15.65	13.45	11.70	13.85	9.35	7.70
3	....	3.05	4.30	5.95	9.95	8.45	15.70	12.15	13.25	13.00	9.00	8.15
4	....	4.25	4.85	....	8.35	9.05	14.55	12.85	13.65	13.00	....	9.10
5	....	5.80	5.80	5.15	9.75	9.95	12.35	12.50	12.95	11.60	....	9.05
6	....	3.34	5.70	4.95	9.45	12.00	11.95	13.70	13.25	10.75	....	7.80
7	4.55	....	5.50	4.75	9.00	12.60	12.20	14.45	12.35	10.65	....	6.30
8	5.10	....	5.05	5.50	9.10	....	13.40	14.75	12.40	11.45	....	6.90
9	4.80	....	4.35	5.95	9.35	11.55	12.55	14.15	13.60	11.50	....	7.10
10	5.40	....	4.00	5.75	8.85	12.30	12.80	12.90	14.60	10.20	....	7.70
11	....	....	4.60	....	8.20	12.60	13.25	11.90	14.10	10.10	5.80	7.80
12	....	5.50	5.45	5.65	7.35	12.35	13.90	12.70	15.60	8.90	7.30	10.80
13	....	5.35	5.95	3.80	8.35	12.50	12.80	12.65	....	8.70	8.65	9.60
14	5.10	....	....	4.00	8.80	12.45	14.10	13.55	....	8.95	12.60	8.15
15	5.50	....	5.75	5.35	9.10	....	14.40	13.75	....	9.75	12.70	....
16	5.25	....	4.85	5.75	8.95	....	....	14.00	13.50	10.30	10.95	7.65
17	4.85	....	5.10	6.00	8.60	12.50	....	12.00	13.20	10.10	8.75	7.55
18	6.15	....	5.95	6.05	7.50	....	....	13.45	13.70	9.90	8.80	7.50
19	4.50	4.70	5.85	5.95	7.75	....	14.00	13.70	13.75	7.80	9.35	7.55
20	....	4.50	....	5.75	7.80	13.85	....	14.05	13.10	8.10	9.70	7.55
21	....	4.90	5.90	5.75	8.45	12.80	12.70	14.75	11.90	9.90	9.80	....
22	3.70	5.70	5.20	6.25	9.20	....	13.60	15.05	11.35	9.20	9.65	....
23	....	4.95	3.80	6.20	....	....	13.25	14.50	14.00	13.20	9.50	6.95
24	....	3.75	4.90	....	....	12.45	13.75	12.40	15.10	9.25	7.80	7.70
25	5.00	4.80	5.35	....	....	....	12.90	12.20	15.05	9.55	7.85	....

Wm-1--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	4.50	4.50	6.05	....	7.65	15.40	12.20	13.05	14.50	9.00	8.60	....
27	1.45	4.30	....	6.20	6.95	15.50	11.40	13.75	14.00	9.70	7.90	....
28	....	4.50	....	....	8.80	15.20	11.20	15.70	13.40	9.30	7.05	....
29	5.45	5.10	6.00	8.95	9.80	15.35	12.60	15.70	12.30	10.20	7.40	....
30	....	....	5.75	9.25	8.20	15.40	14.35	15.45	13.20	10.95	6.70	7.50
31	5.60	....	4.65	....	8.15	....	13.75	14.85	....	10.75	....	7.60

Wyandot County

Wy-1. State of Ohio. State Highway Dept. Lat. 40°50'00", long. 83°17'00". Drilled unused well in limestone, diameter 5 inches, depth 90 feet. Highest water level 26.50 below lsd, Apr. 13, 1952; lowest 36.95 below lsd, Dec. 1, 1952. Records available: 1951-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	31.50	30.80	31.90	30.65	29.50	32.80	33.50	35.95	32.50	32.20	36.95
2	33.15	29.45	28.50	32.85	29.80	31.90	32.15	33.70	36.05	33.35	34.60	32.30
3	34.80	28.30	32.55	32.25	31.00	34.30	32.05	32.60	36.40	34.00	36.65	35.55
4	34.75	29.75	32.35	32.40	29.60	31.00	31.55	35.40	36.70	35.75	32.30	32.20
5	34.65	31.55	34.10	32.35	30.50	31.50	31.90	36.35	34.00	31.95	32.05	31.85
6	30.00	31.60	32.10	30.50	34.90	30.85	30.55	34.65	34.05	33.65	34.70	36.20
7	33.95	30.10	31.40	31.80	33.15	31.10	31.65	34.80	34.10	34.10	36.75	31.40
8	34.05	29.90	31.45	32.35	32.60	30.80	32.60	32.95	33.30	32.40	36.80	32.05
9	33.02	31.70	28.50	32.10	34.00	30.70	32.70	32.90	34.15	34.20	31.65	31.85
10	33.70	28.35	32.35	31.50	33.40	31.30	32.90	31.70	33.65	35.30	32.35	36.85
11	32.85	30.00	31.80	31.20	31.40	31.70	32.00	32.70	33.65	34.35	36.80	33.60
12	33.55	31.00	31.10	32.30	34.20	32.05	33.00	33.35	33.70	31.90	36.45	34.75
13	29.95	30.20	31.35	28.00	34.20	31.70	31.35	33.10	32.90	32.60	32.65	32.20
14	33.60	29.90	31.65	31.40	33.50	31.55	31.95	35.70	35.00	32.50	....	33.90
15	33.10	30.80	31.20	31.45	35.40	30.80	32.20	33.65	36.20	32.40	32.25	35.00
16	33.95	30.85	29.50	30.95	34.50	31.30	32.40	32.85	36.10	32.25	36.90	32.00
17	33.60	28.25	31.30	31.90	35.40	31.75	32.90	32.60	36.40	31.90	33.50	36.50
18	32.85	30.45	31.35	30.70	33.50	31.70	32.05	32.80	34.60	31.95	35.90	32.30
19	32.15	30.00	31.35	29.30	35.20	31.55	33.20	34.45	36.00	31.75	....	36.20
20	29.00	29.05	32.40	31.15	34.60	31.45	31.45	33.35	32.30	35.40	32.45	36.30
21	31.70	30.50	31.50	29.55	35.50	31.90	33.05	34.20	31.80	36.50	36.50	31.40
22	33.25	31.80	30.80	29.10	32.70	30.95	32.90	32.25	33.15	32.60	32.30	32.00
23	33.00	31.60	30.80	30.05	34.45	31.60	32.60	33.05	32.00	32.85	34.00	33.05
24	32.80	28.65	31.00	30.00	34.40	32.55	32.90	33.45	33.30	35.70	35.80	....
25	33.00	32.80	31.70	30.20	29.55	32.65	32.50	33.80	33.00	32.05	32.40	....
26	31.95	31.95	32.30	26.65	31.45	32.50	33.20	34.85	33.90	31.65	36.15	....
27	31.30	32.30	30.60	29.45	32.45	....	31.75	33.25	36.35	35.80	32.15	....
28	31.50	32.10	31.60	30.85	30.85	....	33.20	34.00	36.35	32.55	34.90	....
29	31.95	32.05	31.10	31.20	30.50	....	33.35	34.40	34.15	32.35	31.95	31.70
30	31.90	....	28.10	30.70	30.75	32.40	32.80	34.65	34.85	32.20	31.35	34.15
31	32.55	....	30.80	....	30.60	....	33.70	34.70	....	36.00	....	33.60

PENNSYLVANIA

By Maurice O. Holtzer

Scope of Water-Level Program

The observation-well program in Pennsylvania was continued in 1952 in cooperation with the Topographic and Geologic Survey, Pennsylvania Department of Internal Affairs. Measurements were made in 93 wells in 35 counties. Measurements were made monthly or less frequently in some wells, weekly in others, and several times a day in those which were being observed during pumping tests. At the end of the year, continuous records from recording gages were being obtained from 16 wells. Figure 39 shows the location of wells for which records are given in this report, except those in the Philadelphia and Pittsburgh areas. Figure 40 shows the location of wells in the Philadelphia area and figure 41 shows the location of wells in the Pittsburgh area.

Precipitation

Precipitation for the year 1952 averaged 46.81 inches; it was for the State as a whole the third consecutive year with above-normal precipitation. Precipitation at most stations west of the mountains was below normal, but in the area east of the mountains above normal. The high precipitation resulted in record high water levels in many wells and higher average levels generally than during the last few years.

Interpretation of Water-Level Fluctuations

Most of the observation wells in Pennsylvania are in rural areas and the water levels are unaffected by pumping from other wells; therefore they reflect, in general, natural changes in ground-water storage. A rise of water level can be attributed to local precipitation or a rise of stage in a nearby stream that is hydraulically related to the aquifer tapped by the observation well; and a decline of water level can be attributed to seepage losses to nearby streams or flattening of the water table in an extensive aquifer, or to transpiration and evaporation losses to the atmosphere.

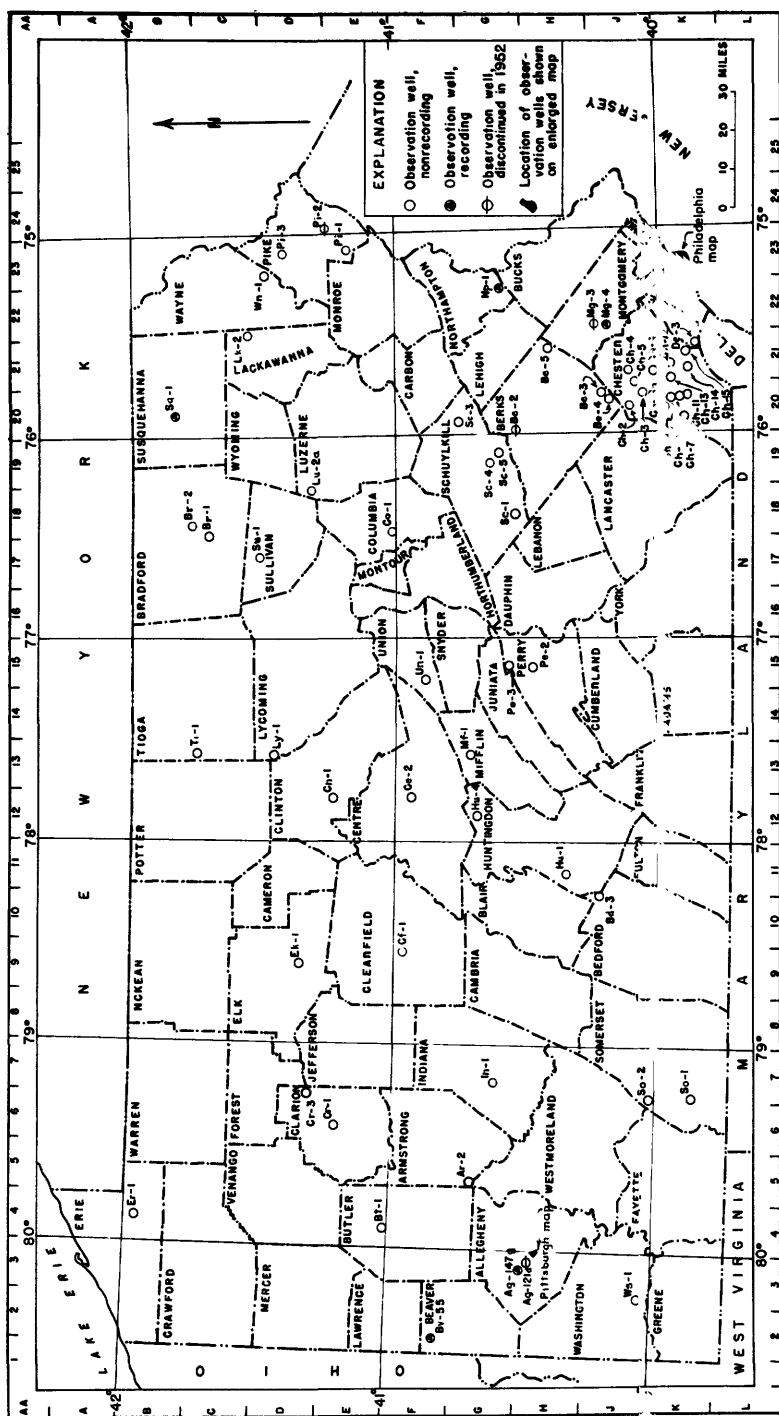
In Philadelphia and Allegheny Counties most observation wells tap aquifers from which moderate to large continuous withdrawals are made and water-level records indicate primarily changes in pressure head caused by changes in the rate or locus of the pumping. Interpretation of fluctuations of water level in any well in the Philadelphia or Pittsburgh areas therefore requires careful study of the local pumping conditions.

In January and February record high water levels were observed in nearly all wells which tap valley-fill sediments of Pleistocene and Recent age in the Triangle area of Pittsburgh. These highs can be attributed primarily to abnormally high stages of the adjacent rivers which provide most of the recharge to the aquifers; however, they are partly the result of reduced withdrawal of ground water for air conditioning during the preceding summer. Water-levels in wells which tap bedrock aquifers showed no appreciable change from previous years.

Record highs were observed in wells tapping the shallow sand and gravel aquifers at the United States Naval Base during the last week in May in the southern part of Philadelphia County. Record highs occurred during the same week at two other wells in South Philadelphia, one of which is in an area of heavy industrial pumping. Water levels in wells tapping the basal sand and gravel aquifer, of Cretaceous age, were comparable with those of previous years.

Well-Numbering System

Wells are designated by a two-letter abbreviation of the name of the county and a serial number beginning with 1. The location is shown by the part of the number enclosed by parentheses. A location number consists of letters and figures which identify a small area within which one or more wells are situated. Along the west border of the map of Pennsylvania (fig. 39) are letters A through L (except I) and along the north border are numbers 1 through 25. Each of these letters and numbers corresponds to 15 minutes of longitude and latitude, respectively. Therefore, a letter-number such as "K3" refers to a quadrangle area 15 minutes on a side with "K" as its west



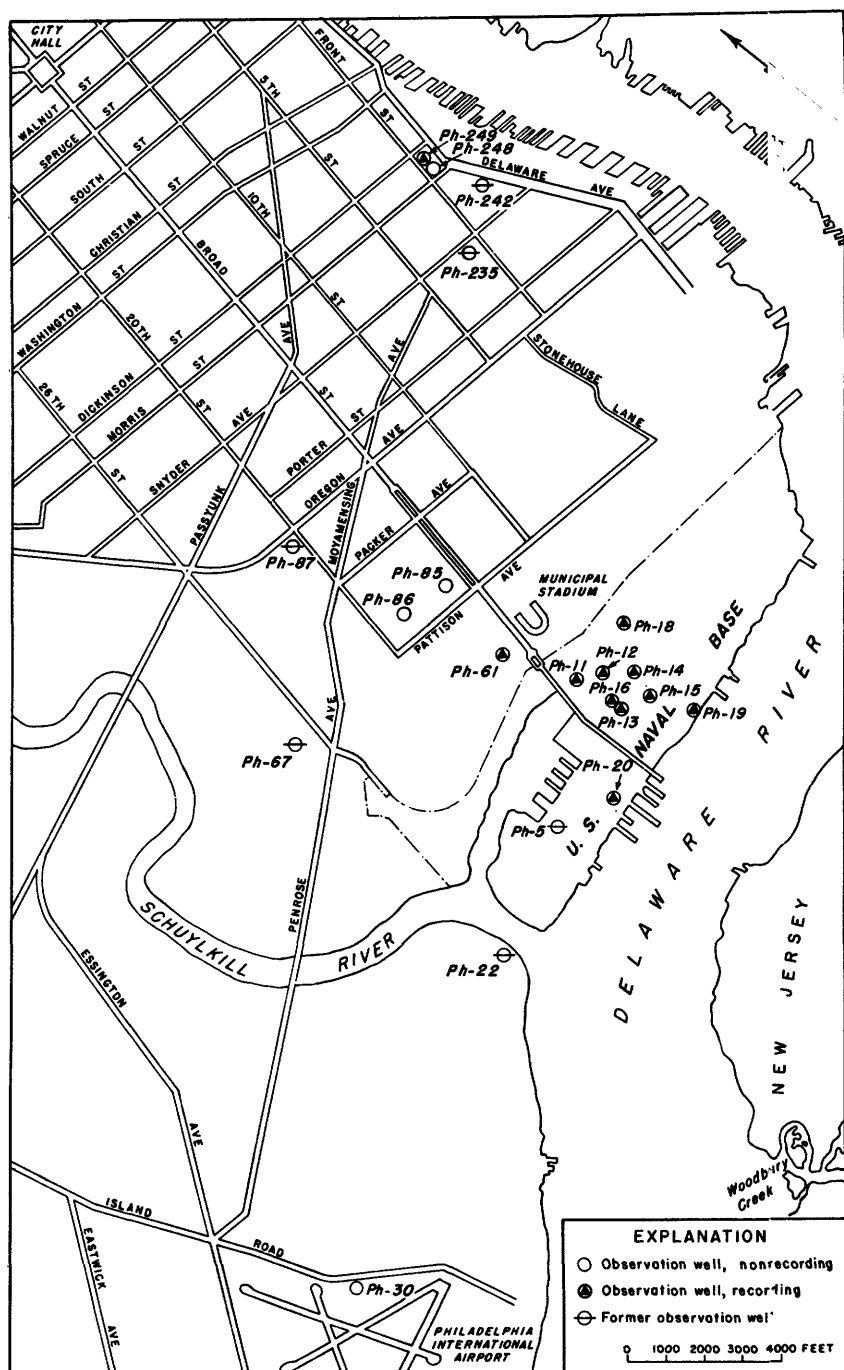


Figure 40. --Location of observation wells in southern part of Philadelphia County, Pa., 1952.

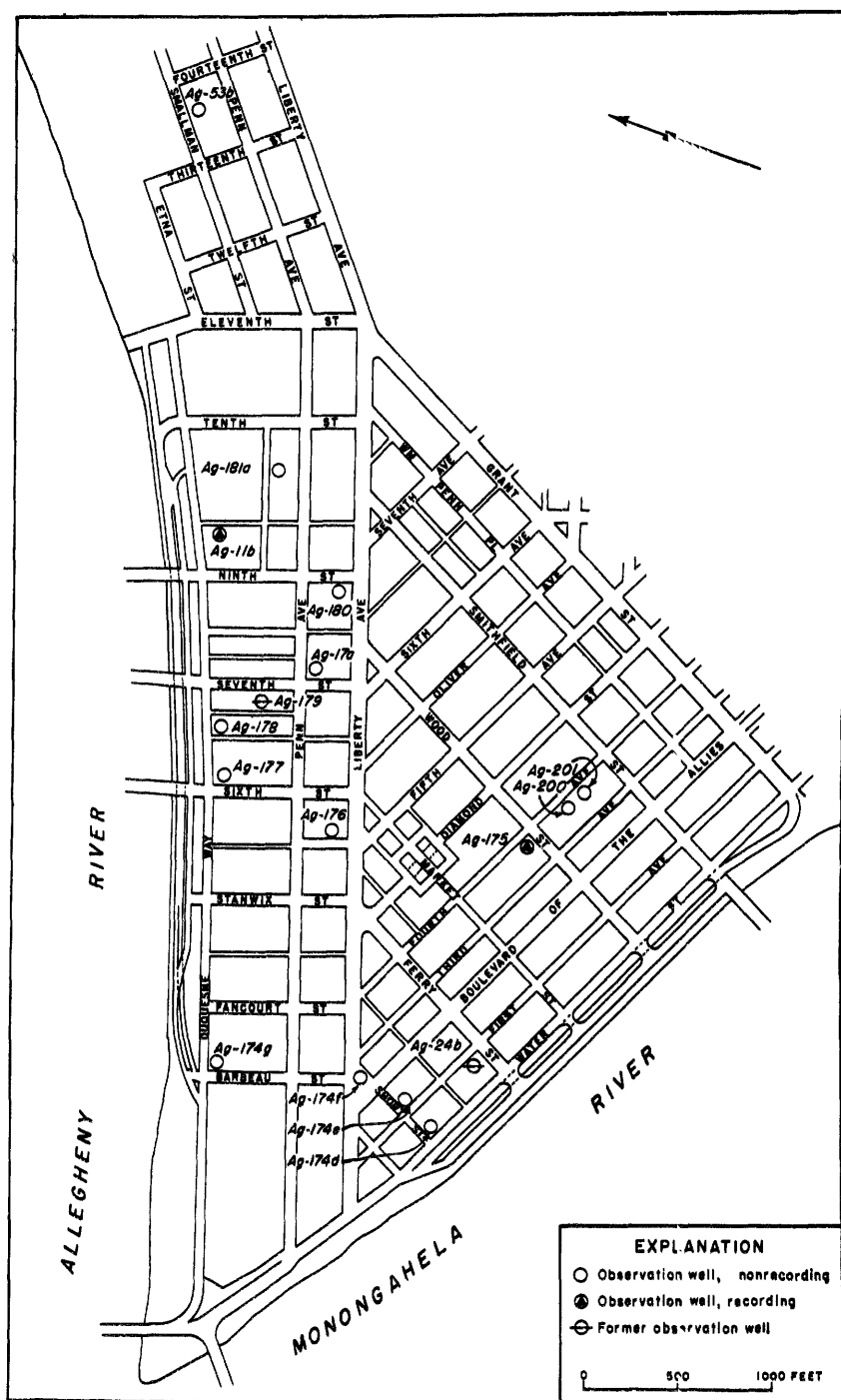


Figure 41. --Location of observation wells in Triangle area of Pittsburgh, Allegheny County, Pa., 1952.

and east borders and "3" as its north and south borders. The "K3" area is divided into four parts by using "a" to represent the northwest quarter, "b" the northeast, "c" the southwest, and "d" the southeast. Thus, "K3a" is a quadrangle $7\frac{1}{2}$ minutes on a side. The second half of the location number consists of 4 figures. These figures are distances south and east of the northwest corner of a $7\frac{1}{2}$ -minute quadrangle, such as quadrangle "K3a." Location "K3a-7534" is between 7.5 and 7.6 miles south and between 3.4 and 3.5 miles east of the northwest corner of "K3a." The number Ag-17a(H3b-3965) designates a well in Allegheny County within a tenth of a mile south and east of a point 3.9 miles south and 6.5 miles east of the northwest corner of quadrangle H3b.

Well Descriptions and Water-Level Measurements

All water-level measurements are below land-surface datum. The land-surface datum for some wells has been changed in this report, and has been indicated by an appropriate statement in the well description.

Allegheny County

Ag-11b(H4a-3700). Atlas Paste Co. 920 Duquesne Way, Pittsburgh. Lat. $40^{\circ}26'40''$, long. $79^{\circ}59'50''$. Drilled unused water-table well in sand and gravel of Pleistocene age, diameter 6 inches, depth 62 feet. Land-surface datum is about 730 feet above msl. Highest water level 27.12 below lsd, Feb. 3, 1952; lowest 41.88 below lsd, Aug. 1, 1946. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	32.2	27.4	29.6	30.9	33.1	34.2	39.3	....	....	35.3	32.2	30.6
2	32.1	27.3	29.4	31.1	33.3	34.3	39.4	....	....	35.3	31.7	31.2
3	31.7	27.1	29.7	31.1	33.2	34.7	39.4	....	....	35.2	32.0	31.0
4	31.6	27.2	29.8	31.2	32.9	35.0	39.4	....	....	35.0	31.5	30.8
5	31.7	27.3	29.9	31.2	33.4	35.2	38.9	....	....	35.0	31.5	31.0
6	31.5	27.2	30.0	30.9	33.6	35.6	....	....	....	35.0	31.1	30.8
7	31.5	27.4	30.1	31.2	33.7	35.8	....	....	....	34.9	31.5	30.8
8	31.4	27.4	30.1	31.3	33.7	35.6	....	....	....	34.9	31.3	31.1
9	31.4	27.6	29.8	31.3	33.7	36.1	....	....	....	34.4	31.2	31.2
10	31.5	27.3	30.1	31.4	33.8	36.2	....	....	....	34.4	31.2	31.2
11	31.4	27.7	30.2	31.4	33.6	....	....	....	....	....	31.1	31.2
12	31.3	27.8	30.0	31.2	33.4	....	....	....	....	....	31.1	31.2
13	31.4	27.7	29.9	31.1	33.7	36.8	....	....	....	....	31.1	30.9
14	31.6	28.1	30.0	31.4	33.7	36.8	....	....	....	....	31.1	30.9
15	31.6	28.3	29.9	31.4	33.9	36.6	....	....	....	....	31.0	30.9
16	31.6	28.3	29.7	31.5	34.0	37.1	....	....	....	....	30.9	31.0
17	31.6	28.1	30.0	31.5	33.8	37.4	....	....	....	....	31.1	31.0
18	31.6	28.5	30.0	31.7	33.6	37.7	....	....	....	....	31.3	31.1
19	31.3	28.5	30.1	31.7	33.8	37.8	....	....	....	....	31.3	31.1
20	31.1	....	30.2	31.5	33.9	38.1	....	....	....	33.1	31.7	30.8
21	31.2	28.9	30.3	32.0	33.9	37.9	....	....	....	32.6	31.1	30.7
22	31.1	....	30.3	32.3	34.0	37.8	....	....	....	....	31.3	30.9
23	31.3	....	30.0	32.5	34.1	38.2	....	....	....	....	31.2	31.0
24	31.3	....	30.2	32.5	34.1	....	....	....	....	....	31.2	31.0
25	31.2	....	30.3	32.6	33.9	38.6	....	....	35.8	....	31.1	30.7
26	31.1	....	30.4	32.5	34.2	....	....	....	35.6	32.1	31.1	30.9
27	....	....	30.5	32.3	34.3	39.0	....	....	35.5	32.1	31.1	30.6
28	....	29.4	30.0	32.7	34.5	39.1	....	....	35.3	32.1	30.9	30.6
29	....	29.6	....	32.8	34.6	38.8	....	....	35.2	32.0	30.8	30.8
30	....	....	....	33.0	34.4	39.2	....	....	35.2	31.9	30.7	30.9
31	....	....	30.7	....	34.2	....	....	....	....	....	....	31.0

Ag-17a(H3b-3965). Stanley Theater. Penn Ave. and Seventh St., Pittsburgh. Lat. $40^{\circ}26'30''$, long. $80^{\circ}00'00''$. Drilled air-conditioning water-table well in sand and gravel of Pleistocene age, diameter 12 inches, depth 101 feet (about 32 feet into rock). Land-surface datum is about 735 feet above msl. Highest water level 27.02 below lsd, Feb. 4, 1952; lowest 42.74 below lsd, Aug. 18, 1949. Records available: 1945-52. Measurement discontinued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	32.34	Jan. 29	27.82	Feb. 12	27.68	Apr. 4	31.19
5	31.86	31	27.10	21	28.66	11	31.21
10	31.82	Feb. 1	27.05	28	29.23	18	31.30
17	31.87	4	27.02	Mar. 7	29.73	25	32.58
23	31.38	5	27.43	14	29.87	May 2	33.27
28	28.78	7	27.34	21	30.28		

Ag-53b(H4a-3604). Hardie Bros. Co. Fourteenth and Smallman Sts., Pittsburgh. Lat. 40°26'50", long. 79°59'30". Drilled unused water-table well in sand and gravel of Pleistocene age, diameter 14 inches, depth 70 feet. Land-surface datum is about 735 feet above msl. Highest water level 34.98 below lsd, Feb. 4, 1952; lowest 44.38 below lsd, July 25, 1952. Records available: 1948-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	39.56	Feb. 4	34.98	Apr. 4	38.94	June 13	42.83
5	38.95	5	35.07	11	39.43	27	43.39
10	38.78	7	35.15	18	39.48	July 11	43.93
17	39.03	12	35.62	25	39.93	25	44.38
23	38.40	25	37.44	May 2	41.00	Aug. 22	43.89
28	36.62	28	37.74	9	40.93	Sept. 22	42.44
29	35.55	Mar. 7	38.53	16	41.83	Oct. 20	40.80
30	35.20	14	38.00	23	41.40	Nov. 26	39.59
31	35.00	21	38.06	29	41.26	Dec. 19	39.85
Feb. 1	35.04						

Ag-147g(H3b-0428). West View Municipal Water Authority. Neville Island, Pittsburgh. Lat. 40°29'30", long. 80°04'20". Drilled observation water-table well in sand and gravel of Pleistocene age, diameter 6 inches, depth 60 feet. Land-surface datum is 725 feet above msl. Highest water level 23.30 below lsd, Aug. 4, 1950; lowest 44.40 below lsd, Feb. 24, 1948. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	40.1	37.4	38.7	41.4	40.2	39.8	39.0	39.3	38.6	39.2	38.4	39.3
2	41.1	37.6	38.7	41.2	40.0	40.0	38.9	39.4	38.4	39.1	38.7	39.7
3	41.4	37.3	38.8	41.2	40.0	40.2	38.3	39.3	37.7	39.2	39.0	39.5
4	40.5	37.5	38.7	41.1	40.0	40.2	38.0	39.6	38.0	39.1	39.1	38.6
5	40.0	37.5	40.8	40.7	40.0	40.1	37.5	39.6	36.9	39.1	38.7	39.2
6	40.1	37.8	39.7	40.6	39.8	40.4	37.2	39.7	37.3	39.4	38.0	39.5
7	38.9	38.3	40.2	40.7	39.7	41.0	37.6	39.9	37.6	39.6	38.8	39.7
8	....	38.4	40.2	40.8	39.7	41.4	38.2	40.3	....	....	39.0	39.4
9	38.8	38.3	40.3	40.8	39.7	41.5	38.7	40.5	39.2	....	39.0	39.9
10	38.8	38.2	40.3	40.8	38.5	41.5	39.0	40.5	39.3	....	38.5	39.8
11	38.8	38.3	40.2	40.9	38.7	41.8	38.8	40.5	39.8	....	38.5	39.7
12	38.8	38.3	40.3	40.6	38.8	41.7	38.1	40.4	40.1	....	38.4	40.4
13	38.8	38.3	39.6	40.2	39.0	41.5	38.8	40.0	40.2	....	38.5	40.7
14	38.8	38.3	40.0	40.4	39.2	41.4	39.1	39.9	40.3	....	38.7	40.8
15	38.6	38.4	40.4	39.9	39.3	41.4	39.4	39.8	40.3	....	38.1	41.0
16	38.6	38.2	40.6	....	39.8	41.4	39.7	40.0	40.3	....	37.5	41.1
17	38.6	37.3	40.6	41.4	40.0	41.4	39.7	39.8	40.2	....	38.0	41.0
18	38.9	37.5	....	41.7	40.0	41.7	39.9	40.3	39.9	....	38.2	39.6
19	38.8	37.9	....	41.8	40.0	42.1	39.9	40.4	39.4	....	38.3	39.8
20	38.8	38.1	....	41.8	39.7	42.2	39.3	40.4	38.9	....	38.9	40.1
21	38.8	38.3	....	41.7	40.0	42.2	38.7	40.0	38.8	37.9	39.0	40.3
22	39.1	38.3	....	41.5	40.1	41.8	39.4	40.6	39.0	38.6	39.2	39.8
23	39.1	38.4	....	41.3	40.2	41.5	39.7	40.9	39.2	38.7	39.2	39.7
24	37.6	38.4	....	41.0	40.4	39.9	39.9	41.2	39.2	39.0	38.2	39.7
25	38.6	38.5	41.8	40.9	40.7	39.6	40.0	41.3	39.2	39.2	39.2	39.8
26	38.9	38.5	42.0	40.9	40.8	40.1	40.0	41.3	39.3	39.4	39.5	39.8
27	38.9	38.6	42.0	40.9	40.8	40.3	40.0	41.2	39.3	39.4	39.4	40.0
28	34.7	38.6	42.0	40.5	40.6	40.4	40.0	41.0	39.5	39.4	39.4	41.8
29	35.1	38.6	41.9	40.3	40.3	40.4	39.4	41.1	39.7	39.6	39.4	42.0
30	36.1	....	41.7	40.1	40.2	39.4	39.2	39.4	39.6	39.2	38.7	41.5
31	36.8	....	41.5	....	40.1	....	39.0	38.8	....	39.6	....	41.8

Ag174d(H3b-4162). City of Pittsburgh, well 4. Water and Short Sts., Pittsburgh. Lat. 40°26'20", long. 80°00'20". Drilled observation water-table well in sand and gravel of Pleistocene age, diameter 12 inches, depth 35 feet. Land-surface datum is 730 feet above msl. Highest water level 14.74 below lsd, Jan. 28, 1952; lowest 28.39 below lsd, Mar. 16, 1946. Records available: 1945-52.

Ag174d(H3b-4162)--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	23.84	Feb. 12	22.35	Apr. 18	24.00	June 27	26.77
5	23.57	21	23.14	25	24.90	July 11	27.10
10	24.64	28	23.40	May 2	25.10	25	27.11
17	25.07	Mar. 7	23.66	9	25.38	Aug. 22	27.25
23	24.23	14	22.50	16	25.24	Sept. 22	25.83
28	14.74	21	23.65	23	25.37	Oct. 20	24.38
29	16.14	Apr. 4	24.17	29	25.22	Nov. 26	24.05
31	19.10	11	24.16	June 13	26.16	Dec. 19	24.14
Feb. 7	21.38						

Ag-174e(H3b-4162). City of Pittsburgh, well 5. First Ave. and Short St., Pittsburgh. Lat. 40°26'20", long. 80°00'20". Drilled observation water-table well in sand and gravel of Pleistocene age, diameter 12 inches, depth 36 feet. Land-surface datum is 731 feet above msl. Highest water level 17.38 below lsd, Jan. 28, 1952; lowest 30.52 below lsd, June 30, 1949. Records available: 1945-52. Measurement discontinued.

Jan. 3	25.85	Jan. 28	17.38	Feb. 21	25.02	Apr. 4	25.96
5	25.14	29	18.10	28	24.96	11	25.89
10	26.35	31	20.82	Mar. 7	25.20	18	25.62
17	26.88	Feb. 7	22.90	14	24.00	25	26.66
23	25.88	12	23.90	21	25.24	May 2	26.87

e Estimated.

Ag-174f(H3b-4062). City of Pittsburgh, well 6. Liberty Ave. and Short St., Pittsburgh. Lat. 40°26'20", long. 80°00'20". Drilled observation water-table well in sand and gravel of Pleistocene age, diameter 12 inches, depth 36 feet. Land-surface datum is 730 feet above msl. Highest water level 17.68 below lsd, Apr. 15, 1948; lowest 30.04 below lsd, Aug. 18, 1949. Records available: 1945-52. Measurement discontinued.

Feb. 28	24.40	Mar. 21	24.68	Apr. 11	25.39	Apr. 25	26.08
Mar. 7	24.63	Apr. 4	25.38	18	25.12	May 2	26.48
14	23.48						

Ag-174g(H3b-3962). City of Pittsburgh, well 7. Duquesne Way and Barbeau St., Pittsburgh. Lat. 40°26'30", long. 80°00'00". Drilled observation water-table well in sand and gravel of Pleistocene age, diameter 12 inches, depth 40 feet. Land-surface datum is 723 feet above msl. Highest water level 0.33 below lsd, Apr. 15, 1948; lowest 18.63 below lsd, July 14, 1949. Records available: 1948-52.

Jan. 3	8.64	Feb. 12	9.00	Apr. 18	9.65	June 27	14.98
5	8.85	21	9.15	25	9.33	July 11	17.53
10	9.18	28	9.20	May 2	9.66	25	17.84
17	9.10	Mar. 7	9.32	9	11.80	Aug. 22	17.09
23	9.06	14	9.10	16	14.29	Sept. 22	18.19
28	.58	21	9.24	23	14.08	Oct. 20	17.13
29	5.34	Apr. 4	9.52	29	14.31	Nov. 26	16.13
31	8.15	11	9.80	June 13	16.43	Dec. 19	15.56
Feb. 7	8.80						

Ag-175(H3b-4165). Columbia Building. Fourth Ave. and Wood St., Pittsburgh. Lat. 40°26'20", long. 80°00'00". Drilled unused water-table well in sand and gravel of Pleistocene age, diameter 8 inches, depth 60 feet. Land-surface datum is about 735 feet above msl. Recording gage removed Oct. 20, 1952. Highest water level 29.62 below lsd, Jan. 30, 1952; lowest 43.58 below lsd, July 26, 1952. Records available: 1947-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	35.7	30.4	....	34.2	36.3	37.4	....	43.4	....	38.4	....	....
2	35.5	30.8	....	34.4	36.3	37.5	....	43.3	....	38.5	....	....
3	35.4	30.8	....	34.5	....	37.8	....	43.2	....	38.5	....	....
4	35.1	31.0	....	34.5	....	38.1	....	43.0	....	38.2	....	....
5	34.7	31.1	....	34.5	....	38.3	....	43.0	....	37.9	....	....
6	34.6	31.0	....	34.5	....	38.6	....	43.1	....	37.4	....	....
7	34.7	31.0	33.3	34.3	....	38.9	....	43.2	....	37.2	....	....
8	34.7	31.2	33.3	34.3	....	38.9	....	43.2	....	37.0	....	....
9	34.8	31.3	33.2	34.4	36.8	39.1	....	43.2	....	36.8	....	....
10	35.0	31.3	33.2	34.5	36.9	39.4	....	43.1	....	36.6	....	....

Ag-175(H3b-4165)--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	35.0	31.4	33.4	34.6	36.9	39.7	....	42.8	....	36.4	....	....
12	35.0	31.6	33.4	34.5	36.7	39.8	....	42.8	....	36.3	....	....
13	35.0	31.7	33.1	34.5	36.6	39.9	....	42.9	....	36.2	....	....
14	35.1	31.9	32.9	34.4	36.7	40.1	....	42.9	....	36.3	....	....
15	35.2	32.1	32.8	34.4	36.9	40.0	....	43.0	....	36.3	....	....
16	35.3	32.2	32.8	34.4	36.9	40.3	....	43.0	....	36.3	....	....
17	35.3	32.2	33.0	34.5	36.8	40.6	....	42.8	....	36.2	....	....
18	35.4	32.2	33.2	34.7	36.8	40.8	....	42.6	....	36.0	....	....
19	35.3	32.3	33.4	34.9	36.7	41.0	....	42.7	....	35.8	....	....
20	35.0	....	33.5	34.9	36.7	41.2	....	42.7	....	35.4	....	....
21	34.7	32.5	33.7	35.3	36.7	41.3	....	42.8	....	....	....	....
22	34.6	32.5	33.8	35.8	36.8	41.2	....	....	....	....	....	....
23	34.6	32.5	33.8	35.9	36.9	41.3	....	....	....	....	....	....
24	34.5	32.5	33.5	35.9	37.1	41.5	....	....	....	....	....	....
25	34.5	32.6	33.5	35.8	37.1	41.7	43.6	....	39.1	....	....	....
26	34.3	32.7	33.7	35.7	37.2	42.0	43.6	....	38.8	....	....	....
27	34.2	32.8	33.8	35.6	37.3	....	43.4	....	38.7	....	....	....
28	34.3	....	33.9	35.8	37.4	....	43.2	....	38.4	....	....	....
29	30.3	....	....	36.0	37.5	....	43.3	....	38.2	....	....	....
30	29.6	....	....	36.2	37.5	....	43.4	....	38.3	....	....	....
31	30.0	....	34.0	....	37.4	....	43.4	....	....	....	....	....

Ag-176(H3b-4064). May Building. Fifth and Liberty Aves., Pittsburgh. Lat. 40°26'30", long. 80°00'10". Drilled unused water-table well in sand and gravel of Pleistocene age, diameter 8 inches, depth 53 feet. Land-surface datum is 730 feet above msl. Highest water level 23.64 below lsd, Jan. 29, 1952; lowest 39.40 below lsd, Aug. 2, 1951. Records available: 1950-52. Measurement discontinued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	29.95	Jan. 28	23.65	Feb. 21	27.16	Apr. 4	29.38
5	29.25	29	23.64	28	27.50	11	29.19
10	29.62	31	24.50	Mar. 7	27.96	18	29.29
17	30.04	Feb. 7	25.62	14	27.52	25	30.34
23	29.20	12	26.30	21	28.23	May 2	31.39

Ag-177(H3b-3864). Fulton Building. Duquesne Way and Sixth St., Pittsburgh. Lat. 40°26'40", long. 80°00'10". Drilled unused water-table well in sand and gravel of Pleistocene age, diameter 12 inches, depth 67 feet. Land-surface datum is about 733 feet above msl. Highest water level 24.25 below lsd, Jan. 28, 1952; lowest 40.65 below lsd, July 28, 1949. Records available: 1945-52.

Jan. 3	31.29	Feb. 12	28.97	Apr. 18	32.12	June 27	40.14
5	31.25	21	29.39	25	32.48	July 11	39.45
10	31.45	28	29.70	May 2	33.04	25	40.23
17	32.05	Mar. 7	30.78	9	33.58	Aug. 22	39.31
23	31.25	14	29.59	16	33.41	Sept. 22	35.54
28	24.25	21	30.65	23	33.89	Oct. 20	31.62
29	25.23	Apr. 4	31.59	29	35.24	Nov. 26	30.71
31	26.65	11	31.38	June 13	36.87	Dec. 19	30.76
Feb. 7	27.71						

Ag-178(H3b-3865). Pittsburgh Plate Glass Co. 632 Duquesne Way, Pittsburgh. Lat. 40°26'40", long. 80°00'00". Drilled unused water-table well in sand and gravel of Pleistocene age, diameter 3 inches, depth 41 feet. Land-surface datum is about 733 feet above msl. Highest water level 24.50 below lsd, Jan. 28, 1952; lowest 38.30 below lsd, June 29, 1950. Records available: 1946-52. Measurement discontinued.

Jan. 3	30.75	Jan. 28	24.50	Feb. 21	26.94	Apr. 4	29.60
5	30.22	29	24.55	28	27.34	11	30.28
10	30.30	31	24.62	Mar. 7	28.23	18	30.49
17	30.42	Feb. 7	25.30	14	28.35	25	31.11
23	30.50	12	25.78	21	29.15	May 2	31.30

Ag-180(H4a-3900). Victory Building. Liberty Ave. and Ninth St., Pittsburgh. Lat. 40°26'30", long. 79°59'50". Drilled unused water-table well in sand and gravel of Pleistocene age, diameter 4 inches, depth 61 feet. Land-surface datum is about 736 feet above msl. Highest water level 32.10 below lsd, Feb. 4-5, 1952; lowest 46.88 below lsd, July 25, 1952. Records available: 1946-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	37.50	Feb. 4	32.10	Apr. 4	35.79	June 13	42.19
5	37.34	5	32.10	11	35.97	27	45.11
10	36.78	7	32.16	18	36.10	July 11	45.87
17	36.63	12	32.24	25	37.22	25	46.88
23	36.52	21	33.18	May 2	37.95	Aug. 22	46.15
28	35.58	28	33.84	9	38.65	Sept. 22	43.21
29	34.12	Mar. 7	34.46	16	38.80	Oct. 20	38.69
30	33.25	14	34.72	23	38.89	Nov. 26	36.43
31	32.84	21	34.80	29	39.60	Dec. 19	36.08

Ag-181a(H4a-3801). Federal-Rice Drug Co. 947 Penn Ave., Pittsburgh. Lat. 40°26'40", long. 79°59'50". Drilled unused water-table well in sand and gravel of Pleistocene age, diameter 8 inches, depth 62 feet. Land-surface datum is 732 feet above msl. Highest water level 31.20 below lsd, Feb. 4, 1952; lowest 44.60 below lsd, Aug. 2, 1951. Records available: 1949-52. Measurement discontinued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	36.45	Jan. 29	33.30	Feb. 7	31.35	Mar. 21	34.30
5	36.20	30	32.67	12	31.60	Apr. 4	35.21
10	35.65	31	32.10	21	32.73	11	35.49
17	35.78	Feb. 1	31.75	28	33.78	18	35.63
23	35.38	4	31.20	Mar. 7	34.10	25	36.50
28	34.26	5	31.35	14	34.18	May 2	37.15

Ag-200(H3b-4265). Commonwealth Building. 316 Fourth Ave., Pittsburgh. Lat. 40°26'20", long. 80°00'00". Drilled unused artesian well in shale of Conemaugh formation, diameter 8 inches, depth 99 feet. Land-surface datum is 737 feet above msl. Highest water level 35.90 below lsd, Jan. 22, 1948; lowest 58.91 below lsd, Apr. 3, 1946. Records available: 1945-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	45.95	Feb. 7	42.66	Mar. 7	43.31	Apr. 11	43.32
10	44.96	12	41.24	14	46.45	18	43.10
17	47.50	21	42.24	21	44.48	25	43.39
23	43.86	28	45.73	Apr. 4	45.17	May 2	44.70
31	42.75						

Ag-201(H3b-4265). Keystone Building. 324 Fourth Ave., Pittsburgh. Lat. 40°26'20", long. 80°00'00". Drilled unused artesian well in shale of Conemaugh formation, diameter 8 inches, depth 77 feet. Land-surface datum is 737 feet above msl. Highest water level 34.40 below lsd, Jan. 22, 1948; lowest 53.93 below lsd, Apr. 3, 1946. Records available: 1945-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	43.35	Feb. 21	40.31	Apr. 25	41.12	July 11	41.29
7	37.98	28	43.52	May 2	40.88	25	41.82
10	42.36	Mar. 7	41.56	9	41.30	Aug. 22	40.87
17	44.14	14	44.20	16	44.52	Sept. 22	37.74
23	41.10	21	42.45	23	42.50	Oct. 20	35.97
31	40.10	Apr. 4	42.49	29	40.73	Nov. 26	40.25
Feb. 7	40.05	11	41.18	June 13	42.03	Dec. 19	40.31
12	39.24	18	41.00	27	40.66		

Armstrong County

Ar-2(G5a-4744). Martin J. Cordera. Schenley. Lat. 40°40'50", long. 79°39'50". Drilled unused water-table well in sand and gravel of Pleistocene age, diameter 6 inches, depth 82 feet. Land-surface datum is about 780 feet above msl. Water levels in reports prior to 1952 are recorded 0.3 above lsd. Highest water level 27.83 below lsd, Mar. 29, 1950; lowest 39.94 below lsd, Aug. 30, 1950. Records available: 1949-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	33.39	Feb. 20	37.15	Apr. 9	35.59	May 28	31.04
9	34.23	27	37.76	16	31.29	June 4	37.29
16	35.72	Mar. 5	37.47	23	36.33	11	38.49
23	33.98	12	30.77	30	37.65	18	38.79
30	28.75	19	34.01	May 7	34.70	25	38.80
Feb. 6	28.81	26	31.79	14	33.05	July 2	38.83
13	36.59	Apr. 2	36.58	21	32.55	9	39.09

Ar-2(G5a-4744)--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 16	39.22	Sept. 3	39.35	Oct. 15	39.33	Nov. 26	37.07
23	39.17	10	39.39	22	39.41	Dec. 3	38.87
30	39.21	17	39.26	29	39.40	10	37.58
Aug. 7	39.33	24	38.85	Nov. 5	39.48	17	36.00
13	39.26	Oct. 1	39.07	12	39.10	24	37.80
20	38.61	8	39.24	19	39.07	31	38.35
27	39.23						

Beaver County

By-55(F2c-4540). Mrs. F. E. Duff. Darlington. Lat. 40°48'30", long. 80°25'20". Drilled unused water-table well in sand and gravel of Pleistocene age, diameter 6 inches, depth 45 feet. Land-surface datum is about 915 feet above msl. Highest water level 12.5 below lsd, Apr. 3, 1951; lowest 19.3 below lsd, Nov. 12-21, 1952. Records available: 1949-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	17.5	15.0	16.1	16.2	15.9	16.0	17.1	18.1	18.4	18.6	19.1	19.0
2	17.3	15.0	16.1	16.2	16.0	16.0	17.2	18.1	18.5	18.7	19.1	19.0
3	17.2	15.0	16.2	16.2	16.0	16.0	17.2	18.2	18.5	18.7	19.2	19.0
4	17.0	14.8	16.2	16.3	16.1	16.1	17.2	18.2	18.5	18.7	19.2	19.0
5	16.9	14.7	16.3	16.2	16.1	16.1	17.2	18.3	18.6	18.7	19.2	19.0
6	16.8	14.7	16.3	16.3	16.2	16.2	17.3	18.3	18.6	18.8	19.2	18.9
7	16.8	14.6	16.4	16.3	16.2	16.2	17.3	18.3	18.6	18.8	19.2	18.9
8	16.7	14.6	16.4	16.4	16.3	16.3	17.4	18.4	18.7	18.8	19.2	18.8
9	16.6	14.6	16.4	16.4	16.3	16.4	17.4	18.4	18.7	18.8	19.2	18.8
10	16.7	14.7	16.4	16.4	....	16.4	17.4	18.2	18.7	18.8	19.2	18.8
11	16.6	14.8	16.4	16.5	....	16.5	17.5	18.0	18.8	18.8	19.2	18.8
12	16.6	14.8	16.2	16.5	....	16.6	17.6	18.0	18.8	18.8	19.3	18.7
13	16.6	14.9	16.2	16.4	....	16.6	17.6	18.0	18.8	18.8	19.3	18.6
14	16.6	15.0	16.2	16.4	....	16.6	17.6	18.0	18.8	18.8	19.3	18.6
15	16.6	15.0	16.2	16.2	....	16.6	17.7	18.0	18.8	18.9	19.3	18.6
16	16.6	15.1	16.2	16.0	....	16.7	17.7	18.0	18.7	18.9	19.3	18.6
17	16.6	15.2	16.2	15.9	16.4	16.8	17.8	....	18.7	18.9	19.3	18.6
18	16.5	15.2	16.2	15.8	16.4	16.8	17.8	....	18.7	18.9	19.3	18.6
19	16.3	15.3	16.2	15.8	16.5	16.9	17.8	....	18.6	18.9	19.3	18.6
20	16.2	15.4	16.1	15.7	16.5	16.9	17.8	....	18.4	18.9	19.3	18.6
21	16.1	15.5	16.1	15.7	16.4	17.0	17.8	....	18.4	19.0	19.3	18.6
22	16.0	15.6	16.1	15.7	16.5	17.0	17.8	....	18.4	19.0	19.2	18.6
23	16.0	15.6	16.0	15.7	16.5	17.0	17.9	18.1	18.4	19.0	19.1	18.6
24	15.9	15.7	16.0	15.7	16.5	17.0	17.9	18.1	18.4	19.0	19.0	18.6
25	15.9	15.8	16.0	15.7	16.3	17.0	17.9	18.2	18.4	19.0	19.0	18.6
26	15.8	15.9	16.1	15.7	16.2	17.1	18.0	18.2	18.5	19.0	19.0	18.6
27	15.7	15.9	16.1	15.7	16.1	17.2	18.0	18.3	18.5	19.0	19.0	18.6
28	15.4	16.0	16.1	15.7	16.0	17.2	18.0	18.3	18.5	19.1	19.0	18.6
29	15.2	16.0	16.1	15.8	15.9	17.2	18.0	18.4	18.6	19.1	19.0	18.6
30	15.2		16.2	15.9	15.9	17.1	18.0	18.4	18.6	19.1	19.0	18.7
31	15.1		16.2		15.9		18.1	18.4		19.1		18.7

Bedford County

Bd-3(J10b-2363). W. M. Hoffman. Norris and Liberty Sts., Saxton. Lat. 40°12'50", long. 78°15'20". Dug unused water-table well in shale of Chemung formation or Portage group, diameter 5 feet, depth 58 feet, cased with stone. Land-surface datum is about 895 feet above msl. Water levels in reports prior to 1952 are recorded 0.3 above lsd. Highest water level 44.08 below lsd, Apr. 16, 1948; lowest 53.69 below lsd, Feb. 13, 1948. Records available: 1941-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	51.22	Feb. 15	50.68	Mar. 28	49.14	May 9	49.98
11	50.64	22	50.94	Apr. 4	50.48	16	50.50
18	51.16	29	51.07	11	49.59	23	50.67
25	51.06	Mar. 7	51.18	18	49.38	30	50.22
Feb. 1	49.09	14	48.63	25	50.48	June 6	50.67
8	49.96	21	50.25	May 2	47.94	13	50.74

Bd-3(J10b-2363)--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 20	50.84	Aug. 8	52.44	Sept. 26	53.04	Nov. 14	53.22
27	50.92	15	52.55	Oct. 3	53.03	21	53.18
July 4	51.19	22	52.80	10	53.14	28	52.00
11	51.41	29	52.60	17	53.20	Dec. 5	52.22
18	51.43	Sept. 5	52.76	24	53.15	12	52.30
25	51.91	12	52.84	31	53.18	19	51.30
Aug. 1	52.03	19	52.99	Nov. 7	53.20	26	52.00

Berks County

Be-2(G20c-6206). Howard Dubois. Lat. 40°32'00", long. 75°59'10". Dug unused water-table well in Martinsburg shale, diameter 4 feet, depth 11 feet. Land-surface datum is 355 feet above msl. Water levels in reports prior to 1952 are recorded 0.3 above lsd. Highest water level 5.04 below lsd, Feb. 15, 1950; lowest 9.11 below lsd, Aug. 25, 1949. Records available: 1948-52. Jan. 8, 7.40; Feb. 1, 7.48; Feb. 18, 7.20; Mar. 7, 7.44; Mar. 24, 6.16. Measurement discontinued.

Be-3(J20b-3547). Commonwealth of Pennsylvania. French Creek State Park. Near Elverson. Lat. 40°11'50", long. 75°47'00". Drilled unused water-table well in Vintage dolomite, diameter 4 inches, depth 39 feet. Land-surface datum is about 540 feet above msl. (Paul H. Walker, voluntary observer.) Highest water level 22.43 below lsd, June 22, 1948; lowest 38.88 below lsd, Dec. 30, 1949. Records available: 1948-52.

Jan. 4	35.04	Apr. 11	26.81	July 11	26.38	Oct. 4	33.30
11	34.84	18	26.05	18	27.18	10	33.63
25	33.92	25	35.72	25	28.07	17	33.75
Feb. 1	33.02	May 2	24.44	Aug. 1	28.85	24	34.92
8	32.19	9	23.70	8	29.52	31	35.52
15	31.64	16	23.12	17	30.15	Nov. 7	34.80
22	30.90	23	22.94	22	30.72	14	35.11
29	30.17	30	22.63	29	31.28	21	35.27
Mar. 7	29.63	June 6	22.56	Sept. 5	31.78	28	34.30
14	28.93	13	23.28	12	32.14	Dec. 5	35.02
21	28.29	20	23.93	19	32.50	12	34.75
28	27.75	July 3	25.32	26	32.87	19	34.33
Apr. 4	27.36						

Be-4(J20b-4426). Commonwealth of Pennsylvania. French Creek State Park. Near Elverson. Lat. 40°11'00", long. 75°49'30". Dug unused water-table well in sandstone or shale of Stockton formation, diameter 4 feet, depth 20 feet. Land-surface datum is 694 feet above msl. (Paul H. Walker, voluntary observer.) Highest water level 5.04 below lsd, May 2, 1952; lowest dry, Aug. 12, 1949. Records available: 1948-52.

Jan. 4	7.14	Apr. 4	9.36	July 11	12.34	Oct. 4	14.03
11	9.64	11	9.25	18	13.08	10	14.15
25	8.05	18	6.18	25	12.92	17	14.27
Feb. 1	7.32	25	9.17	Aug. 1	13.45	24	15.16
8	7.14	May 2	5.04	8	13.12	31	15.30
15	10.01	9	8.73	17	12.32	Nov. 7	15.48
22	10.29	16	9.07	22	12.45	14	15.60
29	11.06	23	9.87	29	13.33	21	15.32
Mar. 7	9.70	30	8.25	Sept. 5	10.19	28	11.63
14	6.49	June 6	8.58	12	12.05	Dec. 5	12.24
21	6.98	13	10.86	19	12.91	12	7.09
28	7.96	20	12.09	26	13.54	19	10.34

Be-5(H21b-6720). Joseph A. Witman. Bally. Lat. 40°24'00", long. 75°35'10". Dug unused water-table well in Hardyston quartzite, diameter 36 inches, depth 18 feet. Land-surface datum is about 470 feet above msl. Highest water level 9.10 below lsd, Apr. 2, 1951; lowest 18.7 below lsd, Nov. 14, 1952. Records available: 1949-52.

Be-5(H21b-6720)--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	14.8	Mar. 17	12.5	May 26	12.6	Aug. 4	16.2
14	14.5	24	13.8	June 2	12.8	11	16.5
21	14.7	31	14.5	8	13.2	Sept. 7	16.6
28	13.1	Apr. 7	14.8	16	13.9	22	16.8
Feb. 4	13.0	14	14.5	23	14.5	29	16.7
11	13.3	21	13.8	29	14.7	Oct. 6	16.8
18	13.2	28	10.1	July 7	15.3	20	17.3
24	13.8	May 5	12.6	14	15.0	Nov. 14	18.7
Mar. 3	12.7	12	13.9	21	15.3	24	16.4
10	13.2	19	14.2	29	15.7		

Bradford County

Br-1(C18a-2806). Mrs. Charlotte Payne. Monroeton. Lat. 41°42'20", long. 76°29'10". Dug unused water-table well in alluvium of Recent age, diameter 36 inches, depth 8 feet, cased with stone. Land-surface datum is about 780 feet above msl. Highest water level 0.67 below lsd, Mar. 31, 1951; lowest dry several times in 1932, 1936, 1939, 1941-43. Records available: 1931-44, 1946-52.

Apr. 18	1.29	June 17	2.75	Aug. 15	4.41	Oct. 10	5.10
28	1.56	25	3.16	21	4.53	16	5.28
May 5	2.09	July 4	3.95	28	4.59	24	5.25
13	1.35	8	4.03	Sept. 3	4.71	30	5.31
19	1.75	15	3.97	11	4.84	Nov. 14	5.17
27	1.22	24	3.68	16	4.97	21	4.04
June 2	1.42	31	4.02	23	5.03	Dec. 31	1.77
9	1.75	Aug. 7	4.21	29	5.14		

Br-2(B18c-7333). C. Holon. East Towanda. Lat. 41°46'00", long. 76°26'00". Dug unused water-table well in shale of Chemung formation and/or in drift of Pleistocene age, diameter 30 inches, depth 64 feet, cased with brick. Land-surface datum is about 827 feet above msl. Highest water level 17.00 below lsd, May 25, 1947; lowest 61.70 below lsd, Feb. 15, 1942. Records available: 1931-52.

Jan. 6	43.64	Mar. 30	29.62	June 22	40.32	Sept. 21	51.03
8	44.71	Apr. 6	28.09	29	41.98	28	51.64
13	40.64	9	27.53	July 6	43.36	Oct. 5	52.26
20	32.91	13	29.95	13	44.45	12	52.83
27	33.77	20	27.22	21	45.44	19	53.40
28	32.54	27	31.96	24	37.18	27	54.08
Feb. 3	34.37	May 4	34.86	27	46.08	Nov. 2	54.58
10	30.86	11	38.10	Aug. 3	46.82	9	55.12
17	34.95	13	35.50	11	47.64	16	55.70
24	38.63	18	31.86	17	48.15	23	56.15
Mar. 2	38.68	25	30.46	23	53.55	30	56.75
7	36.01	June 1	27.37	25	48.84	Dec. 7	56.90
9	34.16	8	33.90	31	49.30	14	49.14
16	29.20	15	37.96	Sept. 7	49.89	21	44.00
23	28.13	18	39.05	14	50.45	28	39.85

Butler County

Bt-1(E4c-8154). Ralph W. Wick. West Sunbury. Lat. 41°00'20", long. 79°53'40". Dug unused water-table well in shale of Conemaugh formation, diameter 4 inches, depth 18 feet, cased with stone. Land-surface datum is about 1,400 feet above msl. Water levels in reports prior to 1952 are recorded 0.2 above lsd. Highest water level 6.64 below lsd, Mar. 14, 1942; lowest 11.02 below lsd, Oct. 5, 1946. Records available: 1941-52. Jan. 5. 8.72; Jan. 12, 8.10; Jan. 19, 7.50; Jan. 26, 7.32. Measurement discontinued.

Centre County

Ce-2(F12b-4047). G. C. Benner. Milesburg. Lat. 40°56'20", long. 77°47'00". Dug unused water-table well in Helderberg limestone, diameter 4 feet, depth 22 feet. Land-surface datum is about 698 feet above msl. Highest water level 1.98 below lsd, Apr. 17, 1948; lowest 19.63 below lsd, Nov. 3, 1952. Records available: 1946-52. Measurement discontinued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	7.80	Mar. 24	4.64	June 2	7.43	Aug. 18	12.16
14	8.82	31	5.95	9	11.81	25	16.78
28	4.20	Apr. 7	5.44	16	13.98	Sept. 2	15.57
Feb. 4	4.47	14	5.50	23	14.98	8	17.09
12	6.00	21	4.58	30	15.72	15	18.27
18	8.00	28	5.79	July 7	16.49	22	16.36
25	10.88	May 5	8.26	21	16.11	29	18.30
Mar. 3	12.07	12	9.79	28	17.02	Oct. 6	18.61
10	12.41	19	6.10	Aug. 3	17.76	13	18.54
17	4.62	26	7.00	11	17.36	Nov. 3	19.63

Chester County

Ch-2(J20d-0709). Lewis R. Shingle. Honeybrook Township. Lat. 40°06'50", long. 75°51'20". Dug unused water-table well in granodiorite or quartz monzonite of pre-Cambrian age, diameter 36 inches, depth 15 feet, cased with stone. Land-surface datum is about 640 feet above msl. (Lewis R. Shingle, voluntary observer.) Water levels in reports prior to 1952 are recorded 0.5 above lsd. Highest water level 3.50 below lsd, Mar. 11, 1952; lowest 12.76 below lsd, Oct. 30, 1951. Records available: 1951-52.

Jan. 1	8.18	Apr. 1	7.28	July 1	7.84	Sept. 30	9.96
8	8.41	8	7.19	8	7.14	Oct. 2	9.45
15	8.37	15	8.17	15	7.61	7	10.47
22	6.62	22	6.46	22	8.15	14	10.43
29	7.17	29	4.20	29	8.01	29	10.44
Feb. 5	6.37	May 6	6.48	Aug. 5	8.57	Nov. 4	10.45
12	7.49	13	6.75	12	8.38	18	10.70
14	7.82	20	8.74	19	8.68	25	9.44
19	7.79	27	8.06	26	9.08	Dec. 2	8.49
28	8.02	June 3	6.44	Sept. 2	8.68	9	7.18
Mar. 4	5.07	5	6.36	9	8.77	16	8.44
11	3.50	10	6.84	16	9.07	29	8.28
18	6.83	17	7.15	24	9.29	30	8.36
25	7.85	24	7.63				

Ch-3(J20d-4839). Fred M. Anderson. West Brandywine Township. Lat. 40°03'20", long. 75°48'00". Dug unused water-table well in granodiorite of pre-Cambrian age, diameter 38 inches, depth 31 feet, cased with stone. Land-surface datum is about 600 feet above msl. (Mrs. Fred M. Anderson, voluntary observer.) Water levels in reports prior to 1952 are recorded 1.5 above lsd. Highest water level 17.68 below lsd, June 5, 1952; lowest 28.50 below lsd, Nov. 5, 1951. Records available: 1951-52.

Jan. 15	23.24	Mar. 17	19.50	Oct. 2	24.24	Oct. 30	25.20
21	22.94	Apr. 29	19.02	14	24.70	Nov. 1	25.47
28	22.48	May 2	18.48	21	24.92	5	25.34
Feb. 4	21.42	June 5	17.88	28	25.05	Dec. 29	23.06
11	20.49	July 25	21.50				

Ch-4(J21c-3838). G. Richland Rebmann, Jr. West Vincent Township. Lat. 40°06'40", long. 75°40'30". Dug unused water-table well in quartz monzonite of pre-Cambrian age, diameter 4 feet, depth 30 feet, cased with stone. Land-surface datum is about 570 feet above msl. (Jesse A. Baxter, voluntary observer.) Water levels in reports prior to 1952 are recorded 0.8 above lsd. Highest water level 19.45 below lsd, May 2, 1952; lowest 28.03 below lsd, Oct. 23, 1951. Records available: 1951-52.

Jan. 8	24.04	Apr. 29	19.73	Aug. 8	24.20	Oct. 30	26.55
15	23.52	May 2	19.45	14	24.40	Nov. 1	25.79
Feb. 14	21.30	June 5	19.96	26	24.70	16	26.20
Apr. 11	21.56	July 25	23.59	Sept. 10	24.41	22	22.45
22	21.62	31	25.95	Oct. 2	25.76	Dec. 29	23.89

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Ch-5(J21c-2001). Richard Cadbury. Wallace Township. Lat. 40°05'40", long. 75°44'50". Dug unused water-table well in quartz monzonite of pre-Cambrian age, diameter 30 inches, depth 12 feet, cased with stone. Land-surface datum is about 560 feet above msl. (Richard Cadbury, voluntary observer.) Water levels in reports prior to 1952 are recorded 0.3 above lsd. Highest water level 1.55 below lsd, Apr. 29, 1952; lowest 9.17 below lsd, Nov. 3, 1951. Records available: 1951-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	2.34	May 3	1.62	Sept. 13	2.89	Nov. 20	6.21
12	2.29	10	1.91	20	3.14	21	6.10
15	2.30	17	1.90	27	3.28	22	4.86
19	2.29	24	2.03	Oct. 2	3.73	23	4.61
26	2.14	31	1.90	4	3.80	24	4.48
Feb. 2	1.92	June 5	1.88	11	4.12	25	4.45
9	1.84	7	1.90	18	4.50	26	4.43
16	1.94	14	1.97	25	4.85	27	4.47
23	1.97	21	2.02	Nov. 1	5.20	28	4.52
Mar. 1	2.02	28	2.05	3	5.31	29	4.56
8	1.97	July 5	2.11	4	5.36	Dec. 5	4.71
15	1.81	12	2.09	8	5.58	6	4.31
22	1.82	19	2.19	10	5.68	7	4.25
29	1.85	26	2.24	11	5.72	11	3.36
Apr. 5	1.78	Aug. 2	2.27	12	5.79	13	2.48
12	1.89	9	2.24	15	5.94	20	2.63
19	1.81	16	2.27	16	6.01	22	2.48
26	1.88	23	2.48	17	6.07	27	2.48
29	1.55	30	2.66	18	6.12	29	2.50
May 2	1.58	Sept. 6	2.49	19	6.17		

Ch-6(J21c-7630). John J. Englerth. Downingtown. Lat. 40°00'40", long. 75°41'30". Dug unused water-table well in Ledger dolomite, diameter 4½ feet, depth 20 feet, cased with stone. Land-surface datum is about 270 feet above msl. (John J. Englerth, voluntary observer.) Highest water level 12.19 below lsd, Apr. 29, 1952; lowest 18.05 below lsd, Sept. 10, 1951. Records available: 1951-52.

Jan. 15	14.48	Mar. 12	13.84	Apr. 29	12.19	July 25	16.28
Feb. 7	12.90	18	14.17	June 5	12.95	Sept. 7	16.50
Mar. 2	15.20						

Ch-7(K20a-7146). D. L. Gibbs. Cochranville. Lat. 39°53'40", long. 75°54'40". Dug unused water-table well in Peters Creek quartzite, diameter 4 feet, depth 40 feet, cased with stone. Land-surface datum is about 560 feet above msl. Water levels in reports prior to 1952 are recorded 0.5 above lsd. Highest water level 28.05 below lsd, May 2, 1952; lowest 36.39 below lsd, Oct. 23, 1951. Records available: 1951-52.

Jan. 15	32.07	Apr. 11	30.53	June 6	28.74	Oct. 30	34.38
Feb. 14	30.00	29	28.62	July 25	31.66	Dec. 29	31.05
Mar. 20	30.36	May 2	28.05	Oct. 2	32.20		

Ch-8(K20b-1001). John Robinson. Valley Township. Lat. 39°59'00", long. 75°52'20". Dug unused water-table well in Baltimore gneiss, diameter 36 inches, depth 20 feet, cased with stone. Land-surface datum is about 660 feet above msl. (John Robinson, voluntary observer.) Water levels in reports prior to 1952 are recorded 0.2 above lsd. Highest water level 6.86 below lsd, Apr. 27, 1952; lowest 17.29 below lsd, Oct. 23, 1951. Records available: 1951-52.

Jan. 7	11.52	Feb. 14	10.93	May 12	10.70	Oct. 30	15.80
14	11.44	Apr. 11	10.95	June 6	9.30	Nov. 2	15.83
21	11.40	27	6.86	July 25	13.37	16	16.10
28	8.83	29	7.23	Oct. 2	14.88	Dec. 29	12.59
Feb. 11	10.18	May 5	10.56				

Ch-9(K20b-3329). C. Raymond Young. Youngsburg. Lat. 39°57'00", long. 75°49'10". Dug unused water-table well in Peters Creek quartzite, diameter 30 inches, depth 25 feet, cased with stone. Land-surface datum is about 510 feet above msl. (Mr. C. Raymond Young, voluntary observer.) Water levels in reports prior to 1952 are recorded 1.0 above lsd. Highest water level 10.90 below lsd, June 6, 1952. Records available: 1951-52.

Jan. 15	12.93	Apr. 13	13.10	June 6	10.90	Oct. 2	16.57
Feb. 14	11.24	29	12.53	15	12.40	30	17.65
Mar. 20	12.33	May 25	13.20	July 25	13.37	Dec. 29	13.80
Apr. 11	12.92	June 2	11.60				

Ch-10(K20b-5932). Robert J. Kleberg, Jr. Doe Run. Lat. 39°54'50", long. 75°48'50". Drilled unused water-table well in Cockeysville marble, diameter 6 inches, depth 34 feet. Land-surface datum is about 300 feet above msl. (Burnett Wilson, voluntary observer.) Water levels in reports prior to 1952 are recorded 1.0 above lsd. Highest water level 8.46 below lsd, Apr. 29, 1952; lowest 15.10 below lsd, Oct. 12, 19, 26, 1951. Records available: 1951-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	11.34	Feb. 22	11.14	Apr. 18	10.57	June 6	9.66
11	11.40	29	11.20	25	10.69	July 25	10.84
15	11.49	Mar. 7	11.11	29	8.46	Sept. 5	12.00
18	10.84	14	10.07	May 2	8.97	12	11.97
25	10.15	21	9.93	9	10.16	Oct. 2	12.34
Feb. 1	9.85	28	10.38	16	10.35	30	13.09
8	10.13	Apr. 4	10.58	23	10.13	Dec. 29	11.20
15	10.87	11	10.50	30	10.00		

Ch-11(K20b-7632). J. E. Ryan. West Marlboro Township. Lat. 39°53'10", long. 75°48'50". Dug unused water-table well in Baltimore gneiss, diameter 24 inches, depth 20 feet, cased with stone. Land-surface datum is about 540 feet above msl. (Sam Reyner, voluntary observer.) Highest water level 10.29 below lsd, June 6, 1952; lowest 14.90 below lsd, May 19, 1952. Records available: 1950-52.

Jan. 7	12.14	Apr. 29	10.58	July 21	11.08	Oct. 6	12.27
14	12.13	May 2	10.36	29	11.37	14	12.37
15	12.15	5	12.41	Aug. 4	11.53	20	12.55
21	12.09	12	12.60	11	11.53	27	12.55
28	12.08	19	14.90	18	11.69	Nov. 3	12.61
Feb. 4	12.40	June 6	10.29	25	12.89	10	12.68
11	12.37	9	10.43	Sept. 3	11.82	17	12.76
18	11.43	16	10.76	8	11.88	24	12.26
25	13.56	24	11.08	15	12.15	Dec. 1	12.24
Apr. 11	11.13	30	11.18	22	12.07	8	12.09
15	12.11	July 7	11.39	29	12.17	15	11.77
21	12.09	14	11.08	Oct. 2	12.18	29	11.70
28	12.05						

Ch-12(K21a-3149). Thomas P. Harney. East Bradford Township. Lat. 39°57'10", long. 75°39'20". Dug unused water-table well in Baltimore gneiss, diameter 30 inches, depth 40 feet, cased with stone. Land-surface datum is about 290 feet above msl. (Thomas P. Harney, voluntary observer.) Water levels in reports prior to 1952 are recorded 2.0 above lsd. Highest water level 30.40 below lsd, June 6, July 20, 1952; lowest dry, Dec. 7, 1951. Records available: 1951-52.

Jan. 1	36.40	Apr. 6	31.70	June 6	30.40	Sept. 21	35.10
13	36.10	13	31.30	8	30.70	Oct. 3	35.28
15	36.10	20	31.25	15	30.70	12	35.40
29	35.80	27	31.35	22	30.60	19	35.50
Feb. 6	35.20	29	31.04	July 1	31.30	26	35.77
17	34.40	May 2	30.90	13	32.00	Nov. 2	35.90
24	34.40	4	31.00	20	30.40	9	36.10
Mar. 9	33.70	11	30.95	25	32.71	16	36.30
16	33.10	18	31.00	30	33.00	Dec. 7	38.30
23	32.70	25	31.00	Aug. 29	34.70	14	35.70
30	32.30	June 1	30.90	Sept. 7	34.88	29	35.32

Ch-13(K21a-3512). Everett S. Barr. West Bradford Township. Lat. 39°57'00", long. 75°43'40". Dug unused water-table well in Peters Creek quartzite, diameter 24 inches, depth 18 feet, cased with stone. Land-surface datum is about 360 feet above msl. Highest water level 11.70 below lsd, June 6, 1952; lowest 17.20 below lsd, Sept. 26, 1951. Records available: 1951-52.

Jan. 15	13.59	Apr. 11	14.13	June 6	11.70	Oct. 30	15.78
Feb. 14	12.66	29	12.94	July 25	14.45	Dec. 29	13.60
Mar. 20	13.12	May 2	12.62	Oct. 3	15.41		

Ch-14(K21a-7841). John T. Crossland. Pocopson Township. Lat. 39°53'10", long. 75°40'20". Dug unused water-table well in gneiss of Wissahickon formation, diameter 36 inches, depth 26 feet, cased with stone. Land-surface datum is about 370 feet above msl. (John T. Crossland, voluntary observer.) Highest water level 17.30 below lsd, June 6, 1952; lowest 23.90 below lsd, Nov. 13, 1951. Records available: 1950-52.

Ch-14(K21a-7841)--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	20.78	Mar. 24	17.52	June 6	17.30	Sept. 22	20.65
14	20.57	31	17.45	9	17.38	29	21.15
21	20.47	Apr. 7	17.60	23	18.14	Oct. 3	21.25
29	19.91	21	17.99	30	18.49	13	21.53
Feb. 4	19.26	28	17.84	July 8	18.77	20	21.69
11	18.32	29	17.60	14	19.05	27	21.89
14	18.20	May 2	17.42	21	19.34	Nov. 3	22.02
18	18.25	5	17.50	Aug. 11	20.10	28	22.14
26	18.40	12	17.55	25	20.49	Dec. 8	22.04
Mar. 10	18.50	19	17.60	Sept. 1	20.57	15	21.54
17	17.89	26	18.00	15	20.85	29	21.12

Ch-15(K21b-7407). W. C. Appleton. Chadds Ford. Lat. 39°53'00", long. 75°36'40". Dug unused water-table well in gneiss of Wissahickon formation, diameter 42 inches, depth 38 feet, cased with stone. Land-surface datum is about 220 feet above msl. (Miss Appleton, voluntary observer.) Highest water level 20.94 below lsd, Feb. 14, 1952; lowest 30.05 below lsd, Dec. 29, 1952. Records available: 1950-52.

Jan. 15	24.73	Apr. 11	22.96	June 6	23.43	Nov. 17	24.92
Feb. 14	20.94	29	23.44	July 25	27.83	Dec. 29	30.05
Mar. 20	21.84	May 2	22.38	Oct. 3	28.19		

Clarion County

Cr-1(E6a-2560). John G. Meisinger. 614 Wood St., Clarion. Lat. 41°12'40", long. 79°23'00". Dug unused water-table well in sandstone of Allegheny formation, diameter 36 inches, depth 28 feet, cased with stone to 15. Land-surface datum is about 1,480 feet above msl. (H. F. Brooks, voluntary observer.) Highest water level 11.36 below lsd, Apr. 9, 1938; lowest 21.08 below lsd, Nov. 15, 1952. Records available: 1932-52.

Jan. 5	12.02	Apr. 5	14.96	July 12	18.10	Oct. 12	19.74
12	13.84	8	14.93	19	18.70	17	20.04
19	11.85	26	13.70	26	19.00	24	20.42
26	12.01	May 3	15.53	Aug. 2	19.20	31	20.67
Feb. 2	12.71	9	14.42	9	19.47	Nov. 6	20.86
5	11.57	13	12.71	16	19.77	8	20.90
9	12.07	18	12.30	23	19.39	15	21.08
16	13.24	23	12.15	26	17.70	21	19.32
23	14.63	29	13.96	30	18.54	28	19.16
Mar. 1	15.21	June 6	13.73	Sept. 5	19.53	Dec. 5	18.18
6	14.67	13	17.12	12	19.85	10	15.80
8	14.17	17	17.33	19	19.18	12	14.36
15	12.25	21	17.51	26	18.88	19	15.38
22	12.05	28	17.74	Oct. 3	19.83	26	16.30
31	13.86	July 5	17.67	10	19.65		

Cr-3(D7c-2511). Commonwealth of Pennsylvania. Cook Forest Park. Lat. 41°20'20", long. 79°13'40". Drilled unused water-table well in sandstone of Pottsville or Pocono formation, diameter 6 inches, depth 130 feet, cased to 12. Land-surface datum is about 1,530 feet above msl. (Paul R. Beattie, voluntary observer.) Water levels in reports prior to 1952 are recorded 0.8 above lsd. Highest water level 44.7 below lsd, Mar. 16, May 5, 1951; lowest 92.20 below lsd, Dec. 6, 1952. Records available: 1950-52.

Jan. 4	80.15	Apr. 11	52.20	July 5	54.95	Oct. 4	83.30
11	79.20	19	51.20	12	49.20	11	84.20
18	74.20	26	51.10	20	59.20	18	82.20
25	67.95	May 2	51.20	26	61.20	24	82.20
Feb. 1	61.25	10	52.20	Aug. 3	65.20	Nov. 1	83.20
8	60.20	17	57.20	9	66.50	7	84.20
15	64.20	23	50.20	15	69.12	14	84.20
22	57.20	June 1	49.20	23	76.80	21	86.20
29	57.20	7	49.20	30	76.30	29	90.20
Mar. 7	59.20	13	50.20	Sept. 8	80.20	Dec. 6	92.20
14	56.20	16	47.65	13	79.20	13	91.50
22	53.20	21	51.20	20	80.20	20	88.20
28	51.20	28	52.20	27	82.20	27	88.20
Apr. 4	52.20						

Clearfield County

Cf-4(F9b-2051). Jared I. McNaul. Curwensville. Lat. 40°58'10", long. 78°31'30". Dug unused water-table well in sandstone of Allegheny formation, diameter 5 feet, depth 30 feet. Land-surface datum is about 1,160 feet above msl. Water levels in reports prior to 1952 are recorded 0.1 above lsd. Highest water level 15.57 below lsd, Mar. 5, 1951; lowest 21.30 below lsd, Aug. 31, 1946. Records available: 1946-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	19.76	Apr. 8	19.09	July 7	20.29	Oct. 6	20.54
14	19.81	14	18.96	14	20.37	13	20.49
21	18.56	21	19.04	21	20.39	21	20.59
28	18.52	28	19.41	28	20.40	28	20.62
Feb. 4	19.07	May 5	19.48	Aug. 4	20.41	Nov. 3	20.65
11	18.92	12	19.82	11	20.31	10	20.81
18	19.49	19	19.91	18	20.08	17	20.86
25	19.80	26	18.63	25	20.11	28	20.52
Mar. 3	18.91	June 2	18.81	Sept. 1	20.29	Dec. 2	20.56
10	19.90	9	19.67	8	20.38	8	20.51
17	19.08	16	19.93	15	20.44	16	19.92
24	18.68	23	20.12	22	20.50	22	20.23
31	19.31	30	20.23	29	20.51	29	20.42

Clinton County

Cn-1(E12b-0653). Commonwealth of Pennsylvania. Sproul State Forest, Renovo. Lat. 41°14'20", long. 77°46'20". Drilled unused water-table well in sandstone of Pottsville formation, diameter 6 inches, depth 78 feet, cased to 38. Land-surface datum is about 2,050 feet above msl. (Clarence F. Billotte, voluntary observer.) Water levels in reports prior to 1952 are recorded 0.3 above lsd. Highest water level 44.0 below lsd, Jan. 13, 1951; lowest 55.3 below lsd, Nov. 15, 1952. Records available: 1950-52.

Jan. 5	50.2	Apr. 5	47.0	July 5	46.5	Oct. 4	52.9
12	50.3	12	46.8	12	46.6	11	53.1
19	49.3	19	46.7	19	46.7	18	54.3
26	49.0	26	45.7	26	50.0	25	54.5
Feb. 2	49.0	May 3	45.8	Aug. 2	50.1	Nov. 1	54.9
9	48.9	10	45.6	9	51.0	15	55.3
16	49.0	17	45.6	16	50.9	22	55.1
23	49.0	24	46.1	23	51.0	29	55.2
Mar. 1	47.9	31	46.1	30	50.9	Dec. 6	55.2
8	47.6	June 7	46.1	Sept. 6	49.1	13	55.2
15	47.5	16	46.5	13	52.9	20	55.2
22	47.3	21	46.5	20	53.0	27	55.2
29	47.2	28	46.5	27	52.9		

Columbia County

Co-1(E18c-8318). Fred E. Walters. Fernville. Lat. 41°00'10", long. 76°27'50". Dug unused water-table well in sand of Pleistocene age, diameter 36 inches, depth 19 feet, cased with stone. Land-surface datum is about 490 feet above msl. Water levels in reports prior to 1952 are recorded 2.4 above lsd. Highest water level 4.88 below lsd, Sept. 2, 1933; lowest 14.51 below lsd, Dec. 15, 1931. Records available: 1931-52.

Jan. 1	9.97	Apr. 5	10.40	July 5	11.57	Oct. 11	12.07
12	9.47	12	10.56	12	12.35	18	12.35
19	10.22	19	10.30	19	10.83	25	13.89
26	10.00	26	9.91	26	10.89	Nov. 1	12.82
Feb. 2	10.04	May 3	10.40	Aug. 2	11.17	8	12.86
9	10.25	10	8.91	16	10.35	15	11.95
16	10.56	17	9.96	23	11.06	20	10.25
23	10.64	24	9.41	30	10.16	29	10.71
Mar. 1	10.85	31	9.97	Sept. 6	10.47	Dec. 6	12.19
8	10.53	June 7	10.57	13	10.95	13	9.87
17	9.97	14	10.87	20	11.27	20	11.00
22	9.94	21	10.91	27	11.70	27	10.97
29	10.32	28	11.55	Oct. 4	11.87		

Delaware County

De-3(K21d-2125). Michael S. Ebert. Birmingham Township. Lat. 39°50'40", long. 75°34'10". Dug unused water-table well in gneiss of Wissahickon formation, diameter 42 inches, depth 22 feet, cased with stone. Land-surface datum is about 260 feet above msl. (Michael S. Ebert, voluntary observer.) Water levels in reports prior to 1952 are recorded 1.8 above lsd. Highest water level 11.29 below lsd, Feb. 11, 1952; lowest 18.03 below lsd, Nov. 5, 1951. Records available: 1950-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	12.47	12.36	.....	.....	.....	14.32	.....	16.20	15.90
2	12.55	12.15	13.11	.....	.....	.....	.....	16.21	.....
3	13.74	12.68	12.15	.....	.....	.....	.....	15.41	16.23	.....
4	11.56	.....	12.78	12.09	.....	.....	14.18	.....	.....	16.26	.....
5	12.77	12.11	.....	.....	.....	.....	.....	16.28	.....
6	12.76	12.17	12.52	.....	.....	.....	15.49	16.31	.....
7	12.68	.....	.....	12.88	12.29	.....	14.68	.....	.....	.....	16.35	.....
8	12.96	12.38	.....	.....	.....	14.71	.....	16.37	14.43
9	13.01	12.44	12.60	.....	.....	.....	.....	16.39	.....
10	13.94	13.01	12.58	.....	.....	.....	.....	.....	16.42	.....
11	11.29	.....	13.03	12.71	.....	.....	13.82	.....	.....	16.45	.....
12	12.76	.....	.....	.....	.....	.....	16.47	.....
13	13.06	.....	.....	.....	.....	.....	15.69	16.51	.....
14	13.12	11.98	.....	13.04	.....	.....	13.97	.....	.....	.....	16.53	.....
15	13.12	.....	.....	.....	.....	14.89	.....	16.56	13.79
16	13.16	.....	13.25	.....	.....	.....	.....	16.57	.....
17	12.19	13.21	.....	.....	.....	.....	.....	.....	16.61	.....
18	12.36	.....	13.25	.....	.....	.....	13.75	.....	.....	16.65	.....
19	12.63	.....	13.95	.....	.....	.....	16.66	.....
20	13.34	.....	.....	.....	.....	.....	15.88	16.68	.....
21	13.44	.....	.....	13.40	.....	.....	.....	.....	.....	.....	16.69	.....
22	13.42	.....	.....	.....	.....	15.09	.....	16.29	13.19
23	13.45	.....	13.85	.....	.....	.....	.....	16.21	.....
24	11.93	13.49	.....	.....	.....	.....	.....	.....	16.21	.....
25	13.19	.....	13.50	.....	.....	.....	14.01	.....	.....	16.17	.....
26	13.54	13.74	.....	.....	.....	.....	.....	16.12	.....
27	12.09	13.51	.....	.....	.....	.....	.....	16.05	16.06	.....
28	12.90	.....	12.18	13.11	.....	.....	13.85	.....	.....	.....	16.03	.....
29	12.26	12.93	.....	.....	.....	.....	15.30	.....	15.98	13.22
30	12.38	12.63	.....	14.29	.....	.....	.....	.....	15.93	.....
31	12.42	.....	.....	.....	.....	.....	.....	.....	.....	.....

Elk County

Ek-1(D9d-0909). Mrs. Elizabeth Ernst. Kersey. Lat. 41°21'40", long. 78°36'20". Drilled unused water-table well in shale of Allegheny formation, diameter 4 inches, depth 87 feet. Land-surface datum is about 1,900 feet above msl. Water levels in reports prior to 1952 are recorded 1.5 above lsd. Highest water level 6.62 below lsd, June 11, 1943; lowest 11.40 below lsd, Nov. 2, 1951. Records available: 1941-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	8.60	Apr. 4	8.00	July 4	8.40	Oct. 3	9.80
11	8.75	11	7.75	11	8.48	10	9.60
18	8.45	18	7.54	18	8.60	17	9.65
25	8.39	25	7.55	25	8.70	24	9.70
Feb. 1	8.25	May 2	7.90	Aug. 1	8.81	31	9.90
8	7.95	9	8.00	8	8.82	Nov. 7	10.10
15	8.20	16	7.85	15	9.20	14	10.20
22	8.39	23	7.45	22	9.18	21	10.00
29	8.31	30	7.30	29	9.30	28	9.60
Mar. 7	8.33	June 6	7.52	Sept. 5	9.40	Dec. 5	9.60
14	8.10	13	7.85	12	9.48	12	9.30
21	8.10	20	8.10	19	9.48	19	9.40
28	7.98	27	8.20	26	9.55	26	9.35

Erie County

Er-1(B4b-3203). Mrs. Grace P. Estes. Near Carters Corners. Lat. 41°57'10", long. 79°52'00". Dug unused water-table well in sand of Pleistocene age, diameter 4 feet, depth 19 feet. Land-surface datum is about 1,440 feet above msl. (Julius Horvath, voluntary observer.) Water levels in reports prior to 1952 are recorded 0.7 above lsd. Highest water level 7.22 below lsd, Apr. 20, 1952; lowest dry, Sept. 8-Dec. 1, 1934. Records available: 1931-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	9.42	Apr. 20	7.22	July 7	17.11	Sept. 28	14.95
20	10.11	May 4	14.68	20	17.19	Oct. 12	16.23
Feb. 17	11.25	15	15.56	Aug. 3	17.34	26	16.38
Mar. 4	12.72	18	15.64	17	16.62	Nov. 9	16.23
9	12.20	June 1	12.05	28	16.59	30	13.46
30	11.26	15	15.38	Sept. 1	16.85	Dec. 21	11.63
Apr. 11	11.55	20	16.15	14	17.04		

Huntingdon County

Hu-1(H11c-1559). Fred M. Schell. Near Aitch and Markiesburg. Lat. 40°21'10", long. 78°08'20". Drilled unused water-table well in sandstone of Chemung formation, diameter 6 inches, depth 42 feet. Land-surface datum is about 720 feet above msl. Highest water level at land-surface datum, Mar. 15, 1941; lowest 26.25 below lsd, Oct. 1, 1932. Records available: 1931-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	15.89	Apr. 5	19.74	July 5	21.43	Oct. 4	21.39
12	17.82	12	18.67	12	21.33	11	21.43
19	19.37	19	17.60	19	21.42	18	21.80
26	19.60	26	19.09	26	21.56	25	22.28
Feb. 2	16.71	May 3	17.20	Aug. 2	20.63	Nov. 1	22.46
9	17.08	10	19.58	9	21.73	8	23.06
16	19.58	17	19.97	16	21.62	15	19.60
23	20.79	24	19.45	23	21.33	22	20.46
Mar. 1	21.05	31	17.38	30	21.51	29	16.40
8	20.89	June 7	19.68	Sept. 6	19.95	Dec. 6	19.23
15	16.21	14	20.97	13	20.89	15	19.12
22	18.14	21	21.17	20	21.12	20	19.87
29	16.46	28	21.25	27	21.29	27	20.78

Hu-4(G12b-4404). Commonwealth of Pennsylvania. Logan State Forest. Lat. 40°11'10", long. 77°51'50". Drilled unused water-table well in shale or sandstone of Clinton formation, diameter 6 inches, depth 73 feet. Land-surface datum is about 1,060 feet above msl. (V. M. Eckley, voluntary observer.) Highest water level 34.71 below lsd, June 15, 1951; lowest 39.37 below lsd, Nov. 14, 1952. Records available: 1950-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	35.14	Apr. 4	36.19	July 3	38.16	Oct. 3	39.04
11	36.97	11	36.12	11	38.18	10	39.09
19	35.31	18	35.55	19	38.29	17	39.16
25	36.57	25	35.95	25	38.51	24	39.19
Feb. 1	36.15	May 2	36.31	Aug. 1	38.55	31	39.24
8	35.91	9	36.81	11	38.69	Nov. 8	39.35
15	36.69	16	36.48	15	38.71	14	39.37
23	37.12	23	35.97	23	38.74	21	38.09
29	36.99	31	36.36	29	38.82	28	37.61
Mar. 7	37.13	June 6	36.93	Sept. 5	38.54	Dec. 8	37.19
14	34.93	13	37.59	12	38.69	13	36.05
21	35.17	20	37.89	19	38.77	19	37.16
28	36.15	27	38.03	26	38.85	28	37.55

Indiana County

In-1(G7c-0547). Commonwealth of Pennsylvania. Indiana State Teachers College, Indiana. Lat. 40°37'00", long. 79°09'30". Drilled unused artesian well in sandstone of Cone-maugh formation, diameter 6 inches, depth 200 feet. Land-surface datum is about 1,300 feet above msl. Highest water level 75.10 below lsd, June 9, 1951; lowest 92.45 below lsd, Sept. 27, 1952. Records available: 1944-47, 1949-52.

In-1(G7c-0547)--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	80.7	Apr. 5	76.4	July 5	80.1	Oct. 4	83.5
12	80.7	12	76.0	12	81.0	11	83.6
19	80.4	19	76.0	19	81.0	18	83.7
26	78.9	26	76.2	26	81.1	25	83.8
Feb. 2	78.8	May 3	76.7	Aug. 2	82.1	Nov. 1	84.0
9	78.3	10	76.6	9	82.4	8	84.5
16	78.2	17	77.0	16	82.1	15	84.8
23	78.3	24	76.8	23	82.6	22	85.2
29	80.3	31	77.0	30	82.1	Dec. 6	84.6
Mar. 8	78.0	June 7	77.7	Sept. 6	82.8	13	84.1
15	77.2	14	78.6	13	83.1	20	83.4
22	76.7	21	79.4	20	83.3	27	82.9
29	76.7	28	80.1	27	92.4		

Lackawanna County

Lk-2(C22c-4709). Orval J. Ransom. Near Carbondale. Lat. 41°3'20", long. 75°28'50". Dug unused water-table well in sand of Pleistocene age, diameter 24 inches, depth 18 feet, cased with stone. Land-surface datum is about 1,615 feet above msl. Highest water level 1.05 below lsd, Dec. 8, 1950; lowest 13.10 below lsd, Oct. 15, 1943. Records available: 1931-52.

Jan. 4	3.15	Apr. 4	4.05	July 11	7.55	Oct. 10	8.39
11	4.62	11	3.73	18	5.91	17	8.85
18	2.20	19	3.10	25	6.90	23	9.10
25	4.35	25	5.00	Aug. 1	7.75	Nov. 1	9.51
Feb. 1	4.27	May 2	3.72	8	7.75	7	9.92
8	3.50	8	5.68	15	7.48	14	9.93
15	5.00	16	3.83	21	6.11	21	9.98
21	6.23	23	3.51	29	6.80	23	4.20
28	6.81	30	3.51	Sept. 5	4.30	28	4.59
Mar. 6	7.28	June 5	3.81	12	6.05	Dec. 5	4.59
12	2.60	13	6.20	19	7.04	12	1.75
14	3.20	20	7.39	27	7.34	18	5.00
21	3.00	27	8.16	Oct. 3	7.85	26	4.73
28	3.42	July 4	8.90				

Luzerne County

Lu-2(D18d-5152). Commonwealth of Pennsylvania. Ricketts Glen State Park. Lat. 41°18'00", long. 76°16'20". Dug unused water-table well in sandstone or shale of Catskill formation, diameter 18 inches, depth 24 feet. Land-surface datum is about 1,290 feet above msl. (Warren A. Cope, voluntary observer.) Highest water level 9.29 below lsd, Dec. 31, 1949; lowest dry several times in 1949, 1951-52. Records available: 1948-52.

Jan. 4	11.30	Mar. 28	10.82	June 20	14.53	Sept. 5	15.76
11	12.08	Apr. 4	11.40	27	15.80	12	15.80
18	11.37	10	11.44	July 7	(f)	19	15.80
25	11.33	18	10.76	11	(f)	26	(f)
Feb. 1	10.89	26	11.61	18	(f)	Oct. 3	(f)
8	10.80	May 2	12.31	25	(f)	10	(f)
15	12.33	9	13.07	Aug. 1	(f)	24	(f)
21	13.09	16	10.53	8	(f)	Nov. 7	(f)
29	14.13	23	11.08	15	(f)	21	(f)
Mar. 7	15.19	31	10.76	22	(f)	Dec. 10	7.50
14	10.23	June 6	11.86	29	(f)	31	12.77
21	11.26	13	13.41				

f Dry.

Lycoming County

Ly-1(D13b-2229). Commonwealth of Pennsylvania. Tiadaghton State Forest. Lat. 41°28'00", long. 77°33'50". Drilled unused water-table well in sandstone of Pottsville or Pocono formation, diameter 4 inches, depth 74 feet. Land-surface datum is about 2,070 feet above msl. (George B. Will, voluntary observer.) Highest water level 16.97 below lsd, Dec. 11, 1950; lowest 30.75 below lsd, Nov. 19, 1951. Records available: 1949-52.

Ly-1(D13b-2229)--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	24.59	Apr. 7	20.78	July 7	26.54	Oct. 20	28.94
15	24.15	21	20.60	14	28.17	27	28.40
21	22.81	29	21.20	21	27.00	Nov. 3	28.78
28	22.05	May 5	22.65	28	26.30	10	28.20
Feb. 11	19.91	12	23.35	Aug. 4	27.80	17	30.60
18	21.87	19	22.68	11	28.36	24	22.95
28	23.50	27	22.11	18	29.00	Dec. 3	29.35
Mar. 4	23.90	June 3	22.71	Sept. 3	28.46	8	27.20
10	24.56	16	23.31	8	29.10	15	26.60
17	23.50	23	25.05	16	29.84	24	23.70
24	22.10	July 1	25.74	Oct. 13	28.97	29	23.80
Apr. 1	20.84						

Mifflin County

Mf-1(G13b-3237). Charles C. Naginey. Naginey. Lat. 40°42'10", long. 77°33'10". Dug unused water-table well in limestone of Ordovician or Cambrian age, diameter 36 inches, depth 28 feet, cased with stone. Land-surface datum is about 680 feet above msl. Highest water level 5.88 below lsd, Dec. 4, 1950; lowest 23.66 below lsd, Sept. 25, 1948. Records available: 1941-42, 1946-52.

Jan. 5	13.25	Apr. 12	16.12	July 8	21.66	Oct. 6	23.19
12	16.52	17	14.97	15	21.98	13	23.19
19	15.22	19	15.24	22	22.19	20	23.20
26	16.36	26	16.11	29	22.16	27	23.24
Feb. 2	15.01	May 5	17.22	Aug. 5	22.41	Nov. 3	23.24
9	15.28	12	16.49	11	20.56	10	23.35
16	18.02	19	16.98	18	21.78	17	23.30
23	19.12	26	14.97	25	22.91	25	15.32
Mar. 1	19.26	June 3	16.91	Sept. 1	20.20	Dec. 1	18.53
8	19.60	9	18.12	8	21.27	8	18.51
15	12.94	16	19.86	15	22.67	16	17.05
22	15.12	24	21.10	22	22.97	23	19.01
29	16.12	30	21.72	29	23.18	29	20.05
Apr. 5	17.20						

Montgomery County

Mg-3(J22a-0622). Gottfried Ott. Near Schwenksville. Lat. 40°14'20", long. 75°27'20". Dug unused water-table well in Brunswick shale, diameter 4 feet, depth 29 feet. Land-surface datum is about 170 feet above msl. Highest water level 6.65 below lsd, Dec. 22, 1949; lowest 13.80 below lsd, Oct. 21, 1949. Records available: 1948-51. No measurement made in 1952.

Mg-4(J22a-4018). Collegeville-Trappe Joint Water Works. West First Ave., Trappe. Lat. 40°11'30", long. 75°27'50". Drilled unused artesian well in Brunswick shale, diameter 8 inches, depth 275 feet. Land-surface datum is about 220 feet above msl. Water levels are affected by pumping of other municipal wells. (Charles J. Smedley, voluntary observer.) Highest water level 12.80 below lsd, Apr. 30, 1952; lowest 78.55 below lsd, Dec. 9, 1949. Records available: 1949-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	20.4	16.9	....	25.7	21.1	23.9	32.7	47.7	51.5	43.0	61.0	44.5
2	25.3	22.4	32.2	21.5	15.6	19.1	38.2	48.2	55.7	49.0	60.7	48.3
3	....	22.8	31.2	27.6	21.9	23.4	38.8	43.8	55.7	49.2	61.2	48.8
4	23.7	17.0	32.5	28.3	22.1	23.5	36.9	43.9	57.0	49.3	57.8	43.4
5	19.4	22.4	....	22.6	17.4	18.1	40.1	48.2	57.2	49.6	57.0	46.6
6	24.6	22.6	....	26.2	23.9	23.7	41.1	48.9	41.2	45.0	62.7	46.8
7	25.0	17.5	....	27.8	24.2	24.0	36.7	44.1	45.1	50.4	63.1	40.2
8	21.9	23.2	28.4	28.0	19.3	19.1	41.8	48.9	45.3	51.0	58.6	41.5
9	26.0	23.6	28.8	28.8	25.7	25.2	42.1	49.2	41.0	46.4	62.8	41.9
10	26.2	18.3	24.9	29.0	26.1	25.4	36.5	48.3	39.2	51.9	63.2	35.7

Mg-4(J22a-4018)--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	21.2	24.7	25.9	22.6	30.0	20.5	41.3	48.8	43.8	52.2	59.3	34.2
12	26.5	25.0	26.0	27.7	26.4	26.5	41.6	45.0	44.4	51.9	63.9	34.0
13	26.9	20.4	18.6	28.0	28.2	27.0	40.5	43.9	39.2	52.2	64.3	25.1
14	21.6	26.3	24.4	22.2	30.6	23.0	40.9	49.3	43.8	49.0	60.4	27.3
15	26.0	26.9	24.6	27.1	31.4	27.8	36.8	49.6	43.8	48.6	64.6	27.6
16	24.5	21.6	23.7	27.5	26.2	28.4	35.7	44.5	39.2	54.5	65.2	21.8
17	....	26.3	24.1	20.4	32.0	29.0	41.1	48.8	44.4	54.6	61.4	27.5
18	....	26.7	20.1	26.8	32.7	30.1	41.5	49.1	44.6	51.0	66.0	28.1
19	....	22.6	25.0	26.8	27.5	25.1	36.2	45.4	39.4	54.5	66.4	23.1
20	26.4	28.0	25.3	21.0	32.3	31.0	41.2	48.8	44.0	54.9	62.9	27.8
21	26.8	28.4	19.2	27.5	32.7	31.3	41.9	49.4	44.5	51.6	66.5	28.2
22	22.5	23.7	24.2	27.8	28.4	30.7	38.2	45.1	39.5	56.2	66.2	22.0
23	23.0	29.2	24.3	22.6	33.6	31.1	43.0	49.8	45.0	56.8	60.5	26.1
24	26.3	29.6	20.2	28.5	35.2	26.8	43.1	50.5	45.3	52.9	60.4	26.3
25	....	24.8	24.0	28.7	32.9	26.9	38.9	46.0	40.7	58.2	55.4	20.4
26	18.9	30.2	24.2	22.2	32.9	33.5	44.3	51.0	46.6	59.0	51.7	25.8
27	....	30.8	18.8	23.6	24.2	35.6	45.2	51.7	47.0	54.0	53.4	25.9
28	....	25.8	24.3	23.5	27.9	31.6	47.0	46.9	46.5	59.2	53.2	26.2
29	....	31.8	24.3	14.5	28.2	35.4	47.3	51.9	46.7	60.1	49.9	26.5
30	....	....	19.6	20.9	27.7	36.0	43.0	51.5	43.2	55.4	50.3	22.2
31	....	....	25.3	....	27.8	....	42.2	51.2	....	60.5	....	21.9

Northampton County

Np-1(G22d-1955). H. Richard Gault. In Lower Saucon Township. Lat. 40°35'50", long. 75°16'10". Dug unused water-table well in Byram granite gneiss, diameter 4 feet, depth 41 feet, cased with stone. Land-surface datum is about 610 feet above msl. (H. Richard Gault, voluntary observer.) Highest water level 12.9 below lsd, May 2, 1952; lowest 31.8 below lsd, Nov. 27-30, Dec. 1, 1952. Records available: 1951-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	21.6	18.5	....	20.6	13.2	21.0	....	27.2	29.6	27.4	....	31.8
2	....	18.3	22.2	20.7	12.9	21.1	....	27.3	29.6	27.5	30.0	31.6
3	....	18.3	22.2	20.9	13.2	21.1	....	27.4	29.6	27.6	30.0	31.5
4	....	18.4	22.2	21.0	13.8	21.0	....	....	29.6	27.6	30.1	31.4
5	....	18.7	22.4	21.0	14.3	20.8	....	....	29.6	27.7	30.2	31.3
6	....	18.8	22.5	20.9	14.8	....	....	....	29.6	27.8	30.2	31.0
7	....	18.8	22.6	20.4	15.4	....	....	....	29.5	27.8	....	31.1
8	....	18.7	22.7	19.4	....	20.4	....	....	29.3	28.0	....	30.9
9	....	18.6	22.9	18.6	....	20.5	24.8	....	....	28.0	30.6	30.6
10	....	18.6	22.9	18.1	16.7	20.6	25.0	....	....	28.1	30.6	30.3
11	....	18.7	22.9	18.2	17.3	20.8	25.1	....	....	28.2	30.7	29.8
12	....	19.0	22.9	18.3	17.8	21.0	25.2	....	....	28.2	30.8	28.9
13	20.8	19.1	....	18.4	18.1	21.2	25.3	....	....	28.2	....	27.0
14	20.9	19.3	....	18.6	18.6	21.4	25.4	....	27.9	28.3	....	24.2
15	21.0	19.5	....	18.8	18.8	21.5	25.5	....	27.8	28.4	....	22.2
16	21.2	19.7	19.2	18.5	19.2	....	25.6	....	27.6	28.5	31.2	21.8
17	21.2	....	19.4	17.2	....	....	....	28.4	27.5	28.6	31.3	21.8
18	21.4	....	19.5	16.2	19.8	....	....	....	27.4	28.7	31.4	21.9
19	21.5	....	19.8	15.8	20.0	....	....	....	27.3	28.8	31.4	22.1
20	21.5	....	19.9	15.7	20.2	22.5	....	....	27.2	28.9	31.4	22.2
21	21.5	....	20.1	....	20.4	22.6	....	....	27.2	29.0	31.5	22.4
22	21.5	....	20.2	....	20.6	22.7	....	....	27.2	29.1	31.5	22.6
23	21.5	....	20.3	....	....	22.8	26.3	....	27.2	29.2	31.6	....
24	21.5	21.1	20.4	....	....	23.0	26.4	29.2	27.2	29.2	31.7	....
25	21.5	21.3	20.5	....	21.3	23.0	26.5	29.3	27.2	29.5	31.7	....
26	21.2	21.4	20.6	....	21.5	23.2	....	29.3	27.2	....	31.7	22.9
27	21.1	21.5	20.6	18.0	21.6	23.3	....	29.4	27.2	....	31.8	23.0
28	20.8	....	20.5	18.0	21.6	....	....	29.4	27.3	....	31.8	23.0
29	20.2	....	20.5	17.3	....	....	....	29.5	27.3	....	31.8	23.0
30	19.6	....	20.6	14.9	21.3	....	27.0	29.6	27.4	....	31.8	23.0
31	18.9	....	20.6	....	21.2	....	27.1	....	....	....	....	....

Perry County

Pe-2(H15a-1461). Bertha Demaree. 29 North Third St., Newport. Lat. 40°28'40", long. 77°08'00". Dug unused water-table well in sandstone of Chemung formation, diameter 36 inches, depth 20 feet, cased with stone. Land-surface datum is about 400 feet above msl. (Mrs. Frances K. Fry, voluntary observer.) Water levels in reports prior to 1952 are recorded 0.4 above lsd. Highest water level 7.18 below lsd, Apr. 27, 1940; lowest 18.19 below lsd, May 28, 1943. Records available: 1931-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	13.68	Apr. 6	9.98	July 6	13.58	Oct. 5	14.64
8	13.70	13	10.30	20	13.90	11	14.68
12	13.32	20	9.40	26	14.18	18	14.72
27	12.03	May 2	10.00	Aug. 2	14.32	21	15.09
Feb. 2	12.01	4	8.70	8	14.48	Nov. 1	15.36
10	11.22	17	9.70	10	13.74	8	15.53
12	11.37	26	9.87	17	14.32	15	15.51
16	11.28	June 1	10.30	23	14.39	29	15.25
23	11.58	7	10.29	30	14.54	Dec. 6	15.31
Mar. 3	11.03	15	12.18	Sept. 7	14.10	13	15.38
20	10.88	22	12.82	9	12.12	20	15.43
22	10.69	29	13.30	20	14.26	27	15.38
30	10.90	July 2	13.58	27	14.30		

Pe-3(G15c-4363). I. L. Zeigler. Near Millerstown. Lat. 40°33'40", long. 77°07'40". Dug unused water-table well in weathered shale of Cayuga group, diameter 4 feet, depth 12 feet, cased with stone. Land-surface datum is about 460 feet above msl. Highest water level 1.63 below lsd, May 7, 1943; lowest 9.33 below lsd, Dec. 11, 1939. Records available: 1936-48, 1950-52. Jan. 7, 2.04; Mar. 19, 2.55; July 1, 2.65; Sept. 8, 2.71.

Philadelphia County

Ph-11. Formerly Ph-2a. U. S. Navy Department, Naval Base. League Island, Philadelphia. Lat. 39°53'40", long. 75°10'20". Drilled observation artesian well in sand of Cretaceous age ("middle" aquifer), diameter 8 inches, depth 237 feet (10 feet into rock), cased to 94, screen 94-104. Land-surface datum is 9.41 feet above msl. Water levels are affected by pumping of well 1,800 feet distant. Mean daily range of fluctuation caused by tidal loading, 0.2 foot. Highest water level 25.98 below lsd, June 1, 1952; lowest 37.01 below lsd, Mar. 10, 1950. Records available: 1945-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	31.1	33.2	31.8	30.3	30.5	27.0	31.7	32.1	28.5	30.4	30.1	29.7
2	32.0	32.9	31.2	30.2	30.2	28.5	31.8	32.1	29.8	29.9	29.2	29.7
3	32.7	30.9	31.7	30.6	29.4	28.5	31.7	31.8	30.7	29.8	29.7	30.1
4	33.3	30.6	31.7	31.0	28.3	29.2	31.5	31.1	30.6	29.6	29.8	30.4
5	33.3	31.4	32.2	31.0	28.8	29.4	28.9	32.0	31.9	27.4	29.7	30.4
6	32.1	32.6	32.7	29.0	29.3	29.1	28.6	32.1	31.4	29.6	29.6	30.1
7	33.0	32.6	32.7	30.8	30.0	29.7	30.2	32.2	29.2	29.4	30.6	28.8
8	33.0	32.7	32.5	31.1	30.0	28.7	30.8	32.2	29.7	29.7	30.6	29.7
9	33.0	32.7	31.3	31.1	30.4	29.4	30.8	31.9	29.8	29.6	29.1	30.1
10	33.0	30.3	31.8	30.9	30.7	30.0	30.3	31.5	30.1	29.6	27.7	30.6
11	33.6	31.1	31.5	30.9	30.7	30.2	31.0	31.0	30.1	29.5	27.9	30.4
12	33.6	32.1	31.1	30.4	29.2	30.2	31.0	31.1	30.2	27.6	28.9	30.7
13	31.6	32.6	31.2	29.2	29.6	30.5	29.4	31.2	30.8	28.7	28.9	30.7
14	32.3	33.0	31.4	29.7	29.5	30.7	30.4	31.5	28.5	29.2	29.8	29.6
15	32.9	33.0	31.3	29.9	29.2	30.5	31.0	31.5	29.6	29.9	29.7	29.8
16	33.2	32.9	29.8	29.9	29.1	31.0	31.5	31.3	29.7	29.9	28.7	30.5
17	33.2	31.4	30.4	30.3	28.0	31.4	31.7	30.0	29.8	29.9	29.4	31.3
18	32.7	31.8	31.2	30.3	27.4	31.7	31.7	31.0	30.5	29.6	29.5	31.5
19	32.7	31.9	31.2	30.0	28.4	31.9	31.4	31.3	30.8	28.8	29.5	31.7
20	31.2	32.0	31.4	28.7	29.2	32.0	29.8	31.6	30.3	29.6	29.4	31.7
21	32.5	32.1	31.3	30.0	29.1	31.9	30.4	31.9	28.9	30.2	29.2	29.4
22	32.5	32.1	30.6	30.0	29.5	30.8	31.5	32.2	30.2	30.3	29.0	30.4
23	32.2	31.4	29.4	30.2	30.0	29.7	31.7	32.1	30.4	30.3	27.3	30.4
24	32.9	31.2	30.3	30.2	29.7	30.8	32.7	30.4	30.6	29.9	29.0	30.0
25	33.2	31.7	30.9	30.2	27.8	31.0	32.7	31.3	30.7	29.4	30.0	29.6
26	33.1	31.7	30.8	29.8	28.1	31.4	32.6	32.1	30.7	28.1	30.0	28.6
27	31.1	31.7	30.8	28.5	29.3	31.6	32.0	32.1	30.6	28.9	29.8	28.4
28	31.3	31.7	31.1	28.3	29.7	31.8	30.9	32.1	29.9	29.4	28.4	28.5
29	32.1	31.8	31.0	29.4	30.3	31.7	31.5	31.9	30.2	29.9	29.0	28.8
30	32.8		29.8	30.2	30.3	31.2	31.9	30.9	30.1	30.3	28.6	29.9
31	33.2		30.3		28.7		32.2	29.8		30.3		30.2

Ph-12. Formerly Ph-2b. U. S. Navy Department, Naval Base. League Island, Philadelphia. Lat. 39°53'40", long. 75°10'20". Drilled observation artesian well in sand of Cretaceous age ("middle" aquifer), diameter 8 inches, depth 110 feet, cased to 94, screen 94-104. Land-surface datum is 10.44 feet above msl. Water levels are affected by pumping of well 1, 100 feet distant. Mean daily range of fluctuation caused by tidal loading, 0.2 foot. Highest water level 26.08 below lsd, June 1, 1952; lowest 36.17 below lsd, Mar. 10, 1950. Records available: 1944-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	30.4	32.1	30.7	29.9	29.8	26.5	30.9	31.2	28.0	30.0	29.1	29.1
2	31.7	31.0	30.5	29.9	29.3	28.5	31.1	31.2	29.4	29.0	28.3	29.0
3	32.2	30.2	31.3	30.5	28.7	28.0	30.9	30.4	29.6	29.3	29.4	29.6
4	32.7	31.3	31.0	30.7	27.7	28.7	30.2	30.6	29.7	28.7	29.4	29.7
5	32.1	....	31.6	30.7	28.7	28.9	28.3	31.2	31.0	27.2	29.1	29.3
6	31.1	31.8	32.0	28.6	28.9	29.1	28.3	31.2	29.5	29.4	29.2	28.9
7	32.5	32.0	32.0	30.6	29.7	28.9	29.7	31.3	28.5	29.0	30.0	28.0
8	32.2	32.0	31.1	30.9	29.1	27.6	30.0	31.2	29.2	29.4	30.0	29.2
9	32.4	31.9	30.5	30.5	29.8	29.0	29.3	30.7	29.7	29.1	28.4	29.5
10	32.0	30.0	31.3	30.6	29.5	29.2	29.6	30.4	29.6	29.3	27.6	29.7
11	33.0	29.8	30.7	30.4	29.2	29.5	30.2	30.4	29.8	28.6	27.8	29.6
12	32.5	31.2	....	29.5	29.0	29.4	29.3	30.5	29.6	27.3	28.8	29.8
13	31.0	32.0	30.6	28.6	29.3	29.9	28.4	30.6	29.7	28.6	29.5	29.4
14	31.9	32.3	30.8	30.0	28.6	30.1	29.8	30.8	28.1	28.8	29.4	28.5
15	32.4	32.1	30.2	29.7	28.7	29.4	30.2	30.8	28.9	29.4	29.0	29.3
16	32.8	31.6	28.7	29.4	28.4	30.3	30.5	30.0	28.9	29.3	28.0	29.7
17	32.5	30.3	30.1	29.9	27.8	30.4	30.8	28.9	28.9	29.3	29.2	30.5
18	32.2	31.5	30.9	29.8	27.3	30.7	30.6	30.4	29.6	28.8	29.2	30.8
19	31.6	31.6	30.6	29.1	28.1	30.9	30.0	30.2	29.9	28.0	29.0	30.9
20	30.4	31.3	30.8	28.3	28.3	31.1	28.7	30.9	28.9	29.4	28.4	30.9
21	32.2	31.7	30.2	29.7	28.9	30.5	29.7	31.0	28.1	29.9	28.5	28.7
22	31.8	31.4	29.9	29.4	29.1	29.0	30.6	31.4	29.8	29.6	27.9	....
23	32.0	30.7	28.9	29.7	29.6	29.6	30.8	31.0	29.9	29.4	27.0	29.5
24	32.4	30.4	30.2	29.7	28.2	....	31.5	29.3	30.1	29.3	28.9	29.3
25	32.6	31.3	30.5	29.5	27.6	30.1	31.5	30.6	30.2	28.6	29.4	28.8
26	32.1	30.9	30.5	28.8	28.0	30.4	31.4	31.2	30.0	27.9	29.3	28.0
27	30.3	31.2	30.4	....	29.0	30.7	30.7	31.3	29.7	28.6	28.9	27.9
28	31.9	31.0	30.7	....	29.2	31.0	30.3	31.4	28.9	29.0	28.3	28.0
29	....	31.3	30.1	....	29.7	30.2	30.8	30.8	29.9	29.5	28.6	28.2
30	32.2	29.4	29.3	....	29.1	30.6	31.1	29.8	29.2	29.8	28.9	29.1
31	32.5	....	30.1	....	27.8	....	31.2	29.1	....	29.7	....	29.4

Ph-13. Formerly Ph-2c. U. S. Navy Department, Naval Base. League Island, Philadelphia. Lat. 39°53'30", long. 75°10'20". Drilled observation artesian well in sand and gravel of Pleistocene or Recent age, diameter 8 inches, depth 73 feet, cased to 54, screen 54-63. Land-surface datum is 11.83 feet above msl. Mean daily range of fluctuation caused by tidal loading, 0.1 foot. Highest water level 24.03 below lsd, May 26, 1952; lowest 31.23 below lsd, Mar. 11, 1950. Records available: 1945-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	28.7	27.0	26.4	25.7	25.1	....	25.8	26.2	25.3	25.2	25.7	25.1
2	28.6	26.8	26.5	25.6	25.2	....	25.8	26.1	24.8	25.1	25.7	25.1
3	28.8	26.7	26.5	25.8	25.2	....	25.8	26.1	25.3	25.5	25.4	25.0
4	28.9	26.2	26.4	25.9	25.1	24.4	25.7	25.9	25.4	25.4	25.5	25.1
5	28.6	26.0	26.5	25.7	25.0	24.6	25.6	26.0	25.6	25.3	25.5	25.0
6	28.7	26.4	26.8	25.4	24.9	24.6	25.5	26.1	25.6	25.1	25.6	24.8
7	28.7	26.5	26.8	25.7	25.2	24.8	25.4	26.2	25.4	25.2	25.8	24.9
8	28.7	26.6	26.8	26.0	25.2	24.8	25.2	26.2	25.4	25.2	25.9	24.9
9	28.5	26.5	26.7	26.1	25.1	24.7	25.1	26.2	25.3	25.2	25.9	25.0
10	28.8	26.4	26.6	26.0	25.0	24.6	25.1	25.9	25.2	25.3	25.3	25.0
11	29.3	26.2	26.1	26.0	25.1	24.9	25.3	25.7	25.3	25.3	25.2	24.8
12	29.3	26.6	26.2	26.0	25.0	25.0	25.4	25.7	25.2	25.0	25.2	25.0
13	29.0	26.8	26.1	25.8	25.1	25.1	25.4	25.8	25.2	24.8	25.4	25.1
14	28.7	26.9	26.2	25.2	25.1	25.2	25.1	25.9	25.1	25.0	25.4	25.1
15	28.8	27.0	26.2	25.4	25.0	25.1	25.2	25.9	24.9	25.0	25.4	25.0
16	29.1	27.0	25.9	25.5	25.0	25.1	25.5	25.7	24.8	25.2	25.3	25.3
17	29.1	26.4	26.2	25.5	25.1	25.1	25.7	25.6	25.0	25.4	25.3	25.5
18	27.4	26.7	26.3	25.5	24.8	25.4	25.7	25.6	25.1	25.4	25.3	25.9
19	27.4	26.7	26.3	25.6	24.8	25.5	25.5	25.8	25.3	25.0	25.2	26.0
20	27.0	26.8	26.0	25.4	24.7	25.8	25.3	25.8	25.4	25.5	24.9	26.0

Ph-13--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	27.2	26.5	26.0	25.5	24.7	25.9	25.2	25.8	25.4	25.6	24.7	25.5
22	27.3	26.7	26.0	25.6	25.0	25.8	25.5	26.1	25.3	25.6	....	25.2
23	27.0	26.8	25.8	25.6	25.1	25.6	25.5	26.1	25.4	25.5	....	25.2
24	27.4	26.5	25.7	25.8	25.1	25.3	26.0	26.1	25.5	25.4	....	25.1
25	27.6	26.4	25.9	25.6	24.8	25.3	26.2	25.9	25.6	25.6	24.9	25.2
26	27.2	26.5	25.9	25.4	....	25.4	26.2	26.0	25.5	25.6	24.9	25.1
27	....	26.3	25.9	25.2	....	25.7	26.1	26.1	25.5	25.2	24.8	25.0
28	26.3	26.0	26.0	24.8	24.7	25.8	25.8	26.1	25.5	24.9	25.0	25.3
29	26.8	26.2	26.1	24.7	24.9	25.7	25.8	26.0	25.4	25.4	25.1	25.2
30	27.0		26.2	24.9	25.0	25.6	26.0	25.8	25.2	25.7	25.0	25.2
31	27.0		26.1		24.9		26.1	25.8		25.7		25.2

Ph-14. Formerly Ph-2d. U. S. Navy Department, Naval Base. League Island, Philadelphia. Lat. 39°53'30", long. 75°10'10". Drilled observation artesian well in sand and gravel of Pleistocene or Recent age, diameter 3 inches, depth 70 feet, cased to 46, screen 46-56. Land-surface datum is 11.28 feet above msl. Mean daily range of fluctuation caused by tidal loading, 0.1 foot. Highest water level 26.4 below lsd, Dec. 2, 1952; lowest 33.22 below lsd, Mar. 10, 31, 1950. Records available: 1945-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	29.9	29.7	28.9	28.1	27.4	26.5	28.3	28.6	27.6	27.4	27.7	27.1
2	30.0	29.4	29.0	28.0	27.4	26.6	28.3	28.6	27.2	27.3	27.7	26.4
3	30.2	29.1	28.9	28.2	27.4	26.6	28.2	28.5	27.6	27.7	27.4	27.2
4	30.2	28.6	28.9	28.3	27.2	26.7	28.0	28.2	27.7	27.7	27.5	27.3
5	30.0	28.6	29.1	28.2	27.1	26.8	27.7	28.5	27.9	27.2	27.5	27.2
6	29.9	29.0	29.3	27.7	27.1	26.8	27.6	28.5	27.9	27.1	27.3	26.9
7	30.1	29.1	29.4	28.2	27.4	26.9	27.5	28.7	27.5	27.3	28.0	27.0
8	30.0	29.1	29.4	28.5	27.4	26.9	27.5	28.7	27.6	27.4	28.0	27.1
9	30.0	29.0	29.1	28.5	27.2	26.8	27.3	28.5	27.6	27.3	27.9	27.2
10	30.2	28.8	29.0	28.5	27.2	26.9	27.4	28.2	27.6	27.4	27.2	27.2
11	30.7	28.6	28.7	28.4	27.2	27.0	27.7	28.0	27.5	27.4	27.2	27.1
12	30.7	29.0	28.6	28.4	27.1	27.2	27.8	28.1	27.5	27.0	27.3	27.3
13	30.3	29.3	28.6	28.1	27.2	27.5	27.6	28.1	27.5	26.9	27.5	27.4
14	30.1	29.4	28.7	....	27.2	27.5	27.5	28.2	27.3	27.1	27.6	27.3
15	30.2	29.5	28.7	27.7	27.2	27.4	27.6	28.2	27.1	27.1	27.6	....
16	30.5	29.5	28.2	27.8	27.2	27.4	28.0	28.1	26.9	27.3	27.6	27.5
17	30.6	28.9	28.5	27.8	27.2	27.4	28.2	27.7	27.1	27.4	27.5	27.8
18	29.8	29.2	28.8	27.8	27.0	27.8	28.1	27.9	27.3	27.4	27.3	28.1
19	29.8	29.2	28.8	27.8	26.9	27.9	27.9	28.1	27.4	27.1	27.0	28.1
20	29.3	29.3	28.5	27.6	26.9	28.2	27.6	28.2	27.5	27.5	26.8	28.1
21	29.7	29.1	28.4	27.8	26.9	28.2	27.6	28.2	27.4	27.7	26.7	27.7
22	29.7	29.2	28.3	27.8	27.1	28.0	27.9	28.5	27.4	27.7	26.7	27.6
23	29.6	29.2	28.2	27.8	27.3	27.6	27.9	28.5	27.7	27.6	26.6	27.6
24	30.0	29.0	28.1	27.9	27.3	27.5	28.4	28.4	27.8	27.5	27.0	27.4
25	30.1	29.0	28.3	27.9	26.9	27.5	28.6	28.2	27.8	27.5	27.2	27.3
26	29.8	29.0	28.3	27.6	26.5	27.7	28.6	28.4	27.8	27.6	27.1	27.1
27	29.0	28.8	28.3	27.4	26.8	28.0	28.4	28.5	27.7	27.2	26.9	26.9
28	28.7	28.5	28.4	26.9	26.9	28.2	28.0	28.4	27.7	27.0	27.1	....
29	29.5	28.7	28.5	27.0	27.2	28.1	28.1	28.3	27.5	27.6	27.1	....
30	29.6		28.5	27.1	27.2	28.1	28.3	28.2	27.5	27.7	26.8	27.1
31	29.7		28.3		27.0		28.6	28.0		27.7		27.2

Ph-15. Formerly Ph-2f. U. S. Navy Department, Naval Base. League Island, Philadelphia. Lat. 39°53'20", long. 75°10'10". Drilled observation artesian well in sand and gravel of Pleistocene or Recent age, diameter 3 inches, depth 82 feet, cased to 59, screen 59-69. Land-surface datum is 11.87 feet above msl. Mean daily range of fluctuation caused by tidal loading, 0.1 foot. Highest water level 26.1 below lsd, May 26, 1952; lowest 32.89 below lsd, Mar. 31, 1950. Records available: 1945-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	29.9	29.0	28.3	27.6	26.9	26.2	27.7	....	27.1	27.0	27.4	26.8
2	29.9	28.7	28.5	27.5	26.9	26.2	27.7	....	27.1	27.0	27.4	26.8
3	30.1	28.6	28.4	27.7	27.0	26.2	27.6	....	27.3	27.3	27.1	26.9
4	30.2	28.0	28.3	27.8	26.8	26.2	27.6	27.7	27.4	27.3	27.2	26.9
5	30.0	28.0	28.6	27.7	26.7	26.4	27.3	27.8	27.4	27.0	27.2	26.8

Ph-15--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	29.9	28.3	28.8	27.3	26.7	26.4	27.2	27.9	27.4	26.8	26.9	26.6
7	30.0	28.5	28.8	27.7	27.0	26.6	27.1	28.1	27.2	27.0	27.6	26.7
8	30.0	28.6	28.8	28.0	27.0	26.5	27.0	28.1	27.2	27.0	27.7	26.8
9	29.9	28.4	28.6	28.0	26.8	26.4	26.9	28.0	27.1	27.0	27.6	26.8
10	30.2	28.3	28.5	27.9	26.8	26.4	27.0	27.8	27.1	27.1	26.9	26.8
11	30.7	28.0	28.1	27.9	26.8	26.6	27.2	27.5	27.1	27.1	26.8	26.7
12	30.7	28.5	28.1	27.9	26.7	26.8	27.3	27.6	27.0	26.7	27.0	26.8
13	30.3	28.7	28.1	27.7	26.8	27.0	27.2	27.7	27.1	26.6	27.1	27.0
14	30.1	28.9	28.2	....	26.8	27.0	27.0	27.8	26.9	26.8	27.2	27.0
15	30.1	29.0	28.2	27.1	26.7	26.9	27.1	27.8	26.7	26.2	27.2	26.8
16	30.4	29.0	27.7	27.2	26.8	27.0	27.4	27.7	26.5	26.9	27.0	27.1
17	30.5	28.4	28.1	27.3	26.9	27.0	27.6	27.4	26.7	27.1	27.1	27.3
18	29.3	28.6	28.2	27.3	26.6	27.3	27.6	27.5	26.9	27.0	27.1	27.7
19	29.3	28.7	28.2	27.4	26.5	27.4	27.3	27.6	27.1	26.8	26.8	27.9
20	28.8	28.7	28.0	27.1	26.4	27.8	27.1	27.6	27.1	27.2	26.6	27.9
21	29.2	28.5	27.9	27.3	26.5	27.8	27.1	27.6	27.1	27.3	26.4	27.3
22	....	28.7	27.9	27.3	26.7	27.6	27.3	27.9	27.0	27.3	26.3	27.1
23	29.0	28.7	27.8	27.4	26.9	27.3	27.3	27.9	27.3	27.3	26.3	27.1
24	29.4	28.5	27.6	27.5	26.9	27.1	27.8	27.9	27.4	27.1	26.7	27.0
25	29.4	28.4	27.8	27.5	26.5	27.0	....	27.7	27.5	27.2	26.7	27.0
26	29.2	28.4	27.8	27.3	26.1	27.2	....	27.8	27.3	27.2	26.7	26.8
27	28.4	28.2	27.8	27.1	26.4	27.4	27.8	27.8	27.3	26.9	26.6	26.7
28	28.2	27.9	28.0	26.6	26.4	27.6	27.5	27.8	27.3	26.6	26.7	26.9
29	28.7	28.1	28.0	26.5	26.7	27.5	27.6	27.8	27.1	27.2	26.8	26.8
30	29.0	....	28.0	26.6	26.7	27.5	27.8	27.7	27.1	27.4	26.6	26.7
31	29.0	....	27.9	....	26.6	....	27.9	27.6	....	27.4	....	26.7

Ph-16. Formerly Ph-29. U. S. Navy Department, Naval Base. League Island, Philadelphia. Lat. 39°53'30", long. 75°10'20". Drilled observation artesian well in sand and gravel of Pleistocene or Recent age, diameter 3 inches, depth 84 feet, cased to 52, screen 52-62. Land-surface datum is 10.63 feet above msl. Mean daily range of fluctuation caused by tidal loading, 0.1 foot. Highest water level 24.0 below lsd, May 26, June 2, 1952; lowest 30.58 below lsd, Mar. 31, 1950. Records available: 1945-52. Measurement discontinued.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	27.9	26.9	26.3	25.5	24.8	24.1	25.5	26.1	25.2	....	25.4	....
2	27.8	26.6	26.4	25.4	24.9	24.0	25.6	26.0	24.6	24.8	25.3	....
3	28.1	26.6	26.4	25.6	24.9	24.1	25.6	25.9	25.1	25.2	25.0	....
4	28.1	26.0	26.2	25.7	24.8	24.1	25.5	25.7	25.2	....	25.2	....
5	28.0	25.9	26.4	25.5	24.6	24.3	25.3	25.8	25.3	....	25.2	....
6	27.9	26.3	26.6	25.2	24.6	24.3	25.2	25.8	25.3	....	24.9	....
7	28.0	26.4	26.7	25.5	24.9	24.5	25.1	26.0	25.1	....	25.6	....
8	27.9	26.5	26.7	25.8	24.9	24.5	25.0	26.0	25.1	....	25.6	....
9	27.9	26.4	26.5	25.9	24.8	24.3	24.9	25.9	25.1	24.9	25.6	....
10	28.2	26.2	26.4	25.7	24.7	24.3	24.8	25.6	25.0	25.0	25.0	....
11	28.7	26.0	26.1	25.8	24.7	24.7	25.1	25.4	25.0	25.0	24.9	....
12	28.6	26.4	26.0	25.8	24.7	24.8	25.2	25.5	25.0	24.8	24.9	....
13	28.4	26.6	25.9	25.6	24.8	24.9	25.1	25.6	25.0	24.5	25.1	....
14	28.1	26.7	26.0	24.9	24.8	25.0	24.9	25.8	24.8	24.7	25.1	....
15	28.1	26.8	26.0	25.1	24.7	24.9	25.0	25.8	24.7	24.7	....	....
16	28.4	26.8	25.6	25.1	....	24.9	25.3	25.6	24.6	....	....	....
17	28.5	26.2	26.0	25.2	....	24.9	25.5	25.4	24.7	....	....	....
18	27.2	26.5	26.1	25.2	....	25.2	25.5	25.5	24.8	....	....	....
19	27.3	26.5	26.1	25.3	....	25.3	25.3	25.6	25.0	....	24.6	....
20	26.8	26.6	25.8	25.1	....	25.7	25.1	25.6	25.1	....	....	....
21	27.1	26.4	25.8	25.2	24.3	25.8	25.0	25.6	25.1	....	....	....
22	27.1	26.5	25.8	25.2	24.6	25.6	25.3	25.9	25.0	25.2	....	....
23	26.8	26.6	25.6	25.4	24.8	....	25.3	25.9	25.2	25.2	....	....
24	27.3	26.4	25.4	25.5	24.8	....	25.8	25.9	25.3	25.1	....	....
25	27.4	26.2	25.7	25.4	24.5	....	26.0	25.7	25.3	25.3	....	....
26	27.1	26.3	25.7	25.2	24.0	25.1	26.0	25.8	25.2	25.3	....	....
27	26.4	26.1	25.7	25.0	24.2	25.4	25.9	25.9	25.2	....	....	....
28	26.2	25.8	25.9	24.5	24.3	25.5	25.5	25.9	25.2	....	....	....
29	26.8	26.0	26.0	24.5	24.6	25.5	25.6	25.8	....	25.2	....	....
30	26.9	....	26.0	24.6	24.7	25.4	25.6	25.7	....	25.4	....	....
31	26.9	....	25.9	....	24.5	....	25.9	25.6	....	25.4	....	....

Ph-18. Formerly Ph-2i. U. S. Navy Department, Naval Base. League Island, Philadelphia. Lat. 39°53'40", long. 75°10'00". Drilled observation artesian well in sand and gravel of Cretaceous age ("lower" aquifer), diameter 8 inches, depth 218 feet (2 feet into rock), cased to 207, screen 207-212. Land-surface datum is 12.70 feet above msl. Water levels are affected by pumping of 6 Naval Base water-supply wells and 2 Pennsylvania Railroad wells. Mean daily range of fluctuation caused by tidal loading, 0.4 foot. Highest water level 33.3 below lsd, Nov. 25, 1950. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	37.5	44.6	42.0	40.3	42.4	....	43.9	44.1	34.5	41.1	39.8	39.9
2	41.8	43.9	40.9	40.2	40.7	38.7	44.1	43.7	40.5	40.9	37.2	40.0
3	44.1	39.3	42.6	40.4	38.2	39.0	43.6	42.7	42.4	39.8	39.6	41.2
4	45.5	41.7	42.9	42.3	35.7	40.1	42.6	42.2	40.8	37.4	39.6	41.4
5	45.0	42.9	44.0	42.3	38.2	40.2	35.9	44.1	43.6	33.2	30.1	41.5
6	41.6	44.5	44.6	36.9	40.3	41.3	36.0	43.8	40.9	40.1	30.9	39.3
7	44.6	44.8	44.4	42.1	40.9	40.9	41.4	43.4	37.9	38.1	40.5	36.6
8	44.8	45.6	42.3	42.7	40.0	38.2	42.7	43.4	39.8	39.1	40.2	39.4
9	45.3	45.5	40.4	41.0	42.4	40.6	40.6	43.1	40.3	38.8	30.3	40.4
10	45.0	37.9	42.4	41.0	42.7	41.6	42.2	42.7	40.0	39.6	34.6	42.5
11	46.0	41.2	42.1	42.0	42.7	41.9	42.4	42.2	40.5	37.8	31.7	41.2
12	45.7	43.2	41.9	40.2	39.4	41.9	42.9	41.8	42.3	....	37.8	41.4
13	38.6	44.5	42.9	36.5	40.3	42.2	36.2	41.4	43.0	....	30.8	41.3
14	43.6	45.0	42.4	40.6	38.4	42.2	41.7	41.6	36.9	....	30.6	37.7
15	44.3	44.1	40.7	40.4	38.8	42.0	42.9	43.3	41.4	....	30.6	39.6
16	45.0	43.2	36.5	39.2	38.1	43.1	43.7	41.1	40.4	....	30.5	41.7
17	44.8	40.3	38.9	39.7	35.3	43.6	44.2	38.2	40.3	....	30.4	42.9
18	44.3	42.5	40.3	39.7	33.4	44.6	43.8	42.9	42.4	....	30.7	43.0
19	43.2	42.4	41.3	38.6	37.8	44.7	42.8	43.1	42.1	....	30.9	42.8
20	39.0	42.3	42.2	36.4	39.6	44.1	47.8	43.5	39.2	....	30.7	42.0
21	43.5	43.6	41.0	39.3	39.2	43.8	41.8	43.6	35.6	....	30.8	36.5
22	44.2	43.2	40.7	39.5	39.9	39.7	43.5	45.0	40.7	....	33.7	41.3
23	44.2	40.7	36.0	39.9	40.8	39.7	44.5	43.7	40.7	....	33.7	41.3
24	44.2	40.2	40.6	39.9	38.7	42.0	45.4	38.5	40.6	39.7	30.1	39.3
25	44.9	42.1	41.8	39.7	34.6	42.7	45.2	42.8	40.9	38.2	40.9	38.9
26	44.3	41.6	41.1	39.0	37.2	43.6	44.6	44.4	40.9	34.4	41.3	35.8
27	40.9	44.0	41.6	36.0	40.0	43.8	43.4	44.3	40.9	39.2	39.0	35.7
28	42.1	43.8	41.1	37.8	40.4	43.7	42.4	44.4	39.0	39.3	36.8	36.1
29	43.0	43.4	40.7	39.2	42.0	42.9	43.3	43.2	40.7	39.7	37.6	38.2
30	44.4		37.5	42.2	41.4	42.1	43.9	40.2	40.1	40.3	35.5	40.2
31	44.8		39.6		36.2		43.8	38.2		40.1		41.2

Ph-19. Formerly Ph-2j. U. S. Navy Department, Naval Base. League Island, Philadelphia. Lat. 39°53'10", long. 75°10'00". Drilled observation artesian well in sand and gravel of Cretaceous age ("lower" aquifer), diameter 8 to 6 inches, depth 274 feet (15 feet into rock), cased to 242, screen 242-247. Land-surface datum is 10.68 above msl. Water levels are affected by pumping of 6 Naval Base water-supply wells and by Texas Co. wells on New Jersey side of river. Mean daily range of fluctuation caused by tidal loading, 2.1 feet. Highest water level 29.55 below lsd, Nov. 25, 1950; lowest 61.00 below lsd, Mar. 11, 1950. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	44.8	53.7	50.4	48.5	52.2	35.9	51.6	52.0	40.3	49.9	47.7	49.6
2	48.5	53.3	49.6	48.6	48.9	....	52.2	52.0	50.3	48.5	44.8	39.7
3	42.9	45.5	50.4	49.1	46.5	....	52.3	50.2	52.8	43.7	50.4	40.0
4	54.6	49.5	51.2	50.1	42.6	....	51.5	49.8	51.4	40.3	48.8	41.3
5	54.5	50.2	52.8	50.3	45.8	....	40.5	52.0	53.4	37.4	47.9	41.0
6	47.8	53.7	54.1	43.6	48.3	....	39.8	52.4	50.8	45.7	47.2	39.2
7	53.2	54.2	53.4	49.5	50.4	....	48.8	52.6	46.7	45.1	50.2	34.5
8	53.5	54.3	50.5	49.7	49.3	....	50.6	52.4	49.0	46.7	48.2	38.3
9	54.2	52.0	49.2	48.1	52.4	....	48.3	51.7	49.4	51.4	40.7	51.2
10	53.4	44.7	50.5	49.4	53.0	....	50.4	51.2	49.6	53.8	39.9	52.5
11	55.3	50.1	50.3	48.1	....	50.2	50.6	49.8	49.9	45.2	41.3	52.0
12	53.0	51.9	50.3	44.8	....	50.2	50.8	49.9	51.2	38.1	44.8	50.6
13	45.4	53.5	50.7	41.6	....	50.4	42.0	50.1	53.6	44.6	48.3	50.6
14	52.0	54.6	50.2	48.0	46.1	51.2	47.6	50.4	42.0	46.3	46.0	44.6
15	53.4	53.5	47.8	48.0	46.4	50.5	51.0	51.0	50.4	59.8	44.4	48.2
16	54.0	51.8	43.2	47.2	45.3	52.1	52.2	49.8	51.5	....	42.6	51.7
17	52.4	48.2	47.6	47.6	39.9	53.0	52.3	43.7	51.1	....	45.4	52.9
18	52.1	50.4	48.9	48.0	38.6	54.0	52.4	50.6	52.8	....	46.5	53.9
19	50.2	50.8	49.7	46.0	45.1	54.5	51.5	51.7	52.4	....	46.3	52.9
20	46.4	51.0	51.0	43.3	47.5	53.8	44.1	52.0	48.3	....	46.7	52.6

Ph-19--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	50.1	51.5	50.3	47.7	46.6	53.3	50.0	52.1	43.2	....	46.1	44.7
22	51.4	51.7	49.5	48.0	47.4	43.2	52.6	51.9	50.0	....	42.4	50.1
23	51.0	49.5	42.9	49.5	48.8	46.2	53.6	50.4	50.2	49.6	37.2	50.2
24	52.6	48.6	48.9	48.8	40.9	50.7	55.5	44.8	50.2	58.4	44.5	48.9
25	52.9	50.7	49.2	47.8	40.5	51.7	55.5	53.3	51.4	47.1	48.2	48.1
26	50.5	49.5	48.9	47.0	....	52.8	53.8	54.4	51.4	40.7	49.6	43.5
27	47.3	52.8	49.5	42.8	....	52.9	52.3	54.3	51.0	56.9	45.0	43.1
28	49.8	51.4	50.0	45.9	47.6	53.2	48.0	54.8	47.1	56.0	43.3	....
29	51.0	52.2	49.1	47.3	50.7	52.4	51.4	52.6	50.5	59.2	44.0	....
30	51.1	44.7	51.9	49.6	47.8	52.4	49.9	47.9	59.8	40.2	50.4	51.2
31	53.8	48.3	....	....	40.1	....	52.4	46.0	....	62.0	....	....

Ph-20. Formerly Ph-2k. U. S. Navy Department, Naval Base. League Island, Philadelphia. Lat. 39°53'10", long. 75°10'40". Drilled observation artesian well in sand and gravel of Cretaceous age ("lower" aquifer), diameter 8 inches, depth 269 feet (19 feet into rock), cased to 238, screen 238-243. Land-surface datum is 13 feet above msl. Water levels are affected by pumping of 6 Naval Base water-supply wells and by Texas Co. wells on New Jersey side of river. Mean daily range of fluctuation caused by tidal loading, 1.7 feet. Lowest water level 59.54 below lsd, Feb. 3, 1950. Records available: 1946-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	48.4	54.1	51.0	49.5	52.3	36.3	51.4	52.2	....	51.3	....	50.3
2	50.6	53.9	50.5	49.6	47.8	43.9	51.8	51.9	....	....	....	50.7
3	53.7	43.4	49.1	50.2	45.8	44.1	51.7	49.5	53.5	....	....	51.9
4	55.6	49.8	49.4	50.8	40.5	45.9	50.9	49.6	51.8	....	....	51.9
5	55.1	50.8	52.8	51.2	46.5	47.5	40.9	51.8	54.5	....	44.3	51.5
6	48.6	....	53.8	41.8	48.2	49.2	40.5	51.8	47.4	....	....	49.0
7	54.3	54.2	53.0	50.3	50.4	48.7	48.4	51.9	44.0	....	....	46.3
8	54.2	54.3	49.4	50.4	49.6	39.7	50.2	52.0	50.6	48.0	....	49.6
9	54.9	52.6	48.5	49.2	52.2	48.1	46.3	51.5	49.5	46.6	....	52.1
10	54.1	45.9	50.0	50.8	....	49.2	49.8	50.6	48.4	46.6	....	53.3
11	55.7	51.2	50.6	49.0	....	49.8	50.3	49.7	50.5	44.1	....	....
12	52.9	53.0	50.8	42.2	....	49.4	49.8	50.3	52.4	38.7	44.8	....
13	46.9	53.8	49.6	40.4	....	49.2	42.2	50.5	53.9	45.3	....	....
14	52.6	54.4	49.8	48.8	47.8	49.7	48.9	50.9	....	48.8	....	....
15	54.0	53.8	47.5	48.8	48.0	48.8	50.8	51.1	....	51.4	....	....
16	54.4	52.8	44.6	48.1	45.4	51.7	51.8	50.1	....	51.2	....	52.4
17	54.2	47.8	49.2	49.0	38.6	52.8	52.0	41.3	52.1	49.0	....	52.8
18	53.0	50.0	50.5	48.9	39.9	53.8	51.9	49.9	....	46.8	....	....
19	50.0	....	50.2	46.0	45.2	54.2	50.8	50.8	....	40.9	44.7	53.9
20	46.6	49.8	52.4	41.3	47.9	53.2	46.4	51.1	....	50.7	....	52.5
21	....	52.0	51.2	48.6	47.0	52.5	49.9	51.4	....	46.5	....	45.7
22	....	52.1	50.2	50.0	47.9	40.8	52.2	51.0	....	47.4	....	50.4
23	49.1	49.0	41.6	50.2	49.2	46.8	53.0	49.1	....	....	....	50.3
24	50.9	48.3	50.2	49.7	42.8	50.2	....	45.1	50.7	....	....	48.2
25	51.0	51.5	48.2	48.3	41.4	51.7	....	53.8	51.8	....	49.3	47.7
26	49.4	48.8	47.7	44.7	45.2	52.8	....	55.0	51.6	....	50.2	45.2
27	44.2	52.2	50.5	39.2	46.4	52.8	....	54.6	....	....	44.2	44.6
28	48.4	51.5	50.6	41.3	47.4	52.8	....	55.0	....	....	41.2	45.1
29	49.0	50.0	49.5	....	50.0	52.1	....	....	....	47.0	45.4	48.8
30	50.0	....	42.3	52.1	49.9	49.6	52.1	....	....	....	43.6	42.0
31	54.1	....	49.4	....	39.2	....	52.4	....	....	....	....	41.9

Ph-30. City of Philadelphia. Island Ave. at Philadelphia International Airport. Lat. 39°52'40", long. 75°13'40". Drilled unused artesian well in sand and gravel of Cretaceous age, diameter 30 to 10 inches, depth 198 feet, cased to 117, screen 117-137. Land-surface datum is about 10 feet above msl. Highest water level 8.49 below lsd, Dec. 21, 1945; lowest 14.76 below lsd, Nov. 19, 1948. Records available: 1943-52.

Ph-30--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	12.48	Apr. 15	11.88	July 16	12.80	Oct. 8	13.08
16	11.90	23	12.30	23	12.90	15	13.07
23	11.35	30	10.85	30	13.17	22	13.35
30	11.32	May 7	11.80	Aug. 6	13.27	29	13.18
Feb. 7	11.21	14	11.80	13	12.35	Nov. 5	13.29
13	11.88	21	11.90	20	12.44	12	13.20
20	11.76	28	11.37	27	12.81	19	13.18
27	12.02	June 4	11.29	Sept. 3	12.25	Dec. 2	12.27
Mar. 6	11.78	11	11.71	10	12.53	9	11.87
19	11.46	18	12.27	17	12.79	16	11.91
26	11.52	25	12.33	24	12.88	23	12.06
Apr. 3	11.80	July 2	12.68	Oct. 1	12.96	30	12.19
9	12.18						

Ph-61. City of Philadelphia. In League Island Park, Philadelphia. Lat. 39°54'00", long. 75°10'30". Drilled unused artesian well in sand and gravel of Cretaceous age, diameter 8 inches, depth 176 feet. Land-surface datum is 15.18 feet above msl. Highest water level 21.7 below lsd, June 1, 1952; lowest 37.09 below lsd, June 16, 1950. Records available: 1943-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	27.0	30.0	28.4	26.8	28.1	21.7	31.3	31.8	24.0	27.8	26.7	27.0
2	28.6	29.6	28.4	26.9	26.7	25.0	31.6	31.4	27.1	27.4	25.3	27.0
3	30.0	26.5	28.5	27.4	25.7	25.5	31.4	28.1	28.6	26.3	26.4	27.7
4	30.9	27.9	28.4	28.0	24.0	26.2	30.9	30.4	27.5	25.1	26.4	27.6
5	30.4	28.6	29.3	28.0	25.5	26.2	27.2	31.5	30.2	22.8	26.4	27.4
6	28.3	30.1	29.8	24.9	26.2	26.9	27.4	31.5	27.4	26.6	26.2	26.9
7	30.4	29.9	29.7	27.7	27.3	26.6	30.2	31.3	25.3	25.8	27.6	25.5
8	30.2	30.0	28.5	28.0	26.7	24.4	30.6	30.2	27.0	26.5	27.2	26.7
9	30.8	29.2	27.8	27.2	28.2	26.3	27.6	30.9	26.8	26.2	24.5	27.5
10	30.5	26.7	28.5	27.6	28.5	26.9	29.7	28.6	26.7	26.4	24.2	28.4
11	31.2	28.4	....	27.5	28.4	27.3	30.7	30.8	27.5	25.8	24.0	27.8
12	30.2	29.1	27.8	26.4	26.1	27.0	30.2	30.8	27.9	23.2	25.7	28.2
13	27.5	29.7	28.0	24.7	26.5	28.7	27.2	30.9	28.4	25.6	27.4	28.0
14	29.5	29.9	28.1	26.7	25.9	29.0	30.0	31.1	25.0	26.4	26.4	25.7
15	30.0	29.9	27.4	26.7	25.9	28.8	30.9	31.3	27.3	27.3	26.1	27.1
16	30.4	29.0	25.8	26.6	25.5	31.1	31.2	30.1	27.5	27.3	24.6	27.9
17	30.3	27.5	27.1	27.0	23.5	31.4	31.4	26.7	27.4	27.2	26.0	28.5
18	29.7	28.3	27.7	27.0	23.0	31.8	31.4	30.8	28.4	26.2	26.2	28.9
19	29.0	28.6	27.7	....	25.2	32.1	30.7	31.0	28.3	24.9	26.7	28.7
20	27.6	28.6	28.7	....	26.4	31.8	28.7	31.2	26.4	27.0	26.5	28.7
21	29.2	29.3	27.8	....	25.9	31.2	30.3	31.3	24.3	27.2	26.6	25.7
22	29.1	29.1	27.4	....	26.4	27.3	31.3	32.0	27.1	27.4	25.3	27.1
23	28.8	28.2	25.0	27.0	27.2	29.1	31.6	30.9	27.4	27.0	23.2	27.1
24	29.8	27.9	27.6	27.0	25.6	30.4	33.3	28.3	27.5	26.8	26.1	26.7
25	29.8	28.3	27.7	26.9	23.6	31.1	33.1	31.3	27.7	25.8	27.2	26.4
26	29.0	27.9	27.4	25.9	24.9	31.6	32.1	31.9	27.6	23.9	27.4	25.2
27	27.1	28.7	27.8	23.9	26.0	31.8	30.9	32.1	27.4	26.1	26.2	24.9
28	28.2	28.7	27.9	25.5	26.7	31.8	30.7	32.1	26.1	26.4	24.3	25.1
29	28.8	28.7	27.6	26.6	27.4	31.4	31.4	30.8	27.7	26.8	25.5	26.1
30	29.5		25.4	28.1	27.4	30.5	31.8	29.2	26.8	27.2	24.5	27.5
31	30.0		26.8		23.9		31.9	27.4		26.9		27.4

Ph-85. U. S. Navy Department, Naval Hospital, Philadelphia. Lat. 39°54'20", long. 75°10'30". Drilled unused artesian well in sand and gravel of Cretaceous age, diameter 24 to 30 inches, depth 147 feet, cased to 108, screen 108-133. Land-surface datum is about 14 feet above msl. Highest water level 22.35 below lsd, May 21, 1952; lowest 30.70 below lsd, Nov. 9, 1945. Records available: 1944-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	24.96	Feb. 13	25.46	Apr. 3	23.84	May 14	22.60
9	26.33	20	25.16	9	23.91	21	22.35
16	26.09	27	24.85	15	23.43	28	22.88
23	25.44	Mar. 6	25.38	23	23.78	June 4	22.63
30	25.86	19	24.38	30	23.80	11	23.22
Feb. 7	25.41	26	24.32	May 7	23.33	18	24.67

Ph-85--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 25	24.23	Aug. 13	24.71	Oct. 1	23.39	Nov. 19	23.57
July 2	24.89	20	24.78	8	23.02	Dec. 2	23.62
9	22.80	27	25.59	15	23.12	9	24.62
16	24.77	Sept. 3	24.16	22	23.83	16	23.88
23	24.59	10	23.61	29	23.34	23	23.83
30	25.11	17	23.45	Nov. 5	23.38	30	23.78
Aug. 6	25.35	24	23.79	12	22.83		

Ph-86. U. S. Navy Department, Naval Hospital. Philadelphia. Lat. $39^{\circ}54'20''$, long. $75^{\circ}10'40''$. Drilled unused artesian well in sand and gravel of Cretaceous age, diameter 24 to 10 inches, depth 151 feet, cased to 101, screen 101-126. Land-surface datum is about 14 feet above msl. Highest water level 21.56 below lsd, May 21, 1952; lowest 29.19 below lsd, Nov. 9, 1945. Records available: 1944-52.

Jan. 2	24.80	Apr. 9	22.97	July 9	21.78	Oct. 8	22.20
9	25.16	15	22.55	16	23.19	15	22.29
16	25.01	23	22.80	23	23.49	22	22.91
23	24.47	30	22.75	30	23.55	29	22.49
30	24.71	May 7	22.37	Aug. 6	23.74	Nov. 5	22.53
Feb. 7	24.30	14	21.78	13	23.34	12	22.11
13	24.36	21	21.56	20	23.32	19	22.68
20	24.09	28	21.84	27	23.98	Dec. 2	22.66
27	23.82	June 4	21.60	Sept. 3	22.94	9	23.68
Mar. 6	24.19	11	22.00	10	23.43	16	23.76
19	23.37	18	23.06	17	22.47	23	22.80
26	23.41	25	22.73	24	22.53	30	22.76
Apr. 3	22.98	July 2	23.27	Oct. 1	22.44		

Ph-248. McCahan Sugar Refinery. Philadelphia. Lat. $39^{\circ}55'30''$, long. $75^{\circ}08'40''$. Drilled unused artesian well in sand and gravel of Cretaceous age, diameter 8 inches, depth 105 feet. Land-surface datum is about 13 feet above msl. Highest water level 29.34 below lsd, Apr. 30, 1952; lowest 61.57 below lsd, Sept. 16, 1944. Records available: 1944-52.

Jan. 9	39.17	Apr. 3	30.56	July 2	33.80	Oct. 8	35.81
16	39.19	9	29.58	16	38.33	15	36.36
23	36.64	23	30.97	23	40.98	22	37.68
30	37.08	30	29.34	30	42.88	29	35.78
Feb. 7	37.94	May 7	29.80	Aug. 6	43.20	Nov. 5	35.71
13	34.97	14	29.63	13	35.82	12	36.51
20	33.89	21	29.73	20	35.96	19	36.03
27	31.97	28	29.46	Sept. 3	41.05	Dec. 2	35.28
Mar. 4	30.24	June 4	30.16	10	41.76	9	35.20
12	32.60	11	32.60	17	40.00	16	36.55
19	30.91	18	34.36	24	39.43	23	34.78
26	30.39	25	34.34	Oct. 1	39.88	30	34.43

Ph-249. Crown Paper Board Co., Inc., Philadelphia. Lat. $39^{\circ}55'40''$, long. $75^{\circ}08'40''$. Drilled unused artesian well in sand and gravel of Cretaceous age, diameter 8 to 6 inches, depth 156 feet. Land-surface datum is about 13 feet above msl. Highest water level 26.6 below lsd, May 25, 1952; lowest 47.9 below lsd, May 18, 1951. Records available: 1947-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	29.2	34.7	29.7	29.4	29.3	26.9	33.6	40.5	33.7	37.8	35.1	34.0
2	31.8	34.8	28.6	29.3	29.0	28.2	32.7	39.3	38.9	37.8	33.8	34.1
3	32.6	34.8	29.0	29.2	28.4	28.2	30.6	33.6	39.4	35.1	34.2	35.0
4	32.8	34.8	29.7	29.6	27.5	28.9	29.1	36.4	39.0	34.2	34.6	35.5
5	34.0	35.2	29.7	28.2	28.0	....	30.1	36.6	39.1	33.4	34.2	34.1
6	32.8	34.2	30.0	27.8	29.4	....	29.9	36.4	38.7	34.4	34.3	34.5
7	34.9	34.3	29.6	28.0	29.9	....	32.4	36.0	35.8	34.6	34.0	33.4
8	35.3	34.2	29.1	28.3	28.8	....	31.0	36.0	38.5	34.7	34.1	34.2
9	37.5	33.9	28.1	28.8	29.4	....	31.5	34.1	39.1	34.4	33.1	34.4
10	35.0	33.5	28.8	28.7	28.5	....	31.8	33.4	39.4	33.9	36.2	33.4
11	34.9	33.0	29.2	28.1	27.1	34.9	33.3	34.2	39.0	33.8	36.7	33.9
12	34.4	32.6	29.7	27.9	29.7	33.2	33.2	34.5	37.5	32.9	35.4	33.8
13	34.6	....	29.7	26.7	28.3	34.7	31.0	34.9	37.2	34.2	35.7	33.4
14	34.5	....	29.9	27.8	29.1	32.6	35.4	35.0	33.5	36.5	35.1	33.0
15	35.8	....	29.7	28.5	29.6	32.1	36.4	34.3	36.5	35.9	33.9	35.0

Ph-249--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	35.6	....	28.6	28.6	29.9	33.1	38.5	33.8	37.6	35.0	33.0	35.5
17	33.6	....	29.2	28.2	28.1	34.0	38.8	33.9	38.1	36.0	34.6	35.7
18	35.0	....	30.5	28.8	27.7	33.7	39.0	34.4	38.1	34.6	34.8	36.0
19	35.0	....	29.3	28.1	29.3	33.5	38.2	34.9	37.9	33.2	34.9	36.1
20	33.5	31.8	30.0	27.3	28.4	33.8	35.6	34.7	37.5	35.8	34.8	35.1
21	33.3	31.7	29.5	28.5	28.2	33.2	38.3	34.4	34.0	36.7	34.8	32.9
22	33.6	30.6	28.5	28.5	29.7	32.4	38.7	35.6	36.8	34.2	33.6	33.6
23	34.6	30.6	27.6	28.9	29.0	33.6	39.7	34.9	37.1	34.9	32.6	34.0
24	34.5	30.5	29.1	29.1	27.8	33.3	39.4	34.3	37.2	35.0	35.4	33.4
25	34.3	30.0	29.0	28.7	26.6	33.6	40.1	36.6	37.3	34.2	35.6	29.0
26	34.3	30.3	29.1	28.6	27.7	33.2	39.4	37.8	37.4	33.4	35.1	32.3
27	31.7	30.4	29.5	27.2	28.6	35.8	33.5	38.1	36.6	34.1	33.6	32.7
28	33.2	30.1	29.7	27.7	28.6	33.8	39.0	39.6	33.6	34.3	34.2	32.7
29	34.3	29.8	29.1	28.6	29.0	33.3	40.1	40.3	37.2	35.2	34.0	32.8
30	34.2		28.5	28.6	27.7	34.2	40.4	39.3	37.5	35.2	33.2	33.5
31	34.6		29.3		27.1		40.5	35.9		34.8		33.4

Pike County

Pi-1. Commonwealth of Pennsylvania. Delaware State Forest near Bushkill. Lat. 41°10'30", long. 75°04'50". Dug unused water-table well in shale or sandstone of Catskill formation, diameter 24 inches, depth 32 feet. Land-surface datum is about 1,183 feet above msl. (Clyde L. Raitt, Jr., voluntary observer.) Water levels in reports prior to 1952 are recorded 1.0 above lsd. Highest water level 1.00 below lsd, Apr. 30, 1949; lowest 15.33 below lsd, Nov. 23, 1948. Records available: 1948-49, 1951-52. Jan. 27, 4.99; Feb. 24, 4.97; Mar. 3, 8.08; Mar. 9, 8.91.

Pi-2(D24c-8002). Commonwealth of Pennsylvania. Delaware State Forest. Lat. 41°15'20", long. 74°59'40". Drilled unused artesian well in shale or sandstone of Catskill formation, diameter 4 inches, depth 297 feet. Land-surface datum is about 1,310 feet above msl. (Clyde L. Raitt, Sr., voluntary observer.) Water levels in reports prior to 1952 are recorded 1.0 above lsd. Highest water level 27.10 below lsd, Jan. 10, 1949; lowest 33.35 below lsd, Oct. 17, 1949. Records available: 1948-52. Measurement discontinued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	28.82	Feb. 23	29.15	Apr. 12	28.57	May 30	28.58
12	27.95	Mar. 1	29.28	19	28.41	June 7	28.57
19	28.84	8	29.56	26	28.48	14	29.13
26	28.41	15	29.02	May 3	28.32	21	29.59
Feb. 2	28.44	22	28.88	10	28.45	28	29.08
9	28.42	29	28.82	17	28.82	July 5	30.53
16	28.77	Apr. 5	28.60	24	28.83	12	30.28

Pi-3(D23b-5615). Commonwealth of Pennsylvania. Delaware State Forest. Lat. 41°25'00", long. 75°05'40". Drilled unused water-table well in shale or sandstone of Catskill formation, diameter 6 inches, depth 43 feet. Land-surface datum is about 1,310 feet above msl. (Fred Hatton, voluntary observer.) Water levels in reports prior to 1951 are recorded 7.0 below lsd. Highest water level 23.38 below lsd, Apr. 1, 1950; lowest 45.76 below lsd, Oct. 23, 1949. Records available: 1948-52.

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	26.72	15	25.54		7	26.40		13			33.44
12	27.22	23	24.64		21	29.38		20			36.75
19	26.87	29	25.39		5	32.65		4			37.90
26	25.16	5	24.06		12	28.55		18			39.08
Feb. 2	25.60	12	24.88		19	29.36		Nov. 1			39.47
9	26.05	20	24.97		26	31.11		8			40.06
16	27.04	May 12	26.01		Aug. 12	32.85		15			40.73
23	27.86	17	26.55		16	34.76		29			26.05
Mar. 1	29.80	24	26.08		23	37.07		Dec. 6			26.10
8	30.96	31	25.14		30	31.53		13			23.46

Schuylkill County

Sc-1(G18c-58). Wick C. Donofrio. Pine Grove. Lat. 40°32'20", long. 76°22'40". Dug domestic water-table well in shale of Portage group, diameter 36 inches, depth 31 feet, cased with stone. Land-surface datum is about 560 feet above msl. Highest water level 4.14 below lsd, Aug. 31, 1940; lowest 31.78 below lsd, Nov. 5, 1944. Records available: 1931-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	15.00	Apr. 5	13.00	July 5	21.68	Oct. 4	19.64
12	16.00	12	11.90	12	21.02	11	21.76
18	14.99	19	15.59	19	22.22	14	23.00
26	12.29	26	13.00	26	19.00	25	23.80
Feb. 2	14.26	May 2	15.00	Aug. 2	20.07	Nov. 1	23.00
9	15.97	9	15.48	9	20.00	8	21.90
16	16.38	17	15.50	16	19.17	15	23.57
23	17.07	24	14.80	23	20.48	22	14.70
29	17.17	31	15.16	30	19.07	29	14.00
Mar. 1	17.70	June 7	17.99	Sept. 6	13.26	Dec. 6	11.65
8	14.35	14	18.39	13	16.60	13	13.28
15	13.06	21	20.50	20	18.16	20	14.60
29	14.73	28	20.66	27	19.87	27	15.30

Sc-3. John Perla. Near South Tamaqua. Lat. 40°45'20", long. 75°56'00". Dug unused water-table well in shale or sandstone of Chemung formation or Portage group, diameter 4 feet, depth 37 feet. Land-surface datum is about 835 feet above msl. Water levels in reports prior to 1952 are recorded 1.0 above lsd. Highest water level 11.41 below lsd, Dec. 12, 1950; lowest 28.56 below lsd, Nov. 10, 1948. Records available: 1948-52.

Jan. 8	15.34	Feb. 15	18.37	Apr. 16	15.35	Aug. 11	21.72
25	15.28	28	22.22	June 18	18.14	Sept. 26	22.60
Feb. 1	14.55	Apr. 2	17.25	July 14	17.30	Nov. 5	25.50

Sc-4. Paul Fritz. Adamsdale. Lat. 40°38'00", long. 76°07'40". Dug unused water-table well in shale of Portage group or Hamilton formation, diameter 5 feet, depth 19 feet. Land-surface datum is about 500 feet above msl. Water levels in reports prior to 1952 are recorded 0.6 above lsd. Highest water level 2.07 below lsd, Oct. 9, 1950; lowest 8.99 below lsd, Aug. 10, 1949. Records available: 1948-52.

Jan. 8	3.	Feb. 25	4.85	June 10	2.91	Sept. 29	5.54
14	3.6	Mar. 4	5.44	July 7	5.83	Oct. 6	6.06
21	3.06	10	4.46	14	5.41	14	6.49
29	2.67	Apr. 2	2.48	23	5.31	30	7.18
Feb. 4	2.28	16	2.64	Aug. 26	5.67	Nov. 7	7.43
11	3.40	24	3.58	Sept. 15	4.38	13	7.89
18	4.28	May 6	4.63				

Sc-5. George Biengle. Near Auburn. Lat. 40°36'20", long. 76°05'30". Dug unused water-table well in Marcellus shale in Hamilton formation of Portage group, diameter 36 inches, depth 34 feet. Land-surface datum is about 490 feet above msl. Water levels in reports prior to 1952 are recorded 0.6 above lsd. Highest water level 23.48 below lsd, Feb. 4, 1952; lowest 29.49 below lsd, Dec. 20, 1949. Records available: 1948-52.

Jan. 8	24.42	Jan. 29	24.25	Feb. 18	24.37	Apr. 16	24.18
14	24.66	Feb. 4	23.48	25	24.84	Oct. 6	26.44
21	24.84	11	23.87	Mar. 10	25.33		

Somerset County

So-1(K7c-0912). N. B. Sanner. Markleton. Lat. 39°51'40", long. 79°13'30". Dug unused water-table well in Allegheny formation, diameter 18 inches, depth 19 feet, cased with tile. Land-surface datum is about 1,680 feet above msl. (R. E. Carpenter, voluntary observer.) Highest water level 11.02 below lsd, Apr. 12, 1948; lowest 16.99 below lsd, Sept. 24, 1944. Records available: 1931-52.

Jan. 7	14.15	Feb. 25	14.07	Apr. 7	12.73	May 26	11.03
14	14.25	28	14.22	14	12.55	June 2	13.05
21	13.86	Mar. 2	14.52	21	13.15	9	13.68
25	14.07	10	14.22	28	12.40	12	13.86
28	12.65	17	13.50	May 5	13.20	16	14.12
Feb. 4	12.95	24	12.68	6	13.12	23	12.72
10	13.65	31	13.35	12	13.10	30	14.05
17	14.00	Apr. 1	13.31	19	12.95	July 7	14.48

So-1(K7c-0912)--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 14	14.82	Aug. 25	15.60	Oct. 7	16.21	Nov. 25	15.68
15	15.10	Sept. 2	15.73	13	16.10	Dec. 1	15.80
21	15.10	8	15.90	20	16.20	3	15.79
28	15.40	15	15.95	27	16.27	8	15.38
Aug. 4	15.60	22	16.04	Nov. 3	16.38	15	14.95
11	15.70	29	16.14	12	16.45	22	14.98
18	15.65	Oct. 6	16.20	17	16.48	29	15.40

So-2. U. S. National Park Service, Laurel Hill Recreational Area. Bakersville. Lat. 40°00'00", long. 79°14'20". Drilled unused artesian well in sandstone of Pottsville formation, diameter 4 to 6 inches, depth 450 feet, cased to 311. Land-surface datum is 2,040 feet above msl. (Ray Martz, voluntary observer.) Highest water level 32.35 below lsd, May 3, 1948; lowest 38.97 below lsd, Aug. 21, 1937. Records available: 1937-52.

Jan. 3	34.91	Apr. 10	34.00	July 12	34.20	Oct. 8	35.52
9	34.86	14	33.75	19	34.51	10	35.59
17	34.78	19	33.90	26	34.62	15	35.58
23	34.59	26	33.87	Aug. 1	34.78	22	35.73
Feb. 1	34.51	May 6	33.72	9	34.88	29	35.76
6	34.31	10	33.66	16	34.93	Nov. 5	35.72
13	34.29	16	33.62	23	34.98	14	35.86
20	34.23	29	33.49	30	35.05	20	35.80
28	34.19	June 7	33.48	Sept. 6	35.29	26	35.79
Mar. 6	34.22	12	33.71	13	35.39	Dec. 3	35.80
21	34.05	19	33.88	18	35.34	11	35.50
26	34.09	26	33.90	27	35.37	16	35.52
Apr. 3	34.02	July 2	34.15	Oct. 1	35.49	24	35.49

Sullivan County

Su-1(C17d-8117). Carl D. Molyneux. Near Forksville. Lat. 41°30'20", long. 76°35'20". Dug unused water-table well in sand and gravel of Pleistocene age, diameter 4 feet, depth 28 feet, cased with stone. Land-surface datum is about 1,280 feet above msl. Highest water level 18.11 below lsd, Dec. 2, 1950; lowest dry many times between 1935 and 1952. Records available: 1935-52.

Jan. 5	23.18	Apr. 12	24.46	July 12	26.81	Oct. 11	(f)
12	23.35	19	24.83	19	26.86	18	(f)
19	23.03	26	24.34	26	26.36	25	(f)
26	22.27	May 3	24.91	Aug. 2	26.79	Nov. 1	(f)
Feb. 9	23.33	10	25.48	9	(f)	8	(f)
16	23.84	17	22.19	16	(f)	15	(f)
23	24.06	24	23.66	23	(f)	22	23.48
Mar. 1	24.14	31	23.26	30	(f)	Dec. 1	24.11
8	24.39	June 7	23.88	Sept. 6	(f)	6	21.19
15	21.16	14	25.82	13	(f)	13	21.93
22	22.73	21	25.96	20	(f)	20	23.54
29	23.35	28	26.41	27	(f)	27	23.91
Apr. 5	24.08	July 5	26.88	Oct. 4	(f)		

f Dry.

Susquehanna County

Sq-1(B20c-2461). Carlton farm. Montrose. Lat. 41°50'20", long. 75°52'50". Dug unused water-table well in drift of Pleistocene age, diameter 36 inches, depth 38 feet, cased with stone. Land-surface datum is about 1,685 feet above msl. Highest water level 1.80 below lsd, Mar. 18, 1936; lowest 10.40 below lsd, Oct. 6, 13, 1939. Records available: 1930-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.6	4.6	7.7	4.6	5.7	4.8	9.1	6.4	9.3	...	9.7	9.2
2	3.7	4.6	7.8	4.5	5.8	5.0	9.2	6.4	8.9	...	9.8	9.0
3	3.8	4.7	7.9	4.5	5.9	5.1	9.2	6.6	8.9	...	9.8	9.0
4	4.0	4.6	8.0	4.5	6.1	5.2	9.3	6.7	8.7	9.5	9.8	8.9
5	4.1	4.4	8.1	4.5	6.0	5.3	9.3	6.9	...	9.6	10.0	8.8

Sq-1(B20c-2461)--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	4.3	4.5	8.2	3.9	6.4	5.5	9.3	7.0	...	9.6	10.0	8.4
7	4.4	4.5	8.3	3.9	6.6	5.6	9.4	7.2	...	9.7	10.0	8.2
8	4.4	4.6	8.4	4.1	6.8	5.7	9.4	7.4	8.0	9.7	10.0	8.0
9	4.5	4.7	8.4	4.2	7.0	5.8	9.4	7.5	7.9	9.8	10.0	7.8
10	4.6	4.8	8.5	4.4	7.2	6.0	8.9	7.6	7.8	9.8	10.0	7.7
11	4.7	4.9	8.5	4.5	7.3	6.2	8.3	7.8	7.8	9.8	10.0	7.3
12	4.8	5.0	3.9	4.6	7.3	6.5	8.7	7.9	7.8	...	10.0	4.3
13	4.9	5.2	4.2	4.6	6.8	6.7	8.6	8.1	7.8	...	10.1	4.0
14	5.0	5.3	4.5	4.6	6.7	7.0	8.5	8.2	7.9	...	10.1	4.0
15	5.0	5.5	4.7	4.4	6.6	7.2	8.4	8.3	7.9	...	10.1	4.1
16	4.2	5.6	4.8	3.9	6.5	7.5	8.3	8.4	8.0	...	10.1	4.2
17	4.0	5.7	5.0	4.0	6.4	7.7	8.2	8.5	...	...	10.1	4.3
18	3.6	5.8	5.2	4.2	6.3	7.9	8.2	8.6	...	...	10.2	4.4
19	3.5	6.0	5.4	4.3	6.2	8.2	8.2	8.6	...	...	10.2	4.6
20	3.7	6.2	5.4	4.5	6.2	8.2	8.1	8.7	...	...	10.2	4.7
21	3.9	6.3	3.9	4.7	6.1	8.4	...	8.8	8.3	...	10.1	4.8
22	4.0	6.5	4.0	4.8	6.0	8.5	7.2	8.8	8.4	...	10.1	4.8
23	4.2	6.7	3.9	5.0	5.8	8.6	6.9	8.9	8.5	...	10.0	4.9
24	4.3	6.8	3.5	5.1	5.8	8.7	6.7	9.0	8.6	...	10.0	4.9
25	4.5	7.0	3.7	5.2	5.7	8.7	6.5	9.0	8.7	...	9.9	4.9
26	4.4	7.2	3.9	5.2	5.4	8.8	6.4	9.0	8.7	9.8	9.8	4.9
27	3.7	7.3	4.0	5.3	4.8	8.9	6.3	9.1	8.8	9.8	9.7	4.9
28	3.9	7.4	4.2	5.4	4.6	9.0	6.2	9.1	8.9	9.8	9.6	5.0
29	4.1	7.5	4.3	5.5	4.6	9.0	6.2	9.2	8.9	9.8	9.4	5.0
30	4.3		4.4	5.6	4.7	9.1	6.2	9.2	9.0	9.9	9.3	5.1
31	4.5		4.5		4.8		6.3	9.3		9.9		5.2

Tloga County

Ti-1(B13d-8436). Lewis Robert Kohler. Gaines. Lat. 41°45'00", long. 77°33'30". Dug used water-table well in sand of Pleistocene age, diameter 4 feet, depth 23 feet, cased with stone. Land-surface datum is about 1,290 feet above msl. Water levels in reports prior to 1952 are recorded 3.8 above lsd. Highest water level 4.65 below lsd, Mar. 21, 1936; lowest 21.18 below lsd, Sept. 16, 1939. Records available: 1935-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	6.96	Apr. 5	5.69	July 5	17.87	Oct. 4	18.68
12	9.50	12	4.81	12	18.17	11	17.97
19	7.54	19	6.72	19	18.57	18	18.04
26	5.39	26	8.60	26	18.22	25	18.14
Feb. 2	6.19	May 3	11.40	Aug. 2	18.30	Nov. 1	18.70
9	6.59	10	12.80	9	17.93	8	19.10
16	8.84	17	13.85	16	16.79	15	19.40
23	11.28	24	12.60	23	16.86	22	13.83
Mar. 1	13.26	31	8.83	30	18.07	29	14.64
8	11.10	June 7	11.84	Sept. 6	18.55	Dec. 6	15.38
15	6.18	14	14.89	13	18.70	13	6.75
22	5.58	21	17.00	20	18.85	20	11.55
29	7.49	28	17.63	27	18.80	27	12.78

Union County

Un-1(F15a-8127). D. R. Pursley. Laurelton. Lat. 40°52'50", long. 77°51'50". Dug unused water-table well in shale or limestone of Cayuga group, diameter 5 feet, depth 13 feet. Land-surface datum is about 655 feet above msl. Water levels in reports prior to 1952 are recorded 2.00 above lsd. Highest water level 2.84 below lsd, Mar. 22, 1952. lowest 9.18 below lsd, Oct. 26, 1951. Records available: 1946-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	4.78	Mar. 14	2.85	June 18	6.08	Sept. 26	6.78
11	4.77	22	2.84	27	6.47	Oct. 3	7.35
18	3.87	Apr. 4	4.22	July 11	6.68	Nov. 1	8.22
25	3.77	25	4.57	25	7.36	7	8.24
Feb. 2	4.14	May 3	4.66	Aug. 16	7.34	21	8.54
8	4.15	9	4.67	22	7.33	28	4.33
23	4.20	17	4.86	29	7.45	Dec. 5	4.34
29	4.55	30	4.45	Sept. 5	5.37	12	4.11
Mar. 7	4.57	June 13	5.32	19	6.44	26	4.10

Washington County

Ws-1(J3c-5924). Albert Mankey. Amity. Lat. 40°02'20", long. 80°12'10". Dug unused water-table well in limestone of Washington formation, diameter 40 inches, depth 36 feet, cased with stone to 4. Land-surface datum is about 1,190 feet above msl. Water levels in reports prior to 1952 are recorded 0.7 above lsd. Highest water level 8.39 below lsd, June 22, 1946; lowest 34.14 below lsd, Oct. 1, 1938. Records available: 1938-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	20.20	Apr. 2	13.56	July 2	18.34	Sept. 26	28.71
9	18.60	9	14.75	18	22.91	Oct. 8	28.81
16	19.64	16	12.31	24	21.89	17	28.53
22	15.10	23	14.01	25	22.45	23	28.15
29	12.91	30	12.59	Aug. 1	23.54	30	27.64
Feb. 6	11.41	May 6	12.41	6	23.47	31	27.71
12	16.26	9	12.46	12	26.43	Nov. 8	28.08
19	14.11	15	15.17	19	26.76	22	27.83
28	14.83	23	12.16	27	28.31	Dec. 4	27.89
Mar. 5	13.96	June 4	14.76	Sept. 4	30.51	11	27.09
13	14.21	12	15.91	12	30.37	27	25.51
20	10.01	20	18.36	17	29.92		

Wayne County

Wn-1(D23a-0933). Arthur H. Tyce. Near Hawley. Lat. 41°29'10", long. 75°11'10". Dug unused water-table well in sand and gravel of Pleistocene age, diameter 30 inches, depth 17 feet, cased with stone. Land-surface datum is about 920 feet above msl. Highest water level 2.08 below lsd, May 23, 1942; lowest dry, Oct. 25, Nov. 15-Dec. 20, 1941. Records available: 1931-42, 1944-52.

Jan. 5	9.90	Apr. 5	4.45	July 5	10.70	Oct. 4	13.90
12	9.72	12	6.28	12	4.08	11	14.50
18	8.77	19	5.10	19	8.44	18	14.78
26	7.34	26	6.15	26	9.97	25	15.04
Feb. 2	7.25	May 3	6.22	Aug. 2	10.30	Nov. 1	15.20
9	6.78	10	7.76	9	11.25	8	15.37
16	8.00	17	8.19	16	11.35	15	15.43
23	8.30	24	9.20	23	12.02	22	13.88
Mar. 1	8.33	31	7.00	30	12.15	29	14.00
8	8.35	June 7	8.00	Sept. 6	11.84	Dec. 6	13.67
15	6.37	14	8.62	13	11.52	13	6.41
22	4.70	21	9.60	20	12.37	20	9.50
29	5.30	28	10.03	27	13.08	27	9.80

RHODE ISLAND

By W. B. Allen and W. H. Bierschenk

Scope of Water-Level Program

The observation-well program in Rhode Island, begun in 1944, was continued in 1952 in cooperation with the Rhode Island Development Council. One phase of the program includes the maintenance of a network of observation wells to determine the magnitude and character of water-level fluctuations, and the rate at which the underground reservoirs are being replenished by rainfall or depleted by seepage, evapotranspiration, or pumpage. At the end of 1951, the observation-well program in Rhode Island included 51 wells. At the end of 1952, the program included 48 wells. Of these wells, 3 were measured daily, 21 weekly, 19 monthly, and 5 were equipped with recording gages. About one-half of the water-level measurements show fluctuations caused by pumping and the rest show natural recharge or discharge. The location of the observation wells in Rhode Island is shown in figures 42 and 43.

A reconnaissance report¹ of ground-water conditions for Rhode Island was reviewed and approved in Washington. In April, a report on ground-water studies in Rhode Island was presented at the quarterly meeting of the New England Water Works Association at Kingston. This paper gives briefly a general overall view of the ground-water resources in Rhode Island and discusses geologic and hydrologic problems that affect the yield of ground-water reservoirs. During September, the Rhode Island Development Council released a memorandum explaining the cooperative ground-water program.² Field work has been completed for the more detailed investigations of ground-water resources in northeast Rhode Island covering the Bristol, East Greenwich, East Providence, Fall River, and Providence quadrangles. Field work has been conducted in the Pawcatuck River and Rhode Island Coastal drainage basin area at the request of the Federal Security Agency, Public Health Service. The purpose of the latter work is to provide ground-water data for the water-supply studies of the New England-New York Interagency Committee. The monthly sampling of chloride content from two industrial plants in the Woonasquatucket River Valley in Providence is being continued to determine the effects of pumpage on salt-water encroachment.

Precipitation

Average statewide precipitation in 1952 was 41.71 inches (U. S. Weather Bureau, Climatological Data for New England), or about 3.4 inches less than in 1951 and about 0.9 inch less than normal. The precipitation at Providence (Post Office Annex Bldg.) during the year was 41.83 inches (U. S. Weather Bureau, Local Climatological Data), or about 7.2 inches less than in 1951 and 2.2 inches more than the normal for the preceding 48 years. In general, the temperatures for the State were slightly more than 2° above normal, resulting in slightly above-average losses by evaporation and transpiration. In 1952, with less precipitation than in the preceding year, the possibilities for recharge of ground-water reservoirs were less favorable and water levels were generally lower than in 1951.

Pumpage

It is estimated on the basis of a partial inventory that the average daily consumption of ground water in Rhode Island is about 33,000,000 gallons. Average daily consumption of ground water by municipalities is not accurately known because the water companies using both ground and surface water do not differentiate their pumpage as to source. The total capacity of wells owned by water companies is 20,300,000 gallons per day, and it is estimated that municipalities were pumping an average of 20,300,000 gallons per day during summer months. In collecting well data, estimates are made of ground-water use by industrial firms but in many cases water is not metered and accurate values of pumpage are not available. It is estimated that industries pump about 10,400,000 gallons per day. Water used for rural supply that is included in the

¹ Allen, W. B., The ground-water resources of Rhode Island: R. I. Devel. Council, Geol. Bull. 6, 1953.

² Allen, W. B., Rhode Island Cooperative Ground-Water Survey. Report for 1951 R. I. Devel. Council, Water Res. Memo. 1, September 1952.

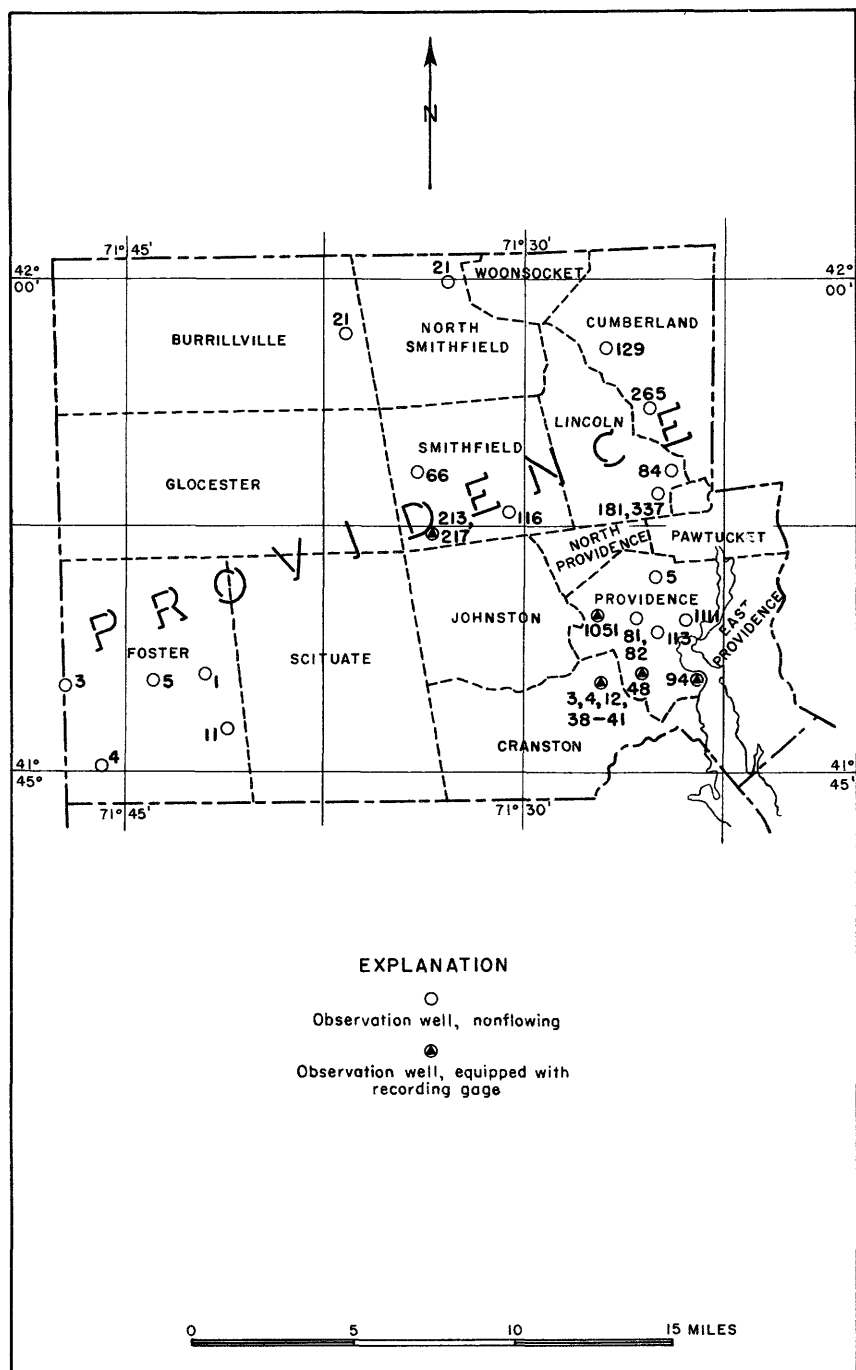


Figure 42. --Location of observation wells in Providence County, R. I., 1957.

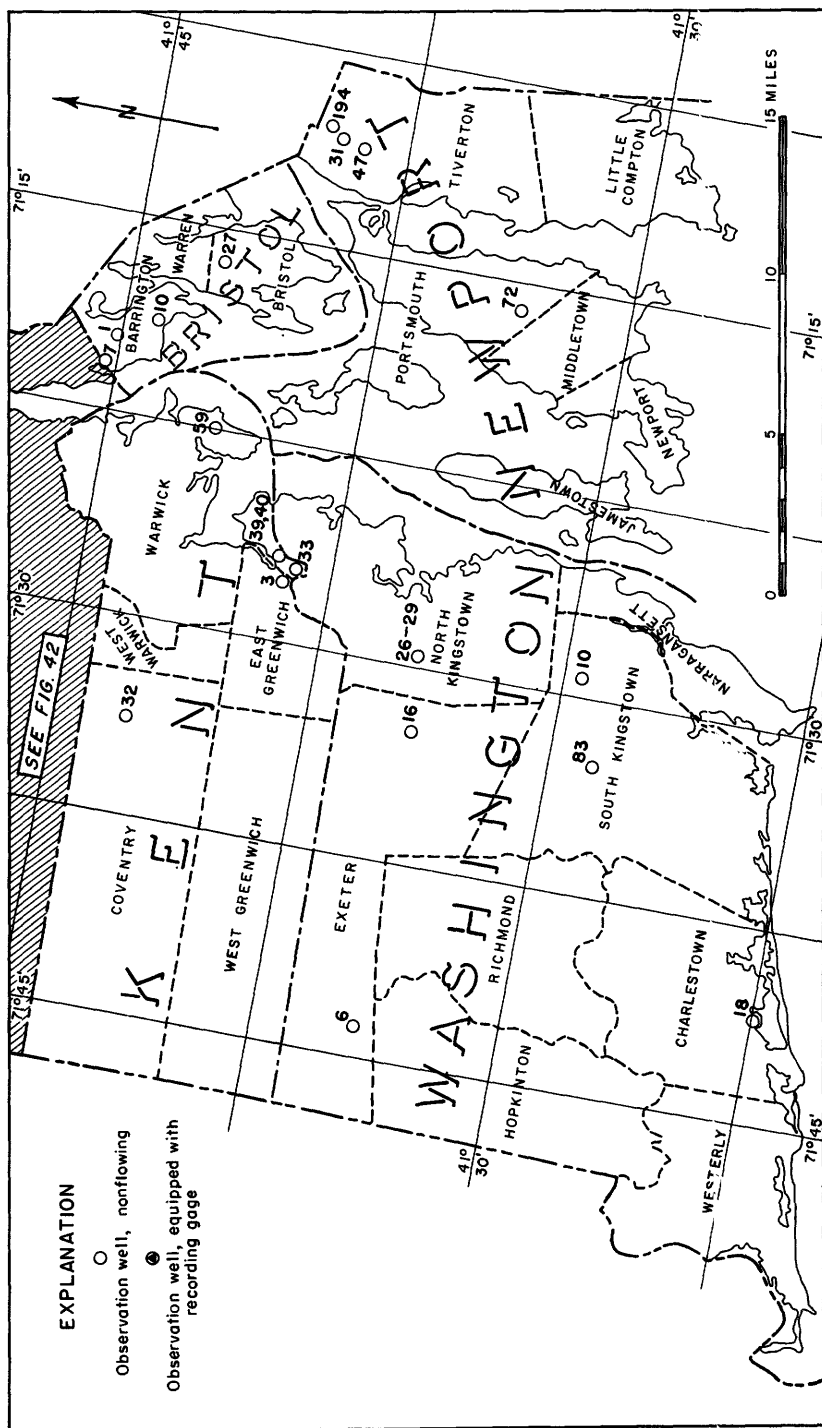


Figure 43. --Location of observation wells in Kent, Newport, and Washington Counties, R. I., 1952.

statewide consumption figure is estimated on the basis of farm and home requirements and population figures and is about 2,300,000 gallons per day.

Interpretation of Water-Level Fluctuations

In Rhode Island, the natural fluctuations of ground-water levels are chiefly the result of differences in the amount and distribution of precipitation. The usual yearly trend of water levels consists of a rise during the early months of the year with the peak being reached in March or April. Thereafter, the levels decline and do not commence to recover until November. During 1952, water levels followed this general pattern except that recovery began later in the year, or in late December.

At the beginning of 1952, ground-water levels were normal or above normal because of above-normal precipitation from November 1951 through March 1952. In January, 4 wells reached their highest stages in 6 to 7 years of record. In March and April, water levels reached their peaks for the year in most wells, and the highest in 5 to 9 years of record in 7 wells. Water levels began to decline steadily from May through July.

Above-normal precipitation in August slowed the seasonal decline in water levels and resulted in substantial recoveries in numerous wells. A deficiency of precipitation from September through December resumed the decline in water levels and resulted in levels that were somewhat below normal for that period. The year's lowest readings occurred during November and early December, six wells reaching their lowest stages in 6 to 9 years of record. About half the wells showed a slight recovery in water levels in the last weeks of the year. Thus the year closed with a net loss in ground-water storage.

Acknowledgments

The authors gratefully acknowledge the voluntary measurements made by many individuals on the following wells: Barrington 7; Coventry 32; Cranston 3, 4, 38-41; Exeter 16; Lincoln 181, 337; North Kingstown 26-29; Providence 81, 82, 1111; South Kingstown 83; Tiverton 31, 47, 194; and Warwick 39, 40.

Well-Numbering System

The identifying symbols for wells in Rhode Island consist of the name of the town or city followed by a number, wells in each town or city being numbered independently.

Well Descriptions and Water-Level Measurements

(Water levels are in feet below land-surface datum unless otherwise indicated.)

Bristol County

Barrington 1. Barrington. Lat. 41°44'35", long. 71°19'31". Drilled unused water-table well in bedrock, diameter 10 inches, depth 232 feet. Land-surface datum is 50.90 feet above msl. Highest water level 42.71 below lsd, May 29, 1948; lowest 46.92 below lsd, Dec. 15, 1945. Records available: 1945-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	44.47	Apr. 29	43.55	July 31	45.27	Oct. 31	46.12
Feb. 27	44.05	May 29	43.81	Aug. 28	45.39	Nov. 28	46.26
Mar. 28	43.22	June 27	44.37	Sept. 30	45.80	Dec. 27	45.11

Barrington 7. Rhode Island Lace Works, Inc. Narragansett and Bay Spring Aves. Lat. 41°45'00", long. 71°20'57". Dug unused water-table well in sand and gravel, diameter 4½ feet, depth 12 feet. Water level influenced by nearby pumping wells. Land-surface datum is about 15 feet above msl. Highest water level 4.99 below lsd, June 1, 1948; lowest 10.91 below lsd, Oct. 31, 1949. Records available: 1947-52.

Jan. 2	7.08	Mar. 31	6.21	June 23	7.30	Oct. 6	8.69
14	7.03	Apr. 7	6.31	July 14	7.43	14	8.60
21	7.01	14	6.32	21	7.84	21	8.75
28	6.81	21	6.01	28	8.05	27	8.81
Feb. 4	6.67	28	6.31	Aug. 4	8.05	Nov. 4	8.98
11	6.81	May 5	6.35	11	7.39	10	9.01
18	6.77	12	6.42	18	7.36	17	9.05
25	6.62	19	6.74	25	7.92	24	8.91
Mar. 3	6.67	26	6.73	Sept. 2	7.19	Dec. 8	8.99
10	6.24	June 2	6.71	8	8.39	15	8.99
17	6.02	9	6.90	15	8.56	22	8.76
24	6.08	16	7.20	29	8.63	29	8.57

Barrington 10. Charles Douglas. Lat. 41°43'33", long. 71°18'57". Dug unused water-table well in sand and gravel, diameter 30 inches, depth 38 feet. Land-surface datum is about 40 feet above msl. Highest water level 32.81 below lsd, June 30, 1948; lowest dry Oct. 31, Nov. 28, Dec. 27, 1952. Records available: 1947-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	35.72	Apr. 29	33.86	July 31	35.74	Oct. 31	(f)
Feb. 27	35.03	May 29	34.03	Aug. 28	36.98	Nov. 28	(f)
Mar. 28	33.82	June 27	34.37	Sept. 30	36.82	Dec. 27	(f)

f Drv.

Bristol 27. H. T. Sullivan. Hope and Tupelo Sts. Lat. 41°42'14", long. 71°16'53". Dug unused water-table well in till, diameter 30 inches, depth 26 feet. Land-surface datum is about 120 feet above msl. Highest water level 9.21 below lsd, Mar. 26, 1950; lowest 18.51 below lsd, Oct. 30, 1951. Records available: 1949-52.

Jan. 30	10.02	Apr. 29	13.97	July 31	17.21	Oct. 31	18.29
Feb. 27	11.77	May 29	14.44	Aug. 28	15.32	Nov. 28	18.44
Mar. 28	10.64	June 27	15.54	Sept. 30	17.39	Dec. 27	17.19

Kent County

Coventry 32. Kent County Water Authority. Lat. 41°41'15", long. 71°33'48". Driven unused water-table well in sand and gravel, diameter 2½ inches, depth 34 feet. Water level influenced by nearby pumping wells. Land-surface datum is about 230 feet above msl. Highest water level 1.86 below lsd, Mar. 26, 1952; lowest 11.65 below lsd, Nov. 15 1949. Records available: 1948-52.

Jan. 2	c7.38	Mar. 12	2.08	May 20	3.31	Aug. 21	c8.79
17	c9.05	19	1.98	June 19	4.56	Sept. 4	c8.93
23	c7.30	26	1.86	July 14	c8.24	18	c9.00
30	c6.88	Apr. 2	2.02	22	c9.01	Oct. 9	c9.17
Feb. 6	c6.15	9	2.76	Aug. 6	c8.70	24	c9.43
27	2.12	May 8	3.28	13	c8.51	Dec. 29	c9.55
Mar. 5	2.10	15	3.24				

c Nearby wells being pumped.

Warwick 39. U. S. Naval Advance Base Depot. Davisville. Lat. 41°38'19", long. 71°27'54". Drilled public-supply water-table well in sand and gravel, diameter 18 inches, depth 61 feet. Water level influenced by nearby pumping well. Land-surface datum is 35.9 feet above msl. Highest water level 9.8 below lsd, Mar. 21, 1948; lowest 39.8 below lsd, Sept. 10, 1944. Records available: 1943-52.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	11.5	11.8	11.5	10.9	11.0	11.5	a25.30	a29.00	a26.75	16.25	16.75	17.25
2	11.5	11.8	10.9	10.8	a22.8	11.5	a25.30	17.25	a27.25	16.25	16.75	17.50
3	11.5	11.8	11.3	10.8	10.9	11.5	a27.75	17.25	a27.25	16.25	16.75	17.50
4	11.5	11.8	11.3	11.0	10.8	11.5	13.25	a28.25	15.95	16.35	a28.10	17.75
5	11.8	11.8	11.3	10.8	10.9	11.5	13.25	a29.75	15.95	16.35	a28.20	17.95
6	11.8	11.8	11.3	10.3	10.9	11.6	13.75	a29.75	16.05	a27.50	17.10	17.25
7	11.8	11.8	11.3	a22.7	10.9	12.3	a26.25	16.75	15.65	a27.50	a28.30	17.25
8	12.0	11.8	11.3	11.0	10.9	11.8	a27.25	a28.75	a27.50	a27.40	17.75	16.25
9	12.0	11.8	11.3	11.1	10.9	11.8	a27.25	16.40	a27.50	a27.60	17.75	16.25
10	12.0	11.8	a21.7	11.3	11.8	11.8	a27.10	16.20	a27.50	a27.85	17.75	16.75
11	12.0	11.8	11.0	11.3	11.3	12.3	a27.25	a27.40	a27.60	16.25	17.75	16.75
12	11.9	a22.3	10.3	11.3	11.3	12.3	a27.25	a27.20	a27.65	16.25	17.75	16.75
13	11.9	11.8	10.3	11.0	11.3	12.3	14.75	a27.20	16.55	16.25	17.75	16.08
14	a22.7	11.8	a21.7	11.0	11.6	12.2	a27.10	a27.25	a27.25	a27.85	17.75	16.00
15	12.1	11.8	10.3	10.8	11.6	12.1	a27.10	a26.95	16.25	16.25	17.75	a28.00
16	12.1	11.8	10.3	10.8	11.6	a23.7	a28.00	14.95	16.25	16.95	17.75	16.05
17	11.8	11.8	10.3	10.8	11.5	a23.7	a28.10	14.25	16.25	a27.75	11.80	16.03
18	11.8	11.1	10.3	10.9	11.5	a24.0	a28.00	a26.75	a27.25	16.95	11.80	16.60
19	11.8	11.0	10.3	10.8	11.5	a24.0	16.25	a26.75	16.25	16.95	11.80	16.60
20	11.8	11.0	10.5	10.8	11.6	a24.4	16.25	a26.75	16.25	a27.75	11.80	16.25
21	11.8	11.0	10.6	10.8	11.5	a24.9	a28.55	a26.75	16.10	17.00	11.80	16.25
22	11.8	11.0	10.5	10.8	11.5	13.3	a28.55	a27.25	a27.25	13.00	18.25	15.95
23	11.8	a22.4	10.5	a23.4	11.5	13.3	a28.75	14.70	a27.45	17.50	17.25	15.95
24	11.8	11.1	10.5	10.8	11.5	13.3	a28.75	14.20	a27.50	17.30	17.25	15.95
25	11.8	11.1	10.5	10.8	11.5	a24.9	a28.75	14.20	a27.50	17.25	17.25	15.75

Warwick 39--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	11.8	11.5	10.8	11.8	11.5	a25.3	16.10	14.95	16.75	17.25	17.25	15.85
27	11.8	12.0	10.8	11.3	a22.8	a26.10	a28.20	14.95	16.25	16.75	17.25	15.80
28	11.8	11.5	10.8	11.0	11.5	13.3	a28.85	15.85	16.25	16.75	17.25	15.70
29	11.8	11.5	10.8	11.0	11.6	13.1	a29.20	15.85	16.25	16.75	17.25	15.65
30	11.8		10.8	11.0	11.6	a25.4	a28.90	15.55	16.25	16.75	17.25	16.00
31	11.8		10.8		11.3		a29.30	15.55		16.75		16.00

a Pumping.

Warwick 40. U. S. Naval Advance Base Depot. Davisville. Lat. 41°38'16", long. 71°27'54". Drilled public-supply water-table well in sand and gravel, diameter 18 inches, depth 80 feet. Water level influenced by nearby pumping well. Land-surface datum is 31.4 feet above msl. Highest water level 4.5 below lsd, Apr. 2, 1948; lowest 22.6 below lsd, Sept. 6, 1944. Records available: 1943-52.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.7	7.3	7.3	6.8	7.3	7.6	9.80	13.90	19.75	12.75	14.25	13.50
2	7.7	7.3	7.3	6.8	7.8	7.7	9.85	13.95	11.25	12.75	14.30	13.55
3	7.8	7.3	7.3	6.8	7.8	7.7	10.25	13.25	11.25	13.25	14.25	13.55
4	7.8	7.3	7.3	7.3	7.8	7.6	10.25	12.25	11.25	13.25	14.20	14.10
5	7.8	7.0	7.3	6.8	7.8	7.6	10.25	13.25	11.75	13.25	14.20	14.35
6	8.3	7.0	7.0	7.5	7.8	7.6	9.95	13.25	11.75	13.00	14.20	14.25
7	8.3	7.0	7.0	6.8	7.7	7.8	10.75	13.25	11.75	12.90	14.20	14.25
8	8.3	7.0	7.0	6.8	7.7	8.3	11.25	13.25	11.65	12.90	14.25	14.25
9	8.3	7.0	7.0	6.8	7.8	8.3	11.25	12.85	11.65	12.85	14.25	14.25
10	8.3	7.0	7.0	6.8	8.3	8.3	11.25	12.60	11.65	12.90	14.25	12.95
11	8.3	7.0	7.0	7.0	7.6	8.8	11.25	11.10	11.60	12.75	14.25	12.95
12	8.3	7.0	6.3	6.8	7.6	8.8	11.25	11.10	11.55	13.25	14.25	12.75
13	8.3	7.0	6.3	6.8	7.6	8.8	10.75	11.20	11.75	13.25	14.25	11.03
14	8.3	7.3	6.3	7.0	7.6	8.8	11.25	10.90	11.95	13.25	14.25	12.04
15	8.3	7.6	6.3	7.0	7.6	8.8	11.20	10.95	11.95	13.25	14.25	13.00
16	8.3	7.6	6.3	7.0	7.3	8.7	11.35	10.95	11.95	13.75	14.25	13.00
17	8.3	7.3	6.5	7.0	7.3	8.7	11.60	10.75	11.95	13.75	14.30	13.03
18	8.3	7.3	6.5	6.8	7.3	8.6	11.10	10.75	11.75	13.70	14.30	13.50
19	8.3	7.3	6.5	6.8	7.3	8.8	12.25	10.95	11.75	13.70	14.30	13.40
20	8.3	7.3	6.8	6.8	7.3	8.9	12.25	10.95	11.25	13.70	14.30	13.45
21	7.8	7.3	6.8	6.7	7.3	j6.3	12.25	10.95	12.25	13.75	14.30	13.75
22	7.5	7.3	6.8	6.7	7.4	9.3	12.25	10.75	12.25	13.70	14.25	12.75
23	7.3	7.3	6.8	6.7	7.3	8.8	12.25	10.75	12.25	14.02	14.25	12.75
24	7.3	7.7	6.8	6.7	7.3	9.3	13.25	10.25	12.25	13.95	12.75	12.75
25	7.8	7.7	6.9	6.7	7.3	9.3	13.25	10.25	12.30	13.95	12.75	12.75
26	7.8	7.3	6.9	8.0	7.3	9.7	13.25	10.75	12.25	13.95	12.75	12.50
27	7.7	7.0	6.8	7.7	7.3	10.2	13.25	10.95	12.25	13.75	12.75	12.50
28	7.7	7.3	6.8	7.3	7.6	10.2	13.30	11.95	12.75	13.75	12.75	12.00
29	7.7	7.3	6.8	6.6	7.6	10.2	13.40	11.75	12.75	14.25	11.75	12.70
30	7.7		6.8	6.8	7.3	9.7	13.45	11.75	12.75	14.25	13.50	12.60
31	7.5		6.8		7.3		14.20	11.85		14.25		11.25

j Not pumping.

Warwick 59. Our Lady of Providence Seminary. Warwick Neck and Aldrich Aves. Lat. 41°41'06", long. 71°22'39". Dug unused water-table well in till, diameter 30 inches, depth 27 feet. Land-surface datum is about 125 feet above msl. Highest water level 4.26 below lsd, Apr. 29, 1952; lowest 24.77 below lsd, Oct. 31, 1949. Records available: 1949-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	4.45	Apr. 29	4.26	July 31	11.92	Nov. 1	15.54
Feb. 29	4.72	May 29	4.99	Aug. 29	10.84	29	15.98
Mar. 31	4.81	June 27	7.44	Sept. 29	13.18	Dec. 27	13.75

Newport County

Portsmouth 72. St. Mary's Church. East Main Rd. Lat. 41°32'47", long. 71°15'42". Dug unused water-table well in till, diameter 36 inches, depth 42 feet. Land-surface datum is about 235 feet above msl. Highest water level 6.96 below lsd, Feb. 20, 1948; lowest 29.94 below lsd, Nov. 22, 1949. Records available: 1947-52.

Jan.	8	14.05	Feb.	5	11.95	Mar.	5	16.04	Apr.	8	16.40
	15	15.44		12	13.27		11	10.14		15	17.10
	22	15.66		19	14.46		18	10.08		22	17.45
	29	11.87		26	14.43		Apr. 1	13.94		29	17.72

Portsmouth 72--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 7	16.49	July 8	21.11	Sept. 9	20.14	Nov. 12	24.79
14	17.48	15	21.77	16	20.48	18	25.08
21	18.20	22	22.39	23	20.97	25	25.29
27	18.49	29	23.03	30	21.53	Dec. 2	25.46
June 3	18.52	Aug. 5	23.52	Oct. 7	22.10	10	25.56
10	18.76	12	22.44	14	22.71	16	25.19
17	19.26	19	21.45	21	23.32	23	24.87
25	19.94	26	20.51	29	23.91	30	23.92
July 1	20.45	Sept. 2	20.07	Nov. 5	24.41		

Tiverton 31. North Tiverton Water District. Lat. 41°39'11", long. 71°11'15". Driven unused water-table well in sand and gravel, diameter 8 inches, depth 21 feet. Water level influenced by nearby pumping wells. Land-surface datum is about 250 feet above msl. Highest water level flowing 1948, 1949, 1951; lowest 12.37 below lsd, Aug. 26, 1950. Records available: 1947-52.

Jan. 6	+2.07	May 13	+0.10	Aug. 3	c-3.70	Oct. 12	c-1.01
13	1.64	19	.99	11	c-3.15	19	c6.56
20	.88	June 1	2.50	17	+ .70	Nov. 8	c6.73
28	2.26	8	.30	24	c-3.78	15	c5.20
Feb. 5	1.76	16	+ .46	Sept. 2	+ .54	23	c3.16
Mar. 26	2.37	29	c-2.20	7	c-2.50	30	c1.30
30	+1.36	July 6	.85	14	+ .72	Dec. 7	- .27
Apr. 14	c-2.29	13	.71	21	+ .41	14	+ .70
22	c2.40	20	1.80	28	c-2.49	21	+ .32
May 5	c-2.26	27	c3.59	Oct. 5	c2.37		

c Nearby wells being pumped.

Tiverton 47. North Tiverton Water District. Lat. 41°38'08", long. 71°11'08". Driven unused water-table well in sand and gravel, diameter 2½ inches, depth 27 feet. Water level influenced by nearby pumping wells. Land-surface datum is about 160 feet above msl. Highest water level flowing 1948; lowest 16.88 below lsd, Oct. 16, 1948. Records available: 1947-52.

Jan. 6	-0.34	May 13	-1.88	Aug. 3	-14.05	Oct. 12	-8.46
13	+ .14	19	-.09	11	-4.69	19	9.23
22	-.07	June 1	+ .08	17	+ .26	Nov. 8	7.86
28	+ .31	8	-.20	24	-4.47	15	10.66
Feb. 5	.37	16	3.76	Sept. 2	4.00	23	3.36
Mar. 26	+ .07	29	3.34	7	5.66	30	1.03
30	-2.15	July 6	5.57	14	5.96	Dec. 7	3.20
Apr. 14	2.80	13	9.94	21	6.31	14	1.40
22	2.00	20	12.83	28	8.19	21	2.66
May 5	.38	27	13.78	Oct. 5	8.45		

Tiverton 194. North Tiverton Water District. Osborn well field, well 27. Lat. 41°39'44", long. 71°10'36". Driven unused water-table well in sand and gravel, diameter 6 inches, depth 21 feet. Water level influenced by nearby pumping wells. Land-surface datum is about 175 feet above msl. Highest water level 0.93 below lsd, Aug. 24, 1952; lowest 7.26 below lsd, July 20, 1952. Records available: 1952.

Mar. 30	1.33	June 29	4.31	Aug. 24	0.93	Oct. 19	6.56
Apr. 14	1.40	July 6	5.26	Sept. 2	1.20	Nov. 8	3.69
22	1.66	13	5.51	7	5.05	15	1.84
May 5	2.09	20	7.26	14	4.91	23	5.83
13	1.96	27	5.99	21	4.77	30	4.94
19	2.10	Aug. 3	3.34	28	4.79	Dec. 7	4.56
June 1	2.19	11	1.49	Oct. 5	5.17	14	3.69
8	2.40	17	1.59	12	6.53	21	2.60
16	2.98						

Providence County

Burrillville 21. Cyrille Bruynel. Lat. 41°57'26", long. 71°36'15". Dug unused water-table well in till, diameter 24 inches, depth 15 feet. Land-surface datum is about 400 feet above msl. Highest water level 5.21 below lsd, Jan. 30, 1952; lowest dry Nov. 1, 28, 1952. Records available: 1947-52.

Jan. 30	5.21	Apr. 28	4.22	Aug. 1	12.02	Nov. 1	(f)
Feb. 27	6.62	May 28	6.99	28	11.29	28	(f)
Mar. 28	5.65	June 26	8.79	Sept. 30	12.99	Dec. 26	10.67

f Dry.

Cranston 3. Narragansett Brewing Co. Lat. 41°47'59", long. 71°26'36". Drilled industrial water-table well in sand and gravel, diameter 24 inches, depth 56 feet. Measurements made an hour after pump shut off. Land-surface datum is 65.29 feet above msl. Highest water level 24.5 below lsd, Aug. 26, 1938; lowest 36.3 below lsd, Jan. 28, 1951. Records available: 1938-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	28.8	Apr. 6	27.0	July 6	27.5	Sept. 28	29.0
13	29.0	13	27.0	13	28.6	Oct. 5	28.4
20	29.0	20	27.1	20	28.8	12	28.4
27	29.2	27	27.3	27	29.0	19	29.0
Feb. 3	28.2	May 4	27.5	Aug. 3	29.0	26	27.7
10	28.2	11	27.5	10	29.4	Nov. 2	29.7
17	27.7	18	27.5	17	29.3	16	29.8
24	27.5	25	27.5	24	29.1	23	30.0
Mar. 2	27.3	June 2	27.5	31	29.2	30	29.8
9	27.3	8	26.2	Sept. 7	29.1	Dec. 7	30.0
16	27.2	15	26.1	14	29.4	14	29.9
23	27.4	22	27.2	21	28.9	28	30.2
30	27.2	29	27.6				

Cranston 4. Narragansett Brewing Co. Lat. 41°47'51", long. 71°26'39". Drilled industrial water-table well in sand and gravel, diameter 24 inches, depth 89 feet. Measurements made $\frac{1}{2}$ hour after pump shut off. Land-surface datum is 65.57 feet above msl. Highest water level 22.3 below lsd, June 22, 1939; lowest 36.7 below lsd, Jan. 2, 9, 16, 23, 1949. Records available: 1939-52.

Jan. 6	30.9	Apr. 6	29.0	July 6	31.7	Oct. 5	32.3
13	29.6	13	29.2	13	31.2	12	31.9
20	29.9	20	29.2	20	31.9	19	32.1
27	30.2	27	29.4	27	31.6	26	31.9
Feb. 3	29.9	May 4	29.6	Aug. 3	33.7	Nov. 2	31.8
10	30.0	11	29.5	10	32.0	9	32.0
17	29.6	18	29.2	17	32.0	16	32.1
24	29.4	25	29.6	24	31.2	23	32.3
Mar. 2	29.6	June 1	29.6	31	32.0	30	32.1
9	29.6	8	30.3	Sept. 7	32.1	Dec. 7	32.1
16	29.0	15	30.3	14	32.1	14	32.3
23	29.6	22	31.1	21	31.1	28	32.8
30	29.4	29	31.5	28	30.7		

Cranston 12. Narragansett Brewing Co. Lat. 41°47'59", long. 71°26'36". Drilled industrial water-table well in sand and gravel, diameter 24 inches, depth 56 feet. Water level influenced by nearby pumping wells. Land-surface datum is 68.91 feet above msl. Highest water level 28.4 below lsd, Apr. 25, 1948; lowest 34.0 below lsd, Sept. 4, 11, 1949. Records available: 1938-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	30.79	.....	29.84	29.52	30.16	29.78	30.91	31.85	31.36	32.06	31.80	31.77
2	30.67	.....	29.77	29.59	30.10	29.91	31.04	31.71	31.52	32.12	31.75	31.96
3	30.65	.....	29.98	29.60	29.77	30.15	31.12	31.34	31.75	32.04	31.71	32.21
4	30.62	.....	30.18	29.53	29.64	30.28	31.14	31.38	31.85	31.79	31.69	32.31
5	30.60	.....	30.25	29.32	29.83	30.35	30.85	31.65	31.75	31.67	31.61	32.24
6	30.56	30.73	30.26	29.19	30.00	30.26	30.64	31.80	31.51	31.80	31.64	32.34
7	30.72	30.61	30.14	29.38	30.27	30.95	30.79	31.88	31.37	31.99	31.66	31.90
8	30.68	30.28	29.89	29.54	30.37	29.82	31.03	31.92	31.47	32.06	31.66	31.82
9	30.54	30.13	29.74	29.57	30.31	29.01	31.17	.....	31.71	31.96	31.63	31.99
10	30.49	30.06	29.63	29.57	29.94	30.28	31.24	.....	31.85	31.73	31.62	32.24
11	30.51	30.30	29.58	29.47	29.76	30.43	31.13	.....	31.91	31.64	31.62	32.34
12	30.50	30.53	29.73	29.31	29.90	30.50	30.87	.....	31.80	31.54	31.81	32.27
13	30.44	30.60	29.97	29.21	30.13	30.37	30.75	31.87	31.57	31.45	31.99	32.09
14	30.63	30.47	30.03	29.47	30.26	30.10	30.91	31.83	31.46	31.65	31.94	31.98
15	30.62	30.17	29.93	29.78	30.36	29.97	31.20	31.48	31.59	31.87	31.79	32.10
16	30.43	30.05	29.58	29.95	30.36	30.14	31.35	31.43	31.80	31.98	31.71	32.32
17	30.40	29.96	29.63	30.05	30.01	30.41	31.44	31.30	31.95	31.91	31.91	32.46
18	30.38	29.84	29.82	29.92	29.83	30.58	31.40	31.35	32.02	31.73	32.12	32.51
19	30.38	30.14	29.84	29.60	29.98	30.67	31.11	31.69	31.92	31.60	32.24	32.46
20	30.32	30.31	29.88	29.44	30.23	30.73	30.98	31.78	31.68	31.75	32.31	32.22

Cranston 12--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	30.37	30.25	29.88	29.67	30.35	30.62	31.16	31.84	31.57	31.97	32.23	32.11
22	30.35	30.01	29.66	29.96	30.43	30.32	31.42	31.71	31.69	32.05	32.03	32.19
23	30.27	29.91	29.43	30.12	30.40	30.45	31.54	31.45	31.91	31.96	31.89	32.40
24	30.27	29.83	29.53	30.20	30.03	30.71	31.63	31.32	32.02	31.77	32.01	32.50
25	30.27	30.07	29.69	30.08	29.85	30.85	31.62	31.43	32.06	31.70	32.20	32.42
26	30.24	30.27	29.74	29.73	29.96	30.95	31.31	31.65	31.96	31.65	32.30	32.16
27	30.20	30.30	29.76	29.57	30.20	31.00	31.14	31.81	31.71	31.81	32.22	32.10
28	30.46	30.19	29.64	29.48	30.32	30.90	31.18	31.89	31.59	32.02	31.97	32.06
29	30.79	29.94	29.38	29.73	30.40	30.61	31.49	31.90	31.67	32.13	31.89	32.23
30	30.92		29.24	30.02	30.30	30.68	31.70	31.64	31.92	32.06	31.84	32.44
31	.....		29.38		29.96		31.83	31.49		31.88		31.49

Cranston 38. Narragansett Brewing Co. Lat. 41°47'44", long. 71°26'43". Driven observation water-table well in sand and gravel, diameter 2½ inches, depth 30 feet. Water level influenced by nearby pumping well. Land-surface datum is 52.43 feet above msl. Highest water level 15.1 below lsd, May 7, 1946; lowest 25.5 below lsd, Aug. 29, 1949. Records available: 1947-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	20.7	Apr. 14	19.4	July 7	21.0	Oct. 5	22.0
14	20.9	21	19.5	14	21.1	13	22.0
21	20.7	28	19.9	21	21.2	21	22.4
Feb. 4	20.5	May 5	19.9	Aug. 4	22.0	27	22.2
11	20.1	12	19.8	11	22.0	Nov. 3	22.3
19	20.3	19	19.9	18	21.3	10	22.2
25	20.1	26	19.9	25	21.7	17	22.1
Mar. 3	19.9	June 2	19.5	Sept. 2	21.7	24	22.5
10	19.8	10	19.7	8	22.0	Dec. 1	22.4
17	19.5	16	19.9	15	22.3	8	22.5
24	19.0	23	20.6	22	22.3	15	22.5
31	19.1	30	20.8	29	22.2	29	22.6
Apr. 7	19.3						

Cranston 39. Narragansett Brewing Co. Lat. 41°47'44", long. 71°26'43". Driven observation water-table well in sand and gravel, diameter 2½ inches, depth 20 feet. Water level influenced by nearby pumping well. Land-surface datum is 46.03 feet above msl. Highest water level 9.2 below lsd, June 14, 1948; lowest 15.7 below lsd, Aug. 29, 1949. Records available: 1946-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	12.1	Apr. 14	10.6	July 7	11.8	Oct. 5	13.3
14	12.0	21	10.7	14	12.3	13	13.1
21	12.1	28	11.1	21	12.6	21	13.3
Feb. 4	11.7	May 5	11.1	Aug. 4	12.9	27	13.4
11	11.4	12	11.1	11	13.1	Nov. 3	13.5
19	11.2	19	11.1	18	12.8	10	13.1
25	11.1	26	11.1	25	12.8	17	13.1
Mar. 3	11.0	June 2	10.9	Sept. 2	12.9	24	13.5
10	11.0	10	11.1	8	13.1	Dec. 1	13.5
17	10.9	16	11.2	15	13.1	8	13.5
24	10.7	23	11.7	22	13.1	15	13.6
31	10.5	30	12.0	29	13.1	29	13.6
Apr. 7	10.6						

Cranston 40. Narragansett Brewing Co. Lat. 41°47'44", long. 71°26'43". Driven observation water-table well in sand and gravel, diameter 2½ inches, depth 40 feet. Water level influenced by nearby pumping wells. Land-surface datum is 54.02 feet above msl. Highest water level 17.3 below lsd, June 14, 1948; lowest 22.3 below lsd, Aug. 29, Sept. 19, 1949. Records available: 1946-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	19.2	Apr. 14	17.8	July 7	19.2	Oct. 5	20.4
14	19.2	21	17.9	14	19.5	13	20.1
21	18.9	28	18.2	21	19.9	21	20.3
Feb. 4	18.7	May 5	18.2	Aug. 4	20.0	27	20.4
11	18.5	12	18.3	11	20.2	Nov. 3	20.4
19	18.3	19	18.3	18	19.9	10	20.2
25	18.0	26	18.3	25	19.9	17	20.2
Mar. 3	18.1	June 2	18.1	Sept. 2	20.1	24	20.5
10	18.1	10	18.3	8	20.2	Dec. 1	20.4
17	17.9	16	18.1	15	21.3	8	20.5
24	17.8	23	18.9	22	20.3	15	20.7
31	17.7	30	19.2	29	20.1	29	20.7
Apr. 7	17.9						

Cranston 41. Narragansett Brewing Co. Lat. 41°47'41", long. 71°26'45". Driven observation water-table well in sand and gravel, diameter 2½ inches, depth 33 feet. Water level influenced by nearby pumping well. Land-surface datum is 56.53 feet above msl. Highest water level 17.54 below lsd, May 7, 1946; lowest 24.2 below lsd, Sept. 5, 1949. Records available: 1946-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	21.3	Apr. 14	19.8	July 7	21.1	Oct. 5	22.3
14	21.3	21	20.1	14	21.3	13	22.2
21	21.1	28	20.3	21	21.8	21	22.3
Feb. 4	20.8	May 5	20.3	Aug. 4	21.9	27	22.3
11	20.6	12	20.3	11	21.8	Nov. 3	22.4
19	20.4	19	20.3	18	21.7	10	22.3
25	20.3	26	20.4	25	21.7	17	22.2
Mar. 3	20.3	June 2	20.0	Sept. 2	21.8	24	22.4
10	20.2	10	20.3	8	21.9	Dec. 1	22.3
17	19.8	16	20.4	15	22.1	8	22.4
24	19.5	23	20.3	22	22.2	15	22.7
31	19.7	30	21.0	29	22.3	29	22.6
Apr. 7	19.8						

Cumberland 129. Thomas Cooney Estate. Lat. 41°58'20", long. 71°27'14". Dug unused water-table well in till, diameter 30 inches, depth 30 feet. Land-surface datum is about 330 feet above msl. Highest water level 5.42 below lsd, Mar. 27, 1950; lowest 17.99 below lsd Aug. 31, 1949. Records available: 1946-52.

Jan. 30	5.81	Apr. 28	6.72	Aug. 1	14.41	Nov. 28	13.13
Feb. 27	7.74	May 28	8.28	Sept. 30	15.16	Dec. 26	9.88
Mar. 28	6.57	June 28	10.54	Nov. 1	15.51		

Cumberland 265. Clarence Lawton. Lat. 41°56'26", long. 71°25'45". Dug unused water-table well in sand and gravel, diameter 30 inches, depth 20 feet. Land-surface datum is about 130 feet above msl. Highest water level 10.67 below lsd, Feb. 26, 1948; lowest 17.20 below lsd, Sept. 29, 1949. Records available: 1946-52.

Jan. 30	11.06	Apr. 28	13.12	Aug. 1	15.84	Nov. 1	15.61
Feb. 27	12.23	May 28	12.52	28	13.03	28	14.11
Mar. 28	12.04	June 26	13.98	Sept. 30	15.31	Dec. 26	12.29

Foster 1. Old Staples Farm. Lat. 41°48'53", long. 71°42'18". Dug unused water-table well in sand and gravel, diameter 20 inches, depth 13 feet. Land-surface datum is about 380 feet above msl. Highest water level 5.06 below lsd, May 28, 1951; lowest 13.00 below lsd, Oct. 28, 1949. Records available: 1947-52.

Jan. 31	6.15	Apr. 28	5.25	Aug. 1	11.82	Nov. 1	12.70
Feb. 29	7.09	May 28	6.56	28	11.38	28	11.17
Mar. 28	6.11	June 26	9.54	Sept. 30	12.40	Dec. 26	7.91

Foster 3. Clarence S. Cook. Lat. 41°47'42", long. 71°47'33". Dug unused water-table well in till, diameter 24 inches, depth 36 feet. Land-surface datum is about 610 feet above msl. Highest water level 14.38 below lsd, Mar. 31, 1948; lowest 34.27 below lsd, Dec. 26, 1952. Records available: 1947-52.

Jan. 31	15.09	Apr. 28	16.45	Aug. 1	22.07	Nov. 1	30.85
Feb. 29	15.78	May 28	16.69	28	25.06	28	30.92
Mar. 28	15.12	June 26	17.27	Sept. 30	27.52	Dec. 26	34.27

Foster 4. Cucumber Hill. Lat. 41°45'17", long. 71°46'01". Dug unused water-table well in till, diameter 24 inches, depth 17 feet. Land-surface datum is about 605 feet above msl. Highest water level 7.27 below lsd, Mar. 27, 1950; lowest 16.71 below lsd, Oct. 28, 1949. Records available: 1947-52.

Jan. 31	7.45	Apr. 28	8.80	Aug. 1	10.77	Nov. 1	11.26
Feb. 29	8.92	May 28	8.97	28	9.02	28	11.64
Mar. 28	8.04	June 26	9.83	Sept. 30	10.89	Dec. 26	9.87

Foster 5. S. J. Chatterson. Lat. 41°48'29", long. 71°43'45". Dug unused water-table well in sand and gravel, diameter 30 inches, depth 12 feet. Land-surface datum is about 465 feet above msl. Highest water level 7.66 below lsd, Mar. 31, 1948; lowest 11.48 below lsd, July 29, 1949. Records available: 1947-52.

Jan. 31	8.03	Apr. 28	9.33	Aug. 1	11.17	Nov. 1	10.72
Feb. 29	9.26	May 28	9.27	28	10.36	28	9.85
Mar. 28	8.42	June 26	10.08	Sept. 30	10.88	Dec. 26	9.46

Lincoln 84. Lincoln Bleachery & Dye Works, Lonsdale. Lat. 41°54'3", long. 71°24'24". Driven unused water-table well in sand and gravel, diameter 3 inches, depth 107 feet. Water level influenced by nearby pumping wells. Land-surface datum is about 60 feet above msl. Highest water level 2.70 below lsd, Mar. 20, 1948; lowest 7.22 below lsd, Oct. 28, 1950. Records available: 1946-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	4.69	Apr. 4	5.07	July 3	6.35	Oct. 3	6.45
12	5.41	11	5.04	11	6.17	10	6.48
18	5.00	18	5.11	18	6.32	17	6.53
25	4.49	26	5.44	25	6.42	24	5.73
Feb. 1	4.41	May 2	4.16	Aug. 1	6.43	31	6.78
8	4.28	9	5.59	8	5.87	Nov. 7	6.79
15	4.83	16	5.21	15	6.03	14	6.85
23	5.25	23	5.06	22	6.27	21	6.92
29	5.41	29	5.29	29	6.44	28	6.50
Mar. 7	4.45	June 6	5.01	Sept. 5	5.70	Dec. 6	6.53
15	3.39	13	5.44	12	6.37	12	6.36
21	2.95	20	5.77	19	6.33	19	6.39
28	4.14	27	6.04	26	6.39	26	6.52

Lincoln 181. Sayles Finishing Plants, Inc. Lat. 41°53'29", long. 71°24'30". Driven unused water-table well in sand and gravel, diameter 3 inches, depth 110 feet. Water level influenced by nearby pumping wells. Land-surface datum is about 60 feet above msl. Highest water level 0.88 below lsd, May 31, 1948; lowest 5.17 below lsd, Nov. 18, 1952. Records available: 1946-52. Measurement discontinued.

Jan. 23	2.96	Apr. 15	2.73	June 17	2.60	Sept. 23	4.40
Mar. 10	3.06	22	2.75	July 22	3.87	30	4.42
18	3.00	29	2.44	29	3.94	Oct. 14	4.25
26	2.79	June 3	2.25	Sept. 16	4.46	Nov. 18	5.17
Apr. 1	2.75	10	2.33				

Lincoln 337. City of Pawtucket. Sayles Finishing Plants, Inc. Lat. 41°53'23", long. 71°24'41". Jetted unused water-table well in sand, diameter 2 inches, depth 31 feet. Water level influenced by nearby pumping well. Land-surface datum is about 60 feet above msl. Highest water level 9.60 below lsd, Jan. 4, 1950; lowest 12.40 below lsd, Nov. 18, 1952. Records available: 1950-52. Measurement discontinued.

Jan. 23	10.15	Apr. 15	10.57	June 17	10.32	Sept. 23	11.82
Mar. 10	10.74	22	10.57	July 22	10.90	30	11.80
18	10.40	29	10.49	29	11.07	Oct. 14	11.90
26	10.49	June 3	10.14	Sept. 16	11.82	Nov. 18	12.40
Apr. 1	10.49	10	10.14				

North Smithfield 21. James W. Shaw. Branch Village. Lat. 41°59'48", long. 71°32'53". Dug unused water-table well in sand and gravel, diameter 24 inches, depth 16 feet. Land-surface datum is about 250 feet above msl. Highest water level 5.69 below lsd, Feb. 26, 1948; lowest 11.31 below lsd, Oct. 28, 1949. Records available: 1947-52.

Jan. 30	6.11	Apr. 28	7.28	Aug. 1	10.04	Nov. 1	11.05
Feb. 27	7.37	May 28	7.69	28	10.32	28	10.95
Mar. 28	6.44	June 26	8.70	Sept. 30	10.68	Dec. 26	9.90

Providence 5. American Silk Spinning Co. Lat. 41°50'21", long. 71°25'12". Drilled unused water-table well in bedrock, diameter 6 inches, depth 472 feet. Land-surface datum is 28.28 feet above msl. Highest water level 7.67 below lsd, Apr. 27, 1949; lowest 9.46 below lsd, Nov. 3, 1945, Oct. 31, Nov. 28, 1952. Records available: 1944-52.

Jan. 30	8.42	Apr. 26	8.24	Aug. 1	8.84	Oct. 31	9.46
Feb. 27	8.25	May 28	8.36	28	8.81	Nov. 28	9.46
Mar. 28	8.22	June 26	8.76	Sept. 30	9.22	Dec. 26	9.35

Providence 48. Gorham Manufacturing Co. Lat. 41°47'47", long. 71°25'56". Drilled unused water-table well in sand, diameter 8 inches, depth 121 feet. Water level influenced by nearby pumping wells. Land-surface datum is 45.79 feet above msl. Highest water level 5.88 below lsd, Apr. 20, 1952; lowest 10.20 below lsd, Oct. 20, 1947. Records available: 1944-52.

Providence 48--Continued.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.56	6.47	6.21	6.07	6.13	6.21	6.48	6.79	6.70	6.94	7.07	7.04
2	6.63	6.47	6.18	6.09	6.16	6.19	6.48	6.78	6.70	6.95	7.07	7.05
3	6.64	6.45	6.19	6.11	6.16	6.25	6.52	6.61	6.75	6.94	7.06	7.09
4	6.65	6.42	6.22	6.12	6.10	6.27	6.50	6.64	6.77	6.93	7.08	7.10
5	6.61	6.46	6.20	6.09	6.18	6.28	6.48	6.64	6.79	6.91	7.07	7.10
6	6.58	6.47	6.16	6.00	6.17	6.29	6.48	6.62	6.77	6.93	7.07	7.04
7	6.61	6.44	6.14	6.05	6.18	6.30	6.51	6.61	6.76	6.93	7.10	7.03
8	6.62	6.44	6.12	....	6.20	6.28	6.54	6.62	6.80	6.85	7.06	7.02
9	6.63	6.43	6.12	6.10	6.22	6.32	6.56	6.60	6.82	6.86	7.08	7.04
10	6.61	6.43	....	6.09	6.22	6.35	6.56	6.56	6.84	6.87	7.08	7.06
11	6.67	6.39	....	6.08	6.17	6.37	6.57	6.46	6.84	6.86	7.07	7.06
12	6.65	6.44	6.08	6.07	6.15	6.39	6.55	6.53	6.86	6.83	7.10	7.04
13	6.60	6.46	6.08	6.03	6.15	6.41	6.56	6.52	6.84	6.86	7.12	7.03
14	6.65	6.44	6.11	6.02	6.19	6.40	6.60	6.52	6.82	6.89	7.12	7.02
15	6.63	6.45	6.08	6.06	6.19	6.37	6.66	6.57	6.82	6.90	7.11	7.04
16	6.57	6.43	6.02	6.04	6.24	6.38	6.68	6.56	6.81	6.93	7.05	7.11
17	6.56	6.41	6.09	6.04	6.22	6.39	6.70	6.54	6.85	6.94	7.03	7.12
18	6.54	6.35	6.11	6.02	6.18	6.41	6.69	6.54	6.88	6.94	7.03	7.15
19	6.51	6.35	6.09	5.98	6.24	6.42	6.67	6.58	6.88	6.93	7.00	7.15
20	6.47	6.36	6.07	5.93	6.27	6.46	6.67	6.60	6.87	6.98	7.01	7.15
21	6.50	6.33	6.08	6.00	6.23	6.46	6.69	6.62	6.85	7.01	7.00	7.11
22	6.47	6.25	6.06	6.08	6.26	6.43	6.72	6.60	6.85	7.03	6.99	7.14
23	6.51	6.25	6.01	6.13	6.27	6.45	6.73	6.60	6.89	7.03	6.88	7.13
24	6.50	6.23	6.01	6.18	6.25	6.47	6.76	6.59	6.89	7.07	6.86	7.14
25	6.53	6.22	6.02	6.18	6.21	6.48	6.78	6.62	6.91	7.08	6.91	7.12
26	6.50	6.24	6.01	6.16	6.22	6.48	6.76	6.65	6.91	7.07	6.91	7.10
27	6.43	6.21	6.04	6.09	6.25	6.48	6.71	6.70	6.90	7.07	6.90	7.09
28	6.42	6.21	6.05	6.10	6.28	6.47	6.74	6.73	6.89	7.10	6.97	7.09
29	6.47	6.21	6.04	6.10	6.31	6.45	6.76	6.74	6.91	7.08	6.99	7.11
30	....	....	6.00	6.11	6.28	6.45	6.77	6.73	6.93	7.08	6.99	7.14
31	....	....	6.07	....	6.27	....	6.79	6.72	....	7.08	....	7.14

Providence 81. Nicholson File Co. well 2. Lat. $41^{\circ}49'40''$, long. $71^{\circ}25'47''$. D-rilled industrial water-table well in sand and gravel, diameter 10 inches, depth 145 feet. Land-surface datum is about 10 feet above msl. Highest water level 15.0 below lsd, May 29, July 17, 24, Nov. 13, 1949, Dec. 30, 1951; lowest 25.0 below lsd, Feb. 2, 1947, Aug. 28, Sept. 25, 1949, June 6, 1951. Records available: 1941, 1944-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	18.0	Mar. 30	19.0	June 22	21.0	Oct. 12	24.0
13	18.0	Apr. 6	19.0	29	21.0	19	22.0
20	19.0	13	19.0	July 6	19.0	Nov. 2	22.0
27	19.0	20	20.0	21	20.0	9	22.0
Feb. 3	19.0	27	19.0	Aug. 5	24.0	16	22.0
10	19.0	May 4	21.0	11	24.0	23	22.0
17	19.0	11	20.0	17	24.0	30	22.0
24	19.0	18	19.0	24	24.0	Dec. 7	22.0
Mar. 2	19.0	25	21.0	Sept. 14	24.0	14	22.0
9	19.0	June 1	19.0	21	24.0	21	21.0
16	19.0	8	19.0	Oct. 5	24.0	28	21.0
23	19.0	15	21.0				

Providence 82. Nicholson File Co. well 1. Lat. $41^{\circ}49'40''$, long. $71^{\circ}25'47''$. Drilled industrial water-table well in sand and gravel, diameter 8 inches, depth 150 feet. Land-surface datum is about 8 feet above msl. Highest water level 10.0 below lsd, May 29, July 17, 24, Nov. 13, 1949, Dec. 30, 1951; lowest 22.8 below lsd, Aug. 4, 1946. Records available: 1946-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	13.0	Mar. 9	14.0	May 11	15.0	July 14	15.0
13	14.0	16	14.0	18	15.0	21	15.0
20	15.0	23	15.0	25	16.0	Aug. 5	17.0
27	14.0	30	14.0	June 1	15.0	11	17.0
Feb. 3	14.0	Apr. 6	14.0	8	15.0	17	17.0
10	14.0	13	15.0	15	17.0	24	17.0
17	15.0	20	15.0	22	17.0	Sept. 14	17.0
24	15.0	27	14.0	29	17.0	21	17.0
Mar. 2	15.0	May 4	17.0	July 6	15.0	Oct. 5	17.0

Providence 82--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 12	16.0	Nov. 9	15.0	Nov. 30	15.0	Dec. 21	15.0
19	16.0	16	15.0	Dec. 7	15.0	28	15.0
Nov. 2	15.0	23	15.0	14	15.0		

Providence 94. Providence Gas Co. Sassafras Point plant. Lat. 41°47'58", long. 71°23'33". Drilled unused water-table well in sand, diameter 16 inches, depth 120 feet. Water level influenced by tides and nearby pumping wells. Land-surface datum is 12.32 feet above msl. Highest water level 10.65 below lsd, July 29, 1948; lowest 28.34 below lsd, Sept. 1, 1945. Records available: 1944-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	16.79	16.64	16.60	17.08	16.66	
2	h15.83	.....	.....	h16.16	.....	.....	16.38	16.77	16.59	16.59	16.95	16.22
3	16.49	16.79	16.77	17.00	16.75	15.99
4	h15.92	16.55	16.93	16.80	16.99	16.80	16.08
5	h16.32	.....	.....	.....	16.72	16.94	13.14	17.16	16.76	16.09
6	h15.84	.....	.....	.....	.....	16.83	16.86	.....	16.91	16.19	15.96
7	h15.54	.....	17.01	16.83	.....	16.74	16.34	15.90
8	16.83	17.10	.....	17.70	16.60	15.83
9	h16.24	.....	.....	h16.06	.....	.....	16.73	16.96	.....	.....	16.28	15.78
10	16.58	16.74	16.19	.....	16.30	15.76
11	h15.26	16.66	16.50	16.26	.....	16.45	15.62
12	h16.72	.....	.....	.....	16.80	16.35	16.10	.....	16.71	15.86
13	h16.97	.....	.....	.....	.....	16.32	16.50	16.37	16.19	.....	16.74
14	h16.11	.....	16.43	16.47	16.33	16.19	.....	16.75
15	16.32	16.32	16.27	16.24	16.40	16.61
16	h15.55	.....	.....	.....	.....	.....	16.31	16.33	16.15	16.28	16.64	16.67
17	16.29	16.30	16.24	16.30	16.73	16.60
18	16.31	16.33	16.26	16.46	16.73	16.65
19	h15.35	.....	.....	.....	16.23	16.38	16.42	16.37	16.63	16.35
20	h16.93	.....	.....	.....	.....	16.33	16.27	16.50	16.53	16.69	16.34
21	h15.93	.....	16.52	16.30	16.52	16.57	16.89	16.17
22	16.46	16.25	16.40	16.61	16.94	15.98
23	h13.63	.....	.....	h15.86	.....	.....	16.50	16.28	16.44	16.60	16.61	16.04
24	16.35	.....	16.37	16.44	16.55	16.26
25	16.23	.....	16.47	16.41	16.57	16.40
26	h15.29	.....	.....	.....	.....	16.44	16.32	16.48	16.26	15.86
27	h15.06	.....	.....	.....	.....	.....	16.22	16.25	16.45	16.45	16.09
28	h15.36	.....	.....	16.28	16.25	16.68	16.54	15.89
29	16.28	16.25	17.06	16.50	16.02
30	h15.06	.....	.....	h15.82	.....	.....	16.47	16.41	16.35	17.27	16.68	15.97
31	16.53	16.28	.....	17.26	.....	15.89

h Tape measurement.

Providence 113. Providence Young Men's Christian Association, 167 Broad St. Lat. 41°49'07", long. 71°24'55". Drilled unused water-table well in bedrock, diameter 12 inches, depth 208 feet. Land-surface datum is 79.89 feet above msl. Highest water level 44.76 below lsd, May 28, 1952; lowest 49.12 below lsd, Nov. 9, 1945. Records available: 1944-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	45.64	Apr. 28	44.81	July 31	45.16	Oct. 31	45.49
Feb. 27	45.32	May 28	44.76	Aug. 28	45.34	Nov. 28	45.51
Mar. 28	45.15	June 26	44.78	Sept. 29	45.43	Dec. 26	45.51

Providence 1051. U. S. Rubber Co. Lat. 41°49'40", long. 71°26'08". Drilled unused water-table well in sand and gravel, diameter 8 inches, depth 82 feet. Water level influenced by nearby pumping wells. Land-surface datum is about 10 feet above msl. Highest water level 4.71 below lsd, Dec. 26, 1951; lowest 16.10 below lsd, Jan. 16, 1948. Records available: 1948-52.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.74	10.69	10.27	9.87	11.14	8.88	11.30	9.94	10.09	11.74	11.85	9.73
2	6.55	10.42	9.58	10.32	11.43	7.90	11.87	10.11	9.37	12.05	11.30	10.38
3	7.96	9.58	9.13	10.64	11.43	9.30	12.13	9.94	10.60	12.05	10.73	10.98
4	8.90	8.90	9.82	10.97	11.10	10.25	12.13	9.49	11.44	11.84	10.89	11.33
5	8.97	9.48	9.97	10.97	10.39	10.85	10.34	10.03	11.57	11.25	11.47	11.50

Providence 1051--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	8.90	9.89	.....	10.38	10.93	11.03	8.38	10.98	11.58	10.34	11.77	11.46
7	8.75	10.16	.....	9.35	11.26	11.03	7.00	11.63	11.37	10.95	11.97	10.89
8	9.52	10.29	.....	9.93	11.50	10.77	7.32	11.88	10.47	11.44	11.97	10.08
9	10.08	10.29	.....	10.50	11.73	9.53	7.32	11.89	11.18	11.68	11.47	10.70
10	10.44	9.68	.....	10.85	11.82	10.38	7.14	11.75	11.88	11.68	10.59	11.14
11	10.65	8.55	.....	11.04	11.65	11.15	6.65	11.26	12.40	11.53	10.47	11.41
12	10.65	9.23	10.05	11.04	10.90	11.66	5.65	11.74	12.43	11.05	10.12	11.59
13	10.21	9.78	10.24	10.40	10.45	11.67	4.78	11.74	12.30	10.26	10.45	11.59
14	9.35	10.25	10.39	9.51	10.70	11.67	3.85	11.67	11.81	10.00	10.63	11.01
15	9.58	10.48	10.39	10.08	10.98	11.38	3.28	11.62	10.83	10.66	10.63	10.32
16	9.92	10.48	9.75	10.55	11.00	10.50	3.19	11.62	11.47	11.17	10.37	10.96
17	10.13	9.95	8.83	10.93	11.00	11.24	3.94	11.23	12.00	11.60	9.75	11.29
18	10.29	9.00	9.31	11.22	10.53	11.78	4.73	11.23	12.35	11.60	10.34	11.65
19	10.30	8.95	9.77	11.22	9.35	12.20	5.02	11.25	12.35	11.10	10.87	11.87
20	9.85	10.04	10.09	10.67	9.88	12.21	5.02	10.55	12.27	10.32	11.27	11.87
21	9.33	10.32	10.32	9.87	10.34	12.14	6.10	11.04	11.83	10.98	11.43	11.25
22	9.92	10.48	10.32	10.41	10.68	11.68	7.19	11.06	11.26	11.52	11.44	10.49
23	10.41	10.48	9.75	10.93	10.73	10.68	8.02	11.04	11.82	11.91	10.90	10.98
24	10.82	9.95	8.98	11.25	10.73	11.35	8.55	10.71	12.25	11.92	10.27	10.98
25	11.04	9.26	9.54	11.54	10.45	12.02	8.93	10.54	12.51	11.82	10.82	10.95
26	11.04	9.65	10.10	11.54	9.95	12.63	9.07	11.13	12.51	11.32	11.31	9.33
27	10.45	9.95	10.50	10.88	10.31	12.65	9.07	11.65	12.29	9.47	11.31	8.69
28	9.64	10.18	10.76	9.93	10.78	12.56	8.56	11.97	11.67	9.80	10.18	8.66
29	10.14	10.28	10.76	10.23	11.21	12.03	8.98	11.97	10.49	11.46	10.21	9.19
30	10.60		10.25	10.66	11.22	10.55	9.47	11.77	11.16	11.95	9.69	9.87
31	10.70		9.38		10.02		9.70	11.37		11.95		10.04

Providence 1111. Brown University. Rhode Island Hall. Lat. $41^{\circ}49'31''$, long. $71^{\circ}24'46''$. Dug unused water-table well in till, diameter 30 inches, depth 24 feet. Land-surface datum is about 120 feet above msl. Highest water level 9.18 below lsd, Jan. 23, 1952; lowest 18.40 below lsd, Nov. 2, 3, 1949. Records available: 1946-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	9.47	Apr. 7	11.78	July 8	14.30	Oct. 13	14.64
14	10.16	14	12.26	14	14.55	20	15.16
21	10.29	21	12.55	21	14.85	27	15.68
28	9.18	28	12.63	28	15.20	Nov. 3	16.14
Feb. 4	9.44	May 6	11.67	Aug. 4	15.52	10	16.50
11	9.47	12	12.05	11	14.90	17	16.76
18	9.68	19	12.44	25	14.58	24	16.50
26	10.53	26	12.77	Sept. 2	14.84	Dec. 1	16.59
Mar. 3	11.00	June 2	12.92	8	15.13	8	16.66
10	9.34	9	13.13	15	15.49	15	16.62
17	9.47	16	13.43	22	15.28	22	16.44
24	10.41	25	13.78	29	15.59	29	15.97
31	11.15	30	13.97	Oct. 6	15.67		

Smithfield 66. E. Sheffield. Lat. $41^{\circ}54'23''$, long. $71^{\circ}34'39''$. Dug unused water-table well in sand and gravel, diameter 21 inches, depth 17 feet. Land-surface datum is about 415 feet above msl. Highest water level 5.28 below lsd, Jan. 30, 1952; lowest 15.27 below lsd, Oct. 28, 1949. Records available: 1947-52.

Jan. 30	5.28	Apr. 28	8.36	Aug. 1	13.36	Nov. 1	14.64
Feb. 27	8.41	May 28	8.75	28	12.90	28	13.54
Mar. 28	5.95	June 26	11.04	Sept. 30	14.12	Dec. 26	11.82

Smithfield 213. Northwestern Water Co. Greenville. Lat. $41^{\circ}51'47''$, long. $71^{\circ}33'07''$. Drilled unused water-table well in sand and gravel, diameter 6 inches, depth 28 feet. Water level influenced by nearby pumping wells. Land-surface datum is about 285 feet above msl. Recording gage installed May 13, 1952. Highest water level 11.12 below lsd, Dec. 27, 1951; lowest 16.48 below lsd, Nov. 29, 1949. Records available: 1945, 1949-52.

Smithfield 213--Continued.

Daily lowest water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	11.44	11.95	12.93	12.83	13.37	13.60	13.48
2	11.36	11.96	12.96	12.84	13.37	13.62	13.51
3	11.37	11.97	12.96	12.88	13.37	13.63	13.51
4	11.38	12.01	12.94	12.91	13.37	13.63	13.51
5	11.39	12.05	12.94	12.97	13.36	13.63	13.51
6	11.42	12.10	12.85	12.98	13.38	13.64	13.51
7	11.45	12.14	12.77	13.00	13.37	13.64	13.42
8	11.48	12.16	12.73	13.03	13.27	13.65	13.36
9	11.51	12.18	12.73	13.05	13.27	13.66	13.34
10	11.53	12.20	12.55	13.09	13.27	13.66	13.32
11	11.55	12.22	12.55	13.12	13.27	13.67	13.32
12	11.58	12.24	12.52	13.16	13.33	13.69	13.32
13	11.33	11.61	12.29	12.54	13.18	13.35	13.73	13.26
14	11.34	11.64	12.33	12.58	13.18	13.37	13.73	13.17
15	11.35	11.68	12.35	12.62	13.20	13.36	13.73	13.13
16	11.37	11.73	12.39	12.60	13.21	13.38	13.73	13.09
17	11.39	11.73	12.45	12.53	13.22	13.39	13.73	13.08
18	11.40	11.74	12.49	12.51	13.22	13.42	13.74	13.08
19	11.43	11.75	12.54	12.51	13.18	13.43	13.75	13.08
20	11.43	11.73	12.60	12.54	13.19	13.44	13.75	13.08
21	11.43	11.76	12.62	12.55	13.21	13.46	13.75	13.08
22	11.40	11.79	12.66	12.59	13.21	13.46	13.75	13.08
23	11.38	11.82	12.70	12.62	13.21	13.48	13.57	13.08
24	11.38	11.85	12.73	12.66	13.21	13.49	13.53	13.08
25	11.38	11.88	12.77	12.70	13.22	13.51	13.44	13.08
26	11.38	11.91	12.79	12.71	13.23	13.52	13.41	13.08
27	h11.49	.....	.....	11.38	11.93	12.82	12.73	13.25	13.53	13.40	13.08
28	h11.27	h11.56	11.39	11.95	12.84	12.74	13.25	13.54	13.40	13.08
29	11.41	11.96	12.85	12.75	13.32	13.54	13.42	13.08
30	h11.17	.....	.....	.....	11.43	11.94	12.89	12.81	13.33	13.57	13.40	13.08
31	11.44	.....	12.92	12.84	.....	13.59	.....	13.08

h Tape measurement.

Smithfield 217. Northwestern Water Co. Greenville. Lat. $41^{\circ}51'47''$, long. $71^{\circ}33'07''$. Drilled unused water-table well in sand and gravel, diameter 6 inches, depth 57 feet. Water level influenced by nearby pumping wells. Land-surface datum is about 300 feet above msl. Highest water level 17.19 below lsd, Mar. 28, 1952; lowest 24.29 below lsd, Nov. 29, 1949. Records available: 1945, 1949-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	18.22	Apr. 28	18.38	Aug. 1	20.04	Nov. 1	20.72
Feb. 27	18.32	May 28	18.27	28	19.83	28	20.51
Mar. 28	17.19	June 26	18.94	Sept. 30	20.39	Dec. 26	20.07

Washington County

Charlestown 18. U. S. Navy Dept. Naval Auxiliary Air Station. Lat. $41^{\circ}22'21''$, long. $71^{\circ}39'43''$. Drilled unused water-table well in sand and clay, diameter 8 inches, depth 32 feet. Land-surface datum is 26.4 feet above msl. Highest water level 14.46 below lsd, Mar. 31, 1952; lowest 21.43 below lsd, Oct. 28, Nov. 30, 1949. Records available: 1946-52.

Jan. 31	16.32	Apr. 29	16.12	July 31	18.91	Nov. 1	20.00
Feb. 29	15.52	May 29	16.65	Aug. 29	16.91	29	20.54
Mar. 31	14.46	June 27	17.49	Sept. 29	18.43	Dec. 27	20.75

Exeter 6. Wood River Picnic Area. Lat. $41^{\circ}34'23''$, long. $71^{\circ}43'19''$. Dug unused water-table well in sand and gravel, diameter 30 inches, depth 10 feet. Water level probably influenced by nearby Wood River. Land-surface datum is about 130 feet above msl. Highest water level 4.37 below lsd, Jan. 31, 1952; lowest 7.49 below lsd, Sept. 6, 1949. Records available: 1946, 1948-52.

Jan. 31	4.37	Apr. 29	5.07	July 31	7.07	Nov. 1	7.29
Feb. 29	5.15	May 29	5.79	Aug. 29	7.04	29	7.23
Mar. 31	5.03	June 27	6.43	Sept. 29	7.32	Dec. 27	6.72

Exeter 16. State of Rhode Island, Exeter School. Lat. $41^{\circ}33'07''$, long. $71^{\circ}32'37''$. Driven unused water-table well in sand and gravel, diameter $2\frac{1}{2}$ inches, depth 27 feet. Water level influenced by nearby pumping wells. Land-surface datum is about 100 feet above msl. Highest water level 7.86 below lsd, June 9, 1948; lowest 14.86 below lsd, Dec. 29, 1948. Records available: 1946-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	11.05	Apr. 9	8.93	July 9	10.95	Oct. 8	11.93
9	10.73	16	9.11	16	11.01	15	12.06
16	10.63	23	9.40	23	11.35	22	12.21
23	10.03	30	9.28	30	11.57	29	12.35
30	9.50	May 7	9.58	Aug. 6	11.47	Nov. 5	12.40
Feb. 6	9.10	14	9.76	13	8.10	12	12.50
13	9.00	21	9.66	20	10.70	19	12.75
20	8.98	28	9.78	27	10.67	26	12.86
27	9.00	June 4	9.95	Sept. 3	10.81	Dec. 3	13.00
Mar. 5	8.80	11	9.92	10	11.13	10	13.06
12	8.30	18	10.07	17	11.35	17	12.95
19	8.50	25	10.29	24	11.58	24	13.00
26	8.50	July 2	10.40	Oct. 1	11.75	31	13.02
Apr. 2	8.68						

North Kingstown 26. North Kingstown Water Commission pumping station. Lat. $41^{\circ}33'25''$, long. $71^{\circ}29'01''$. Drilled public-supply water-table well in sand and gravel, diameter 12 inches, depth 50 feet. Measurements made about 10 hours after pump shut off. Land-surface datum is about 56 feet above msl. Highest water level 9.40 below lsd, June 1, 1948; lowest 13.37 below lsd, July 31, 1952. Records available: 1947-52.

Jan. 9	10.85	Mar. 28	10.78	June 26	11.95	Sept. 5	11.41
17	11.05	Apr. 11	10.98	July 3	11.20	12	11.58
24	10.72	18	11.00	10	12.35	19	11.50
31	10.60	24	11.16	17	12.45	26	11.48
Feb. 8	10.61	May 2	10.69	24	13.32	Oct. 25	11.58
15	10.88	9	11.05	31	13.37	31	11.62
29	10.85	16	10.93	Aug. 8	11.00	Nov. 7	11.60
Mar. 6	10.72	30	10.97	15	10.64	21	11.95
13	10.15	June 4	11.06	22	11.10	Dec. 26	11.28
21	10.67	19	11.55	29	11.29		

North Kingstown 27. North Kingstown Water Commission observation well 1. Lat. $41^{\circ}33'25''$, long. $71^{\circ}29'01''$. Driven observation well in sand and gravel, diameter $2\frac{1}{2}$ inches, depth 15 feet. Water level influenced by nearby pumping well. Land-surface datum is about 55 feet above msl. Highest water level 4.98 below lsd, June 15, 1949; lowest 8.94 below lsd, July 31, 1952. Records available: 1947-52.

Jan. 9	5.79	Mar. 28	5.79	June 26	6.87	Sept. 5	6.48
17	6.03	Apr. 11	5.99	July 3	7.00	12	6.68
24	5.84	18	5.99	10	7.90	19	6.54
31	5.80	24	6.20	17	8.08	26	6.54
Feb. 8	5.60	May 2	5.65	24	8.84	Oct. 26	6.62
15	5.50	9	6.07	31	8.94	31	6.71
29	5.83	16	5.94	Aug. 8	6.30	Nov. 7	6.68
Mar. 6	5.67	30	5.96	15	5.59	21	7.08
13	5.22	June 4	6.10	22	6.29	Dec. 26	6.48
21	5.69	19	6.79	29	6.36		

North Kingstown 28. North Kingstown Water Commission observation well 2. Lat. $41^{\circ}33'25''$, long. $71^{\circ}29'01''$. Driven observation water-table well in sand and gravel, diameter $2\frac{1}{2}$ inches, depth 15 feet. Water level influenced by nearby pumping well. Land-surface datum is about 55 feet above msl. Highest water level 6.39 below lsd, Mar. 13, 1952; lowest 9.66 below lsd, July 24, 31, 1952. Records available: 1947, 1949-52.

Jan. 9	7.06	Mar. 28	7.04	June 26	8.23	Sept. 5	7.58
17	7.28	Apr. 11	7.24	July 3	8.06	12	7.74
24	6.93	18	7.25	10	8.62	19	7.63
31	6.75	24	7.41	17	8.69	26	7.65
Feb. 8	6.86	May 2	6.90	24	9.66	Oct. 26	7.88
15	7.11	9	7.30	31	9.66	31	7.82
29	7.09	16	7.16	Aug. 8	7.10	Nov. 7	7.84
Mar. 6	6.76	30	7.32	15	6.79	21	8.23
13	6.39	June 4	7.30	22	7.27	Dec. 26	7.52
21	7.70	19	7.78	28	7.45		

North Kingstown 29. North Kingstown Water Commission observation well 3. Lat. 41°33'25", long. 71°29'01". Driven observation water-table well in sand and gravel, diameter 2½ inches, depth 13 feet. Water level influenced by nearby pumping well. Land-surface datum is about 55 feet above msl. Highest water level 6.50 below lsd, Dec. 4, 1950; lowest 11.18 below lsd, July 31, 1952. Records available: 1947-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	7.34	Mar. 28	7.84	June 26	9.26	Sept. 5	8.54
17	7.57	Apr. 11	7.02	July 3	9.30	12	8.75
24	7.26	18	8.06	10	10.25	19	8.63
31	7.19	24	8.29	17	10.45	26	8.56
Feb. 8	7.24	May 2	7.72	24	10.98	Oct. 25	8.67
15	7.60	9	8.14	31	11.18	31	8.74
29	7.66	16	8.13	Aug. 8	8.80	Nov. 7	8.73
Mar. 6	7.50	30	8.05	15	7.67	21	9.14
13	7.00	June 4	8.26	22	8.35	Dec. 26	8.72
21	7.70	19	8.73	29	8.42		

South Kingstown 10. Village of Kingston, South and Kingston Rds. Lat. 41°28'48", long. 71°28'24". Dug unused water-table well in till, diameter 36 inches, depth 18 feet. Land-surface datum is about 240 feet above msl. Highest water level 3.19 below lsd, Apr. 29, 1952; lowest 14.45 below lsd, Dec. 1, 1949. Records available: 1947-52.

Jan. 31	3.45	Apr. 29	3.19	July 31	9.73	Nov. 1	11.10
Feb. 29	3.31	May 29	3.64	Aug. 29	6.18	Dec. 27	9.74
Mar. 31	3.41	June 27	6.82	Sept. 29	8.74		

South Kingstown 83. Wakefield Water Co. Lat. 41°26'04", long. 71°32'11". Drilled unused water-table well in sand and gravel, diameter 8 inches, depth 26 feet. Water level influenced by nearby pumping wells. Land-surface datum is 92.77 feet above msl. Highest water level 0.17 below lsd, Mar. 28, 1952; lowest 14.75 below lsd, Aug. 28, 1946. Records available: 1944, 1948-52.

Day	Feb.	Mar.	Apr.	May	Aug.	Sept.	Oct.	Nov.	Dec.
1	3.22	c10.44	3.23	2.40
2	0.57	....	3.17	c9.73	c10.28	2.43
3	3.20	c10.39	2.93	2.44
4	0.38	....	....	c11.01	2.79	3.53	2.55
5	0.85	....	....	....	....	c10.57	c10.32	c10.95	2.47
6	c11.03	2.89	c10.69	2.23
7	0.42	....	....	c12.88	c11.06	c10.78	2.98	2.35
8	.94	....	....	....	c8.51	c9.88	3.27	3.27	2.38
974	c13.03	....	c10.80	c10.89	2.39
10	4.51	3.01	2.97	c10.77	2.43
1146	....	4.21	c10.93	2.85	2.94	2.42
1260	c11.09	2.99	3.05	3.16	2.26
13	c11.13	3.19	3.29	c11.03	2.31
1429	....	....	c10.44	3.25	c10.74	c10.94	2.38
15	c11.07	c9.73	3.02	2.98	2.36
16	1.04	....	....	....	c10.75	3.26	2.74	3.23	2.43
17	c9.87	c10.56	3.12	c10.88	2.45
1848	....	c10.93	c10.25	3.40	c10.69	2.49
19	c11.05	c10.67	c10.87	2.91	2.50
20	c10.63	c10.48	c10.57	3.17	2.54
2126	....	....	c11.18	2.70	c10.55	3.23	2.53
22	.79	....	....	....	2.22	3.05	2.92	3.85	2.53
23	3.22	c10.57	3.92	3.02	2.14
24	c11.00	3.05	c10.80	c10.83	2.40
25	c10.99	2.77	2.89	2.47	2.34
26	4.22	c10.28	c10.82	2.40	2.29
27	c11.15	c10.27	c10.17	2.33	2.34
2817	....	....	c11.57	2.63	c10.88	2.34	2.42
29	.74	....	....	....	c10.86	3.19	c10.47	2.38	2.45
30	3.39	2.88	3.05	2.36	2.51
31	c11.31	....	3.12	....	2.48

c Nearby well being pumped.

VERMONT

By Walter MacDonald, Jr.

Scope of Water-Level Program

Periodic measurements of water levels in Vermont, begun in October 1942, were continued in 1952. Measurements were made weekly in three wells, Middlesex 1 in Washington County, Newfane 1 in Windham County, and Bethel 1 in Windsor County, for a total of 156 readings. See figure 39 for locations.

Precipitation

Precipitation during 1952 for the State as a whole was 39.01 inches, which was 0.59 inch above normal and 4.89 inches less than in 1951, with less than normal occurring in March and the period from July through November. June was the wettest month and November the driest.

Interpretation of Water-Level Fluctuations

The typical seasonal pattern in Vermont water levels shows a general decline during the winter months when the ground is frozen followed by a sharp increase in late March and early April as the snow cover melts. With the advent of the growing season, the water table trends downward until October, owing to loss of water through evapotranspirative processes. The autumnal frosts halt these processes and water levels generally rise until the ground becomes frozen, when a gentle decline occurs. Abnormal rainfalls or unseasonal temperatures are often represented by sharp gains which deviate from the seasonal normals.

The water levels in 1952 were abnormally high in January and February, reflecting the large amount of precipitation in 1951. They remained slightly above the seasonal average through May, rising in March and April and declining in May. June found levels continuing to drop but much less than usual, being abnormally high for the month due to excessive precipitation. Levels continued to drop until the end of August with below-average readings in July and August. During September, October, and November water levels rose seasonally although they were still below monthly averages. A continued rise to somewhat higher than seasonal averages took place in December as a higher percentage than usual of the precipitation fell as rain.

There was generally a slight loss in ground-water storage during the year from the high levels prevailing at the end of 1951.

Well-Numbering System

Wells in Vermont are numbered on a town basin numerically in the order that they are inventoried.

Well Descriptions and Water-Level Measurements

(Water levels are in feet below land-surface datum.)

Washington County

Middlesex 1. Lynford Roy. Lat. 44°18'08", long. 72°35'12". Dug unused water-table well in sandy glacial till, diameter 24 inches, depth 12 feet. Land-surface datum is about 760 feet above msl. Highest water level 4.56 below lsd, Apr. 6, 1952; lowest dry several times in 1944, 1947, 1948, 1949, and 1952. Records available: 1942-52.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	6.21	Feb. 10	6.07	Mar. 16	6.46	Apr. 20	5.58
13	6.56	18	6.37	23	6.37	27	6.25
20	6.33	24	6.69	30	5.95	May 4	6.97
27	6.50	Mar. 2	6.80	Apr. 6	4.56	11	7.03
Feb. 3	6.20	9	7.07	13	5.33	18	6.56

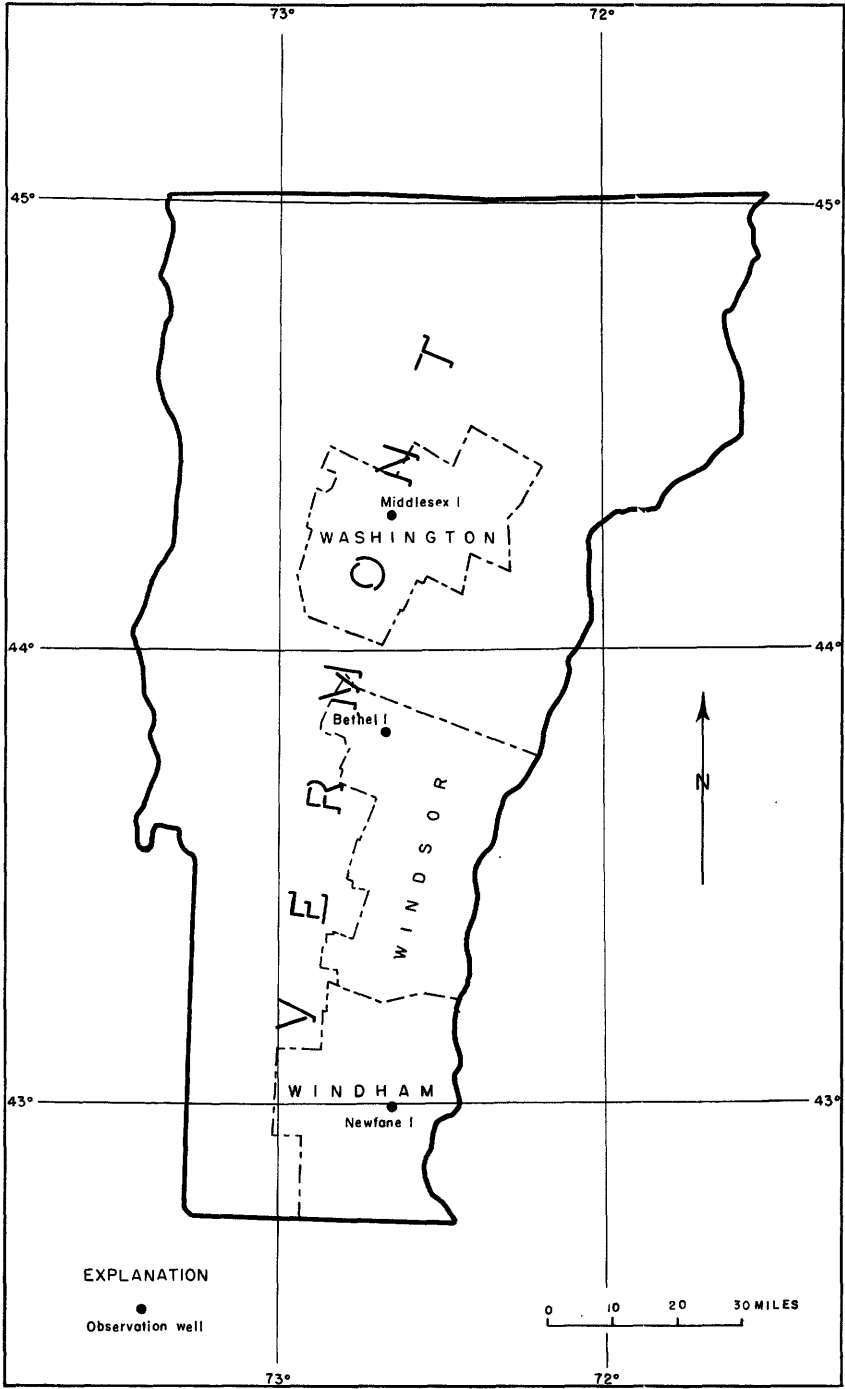


Figure 44. --Location of observation wells in Vermont, 1952.

Middlesex 1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 25	6.52	July 20	8.07	Sept. 15	10.12	Nov. 10	9.04
June 1	6.54	27	9.07	21	10.52	16	8.40
8	6.00	Aug. 3	10.05	28	10.60	24	8.52
15	6.40	10	10.40	Oct. 5	10.22	30	8.54
22	7.07	17	10.64	12	9.47	Dec. 7	8.57
29	7.19	24	10.82	19	9.40	16	7.28
July 6	7.85	31	(f)	27	9.30	22	7.31
14	7.92	Sept. 7	10.27	Nov. 2	9.27	29	7.07

f Dry.

Windham County

Newfane 1. Arthur Brooks. Lat. 42°59'05", long. 72°39'23". Dug unused water-table well in glacial drift, diameter 36 inches, depth 9 feet. Land-surface datum is about 550 feet above msl. Highest water level 1.95 below lsd, Apr. 9, 1952; lowest dry Aug. 6, Nov. 5, 19, 1952. Records available: 1951-52.

Jan. 2	4.54	Mar. 26	3.84	June 25	6.08	Oct. 1	7.86
9	4.59	Apr. 2	3.24	July 2	6.79	8	7.87
16	4.87	9	1.95	16	6.54	15	7.97
23	4.38	16	2.45	23	7.26	22	7.96
30	3.95	23	2.89	30	7.65	Nov. 5	(f)
Feb. 6	3.55	30	3.08	Aug. 6	(f)	12	7.97
13	2.03	May 7	4.03	13	7.79	19	(f)
20	4.24	14	3.60	20	7.62	26	6.58
27	4.86	21	3.97	27	7.78	Dec. 3	7.00
Mar. 5	5.28	28	3.99	Sept. 4	7.06	10	6.26
12	3.85	June 11	3.76	10	4.99	17	4.55
19	4.28	18	4.99	24	6.78	31	5.18

f Dry.

Windsor County

Bethel 1. Tyler & Rice Veneer Mill. Lat. 43°49'46", long. 72°37'55". Dug unused water-table well in glacial drift, diameter 6 feet, depth 16 feet. Land-surface datum is about 550 feet above msl. Highest water level 7.00 below lsd, Feb. 5, 1952; lowest 14.05 below lsd, Nov. 4, 11, 1952. Records available: 1951-52.

Jan. 1	11.26	Apr. 8	9.48	July 8	12.70	Oct. 9	13.74
8	11.30	15	9.02	16	13.30	15	13.74
15	11.40	22	8.08	22	13.50	22	13.90
22	11.40	29	10.80	29	13.70	28	13.90
29	10.96	May 6	11.80	Aug. 5	14.00	Nov. 4	14.05
Feb. 5	7.00	13	11.40	14	13.90	11	14.05
12	10.80	21	11.20	21	14.00	19	14.00
19	11.20	27	11.00	28	14.00	26	13.40
25	11.40	June 3	9.10	Sept. 2	12.90	Dec. 2	13.80
Mar. 5	11.40	12	11.20	9	13.40	9	13.40
12	8.40	18	11.40	18	13.80	17	12.20
18	10.20	25	12.36	25	13.90	24	12.40
25	10.80	July 1	12.50	30	14.00	31	12.50
Apr. 1	11.40						