

# Ground-Water Levels in the United States 1957-61

## North-Central States

*Prepared under the direction of* O. MILTON HACKETT, *Chief, Ground Water Branch*

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GEOLOGICAL SURVEY WATER-SUPPLY PAPER 1781

*Prepared in cooperation with the States  
of Iowa, Kansas, Minnesota, Nebraska,  
North Dakota, South Dakota, and  
Wisconsin, and with other agencies*



**UNITED STATES DEPARTMENT OF THE INTERIOR**

**STEWART L. UDALL, *Secretary***

**GEOLOGICAL SURVEY**

**Thomas B. Nolan, *Director***

## PREFACE

This report was prepared by the Geological Survey in cooperation with the States of Iowa, Kansas, Minnesota, Nebraska, North Dakota, South Dakota, and Wisconsin, and with other agencies, by personnel of the Water Resources Division under the direction of:

Luna B. Leopold . . . . . Chief Hydrologist  
O. Milton Hackett. . . . . Chief, Ground Water Branch  
W. L. Steinhilber. . . . . District Geologist (Ground Water), Iowa City, Iowa  
V. C. Fishel. . . . . District Engineer (Ground Water), Lawrence, Kans.  
R. F. Brown. . . . . District Geologist (Ground Water), St. Paul, Minn.  
C. F. Keech. . . . . District Engineer (Ground Water), Lincoln, Nebr.  
Edward Bradley. . . District Geologist (Ground Water), Grand Forks, N. Dak.  
J. E. Powell. . . . . District Engineer (Ground Water), Huron, S. Dak.  
C. L. R. Holt, Jr. . . . . District Geologist (Ground Water), Madison, Wis.



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## GROUND-WATER LEVELS IN

## THE UNITED STATES

1957-61

## NORTH-CENTRAL STATES

## INTRODUCTION

By O. M. Hackett

Publication of records of water levels in the United States in the annual series of water-supply papers was begun by the Geological Survey in 1935. From 1935 through 1939, 5 volumes were issued as Water-Supply Papers 777, 817, 840, 845, and 886. From 1940 through 1955, 6 volumes, each for a separate section of the United States as shown in figure 1, were published annually. The following table gives the numbers of water-supply papers by year and section.

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
1953	1265	1266	1267	1268	1269	1270
1954	1321	1322	1323	1324	1325	1326
1955	1404	1405	1406	1407	1408	1409
1956	....	....	1456	....	....	....
1956-57	1537	....	....	....	....	....
1956-58	....	1538	....	....	....	....
1956-59	....	....	....	1549	....	....
1956-60	....	....	....	....	1760	....
1956-60	....	....	....	....	....	1770
1957-61	....	....	1781	....	....	....

The program begun in 1956 provides for the publication of 5 years of record in 1 volume for each geographic section. During a 4-year transitional period, however, 4 of the volumes will not contain 5 years of record, as shown in the following schedule:

North-central:	1956, 1957-61, 1962-66, etc.
Northeastern:	1956-57, 1958-62, 1963-67, etc.
Southeastern:	1956-58, 1959-63, 1964-68, etc.
South-central:	1956-59, 1960-64, 1965-69, etc.
Northwestern:	1956-60, 1961-65, 1966-70, etc.
Southwestern:	1956-60, 1961-65, 1966-70, etc.

Moreover, beginning in 1956, only water-level data from a basic network of observation wells will be published. The minimum basic network provides observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers. In some States the basic network forms the skeletal index of a more comprehensive observation-well program. Publications that contain substantial additional water-level data are listed at the end of each State report in this volume.

Water-level measurements in this report are given in feet with reference to either mean sea level (msl) or land-surface datum (lsd). Mean sea level is the datum plane on which the national network of precise levels is based; land-surface datum is a precise datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum above mean sea level is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. A plus sign (+) is placed before a measurement if the level is above the plane of reference. Measurements of water levels in wells equipped with recording gages are given for every fifth day and the end of each month (eom).

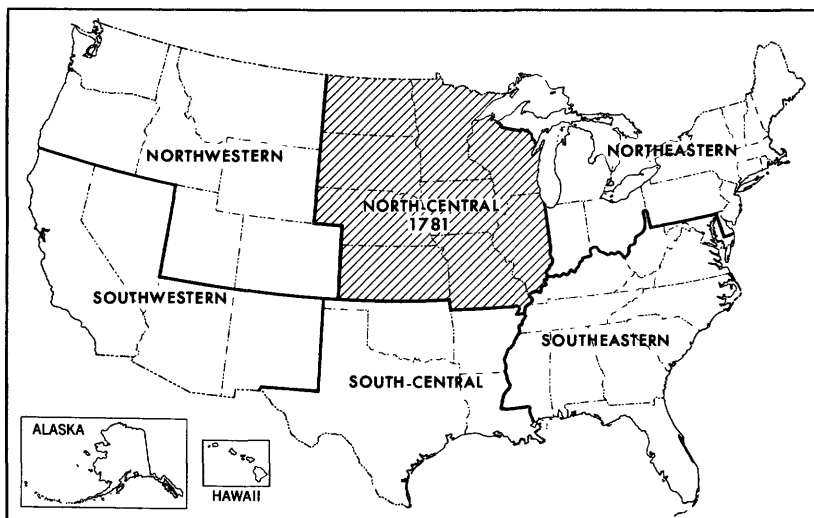


Figure 1. --Outline map of the United States showing States included in this volume.

In the collection of water-level data to serve the objectives of the observation-well program, the problem generally is to measure changes in water level accurately, rather than to determine the absolute position of the water surface. Because the measurements are made in many types of wells, under varying conditions of access and at different temperatures, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the best possible combination of measuring technique and equipment is selected, and so long as it is not changed, the measurements at each well will be consistent.

Water levels are reported to as many significant figures as can be justified by the local conditions, and the end use of the information. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, in view of the principal use to which the data are put, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

Measurements were made under the direction of the district supervisors of the Ground Water Branch in the several States.

Joy L. Charbonneau was responsible for the compilation and typing of this report.



# ILLINOIS

By L. L. Steele

Figure 2 shows the location of observation wells in Illinois.

## Well-Numbering System

The number assigned to the Bureau County well shows its location according to the Bureau of Land Management's system for subdivision of public land. The system is explained on page 7 in the Iowa report.

Wells in Du Page County are numbered serially.

## Well Descriptions and Water-Level Measurements

Water levels are reported in feet below land-surface datum, unless otherwise indicated.

### Bureau County

16-9E-9N1. Perry Croissant. Formerly R. E. Neff. 326 1st St., Princeton. Dug unused water-table well in glacial drift, diam 32 in, depth 29 ft, cribbed with brick. MP top of hole in board cover, at lsd. Highest water level 2.94 below lsd, May 15, 1943; lowest 26.64 below lsd, Mar. 30, 1957. Records available: 1942-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5, 1957	25.20	Aug. 31, 1957	18.83	Apr. 19, 1958	13.44	Dec. 20, 1958	14.69
14	25.24	Sept. 7	19.17	26	12.87	27	14.84
19	25.43	14	19.45	May 3	13.26	Jan. 3, 1959	14.91
26	25.54	21	19.71	10	11.98	10	15.19
Feb. 2	25.68	28	20.12	17	12.82	17	14.98
9	25.83	Oct. 5	20.44	24	13.06	24	15.08
16	25.98	12	20.73	31	13.64	31	15.18
23	26.14	19	20.23	June 7	13.00	Feb. 7	15.19
Mar. 2	26.23	26	20.97	14	10.30	14	9.32
9	26.37	Nov. 2	20.27	21	10.55	21	10.88
16	26.47	9	20.45	28	12.54	28	9.03
23	26.56	16	20.11	July 5	12.59	Mar. 7	9.00
30	26.64	23	19.03	12	12.58	14	9.64
Apr. 6	26.52	30	19.31	19	12.86	21	9.36
13	19.73	Dec. 7	19.58	26	12.22	28	8.79
20	17.22	14	19.85	Aug. 16	11.99	Apr. 4	7.78
27	14.02	21	18.68	23	13.39	11	8.44
May 4	13.21	28	16.64	30	14.35	18	9.00
11	14.08	Jan. 4, 1958	16.95	Sept. 6	12.97	25	9.38
18	13.24	11	17.38	13	11.82	May 2	8.65
25	12.87	18	17.73	20	13.50	9	10.05
June 1	13.32	25	17.87	27	13.80	16	10.30
8	14.25	Feb. 1	18.04	Oct. 4	14.28	23	9.28
15	13.35	8	18.23	11	12.97	30	10.30
22	14.11	15	18.26	18	13.78	June 6	10.90
29	14.55	22	18.37	25	14.11	13	11.80
July 13	16.11	Mar. 1	15.83	Nov. 1	13.98	20	12.68
20	16.56	8	14.77	8	14.42	27	13.42
27	16.95	15	14.00	15	13.55	July 4	12.30
Aug. 3	17.31	22	15.01	22	13.47	11	13.32
10	17.72	29	15.10	29	13.67	18	13.59
17	18.11	Apr. 5	15.03	Dec. 6	14.04	25	12.58
24	18.43	12	13.04	13	14.42	Aug. 1	13.64

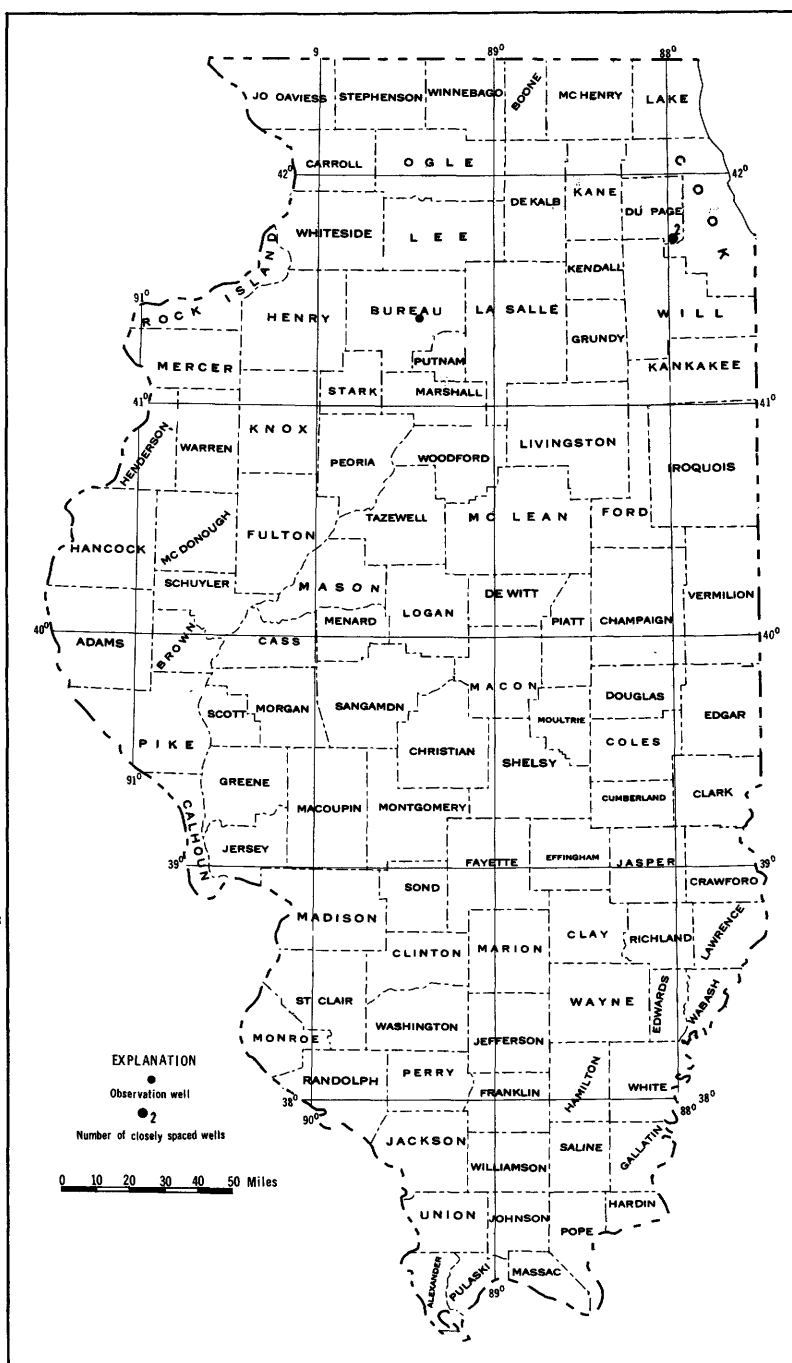


Figure 2. -- Location of observation wells in Illinois, 1957-61.

16-9E-9N1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 8, 1959	11.43	Mar. 19, 1960	9.13	Oct. 29, 1960	13.10	June 10, 1961	10.38
22	12.20	26	9.20	Nov. 5	12.44	17	11.37
29	13.03	Apr. 2	4.21	12	12.79	22	11.05
Sept. 5	13.94	9	5.72	19	12.70	24	11.47
12	14.90	23	4.90	26	12.04	July 1	10.90
19	15.54	30	5.70	Dec. 3	13.32	8	11.20
26	13.04	May 7	5.23	10	13.43	15	12.02
Oct. 2	11.92	14	6.20	17	13.65	22	12.04
10	9.87	21	6.10	31	13.98	29	9.81
16	11.38	28	4.86	Jan. 7, 1961	14.25	Aug. 5	5.03
23	12.00	June 4	5.74	14	14.45	12	8.65
31	11.68	11	6.27	21	14.65	19	10.02
Nov. 7	11.00	18	5.25	28	14.85	26	11.02
14	11.26	25	6.23	Feb. 4	15.28	Sept. 2	11.92
21	11.31	July 2	7.20	11	15.26	9	12.58
28	11.11	9	8.42	18	15.06	16	6.92
Dec. 5	11.22	16	9.40	25	14.43	23	8.92
12	10.36	23	9.96	Mar. 4	14.39	30	6.85
19	10.65	30	10.25	11	10.80	Oct. 7	8.14
26	10.23	Aug. 6	9.25	18	9.62	14	8.37
Jan. 2, 1960	8.14	13	9.51	25	9.84	21	8.85
9	8.97	20	8.05	Apr. 1	10.21	28	9.28
16	5.91	27	10.04	8	10.70	Nov. 4	7.80
23	7.41	Sept. 3	12.05	15	10.67	11	7.97
30	8.28	10	11.62	22	10.02	18	6.42
Feb. 6	8.05	17	11.75	29	10.50	25	6.68
13	8.98	24	11.85	May 6	9.00	Dec. 1	7.25
20	9.23	Oct. 1	11.58	13	9.39	9	7.84
27	9.52	8	12.38	20	9.46	16	8.41
Mar. 5	9.94	15	12.70	27	9.79	23	8.74
12	10.17	22	13.08	June 3	10.36	30	9.16

## Du Page County

ANL 9. Argonne National Laboratory. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 9, T. 37 N., R. 11 E. Drilled unused (previously reported observation) artesian well in Niagara Dolomite of Middle Silurian age, diam 4 in, depth 140 ft, cased to 90. Lsd 733 ft above msl. MP top of casing, 0.31 ft above lsd. Highest water level 88.97 below lsd, May 27, 1951; lowest 95.68 below lsd, Sept. 8, 1961. Records available: 1948-61. Affected by pumping of nearby wells.

## Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	93.87	94.00	93.95	93.75	93.69	93.49	93.93	93.56	93.75	94.05	93.77	93.93
10	94.06	93.90	93.91	93.99	93.53	93.50	94.10	93.51	93.83	94.12	94.11	93.92
15	93.94	93.97	94.07	94.03	93.67	93.68	93.98	93.52	93.75	94.19	93.85	93.96
20	93.84	94.07	94.06	93.99	93.37	93.72	93.83	93.62	93.87	94.21	93.85	93.87
25	93.99	93.87	93.91	93.91	93.57	93.81	93.37	93.61	93.96	93.97	93.85	94.03
Eom	93.82	93.92	94.16	93.79	93.52	93.81	93.51	93.71	93.97	93.78	93.92	93.93
1958												
5	94.18	93.88	93.72	93.42	93.82	94.13	93.44	93.67	94.21	94.30	94.29	94.48
10	93.82	94.14	93.45	93.69	93.70	93.76	93.54	93.81	94.21	94.28	94.40	94.56
15	93.82	94.15	93.55	93.58	93.88	93.84	93.47	93.99	94.14	94.41	94.45	94.56
20	93.83	94.41	93.53	93.50	93.87	93.55	93.45	93.95	94.27	94.30	94.49	94.51
25	93.61	94.07	93.55	93.88	93.89	93.39	93.42	93.97	94.24	94.32	94.76	94.56
Eom	93.65	93.66	93.52	93.79	93.81	93.43	93.59	94.03	94.34	94.52	94.87	94.60
1959												
5	94.60	94.60	94.26	93.55	93.37	93.28	93.86	94.15	94.56	94.55	94.51	93.99
10	94.66	94.74	93.89	93.65	93.15	93.37	94.02	94.16	94.62	94.56	94.32	94.13
15	94.28	94.66	94.23	93.45	93.47	93.54	94.08	94.32	94.53	94.52	94.41	94.17
20	94.46	94.57	94.18	93.41	93.34	93.58	94.04	94.41	94.62	94.67	94.16	94.22
25	94.62	94.26	93.89	93.35	93.38	93.69	94.22	94.49	94.59	94.24	93.97	94.14
Eom	94.90	94.27	93.62	93.28	93.28	93.95	94.23	94.43	94.57	94.60	94.02	94.02

e Estimated.

## ANL 9--Continued.

1960												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	93.95	92.90	93.21	92.67	92.42	92.87	93.34	93.99	94.49	94.24	94.63	94.55
10	93.49	92.31	93.15	92.98	92.45	93.01	93.35	94.04	94.71	94.55	94.78	94.69
15	93.43	92.78	93.26	92.71	92.54	92.78	93.53	94.13	94.67	94.69	94.46	94.41
20	93.37	93.14	93.09	92.57	92.61	93.07	93.47	94.05	94.57	94.67	94.56	94.61
25	93.16	e92.84	93.29	92.26	92.60	93.16	93.63	94.25	94.59	94.57	94.53	94.56
Eom	92.99	93.20	92.98	92.44	92.74	93.18	93.77	94.43	94.56	94.15	94.71	94.44
1961												
5	94.53	94.91	94.79	94.67	94.82	94.92	95.27	95.46	95.59	94.24	93.66	93.51
10	94.66	94.60	94.94	94.83	94.79	95.04	95.21	95.52	95.56	94.20	93.70	93.67
15	94.46	94.76	94.80	94.64	94.68	95.21	95.26	95.58	95.54	94.10	93.72	93.90
20	94.55	94.78	94.99	94.90	94.94	95.01	95.27	95.60	95.19	93.95	93.71	93.69
25	94.94	94.49	94.82	94.55	94.82	95.12	95.38	95.53	94.92	93.92	93.59	93.59
Eom	94.73	94.79	94.68	94.67	95.02	95.28	95.52	95.39	94.61	93.69	93.58	93.74

e Estimated.

ANL 10. Argonne National Laboratory. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 9, T. 37 N., R. 11 E. Drilled unused (previously reported observation) artesian well in Niagara Dolomite of Middle Silurian age, diam 10 in, depth 199 ft (previously reported 186 ft), cased to 86. Lsd 705 ft above msl. MP top of casing, 2.40 ft above lsd. Highest water level 57.79 below lsd, May 8, 1950; lowest 80.86 below lsd, Aug. 24, 1961. Records available: 1948-61. Affected by pumping of nearby wells.

## Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	73.62	74.51	75.01	74.30	72.83	73.93	75.32	75.06	76.08	75.02	74.69	74.15
10	74.18	74.41	72.75	74.59	74.11	74.79	75.09	75.37	75.04	75.40	74.30	75.80
15	e73.80	75.21	74.80	74.23	75.11	75.02	74.95	75.39	74.98	74.94	75.20	74.94
20	72.95	75.21	74.68	74.55	73.62	75.39	75.23	75.66	75.91	74.60	75.00	74.92
25	74.19	74.43	73.58	74.48	74.38	75.55	75.26	75.20	75.45	74.61	74.02	74.20
Eom	74.45	76.75	73.07	74.08	74.28	74.79	74.95	75.48	74.75	74.15	74.02	74.52

## 1958

5	73.40	74.49	74.65	74.80	74.58	76.13	75.64	76.75	77.48	76.34	76.10	76.50
10	74.20	74.74	74.28	e74.10	74.91	76.30	77.28	76.60	76.52	76.81	76.39	75.83
15	74.38	75.45	74.65	74.99	75.38	75.15	76.02	77.80	76.95	77.59	76.10	74.93
20	74.42	76.70	74.68	73.92	75.07	75.55	74.79	77.70	76.62	76.32	75.75	75.76
25	73.50	75.11	74.52	74.90	75.19	75.83	76.52	76.10	77.81	76.51	76.82	75.30
Eom	74.10	74.91	74.82	75.38	74.83	76.23	76.09	76.80	76.75	78.20	75.82	75.61

## 1959

5	e75.80	76.44	79.30	71.48	72.52	73.51	75.66	77.44	77.85	78.84	75.14	74.92
10	75.85	76.66	73.42	72.20	74.78	74.87	76.48	76.44	77.63	76.00	74.84	75.21
15	75.79	76.35	78.84	71.88	75.08	74.16	76.29	76.99	77.12	75.92	74.41	74.33
20	76.95	76.01	73.44	72.24	73.72	74.90	76.06	78.06	76.68	75.65	74.79	72.45
25	76.56	77.53	72.50	71.85	73.03	76.69	75.86	78.31	77.10	74.72	74.63	72.63
Eom	76.78	78.10	72.33	71.95	73.21	76.02	77.43	77.88	77.18	75.76	74.44	74.31

## 1960

5	74.12	73.03	73.17	74.53	72.40	74.43	75.65	77.01	77.37	76.13	76.60	76.46
10	71.80	72.35	73.50	74.34	72.95	74.39	74.70	75.61	77.23	77.03	76.77	76.39
15	72.80	72.72	73.30	72.11	74.35	75.29	75.47	76.68	77.25	76.90	75.90	76.24
20	72.82	73.24	72.92	73.86	73.22	75.40	76.46	76.77	76.55	76.82	76.29	76.57
25	e71.90	73.18	73.19	72.30	72.26	75.69	74.92	78.68	76.61	76.83	76.36	e75.80
Eom	70.59	72.99	e73.70	74.58	74.23	74.46	76.01	79.79	76.88	75.83	e75.92	e75.60

## 1961

5	e75.70	e76.05	75.45	76.16	76.48	77.63	78.11	79.06	80.10	77.00	75.32	75.28
10	e75.70	h75.88	76.14	76.02	76.13	77.75	78.60	80.59	79.95	77.47	76.14	73.37
15	e75.95	76.22	76.54	76.18	76.44	78.67	78.98	79.35	79.72	75.15	75.73	75.44
20	h76.35	75.74	75.82	77.02	76.98	77.60	79.57	78.90	79.09	76.90	75.49	75.30
25	e75.85	76.28	76.50	75.77	77.74	77.73	78.42	79.96	78.69	76.70	75.84	73.96
Eom	e76.00	78.71	76.40	73.90	76.25	79.51	78.88	80.02	77.73	75.42	e75.50	72.48

e Estimated.

h Tape measurement.

## Reference

Knowles, D. B., Drescher, W. J., and LeRoux, E. F., 1963, Ground-water conditions at Argonne National Laboratory, Illinois, 1948-60: U. S. Geol. Survey Water-Supply Paper 1669-O. [In press.]

# IOWA

By L. L. Steele

The observation-well program in Iowa was continued from 1957 through 1961 in cooperation with the State Geological Survey. Figure 3 shows the location of observation wells included in this report.

## Well-Numbering System

Wells are numbered in accordance with the Bureau of Land Management's system of land subdivision. Each well number is made up of three segments. The first segment indicates the township, the second the range, and the third the section in which the well is situated. The letter after the section number represents the 40-acre subdivision of the section, as shown in the diagram. Numbers are added as suffixes to distinguish wells in the same tract. Thus, the number 75-30-17E1 designates well 1 in the SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 17, T. 75 N., R. 30 W.

D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

## Well Descriptions and Water-Level Measurements

Water levels are reported in feet below land-surface datum, unless otherwise indicated. Barometric leveling is used in referencing land-surface datum.

### Adair County

75-30-17E1. F. E. Robert. Drilled unused water-table well in glacial drift, diam 12 in, depth 26 ft, lined with tile. Lsd 1, 267 ft above msl. MP top of board platform, 0.51 ft above lsd. Highest water level 0.18 above lsd, Mar. 23, 1943; lowest 8.40 below lsd, July 28, 1953. Records available: 1942-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 11, 1957	0.06	May 19, 1958	1.89	Sept. 10, 1959	2.11	Dec. 15, 1960	0.48
May 28	.12	Aug. 28	1.47	Dec. 2	.19	Mar. 29, 1961	.24
Sept. 5	2.21	Dec. 11	2.61	Feb. 29, 1960	.15	May 5	.22
Oct. 28	.05	Feb. 25, 1959	2.61	June 23	.06	Sept. 27	.23
Nov. 14	.09	May 14	.22	Sept. 22	1.34	Dec. 1	.22
Feb. 25, 1958	.06						

### Buena Vista County

90-37-34B1. Ed Zinn. Dug unused water-table well in glacial drift, diam 4 ft (previously reported 36 in), depth 29 ft, lined with rock. Lsd 1, 404 ft above msl. MP east side of concrete platform, 2.00 ft above lsd. Highest water level 3.77 below lsd, Oct. 15, 1946; lowest 18.32 below lsd, Aug. 27, 1941. Records available: 1940-61.

Feb. 19, 1957	17.82	May 29, 1958	9.25	Aug. 27, 1959	11.80	Nov. 24, 1960	10.00
May 20	14.69	Aug. 18	11.22	Nov. 29	10.80	Mar. 6, 1961	9.50
Aug. 26	14.46	Nov. 29	14.23	Feb. 17, 1960	8.79	June 8	6.80
Dec. 3	12.53	Mar. 4, 1959	13.39	May 23	6.40	Aug. 15	9.77
Mar. 13, 1958	10.77	June 3	6.53	Aug. 11	10.01	Dec. 5	9.23

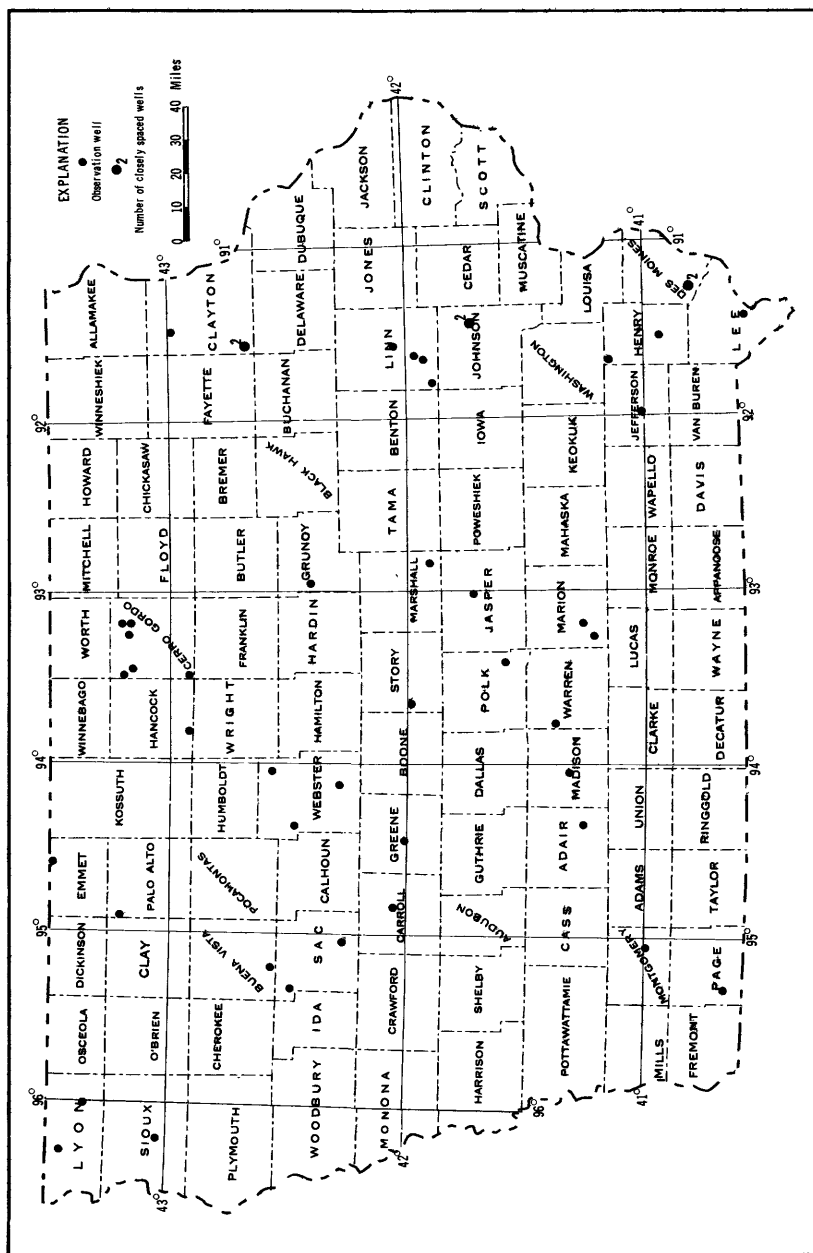


Figure 3. --- Location of observation wells in Iowa, 1957-61.

Carroll County

84-35-25F1. City of Carroll test hole 1. Drilled observation artesian well in Dakota Sandstone of Lower Cretaceous age, diam 8 in, depth 120 ft, cased to 106. Lsd 1, 242 ft above msl. MP top of casing, 0.49 ft above lsd. Highest water level 34.55 below lsd, Sept. 8, 1945; lowest 72.12 below lsd, Aug. 28, 1956. Records available: 1939-49, 1952-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 20, 1957	60.18	Aug. 20, 1958	60.30	Mar. 1, 1960	59.68	Mar. 6, 1961	52.80
Aug. 26	65.55	Nov. 29	63.42	May 23	61.13	June 8	53.54
Dec. 3	64.66	Mar. 19, 1959	56.05	Aug. 11	61.31	Aug. 15	55.74
Mar. 13, 1958	51.74	June 3	56.00	Nov. 24	53.40	Dec. 5	53.10
June 3	56.71	Aug. 31	66.10				

Cerro Gordo County

94-22-32N1. Meservey. Drilled unused artesian well in limestone of Mississippian age, diam 6 in, depth 125 ft, cased to 118. Lsd 1, 258 ft above msl. MP top of concrete pumpbase, 7.00 ft below lsd. Highest water level 12.09 below lsd, June 17, 1960; lowest 17.89 below lsd, Apr. 2, 1959. Records available: 1958-61. Well destroyed; measurement discontinued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 16, 1958	16.63	Sept. 2, 1959	14.75	June 17, 1960	12.09	Feb. 28, 1961	14.65
Dec. 11	17.60	Dec. 8	14.03	Sept. 7	13.23	May 17	12.49
Apr. 2, 1959	17.89	Mar. 3, 1960	13.13	Dec. 1	14.30	Sept. 21	13.97
June 17	14.94						

95-22-3B1. Knut Olson. Drilled domestic and stock artesian well in limestone of Devonian age, diam 4 in, depth 134 ft. Lsd 1, 260 ft above msl. MP top of casing, 1.40 ft above lsd. Highest water level 14.34 below lsd, July 3, 1945; lowest 22.68 below lsd, May 17, 1961. Records available: 1941-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 21, 1957	21.43	May 21, 1958	20.09	Sept. 3, 1959	20.99	Dec. 1, 1960	20.00
May 23	20.91	Aug. 12	20.75	Dec. 8	19.07	Feb. 28, 1961	21.61
Aug. 31	20.48	Nov. 6	22.03	Mar. 3, 1960	19.30	May 17	22.68
Nov. 26	21.29	Apr. 2, 1959	22.33	June 16	18.32	Sept. 21	22.52
Mar. 5, 1958	20.13	June 17	20.89	Sept. 7	21.32	Dec. 19	20.93

96-20-3P1. Minneapolis & St. Louis Ry. Co. Drilled unused artesian well in St. Peter Sandstone of Middle Ordovician age, diam 12 to 10 in, depth 805 ft, cased, 12-in 0-30, 10-in 614-730. Lsd 1, 120 ft above msl. MP top of plank cover, at lsd. Highest water level 32.71 below lsd, May 7, 1951; lowest 59.45 below lsd, Feb. 28, 1959. Records available: 1941-61.

Water level at noon, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	.....	.....	.....	53.49	54.13	50.71	51.19	54.43	54.28	54.90	54.35	54.20
10	.....	.....	.....	53.70	54.28	50.98	51.95	54.75	54.34	54.70	54.46	54.43
15	.....	.....	54.65	53.68	54.06	51.21	52.48	54.67	54.18	54.31	54.17	54.39
20	.....	.....	54.28	53.98	53.17	50.71	53.24	54.68	54.50	54.65	54.03	54.19
25	.....	.....	53.57	53.94	51.74	50.54	53.61	54.61	54.42	54.46	53.88	54.02
Eom	.....	.....	53.60	54.02	50.98	50.73	53.96	54.25	54.35	54.30	53.88	54.30

1958

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	54.37	55.38	56.01	56.05	54.65	53.77	53.69	54.57	55.86	56.59	56.74	57.27
10	54.54	55.57	56.05	55.50	54.73	52.67	53.70	54.78	56.10	56.55	e56.88	57.32
15	54.72	56.10	56.10	54.88	55.38	52.97	53.64	55.21	56.07	56.46	.....	57.27
20	54.78	56.19	56.31	54.69	55.55	53.32	53.62	55.17	56.10	56.15	.....	57.51
25	54.62	56.00	56.18	54.80	55.54	53.28	53.90	55.45	56.51	56.51	56.70	57.37
Eom	54.95	55.90	56.32	54.40	55.67	53.43	54.36	55.85	56.46	56.63	57.00	57.27

1959

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	57.50	59.05	59.15	54.58	55.30	51.09	50.20	52.73	51.45	50.22	51.25	e50.00
10	57.75	59.25	59.30	e54.57	54.95	50.64	50.63	52.84	52.06	50.46	50.62	50.15
15	57.99	59.18	58.59	54.50	54.65	50.74	50.95	53.27	52.17	.....	50.33	50.29
20	58.16	59.35	58.12	54.81	54.68	50.40	51.05	53.42	52.03	51.02	e50.36	50.60
25	58.43	59.35	56.25	55.15	53.24	50.45	51.80	.....	e51.17	50.76	.....	50.45
Eom	59.04	59.45	54.65	55.17	51.12	50.33	52.44	51.92	50.66	51.17	e49.87	50.09

1960

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	49.45	50.14	51.67	51.04	50.45	47.27	47.51	49.70	50.16	50.65	51.87	53.66
10	49.31	50.17	51.82	51.12	49.15	47.31	47.51	49.30	50.97	50.91	51.41	53.22
15	49.48	50.42	51.96	51.15	48.63	47.55	48.27	49.13	51.17	52.40	50.88	53.65
20	49.57	51.03	52.28	50.87	48.70	47.32	48.67	48.89	51.32	51.88	51.55	54.07
25	49.67	51.16	52.04	51.01	48.55	47.18	49.03	48.75	50.97	51.87	51.82	54.07
Eom	50.00	51.52	51.00	50.73	47.17	47.06	49.13	49.32	50.75	51.60	52.38	54.56

e Estimated.

96-20-3P1-- Continued.

1961												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	54.42	56.28	54.80	47.54	48.85	51.30	53.59	54.69	55.75	56.25	54.93	55.08
10	55.05	56.59	54.78	47.41	48.47	51.54	53.78	54.67	56.02	56.18	54.42	55.40
15	55.51	56.96	55.20	48.21	49.85	52.37	53.76	55.05	56.29	55.35	54.50	55.45
20	55.78	56.49	55.21	48.00	50.17	52.53	53.98	55.18	56.07	55.40	54.57	55.43
25	55.93	55.95	54.08	48.13	50.20	53.15	53.73	55.45	56.34	55.40	54.79	55.43
Eom	56.27	55.70	47.20	48.55	50.75	53.72	54.67	56.04	56.32	55.11	54.85	56.11

96-20-16J1. Mason City, well 11. Drilled municipal artesian well in Jordan Sandstone of Upper Cambrian age, diam 20 to 10 in, depth 1,306 ft, cased, 20-in 0-143, 14-in 713-777, 10-in 777-900 (previously reported 10-in 713-900). Lsd 1,168 ft (previously reported 1,170 ft) above msl. MP hole in well cover, 1.21 ft above lsd. Highest water level 162.23 below lsd, June 25, 1942; lowest 285.79 below lsd, Sept. 8, 1960. Records available: 1939-43, 1947-61. Water levels affected by pumping.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 22, 1957	248.80	May 21, 1958	267.49	Sept. 3, 1959	281.79	Mar. 1, 1961	274.79
May 23	230.90	Aug. 13	273.79	Mar. 2, 1960	274.79	May 18	280.29
Aug. 31	268.80	Nov. 5	268.79	Sept. 8	285.79	Sept. 21	271.46
Nov. 26	264.80	June 18, 1959	283.79	Dec. 2	281.29	Dec. 19	268.79
Mar. 5, 1958	264.99						

96-21-13E1. Mason City and Clear Lake RR. Drilled unused water-table well, diam 5 in, depth 29 ft. Lsd 1,168 ft (previously reported 1,170 ft) above msl. MP top of casing, 0.61 ft above lsd. Highest water level 1.73 below lsd, June 28, 1951; lowest 17.26 below lsd, Nov. 18, 1955. Records available: 1940-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 21, 1957	9.73	May 21, 1958	9.76	Sept. 3, 1959	8.36	Dec. 1, 1960	9.31
May 23	9.08	Aug. 14	9.37	Dec. 8	7.83	Feb. 27, 1961	9.77
Aug. 31	9.39	Nov. 6	9.99	Mar. 3, 1960	8.22	May 17	7.04
Nov. 26	9.72	Apr. 1, 1959	8.46	June 16	7.53	Sept. 21	9.53
Mar. 5, 1958	9.86	June 18	7.93	Sept. 8	8.73	Dec. 19	9.31

96-22-20L1. Boy Scouts of America. Drilled unused water-table well in glacial drift, diam 5 in, depth 126 ft. Lsd 1,249 ft (previously reported 1,250 ft) above msl. MP hole in side of casing, 1.30 ft above lsd. Highest water level 29.65 below lsd, Mar. 25, 1942; lowest 41.97 below lsd, July 21, 1955. Records available: 1940-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 21, 1957	37.48	May 21, 1958	37.57	Sept. 3, 1959	38.50	Dec. 1, 1960	38.58
May 23	37.53	Aug. 14	40.26	Dec. 8	37.64	Feb. 28, 1961	38.44
Aug. 31	38.76	Nov. 6	39.98	Mar. 3, 1960	36.80	May 17	38.08
Nov. 26	37.30	Apr. 2, 1959	38.98	June 16	37.26	Sept. 21	38.91
Mar. 5, 1958	37.03	June 17	38.55	Sept. 7	39.13	Dec. 19	37.34

#### Clayton County

91-6-22G1. Strawberry Point. Drilled unused artesian well in dolomite of Silurian age, diam 8 in, depth 160 ft, cased to 130. Lsd 1,212 ft above msl. MP top of casing, 5.30 ft below lsd (since Dec. 31, 1960). Highest water level 118.01 below lsd, Dec. 4, 1961; lowest 157.44 below lsd, Oct. 29, 1957. Records available: 1955-61. Water levels affected by pumping of nearby wells. For additional measurements, see Steinhilber and others (1961).

#### Lowest water level for the day, from recorder graph, 1955

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	.....	.....	145.70	145.58	145.20	148.26	148.68	147.21	145.92	145.18	144.59	144.95
10	.....	.....	145.63	145.22	145.68	148.51	148.97	145.95	146.43	144.72	143.72	146.39
15	.....	.....	145.45	145.35	146.99	148.50	147.52	143.90	145.77	144.60	143.67	146.00
20	.....	145.96	145.41	146.37	147.48	148.53	147.72	146.03	146.10	145.08	144.15	146.19
25	.....	145.24	145.46	145.70	147.42	148.80	147.69	145.58	145.55	144.57	144.65	146.90
Eom	.....	145.61	145.39	144.79	147.93	148.53	147.78	145.42	145.75	144.65	144.72	147.54

1956											
5	148.10	149.05	149.52	149.62	149.18	149.28	151.17	153.35	150.45	151.80	.....
10	148.04	149.13	149.78	149.70	148.57	150.70	151.29	151.55	.....	152.20	153.05
15	148.15	149.54	150.48	149.73	148.40	150.93	151.33	151.90	.....	.....	152.85
20	148.45	149.58	150.29	150.05	148.36	151.20	152.30	151.50	151.35	152.40	152.85
25	148.83	149.58	150.55	149.80	148.47	151.07	152.20	150.80	151.70	152.60	152.70
Eom	148.85	150.01	149.55	150.02	.....	150.79	152.65	150.80	152.05	152.55	.....



91-6-22G1--Continued.

Water level at noon, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	.....	.....	154.70	154.02	155.50	154.90	153.73	.....	155.27	156.36	152.68	153.56
10	.....	.....	154.60	154.37	155.70	.....	153.87	154.83	155.37	156.66	151.26	153.61
15	.....	.....	154.63	154.70	155.67	154.51	153.63	.....	155.34	157.01	152.14	153.62
20	.....	.....	155.00	154.73	155.32	154.00	154.08	155.16	155.72	156.81	152.51	153.67
25	.....	.....	154.70	154.68	155.30	153.23	153.34	155.65	156.06	157.18	152.94	153.56
Eom	.....	.....	154.84	155.15	155.45	153.42	154.44	155.53	156.07	155.97	153.24	153.95

1958

5	153.67	154.75	154.75	152.93	151.65	150.37	150.65	151.28	152.92	151.10	148.04	148.70
10	153.64	154.71	154.25	152.44	151.62	149.88	151.25	151.68	153.22	150.62	148.44	149.60
15	153.88	154.94	153.76	152.18	151.80	150.44	150.80	151.63	153.12	150.05	148.33	150.05
20	153.57	.....	153.67	151.63	151.90	150.45	151.20	151.39	152.85	149.39	148.48	150.50
25	153.62	155.61	153.70	151.95	151.52	150.55	151.11	.....	152.28	149.04	148.23	151.18
Eom	154.04	155.21	153.63	151.71	151.10	150.53	151.25	152.50	151.57	148.74	148.85	152.11

1959

5	152.52	154.03	155.56	150.97	148.42	.....	144.45	.....	142.96	146.30	146.62	145.21
10	152.97	154.21	154.48	150.50	148.66	146.39	143.89	142.30	144.00	.....	146.10	144.86
15	152.80	154.31	154.65	149.52	149.29	146.04	143.85	142.33	.....	146.38	145.89	144.98
20	153.55	155.01	153.87	149.41	149.36	145.69	.....	142.42	.....	146.25	145.37	145.20
25	154.13	155.28	153.14	148.94	148.84	145.68	.....	142.63	145.96	146.47	145.58	144.90
Eom	154.16	155.55	151.82	147.90	147.77	145.54	.....	142.38	146.38	146.55	145.21	144.22

1960

5	144.00	142.15	142.90	139.80	136.63	133.51	134.25	.....	135.14	131.32	129.51	127.66
10	143.71	141.99	142.94	139.25	135.32	133.49	134.88	135.32	134.94	131.04	129.12	127.78
15	143.44	142.41	142.98	138.73	134.05	133.42	134.70	135.56	134.39	130.77	128.15	127.40
20	143.10	142.30	142.68	138.27	133.23	134.17	135.46	135.72	134.06	130.37	128.41	127.75
25	142.42	142.28	142.12	139.88	137.88	134.11	135.25	135.45	133.86	129.93	127.98	127.06
Eom	142.54	142.66	141.23	137.72	133.70	134.24	135.03	135.43	132.49	129.04	128.45	127.04

1961

5	126.15	126.71	126.36	124.03	122.97	123.00	123.45	123.78	124.23	121.93	120.83	118.60
10	126.42	126.33	126.04	124.14	123.03	123.01	123.65	123.70	124.03	121.77	119.70	119.01
15	126.38	126.50	.....	123.79	122.95	123.39	123.60	123.65	124.33	121.64	119.42	119.38
20	126.09	126.58	125.98	123.65	123.21	123.07	123.70	123.97	123.52	121.70	118.98	119.34
25	126.82	126.15	125.50	123.10	122.85	123.40	124.10	123.82	123.20	121.59	118.60	119.06
Eom	126.33	126.48	124.23	122.74	122.90	123.33	123.90	124.07	122.60	121.27	118.62	119.61

e Estimated.

91-6-22G3. Howard Bowman. Dug unused water-table well in glacial drift, diam 36 in, depth 18 ft, cribbed with brick. Lsd 1, 221 ft above msl. MP top of board platform, at lsd. Highest water level 3.54 below lsd, May 6, 1960; lowest 9.75 below lsd, Mar. 20, 1957. Records available: 1957-61. For additional measurements, see Steinhilber and others (1961).

Water level at noon, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	.....	.....	9.69	8.57	8.37	6.61	7.95	.....	e8.94	.....	.....	8.08
10	.....	.....	9.75	8.40	7.54	7.15	e8.30	.....	e9.26	.....	.....	8.29
15	.....	.....	e9.77	8.51	6.23	7.20	8.55	.....	8.88	.....	.....	e8.46
20	.....	.....	9.75	8.54	6.82	6.28	8.71	.....	8.99	.....	.....	8.34
25	.....	.....	9.39	8.43	6.83	7.05	.....	.....	9.00	.....	7.76	8.38
Eom	.....	.....	9.20	8.19	e5.84	7.52	.....	.....	9.20	.....	7.80	.....

1958

5	.....	.....	.....	8.98	8.30	.....	.....	.....	.....	.....	e9.18	.....
10	.....	.....	.....	7.36	8.46	e6.52	.....	e8.74	e9.26	8.32	9.29	e9.40
15	.....	.....	.....	7.69	8.70	.....	e8.32	8.58	9.16	8.65	9.40	e9.48
20	.....	.....	.....	.....	8.88	.....	8.53	8.86	9.29	e8.95	.....	e9.58
25	.....	.....	.....	.....	9.00	.....	e8.77	.....	.....	.....	.....	.....
Eom	.....	.....	9.59	.....	9.10	.....	.....	.....	.....	.....	.....	.....

1959

5	.....	.....	.....	.....	.....	.....	.....	8.15	8.21	7.22	.....	.....
10	.....	.....	.....	.....	7.62	.....	.....	8.38	8.60	.....	.....	8.26
15	.....	.....	.....	.....	6.74	.....	e7.15	8.02	8.89	.....	.....	8.43
20	.....	.....	.....	.....	.....	7.68	7.58	8.22	9.09	8.25	.....	8.58
25	.....	.....	.....	.....	.....	.....	7.98	8.44	9.04	7.42	.....	8.32
Eom	.....	.....	.....	.....	.....	.....	8.06	7.68	7.42	7.59	.....	6.18

e Estimated.

91-6-22G3--Continued.

1960											
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. Dec.
5	6.71	7.74	....	7.22	5.35	....	8.07	7.63	8.44	7.91	6.40
10	e7.20	7.80	....	7.39	....	....	8.16	7.78	8.73	8.27	7.07
15	....	8.00	8.90	7.57	....	e7.10	7.29	e8.15	8.92	8.48	7.39
20	....	e8.22	8.64	5.55	....	6.93	8.03	7.68	....	8.67	7.72
25	....	....	8.69	6.05	....	7.44	7.77	8.15	e6.37	7.50	8.00
Eom	....	....	7.56	5.15	....	7.83	7.29	8.00	7.45	5.70	e8.23

1961											
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. Dec.
5	....	9.58	....	6.68	6.33	7.17	7.78	....	....	6.14	5.30
10	....	9.61	....	7.00	6.78	6.75	8.23	....	....	6.79	6.18
15	....	9.65	....	6.63	e6.60	7.45	8.20	....	....	6.79	6.51
20	9.30	8.88	....	6.02	6.68	7.85	8.31	....	....	7.06	5.70
25	9.39	8.50	....	5.22	6.72	e8.18	8.22	....	6.32	e7.25	6.01
Eom	9.58	8.72	....	5.85	7.32	8.42	....	....	4.20	5.85	....

e Estimated.

95-4-32R1. Milton and Willis Meier. Drilled stock artesian well in St. Peter Sandstone of Middle Ordovician age, diam 6 in, reported depth 380 ft, cased with iron. Lsd 1,090 ft above msl. MP plug in pumpbase, 1.00 ft above lsd. Highest water level 106.68 below lsd, Dec. 18, 1961; lowest 125.12 below lsd, July 16, 1959. Records available: 1957-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 9, 1957	124.62	May 21, 1958	121.34	Dec. 12, 1958	123.79	Sept. 26, 1960	111.98
Nov. 25	122.50	June 11	121.67	Jan. 12, 1959	124.09	Nov. 30	111.88
Dec. 27	124.05	July 16	122.18	May 26	125.06	Mar. 2, 1961	110.89
Jan. 30, 1958	119.90	Aug. 12	122.25	July 16	125.12	May 22	110.80
Mar. 4	120.53	Sept. 12	122.63	Sept. 3	124.76	Sept. 22	110.50
31	120.74	Oct. 10	123.20	Dec. 9	123.30	Dec. 18	106.68
May 2	120.96	Nov. 7	123.13	June 15, 1960	114.33		

## Des Moines County

69-3-6A1. Iowa Ordnance Plant well 3. Drilled unused artesian well in St. Peter Sandstone of Middle Ordovician age, diam 16 in, depth 1,205 ft, cased to 855. Lsd 717 ft (previously reported 720 ft) above msl. MP top of recorder platform, 1.61 ft above lsd. Highest water level 162.70 below lsd, Mar. 27, 1950; lowest 181.85 below lsd, Sept. 10, 1960. Records available: 1950-61.

## Water level at noon, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. Dec.
5	177.64	177.98	177.11	....	177.21	176.65	177.02	177.69	178.16	178.40	....
10	177.90	....	176.77	....	176.84	176.69	177.36	177.57	178.10	178.50	e179.60
15	e177.80	....	177.16	....	176.96	176.78	177.24	177.63	177.87	178.20	....
20	....	....	177.08	177.02	176.74	176.77	177.27	177.91	178.00	179.09	178.08
25	....	....	176.75	176.98	176.58	176.85	177.53	177.89	178.16	179.28	178.02
Eom	178.15	....	177.06	177.23	176.80	176.95	177.37	178.03	178.22	178.91	....

1958

5	....	e177.59	177.78	177.25	178.33	178.95	179.12	179.45	179.89	180.12	179.70
10	....	e177.74	177.86	177.84	178.12	178.47	179.24	179.52	180.04	180.06	179.95
15	177.87	....	177.79	177.97	178.44	178.85	179.33	179.65	179.89	179.99	178.69
20	177.71	....	177.92	177.87	178.61	178.98	179.27	179.58	179.85	179.67	179.94
25	e177.29	e177.59	177.82	178.30	178.56	178.91	179.26	....	179.99	179.97	179.63
Eom	177.75	177.32	177.87	178.16	178.46	179.19	179.39	179.90	180.01	180.14	180.15

1959

5	....	....	179.54	178.84	178.92	....	180.06	180.42	....	180.49	180.42
10	....	....	178.97	179.04	178.79	....	180.18	180.40	180.92	180.41	180.32
15	....	....	178.76	178.76	179.38	....	180.30	180.50	180.60	180.60	180.67
20	....	179.81	179.02	178.74	179.31	179.93	180.32	180.54	180.73	....	180.30
25	....	179.34	179.10	178.61	179.42	179.77	180.40	180.55	180.53	180.26	180.14
Eom	....	....	178.85	178.51	179.33	179.97	180.47	180.51	180.80	180.70	180.33

1960

5	180.26	179.55	179.93	179.39	179.22	179.51	181.49	181.72	181.67	181.30	181.41
10	179.95	179.01	179.63	179.68	179.27	179.66	181.25	181.63	181.77	181.50	181.46
15	179.86	179.75	179.53	179.28	179.27	179.34	181.48	181.75	181.64	181.53	180.69
20	180.03	179.78	179.46	179.14	179.22	....	181.55	181.45	181.88	181.57	181.06
25	179.82	179.42	179.52	179.14	179.28	....	181.50	181.56	181.59	181.22	180.64
Eom	179.84	179.96	179.30	179.21	179.44	....	181.65	181.68	181.56	180.58	181.26

e Estimated.

69-3-6A1--Continued.

1961

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	180.77	181.71	180.54	180.20	180.46	180.68	181.13	181.21	.....	.....	.....	.....
10	181.16	181.11	180.33	180.36	180.59	180.73	181.49	.....	.....	.....	.....	.....
15	181.02	181.26	180.31	180.13	180.33	181.10	181.35	.....	.....	.....	180.97	.....
20	180.08	181.27	180.48	180.19	180.68	180.82	181.42	.....	.....	.....	181.17	.....
25	181.63	.....	180.35	180.04	180.41	181.07	181.59	.....	.....	.....	.....	.....
Eom	181.24	.....	180.12	180.42	180.68	181.06	181.30	.....	.....	.....	.....	.....

69-3-6R1. Iowa Ordnance Plant well 2. Drilled unused artesian well in limestone of Devonian and Mississippian age, diam 19 in, depth 675 ft, cased to 75. Lsd 699 ft above msl. MP top of recorder platform, 1.91 ft above lsd. Highest water level 74.65 below lsd, Oct. 31, 1960; lowest 83.19 below lsd, Apr. 6, 1950. Records available: 1950-61.

Water level at noon, from recorder graph, 1956

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	.....	.....	.....	77.51	77.80	78.10	78.28	78.65	78.96	78.75	78.67	78.93
10	77.47	.....	77.55	77.69	77.73	78.14	78.27	78.84	79.03	78.52	78.65	78.71
15	77.06	77.56	77.83	77.33	77.83	78.09	78.21	78.85	78.83	78.72	79.05	78.78
20	77.24	.....	77.85	77.93	78.09	78.03	78.28	78.98	79.02	78.78	78.78	78.65
25	77.35	77.30	77.73	77.84	78.18	78.05	78.28	78.98	78.98	78.83	78.98	78.77
Eom	.....	77.62	77.65	77.99	77.92	78.10	78.39	78.67	78.79	78.88	78.87	78.99

1957

5	78.70	.....	79.04	79.25	78.55	79.05	78.78	78.23	77.87	77.77	77.76	77.83
10	.....	.....	79.12	78.81	79.09	79.20	78.37	78.28	77.95	77.56	77.60	77.92
15	.....	.....	79.09	78.70	79.09	79.05	78.47	78.27	78.10	77.88	78.23	77.76
20	.....	.....	78.91	78.81	79.18	79.03	78.43	78.09	77.93	77.56	78.09	78.25
25	.....	.....	79.15	78.94	79.19	78.82	78.21	78.11	77.88	77.81	77.92	77.87
Eom	.....	.....	78.90	78.66	78.91	78.87	78.41	77.96	77.75	77.94	77.82	77.88

1958

5	77.57	77.98	77.74	78.18	77.55	77.14	76.81	.....	76.66	76.40	76.52	76.27
10	76.90	e77.75	77.77	77.71	77.71	77.46	76.78	.....	76.59	76.35	76.31	75.83
15	77.70	77.88	77.69	77.70	77.49	77.14	.....	.....	76.71	76.27	76.58	e76.09
20	77.79	.....	77.68	77.81	77.46	77.08	.....	76.87	76.57	76.44	76.28	e76.06
25	78.13	e77.97	77.72	77.51	77.47	77.02	76.86	76.81	76.63	76.27	76.27	e76.05
Eom	77.98	78.39	77.73	77.47	77.48	76.71	e76.93	76.97	76.55	76.05	e75.79	e76.07

1959

5	.....	.....	76.63	76.85	76.83	76.77	76.66	76.80	.....	76.56	76.38	76.49
10	.....	.....	76.96	77.13	76.62	76.69	76.80	76.64	76.86	76.53	76.57	76.57
15	.....	76.87	76.67	76.99	76.96	.....	76.80	76.70	76.65	.....	76.87	76.49
20	.....	77.04	76.95	76.86	76.69	76.78	76.65	76.61	76.83	76.83	76.62	76.67
25	.....	.....	77.10	76.76	76.87	76.64	76.76	76.65	76.74	76.33	76.33	.....
Eom	.....	77.03	76.97	76.62	76.67	76.75	76.78	76.66	76.78	76.76	76.60	76.39

1960

5	76.47	75.95	76.19	75.67	75.38	75.18	75.17	75.07	75.23	75.18	75.45	75.34
10	76.24	.....	75.92	75.96	75.27	75.29	75.07	75.02	75.40	75.35	75.65	75.62
15	75.99	76.13	75.94	75.56	75.28	75.01	75.22	75.27	75.21	75.32	75.16	75.29
20	76.32	76.22	.....	75.52	75.24	75.27	75.16	75.10	75.24	75.43	75.47	75.66
25	76.16	75.86	75.91	75.34	75.16	75.23	76.06	75.25	75.26	75.26	75.39	75.51
Eom	76.20	75.18	75.49	75.25	75.32	75.10	75.09	75.27	75.24	75.70	75.63	75.48

1961

5	75.54	76.14	75.43	75.24	75.58	75.52	75.62	75.76	.....	.....	.....	.....
10	75.76	75.76	75.45	75.39	75.56	75.38	78.76	e75.92	.....	.....	.....	.....
15	75.55	75.85	75.27	75.16	75.16	75.71	75.56	.....	.....	.....	.....	.....
20	75.68	76.01	75.56	75.39	75.66	75.51	75.54	.....	.....	.....	.....	.....
25	76.20	75.52	75.47	75.17	75.42	75.63	75.67	.....	.....	.....	.....	.....
Eom	75.85	75.19	75.27	75.50	75.54	75.63	75.71	.....	.....	.....	.....	.....

e Estimated.

Emmet County

100-32-11R1. Okamanpedan Lake Reserve State Park. Drilled public-supply artesian well in Dakota Sandstone of Lower Cretaceous age, diam 6 in, depth 277 ft. Lsd 1,233 ft (previously reported 1,230 ft) above msl. MP plug in pumpbase, 0.61 ft above lsd (since Dec. 4, 1957). Highest water level 59.60 below lsd, Dec. 19, 1946; lowest 68.45 below lsd, Aug. 29, 1956. Records available: 1939-61.

## 100-32-11R1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Dec. 4, 1957	65.77	Dec. 11, 1958	66.79	Dec. 8, 1959	67.00	Dec. 7, 1960	66.82
Mar. 12, 1958	65.83	Mar. 5, 1959	66.34	Mar. 2, 1960	66.94	Mar. 9, 1961	67.57
June 1	65.89	June 17	66.54	May 25	66.03	May 17	66.34
Aug. 20	66.44	Aug. 29	67.00	Aug. 22	66.62	Dec. 6	66.72

Greene County

83-30-8M1. City of Jefferson. Drilled public-emergency-supply artesian well in Jordan Sandstone of Upper Cambrian age, diam 12 to 6 in, depth 2,307 ft, cased to 1,796. Lsd 1,065 ft above msl. MP edge of vent pipe, 1.00 ft above lsd. Highest water level 76.14 below lsd, Dec. 15, 1961; lowest 77.56 below lsd, Dec. 8, 1960. Records available: 1960-61. Dec. 8, 1960, 77.56; Mar. 6, 1961, 77.39; June 8, 77.03; Aug. 15, 77.32; Dec. 15, 76.14.

Grundy County

88-18-15K1. Town of Wellsburg. Drilled public-emergency-supply artesian well in English River Siltstone [of Stainbrook (1950)] of Lower Mississippian age, diam 12 in, depth 156 ft, cased to 128. Lsd 1,060 ft above msl. MP edge of vent pipe, 1.25 ft above lsd. Highest water level 60.45 below lsd, Dec. 19, 1961; lowest 96.81 below lsd, Sept. 27, 1960. Records available: 1960-61. Sept. 27, 1960, 96.81; Dec. 2, 86.93; Feb. 27, 1961, 77.16; May 18, 70.60; Sept. 18, 64.64; Dec. 19, 60.45.

Hancock County

94-25-34M1. Clarion-Webster Experimental Farm. Bored unused water-table well in glacial drift, diam 3 in, depth 18 ft, cased with downspout all the way. Lsd 1,197 ft above msl. MP top of casing, 0.60 ft above lsd. Highest water level 3.90 below lsd, May 31, 1960; lowest 10.99 below lsd, Dec. 1, 1960. Records available: 1960-61.

May 2, 1960	5.50	Sept. 30, 1960	9.95	Apr. 29, 1961	4.25	Aug. 28, 1961	7.70
31	3.90	Oct. 18	9.95	May 17	4.63	Sept. 21	8.99
June 30	5.00	Nov. 21	10.85	June 30	5.50	Nov. 1	6.00
July 30	7.15	Dec. 1	10.99	July 31	7.00	Dec. 19	5.79
Aug. 31	9.40	Apr. 1, 1961	7.50				

Henry County

71-6-9B1. City of Mount Pleasant well 2. Drilled municipal artesian well in Jordan Sandstone of Upper Cambrian age, diam 10 to 6 in, depth 1,820 ft, cased, 10-in 0-500, 8-in 500-567, 6-in 567-678. Lsd 732 ft (previously reported 730 ft) above msl. MP hole in well cover, 1.22 ft above lsd. Highest water level 132.40 below lsd, Sept. 5, 1945; lowest 172.76 below lsd, Sept. 14, 1961. Records available: 1945-61. Water levels affected by pumping.

Mar. 20, 1957	166.14	May 15, 1958	167.76	Aug. 20, 1959	170.41	Dec. 29, 1960	172.45
May 27	167.51	Aug. 7	168.39	Nov. 19	168.21	Apr. 13, 1961	170.42
Sept. 4	167.75	Nov. 10	169.25	Mar. 22, 1960	171.32	June 21	172.24
Nov. 13	167.03	Feb. 16, 1959	169.74	June 8	169.74	Sept. 14	172.76
Feb. 14, 1958	167.06	May 15	166.62	Sept. 19	171.47	Nov. 14	171.78

73-7-4Q1. Town of Wayland. Dug unused water-table well in glacial drift, diam 48 in, depth 52 ft. Lsd 745 ft above msl. MP top of cement cover, 0.21 ft above lsd. Highest water level 4.81 below lsd, Mar. 28, 1961; lowest 11.10 below lsd, Sept. 21, 1960. Records available: 1960-61. Sept. 21, 1960, 11.10; Dec. 14, 10.90; Mar. 28, 1961, 4.81; May 3, 5.66; May 12, 6.11; Sept. 28, 8.46; Nov. 14, 7.60.

Jasper County

80-18-31C1. P. W. Beukema. Dug stock (previously reported unused) water-table well in glacial drift, diam 36 in, depth 37 ft, cribbed with brick. Lsd 937 ft (previously reported 940 ft) above msl. MP top of cement platform, 1.00 ft above lsd. Highest water level 2.67 below lsd, June 10, 1947; lowest 27.15 below lsd, Dec. 18, 1948. Records available: 1940-61.

Apr. 12, 1957	25.27	Feb. 25, 1958	25.52	May 14, 1959	10.21	Sept. 12, 1960	10.74
May 28	24.97	May 19	26.93	Sept. 10	14.40	Dec. 15	14.39
Sept. 6	21.20	Aug. 29	22.17	Dec. 2	10.69	Mar. 29, 1961	9.21
Oct. 21	22.39	Dec. 11	22.17	Feb. 18, 1960	7.19	May 5	9.66
Nov. 15	22.40	Feb. 25, 1959	24.90	June 22	5.09	Nov. 21	6.20

Jefferson County

72-10-25A1. City of Fairfield well no. 3. Drilled unused artesian well in glacial sand and gravel, diam 6 in, depth 191 ft, cased. Lsd 738 ft above msl. MP base of recorder shelter, 1.55 ft above lsd (since May 12, 1961). Highest water level 36.98 below lsd, Nov. 2, 1961; lowest 87.13 below lsd, Feb. 15, 1958. Records available: 1958-61.

Water level at noon, from recorder graph, 1958											
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
5	.....	.....	85.36	.....	.....	82.51	76.07	.....	71.85	.....	66.00
10	.....	.....	e85.05	.....	.....	77.80	75.82	73.59	e71.65	.....	e67.67
15	.....	87.13	.....	.....	.....	77.53	75.39	73.19	.....	.....	67.25
20	.....	86.75	.....	.....	e79.48	77.18	74.92	72.88	70.75	.....	66.90
25	.....	86.12	.....	.....	79.13	76.82	74.68	72.58	70.06	.....	e66.55
Eom	.....	85.63	.....	.....	78.62	76.55	74.25	72.20	e69.55	.....	.....

1959

5	.....	62.35	60.60	e59.15	57.66	56.18	.....	53.74	.....	51.40	50.35
10	64.07	e62.20	60.50	59.01	e57.30	55.99	.....	53.52	e52.68	51.22	50.22
15	63.65	e61.80	60.14	58.70	e57.27	55.82	54.70	e53.40	52.41	e51.16	50.17
20	63.34	61.71	e59.97	58.35	56.85	.....	54.46	.....	52.29	.....	49.95
25	63.02	61.34	.....	58.10	56.71	.....	54.35	.....	51.91	e50.83	49.72
Eom	62.80	61.16	.....	57.80	56.30	.....	54.02	.....	51.81	50.62	49.66

1960

5	.....	47.54	.....	46.05	45.15	.....	43.90	.....	.....	42.43	41.85
10	.....	47.12	.....	46.05	45.13	44.52	43.75	.....	.....	42.43	41.85
15	.....	47.25	.....	45.78	45.05	44.22	.....	.....	.....	42.32	41.55
20	e48.00	47.16	e46.33	45.65	44.82	44.25	.....	.....	e42.70	42.28	41.60
25	47.85	.....	46.23	e45.55	44.65	44.11	.....	.....	42.63	e42.13	41.50
Eom	47.73	.....	46.06	45.43	e44.65	43.92	.....	.....	42.52	41.68	41.48

1961

5	40.95	40.58	40.03	39.53	39.29	39.07	.....	.....	.....	37.77	37.45
10	40.94	40.38	39.87	39.52	39.23	e38.99	.....	.....	.....	37.76	37.40
15	40.78	40.35	39.76	39.40	39.11	e39.02	.....	.....	38.03	37.76	e37.45
20	.....	40.28	39.80	39.35	39.21	e39.01	.....	.....	37.98	e37.65	.....
25	40.83	40.09	39.70	39.28	39.10	e38.99	.....	.....	37.85	37.60	.....
Eom	40.60	.....	39.57	e39.31	39.10	e38.98	.....	.....	37.47	37.47	.....

e Estimated.

Johnson County

80-5-22M1. Chicago, Rock Island & Pacific RR. Co. Dug unused water-table well in glacial drift, diam 4 ft, depth 20 ft, cribbed with brick. Lsd 753 ft (previously reported 750 ft) above msl. MP base of recorder shelter, 0.30 ft above lsd. Highest water level 5.88 below lsd, May 22, 1953; lowest dry, Dec. 2-31, 1955. Records available: 1941-56, 1958-61. No measurement made in 1957.

Water level at noon, from recorder graph, 1958											
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
5	.....	16.86	16.67	15.95	15.65	.....	16.12	17.51	18.29	18.41	.....
10	.....	16.86	16.21	15.93	15.52	.....	16.65	17.66	18.06	18.04	.....
15	15.09	.....	15.86	16.27	15.25	.....	16.98	17.78	17.85	16.35	17.27
20	15.62	.....	.....	16.40	.....	14.89	17.03	17.76	17.93	15.92	e17.42
25	16.01	.....	.....	15.96	.....	15.11	17.09	17.87	18.06	16.18	16.75
Eom	16.52	16.87	.....	15.85	.....	15.66	17.31	18.08	18.25	e16.57	16.82

1959

5	e18.19	18.78	.....	6.65	6.39	6.56	14.15	e15.98	e16.23	17.03	10.60
10	18.42	18.92	.....	8.20	8.36	9.23	14.60	16.00	16.58	.....	8.15
15	18.49	18.55	.....	10.02	8.97	11.00	15.13	16.03	16.81	8.93	9.49
20	18.55	e18.02	.....	10.04	9.77	12.21	15.45	15.33	17.12	11.13	10.21
25	18.67	.....	e10.20	7.50	8.82	13.15	15.42	15.17	17.32	11.72	10.37
Eom	18.80	.....	8.41	5.93	9.13	14.08	15.69	15.78	17.34	11.42	10.08

1960

5	6.83	9.27	10.74	.....	7.68	.....	10.28	11.40	15.35	.....	5.98
10	e8.65	9.08	11.05	.....	.....	.....	9.60	12.02	15.92	e15.45	8.16
15	.....	9.42	10.97	7.88	6.14	6.20	7.12	12.63	16.35	15.31	9.37
20	.....	9.87	11.17	.....	7.16	7.83	8.62	13.23	16.50	14.74	6.05
25	.....	10.12	10.65	6.02	6.48	8.98	9.73	13.99	16.21	14.62	7.93
Eom	.....	10.54	6.82	7.76	6.33	9.65	10.65	14.80	e15.35	13.94	9.67

e Estimated.

## 80-5-22M1--Continued.

1961												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	12.30	13.30	11.36	8.77	10.24	11.45	12.95	....	....	8.10	....	7.33
10	12.64	13.27	....	9.57	10.58	10.82	13.39	6.99	....	9.50	5.95	8.57
15	12.64	13.50	....	....	10.62	11.03	13.91	9.65	....	9.68	7.91	....
20	12.77	13.37	6.45	9.89	10.85	....	14.56	11.08	....	10.19	....	....
25	....	12.54	7.54	9.83	10.85	11.93	13.57	....	....	10.73	....	....
Eom	13.07	12.32	7.48	9.93	11.16	12.47	13.36	....	....	10.95	6.02	11.90

80-5-22M2. Chicago, Rock Island & Pacific RR. Co. Drilled unused artesian well, diam 5 in, depth 82 ft. Lsd 753 ft (previously reported 750 ft) above msl. MP base of recorder shelter, 0.30 ft above lsd. Highest water level 8.15 below lsd, Apr. 21, 1952; lowest 21.05 below lsd, Sept. 26, 1957. Records available: 1941-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31, 1957	19.31	Dec. 1, 1958	19.25	Oct. 19, 1959	17.03	Sept. 15, 1960	17.10
July 23	20.04	22	19.44	27	16.79	26	16.75
Sept. 26	21.05	30	19.71	Nov. 2	16.74	Oct. 21	16.80
Dec. 17	20.04	Jan. 8, 1959	19.81	20	16.28	Nov. 8	14.80
Feb. 27, 1958	18.30	Mar. 26	16.59	Dec. 7	16.42	25	14.50
Apr. 2	18.86	Apr. 19	17.13	Feb. 1, 1960	15.71	Dec. 14	15.01
June 18	18.48	30	15.16	8	15.43	Jan. 10, 1961	15.80
July 1	19.06	May 6	16.45	Mar. 1	16.13	13	15.71
16	19.34	13	16.27	22	16.28	Feb. 14	16.22
25	19.40	21	15.85	31	13.63	27	15.83
Aug. 13	19.73	June 12	16.78	Apr. 12	14.90	Apr. 14	14.43
20	19.78	23	17.42	May 13	13.57	26	14.53
27	19.84	Aug. 6	18.02	June 8	12.23	June 23	15.70
Sept. 26	20.06	27	18.35	28	14.64	Aug. 2	14.40
Oct. 13	18.99	Sept. 8	18.76	Aug. 3	15.24	Oct. 3	14.16
28	19.34	14	18.87	23	16.08	31	14.57
Nov. 14	19.48	Oct. 12	16.65	Sept. 8	16.79	Dec. 29	14.38

## Lee County

67-5-14L1. U.S. Geol. Survey. Driven observation water-table well in alluvial sand, diam 1½ in, depth 13 ft, screened 11-13. Lsd 529 ft (previously reported 530 ft) above msl. MP top of casing, 1.50 ft above lsd. Highest water level 5.57 below lsd, June 9, 1960; lowest 9.33 below lsd, Oct. 30, 1956, Mar. 20, 1957. Records available: 1950-61.

Mar. 20, 1957	9.33	May 15, 1958	8.15	Aug. 20, 1959	6.98	Dec. 29, 1960	7.63
May 27	8.15	Aug. 7	7.99	Nov. 18	6.92	Apr. 13, 1961	6.69
Sept. 4	8.59	Nov. 10	8.60	Mar. 21, 1960	7.30	June 21	8.45
Nov. 13	8.30	Feb. 16, 1959	8.16	June 9	5.57	Sept. 14	7.46
Feb. 14, 1958	8.28	May 20	7.46	Sept. 19	7.32		

## Linn County

82-7-18P2. Joseph Cerveny, Sr. Dug unused water-table well in glacial drift, diam 4 ft, depth 14 ft, cribbed with brick. Lsd 820 ft above msl. MP base of recorder shelter, 0.08 ft above lsd. Highest water level 1.26 below lsd, Jan. 12, 1960; lowest 8.98 below lsd, Feb. 17, 1961. Records available: 1959-61.

## Water level at noon, from recorder graph, 1959

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	.....	.....	.....	.....	.....	.....	.....	6.39	3.62	3.16	4.87	
10	.....	.....	.....	.....	.....	.....	.....	6.73	e4.38	4.15	4.97	
15	.....	.....	.....	.....	.....	.....	.....	5.15	6.92	4.96	4.53	4.99
20	.....	.....	.....	.....	.....	.....	.....	5.67	7.11	5.19	4.69	5.05
25	.....	.....	.....	.....	.....	.....	5.32	5.68	7.25	3.98	4.62	e5.08
Eom	.....	.....	.....	.....	.....	5.43	6.18	5.98	4.47	4.73	3.97	

## 1960

5	4.56	4.86	4.24	4.10	4.59	3.14	5.34	5.78	7.16	7.74	4.88	.....
10	4.76	3.98	4.30	4.58	4.18	4.64	3.60	5.99	7.42	7.99	5.50	.....
15	2.85	4.81	5.35	4.74	4.66	4.68	4.45	6.33	7.65	.....	5.27	.....
20	4.24	e5.02	5.44	4.04	4.68	.....	.....	e6.53	.....	e7.92	5.48	.....
25	e4.55	.....	5.38	4.58	3.88	4.98	5.21	6.81	.....	8.12	e5.77	.....
Eom	4.80	.....	3.56	3.14	.....	5.15	e5.48	6.80	.....	1.84	.....	.....

e Estimated.

82-7-18P2--Continued.

1961

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	....	8.83	5.94	4.46	4.96	....	5.18	....	e6.43	4.60	4.11	....
10	....	8.87	3.68	4.66	....	....	5.50	....	6.73	e4.80	4.63	....
15	....	8.95	3.50	4.67	....	....	5.55	....	4.00	4.25	4.82	....
20	....	7.95	4.17	4.73	....	....	5.85	....	4.75	4.80	....	....
25	....	6.85	4.23	4.74	....	5.07	....	....	4.87	4.93	....	....
Eom	8.66	7.34	4.03	4.85	....	5.30	....	....	3.54	4.98	....	5.38

e Estimated.

83-7-21K1. Wapsi Valley Creamery. Drilled unused artesian well in dolomite of Silurian age, diam 8 to 6 in, depth 261 ft, cased, 8-in 0-28, 6-in 21-154. Lsd 773 ft (previously reported 770 ft) above msl. MP top of casing, 1.75 ft above lsd. Highest water level 56.76 below lsd, Apr. 23, 1944; lowest 74.87 below lsd, Feb. 5, 1959. Records available: 1943-59. Well destroyed; measurement discontinued. Water levels affected by pumping of nearby wells.

Water level at noon, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	....	....	....	....	....	72.63	73.00	73.77	73.36	72.45	e73.06	....
10	....	....	....	....	....	72.70	73.47	73.79	73.32	70.08	72.79	....
15	....	....	....	....	72.88	e72.87	73.59	74.20	72.79	73.39	....	....
20	....	....	....	....	72.53	73.13	73.62	74.09	73.17	e73.66	....	....
25	....	....	....	....	72.60	72.93	73.88	73.70	72.34	e73.47	....	....
Eom	....	....	....	....	72.56	72.63	74.08	73.42	e72.30	73.33	....	....

1958

5	....	....	73.65	72.55	73.58	74.49	73.13	74.37	74.25	73.13	74.10	74.35
10	....	72.49	73.36	73.56	73.25	74.40	....	73.61	74.07	....	....	74.27
15	....	72.85	73.10	73.43	....	73.08	....	74.69	73.74	73.25	....	e73.63
20	....	72.90	73.70	72.77	74.21	....	73.00	....	73.26	e73.17	....	74.53
25	....	73.75	73.50	73.77	73.38	....	74.14	74.12	....	....	74.01	73.78
Eom	....	73.52	73.25	73.63	73.44	73.70	....	73.69	73.87	74.19	73.23	74.37

1959

5	74.18	74.78	....	72.62	....	....	....	....	....	....	....	....
10	73.93	74.73	....	....	....	....	....	....	....	....	....	....
15	74.68	73.76	....	....	....	....	....	....	....	....	....	....
20	74.50	....	....	....	....	....	....	....	....	....	....	....
25	73.77	....	73.90	....	....	....	....	....	....	....	....	....
Eom	74.10	....	73.26	....	....	....	....	....	....	....	....	....

e Estimated.

83-7-32G1. Floyd Felter. 22d Ave. SW. and 11th St. SW., Cedar Rapids. Drilled unused artesian well in limestone, diam 5 in, depth 282 ft. Lsd 805 ft (previously reported 800 ft) above msl. MP plug in well cover, at lsd. Highest water level 75.88 below lsd, Jan. 26, 1942; lowest 99.08 below lsd, July 31, 1957. Records available: 1940-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3, 1957	91.90	Nov. 29, 1957	96.20	Oct. 30, 1958	97.45	Oct. 1, 1959	94.32
30	93.13	Dec. 30	95.90	Dec. 1	96.62	Jan. 4, 1960	88.43
Mar. 1	95.38	Jan. 30, 1958	95.56	30	95.19	Mar. 1	88.30
Apr. 8	92.41	Feb. 27	95.83	Jan. 30, 1959	97.73	Apr. 4	87.80
29	95.37	Mar. 31	96.33	Mar. 24	96.73	June 30	88.84
May 31	96.87	Apr. 30	95.30	May 1	93.84	Sept. 30	90.69
July 1	97.38	June 13	97.69	29	94.13	Dec. 30	88.89
31	99.08	July 1	98.28	July 2	95.50	Mar. 31, 1961	88.93
Sept. 5	96.92	31	98.55	Aug. 10	93.61	July 7	90.74
30	97.66	Sept. 2	97.62	Sept. 8	94.78	Oct. 6	90.19
Oct. 30	97.89	Oct. 1	98.28				

84-7-13E2. U.S. Geol. Survey. Drilled observation water-table well in glacial drift, diam 1½ in, depth 17 ft, screened 15-17. Lsd 892 ft (previously reported 890 ft) above msl. MP top of casing, 0.75 ft above lsd. Highest water level 1.11 below lsd, Mar. 29, 1960; lowest 12.90 below lsd, Dec. 3, 1956. Records available: 1940-61.

Jan. 3, 1957	12.77	Aug. 30, 1957	9.89	June 2, 1958	8.95	Jan. 30, 1959	12.30
30	12.56	Sept. 30	11.32	13	7.00	Feb. 27	10.28
Mar. 1	11.55	Oct. 30	11.11	30	7.79	Mar. 30	2.68
30	10.34	Nov. 29	7.80	July 31	8.28	May 1	2.11
Apr. 8	9.41	Dec. 30	8.68	Sept. 2	10.37	29	1.79
29	9.37	Jan. 30, 1958	9.15	Oct. 1	10.97	July 2	1.75
May 31	4.44	Feb. 27	8.69	30	11.94	31	4.21
July 1	6.81	Mar. 31	8.40	Dec. 1	11.18	Aug. 31	4.64
31	8.67	Apr. 30	7.70	30	11.91	Oct. 1	5.22

## 84-7-13E2-- Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 2, 1959	3.40	Apr. 4, 1960	1.40	Nov. 1, 1960	4.34	July 7, 1961	4.57
Dec. 1	2.36	27	1.92	30	4.92	Aug. 1	3.53
Jan. 4, 1960	2.13	May 18	2.10	Dec. 30	4.93	31	5.80
12	1.30	June 1	2.73	Jan. 31, 1961	5.73	Sept. 30	3.68
25	1.88	8	2.89	Feb. 27	5.21	Oct. 6	2.79
Feb. 1	1.93	30	3.70	Apr. 3	2.08	31	3.02
Mar. 1	2.55	Aug. 4	4.82	May 2	2.65	Dec. 4	2.10
29	1.11	30	4.90	June 1	4.10	29	2.82
Apr. 1	1.15	Sept. 30	6.19	30	5.12		

Lyon County

99-44-26R1. State of Iowa. Drilled unused water-table well in glacial drift, diam 20 in, depth 38 ft, lined with tile. Lsd 1,400 ft above msl. MP top west side of casing, 2.01 ft above lsd. Highest water level 0.50 below lsd, June 26, 1951; lowest 9.74 below lsd, Oct. 24, 1940. Records available: 1940-43, 1947-61.

Feb. 19, 1957	7.33	May 31, 1958	3.15	Aug. 28, 1959	2.38	Nov. 25, 1960	1.35
May 21	1.88	Aug. 19	4.01	Nov. 27	1.65	Mar. 9, 1961	.92
Aug. 27	.58	Nov. 25	6.11	Mar. 2, 1960	3.38	June 10	.87
Dec. 4	.99	Mar. 5, 1959	6.73	May 25	.66	Aug. 16	3.40
Mar. 12, 1958	1.99	June 1	1.27	Aug. 15	3.17	Dec. 6	1.84

99-45-5B1. City of Rock Rapids. Drilled unused artesian well in Dakota Sandstone of Lower Cretaceous age, diam 10 in, depth 375 ft, cased to 296. Lsd 1,363 ft above msl. MP plug in cover over casing, 1.00 ft above lsd. Highest water level 107.30 below lsd, Nov. 25, 1960; lowest 107.85 below lsd, Aug. 16, 1961. Records available: 1960-61. Aug. 15, 1960, 107.38; Nov. 25, 107.30; Mar. 9, 1961, 107.52; June 10, 107.35; Aug. 16, 107.85; Dec. 6, 107.75.

Madison County

75-28-2B1. Glen Newton. Drilled unused water-table well in glacial drift, diam 24 in, depth 32 ft, cribbed with rock. Lsd 1,093 ft (previously reported 1,090 ft) above msl. MP hole in board platform, 0.50 ft above lsd. Highest water level 9.93 below lsd, Oct. 23, 1946; lowest 20.59 below lsd, Oct. 1, 1943. Records available: 1940-61.

Apr. 11, 1957	16.27	May 19, 1958	16.20	Sept. 10, 1959	16.30	Dec. 15, 1960	14.45
May 28	15.69	Aug. 28	16.67	Dec. 2	15.01	Mar. 29, 1961	13.50
Sept. 5	17.05	Dec. 11	16.32	Feb. 29, 1960	14.42	May 4	13.13
Oct. 28	16.73	Feb. 25, 1959	16.55	June 22	14.05	Sept. 27	14.45
Nov. 14	16.45	May 14	15.15	Sept. 21	15.36	Dec. 1	13.05
Feb. 25, 1958	16.20						

Marion County

74-21-11K2. Town of Melcher. Drilled unused water-table well in glacial drift, diam 18 in, depth 25 ft, lined with tile. Lsd 948 ft above msl. MP top of well cover, 1.00 ft above lsd. Highest water level 0.33 below lsd, Mar. 14, 1961; lowest 16.27 below lsd, Oct. 22, 1953. Records available: 1950-61.

Jan. 5, 1956	13.50	May 10, 1956	11.82	Sept. 13, 1956	9.85	Jan. 17, 1957	13.02
12	13.10	17	12.15	20	12.55	24	14.24
19	13.08	24	12.83	27	13.35	31	12.84
26	12.72	31	11.97	Oct. 4	13.76	Feb. 7	12.82
Feb. 2	13.20	June 7	12.62	11	14.19	14	12.65
9	13.13	14	12.29	18	13.95	21	12.89
16	13.14	21	12.95	25	14.16	26	12.99
23	13.29	28	13.62	Nov. 1	13.92	Mar. 7	13.06
Mar. 1	13.22	July 5	13.19	9	13.12	14	12.98
8	13.32	12	13.73	16	13.11	21	11.97
15	13.10	19	13.60	23	13.11	27	10.75
22	13.26	26	13.63	29	13.03	Apr. 4	9.32
28	13.32	Aug. 2	12.82	Dec. 6	13.27	11	9.15
Apr. 5	13.23	9	11.52	13	13.41	18	9.18
12	13.20	16	11.76	20	13.33	25	8.90
19	13.38	23	11.17	27	12.86	May 2	8.79
26	13.43	30	11.18	Jan. 3, 1957	13.12	9	9.06
May 3	11.82	Sept. 6	11.15	10	13.28	16	8.35



74-21-11K2--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 23, 1957	8.03	July 22, 1958	2.68	Sept. 8, 1959	9.30	Nov. 7, 1960	6.87
30	8.35	29	4.44	11	8.50	15	6.66
June 13	8.44	Aug. 5	4.08	14	8.62	21	5.48
20	8.96	12	5.10	21	8.30	29	6.32
27	9.44	19	6.00	28	7.40	Dec. 5	6.53
July 3	9.82	26	6.19	Oct. 7	6.65	13	6.80
10	10.90	Sept. 2	6.59	13	6.44	14	5.49
18	11.46	9	5.77	19	6.55	20	6.74
24	11.96	16	5.09	26	6.33	Jan. 4, 1961	5.65
31	11.15	23	5.28	Nov. 2	6.43	9	5.72
Aug. 7	11.94	30	5.45	9	5.32	16	6.15
14	12.27	Oct. 7	5.60	16	5.78	24	6.99
21	11.96	14	5.87	23	5.46	31	6.29
28	11.35	21	5.50	Dec. 1	5.58	Feb. 8	6.19
Sept. 4	10.97	28	6.18	2	5.66	14	5.64
5	11.17	Nov. 4	6.12	8	5.70	21	5.62
11	10.60	11	6.32	15	5.67	27	4.30
18	10.77	18	5.06	22	5.70	Mar. 7	2.16
25	11.30	25	5.23	29	3.72	14	.33
Oct. 2	12.15	Dec. 2	5.33	Jan. 5, 1960	4.30	20	3.24
9	11.17	9	4.72	12	4.46	28	.90
16	10.78	16	5.39	19	1.20	Apr. 4	2.04
23	10.60	23	5.57	26	1.70	10	2.35
30	10.13	30	5.93	Feb. 2	3.88	18	2.18
Nov. 6	10.30	Jan. 6, 1959	6.06	29	3.72	24	1.93
13	10.18	13	5.93	Mar. 28	3.90	May 1	2.79
14	9.96	20	5.87	Apr. 4	.90	8	3.10
20	9.75	27	5.89	11	1.76	15	3.80
27	9.59	Feb. 3	6.13	18	.75	22	4.03
Dec. 4	9.99	10	5.77	26	2.20	31	4.98
11	9.84	17	5.46	May 2	1.76	June 4	5.10
18	9.80	24	5.13	9	1.43	11	6.32
26	9.28	26	4.96	16	1.93	19	5.52
Jan. 2, 1958	9.14	Mar. 3	4.43	23	2.15	25	5.80
9	9.83	10	4.73	31	2.00	July 2	6.49
16	8.96	17	3.13	June 7	2.50	13	3.14
22	9.08	24	2.26	13	1.88	18	7.20
29	9.18	31	.77	21	2.88	26	7.46
Feb. 5	9.58	Apr. 7	1.87	22	2.35	Aug. 4	6.78
12	9.27	14	2.33	27	3.30	7	6.94
19	9.38	21	.56	July 5	4.00	15	7.39
26	7.07	28	1.77	12	4.22	24	7.87
Mar. 5	7.55	May 5	1.84	19	4.52	31	6.34
12	7.27	12	.57	26	5.29	Sept. 5	7.46
19	5.24	15	1.94	Aug. 3	5.58	14	5.19
26	6.07	19	1.72	9	5.90	18	5.88
Apr. 1	7.09	26	1.60	16	4.60	26	5.28
9	6.94	June 2	1.71	23	4.57	Oct. 5	4.33
16	6.81	9	3.01	30	7.30	12	4.58
May 7	6.88	23	4.60	Sept. 6	7.85	21	4.70
14	7.57	30	6.00	13	8.17	28	4.72
20	7.93	July 7	5.14	20	7.80	Nov. 2	3.38
27	8.49	20	7.03	21	6.82	10	4.22
June 3	8.52	27	8.57	27	7.39	14	3.20
10	8.92	Aug. 3	7.44	Oct. 4	7.64	28	2.00
17	8.92	11	8.50	11	7.75	Dec. 5	2.37
24	9.00	17	7.98	18	7.77	15	2.86
July 1	9.96	24	8.59	25	7.87	21	3.32
8	3.16	31	9.05	Nov. 1	5.20	29	3.36
15	4.52						

75-20-31C2. Miss Amanda Elliot. Drilled unused water-table well in glacial drift, diam 15 in, depth 29 ft, lined with tile. Lsd 919 ft above msl. MP top of plank platform, 1.31 ft above lsd. Highest water level 2.31 below lsd, June 11, 1947; lowest 27.42 below lsd, Oct. 28, 1953.

Records available: 1940-61.

Apr. 11, 1957	10.38	May 20, 1958	13.74	Sept. 11, 1959	12.25	Dec. 14, 1960	8.45
May 28	9.03	Aug. 28	13.49	Dec. 2	11.14	Mar. 28, 1961	2.88
Sept. 5	13.51	Dec. 12	11.85	Feb. 29, 1960	8.04	May 4	5.85
Nov. 14	14.67	Feb. 26, 1959	8.27	June 22	5.89	Sept. 28	9.19
Feb. 26, 1958	14.87	May 15	4.19	Sept. 21	9.57	Nov. 27	3.65

Marshall County

84-18-24Q1. City of Marshalltown. Drilled unused artesian well in glacial sand and gravel of Pleistocene age, diam 8 in, depth 200 ft, cased to 190, screened 190-200. Lsd 871 ft (previously reported 870 ft) above msl. MP hole in plate over casing, 1.80 ft above lsd. Highest water level 4.92 below lsd, July 13, 1951; lowest 22.76 below lsd, Dec. 18, 1961. Records available: 1949-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 22, 1957	21.20	May 22, 1958	18.40	Sept. 2, 1959	22.72	Dec. 2, 1960	21.09
May 20	19.77	Aug. 14	20.35	Dec. 7	21.02	Feb. 27, 1961	18.93
Aug. 26	19.26	Nov. 4	19.51	Apr. 15, 1960	13.82	May 16	18.47
Dec. 3	18.91	Mar. 4, 1959	20.59	May 23	12.20	Sept. 18	22.63
Mar. 5, 1958	18.62	June 16	16.63	Sept. 7	20.55	Dec. 18	22.76

Montgomery County

71-36-6J1. State of Iowa. Drilled observation water-table well in glacial drift, diam 1½ in, depth 38 ft, screened 36-38. Lsd 1,081 ft (previously reported 1,080 ft) above msl. MP top of casing, 3.02 ft above lsd. Highest water level 2.52 below lsd, May 31, 1951; lowest 30.99 below lsd, Apr. 26, 1950. Records available: 1950-61.

Jan. 28, 1957	14.88	Apr. 28, 1958	14.23	June 25, 1959	5.21	Sept. 21, 1960	12.42
Feb. 20	15.30	May 27	13.87	July 24	12.39	Oct. 27	12.68
Apr. 2	15.48	June 24	13.38	Aug. 28	12.33	Dec. 1	13.09
30	14.38	July 24	13.54	Sept. 28	13.22	28	13.58
May 22	13.87	Aug. 27	13.18	Oct. 31	13.33	Feb. 22, 1961	14.27
June 21	13.58	Sept. 26	13.65	Dec. 2	13.38	Apr. 7	4.66
July 26	13.96	Oct. 28	13.56	23	13.58	25	13.75
Aug. 29	14.38	Nov. 28	13.41	Feb. 2, 1960	13.14	May 22	12.68
Oct. 1	14.63	Dec. 30	13.81	25	7.78	June 25	12.88
28	14.48	Jan. 27, 1959	13.96	Apr. 19	12.78	July 27	7.82
Dec. 3	14.47	Feb. 25	14.21	June 1	12.38	Aug. 23	13.48
30	14.42	Apr. 6	13.58	27	12.60	Sept. 25	13.68
Jan. 24, 1958	14.46	28	13.35	July 20	13.43	Oct. 25	13.47
Mar. 21	14.26	May 25	12.35	Aug. 25	12.77	Nov. 28	13.08

Page County

68-38-7N1. John Cutter. Drilled unused water-table well in glacial drift, diam 12 in, depth 44 ft, lined with tile. Lsd 1,087 ft (previously reported 1,090 ft) above msl. MP top of ¾-in pipe, inserted through board cover, 1.50 ft above lsd. Highest water level 1.44 below lsd, June 23, 1947; lowest 20.96 below lsd, Nov. 24, 1958. Records available: 1934-61.

Jan. 21, 1957	17.82	June 2, 1958	12.98	Sept. 1, 1959	11.29	Nov. 1, 1960	14.15
Feb. 19	16.32	26	13.83	Oct. 6	4.26	Dec. 2	14.64
Mar. 21	17.60	July 29	6.16	29	9.85	Jan. 3, 1961	15.24
May 2	9.90	Aug. 29	10.42	Dec. 2	13.32	Feb. 4	15.20
22	9.98	Oct. 1	11.39	Jan. 6, 1960	12.87	27	12.40
June 29	4.35	29	13.73	Feb. 1	10.35	Apr. 3	4.26
July 29	10.10	Nov. 24	20.96	22	8.70	May 1	7.22
Aug. 30	12.89	Dec. 27	15.36	Apr. 4	3.98	24	10.11
Sept. 30	13.24	Feb. 3, 1959	13.74	May 3	9.10	June 22	7.29
Oct. 29	12.00	Mar. 2	11.19	24	8.19	Aug. 2	9.70
Dec. 2	9.90	29	5.06	July 5	9.43	25	12.44
Jan. 27, 1958	11.57	Apr. 29	6.28	28	13.12	Oct. 2	6.84
Feb. 26	8.76	May 27	5.19	Sept. 1	9.21	Nov. 8	10.48
Mar. 25	9.02	July 6	6.86	Oct. 3	14.52	Dec. 4	10.10
Apr. 29	5.58	28	11.74				

Palo Alto County

97-34-30Q1. Norman Broadwell. Dug domestic water-table well in glacial drift, diam 48 to 18 in, depth 25 ft, cribbed with rock. Lsd 1,361 ft above msl. MP top of board platform, 0.50 ft above lsd. Highest water level 15.63 below lsd, July 20, 1955; lowest 21.04 below lsd, Nov. 16, 1955. Records available: 1940-45, 1948-59. Well destroyed; measurement discontinued.

Feb. 26, 1957	19.45	Dec. 4, 1957	18.53	June 1, 1958	16.84	Dec. 11, 1958	20.92
May 21	18.38	Mar. 12, 1958	19.13	Aug. 20	18.07	Mar. 5, 1959	20.30
Aug. 30	19.36						

Polk County

79-22-22A1. J. G. Reed. Dug unused water-table well in glacial drift, diam 36 in, depth 39 ft, cribbed with tile. Lsd 930 ft above msl. MP top west side of concrete curb, 0.20 ft above lsd. Highest water level 2.08 below lsd, May 14, 1959; lowest 11.22 below lsd, Dec. 6, 1956. Records available: 1940-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 12, 1957	10.88	May 19, 1958	5.52	Sept. 10, 1959	6.43	Dec. 15, 1960	4.62
May 28	4.30	Aug. 29	5.64	Dec. 2	4.70	Mar. 29, 1961	2.79
Sept. 6	6.30	Dec. 11	5.85	Feb. 18, 1960	4.18	May 5	3.59
Nov. 15	5.28	Feb. 25, 1959	6.18	June 22	3.90	Dec. 1	4.21
Feb. 25, 1958	4.30	May 14	2.08	Sept. 12	4.69		

Sac County

86-36-4N1. State Conservation Commission. Dug unused water-table well in glacial drift, diam 36 in, depth 9 ft, cribbed with concrete. Lsd 1,223 ft above msl. MP top north side of concrete curb, 2.52 ft above lsd. Highest water level 2.48 below lsd, June 28, 1945; lowest dry Aug. 29, 1956, Feb. 19, 1957. Records available: 1940-61.

Feb. 19, 1957	(f)	June 3, 1958	6.41	Aug. 31, 1959	6.67	Nov. 24, 1960	6.08
May 20	8.88	Aug. 20	6.54	Nov. 26	6.28	Mar. 6, 1961	5.79
Aug. 26	8.88	Nov. 29	7.18	Mar. 1, 1960	5.73	June 8	6.14
Dec. 3	6.83	Mar. 19, 1959	6.75	May 23	4.57	Aug. 15	5.58
Mar. 13, 1958	6.23	June 3	4.15	Aug. 11	5.70	Dec. 5	5.44

f Dry.

89-38-26A2. City of Schaller. Drilled emergency public-supply artesian well in Dakota Sandstone of Lower Cretaceous age, diam 10 to 8 in, depth 352 ft, cased to 352, perforated 304-352. Lsd 1,376 ft above msl. MP edge of pump breather pipe, 1.80 ft above lsd. Highest water level 210.04 below lsd, Mar. 25, 1948; lowest 229.10 below lsd, May 2, 1956. Records available: 1940-61.

Feb. 21, 1956	228.67	June 3, 1958	223.00	Aug. 31, 1959	223.76	Nov. 24, 1960	223.80
May 2	229.10	Aug. 20	223.50	Nov. 26	223.65	Mar. 6, 1961	223.73
May 20, 1957	221.98	Nov. 29	223.80	Mar. 1, 1960	224.88	June 8	223.77
Aug. 26	222.92	Mar. 19, 1959	223.23	May 24	224.04	Aug. 15	224.57
Dec. 3	222.40	June 3	223.72	Aug. 11	224.20	Dec. 5	223.87
Mar. 13, 1958	223.33						

Sioux County

95-45-5A1. City of Sioux Center. Drilled unused artesian well in Dakota Sandstone of Lower Cretaceous age, diam 5 in, depth 456 ft. Lsd 1,454 ft (previously reported 1,450 ft) above msl. MP top of casing, 3.75 ft below lsd. Highest water level 266.94 below lsd, Sept. 8, 1945; lowest 270.68 below lsd, Jan. 24, 1961. Records available: 1939-45, 1948-49, 1952-61. Feb. 19, 1957, 269.19; May 21, 268.18; Aug. 27, 269.02; Dec. 4, 269.10; Dec. 30, 269.20.

## Water level at noon, from recorder graph, 1958

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	269.42	268.95	269.06	268.22	269.30	269.49	269.11	269.08	.....	.....	.....	.....
10	269.11	269.45	269.24	269.22	268.94	268.95	269.20	269.08	.....	.....	.....	.....
15	269.22	269.34	269.22	269.11	269.34	269.14	269.13	269.09	.....	.....	.....	.....
20	269.15	269.28	269.35	269.00	269.21	269.20	269.13	269.10	.....	.....	.....	.....
25	268.51	268.77	269.32	269.53	269.14	269.12	269.08	.....	.....	269.10	.....	.....
Eom	268.95	268.72	269.08	269.10	268.73	268.83	269.07	.....	.....	.....	.....	.....

1959

5	.....	.....	.....	.....	.....	269.40	269.48	269.35	269.31	269.54	269.71	269.94
10	.....	.....	.....	.....	.....	269.35	269.63	269.49	269.95	269.40	269.40	269.68
15	.....	.....	.....	.....	.....	269.32	269.58	269.53	269.45	269.42	269.68	269.68
20	.....	.....	.....	.....	.....	269.60	269.53	269.40	269.41	269.65	269.59	269.95
25	.....	.....	.....	.....	.....	269.20	269.57	269.53	269.19	269.22	269.30	269.50
Eom	.....	.....	.....	.....	.....	269.55	269.75	269.45	269.78	269.83	269.65	269.76

1960

5	270.00	269.70	270.22	269.80	269.52	269.85	269.86	269.98	269.73	269.70	270.05	269.57
10	269.75	269.25	269.83	269.90	269.75	269.78	269.98	269.98	269.94	269.90	270.02	269.92
15	269.78	269.72	269.85	269.55	269.60	269.50	269.98	269.82	269.90	270.17	269.48	269.84
20	269.98	269.98	270.03	269.32	269.57	269.71	269.98	269.66	269.90	270.06	270.00	270.34
25	269.72	269.83	269.70	269.42	269.40	269.83	269.98	269.65	269.94	269.91	269.58	269.67
Eom	269.70	270.10	269.42	269.76	269.70	269.75	269.97	269.74	269.90	269.52	270.31	269.78

e Estimated.

95-45-5A1--Continued.

## 1961

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	269.83	270.41	269.76	269.68	269.75	269.84	269.82	270.01	270.01	269.80	270.41	269.84
10	269.92	269.88	269.41	269.81	269.74	269.65	270.00	269.91	269.85	269.82	269.89	270.24
15	269.79	270.07	269.77	269.70	269.62	270.26	269.73	270.04	270.13	270.22	269.98	270.40
20	270.08	270.00	270.18	269.30	270.11	269.90	269.82	270.22	269.58	270.10	270.08	270.10
25	270.27	269.66	269.60	269.53	269.79	269.95	269.85	269.86	270.11	274.20	269.87	269.81
Eom	269.93	269.90	269.67	269.85	269.75	269.78	269.78	269.82	269.82	269.96	269.90	270.25

## Story County

83-24-20J1. Agricultural Engineering Experiment Station. Dug unused water-table well in glacial drift, diam 36 in, depth 38 ft, cribbed with brick. Lsd 1,022 ft above msl. MP top of west side of concrete platform, 0.25 ft above lsd. Highest water level 5.90 below lsd, May 31, 1944; lowest 26.09 below lsd, July 14, 1939. Records available: 1939-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 18, 1957	18.80	May 17, 1958	10.20	Aug. 31, 1959	13.63	Dec. 6, 1960	13.48
May 20	11.42	Aug. 18	9.20	Dec. 7	12.26	Mar. 10, 1961	11.41
Aug. 26	12.92	Dec. 10	13.02	Apr. 15, 1960	7.12	May 16	7.44
Dec. 5	11.75	Mar. 4, 1959	13.50	May 23	6.90	Dec. 7	8.33
Mar. 13, 1958	9.71	June 16	7.48	Sept. 7	12.66		

## Warren County

76-25-8R1. Mrs. Gertrude Kelley. Dug domestic water-table well in glacial drift, diam 30 in, depth 40 ft, cribbed with cement tile. Lsd 984 ft above msl. MP top of board cover, 0.71 ft above lsd. Highest water level 3.15 below lsd, Mar. 28, 1961; lowest 19.13 below lsd, Feb. 25, 1959. Records available: 1958-61.

Dec. 11, 1958	17.82	Dec. 2, 1959	12.15	Sept. 21, 1960	12.98	May 4, 1961	5.39
Feb. 25, 1959	19.13	Feb. 29, 1960	7.37	Dec. 14	13.28	Sept. 27	7.48
May 14	6.31	June 22	6.94	Mar. 28, 1961	3.15	Dec. 1	4.99
Sept. 11	12.05						

## Webster County

87-28-29N1. Ransom Helms. Formerly Grant Spangler. Drilled unused water-table well in glacial drift, diam 12 in, depth 42 ft, lined with tile. Lsd 1,165 ft (previously reported 1,160 ft) above msl. MP top of recorder platform, 4.10 ft above lsd. Highest water level 0.52 below lsd, June 12, 1947; lowest 13.62 below lsd, Mar. 12, 1956. Records available: 1942-56, 1958-61. No measurement made in 1957.

## Water level at noon, from recorder graph, 1958

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	....	....	....	2.70	3.58	4.06	3.49	4.30	5.38	6.12	6.78	....
10	....	....	e3.64	3.05	3.70	3.94	3.93	4.55	5.26	5.52	6.99	....
15	....	....	3.30	3.25	3.86	3.84	3.80	4.79	4.58	5.87	7.04	....
20	....	....	3.52	3.38	4.00	4.13	3.46	4.96	5.16	6.09	6.45	....
25	....	....	3.58	3.35	4.18	3.60	3.90	4.75	5.55	6.41	6.48	....
Eom	....	....	3.51	3.43	4.33	4.02	4.08	5.15	5.85	6.67	6.76	....

## 1959

5	....	....	7.38	3.87	e3.52	....	....	4.90	4.74	4.67	4.72	4.75
10	....	....	7.25	4.20	3.03	3.42	....	4.88	5.38	4.96	4.61	e4.86
15	....	....	6.29	4.25	3.42	3.71	....	5.30	5.62	5.24	4.75	4.95
20	....	....	5.35	....	....	4.03	....	5.62	5.18	5.50	4.76	5.02
25	....	....	4.52	....	....	4.28	....	4.80	5.50	5.52	4.60	5.00
Eom	....	....	3.80	....	....	....	5.45	5.02	4.65	5.72	4.72	3.68

## 1960

5	4.05	4.55	4.50	e2.40	2.92	3.05	3.87	4.28	4.41	e4.55	5.15	4.70
10	4.22	3.88	e4.88	2.88	2.47	3.31	3.32	4.15	4.72	4.83	5.35	5.24
15	4.05	e4.26	e5.50	3.00	2.92	3.48	3.04	4.53	4.92	5.10	5.40	5.45
20	4.30	4.22	5.82	2.33	2.65	3.34	3.53	3.88	4.21	5.25	5.58	5.62
25	4.45	4.21	5.42	2.68	1.74	3.65	3.83	4.31	3.47	5.25	5.58	5.55
Eom	4.60	4.37	e3.10	2.45	2.59	3.59	4.01	3.95	e4.15	4.64	5.67	5.63

e Estimated.

87-28-29N1-- Continued.

1961

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	5.75	6.12	4.85	3.13	3.25	3.57	3.86	3.77	4.13	3.57	3.62	3.86
10	5.67	....	4.85	3.32	3.32	2.58	4.06	3.90	4.39	3.73	3.77	4.02
15	5.75	....	3.29	2.50	3.45	2.88	3.84	4.27	3.56	....	3.95	4.17
20	5.75	....	3.07	e2.79	3.15	3.32	4.38	3.68	3.81	....	3.64	4.27
25	5.73	5.27	2.74	2.68	e3.25	3.62	4.23	4.15	4.11	....	3.72	4.27
Eom	5.98	5.18	2.83	3.05	3.25	3.88	3.73	4.50	3.31	3.72	3.84	4.35

e Estimated.

89-30-23R1. Johnson Township Consolidated School. Barnum. Drilled unused artesian well in sandstone, diam 4 in, reported depth 208 ft, cased to bottom, perforated 203-208. Lsd 1, 174 ft (previously reported 1, 170 ft) above msl. MP top of casing, 6.40 ft below lsd. Highest water level 30.86 below lsd, July 2, 1945; lowest 39.13 below lsd, May 22, 1957. Records available: 1942-45, 1947-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 20, 1957	38.92	May 29, 1958	37.72	Aug. 27, 1959	36.99	Dec. 8, 1960	37.11
May 22	39.13	Aug. 18	37.13	Dec. 7	36.87	Mar. 10, 1961	37.00
Aug. 29	38.99	Dec. 10	37.05	Feb. 15, 1960	36.83	May 16	37.24
Dec. 5	38.35	Mar. 4, 1959	37.21	May 26	36.47	Aug. 18	37.04
Mar. 11, 1958	38.01	June 16	37.15	Sept. 10	36.48	Dec. 7	36.67

90-27-31N1. C. S. Knudson. Drilled unused water-table well in glacial drift, diam 15 in, depth 53 ft, lined with tile. Lsd 1, 125 ft (previously reported 1, 120 ft) above msl. MP top of plank platform, 1.00 ft above lsd. Highest water level 3.49 below lsd, May 26, 1960; lowest 13.90 below lsd, Dec. 17, 1948. Records available: 1942-43, 1948-54, 1956-61.

Feb. 21, 1957	11.12	May 29, 1958	5.77	Aug. 27, 1959	6.72	Dec. 6, 1960	7.21
May 22	9.14	Aug. 18	5.22	Dec. 7	6.01	Mar. 10, 1961	7.85
Aug. 29	3.88	Dec. 10	6.79	Feb. 14, 1960	6.27	May 16	5.35
Dec. 5	4.83	Mar. 4, 1959	8.37	May 26	3.49	Aug. 18	5.42
Mar. 11, 1958	6.78	June 16	4.74	Sept. 10	6.85	Dec. 7	4.98

## Reference

Steinhilber, W. L., Van Eck, O. J., and Feulner, A. J., 1961, Geology and ground-water resources of Clayton County, Iowa: Iowa Geol. Survey Water-Supply Bull. 7, 142 p., 9 pls., 25 figs.

## KANSAS

By Margaret E. Broeker

The observation-well program in Kansas was continued during 1957 through 1961 in cooperation with the State Geological Survey, the Division of Water Resources of the State Board of Agriculture, the Division of Sanitation of the State Board of Health, and, in the Missouri Basin, the U. S. Bureau of Reclamation. In addition, the City of Wichita cooperated in Harvey, McPherson, and Sedgwick Counties. Figure 4 shows the location of observation wells included in this report.

### Well-Numbering System

Wells are numbered either serially within counties or in accordance with the Bureau of Land Management's system of land subdivision. By the latter method each well is made up of three segments. The first segment indicates the township, the second the range, and the third the section in which the well is situated. Townships are numbered south from the north border of the state. Ranges are numbered east and west of a line on the east side of Jewell, Mitchell, Lincoln, Ellsworth, and Rice Counties. The letters after the section number, which are assigned in a counterclockwise direction, represent subdivisions of the section. The first letter denotes the 160-acre tract, the second the 40-acre tract, and the third the 10-acre tract. Thus, the number Cheyenne 1-38-27adb designates the well in the NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 27, T. 1 S., R. 38 W.

### Well Descriptions and Water-Level Measurements

Water levels are reported in feet below land-surface datum, unless otherwise indicated.

#### Barber County

1. D. S. Shaw. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 19, T. 31 S., R. 15 W. Drilled unused water-table well in deposits of Permian age, diam 8 to 6 in, depth 97 ft, galvanized iron casing. MP top of well cover, 1.05 ft above lsd. Highest water level 56.40 below lsd, June 20, 1951; lowest 82.99 below lsd, Oct. 17, 1940. Records available: 1940-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 24, 1957	74.10	July 23, 1958	73.95	Oct. 20, 1959	74.69	Oct. 17, 1960	74.40
Sept. 17	73.78	Oct. 22	74.28	Jan. 25, 1960	74.96	Jan. 17, 1961	74.30
Dec. 11	74.39	Jan. 22, 1959	74.45	Apr. 19	74.26	Apr. 18	74.17
Mar. 24, 1958	74.08	Apr. 20	74.57	July 18	74.93	Oct. 23	74.40
Apr. 24	74.19	July 22	74.69				

#### Barton County

43. M. Hagen. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 20, T. 20 S., R. 11 W. Drilled unused (previously reported observation) water-table well in deposits of Pleistocene age, diam 6 in, depth 46 ft, oil well casing to 46. MP top west edge of casing, 0.50 ft above lsd. Highest water level 12.97 below lsd, Aug. 21, 1951; lowest 33.98 below lsd, Nov. 19, 1952. Records available: 1942-61.

Jan. 21, 1957	23.66	Nov. 19, 1957	18.43	Sept. 18, 1958	15.25	July 20, 1959	16.04
Feb. 18	23.70	Dec. 16	18.49	Oct. 20	15.26	Aug. 19	15.49
Mar. 20	23.71	Jan. 14, 1958	18.60	Nov. 20	15.72	Sept. 21	16.37
Apr. 22	23.49	Feb. 5	18.69	Dec. 22	15.93	Oct. 19	17.30
May 15	23.03	Mar. 17	18.50	Jan. 20, 1959	16.20	Nov. 19	14.35
June 19	21.73	Apr. 23	17.84	Feb. 20	16.61	Dec. 17	16.70
July 15	19.47	May 20	16.60	Mar. 20	16.63	Jan. 21, 1960	16.18
Aug. 12	19.18	June 18	16.46	Apr. 17	15.70	Mar. 1	13.64
Sept. 23	18.68	July 22	15.77	May 20	15.56	21	16.59
Oct. 8	18.84	Aug. 20	14.96	June 23	15.55	Apr. 18	15.10

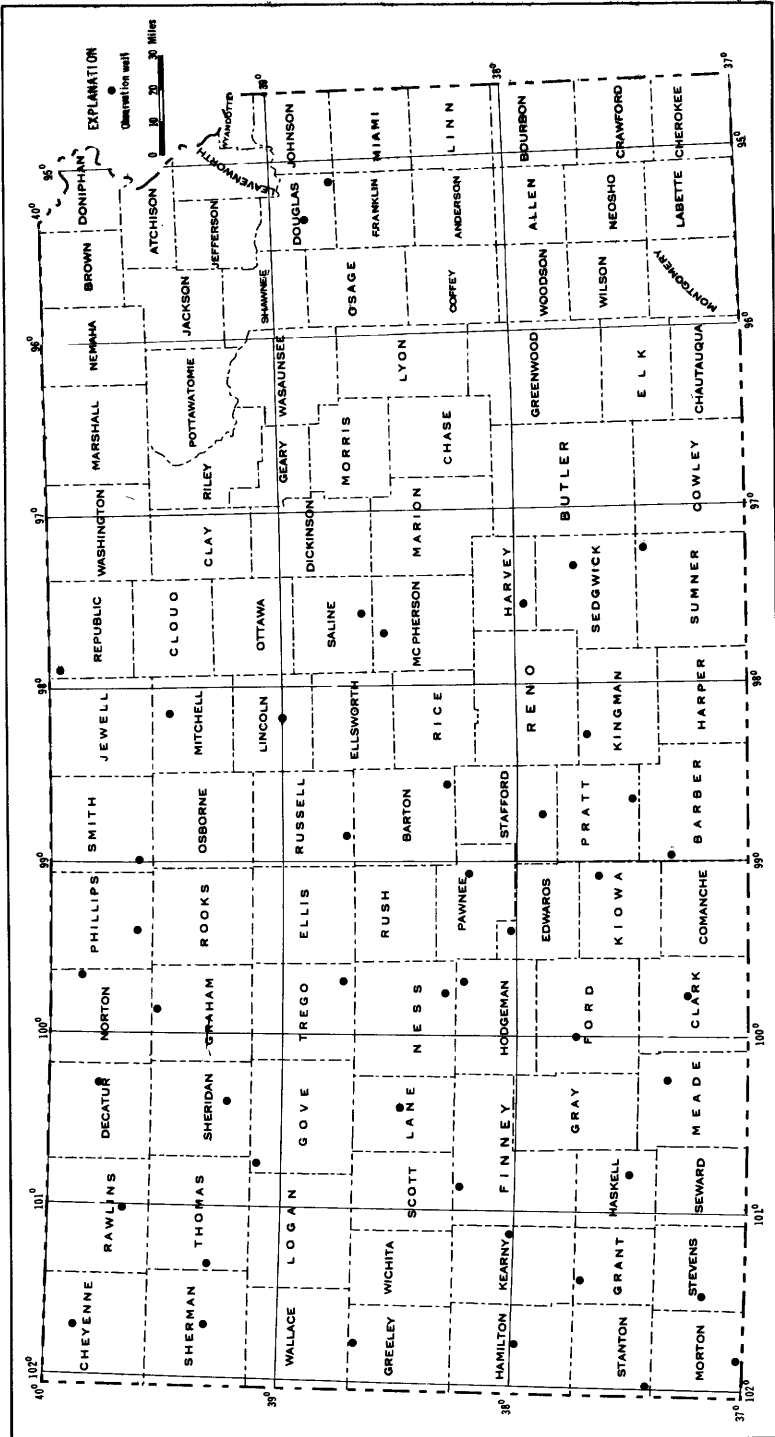


Figure 4.--Location of observation wells in Kansas, 1957-61.

## 43--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 19, 1960	15.15	Oct. 19, 1960	17.70	Mar. 20, 1961	18.26	Aug. 17, 1961	18.16
June 22	15.42	Nov. 21	17.74	Apr. 17	18.33	Sept. 27	18.53
July 21	16.00	Dec. 21	17.94	May 25	18.26	Oct. 18	18.59
Aug. 22	16.77	Jan. 16, 1961	18.01	June 20	18.48	Nov. 20	18.62
Sept. 21	17.37	Feb. 21	18.18	July 17	18.83	Dec. 18	18.52

Cheyenne County

2-39-19ccc. A. C. Keller. Drilled unused (previously reported domestic) water-table well in alluvium, diam 4 in, depth 23 ft, galvanized iron casing. Lsd 3, 208.99 ft above msl. MP top of casing, at lsd. Highest water level 13.68 below lsd, May 26, 1955; lowest dry, Aug. 6, 1959, Nov. 7, 1960, Jan. 4, July 18, 1961. Records available: 1948-50, 1952-61.

Feb. 5, 1957	16.52	May 26, 1958	15.58	May 12, 1959	16.10	Nov. 17, 1960	(f)
May 8	15.75	Aug. 12	16.07	Aug. 6	(f)	Jan. 4, 1961	(f)
Aug. 13	15.95	Feb. 16, 1959	15.70	Apr. 12, 1960	13.95	July 18	(f)
Nov. 13	16.23						

f Dry.

Clark County

10. J. F. Folks Estate. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 24, T. 32 S., R. 23 W. Drilled stock water-table well in deposits of Pleistocene age, diam 6 in, depth 21 ft, galvanized iron casing. MP top south side of casing, 1.50 ft above lsd. Highest water level 12.82 below lsd, Jan. 21, 1959; lowest 17.63 below lsd, Sept. 27, 1946. Records available: 1940-47, 1954-61.

June 24, 1957	14.45	July 23, 1958	14.75	July 21, 1959	15.46	Jan. 17, 1961	15.87
Sept. 17	14.89	Oct. 21	15.12	Oct. 20	15.88	Apr. 18	15.50
Dec. 11	15.07	Jan. 21, 1959	12.82	Apr. 19, 1960	15.78	July 18	16.05
Mar. 24, 1958	15.18	Apr. 20	15.26	July 19	15.23	Oct. 23	15.96
Apr. 23	15.06						

Decatur County

3-26-5cc. John Hicks. Drilled unused water-table well in Ogallala Formation of Pliocene age, diam 5 in, depth 147 ft, galvanized iron casing. MP top of casing, 1.10 ft above lsd. Highest water level 136.66 below lsd, July 25, 1961; lowest 143.10 below lsd, Feb. 8, 1954. Records available: 1952-61. Measurement discontinued.

Feb. 12, 1957	142.86	July 16, 1958	141.33	Oct. 13, 1959	141.54	Jan. 16, 1961	141.55
Aug. 19	141.56	Oct. 17	141.62	Jan. 13, 1960	141.70	Apr. 14	141.68
Nov. 13	141.45	Jan. 16, 1959	141.36	Apr. 13	141.81	July 11	137.63
Feb. 18, 1958	141.60	Apr. 15	141.41	July 13	141.57	25	136.66
Apr. 16	141.42	July 15	142.00	Oct. 13	141.64		

Douglas County

13-19-21bb. C. E. Banning. Drilled domestic and stock artesian well in Tonganoxie Sandstone Member of Stranger Formation of Pennsylvanian age, diam 6 in, depth 96 ft, cased with iron. MP top of casing cover plate, 3.10 ft below lsd. Highest water level 23.48 below lsd, May 20, 1952; lowest 41.99 below lsd, Jan. 5, 1957. Records available: 1952-60. No measurement made in 1961.

Jan. 5, 1957	41.99	Jan. 30, 1958	36.08	Sept. 2, 1958	41.25	Oct. 26, 1959	35.19
Apr. 14	40.37	Mar. 14	35.53	Mar. 24, 1959	32.54	Nov. 25	33.57
Aug. 2	41.35	June 23	35.67	May 26	32.84	Feb. 8, 1960	32.67
Sept. 30	40.23	Aug. 7	35.87	June 26	37.42	Oct. 10	37.90

15-21-4bcc. U. S. Geol. Survey and Kansas Geol. Survey. Drilled observation water-table well in Ireland Sandstone Member of Lawrence Shale of Pennsylvanian age, diam 5 in, depth 144 ft, galvanized iron casing. MP top of well seal, 2.00 ft above lsd. Highest water level 16.73 below lsd, May 27, 1960; lowest 29.04 below lsd, Feb. 26, 1957. Records available: 1956-61.

Jan. 5, 1957	28.32	Jan. 30, 1958	25.27	May 26, 1959	19.94	Mar. 28, 1960	17.33
Feb. 26	29.04	Mar. 14	23.11	June 26	23.44	May 27	16.73
Apr. 14	27.93	June 21	21.70	Aug. 25	22.21	Oct. 10	24.71
June 1	26.43	Aug. 7	17.65	Oct. 26	21.37	Jan. 7, 1961	19.21
July 30	25.93	Feb. 23, 1959	18.22	Nov. 25	21.88	July 13	20.42
Nov. 27	24.92	Mar. 24	19.70	Feb. 8, 1960	18.31		



Edwards County

10. E. F. Lippoldt. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 22, T. 23 S., R. 19 W. Dug unused water-table well in Dakota Formation of Lower Cretaceous age (previously reported terrace deposits of Pleistocene age), diam 4 $\frac{1}{2}$  ft, depth 70 ft, cribbed with rock. MP top of hole in concrete cover, 0.60 ft above lsd. Highest water level 61.86 below lsd, June 21, 1960; lowest 68.20 below lsd, Mar. 13, 1946. Records available: 1944-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 21, 1957	63.00	Apr. 22, 1958	63.05	June 23, 1959	63.18	Sept. 21, 1960	62.64
Feb. 18	63.01	May 20	62.98	July 20	63.05	Oct. 18	62.56
Mar. 20	63.05	June 18	62.89	Aug. 19	63.14	Jan. 16, 1961	64.81
Apr. 22	62.96	July 22	62.58	Sept. 21	63.28	Feb. 21	64.08
May 15	63.09	Aug. 20	62.53	Oct. 19	63.00	Mar. 20	63.49
June 19	62.53	Sept. 18	62.65	Nov. 19	62.70	Apr. 17	63.91
July 15	62.56	Oct. 21	62.73	Dec. 17	62.73	May 25	62.93
Aug. 12	62.94	Nov. 20	62.82	Jan. 26, 1960	62.48	June 20	63.14
Sept. 23	63.02	Dec. 22	62.59	Mar. 1	62.47	July 17	62.85
Oct. 8	63.04	Jan. 21, 1959	62.80	21	62.67	Aug. 17	62.86
Nov. 19	(a)	Feb. 20	66.57	May 20	63.42	Sept. 26	62.58
Dec. 16	(a)	Mar. 20	66.54	June 21	61.86	Oct. 24	62.44
Jan. 14, 1958	63.59	Apr. 17	63.37	July 19	63.29	Nov. 21	63.01
Feb. 5	63.29	May 20	63.92	Aug. 22	63.00	Dec. 19	62.79
Mar. 17	63.18						

a Well being pumped.

Finney County

5. E. Alberta Reeves. SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 19, T. 21 S., R. 32 W. Drilled unused water-table well in deposits of Pleistocene age, diam 6 in, depth 32 ft, galvanized iron casing. MP hole in east side of pumpbase, 0.40 ft above lsd. Highest water level 15.30 below lsd, Aug. 14, 1951; lowest 25.80 below lsd, Nov. 10, Dec. 5, 1961. Records available: 1939-61.

Jan. 9, 1957	22.81	Apr. 2, 1958	23.72	July 24, 1959	22.94	Oct. 14, 1960	24.24
Feb. 14	22.96	May 22	23.61	Aug. 7	23.35	Nov. 18	24.33
Mar. 11	23.04	June 10	23.19	Sept. 11	24.00	Feb. 15, 1961	24.28
Apr. 24	23.13	Aug. 19	22.33	Oct. 23	24.01	Mar. 13	24.50
May 8	23.19	Sept. 19	22.39	Nov. 20	23.97	Apr. 19	24.85
June 10	(a)	Oct. 24	21.68	Dec. 11	23.94	May 15	25.12
July 10	(a)	Nov. 14	21.93	Jan. 7, 1960	23.89	June 20	25.10
Aug. 6	(a)	Dec. 19	21.96	Feb. 10	23.80	July 5	25.14
Sept. 10	23.46	Jan. 23, 1959	21.94	Apr. 8	23.26	Aug. 2	25.32
Oct. 15	23.59	Feb. 6	21.83	May 4	23.02	Sept. 5	25.58
Nov. 21	23.67	Mar. 13	21.93	June 14	23.14	Oct. 2	25.79
Dec. 18	23.70	Apr. 17	21.98	July 12	23.14	Nov. 10	25.80
Jan. 7, 1958	24.31	May 22	22.52	Aug. 17	23.53	Dec. 5	25.80
Feb. 4	23.69	June 5	22.66	Sept. 9	23.87		

a Well being pumped.

Ford County

8. F. H. Diehl. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 34, T. 26 S., R. 25 W. Drilled irrigation water-table well in alluvium, diam 20 in, depth 23 ft, cased with concrete. Lsd 2,490.2 ft above msl. MP top of casing, 0.80 ft above lsd. Highest water level 0.86 below lsd, May 13, 1942; lowest 8.53 below lsd, Nov. 19, 1956. Records available: 1938-61.

Jan. 21, 1957	7.89	Apr. 22, 1958	5.73	May 20, 1959	6.11	Dec. 20, 1960	6.85
Feb. 18	(a)	May 20	5.12	July 21	6.91	Jan. 17, 1961	7.06
Apr. 22	6.70	June 19	5.63	Oct. 20	7.06	Feb. 21	6.61
May 15	6.72	July 23	5.22	Nov. 19	6.78	Mar. 30	6.55
June 19	6.31	Aug. 20	5.48	Dec. 17	6.50	Apr. 18	6.76
July 15	6.18	Sept. 18	5.83	Jan. 26, 1960	6.26	May 25	6.66
Aug. 12	5.65	Oct. 21	6.49	Mar. 1	6.11	June 20	6.76
Sept. 23	5.79	Nov. 20	6.20	21	5.80	Aug. 17	7.49
Oct. 8	6.18	Dec. 22	6.19	Apr. 19	5.15	Sept. 26	7.20
Nov. 19	6.68	Jan. 21, 1959	6.06	May 20	5.80	Oct. 24	7.36
Dec. 12	6.49	Feb. 17	5.87	June 21	5.57	Nov. 21	7.16
Feb. 5, 1958	6.60	Mar. 20	5.85	Oct. 18	7.36	Dec. 19	7.09
Mar. 17	6.18						

a Well being pumped.

Gove County

11-31-10aa. Thos. P. Johnstone. Drilled unused (previously reported observation) water-table well in Ogallala Formation of Pliocene age, diam 5 in, depth 97 ft, galvanized iron casing. MP top of casing, 0.80 ft above lsd. Highest water level 88.69 below lsd, Aug. 11, 1952; lowest 91.52 below lsd, May 13, 1957. Records available: 1952-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 12, 1957	91.42	Apr. 15, 1958	90.90	July 14, 1959	91.02	Oct. 12, 1960	90.37
May 13	91.52	July 15	90.86	Oct. 12	91.14	Jan. 17, 1961	90.27
Aug. 19	91.24	Oct. 16	90.81	Jan. 12, 1960	91.19	Apr. 12	89.99
Nov. 13	91.02	Jan. 15, 1959	90.88	Apr. 11	91.16	July 13	90.36
Feb. 18, 1958	90.90	Apr. 14	90.80	July 14	90.74	Oct. 18	90.27

Graham County

6-23-12ccb. H. Hauser. Drilled stock water-table well in Ogallala Formation of Pliocene age, diam 5 in, depth 70 ft, galvanized iron casing. MP top of casing, 1.30 ft above lsd. Highest water level 60.60 below lsd, Oct. 17, 1961; lowest 63.97 below lsd, Feb. 12, 1957. Records available: 1952-61.

Feb. 12, 1957	63.97	July 15, 1958	62.98	Oct. 13, 1959	63.21	Jan. 16, 1961	62.05
May 13	63.91	Oct. 11	62.56	Jan. 14, 1960	63.11	Apr. 14	62.37
Aug. 19	62.29	Jan. 16, 1959	62.53	Apr. 13	62.61	July 11	61.36
Nov. 13	62.29	Apr. 15	62.70	July 15	61.71	24	61.28
Feb. 18, 1958	62.74	July 16	62.98	Oct. 14	61.85	Oct. 17	60.60
Apr. 16	62.79						

Grant County

5. C. L. Jury. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 4, T. 27 S., R. 37 W. Drilled unused water-table well in deposits of Pleistocene age and Ogallala Formation of Pliocene age, diam 6 in, depth 139 ft (previously reported 78 ft), cased with iron. Lsd 3,069.89 ft above msl. MP top of casing, 0.40 ft above lsd. Highest water level 65.53 below lsd, May 9, Nov. 28, 1951; lowest 83.95 below lsd, May 22, 1961. Records available: 1941-61.

Feb. 20, 1957	75.90	May 13, 1958	77.51	Aug. 19, 1959	82.04	Nov. 18, 1960	77.10
May 20	76.36	Aug. 13	77.58	Nov. 13	77.83	Feb. 14, 1961	75.19
Aug. 7	77.93	Nov. 6	77.60	Feb. 25, 1960	74.35	May 22	83.95
Nov. 6	77.63	Feb. 12, 1959	75.11	May 11	76.40	Aug. 9	83.90
Feb. 12, 1958	77.67	May 15	82.00	Aug. 23	82.03	Nov. 8	80.05

Greeley County

16-41-20ba. J. Howell. Drilled stock (previously reported observation) water-table well in Ogallala Formation of Pliocene age, diam 6 in, depth 153 ft, galvanized iron casing. Lsd 3,741.0 ft above msl. MP top of casing, 0.40 ft above lsd. Highest water level 127.96 below lsd, Jan. 6, 1949; lowest 134.08 below lsd, Dec. 6, 1961. Records available: 1947-61.

Jan. 10, 1957	131.91	Mar. 12, 1958	132.50	Sept. 18, 1959	133.49	Dec. 13, 1960	133.36
May 8	131.82	June 5	132.65	Dec. 8	129.39	May 7, 1961	132.74
July 11	132.35	Sept. 8	132.64	Mar. 28, 1960	132.60	June 12	133.48
Sept. 10	132.36	Dec. 15	132.50	June 8	132.18	Sept. 13	134.00
Nov. 21	132.95	Mar. 31, 1959	131.67	Sept. 28	133.38	Dec. 6	134.08
Jan. 8, 1958	132.77	June 25	132.29				

Hamilton County

3. B. Rees. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 8, T. 24 S., R. 40 W. Dug and drilled unused water-table well in alluvium, diam 12 in, depth 25 ft, galvanized iron casing. Lsd 3,223.35 ft above msl. MP top west side of bolt in concrete, 0.25 ft above lsd. Highest water level 11.45 below lsd, May 31, 1951; lowest 17.29 below lsd, Sept. 21, 1956. Records available: 1939-61. Well destroyed; measurement discontinued.

Jan. 25, 1957	16.35	Oct. 18, 1957	15.56	July 23, 1958	15.09	Apr. 17, 1959	14.75
Feb. 22	16.55	Nov. 21	15.31	Aug. 22	14.55	May 22	14.27
Mar. 22	16.48	Dec. 20	15.32	Sept. 19	14.40	June 26	13.41
Apr. 26	16.48	Jan. 17, 1958	14.40	Oct. 24	13.95	July 24	13.13
May 24	16.29	Feb. 21	13.43	Nov. 14	14.01	Aug. 19	13.05
June 21	15.85	Mar. 21	14.38	Dec. 18	14.10	Sept. 25	13.17
July 19	16.05	Apr. 25	15.35	Jan. 23, 1959	15.42	Oct. 23	13.18
Aug. 23	16.15	May 15	15.17	Feb. 20	14.49	Nov. 20	13.55
Sept. 20	16.14	June 13	15.19	Mar. 20	14.60	Dec. 18	13.85

3--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5, 1960	14.05	Sept. 22, 1960	15.35	Jan. 19, 1961	15.36	May 25, 1961	15.85
May 12	14.86	Oct. 13	15.43	Feb. 23	15.45	June 22	15.48
June 16	13.62	Nov. 17	15.73	Mar. 23	15.81	July 20	15.28
July 18	13.85	Dec. 29	15.26	Apr. 20	15.80	Aug. 24	14.89
Aug. 25	14.60						

Harvey County

839. City of Wichita. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 35, T. 24 S., R. 2 W. Drilled observation water-table well in Pleistocene sand, diam  $\frac{1}{2}$  in, depth 27 ft, galvanized iron casing. Lsd 1,389.19 ft above msl. MP top of pipe, 1.00 ft above lsd. Highest water level 10.62 below lsd, Aug. 21, 1939; lowest 32.52 below lsd, May 1, 1957. Records available: 1938-61.

Jan. 31, 1957	32.30	May 2, 1958	30.87	July 31, 1959	28.16	Sept. 29, 1960	24.43
Mar. 1	32.45	June 3	30.67	Sept. 1	29.04	Nov. 1	24.09
Apr. 2	32.49	July 1	30.79	Oct. 1	27.68	Dec. 1	24.00
May 1	32.52	Aug. 1	30.46	30	27.13	Jan. 1, 1961	24.08
31	32.10	Sept. 3	30.07	Dec. 1	22.83	Feb. 1	24.09
July 1	31.94	Oct. 2	29.82	29	26.62	Mar. 1	24.39
Aug. 1	31.74	31	29.44	Feb. 1, 1960	26.70	30	24.09
30	31.78	Dec. 1	29.17	Mar. 1	26.71	Apr. 28	23.93
Oct. 2	31.73	Jan. 1, 1959	28.98	30	26.52	June 1	23.64
Nov. 1	31.69	30	29.00	May 2	26.15	July 1	23.10
Dec. 5	31.59	Mar. 2	28.85	June 1	25.72	31	21.97
Jan. 1, 1958	31.45	Apr. 1	28.67	July 1	25.45	Sept. 29	21.12
Feb. 4	31.20	May 1	28.43	Aug. 1	25.16	Oct. 30	21.34
Mar. 5	31.14	June 1	28.55	Sept. 1	24.93	Dec. 29	20.91
Apr. 2	30.95	30	28.30				

Haskell County

29-32-26cb. D. E. McClure. Drilled unused water-table well in Ogallala Formation of Pliocene age, diam 5 in, depth 205 ft, cased with iron. Lsd 2,896.29 ft above msl. MP top of wooden pipe clamp, west side, 1.55 ft above lsd. Highest water level 190.01 below lsd, Aug. 10, 1953; lowest dry, Aug. 18, 1959, Aug. 22, 1960. Records available: 1941, 1952-61. Measurement discontinued.

Feb. 20, 1957	196.51	May 13, 1958	195.32	Aug. 18, 1959	(f)	Oct. 21, 1960	199.47
May 20	194.47	Aug. 14	197.42	Nov. 6	201.12	Jan. 6, 1961	200.16
Aug. 7	198.16	Nov. 6	197.67	Feb. 18, 1960	200.30	Apr. 4	198.36
Nov. 6	196.19	Feb. 13, 1959	196.92	May 10	200.15	July 18	201.23
Feb. 12, 1958	196.17	May 7	198.49	Aug. 22	(f)	Oct. 3	201.13

f Dry.

Hodgeman County

3. C. A. Bradley. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 12, T. 21 S., R. 22 W. Dug and drilled irrigation water-table well in terrace deposits of Pleistocene age, diam 60 to 20 in, depth 76 ft, galvanized iron casing. MP top south side of concrete curb, 1.00 ft above lsd. Highest water level 21.84 below lsd, Jan. 20, 1959; lowest 39.74 below lsd, Oct. 24, 1956. Records available: 1940-61. Measurement discontinued.

Jan. 23, 1957	39.09	Jan. 15, 1958	35.38	Jan. 20, 1959	21.84	Apr. 18, 1960	34.10
Apr. 11	39.49	Apr. 22	34.47	Apr. 17	28.67	July 20	29.41
July 17	36.79	July 22	33.37	Oct. 19	32.18	Jan. 16, 1961	32.22
Oct. 10	36.94	Oct. 21	30.65	Jan. 21, 1960	32.28	Apr. 17	31.45

Kearny County

16. C. B. Campbell. SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 15, T. 23 S., R. 35 W. Drilled unused water-table well in deposits of Pleistocene age and Ogallala Formation of Pliocene age, diam 6 in, depth 60 ft, galvanized iron casing. Lsd 3,017.05 ft above msl. MP top north side of casing, 0.40 ft above lsd. Highest water level 23.69 below lsd, May 31, 1951; lowest 55.79 below lsd, Nov. 27, 1956. Records available: 1939-61.

Feb. 25, 1957	53.98	July 15, 1958	50.86	Oct. 13, 1959	49.90	Jan. 11, 1961	50.24
May 9	53.99	Oct. 10	49.42	Jan. 5, 1960	47.45	Apr. 24	50.35
Aug. 6	54.53	Jan. 6, 1959	47.04	Apr. 26	46.06	July 19	50.65
Nov. 18	54.09	Apr. 3	47.79	July 28	48.20	Sept. 17	53.02
Feb. 11, 1958	52.50	July 24	48.66	Oct. 25	52.31		

Kingman County

4. N. Lawson. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 9, T. 27 S., R. 9 W. Drilled unused (previously reported observation) water-table well in sand and gravel of Pleistocene age, diam 2 in, depth 76 ft, galvanized pipe casing. MP top opening of pump, 3.00 ft above lsd (previously reported 0.30 ft above lsd). Highest water level 55.58 below lsd, Sept. 1, 1953; lowest 65.13 below lsd, Feb. 6, 1947. Records available: 1945-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 4, 1957	59.63	Apr. 24, 1958	58.60	July 22, 1959	58.49	Oct. 20, 1960	57.28
June 25	58.45	July 23	58.66	Oct. 21	58.03	Jan. 19, 1961	57.50
Sept. 18	58.59	Oct. 20	58.65	Jan. 22, 1960	57.51	Apr. 20	57.74
Dec. 12	58.60	Jan. 22, 1959	58.77	Apr. 20	57.49	July 20	55.81
Mar. 25, 1958	58.68	Apr. 21	58.85	July 18	57.46	Oct. 18	55.92

Kiowa County

4. H. E. Davis. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 4, T. 28 S., R. 16 W. Drilled domestic and irrigation water-table well in sand and gravel of Pleistocene age, diam 6 in, depth 109 ft, galvanized casing. MP top south side of casing, 0.50 ft above lsd. Highest water level 63.87 below lsd, Sept. 4, 1952; lowest 76.07 below lsd, Aug. 20, 1943. Records available: 1940-61.

Apr. 4, 1957	67.43	Apr. 23, 1958	66.98	July 22, 1959	66.82	Oct. 18, 1960	66.76
June 25	67.83	July 24	67.43	Oct. 21	66.88	Jan. 18, 1961	66.85
Sept. 17	67.67	Oct. 23	68.26	Jan. 26, 1960	66.72	Apr. 19	66.88
Dec. 12	67.56	Jan. 23, 1959	67.05	Apr. 20	66.84	July 19	67.07
Mar. 25, 1958	67.70	Apr. 15	69.18	July 19	66.88	Oct. 24	67.07

Lane County

18-28-15ccc. C. S. and F. E. Boone. Drilled unused (previously reported observation) water-table well in Ogallala Formation of Pliocene age, diam 6 in, depth 61 ft, galvanized iron casing. Lsd 2,739.5 ft above msl. MP top southwest side of casing, 0.50 ft above lsd. Highest water level 54.23 below lsd, Aug. 25, 1952; lowest 56.49 below lsd, Dec. 18, 1957. Records available: 1950-61.

Feb. 14, 1957	55.88	Feb. 11, 1958	55.68	June 5, 1959	55.06	Dec. 9, 1960	54.55
Apr. 18	55.84	Apr. 3	55.65	Sept. 11	55.44	Mar. 13, 1961	54.50
June 13	55.81	June 10	55.71	Dec. 11	55.19	June 7	54.70
Aug. 14	55.83	Sept. 19	56.39	Mar. 11, 1960	54.30	Sept. 5	54.63
Oct. 17	55.81	Dec. 15	55.08	June 14	55.02	Dec. 5	54.32
Dec. 18	56.49	Mar. 6, 1959	55.12	Sept. 9	54.84		

Lincoln County

12-8-11cb. Jim and Ed Healy (previously reported Herby). Dug domestic and stock water-table well in terrace deposits of Pleistocene age, diam 4 ft, depth 32 ft, cribbed with rock. MP top of concrete curb, at lsd. Highest water level 4.76 below lsd, July 25, 1951; lowest 20.90 below lsd, Dec. 20, 1956. Records available: 1947-61.

Mar. 13, 1957	20.48	May 6, 1958	13.98	June 15, 1960	15.38	May 10, 1961	17.42
July 19	12.85	Aug. 5	15.28	Oct. 20	18.06	June 26	13.22
Oct. 30	17.25	Apr. 3, 1959	18.82	Mar. 16, 1961	19.00	Sept. 19	15.28
Jan. 9, 1958	18.90	Oct. 14	17.70				

McPherson County

17-3-17dd. U.S. Geol. Survey. Drilled observation water-table well in terrace deposits of Pleistocene age, diam 1 $\frac{1}{2}$  in, depth 39 ft, galvanized iron casing. Lsd 1,331.5 ft above msl. MP top of pipe, 1.20 ft above lsd. Highest water level 16.75 below lsd, July 24, 1951; lowest 29.80 below lsd, Sept. 7, 1956. Records available: 1946-61.

Mar. 18, 1957	28.78	May 6, 1958	23.78	May 25, 1959	25.15	Sept. 1, 1960	25.34
May 8	28.41	June 12	24.27	June 26	25.12	Nov. 30	24.70
June 10	26.32	July 21	24.35	July 24	25.40	Mar. 17, 1961	25.58
Aug. 19	24.84	Aug. 14	23.78	Aug. 21	26.48	May 11	25.18
Oct. 11	24.69	Sept. 19	23.70	Dec. 16	25.17	June 27	24.16
Nov. 15	25.32	Oct. 16	23.97	Feb. 27, 1960	24.30	Aug. 24	24.50
Jan. 3, 1958	25.95	Nov. 19	24.42	May 26	22.80	Sept. 20	24.29
Feb. 12	26.23	Feb. 23, 1959	25.99	June 30	23.49	Dec. 28	24.85
Apr. 1	25.78	Mar. 25	26.05	July 27	24.78		

Meade County

61. John Meyer. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 26, T. 31 S., R. 27 W. Drilled unused water-table well in lower Pleistocene deposits, diam 6 in, depth 87 ft, cased with iron. MP top south side of casing, 0.60 ft above lsd. Highest water level 56.34 below lsd, Dec. 28, 1955; lowest 60.77 below lsd, May 17, 1940. Records available: 1939-59. Measurement discontinued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 19, 1957	56.55	Mar. 19, 1958	56.58	Oct. 17, 1958	56.38	Apr. 10, 1959	57.56
June 18	56.69	July 16	56.49	Jan. 8, 1959	56.49	July 17	56.98
Dec. 19	56.37						

Mitchell County

7-7-7aaa. A. McDysan. Drilled domestic and stock water-table well in terrace deposits of Pleistocene age (previously reported Greenhorn Limestone), diam 6 in, depth 43 ft, galvanized iron casing. MP top of rock curb, 1.00 ft above lsd. Highest water level 19.40 below lsd, July 25, 1951 (previously reported 16.05 below lsd, Jan. 22, 1951); lowest 36.10 below lsd, Mar. 12, 1957. Records available: 1946-61. Measurement discontinued.

Mar. 12, 1957	36.10	May 6, 1958	30.39	June 13, 1960	27.47	May 10, 1961	27.65
Aug. 13	31.27	Apr. 2, 1959	29.37	Oct. 20	27.73	June 26	25.72
Nov. 11	31.03	Oct. 8	29.78	Jan. 15, 1961	24.00	Sept. 18	24.53
Feb. 21, 1958	30.96						

Morton County

117. W. C. Washburn. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 4, T. 35 S., R. 42 W. Drilled unused water-table well in Ogallala Formation of Pliocene age, diam 6 in, depth 216 ft, cased with iron. MP top west side of casing, 1.20 ft above lsd. Highest water level 152.39 below lsd, Feb. 11, 1959; lowest 166.54 below lsd, May 25, 1948. Records available: 1939-61.

Feb. 21, 1957	155.03	May 14, 1958	154.71	Aug. 18, 1959	154.00	Nov. 9, 1960	153.89
Aug. 8	155.35	Nov. 6	154.54	Nov. 6	153.94	Feb. 14, 1961	153.35
Nov. 7	155.47	Feb. 11, 1959	152.39	Feb. 28, 1960	153.88	May 16	153.13
Feb. 13, 1958	154.85	May 7	154.51	May 11	153.67	Nov. 7	153.71

Ness County

2. C. L. Whitley. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 20, T. 20 S., R. 22 W. Dug and drilled irrigation water-table well in terrace deposits of Pleistocene age, diam 20 in, depth 58 ft, galvanized iron casing. MP top south side of concrete curb, 0.50 ft above lsd. Highest water level 17.81 below lsd, July 12, 1951; lowest 33.69 below lsd, July 26, 1956. Records available: 1940-61.

Jan. 23, 1957	31.19	Apr. 22, 1958	25.54	July 20, 1959	29.10	Oct. 18, 1960	24.29
Apr. 11	30.90	July 22	23.45	Oct. 19	23.45	Jan. 16, 1961	23.78
July 17	28.23	Oct. 20	21.41	Jan. 21, 1960	22.68	Apr. 17	23.98
Oct. 10	27.05	Jan. 20, 1959	18.93	Apr. 18	22.16	July 17	28.87
Jan. 16, 1958	26.28	Apr. 17	22.04	July 20	31.83	Oct. 19	22.46

Norton County

2-21-1bb. Verner Ross. Drilled irrigation water-table well in terrace deposits of Pleistocene age, diam 24 in, depth 70 ft, galvanized iron casing. Lsd 2, 122.4 ft above msl. MP top east side of pumpbase, 1.30 ft above lsd. Highest water level 18.76 below lsd, July 23, 1951; lowest 38.60 below lsd, July 27, 1961. Records available: 1946-61.

Feb. 15, 1957	29.58	Mar. 4, 1959	27.10	May 13, 1960	26.20	Mar. 2, 1961	26.50
Mar. 19	29.02	May 11	25.70	June 29	25.30	June 21	24.00
June 13	27.35	Sept. 18	33.60	Aug. 23	24.47	July 27	38.60
Sept. 27	31.47	Nov. 10	30.40	Nov. 15	27.80	Sept. 26	28.00
Jan. 28, 1958	26.92	Apr. 18, 1960	26.90	Jan. 12, 1961	27.10	Nov. 1	27.00

b Well pumped recently.

Pawnee County

8. F. B. Reed. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 6, T. 22 S., R. 16 W. Drilled irrigation water-table well in alluvium, diam 19 in, depth 34 ft, galvanized iron casing. MP top south side of concrete curb, 1.50 ft above lsd. Highest water level 7.01 below lsd, Aug. 29, 1950; lowest 18.72 below lsd, Sept. 18, 1956. Records available: 1940-61. Measurement discontinued.

8--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8, 1957	17.03	Apr. 22, 1958	14.91	Apr. 17, 1959	13.52	Apr. 19, 1960	13.23
Feb. 18	16.52	May 20	13.63	May 20	13.61	May 19	13.44
Apr. 22	15.28	June 18	13.68	June 23	13.79	Sept. 21	14.77
May 15	15.12	July 22	14.37	July 20	13.70	Nov. 21	15.29
June 19	14.78	Aug. 20	8.86	Aug. 19	14.20	Dec. 20	14.83
July 15	14.25	Sept. 18	10.90	Sept. 21	14.69	Jan. 16, 1961	14.80
Aug. 7	14.20	Oct. 21	11.46	Oct. 19	14.29	Feb. 21	14.73
Sept. 24	14.22	Nov. 20	11.20	Nov. 19	14.38	Mar. 20	14.89
Oct. 8	14.13	Dec. 22	11.58	Dec. 17	16.40	Apr. 17	14.80
Dec. 12	14.19	Jan. 21, 1959	12.21	Jan. 21, 1960	14.18	May 25	14.76
Jan. 14, 1958	14.22	Feb. 20	12.94	Mar. 1	12.88	June 20	14.63
Feb. 5	13.68	Mar. 20	12.74	21	12.58	July 17	14.70

Phillips County

4-19-35ab. Glenn Seeger. Drilled domestic and stock water-table well in terrace deposits of Pleistocene age, diam 10 in, depth 35 ft, galvanized iron casing. MP top of casing, 1.30 ft above lsd. Highest water level 7.43 below lsd, May 24, 1952; lowest 15.93 below lsd, Mar. 12, 1957. Records available: 1946-60. No measurement made in 1961.

Mar. 12, 1957	15.93	Feb. 21, 1958	13.10	Apr. 2, 1959	15.59	June 15, 1960	13.82
Aug. 13	14.28	May 7	14.64	Oct. 14	15.87	Oct. 20	14.00
Nov. 14	14.78						

Pratt County

29-13-13aa. E. R. Kessler. Drilled unused (previously reported irrigation) water-table well in sand and gravel of Pleistocene age, diam 10 in, depth 125 ft, galvanized iron casing. Lsd 1,916.7 ft above msl. MP top south side of concrete platform, 0.40 ft above lsd. Highest water level 87.65 below lsd, June 29, 1953; lowest 92.25 below lsd, Dec. 15, 1954. Records available: 1951-61.

Apr. 3, 1957	89.74	Apr. 24, 1958	90.54	July 22, 1959	89.84	Oct. 17, 1960	89.41
June 24	90.00	July 22	89.89	Oct. 20	89.79	Jan. 18, 1961	89.30
Sept. 17	89.88	Oct. 22	89.84	Jan. 25, 1960	90.64	Apr. 18	89.25
Dec. 11	89.79	Jan. 22, 1959	89.93	Apr. 19	90.39	July 19	89.07
Mar. 24, 1958	90.06	Apr. 20	90.12	July 18	89.63	Oct. 23	89.19

Rawlins County

4-33-18dd. W. B. Minney. Drilled unused water-table well in Ogallala Formation of Pliocene age, diam 5 in, depth 103 ft, galvanized iron casing. MP top north side of hole in pumpbase, 1.30 ft above lsd. Highest water level 86.61 below lsd, Aug. 4, 1952; lowest 88.52 below lsd, Oct. 13, 1959, Jan. 13, 1960. Records available: 1952-61.

Feb. 13, 1957	88.42	Apr. 16, 1958	88.19	Oct. 13, 1959	88.52	Jan. 16, 1961	87.83
May 14	88.40	Oct. 17	88.23	Jan. 13, 1960	88.52	Apr. 13	87.88
Aug. 20	88.23	Jan. 15, 1959	88.26	Apr. 12	88.21	July 12	87.82
Nov. 14	88.15	Apr. 14	88.34	July 13	87.85	Oct. 17	87.79
Feb. 19, 1958	88.18	July 14	88.36	Oct. 13	87.82		

Republic County

1-5-7bb. U.S. Geol. Survey. Driven and bored (previously reported drilled) observation water-table well in alluvium, diam 1½ in, depth 13 ft, galvanized iron casing. Lsd 1,515.31 ft above msl. MP top of pipe, 1.00 ft above lsd. Highest water level 2.75 below lsd, Sept. 9, 1958; lowest 9.62 below lsd, Mar. 28, 1956. Records available: 1947-61.

Feb. 21, 1957	9.41	Sept. 9, 1958	2.75	May 3, 1960	5.06	July 10, 1961	6.60
Apr. 24	9.15	Feb. 4, 1959	7.08	July 7	4.84	Aug. 3	7.27
June 26	3.22	May 6	5.08	Sept. 8	7.32	Sept. 7	6.90
Sept. 4	6.35	July 2	5.75	Feb. 7, 1961	8.32	Oct. 3	7.43
Jan. 3, 1958	8.04	Sept. 4	7.94	May 3	7.83	Nov. 6	7.60
May 6	6.61	Feb. 8, 1960	7.54	June 6	5.64	Dec. 22	7.32
July 7	7.29						

Russell County

45. Dick Gossett. Formerly Jacob Flegler. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 11, T. 15 S., R. 14 W. Dug stock water-table well in alluvium, diam 28 to 32 in, depth 27 ft, cribbed with rock. MP top east edge of rock casing, 1.50 ft below lsd (previously reported 0.70 ft above lsd). Highest water level 17.01 below lsd, Apr. 14, 1960; lowest 24.28 below lsd, Aug. 20, 1941. Records available: 1941-60. Measurement discontinued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 22, 1957	22.51	Apr. 15, 1958	18.08	Apr. 13, 1959	19.24	Apr. 14, 1960	17.01
Apr. 9	21.02	July 14	18.28	July 13	19.70	June 15	17.66
June 16	18.91	Oct. 15	18.15	Oct. 14	17.32	Aug. 3	18.58
Oct. 9	19.62	Jan. 14, 1959	18.96	Jan. 20, 1960	18.07	Nov. 29	17.92
Jan. 15, 1958	19.93						

Saline County

15-2-18cd. U.S. Geol. Survey. Drilled and driven observation water-table well in terrace deposits of Pleistocene age, diam 1 $\frac{1}{4}$  in, depth 45 ft, galvanized iron casing. Lsd 1, 261.3 ft above msl. MP top of pipe, 1.40 ft above lsd. Highest water level 11.50 below lsd, Sept. 18, 1951; lowest 28.65 below lsd, Sept. 7, 1956. Records available: 1946-61.

Mar. 18, 1957	27.44	May 6, 1958	20.98	May 25, 1959	23.53	Sept. 1, 1960	23.38
May 8	26.12	June 12	21.45	June 26	22.93	Nov. 30	22.50
June 10	24.04	July 21	20.96	July 24	23.79	Mar. 17, 1961	24.07
Aug. 19	22.63	Aug. 13	20.03	Aug. 21	24.30	May 11	23.42
Oct. 11	21.95	Sept. 19	21.30	Dec. 16	23.46	June 28	20.34
Nov. 15	22.82	Oct. 16	21.79	Mar. 28, 1960	21.57	Aug. 24	21.19
Jan. 3, 1958	23.77	Nov. 19	22.82	May 26	20.77	Sept. 20	21.01
Feb. 12	24.27	Feb. 23, 1959	23.92	June 30	21.37	Dec. 27	22.80
Apr. 1	23.75	Mar. 24	24.10	July 28	23.83		

Sedgwick County

809. City of Wichita. NW cor. NW $\frac{1}{4}$  sec. 21, T. 26 S., R. 1 E. Driven observation water-table well in sand and gravel of Pleistocene age, diam 1 $\frac{1}{4}$  in, depth 32 ft, galvanized iron casing. Lsd 1, 330.32 ft above msl. MP top of pipe, 3.60 ft above lsd. Highest water level 5.91 below lsd, July 11, 1951; lowest 17.68 below lsd, Jan. 31, 1957. Records available: 1938-61.

Jan. 31, 1957	17.68	July 1, 1958	13.07	Oct. 1, 1959	13.07	Dec. 1, 1960	11.27
Mar. 1	17.64	Aug. 1	11.97	30	13.20	Jan. 1, 1961	11.46
Apr. 1	17.48	Sept. 3	12.40	Dec. 1	13.07	Feb. 1	11.93
May 1	16.47	Oct. 2	12.01	29	13.11	Mar. 1	12.11
31	15.41	Dec. 1	12.46	Feb. 1, 1960	13.03	30	11.49
July 1	14.38	Jan. 1, 1959	12.71	Mar. 1	12.73	Apr. 28	11.41
Aug. 1	13.18	30	12.90	30	12.12	June 1	10.59
30	13.52	Mar. 2	12.94	May 2	11.92	30	11.05
Oct. 2	13.64	Apr. 1	13.03	June 1	11.80	July 31	10.45
Nov. 1	13.68	May 1	13.21	July 1	12.02	Sept. 1	10.66
Dec. 30	13.90	June 1	12.82	Aug. 1	12.32	29	10.17
Feb. 4, 1958	14.09	30	12.72	Sept. 1	11.65	Oct. 30	9.97
Mar. 5	14.06	July 31	13.58	29	11.07	Nov. 30	9.66
May 2	12.79	Sept. 1	14.06	Nov. 1	10.73	Dec. 29	10.33
June 3	12.73						

Sheridan County

8-28-33dc. School District. Drilled unused water-table well in Ogallala Formation of Pliocene age, diam 8 in, depth 56 ft, galvanized iron casing. MP top of casing, 0.90 ft above lsd. Highest water level 48.35 below lsd, Aug. 7, 1952; lowest dry, Aug. 27, 1956. Records available: 1952-61. Measurement discontinued.

Aug. 19, 1957	51.65	July 15, 1958	50.17	July 15, 1959	54.03	Oct. 14, 1960	55.32
Nov. 13	51.50	Oct. 17	50.48	Apr. 12, 1960	53.74	Jan. 16, 1961	55.30
Feb. 18, 1958	51.21	Feb. 16, 1959	52.05	July 15	54.53	Apr. 14	55.60
Apr. 16	50.52	Apr. 15	51.91				

Sherman County

8-40-24baa. Victoria Van Drasek Estate. Drilled unused water-table well in Ogallala Formation of Pliocene age, diam 6 in, depth 164 ft, galvanized iron casing. Lsd 3,697.7 ft above msl. MP top west side of casing, 0.70 ft above lsd. Highest water level 135.54 below lsd, Apr. 21, 1953; lowest 141.28 below lsd, July 14, 1959. Records available: 1948-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9, 1957	137.66	Apr. 16, 1958	138.34	July 14, 1959	141.28	Oct. 13, 1960	139.98
Apr. 25	138.00	July 16	138.61	Oct. 12	139.35	Jan. 17, 1961	140.13
July 10	138.05	Oct. 16	138.84	Jan. 12, 1960	139.64	Apr. 13	140.19
Oct. 15	138.91	Jan. 15, 1959	139.00	Apr. 11	139.53	July 25	140.22
Jan. 7, 1958	138.35	Apr. 14	138.93	July 15	139.70	Oct. 18	140.52

Smith County

5-15-2dc. George K. Wamhoff. Drilled unused water-table well in terrace deposits of Pleistocene age, diam 10 in, depth 42 ft, cased with tile. Lsd 1,651.0 ft above msl. MP top west side of board platform, 1.20 ft above lsd. Highest water level 23.95 below lsd, Oct. 22, 1951; lowest 33.84 below lsd, Nov. 30, 1948. Records available: 1945-60. No measurement made in 1961. Mar. 12, 1957, 33.20; Feb. 21, 1958, 31.28; May 7, 30.60; Apr. 2, 1959, 30.47; Oct. 8, 31.10; Oct. 20, 1960, 30.05.

Stafford County

25-13-3bb. M. L. Halley. Driven unused water-table well in sand and gravel of Pleistocene age, diam 4 in, depth 32 ft (previously reported 30 ft), cased with iron, sand point driven in well pit. Lsd 1,933.3 ft above msl. MP top of pipe, 0.80 ft above lsd (since Feb. 18, 1957). Highest water level 2.75 below lsd, May 21, 1952; lowest dry, Aug. 15, Oct. 22, Nov. 20, 1956. Records available: 1951-61.

Feb. 18, 1957	20.98	June 18, 1958	14.28	Aug. 20, 1959	13.44	Nov. 21, 1960	14.19
Mar. 20	20.52	July 24	11.73	Sept. 21	14.57	Dec. 21	14.49
Apr. 9	20.40	Aug. 20	11.59	Oct. 19	14.19	Jan. 18, 1961	14.63
May 15	20.07	Sept. 18	11.83	Nov. 19	13.85	Feb. 22	14.49
June 19	17.25	Oct. 20	12.07	Dec. 17	13.23	Mar. 20	14.85
Aug. 12	16.96	Nov. 20	12.29	Jan. 25, 1960	14.26	Apr. 19	14.93
Sept. 24	16.98	Dec. 22	12.13	Mar. 3	14.09	May 25	14.77
Oct. 8	17.05	Jan. 23, 1959	12.62	22	14.03	June 20	14.98
Nov. 19	16.44	Feb. 20	12.78	Apr. 20	13.04	July 17	15.39
Dec. 16	16.12	Mar. 20	12.92	May 20	11.84	Aug. 17	15.29
Jan. 14, 1958	16.08	Apr. 17	12.84	June 21	11.48	Sept. 26	13.84
Feb. 5	16.36	May 20	11.90	July 18	12.37	Oct. 23	13.89
Mar. 17	16.15	June 23	12.00	Sept. 21	14.46	Nov. 21	13.50
Apr. 23	14.86	July 23	12.64	Oct. 17	14.25	Dec. 19	13.39
May 20	14.36						

Stanton County

146. C. M. Harrison. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 27, T. 30 S., R. 43 W. Drilled unused water-table well in Dakota Formation of Lower Cretaceous age, diam 5 in, depth 55 ft, galvanized iron casing. MP hole in southwest side of steel cylinder, 1.00 ft above lsd (previously reported at lsd). Highest water level 31.54 below lsd, Nov. 29, 1951; lowest dry, Aug. 19, 1959. Records available: 1939-51, 1953-61. Measurement discontinued.

Feb. 21, 1957	48.47	May 14, 1958	40.68	May 15, 1959	43.15	Feb. 25, 1960	42.64
Aug. 7	47.96	Aug. 14	42.63	Aug. 19	(f)	May 11	42.46
Nov. 7	44.73	Nov. 6	48.20	Nov. 13	47.69	Feb. 13, 1961	45.37
Feb. 13, 1958	41.62	Feb. 11, 1959	39.65				

f Dry.

Stevens County

33-38-20aa. Forrest Farrar. Drilled domestic water-table well in deposits of Pleistocene age and Ogallala Formation of Pliocene age, diam 5 in, depth 118 ft (previously reported 119 ft), galvanized iron casing. MP slit in steel plate over casing, 0.60 ft above lsd. Highest water level 77.60 below lsd, Nov. 7, 1961; lowest 97.29 below lsd, Apr. 7, 1956. Records available: 1956-61.



## 33-38-20aa--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 20, 1957	89.81	May 13, 1958	87.82	Aug. 14, 1959	79.50	Nov. 9, 1960	82.30
May 20	87.47	Nov. 16	84.20	Nov. 6	80.06	Feb. 13, 1961	79.60
Aug. 7	87.89	Feb. 12, 1959	83.66	Feb. 18, 1960	82.64	May 16	80.96
Nov. 6	85.12	May 7	86.68	Aug. 22	82.33	Nov. 7	77.60
Feb. 12, 1958	86.62						

Sumner County

19. Thomas Graber. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 17, T. 30 S., R. 2 E. Bored observation water-table well in terrace deposits of Pleistocene age, diam 1 $\frac{1}{2}$  in, depth 30 ft, cased with steel. MP top of pipe, 1.60 ft above lsd. Highest water level 6.65 below lsd, June 6, 1957; lowest 12.18 below lsd, Sept. 13, 1956. Records available: 1954-61.

Mar. 19, 1957	11.89	June 6, 1957	6.65	Apr. 2, 1958	7.52	Nov. 30, 1960	9.50
Apr. 22	10.95	Aug. 14	9.66	July 7, 1959	9.72	Dec. 28, 1961	8.85

Thomas County

7. City of Brewster. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 18, T. 8 S., R. 36 W. Drilled unused water-table well in Ogallala Formation of Pliocene age, diam 6 in, depth 139 ft, galvanized iron casing. MP top west side of casing, 0.30 ft above lsd. Highest water level 110.85 below lsd, July 8, 1953; lowest 128.02 below lsd, Oct. 14, 1948. Records available: 1942-61.

Jan. 9, 1957	124.10	July 16, 1958	125.42	Oct. 13, 1959	126.02	Jan. 17, 1961	123.59
Apr. 24	124.85	Oct. 17	124.60	Jan. 13, 1960	124.35	Apr. 14	123.77
July 10	125.17	Jan. 16, 1959	124.41	Apr. 12	124.19	July 14	127.30
Oct. 15	124.64	Apr. 14	124.77	July 15	125.00	June 26	125.02
Jan. 7, 1958	124.78	July 15	125.13	Oct. 14	126.83	Oct. 17	124.41
Apr. 16	124.72						

Trego County

14-22-36aa. U.S. Geol. Survey. Drilled observation water-table well in terrace deposits of Pleistocene age, diam 1 $\frac{1}{2}$  in, depth 74 ft, galvanized pipe casing. Lsd 2,114.72 ft above msl. MP top of pipe, 1.50 ft above lsd. Highest water level 26.82 below lsd, Dec. 5, 1960; lowest 43.11 below lsd, Mar. 16, 1950. Records available: 1949-54, 1956-61.

Jan. 31, 1957	27.90	Jan. 9, 1958	27.21	Feb. 24, 1959	27.35	Mar. 16, 1961	27.93
Mar. 4	28.20	Feb. 3	27.20	Oct. 9	27.20	May 9	26.99
July 11	28.07	May 6	27.22	June 13, 1960	26.88	June 27	27.13
Oct. 24	27.29	Aug. 5	27.39	Dec. 5	26.82	Sept. 19	27.04
Nov. 1	27.30						

# MINNESOTA

By G. C. Straka and W. A. Miller

The observation-well program in Minnesota was continued during 1957 through 1961 in co-operation with the Division of Waters of the State Department of Conservation, the Department of Iron Range Resources and Rehabilitation, and the Board of County Commissioners of Hennepin County. Figure 5 shows the location of observation wells included in this report.

## Well-Numbering System

Wells are numbered in accordance with the Bureau of Land Management's system of land subdivision. Each well number is made up of three segments. The first segment indicates the township, the second the range, and the third the section in which the well is situated. The letters after the section number, which are assigned in a counterclockwise direction, represent subdivisions of the section. The first letter denotes the 160-acre tract, the second the 40-acre tract, and the third the 10-acre tract. The letter "B" before the township number designates a well in the northwest quadrant of the fourth principal meridian and base-line system. (If the well is in the northwest quadrant of the fifth principal meridian and base-line system, no letter is included.) Numbers are added as suffixes to distinguish wells in the same tract. Thus, the number 108.30.9add designates the well in the  $SE\frac{1}{4}SE\frac{1}{4}NE\frac{1}{4}$  sec. 9, T. 108 N., R. 30 W.

## Well Descriptions and Water-Level Measurements

Water levels are reported in feet below land-surface datum, unless otherwise indicated.

### Brown County

108.30.9add. Erwin Kjelshus. Drilled unused water-table well in glacial drift, diam 16 in, depth 32 ft. MP top of concrete cover, 0.40 ft above lsd. Highest water level 2.70 below lsd, May 2, 1951; lowest 17.68 below lsd, Feb. 28, 1956. Records available: 1942-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9, 1957	9.60	June 27, 1957	3.28	Dec. 10, 1957	6.02	May 26, 1958	5.42
15	9.75	July 4	4.38	17	6.03	June 2	4.69
23	10.04	10	4.80	24	6.13	11	4.72
29	10.24	15	5.20	31	6.19	17	4.91
Feb. 5	10.68	24	4.68	Jan. 7, 1958	6.28	24	5.20
12	11.09	31	5.00	14	6.41	July 1	5.62
18	11.50	Aug. 7	5.58	21	6.46	8	5.31
26	11.78	14	5.58	28	6.65	14	5.27
Mar. 4	11.83	20	5.95	Feb. 3	6.77	22	5.78
12	11.96	29	5.12	11	6.93	30	6.17
19	11.97	Sept. 4	5.25	18	7.18	Aug. 14	6.00
27	11.25	9	5.40	26	6.60	21	6.56
Apr. 4	10.03	18	5.79	Mar. 4	6.75	27	6.80
11	9.75	24	5.96	11	6.85	Sept. 3	7.15
17	9.27	Oct. 2	6.36	19	6.94	10	7.42
23	8.90	9	6.67	26	7.04	16	7.76
May 1	8.73	15	6.75	Apr. 1	7.04	24	8.15
6	8.82	22	6.79	9	4.52	Oct. 1	8.74
15	8.47	29	6.30	15	4.57	8	9.24
21	7.15	Nov. 5	6.20	23	4.75	15	9.85
29	5.75	13	6.18	30	4.76	22	10.28
June 5	5.05	20	6.18	May 6	4.87	28	10.78
12	5.20	28	5.97	13	5.05	Nov. 6	11.20
22	3.92	Dec. 4	5.91	20	5.24	13	11.53

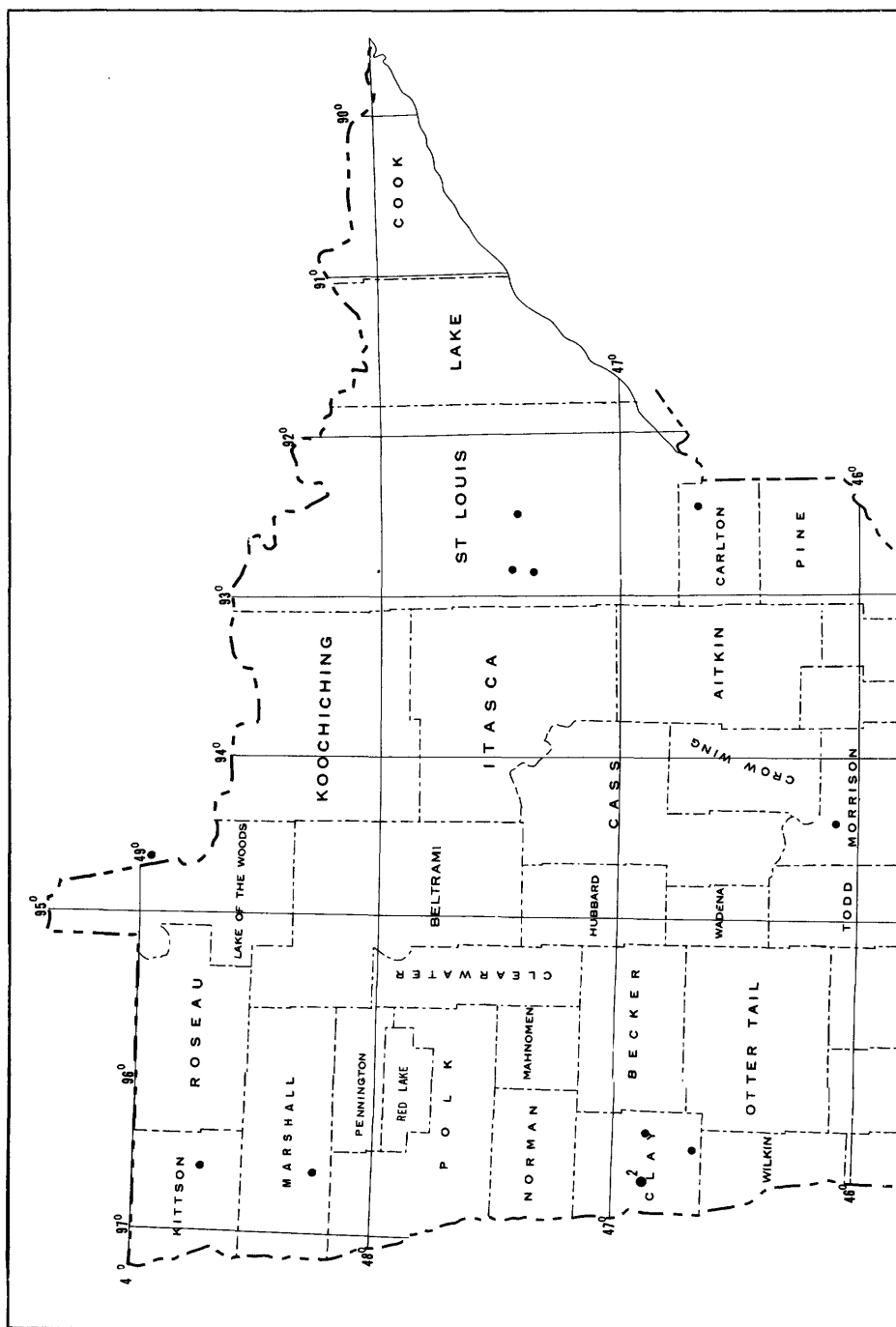
108.30.9add--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 18, 1958	11.60	Mar. 28, 1960	8.58	Nov. 3, 1960	6.00	June 1, 1961	4.34
25	11.91	Apr. 5	6.92	9	6.15	7	4.46
Dec. 2	12.12	12	6.87	17	6.26	13	4.72
9	12.42	19	5.07	23	6.40	20	4.94
16	12.47	26	5.09	30	6.32	27	5.29
24	12.76	May 3	5.04	Dec. 7	6.13	July 3	5.65
30	13.09	10	5.17	14	6.15	10	6.24
Oct. 7, 1959	11.30	17	4.69	20	6.44	17	6.71
14	11.32	24	3.58	27	6.60	26	5.77
21	11.84	31	4.25	Jan. 3, 1961	6.72	Aug. 3	4.96
28	11.80	June 8	4.64	10	6.85	10	5.28
Nov. 3	11.52	15	4.79	17	7.05	17	5.74
18	9.34	21	4.80	24	7.25	Sept. 1	6.22
25	9.14	30	4.80	31	7.36	7	6.65
Dec. 2	9.14	July 7	4.90	Feb. 7	7.62	14	6.50
8	9.13	13	4.98	14	7.87	21	6.86
15	9.09	20	5.35	21	7.99	28	7.20
22	8.98	28	5.93	28	7.82	Oct. 4	7.16
29	7.02	Aug. 2	6.58	Mar. 7	7.56	12	7.49
Jan. 5, 1960	6.53	14	7.25	Mar. 14	7.49	19	7.57
12	6.48	22	7.73	21	6.89	26	7.67
19	6.72	29	6.70	28	4.88	Nov. 3	7.26
26	6.83	Sept. 5	6.86	Apr. 4	4.89	9	7.08
Feb. 2	7.00	13	5.76	12	4.82	16	7.33
9	7.09	19	5.64	18	4.45	22	7.29
15	7.27	27	4.91	25	4.28	29	7.49
22	7.49	Oct. 3	5.02	May 3	4.57	Dec. 5	7.58
29	7.73	12	5.33	9	4.55	13	7.75
Mar. 7	8.01	18	5.68	18	3.79	19	7.85
11	8.14	26	5.78	25	4.02	26	8.05

Carlton County

B49.17.23caa. City of Cloquet. Drilled unused water-table well in glacial sand and gravel, diam 12 in, depth 51 ft, screened 26-46. MP top of wood platform, 1.40 ft above lsd. Highest water level 4.66 below lsd, Aug. 17, 1953; lowest 14.64 below lsd, Mar. 6, 1961. Records available: 1948-61. Measured by S. O. Hanson.

Jan. 7, 1957	9.32	Sept. 3, 1957	9.31	May 26, 1958	10.55	Jan. 12, 1959	11.81
14	9.43	9	8.62	June 2	10.29	19	11.94
21	9.44	17	8.86	10	10.08	Feb. 4	12.21
28	9.56	23	8.75	16	10.40	9	12.30
Feb. 4	9.65	30	8.90	23	10.45	16	12.42
11	9.73	Oct. 7	8.99	30	10.55	23	12.50
18	9.79	14	9.12	July 7	9.65	Mar. 2	12.66
25	9.83	21	9.08	14	9.62	9	12.61
Mar. 4	9.91	28	9.21	21	9.85	16	12.64
11	9.85	Nov. 4	9.12	28	9.99	23	12.68
18	9.54	11	9.23	Aug. 4	10.21	30	12.70
25	8.84	25	9.46	11	10.31	Apr. 6	12.75
Apr. 1	8.70	Dec. 2	9.61	18	10.56	13	12.78
8	8.70	9	9.63	25	10.38	20	12.78
15	8.90	16	9.83	Sept. 1	9.91	27	12.82
22	8.56	23	9.93	8	9.74	May 4	12.86
30	8.75	30	10.03	15	9.69	11	12.66
May 6	8.94	Jan. 20, 1958	10.28	22	9.90	18	12.80
20	9.26	27	10.29	29	10.04	June 1	11.92
27	8.95	Feb. 3	10.39	Oct. 6	10.32	8	11.70
June 3	9.10	10	10.50	13	10.42	22	11.94
25	8.15	24	10.54	20	10.59	29	11.76
July 1	8.24	Mar. 3	10.41	27	10.79	July 6	11.97
8	8.26	10	10.35	Nov. 3	11.28	13	11.26
15	8.14	16	10.30	24	10.82	20	11.54
21	7.84	24	10.27	Dec. 1	10.99	27	11.64
29	8.09	31	10.29	8	11.14	Aug. 3	11.86
Aug. 5	8.33	Apr. 7	10.32	15	11.30	10	11.96
12	9.34	14	10.34	22	12.56	16	11.99
19	9.37	21	10.40	29	12.57	24	12.04
26	8.80	May 5	10.50	Jan. 5, 1959	11.68	31	11.99



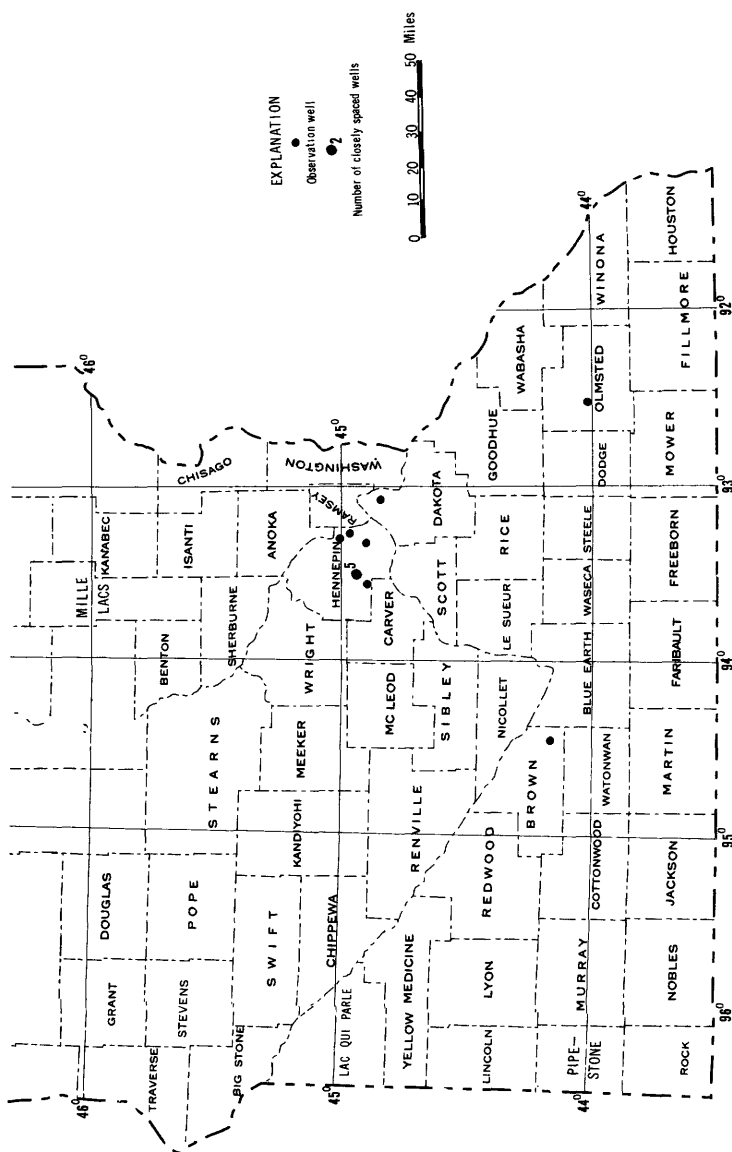


Figure 5. --Location of observation wells in Minnesota, 1957-61.

B49. 17. 23caa--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 8, 1959	11.66	Apr. 18, 1960	13.16	Nov. 14, 1960	13.35	May 22, 1961	11.60
21	11.86	25	12.37	21	13.43	June 5	12.08
28	11.64	May 2	11.4	28	13.51	12	12.28
Oct. 5	11.77	16	10.9	Dec. 5	13.53	19	12.50
12	11.80	23	11.0	12	13.40	26	12.72
19	11.93	31	10.9	19	13.62	July 5	12.88
26	12.00	June 6	11.25	26	13.77	10	13.01
Nov. 2	12.12	13	11.43	Jan. 2, 1961	13.88	17	12.62
9	12.27	20	11.70	9	13.97	23	12.65
16	12.40	July 5	11.63	16	14.06	31	12.88
23	12.57	11	11.92	23	14.17	Aug. 14	13.30
30	12.75	25	12.02	30	14.27	21	13.51
Dec. 7	12.91	Aug. 1	12.19	Feb. 6	14.34	28	13.65
14	13.15	8	12.20	13	12.61	Sept. 5	13.80
21	13.18	15	11.91	21	13.57	11	13.60
28	13.16	22	12.13	27	14.55	18	13.25
Jan. 4, 1960	13.24	29	12.13	Mar. 6	14.64	25	13.52
10	13.68	Sept. 6	12.25	13	14.58	Oct. 1	13.74
18	13.50	12	12.33	20	14.58	9	13.88
Feb. 8	13.70	19	12.52	27	14.47	16	13.86
15	13.82	26	12.63	Apr. 3	14.12	23	13.94
22	13.91	Oct. 3	12.81	10	14.08	30	14.03
29	14.00	10	12.98	17	13.89	Nov. 6	13.76
Mar. 7	14.08	17	12.97	24	12.66	13	13.99
14	14.12	24	13.16	May 1	12.39	20	14.08
21	14.12	31	12.87	8	12.48	27	14.22
27	14.07	Nov. 7	13.15	15	11.86	Dec. 4	14.32
Apr. 4	13.51						

## Clay County

137. 45. 30cdbl. City of Barnesville. Drilled unused water-table well in glacial drift, diam 10 in, depth 73 ft. MP top of casing, 1.50 ft above lsd. Highest water level 3.16 below lsd, June 20, 1953; lowest 7.41 below lsd, Oct. 25, 27, 1949. Records available: 1949-61.

Jan. 5, 1957	6.42	Aug. 31, 1957	5.83	May 3, 1958	5.21	Jan. 24, 1959	5.64
12	6.45	Sept. 7	4.76	10	5.24	31	5.68
19	6.47	14	4.74	17	5.42	Feb. 7	5.86
26	6.65	21	4.54	24	5.52	14	6.16
Feb. 2	6.60	28	5.14	31	5.80	21	6.20
9	6.62	Oct. 5	6.16	June 7	5.83	28	6.40
17	6.58	12	5.07	14	5.86	Mar. 7	6.46
23	6.60	18	5.10	21	5.67	14	6.52
Mar. 2	6.62	26	5.14	28	5.66	21	6.42
9	6.66	Nov. 2	5.15	July 5	3.68	28	6.16
16	6.55	9	5.16	12	3.92	Apr. 4	6.18
23	6.24	16	5.18	19	3.83	11	6.06
30	5.93	23	5.52	Aug. 2	5.18	18	6.02
Apr. 6	6.22	30	6.42	9	5.16	25	5.78
13	6.26	Dec. 7	5.54	16	5.46	May 2	5.68
20	4.63	14	5.57	23	5.52	9	5.12
27	4.68	21	5.64	31	5.54	16	5.04
May 4	4.92	28	5.74	Sept. 6	5.60	23	4.80
11	4.94	Jan. 4, 1958	5.76	27	5.66	29	4.98
18	5.16	11	5.80	Oct. 4	5.87	June 6	5.08
25	4.63	25	5.94	12	5.66	13	4.92
June 1	4.97	Feb. 1	5.96	18	5.68	20	3.29
8	5.39	8	5.98	25	5.78	27	3.67
15	5.22	15	6.12	Nov. 1	6.18	July 5	4.03
22	4.51	22	6.16	8	5.67	18	4.58
29	4.54	Mar. 1	6.14	15	5.65	25	4.94
July 6	4.88	8	6.18	22	5.18	Aug. 1	5.51
13	5.26	15	6.14	29	5.20	8	5.41
20	4.96	22	6.16	Dec. 6	5.22	15	5.63
27	5.23	29	6.01	13	5.38	22	5.91
Aug. 3	5.26	Apr. 5	5.98	20	5.46	29	4.94
10	5.52	12	5.71	27	5.53	Sept. 5	5.29
17	5.57	19	5.57	Jan. 10, 1959	5.48	12	5.77
24	5.62	26	5.41	17	5.52	19	5.86

## 137. 45. 30cdb1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 26, 1959	5.82	Apr. 24, 1960	6.55	Nov. 19, 1960	6.47	June 17, 1961	6.20
Oct. 3	5.92		6.02	26	6.44	24	6.08
10	5.86	May 7	5.38	Dec. 3	6.52	July 1	6.34
17	5.94		5.52	10	6.48	8	6.46
24	5.76	14	5.10	17	6.52	15	6.52
31	5.82	28	4.90	24	6.56	22	6.64
Nov. 7	5.76	June 4	5.56	31	6.54	29	6.66
15	5.80	11	5.64	Jan. 7, 1961	6.62	Aug. 12	6.74
21	5.78	18	5.86	14	6.66	18	6.68
28	5.76	25	5.66	21	6.78	19	6.84
Dec. 7	5.82	July 2	5.61	28	6.76	26	6.87
12	5.86	9	5.73	Feb. 4	6.77	Sept. 2	6.94
20	5.84	16	5.17	11	6.79	9	6.97
26	6.02	23	5.69	18	6.77	17	6.54
Jan. 2, 1960	6.18	30	5.87	25	6.68	23	6.52
9	6.52	Aug. 6	6.04	Mar. 4	6.74	30	6.56
16	6.56	13	6.08	11	6.72	Oct. 7	6.68
23	6.72	20	6.12	18	6.76	14	6.56
30	6.92	27	5.59	25	6.80	21	6.58
Feb. 6	6.96	Sept. 3	5.78	Apr. 1	6.85	28	6.60
13	7.02	10	5.99	8	7.16	Nov. 4	6.57
20	6.98	17	6.23	15	7.30	11	6.58
27	7.04	24	6.38	22	7.38	18	6.80
Mar. 5	7.06	Oct. 1	6.42	29	7.40	25	6.56
12	7.10	8	6.56	May 6	6.67	Dec. 2	6.58
19	7.08	15	6.60	13	6.52	9	6.60
26	7.12	22	6.62	20	5.56	17	6.58
Apr. 2	7.14	29	6.60	27	5.73	23	6.66
9	7.12	Nov. 5	6.43	June 3	5.96	29	6.64
16	6.97	12	6.45	10	6.16		

139. 45. 1ccd2. Village of Hawley. Drilled unused water-table well in glacial drift, diam 10 in, depth 122 ft. MP top west side of casing, 2.05 ft above lsd. Highest water level 12.09 below lsd, Aug. 6, 1955; lowest 20.46 below lsd, Aug. 9, 1961. Records available: 1949-61. Water levels affected by pumping.

## Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	16.52	16.35	16.73	15.62	16.45	16.07	15.93	17.93	16.58	18.08	18.13	18.61
10	16.53	16.20	16.05	15.65	16.90	16.02	16.78	18.19	16.68	17.97	17.93	18.48
15	16.64	16.63	16.08	15.86	16.84	15.38	17.13	18.12	17.13	18.12	18.17	18.40
20	16.31	16.42	15.88	15.43	16.75	15.60	17.17	18.34	16.80	17.64	18.21	18.56
25	16.58	16.41	15.01	15.56	16.52	14.22	17.17	18.07	17.13	17.83	18.32	18.24
Eom	16.66	16.63	15.10	16.30	15.98	14.68	17.53	18.35	17.62	18.33	18.34	18.79

1958

5	18.23	18.71	18.83	18.43	18.59	17.75	17.63	18.65	18.12	18.27	18.50	17.72
10	18.67	18.89	18.80	18.22	18.58	17.95	17.65	18.40	18.13	18.41	18.51	18.09
15	18.59	18.69	18.51	18.57	18.64	17.90	18.63	18.68	17.94	18.49	18.59	18.09
20	18.64	18.60	18.61	17.97	18.86	18.38	17.77	19.02	18.06	20.06	18.03	18.41
25	18.58	18.95	18.67	18.42	18.62	18.48	18.57	18.39	18.23	18.74	17.82	18.22
Eom	18.62	18.49	18.62	18.37	18.82	18.51	18.82	18.11	18.52	18.46	17.69	18.45

1959

5	18.40	18.55	18.49	17.19	18.11	18.08	16.83	17.98	18.06	18.57	18.59	18.62
10	18.49	18.55	18.51	17.91	17.96	17.75	16.21	17.92	18.16	18.45	18.50	18.69
15	18.38	18.42	18.18	18.20	18.24	17.18	16.03	17.91	18.38	18.39	18.57	19.86
20	18.45	18.61	18.20	18.17	18.50	17.12	16.53	18.20	18.11	18.47	18.53	18.78
25	18.27	18.62	18.13	18.34	18.44	17.21	17.24	17.77	18.52	18.32	18.50	18.86
Eom	18.62	18.75	16.75	18.27	18.17	17.31	17.75	17.83	18.53	18.49	18.61	18.48

1960

5	18.48	18.61	18.59	17.15	16.40	18.71	18.28	18.85	18.44	.....	18.76	19.07
10	18.47	18.57	18.61	16.31	17.07	18.48	18.48	18.52	18.49	.....	19.19	19.11
15	18.98	18.58	18.69	16.20	17.44	18.58	18.58	18.80	18.62	18.77	19.35	19.25
20	18.52	18.55	18.60	16.59	18.50	18.91	18.96	18.58	.....	18.88	19.17	19.13
25	18.51	18.66	18.63	16.26	18.77	18.69	18.90	18.25	.....	18.86	19.29	19.25
Eom	18.42	18.65	17.96	15.72	18.50	18.38	18.67	18.15	.....	18.75	19.22	19.16

## 139. 45. 1ccd2--Continued.

Day	1961											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	19.27	18.94	18.56	18.75	18.60	18.51	18.68	18.91	19.02	18.63	18.53	18.65
10	19.32	18.91	18.47	18.83	18.52	18.60	18.80	18.90	18.83	18.56	18.61	18.59
15	19.07	19.28	19.07	18.89	17.89	18.72	18.82	19.21	18.29	18.32	18.60	18.72
20	19.32	18.88	18.79	18.42	17.70	18.62	18.70	18.83	18.31	18.68	18.69	18.67
25	19.05	18.71	18.80	18.29	18.04	18.54	18.85	19.29	18.21	18.64	18.67	18.55
Eom	19.05	18.71	18.73	18.35	18.31	19.40	18.67	19.03	18.41	18.58	18.59	18.61

139. 47. 5cdc. City of Moorhead. Drilled observation water-table well in glacial sand and gravel, diam 8 in, depth 131 ft, slotted 91-107. MP wood floor of instrument shelter, 3.60 ft above lsd. Highest water level 12.19 below lsd, July 15, 1947; lowest 30.11 below lsd, June 6, 7, 1961. Records available: 1947-61. Water levels affected by pumping.

## Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	.....	.....	26.48	26.46	26.92	27.44	27.07	27.20	26.92	26.90	26.59	26.43
10	.....	26.48	26.39	26.47	27.14	27.47	27.45	27.52	26.93	26.92	26.62	26.48
15	.....	26.49	26.51	26.41	27.12	27.09	27.50	27.30	26.92	26.84	26.53	26.44
20	.....	26.47	26.45	26.44	27.02	27.05	27.20	27.25	26.91	26.78	26.54	26.52
25	.....	26.48	26.50	26.55	26.99	26.89	27.20	27.26	26.80	26.77	26.49	26.37
Eom	26.51	26.44	26.42	26.98	27.21	27.01	27.28	27.09	26.88	26.70	26.38	26.43

## 1958

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	26.40	26.30	26.35	26.34	26.98	27.42	27.23	27.33	27.11	27.35	27.45	27.12
10	26.42	26.28	26.30	26.50	27.30	27.37	26.83	27.54	27.09	27.43	27.26	27.10
15	26.37	26.32	26.34	26.58	27.34	27.27	26.71	27.51	27.12	27.34	27.37	27.01
20	26.35	26.07	26.35	26.67	27.49	27.30	26.74	27.71	27.27	27.42	27.22	27.07
25	26.34	26.24	26.36	26.99	27.74	27.22	27.02	27.17	27.35	27.41	27.09	26.95
Eom	26.32	26.34	26.38	26.93	27.90	27.40	27.07	27.07	27.35	27.34	27.02	26.90

## 1959

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	26.84	26.91	27.16	27.52	28.32	28.43	28.00	28.99	28.52	28.66	.....	28.63
10	26.93	26.90	27.35	27.59	28.03	28.54	27.96	28.66	28.65	28.65	.....	28.62
15	26.89	26.97	27.45	27.77	28.03	28.21	28.00	28.63	28.94	28.59	.....	28.65
20	26.87	26.94	27.43	27.75	28.29	28.26	28.01	28.85	28.74	28.60	28.53	28.65
25	26.89	26.99	27.50	27.98	28.35	28.12	28.28	28.90	28.75	28.57	28.67	28.56
Eom	26.91	27.01	27.47	.....	28.13	28.09	28.96	28.62	28.67	28.63	28.59	28.56

## 1960

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	28.48	28.59	28.55	.....	.....	.....	28.69	.....	29.01	.....	29.23	29.42
10	28.54	28.59	28.54	.....	.....	.....	29.20	.....	29.10	.....	29.16	29.42
15	28.53	28.54	28.56	.....	28.48	.....	29.12	.....	.....	29.29	29.22	29.26
20	28.48	28.53	28.51	.....	28.54	28.92	29.38	29.24	.....	29.25	29.25	29.22
25	28.48	28.50	28.44	.....	28.80	28.70	.....	29.29	.....	29.28	29.32	29.20
Eom	28.51	28.54	28.32	28.04	.....	28.79	.....	29.02	.....	29.21	29.34	29.13

## 1961

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	29.04	29.02	28.97	28.98	.....	30.09	29.28	28.47	28.90	28.36	28.21	27.98
10	29.00	28.96	28.93	28.97	.....	29.95	29.63	28.74	28.59	28.36	28.20	28.0
15	29.06	29.01	28.95	28.99	.....	29.75	29.40	28.87	28.37	28.30	28.15	.....
20	29.08	28.96	28.95	29.07	.....	29.56	28.92	28.85	28.49	28.25	28.12	.....
25	29.06	28.98	28.98	29.10	29.35	29.29	28.62	28.57	28.50	28.24	28.04	.....
Eom	29.00	28.96	29.06	.....	29.93	29.36	28.42	28.85	28.42	28.20	28.01	27.93

h Tape measurement.

139. 47. 6aaa. U. S. Geol. Survey. Drilled observation water-table well in glacial gravel, diam 3 in, depth 103 ft, casing slotted near bottom. MP top of casing, 2.50 ft above lsd. Highest water level 1.88 below lsd, May 21, 1956; lowest 27.58 below lsd, July 18, Sept. 12, Oct. 10, 1961. Records available: 1949-61. Water levels affected by pumping.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4, 1957	24.82	Jan. 4, 1958	25.04	Jan. 14, 1959	25.14	Jan. 12, 1960	26.20
30	24.98	30	25.03	Feb. 9	25.44	Feb. 3	26.25
Feb. 28	24.94	Feb. 26	25.06	Mar. 9	25.62	29	26.30
Mar. 26	25.20	Mar. 26	24.34	Apr. 6	25.74	Mar. 26	26.54
Apr. 23	25.27	Apr. 21	24.92	May 6	25.82	Apr. 26	26.57
May 21	25.35	May 21	25.34	June 1	25.93	May 24	26.56
June 20	25.44	June 19	25.53	July 1	25.93	June 21	26.68
July 17	25.40	July 14	25.02	29	25.90	July 20	26.88
Aug. 14	25.50	Aug. 13	25.11	Aug. 26	26.03	Aug. 16	27.10
Sept. 10	25.49	Sept. 10	25.26	Sept. 23	26.15	Sept. 13	26.55
Oct. 9	25.29	Nov. 5	25.13	Oct. 21	26.22	Oct. 11	27.13
Nov. 8	25.20	Dec. 3	24.78	Nov. 16	25.86	Nov. 8	27.15
Dec. 5	25.07	17	24.55	Dec. 14	26.22	Dec. 6	27.30



139. 47. 6aaa--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3, 1961	27.33	Apr. 25, 1961	27.43	Aug. 15, 1961	27.55	Nov. 7, 1961	27.00
31	27.33	May 23	27.45	Sept. 12	27.58	Dec. 5	27.40
Feb. 28	27.38	June 20	27.57	Oct. 10	27.58	30	27.10
Mar. 28	27.41	July 18	27.58				

Dakota County

B28. 22. 22bdd1. Chicago Great Western Ry. Drilled unused artesian well in Jordan Sandstone of Late Cambrian age, diam 10 in, reported depth 300 ft. MP top of wood platform, 3.90 ft below lsd. Highest water level 8.00 below lsd, Apr. 14, 1952; lowest 20.80 below lsd, Aug. 17, 1961. Records available: 1951-61. Water levels affected by regional pumping.

## Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	15.75	16.20	16.27	15.83	16.80	17.21	.....	15.54	15.65	15.98	15.62	16.06
10	16.01	15.92	15.65	15.75	17.62	17.24	14.09	15.61	15.70	16.04	15.33	15.98
15	16.05	16.29	16.22	15.65	17.03	16.76	15.07	15.76	15.64	16.03	15.68	15.33
20	15.73	16.30	16.14	15.70	16.58	16.42	14.88	15.84	15.97	15.86	15.64	15.47
25	16.33	16.04	15.96	15.88	16.37	.....	15.14	15.40	15.93	16.01	15.76	15.16
Eom	16.26	16.29	15.23	16.44	16.57	.....	15.65	15.54	16.07	15.55	15.46	15.43

1958

5	15.18	16.08	15.51	14.83	15.05	.....	16.81	17.25	17.08	17.37	16.45	16.16
10	15.34	15.95	15.32	14.79	16.12	.....	16.86	17.18	16.78	17.22	16.18	16.12
15	15.37	15.67	15.21	14.82	16.58	15.42	16.64	17.75	16.68	16.96	15.82	16.17
20	15.35	15.73	15.28	14.77	16.17	17.03	16.21	18.45	16.64	16.72	15.68	15.94
25	15.29	15.55	15.34	14.91	.....	16.38	17.11	17.19	17.23	16.51	15.77	15.83
Eom	16.04	15.78	15.22	14.63	.....	17.56	17.23	16.70	17.31	16.47	15.68	15.83

1959

5	15.85	16.40	16.35	16.23	16.91	16.48	16.73	19.34	16.62	16.28	16.46	17.30
10	16.04	16.34	16.40	16.57	16.07	17.82	17.11	18.00	16.81	16.23	16.59	17.46
15	16.24	16.03	16.37	17.07	16.17	16.81	17.73	17.40	16.88	16.46	16.92	17.41
20	16.24	16.34	16.43	16.43	16.34	17.07	18.27	17.53	16.27	16.37	17.26	16.95
25	16.00	16.27	16.43	16.88	16.17	17.75	18.93	17.38	16.37	16.01	17.35	17.12
Eom	16.23	16.15	16.31	17.25	15.80	16.73	20.08	16.95	16.30	16.34	17.25	17.25

1960

5	17.17	17.43	17.73	16.20	15.02	14.60	16.24	19.79	18.18	17.50	17.15	16.95
10	17.00	17.53	17.63	14.94	15.16	16.00	16.30	18.75	18.08	17.49	17.20	16.87
15	17.49	17.40	17.73	15.22	16.49	16.73	17.02	19.03	17.90	17.70	17.16	17.08
20	17.65	17.52	17.51	15.05	15.91	16.06	18.10	18.08	17.60	17.62	16.76	16.98
25	17.54	17.74	17.66	15.20	14.96	15.72	18.67	18.36	17.05	17.46	16.77	16.50
Eom	17.40	17.68	17.41	14.65	13.77	16.23	18.87	17.90	17.30	17.35	16.97	16.65

1961

5	16.75	16.26	16.44	16.65	16.65	17.82	18.13	18.55	18.89	18.08	16.90	16.86
10	16.70	16.73	16.72	16.52	16.58	17.55	19.45	19.39	18.40	17.77	17.06	16.80
15	16.20	16.74	16.88	16.27	16.58	18.40	18.88	20.49	18.46	17.48	17.18	17.46
20	16.73	16.20	16.67	16.32	15.75	18.00	19.03	19.13	18.48	17.77	17.03	17.49
25	16.71	16.53	16.55	16.43	16.30	17.57	19.02	19.17	18.09	17.80	16.80	16.83
Eom	16.70	16.83	16.47	16.08	16.78	19.84	18.78	19.85	17.76	17.48	16.95	17.06

Hennepin County

B29. 23. 19cdd1. Great Northern Ry. Drilled unused artesian well in sandstones of late Precambrian and Late Cambrian age, diam 8 to 6 in, reported depth 1,016 ft, slotted 925-1,016. MP wood floor of instrument shelter, 3.40 ft above lsd. Highest water level 142.19 below lsd, July 7, 1957; lowest 167.22 below lsd, Sept. 23, 1961. Records available: 1954-61. Water levels affected by regional pumping.

## Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	146.13	.....	145.40	144.20	144.47	142.53	143.47	145.72	147.51	147.08	145.56	144.13
10	146.19	146.02	145.24	144.35	144.07	142.79	143.60	146.62	147.2	147.01	145.68	144.38
15	.....	145.92	145.27	144.46	143.95	142.93	143.89	147.41	146.79	146.33	144.97	144.16
20	.....	145.86	144.95	144.40	143.69	143.44	143.88	147.48	147.38	146.62	144.81	143.78
25	.....	145.39	145.09	144.03	143.78	143.63	144.99	147.40	146.79	146.34	144.84	143.84
Eom	.....	145.47	144.92	144.23	143.18	142.87	144.95	148.00	146.41	145.70	144.56	143.33

## B29. 23. 19cddl -- Continued.

1958												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	143.29	143.12	143.24	142.62	143.49	145.09	147.46	150.74	152.54	152.82	152.67	152.24
10	143.16	143.83	143.24	142.80	143.16	145.61	147.61	151.46	152.65	153.11	152.52	152.40
15	143.12	143.55	143.14	142.85	143.58	145.66	148.38	152.83	152.77	152.95	152.56	152.39
20	143.24	143.41	143.03	143.42	143.71	145.95	148.82	152.86	152.76	152.96	152.53	152.54
25	143.04	142.88	142.98	144.01	144.20	145.86	149.88	153.09	153.11	153.61	152.21	152.40
Eom	143.47	143.24	142.93	143.32	144.74	146.28	150.68	152.84	152.95	153.27	152.43	151.96
1959												
5	151.78	153.15	153.24	152.98	153.42	154.16	153.63	155.72	157.41	156.62	.....	153.07
10	152.31	153.12	152.90	153.32	153.45	154.80	153.96	155.87	158.06	156.32	.....	152.61
15	152.31	153.34	152.95	152.91	154.06	154.63	153.91	155.78	157.46	155.93	.....	152.13
20	152.47	153.44	153.35	153.36	153.87	154.28	154.61	156.11	157.13	.....	.....	152.10
25	152.88	153.08	153.20	153.52	154.05	154.18	154.92	156.15	157.32	.....	153.71	151.31
Eom	153.47	153.26	152.69	153.27	154.13	154.53	155.66	156.84	157.20	.....	153.05	150.27
1960												
5	149.38	149.12	149.07	149.72	151.39	153.65	154.44	156.42	157.30	157.49	157.04	154.37
10	149.19	149.20	149.02	150.15	151.71	154.04	154.26	156.54	157.68	157.59	156.80	154.42
15	149.10	149.62	148.93	149.90	151.97	153.94	154.20	156.75	158.04	157.95	155.91	153.93
20	148.70	150.11	149.29	149.67	152.28	154.33	154.98	156.55	157.54	157.71	155.92	153.95
25	148.39	149.26	149.63	149.97	152.99	154.50	155.31	157.26	157.74	157.12	154.76	153.26
Eom	148.99	148.98	149.66	150.99	153.31	154.59	155.56	157.47	157.74	156.68	154.99	152.72
1961												
5	152.07	153.00	152.16	151.36	152.84	154.50	159.22	164.15	166.66	166.30	166.97	165.27
10	152.18	152.85	151.44	151.40	153.20	155.11	159.71	164.61	166.53	166.55	166.65	165.47
15	152.48	153.05	151.25	151.41	153.32	156.80	160.40	165.12	166.84	166.81	166.48	165.48
20	152.72	153.14	151.70	151.60	153.86	156.89	161.66	165.63	166.42	166.78	166.37	164.98
25	152.95	153.08	151.59	151.83	154.29	157.15	162.45	166.27	167.02	166.76	165.85	164.46
Eom	152.59	153.02	151.47	152.50	154.06	159.09	163.25	166.61	166.71	166.37	165.70	163.6
B29. 23. 30bdal. Tescom Corp. Formerly Smith Welding Equipment Corp. 2633 4th St. SE., Minneapolis. Drilled unused artesian well in Jordan Sandstone of Late Cambrian age, diam 8 in, depth 445 ft, reported cased to 262. MP top of wood platform, 12.20 ft below lsd. Highest water level 77.9 below lsd, Apr. 21, Dec. 26, 1952; lowest 138.9 below lsd, Aug. 28, 1959. Records available: 1952-61. Water levels affected by regional pumping.												
Lowest water level for the day, from recorder graph, 1957												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	104.6	104.2	.....	108.2	.....	122.3	111.0	113.2	120.2	117.3	108.9	105.1
10	105.2	98.7	106.3	108.4	114.0	117.9	122.1	116.5	118.5	115.9	102.5	106.2
15	105.0	108.8	109.3	104.5	112.3	117.2	114.9	121.9	111.1	113.3	108.6	99.0
20	100.4	107.8	112.1	107.9	108.6	118.5	119.4	119.2	117.0	105.8	106.9	107.3
25	106.1	.....	106.9	115.2	116.5	114.1	120.3	116.6	115.3	112.1	104.2	93.7
Eom	106.5	.....	101.1	114.1	113.4	107.3	121.2	117.8	111.5	109.8	103.0	96.6
1958												
5	95.2	102.3	107.8	108.5	.....	118.2	103.4	.....	125.3	113.9	118.1	113.3
10	104.5	98.5	107.2	110.8	.....	114.9	108.8	122.6	122.3	120.9	113.3	113.1
15	103.5	99.5	106.9	.....	.....	104.1	116.3	131.3	122.2	123.7	114.8	110.1
20	99.4	104.2	108.9	.....	113.7	115.7	110.3	130.8	123.9	121.6	115.3	108.9
25	102.2	106.6	108.5	.....	108.9	110.4	.....	119.9	127.4	120.6	113.3	98.0
Eom	103.4	107.9	106.2	.....	108.2	112.2	.....	115.5	120.3	119.9	105.7	108.5
1959												
5	108.1	110.9	107.5	105.0	129.6	128.7	108.7	.....	126.5	118.7	.....	115.7
10	109.0	109.9	108.6	.....	114.6	130.7	124.0	.....	128.0	117.7	.....	114.7
15	111.2	106.7	.....	.....	120.7	125.4	128.8	130.8	125.4	.....	113.0	112.6
20	105.8	110.7	.....	.....	126.0	129.1	129.7	137.6	117.4	.....	116.6	105.5
25	105.1	106.6	.....	.....	119.8	131.7	133.5	136.2	128.2	.....	116.4	100.8
Eom	108.5	106.3	.....	.....	110.5	120.7	.....	130.3	121.8	.....	114.7	105.3
1960												
5	110.6	104.7	111.3	114.7	114.1	116.9	114.9	133.8	117.7	115.9	111.4	104.4
10	103.8	109.3	110.0	111.9	116.5	129.9	115.6	.....	125.3	114.2	110.3	105.4
15	114.7	107.6	107.8	120.6	119.5	131.6	125.0	124.1	122.0	117.4	106.8	107.0
20	113.8	110.3	104.4	113.1	130.7	122.7	.....	131.9	118.8	112.9	104.9	105.8
25	110.1	112.4	114.1	113.0	128.9	120.7	130.5	132.1	110.3	111.6	103.4	97.0
Eom	102.4	108.2	115.0	111.4	115.6	121.9	123.3	129.0	113.1	109.2	106.9	100.0
1961												
5	103.0	99.5	101.8	106.2	109.0	121.8	119.0	129.8	120.3	115.8	103.8	105.5
10	102.5	105.1	105.1	105.3	109.8	124.0	121.6	131.5	124.5	114.7	107.2	101.3
15	98.8	104.5	105.1	108.2	106.2	123.6	123.8	132.1	117.4	109.3	106.4	105.5
20	104.0	101.6	102.2	107.7	109.9	119.6	127.4	120.5	123.4	113.6	106.3	104.2
25	104.6	103.3	105.9	106.0	115.6	116.8	126.9	128.6	111.8	111.2	103.7	94.0
Eom	103.5	104.6	107.4	101.4	118.1	132.4	126.4	133.8	112.8	107.8	107.1	93.5

B29.24.27dba. City of Minneapolis. Auditorium. East Grant St. and 3d Ave. South. Drilled industrial artesian well in sandstones of Late Cambrian and Early Ordovician age, diam 20 in, depth 823 ft, reported cased to 275. MP top of breather pipe at pumpbase, 21.65 ft below lsd. Highest water level 59.0 below lsd, Jan. 11-12, Feb. 2, 1932; lowest 118.20 below lsd, Aug. 28, 1959. Records available: 1931-32, 1940-41, 1943-46, 1948-61. Water levels affected by regional pumping.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7, 1957	83.47	Apr. 11, 1958	85.41	July 3, 1959	102.87	Oct. 7, 1960	101.75
14	82.97	18	91.61	10	105.89	14	103.57
21	82.65	25	86.94	17	108.20	21	99.74
28	82.43	May 2	85.07	24	107.51	28	99.11
Feb. 4	82.62	9	88.25	31	115.28	Nov. 4	99.04
11	82.59	16	98.96	Aug. 7	111.20	11	97.30
18	82.56	23	92.49	21	116.57	18	96.85
25	81.78	28	92.62	28	118.20	25	95.53
Mar. 4	82.47	June 4	91.50	Sept. 4	109.60	Dec. 2	95.72
11	82.52	11	92.79	11	107.25	9	95.24
18	82.61	18	92.47	18	102.82	16	94.65
25	b85.20	25	92.98	25	106.14	23	93.53
Apr. 1	82.42	July 2	105.34	Oct. 2	100.94	30	92.42
8	82.52	9	98.31	9	99.95	Jan. 6, 1961	92.04
15	82.16	16	99.95	16	98.75	13	91.65
22	84.91	23	104.92	23	98.36	20	91.49
29	88.40	30	104.93	30	97.73	27	90.64
May 6	87.43	Aug. 13	110.48	Nov. 6	96.79	Feb. 3	90.24
13	88.96	20	109.85	13	95.89	10	90.15
20	87.27	27	102.91	20	95.08	17	89.90
27	91.47	Sept. 3	104.43	27	93.87	24	89.58
June 3	94.99	10	102.00	Dec. 4	94.06	Mar. 3	89.32
10	101.79	17	99.89	11	93.32	10	88.90
17	100.28	24	106.92	17	93.35	17	88.81
24	95.67	Oct. 1	98.16	23	92.54	24	88.63
July 1	97.50	8	100.22	30	91.94	31	88.20
3	106.99	13	97.53	Jan. 8, 1960	91.71	Apr. 7	88.37
8	99.02	17	99.10	15	91.65	14	88.17
15	102.44	24	100.38	22	91.40	21	88.04
22	104.70	31	96.08	29	90.73	28	88.04
29	109.65	Nov. 7	94.93	Feb. 5	89.75	May 5	88.45
Aug. 5	102.61	14	94.26	12	90.48	12	95.56
9	106.99	21	93.68	19	90.12	19	91.04
16	107.60	28	91.65	26	89.68	26	93.17
26	107.00	Dec. 5	91.90	Mar. 4	89.60	June 2	96.85
Sept. 2	99.22	12	91.06	11	89.15	9	101.61
9	103.74	19	90.40	18	88.80	16	102.15
16	98.45	24	89.92	25	88.99	23	102.66
23	95.48	31	88.85	Apr. 1	90.21	30	109.00
Oct. 30	95.34	Jan. 7, 1959	88.30	8	90.14	July 7	105.50
7	95.87	9	88.90	15	94.17	14	103.68
14	94.06	16	87.95	22	95.39	21	106.56
21	92.77	23	88.58	29	91.80	28	111.46
28	91.81	30	88.18	May 6	92.30	Aug. 4	a152.87
Nov. 4	91.42	Feb. 6	87.82	13	94.44	11	111.08
11	90.04	13	87.75	20	98.29	18	114.96
19	89.35	20	86.99	27	97.06	25	111.51
25	88.96	27	86.66	June 3	98.34	Sept. 1	114.78
Dec. 2	88.31	Mar. 6	86.55	10	98.92	8	109.57
9	87.49	13	86.62	17	97.75	15	103.90
20	87.54	20	87.10	24	98.81	21	107.98
27	85.15	27	87.59	July 1	101.08	30	101.36
Jan. 3, 1958	85.46	Apr. 3	87.35	8	101.88	Oct. 6	103.43
10	85.66	10	88.01	15	104.56	13	103.56
17	85.36	17	90.59	22	110.74	20	101.59
24	84.37	24	89.94	29	111.74	27	100.31
31	84.33	May 1	94.81	Aug. 5	117.44	Nov. 3	99.85
Feb. 7	84.03	8	94.43	12	110.09	10	98.72
14	83.66	15	91.59	19	110.40	17	98.47
21	83.90	22	95.16	26	110.68	24	96.85
28	83.62	29	98.69	31	111.61	Dec. 1	97.43
Mar. 7	84.07	June 5	104.12	Sept. 9	108.86	8	96.45
14	83.59	12	105.75	16	105.51	15	95.99
21	83.68	19	103.77	23	103.23	22	94.97
28	83.47	26	107.26	30	101.38	28	94.00
Apr. 4	85.40						

a Well being pumped.

b Well pumped recently.

117.21.16cca. City of St. Louis Park. Drilled unused artesian well in Jordan Sandstone of Late Cambrian age, diam 16 in, depth 421 ft, reported cased to 280. Lsd 916.82 ft above msl. MP floor of wellhouse, 0.70 ft above lsd. Highest water level 66.0 below lsd, Mar. 23, 1953; lowest 110.5 below lsd, July 31, 1959. Records available: 1953-61. Water levels affected by regional pumping.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	73.9	74.3	75.0	76.2	87.5	93.4	80.1	83.9	80.5	84.7	76.4	74.0
10	74.9	74.3	74.4	75.8	95.3	88.6	91.6	82.9	79.8	81.1	74.7	75.0
15	73.2	75.9	75.4	74.4	81.1	81.3	88.6	....	77.7	78.4	77.8	72.7
20	71.5	75.9	76.1	75.8	77.1	83.8	87.1	....	81.3	75.7	74.4	74.5
25	75.1	75.6	75.5	81.1	76.3	79.5	86.1	....	79.2	76.4	74.2	72.0
Eom	74.4	75.8	74.4	87.7	79.4	78.5	88.2	80.2	86.1	75.9	72.6	72.6

1958

5	72.7	72.9	73.0	72.9	78.3	82.1	89.6	89.3	84.6	86.6	79.7	77.1
10	74.0	72.5	72.0	76.6	89.8	80.8	82.9	90.6	83.3	82.7	78.0	76.5
15	74.4	73.2	72.0	79.8	93.0	79.5	....	92.8	84.4	82.9	78.2	75.6
20	74.8	72.2	74.0	84.5	83.4	94.5	86.9	100.5	84.2	82.9	78.3	76.3
25	73.5	72.2	73.6	78.9	88.6	83.0	91.7	82.6	86.0	80.8	77.2	74.5
Eom	73.4	72.8	74.0	79.0	88.0	101.7	91.6	80.6	85.9	81.0	75.2	75.5

1959

5	75.3	75.5	75.4	80.0	93.5	97.1	88.0	98.9	89.0	81.7	78.5	77.1
10	75.0	75.3	....	86.2	80.6	107.4	90.2	90.5	91.4	81.0	79.4	77.0
15	75.7	75.2	....	94.8	83.8	92.4	98.5	87.3	97.2	79.5	77.1	76.6
20	75.1	75.9	....	86.5	92.9	94.4	103.7	94.2	86.8	80.0	77.1	75.6
25	74.9	74.9	....	93.2	87.7	101.9	107.8	89.4	86.9	79.1	77.3	75.3
Eom	76.1	75.0	....	96.8	81.6	86.4	110.5	87.7	85.3	79.6	76.3	76.4

1960

5	76.1	76.1	75.3	78.9	81.2	86.7	86.1	106.7	93.3	83.8	79.6	77.0
10	75.3	76.1	76.6	77.2	82.0	98.5	90.2	90.1	87.7	85.1	78.1	77.1
15	76.5	75.6	75.7	81.9	92.8	102.0	90.3	92.7	87.2	83.1	78.4	78.2
20	76.2	76.8	76.7	80.6	85.6	88.2	102.3	89.9	82.9	81.0	77.7	77.1
25	75.8	76.4	79.0	81.8	85.0	84.0	107.5	98.3	78.7	82.1	77.7	75.8
Eom	75.3	76.5	79.1	80.2	82.5	....	99.1	88.9	80.9	79.4	78.1	76.9

1961

5	76.6	76.2	74.7	75.7	82.6	95.1	85.5	90.3	88.4	83.7	76.7	76.9
10	76.3	76.6	75.6	76.5	80.4	88.7	98.3	96.5	87.4	82.3	78.3	75.9
15	76.0	76.0	76.1	77.1	78.7	92.3	93.3	105.2	82.0	77.9	77.4	78.3
20	77.7	75.4	76.7	79.6	76.7	92.0	91.3	89.6	87.3	....	77.7	78.0
25	76.5	75.9	75.5	76.1	82.8	89.1	90.1	95.1	81.3	80.8	77.5	74.0
Eom	76.5	75.7	76.3	76.2	90.4	106.5	92.1	105.8	79.3	79.3	77.6	74.6

117.22.5abd2. Hennepin County Highway Dept. Drilled observation artesian well in sandstones of Late Cambrian and Early Ordovician age, diam 6 in, depth 483 ft, cased to 201. Lsd 942.79 ft above msl. MP wood floor of instrument shelter, 3.00 ft above lsd. Highest water level 38.51 below lsd, Nov. 23, 1954; lowest 78.48 below lsd, Sept. 23, 1960. Records available: 1953-61. Water levels affected by regional pumping.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	41.18	41.01	40.97	40.88	43.80	45.11	43.21	45.23	43.07	44.31	41.93	40.80
10	41.29	40.79	40.62	41.15	46.48	45.28	45.20	44.89	42.93	43.93	41.94	41.32
15	41.06	40.83	41.58	41.24	45.76	44.46	45.61	44.30	42.93	42.55	41.64	40.89
20	40.54	41.15	41.30	41.04	43.51	43.67	45.26	44.51	42.88	43.01	41.66	40.67
25	41.11	40.77	41.24	41.16	42.84	42.61	44.55	44.45	42.85	42.03	41.36	40.49
Eom	40.84	40.73	41.21	42.20	44.12	42.77	45.33	43.56	43.81	41.73	41.07	40.92

1958

5	40.75	40.94	41.16	40.33	42.92	45.17	50.91	48.42	45.30	46.32	43.77	42.06
10	40.71	41.07	41.25	40.91	43.85	44.90	48.28	47.20	44.90	45.45	43.60	42.22
15	40.91	40.83	40.97	41.10	46.34	44.37	....	47.80	45.58	44.68	43.80	42.17
20	41.09	40.67	41.06	42.62	46.51	46.20	....	49.6	45.58	44.1	43.27	42.24
25	40.89	40.38	41.05	43.37	46.80	45.90	47.33	48.03	45.39	45.12	42.66	42.02
Eom	41.3	41.18	40.81	43.70	46.65	46.98	47.82	45.58	46.01	44.23	42.42	42.09

1959

5	42.23	42.07	42.43	....	....	h74.38	....	52.53	46.88	45.98	44.93	44.36
10	41.87	42.12	42.21	h73.33	....	....	h46.33	49.81	47.84	45.79	44.42	44.23
15	42.15	42.06	42.42	....	h73.90	....	....	47.02	48.41	48.48	45.40	44.41
20	42.17	42.25	42.90	....	....	....	....	48.38	48.55	48.04	45.50	44.35
25	42.05	42.43	42.96	....	....	....	....	47.97	47.15	45.17	44.48	44.01
Eom	42.47	42.49	....	....	....	....	h54.06	47.60	46.66	45.14	44.04	43.97

c Nearby well being pumped.

h Tape measurement.

## 117. 22. 5abd2-- Continued.

1960

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	44.18	43.90	44.19	44.4	45.58	47.40	48.48	.....	51.18	.....	.....	43.89
10	43.83	43.58	44.05	44.59	45.92	48.68	49.34	52.18	52.49	46.50	44.62	42.72
15	44.56	43.66	43.95	44.64	47.23	50.28	49.28	52.14	51.52	46.81	43.31	42.74
20	44.09	43.79	44.20	44.94	47.04	49.13	50.27	51.94	.....	46.09	43.38	42.92
25	43.82	43.75	44.49	45.9	46.69	47.94	54.04	.....	.....	45.44	43.09	42.19
Eom	43.62	44.07	44.30	45.61	47.27	48.39	.....	50.36	h75.10	45.50	44.01	42.11

1961

5	42.10	42.68	42.45	42.72	43.73	46.13	49.44	48.88	51.78	.....	44.00	43.43
10	42.25	42.51	42.30	42.69	43.63	47.83	50.00	49.65	48.91	45.25	43.26	43.27
15	42.50	42.78	42.78	42.70	44.20	47.72	50.26	51.84	.....	44.87	43.23	43.38
20	43.05	42.55	42.97	42.78	44.08	49.17	50.27	51.84	.....	45.36	43.34	43.26
25	43.26	42.27	42.60	43.06	44.40	47.63	48.62	50.77	.....	44.57	42.99	42.98
Eom	42.66	42.62	42.78	43.04	46.12	52.28	50.11	52.33	.....	43.84	42.86	43.41

h Tape measurement.

117. 22. 8dbd2. Formerly 117. 22. 8dbb2. Hennepin County Highway Dept. Drilled observation artesian well in Jordan Sandstone of Late Cambrian age, diam 6 in, depth 503 ft, cased to 228. Lsd 931.62 ft above msl. MP wood floor of instrument shelter, 4.30 ft above lsd. Highest water level 19.35 below lsd, Apr. 6, 1958; lowest 32.93 below lsd, May 3, 1959. Records available: 1953-61. Water levels affected by regional pumping.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	21.52	21.49	21.26	21.32	23.60	25.10	22.76	23.94	22.05	23.06	21.07	20.05
10	21.64	21.44	21.04	21.43	25.78	24.98	24.10	23.67	21.87	22.69	21.00	20.31
15	21.49	21.46	23.21	21.48	24.9	24.28	24.34	23.39	21.88	21.62	20.78	20.09
20	21.24	21.53	21.73	21.25	23.36	23.55	24.12	23.22	21.85	22.56	20.56	19.93
25	21.45	21.28	21.58	21.28	25.48	22.62	23.55	23.16	21.86	21.17	20.32	19.79
Eom	21.37	21.14	21.58	23.48	24.46	22.32	23.92	22.33	23.65	21.61	20.19	19.88

1958

5	19.77	19.70	20.14	19.56	21.29	23.83	28.73	26.83	24.75	26.20	23.28	21.92
10	19.85	.....	20.16	19.70	22.37	24.48	27.07	26.22	24.75	24.83	23.02	21.87
15	19.90	19.94	20.22	19.92	24.57	23.01	25.09	27.45	26.1	24.03	24.12	21.75
20	19.90	19.84	20.12	21.38	24.52	25.47	25.77	28.09	27.51	23.98	22.67	21.87
25	19.83	19.74	20.09	21.65	25.71	24.27	26.38	26.75	25.12	24.48	22.19	21.65
Eom	19.77	21.20	.....	22.53	24.56	26.53	26.67	25.68	26.01	23.52	22.17	21.50

1959

5	21.54	21.74	21.96	26.58	31.57	29.91	25.99	30.74	25.82	24.77	23.60	23.17
10	21.59	21.78	21.67	27.85	29.53	30.02	26.49	28.45	26.7	24.53	23.20	22.98
15	21.60	22.43	21.91	29.18	29.96	29.19	26.89	27.37	.....	23.92	23.24	22.85
20	21.62	21.80	22.33	30.17	30.05	29.59	28.22	27.6	26.39	23.99	23.09	22.89
25	21.62	21.86	22.55	30.75	30.44	30.05	32.12	27.10	25.8	23.94	23.12	22.79
Eom	21.79	22.54	24.43	31.90	30.20	26.83	32.32	26.62	25.22	23.75	23.02	22.66

1960

5	22.70	22.33	22.68	22.82	23.26	24.37	25.41	30.23	.....	25.25	24.09	23.23
10	22.69	22.40	22.64	22.94	23.30	25.79	26.94	28.04	27.68	25.12	23.44	22.07
15	22.70	22.32	22.63	23.14	24.94	26.69	25.87	.....	27.03	25.24	22.78	21.92
20	22.56	22.66	23.70	23.04	24.72	26.03	27.40	27.72	27.84	24.82	23.88	22.01
25	22.44	22.49	23.43	23.73	24.22	24.96	29.75	.....	27.34	24.32	22.4	21.68
Eom	22.40	22.73	22.90	23.38	26.08	25.51	29.45	26.84	28.90	24.10	22.54	21.56

1961

5	21.42	21.72	21.24	21.06	21.51	24.40	25.78	25.47	27.55	24.96	22.7	21.86
10	21.47	21.37	21.15	21.15	21.40	24.79	26.36	26.11	25.78	24.37	22.2	21.86
15	22.40	21.44	21.94	21.00	21.88	24.66	26.20	27.24	28.05	23.70	22.1	21.80
20	22.73	21.36	21.46	.....	21.63	25.33	26.46	27.81	28.66	23.68	21.93	21.60
25	22.76	21.20	21.21	20.98	22.07	24.47	25.47	26.91	28.07	23.41	21.75	22.19
Eom	21.67	21.26	21.01	21.13	23.68	27.81	26.33	28.44	27.72	22.95	21.60	21.80

117. 23. 11bbd1. Minnetonka Boat Works, Inc. Orono. Drilled observation artesian well in Jordan Sandstone of Late Cambrian age, diam 6 in, depth 437 ft, cased to 270. Lsd 930.81 ft above msl. MP wood floor of instrument shelter, 3.30 ft above lsd. Highest water level 14.05 below lsd, Apr. 30, 1954; lowest 28.56 below lsd, June 11, 1959. Records available: 1942-46, 1948-61. Water levels affected by regional pumping.

117. 23. 11bbd1--Continued.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	15.99	15.94	15.90	15.65	17.15	17.44	16.08	16.87	15.61	17.35	15.34	14.96
10	16.05	.....	15.80	15.78	18.66	17.64	19.22	16.83	15.66	16.20	15.27	15.12
15	16.06	15.89	15.88	h15.76	17.34	16.54	17.44	16.35	15.39	15.63	15.0	15.01
20	15.85	16.03	15.93	15.71	16.47	16.20	17.44	17.29	15.62	15.61	14.97	14.81
25	16.05	15.90	15.91	15.89	16.36	15.84	16.67	16.33	15.53	15.42	15.02	14.99
Eom	.....	15.86	16.04	16.51	16.55	15.71	17.73	15.86	16.60	15.83	15.01	15.03

1958

5	15.10	14.88	15.01	14.69	15.50	16.33	19.18	19.39	18.94	18.74	17.06	h16.39
10	14.92	15.03	15.05	14.88	.....	16.06	17.58	19.59	17.79	17.69	16.73	.....
15	14.96	15.04	14.95	15.10	17.93	16.05	17.06	19.95	18.06	18.22	16.80	.....
20	14.97	.....	15.00	15.44	16.81	17.31	20.22	20.81	18.07	17.96	16.71	.....
25	14.74	14.83	15.02	15.52	17.06	16.41	19.86	18.81	17.63	17.67	16.55	.....
Eom	14.89	14.83	14.92	15.64	17.86	18.65	19.41	18.04	18.06	17.23	.....	h16.53

1959

5	16.64	16.6	16.75	23.07	27.23	26.90	22.25	23.76	19.83	18.81	18.34	18.16
10	.....	16.67	16.61	24.47	25.57	28.43	21.01	22.27	20.17	18.62	18.20	18.16
15	16.5	16.75	16.62	25.78	25.84	26.82	22.17	20.55	20.57	18.65	18.34	18.09
20	16.5	16.75	17.00	25.56	27.38	26.80	22.69	21.81	20.08	18.69	18.23	18.23
25	16.6	16.71	16.84	26.45	26.22	27.37	23.50	20.14	19.46	18.32	18.11	18.11
Eom	16.9	16.75	18.96	27.60	26.14	22.30	25.47	19.77	19.10	18.45	18.15	18.03

1960

5	18.00	17.84	18.04	17.88	18.01	18.41	18.84	23.43	22.03	20.57	19.13	18.26
10	18.00	17.75	17.94	18.05	18.65	19.86	20.29	21.39	23.60	20.04	18.94	18.25
15	17.96	18.42	17.98	17.97	19.25	20.46	19.06	21.61	23.78	19.92	20.28	18.08
20	18.03	18.05	17.98	18.21	18.48	19.05	21.03	21.67	22.67	19.80	18.67	18.26
25	17.98	17.96	18.06	18.43	18.21	18.34	23.24	22.47	23.22	19.94	18.36	18.00
Eom	17.96	18.02	17.81	18.14	17.95	18.71	22.93	21.80	22.50	19.16	18.53	17.95

1961

5	17.87	18.08	17.67	17.50	17.99	19.39	20.00	20.04	21.26	21.54	18.88	18.21
10	17.94	17.82	17.68	17.56	17.59	19.33	21.64	21.11	19.70	20.36	18.58	18.40
15	17.91	17.89	17.72	17.30	17.70	19.60	21.09	22.36	21.27	19.76	18.46	18.42
20	18.04	17.86	17.84	17.36	17.57	19.73	21.41	21.40	23.32	19.66	18.46	18.20
25	18.27	17.70	17.62	17.36	17.74	19.35	19.92	21.96	23.01	19.60	18.26	18.17
Eom	18.00	17.78	17.52	17.57	19.20	23.18	21.38	23.16	22.95	19.00	18.31	18.26

h Tape measurement.

117. 23. 34daa2. Hennepin County Highway Dept. Drilled observation artesian well in sandstones of Late Cambrian and Early Ordovician age, diam 6 in, depth 468 ft, cased to 199. Lsd 946.84 ft above msl. MP wood floor of instrument shelter, 4.20 ft above lsd. Highest water level 51.55 below lsd, Nov. 27, 1954; lowest 102.49 below lsd, Sept. 21, 1961. Records available: 1953-61. Water levels affected by regional pumping.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	54.42	54.38	54.36	53.96	54.94	54.94	54.64	55.19	54.52	54.77	54.70	53.61
10	54.55	54.36	54.18	54.34	55.34	55.23	54.93	55.00	54.35	54.79	54.12	53.89
15	54.51	54.32	54.30	54.41	55.51	55.16	55.22	54.90	54.22	54.28	53.60	53.72
20	54.19	54.55	54.35	54.30	54.99	54.92	55.13	54.87	54.30	54.45	53.69	53.37
25	54.5	54.32	54.42	54.18	54.84	54.81	55.13	54.75	54.48	55.32	53.71	53.67
Eom	54.25	54.28	54.44	54.57	54.97	54.68	55.67	54.64	54.46	54.87	.....	53.73

1958

5	53.79	53.42	53.54	53.16	54.01	54.92	56.08	55.25	c60.01	55.85	54.91	.....
10	53.50	53.63	53.61	53.50	54.04	54.47	55.85	55.21	c61.19	55.75	.....	55.71
15	53.60	53.64	53.45	53.51	54.81	54.57	h55.55	55.33	c61.62	55.53	55.03	55.69
20	53.58	53.64	53.55	53.66	54.96	54.75	.....	55.57	d57.54	55.07	56.57	55.94
25	53.25	53.29	53.60	54.13	54.93	54.78	55.27	55.50	55.98	55.39	54.85	55.62
Eom	53.43	53.31	53.40	53.78	54.89	55.03	55.11	54.94	55.82	55.24	.....	55.74

1959

5	55.76	55.67	55.75	.....	.....	h61.08	.....	61.63	59.16	58.67	57.96	57.82
10	55.83	55.73	55.82	h58.23	.....	.....	h59.24	60.67	59.63	58.51	57.73	57.88
15	55.55	55.80	56.35	.....	ch96.73	.....	59.60	60.07	59.59	58.15	57.88	57.66
20	55.62	55.71	56.21	.....	.....	.....	59.94	59.87	59.35	58.36	57.80	57.95
25	55.73	55.71	56.17	.....	.....	.....	61.20	59.69	59.36	57.84	57.89	57.48
Eom	56.20	55.73	.....	.....	.....	.....	62.50	59.42	58.99	58.07	58.17	57.60

c Nearby well being pumped.

d Nearby well pumped recently.

h Tape measurement.

117. 23. 34daa2--Continued.

1960

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	57.61	57.54	58.04	57.78	58.27	58.84	59.04	61.08	60.76	60.03	58.95	58.07
10	57.54	57.35	57.70	58.02	58.29	59.27	59.20	60.44	.....	59.62	58.76	58.46
15	57.58	57.52	57.68	60.90	58.81	59.53	59.22	60.63	.....	59.74	58.19	57.86
20	57.85	57.94	57.85	60.84	58.60	59.46	59.62	60.57	.....	59.20	58.43	58.23
25	57.59	57.54	57.72	58.94	58.52	59.17	60.95	60.76	.....	58.81	58.09	57.74
Eom	57.53	57.80	57.74	58.69	58.44	58.96	61.33	63.40	66.47	58.47	58.46	58.02

1961

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	57.56	58.21	57.50	57.66	57.90	59.43	60.28	60.32	60.78	.....	58.54	57.84
10	57.80	57.62	57.50	57.59	57.94	59.29	60.66	60.02	59.99	59.20	58.27	57.94
15	57.74	57.74	57.78	57.40	57.94	59.57	60.37	60.92	.....	59.02	58.14	58.00
20	57.94	57.68	57.75	57.48	58.36	60.23	60.10	60.83	.....	58.88	58.10	57.86
25	58.08	57.50	57.46	57.48	58.14	59.70	59.86	60.54	.....	58.92	58.02	57.50
Eom	57.76	57.68	57.38	57.86	58.84	61.18	59.65	61.36	.....	58.57	57.91	57.82

h Tape measurement.

118. 23. 35aaa2. Hennepin County Highway Dept. Drilled observation water-table well in glacial drift, diam 2 in, depth 151 ft. MP top of casing, 3.40 ft above lsd. Highest water level 19.08 below lsd, Mar. 13, 1954; lowest 37.4 below lsd, June 9, 1942. Records available: 1942, 1944-46, 1948-61. Water levels affected by pumping.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7, 1957	21.95	Dec. 9, 1957	20.89	Nov. 7, 1958	22.40	Oct. 2, 1959	26.81
14	21.83	20	20.70	14	22.57	9	26.89
21	21.65	27	20.73	21	22.48	16	26.80
28	21.67	Jan. 3, 1958	20.46	28	22.43	23	26.26
Feb. 4	21.90	10	21.02	Dec. 5	22.53	30	26.55
11	21.61	17	20.93	12	22.48	Nov. 6	26.52
18	21.79	24	20.67	19	22.55	13	26.31
25	21.58	31	20.78	24	22.21	20	25.93
Mar. 4	21.61	Feb. 7	20.88	31	22.35	27	26.12
11	21.43	14	20.85	Jan. 7, 1959	22.42	Dec. 4	25.91
18	21.60	21	20.83	9	22.47	11	25.65
25	21.61	28	20.78	16	22.25	17	25.83
Apr. 1	21.46	Mar. 7	20.90	23	22.32	23	25.60
8	21.59	14	20.77	30	22.41	30	25.60
15	21.45	21	20.76	Feb. 6	22.32	Jan. 8, 1960	25.70
22	21.43	28	20.71	13	22.21	15	25.44
29	21.53	Apr. 4	20.58	20	22.15	22	25.47
May 6	21.56	11	20.72	27	22.21	29	25.38
13	21.68	18	20.62	Mar. 6	22.07	Feb. 5	25.04
20	21.44	25	20.99	13	21.97	12	25.37
27	21.79	May 2	20.65	20	22.28	19	25.24
June 3	21.69	9	20.75	27	22.30	26	24.96
10	21.59	16	20.92	Apr. 3	c22.64	Mar. 4	25.07
17	21.67	23	21.13	10	c23.39	11	24.89
24	21.61	28	21.20	17	c24.03	18	24.66
July 1	21.55	June 4	21.09	24	c24.70	25	24.68
8	21.49	11	21.28	May 1	c25.35	Apr. 1	24.60
15	21.48	18	21.19	8	c26.13	8	24.80
22	21.49	25	21.26	15	c26.64	15	24.55
29	21.42	July 2	21.43	22	c27.21	22	24.52
Aug. 5	21.61	9	21.48	29	c27.59	29	24.55
9	21.45	16	21.79	June 5	c27.88	May 6	24.60
16	21.55	23	21.90	12	c28.38	13	24.43
26	21.53	30	22.03	19	c28.71	20	24.53
Sept. 2	21.35	Aug. 6	22.24	26	28.70	27	24.55
9	21.24	13	22.40	July 3	28.40	June 3	24.48
16	21.27	20	22.56	10	28.24	10	24.46
23	21.23	27	22.50	17	28.03	17	24.65
30	21.28	Sept. 3	22.67	24	28.15	24	24.69
Oct. 7	21.29	10	22.78	31	28.08	July 1	24.58
14	21.23	17	22.68	Aug. 7	28.10	8	24.63
21	21.14	24	22.40	14	27.94	15	24.68
28	21.03	Oct. 1	22.74	21	27.76	22	24.76
Nov. 4	21.04	8	22.59	28	26.67	29	24.86
11	21.13	13	22.64	Sept. 4	27.46	Aug. 5	25.19
20	21.01	17	22.67	11	27.44	12	25.20
25	20.93	24	22.81	18	27.27	19	25.36
Dec. 2	20.82	31	22.63	25	26.79	26	25.59

## 118. 23. 35aaa2--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 31, 1960	25.57	Jan. 6, 1961	25.34	May 5, 1961	24.39	Sept. 7, 1961	25.65
Sept. 9	26.20	13	25.01	12	24.30	14	25.75
16	26.44	20	25.29	19	24.57	21	25.71
23	26.20	27	25.11	26	24.57	30	25.87
30	26.70	Feb. 3	25.16	June 2	24.37	Oct. 6	25.92
Oct. 7	26.55	10	25.01	9	24.30	13	26.20
14	26.44	17	25.05	16	24.55	20	26.03
21	26.26	24	24.99	23	24.65	27	25.73
28	26.07	Mar. 3	24.98	30	24.75	Nov. 3	25.92
Nov. 4	26.35	10	24.62	July 7	24.91	10	25.67
11	26.02	17	24.84	21	25.03	17	25.80
18	26.09	24	24.62	28	25.08	24	25.78
25	25.73	31	24.62	Aug. 4	25.21	Dec. 1	25.57
Dec. 2	25.70	Apr. 7	24.62	11	25.36	8	25.62
9	25.51	14	24.40	18	25.45	15	25.59
16	25.52	21	24.48	25	25.36	22	25.33
23	25.45	28	24.67	Sept. 1	25.40	29	25.23
30	25.24						

c Nearby well being pumped.

Kittson County

160. 46. 5dccc1. Dale R. Bronson. Dug domestic water-table well in glacial outwash, diam 36 in, depth 8 ft, lined with concrete. MP top of wood cover, 1.90 ft above lsd. Highest water level 0.64 below lsd, Sept. 4, 1957; lowest 6.35 below lsd, Sept. 5, 1961. Records available: 1956-61.

Jan. 3, 1957	3.58	Oct. 22, 1957	1.17	Sept. 3, 1958	4.60	July 16, 1959	4.02
9	3.69	30	1.45	12	4.69	22	3.43
16	3.69	Nov. 5	1.41	18	4.80	29	3.84
23	3.32	12	1.45	25	4.94	Aug. 5	3.99
30	3.35	20	1.56	Oct. 1	4.95	12	4.18
Feb. 6	3.51	27	1.67	7	4.97	20	4.31
12	3.64	Dec. 3	1.96	16	4.90	27	4.35
19	3.68	10	2.28	22	4.92	Sept. 2	4.39
28	3.80	17	2.31	28	4.95	10	4.48
Mar. 7	3.87	Jan. 1, 1958	2.68	Nov. 4	4.98	18	4.63
12	3.36	8	3.69	14	4.99	24	4.71
20	3.34	29	3.60	21	4.99	29	4.72
27	3.68	Feb. 4	3.75	29	5.00	Oct. 7	4.73
Apr. 8	2.88	11	3.04	Dec. 24	5.25	13	4.31
11	3.45	18	4.10	30	5.27	20	4.16
16	2.46	25	4.18	Jan. 7, 1959	5.31	27	3.95
23	2.38	Mar. 5	4.43	13	5.32	Nov. 3	3.79
May 1	1.91	11	4.50	22	5.33	11	3.76
8	1.86	18	4.40	28	5.45	18	4.17
15	2.77	26	5.03	Feb. 5	5.46	25	4.12
22	1.83	Apr. 3	4.29	11	5.49	Dec. 1	4.23
29	1.93	9	4.21	18	5.52	8	4.28
June 5	1.95	16	4.05	26	5.60	15	4.39
12	2.28	24	3.70	Mar. 5	5.80	22	4.51
19	1.42	30	3.24	11	5.80	29	4.69
26	.72	May 6	3.65	19	5.77	Jan. 5, 1960	4.70
July 3	1.26	14	2.60	25	5.77	12	4.68
10	.84	21	2.85	31	4.70	19	4.69
17	.75	28	2.88	Apr. 8	4.19	26	4.68
24	1.35	June 5	2.89	15	3.95	Feb. 2	4.52
31	1.88	11	3.10	21	3.78	9	4.53
Aug. 7	1.48	17	3.21	28	3.65	16	4.68
14	1.54	26	3.49	May 5	3.35	23	4.70
21	1.95	July 3	3.60	14	3.24	Mar. 1	4.69
28	1.62	8	3.06	21	3.26	8	4.68
Sept. 4	.64	15	3.00	28	2.94	15	4.73
10	1.12	23	3.40	June 3	2.91	22	5.99
18	1.11	31	3.64	10	2.93	29	5.65
25	1.21	Aug. 5	3.89	18	2.96	Apr. 5	5.48
Oct. 2	1.24	13	4.08	25	3.05	12	5.89
9	1.31	20	4.32	July 1	4.03	19	4.49
15	1.26	28	4.46	8	4.01	26	4.12



160. 46. 5dccc1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 3, 1960	4.32	Sept. 28, 1960	5.04	Feb. 9, 1961	5.37	June 27, 1961	4.96
10	4.24	Oct. 6	5.14	15	5.36	July 4	5.16
17	4.19	12	5.17	23	5.91	11	5.24
24	4.13	20	5.21	28	5.19	18	5.43
June 7	2.60	25	5.25	Mar. 8	5.91	25	5.62
14	2.73	Nov. 1	5.15	14	5.98	Aug. 1	5.64
21	2.69	7	5.12	21	5.62	9	5.81
27	2.74	15	5.10	30	4.91	16	5.89
July 7	3.30	23	5.09	Apr. 4	4.92	23	5.96
12	3.25	29	5.10	18	4.80	29	6.21
20	3.23	Dec. 7	5.11	25	4.77	Sept. 5	6.35
28	3.79	16	5.30	May 2	4.76	12	6.31
Aug. 4	3.84	23	5.40	9	4.35	Oct. 3	6.16
10	4.00	29	5.47	16	4.86	10	6.16
18	4.17	Jan. 6, 1961	5.46	23	4.89	17	6.17
24	4.54	11	5.40	30	4.51	24	6.19
31	4.69	18	5.42	June 6	4.46	31	6.18
Sept. 7	4.76	24	5.38	14	4.76	Nov. 14	6.13
15	4.83	31	5.40	20	4.76	21	6.12
22	4.85						

Marshall County

155. 47. 11aaa3. U. S. Geol. Survey. Drilled observation artesian well in glacial sand and gravel, diam 6 to 4 in, depth 86 ft, cased, 6-in 0-41, 4-in 41-83, screened 83-86. MP wood floor of instrument shelter, 3.15 ft above lsd. Highest water level 5.83 below lsd, Feb. 26, 1958; lowest 28.89 below lsd, Oct. 4, 1956. Records available: 1956-61. Water levels affected by pumping. Recording gage installed Nov. 7, 1957; recording gage removed July 28, 1959.

Oct. 2, 1956	7.51	Feb. 1, 1957	6.26	May 10, 1957	6.45	Aug. 10, 1957	6.64
4	28.89	8	6.14	17	6.51	16	6.70
6	29.80	15	6.13	24	6.35	23	6.73
Nov. 16	6.58	22	6.14	June 1	6.53	30	6.72
23	6.45	Mar. 2	6.16	7	6.47	Sept. 6	6.51
30	6.40	8	6.17	14	6.31	13	6.40
Dec. 7	6.46	15	6.21	20	6.34	20	6.36
14	6.35	22	6.18	28	6.23	27	6.40
21	6.27	29	6.33	July 5	6.37	Oct. 4	6.39
28	6.25	Apr. 6	6.24	12	6.45	11	6.37
Jan. 4, 1957	6.28	12	6.40	19	6.55	18	6.39
11	6.30	20	6.38	26	6.62	25	6.31
18	6.21	26	6.33	Aug. 3	6.71	Nov. 1	6.30
26	6.27	May 4	6.55				

d Nearby well pumped recently.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	....	....	....	....	....	....	....	....	....	....	....	6.03
10	....	....	....	....	....	....	....	....	....	....	6.20	6.14
15	....	....	....	....	....	....	....	....	....	....	6.1	6.02
20	....	....	....	....	....	....	....	....	....	....	6.04	5.89
25	....	....	....	....	....	....	....	....	....	....	6.06	6.00
Eom	....	....	....	....	....	....	....	....	....	....	6.05	6.08

1958

5	6.13	6.02	6.05	6.12	6.45	....	8.4	8.9	....	8.0	7.5	....
10	5.96	6.15	6.2	6.23	6.38	....	9.1	9.7	10.0	7.7	7.4	....
15	6.05	....	6.17	6.18	6.54	....	9.3	16.6	8.7	7.7	7.3	....
20	6.06	....	6.18	6.18	....	7.3	7.4	17.6	8.3	7.5	7.1	....
25	5.90	....	6.22	6.38	....	7.2	13.6	8.9	14.4	7.5	7.1	....
Eom	5.98	6.00	6.19	6.28	....	7.2	13.6	15.2	8.1	7.5	7.1	....

1959

5	....	20.6	16.0	19.2	11.2	21.0	9.8	....	....	....	....	....
10	....	20.2	hi 2.91	11.2	12.4	20.4	10.8	....	....	....	....	....
15	21.2	22.8	....	11.4	15.8	17.0	21.0	....	....	....	....	....
20	22.4	22.8	....	11.6	19.4	11.0	....	....	....	....	....	....
25	24.4	24.2	....	16.4	10.8	23.6	....	....	....	....	....	....
Eom	....	25.0	....	20.2	12.2	11.0	....	....	....	....	....	....

h Tape measurement.

155. 47. 11aaa3--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 28, 1959	22.57	Apr. 1, 1960	19.78	Dec. 2, 1960	15.96	June 30, 1961	28.05
Aug. 31	17.90	May 1	17.61	31	15.71	July 31	24.47
Oct. 1	18.07	31	16.53	Feb. 1, 1961	24.99	Aug. 31	23.63
Nov. 2	14.48	June 30	16.45	28	17.25	Sept. 30	23.34
30	15.25	Aug. 3	25.75	Apr. 2	17.51	Nov. 1	15.92
Dec. 31	16.61	Sept. 2	14.64	30	16.21	30	20.05
Feb. 1, 1960	15.03	Oct. 2	19.10	June 2	26.21	Dec. 31	20.55
29	16.32	31	16.29				

## Morrison County

130. 29. 8dcc. U. S. Geol. Survey. Drilled observation water-table well in glacial gravel, diam 2 in, depth 59 ft, screened 56-59. MP top of casing, 2.10 ft above lsd. Highest water level 8.93 below lsd, Aug. 14, 1953; lowest 19.75 below lsd, Aug. 4, 1961. Records available: 1949-61.

Jan. 4, 1957	13.90	Feb. 6, 1958	12.83	Feb. 13, 1959	15.28	Feb. 19, 1960	14.51
11	14.00	14	12.79	20	15.40	26	14.56
18	13.96	21	12.72	27	15.47	5	14.61
28	14.11	28	12.64	Mar. 6	15.54	11	14.81
Feb. 1	14.21	Mar. 7	12.53	13	15.58	18	14.87
8	14.25	14	12.61	20	15.58	25	14.90
15	14.26	21	12.56	27	15.60	Apr. 1	14.68
22	14.38	28	12.54	Apr. 3	15.64	8	14.60
Mar. 1	14.45	Apr. 4	12.43	10	15.72	15	14.82
8	14.51	11	12.27	17	15.90	22	14.73
15	14.56	18	12.18	24	16.00	29	14.85
29	14.58	25	12.15	May 1	16.10	May 6	14.86
Apr. 5	14.54	May 2	11.92	8	16.01	13	14.83
12	14.44	9	13.62	15	15.80	20	14.85
19	14.36	16	13.85	22	15.85	27	14.67
26	13.98	23	13.87	29	15.48	June 3	14.60
May 3	13.87	30	14.10	June 8	15.00	10	14.82
10	13.83	June 6	13.91	12	15.87	17	14.86
17	13.64	13	14.01	19	16.17	24	16.82
24	13.51	20	14.82	26	16.90	July 1	15.83
31	13.65	27	15.15	July 3	15.20	8	15.53
June 7	13.54	July 5	14.67	10	15.00	15	15.81
14	14.19	11	15.06	17	16.06	22	16.43
21	14.82	18	16.02	24	16.28	29	16.90
28	14.35	25	16.17	31	16.70	Aug. 5	16.82
July 5	13.57	Aug. 1	16.85	Aug. 7	16.70	12	16.83
12	13.01	8	16.76	14	16.74	19	17.46
19	14.10	15	16.90	21	16.47	26	16.64
26	13.77	22	16.76	28	15.46	Sept. 2	15.90
Aug. 2	14.26	29	15.81	Sept. 4	15.14	9	15.85
16	14.05	Sept. 5	15.31	11	14.90	16	15.80
23	14.28	12	15.08	21	14.42	23	15.72
30	15.58	19	15.00	25	14.38	30	15.64
Sept. 6	13.32	26	14.96	Oct. 2	14.32	Oct. 7	15.54
13	12.87	Oct. 3	14.93	9	14.00	17	15.49
20	12.77	10	14.86	16	13.94	21	15.44
27	12.65	17	14.84	23	13.84	28	15.38
Oct. 4	12.26	24	13.91	30	13.97	Nov. 4	15.30
11	12.21	31	15.84	Nov. 6	13.91	14	15.20
18	12.20	Nov. 7	15.82	13	13.95	18	15.15
25	12.20	14	15.86	20	14.18	25	15.22
Nov. 15	12.17	21	15.50	30	14.08	Dec. 2	15.10
22	12.21	28	14.91	Dec. 4	14.02	9	15.07
29	12.30	Dec. 5	15.00	11	14.06	16	15.04
Dec. 6	12.25	15	15.01	18	14.12	23	15.06
13	12.41	19	15.09	24	14.17	28	15.03
20	12.43	26	15.01	31	14.16	Jan. 6, 1961	15.00
27	12.47	Jan. 2, 1959	15.01	Jan. 8, 1960	13.96	13	14.99
Jan. 3, 1958	12.53	9	15.06	15	14.26	20	14.97
10	12.64	16	15.16	22	14.21	27	14.94
17	12.66	23	15.17	29	14.36	Feb. 3	14.95
24	12.87	30	15.20	Feb. 5	14.40	10	14.96
31	12.84	Feb. 6	15.30	12	14.43	17	14.98

130. 29. 8dec-- Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 24, 1961	14.94	May 19, 1961	16.30	Aug. 4, 1961	19.75	Oct. 20, 1961	18.05
Mar. 3	15.38	26	16.05	11	19.65	27	17.94
10	15.12	June 2	16.10	18	19.70	Nov. 3	17.55
17	14.92	9	16.15	25	19.50	11	17.43
24	16.80	16	16.80	Sept. 1	19.28	17	17.25
30	16.55	23	17.40	11	18.96	24	17.12
Apr. 7	16.52	30	17.80	15	18.66	Dec. 1	16.95
14	16.50	July 7	19.60	22	18.48	8	16.92
21	16.54	14	19.30	29	18.37	15	16.86
28	16.52	21	19.55	Oct. 6	18.20	22	16.82
May 5	16.48	28	19.70	13	18.12	29	16.78
12	16.42						

Olmstead County

107. 14. 35cd1. Kahler Corp. Kahler Hotel, 1st St. and 2d Ave. SW., Rochester. Drilled unused artesian well in Jordan Sandstone of Late Cambrian age, diam 15 in, depth 517 ft, reported cased to about 100. MP top of wood platform, 14.50 ft below lsd. Highest water level 23.9 below lsd, Apr. 18, 1960; lowest 79.5 below lsd, Sept. 7, 1960. Records available: 1957-61. Water levels affected by regional pumping.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	....	....	....	....	....	....	....	....	47.0	54.0	56.4	54.5
10	....	....	....	....	....	....	69.7	62.7	59.6	54.0	46.5	61.8
15	....	....	....	....	....	....	75.0	73.5	49.0	55.5	55.2	45.0
20	....	....	....	....	....	....	72.3	63.5	50.5	48.0	47.6	59.1
25	....	....	....	....	....	....	73.9	59.3	47.5	43.2	59.9	36.2
Eom	....	....	....	....	....	....	72.7	62.4	59.5	57.6	53.7	55.0

1958

5	47.8	66.6	....	....	48.2	58.3	56.5	....	62.5	36.7	56.0	54.4
10	60.2	43.8	....	....	58.6	....	47.6	61.3	60.2	52.4	45.4	44.5
15	59.9	47.1	48.6	....	62.7	47.6	55.2	75.3	58.3	49.5	....	57.0
20	62.7	....	....	44.8	61.8	58.2	....	....	42.0	59.4	....	52.6
25	44.4	....	....	41.7	47.7	45.3	....	....	48.0	49.4	....	35.5
Eom	49.4	....	....	57.2	56.7	75.2	....	....	49.6	61.5	35.1	43.1

1959

5	55.8	60.7	45.5	....	63.2	72.2	52.4	74.8	48.1	54.7	50.7	37.5
10	44.5	54.5	55.6	....	42.3	72.9	64.9	69.0	57.5	47.1	58.9	38.0
15	45.3	47.1	43.1	57.6	48.5	63.6	....	61.2	51.9	....	38.9	50.5
20	56.8	40.7	52.5	40.2	68.7	59.6	....	76.1	41.1	....	51.1	42.9
25	49.3	43.5	49.5	52.7	60.5	72.9	....	73.9	55.9	....	46.4	30.2
Eom	54.3	50.1	50.9	56.7	36.4	58.1	....	68.3	51.4	46.3	48.0	48.3

1960

5	....	57.9	47.2	57.6	49.8	41.8	51.9	68.7	64.6	39.8	44.1	53.6
10	....	54.1	42.9	44.3	43.5	64.6	53.1	57.5	57.2	51.3	53.3	42.5
15	55.0	52.9	56.7	52.5	48.5	62.7	60.8	60.0	59.6	49.5	54.2	56.5
20	47.9	46.3	42.4	53.7	58.4	42.1	69.0	58.5	49.3	55.7	46.0	47.0
25	39.9	55.1	47.9	42.9	50.7	54.8	74.5	74.1	....	53.7	55.9	45.3
Eom	46.1	56.4	56.0	43.3	52.4	57.1	62.9	74.3	43.1	52.8	54.3	50.5

1961

5	45.0	49.7	43.4	47.3	43.3	62.3	51.3	58.5	60.8	62.1	....	51.8
10	58.6	51.5	59.0	54.0	60.1	61.9	65.8	68.9	58.1	59.5	....	43.5
15	40.9	56.3	52.2	51.6	55.9	61.3	60.8	73.2	56.9	....	....	44.5
20	58.1	53.9	54.4	58.0	48.9	50.7	67.9	53.5	61.9	....	....	49.4
25	57.1	50.7	49.7	52.7	55.7	51.7	66.7	71.0	55.8	....	....	40.3
Eom	57.9	51.2	43.1	44.3	62.7	79.1	70.3	79.0	53.7	....	....	40.5

St. Louis County

B57. 20. 5dad1. Great Northern Ry. Drilled unused artesian well in Biwabik Iron-Formation of middle Precambrian age, diam 12 to 6 in, depth 430 ft, cased to 315. MP top of wood platform, 1.20 ft above lsd. Highest water level 58.76 below lsd, Aug. 9, 1955; lowest 67.51 below lsd, Dec. 31, 1961. Records available: 1955-61.

B57. 20. 5dad1--Continued.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	64.95	65.33	65.72	66.09	.....	66.16	65.99	.....	.....	65.67	65.50	65.33
10	65.02	65.42	65.68	66.19	.....	66.24	.....	.....	65.73	65.65	65.53	65.36
15	65.10	65.42	65.70	66.22	.....	66.19	.....	.....	65.67	65.57	65.37	65.33
20	65.07	65.54	65.78	66.07	66.14	66.06	65.77	.....	65.65	65.58	65.36	65.32
25	65.19	65.57	65.93	66.12	66.12	66.07	.....	.....	65.62	65.60	65.38	65.37
Eom	65.24	65.60	66.07	66.23	66.19	.....	.....	.....	65.59	65.46	65.34	65.46

1958

5	65.53	65.69	65.90	66.13	66.11	66.08	65.77	64.97	64.93	64.96	64.91	64.84
10	65.46	65.72	65.97	65.98	65.99	65.89	65.39	64.88	64.97	64.91	64.97	64.96
15	65.55	65.85	65.96	65.96	66.11	66.02	65.25	65.00	64.89	64.98	65.02	64.88
20	65.60	65.83	66.03	65.98	66.10	66.02	65.19	64.93	64.86	64.85	64.91	64.95
25	65.54	65.75	66.10	66.10	66.10	65.95	65.12	64.95	64.83	64.98	64.93	65.01
Eom	65.67	65.86	66.09	65.94	66.10	65.99	65.06	64.88	64.86	64.98	64.99	65.03

1959

5	65.10	65.44	65.87	66.25	66.44	66.54	66.18	66.14	65.27	65.46	65.66	.....
10	65.17	65.50	65.87	66.38	66.43	66.48	66.03	66.13	65.37	65.37	65.59	.....
15	65.11	65.55	65.90	66.33	66.57	66.45	66.07	66.20	65.41	65.48	65.73	.....
20	65.21	65.66	66.10	66.43	66.55	66.48	66.07	.....	65.34	65.57	65.70	.....
25	65.30	65.71	66.17	66.46	66.55	66.31	66.03	65.50	65.37	65.47	.....	.....
Eom	65.44	65.74	66.18	66.43	66.48	66.23	66.11	65.40	65.46	65.64	.....	.....

1960

5	.....	.....	.....	.....	66.48	66.51	66.38	66.46	66.01	65.57	65.28	65.20
10					66.59	66.52	66.36	66.28	66.02	65.54	65.27	65.28
15					66.57	66.43	66.34	66.35	65.98	65.43	65.16	65.31
20					66.55	66.54	66.34	66.25	65.91	65.38	65.29	65.45
25					66.56	66.40	66.30	66.21	65.80	65.28	65.25	65.33
Eom				66.51	66.41	66.35	66.33	66.16	65.72	65.11	65.38	65.43

1961

5	65.43	65.82	66.07	66.33	66.52	66.29	66.28	66.42	66.86	66.95	67.27	67.27
10	65.46	65.80	66.14	66.39	66.44	66.31	66.31	66.47	66.73	67.03	67.26	67.34
15	65.58	65.90	66.18	66.29	66.31	66.37	66.26	66.53	66.70	67.06	67.25	67.40
20	65.61	65.89	66.26	66.27	66.36	66.23	66.29	66.60	66.74	67.15	67.34	67.43
25	65.78	65.85	66.23	66.31	66.35	66.29	66.39	66.64	66.86	67.15	67.30	67.41
Eom	65.76	66.00	66.26	66.43	66.33	66.32	66.41	66.68	66.90	67.11	67.31	67.51

#### h Tape measurement.

B58. 18. 12ccc1. Oliver Iron Mining Division, U. S. Steel Corp. Drilled observation artesian well in glacial sand and gravel, diam 6 in, depth 97 ft, slotted 76-97. MP wood floor of instrument shelter, 2.04 ft above lsd. Highest water level 10.64 below lsd, July 20, 1957; lowest 16.25 below lsd, Mar. 19-20, 1961. Records available: 1954-61.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	14.79	15.22	15.55	15.73	13.05	13.26	12.69	12.17	12.56	12.79	13.03	13.22
10	14.87	15.28	15.58	13.70	13.20	13.34	12.76	12.23	12.62	12.83	13.05	13.36
15	14.94	15.33	15.64	13.97	13.10	13.38	12.12	12.24	12.67	12.85	12.93	13.40
20	15.03	15.40	15.70	12.81	13.25	13.31	10.99	12.32	12.59	12.90	13.00	13.42
25	.....	15.5	15.56	12.16	13.16	12.70	11.69	12.36	12.58	12.94	13.09	13.51
Eom	.....	15.47	14.98	12.77	13.15	12.87	12.04	12.48	12.66	12.98	13.16	13.65

1958

5	13.71	14.13	14.31	14.25	14.35	13.99	13.20	13.41	.....	.....	.....	.....
10	13.79	14.21	14.40	14.26	14.34	13.05	13.25	13.50	.....	.....	.....	.....
15	13.86	14.30	14.42	14.23	14.37	13.53	13.30	.....	.....	.....	.....	.....
20	13.92	14.35	14.50	14.19	14.41	13.64	13.39	.....	.....	.....	.....	.....
25	13.96	14.37	14.48	14.32	14.48	13.67	13.44	.....	.....	.....	.....	.....
Eom	14.06	.....	14.34	14.26	14.50	13.73	13.31	.....	.....	.....	.....	.....

1959

5	.....	.....	.....	.....	.....	.....	.....	.....	12.77	12.70	.....
10	.....	.....	.....	.....	.....	.....	.....	.....	12.69	12.74	.....
15	.....	.....	.....	.....	.....	.....	.....	.....	12.70	12.86	.....
20	.....	.....	.....	.....	.....	.....	.....	.....	12.57	12.93	.....
25	.....	.....	.....	.....	.....	.....	.....	.....	12.73	12.50	.....
Eom	.....	.....	.....	.....	.....	.....	.....	.....	12.75	12.61	.....

1960

	1990											
5	.....	.....	.....	.....	12.28	12.13	12.84	13.18	13.59	14.14	14.52	14.84
10	.....	.....	.....	.....	12.65	12.31	12.94	13.24	13.71	14.23	14.57	14.85
15	.....	.....	.....	.....	12.79	12.43	13.06	13.36	13.84	14.28	14.61	.....
20	.....	.....	.....	.....	12.87	12.59	13.03	13.42	13.91	14.36	14.66	.....
25	.....	.....	.....	h12.41	12.73	12.53	13.12	13.51	14.00	14.43	14.73	.....
Eom	.....	.....	.....	12.74	11.52	12.70	13.03	13.68	14.07	14.42	14.84	.....

### h Tape measurement.

## B58. 18. 12cccl--Continued.

1961

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	15.24	15.75	16.09	15.76	14.33	13.97	14.54	15.00	15.55	15.29	15.21	15.60
10	15.34	15.81	16.13	15.83	14.14	14.10	14.62	15.11	15.57	15.37	15.23	15.72
15	15.41	15.89	16.20	15.74	13.20	13.91	14.60	15.21	14.98	15.15	15.32	15.79
20	15.49	15.96	16.25	15.00	13.41	14.12	14.69	15.28	15.06	15.19	15.41	15.86
25	15.57	15.97	16.14	13.69	13.68	14.28	14.79	15.37	15.16	15.22	15.48	15.91
Eom	15.67	16.03	15.62	14.16	13.83	14.41	14.90	15.44	15.24	15.24	15.55	16.02

B58. 20. 16dbcl. City of Chisholm. Drilled unused artesian well in glacial outwash sand and gravel, diam 12 in, depth 40 ft, screened 30-40. MP top of wood platform, 1.70 ft above lsd. Highest water level 0.23 below lsd, May 10, 1954; lowest 15.60 below lsd, Mar. 23-24, 1957. Records available: 1953-61. Water levels affected by pumping.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	13.80	14.54	15.12	14.27	.....	9.36	7.79	8.22	10.66	12.07	11.57	11.33
10	13.91	14.66	15.12	13.18	.....	9.62	8.30	8.87	10.82	11.84	11.33	11.52
15	14.00	14.83	15.25	12.25	.....	9.80	6.38	9.07	11.17	11.82	11.22	11.55
20	14.10	14.77	15.31	9.73	.....	9.77	6.47	9.91	11.46	11.66	11.13	12.37
25	14.32	14.91	15.47	....	8.98	8.75	5.63	10.01	11.88	11.64	11.16	12.11
Eom	14.43	14.97	15.06	....	9.03	8.64	7.35	10.40	11.52	11.48	11.20	12.39

1958

5	12.28	13.53	13.74	13.40	12.12	12.33	9.31	10.30	10.79	9.47	9.63	8.3
10	12.94	13.62	13.68	12.93	12.20	10.80	9.26	10.37	10.70	9.52	9.48	8.7
15	13.00	13.70	13.64	12.77	12.47	10.18	9.26	10.61	10.64	9.32	9.36	9.4
20	13.16	13.70	13.70	12.63	12.48	9.97	9.57	10.79	10.46	9.38	7.84	...
25	13.27	11.28	13.89	12.46	12.78	9.95	10.30	10.78	10.22	9.67	7.63	...
Eom	13.51	13.82	13.97	12.25	12.60	10.43	10.08	10.79	9.60	9.62	8.07	...

1959

5	.....	.....	.....	11.00	8.81	6.40	6.74	9.51	7.72	7.35	7.17	...
10	.....	.....	12.17	10.62	7.66	6.42	5.03	9.27	6.72	7.10	7.34	...
15	10.20	.....	12.28	10.48	7.42	6.71	6.03	9.52	7.15	6.91	7.42	...
20	.....	.....	12.48	10.11	5.87	7.37	6.92	9.77	7.22	6.80	7.69	...
25	.....	.....	13.12	9.72	5.72	7.52	7.32	9.74	7.13	6.57	.....	...
Eom	.....	.....	11.72	9.58	5.60	6.36	8.76	9.42	7.09	6.84	.....	...

1960

5	.....	.....	.....	.....	5.66	5.30	7.54	9.92	9.49	10.59	11.03	11.16
10	.....	.....	.....	5.30	5.98	5.90	8.55	9.46	9.73	10.82	11.08	11.00
15	.....	.....	.....	7.48	6.42	6.65	9.47	9.75	9.92	10.88	11.01	11.00
20	.....	.....	.....	8.17	6.70	7.10	9.34	9.85	10.01	10.89	11.00	.....
25	.....	.....	.....	6.51	6.88	6.71	9.62	10.02	10.18	10.97	11.07	.....
Eom	.....	.....	.....	6.32	4.61	7.16	9.44	10.25	10.52	11.00	11.30	.....

1961

5	11.64	.....	13.57	12.72	8.81	7.75	10.95	11.95	12.98	12.97	12.44	12.19
10	11.75	.....	13.76	12.66	8.00	8.30	11.15	12.22	12.96	13.02	12.30	12.33
15	11.84	.....	13.77	12.61	5.94	8.88	11.17	12.45	12.88	12.68	12.29	12.45
20	12.01	.....	13.81	11.82	5.80	9.70	11.37	12.39	12.78	12.73	12.24	12.56
25	12.30	.....	13.66	8.92	6.58	10.12	11.70	12.73	12.90	12.80	12.18	12.53
Eom	.....	13.47	12.75	8.54	7.33	10.91	11.89	12.92	12.86	12.68	12.15	12.76

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# MISSOURI

By L. L. Steele

Figure 6 shows the location of observation wells in Missouri.

## Well-Numbering System

The numbers assigned to the observation wells show their location according to the Bureau of Land Management's system for subdivision of public land, which is explained on page 7.

## Well Descriptions and Water-Level Measurements

Water levels are reported in feet below land-surface datum, unless otherwise indicated.

### Grundy County

61-24-17R1. D. H. Dockery. Formerly W. W. Brummitt. 105 East 4th St., Trenton. Dug unused water-table well in glacial drift, diam 36 in, depth 21 ft, cribbed with rock. Lsd 830 ft above msl. MP hole in cement cover (previously reported top of hole in plank cover), at lsd. Highest water level 0.03 below lsd, June 21, 1947; lowest 17.00 below lsd, Nov. 2, 1957. Records available: 1942-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6, 1957	14.60	Sept. 8, 1957	15.70	May 4, 1958	16.24	Jan. 11, 1959	9.98
13	14.80	16	15.72	11	16.36	18	9.98
20	14.70	22	15.74	18	16.36	25	10.60
27	14.72	28	15.80	25	16.38	Feb. 1	9.96
Feb. 3	14.72	-Oct. 6	15.90	June 1	11.50	8	9.86
10	14.70	13	15.90	8	11.50	15	9.98
17	14.82	20	15.90	15	13.00	22	9.98
24	14.78	27	16.00	22	13.00	Mar. 1	9.00
Mar. 3	14.80	Nov. 2	17.00	29	12.90	8	10.00
10	14.72	10	16.92	July 6	12.90	15	10.00
17	14.76	17	16.40	13	13.00	22	11.00
24	14.78	24	16.40	20	10.00	29	12.00
31	14.82	Dec. 1	16.40	27	11.00	Apr. 5	10.00
Apr. 7	14.80	8	16.35	Aug. 3	8.00	12	4.00
14	14.59	15	16.30	10	9.50	19	10.00
28	14.52	22	16.20	16	9.00	26	6.00
May 5	14.56	29	16.22	25	9.50	May 3	3.80
12	14.56	Jan. 5, 1958	16.24	31	8.96	10	6.00
19	14.25	12	16.26	Sept. 7	8.94	16	4.92
26	13.91	19	16.28	14	9.00	24	8.00
June 2	13.80	26	16.28	21	9.00	31	9.00
9	13.80	Feb. 2	16.26	Oct. 5	9.44	June 7	10.00
16	13.78	9	16.32	12	9.44	14	4.00
23	13.70	16	16.36	19	9.50	21	9.00
30	13.66	23	16.36	26	9.00	27	9.00
July 7	14.10	Mar. 2	16.36	Nov. 1	8.00	July 19	10.00
14	14.60	9	16.38	9	9.50	25	11.00
21	14.38	16	16.24	16	11.00	Aug. 2	9.00
28	14.37	23	16.22	23	10.15	9	8.00
Aug. 4	14.50	30	16.16	30	10.14	16	9.00
11	15.49	Apr. 6	16.16	Dec. 7	10.10	23	11.00
18	15.70	13	16.17	14	9.85	30	11.96
25	15.72	20	16.15	21	10.00	Sept. 6	14.00
Sept. 1	15.64	27	16.22	28	9.86	13	10.00

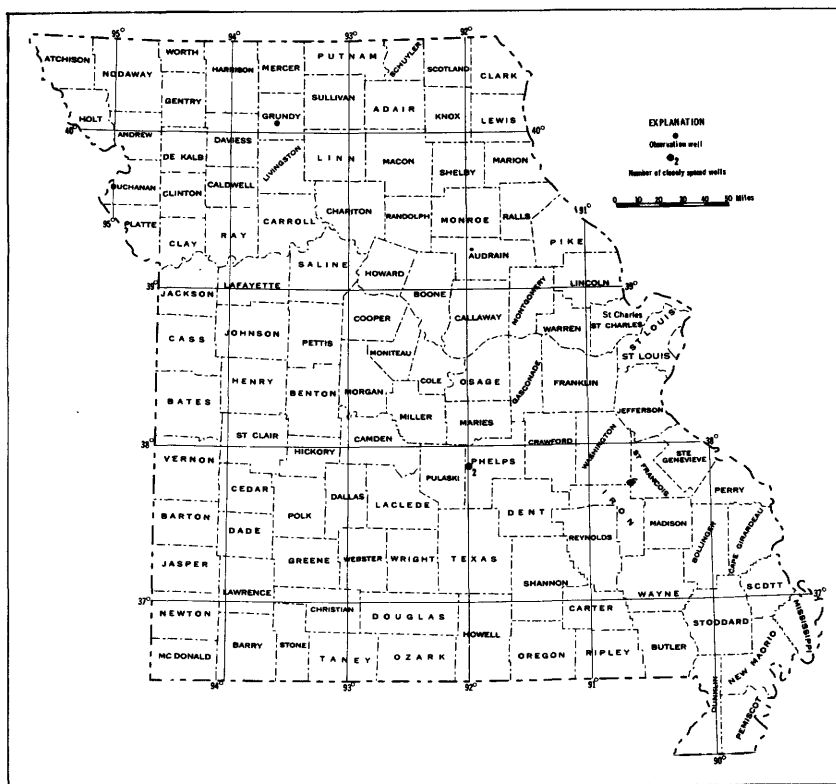


Figure 6. --Location of observation wells in Missouri, 1957-61.



61-24-17R1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 20, 1959	12.00	Mar. 13, 1960	11.00	Sept. 11, 1960	9.00	Mar. 12, 1961	9.60
27	12.00	20	10.00	18	10.00	19	9.10
Oct. 4	12.00	27	9.00	25	8.00	26	5.80
11	11.96	Apr. 3	4.97	Oct. 1	11.20	Apr. 2	4.10
18	11.96	10	6.00	9	9.90	9	4.00
25	11.93	17	5.00	16	9.00	16	2.50
28	11.38	24	4.00	23	10.20	23	1.80
Nov. 1	11.96	May 1	5.00	30	9.80	30	2.40
8	13.00	8	3.00	Nov. 6	9.00	May 4	2.76
15	11.96	15	6.00	13	10.60	14	2.40
22	11.96	22	9.00	20	10.40	28	3.14
29	13.00	29	7.93	27	10.50	June 11	3.75
Dec. 6	12.00	June 5	6.00	Dec. 4	10.40	25	4.09
13	13.01	12	9.00	11	10.60	July 9	4.40
20	12.98	19	4.00	25	10.50	23	4.40
27	11.00	26	6.08	Jan. 1, 1961	10.20	Aug. 6	3.74
Jan. 3, 1960	13.00	July 3	8.00	8	10.10	20	3.70
10	12.00	10	6.00	15	10.50	29	3.52
17	12.20	18	9.00	22	10.20	Sept. 10	2.90
24	10.00	31	8.10	29	10.40	27	2.80
31	10.00	Aug. 7	9.00	Feb. 5	10.50	Oct. 27	2.44
Feb. 7	9.00	14	8.00	12	10.40	Nov. 14	2.40
14	8.00	21	8.00	19	10.20	28	1.79
21	13.00	28	9.50	26	10.30	Dec. 17	2.90
28	10.00	Sept. 4	9.60	Mar. 5	10.40	29	2.10
Mar. 6	9.00						

Phelps County

37-10-13K1. S. V. Allen. Jerome. Drilled unused water-table well in Gasconade Dolomite of Lower Ordovician age, diam 6 in, depth 34 ft. MP top south side of casing, 0.50 ft above lsd. Highest water level 4.38 below lsd, Apr. 2, 1945; lowest 13.10 below lsd, Sept. 30, 1960. Records available: 1942-61.

Feb. 28, 1957	7.20	May 28, 1958	7.96	June 30, 1959	9.16	Aug. 1, 1960	9.85
Apr. 1	7.73	June 30	8.06	July 30	10.23	Sept. 1	10.28
30	7.38	July 30	7.60	Sept. 1	10.89	30	13.10
May 31	6.10	Sept. 2	8.27	30	11.72	Oct. 31	12.27
June 1	6.66	30	8.41	Oct. 29	10.66	Nov. 30	12.19
July 31	8.30	Nov. 1	8.55	Nov. 30	9.85	Dec. 29	10.88
Aug. 29	9.40	Dec. 2	8.57	Dec. 30	7.64	Jan. 31, 1961	11.26
Sept. 28	9.59	30	8.83	Feb. 1, 1960	7.91	Feb. 28	10.33
Oct. 30	8.50	Jan. 30, 1959	8.05	Mar. 1	8.25	Mar. 30	9.45
Dec. 31	7.81	Feb. 26	7.84	31	8.59	May 1	7.98
Jan. 30, 1958	7.89	Mar. 30	7.81	Apr. 29	4.63	June 29	9.44
Feb. 27	4.43	Apr. 30	8.04	June 2	8.31	Sept. 5	10.10
Mar. 29	7.69	June 2	7.68	30	9.41	Nov. 30	9.45
Apr. 30	7.65						

37-10-24A1. Fred Pillman. Arlington. Dug and drilled unused water-table well in Gasconade Dolomite of Lower Ordovician age, diam 6 in, depth 15 ft, MP top south side of casing inside of concrete box, 1.00 ft above lsd. Highest water level 4.16 below lsd, Apr. 2, 1945; lowest dry, several times 1956-61. Records available: 1942-61.

Feb. 28, 1957	7.90	May 28, 1958	8.78	June 30, 1959	11.43	Aug. 1, 1960	12.74
Apr. 1	10.35	June 30	9.63	July 30	(f)	Sept. 1	(f)
30	7.71	July 30	7.80	Sept. 1	(f)	30	(f)
May 31	6.40	Sept. 2	7.33	30	(f)	Oct. 31	(f)
June 1	6.11	30	10.40	Oct. 29	12.51	Nov. 30	(f)
July 31	9.30	Nov. 1	12.17	Nov. 30	12.54	Dec. 29	12.18
Sept. 28	12.25	Dec. 2	(f)	Dec. 30	9.09	Jan. 31, 1961	(f)
Nov. 30	12.55	30	(f)	Feb. 1, 1960	9.84	Feb. 28	12.77
Dec. 31	10.29	Jan. 30, 1959	(f)	Mar. 1	10.34	Mar. 30	10.31
Jan. 30, 1958	10.20	Feb. 26	10.66	31	8.08	May 1	9.40
Feb. 27	7.83	Mar. 30	9.66	Apr. 29	6.27	June 29	9.40
Mar. 29	6.35	Apr. 30	9.95	June 2	9.70	Sept. 5	10.50
Apr. 29	7.64	June 2	7.70	30	11.68	Nov. 30	9.01

f Dry.

# NEBRASKA

By C. F. Keech

The observation-well program in Nebraska was continued in 1957 through 1961 in cooperation with the Conservation and Survey Division, University of Nebraska. Figure 7 shows the location of observation wells included in this report.

## Well-Numbering System

Wells are numbered in accordance with the Bureau of Land Management's system of land subdivision in which each well number is made up of three segments. The first indicates the township, the second the range, and the third the section in which the well is situated. The letters after the section number, which are assigned in a counterclockwise direction, represent subdivisions of the section. The first letter denotes the 160-acre tract, the second the 40-acre tract, and the third the 10-acre tract. Thus, the number A1-10-27ac indicates the well in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 27, T. 1 N., R. 10 E. The letter "A" before the township number designates a well east of the sixth principal meridian. (If the well is west of the meridian, no letter is included.) Serial numbers are added to distinguish wells in the same tract.

## Well Descriptions and Water-Level Measurements

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

### Adams County

7-10-23ab. Henry Fricke. Drilled unused water-table well in sand and gravel of Pleistocene age, diam 8 in, depth 155 ft, casing perforated below water table. Lsd 1,927 ft above msl. MP top of casing, 1.00 ft above lsd. Highest water level 99.95 below lsd, Jan. 22, Mar. 14, 1935; lowest 109.16 below lsd, Aug. 1, 1961. Records available: 1934-38, 1948-61. Apr. 11, 1957, 104.33; Nov. 1, 105.00; Nov. 7, 104.93. Recording gage installed Nov. 7, 1957.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	104.78
10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	104.92	104.88
15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	104.93	104.78
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	104.81	104.72
25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	104.73
Eom	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	104.70

1958

5	104.64	104.55	.....	104.55	104.40	104.71	.....	106.76	105.50	105.42	105.45	105.54
10	104.68	104.50	.....	104.43	104.46	104.75	.....	105.87	105.51	105.42	105.36	105.31
15	104.61	.....	.....	104.40	104.41	104.73	105.30	105.55	105.54	105.32	105.30	105.27
20	104.60	.....	.....	104.40	104.40	104.85	105.28	105.53	105.48	105.49	.....	105.27
25	104.60	.....	.....	104.40	104.57	.....	105.29	105.48	105.48	105.45	.....	105.20
Eom	104.63	.....	104.42	104.35	104.52	.....	105.30	105.51	105.50	105.40	105.30	105.17

1959

5	105.14	.....	.....	105.27	105.24	105.20	105.43	107.04	106.59	106.23	106.21	.....
10	105.18	.....	.....	105.15	105.24	105.25	105.58	107.23	106.61	106.36	106.18	105.96
15	105.25	.....	105.25	105.13	105.17	105.35	105.75	106.42	106.60	106.19	.....	106.00
20	105.23	.....	105.23	105.20	105.16	105.44	105.96	106.42	106.40	106.19	.....	105.98
25	105.26	.....	105.17	105.21	105.08	105.60	107.38	106.77	106.27	106.20	.....	105.90
Eom	105.22	.....	105.19	105.32	105.15	105.45	106.51	106.67	106.29	106.14	.....	105.92

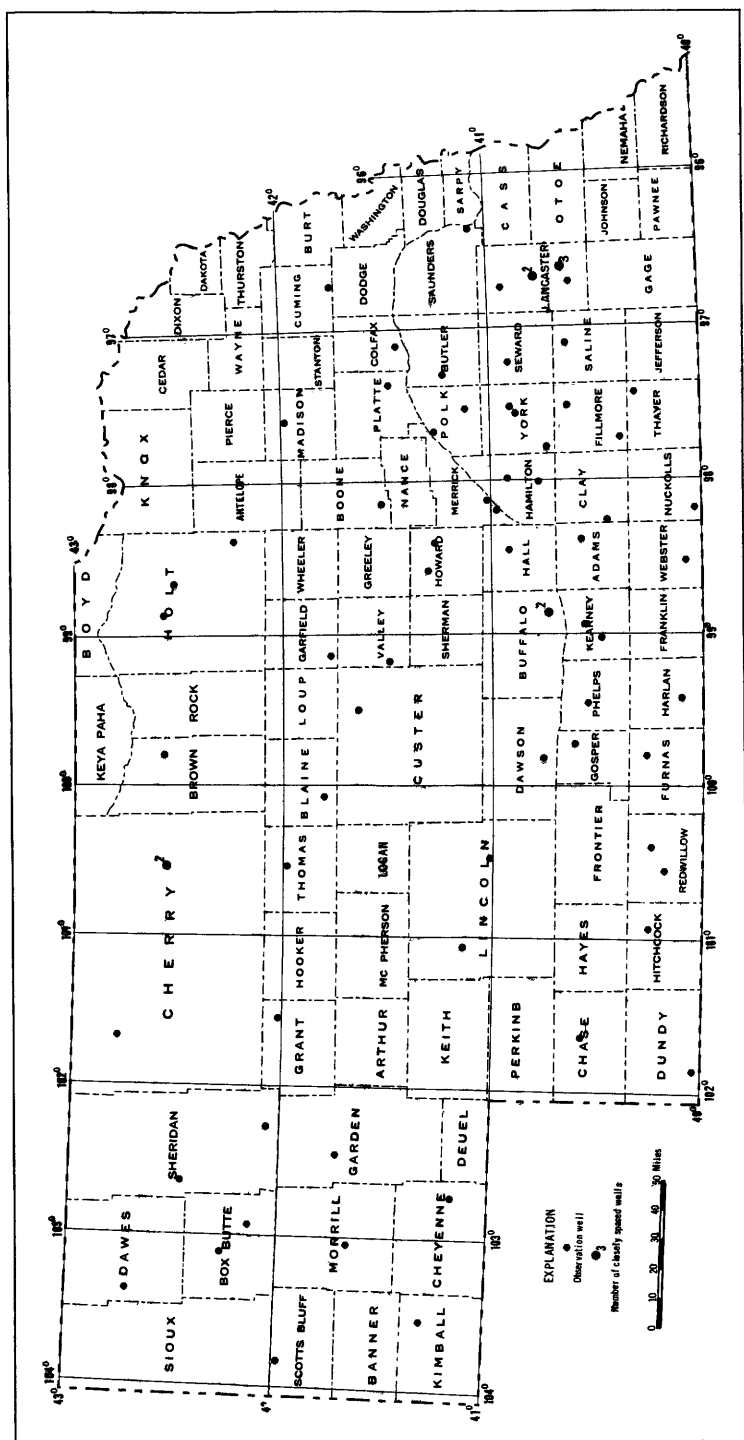


Figure 7.--Location of observation wells in Nebraska, 1957-61.

7-10-23ab--Continued.

1960												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	105.85	105.87	105.83	105.80	105.78	106.03	106.11	.....	108.75	107.00	106.90	106.89
10	105.95	105.92	105.87	105.78	105.80	105.93	106.10	.....	107.41	107.12	106.82	106.68
15	105.94	105.83	105.79	105.79	105.81	105.92	107.87	108.67	107.38	107.00	106.88	106.75
20	.....	105.83	105.85	105.85	105.95	106.01	108.34	107.44	107.36	106.88	106.80	106.78
25	.....	105.85	105.83	105.84	105.90	106.04	.....	107.35	107.31	106.96	106.73	106.73
Eom	.....	105.85	105.77	105.82	105.92	106.11	.....	107.30	107.11	106.86	106.78	106.67
1961												
5	106.61	106.57	106.55	106.55	106.51	106.70	108.59	109.16	.....	107.99	107.85	107.70
10	106.64	106.52	106.53	106.47	106.58	106.74	108.79	.....	.....	107.90	107.83	107.71
15	106.61	106.58	106.52	106.54	106.60	106.80	.....	.....	.....	107.92	107.75	107.62
20	106.66	106.53	106.48	106.63	106.54	106.70	.....	.....	.....	107.86	107.73	107.64
25	106.55	106.53	106.46	106.50	106.69	106.87	.....	.....	.....	108.00	107.70	107.61
Eom	106.57	106.51	106.49	106.59	106.65	106.96	.....	.....	108.05	107.78	107.67	107.65

h Tape measurement.

Blaine County

22-24-33ca. U. S. Geol. Survey. Lincoln. Drilled observation water-table well in fine sand of Pleistocene age, diam 1 in, depth 13 ft, screened 11-13. MP top of casing, 1.40 ft above lsd. Highest water level 1.04 below lsd, Mar. 8, 1950; lowest 6.97 below lsd, Aug. 8, 1951. Records available: 1934-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 18, 1957	4.01	June 9, 1958	3.41	July 21, 1959	4.26	Oct. 10, 1960	5.20
Mar. 4	4.08	23	3.60	Aug. 5	4.80	13	5.13
18	3.73	July 7	4.08	19	4.97	25	4.94
Apr. 1	4.22	22	3.98	Sept. 1	5.19	Nov. 6	4.80
9	3.17	Aug. 4	4.34	15	5.42	21	4.52
July 29	4.10	Sept. 2	4.96	29	5.09	Dec. 6	4.22
22	4.07	4	4.97	Oct. 14	4.84	20	4.11
Aug. 19	3.96	15	3.57	26	4.73	Jan. 3, 1961	3.90
Sept. 3	4.44	29	4.02	Nov. 9	4.16	16	3.79
16	4.41	Oct. 13	4.21	23	4.00	Feb. 14	3.70
30	4.62	27	4.34	Dec. 21	4.05	28	3.50
Oct. 14	4.38	Nov. 12	4.03	Jan. 5, 1960	4.11	Mar. 16	2.91
19	4.27	Dec. 8	3.83	Feb. 2	3.65	Apr. 4	3.10
28	3.92	22	3.79	17	3.25	25	3.09
Nov. 12	3.88	Jan. 6, 1959	3.98	Mar. 4	3.66	May 19	3.04
25	3.69	19	3.79	17	3.37	June 8	3.42
Dec. 9	3.78	Feb. 2	3.80	30	2.26	20	3.72
23	3.90	16	3.77	Apr. 12	2.90	July 3	4.40
Jan. 6, 1958	3.98	Mar. 2	3.40	26	3.00	18	4.95
20	3.86	16	3.28	May 10	2.55	Aug. 1	5.01
Feb. 3	3.88	30	3.03	24	2.95	15	5.32
17	4.06	Apr. 13	3.50	June 7	3.40	29	4.95
Mar. 3	3.48	27	3.06	July 5	4.14	Sept. 12	5.09
20	3.26	May 11	3.16	18	4.58	Oct. 3	4.80
31	2.32	25	3.14	Aug. 4	5.18	11	4.78
Apr. 14	2.42	June 8	3.93	16	5.24	23	4.63
28	2.19	22	4.48	30	5.34	Nov. 14	4.34
May 13	3.17	July 8	4.55	Sept. 14	5.50	Dec. 4	4.27
26	3.38						

Boone County

18-7-4ca. U. S. Geol. Survey. Lincoln. Drilled observation water-table well in sand of Pleistocene age, diam 1 in, depth 22 ft, screened 20-22. MP top of casing, 2.90 ft above lsd. Highest water level 10.82 below lsd, July 24, 1950; lowest 15.17 below lsd, Oct. 26, 1940. Records available: 1937-42, 1948-61.

Dec. 11, 1957	13.07	Sept. 8, 1960	12.38	Mar. 24, 1961	12.32	Aug. 16, 1961	12.28
Oct. 23, 1958	13.17	Nov. 2	12.62	Apr. 25	12.38	Sept. 26	12.27
June 10, 1959	12.51	Dec. 20	12.56	May 17	12.04	Oct. 18	12.35
Sept. 2	13.17	Jan. 12, 1961	12.46	June 13	11.89	Nov. 29	12.35
Aug. 3, 1960	12.39	Feb. 15	12.38	July 27	12.82		

Box Butte County

25-48-4ddd1. U.S. Geol. Survey. Drilled observation water-table well in sand of Marsland Formation of Tertiary age, diam 1½ in, depth 98 ft, screened 92-98. Lsd 4,032.95 ft above msl. MP top of casing, 1.85 ft above lsd. Highest water level 63.14 below lsd, Jan. 25, 1950; lowest 78.42 below lsd, Oct. 9, 1961. Records available: 1946-61. Oct. 18, 1957, 71.63; Sept. 10, 1958, 72.38; Oct. 8, 1959, 73.38; July 19, 1960, 73.86; Oct. 11, 74.17; Oct. 9, 1961, 78.42.

26-50-12dc. Mrs. L. A. Rosenberg. Hemingford. Dug domestic water-table well in sandstone of Tertiary age, diam 4 ft, depth 106 ft, lined with concrete. Lsd 4,231.51 ft above msl. MP top of platform, 1.00 ft above lsd. Highest water level 99.59 below lsd, Sept. 19, 1954; lowest 105.63 below lsd, Oct. 11, 1960. Records available: 1938, 1942, 1946-51, 1953-58, 1960-61. No measurement made in 1959. Oct. 18, 1957, 102.24; Sept. 10, 1958, 102.73; July 19, 1960, 103.26; Oct. 11, 105.63; Oct. 9, 1961, 104.65.

Brown County

30-21-19cc. Consumers Public Power District. Ainsworth. Drilled unused water-table well in sand of Pleistocene age, diam 6 in, depth 57 ft, casing perforated below water table. Lsd 2,509.07 ft above msl. MP top of casing, 0.20 ft above lsd. Highest water level 34.40 below lsd, Oct. 23-25, 29, 1952; lowest 40.88 below lsd, Sept. 24, 1959. Records available: 1947-61.

## Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	39.80	39.69	39.60	39.50	39.46	.....	39.45	39.93	40.36	39.95	.....	39.23
10	.....	39.67	39.59	.....	39.45	39.48	39.63	39.81	40.41	39.90	.....	39.20
15	.....	39.66	39.59	39.48	39.53	39.45	39.64	39.93	40.37	39.83	39.39	39.16
20	.....	39.64	39.58	39.49	39.52	39.43	39.75	40.05	40.25	39.76	39.36	39.12
25	.....	39.62	39.58	39.47	39.52	39.43	39.84	40.16	40.17	39.68	39.31	39.10
Eom	.....	39.62	39.56	39.47	39.49	39.41	39.87	40.27	40.05	39.59	39.26	39.05

## 1958

5	39.03	38.83	38.69	38.67	38.60	38.58	38.54	38.90	39.56	39.41	39.00	38.71
10	38.98	38.82	38.68	38.67	.....	38.55	38.56	38.94	39.65	39.35	38.94	38.68
15	38.95	38.79	38.67	38.66	.....	38.55	38.63	39.02	39.69	39.25	38.89	38.54
20	38.92	38.76	38.65	38.64	.....	38.55	38.73	39.17	39.62	39.16	38.84	38.59
25	38.90	38.73	38.64	38.63	.....	38.54	38.84	39.29	39.55	39.11	38.80	38.58
Eom	38.87	38.71	38.61	38.62	.....	38.53	38.85	39.50	39.48	39.04	38.77	.....

## 1959

5	38.54	38.40	38.35	38.31	38.40	38.64	39.06	39.60	40.44	40.51	40.24	39.96
10	38.53	38.40	38.35	38.31	38.45	38.70	39.13	39.75	40.55	40.47	40.18	39.92
15	38.50	38.38	38.35	38.30	38.47	38.78	39.21	39.91	40.60	40.41	40.14	.....
20	38.46	38.38	38.35	38.35	38.46	38.80	39.29	40.11	40.60	40.35	40.08	39.85
25	38.45	38.36	38.34	38.37	38.52	38.81	39.35	40.27	40.67	40.35	40.02	39.83
Eom	.....	38.36	38.32	.....	38.58	38.98	39.47	40.34	40.59	40.28	39.99	39.80

## 1960

5	39.78	39.63	39.52	.....	39.34	39.21	.....	39.28	40.05	39.42	39.01	38.70
10	39.76	39.60	39.51	39.44	39.33	39.23	.....	39.47	40.00	39.34	38.93	38.63
15	39.73	39.59	39.50	39.41	39.30	39.27	39.04	39.62	39.89	39.28	38.88	38.63
20	39.70	39.58	39.49	39.39	39.27	39.34	38.99	39.77	.....	39.20	38.85	38.61
25	39.68	39.55	39.48	39.37	39.26	39.35	39.04	39.91	39.66	39.13	38.78	38.59
Eom	39.65	39.54	39.46	39.36	.....	.....	39.15	40.05	39.55	39.06	.....	38.56

## 1961

5	38.53	38.42	38.36	38.33	38.41	38.61	38.85	39.09	39.54	39.36	39.08	38.90
10	38.51	38.41	38.36	38.33	38.47	38.69	38.85	39.17	39.57	39.29	39.05	38.88
15	38.48	38.40	38.35	38.32	38.53	38.80	38.83	39.29	39.59	39.26	39.02	38.86
20	38.47	38.38	38.35	38.38	38.55	38.84	38.86	39.39	39.56	39.21	38.99	38.83
25	38.45	38.37	38.34	38.38	38.55	38.83	38.93	39.53	39.48	39.17	38.96	38.82
Eom	38.43	38.37	38.34	38.38	38.56	38.84	39.03	39.52	39.42	39.11	38.93	38.79

Buffalo County

9-14-1dc. U.S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diam 8 in, depth 37 ft, casing perforated below water table. Lsd 2,060.43 ft above msl. MP top of casing, 0.80 ft above lsd. Highest water level 15.36 below lsd, June 11, 1952; lowest 27.22 below lsd, Aug. 25, 1957. Records available: 1946-61.

9-14-1dc--Continued.

Lowest water level for the day, from recorder graph, 1957												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	.....	26.01	25.95	25.89	25.82	.....	25.44	26.74	26.83	26.03	25.63	25.36
10	.....	26.00	25.94	25.88	25.81	.....	25.40	26.92	26.70	25.95	25.60	25.32
15	.....	25.98	25.93	25.87	25.77	25.61	25.35	27.20	26.57	25.86	25.52	25.27
20	.....	25.97	25.92	25.86	25.75	25.58	25.62	27.15	26.40	25.81	25.48	25.24
25	.....	25.96	25.91	25.84	.....	25.54	25.91	27.22	26.24	25.75	25.43	25.20
Eom	26.02	25.96	25.90	25.83	.....	25.50	26.42	27.11	26.13	25.70	25.40	25.15
1958												
5	25.13	24.88	24.72	24.52	24.24	23.90	23.73	23.32	23.35	22.75	22.47	22.35
10	25.09	24.86	24.69	24.48	24.17	23.83	23.66	23.77	23.28	22.71	22.42	22.29
15	25.06	24.83	24.66	24.43	24.13	23.79	23.59	23.95	23.18	22.63	22.35	22.25
20	25.00	24.80	24.64	24.37	.....	23.73	23.52	23.75	23.02	22.56	.....	22.24
25	24.95	24.77	24.60	24.36	.....	23.68	23.40	23.53	22.92	22.55	.....	22.15
Eom	24.92	24.76	24.56	24.29	.....	23.61	23.27	23.31	22.84	22.50	.....	22.14
1959												
5	22.18	21.99	21.87	21.79	21.58	21.40	21.59	23.73	24.23	23.66	23.53	23.36
10	22.10	21.98	21.85	21.75	21.55	21.36	21.60	23.70	24.12	23.63	23.46	23.33
15	22.09	21.88	21.92	21.61	21.56	21.38	22.05	23.93	23.95	23.58	23.43	23.31
20	22.05	21.98	21.88	21.70	21.49	21.35	22.47	23.70	23.84	23.54	23.41	23.29
25	22.04	21.94	21.79	21.65	21.46	21.29	22.83	23.90	23.77	23.52	23.38	23.26
Eom	.....	21.90	21.77	21.59	21.48	21.53	23.35	24.22	23.73	23.50	23.37	23.27
1960												
5	23.28	23.14	.....	22.88	22.52	25.07	21.48	23.20	24.64	24.08	23.61	23.37
10	23.21	23.12	.....	22.82	22.50	22.00	21.37	23.57	24.87	23.98	23.58	23.31
15	23.20	.....	.....	22.72	22.32	21.90	21.30	23.84	24.77	23.88	23.49	23.28
20	23.20	.....	.....	22.68	22.27	21.80	21.55	24.13	24.54	23.81	23.46	23.27
25	23.18	.....	22.99	22.59	22.18	21.70	22.17	24.40	24.36	23.72	23.41	23.22
Eom	23.15	.....	22.92	22.56	22.12	21.57	22.76	24.57	24.21	23.65	23.43	23.18
1961												
5	23.18	23.06	22.92	22.82	22.68	22.46	22.08	23.65	24.06	23.48	23.17	22.93
10	23.16	23.03	22.92	22.79	22.67	22.40	22.05	23.86	24.15	23.39	23.07	22.91
15	23.14	23.02	22.89	22.79	22.65	22.36	22.00	23.92	24.04	23.35	23.05	22.89
20	23.13	23.00	22.89	22.75	22.63	22.29	22.68	24.05	23.80	23.29	23.02	22.86
25	23.14	22.99	22.85	22.72	22.55	22.22	23.09	23.79	23.69	23.25	22.98	22.82
Eom	23.06	22.97	22.83	22.70	22.50	22.15	23.31	23.77	23.56	23.17	22.95	22.80

9-14-19dd. Robert D. Lewis. Gibbon. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diam 24 in, depth 54 ft, casing perforated below water table. Lsd 2, 102.16 ft above msl. MP hole in pumpbase, 0.70 ft above lsd. Highest water level 22.55 below lsd, June 9, 1931; lowest 34.70 below lsd, Sept. 15, 1956, Aug. 19, 1957. Records available: 1930-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 15, 1957	33.05	Mar. 20, 1958	31.10	July 20, 1959	29.80	Dec. 20, 1960	30.20
Feb. 15	32.80	Apr. 22	30.50	Aug. 20	31.35	Jan. 17, 1961	30.00
Mar. 15	32.60	May 21	29.80	Sept. 26	32.10	Feb. 20	29.80
Apr. 16	32.30	June 21	29.60	Oct. 20	30.70	Mar. 18	29.70
May 15	32.30	July 19	29.70	Jan. 22, 1960	29.15	Apr. 19	29.40
June 18	31.80	Aug. 20	30.80	Mar. 18	30.20	May 17	29.80
July 13	31.30	Sept. 16	30.15	Apr. 18	29.50	June 17	29.00
Aug. 19	34.70	Oct. 21	29.60	May 19	29.20	July 16	29.00
Sept. 18	34.00	Nov. 25	29.30	July 15	28.10	Aug. 18	30.50
Oct. 21	32.80	Dec. 22	29.10	Aug. 15	31.20	Sept. 30	30.30
Nov. 21	32.20	Jan. 20, 1959	29.10	Sept. 24	31.35	Oct. 3	30.26
Dec. 3	32.05	Mar. 20	29.90	Oct. 17	31.00	17	30.00
20	31.80	Apr. 20	28.60	Nov. 3	30.74	Nov. 15	29.60
Jan. 20, 1958	31.50	June 22	28.20	19	30.50	Dec. 28	29.30
Feb. 21	31.20						

## Butler County

A15-1-27dd. U. S. Geol. Survey. Drilled observation water-table well in sand and gravel of Pleistocene age, diam 5 in, depth 210 ft, perforated 199-210. MP top of platform, at lsd. Highest water level 86.86 below lsd, July 17, 1959; lowest 108.63 below lsd, July 23, 1961. Records available: 1958-61. Recording gage installed June 5, 1958.

## A15-1-27dd-- Continued.

Lowest water level for the day, from recorder graph, 1958

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	.....	.....	.....	.....	.....	104.99	101.55	99.86	.....	93.61	93.29	93.08
10	.....	.....	.....	.....	.....	103.97	100.65	.....	.....	93.56	93.67	92.89
15	.....	.....	.....	.....	.....	.....	100.28	104.78	.....	93.32	93.53	92.80
20	.....	.....	.....	.....	.....	.....	99.94	105.42	.....	93.15	93.27	92.93
25	.....	.....	.....	.....	.....	.....	99.70	100.45	93.70	93.18	93.30	92.75
Eom	.....	.....	.....	.....	.....	104.08	99.65	.....	93.57	93.03	93.14	92.70

1959

5	92.80	.....	92.40	.....	.....	92.35	91.75	.....	95.18	93.32	93.31	93.13
10	.....	.....	92.46	.....	.....	92.34	91.70	.....	94.92	93.36	93.12	93.01
15	.....	.....	92.64	.....	.....	92.36	88.36	98.09	94.17	93.16	93.02	93.07
20	.....	.....	92.72	.....	92.62	92.24	89.90	95.73	93.77	93.20	92.99	93.04
25	.....	92.55	92.64	.....	92.55	91.95	90.45	95.24	93.53	93.15	93.04	92.97
Eom	.....	92.45	92.60	.....	92.46	91.46	.....	96.45	93.53	93.18	93.03	93.04

1960

5	93.23	.....	.....	93.02	92.94	93.04	92.91	105.55	.....	93.23	93.05	92.84
10	93.18	.....	92.98	93.01	92.95	92.94	94.63	.....	94.17	93.22	93.02	92.55
15	93.20	.....	92.91	92.91	92.97	92.80	95.93	.....	93.82	93.26	92.83	92.70
20	.....	.....	93.06	92.92	92.94	92.83	99.90	.....	93.60	93.14	92.87	92.72
25	.....	.....	93.02	93.02	92.93	92.89	.....	.....	93.50	93.03	92.65	92.52
Eom	.....	.....	92.98	93.05	92.90	92.85	.....	.....	93.39	92.95	92.88	92.50

1961

5	92.43	92.55	92.52	92.46	92.25	92.30	99.26	.....	97.84	94.44	94.03	93.65
10	92.51	92.42	92.44	92.36	92.38	92.34	105.42	.....	96.51	94.33	93.67	93.67
15	92.50	92.55	92.46	92.53	92.52	92.53	106.86	104.17	95.93	94.31	93.70	93.62
20	92.57	92.50	92.52	92.47	92.38	92.44	108.16	103.43	95.30	94.13	93.66	93.58
25	92.69	92.50	92.33	92.40	92.45	92.49	107.12	98.83	95.10	94.15	93.64	93.39
Eom	92.45	92.49	92.36	92.38	92.32	94.35	105.02	98.47	94.75	93.95	93.55	93.55

## Chase County

7-38-28cc. Roy Hust. Imperial. Drilled unused water-table well in sand of Pleistocene age, diam 18 in, depth 143 ft, casing perforated below water table. MP top of casing, 0.30 ft above lsd. Highest water level 74.03 below lsd, May 5, 1951; lowest 76.93 below lsd, Aug. 25, Sept. 10, 1957. Records available: 1944, 1946-61.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	76.42	76.38	76.37	76.36	76.50	.....	76.68	76.78	76.90	76.84	76.74	76.60
10	76.40	76.40	76.32	76.37	76.50	.....	76.73	76.82	76.93	76.83	76.71	76.80
15	76.43	76.34	76.30	76.30	76.56	.....	76.71	76.87	76.89	76.78	76.75	76.69
20	76.47	76.39	76.30	76.29	76.55	.....	76.73	76.87	76.87	76.75	76.76	76.65
25	76.42	76.30	76.38	76.43	76.57	.....	76.72	76.93	76.85	76.80	76.67	76.66
Eom	76.38	76.33	76.32	76.50	76.54	76.62	76.70	76.86	76.83	76.66	76.72	76.66

1958

5	76.67	76.60	.....	.....	76.45	76.55	76.56	76.72	76.81	76.68	76.60	76.51
10	76.63	76.55	.....	.....	76.42	76.52	76.66	76.83	76.82	76.71	76.50	76.45
15	76.62	.....	.....	76.50	76.44	76.49	76.70	76.85	76.79	76.61	76.43	76.39
20	76.58	.....	.....	76.48	76.39	76.51	76.63	76.84	76.73	76.62	76.56	76.41
25	76.60	.....	.....	76.52	76.37	76.53	76.60	76.78	76.83	76.67	76.54	76.35
Eom	76.61	.....	.....	76.45	76.45	76.46	76.69	76.88	76.78	76.57	76.48	76.35

1959

5	.....	76.32	76.15	76.17	.....	75.95	76.05	76.38	76.52	76.50	76.46	76.24
10	76.32	76.33	76.21	76.11	.....	75.86	76.07	76.47	76.65	76.56	76.35	76.13
15	76.37	76.24	76.22	76.04	.....	75.87	76.05	76.52	76.55	76.47	76.35	76.15
20	76.34	76.24	76.25	76.11	.....	75.91	76.15	76.56	76.55	76.44	76.25	76.13
25	76.31	76.19	76.15	76.07	75.90	75.96	76.24	76.57	76.48	76.41	76.30	76.00
Eom	76.36	76.23	76.16	.....	75.95	76.07	76.33	76.60	76.55	76.41	76.23	76.04

1960

5	76.14	76.00	75.94	75.82	75.78	75.74	75.57	75.80	75.95	75.86	75.72	75.58
10	76.09	76.05	75.98	75.83	75.76	75.60	75.51	75.92	75.99	75.85	75.60	75.43
15	76.08	75.98	75.85	75.80	75.69	75.59	75.56	75.90	75.95	75.77	75.60	75.48
20	76.07	75.95	75.85	75.84	75.72	75.61	75.55	75.99	75.89	75.74	75.58	75.50
25	76.00	75.95	75.82	75.79	75.72	75.56	75.63	76.06	75.91	75.74	75.46	75.41
Eom	75.99	75.98	75.82	75.79	75.61	75.57	75.72	75.94	75.94	75.60	75.55	75.35

## 7-38-28cc--Continued.

1961												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	75.29	75.23	75.04	75.09	74.88	74.81	74.82	75.11	75.29	75.08	75.12	74.91
10	75.32	75.13	75.03	74.94	74.84	74.80	74.85	75.25	75.30	75.08	74.88	74.96
15	75.27	75.20	75.02	75.09	74.96	74.87	74.93	75.22	75.25	75.09	74.99	74.88
20	75.28	75.15	74.99	75.05	74.91	74.78	74.96	75.17	75.11	75.01	74.95	74.88
25	75.24	75.09	74.91	74.99	74.93	74.78	75.13	75.12	75.22	75.14	74.92	74.81
Eom	75.20	75.11	75.02	75.03	74.81	74.81	75.03	75.13	75.20	74.99	74.88	74.91

Cherry County

30-28-36aa. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diam 1½ in, depth 12 ft, screened 10-12. Lsd 2,896.36 ft above msl. MP top of casing, 3.00 ft above lsd. Highest water level 0.25 above lsd, Apr. 1, 1955; lowest 4.46 below lsd, Nov. 1, 1956. Records available: 1949-57, 1959-60. No measurement made in 1958. Nov. 22, 1957, 2.82; Dec. 19, 2.60; Oct. 22, 1959, 3.93; Aug. 10, 1960, 4.35. Well destroyed Aug. 10, 1960; measurement discontinued. Replaced by 30-28-36aaa.

30-28-36aaa. U. S. Geol. Survey. Bored observation water-table well in sand and peat, diam 1½ in, depth 12 ft, cased with galvanized iron. Lsd 2,897.26 ft above msl. MP 3.00 ft above lsd. Records available: 1961. Oct. 11, 1961, 0.71.

34-38-14bc. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diam 1 in, depth 17 ft, screened 15-17. MP top of casing, 2.30 ft above lsd. Highest water level 5.20 below lsd, Apr. 2, 1952; lowest 8.14 below lsd, Aug. 9, 1937. Records available: 1936-41, 1944-47, 1951-61. Nov. 22, 1957, 6.36; July 10, 1958, 5.82; Sept. 11, 6.78; Oct. 21, 1959, 6.96; July 20, 1960, 6.45; Oct. 11, 1961, 7.33.

Cheyenne County

14-47-26cb. U. S. Geol. Survey. Drilled observation water-table well in sand and gravel of Pleistocene age, diam 1 in, depth 29 ft, screened 27-29. Lsd 3,872.80 ft above msl. MP top of casing, 1.20 ft above lsd. Highest water level 18.32 below lsd, Mar. 28, 1951; lowest 21.81 below lsd, Oct. 10, 1956. Records available: 1940-42, 1944, 1947, 1950-52, 1954-61. Oct. 16, 1957, 20.01; Sept. 30, 1958, 18.69; Oct. 12, 1959, 21.12; Oct. 8, 1960, 21.40; Oct. 6, 1961, 19.85.

Clay County

6-8-17bb. Willard W. Kissinger. Hastings. Drilled irrigation water-table well in sand of Pleistocene age, diam 18 in, depth 151 ft, casing perforated below water table. Lsd 1,846 ft above msl. MP hole in turbine base, at lsd. Highest water level 95.53 below lsd, June 24, 1954; lowest 99.00 below lsd, Sept. 27, 1961. Records available: 1952, 1954-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4, 1957	97.61	May 8, 1957	97.06	Sept. 17, 1958	97.97	Nov. 9, 1960	98.11
Feb. 6	97.33	Oct. 28	97.90	Nov. 12, 1959	98.21	Sept. 27, 1961	99.00
Mar. 6	97.30	Dec. 19	97.62				

Colfax County

A17-3-4cc. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diam 1½ in, depth 16 ft, screened 14-16. Lsd 1,370.58 ft above msl. MP top of casing, 1.00 ft above lsd. Highest water level 4.15 below lsd, Apr. 1, 1952; lowest 7.62 below lsd, Nov. 28, 1956. Records available: 1946-61. Dec. 9, 1957, 5.90; Oct. 9, 1958, 6.67; Dec. 2, 1959, 5.79; Nov. 30, 1960, 5.90; Nov. 7, 1961, 6.09.

Cuming County

A21-6-23bb. U. S. Geol. Survey. Drilled observation water-table well in sand and gravel of Pleistocene age, diam 1 in, depth 23 ft, screened 21-23. MP top of casing, 1.30 ft above lsd. Highest water level 3.52 below lsd, Dec. 5, 1960; lowest 8.93 below lsd, Oct. 10, 1941. Records available: 1934-44, 1946, 1948, 1950-61. Mar. 13, 1957, 6.36; Dec. 12, 5.57; Oct. 27, 1958, 5.68; Sept. 25, 1959, 4.87; Dec. 5, 1960, 3.52; Oct. 30, 1961, 3.92.



Custer County

19-19-2bb. Ralph Slagel. Sargent. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diam 18 in, depth 69 ft, casing perforated below water table. Lsd 2,361.95 ft above msl. MP hole in turbine base, at lsd. Highest water level 11.30 below lsd, Oct. 19, 1961; lowest 19.41 below lsd, Sept. 1, 1954. Records available: 1949-55, 1957-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 10, 1957	g17.50	Feb. 3, 1958	g16.60	Oct. 23, 1959	g13.60	Feb. 15, 1961	g12.90
Aug. 1	g17.05	Apr. 1	g15.50	Apr. 8, 1960	g13.80	Apr. 14	g14.50
Sept. 5	g16.70	Mar. 9, 1959	g16.00	June 2	g12.00	Oct. 5	11.45
Oct. 3	g16.20	May 7	g16.00	Oct. 7	g11.40	19	g11.30
Dec. 3	g18.60	Oct. 22	13.40	Nov. 1	11.96		

g Measurement made by U. S. Bureau of Reclamation, Sargent, Nebraska.

Dawes County

31-52-3dc. T. P. Moody. Crawford. Drilled observation water-table well in sand and alluvium, diam 8 in, depth 39 ft, casing perforated below water table. MP edge of iron plate, 1.07 ft above lsd. Highest water level 15.87 below lsd, May 30, 1948; lowest 22.28 below lsd, Oct. 31, 1956. Records available: 1934-61.

Jan. 2, 1957	20.67	Dec. 17, 1958	19.98	May 4, 1960	20.42	Mar. 23, 1961	21.59
Apr. 10	20.25	Feb. 27, 1959	20.35	June 6	20.21	Apr. 21	21.38
May 15	19.48	July 23	20.65	28	20.38	May 23	20.94
July 30	18.46	Sept. 30	21.43	July 29	21.21	June 27	20.92
Oct. 18	19.61	Oct. 8	21.38	Aug. 30	21.83	July 26	21.16
24	19.65	30	21.08	Sept. 29	22.17	Aug. 25	21.65
Jan. 10, 1958	20.25	Nov. 27	20.79	Oct. 27	22.26	Sept. 22	21.84
Apr. 25	19.51	Dec. 31	20.57	Nov. 30	21.96	Oct. 10	21.53
May 27	19.54	Feb. 2, 1960	20.54	Jan. 4, 1961	21.81	24	21.49
July 31	19.55	Mar. 2	20.65	Feb. 2	21.63	Nov. 22	21.19
Sept. 10	19.86	Apr. 5	20.38	Mar. 6	21.68	Dec. 22	21.23

Dawson County

10-22-29aa. U. S. Geol. Survey. Drilled observation water-table well in gravel of Pleistocene age, diam 1 in, depth 12 ft, screened 10-12. Lsd 2,435.14 ft above msl. MP top of casing, 1.80 ft above lsd. Highest water level 1.52 below lsd, July 12, 1947; lowest 8.34 below lsd, Dec. 28, 1955. Records available: 1931-43, 1945-55, 1957-61. Oct. 15, 1957, 8.29; Dec. 3, 7.94; Sept. 25, 1958, 6.75; Dec. 9, 1959, 6.76; Nov. 3, 1960, 6.10; Oct. 4, 1961, 6.20.

Dundy County

1-40-29bb. U. S. Geol. Survey. Drilled observation water-table well in silt and clay, diam 8 in, depth 21 ft, casing perforated below water table. Lsd 3,207 ft above msl. MP top of casing, 1.60 ft above lsd. Highest water level 10.12 below lsd, Aug. 22-23, 1950; lowest 14.19 below lsd, Sept. 15, 1955. Records available: 1946-61.

## Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	13.85	13.73	13.63	13.54	13.41	12.96	12.57	12.72	14.06	13.79	13.59	13.43
10	13.83	13.72	13.61	13.53	13.39	12.81	12.55	13.10	13.95	13.77	13.57	13.41
15	13.82	13.70	13.59	13.52	13.37	12.74	12.61	13.52	13.88	13.73	13.53	13.39
20	13.78	13.68	13.58	13.48	13.31	12.70	12.66	13.89	13.85	13.70	13.51	13.37
25	13.77	13.66	13.56	13.47	13.26	12.67	12.65	13.80	13.82	13.67	13.48	13.35
Eom	13.75	13.65	13.56	13.43	13.20	12.61	12.66	14.00	13.80	13.62	13.46	13.34

## 1958

5	13.33	13.26	13.19	13.12	13.04	12.97	12.85	12.73	12.67	12.70	12.73	12.72
10	13.34	13.25	13.18	13.11	13.03	12.96	12.85	12.73	12.70	12.73	12.73	12.73
15	13.33	13.23	13.17	13.10	13.01	12.97	12.86	12.75	12.70	12.73	12.72	12.74
20	13.31	13.23	13.16	13.08	13.00	12.97	12.88	12.70	12.68	12.72	12.74	12.73
25	13.28	13.21	13.14	13.07	12.98	12.92	12.81	12.67	12.70	12.75	12.73	12.72
Eom	13.27	13.20	13.13	13.06	12.96	12.86	12.74	12.65	12.71	12.75	12.74	12.73

## 1959

5	12.72	12.68	12.65	12.62	12.56	12.54	12.94	13.09	13.49	13.64	13.50	13.38
10	12.72	12.68	12.64	12.61	12.55	12.54	12.99	13.19	13.64	13.60	13.48	13.35
15	12.72	12.67	12.65	12.59	12.56	12.64	13.03	13.18	13.68	13.59	13.45	13.34
20	12.71	12.66	12.64	12.58	12.55	12.72	13.04	13.24	13.69	13.56	13.43	13.33
25	12.71	12.66	12.63	12.57	12.55	12.75	13.01	13.30	13.69	13.55	13.40	13.32
Eom	12.70	12.65	12.63	12.56	12.54	12.91	13.04	13.36	13.68	13.53	13.39	13.31

1-40-29bb--Continued.

1960												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	13.29	13.18	13.08	12.72	12.58	12.60	12.75	13.05	13.39	13.50	13.44	13.31
10	13.26	13.15	13.05	12.68	12.57	12.61	12.76	13.15	13.42	13.51	13.42	13.30
15	13.25	13.15	13.02	12.65	12.57	12.61	12.80	13.20	13.44	13.52	13.39	13.28
20	13.24	13.13	12.98	12.62	12.57	12.64	12.85	13.26	13.46	13.51	13.37	13.27
25	13.23	13.12	12.86	12.60	12.56	12.66	12.91	13.30	13.47	13.49	13.35	13.26
Eom	13.20	13.10	12.77	12.59	12.58	12.71	13.00	13.35	13.49	13.46	13.34	13.25
1961												
5	13.24	13.15	13.09	13.04	12.99	12.98	13.23	13.53	13.71	13.75	13.68	13.55
10	13.22	13.14	13.08	13.03	12.99	12.98	13.28	13.57	13.73	13.75	13.64	13.53
15	13.20	13.13	13.07	13.03	12.98	13.02	13.31	13.59	13.75	13.75	13.62	13.52
20	13.20	13.12	13.06	13.00	12.98	13.04	13.36	13.61	13.77	13.74	13.60	13.50
25	13.19	13.10	13.05	13.00	12.97	13.09	13.41	13.63	13.77	13.73	13.58	13.49
Eom	13.16	13.10	13.05	13.00	12.97	13.15	13.48	13.68	13.76	13.70	13.55	13.46

Fillmore County

5-4-12bc. U. S. Geol. Survey. Drilled observation water-table well in sand and gravel of Pleistocene age, diam 8 in, depth 100 ft, perforated 80-100. MP top of casing, at lsd. Highest water level 73.13 below lsd, June 15, 1957; lowest 77.15 below lsd, Sept. 27, 1961. Records available: 1956-61.

Lowest water level for the day, from recorder graph, 1957												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	73.43	73.34	73.31	73.27	73.24	73.18	73.17	73.85	74.37	74.36	74.28	74.13
10	73.50	73.39	73.34	73.36	73.23	73.20	73.19	73.97	74.37	74.36	74.25	74.29
15	73.43	73.38	73.35	73.23	73.29	73.13	73.27	74.10	74.38	74.33	74.27	74.18
20	73.36	73.33	73.27	73.31	73.22	73.18	73.48	74.20	74.37	74.32	74.25	74.13
25	73.40	73.37	73.29	73.31	73.27	73.19	73.62	74.30	74.37	74.33	74.18	74.18
Eom	73.33	73.33	73.25	73.23	73.24	73.17	73.75	74.32	74.35	74.24	74.20	74.16
1958												
5	74.10	74.08	74.08	74.09	73.99	74.00	74.04	74.19	74.68	74.58	.....	74.50
10	74.10	74.07	74.06	74.04	73.97	74.01	74.17	74.30	74.78	74.60	.....	74.44
15	74.10	74.08	74.04	74.02	73.99	73.95	74.11	74.45	74.68	74.48	.....	74.40
20	74.08	74.02	74.05	74.01	74.00	73.98	74.11	74.50	74.66	.....	74.52	74.42
25	74.08	73.98	74.02	74.04	73.95	74.00	74.10	74.55	74.58	.....	74.55	74.35
Eom	74.13	74.10	73.99	73.98	73.98	73.93	74.12	74.60	74.64	.....	74.49	74.34
1959												
5	74.35	74.32	74.19	74.27	74.24	74.12	74.14	74.74	.....	.....	.....	75.70
10	74.30	74.37	74.23	74.20	74.19	74.12	74.13	74.84	.....	.....	75.83	75.62
15	74.36	74.24	74.28	74.15	74.16	74.10	74.16	.....	.....	.....	75.76	75.65
20	74.33	.....	74.28	74.21	74.27	74.18	74.27	.....	.....	.....	75.73	75.65
25	74.33	74.18	74.20	74.21	74.13	74.12	74.42	.....	.....	.....	75.80	75.57
Eom	74.33	74.23	74.26	74.16	74.17	74.14	74.69	.....	h75.79	.....	75.71	75.58
1960												
5	75.65	75.52	75.51	75.45	75.35	75.31	75.17	75.57	76.10	76.33	76.25	76.11
10	75.62	75.56	75.51	75.40	75.33	75.24	75.13	75.62	76.19	76.30	76.18	75.98
15	75.64	75.50	75.45	75.38	75.33	75.18	75.18	75.72	76.28	76.33	76.16	76.04
20	75.58	75.50	75.49	75.43	75.29	75.17	75.19	75.83	76.30	76.25	76.13	76.05
25	75.58	75.53	75.44	75.42	75.28	75.19	75.34	75.97	76.35	76.24	76.05	75.98
Eom	75.54	75.55	75.38	75.41	75.21	75.20	75.50	76.02	76.35	76.18	76.11	75.92
1961												
5	75.87	75.79	75.69	75.62	75.49	75.40	75.42	76.14	76.84	77.05	77.04	76.79
10	75.88	75.74	75.65	75.55	75.46	75.38	75.41	76.31	76.93	77.04	76.89	76.83
15	75.84	75.75	75.64	75.62	75.54	75.42	75.46	76.38	77.01	77.05	76.85	76.79
20	75.88	75.71	75.62	75.60	75.47	75.35	75.65	76.49	77.03	77.00	76.86	76.74
25	75.85	75.67	75.55	75.55	75.47	75.35	75.83	76.59	77.09	77.07	76.82	76.71
Eom	75.78	75.67	75.58	75.54	75.42	75.35	75.99	76.71	77.13	76.96	76.79	76.76

h Tape measurement.

8-2-26ad1. U. S. Geol. Survey. Near Exeter. Drilled observation water-table well in Peorian Loess of Pleistocene age, diam 8 in, depth 40 ft, perforated 25-40. MP top of casing, at lsd. Highest water level 15.77 below lsd, June 22, 1960; lowest 24.16 below lsd, July 10, 1958. Records available: 1956-61.

8-2-26ad1--Continued.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	23.86	23.90	24.00	23.55	23.97	23.69	22.34	23.56	23.95	24.12	23.85	23.61
10	23.94	23.95	23.93	23.66	23.95	23.81	22.66	23.65	23.93	24.15	23.82	23.77
15	23.89	23.98	24.11	23.71	23.61	23.96	22.86	23.85	23.89	23.97	23.72	23.68
20	23.78	23.97	24.06	23.83	22.98	22.75	23.10	23.83	23.95	24.01	23.77	23.64
25	23.93	23.96	24.06	23.84	23.47	22.20	23.20	23.88	23.98	23.98	23.69	23.66
Eom	23.82	23.98	23.85	23.89	23.59	21.74	23.38	23.92	24.04	23.81	23.72	23.75

1958

5	23.74	23.80	23.83	.....	.....	.....	24.08	22.79	23.10	22.46	22.40	22.46
10	23.72	23.85	23.90	.....	.....	.....	24.16	22.91	22.41	22.56	22.36	22.39
15	23.74	23.87	23.90	.....	.....	.....	23.86	23.07	22.43	22.50	22.25	22.34
20	23.73	23.85	23.95	.....	.....	23.80	23.12	23.13	.....	22.45	22.46	22.43
25	23.70	23.78	23.36	.....	.....	23.87	22.66	23.05	.....	22.55	22.45	22.38
Eom	23.79	23.75	23.06	.....	.....	23.97	22.60	23.12	22.49	22.40	22.42	22.42

1959

5	22.50	22.65	22.63	22.25	21.94	.....	20.58	20.04	21.00	21.18	21.31	21.23
10	22.47	22.75	22.45	22.36	22.37	.....	20.79	20.28	21.42	21.22	21.17	21.09
15	22.58	22.74	22.57	22.28	22.28	.....	18.88	20.51	21.41	21.08	21.05	21.19
20	22.55	22.77	22.49	22.35	22.65	.....	19.10	20.58	21.77	21.13	21.00	21.22
25	22.58	22.66	22.35	22.13	.....	20.65	19.59	20.80	21.27	21.06	21.08	21.10
Eom	22.72	22.57	22.13	22.15	.....	20.89	20.11	21.00	21.42	21.25	21.09	21.24

1960

5	21.37	21.38	.....	.....	18.57	18.73	17.64	17.89	19.18	19.60	19.63	.....
10	21.34	20.63	.....	17.88	18.58	18.63	17.50	18.16	19.56	19.75	19.59	.....
15	21.42	20.63	.....	18.08	18.62	18.99	17.15	18.37	19.64	19.58	19.29	19.70
20	21.42	20.07	.....	18.20	18.07	16.62	17.18	18.36	19.55	19.40	19.52	19.95
25	21.33	.....	20.95	18.60	17.87	16.65	17.55	18.86	19.60	19.25	19.26	19.73
Eom	.....	.....	15.87	18.84	18.14	17.25	17.57	18.90	19.62	19.13	19.85	19.68

1961

5	.....	.....	18.60	18.39	17.54	17.13	18.29	18.59	18.81	18.21	18.47	17.99
10	.....	.....	18.56	18.26	17.67	17.27	18.39	18.65	18.84	18.15	17.95	18.19
15	.....	.....	18.45	17.48	17.85	17.68	18.45	18.62	18.74	18.43	18.06	18.24
20	.....	.....	18.68	17.62	17.81	17.51	18.54	18.63	18.46	18.28	18.15	18.12
25	.....	.....	18.45	17.62	17.12	17.73	18.65	18.49	18.38	18.50	17.72	17.95
Eom	.....	.....	18.15	17.77	17.09	17.95	18.70	18.70	18.40	18.28	17.80	18.35

e Estimated.

Furnas County

4-22-29ad. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diam 1½ in, depth 23 ft, screened 21-23. Lsd 2, 134 ft above msl. MP top of casing, 1.00 ft above lsd. Highest water level 5.60 below lsd, Aug. 26, 1958; lowest 17.60 below lsd, Aug. 13, 1946. Records available: 1946-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 13, 1957	g13.19	Aug. 26, 1958	g5.60	Apr. 12, 1960	g10.10	Mar. 3, 1961	g11.7
May 6	g13.30	Jan. 14, 1959	g11.10	May 25	g10.40	Apr. 28	g12.2
July 10	g11.62	May 25	g12.00	June 28	g7.00	June 20	g9.4
Oct. 30	g10.50	Sept. 15	g8.90	Sept. 12	g7.60	Aug. 3	g7.8
Jan. 22, 1958	g11.16	Oct. 15	9.77	Oct. 24	9.73	Sept. 18	8.85
Apr. 14	g9.54	22	g10.00	Jan. 16, 1961	g11.8	Oct. 3	g9.3
June 27	g10.60						

g Measurement made by U. S. Bureau of Reclamation, McCook, Nebraska.

Garden County

20-44-5db. Crescent Lake Migratory Bird Refuge. Drilled observation water-table well in fine sand, diam 1½ in, depth 20 ft, screened 18-20. Lsd 3, 798.19 ft above msl. MP top of casing, 2.50 ft above lsd. Highest water level 4.30 below lsd, Oct. 21, 1934; lowest 8.70 below lsd, Apr. 11, 1941. Records available: 1934-61. Measurements made by Crescent Lake National Wildlife Refuge.

Apr. 1, 1957	7.60	July 14, 1958	6.60	July 9, 1959	5.40	Oct. 24, 1960	7.30
June 28	7.00	Oct. 22	6.70	Oct. 14	7.10	Mar. 16, 1961	7.30
Sept. 27	7.30	Jan. 20, 1959	6.70	Apr. 6, 1960	6.80	July 3	6.90
Jan. 3, 1958	7.40	Mar. 31	6.50	June 28	6.80	Sept. 22	7.30
Apr. 21	6.90						

Garfield County

21-16-14cb. Frank Smolik. Burwell. Drilled irrigation water-table well in gravel of Pleistocene age, diam 18 in, depth 154 ft, casing perforated below water table. MP hole in turbine base, 2.00 ft above lsd. Highest water level 23.54 below lsd, Oct. 15, 1958; lowest 24.92 below lsd, Oct. 28, 1959. Records available: 1950-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 22, 1957	23.75	May 6, 1958	23.57	Oct. 15, 1958	23.54	Nov. 17, 1960	23.81
Feb. 25, 1958	24.28	June 17	23.68	Oct. 28, 1959	24.92	Oct. 6, 1961	23.92

Gosper County

7-21-6bc. Andy Larson Estate. Holdrege. Drilled unused water-table well in Ogallala Formation of Pliocene age, diam 4 in, depth 132 ft, casing perforated below water table. Lsd 2,466.95 ft above msl. MP top of casing, 0.40 ft above lsd. Highest water level 76.67 below lsd, Sept. 22, 1961; lowest 117.80 below lsd, Sept. 26, 1935. Records available: 1934-40, 1948-61. Dec. 2, 1957, 86.06; Sept. 24, 1958, 84.92; Oct. 12, 1959, 80.95; Oct. 21, 1960, 78.32; Sept. 22, 1961, 76.67.

Grant County

24-36-30bb. U. S. Geol. Survey. Drilled observation water-table well in fine sand, diam 1 in, depth 15 ft, screened 13-15. MP top of casing, 1.20 ft above lsd. Highest water level 3.59 below lsd, June 8, 1935; lowest 6.62 below lsd, July 22, 1940. Records available: 1934-42, 1946-55, 1957-61. Oct. 19, 1957, 4.49; Sept. 4, 1958, 4.45; Oct. 2, 4.59; Oct. 9, 1959, 4.85; Oct. 13, 1960, 4.82; Oct. 9, 1961, 4.69.

Hall County

11-11-25cc. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diam 8 in, depth 37 ft, casing perforated below water table. Lsd 1,922.4 ft above msl. MP top of casing, 1.60 ft above lsd. Highest water level 12.18 below lsd, June 25, 1949; lowest 23.99 below lsd, Aug. 15, 1957. Records available: 1946-61.

## Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	22.40	22.41	22.41	22.42	22.33	22.10	21.67	23.38	22.68	22.09	21.91	21.84
10	22.40	22.41	22.40	22.42	22.32	22.07	21.61	23.82	22.53	22.04	21.90	21.84
15	22.40	22.41	22.40	22.42	22.29	22.03	21.57	23.99	22.42	22.01	21.87	21.83
20	22.40	22.41	22.40	22.42	22.25	21.94	21.52	23.35	22.32	21.98	21.87	21.82
25	22.40	22.41	22.40	22.38	22.22	21.80	22.28	23.02	22.24	21.97	21.86	21.83
Eom	22.41	22.41	22.41	22.35	22.15	21.74	22.97	22.88	22.13	21.92	21.85	21.82

1958

5	21.82	21.83	21.83	21.65	21.44	21.24	21.10	.....	20.54	20.41	20.34	20.32
10	21.82	21.83	21.82	21.61	21.40	21.20	21.07	.....	20.54	20.41	20.33	20.29
15	21.81	21.82	21.82	21.57	21.38	21.20	20.98	21.57	20.51	20.39	20.30	.....
20	21.84	21.82	21.82	21.52	21.35	21.16	.....	21.58	20.48	20.35	20.28	20.32
25	21.83	21.81	21.81	21.50	21.33	21.14	.....	20.96	20.47	20.38	20.30	20.32
Eom	21.83	21.82	21.75	21.46	21.29	21.11	.....	20.61	20.44	20.32	20.28	20.31

1959

5	20.33	.....	20.27	20.15	20.09	19.84	19.59	21.40	21.07	21.15	21.11	21.09
10	20.34	.....	20.27	20.16	20.06	19.80	19.56	21.30	21.21	21.13	21.11	21.09
15	20.35	.....	20.25	20.13	20.04	19.74	19.55	21.48	21.22	21.12	21.11	21.08
20	20.37	.....	20.26	20.13	19.97	19.70	19.64	21.05	21.20	21.12	21.10	21.09
25	.....	.....	20.23	20.12	19.95	19.65	20.54	21.54	21.18	21.10	21.08	21.08
Eom	.....	20.27	20.21	20.10	19.89	19.62	21.26	21.32	21.17	21.11	21.10	21.07

1960

5	21.09	.....	.....	19.63	20.08	19.68	19.05	19.70	19.80	19.85	19.77	.....
10	21.08	.....	.....	20.14	19.62	19.63	18.95	19.60	19.79	19.84	19.77	.....
15	21.07	.....	.....	20.24	19.84	19.56	18.89	20.06	19.82	19.82	19.76	.....
20	21.07	.....	.....	20.22	19.86	19.44	18.85	20.10	19.85	19.82	19.78	.....
25	.....	.....	21.01	20.15	19.82	19.31	19.30	19.97	19.86	19.79	19.79	.....
Eom	.....	.....	20.40	20.12	19.75	19.17	19.91	19.87	19.86	19.77	19.79	.....

1961

5	19.80	.....	19.78	19.76	19.75	18.47	18.20	18.40	19.26	19.20	19.11	19.08
10	19.80	.....	19.78	19.76	19.75	18.43	18.17	18.43	19.46	19.15	19.12	19.09
15	19.79	.....	19.78	19.75	19.74	18.37	18.14	18.47	19.44	19.15	19.10	19.09
20	19.79	.....	19.77	19.75	19.74	18.33	18.17	18.50	19.33	19.13	19.10	19.10
25	.....	.....	19.77	19.75	18.37	18.29	18.26	18.55	19.28	19.11	19.08	19.10
Eom	.....	.....	18.76	19.76	18.50	18.25	18.33	18.81	19.23	19.10	19.10	19.11

Hamilton County

10-6-26bc. U. S. Geol. Survey. Drilled observation water-table well in sand and gravel of Pleistocene age, diam 8 in, depth 130 ft, casing perforated below water table. Lsd 1,790.5 ft above msl. MP top of casing, 1.50 ft above lsd. Highest water level 84.90 below lsd, June 20, 1956; lowest 91.25 below lsd, Aug. 15, 1957. Records available: 1956-61.

## Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	87.80	87.58	87.48	87.42	87.33	87.20	87.12	90.00	90.72	89.76	89.32	.....
10	87.82	87.58	87.47	87.47	87.27	87.20	87.09	90.98	90.32	89.67	89.25	.....
15	87.75	87.56	87.50	87.37	87.35	87.15	87.36	91.25	90.20	89.61	89.25	88.95
20	87.67	87.55	87.41	87.43	87.29	87.14	88.44	90.85	90.00	89.53	89.16	88.87
25	87.68	87.55	87.44	87.40	87.32	87.15	88.96	90.73	90.00	89.48	.....	88.86
Eom	87.61	87.49	87.41	87.33	87.28	87.15	89.80	90.70	89.85	89.37	.....	88.81

## 1958

5	88.72	88.52	88.38	88.28	88.05	87.95	87.81	87.69	90.06	89.07	.....	88.53
10	88.72	88.47	88.35	88.19	88.02	87.88	87.84	87.94	89.79	89.00	.....	88.49
15	88.66	.....	88.30	88.16	88.02	87.84	87.75	88.95	89.58	88.88	88.65	88.38
20	88.65	.....	88.29	88.15	.....	87.88	87.72	89.54	89.47	88.85	88.68	88.36
25	88.63	88.35	88.25	88.15	.....	87.88	87.68	89.67	89.34	88.77	88.64	88.28
Eom	88.62	88.50	88.20	88.07	.....	87.83	87.67	90.13	89.21	88.65	88.53	88.34

## 1959

5	88.13	.....	87.88	86.80	87.65	87.48	87.39	88.67	89.01	89.13	88.72	88.30
10	88.14	.....	87.86	87.71	87.65	87.47	87.33	88.55	90.16	89.14	88.64	88.26
15	88.16	88.00	87.89	87.67	87.59	87.41	87.23	88.85	89.85	88.97	.....	88.28
20	88.11	87.95	87.85	87.72	87.63	87.40	87.36	88.68	89.59	88.88	88.47	88.22
25	88.10	87.92	87.78	87.70	87.51	87.40	87.82	88.57	89.37	88.84	88.48	88.24
Eom	88.06	87.89	87.78	87.63	87.55	87.39	88.69	89.03	89.25	88.71	88.37	.....

## 1960

5	88.01	87.92	87.74	.....	.....	.....	87.10	89.70	89.45	88.81	88.43	88.20
10	88.10	87.92	87.74	.....	.....	.....	87.03	89.63	89.29	88.70	88.35	88.05
15	88.09	87.84	87.68	.....	.....	.....	87.39	90.05	89.19	88.66	88.33	88.06
20	88.00	87.80	87.69	.....	.....	.....	88.00	89.91	89.06	88.53	88.25	88.05
25	87.98	87.79	87.65	.....	.....	.....	88.82	89.97	88.98	.....	88.16	87.98
Eom	87.92	87.79	.....	.....	.....	87.15	89.11	89.64	88.88	.....	88.18	87.89

## 1961

5	87.86	87.59	87.44	87.30	87.12	86.95	86.84	88.80	89.65	89.06	88.75	88.45
10	87.82	87.54	87.40	87.22	87.06	86.97	86.80	88.67	89.60	89.01	88.62	88.39
15	87.76	87.56	87.37	87.27	87.14	86.98	87.15	88.86	89.48	88.91	88.60	88.38
20	87.78	87.50	87.33	87.25	87.08	86.91	87.90	88.97	89.33	88.85	88.55	88.32
25	87.65	87.49	87.28	87.18	87.09	86.90	88.41	89.15	89.24	88.85	88.50	88.28
Eom	87.60	87.44	87.27	87.16	87.16	86.86	88.90	89.34	89.21	88.72	88.45	88.30

11-6-13cb1. O. S. Swedberg. Aurora. Drilled irrigation water-table well in sand and gravel of Pleistocene age, diam 24 in, depth 194 ft, casing perforated below water table. Lsd 1,812.2 ft above msl. MP hole in south side turbine base, at lsd (previously reported end of discharge pipe). Highest water level 90.30 below lsd, Jan. 24, 1935; lowest 105.98 below lsd, Dec. 3, 1956. Records available: 1934-42, 1944, 1946-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7, 1957	101.38	Dec. 20, 1957	100.34	Sept. 19, 1958	102.11	Nov. 9, 1960	101.37
Mar. 12	98.63	June 16, 1958	98.82	Nov. 19, 1959	102.10	Nov. 22, 1961	102.17
Oct. 29	101.13						

Harlan County

2-19-28dd. U. S. Geol. Survey. Drilled observation water-table well in sand and gravel of Pleistocene age, diam 1 in, depth 22 ft, screened 20-22. MP top of casing, 1.20 ft above lsd. Highest water level 6.59 below lsd, June 11, 1949; lowest 12.14 below lsd, Sept. 13, 1955. Records available: 1940-41, 1946-61.

Feb. 14, 1957	g10.50	July 1, 1958	g9.10	Oct. 27, 1959	g11.20	Mar. 17, 1961	g10.6
May 2	g10.27	Sept. 25	g10.30	July 12, 1960	g8.00	May 8	g10.5
July 12	g7.05	Jan. 14, 1959	g9.80	Sept. 19	g10.50	Aug. 9	g10.6
Oct. 31	g8.88	Apr. 7	g9.30	Oct. 24	11.44	Sept. 19	11.09
Feb. 4, 1958	g9.97	Sept. 16	g11.10	Nov. 29	g11.30	Oct. 4	g11.0
Apr. 16	g7.26	Oct. 15	11.18	Jan. 18, 1961	g10.5		

g Measurement made by U. S. Bureau of Reclamation, McCook, Nebraska.

Hitchcock County

3-32-11bb. U. S. Geol. Survey. Drilled observation water-table well in silt and fine sand of Pleistocene age, diam 1½ in, depth 18 ft, screened 16-18. MP top of casing, 1.00 ft above lsd. Highest water level 12.65 below lsd, Feb. 8, 1949; lowest 14.88 below lsd, Nov. 10, 1955. Records available: 1946-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 23, 1957	g13.94	May 7, 1958	g13.88	June 15, 1959	g14.20	Mar. 16, 1961	g14.00
Apr. 18	g13.88	June 27	g13.94	July 25	g14.36	May 16	g14.10
May 15	g14.01	July 28	g13.65	Sept. 14	g14.46	June 14	g14.02
June 25	g13.99	Sept. 22	g14.54	Aug. 27, 1960	g14.03	July 14	g13.92
July 16	g13.90	Nov. 25	g14.06	Oct. 22	14.10	Sept. 19	g14.13
Sept. 16	g14.65	Jan. 9, 1959	g13.86	Nov. 15	g14.08	20	14.32
Nov. 7	g14.15	Mar. 17	g13.80	Jan. 11, 1961	g14.05	Nov. 2	g14.13
Jan. 21, 1958	g14.25	May 20	g13.71				

g Measurement made by U. S. Bureau of Reclamation, McCook, Nebraska.

Holt County

27-9-34da. U. S. Geol. Survey. Drilled observation water-table well in sand and gravel of Pleistocene age, diam 1 in, depth 17 ft, screened 15-17. MP top of casing, 1.10 ft above lsd. Highest water level 2.67 below lsd, Apr. 5, 1960; lowest 9.90 below lsd, Sept. 1, 1948. Records available: 1934-61.

Feb. 14, 1957	7.62	Jan. 22, 1958	7.44	Feb. 12, 1959	7.36	July 11, 1960	6.26
Mar. 13	7.90	Feb. 4	7.34	Mar. 6	7.25	20	7.00
Apr. 17	7.19	18	7.33	12	7.28	Aug. 2	7.79
May 23	5.73	Mar. 4	7.20	Apr. 1	6.34	16	8.22
June 12	6.80	19	7.28	9	6.95	Oct. 12	8.41
18	5.59	Apr. 2	6.07	23	6.48	Nov. 9	8.19
July 2	6.99	May 28	7.28	May 15	6.51	22	7.92
12	7.62	June 25	7.70	21	6.13	Dec. 6	8.00
16	7.74	26	7.79	June 4	5.97	8	7.99
26	7.99	July 8	7.73	18	6.81	Jan. 18, 1961	7.25
Aug. 6	8.06	24	7.56	July 2	6.47	Feb. 16	7.40
Sept. 4	8.52	Aug. 28	7.90	9	7.18	Apr. 5	7.13
12	8.35	Sept. 8	6.94	16	6.44	May 17	7.35
18	7.37	24	6.42	Sept. 24	8.01	June 3	6.70
Oct. 2	8.29	Oct. 10	8.26	Dec. 22	7.05	14	7.42
16	7.79	23	8.22	Jan. 19, 1960	6.62	July 12	7.89
30	7.80	28	8.19	Feb. 3	6.74	25	7.99
Nov. 14	7.77	Nov. 6	8.14	Mar. 2	6.43	Aug. 10	8.19
21	7.68	20	8.08	Apr. 5	2.67	Sept. 27	8.27
27	7.65	Dec. 4	7.78	13	4.18	28	8.06
Dec. 16	7.67	18	7.70	26	5.40	Oct. 19	7.88
23	5.93	31	7.67	June 8	6.43	Nov. 1	8.13
Jan. 6, 1958	7.54	Jan. 31, 1959	7.41	21	5.55	Dec. 14	7.77

29-11-21bbb. Murphy. Drilled stock water-table well in sand of Pleistocene age, diam 5 in, depth 55 ft, casing perforated below water table. Lsd 2,001.06 ft above msl. MP top of casing, 1.20 ft above lsd. Highest water level 16.87 below lsd, Jan. 14, 1948; lowest 26.43 below lsd, July 9, 1959. Records available: 1947-53, 1955-61.

Sept. 12, 1957	24.75	Oct. 28, 1958	25.62	Apr. 13, 1960	25.69	June 14, 1961	23.91
Nov. 21	24.94	July 9, 1959	26.43	July 12	23.81	Sept. 28	24.46
June 26, 1958	25.50	Sept. 23	25.69	Dec. 6	23.47		

30-13-27cc. John Tenborg. Drilled unused water-table well in sand of Pleistocene age, diam 6 in, depth 67 ft, casing perforated below water table. Lsd 2,064.64 ft above msl. MP top of casing, 1.20 ft above lsd. Highest water level 18.29 below lsd, July 23, 1953; lowest 30.80 below lsd, Oct. 13, 1948. Records available: 1947-61.

Feb. 14, 1957	25.92	June 26, 1958	27.78	Sept. 23, 1959	28.78	Dec. 6, 1960	25.58
Sept. 12	26.60	Oct. 28	27.82	Apr. 13, 1960	28.63	Sept. 28, 1961	26.15
Nov. 21	28.61	July 9, 1959	28.74				

Howard County

15-9-9aa1. Wilber Edwards. Cushing. Drilled unused water-table well in sand of Pleistocene age, diam 18 in, depth 90 ft, casing perforated below water table. Lsd 1,780.23 ft above msl. MP top of casing, at lsd (since Dec. 11, 1957). Highest water level 30.94 below lsd, Sept. 11, Oct. 23, 1951; lowest 35.65 below lsd, Sept. 5, 1957. Records available: 1948-61.

15-9-9aa1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 21, 1957	35.48	May 7, 1958	33.75	Aug. 6, 1959	33.80	Nov. 23, 1960	31.32
Sept. 5	35.65	June 25	33.57	Sept. 16	32.95	Oct. 25, 1961	32.82
Dec. 11	34.34						

16-11-19cb1. Ray Parker. Cotesfield. Drilled irrigation water-table well in sand of Pleistocene age, diam 18 in, depth 96 ft, casing perforated below water table. Lsd 1,904.72 ft above msl. MP hole in turbine base, 1.00 ft above lsd (since Sept. 5, 1957). Highest water level 40.56 below lsd, May 31-June 1, 1951; lowest 50.53 below lsd, Sept. 4, 1953. Records available: 1950-55, 1957-60. Measurement discontinued; well destroyed.

Mar. 21, 1957	46.30	Nov. 22, 1957	44.24	June 25, 1958	43.11	Oct. 27, 1959	45.81
Sept. 5	47.63	May 7, 1958	43.50	Oct. 21	41.42	Nov. 23, 1960	42.89

Kearney County

5-15-3ba. Ed Downs. Drilled unused water-table well in sand and gravel of Pleistocene age, diam 6 in, depth 122 ft, cased with galvanized iron. Lsd 2,192.73 ft above msl. MP top of casing, at lsd. Highest water level 96.69 below lsd, June 21, 1961; lowest 108.15 below lsd, Aug. 8, 1947. Records available: 1947-61. Dec. 5, 1956, 101.62; Nov. 8, 1957, 100.92; Sept. 18, 1958, 100.01; Oct. 12, 1959, 99.88; Dec. 8, 99.31; Oct. 25, 1960, 98.93. Recording gage reinstalled Mar. 17, 1961.

Lowest water level for the day, from recorder graph, 1961

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	.....	.....	.....	97.73	97.12	97.03	98.25	.....	.....	98.07	98.20	97.45
10	.....	.....	.....	97.45	97.35	97.08	99.07	.....	.....	97.98	97.39	97.53
15	.....	.....	.....	97.83	97.55	97.41	99.34	.....	.....	98.18	97.49	97.47
20	.....	.....	97.88	97.55	97.35	97.05	100.18	.....	.....	97.90	97.51	97.35
25	.....	.....	97.45	97.49	97.36	97.03	99.98	.....	98.52	98.17	97.42	97.00
Eom	.....	.....	97.58	97.40	97.10	97.44	100.00	.....	98.32	97.86	97.25	97.35

6-15-1cb. Roy Youngson. Minden. Drilled irrigation water-table well in gravel, diam 18 in, depth 176 ft, casing perforated below water table. Lsd 2,171.80 ft above msl. MP hole in turbine base, 1.00 ft above lsd. Highest water level 56.00 below lsd, Sept. 23, 1961; lowest 71.36 below lsd, June 29, 1948. Records available: 1948-61. Nov. 8, 1957, 61.78; Sept. 18, 1958, 60.94; Oct. 12, 1959, 59.20; Oct. 24, 1960, 57.64; Sept. 23, 1961, 56.00.

Kimball County

15-55-17cc. Kimball Irrigation District. Kimball. Drilled unused water-table well in gravel, diam 4 in, depth 114 ft, casing perforated below water table. Lsd 4,740.40 ft above msl. MP top of casing, 0.84 ft above lsd. Highest water level 92.18 below lsd, Jan. 2, 1936; lowest 97.10 below lsd, Oct. 11, 1956. Records available: 1935-42, 1950-61. Oct. 17, 1957, 96.94; Oct. 1, 1958, 96.33; Oct. 13, 1959, 96.54; Oct. 9, 1960, 96.84; Oct. 6, 1961, 96.15.

Lancaster County

A8-6-34dd. U.S. Geol. Survey. Drilled observation water-table well in sand, diam 8 in, depth 53 ft, casing perforated below water table. MP top of casing, 1.00 ft above lsd. Highest water level 3.41 below lsd, Apr. 5, 1960; lowest 8.90 below lsd, July 31, 1954. Records available: 1954-61.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	....	6.56	6.44	5.62	5.79	6.39	....	6.54	6.86	6.30	5.93	6.06
10	....	6.52	6.45	5.64	5.66	6.41	6.35	6.59	6.41	6.27	5.99	6.13
15	6.14	6.50	6.54	5.68	5.54	6.43	6.41	6.62	6.59	6.06	5.89	5.99
20	6.53	6.53	6.46	5.72	5.45	6.35	6.50	6.61	6.55	6.00	6.47	5.95
25	6.56	6.39	6.25	5.69	....	....	6.46	6.81	6.48	6.07	6.31	5.97
Eom	6.54	6.52	5.91	5.74	6.42	....	6.06	6.71	6.40	5.95	6.17	5.99

1958

5	5.96	5.85	5.17	5.13	5.18	5.70	5.79	5.98	6.24	6.13	6.31	5.99
10	5.92	6.05	5.10	5.28	5.20	5.54	5.74	5.97	6.15	6.41	6.30	6.03
15	5.96	6.21	5.06	5.28	5.18	5.60	6.15	6.04	6.13	6.38	6.25	6.01
20	5.94	6.04	5.12	5.32	5.35	5.70	5.95	6.08	6.10	6.32	6.16	5.97
25	5.85	5.77	5.15	5.43	5.33	5.84	5.82	6.20	6.10	6.39	6.05	5.92
Eom	5.87	5.06	5.19	....	5.26	5.80	5.91	6.31	6.18	6.36	5.87	5.90

## A8-6-34dd--Continued.

1959												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	5.81	5.92	6.33	6.35	5.70	6.20	6.34	6.02	....	....	6.34	6.22
10	5.78	5.92	6.63	6.43	5.28	6.36	6.41	5.99	....	....	6.24	5.98
15	5.78	5.94	6.67	6.46	5.92	6.62	6.35	5.97	....	....	6.55	5.90
20	5.83	5.89	6.69	6.49	5.76	6.59	6.26	5.94	....	....	6.49	5.89
25	5.84	6.03	6.67	6.43	5.52	6.67	6.42	6.03	....	....	6.32	5.84
Eom	5.89	6.12	6.21	6.49	5.85	6.69	6.30	....	....	6.09	6.35	5.88
1960												
5	6.29	6.14	6.20	3.41	6.16	5.69	6.47	7.05	6.92	6.92	6.76	6.67
10	6.19	5.83	6.21	4.40	6.27	5.80	6.51	7.05	7.00	....	6.72	6.65
15	5.73	6.17	....	5.16	6.16	5.70	6.75	7.07	7.00	....	6.64	6.77
20	6.29	6.15	....	5.54	6.20	5.82	6.89	6.96	7.01	....	6.71	6.84
25	6.31	6.15	....	5.88	5.55	5.70	6.95	6.89	6.93	....	6.63	6.77
Eom	6.30	6.20	....	6.05	5.74	6.38	7.00	6.80	6.93	6.69	6.70	6.67
1961												
5	6.66	6.68	6.65	6.08	5.77	5.80	....	....	....	6.00	5.30	....
10	6.59	6.64	6.65	6.04	5.79	5.80	....	....	6.62	5.92	5.11	5.04
15	6.57	6.68	6.51	5.84	5.90	5.78	....	....	6.46	5.65	5.15	5.36
20	6.59	6.67	6.50	5.85	5.87	5.84	....	....	6.35	5.46	....	5.30
25	6.74	6.66	6.49	5.80	5.81	5.52	....	....	6.28	5.45	....	5.35
Eom	6.65	6.67	6.13	5.82	5.88	....	....	....	6.08	5.33	....	6.02

A8-7-18ddb. U. S. Geol. Survey. Drilled observation water-table well in sand and gravel, diam 8 in, depth 41 ft, perforated 36-41. MP top of casing, 2.00 ft above lsd. Highest water level 1.63 below lsd, Aug. 25, 1954; lowest 12.55 below lsd, June 20, 1956. Records available: 1954-61. Recording gage removed Apr. 30, 1958.

Lowest water level for the day, from recorder graph, 1957												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	11.14	11.33	11.47	....	9.25	7.50	4.76	9.12	10.28	11.16	9.40	8.35
10	11.24	11.35	11.35	7.35	9.05	8.04	5.75	9.50	10.16	11.20	9.62	8.92
15	11.23	11.40	11.57	....	6.12	6.42	6.64	9.92	10.44	8.64	9.51	8.90
20	11.15	11.43	11.51	8.34	5.52	5.09	7.48	10.30	10.64	6.54	9.59	8.96
25	11.31	11.32	11.06	8.60	5.74	5.47	7.86	10.20	10.85	8.71	9.23	9.06
Eom	11.19	11.41	9.53	8.92	6.79	6.42	8.62	10.28	10.99	9.03	8.41	9.36
1958												
5	9.34	8.80	3.32	3.84	....	....	....	....	....	....	....	....
10	9.17	8.95	3.01	4.04	....	....	....	....	....	....	....	....
15	9.14	9.14	2.84	4.29	....	....	....	....	....	....	....	....
20	9.03	9.14	3.09	4.58	....	....	....	....	....	....	....	....
25	8.85	8.95	3.36	4.14	....	....	....	....	....	....	....	....
Eom	8.81	3.11	3.72	4.30	....	....	....	....	....	....	....	....

e Estimated.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 9, 1958	4.75	Mar. 16, 1959	8.13	Apr. 5, 1960	2.18	Dec. 28, 1960	8.92
Nov. 10	8.44	Nov. 18	8.89	Aug. 4	7.20	Dec. 7, 1961	8.05

A8-7-20dda. U. S. Geol. Survey. Drilled observation water-table well in sand, diam 8 in, depth 33 ft, casing perforated below water table. MP top of casing, 1.00 ft above lsd. Highest water level 0.16 above lsd, Mar. 27, 1960; lowest 11.55 below lsd, Mar. 20, 1957. Records available: 1954-61.

Lowest water level for the day, from recorder graph, 1957												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	11.23	11.39	11.52	10.48	10.81	10.93	7.74	9.54	9.82	10.10	8.63	8.03
10	11.26	11.40	11.52	10.20	10.80	10.11	8.08	9.70	9.65	10.13	8.76	8.21
15	11.29	11.44	11.54	10.19	10.67	10.00	8.47	9.85	9.71	9.74	8.80	8.25
20	11.33	11.48	11.55	10.36	9.48	....	8.88	9.89	9.83	8.49	8.96	8.18
25	11.35	11.49	11.43	10.52	9.22	9.20	9.10	9.98	9.82	8.31	8.80	8.17
Eom	11.36	11.50	11.38	10.68	9.63	9.52	9.37	10.09	10.00	8.43	8.11	8.27
1958												
5	8.33	7.70	6.48	5.01	4.53	5.28	5.50	....	5.18	5.25	5.58	5.58
10	8.51	7.95	5.71	4.91	4.45	5.40	5.47	....	4.70	5.37	5.60	5.60
15	8.13	8.13	5.45	4.81	4.70	5.50	....	....	4.68	5.36	5.57	5.67
20	7.97	8.21	5.46	4.78	4.72	5.69	....	....	4.69	5.37	5.64	5.78
25	7.83	7.99	5.37	4.53	4.85	5.84	....	4.66	4.96	5.48	5.58	5.78
Eom	7.71	5.90	5.20	....	5.01	6.05	....	5.05	5.15	5.50	5.62	5.79



## A8-7-20dda--Continued.

1959

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	5.87	6.29	6.08	2.89	1.15	2.42	1.92	3.68	5.00	3.73	3.84	4.01
10	5.94	6.37	5.39	3.29	1.72	3.05	3.05	4.09	5.38	....	3.68	3.93
15	6.02	6.40	5.14	2.33	2.22	3.29	2.90	4.36	5.37	....	3.73	3.95
20	6.04	6.48	4.39	2.34	1.76	2.30	3.04	4.52	4.70	....	3.82	3.95
25	6.13	6.38	4.07	2.95	1.80	2.60	3.38	4.80	4.48	....	3.89	3.93
Eom	6.29	6.16	2.32	3.19	1.65	3.00	3.68	4.95	4.68	3.78	3.90	4.06

1960

5	4.09	2.80	2.39	1.56	2.10	3.31	3.15	3.91	....	....	3.70	3.93
10	4.07	1.55	2.68	2.02	2.60	3.09	3.86	3.34	....	....	3.74	3.79
15	3.43	2.21	2.05	1.90	2.82	2.47	2.73	3.84	....	....	3.70	3.90
20	3.54	2.31	2.10	2.05	2.41	2.65	2.85	3.51	....	....	3.78	3.98
25	....	2.42	1.60	2.59	2.25	2.48	....	....	....	....	3.66	4.02
Eom	....	2.29	(j)	1.75	2.90	2.95	....	....	....	2.93	3.91	3.95

1961

5	3.84	....	4.60	3.05	1.80	2.89	4.25	....	....	6.09	4.66	3.29
10	3.83	....	4.40	2.18	2.49	3.15	4.35	....	6.44	4.75	4.45	3.43
15	3.84	4.70	2.33	2.15	3.04	3.36	4.13	....	5.66	4.87	4.55	....
20	3.95	4.71	2.95	2.73	2.78	3.44	4.38	....	5.90	4.91	3.59	....
25	....	4.68	3.18	3.03	2.79	3.73	....	....	6.00	5.06	2.82	....
Eom	....	4.68	2.39	3.13	3.14	4.01	....	....	6.10	4.89	3.09	....

j Flooded.

A8-7-30cd. U. S. Geol. Survey. Drilled observation water-table well in sand, diam 8 in, depth 22 ft, casing perforated below water table. MP top of casing, 2.00 ft above lsd. Highest water level 5.78 below lsd, July 5-6, 1959; lowest 16.52 below lsd, Mar. 15, 1957. Records available: 1954-61. Recording gage removed Feb. 27, 1961.

## Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	16.33	16.42	16.50	15.31	15.15	14.31	13.38	13.57	14.06	14.56	13.60	13.42
10	....	16.43	16.44	15.01	15.14	14.28	13.27	13.61	14.09	14.71	13.70	13.54
15	....	16.44	16.52	14.95	15.13	14.34	13.23	13.81	14.18	14.26	13.74	13.44
20	16.37	16.48	16.51	15.02	14.84	14.01	13.28	13.82	14.25	13.45	13.87	13.45
25	....	16.45	16.51	15.03	14.56	13.50	13.32	13.91	14.35	13.50	13.73	....
Eom	16.37	16.49	16.21	15.09	14.37	13.47	13.43	14.07	14.44	13.40	13.71	....

1958

5	13.55	13.55	11.56	9.73	9.84	10.35	10.81	8.54	9.72	10.50	11.41	....
10	13.70	13.59	11.03	9.93	9.85	10.37	10.80	8.70	9.77	10.70	11.50	....
15	13.72	13.63	10.34	9.96	10.01	10.45	9.50	8.90	9.90	10.79	11.55	....
20	13.71	13.57	9.87	10.01	10.06	10.55	9.10	9.07	10.06	10.96	11.77	12.29
25	13.65	13.56	9.73	10.12	10.13	10.63	8.68	9.27	10.20	11.14	11.85	12.31
Eom	13.65	11.91	9.72	....	10.20	10.66	8.47	9.52	10.39	11.21	12.05	12.34

1959

5	....	....	12.83	10.76	9.28	....	5.83	7.94	9.63	10.80	11.62	12.15
10	....	....	12.69	10.65	....	....	6.21	8.27	9.98	....	11.70	12.15
15	....	....	12.50	10.49	....	....	6.60	8.57	10.19	....	11.67	12.28
20	....	....	12.29	10.60	....	....	6.91	8.81	10.49	....	11.78	12.36
25	....	12.89	12.03	10.38	....	6.50	7.26	9.09	10.50	....	11.94	12.36
Eom	....	12.86	10.92	10.23	....	6.87	7.75	9.40	10.77	11.43	11.99	12.50

1960

5	12.52	12.45	....	7.44	8.51	8.85	8.73	9.10	....	....	12.18	12.58
10	12.44	12.09	....	7.60	8.83	9.04	8.94	8.85	....	....	12.25	12.52
15	12.50	....	....	7.75	9.05	8.84	9.24	8.68	....	....	12.30	12.65
20	....	....	11.47	7.73	9.26	8.90	....	....	....	....	12.36	12.73
25	....	....	10.59	8.11	8.24	8.26	....	....	....	....	12.35	12.72
Eom	....	....	....	8.40	8.48	8.40	....	....	....	12.01	12.53	....

1961

5	12.79	13.03	....	....	....	....	....	....	....	....	....	....
10	12.85	13.05	....	....	....	....	....	....	....	....	....	....
15	12.89	13.11	....	....	....	....	....	....	....	....	....	....
20	12.97	13.12	....	....	....	....	....	....	....	....	....	....
25	13.01	13.12	....	....	....	....	....	....	....	....	....	....
Eom	13.00	13.18	....	....	....	....	....	....	....	....	....	....

A10-6-34ca. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diam 8 in, depth 36 ft, casing perforated below water table. MP top of casing, 2.00 ft above lsd. Highest water level 10.00 below lsd, July 15, 1952; lowest 18.53 below lsd, Feb. 20, 1957. Records available: 1951-61. Recording gage removed Nov. 1, 1957.

## A10-6-34ca--Continued.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	18.50	18.50	18.52	18.00	18.13	17.78	15.44	17.32	17.63	17.88	.....	.....
10	18.52	18.49	18.52	18.00	18.15	17.79	16.00	17.40	17.66	17.93	.....	.....
15	18.52	18.50	18.52	18.03	17.88	18.05	16.81	17.48	17.70	17.78	.....	.....
20	18.51	18.53	18.50	18.05	17.81	16.51	17.01	17.52	17.74	17.75	.....	.....
25	18.51	18.52	18.42	18.07	17.90	18.11	17.07	17.57	17.79	17.72	.....	.....
Eom	18.51	18.52	18.19	18.10	17.95	18.38	17.22	17.63	17.86	17.74	.....	.....

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 1, 1957	17.74	Jan. 2, 1958	17.32	Feb. 21, 1958	17.71	Nov. 10, 1958	16.44
14	17.74	9	17.74	28	17.09	Mar. 16, 1959	16.48
21	17.83	16	17.70	Mar. 7	16.49	Nov. 18	16.47
28	17.71	23	17.72	28	16.61	Apr. 5, 1960	13.18
Dec. 5	17.67	31	17.60	Apr. 4	16.64	Aug. 4	14.92
12	17.72	Feb. 7	17.65	18	16.77	Dec. 28	16.22
19	17.73	14	17.65	May 9	16.77	Dec. 7, 1961	16.07
26	17.77						

A10-6-36cdd. City of Lincoln. Drilled unused water-table well in Dakota Sandstone of Lower Cretaceous age, diam 16 in, depth 170 ft, casing perforated below water table. MP top of casing, 1.00 ft above lsd. Highest water level 62.52 below lsd, Dec. 16, 1961; lowest 71.19 below lsd, Sept. 5, 1956. Records available: 1951-61.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	70.82	70.66	70.44	70.38	70.44	70.18	70.28	70.39	70.32	70.22	70.29	69.88
10	71.03	70.67	70.13	70.47	70.22	70.14	70.32	70.31	70.24	70.39	70.22	70.31
15	70.80	70.65	70.70	70.35	70.47	70.29	70.18	70.24	70.20	70.19	.....	.....
20	70.58	70.56	70.48	70.48	70.14	70.19	70.25	70.36	70.19	70.37	.....	69.89
25	70.89	70.39	70.42	70.35	70.30	70.15	70.25	70.26	70.14	70.40	69.97	69.92
Eom	70.47	70.41	70.34	70.38	70.36	70.23	70.23	70.35	70.17	70.10	70.15	70.12

1958

5	69.96	69.80	69.74	69.37	69.30	69.40	69.07	68.83	68.74	68.58	.....	.....
10	69.91	.....	69.72	69.60	69.15	69.21	.....	68.76	68.72	68.74	68.36	68.20
15	69.83	.....	69.59	69.47	69.31	69.18	69.08	68.75	68.71	.....	68.23	66.04
20	69.68	.....	69.60	69.42	69.32	69.21	68.90	68.78	68.62	.....	.....	66.22
25	69.80	.....	69.48	69.63	69.24	69.20	68.88	68.75	68.69	.....	68.49	67.98
Eom	69.80	.....	69.37	69.28	69.29	69.00	68.85	68.87	.....	.....	68.33	67.92

1959

5	68.12	67.84	67.30	67.40	67.06	66.76	66.48	66.41	66.18	66.18	66.42	66.05
10	67.84	67.92	67.43	67.37	67.05	66.66	66.46	66.33	66.56	66.40	66.20	65.73
15	67.98	67.68	67.60	67.04	67.15	66.64	66.62	66.30	66.30	66.17	66.00	65.63
20	67.86	67.70	67.60	67.30	67.00	66.72	66.48	66.27	66.28	66.13	65.88	65.82
25	67.80	67.48	67.34	67.20	66.80	66.61	66.46	66.25	66.10	66.04	66.08	65.53
Eom	68.09	67.49	67.26	67.01	67.02	66.84	66.62	66.28	66.40	66.24	65.92	65.83

1960

5	65.95	65.49	65.50	65.34	64.97	65.08	64.88	64.73	64.40	64.34	64.45	.....
10	65.73	65.72	65.42	65.38	65.20	64.89	64.64	64.68	64.40	64.32	64.34	.....
15	65.83	65.50	65.23	65.16	65.04	64.71	64.72	64.60	64.47	64.47	64.16	64.06
20	65.76	65.50	65.50	65.15	64.96	64.81	64.67	64.46	64.32	64.30	64.19	64.22
25	65.59	65.48	65.26	65.28	65.05	64.85	64.61	64.62	.....	64.20	63.90	63.66
Eom	65.54	65.62	65.01	65.28	64.84	64.80	64.69	64.49	.....	64.08	64.39	.....

1961

5	63.72	.....	63.57	63.48	63.14	63.10	63.18	63.27	63.34	.....	63.51	63.02
10	63.80	.....	63.46	63.36	63.28	63.12	63.14	63.31	63.20	.....	62.98	63.20
15	63.72	63.78	63.51	63.55	63.40	63.36	63.08	63.30	63.42	.....	63.22	63.07
20	63.96	63.68	.....	63.52	63.33	63.14	63.03	63.39	63.02	.....	63.16	63.02
25	63.78	63.52	.....	63.30	63.36	63.20	63.15	63.16	.....	.....	63.38	62.97
Eom	63.64	63.59	63.38	63.38	63.19	63.13	63.19	63.13	.....	.....	63.18	62.89

A11-6-20dc. U. S. Geol. Survey. Drilled observation water-table well in sand and alluvium, diam 8 in, depth 34 ft, casing perforated below water table. MP top of casing, 3.00 ft above lsd. Highest water level 12.40 below lsd, Apr. 24, 1952; lowest 17.53 below lsd, Jan. 5, 10, 1957. Records available: 1951-61. Recording gage removed Mar. 5, 1958. Nov. 10, 1958, 16.70; Nov. 18, 1959, 16.87; Dec. 28, 1960, 16.55; Dec. 6, 1961, 16.55.

A11-6-20dc--Continued.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	17.53	.....	.....	.....	17.30	.....	.....	16.17	15.10	16.59	16.65	16.73
10	17.53	.....	17.51	.....	17.37	17.15	15.27	16.37	15.52	16.67	16.74	16.77
15	17.51	.....	.....	.....	.....	17.17	15.64	16.05	15.78	16.15	16.80	16.82
20	17.45	.....	.....	17.34	.....	15.70	15.92	15.50	16.07	16.18	16.84	.....
25	17.42	.....	.....	17.39	.....	15.65	15.55	15.78	16.28	16.40	16.87	.....
Eom	17.38	.....	.....	17.24	.....	16.03	15.93	15.08	16.46	16.55	16.78	.....

1958

5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
15	16.97	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
20	16.98	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
25	17.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Eom	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Lincoln County

12-28-9bc. Central Nebraska Public Power and Irrigation District. Hastings. Drilled observation water-table well in alluvium, sand and gravel, diam 2 in, depth 14 ft, perforated 9-14. Lsd 2,702.68 ft above msl. MP top of casing, 0.40 ft above lsd. Highest water level 3.58 below lsd, Mar. 3, 1949; lowest 10.48 below lsd, Nov. 1, 1939. Records available: 1938-55, 1957-60. Oct. 15, 1957, 4.96; Sept. 9, 1958, 5.30; Dec. 9, 1959, 4.85; Oct. 4, 1960, 5.79. Measurement discontinued; well destroyed.

14-33-27da. U.S. Geol. Survey. Dug and drilled observation water-table well in alluvium of Recent age, diam 15 in, depth 10 ft, casing perforated below water table. Lsd 2,934.06 ft above msl. MP top of casing, 0.80 ft above lsd. Highest water level 1.58 below lsd, June 27, 1949; lowest 6.70 below lsd, Feb. 20-22, 1952. Records available: 1943-61. Recording gage removed 1957. Sept. 30, 1958, 5.13; Dec. 9, 1959, 5.92; Oct. 6, 1960, 6.01; Oct. 5, 1961, 5.55.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	6.05	6.21	6.24	5.98	.....	.....	4.20	.....	5.27	.....	.....	.....
10	.....	6.21	.....	5.93	.....	4.07	.....	5.14	.....	5.40	.....	.....
15	.....	6.21	.....	5.73	.....	4.23	.....	.....	.....	5.41	.....	.....
20	6.13	.....	6.10	4.12	.....	3.59	4.70	.....	.....	.....	.....	.....
25	6.16	.....	6.06	.....	.....	3.74	.....	.....	.....	.....	.....	.....
Eom	.....	6.23	.....	.....	3.49	3.96	.....	5.26	5.38	.....	5.76	.....

Madison County

23-2-5aa. John Bredehoff. Battle Creek. Dug and driven unused water-table well in alluvial sand, diam 1½ in, depth 31 ft, screened 29-31. MP top of casing, 2.30 ft above lsd. Highest water level 2.93 below lsd, June 4, 1935; lowest 5.24 below lsd, Sept. 12, 1955. Records available: 1934-37, 1940-42, 1944-61. Mar. 13, 1957, 4.33; Dec. 12, 4.01; Oct. 28, 1958, 3.52; Oct. 20, 1959, 3.95; Dec. 6, 1960, 3.43; Oct. 27, 1961, 3.92.

Merrick County

12-7-7aa. U.S. Geol. Survey. Drilled observation water-table well in sand and gravel of Pleistocene age, diam 1½ in, depth 13 ft, screened 11-13. Lsd 1,762.16 ft above msl. MP top of casing, 1.00 ft above lsd. Highest water level 4.20 below lsd, Apr. 11, 1960; lowest 10.26 below lsd, Nov. 5, 1956. Records available: 1945-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 27, 1957	g9.86	June 16, 1959	6.82	Mar. 22, 1960	6.46	Jan. 13, 1961	7.33
Sept. 18	g9.45	July 16	6.54	Apr. 11	4.20	June 10	g5.76
May 1, 1958	g8.87	Aug. 14	6.40	May 2	g4.62	12	5.95
Oct. 7	8.68	Sept. 15	7.18	16	4.35	July 24	6.12
28	g8.83	Oct. 13	g6.73	June 29	4.75	Sept. 1	7.28
Jan. 14, 1959	8.87	19	6.82	Oct. 3	g6.75	25	7.48
Feb. 12	9.02	Nov. 17	6.99	18	6.96	28	g7.58
Mar. 12	8.93	Dec. 15	7.14	Nov. 18	7.14	Oct. 18	7.65
Apr. 14	8.10	Feb. 17, 1960	6.57	Dec. 29	7.27	Nov. 27	7.66
May 27	g6.58						

g Measurement made by Mid-State Irrigation District.



## 1-8-23ab--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7, 1959	4.10	May 25, 1959	0.67	July 28, 1960	g2.50	May 15, 1961	g1.8
Feb. 24	3.75	July 23	2.30	Oct. 7	g1.40	July 20	g.9
Apr. 8	2.72	Sept. 30	.85	25	g1.62	Sept. 19	g1.1
May 12	.77	Apr. 19, 1960	g.90	Jan. 4, 1961	g3.1	26	.85
14	1.00	June 1	g2.10	Mar. 15	g2.3	Nov. 7	g1.0

g Measurement made by U. S. Bureau of Reclamation, McCook, Nebraska.

Phelps County

6-19-2aa. Central Nebraska Public Power and Irrigation District. Holdrege. Drilled observation water-table well in sand of Pleistocene age, diam 1 in, depth 151 ft, screened 149-151. Lsd 2,360.81 ft above msl. MP top of casing, 1.00 ft above lsd. Highest water level 67.10 below lsd, Sept. 23, 1961; lowest 123.70 below lsd, Mar. 9, 1945. Records available: 1945-56, 1958-61. No measurement made in 1957. Sept. 24, 1958, 75.24; Oct. 12, 1959, 71.70; Oct. 20, 1960, 69.39; Sept. 23, 1961, 67.10.

Platte County

A18-1-28cd. Loup River Public Power District. Drilled observation water-table well in sand of Pleistocene age, diam 2 in, depth 99 ft, screened 97-99. Lsd 1,511.8 ft above msl. MP top of casing, 0.50 ft above lsd. Highest water level 60.30 below lsd, Mar. 27, Apr. 24, 1940; lowest 72.81 below lsd, Oct. 9, 1958. Records available: 1935-40, 1942-53, 1956-61. Dec. 10, 1957, 72.48; Oct. 9, 1958, 72.81; Dec. 2, 1959, 72.68; Nov. 30, 1960, 71.69; Nov. 8, 1961, 72.09.

Polk County

14-2-21db. U. S. Geol. Survey. Drilled observation water-table well in fine sand of Pleistocene age, diam 5 in, depth 180 ft, perforated 165-174. MP top of casing, at lsd. Highest water level 81.57 below lsd, June 21, 1961; lowest 103.97 below lsd, Aug. 15, 1960. Records available: 1959-61. Recording gage installed Oct. 26, 1959.

## Lowest water level for the day, from recorder graph, 1959

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84.72	84.15
10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84.31	84.03
15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84.23	84.10
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84.09	84.00
25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84.09	83.89
Eom	.....	.....	.....	.....	.....	.....	.....	.....	.....	84.65	84.10	83.93

1960

5	84.00	83.60	83.50	83.73	83.18	83.50	83.14	101.16	.....	85.49	84.72	84.10
10	83.80	83.78	83.70	83.72	83.35	83.17	82.97	102.91	.....	85.39	84.56	83.80
15	83.89	83.78	83.40	83.49	83.41	82.93	83.25	103.97	.....	85.33	84.23	83.96
20	83.81	83.75	83.85	83.37	83.17	83.02	87.07	100.14	.....	85.08	84.29	83.97
25	83.70	83.61	83.74	83.24	82.94	83.03	.....	97.95	.....	84.60	84.06	83.70
Eom	83.65	83.59	83.62	83.23	83.15	83.03	.....	.....	.....	84.52	84.13	83.54

1961

5	83.48	.....	82.67	82.10	82.47	.....	86.05	89.38	89.63	84.39	83.57	83.01
10	83.53	82.97	82.57	82.17	82.28	.....	93.60	91.68	88.25	84.33	82.75	82.55
15	83.31	83.24	82.37	82.11	82.48	82.05	94.67	95.47	87.20	84.35	82.83	82.64
20	83.68	82.97	82.37	82.12	82.24	81.80	92.93	93.44	85.79	84.00	82.75	82.78
25	83.46	82.88	82.12	82.35	82.18	82.00	94.30	90.47	85.60	83.82	82.53	82.50
Eom	.....	82.69	82.03	82.46	82.19	82.29	91.85	91.30	84.92	83.55	82.47	82.66

15-3-20cc. Ray Norris. Silver Creek. Dug irrigation water-table well in sand of Pleistocene age, diam 12 in, depth 21 ft, casing perforated below water table. Lsd 1,582.83 ft above msl. MP hole in turbine base, 0.20 ft above lsd. Highest water level 4.31 below lsd, Apr. 20, 1949; lowest 9.33 below lsd, Sept. 22, 1953. Records available: 1946-61. Nov. 26, 1957, 7.79; Oct. 9, 1958, 7.36; Nov. 25, 1959, 6.08; Nov. 15, 1960, 7.71; Nov. 7, 1961, 7.53.

## Red Willow County

2-29-4ad. Rex S. Haberman. Hastings. Drilled unused water-table well in sand of Pleistocene age, diam 26 in, depth 40 ft, casing perforated below water table. MP top of casing, 3.00 ft below lsd. Highest water level 26.70 below lsd, May 13, 1960; lowest 37.10 below lsd, July 11, 1953. Records available: 1950-61. Recording gage removed Jan. 1, 1959.

## Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	33.99	33.61	33.29	32.98	32.76	32.38	31.46	33.38	35.50	34.58	33.55	32.82
10	33.89	33.55	33.24	32.93	32.70	32.30	31.25	33.91	35.50	34.40	33.41	32.72
15	33.83	33.49	33.18	32.88	32.65	32.22	31.13	34.36	35.42	34.22	33.27	32.64
20	33.78	33.43	33.13	32.85	32.60	32.08	31.65	34.80	35.24	33.95	33.15	32.56
25	33.72	33.38	33.09	32.84	32.53	31.93	32.10	34.84	35.00	33.89	33.04	32.48
Eom	33.65	33.35	33.03	32.80	32.45	31.68	32.85	35.15	34.79	33.70	32.92	32.40

1958

5	32.35	32.00	31.65	30.65	30.03	29.67	29.62	31.26	31.87	30.73	30.28	30.01
10	32.28	31.96	31.54	30.51	29.97	29.64	29.62	31.36	31.81	30.60	30.23	29.98
15	32.21	31.91	31.43	30.38	29.93	29.62	29.88	31.53	31.60	30.51	30.18	29.96
20	32.15	31.87	31.31	30.24	29.90	29.62	30.18	31.75	31.33	30.44	30.13	29.93
25	32.11	31.78	31.17	30.15	29.85	29.62	30.47	31.90	31.01	30.39	30.09	29.90
Eom	32.05	31.73	30.96	30.11	29.73	29.62	30.87	31.85	30.88	30.34	30.06	29.87

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5, 1959	29.85	June 22, 1960	g27.10	Feb. 28, 1961	g28.5	Sept. 20, 1961	28.89
Mar. 24	g29.40	Oct. 20	g28.9	Apr. 25	g28.5	Oct. 5	g27.8
Oct. 14	31.23	24	31.52	June 23	g27.8	Dec. 19	g31.4
May 13, 1960	g26.70	Jan. 10, 1961	g28.6	July 24	g30.3		

g Measurement made by U. S. Bureau of Reclamation, McCook, Nebraska.

3-28-20bb2. Leo D. England. McCook. Drilled unused water-table well in sand of Pleistocene age, diam 14 in, depth 36 ft, casing perforated below water table. MP top of casing, 0.50 ft above lsd. Highest water level 5.53 below lsd, Sept. 9-10, 1951; lowest 9.70 below lsd, Oct. 15, 20, 1956. Records available: 1950-61. Recording gage removed Feb. 6, 1958.

## Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	8.90	8.70	8.52	8.53	8.49	7.73	7.39	7.80	8.41	8.64	8.46	8.23
10	8.87	8.66	8.51	8.52	8.49	7.67	7.47	7.88	8.50	8.65	8.39	8.27
15	8.83	8.62	8.52	8.50	8.50	7.65	7.51	8.03	8.55	8.63	8.34	8.20
20	8.79	8.59	8.51	8.50	8.40	7.00	7.55	8.10	8.58	8.66	8.31	8.12
25	8.76	8.56	8.53	8.48	8.33	7.23	7.60	8.22	8.60	8.58	8.28	8.17
Eom	8.72	8.54	8.52	8.48	8.22	7.34	7.70	8.33	8.63	8.50	8.26	8.14

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5, 1958	8.06	Jan. 15, 1958	8.02	Jan. 31, 1958	7.98	Oct. 24, 1960	8.60
10	8.03	25	8.05	Dec. 9, 1959	8.06	Sept. 20, 1961	8.89

## Saline County

A8-3-19ad. U. S. Geol. Survey. Drilled observation water-table well in sand and gravel of Pleistocene age, diam 5 in, depth 151 ft, perforated 142-151. Lsd 1,496 ft above msl. MP top of casing, at lsd. Highest water level 96.80 below lsd, June 21-22, 1961; lowest 99.21 below lsd, Nov. 5, 1959. Records available: 1959-61. Recording gage installed Oct. 27, 1959.

## Lowest water level for the day, from recorder graph, 1959

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	99.21	98.80
10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	98.94	98.51
15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	98.60	98.65
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	98.65	98.57
25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	98.77	98.42
Eom	.....	.....	.....	.....	.....	.....	.....	.....	.....	98.92	98.65	98.57

1960

5	98.60	98.35	98.24	98.30	97.98	98.17	97.90	98.47	98.26	98.00	98.10	98.05
10	98.49	98.58	98.32	98.18	98.05	97.95	97.72	98.45	98.40	98.13	98.00	97.57
15	98.63	98.30	98.10	98.06	98.08	97.74	97.77	98.66	98.31	98.25	97.89	97.84
20	98.40	98.23	98.35	98.10	98.07	97.81	97.80	98.50	98.20	98.04	97.90	97.95
25	98.35	98.25	98.15	98.23	98.08	97.90	97.74	98.48	98.30	97.97	97.65	97.66
Eom	98.37	98.37	98.12	98.25	97.88	97.92	98.13	98.39	98.24	97.84	97.99	97.63

## A8-3-19ad--Continued.

1961

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	97.51	97.56	97.48	97.41	97.01	97.05	97.13	98.24	98.98	98.30	.....	.....
10	97.60	97.38	97.32	97.25	97.18	97.15	97.50	98.60	98.67	98.20	.....	.....
15	97.56	97.56	97.42	97.53	97.41	97.31	97.42	98.42	98.74	98.30	.....	.....
20	97.71	97.47	97.40	97.47	97.18	97.09	97.60	98.67	98.40	98.23	.....	.....
25	97.75	97.35	97.17	97.29	97.25	97.06	97.90	98.60	98.56	98.47	.....	.....
Eom	97.41	97.39	97.26	97.22	97.15	97.04	98.20	98.79	98.55	98.16	.....	.....

## Saunders County

A13-9-24cc. City of Lincoln. Drilled observation water-table well in sand of Pleistocene age, diam 1½ in, depth 12 ft, screened 10-12. Lsd 1,065.22 ft above msl. MP top of casing, 4.50 ft above lsd. Highest water level 0.48 below lsd, July 31, 1948; lowest 8.49 below lsd, Sept. 25, 1955. Records available: 1933-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25, 1957	6.22	May 25, 1958	4.20	Sept. 25, 1959	4.27	Nov. 25, 1960	5.12
Feb. 25	5.77	June 25	5.05	Oct. 25	4.37	Dec. 25	5.35
Mar. 26	5.62	July 25	3.83	Nov. 25	4.40	Jan. 25, 1961	5.47
Apr. 25	5.49	Aug. 25	2.32	Dec. 25	4.53	Feb. 25	5.38
May 25	6.29	Sept. 25	2.02	Jan. 25, 1960	4.17	Mar. 25	4.78
June 25	4.77	Oct. 25	4.19	Feb. 25	3.76	Apr. 25	4.39
July 25	5.20	Nov. 25	4.76	Mar. 25	3.63	May 25	4.67
Aug. 25	6.09	Dec. 25	4.96	Apr. 25	2.10	June 24	4.17
Sept. 25	6.15	Jan. 25, 1959	4.89	May 25	1.05	July 25	5.71
Oct. 25	5.82	Feb. 25	4.64	June 25	1.57	Aug. 25	6.38
Nov. 25	5.19	Mar. 25	3.30	July 25	3.75	Sept. 25	6.30
Dec. 25	5.00	Apr. 25	2.70	Aug. 25	3.15	Oct. 25	5.90
Jan. 25, 1958	4.91	May 25	.74	Sept. 25	2.97	Nov. 25	4.88
Feb. 25	4.91	June 25	3.49	Oct. 25	4.69	Dec. 6	5.08
Mar. 25	3.56	July 25	2.88	Nov. 16	5.03	25	5.18
Apr. 25	3.31	Aug. 25	2.70				

## Scotts Bluff County

23-56-6aa. Carl Gompert. Drilled irrigation water-table well in alluvium of Quaternary age, diam 18 in, depth 118 ft, casing perforated below water table. Lsd 4,087.7 ft above msl. MP hole in turbine base, 0.70 ft above lsd. Highest water level 29.24 below lsd, Oct. 26, 1949; lowest 41.04 below lsd, Oct. 6, 1961. Records available: 1948-61. Oct. 17, 1957, 39.69; Oct. 1, 1958, 37.62; Oct. 7, 1959, 37.15; Oct. 10, 1960, 38.80; Oct. 6, 1961, 41.04.

## Seward County

A11-2-21dd. U.S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diam 5 in, depth 123 ft, perforated 112-123. Lsd 1,550 ft above msl. MP top of casing, at lsd. Highest water level 77.15 below lsd, Apr. 14, 1961; lowest 82.70 below lsd, Aug. 23, 1959. Records available: 1958-61. Recording gage installed May 31, 1958.

Lowest water level for the day, from recorder graph, 1958

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	.....	.....	.....	.....	.....	78.08	78.65	78.70	80.86	79.46	79.01	79.01
10	.....	.....	.....	.....	.....	77.78	78.57	80.92	80.43	79.61	79.00	78.88
15	.....	.....	.....	.....	.....	77.84	78.40	81.41	80.09	79.24	78.68	78.75
20	.....	.....	.....	.....	.....	77.95	78.15	82.21	79.76	78.99	79.18	78.82
25	.....	.....	.....	.....	.....	77.93	78.34	82.25	79.85	79.37	78.97	78.59
Eom	.....	.....	.....	.....	77.71	78.94	78.05	81.22	79.73	79.05	79.08	78.68

1959

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	78.79	78.58	78.35	78.46	78.23	78.07	78.16	82.02	81.05	79.99	80.06	79.50
10	78.58	78.77	78.42	78.50	78.10	77.95	78.55	82.30	81.25	80.10	79.52	79.21
15	78.70	78.66	78.59	77.98	78.35	78.00	79.75	82.01	80.55	79.79	79.50	79.29
20	78.51	78.67	78.67	78.45	78.15	78.16	79.93	82.04	80.31	79.75	79.23	79.27
25	78.56	78.40	78.34	78.27	78.06	77.85	81.02	82.07	80.25	79.64	79.25	79.03
Eom	78.88	78.42	78.30	78.13	78.25	78.16	81.52	81.71	80.44	79.87	79.33	79.20

## A11-2-21dd--Continued.

1960											
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. Dec.
5	79.42	.....	.....	.....	78.37	78.55	78.44	81.60	79.36	78.77	78.90 78.56
10	79.12	78.98	.....	.....	78.58	78.39	78.41	80.71	79.53	78.84	78.80 78.16
15	79.21	79.02	.....	.....	78.44	78.12	78.51	80.31	79.20	79.02	78.27 78.31
20	79.20	78.98	.....	78.47	78.43	78.29	78.41	80.28	79.05	78.82	78.57 78.54
25	.....	78.79	.....	78.64	78.42	78.40	80.27	79.92	79.16	78.51	78.14 78.03
Eom	.....	.....	.....	78.78	78.44	78.28	80.98	79.62	78.82	78.41	78.82 78.02
1961											
5	77.99	.....	77.92	77.93	77.62	77.63	79.84	81.27	80.86	79.63	80.02 79.12
10	78.12	.....	78.00	77.79	77.79	77.66	81.02	82.37	80.50	79.62	79.09 79.28
15	78.01	.....	77.96	77.99	77.96	78.09	81.82	81.34	80.62	79.91	79.27 .....
20	78.30	.....	78.15	77.87	77.99	77.75	82.23	81.34	79.90	79.58	79.24 .....
25	.....	.....	77.70	77.78	77.90	77.78	82.55	.....	80.28	79.85	79.03 .....
Eom	.....	.....	77.79	77.81	77.70	78.68	81.74	.....	80.06	79.52	79.04 .....

## Sheridan County

24-43-15ac. U. S. Geol. Survey. Jetted observation water-table well in fine sand of Pleistocene age, diam  $\frac{3}{4}$  in, depth 17 ft, perforated 16-17. MP top of casing, 3.00 ft above lsd. Highest water level 8.15 below lsd, Sept. 4, 1958; lowest 9.42 below lsd, Oct. 12, 1960. Records available: 1958-61. Sept. 4, 1958, 8.15; Oct. 2, 9.04; Oct. 9, 1959, 8.92; Oct. 12, 1960, 9.42; Oct. 9, 1961, 9.19.

29-46-10aa. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diam 6 in, depth 100 ft, casing perforated below water table. Lsd 3,794.5 ft above msl. MP top of casing, 1.50 ft above lsd. Highest water level 35.77 below lsd, Nov. 27, 1960; lowest 38.95 below lsd, May 29, 1954. Records available: 1953-61.

## Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. Dec.
5	38.30	38.37	38.45	38.47	.....	.....	38.44	38.41	37.77	37.27	37.46 37.40
10	38.33	38.41	38.35	38.53	.....	38.53	38.48	38.33	.....	37.31	37.46 37.62
15	38.28	38.43	38.47	.....	.....	38.48	38.50	38.35	.....	37.29	37.47 37.53
20	38.27	38.37	38.45	.....	.....	38.40	38.52	38.21	.....	37.29	37.50 37.50
25	38.56	38.45	38.47	.....	.....	38.43	38.52	38.08	37.26	37.47	37.45 37.53
Eom	38.30	38.43	38.47	.....	.....	38.45	38.42	38.00	37.25	37.37	37.52 37.57
1958											
5	37.64	37.58	37.65	.....	37.77	37.94	37.80	.....	.....	36.61	36.57 36.60
10	37.55	37.57	37.63	.....	37.73	37.80	37.90	.....	.....	36.63	36.57 36.58
15	37.55	37.60	37.67	.....	37.83	37.83	37.78	.....	36.84	36.58	36.48 36.57
20	37.53	37.45	37.65	37.69	37.80	37.78	37.69	.....	36.77	36.55	36.62 36.55
25	37.54	37.62	37.64	37.76	37.85	37.80	.....	.....	36.60	36.65	36.60 36.53
Eom	37.57	37.59	37.69	37.76	37.77	37.70	.....	.....	36.69	36.53	36.60 36.56
1959											
5	36.53	36.68	.....	.....	.....	.....	37.16	36.99	36.40	36.29	36.24 36.19
10	36.59	36.68	.....	.....	.....	.....	37.17	36.93	36.47	36.30	36.18 36.12
15	36.65	36.70	.....	.....	.....	.....	37.18	36.90	36.36	36.21	36.18 36.14
20	36.63	36.74	.....	.....	.....	37.16	37.10	36.85	36.32	36.19	36.13 36.17
25	36.63	36.73	.....	.....	.....	37.11	37.11	36.79	36.28	36.14	36.16 36.05
Eom	36.74	.....	.....	.....	.....	37.25	37.11	36.58	36.33	36.18	36.18 36.09
1960											
5	36.19	36.28	36.36	36.16	36.28	36.49	36.49	36.27	36.12	35.99	35.98 35.99
10	36.14	36.25	36.38	36.13	36.31	36.43	36.40	36.34	36.19	35.99	35.91 35.91
15	36.20	36.28	36.27	36.15	36.26	36.42	36.43	36.06	36.09	36.00	35.89 35.96
20	36.30	36.31	36.28	36.17	36.31	36.47	36.38	36.16	36.03	35.89	35.90 36.01
25	36.21	36.31	36.12	36.19	.....	36.46	36.33	36.24	36.04	35.93	35.83 35.95
Eom	36.25	36.36	36.10	36.15	.....	36.52	36.16	36.17	36.01	35.89	35.95 35.91
1961											
5	35.89	35.97	36.03	36.20	36.25	36.39	36.58	36.70	36.61	36.07	36.18 36.05
10	35.95	35.97	36.04	36.15	36.28	36.40	36.53	36.76	36.44	36.02	36.02 36.08
15	35.91	36.04	36.07	36.24	36.35	36.52	36.57	36.74	36.34	36.11	36.12 36.06
20	36.00	36.05	36.15	36.24	36.42	36.48	36.57	36.70	36.19	36.02	36.07 36.09
25	35.97	36.02	36.07	36.25	36.44	.....	36.65	36.66	36.23	36.11	36.06 36.07
Eom	35.95	36.06	36.15	36.33	36.39	36.54	36.68	36.60	36.16	36.05	36.00 36.19



Thayer County

4-1-9bac. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diam 8 in, depth 95 ft, casing perforated below water table. MP top of casing, 2.00 ft above lsd. Highest water level 87.83 below lsd, Sept. 28, 1953; lowest 90.01 below lsd, June 25, 1953. Records available: 1953-61.

## Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	89.07	89.05	89.06	89.13	89.15	89.13	89.14	89.33	89.38	89.49	89.49	89.31
10	89.07	89.10	88.99	89.31	89.15	89.14	89.14	89.34	89.47	89.41	89.37	89.40
15	89.11	89.14	89.07	89.13	89.20	89.19	89.14	89.51	89.38	89.39	89.41	89.28
20	89.06	89.05	89.03	89.15	89.15	89.10	89.20	89.41	89.45	89.50	89.36	.....
25	89.10	89.04	89.12	89.18	89.20	89.16	89.14	89.40	89.54	89.58	89.29	.....
Eom	89.03	89.05	89.10	89.13	89.16	89.17	89.34	89.39	89.55	89.39	89.32	89.29

## 1958

5	89.24	89.38	89.43	89.49	89.32	89.40	89.37	89.45	89.47	89.40	89.36	89.29
10	.....	89.38	89.42	89.33	89.30	89.43	89.41	89.55	89.49	89.36	89.26	89.23
15	89.34	89.43	89.39	89.33	89.34	89.39	89.37	89.57	89.46	89.28	89.22	89.22
20	89.35	89.37	89.42	89.33	89.49	89.41	89.32	89.52	89.51	89.32	89.32	89.23
25	89.37	89.35	89.43	89.38	89.33	89.41	89.34	89.50	89.48	89.31	89.31	89.19
Eom	89.43	89.49	89.39	89.30	89.37	89.36	89.32	89.59	89.45	89.25	89.23	89.18

## 1959

5	89.21	89.19	89.13	89.20	89.13	89.10	89.08	89.20	89.22	89.22	89.32	89.22
10	89.18	89.28	89.15	89.13	89.19	89.10	89.05	89.26	89.29	89.31	89.31	89.14
15	89.23	89.14	89.21	89.09	89.11	89.07	89.03	89.25	89.26	89.25	89.21	89.18
20	89.21	89.16	89.20	89.20	89.19	89.07	89.01	89.25	89.27	89.22	89.20	89.19
25	89.23	89.12	89.14	89.11	89.08	89.07	89.05	89.23	89.20	89.25	89.30	89.12
Eom	89.18	89.16	89.19	89.11	89.12	89.08	89.18	89.25	89.23	89.23	89.21	89.16

## 1960

5	89.25	89.21	89.20	89.23	89.13	89.16	89.04	89.06	89.12	89.11	89.06	89.24
10	89.21	89.35	89.23	89.17	89.13	89.08	88.99	89.03	89.12	89.08	89.02	89.15
15	89.23	89.18	89.17	89.17	89.14	89.07	89.00	89.08	89.14	89.10	89.06	89.21
20	89.21	89.18	89.23	89.12	89.13	89.05	88.99	89.10	89.11	89.04	89.02	89.24
25	89.24	89.22	89.20	89.19	89.13	89.04	88.99	89.15	89.13	89.05	88.96	89.22
Eom	89.21	89.23	89.13	89.18	89.06	89.06	89.01	89.14	89.13	88.98	89.03	89.15

## 1961

5	.....	89.17	89.17	89.19	88.91	88.95	88.92	88.99	89.38	89.28	89.29	89.20
10	89.16	89.15	89.13	89.13	88.93	88.95	88.88	89.16	89.37	89.27	89.16	89.22
15	89.14	89.17	89.16	89.20	89.01	89.08	88.88	89.20	89.38	89.23	89.17	89.17
20	89.20	89.15	89.15	89.17	88.97	88.92	88.86	89.26	89.36	89.21	89.19	89.14
25	89.16	89.12	89.10	89.55	88.98	88.92	88.89	89.28	89.36	89.28	89.15	89.14
Eom	89.16	89.13	89.15	88.92	88.99	88.90	88.88	89.32	89.47	89.19	89.16	89.19

Thomas County

23-28-9da. U. S. Geol. Survey. Driven observation water-table well in fine sand and alluvium, diam 1 1/4 in, depth 15 ft, screened 13-15. MP top of casing, 2.30 ft above lsd (since Sept. 4, 1958). Highest water level 8.91 below lsd, Oct. 13, 1960; lowest 10.98 below lsd, July 23, 1940. Records available: 1934-40, 1942, 1944-50, 1953-61. Oct. 19, 1957, 9.02; Sept. 4, 1958, 9.10; Oct. 9, 1959, 8.93; Oct. 13, 1960, 8.91; Aug. 26, 1961, 9.28; Oct. 9, 9.07.

Valley County

18-16-30cc. U. S. Geol. Survey. Drilled observation water-table well in sand of Pleistocene age, diam 3/4 in, depth 14 ft, screened 12-14. Lsd 2,217.61 ft above msl. MP top of casing, 2.00 ft above lsd. Highest water level 2.50 below lsd, June 16, 1960; lowest 5.64 below lsd, June 20, 1956. Records available: 1949-56, 1958-61. No measurement made in 1957.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 17, 1958	3.65	Oct. 22, 1959	g4.25	June 16, 1960	g2.50	Dec. 13, 1960	g4.22
Oct. 16	4.04	29	4.29	July 12	g3.11	Jan. 16, 1961	g4.51
May 19, 1959	g4.00	Nov. 17	g4.34	Aug. 10	g3.01	Feb. 16	g4.42
June 18	g3.50	Dec. 14	g4.62	Sept. 15	g3.47	May 24	g3.70
July 20	g3.70	Mar. 16, 1960	g4.98	Oct. 12	g3.44	July 6	g4.01
Aug. 19	g3.57	Apr. 20	g3.12	Nov. 9	g3.47	Sept. 11	g3.73
Sept. 21	g3.70	May 18	g3.51	21	4.02	Oct. 4	3.67

g Measurement made by U. S. Bureau of Reclamation, St. Paul, Nebraska.

Webster County

1-11-11ab. U. S. Geol. Survey. Drilled observation water-table well in silt and fine sand of Pleistocene age, diam 8 in, depth 17 ft, casing perforated below water table. Lsd 1, 684.9 ft above msl. MP south side of casing, 1.10 ft above lsd. Highest water level 1.34 below lsd, July 11-12, 1951; lowest 10.56 below lsd, Apr. 5, 1957. Records available: 1946-61.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	10.47	10.49	10.52	10.56	10.42	9.70	4.49	5.30	4.58	6.34	6.90	6.99
10	10.49	10.49	10.52	10.55	10.39	9.64	4.68	5.38	4.63	6.40	6.90	7.05
15	10.49	10.49	10.52	10.53	10.29	9.55	5.05	5.80	5.00	....	6.93	7.10
20	10.49	10.50	10.52	10.51	10.05	4.52	5.19	5.96	5.43	....	6.99	7.20
25	10.49	10.50	10.52	10.49	9.87	4.51	5.18	6.13	5.80	....	6.99	7.25
Eom	10.48	10.51	10.55	10.45	9.75	4.50	5.30	4.50	6.14	....	6.94	7.26

1958

5	8.14	8.26	8.25	5.97	6.41	....	....	....	....	5.87	6.72	7.18
10	8.18	8.29	8.22	5.99	6.53	....	....	....	4.45	6.02	6.81	7.24
15	8.22	8.30	8.15	6.05	6.74	....	....	....	5.95	6.19	6.90	7.31
20	8.24	8.35	8.12	....	6.42	....	....	....	5.17	6.30	7.00	7.34
25	8.25	8.39	7.72	6.30	6.57	....	....	....	5.40	6.48	7.07	7.34
Eom	8.25	8.35	5.97	6.34	6.87	....	....	....	5.66	6.64	7.15	7.35

1959

5	7.35	....	....	....	....	....	....	5.95	7.39	8.23	8.29	8.42
10	h7.50	....	....	....	....	h6.54	....	7.56	7.70	7.94	8.30	8.45
15	....	....	....	....	h5.90	h6.64	....	7.60	7.95	7.97	8.33	8.46
20	....	....	....	....	....	....	5.89	7.75	8.00	8.06	8.36	8.48
25	....	h7.73	....	....	h5.82	....	6.31	7.24	8.05	8.15	8.38	8.51
Eom	....	....	....	....	....	....	7.70	7.45	8.19	8.25	8.40	8.54

1960

5	8.55	8.64	8.18	5.65	6.28	6.37	....	5.45	6.78	7.52	7.95	....
10	8.58	8.42	8.20	5.64	6.17	6.52	....	5.88	6.98	7.63	8.00	....
15	8.60	8.23	8.23	5.74	6.28	5.43	....	5.76	7.08	7.73	8.03	....
20	8.63	8.14	8.18	5.88	5.92	4.88	....	5.91	7.18	7.80	8.06	....
25	8.65	8.13	8.09	6.04	5.77	3.11	4.83	6.23	7.31	7.83	8.10	8.25
Eom	8.67	8.15	6.51	6.20	6.10	3.39	4.94	6.58	7.40	7.89	....	8.27

1961

5	8.31	8.44	8.48	8.31	8.02	....	....	6.16	6.98	7.15	....	7.30
10	8.33	8.45	8.50	8.33	7.92	....	6.49	6.00	7.23	7.22	7.56	....
15	8.35	8.46	8.53	8.20	7.84	....	6.84	5.80	6.77	7.30	7.60	....
20	8.37	8.47	8.44	8.05	7.82	....	6.54	6.08	6.79	7.39	7.60	....
25	8.39	8.47	8.38	7.99	6.59	....	6.72	6.11	6.98	7.47	7.43	....
Eom	....	8.48	8.33	8.00	6.47	....	6.29	6.62	7.11	7.54	7.35	....

h Tape measurement.

York County

9-4-6dd. Gustav Thiesen. Drilled observation water-table well in sand and gravel of Pleistocene age, diam 18 in, depth 171 ft, perforated 83-171. MP top of casing, at lsd. Highest water level 79.44 below lsd, June 20, 1959; lowest 82.24 below lsd, Sept. 3, 1961. Records available: 1959-61. Recording gage installed Aug. 6, 1959. May 22, 1959, 79.73; June 24, 79.44; July 22, 79.83.

Lowest water level for the day, from recorder graph, 1959

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	....	....	....	....	....	....	....	....	81.26	81.09	81.03	....
10	....	....	....	....	....	....	....	80.91	81.55	81.18	80.95	....
15	....	....	....	....	....	....	....	81.13	81.41	81.03	80.75	....
20	....	....	....	....	....	....	....	81.04	81.30	81.00	80.77	....
25	....	....	....	....	....	....	....	81.18	81.17	81.00	80.85	....
Eom	....	....	....	....	....	....	....	81.35	81.14	80.92	....	....

1960

5	....	....	....	80.18	80.00	80.00	79.75	80.85	81.42	81.02	80.84	80.80
10	80.55	....	....	80.10	79.97	79.90	79.70	80.77	81.34	81.04	80.77	80.58
15	80.58	h80.38	....	80.11	80.02	79.85	79.83	81.15	81.32	81.04	80.82	80.67
20	80.44	....	....	80.16	80.00	79.81	80.39	81.31	81.20	80.89	80.73	80.68
25	....	....	80.22	80.10	80.00	79.79	80.84	81.70	81.20	80.94	80.64	80.60
Eom	....	....	80.14	80.08	....	79.82	80.81	81.57	81.15	80.82	80.71	80.52

h Tape measurement.

9-4-6dd--Continued.

1961

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	80.43	80.35	80.28	80.20	80.03	79.97	80.01	81.33	81.99	81.55	81.45	81.23
10	80.47	80.31	80.25	80.12	79.97	80.00	80.17	81.64	81.89	81.51	81.28	81.26
15	80.42	80.35	80.23	80.20	80.13	80.03	80.65	81.67	81.82	81.41	81.25	81.18
20	80.50	80.28	80.18	80.19	80.03	79.93	80.95	81.78	81.70	81.40	81.27	81.14
25	80.39	80.24	80.12	80.11	80.08	79.91	81.09	81.69	81.65	81.51	81.23	81.10
Eom	80.36	80.24	80.14	80.07	80.02	80.07	81.36	81.95	81.71	81.35	81.18	81.16

11-2-31ba1. U. S. Geol. Survey. Drilled observation water-table well in sand and gravel of Pleistocene age, diam 8 in, depth 102 ft, perforated casing 84-102. MP top of casing, 1.00 ft above lsd. Highest water level 84.22 below lsd, May 25, 1958; lowest 87.61 below lsd, Sept. 5-6, 1961. Records available: 1957-61. Recording gage installed Oct. 30, 1957.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84.89	84.69
10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84.86	84.69
15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84.82	84.65
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84.78	84.62
25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84.75	84.61
Eom	.....	.....	.....	.....	.....	.....	.....	.....	.....	84.90	84.74	84.57

1958

5	84.57	84.49	84.43	84.34	84.25	84.24	84.50	84.42	86.01	85.39	85.08	85.03
10	84.56	84.48	84.41	84.30	84.24	84.24	84.52	84.60	85.92	85.32	85.17	84.99
15	84.54	84.47	84.40	84.29	84.24	84.25	84.46	85.08	85.80	85.26	85.26	84.94
20	84.52	84.44	84.39	84.28	84.23	84.26	84.44	85.55	85.69	85.19	85.25	84.97
25	84.51	84.41	84.36	84.28	84.22	84.30	84.41	85.73	85.58	85.15	85.15	84.91
Eom	84.52	84.44	84.33	84.25	84.23	84.46	84.40	85.94	85.48	85.09	85.07	84.87

1959

5	84.85	84.67	84.55	84.47	84.38	84.29	84.33	85.97	86.70	86.04	85.65	85.42
10	84.80	84.66	84.54	84.45	84.38	84.27	84.32	86.28	86.60	85.95	85.60	85.38
15	84.77	84.63	84.54	84.42	84.35	84.28	84.31	86.45	86.46	85.88	85.55	85.36
20	84.74	84.60	84.52	84.43	84.38	84.30	84.55	86.39	86.35	85.82	85.50	85.33
25	84.72	84.58	84.48	84.40	84.33	84.30	84.97	86.30	86.22	85.75	85.47	85.30
Eom	84.70	84.58	84.47	84.39	84.32	84.34	85.57	86.63	86.13	85.70	85.44	85.29

1960

5	85.27	85.13	85.03	84.94	84.85	84.77	84.70	85.48	86.33	85.75	85.42	85.22
10	85.25	85.12	85.02	84.92	84.83	84.74	84.78	85.57	86.20	85.69	85.39	85.17
15	85.23	85.10	85.00	84.91	84.81	84.78	84.77	85.69	86.08	85.64	85.35	85.15
20	85.20	85.08	85.00	84.92	84.80	84.77	84.74	85.94	85.98	85.58	85.30	85.13
25	85.17	85.06	84.98	84.88	84.78	84.70	84.73	86.30	85.90	85.54	85.25	85.10
Eom	85.15	85.05	84.96	84.86	84.75	84.74	85.10	86.37	85.83	85.46	85.24	85.05

1961

5	85.02	84.89	84.77	84.64	84.57	84.54	84.85	86.64	87.61	86.86	86.45	86.19
10	85.00	84.85	84.75	84.61	84.56	84.56	84.80	86.95	87.55	86.79	86.49	86.16
15	84.99	84.85	84.72	84.62	84.58	84.55	84.99	87.26	87.37	86.69	86.36	86.14
20	84.98	84.82	84.69	84.60	84.56	84.55	85.40	87.30	87.20	86.62	86.30	86.10
25	84.94	84.80	84.65	84.58	84.56	84.56	85.89	.....	87.09	86.58	86.25	86.08
Eom	84.90	84.78	84.65	84.59	84.57	84.60	86.43	.....	86.99	86.50	86.22	86.06

11-3-36ab. Mother Jewel Home. York. Drilled irrigation water-table well in sand of Pleistocene age, diam 12 in, depth 175 ft, casing perforated below water table. MP hole in turbine base, at lsd. Highest water level 65.82 below lsd, Sept. 11, 1952; lowest 70.99 below lsd, Sept. 18, 1961. Records available: 1948-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7, 1957	69.21	Dec. 20, 1957	69.44	Nov. 19, 1959	70.23	Apr. 5, 1961	69.59
Mar. 12	69.12	June 16, 1958	69.06	June 6, 1960	69.69	Sept. 18	70.99
Oct. 15	69.47	Sept. 15	69.42	July 5	69.58	Nov. 20	70.75
29	69.48	Nov. 20	69.51	Nov. 14	69.95		

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## NORTH DAKOTA

By P. G. Randich and D. G. Adolphson

The observation-well program in North Dakota was continued in 1957 through 1961 in co-operation with the State Water Conservation Commission and the North Dakota Geological Survey. Figure 8 shows the location of observation wells included in this report.

### Well-Numbering System

Wells are numbered in accordance with the Bureau of Land Management's system of land subdivision. Each well number is made up of three segments. The first segment indicates the township, the second the range, and the third the section in which the well is located. The letters after the section number, which are assigned in a counterclockwise direction, represent subdivisions of the section. The first letter denotes the 160-acre tract, the second the 40-acre tract, and the third the 10-acre tract. Numbers are added as suffixes to distinguish wells in the same tract. Thus, the number 140-61-16dcc designates the well in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 16, T. 140 N., R. 61 W.

### Well Descriptions and Water-Level Measurements

Water levels are reported in feet below land-surface datum, unless otherwise indicated.

#### Adams County

130-97-14cc1. Mrs. P. R. Halverson. Drilled domestic and stock water-table well in Fort Union Formation of Paleocene age, diam 4 in, depth 77 ft, slotted pipe 70-77. MP hole in east side of pumpbase, 2.00 ft above lsd. Highest water level 44.34 below lsd, Dec. 4, 1951; lowest 53.59 below lsd, Apr. 16, 1941. Records available: 1940-49, 1951-59. Measurement discontinued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17, 1957	49.02	Nov. 26, 1957	49.71	May 13, 1958	48.85	Dec. 12, 1958	49.28
Feb. 14	49.11	Dec. 17	48.72	June 13	48.95	Jan. 14, 1959	49.32
May 14	48.52	Jan. 20, 1958	48.85	July 15	49.18	Feb. 11	49.30
July 24	48.71	Feb. 13	48.95	Sept. 9	49.08	Mar. 3	49.28
Aug. 14	48.82	Mar. 12	48.95	Oct. 10	49.28	Apr. 6	49.06
Sept. 16	48.56	Apr. 2	48.85	Nov. 11	48.32		

#### Barnes County

140-61-16dcc. L. A. Flynn. Drilled unused water-table well in glacial drift, diam 12 in, depth 51 ft, slotted 45-51. MP hole in east side of pumpbase, 1.20 ft above lsd. Highest water level 36.05 below lsd, Apr. 28, 1954; lowest 37.78 below lsd, May 2, 1961. Records available: 1953-61.

June 11, 1957	37.64	Sept. 5, 1958	36.81	May 11, 1960	37.60	May 2, 1961	37.78
Nov. 21	37.58	May 8, 1959	37.34	Sept. 22	37.14	Nov. 7	37.51
Apr. 10, 1958	37.05	Sept. 9	37.36				

143-61-30ccc1. U. S. Geol. Survey. Drilled unused water-table well in glacial sand and gravel, diam 1 $\frac{1}{2}$  in, depth 66 ft, well point. MP top of pipe, 2.70 ft above lsd. Highest water level 15.29 below lsd, May 24, 1950; lowest 43.59 below lsd, Nov. 7, 1961. Records available: 1950, 1952-61. Water levels affected by pumping of nearby municipal well.

June 11, 1957	34.48	July 31, 1958	32.17	Sept. 9, 1959	37.12	May 2, 1961	40.17
Oct. 29	32.35	Mar. 16, 1959	35.49	Sept. 22, 1960	40.31	Nov. 7	43.59

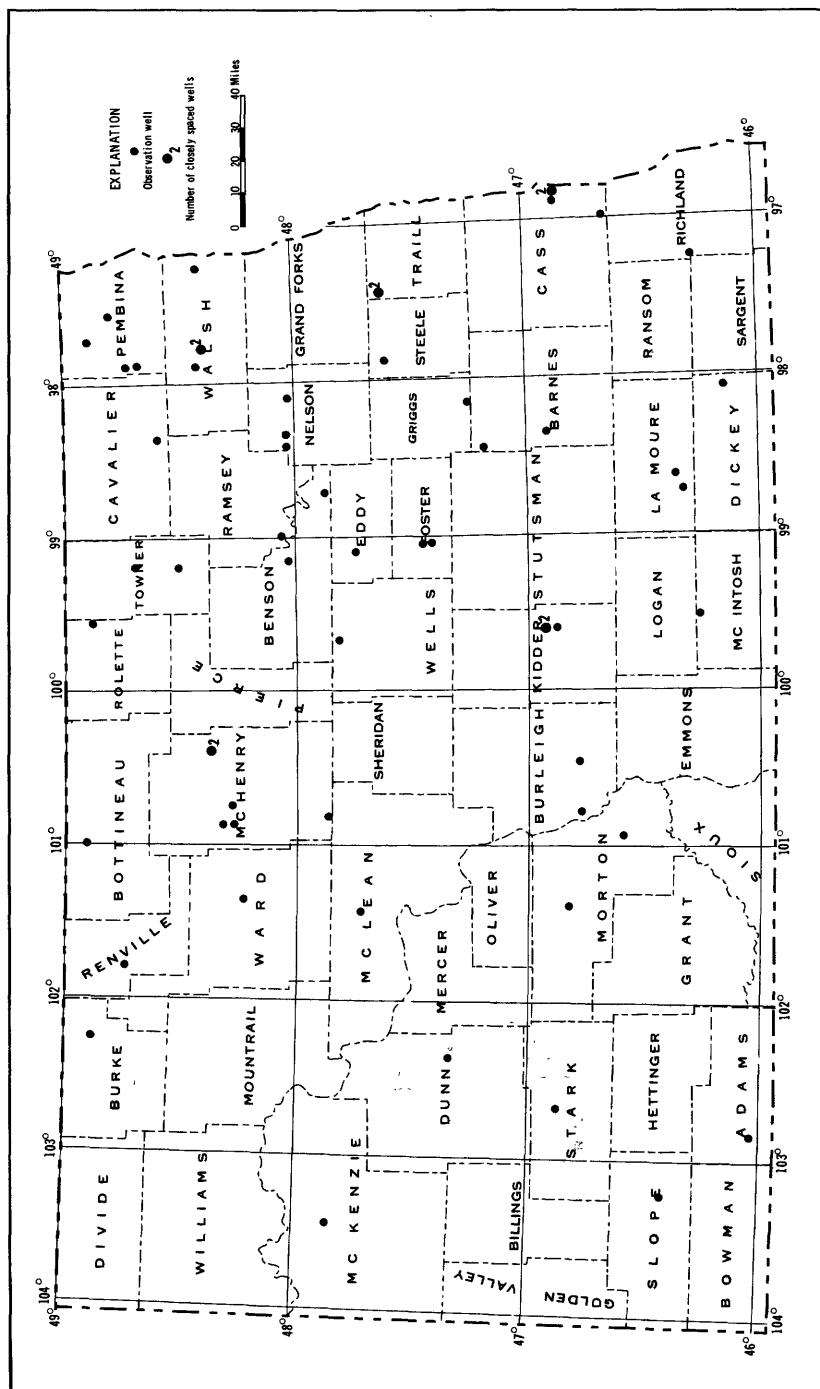


Figure 8. -- Location of observation wells in North Dakota, 1957-61.

Benson County

151-63-29acc. U. S. Geol. Survey. Drilled unused water-table well in glacial outwash sand and gravel, diam 6 in, depth 67 ft, slotted pipe 57-67. MP top of casing, 0.50 ft above lsd. Highest water level 15.20 below lsd, Dec. 15, 1957; lowest 17.38 below lsd, Apr. 12-13, 1956. Records available: 1951-61.

## Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	16.35	16.41	16.46	16.46	16.40	.....	.....	16.26	16.02	15.53	15.29	15.22
10	16.37	16.41	16.45	16.47	.....	.....	.....	16.24	15.96	16.45	15.28	15.22
15	16.37	16.41	16.47	16.47	.....	.....	.....	16.21	15.87	15.40	15.27	15.20
20	16.37	16.42	16.48	16.45	.....	.....	.....	16.18	15.79	15.34	15.25	15.25
25	16.39	16.45	16.48	16.44	.....	.....	.....	16.16	15.71	15.31	15.23	15.28
Eom	16.39	16.45	16.48	16.42	.....	.....	16.28	16.06	15.63	15.30	15.22	15.31

## 1958

5	15.95	15.95	.....	.....	15.97	15.97	15.98	15.73	15.78	15.40	15.46	.....
10	15.99	15.94	.....	.....	15.95	15.94	15.97	.....	15.74	15.79	15.40	15.48
15	15.99	15.92	.....	.....	15.93	15.97	15.97	.....	15.75	15.82	15.40	15.50
20	15.98	15.92	.....	.....	15.94	15.97	15.97	.....	15.76	15.87	15.40	15.52
25	15.97	15.91	.....	.....	15.96	15.97	15.98	.....	15.76	15.90	15.40	.....
Eom	15.96	15.91	.....	.....	15.94	15.97	15.98	.....	15.77	15.40	15.42	.....

## 1959

5	.....	.....	.....	.....	15.95	15.95	15.92	15.89	16.06	16.15	.....	.....
10	.....	.....	.....	.....	15.93	15.97	15.93	15.97	16.08	16.17	.....	.....
15	.....	.....	.....	.....	15.95	15.98	15.90	15.91	16.01	16.09	.....	.....
20	.....	.....	.....	.....	15.97	15.96	15.91	15.90	16.03	16.10	.....	.....
25	15.80	.....	.....	.....	15.92	15.97	15.92	15.90	16.04	16.11	.....	.....
Eom	15.82	.....	.....	.....	15.92	15.98	15.89	16.07	16.13	.....	.....	.....

## 1960

5	.....	16.56	.....	.....	.....	16.32	.....	16.29	16.46	16.57	16.50	16.67
10	.....	.....	.....	.....	.....	e16.34	e16.23	16.29	16.51	16.56	16.53	16.66
15	.....	.....	.....	.....	.....	.....	e16.25	16.30	16.56	16.56	16.55	16.65
20	.....	.....	.....	.....	.....	.....	e16.24	16.30	16.61	16.53	16.59	16.69
25	.....	.....	.....	.....	.....	.....	e16.25	16.35	16.61	16.52	16.62	16.69
Eom	.....	.....	.....	.....	.....	.....	16.25	16.41	16.59	16.51	16.65	16.68

## 1961

5	16.76	16.82	16.88	16.80	16.86	16.87	.....	.....	.....	.....	.....	17.26
10	16.77	16.82	16.86	16.82	16.85	16.87	.....	.....	17.03	.....	.....	17.29
15	16.78	16.85	16.88	16.83	16.85	16.90	.....	.....	.....	.....	.....	17.29
20	16.79	16.88	16.84	16.82	16.87	16.90	.....	.....	.....	.....	.....	17.21
25	16.79	16.86	16.79	16.81	16.85	16.91	.....	.....	.....	.....	.....	17.32
Eom	16.80	16.88	16.81	16.84	16.85	.....	.....	.....	.....	.....	.....	17.26

e Estimated.

153-66-21aab. U. S. Geol. Survey. Drilled unused water-table well in glacial sand and gravel, diam 6 in, depth 103 ft, cased, slotted 83-103. MP top of 5-in steel pipe, 3.50 ft above lsd. Highest water level 0.07 below lsd, May 18, 1956; lowest 5.61 below lsd, Apr. 28, 1953. Records available: 1950-60. Measurement discontinued. Oct. 15, 1957, 1.83; Mar. 20, 1958, 3.61; Oct. 10, 4.28; May 13, 1959, 2.33; Sept. 16, 5.32; Mar. 22, 1960, 5.04; Oct. 4, 4.85.

Bottineau County

163-80-25ccb. City of Westhope. Drilled observation artesian well in Fox Hills Sandstone of Upper Cretaceous age, diam 1½ in, depth 145 ft, screened 135-145. MP top of casing, at lsd. Highest water level 94.82 below lsd, Oct. 15, 1953; lowest 118.48 below lsd, May 13, 1959. Records available: 1953-61. Measurement discontinued. Water level affected by pumping of nearby city-supply wells.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 30, 1957	116.09	Oct. 8, 1958	112.94	May 4, 1960	104.56	May 3, 1961	110.10
Oct. 14	117.04	May 13, 1959	118.48	Oct. 4	96.89	Nov. 15	109.58
May 23, 1958	115.32	Oct. 28	115.58				

Burke County

162-89-5ddi. C. B. Cron. Drilled unused artesian well in glacial drift, diam 3 in, depth 394 ft, well top 388-394. MP top of casing, 2.49 ft above lsd. Highest water level 65.95 below lsd, Oct. 19, 1955; lowest 70.60 below lsd, Sept. 30, 1946. Records available: 1937-61.

162-89-5dd1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 30, 1957	70.25	Oct. 8, 1958	70.43	May 4, 1960	69.78	May 3, 1961	70.16
Oct. 14	70.08	May 13, 1959	70.25	Oct. 4	69.67	Nov. 15	68.32
May 23, 1958	70.22	Oct. 28	69.53				

Burleigh County

138-77-22aad. U. S. Geol. Survey. Drilled observation artesian well in buried-channel deposits and Hell Creek Formation of Upper Cretaceous age, diam 4 in, depth 126 ft, cased to 118, sand and gravel aquifer 89-122, screened with vertically slotted casing, gravel-packed 86-118. Lsd 1, 738.96 ft above msl. MP top of coupling on top of casing, 0.50 ft above lsd. Highest water level 11.73 below lsd, Dec. 31, 1961; lowest 14.15 below lsd, Sept. 25, 1961. Records available: 1961.

Lowest water level for the day, from recorder graph, 1961

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	d13.19	12.40	12.24
10	.....	.....	.....	.....	.....	.....	.....	.....	.....	13.05	12.38	12.15
15	.....	.....	.....	.....	.....	.....	.....	.....	.....	12.87	12.35	12.08
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	12.77	12.34	12.01
25	.....	.....	.....	.....	.....	.....	.....	.....	d14.15	12.56	12.32	11.94
Eom	.....	.....	.....	.....	.....	.....	.....	.....	d13.87	12.42	12.29	11.73

d Nearby well pumped recently.

138-80-15cdd. U. S. Geol. Survey. Drilled observation artesian well in buried-channel deposits and Hell Creek Formation of Upper Cretaceous age, diam 4 in, depth 168 ft, cased to 140, sand and gravel aquifer 93-156, screened with vertically slotted casing, gravel-packed 110-140. Lsd 1, 658.4 ft above msl. MP top edge of coupling on top of casing, 1.00 ft above lsd. Highest water level 35.45 below lsd, Oct. 5, 1961; lowest 40.85 below lsd, Oct. 20, 1961. Records available: 1961.

Lowest water level for the day, from recorder graph, 1961

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	35.45	39.88	38.85
10	.....	.....	.....	.....	.....	.....	.....	.....	.....	h39.78	h39.43	38.75
15	.....	.....	.....	.....	.....	.....	.....	.....	.....	40.15	39.29	38.64
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	d40.85	39.14	38.53
25	.....	.....	.....	.....	.....	.....	.....	.....	.....	d40.70	39.04	38.45
Eom	.....	.....	.....	.....	.....	.....	.....	.....	.....	d40.49	38.94	38.33

d Nearby well pumped recently.

h Tape measurement.

Cass County

137-50-29dda5. City of Kindred. Drilled public-supply water-table well in deposits of glacial Lake Agassiz, diam 16 in, depth 100 ft, open end at 85. MP top of wooden well cover at hole about 1.00 ft south of pump, at lsd. Highest water level 2.68 below lsd, Apr. 11, 1952; lowest 11.47 below lsd, Apr. 12, 1957. Records available: 1948-52, 1954-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 12, 1957	11.47	Dec. 2, 1958	6.24	Oct. 27, 1959	6.19	Nov. 2, 1960	6.82
Nov. 20	5.34	May 7, 1959	6.57	May 9, 1960	4.49	Nov. 7, 1961	6.80
May 9, 1958	5.69						

139-48-6ccdl. The Pierce Co. 1019 1st Ave. North, Fargo. Drilled unused artesian well in glacial drift, diam 6 in, total depth 403 ft, glacial drift aquifer at 180 ft, granite reached at 280. MP top edge of coupling on top of casing, about 5 ft below lsd. Highest water level 28.01 below lsd, July 3, 1940; lowest 83.98 below lsd, Aug. 12, 1960. Records available: 1940-61.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	43.67	44.62	45.37	46.06	46.93	47.82	48.94	49.07	48.83	48.14	47.44	47.06
10	43.85	44.79	45.45	46.23	46.74	48.12	49.02	49.07	48.74	47.99	47.33	47.03
15	44.03	44.92	45.66	46.42	46.87	48.41	49.07	49.04	48.65	47.85	47.21	47.04
20	44.21	45.10	45.74	46.48	47.10	48.70	49.08	49.07	48.56	47.76	47.16	46.96
25	44.40	45.17	45.75	46.55	47.30	48.84	49.10	49.04	48.41	47.64	47.16	47.04
Eom	44.47	45.22	46.89	46.78	47.59	48.93	49.05	49.01	48.30	47.48	47.13	47.12



139-48-6ccdl-- Continued.

1958

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	47.12	47.40	47.65	48.68	49.58	49.73	49.81	50.19	50.52	50.53	49.59	48.28
10	47.04	47.55	47.58	48.93	49.58	49.70	49.85	50.22	50.54	50.47	49.38	48.24
15	47.10	47.58	47.97	49.03	49.62	49.72	49.87	50.27	50.50	50.46	49.22	48.12
20	47.18	47.61	48.15	49.05	49.63	49.76	49.95	50.38	50.54	50.24	48.93	48.03
25	47.20	47.62	48.35	49.30	49.64	49.78	50.02	50.44	50.52	50.15	48.76	47.99
Eom	47.30	47.63	48.61	49.44	49.69	49.83	50.10	50.48	50.54	49.83	48.59	48.02

1959

5	47.98	47.85	47.97	48.45	48.85	.....	49.44	49.18	.....	49.57	49.71	49.39
10	47.97	47.91	48.03	48.57	48.86	48.47	49.36	e49.24	49.74	.....	49.64	e49.40
15	47.87	47.90	48.13	48.56	49.02	49.57	49.31	49.21	e49.76	e49.60	e49.59	49.41
20	47.84	47.92	48.24	48.65	48.94	49.56	49.26	.....	49.55	49.54	e49.49	49.48
25	47.85	47.92	48.33	48.67	49.02	49.55	49.24	.....	.....	e49.50	e49.44	e49.55
Eom	47.91	47.92	48.39	48.72	49.10	49.52	.....	e49.81	e49.79	e49.60	49.39	49.62

e Estimated.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5, 1960	49.38	July 7, 1960	a82.40	Jan. 10, 1961	49.35	July 14, 1961	50.26
12	49.37	14	50.91	19	49.47	21	52.21
19	49.64	21	a75.15	25	49.52	27	50.30
25	49.44	28	a76.17	Feb. 2	49.58	Aug. 2	50.36
Feb. 3	49.64	Aug. 4	a74.88	7	49.62	8	50.40
9	49.52	12	a83.98	10	49.56	14	50.45
16	49.48	19	50.92	17	49.61	21	50.61
24	49.58	27	50.77	24	49.70	28	50.84
Mar. 1	49.60	Sept. 2	53.86	Mar. 3	49.81	Sept. 5	50.71
8	49.57	9	50.59	13	49.83	11	50.76
15	49.58	16	50.40	21	49.87	19	50.15
22	49.55	25	50.25	24	49.94	26	50.08
29	49.54	Oct. 3	50.10	Apr. 3	50.00	Oct. 3	49.89
Apr. 5	49.58	10	49.98	11	49.98	10	49.81
11	49.56	17	49.91	17	49.91	17	49.68
19	49.59	24	49.79	25	49.87	24	49.80
27	49.80	31	49.64	May 2	49.94	31	49.49
May 4	49.61	Nov. 7	49.56	9	51.85	Nov. 8	49.50
11	49.71	15	49.40	22	49.85	14	49.40
19	49.64	21	49.34	29	49.91	21	49.33
25	49.68	Dec. 2	49.21	June 3	49.96	28	49.23
June 2	49.66	8	49.29	9	49.98	5	49.33
11	49.75	13	49.18	16	49.99	13	49.23
18	49.83	20	49.30	23	49.97	20	49.22
25	49.76	27	49.29	30	a74.89	27	49.25
July 1	49.37	Jan. 3, 1961	49.26	July 7	50.40		

a Well being pumped.

139-48-7acbl. City of Fargo. Island Park. Drilled unused artesian well in glacial drift, diam 10 in, depth 228 ft, screened 218-228. MP top edge of coupling on top of 8-in casing, 2.80 ft above lsd. Highest water level 36.68 below lsd, July 19, 1940; lowest 48.69 below lsd, Nov. 15, 1960. Records available: 1940-61.

Jan. 3, 1957	43.15	May 31, 1957	43.50	Oct. 28, 1957	43.66	Mar. 16, 1958	43.93
9	43.26	June 6	43.58	Nov. 4	43.83	23	43.98
16	42.22	16	47.59	11	43.83	30	43.94
23	44.19	23	43.45	18	43.75	Apr. 7	43.95
30	43.20	July 2	45.50	24	43.82	13	43.96
Feb. 2	43.26	16	43.70	Dec. 1	43.80	20	43.95
13	43.30	23	43.72	8	43.82	27	44.02
22	43.26	27	43.78	15	43.81	May 4	44.10
28	45.66	31	43.71	22	43.72	10	44.13
Mar. 7	43.32	Aug. 13	43.84	29	43.84	18	44.12
14	43.28	20	43.90	Jan. 5, 1958	43.84	24	44.21
21	43.29	27	43.98	12	43.85	June 2	44.28
28	43.30	Sept. 3	43.68	19	43.87	8	44.19
Apr. 4	43.40	10	43.77	26	43.81	15	44.25
13	43.47	17	43.61	Feb. 2	43.89	22	44.29
22	43.60	24	43.78	9	43.95	29	44.28
28	43.39	30	43.84	16	43.95	July 7	44.08
May 8	43.42	Oct. 8	43.89	23	43.84	13	44.13
14	43.41	14	43.84	Mar. 3	43.68	19	44.25
22	43.38	21	43.80	10	43.93	27	44.31

139-48-7acbl--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 2, 1958	44.40	June 15, 1959	44.62	Apr. 19, 1960	45.18	Feb. 25, 1961	45.95
11	44.70	22	44.71	27	45.21	Mar. 4	45.99
17	44.56	29	44.77	May 4	45.26	13	46.00
24	44.53	July 6	44.70	11	45.38	21	46.07
Sept. 1	44.52	13	44.75	19	45.37	25	46.11
9	44.58	20	44.83	25	45.45	Apr. 3	46.21
14	44.51	27	44.91	June 2	45.48	11	46.11
21	44.58	Aug. 4	45.06	11	45.53	17	46.05
28	44.62	11	45.06	18	45.56	25	45.99
Oct. 5	44.64	17	45.10	25	45.48	May 2	46.08
12	44.65	24	45.10	July 1	45.46	9	45.99
21	44.60	Sept. 1	45.12	7	45.51	21	46.02
26	44.70	9	45.14	14	45.53	28	46.10
Nov. 4	44.61	16	45.20	21	45.52	June 3	46.11
9	44.64	21	45.26	28	45.57	9	46.19
17	44.54	29	45.25	Aug. 4	45.65	16	46.23
23	44.55	Oct. 5	45.30	12	45.75	23	46.30
30	44.51	14	45.10	19	45.78	30	46.32
Dec. 9	44.61	20	45.27	27	45.75	July 7	46.38
14	44.55	27	45.20	Sept. 2	45.78	14	46.45
21	44.56	Nov. 4	45.24	9	45.79	21	46.52
28	44.55	11	45.11	16	45.90	27	46.57
Jan. 4, 1959	44.55	17	45.14	25	45.97	Aug. 2	46.63
11	44.56	23	45.10	Oct. 3	45.99	8	46.67
18	44.50	30	45.11	10	45.99	14	46.73
25	44.58	Dec. 7	45.12	17	46.09	21	46.80
Feb. 1	44.68	15	45.12	24	45.97	28	46.85
8	44.54	22	45.18	31	45.92	Sept. 5	46.75
15	44.49	30	45.10	Nov. 7	45.90	11	46.81
22	44.52	Jan. 5, 1960	45.12	15	48.69	19	46.66
Mar. 3	44.53	12	45.06	21	45.93	26	46.63
8	44.56	19	45.14	Dec. 2	45.84	Oct. 3	46.61
15	44.58	26	45.14	8	45.89	10	46.62
23	44.51	Feb. 3	45.16	13	45.90	17	46.58
30	44.51	9	45.09	20	45.94	24	46.60
Apr. 5	44.57	16	45.18	27	45.80	31	46.50
12	44.69	24	45.26	Jan. 3, 1961	45.81	Nov. 8	46.54
19	44.66	Mar. 1	45.31	10	45.85	14	46.51
26	44.67	8	45.25	19	45.89	21	46.49
May 3	44.63	15	45.25	25	45.91	28	46.47
11	44.61	22	45.29	Feb. 2	45.97	Dec. 5	46.49
19	44.68	29	45.22	7	46.01	13	46.48
25	44.67	Apr. 5	45.17	11	45.90	20	46.46
June 1	44.67	11	45.20	18	45.87	27	46.47
8	44.68						

139-49-6ad1. Union Stockyards. Drilled unused artesian well in glacial drift, diam 8 in, depth 230 ft, screened 220-230. MP top of casing, 0.40 ft above lsd. Highest water level 24.90 below lsd, May 7, 1938; lowest 100.15 below lsd, Dec. 27, 1961. Records available: 1938-61.

Jan. 3, 1957	82.60	May 31, 1957	79.63	Oct. 28, 1957	81.13	Mar. 16, 1958	78.59
9	82.54	June 6	79.55	Nov. 4	81.21	23	78.54
16	82.40	16	79.55	11	81.27	30	78.56
23	82.41	23	79.45	18	81.24	Apr. 7	78.58
30	82.62	July 1	79.30	24	81.26	13	78.58
Feb. 6	84.72	16	79.40	Dec. 1	81.13	20	77.64
13	82.94	23	79.71	8	81.08	27	78.72
22	83.42	27	80.32	15	80.91	May 4	78.70
28	83.51	31	80.12	22	80.59	10	78.63
Mar. 7	83.57	Aug. 13	80.39	29	80.38	18	78.60
14	83.62	20	80.48	Jan. 5, 1958	80.22	24	78.60
21	83.71	27	80.92	12	81.00	June 2	78.64
28	84.84	Sept. 3	80.92	19	79.82	8	78.74
Apr. 4	83.81	10	80.88	26	79.47	15	78.83
13	83.13	17	80.82	Feb. 2	79.20	22	78.84
22	81.64	23	80.83	9	79.04	29	78.97
30	80.80	30	80.47	16	79.05	July 7	79.15
May 7	80.56	Oct. 8	80.55	23	78.97	13	79.34
14	80.26	14	80.97	Mar. 3	78.83	21	79.80
22	80.01	21	81.06	10	78.63	27	80.16

139-49-6ad1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 11, 1958	81.06	June 15, 1959	84.18	Apr. 19, 1960	90.72	Mar. 4, 1961	94.89
17	81.30	22	84.36	27	90.81	13	95.07
24	81.68	29	84.52	May 4	90.99	21	95.27
Sept. 1	81.84	July 6	84.69	11	91.11	25	95.46
8	81.95	13	84.87	19	91.41	Apr. 3	95.54
14	82.08	20	85.03	25	91.82	11	95.60
21	82.24	27	85.23	June 2	92.38	17	95.74
28	82.40	Aug. 4	85.60	11	92.65	25	95.81
Oct. 5	82.93	11	86.30	18	92.70	May 2	95.88
12	83.23	17	86.20	25	92.68	9	95.95
21	83.55	24	85.96	July 1	92.67	21	96.10
26	83.73	Sept. 1	87.51	7	92.58	28	96.18
Nov. 4	83.91	9	88.84	14	92.52	June 3	96.33
9	83.92	16	89.19	21	92.52	9	96.42
16	83.90	21	89.25	28	92.60	16	96.58
23	83.65	29	89.41	Aug. 4	92.62	23	96.80
30	83.70	Oct. 5	84.50	12	92.75	30	96.93
Dec. 7	83.98	14	89.50	19	92.85	July 7	97.20
14	84.75	20	89.59	27	92.88	14	97.37
21	86.36	27	89.63	Sept. 2	92.86	21	97.60
28	85.48	Nov. 4	89.71	9	92.87	27	97.78
Jan. 4, 1959	85.44	11	89.71	16	92.88	Aug. 2	97.97
11	85.52	17	89.74	25	92.90	8	98.06
18	85.63	23	89.77	Oct. 3	92.89	14	98.19
25	85.76	30	89.71	10	92.31	21	98.25
Feb. 1	85.94	Dec. 7	89.65	17	92.83	28	98.36
8	86.18	15	89.53	24	92.78	Sept. 5	98.50
15	86.32	22	89.60	31	92.73	11	98.64
22	86.45	30	89.24	Nov. 7	92.63	19	98.77
Mar. 3	86.66	Jan. 5, 1960	89.36	15	92.71	26	98.88
8	86.72	12	89.20	Dec. 2	92.17	Oct. 3	98.99
15	86.67	19	89.34	8	92.09	10	99.15
23	86.28	25	89.52	13	92.12	17	99.32
30	85.82	Feb. 3	89.68	20	92.50	24	99.46
Apr. 5	85.37	9	89.79	27	92.46	31	99.75
12	85.10	16	89.91	Jan. 3, 1961	92.55	Nov. 8	100.06
19	84.88	24	90.03	10	92.73	14	100.10
26	84.75	Mar. 1	90.17	19	93.01	21	99.94
May 3	84.56	8	90.30	25	93.20	28	99.88
11	84.47	15	90.39	Feb. 2	93.41	Dec. 5	99.94
19	84.35	22	90.49	7	93.60	13	100.07
25	84.28	29	90.58	11	94.18	20	100.10
June 1	84.18	Apr. 5	90.60	18	94.48	27	100.15
8	84.13	11	90.65	25	94.69		

Cavalier County

161-60-14da1. City of Langdon. Dug public-supply water-table well in glacial drift, diam 12 in, depth 27 ft, lined with brick. MP top of well platform, 1.02 ft above lsd. Highest water level 1.29 below lsd, May 22, 1949; lowest 14.13 below lsd, July 13, 1940. Records available: 1937-61. Measurement discontinued.

Jan. 5, 1957	6.46	May 4, 1957	7.58	Aug. 31, 1957	3.59	Dec. 28, 1957	6.08
12	6.71	11	7.26	Sept. 7	2.43	Jan. 4, 1958	6.44
19	7.01	18	7.12	14	2.93	11	6.82
26	7.38	25	7.63	21	3.39	18	8.15
Feb. 2	7.72	June 1	6.22	28	3.92	25	8.47
9	8.08	8	5.72	Oct. 5	4.10	Feb. 1	7.74
16	8.42	15	4.22	12	3.73	8	8.04
23	8.75	22	4.32	19	3.86	15	8.08
Mar. 2	9.08	29	3.90	26	4.07	22	9.38
9	9.26	July 6	3.73	Nov. 2	4.20	June 7	7.96
16	9.48	13	3.24	9	4.30	14	7.53
23	9.62	20	3.22	16	4.38	21	7.25
30	9.28	27	3.82	23	4.40	28	6.98
Apr. 6	9.08	Aug. 3	4.00	30	4.71	July 5	4.45
13	8.73	10	4.20	Dec. 7	5.18	12	4.06
20	8.44	17	2.78	14	5.55	19	4.15
27	7.94	24	3.34	21	5.83	26	4.52

161-60-14da1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 2, 1958	5.02	May 23, 1959	3.73	Dec. 26, 1959	5.23	Aug. 6, 1960	5.57
9	5.38	30	3.51	Jan. 2, 1960	5.49	13	5.98
16	6.03	June 6	4.04	9	5.81	20	6.32
23	6.41	13	4.06	16	6.13	27	6.02
30	6.68	20	4.48	23	6.38	Sept. 3	6.20
Sept. 6	6.98	27	4.26	30	6.60	10	6.58
13	7.11	July 4	4.32	Feb. 6	6.82	17	6.94
20	7.24	11	4.40	13	7.02	24	7.88
27	7.44	18	4.73	20	7.29	Oct. 1	7.50
Oct. 4	7.60	25	5.02	27	7.55	8	7.66
11	7.78	Aug. 1	5.41	Mar. 5	7.78	15	7.77
18	8.84	8	5.74	12	7.98	22	7.78
25	7.90	15	5.82	19	7.98	29	7.83
Nov. 1	7.90	22	6.18	26	7.58	Nov. 5	7.88
8	7.92	29	5.28	Apr. 16	6.68	12	7.93
15	7.92	Sept. 5	5.10	23	6.00	19	7.98
22	7.90	12	5.63	30	5.43	26	7.98
29	7.86	19	6.06	May 7	5.00	May 6, 1961	7.83
Dec. 6	7.86	26	5.98	14	4.52	13	7.58
13	7.88	Oct. 3	5.73	21	1.63	20	7.36
20	7.91	10	5.03	26	1.27	26	7.28
27	7.95	17	3.98	June 4	2.08	June 3	7.26
Mar. 21, 1959	7.58	24	2.08	11	2.72	10	7.28
Apr. 4	7.03	31	1.53	13	3.04	17	7.32
11	6.00	Nov. 7	2.11	25	3.26	24	7.61
18	4.68	14	2.85	July 2	3.63	July 1	7.59
25	4.48	21	3.77	9	4.03	8	7.80
May 2	4.40	28	4.15	16	4.34	15	7.88
9	4.74	Dec. 5	4.42	23	4.70	22	7.10
16	4.18	12	4.67	30	5.17	28	6.35
	4.06	19	5.02				

Dickey County

131-59-28ba1. City of Oakes. Driven observation water-table well in deposits of glacial Lake Dakota, diam 1½ in, depth 24 ft, well point. MP top of casing, 1.50 ft above lsd. Highest water level 6.60 below lsd, May 17, 1948; lowest 11.01 below lsd, Sept. 10, 1959. Records available: 1940-57, 1959-61. No measurement made in 1958.

Jan. 1, 1957	10.04	Feb. 22, 1957	10.13	Apr. 21, 1957	10.80	Nov. 21, 1957	10.28
7	10.07	Mar. 4	10.12	28	10.78	May 7, 1959	10.40
14	10.06	11	10.14	May 6	10.70	Sept. 10	11.01
21	10.04	18	10.12	13	10.74	May 10, 1960	9.77
28	10.02	25	10.09	22	10.75	Nov. 2	9.36
Feb. 4	10.08	Apr. 1	10.06	26	10.74	May 2, 1961	9.17
10	10.10	7	10.04	June 12	10.15	Nov. 7	9.56
15	10.12	14	10.05	July 9	10.31		

Dunn County

145-92-25ad1. S. F. Lesmeister. Dug domestic and stock water-table well in Fort Union Formation of Paleocene age, diam 4 ft, depth 17 ft, lined with wood. MP top of wood curbing, 2.00 ft above lsd. Highest water level 0.90 above lsd, Jan. 20, 1956; lowest 12.20 below lsd, Aug. 18, 1958. Records available: 1942-61.

Jan. 4, 1957	10.50	Apr. 12, 1957	11.20	Aug. 4, 1957	10.92	Dec. 7, 1957	8.58
11	10.30	19	9.60	11	9.25	14	8.41
18	10.70	26	9.40	18	9.25	21	8.41
25	10.50	May 3	9.50	25	9.08	28	8.66
Feb. 1	10.30	10	8.66	Sept. 2	9.92	Mar. 3, 1958	8.50
8	10.50	17	9.25	9	9.66	10	8.50
15	10.40	24	9.08	16	9.50	17	8.75
22	10.50	31	8.75	23	9.50	24	8.83
Mar. 1	10.20	June 23	9.16	30	9.25	Apr. 7	8.08
8	10.10	30	9.58	Nov. 2	8.50	14	8.33
15	10.20	July 7	9.92	9	8.50	21	8.17
22	9.90	14	10.16	16	8.92	28	8.33
29	9.70	21	10.33	23	9.00	July 7	9.90
Apr. 5	10.90	28	9.58	30	8.75	14	11.90

145-92-25ad1-- Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 21, 1958	11.90	June 8, 1959	9.60	Apr. 11, 1960	7.00	Feb. 20, 1961	8.25
28	11.70	15	9.60	18	7.66	27	8.33
Aug. 4	11.90	22	9.10	25	7.33	Mar. 6	8.33
11	11.80	29	9.40	May 2	7.66	14	8.50
18	12.20	July 6	9.80	9	7.00	20	8.42
25	12.10	13	10.60	16	7.00	27	8.58
Sept. 1	12.10	20	10.90	23	7.66	Apr. 3	8.08
8	11.90	27	10.10	30	7.00	10	8.33
15	11.70	Aug. 3	10.60	June 6	6.83	17	8.33
22	11.70	10	10.40	13	6.66	24	8.83
29	11.60	17	10.60	20	6.50	May 1	8.92
Oct. 6	11.40	24	10.60	27	6.50	8	7.83
13	11.90	31	10.10	July 5	6.50	15	7.67
20	11.10	Sept. 7	9.40	11	6.50	22	7.33
27	10.90	14	9.30	18	6.92	29	7.83
Nov. 3	10.80	21	9.10	25	6.83	June 5	7.92
10	10.50	28	8.60	Aug. 1	7.58	12	7.67
17	10.20	Oct. 5	8.60	8	7.42	19	8.17
24	9.90	12	8.40	15	7.50	26	7.33
Dec. 1	9.10	19	8.50	22	7.83	July 3	7.42
8	9.10	26	8.20	29	7.83	10	7.67
15	9.30	Nov. 2	8.20	Sept. 5	7.92	17	7.86
22	9.10	9	8.00	12	7.75	24	8.00
29	9.30	16	7.10	19	7.42	31	7.83
Jan. 5, 1959	8.30	23	7.10	26	7.50	Aug. 7	7.83
12	8.30	30	7.60	Oct. 3	7.66	14	8.08
19	8.60	Dec. 7	7.90	10	7.50	21	8.25
26	8.40	14	7.60	17	7.50	28	8.17
Feb. 2	8.40	21	7.70	24	7.83	Sept. 4	8.00
9	8.30	28	7.70	31	7.92	11	7.83
16	8.40	Jan. 4, 1960	7.58	Nov. 7	7.83	18	7.83
23	8.60	11	7.75	14	7.66	25	8.58
Mar. 2	8.80	18	7.75	21	7.66	Oct. 2	8.83
9	8.60	25	8.00	28	7.75	9	7.92
16	8.60	31	8.33	Dec. 5	7.83	16	7.83
23	8.40	Feb. 1	8.33	12	7.92	23	7.83
30	8.20	8	8.50	19	7.00	30	7.75
Apr. 6	8.20	15	8.17	26	7.00	Nov. 6	8.25
13	8.20	23	8.00	Jan. 2, 1961	8.00	13	8.25
20	8.20	29	7.66	9	8.00	20	8.33
27	8.40	Mar. 7	7.58	17	8.00	27	8.33
May 4	8.50	14	7.58	23	8.17	Dec. 4	8.33
11	8.60	21	7.42	30	8.25	11	8.42
18	8.90	28	7.33	Feb. 6	8.17	18	8.50
25	9.90	Apr. 4	7.33	13	8.20	25	8.50
June 1	9.90						

Eddy County

149-66-28bbb. Oscar Holton. Dug unused water-table well in glacial drift, diam 30 in, depth 8 ft, lined with concrete, open-end screen. MP top west edge of casing, 0.50 ft above lsd. Highest water level 1.83 below lsd, Apr. 22, 1955; lowest 5.25 below lsd, Nov. 13, 1953. Records available: 1953-60. Measurement discontinued. July 9, 1957, 3.55; Apr. 10, 1958, 2.56; Sept. 2, 3.91; May 20, 1959, 3.63; Sept. 16, 5.10; Oct. 7, 1960, 4.35.

Foster County

146-66-6aad. City of Carrington. Dug standby public-supply water-table well in glacial outwash, diam 32 ft, depth 25 ft, lined with concrete, open end. MP rim of manhole on top of well enclosure, 4.00 ft above lsd. Records available: 1961. Nov. 10, 1961, 4.16.

147-66-31acc. North Dakota Agricultural Experiment Station. Drilled irrigation artesian well (No. D) in buried glaciofluvial deposits, diam 14 in, depth 93 ft, lined with concrete to 93, screened 60-93. Lsd 1,540.47 ft above msl. MP hole in pumpbase, 0.30 ft above lsd. Records available: 1961. Nov. 10, 1961, 23.53.

Griggs County

144-59-20bc1. Griffith Loan & Investment Co. Drilled unused water-table well in glacial drift, diam 5 in, depth 51 ft, screened 45-51. MP top of casing, 0.90 ft below lsd. Highest water level 14.65 below lsd, Nov. 21, 1957; lowest 27.95 below lsd, Apr. 6, 1941. Records available: 1940-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 3, 1957	18.84	Sept. 5, 1958	16.34	May 11, 1960	19.52	May 2, 1961	19.45
Nov. 21	14.65	May 8, 1959	19.42	Sept. 22	18.39	Nov. 7	19.50
Apr. 10, 1958	16.26	Sept. 9	18.77				

Kidder County

139-71-10bc1. Village of Tappen. Dug fire-protection water-table well in glacial drift, diam 8 ft, depth 15 ft, lined with concrete. MP chiseled cross on west side of manhole, 0.10 ft above lsd. Highest water level 3.69 below lsd, May 26, 1950; lowest 12.46 below lsd, Feb. 1, 1941. Records available: 1940-60. Measurement discontinued.

May 3, 1957	6.60	Apr. 10, 1958	8.72	May 8, 1959	9.68	May 11, 1960	9.57
Sept. 11	9.07	July 30	9.28	Sept. 10	11.85	Sept. 20	10.17

140-71-23ccb. K. Maw. Formerly U.S. Geol. Survey. Drilled observation water-table well in glacial drift, diam 8 in, depth 240 ft, cased to 70, perforated 30-70. MP top of 5-in casing, 2.20 ft above lsd. Highest water level 39.54 below lsd, May 3, 1957; lowest 41.85 below lsd, Oct. 24, 1961. Records available: 1955-61.

May 3, 1957	39.54	July 30, 1958	39.96	Sept. 10, 1959	40.99	Sept. 20, 1960	40.84
Sept. 11	39.56	May 8, 1959	40.52	May 11, 1960	40.82	Oct. 24, 1961	41.85
Apr. 10, 1958	39.75						

140-71-28bba. U.S. Geol. Survey. Drilled observation water-table well in glacial drift, diam 8 in, depth 90 ft, cased to 60, perforated. MP top edge of casing, 1.00 ft above lsd (previously reported 1.20 ft above lsd). Highest water level 11.75 below lsd, Dec. 3, 1956; lowest 13.95 below lsd, Sept. 10, 1959. Records available: 1955-61. May 3, 1961, 13.70; Oct. 25, 13.61.

## Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	.....	.....	.....	.....	11.87	.....	.....	.....	.....	12.13	.....	.....
10	.....	.....	.....	.....	.....	.....	.....	.....	12.02	12.24	.....	.....
15	.....	.....	.....	.....	.....	.....	.....	.....	11.89	12.37	.....	.....
20	.....	.....	.....	.....	.....	.....	.....	.....	11.85	12.51	.....	.....
25	12.24	.....	.....	.....	.....	.....	.....	.....	11.97	12.63	.....	.....
Eom	.....	.....	.....	.....	.....	.....	.....	.....	12.09	12.75	.....	.....

## 1958

5	.....	.....	.....	.....	12.48	12.68	12.77	13.02	13.25	.....	.....	.....
10	.....	.....	.....	12.53	12.45	12.68	12.74	13.07	13.26	.....	.....	.....
15	.....	.....	.....	12.47	12.54	12.70	12.74	13.13	13.26	.....	.....	.....
20	.....	.....	.....	12.47	12.57	12.71	12.83	13.17	13.26	.....	.....	.....
25	.....	.....	.....	12.53	12.60	12.73	12.89	13.21	13.25	.....	.....	.....
Eom	.....	.....	.....	12.45	12.66	12.75	13.00	13.25	13.25	.....	.....	.....

## 1959

5	.....	13.21	13.12	13.08	13.05	.....	.....	13.68	13.93	.....	.....	.....
10	.....	13.19	13.11	13.07	e13.04	.....	.....	13.72	13.95	.....	.....	.....
15	.....	13.17	13.09	13.07	.....	.....	13.43	13.77	.....	.....	.....	.....
20	.....	13.15	13.07	13.06	.....	.....	13.50	13.80	.....	.....	.....	.....
25	e13.23	13.14	13.07	13.06	.....	.....	13.54	13.85	.....	.....	.....	.....
Eom	e13.24	13.13	13.09	13.05	.....	.....	13.61	13.89	.....	.....	.....	.....

## 1960

5	.....	.....	.....	.....	.....	.....	13.18	.....	.....	.....	13.64	.....
10	.....	13.50	.....	.....	13.22	.....	.....	.....	13.60	.....	.....	.....
15	.....	.....	.....	.....	.....	.....	.....	.....	13.67	.....	.....	.....
20	.....	.....	.....	.....	.....	.....	.....	.....	13.48	.....	.....	.....
25	.....	.....	.....	.....	.....	13.18	.....	13.48	13.42	.....	.....	.....
Eom	.....	.....	.....	.....	.....	13.10	.....	.....	13.55	.....	.....	13.64

e Estimated.

La Moure County

133-64-3bc1. City of Edgeley. Drilled unused water-table well in Pierre Shale of Upper Cretaceous age, diam 6 in, depth 92 ft, gravel-packed. MP basement-floor level, edge of 6-in flange, 9.00 ft below lsd. Highest water level 20.57 below lsd, Apr. 9, 1955; lowest 28.05 below lsd, Aug. 29, 1946. Records available: 1940-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 9, 1957	22.13	May 9, 1958	20.89	Sept. 10, 1959	23.16	May 2, 1961	21.47
Nov. 21	21.32	July 14, 1959	22.44	Nov. 2, 1960	21.23	Nov. 7	22.66

134-64-24dc1. Mrs. Fidelia Davis. Drilled unused artesian well in Dakota Sandstone of Lower Cretaceous age, diam 4 to 1½ in, depth 1,265 ft, screened 1,255-1,265. MP top of casing, 0.60 ft above lsd. Highest water level 1.39 above lsd, Oct. 27, 1955; lowest 3.26 below lsd, Feb. 18, 1938. Records available: 1937-39, 1950, 1955-59, 1961. No measurement made in 1960. Nov. 21, 1957, +0.95; May 9, 1958, +1.08; May 7, 1959, +0.74; Sept. 10, +1.08; May 2, 1961, +1.05; Nov. 7, +0.69.

McHenry County

152-79-6bc1. Minneapolis, St. Paul, & Sault Ste. Marie RR. Dug railroad water-table well in glacial drift, diam 10 ft, depth 23 ft, lined with brick. MP flange of manhole at south side of railway grade, 2.00 ft above lsd. Highest water level 9.22 below lsd, Sept. 30, 1954; lowest 22.86 below lsd, Nov. 10, 1940. Records available: 1940-48, 1950-60. May 2, 1957, 12.57; Sept. 9, 12.65; May 22, 1958, 9.63; Sept. 4, 12.36; May 20, 1959, 12.72; May 4, 1960, 13.22; Oct. 5, 12.73. Measurement discontinued.

156-78-36bc1. U. S. Forest Service. Denbigh Forest Experiment Station well 1. Dug unused water-table well in deposits of glacial Lake Souris, size 4 x 4 ft, depth 12 ft, lined with wood. MP two brass hubs set in concrete on opposite sides of well, 0.70 ft above lsd. Highest water level 1.29 below lsd, Apr. 15, 1955; lowest dry, Oct. 8, 1958, Nov. 14, 1961. Records available: 1932-41, 1943-61. Measurement discontinued.

Apr. 30, 1957	5.64	Oct. 8, 1958	(f)	May 5, 1960	5.95	May 4, 1961	6.11
Oct. 15	5.68	May 13, 1959	6.12	Oct. 5	6.40	Nov. 14	(f)
May 22, 1958	5.67	Oct. 28	6.20				

f Dry.

156-79-10aad. U. S. Geol. Survey. Drilled unused water-table well in glacial drift, diam 4 in, depth 121 ft, cased to 102, open-bottom screen. MP top of casing, 2.70 ft above lsd. Highest water level 1.35 above lsd, May 3, 1949; lowest 7.80 below lsd, July 16, 1947. Records available: 1947, 1949, 1952-61.

Apr. 30, 1957	3.07	Oct. 8, 1958	3.49	May 6, 1960	3.97	May 4, 1961	3.80
Oct. 15	4.84	May 13, 1959	3.97	Oct. 5	3.43	Nov. 14	4.50
May 22, 1958	2.98	Oct. 28	4.45				

156-79-33dc1. Harold H. Sullwold. Drilled unused water-table well in glacial drift, diam 12 in, depth 38 ft, cased to 35, open-end screen. MP top of 12-in tile curb, 1.60 ft above lsd. Highest water level 4.68 below lsd, May 24, 1950; lowest 14.62 below lsd, Nov. 11, 1940. Records available: 1940-60. Measurement discontinued.

Apr. 30, 1957	9.58	May 22, 1958	9.07	May 13, 1959	8.55	May 5, 1960	8.14
Oct. 15	8.62	Oct. 8	9.95	Oct. 28	6.59	Oct. 5	8.51

157-75-31dc1. U. S. Forest Service. Dug observation water-table well in glacial drift, diam 12 in, depth 12 ft, galvanized culvert. MP flange of manhole at north point, 3.00 ft above lsd. Highest water level 2.11 below lsd, June 23, 1943; lowest 8.08 below lsd, Aug. 1, 1940. Records available: 1940-50, 1952-61. Measurement discontinued; replaced by 157-75-31dcc.

Apr. 29, 1957	3.86	Oct. 8, 1958	4.59	Oct. 28, 1959	4.64	Oct. 5, 1960	4.46
Oct. 15	4.05	May 13, 1959	4.46	May 5, 1960	4.74	May 4, 1961	4.22
May 22, 1958	4.01						

157-75-31dcc. U. S. Forest Service. Drilled irrigation water-table well in glacial drift, diam 17 in, depth 44 ft, casing slotted. MP hole in pumpbase, 1.00 ft above lsd. Records available: 1961. Nov. 14, 1961, 13.64.

McIntosh County

132-71-15a1. City of Wishek. Dug public-supply water-table well in glacial drift, diam 6 ft, depth 27 ft, lined with concrete. MP cross on southeast side of concrete curb, 0.50 ft above lsd. Highest water level 19.09 below lsd, Oct. 7, 1944; lowest 25.50 below lsd, June 5, 26, 1961. Records available: 1940-46, 1948-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7, 1957	23.63	Apr. 21, 1958	23.59	July 28, 1959	24.66	Oct. 17, 1960	24.10
15	23.70	29	23.75	Aug. 4	24.59	24	24.20
21	23.82	May 5	23.71	10	24.32	31	24.40
28	23.80	12	23.71	17	24.03	Nov. 7	23.90
Feb. 4	23.82	19	23.56	24	24.41	14	24.30
11	23.74	26	23.61	31	24.57	22	24.00
19	24.94	June 2	23.39	Sept. 8	24.57	28	24.20
25	24.94	9	23.56	15	24.54	Dec. 6	24.10
Mar. 4	23.90	16	23.58	21	24.24	12	24.00
11	23.86	23	23.38	28	24.24	20	24.30
18	23.93	30	23.64	Oct. 5	24.29	28	24.10
25	23.96	July 7	23.32	12	24.27	Jan. 3, 1961	24.20
Apr. 1	24.05	14	23.38	19	24.20	10	24.60
9	24.04	21	23.42	26	24.20	16	24.30
15	23.90	28	23.52	Nov. 3	24.20	23	24.30
23	24.34	Aug. 4	23.68	9	24.60	30	24.30
29	23.96	11	24.03	16	24.20	Feb. 6	24.20
May 6	24.26	18	24.11	23	24.40	14	24.40
20	23.75	26	24.22	30	24.30	20	24.30
27	23.78	Sept. 2	23.61	Dec. 7	24.30	27	24.60
June 4	24.10	9	23.52	14	24.40	Mar. 6	24.40
11	24.03	15	23.58	21	24.60	13	24.20
17	23.96	22	23.62	28	24.30	21	24.20
24	23.79	29	23.57	Jan. 4, 1960	24.30	27	24.60
July 1	24.53	Oct. 6	23.52	11	24.30	Apr. 3	24.10
8	24.39	13	23.50	18	24.20	10	24.00
15	24.67	20	23.49	25	24.40	18	24.30
22	24.27	27	23.56	Feb. 1	24.30	25	24.10
30	24.57	Nov. 4	23.76	8	24.40	May 1	24.00
Aug. 5	24.41	10	23.72	15	24.30	8	24.10
12	24.46	18	23.69	22	24.50	15	23.90
19	24.36	Dec. 2	23.76	29	24.40	22	23.90
27	24.29	8	23.74	Mar. 7	24.90	29	23.90
Sept. 2	24.02	15	23.82	14	24.40	June 5	25.50
9	23.89	22	23.84	21	24.50	12	24.60
16	23.83	29	23.87	28	24.60	19	25.10
24	23.96	Jan. 5, 1959	23.83	Apr. 4	24.30	26	25.50
30	23.94	12	23.89	11	24.20	July 3	25.10
Oct. 7	23.89	19	23.92	18	24.30	11	25.45
14	23.86	26	24.03	25	24.10	17	24.95
21	23.83	Feb. 2	23.92	May 2	24.40	24	24.65
28	23.84	9	24.02	9	24.00	31	25.30
Nov. 4	24.05	16	24.13	16	24.20	Aug. 7	24.90
12	23.92	23	24.13	23	24.30	15	25.20
18	23.86	Mar. 2	24.09	31	23.90	21	25.30
Dec. 2	23.67	9	24.15	June 6	23.80	28	25.20
9	23.87	16	24.14	13	24.10	Sept. 5	25.10
16	23.68	23	24.07	20	23.70	11	24.80
23	23.74	28	24.09	28	23.80	19	24.90
30	23.69	Apr. 6	24.07	July 4	23.70	26	25.10
Jan. 6, 1958	23.87	13	24.09	12	24.10	Oct. 2	24.60
13	23.75	20	24.18	18	24.00	9	24.90
20	23.74	27	24.22	25	24.80	16	24.75
27	23.81	May 4	24.10	Aug. 1	24.40	23	24.65
Feb. 3	23.81	11	24.16	8	24.10	30	24.90
10	23.81	18	24.21	16	24.20	Nov. 6	24.70
17	23.82	26	24.17	22	23.90	14	25.10
24	23.79	June 1	24.01	29	23.80	20	24.60
Mar. 4	23.87	9	24.27	Sept. 7	24.10	27	24.50
10	23.79	15	24.48	13	23.90	Dec. 5	24.50
17	23.70	22	23.91	20	23.90	11	24.50
24	23.69	29	23.69	26	24.30	19	24.60
31	23.66	July 6	23.92	Oct. 3	24.00	26	24.65
Apr. 7	23.61	14	24.28	10	24.30	30	24.60
14	23.54	21	24.42				



McKenzie County

150-100-12cc1. Chas. E. Fleck. Drilled unused water-table well in Fort Union Formation of Paleocene age, diam 6 in, depth 138 ft, screened 130-138. MP top of casing, 0.95 ft above lsd. Highest water level 112.00 below lsd, Oct. 8, 1955; lowest 114.94 below lsd, Mar. 31, 1945. Records available: 1938-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5, 1957	112.63	Apr. 12, 1958	112.45	July 4, 1959	112.58	Oct. 8, 1960	112.55
12	112.69	19	112.55	11	112.54	15	112.70
19	112.32	26	112.45	18	112.55	22	112.65
26	112.59	May 3	112.73	25	112.60	29	112.60
Feb. 2	112.28	10	112.68	Aug. 1	112.37	Nov. 5	112.55
9	112.62	17	112.62	8	112.43	9	112.80
16	112.59	24	112.65	15	112.35	Dec. 3	112.60
23	112.21	31	112.68	22	112.64	10	112.69
Mar. 2	112.48	June 7	112.35	29	112.74	17	112.61
9	112.25	14	112.52	Sept. 5	112.52	24	112.50
16	112.61	21	112.41	12	112.62	31	112.61
23	112.93	28	112.47	19	112.38	Jan. 7, 1961	112.97
30	112.51	July 5	112.51	26	112.48	14	112.44
Apr. 6	112.70	12	112.32	Oct. 3	112.54	21	112.49
13	112.65	19	112.51	11	112.85	28	112.77
20	112.75	26	112.55	17	112.52	Feb. 4	112.87
27	112.67	Aug. 2	112.62	24	112.61	11	112.65
May 4	112.70	9	112.61	31	112.49	18	112.62
18	112.49	16	112.47	Nov. 7	112.75	25	112.35
25	112.56	23	112.61	14	112.33	Mar. 4	112.57
June 1	112.57	30	112.72	21	112.42	11	112.63
8	112.40	Sept. 6	112.62	28	112.55	18	112.90
15	112.75	13	112.34	Dec. 5	112.50	25	112.57
22	112.80	20	112.63	12	112.59	Apr. 1	112.55
29	112.66	27	112.51	19	112.54	8	112.51
July 6	112.41	Oct. 4	112.73	26	112.81	15	112.78
13	112.67	11	112.57	Jan. 2, 1960	112.68	22	112.65
20	112.49	18	112.28	9	112.69	29	112.49
27	112.54	25	112.64	16	112.65	May 6	112.44
Aug. 3	112.67	Nov. 1	112.47	23	112.45	13	112.65
10	112.41	8	112.32	30	112.55	20	112.52
17	112.60	15	112.65	Feb. 3	112.75	27	112.41
29	112.25	22	112.45	20	112.73	June 3	112.50
31	112.63	Dec. 2	112.52	27	112.63	10	112.67
Sept. 7	112.30	6	112.67	Mar. 5	112.61	17	112.52
14	112.35	13	112.66	12	112.80	24	112.60
21	112.69	20	112.47	19	112.65	July 1	112.67
28	112.47	27	112.33	Apr. 2	112.70	8	112.60
Oct. 5	112.69	Jan. 3, 1959	112.64	9	112.53	15	112.60
12	112.45	10	112.45	16	112.86	22	112.60
19	112.59	17	112.56	23	112.77	29	112.65
26	112.48	24	112.65	30	112.53	Aug. 5	112.59
Nov. 2	112.80	31	112.66	May 7	112.48	12	112.60
9	112.65	Feb. 14	112.62	14	112.72	19	112.62
16	112.73	21	112.47	21	112.49	24	112.69
23	112.56	28	112.65	28	112.66	Sept. 2	113.04
30	112.30	Mar. 7	112.45	June 11	112.60	4	112.61
Dec. 7	112.87	14	112.83	18	112.79	16	112.47
14	112.38	21	112.19	25	112.45	23	112.71
21	112.49	28	112.43	July 2	112.74	30	112.65
28	112.62	Apr. 4	112.49	9	112.49	Oct. 7	112.85
Jan. 4, 1958	112.55	11	112.71	16	112.67	14	112.65
11	112.41	18	112.61	23	112.49	21	112.65
18	112.68	25	112.59	30	112.60	28	112.85
25	112.80	May 2	112.46	Aug. 6	112.65	Nov. 4	113.03
Feb. 1	112.82	9	112.15	13	112.70	11	112.63
8	112.66	16	112.41	20	112.55	18	112.45
15	112.59	23	112.45	27	112.60	25	112.89
22	112.39	30	112.53	Sept. 3	112.75	Dec. 2	112.63
Mar. 1	112.75	June 6	112.41	10	112.45	9	112.65
8	112.64	13	112.41	17	112.60	16	112.45
22	112.65	20	112.45	24	112.63	23	112.70
29	112.45	27	112.47	Oct. 1	112.70	30	112.75
Apr. 5	112.65						

McLean County

149-84-15bc1. T. A. Welsh. Drilled unused water-table well in Fort Union Formation of Paleocene age, diam 6 in, depth 62 ft, screened 60-62. MP top of casing, 0.40 ft above lsd. Highest water level 40.66 below lsd, June 25, 1951; lowest 47.43 below lsd, Mar. 22, 1941. Records available: 1937-49, 1951-60. Measurement discontinued. May 2, 1957, 43.33; Sept. 4, 1958, 44.22; Apr. 14, 1959, 43.85; May 10, 1960, 43.79; Oct. 5, 43.69.

Morton County

136-81-6dc1. Joe Lanz, Jr. Drilled domestic water-table well in Hell Creek Formation of Upper Cretaceous age, diam 24 in, depth 67 ft, cased to 60, open-end screen. MP top south side of 24-in wood curb, 0.50 ft above lsd. Highest water level 20.14 below lsd, July 10, 1950; lowest 25.23 below lsd, Apr. 15, 1941. Records available: 1941-57, 1961. No measurement made 1958-60. May 2, 1957, 22.20; Nov. 16, 1961, 23.44.

139-85-15cc1. Fred Lehde. Drilled irrigation water-table well in Hell Creek Formation of Upper Cretaceous age, diam 24 to 16 in, depth 72 ft, lined with wood. MP north point of wood curbing, 0.50 ft above lsd. Highest water level 28.97 below lsd, Apr. 7, 1951; lowest 71.54 below lsd, Aug. 21, 1955, Apr. 8, 1957. Records available: 1941-61. Pumped during growing season.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5, 1957	65.73	Dec. 21, 1957	66.88	Dec. 8, 1958	65.98	Nov. 28, 1959	67.26
13	63.21		66.88	15	65.39	Dec. 5	70.40
19	64.89	Jan. 4, 1958	65.38	22	66.66	12	67.60
28	62.76		63.76	29	66.37	21	67.65
Feb. 3	64.38		63.49	Jan. 4, 1959	65.04	28	67.50
9	65.19		64.18	12	66.20	Jan. 2, 1960	67.50
16	62.66	Feb. 5	62.89	20	65.36	12	67.69
25	64.40		63.00	24	65.70	18	67.43
Mar. 5	66.67		62.84	Feb. 1	64.39	25	67.51
10	70.88		64.49	7	65.26	30	67.65
17	68.39	Mar. 1	63.45	14	66.63	Feb. 8	67.56
25	69.49		62.90	23	67.07	15	67.61
Apr. 1	69.26		62.85	Mar. 2	66.56	21	67.49
8	71.54		63.75	9	67.41	27	67.54
18	65.64		67.07	16	67.19	Mar. 7	67.55
23	67.99	Apr. 5	65.29	23	66.84	13	69.04
30	69.79		68.89	Apr. 4	68.69	19	69.11
May 6	69.63		66.71	11	70.00	27	68.49
13	68.69		66.61	18	68.67	Apr. 3	68.06
27	67.10	May 4	69.06	27	69.89	10	67.42
June 2	67.40		70.95	May 2	67.83	19	68.17
9	71.30		68.57	11	66.18	23	67.94
15	66.07		66.79	16	67.19	30	68.03
22	68.27		68.66	23	64.98	May 9	68.29
30	70.89	June 8	64.21	30	65.65	16	67.93
July 9	68.53		66.01	June 6	67.82	23	70.73
16	66.10		63.64	15	68.39	June 1	70.15
20	64.60		65.72	24	66.29	6	65.95
27	64.90	July 5	63.75	29	66.09	14	62.97
Aug. 4	62.14		68.99	July 4	66.60	21	66.20
11	62.60		65.75	11	66.01	27	63.84
18	62.85		65.48	18	67.00	July 2	63.82
28	62.46	Aug. 4	65.49	27	67.28	11	66.92
Sept. 3	63.48		68.27	Aug. 2	65.68	18	66.30
10	61.41		68.87	8	65.77	24	68.13
16	62.42		66.75	16	65.95	Aug. 2	70.61
23	64.09	Sept. 1	66.30	23	65.18	7	66.67
27	63.99		70.82	30	65.22	15	68.39
Oct. 7	62.56		65.21	Sept. 6	69.87	24	69.32
12	67.00		68.18	14	69.07	29	68.48
19	64.97		69.04	24	67.84	Sept. 3	68.16
26	67.19	Oct. 7	67.85	30	67.04	11	68.39
Nov. 2	65.27		66.60	Oct. 5	67.82	20	67.68
11	63.74		68.18	13	69.41	25	69.13
17	64.19		70.38	19	67.88	Oct. 1	60.69
23	63.70	Nov. 8	68.29	26	66.08	9	66.70
30	65.24		70.12	Nov. 3	66.40	16	69.32
Dec. 7	65.29		67.53	14	65.69	24	68.39
14	64.67		67.78	21	65.61	30	67.60

139-85-15cc1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 7, 1960	67.48	Feb. 26, 1961	68.48	June 10, 1961	68.48	Oct. 2, 1961	68.93
15	67.35	Mar. 4	66.60	19	67.35	6	68.15
19	67.90	13	67.66	24	67.68	13	67.99
28	67.00	19	67.69	July 9	68.45	20	68.07
Dec. 7	67.02	27	67.00	13	68.86	28	67.79
13	65.15	Apr. 1	69.15	20	68.15	Nov. 6	67.17
17	65.66	10	66.89	25	68.20	10	70.41
26	64.78	15	70.14	31	67.80	17	68.48
Jan. 7, 1961	66.20	24	68.08	Aug. 9	68.78	26	69.13
16	66.99	30	69.01	14	67.40	Dec. 1	67.94
23	66.89	May 6	67.75	20	67.79	8	67.67
28	64.26	14	68.32	31	68.48	15	66.98
Feb. 7	65.86	20	68.20	Sept. 2	68.18	23	68.69
13	65.68	29	68.06	12	66.58	30	68.01
18	65.94	June 5	67.85	22	67.20		

Nelson County

153-58-32dbb. Michigan City. Drilled unused artesian well in Pierre Shale of Upper Cretaceous age, diam 5 in, depth 120 ft, slotted 110-120. MP top of casing, 1.70 ft above lsd. Highest water level 11.80 below lsd, June 23, 1950; lowest 27.00 below lsd, July 18, 1957. Records available: 1948-60. No measurement made in 1961. Water levels affected by pumping of city-supply wells.

Jan. 14, 1957	23.20	Aug. 10, 1957	25.80	May 13, 1958	23.80	June 8, 1959	22.20
28	22.50	17	26.60	July 14	22.00	Aug. 20	25.20
Feb. 11	22.90	22	25.40	29	22.80	30	25.20
25	21.60	29	25.60	Oct. 3	22.80	Sept. 15	26.10
Mar. 26	22.00	Sept. 5	24.40	7	23.57	29	25.30
Apr. 3	22.00	13	22.50	9	23.10	Oct. 5	22.50
13	22.20	Oct. 2	21.50	24	23.80	May 4, 1960	23.23
July 1	23.20	14	20.41	Nov. 4	22.50	22	23.20
9	24.00	Dec. 19	19.70	Jan. 5, 1959	22.30	June 22	24.10
18	27.00	Mar. 20, 1958	21.91	Apr. 8	22.20	Aug. 21	26.10
27	25.70	Apr. 14	22.40	May 8	23.10	Oct. 4	25.35
Aug. 2	25.50						

153-60-32aba. A. W. Goldammer. Drilled unused artesian well in Pierre Shale of Upper Cretaceous age, diam 5 in, depth 103 ft, cased, slotted 96-103. MP hole in south side of pump-base, 1.70 ft above lsd. Highest water level 31.99 below lsd, Oct. 10, 1958; lowest 37.70 below lsd, May 18, 1956. Records available: 1954-61.

Apr. 25, 1957	34.79	Oct. 10, 1958	31.99	May 4, 1960	32.32	May 4, 1961	36.61
Oct. 14	33.79	May 26, 1959	33.34	Oct. 4	33.04	Nov. 14	34.52
Mar. 20, 1958	32.22	Sept. 16	33.12				

153-60-35aaa. U. S. Geol. Survey. Drilled unused artesian well in glacial drift, diam 1½ in, depth 60 ft, well point, screened 57-60. MP top of casing, 3.50 ft above lsd. Highest water level 10.25 below lsd, June 12, 1951; lowest dry, May 4, Nov. 14, 1961. Records available: 1949-61. Water level affected by pumping of nearby municipal well.

Apr. 25, 1957	17.11	Oct. 7, 1958	20.19	May 4, 1960	24.12	May 4, 1961	(f)
Oct. 14	15.54	May 26, 1959	15.46	Oct. 4	24.31	Nov. 14	(f)
Apr. 5, 1958	17.53	Sept. 16	22.69				

f Dry.

Pembina County

160-56-16aaa. S. J. Hanson. Dug domestic and stock water-table well in deposits of glacial Lake Agassiz, diam 20 in, depth 12 ft, lined with wood. MP top east side of well curb, 1.00 ft above lsd. Highest water level 5.31 below lsd, May 22, 1951; lowest 10.59 below lsd, Nov. 1, 1960. Records available: 1946-60. Measurement discontinued. Nov. 15, 1957, 5.91; Apr. 16, 1958, 7.29; Sept. 12, 8.77; May 5, 1959, 6.60; Sept. 8, 9.94; May 3, 1960, 8.50; Nov. 1, 10.59.

161-56-22bb1. E. J. Lander Co. Dug domestic and stock water-table well in deposits of glacial Lake Agassiz, diam 5 ft, depth 14 ft, lined with concrete. MP edge of small hole in shed floor, 0.50 ft above lsd. Highest water level 3.02 below lsd, May 20, 1950; lowest 11.76 below lsd, Apr. 26, 1941. Records available: 1941-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5, 1957	6.41	Apr. 13, 1958	6.90	July 11, 1959	8.24	Oct. 8, 1960	10.36
12	6.90	20	6.30	18	8.37	15	10.42
19	6.67	27	5.98	25	8.59	22	10.44
26	6.81	May 4	5.66	Aug. 1	8.82	29	10.47
Feb. 2	6.92	11	5.61	8	9.01	Nov. 5	10.46
9	7.06	18	5.75	15	9.20	12	10.48
16	7.17	25	5.79	22	9.40	19	10.49
23	7.29	June 1	5.62	29	8.53	26	10.50
Mar. 2	7.31	8	5.74	Sept. 5	9.66	Dec. 3	10.52
9	7.36	15	5.84	12	9.83	10	10.54
16	7.45	22	5.95	19	9.92	17	10.56
23	7.34	29	6.17	26	9.95	24	10.58
30	7.01	July 6	6.25	Oct. 3	9.98	31	10.58
Apr. 6	6.72	13	6.39	10	10.00	Jan. 7, 1961	10.60
13	6.54	20	6.61	17	10.02	14	10.60
20	6.30	27	6.87	24	9.90	21	10.61
27	5.98	Aug. 3	7.17	31	9.76	28	10.63
May 4	5.66	10	7.45	Nov. 7	9.60	Feb. 4	10.65
11	5.61	17	4.47	14	9.50	11	10.67
18	5.75	24	7.60	21	9.40	18	10.69
25	5.79	31	7.73	28	9.32	25	10.70
June 1	5.62	Sept. 7	6.95	Dec. 5	9.29	Mar. 4	10.72
8	5.74	14	6.92	12	9.28	11	10.73
15	5.84	21	7.08	19	9.27	18	10.70
22	5.95	28	7.22	26	9.27	25	10.47
29	6.17	Oct. 5	7.31	Jan. 2, 1960	9.28	Apr. 1	10.29
July 6	6.25	12	7.32	9	9.32	8	10.18
13	6.39	19	7.35	16	9.34	15	10.10
20	6.61	26	7.38	23	9.87	22	10.08
27	6.87	Nov. 2	7.42	30	9.40	29	10.07
Aug. 3	7.17	9	7.45	Feb. 6	9.52	May 6	9.96
10	7.35	16	7.45	13	9.56	13	9.93
17	7.47	23	7.45	20	9.64	20	9.96
24	7.60	30	7.45	27	9.68	27	9.83
31	7.73	Dec. 7	7.50	Mar. 5	9.75	June 3	9.83
Sept. 7	6.95	14	7.56	12	9.82	10	9.95
14	6.92	21	7.61	19	9.88	17	10.22
21	7.08	28	7.65	26	9.92	24	10.44
28	7.22	Jan. 3, 1959	10.04	Apr. 2	9.90	July 1	10.63
Oct. 5	7.31	10	10.05	9	9.48	8	10.72
12	7.32	17	9.95	16	9.13	15	10.78
19	7.35	24	9.96	23	8.86	22	10.82
20	7.38	31	9.96	30	8.30	29	10.87
Nov. 2	7.42	Feb. 7	9.96	May 7	7.90	Aug. 5	10.93
9	7.45	14	9.84	14	7.60	12	11.00
16	7.45	21	9.85	21	7.39	19	11.09
23	7.45	28	9.86	28	7.18	26	11.14
30	7.45	Mar. 7	9.84	June 4	7.06	Sept. 2	11.20
Dec. 7	7.50	14	9.90	11	7.48	9	11.16
14	7.56	21	9.48	18	7.68	16	11.30
21	7.61	28	9.74	25	7.84	23	11.32
28	7.65	Apr. 4	9.10	July 2	8.00	30	11.36
Jan. 5, 1958	6.41	11	8.69	9	8.22	Oct. 7	11.36
12	6.90	18	8.38	16	8.51	14	11.36
19	6.67	25	8.11	23	8.72	21	11.36
26	6.81	May 2	7.94	30	9.00	28	11.32
Feb. 2	6.92	9	7.85	Aug. 6	9.20	Nov. 4	11.26
9	7.06	16	7.61	13	9.48	11	11.26
16	7.17	23	7.55	20	9.90	18	11.26
23	7.29	30	7.48	27	9.78	25	11.25
Mar. 2	7.31	June 6	7.43	Sept. 3	9.92	Dec. 2	11.22
9	7.36	13	7.59	10	10.05	9	11.23
16	7.45	20	7.76	17	10.16	16	11.25
23	7.34	27	7.89	24	10.25	23	11.27
30	7.21	July 4	8.05	Oct. 1	10.32	30	11.30
Apr. 6	6.72						

162-53-31cc1. Garnett A. Snell. Dug domestic and stock water-table well in deposits of glacial Lake Agassiz, size 4 x 4 ft, depth 17 ft, lined with wood. MP edge of northeast curb support, vertical 2- x 4-in plank, 1.50 ft above lsd. Highest water level 3.92 below lsd, May 20, 1950; lowest 12.07 below lsd, Oct. 2, 1943. Records available: 1941-59. Measurement discontinued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5, 1957	8.37	Sept. 7, 1957	5.83	May 10, 1958	7.88	Jan. 10, 1959	10.07
12	8.54	14	5.65	17	7.39	17	10.08
19	8.61	21	5.74	24	7.10	24	10.11
26	8.79	28	5.90	31	7.03	31	10.19
Feb. 2	8.88	Oct. 5	6.11	June 7	7.09	Feb. 7	10.20
9	9.00	12	6.04	14	7.36	14	10.23
16	9.17	19	6.03	21	7.59	21	10.23
23	9.32	26	6.04	28	7.79	28	10.25
Mar. 2	9.35	Nov. 2	6.05	July 5	7.82	Mar. 7	10.29
9	9.38	9	6.05	12	6.83	14	10.31
16	9.53	16	5.96	19	6.85	21	10.34
23	9.45	23	5.88	26	7.26	28	10.20
30	9.22	30	5.82	Aug. 2	7.68	Apr. 4	9.44
Apr. 6	9.05	Dec. 7	5.77	9	8.14	11	8.10
13	9.00	14	5.58	16	8.54	18	7.67
20	8.87	21	6.59	23	8.80	25	7.44
27	8.72	28	6.75	30	8.88	May 2	7.29
May 4	8.44	Jan. 4, 1958	7.22	Sept. 6	9.38	9	7.18
11	8.22	11	7.38	13	9.53	16	6.98
18	8.02	18	7.50	20	9.74	23	6.97
25	7.79	25	7.72	27	9.93	30	6.87
June 1	7.59	Feb. 1	7.87	Oct. 4	9.93	June 6	6.89
8	7.52	8	8.10	11	10.04	13	6.97
15	7.63	15	8.24	18	10.05	20	7.19
22	7.50	22	8.36	25	10.10	27	7.39
29	7.28	Mar. 1	8.56	Nov. 1	10.14	July 4	7.72
July 6	7.08	8	8.60	8	10.00	11	7.90
13	7.03	15	8.63	15	9.90	18	8.13
20	6.99	22	8.65	22	10.04	25	8.40
27	7.32	29	8.69	29	10.06	Aug. 1	8.78
Aug. 3	7.66	Apr. 5	8.68	Dec. 6	10.06	8	8.81
10	7.87	12	8.58	13	10.02	15	8.93
17	7.92	19	8.46	20	10.07	22	9.10
29	7.97	26	8.36	27	10.03	29	9.28
31	8.06	May 3	8.18	Jan. 3, 1959	10.16		

162-55-3dd1. Albert C. McCurdy. Dug unused (previously reported observation) water-table well in deposits of glacial Lake Agassiz, diam 5 ft, depth 17 ft, lined with concrete. MP hole in recorder platform, 0.20 ft above lsd. Highest water level 2.88 below lsd, May 19, 1950; lowest 11.98 below lsd, Apr. 1, 1944. Records available: 1941-59. Measurement discontinued.

Jan. 8, 1957	7.16	June 30, 1957	6.58	Dec. 29, 1957	7.05	June 29, 1958	7.72
13	7.31	July 7	6.76	Jan. 5, 1958	7.32	July 1	7.79
20	7.45	14	6.73	12	7.52	13	7.10
27	7.59	21	6.47	19	7.63	20	7.08
Feb. 3	7.76	28	6.76	26	7.76	27	7.28
10	7.88	Aug. 4	6.81	Feb. 2	7.90	Aug. 3	7.57
17	8.00	11	6.80	9	8.04	10	7.84
24	8.06	17	6.55	16	8.21	17	8.07
Mar. 3	8.21	25	6.64	23	8.40	24	8.27
10	8.29	Sept. 1	6.92	Mar. 2	8.45	31	8.44
17	8.37	8	5.97	9	8.63	Sept. 7	8.59
24	8.46	15	5.95	16	8.71	14	8.72
30	8.18	22	6.09	23	8.76	21	8.87
31	8.18	29	6.27	30	8.80	28	9.03
Apr. 6	7.80	Oct. 6	6.44	Apr. 6	8.83	Oct. 5	9.13
14	7.90	13	6.33	13	8.80	12	9.20
21	7.88	20	6.42	20	8.65	19	9.22
28	7.62	27	6.47	27	8.42	26	9.28
May 5	7.34	Nov. 3	6.51	May 4	8.13	Nov. 2	9.30
12	6.99	10	6.52	11	7.82	9	9.32
19	6.77	17	6.50	18	7.40	16	9.34
26	6.55	29	6.54	25	7.20	23	9.33
June 1	6.48	Dec. 1	5.97	June 1	7.20	30	9.32
8	6.56	8	6.84	8	7.28	Dec. 7	9.30
16	6.68	15	7.02	15	7.42	14	9.34
23	6.53	22	7.01	22	7.56	21	9.34

162-55-3dd1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Dec. 28, 1958	9.39	Mar. 15, 1959	10.01	May 31, 1959	6.42	Aug. 16, 1959	8.00
Jan. 4, 1959	9.41	22	9.86	June 7	6.30	23	8.21
11	9.45	29	9.57	14	6.47	30	8.37
18	9.41	Apr. 5	8.77	21	6.71	Sept. 6	8.50
25	9.57	12	7.84	28	6.84	13	8.65
Feb. 1	9.68	19	7.47	July 5	7.01	20	8.80
8	9.74	26	7.18	12	7.18	27	8.91
15	9.80	May 3	6.99	19	7.25	Oct. 4	6.99
22	9.91	10	6.74	26	7.40	11	9.03
Mar. 1	10.15	17	6.58	Aug. 1	7.60	18	8.72
8	10.05	24	6.57	9	7.82		

Ramsey County

153-64-5aa1. Ray Young. Dug domestic and stock water-table well in glacial drift, diam 4 ft, depth 45 ft, cased to 35. MP top of casing, 1.50 ft above lsd. Highest water level 20.60 below lsd, May 24, 1950; lowest 32.31 below lsd, June 22, 1944. Records available: 1942-50, 1952-56, 1958-61. No measurement made in 1957.

Mar. 20, 1958	24.13	May 13, 1959	25.17	May 4, 1960	26.32	May 4, 1961	26.75
Oct. 10	24.86	Sept. 16	25.19	Oct. 4	26.03	Nov. 14	27.18

Renville County

161-85-20aa1. Minnesota Trust Co. Drilled unused artesian well in Fort Union Formation of Paleocene age, diam 4 in, depth 400 ft, slotted 390-400. MP top of pump, 4.28 ft above lsd. Highest water level 77.46 below lsd, June 21, 1951; lowest 83.04 below lsd, Sept. 26, 1946. Records available: 1937-61.

Apr. 30, 1957	82.07	May 23, 1958	82.31	May 13, 1959	82.44	Oct. 4, 1960	81.66
Oct. 16	82.28	Oct. 8	82.43	May 4, 1960	82.20	Nov. 15, 1961	82.91

Richland County

133-52-33cdd. Max A. Jensen. Driven observation water-table well in deposits of glacial Lake Agassiz, diam 1½ in, depth 20 ft, well point 15-20. MP top of casing, 1.56 ft above lsd. Highest water level 0.75 below lsd, June 27, 1943; lowest 10.09 below lsd, Jan. 10-Mar. 24, 1959. Records available: 1937-61.

Jan. 5, 1957	7.75	July 13, 1957	5.04	Jan. 18, 1958	6.79	July 26, 1958	8.80
12	7.94	20	5.18	25	7.19	Aug. 2	7.69
19	8.19	27	6.08	Feb. 1	7.24	9	7.99
26	8.29	Aug. 3	5.59	8	7.44	16	8.24
Feb. 2	8.34	10	6.54	15	7.64	23	8.24
9	8.58	17	5.04	22	7.89	30	8.39
16	8.65	24	5.04	Mar. 1	7.49	Sept. 6	8.44
23	8.79	31	5.04	8	7.84	13	8.54
Mar. 2	8.76	Sept. 7	4.04	15	6.89	20	8.44
9	8.84	14	4.60	22	6.74	27	8.59
16	8.94	21	4.54	29	6.46	Oct. 4	8.67
23	8.69	29	4.34	Apr. 6	4.24	11	8.67
30	4.24	Oct. 5	4.64	12	3.74	18	8.67
Apr. 6	8.30	12	4.34	19	2.64	25	8.67
13	8.16	19	4.09	26	3.20	Nov. 1	8.63
20	6.54	26	4.24	Mar. 3	3.74	9	8.64
27	4.88	Nov. 2	3.54	10	3.90	15	8.64
May 4	4.74	9	3.64	17	3.34	22	8.29
11	5.26	16	3.82	24	4.99	29	7.99
18	4.76	23	4.09	28	5.48	Dec. 7	8.14
25	3.84	30	4.34	June 7	5.28	13	8.52
June 1	3.64	Dec. 7	4.64	14	5.83	20	8.73
8	5.44	14	5.07	21	6.18	27	8.83
15	4.56	21	5.08	28	6.80	Jan. 4, 1959	8.89
22	4.47	28	5.49	July 5	6.90	10	10.09
29	3.91	Jan. 4, 1958	6.34	12	7.54	17	10.09
July 6	4.62	11	6.59	19	7.94	24	10.09

133-52-33cdd-- Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31, 1959	10.09	Oct. 31, 1959	7.58	July 23, 1960	7.86	Apr. 15, 1961	7.03
Feb. 7	10.09	Nov. 7	7.44	29	7.04	22	6.94
14	10.09	15	7.44	Aug. 6	8.31	29	6.06
21	10.09	21	7.48	13	8.39	May 6	6.01
28	10.09	28	7.51	20	7.69	13	5.54
Mar. 7	10.09	Dec. 5	7.55	27	7.89	20	5.56
14	10.09	12	7.74	Sept. 3	8.07	27	6.09
21	10.09	19	7.87	10	8.37	June 3	6.69
28	8.93	26	8.03	17	8.19	10	7.23
Apr. 4	8.74	Jan. 2, 1960	7.99	24	8.21	16	4.53
11	8.64	9	8.05	Oct. 5	8.12	26	5.91
18	9.04	16	8.17	8	8.01	July 1	6.36
25	9.04	23	8.42	15	7.96	8	7.12
May 2	7.76	30	8.44	22	7.95	15	7.48
9	7.59	Feb. 6	8.53	29	7.94	22	7.53
16	7.44	13	8.58	Nov. 5	8.21	29	7.45
23	7.68	20	8.69	12	8.25	Aug. 5	7.84
30	7.58	27	8.80	19	8.22	12	8.10
June 6	7.79	Mar. 5	8.89	26	8.23	19	8.32
13	7.44	12	8.82	Dec. 3	8.34	26	8.34
20	5.96	19	8.78	10	8.43	Sept. 2	8.19
27	5.44	26	8.84	17	8.41	9	8.05
July 4	5.29	Apr. 2	8.39	24	8.41	16	7.65
11	6.86	9	7.72	31	8.34	23	7.43
18	7.03	16	7.28	Jan. 7, 1961	8.27	30	7.32
25	7.44	23	6.98	14	8.18	Oct. 7	7.35
Aug. 1	7.94	30	4.86	21	8.15	13	6.77
8	8.18	May 7	4.60	28	8.02	20	6.62
15	8.26	14	5.22	Feb. 4	7.86	31	6.76
22	8.54	21	4.65	11	7.83	Nov. 6	6.82
29	7.52	28	5.78	18	7.93	13	6.90
Sept. 5	7.79	June 4	6.57	25	8.04	18	6.89
12	8.14	11	6.83	Mar. 4	7.83	25	6.90
19	8.24	18	7.21	11	7.64	Dec. 2	6.99
26	8.23	25	5.43	18	7.51	9	7.03
Oct. 3	7.14	July 1	6.16	25	7.39	16	7.18
10	8.18	8	7.09	Apr. 1	7.32	23	7.36
17	7.93	16	7.44	8	7.15	30	7.40
24	7.79						

Rolette County

162-69-20aba2. City of Rolla. Replaces well 162-69-20aba. Driven unused water-table well in glacial drift, diam  $1\frac{1}{2}$  in, depth unknown. MP top of casing, 2.20 ft above lsd. Highest water level 10.17 below lsd, Sept. 21, 1956; lowest 14.21 below lsd, Oct. 4, 1960. Records available: 1956-60. Measurement discontinued. Water level affected by pumping of nearby city-supply well.

Sept. 21, 1956	10.17	May 23, 1958	11.90	May 13, 1959	12.97	May 4, 1960	10.19
Oct. 14, 1957	10.72	Aug. 28	11.53	Oct. 28	13.67	Oct. 4	14.21

Slope County

134-100-14ad1. Arthur Nesseth. Drilled domestic and stock water-table well in Fort Union Formation of Paleocene age, diam 24 in, depth 67 ft, slotted 60-67. MP top north point of iron casing, 0.60 ft above lsd. Highest water level 14.07 below lsd, Oct. 7, 1947; lowest 18.91 below lsd, Apr. 17, 1941. Records available: 1940-48, 1951-59. Measurement discontinued.

Jan. 15, 1957	16.14	Dec. 16, 1957	14.91	May 12, 1958	16.23	Oct. 2, 1958	16.80
Feb. 11	16.03	Jan. 20, 1958	14.98	June 13	15.32	Dec. 15	18.02
May 13	16.20	Feb. 19	15.19	Aug. 5	15.49	Jan. 12, 1959	15.00
Sept. 20	15.03	Mar. 11	15.17	Sept. 9	14.95	Feb. 9	18.63
Oct. 21	14.90	Apr. 1	15.26				

Stark County

139-96-3bcb. City of Dickinson. Drilled unused artesian well in Fort Union Formation of Paleocene age, diam 8 in, depth 160 ft, screened 130-160. MP top edge of coupling on top of casing, at lsd. Highest water level 48.41 below lsd, Nov. 15, 1958; lowest 54.95 below lsd, Mar. 10, 1959. Records available: 1958-61. Recording gage removed 1960. Jan. 5, 1961, 50.54; Jan. 14, 50.50. Water level influenced by pumping of nearby city-supply wells.

Lowest water level for the day, from recorder graph, 1958

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	.....	.....	.....	.....	.....	.....	.....	51.58	52.09	51.45	51.17	51.54
10	.....	.....	.....	.....	.....	.....	.....	50.00	51.75	51.20	51.43	51.18
15	.....	.....	.....	.....	.....	.....	.....	51.00	51.80	51.19	48.41	51.46
20	.....	.....	.....	.....	.....	.....	.....	51.38	51.45	51.52	52.24	51.33
25	.....	.....	.....	.....	.....	.....	.....	50.72	51.99	51.25	51.19	51.32
Eom	.....	.....	.....	.....	.....	.....	50.14	52.08	51.45	51.23	51.96	50.92

1959

5	50.72	50.99	53.17	51.78	51.78	51.55	51.71	.....	52.48	51.55	51.71	52.35
10	51.33	51.16	54.95	51.48	52.18	52.38	51.48	.....	51.92	51.62	52.13	52.35
15	50.66	52.42	54.06	51.45	51.82	51.42	51.09	.....	52.03	51.44	52.14	52.52
20	49.26	52.76	53.27	51.95	51.71	52.40	51.23	52.02	51.92	51.59	51.97	52.48
25	49.92	53.14	51.76	52.17	51.42	52.74	50.98	51.73	51.87	52.01	52.58	52.96
Eom	50.85	53.22	52.72	52.26	51.59	51.93	.....	51.62	51.48	51.88	52.29	52.76

1960

5	49.95	52.42	52.64	50.07	53.26	52.20	51.47	50.99	51.65	51.49	51.95	52.18
10	49.60	52.93	52.81	50.57	52.90	51.96	49.05	53.00	51.62	51.38	52.14	51.29
15	49.20	52.96	52.87	52.86	52.62	51.96	49.94	51.73	51.30	51.37	48.87	51.37
20	50.51	53.47	52.38	53.48	52.67	51.90	50.97	50.76	51.05	52.38	50.50	51.08
25	52.85	53.14	52.40	53.28	52.62	51.95	50.43	51.78	51.42	52.51	52.63	51.11
Eom	52.55	53.12	49.97	53.41	52.54	51.62	50.70	51.55	51.65	52.40	52.08	51.37

Steele County

148-57-35bbd. City of Sharon. Drilled unused artesian well in glacial drift, diam 24 in, depth 70 ft, galvanized casing to 65. MP top west edge of casing, 0.35 ft above lsd. Highest water level 29.67 below lsd, May 25, 1956; lowest 37.98 below lsd, Sept. 9, 1959. Records available: 1953-60. Measurement discontinued. Oct. 18, 1957, 29.33; Mar. 20, 1958, 27.36; Sept. 5, 27.36; May 8, 1959, 37.18; Sept. 9, 37.98; May 9, 1960, 34.61; Oct. 21, 32.34.

Towner County

158-66-20d1. S. L. Isaacson. Cando. Dug domestic water-table well in glacial drift, diam 4 ft, depth 30 ft, lined with wood. MP bored hole in top of platform, at lsd. Highest water level 13.67 below lsd, June 19, 1951; lowest 27.59 below lsd, Oct. 8, 1953. Records available: 1942-44, 1947-60. Measurement discontinued. Oct. 15, 1957, 25.91; May 23, 1958, 26.68; Aug. 28, 26.98; May 13, 1959, 26.32; Oct. 28, 26.58; May 4, 1960, 24.78; Oct. 4, 27.51.

160-66-28ba1. Alvin D. Krueger. Drilled unused water-table well in glacial drift, diam 4 in, depth 135 ft, slotted 125-135. MP top of casing, 2.66 ft above lsd. Highest water level 13.44 below lsd, Feb. 6-20, 1960; lowest 17.15 below lsd, Dec. 26, 1942. Records available: 1937-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5, 1957	13.71	Apr. 27, 1957	13.55	Aug. 17, 1957	13.67	Dec. 7, 1957	13.65
12	13.70	May 4	13.56	29	13.65	14	13.64
19	13.86	11	13.57	31	13.64	21	13.63
26	13.66	18	13.58	Sept. 7	13.65	28	13.62
Feb. 2	13.64	25	13.59	14	13.66	Jan. 4, 1958	13.61
9	13.61	June 1	13.60	21	13.67	11	13.61
16	13.59	8	13.62	28	13.68	18	13.60
23	13.56	15	13.63	Oct. 5	13.68	25	13.59
Mar. 2	13.55	22	13.64	12	13.69	Feb. 1	13.58
9	13.56	29	13.65	19	13.70	8	13.56
16	13.57	July 6	13.67	26	13.71	15	13.53
23	13.59	13	13.68	Nov. 2	13.70	22	13.51
30	13.58	20	13.70	9	13.69	Mar. 1	13.50
Apr. 6	13.57	27	13.71	16	13.68	8	13.51
13	13.56	Aug. 3	13.70	23	13.67	15	13.52
20	13.56	10	13.69	30	13.66	22	13.53



160-66-28ba1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 29, 1958	13.54	Mar. 14, 1959	13.74	Feb. 20, 1960	13.44	Jan. 28, 1961	13.82
Apr. 5	13.55	21	13.73	27	13.45	Feb. 4	13.85
12	13.57	28	13.73	Mar. 5	13.45	11	13.84
19	13.58	Apr. 4	13.72	12	13.46	18	13.83
26	13.59	11	13.72	19	13.46	25	13.83
May 3	13.60	18	13.72	26	13.47	Mar. 4	13.82
10	13.61	25	13.71	Apr. 2	13.48	11	13.80
17	13.62	May 2	13.71	9	13.49	18	13.78
24	13.63	9	13.70	16	13.50	25	13.76
31	13.64	16	13.69	23	13.51	Apr. 1	13.75
June 7	13.65	23	13.68	30	13.50	8	13.74
14	13.66	30	13.68	May 7	13.49	15	13.72
21	13.67	June 6	13.67	14	13.48	22	13.70
28	13.67	13	13.67	21	13.48	29	13.69
July 5	13.67	20	13.66	28	13.47	May 6	13.68
12	13.66	27	13.66	June 4	13.48	13	13.67
19	13.66	July 4	13.68	11	13.50	20	13.66
26	13.65	11	13.70	18	13.51	27	13.65
Aug. 2	13.65	18	13.72	25	13.53	June 3	13.67
9	13.66	25	13.77	July 2	13.55	10	13.69
16	13.67	Aug. 1	13.78	9	13.57	17	13.72
23	13.68	8	13.80	16	13.60	24	13.74
30	13.69	15	13.81	23	13.64	July 1	13.75
Sept. 6	13.70	22	13.82	30	13.65	8	13.77
13	13.71	29	13.84	Aug. 6	13.67	15	13.78
20	13.72	Sept. 5	13.84	13	13.69	22	13.80
27	13.73	12	13.84	20	13.71	28	13.82
Oct. 4	13.75	19	13.83	27	13.74	Aug. 5	13.84
11	13.77	26	13.83	Sept. 3	13.76	12	13.86
18	13.78	Oct. 3	13.82	10	13.78	19	13.90
25	13.80	10	13.81	17	13.80	26	13.92
Nov. 1	13.81	17	13.79	24	13.82	Sept. 2	13.93
8	13.82	24	13.77	Oct. 1	13.84	9	13.93
15	13.83	31	13.75	8	13.85	16	13.94
22	13.84	Nov. 7	13.73	15	13.86	23	13.94
29	13.84	14	13.72	22	13.87	30	13.94
Dec. 6	13.83	21	13.70	29	13.88	Oct. 7	13.94
13	13.82	28	13.68	Nov. 5	13.89	14	13.95
20	13.81	Dec. 5	13.66	12	13.90	21	13.95
27	13.80	12	13.64	19	13.90	28	13.94
Jan. 3, 1959	13.79	19	13.62	25	13.91	Nov. 4	13.94
10	13.79	26	13.60	Dec. 3	13.90	11	13.94
17	13.78	Jan. 2, 1960	13.57	10	13.90	18	13.93
24	13.77	9	13.54	17	13.89	25	13.93
31	13.66	16	13.52	24	13.88	Dec. 2	13.92
Feb. 7	13.75	23	13.48	30	13.87	9	13.92
14	13.75	30	13.46	Jan. 7, 1961	13.87	16	13.91
21	13.74	Feb. 6	13.44	14	13.87	23	13.91
28	13.74	13	13.44	21	13.82	30	13.90
Mar. 7	13.74						

Trail County

148-53-18ac1. City of Hatton. Dug domestic water-table well in glacial drift, diam 6 ft, depth 30 ft (previously reported 33 ft--well has filled in), open end 30 ft. MP flange on manhole, 0.10 ft above lsd. Highest water level 6.11 below lsd, July 3, 1942; lowest 30.84 below lsd, July 27, 1940. Records available: 1937-43, 1955-61.

July 8, 1957	9.22	May 8, 1959	9.71	Oct. 10, 1960	11.12	Nov. 6, 1961	9.66
Mar. 20, 1958	9.90	Sept. 9	10.25	May 2, 1961	9.68	9	10.54
Sept. 5	9.84	May 9, 1960	9.54				

148-53-18ad3. City of Hatton. Dug domestic water-table well in glacial drift, diam 5 ft, depth 45 ft, curbed with brick. MP top of flange on manhole opposite pump, 0.10 ft above lsd. Highest water level 3.24 below lsd, June 25, 1950; lowest 34.40 below lsd, Sept. 2, 1939. Records available: 1937-60. Measurement discontinued. July 8, 1957, 12.92; Mar. 20, 1958, 11.87; Sept. 5, 13.39; May 8, 1959, 12.79; Sept. 9, 14.99; May 9, 1960, 12.67; Oct. 10, 12.60.

Walsh County

157-51-16dc2. Henry Dipple. Dug unused water-table well in deposits of glacial Lake Agassiz, diam 4 ft, depth 16 ft, lined with wood. MP top of wood curb, 2.00 ft above lsd. Highest water level 0.12 below lsd, Apr. 12, 1941; lowest 12.09 below lsd, Mar. 11, 1939. Records available: 1937-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 15, 1957	3.55	Sept. 12, 1958	7.69	Sept. 8, 1959	3.26	Nov. 1, 1960	7.08
Apr. 16, 1958	7.49	May 5, 1959	1.96	May 3, 1960	3.30	Nov. 14, 1961	6.10

157-55-17cc1. C. D. Lewis. Dug unused water-table well in deposits of glacial Lake Agassiz, diam 36 in, depth 9 ft, lined with wood. MP arrow at edge of hole in wood platform, 0.40 ft above lsd. Highest water level 1.37 below lsd, Apr. 24, 1948; lowest dry, Sept. 10, 1938. Records available: 1937-38, 1946-61. Measurement discontinued.

Nov. 15, 1957	2.59	Sept. 12, 1958	5.92	Sept. 8, 1959	6.65	Nov. 1, 1960	6.55
Apr. 16, 1958	4.02	May 5, 1959	4.33	May 3, 1960	3.69	Nov. 14, 1961	6.76

157-55-17cd1. C. D. Lewis. Driven unused water-table well in deposits of glacial Lake Agassiz, diam 1½ in, depth 15 ft, screened 10-15. MP top of pipe, 3.00 ft above lsd. Highest water level 1.38 below lsd, June 12, 1943; lowest 10.47 below lsd, Nov. 11, 1938. Records available: 1937-38, 1946-61.

Nov. 15, 1957	3.44	May 5, 1959	5.31	May 3, 1960	5.17	May 21, 1961	6.45
Apr. 16, 1958	5.09	Sept. 28	7.66	Nov. 1	7.49	Nov. 14	8.03
Sept. 12	6.41						

157-56-20ccb. Walsh County well. Dug unused water-table well in glacial outwash, diam 4 ft, depth 10 ft, cased with concrete to 9, open end pipe. MP top east side of concrete casing, 3.20 ft above lsd. Highest water level 5.44 below lsd, June 27, 1956; lowest dry, Sept. 12, 1958, Sept. 8, 1959, Nov. 1, 1960, Nov. 14, 1961. Records available: 1956-61. Measurement discontinued.

June 27, 1956	5.44	Apr. 16, 1958	5.54	Sept. 8, 1959	(f)	Nov. 1, 1960	(f)
Sept. 12	7.03	Sept. 12	(f)	May 3, 1960	5.34	Nov. 14, 1961	(f)
Nov. 15, 1957	5.57	May 5, 1959	5.20				

f Dry.

Ward County

155-83-23baa1. City of Minot. Drilled unused artesian well in glacial drift, diam 12 in, depth 132 ft, screened 120-132. MP top edge of recorder shelf, 19.88 ft below lsd. Highest water level 33.18 below lsd, Oct. 25, 1955; lowest 55.54 below lsd, July 25, 1951. Records available: 1944-59, 1961. No measurement made in 1960. Measurement discontinued.

Apr. 30, 1957	44.12	June 19, 1959	43.98	July 30, 1959	52.22	Sept. 5, 1959	50.78
Oct. 14	37.05	26	43.08	Aug. 1	53.38	15	49.98
May 22, 1958	47.09	July 3	44.18	7	52.98	22	49.88
Oct. 8	53.44	10	43.78	14	52.88	29	45.88
June 2, 1959	50.98	17	44.88	21	51.18	Aug. 4	46.28
12	42.89	23	45.99	26	51.08	Nov. 15, 1961	53.02

Wells County

150-70-20dad. Great Northern Ry. Dug unused water-table well in glacial drift, size 5 x 5 ft, depth 12 ft, lined with wood. MP top of board cover, 2.90 ft above lsd. Highest water level 0.72 above lsd, June 11, 1956; lowest 6.33 below lsd, Dec. 18, 1961. Records available: 1951-61.

Jan. 7, 1957	3.67	Apr. 15, 1957	4.90	July 22, 1957	3.89	Nov. 4, 1957	1.50
14	4.00	22	4.89	29	2.56	11	1.46
21	4.30	29	4.80	Aug. 5	3.30	18	1.30
28	4.40	May 6	3.32	12	3.42	25	1.53
Feb. 4	4.57	13	3.10	19	1.79	Dec. 2	1.80
11	4.54	20	2.78	26	2.33	9	1.92
18	4.63	27	2.18	Sept. 2	1.34	16	2.19
25	4.68	June 3	2.28	9	1.43	23	2.32
Mar. 4	4.99	10	2.45	16	1.49	30	2.75
11	4.70	17	2.00	30	1.88	Jan. 6, 1958	3.04
18	4.82	24	2.62	Oct. 7	1.50	13	3.06
25	4.45	July 1	2.88	14	1.30	20	3.20
Apr. 1	4.53	8	3.40	21	1.32	27	3.43
8	4.38	15	3.87	28	1.76	Feb. 3	3.33

150-70-20dad-- Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10, 1958	3.14	Mar. 2, 1959	5.28	Feb. 15, 1960	5.98	Jan. 23, 1961	5.65
17	3.50	9	5.07	22	5.99	30	5.73
24	3.75	16	4.67	29	6.07	Feb. 6	5.75
Mar. 3	3.45	23	4.36	Mar. 7	6.13	13	5.70
10	3.60	30	4.16	14	6.17	20	5.87
17	3.43	Apr. 6	3.97	21	6.19	27	5.82
24	3.32	13	3.99	28	4.54	Mar. 6	5.50
31	2.98	20	3.95	Apr. 4	3.38	13	5.39
Apr. 7	2.14	27	2.85	11	1.68	20	5.13
14	1.70	May 4	3.76	18	1.79	27	5.12
21	1.80	11	3.24	25	2.21	Apr. 3	5.06
28	1.30	18	3.15	May 2	3.00	10	5.00
May 5	1.24	25	3.09	9	3.03	17	4.83
12	1.08	June 1	2.83	16	3.11	24	4.67
19	1.38	8	3.06	23	1.44	May 1	4.59
26	1.67	15	3.60	30	1.23	8	4.32
June 2	1.70	22	3.70	June 6	1.89	15	4.20
9	1.54	29	3.76	13	1.68	22	4.17
16	1.70	July 6	3.20	20	2.34	29	4.48
23	2.25	13	4.44	27	2.80	June 5	4.63
30	2.32	20	4.75	July 5	2.70	12	4.81
July 7	.86	27	5.03	11	3.25	19	5.05
14	.93	Aug. 3	5.27	18	3.70	26	5.27
21	1.36	10	5.45	25	4.23	July 3	5.47
28	2.06	17	5.58	Aug. 1	4.60	10	5.63
Aug. 4	2.60	24	5.70	8	4.77	17	5.57
11	3.32	31	5.80	15	4.88	24	5.67
18	3.80	Sept. 7	5.85	22	5.02	31	5.78
25	3.75	14	5.15	29	4.54	Aug. 7	5.90
Oct. 6	4.29	21	6.13	Sept. 5	4.92	14	6.01
13	4.30	28	5.83	12	5.10	21	6.07
20	4.25	Oct. 5	5.86	19	5.19	28	6.20
27	4.13	12	5.70	26	5.77	Sept. 4	6.27
Nov. 3	4.05	19	5.25	Oct. 3	5.32	11	6.29
10	4.06	26	5.20	10	5.35	18	6.27
17	4.07	Nov. 2	5.20	17	5.36	25	6.17
24	4.02	9	5.17	24	5.44	Oct. 2	6.13
Dec. 1	4.20	16	5.26	31	5.35	9	6.14
8	4.40	23	5.30	Nov. 7	5.25	16	6.15
15	4.57	30	5.45	14	5.32	23	6.17
22	4.70	Dec. 7	5.42	21	5.28	30	6.20
29	4.82	14	5.40	28	5.38	Nov. 6	6.23
Jan. 5, 1959	4.81	21	5.53	Dec. 6	5.44	13	6.25
12	5.05	28	5.59	12	5.47	20	6.26
19	5.10	Jan. 4, 1960	5.62	19	5.50	27	6.29
26	5.21	11	5.73	26	5.52	Dec. 4	6.30
Feb. 2	5.33	18	5.77	Jan. 2, 1961	5.53	11	6.32
9	5.36	25	5.83	9	5.54	18	6.33
16	5.38	Feb. 1	5.94	16	5.58	25	6.28
23	5.41	8	5.95				

## Reference

Randich, P. G., Petri, L. R., and Adolphson, D. G., 1962, Records, logs and water-level measurements of selected wells, test holes, and springs, and chemical analyses of ground water in Kidder County, North Dakota: North Dakota Geol. Survey Bull. 36, pt. 2.

## SOUTH DAKOTA

By H. J. Bandelman

The observation-well program in South Dakota, begun in 1935, was continued during 1957 through 1961. Measurements of water levels have been continued since 1946 as a part of the Missouri River Basin program. The South Dakota Water Resources Commission has cooperated since 1955. Water-level measurements not included herein are on file at the office of the Ground Water Branch, Water Resources Division, U. S. Geological Survey, Huron, South Dakota. Figure 9 shows the location of observation wells included in this report.

### Well-Numbering System

Wells are numbered in accordance with the Bureau of Land Management's system of land subdivision. Each well number is made up of three segments. The first segment indicates the township, the second the range, and the third the section in which the well is situated. The letters after the section number, which are assigned in a counterclockwise direction, represent subdivisions of the section. The first letter denotes the 160-acre tract, the second the 40-acre tract, and the third the 10-acre tract. If the well can be located within a  $2\frac{1}{2}$ -acre tract, 4 letters are shown in the well number. The letter "A" or "D" before the township number designates a well in the northeast or southeast quadrant of the Black Hills meridian and base-line system. (If the well is in the fifth or sixth principal meridian and base-line system, no letter is included.) Numbers are added as suffixes to distinguish wells in the same tract. Thus, the number 113-65-12cdbl1 designates well 1 in the  $NW\frac{1}{4}NW\frac{1}{4}SE\frac{1}{4}SW\frac{1}{4}$  sec. 12, T. 113 N., R. 65 W.

### Well Descriptions and Water-Level Measurements

Water levels are reported in feet below land-surface datum, unless otherwise indicated.

#### Beadle County

109-62-9ad1. Hildur Erickson. Drilled unused water-table well in glacial drift, diam 18 in, depth 26 ft, cased to 26. Lsd 1,321.6 ft above msl. MP top of casing, 1.30 ft above lsd. Highest water level 9.95 below lsd, June 16, 1947; lowest 27.09 below lsd, Feb. 9, 1938. Records available: 1935-38, 1941, 1944, 1946-60. No measurement made in 1961.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 16, 1957	19.11	Feb. 13, 1958	18.57	Dec. 11, 1958	19.10	Aug. 14, 1959	20.40
June 17	13.55	Apr. 15	16.60	Feb. 6, 1959	19.38	Oct. 25	21.26
July 16	13.70	July 10	15.08	Apr. 9	20.06	Feb. 4, 1960	21.92
Oct. 4	16.09	Aug. 26	16.37	June 9	19.79	Apr. 21	20.88
Dec. 16	17.37	Oct. 28	18.29				

110-62-9bcc1. City of Huron. Drilled unused (previously reported municipal) artesian well in glacial drift, diam 12 in, depth 74 ft, perforated 38-74. Lsd 1,307 ft above msl. MP top of platform, 2.00 ft above lsd. Highest water level 10.81 below lsd, Feb. 4, 1954; lowest 41.17 below lsd, Apr. 1, 1960. Records available: 1954-61. Fluctuation caused primarily by regional pumping.

#### Water level at noon, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	15.20	14.80	14.70	14.58	14.71	14.69	.....	.....	18.13	17.22	17.30	15.28
10	15.12	14.78	14.63	14.60	14.91	14.55	.....	.....	17.92	17.08	17.23	15.25
15	15.09	14.76	14.67	14.62	15.00	14.37	.....	.....	17.83	16.80	16.03	15.09
20	14.96	14.73	14.62	14.54	14.90	h14.26	.....	.....	17.77	16.77	15.85	14.93
25	h14.97	h14.70	h14.70	h14.56	14.70	.....	h14.63	h18.08	h17.64	h16.60	15.73	14.86
Eom	14.85	14.70	14.70	14.62	14.71	.....	.....	18.24	17.41	16.36	15.47	14.80

h Tape measurement.

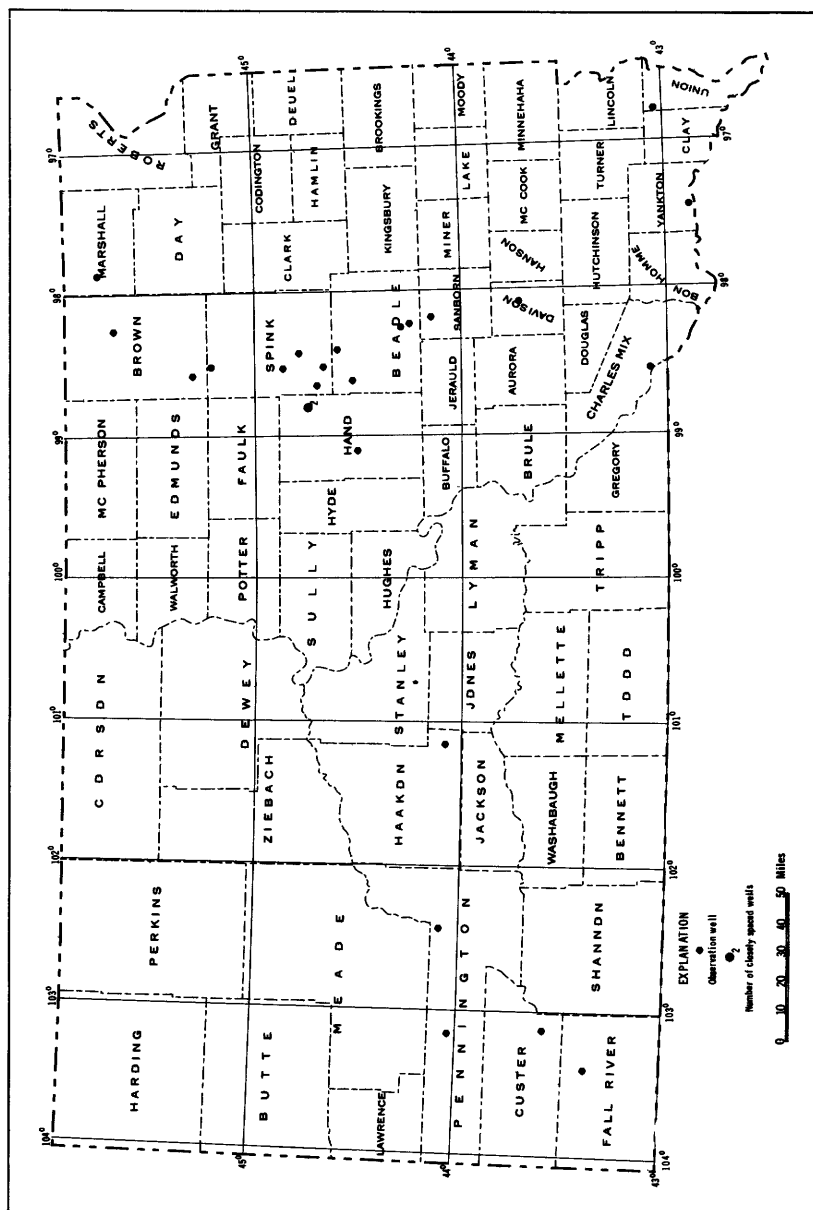


Figure 9. --Location of observation wells in South Dakota, 1957-61.

110-62-9bccc1--Continued.

1958												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	14.72	14.35	14.03	13.85	13.76	14.01	16.11	.....	20.98	19.03	17.33	16.35
10	14.62	14.34	14.02	13.88	13.65	14.32	16.31	.....	19.79	18.77	17.10	16.23
15	h14.58	h14.27	h14.03	h13.85	h13.67	h14.49	h16.48	h18.59	h19.54	h18.46	h18.69	h16.04
20	14.50	14.25	14.03	13.82	13.68	15.03	16.65	19.14	19.37	18.10	16.96	15.97
25	14.40	14.15	14.03	13.84	13.84	15.22	16.92	19.71	19.30	17.89	16.67	15.85
Eom	14.39	.....	14.02	13.75	13.75	15.58	17.30	19.98	19.24	17.65	16.50	15.82
1959												
5	15.68	15.34	15.15	15.22	15.95	19.18	32.60	38.55	37.40	34.85	36.40	35.20
10	15.62	15.29	15.15	15.31	16.61	19.33	26.97	38.75	37.35	34.60	36.15	37.50
15	15.58	15.26	15.16	15.38	17.03	19.37	h35.26	39.05	37.20	35.70	36.70	37.50
20	h15.50	.....	15.19	15.59	20.93	19.90	37.41	39.00	37.05	36.15	36.37	38.30
25	15.45	h15.22	h15.19	h15.73	h18.49	h27.78	38.95	38.80	36.80	37.52	36.25	38.30
Eom	15.45	.....	15.17	15.75	19.46	33.10	39.10	h36.50	h32.12	h35.69	h35.08	h38.26
1960												
5	38.80	39.17	39.87	35.67	.....	22.61	21.15	h29.19	26.50	23.20	21.85	20.23
10	39.10	39.27	40.10	31.15	.....	22.24	21.10	28.07	25.85	h24.76	h21.60	20.11
15	39.05	39.35	40.54	29.30	.....	22.13	21.70	28.05	25.85	23.53	21.26	19.93
20	39.40	39.94	40.67	27.97	23.47	21.63	21.73	28.52	24.75	22.31	21.08	19.77
25	39.40	39.90	40.77	26.85	23.25	21.40	27.85	27.76	24.15	22.16	20.80	19.54
Eom	39.25	.....	40.86	26.10	23.00	21.19	30.00	27.02	23.75	22.03	20.56	19.39
1961												
5	19.28	18.64	18.20	17.91	17.76	17.46	17.17	21.05	25.28	22.92	20.38	18.88
10	19.14	18.49	18.12	17.87	17.65	17.38	17.29	21.92	25.52	22.35	20.02	18.77
15	19.00	18.46	18.10	17.84	17.55	17.13	18.10	22.70	25.25	21.82	19.79	18.56
20	18.93	18.39	.....	17.82	17.40	17.09	19.23	24.07	24.69	21.45	19.54	18.39
25	18.83	18.27	17.97	h17.79	17.45	17.13	19.73	24.50	24.08	h21.08	19.28	18.23
Eom	18.70	18.27	17.96	17.80	17.43	17.15	20.40	24.92	23.51	20.62	19.09	18.16

h Tape measurement.

113-63-2bbbl1. U. S. Bureau of Reclamation. Drilled observation water-table well in glacial drift, diam 4 in, depth 155 ft, cased to 71, perforated 19-70. Lsd 1,307.8 ft (previously reported 1,307.3 ft) above msl. MP top of platform, 2.50 ft above lsd. Highest water level 24.58 below lsd, Jan. 12, 1959; lowest 28.06 below lsd, Mar. 29, 1960. Records available: 1953-61.

Water level at noon, from recorder graph, 1957												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	27.82	27.86	27.89	.....	27.91	27.80	27.62	27.48	27.42	27.40	27.42	27.29
10	27.82	27.88	27.84	.....	27.89	27.75	27.61	27.47	27.40	27.40	27.42	27.58
15	27.85	27.88	27.90	.....	27.91	27.74	27.56	27.48	27.40	27.35	27.38	27.48
20	27.80	27.86	27.90	.....	27.82	27.67	27.54	27.42	27.37	h27.45	27.40	27.34
25	h27.86	h27.90	h27.90	h27.93	27.84	27.67	27.52	27.42	h27.40	27.44	h27.40	27.35
Eom	27.83	27.88	.....	27.93	27.87	27.65	27.50	27.40	27.40	27.37	27.37	h27.43
1958												
5	27.37	h27.42	h27.49	27.40	h27.54	.....	27.56	h27.51	.....	27.52	h27.45	26.57
10	27.42	27.47	h27.53	.....	h27.54	h27.53	h27.55	.....	h27.51	27.63	h27.54	h27.57
15	h27.39	h27.40	h27.55	h27.52	27.61	h27.55	h27.55	27.57	h27.53	h27.55	h27.53	h27.60
20	h27.42	h27.42	27.54	h27.53	h27.56	27.61	h27.58	h27.50	27.53	h27.50	27.70	h27.58
25	h27.43	h27.42	h27.56	27.59	h27.53	h27.51	h27.57	h27.51	27.50	h27.59	h27.56	.....
Eom	27.37	27.51	h27.50	h27.53	27.52	h27.51	27.53	27.52	h27.55	.....	27.52	h27.66
1959												
5	h24.59	.....	.....	h24.76	24.76	24.79	24.81	24.81	24.80	24.86	24.89	24.91
10	h24.58	h24.60	h24.66	.....	24.73	24.77	24.81	24.82	.....	24.88	24.89	24.89
15	.....	h24.65	h24.71	h24.72	24.77	24.77	24.81	24.83	.....	24.84	24.85	24.92
20	h24.59	.....	.....	.....	24.76	24.77	24.80	24.82	.....	24.90	24.87	24.93
25	h24.65	h24.66	24.79	h24.73	24.75	h24.75	h24.80	h24.80	.....	.....	h24.93	.....
Eom	.....	.....	.....	.....	h24.78	24.81	24.83	24.81	h24.86	h24.88	.....	24.95
1960												
5	27.91	27.95	28.00	27.97	27.77	27.50	27.49	h27.45	27.45	27.48	27.46	27.52
10	27.96	27.97	27.99	27.96	27.68	27.48	27.48	27.46	27.46	h27.47	h27.51	27.49
15	27.97	27.92	27.99	28.04	27.60	27.45	.....	27.44	27.47	27.48	27.49	27.50
20	27.97	27.99	27.97	27.99	27.54	27.47	.....	27.45	27.45	27.46	27.50	27.52
25	27.96	27.98	28.01	27.93	27.51	27.47	.....	27.45	27.47	27.47	27.49	27.49
Eom	27.95	.....	28.04	27.87	27.50	27.49	.....	27.46	27.45	27.47	27.53	27.42

h Tape measurement.

113-63-2bbbbb--Continued.

1961

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	27.49	27.57	27.60	27.68	27.65	27.70	27.68	.....	27.64	27.64	27.71	27.66
10	27.54	27.54	27.60	27.66	27.65	27.69	27.64	.....	27.64	27.62	27.64	27.69
15	.....	27.59	27.57	27.68	27.71	27.74	27.65	.....	27.66	27.68	27.64	27.67
20	27.57	27.57	.....	27.69	27.72	27.69	27.63	.....	27.60	27.66	27.66	27.68
25	27.55	27.54	27.09	h27.65	h27.74	27.69	.....	27.64	27.64	h27.70	27.69	27.64
Eom	27.55	27.59	27.66	.....	27.69	27.66	.....	27.61	27.66	27.64	27.65	27.72

h Tape measurement.

113-65-34cccc2. U. S. Bureau of Reclamation. Drilled observation water-table well in glacial drift, diam 1 in, depth 40 ft, perforated 1-40. Lsd 1,380.4 ft above msl. MP top of casing, 1.00 ft below lsd. Highest water level 4.77 below lsd, May 4, 1953; lowest 19.25 below lsd, Nov. 13, 1959. Records available: 1950-59. No measurement made in 1960 or 1961.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31, 1957	17.20	Oct. 1, 1957	14.71	May 29, 1958	13.10	Apr. 30, 1959	18.18
Mar. 29	17.71	Nov. 27	13.85	July 25	14.54	June 25	18.29
Apr. 21	11.88	Feb. 7, 1958	14.83	Oct. 2	16.23	Sept. 10	18.92
June 24	11.65	Mar. 8	14.64	Dec. 24	17.26	Nov. 13	19.25
July 31	13.00						

## Brown County

122-64-36ccdd1. U. S. Bureau of Reclamation. Drilled observation water-table well in lake sediments of Pleistocene age, diam 4 in, depth 48 ft, perforated 6-48. Lsd 1,298.7 ft above msl. MP top of platform, 3.10 ft above lsd. Highest water level 13.8 below lsd, July 3, 1953; lowest 23.42 below lsd, Nov. 27, 1960. Records available: 1953-61.

Water level at noon, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	21.88	22.03	.....	h22.22	22.17	20.61	h18.32	17.98	18.38	h18.90	19.23	19.20
10	21.93	21.99	22.11	22.28	22.00	20.08	18.15	17.97	18.40	18.99	19.23	19.52
15	21.97	.....	22.18	22.29	21.81	19.77	18.06	18.06	18.37	18.83	19.20	19.36
20	21.93	.....	22.20	22.21	21.45	19.28	17.99	18.01	18.55	19.08	19.25	19.40
25	21.99	.....	22.29	22.21	21.27	18.83	17.93	18.03	18.65	19.17	19.26	19.38
Eom	21.93	.....	22.32	22.23	21.18	18.62	17.91	18.18	18.72	19.07	19.30	19.54

1958

5	h19.55	.....	.....	h19.79	.....	.....	h19.60	20.17	20.59	h20.96	21.21	21.27
10	.....	.....	.....	h19.90	.....	.....	19.75	20.23	20.66	21.09	21.22	21.42
15	.....	.....	.....	.....	.....	.....	19.89	20.35	20.74	21.13	21.22	21.46
20	.....	.....	.....	.....	19.24	.....	19.92	20.37	20.78	21.14	21.30	21.46
25	.....	.....	.....	.....	.....	.....	19.94	20.50	20.80	21.23	21.37	21.46
Eom	.....	.....	.....	.....	.....	.....	20.08	20.48	20.90	21.27	21.37	21.48

1959

5	h21.54	21.74	.....	h22.08	22.10	22.08	h22.21	22.44	22.68	22.81	22.84	22.87
10	21.58	21.69	.....	22.11	22.01	22.09	22.28	22.44	22.72	22.75	22.86	22.89
15	21.58	21.73	.....	22.07	22.15	22.14	22.30	22.52	22.79	22.78	22.90	22.91
20	21.50	21.70	.....	22.13	22.14	22.19	22.32	22.54	22.82	22.83	22.89	22.96
25	21.65	21.75	.....	22.13	22.09	22.17	22.38	22.61	22.79	22.84	22.87	22.93
Eom	21.62	.....	.....	22.10	22.03	22.27	22.43	22.62	22.77	22.88	22.89	22.92

1960

5	22.87	.....	.....	.....	.....	22.51	22.45	22.87	23.03	23.25	23.37	23.10
10	22.92	.....	.....	.....	.....	22.45	22.44	22.88	23.08	23.28	23.40	23.08
15	22.93	.....	.....	.....	22.63	22.42	22.67	22.91	23.11	23.30	23.37	23.11
20	22.95	.....	.....	.....	22.55	22.35	22.73	22.87	23.11	23.34	23.38	23.16
25	.....	.....	.....	.....	22.48	22.35	22.72	22.90	23.16	23.14	23.38	23.16
Eom	.....	.....	.....	.....	22.47	22.40	22.81	21.97	23.20	23.33	23.38	23.16

1961

5	.....	.....	.....	.....	21.40	20.08	19.07	19.61	21.15	21.67	22.15	22.28
10	.....	.....	.....	.....	21.10	19.68	19.09	19.85	21.22	21.81	22.10	.....
15	.....	.....	.....	.....	21.05	19.46	19.00	20.02	21.39	21.82	22.24	.....
20	.....	.....	.....	.....	20.97	19.28	19.09	20.26	21.43	21.88	22.24	.....
25	.....	.....	h22.60	.....	20.70	19.17	19.14	20.50	21.58	21.89	22.20	.....
Eom	h23.38	.....	.....	.....	20.52	19.00	19.30	20.82	21.62	.....	22.36	.....

h Tape measurement.

126-62-34abl. U. S. Geol. Survey. Drilled observation water-table well in glacial drift, diam  $\frac{3}{4}$  in, depth 16 ft, screened 15-16. Lsd 1, 290.5 ft above msl. MP top of casing, 5.40 ft above lsd. Highest water level 2.51 below lsd, June 2, 1951; lowest 10.93 below lsd, Sept. 30, 1959. Records available: 1950-60. No measurement made in 1961.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 14, 1957	9.51	Sept. 23, 1957	6.75	Apr. 29, 1958	5.46	Sept. 30, 1959	10.93
Apr. 25	7.24	Dec. 9	6.30	Aug. 19	8.39	May 24, 1960	7.49
June 24	5.97	Feb. 28, 1958	7.12	Feb. 2, 1959	8.64		

### Charles Mix County

95-65-9aacd1. U. S. Army Corps of Engineers. Drilled unused artesian well in Codell Sandstone Member of Carlile Shale of Upper Cretaceous age, diam 12 to 8 in, depth 380 ft, cased to 350. Lsd 1, 474.9 ft above msl. MP top of platform, 3.00 ft above lsd. Highest water level 210.16 below lsd, July 25, 1961; lowest 236.66 below lsd, Apr. 19, 1953. Records available: 1952-61.

#### Water level at noon, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	216.59	216.47	216.52	215.54	214.45	213.60	212.61	212.14	212.41	212.86	214.05	214.52
10	216.70	216.50	216.04	215.51	214.25	213.14	212.55	212.12	212.38	213.06	214.09	215.17
15	216.62	216.63	216.42	215.31	214.15	213.06	212.29	212.06	212.37	212.80	213.96	214.99
20	216.15	216.55	216.06	215.10	213.62	212.84	212.26	.....	212.55	213.18	214.30	214.78
25	216.52	216.46	216.03	214.63	213.80	212.95	212.21	.....	212.68	213.49	214.50	214.88
Eom	216.16	216.49	215.66	214.53	213.92	212.79	212.06	212.26	212.77	213.65	214.68	215.15

1958

5	215.04	214.96	214.75	213.58	212.62	.....	211.72	211.65	.....	212.75	213.33	213.93
10	215.05	215.01	214.78	213.64	212.31	.....	211.61	211.70	212.42	.....	213.53	214.03
15	215.10	214.93	214.61	213.30	212.45	.....	211.71	211.90	212.40	212.61	213.65	213.84
20	215.12	214.82	214.60	212.98	212.32	.....	211.54	211.93	212.43	212.66	214.11	213.82
25	214.70	214.57	214.53	212.86	.....	.....	211.53	211.94	212.55	213.14	213.95	213.75
Eom	215.07	.....	214.39	212.59	.....	.....	211.61	212.05	212.72	213.15	214.08	214.01

1959

5	213.82	213.75	213.59	212.97	211.83	.....	211.39	210.77	210.60	211.16	211.96	213.10
10	213.55	213.77	213.49	212.84	211.62	.....	211.28	210.85	210.96	211.19	212.10	212.93
15	213.80	213.66	213.44	212.31	211.62	.....	211.02	210.78	210.90	211.16	212.65	213.00
20	213.66	213.76	213.60	212.24	211.57	211.30	210.96	210.80	210.70	211.43	212.36	.....
25	213.67	213.62	213.53	212.03	.....	211.12	210.93	210.81	210.60	211.15	212.55	213.89
Eom	213.96	.....	213.12	211.82	.....	211.30	210.99	210.82	211.16	211.59	212.92	.....

1960

5	.....	212.49	212.44	.....	.....	.....	.....	.....	.....	.....	.....	211.47
10	.....	212.35	212.37	.....	.....	.....	.....	.....	.....	.....	.....	.....
15	.....	212.47	212.25	211.92	.....	.....	.....	.....	.....	.....	.....	.....
20	212.60	212.50	212.53	211.83	210.90	210.80	210.58	210.35	213.39	.....	.....	.....
25	212.34	212.39	.....	.....	.....	.....	.....	.....	210.28	210.20	.....	.....
Eom	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

1961

5	.....	.....	.....	211.67	210.60	210.58	.....	.....	.....	.....	.....	211.59
10	.....	.....	.....	211.30	210.67	210.46	.....	.....	.....	.....	.....	211.89
15	.....	.....	212.40	.....	210.74	210.66	.....	.....	.....	.....	.....	211.43
20	.....	.....	212.36	.....	210.66	210.67	.....	.....	.....	.....	.....	211.17
25	.....	.....	211.72	210.92	210.73	.....	210.16	.....	.....	.....	.....	211.12
Eom	.....	.....	211.82	210.93	213.61	.....	.....	.....	.....	.....	211.43	211.65

h Tape measurement.

### Custer County

D-6-8-26aac1. W. B. Englebrecht. Dug unused water-table well in terrace sand and gravel of Quaternary age, diam 4 ft, depth 38 ft, cribbed with rock to 38. Lsd 3,041.0 ft above msl. MP top of cover, 0.30 ft above lsd. Highest water level 30.99 below lsd, May 28, 1957; lowest 37.48 below lsd, Sept. 5, 1946. Records available: 1946-52, 1954-59. No measurement made in 1960 or 1961.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8, 1957	31.77	July 30, 1957	32.19	Mar. 19, 1958	35.56	Jan. 19, 1959	35.18
Mar. 21	32.62	Aug. 18	32.32	May 13	33.66	Mar. 27	35.08
May 28	30.99	Oct. 19	32.73	Oct. 12	34.97	May 26	36.54
June 24	31.57	Dec. 12	32.84				



Davison County

103-61-13ca1. H. J. Carstens. Dug domestic water-table well in glacial drift, diam 30 in, depth 24 ft, cribbed with rock to 24. MP top of cover, at lsd. Highest water level 6.42 below lsd, Feb. 27, 1952; lowest 15.06 below lsd, Oct. 20, 1959. Records available: 1950-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7, 1957	13.50	Mar. 6, 1958	10.72	Mar. 2, 1959	13.28	Sept. 26, 1960	14.14
Feb. 7	13.76	24	10.87	Apr. 27	12.97	Oct. 17	14.13
Mar. 4	13.76	Apr. 7	7.98	May 19	13.01	Nov. 7	13.89
15	13.78	May 2	8.78	June 9	13.64	Dec. 6	14.29
29	13.85	23	9.19	Sept. 21	14.71	Jan. 3, 1961	14.21
Apr. 25	12.11	June 12	10.05	Oct. 20	15.06	31	14.29
May 28	10.59	July 1	10.85	Dec. 14	13.97	Feb. 27	13.22
July 8	11.15	22	10.44	Jan. 11, 1960	14.65	Mar. 23	13.12
29	11.76	Aug. 12	12.36	Feb. 8	14.66	Apr. 12	13.19
Aug. 19	12.80	Sept. 3	12.88	Mar. 8	14.65	May 1	13.09
Sept. 12	11.80	23	13.15	Apr. 11	11.19	July 11	13.11
Oct. 1	12.15	Oct. 16	13.46	May 4	10.45	Aug. 22	14.10
23	12.12	Nov. 5	13.41	24	9.78	Sept. 11	14.41
Nov. 12	12.10	Dec. 3	13.16	June 13	10.21	Oct. 9	14.50
Jan. 13, 1958	10.53	Jan. 8, 1959	13.68	Aug. 16	13.76	Nov. 6	14.04
Feb. 7	10.94	Feb. 2	13.20	Sept. 5	13.61	Dec. 4	14.21

a Well being pumped.

Fall River County

D-8-6-13bad1. H. J. Larson. Dug domestic water-table well in eolian sand of Quaternary age, diam 24 in, depth 13 ft, cribbed with rock to 13. Lsd 3,213.1 ft above msl. MP top of curb, 0.30 ft above lsd. Highest water level 8.75 below lsd (previously reported 8.70 below lsd), Aug. 4, 1947; lowest 11.57 below lsd, May 13, 1958. Records available: 1946-59. No measurement made in 1960 or 1961.

Jan. 9, 1957	11.06	July 30, 1957	10.26	Mar. 19, 1958	10.75	Jan. 19, 1959	10.97
Mar. 21	11.18	Aug. 18	10.24	May 13	11.57	Mar. 27	10.68
May 29	9.93	Nov. 19	10.46	Aug. 15	10.54	May 26	11.08
June 24	9.53	Dec. 13	10.49	Oct. 12	11.08		

Haakon County

A-1-25-6dd1. A. Elrod. Dug unused water-table well in alluvium, diam 24 in, depth 28 ft (previously reported 30 ft), cribbed with wood to 28. Lsd about 1,900 ft above msl. MP top of cover, 0.50 ft above lsd (since Jan. 17, 1957). Highest water level 20.40 below lsd, May 13, 1953; lowest 24.52 below lsd, Oct. 31, 1960. Records available: 1946-61.

Jan. 17, 1957	23.66	Jan. 8, 1958	23.18	Feb. 16, 1959	23.66	Aug. 29, 1960	23.46
Feb. 14	23.65	20	23.28	Mar. 2	23.72	Sept. 19	23.55
Mar. 1	23.68	Feb. 12	23.22	Apr. 13	23.70	25	24.02
11	23.70	Mar. 20	23.29	May 5	23.82	Oct. 31	24.52
20	23.73	Apr. 22	23.21	June 2	23.82	Nov. 23	23.66
Apr. 10	23.74	May 13	23.18	Sept. 14	24.02	Dec. 12	23.71
30	23.71	June 3	23.13	Oct. 6	23.99	Jan. 10, 1961	22.79
May 23	23.58	24	23.09	Nov. 18	23.92	Mar. 3	23.75
June 3	23.35	July 18	23.33	Dec. 8	24.18	28	23.75
25	22.94	Aug. 5	22.95	12	24.04	Apr. 18	23.66
July 16	22.75	28	23.33	Feb. 5, 1960	24.06	May 8	23.64
29	22.88	Sept. 15	22.94	16	24.20	July 18	23.02
Aug. 5	22.99	Oct. 14	23.62	Apr. 8	23.58	Aug. 7	23.60
26	22.81	Nov. 4	23.25	May 4	23.62	28	23.66
Sept. 17	24.14	Dec. 2	23.54	June 7	23.46	Sept. 21	23.68
Oct. 8	23.27	Jan. 6, 1959	23.27	July 10	23.75	Oct. 31	23.66
29	22.96	Feb. 6	23.75	Aug. 8	23.39	Dec. 12	23.29
Nov. 25	23.23						

Hand County

112-69-3dc1. C. Losey. Dug stock water-table well in glacial drift, diam 4 ft, depth 21 ft, cribbed with brick to 21. Lsd about 1,600 ft above msl. MP top of casing, at lsd. Highest water level 2.41 below lsd, May 5, 1953; lowest 19.42 below lsd, Nov. 28, 1948. Records available: 1946-61.

112-69-3dc1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7, 1957	7.26	Feb. 3, 1958	7.79	Mar. 5, 1959	11.06	Sept. 8, 1960	9.46
Feb. 4	8.18	Mar. 3	7.99	Apr. 8	11.13	30	9.49
Mar. 4	8.26	28	7.97	29	11.13	Oct. 20	9.84
20	7.08	Apr. 11	7.67	May 21	11.14	Nov. 10	10.38
Apr. 1	6.01	28	4.32	June 12	11.17	Dec. 9	10.37
12	6.29	May 19	5.31	Sept. 24	11.72	Jan. 7, 1961	10.99
22	4.10	June 9	6.14	Oct. 23	11.91	Feb. 3	10.84
May 6	5.94	30	6.82	Dec. 17	12.50	Mar. 3	10.49
Aug. 2	5.85	July 22	7.43	Jan. 14, 1960	12.77	Apr. 11	10.28
19	6.57	Aug. 11	8.24	Feb. 11	12.71	May 4	7.69
Sept. 3	7.40	Sept. 2	8.95	Apr. 12	3.89	July 11	8.15
26	7.86	29	9.32	May 3	6.36	Aug. 25	9.72
Oct. 17	7.90	Nov. 3	10.06	29	6.84	Sept. 14	9.86
Nov. 5	7.85	Dec. 1	9.98	June 18	7.53	Oct. 12	10.50
Dec. 2	7.88	Jan. 5, 1959	10.76	July 26	8.50	Nov. 9	10.95
Jan. 6, 1958	7.89	Feb. 4	10.61	Aug. 22	9.41		

115-66-2aaa1. U. S. Bureau of Reclamation. Drilled observation artesian well in glacial drift, diam 4 in, depth 149 ft, cased to 62, perforated 40-61, seal between casing and well at 40. Lsd 1, 359.6 ft above msl. MP top of platform, 2.70 ft above lsd. Highest water level 19.98 below lsd, Aug. 29, 1953; lowest 25.21 below lsd, Mar. 1, 1960. Records available: 1953-61.

Water level at noon, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	23.63	23.90	24.02	23.94	24.13	23.20	22.08	21.45	21.37	21.46	21.67	21.37
10	23.77	23.84	23.54	24.10	23.97	22.94	22.06	21.32	21.29	21.66	21.53	22.18
15	23.83	23.93	24.15	23.93	24.00	22.93	.....	21.49	21.28	21.20	21.43	21.83
20	23.55	23.92	23.98	24.19	23.48	23.38	.....	21.27	21.21	21.66	21.72	21.51
25	h23.93	h23.90	h24.12	h24.11	23.52	h22.32	h21.50	21.18	h21.38	h21.77	h21.55	21.62
Eom	23.65	23.90	24.14	24.09	23.49	22.25	21.43	21.24	21.44	21.41	21.55	.....

1958

5	.....	.....	22.11	21.88	22.17	22.19	21.74	21.61	21.70	21.86	22.30	22.69
10	.....	.....	22.27	22.32	21.94	21.88	21.69	21.57	21.88	22.25	22.15	22.73
15	h22.01	h21.95	h22.22	h22.13	h22.25	h21.95	h21.74	h21.53	h21.88	h22.01	22.22	22.69
20	.....	21.77	22.34	22.02	22.05	21.90	21.58	21.66	21.82	21.79	22.70	22.75
25	.....	21.50	22.32	22.48	21.94	21.83	21.51	21.53	21.89	21.45	22.52	22.66
Eom	.....	22.07	22.20	22.07	21.77	21.47	21.55	21.63	22.12	22.24	22.48	22.91

1959

5	22.94	23.12	23.30	23.54	23.73	23.84	24.04	24.10	24.13	24.48	24.80	24.96
10	.....	23.21	23.36	23.65	23.43	23.74	24.09	24.20	24.54	24.48	24.57	24.82
15	.....	23.13	23.50	23.41	23.81	23.79	24.07	24.19	24.40	24.33	24.47	24.89
20	h22.85	23.26	23.70	23.73	23.76	23.92	23.96	24.24	24.25	24.64	24.53	25.02
25	23.10	h23.26	23.50	h23.52	23.83	h23.73	h24.03	24.30	24.43	h24.53	h24.88	24.68
Eom	23.31	.....	23.26	.....	23.88	24.02	.....	24.18	.....	.....	.....	24.79

1960

5	.....	.....	.....	25.09	24.76	24.46	24.21	23.90	24.00	24.19	24.31	24.50
10	.....	.....	.....	24.93	24.94	24.34	23.92	24.07	24.03	24.18	24.18	24.44
15	.....	.....	.....	25.06	24.58	24.13	23.93	23.90	24.13	24.35	24.12	24.51
20	.....	.....	.....	24.93	24.51	24.13	23.89	23.95	23.97	24.15	24.27	24.43
25	.....	.....	.....	24.88	24.42	24.09	23.96	23.94	24.11	24.17	24.14	24.56
Eom	.....	.....	.....	24.84	24.39	24.20	24.02	24.02	23.92	24.18	24.59	24.31

1961

5	24.31	24.77	24.71	24.82	24.53	24.33	24.13	.....	24.28	24.42	24.87	24.61
10	24.51	24.47	24.62	24.67	24.46	24.26	23.96	.....	24.21	24.32	24.48	24.96
15	24.51	24.76	24.77	24.67	24.65	24.47	24.01	.....	24.48	24.60	24.76	24.82
20	24.76	24.68	.....	24.71	24.67	24.18	23.93	.....	24.19	24.56	24.67	24.78
25	24.56	24.47	24.44	h24.56	h24.65	24.20	24.08	24.15	h24.40	h24.77	24.68	24.67
Eom	24.55	24.69	24.66	24.68	24.34	24.08	.....	24.08	24.52	24.57	24.55	24.82

h Tape measurement.

115-66-2aaa3. U. S. Bureau of Reclamation. Jetted observation water-table well in glacial drift, diam 4 in, depth 26 ft, perforated 0-26. Lsd 1, 359.2 ft (previously reported 1,355.9 ft) above msl. MP top of platform, 1.50 ft above lsd. Highest water level 16.36 below lsd, Sept. 29, 1954; lowest dry at 24.73 below lsd, January-May, 1960. Records available: 1954-61.

115-66-2aaaa3--Continued.

## Water level at noon, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	21.27	21.57	21.82	21.99	22.38	20.63	18.16	17.51	17.86	18.27	18.82	18.42
10	21.39	21.54	21.58	22.16	22.15	20.01	17.95	17.41	17.83	18.58	18.77	19.08
15	21.43	21.61	21.94	22.17	22.05	19.43	17.72	17.56	17.84	18.16	18.48	18.84
20	21.31	21.71	21.90	22.16	21.71	18.86	17.65	17.45	17.92	18.68	18.57	18.56
25	h21.55	h21.62	h22.07	h22.16	21.60	h18.45	17.55	17.33	h18.15	h18.84	h18.62	18.72
Eom	21.42	21.70	22.07	22.37	21.39	18.35	17.36	17.60	18.27	18.49	18.65	18.94

1958

5	18.95	19.11	19.38	19.35	19.49	19.18	18.53	18.37	18.57	19.02	19.36	19.77
10	18.93	19.29	19.50	19.72	19.25	18.73	18.50	18.33	18.77	19.18	19.32	19.91
15	h19.07	h19.20	19.48	h19.60	h19.43	h18.85	h18.54	18.28	h18.75	h19.10	h19.45	19.88
20	19.04	19.11	19.60	19.57	19.26	18.80	18.37	18.43	18.63	18.85	19.71	20.02
25	18.81	18.89	19.50	19.78	19.12	18.68	18.34	18.35	18.92	19.45	19.55	20.02
Eom	18.99	.....	19.55	19.47	18.89	18.33	18.30	18.41	19.03	19.42	19.72	20.22

1959

5	20.21	20.46	20.83	21.10	21.34	.....	.....	21.85	21.97	22.26	22.56	22.76
10	20.18	20.58	20.86	21.23	21.18	.....	.....	21.92	22.26	22.20	22.41	22.78
15	20.36	20.56	20.94	21.09	21.50	.....	.....	22.01	22.12	22.28	22.53	22.84
20	h20.25	.....	21.03	21.30	21.43	.....	.....	21.96	22.08	22.39	22.54	23.07
25	20.43	h20.75	h20.99	h21.24	21.39	.....	21.82	h21.94	.....	.....	.....	22.95
Eom	20.57	20.76	20.94	.....	h21.51	h21.57	21.96	22.09	h22.16	h22.41	h22.72	23.03

1960

5	.....	(f)	(f)	20.55	(f)	22.67	20.53	20.77	20.74	20.78	21.09	21.12
10	.....	(f)	(f)	22.97	(f)	22.20	20.34	20.88	20.81	h20.82	21.11	21.32
15	23.11	(f)	(f)	(f)	23.21	21.92	20.27	20.83	20.76	20.92	21.00	.....
20	(f)	(f)	(f)	(f)	23.12	21.69	20.16	20.77	20.68	20.91	21.17	.....
25	(f)	(f)	(f)	23.19	22.99	21.18	20.08	20.73	20.76	20.82	21.11	.....
Eom	(f)	.....	20.93	(f)	22.92	20.68	20.02	20.78	20.75	20.87	21.38	.....

1961

5	.....	22.10	21.74	22.24	22.20	21.77	20.63	20.46	20.67	20.90	21.31	21.47
10	.....	22.03	21.88	22.28	22.15	21.20	20.53	20.42	20.61	20.97	21.31	21.68
15	21.70	22.13	21.95	22.18	22.07	21.23	20.47	20.48	20.77	21.16	21.46	20.73
20	21.80	22.20	.....	22.10	22.24	20.97	20.42	20.58	20.68	21.14	21.43	.....
25	22.03	.....	22.16	h22.14	h22.04	20.84	20.40	20.47	h20.91	h21.24	21.38	.....
Eom	21.93	.....	22.30	22.23	21.79	20.68	20.42	20.42	20.87	21.28	21.41	.....

f Dry.

h Tape measurement.

Marshall County

127-58-19cc1. U. S. Geol. Survey. Jetted observation water-table well in glacial drift, diam  $\frac{3}{4}$  in, depth 15 ft, screened 14 $\frac{1}{2}$ -15. Lsd 1, 291.6 ft above msl. MP top of casing, 3.40 ft above lsd. Highest water level 1.89 below lsd, May 27, 1952; lowest 9.40 below lsd, Oct. 9, 1956. Records available: 1950-60. No measurement made in 1961.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 25, 1957	7.58	Dec. 10, 1957	5.65	Aug. 20, 1958	6.76	Sept. 29, 1959	9.40
June 25	6.65	Feb. 27, 1958	5.82	Feb. 3, 1959	8.25	May 23, 1960	7.14
Sept. 24	6.21	Apr. 30	5.27	June 30	7.76		

Pennington County

A-1-8-17ddd1. E. H. Hoff. Dug unused water-table well in alluvial sand and gravel, diam 5 ft, depth 16 ft, cribbed with rock to 16. MP top of cover, 0.60 ft above lsd. Highest water level 3.58 below lsd, May 19, 1950; lowest 17.27 below lsd, Mar. 14, 1956. Records available: 1946-61.

Jan. 2, 1957	15.52	Mar. 14, 1958	10.04	June 25, 1959	10.84	Aug. 19, 1960	13.17
30	14.20	Apr. 7	9.68	July 20	11.65	Sept. 15	13.66
Feb. 28	13.32	May 23	6.85	Aug. 31	12.75	Oct. 28	15.40
Mar. 19	12.94	July 28	5.43	Sept. 18	13.14	Dec. 6	14.30
May 2	11.32	Aug. 28	7.70	Oct. 5	13.23	Jan. 12, 1961	14.38
June 10	4.90	Oct. 6	9.20	Nov. 27	13.28	31	14.42
July 1	5.15	Nov. 3	11.10	Dec. 31	13.00	Mar. 13	14.48
Sept. 5	7.71	Dec. 15	9.67	Jan. 28, 1960	13.10	May 19	14.60
Oct. 17	8.62	Feb. 3, 1959	9.89	Mar. 15	12.72	July 26	14.82
Nov. 18	10.22	25	11.16	31	11.18	Aug. 31	14.96
Dec. 10	9.32	Apr. 3	11.70	May 26	10.09	Oct. 6	15.27
Jan. 14, 1958	9.48	May 7	11.35	July 8	11.55	Nov. 24	15.24
Feb. 21	10.52	June 4	10.35				

A-2-14-29cdcc1. M. Trask. Dug stock water-table well in alluvium, diam 36 in, depth 14 ft, cribbed with wood to 14. MP base of pump, 0.20 ft above lsd. Highest water level 1.54 below lsd, Mar. 9, 1949; lowest 11.90 below lsd, Jan. 30, 1961. Records available: 1946-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 23, 1957	b8.80	Mar. 10, 1958	3.80	June 3, 1959	3.15	Aug. 15, 1960	8.44
Feb. 28	6.20	Apr. 1	3.22	23	4.30	Sept. 6	9.04
Mar. 19	5.92	28	3.40	July 14	5.48	Oct. 18	(b)(f)
20	b8.03	May 14	3.57	Aug. 24	9.59	Dec. 1	9.44
Apr. 29	5.40	July 17	5.37	Sept. 14	6.40	Jan. 12, 1961	9.90
June 3	2.85	Aug. 26	6.75	Oct. 27	(f)	30	11.90
July 1	3.10	Sept. 18	7.60	Dec. 3	9.05	Mar. 15	10.20
24	3.72	Oct. 28	7.16	30	8.95	May 19	8.02
Sept. 3	5.78	Dec. 10	b7.88	Jan. 20, 1960	8.60	July 18	9.70
Oct. 15	6.05	Jan. 27, 1959	(b)(f)	Feb. 29	9.30	Aug. 31	10.41
Nov. 4	5.70	Feb. 18	(b)(f)	Apr. 19	5.13	Sept. 21	10.20
23	5.32	Mar. 26	8.40	May 24	6.44	Nov. 24	9.53
Jan. 7, 1958	6.15	Apr. 21	4.55	July 6	6.88		

b Well pumped recently.

f Dry.

#### Sanborn County

108-61-31bc1. George Doering. Drilled domestic artesian well in Niobrara Formation of Upper Cretaceous age, diam 3 in, depth 150 ft, cased with pipe. MP top of casing, 0.50 ft above lsd. Highest water level 6.16 below lsd, June 13, 1946; lowest 12.86 below lsd, Aug. 14, 1959. Records available: 1946-47, 1949-60. No measurement made in 1961.

Apr. 16, 1957	11.25	Jan. 8, 1958	10.53	Oct. 28, 1958	11.63	Aug. 14, 1959	12.86
June 17	10.97	Feb. 13	10.87	Dec. 11	11.68	Oct. 23	12.63
July 16	9.76	Apr. 15	10.59	Feb. 6, 1959	11.74	Feb. 4, 1960	12.83
Oct. 4	11.14	July 10	10.59	Apr. 9	11.91	Apr. 21	12.76
Dec. 13	10.97	Aug. 26	10.77	June 9	12.18		

#### Spink County

114-64-11bbbl. U. S. Bureau of Reclamation. Drilled observation artesian well in glacial drift, diam 4 in, depth 60 ft, perforated 20-60. Lsd 1, 310.8 ft above msl. MP top of platform, 3.20 ft above lsd. Highest water level 3.98 below lsd, July 1-2, 1953; lowest 12.27 below lsd, Aug. 25, 1961. Records available: 1953-61.

Water level at noon, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	....	8.27	8.33	8.22	7.50	6.38	5.62	c7.36	d7.07	6.89	6.76	6.65
10	....	8.27	....	8.25	7.43	6.13	5.60	c9.41	6.94	6.90	6.72	6.77
15	....	8.31	....	8.23	7.31	5.96	5.60	c9.99	6.93	6.78	6.66	6.67
20	....	8.36	8.34	7.98	7.00	5.87	5.67	c9.40	6.86	6.86	6.66	6.64
25	h8.29	h8.32	h8.33	h7.68	6.65	5.80	d6.40	c9.35	h6.87	h6.81	h6.67	6.67
Eom	8.25	8.33	8.33	7.57	d6.54	5.78	5.99	d7.46	6.89	6.76	6.69	6.70

1958

5	6.75	6.81	6.83	6.60	6.30	6.07	5.83	c10.10	....	d8.18	7.77	7.78
10	6.74	6.90	6.89	6.54	6.18	5.97	5.90	c9.60	....	d7.91	7.77	6.60
15	h6.75	6.81	h6.91	h6.43	h6.17	h5.94	5.89	....	d8.00	h7.89	7.78	h7.71
20	6.76	6.82	6.90	6.34	6.16	5.92	6.15	....	d8.35	7.77	7.78	....
25	6.70	6.79	6.90	6.34	6.10	6.56	d8.10	....	d8.24	7.79	7.78	7.72
Eom	6.77	6.75	6.63	6.30	6.10	6.10	d9.60	....	d8.29	7.79	7.78	7.73

1959

5	7.74	7.80	7.82	7.91	8.50	7.97	....	d13.55	....	....	9.51	....
10	7.75	7.82	7.82	7.98	8.15	8.02	....	d13.80	....	h9.63	9.45	....
15	7.76	7.84	7.85	7.94	8.14	....	....	d13.32	....	9.58	9.44	....
20	h7.77	7.90	7.89	8.10	8.25	....	....	d13.19	....	9.59	9.42	....
25	7.79	h7.88	h7.90	h8.30	8.11	h8.18	h13.20	13.03	....	9.48	h9.43	....
Eom	7.83	....	7.89	....	h6.03	....	d13.42	....	9.82	h9.51	9.38	h9.33

1960

5	9.29	9.30	....	8.86	7.67	....	....	h10.84	....	....	8.27	....
10	9.30	9.30	....	8.83	7.67	7.50	....	10.41	....	h8.40	h8.27	....
15	9.32	9.32	....	....	7.64	7.49	....	11.90	....	8.37	8.21	....
20	9.35	9.38	....	....	7.61	7.47	....	10.50	....	8.42	....	....
25	9.33	9.38	....	....	7.60	....	....	....	....	8.26	....	....
Eom	9.34	....	....	....	....	....	....	9.07	....	8.23	....	....

c Nearby well being pumped.

d Nearby well pumped recently.

h Tape measurement.

114-64-11bbbl--Continued.

1961

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	....	....	8.27	8.00	7.97	....	8.59	9.98	11.16	9.53	9.10	8.90
10	....	....	8.19	8.03	7.87	....	7.96	10.45	11.18	9.72	9.00	8.92
15	....	8.30	8.17	7.97	7.82	....	8.25	10.85	10.52	9.43	9.00	....
20	....	8.30	....	7.92	7.64	....	9.70	....	9.82	9.30	8.97	....
25	....	8.08	8.02	h7.90	7.52	7.50	10.86	d12.27	h9.59	h9.22	8.97	....
Eom	....	8.37	8.03	7.95	....	7.19	9.64	11.15	9.20	9.09	8.91	8.93

d Nearby well pumped recently.

h Tape measurement.

115-63-4aaaa1. U. S. Bureau of Reclamation. Drilled observation water-table well in lake sediments of Pleistocene age, diam  $1\frac{1}{4}$  in, depth 24 ft, cased to 24. Lsd 1, 293.8 ft above msl. MP top of casing, 1.20 ft above lsd. Highest water level 10.80 below lsd, July 26, Aug. 26, 1948; lowest 17.60 below lsd, Sept. 22, 1950. Records available: 1948-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 23, 1957	14.28	Feb. 11, 1958	13.23	Mar. 24, 1959	14.20	May 25, 1961	16.71
Apr. 18	14.20	Mar. 31	11.85	May 28	14.61	Nov. 28	16.68
June 26	11.66	Sept. 18	12.32	Nov. 9	15.40	Dec. 29	16.76
Aug. 7	11.23	Dec. 9	13.22	May 10, 1960	15.05		

115-65-28aaa1. U. S. Bureau of Reclamation. Drilled observation artesian well in glacial drift, diam 8 in, depth 107 ft, cased to 105, perforated 58-105, seal set at 58. Lsd 1, 340.4 ft above msl. MP top of platform, 3.00 ft above lsd. Highest water level 22.02 below lsd, June 27, 1953; lowest 29.20 below lsd, Oct. 6, 1961. Records available: 1951-61.

Water level at noon, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	25.08	25.09	25.10	24.90	24.44	23.72	23.20	d24.57	24.06	23.79	23.60	....
10	25.10	25.09	25.05	24.93	24.43	23.56	23.20	....	23.94	23.81	23.58	....
15	25.11	25.10	25.06	24.91	24.34	23.44	23.19	....	23.87	23.66	23.56	....
20	25.08	25.14	25.07	24.66	24.16	23.35	23.20	....	23.80	23.72	23.55	....
25	h25.12	h25.08	h25.05	h24.57	23.96	23.28	c24.32	h24.77	h23.80	h23.67	h23.55	23.53
Eom	25.08	25.11	25.04	24.49	23.88	23.27	d24.35	d24.35	23.81	23.62	....	23.53

1958

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	23.60	23.63	23.66	23.46	23.26	23.24	....	....	24.73	24.76	24.39	24.38
10	23.58	23.67	23.69	23.42	23.23	23.17	....	....	24.63	24.51	24.37	24.42
15	h23.60	h23.66	h23.70	h23.34	h23.22	h23.18	24.00	h25.44	h24.52	h24.46	24.39	h24.43
20	23.61	23.70	23.70	23.30	23.23	....	24.36	25.68	24.48	24.48	24.38	24.43
25	23.56	23.66	23.68	23.30	23.25	....	....	25.57	24.60	24.46	24.39	24.43
Eom	23.60	....	23.63	23.25	23.27	....	....	25.04	24.51	24.46	24.42	24.47

1959

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	24.45	24.50	24.56	24.51	24.88	24.79	....	27.85	27.17	26.33	26.09	25.99
10	24.49	24.52	24.57	24.54	24.88	24.84	....	27.69	26.00	26.24	26.07	25.98
15	24.49	24.53	24.56	24.53	24.84	24.85	....	28.05	26.76	26.22	26.07	25.97
20	h24.48	....	24.55	24.53	24.87	25.13	....	27.77	26.57	26.19	26.07	25.97
25	24.50	24.57	h24.53	h24.90	....	25.44	h27.50	28.00	26.45	26.13	h26.01	25.96
Eom	24.53	....	24.53	....	h24.83	25.58	27.83	27.92	h26.38	26.12	....	25.93

1960

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	25.88	25.91	25.96	25.66	24.85	....	24.97	h27.26	26.44	26.23	25.73	25.56
10	25.89	25.89	25.94	25.40	24.85	24.88	24.97	27.37	26.25	h26.85	h25.71	25.57
15	25.91	25.91	25.92	25.16	24.82	24.92	25.41	27.31	26.14	25.83	25.67	25.54
20	25.93	25.92	25.92	25.07	24.80	25.23	....	27.48	26.04	25.83	25.67	25.54
25	25.94	25.94	25.94	24.97	24.80	25.13	....	27.60	26.15	25.76	25.65	25.52
Eom	25.94	....	25.89	24.90	24.81	25.03	....	26.78	26.20	25.74	25.56	25.52

1961

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	25.53	25.55	25.52	25.28	25.29	25.08	25.16	27.20	28.31	27.54	26.37	26.18
10	25.54	25.55	25.48	25.28	25.45	25.08	25.88	27.51	28.47	....	26.34	26.18
15	25.55	25.53	25.44	25.24	25.36	25.07	....	....	28.31	....	26.31	....
20	25.56	25.53	....	25.24	25.19	25.07	....	....	28.23	....	26.28	....
25	25.56	25.53	25.32	h25.26	h25.10	25.07	d27.10	d27.86	h27.50	h26.53	26.24	....
Eom	25.56	25.53	25.30	25.27	25.09	25.08	27.03	d27.99	27.35	26.44	26.21	26.12

c Nearby well being pumped.

d Nearby well pumped recently.

h Tape measurement.

116-64-3dbl. L. J. Hillested. Dug domestic water-table well in glacial drift, diam 18 in, depth 22 ft, cased with corrugated steel to 22. Lsd about 1,300 ft above msl. MP base of pump, 2.20 ft above lsd. Highest water level 7.52 below lsd, Aug. 23, 1961; lowest 14.54 below lsd, Sept. 27, Oct. 18, 1960. Records available: 1946-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 11, 1957	11.90	Feb. 5, 1958	11.95	Feb. 3, 1959	12.72	July 26, 1960	14.31
Feb. 4	12.91	Mar. 3	12.12	Mar. 3	13.36	Aug. 24	14.42
Mar. 4	13.10	28	12.24	Apr. 8	13.46	Sept. 27	14.54
22	12.99	Apr. 9	12.12	27	13.50	Oct. 18	14.54
Apr. 2	12.99	28	12.08	May 20	13.58	Nov. 9	14.51
9	12.96	May 20	11.99	June 10	13.62	Dec. 7	14.37
23	12.60	June 10	11.71	Sept. 17	14.24	Jan. 4, 1961	14.40
May 7	12.22	July 1	11.81	Oct. 21	14.15	Feb. 1	14.44
June 10	11.16	22	12.01	Dec. 15	14.24	Mar. 3	14.43
Sept. 3	11.40	Aug. 15	12.34	Jan. 12, 1960	14.27	May 2	13.11
26	11.61	Sept. 2	12.55	Feb. 9	14.27	July 12	13.88
Oct. 17	11.74	29	12.88	Apr. 13	14.29	Aug. 23	7.52
Nov. 8	11.69	Nov. 3	12.96	May 5	14.08	Sept. 12	7.66
Dec. 3	11.61	Dec. 1	12.89	25	14.02	Oct. 10	8.30
Jan. 6, 1958	11.80	Jan. 5, 1959	13.07	June 14	14.11	Nov. 7	8.75

120-63-6bbbbb1. U. S. Bureau of Reclamation. Drilled observation water-table well in lake sediments of Pleistocene age, diam  $1\frac{1}{4}$  in, depth 24 ft, cased to 24. Lsd 1,297.4 ft above msl. MP top of casing, 1.50 ft above lsd. Highest water level 16.52 below lsd, July 15, 1954; lowest 21.00 below lsd, Apr. 20, 1950. Records available: 1948-52, 1954-60. No measurement made in 1961.

Jan. 23, 1957	19.41	Nov. 6, 1957	17.79	July 18, 1958	18.12	May 15, 1959	19.50
Apr. 19	19.51	Jan. 30, 1958	18.05	Sept. 19	18.36	Aug. 5	19.76
June 26	18.36	Mar. 21	18.20	Dec. 12	18.86	Nov. 2	20.10
July 17	18.04	May 13	18.09	Mar. 10, 1959	19.25	May 11, 1960	20.29
Sept. 26	17.77						

#### Union County

95-50-8ab1. J. J. Dolan. Dug unused water-table well in sand and gravel of Pleistocene age, diam 24 in, depth 42 ft, cased to 42. MP top of casing, 2.50 ft above lsd. Highest water level 0.51 below lsd, Apr. 11, 1947; lowest 14.77 below lsd, May 2, 1957. Records available: 1936-44, 1946-61.

Jan. 15, 1957	14.02	Dec. 9, 1957	10.84	Jan. 23, 1959	11.05	Apr. 13, 1960	5.14
Feb. 14	14.34	Jan. 9, 1958	10.87	Feb. 27	10.91	May 6	4.05
Mar. 4	14.48	Feb. 20	10.38	Mar. 24	10.98	June 10	3.19
24	14.64	Mar. 13	9.87	Apr. 16	11.09	July 21	4.71
Apr. 9	14.74	Apr. 23	8.30	May 15	10.77	Aug. 11	5.56
May 2	14.77	May 15	7.37	June 30	8.69	Sept. 14	3.63
17	14.61	June 11	7.03	July 20	8.24	Oct. 17	4.03
28	14.40	25	7.20	Aug. 18	7.91	Dec. 2	3.98
June 12	13.93	July 15	7.73	Sept. 17	7.98	15	4.16
July 2	12.75	24	8.00	Oct. 21	7.98	Jan. 17, 1961	5.08
17	11.44	Aug. 7	8.43	Nov. 19	6.77	Feb. 14	5.66
Aug. 20	10.87	21	8.76	Dec. 17	6.05	Mar. 15	5.19
Sept. 5	10.79	Sept. 23	9.23	Jan. 7, 1960	5.69	Apr. 18	3.91
Oct. 2	10.70	Oct. 1	9.44	Feb. 24	6.09	May 22	3.77
17	10.78	21	9.67	Mar. 17	6.29	June 20	4.47
Dec. 4	10.87	Nov. 19	10.08				

#### Yankton County

93-56-14aa1. Mrs. J. N. Kayser. Drilled domestic artesian well in Niobrara Formation of Upper Cretaceous age, diam unknown, depth 80 ft. Lsd about 1,200 ft above msl. MP base of pump, 1.20 ft above lsd. Highest water level 36.40 below lsd, June 16, 1961; lowest 47.52 below lsd, June 11, 1947. Records available: 1946-61.

Jan. 24, 1957	47.00	Oct. 21, 1957	46.18	July 29, 1958	45.30	Apr. 21, 1959	47.39
Feb. 27	47.00	Dec. 4	46.07	Aug. 18	46.52	May 26	47.19
Apr. 1	46.71	16	46.26	Sept. 24	46.89	July 21	46.38
17	46.78	Jan. 21, 1958	46.26	Oct. 27	46.81	Aug. 10	46.24
May 23	45.36	Mar. 3	46.55	Nov. 25	47.29	Sept. 21	45.81
June 27	42.09	Apr. 1	45.69	Dec. 19	47.02	Oct. 19	45.91
Aug. 2	46.20	25	46.17	Jan. 16, 1959	47.00	Nov. 20	45.04
19	45.99	May 23	46.22	Feb. 24	47.18	Dec. 21	45.14
Sept. 23	46.20	July 14	46.29	Mar. 17	47.12	Jan. 14, 1960	45.34

93-56-14aa1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 25, 1960	45.71	Aug. 12, 1960	43.81	Jan. 18, 1961	44.71	June 16, 1961	36.40
Mar. 18	45.85	Sept. 16	40.00	Feb. 20	44.85	Aug. 16	44.22
Apr. 15	38.02	Oct. 18	43.97	Mar. 17	42.53	Sept. 22	44.68
May 13	40.84	Nov. 17	45.16	Apr. 19	45.12	Oct. 20	44.82
June 13	40.14	Dec. 16	44.32	May 19	45.10	Nov. 16	44.90
July 22	43.11						

a Well being pumped.

b Well pumped recently.

## WISCONSIN

By R. E. Audini and R. M. Erickson

The observation-well program was continued during 1957 through 1961 in cooperation with the Wisconsin Geological and Natural History Survey. Figure 10 shows the location of observation wells included in this report.

### Well-Numbering System

A three-segment system of letters and numbers is used to designate the location of wells. The first segment is an abbreviation of the county name (Pt, Portage County). The second segment is the township designation, which is based on the Federal system of land subdivision, and is divided into three parts--township, range, and section. All townships are north of the base line for the extended Fourth principal meridian. All ranges are east of the Fourth principal meridian, unless "W" (West) follows the range number. The third segment is the well serial number, which is assigned in the order that the well was inventoried in the county. For example, well Pt-24/10/28-15 is located in Portage County, township 24 north, range 10 east, section 28, and was the 15th well inventoried.

### Well Descriptions and Water-Level Measurements

Water levels are reported in feet below land-surface datum, unless otherwise indicated. Barometric leveling is used in referencing land-surface datum.

#### Adams County

Ad-17/6/5-2. Formerly Ad 2. Wisconsin Conservation Dept. NW $\frac{1}{4}$ SW $\frac{1}{4}$ . Jetted observation water-table well in sand of Pleistocene age, diam 2 in, depth 21 ft, well point 19-21. MP top of casing, 1.70 ft above lsd. Highest water level 12.58 below lsd, July 11, 1960; lowest 18.05 below lsd, Apr. 6, 1959. Records available: 1952-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28, 1957	15.62	June 30, 1958	15.98	Aug. 3, 1959	15.97	Oct. 31, 1960	13.55
Feb. 25	15.79	July 28	16.06	Sept. 8	15.73	Nov. 28	13.53
Mar. 25	16.01	Aug. 25	16.19	Oct. 5	15.49	Jan. 30, 1961	13.93
Apr. 15	16.08	Sept. 29	16.38	Nov. 2	14.75	Feb. 27	14.24
May 6	15.99	Oct. 27	16.59	Dec. 8	13.85	Mar. 27	14.48
June 3	15.70	Nov. 25	16.83	Jan. 4, 1960	13.61	Apr. 3	14.39
July 8	15.27	Dec. 29	17.08	Feb. 29	13.64	May 8	13.99
Aug. 5	14.99	Jan. 26, 1959	17.39	Mar. 28	13.90	June 5	13.80
Oct. 28	15.36	Feb. 23	17.69	Apr. 11	13.91	July 31	13.94
Nov. 25	15.47	Mar. 30	17.98	May 2	13.78	Aug. 28	14.11
Dec. 16	15.50	Apr. 6	18.05	June 6	12.89	Sept. 25	14.31
Feb. 24, 1958	15.80	May 4	17.78	July 25	12.62	Oct. 2	14.33
Mar. 24	16.01	June 1	17.15	Aug. 22	12.88	Nov. 6	14.20
Apr. 9	16.09	July 6	16.30	Sept. 26	13.28	Dec. 4	13.70
May 5	16.02						

#### Ashland County

As-43/4W/32-6. U. S. Forest Service. NE $\frac{1}{4}$ SE $\frac{1}{4}$ . Drilled unused water-table well in sand and gravel of Pleistocene age, diam 5 in, depth 89 ft. MP top of hole in pumpbase, at lsd. Highest water level 26.9 below lsd, Jan. 5, 1961; lowest 30.1 below lsd, Apr. 30, Dec. 31, 1959. Records available: 1957, 1959-61. No measurement made in 1958.

Aug. 22, 1957	29.4	Mar. 31, 1959	30.0	July 31, 1959	29.5	Dec. 31, 1959	30.1
Oct. 11	29.2	Apr. 30	30.1	Aug. 31	29.4	Jan. 29, 1960	28.9
22	29.3	May 28	30.0	Sept. 30	29.0	Feb. 29	28.7
Nov. 12	29.4	June 26	29.7	Dec. 2	28.1	Mar. 31	29.1





Figure 10. --Location of observation wells in Wisconsin, 1957-61.

## As-43/4W/32-6--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 1, 1960	28.9	Aug. 31, 1960	27.7	Feb. 28, 1961	28.2	July 31, 1961	28.43
May 31	28.4	Sept. 30	27.3	Mar. 31	28.5	Aug. 31	28.50
June 30	27.9	Nov. 2	27.1	Apr. 30	28.7	Oct. 2	28.77
Aug. 1	27.8	Jan. 5, 1961	26.9	May 31	28.4	Nov. 1	29.03
5	27.6	31	27.9	June 30	28.67	30	29.11

Barron County

Br-33/13W/21-46. Edward Thuftin. NE $\frac{1}{4}$ NE $\frac{1}{4}$ . Drilled unused water-table well in sandstone of Pleistocene age, diam 4 in, depth 65 ft. Lsd about 1,155 ft above msl. MP top of casing, 2.00 ft above lsd. Highest water level 33.21 below lsd, Dec. 21, 1961; lowest 35.45 below lsd, May 13, 1959. Records available: 1956-61.

Oct. 22, 1956	33.79	June 18, 1958	34.73	Oct. 14, 1959	34.97	Dec. 6, 1960	33.92
Apr. 18, 1957	34.50	Sept. 17	34.74	Dec. 16	34.84	Mar. 21, 1961	33.84
Aug. 21	34.55	Dec. 17	34.85	Mar. 16, 1960	34.90	June 7	33.50
Dec. 11	34.59	May 13, 1959	35.45	June 14	34.38	Sept. 14	33.52
Mar. 13, 1958	34.77	July 22	35.33	Sept. 13	33.88	Dec. 21	33.21

Brown County

Bn-24/20/2-43. Formerly Bn 43. Harry Nick. SW $\frac{1}{4}$ SW $\frac{1}{4}$ . Drilled unused artesian well in St. Peter Sandstone of Middle Ordovician age, diam 5 in, depth 297 ft, reported cased to 60. Lsd 585 ft above msl. MP top of 1 $\frac{1}{2}$ -in pipe, 2.00 ft above lsd. Highest water level 2.50 above lsd, May 3, 1961; lowest 65.28 below lsd, Aug. 20, 1957. Records available: 1948-61. Affected by cessation of pumping from Green Bay municipal wells, August 1957, and by local pumping.

Feb. 13, 1957	-55.15	Jan. 6, 1958	-27.48	Jan. 5, 1959	-3.13	Sept. 6, 1960	-1.56
May 14	54.45	Feb. 5	22.70	June 9	+1.75	Nov. 2	+1.42
Aug. 20	65.28	17	20.96	Sept. 10	-7.94	Feb. 2, 1961	2.15
Sept. 3	62.13	Apr. 15	14.98	Dec. 9	+1.18	May 3	2.50
Oct. 1	54.60	May 15	11.87	Feb. 9, 1960	1.07	Aug. 1	2.20
Nov. 4	44.04	Aug. 7	11.27	May 4	2.10	Nov. 8	1.44
Dec. 9	33.45	Nov. 6	9.65	Aug. 1	1.39		

Bn-24/20/24-76. Formerly Bn 76. Wisconsin Public Service Corp. SE $\frac{1}{4}$ NE $\frac{1}{4}$ . Drilled unused artesian well in sandstone of Cambrian age and St. Peter Sandstone of Middle Ordovician age, diam 5 in, reported depth 500 ft, cased to 150. Lsd 590 ft above msl. MP top of 3-in pipe, 4.00 ft above lsd. Highest water level 41.24 below lsd, May 3, 1961; lowest 248.97 below lsd, Aug. 30, 1955. Records available: 1950-61. Affected by cessation of pumping from Green Bay municipal wells, August 1957, and by local pumping.

Feb. 13, 1957	219.24	Dec. 9, 1957	126.80	June 9, 1959	65.04	Nov. 2, 1960	44.44
May 14	225.22	Feb. 5, 1958	110.08	Sept. 10	65.98	Feb. 1, 1961	43.65
Aug. 6	246.20	May 15	92.98	Feb. 9, 1960	53.98	May 3	41.24
Sept. 3	198.90	Aug. 8	89.13	May 4	49.27	Aug. 2	45.69
Oct. 1	171.56	Nov. 5	81.12	Aug. 1	48.28	Nov. 8	50.79
Nov. 4	141.46	Jan. 5, 1959	77.05	Sept. 6	48.86		

Burnett County

Bt-39/16W/17-2. Formerly Bt 2. Wisconsin Conservation Dept. NE $\frac{1}{4}$ NE $\frac{1}{4}$ . Drilled observation water-table well in sand of Pleistocene age, diam 8 in, depth 46 ft, perforated 44 $\frac{1}{2}$ -46. Lsd 981 ft (previously reported 980 ft) above msl. MP pointer on float gate, 4.87 ft above lsd. Highest water level 31.16 below lsd, July 20, 1952; lowest 34.99 below lsd, Mar. 25, 1951. Records available: 1937-61.

Jan. 18, 1957	32.73	Apr. 4, 1958	33.04	June 19, 1959	33.47	Aug. 12, 1960	33.63
Feb. 22	32.81	May 23	33.03	July 31	33.49	Sept. 23	33.64
Mar. 29	32.86	June 6	33.06	Aug. 28	33.45	Oct. 21	33.61
Apr. 12	32.81	July 11	33.09	Sept. 18	33.52	Nov. 11	33.53
May 3	32.86	Aug. 22	33.15	Oct. 16	33.46	Dec. 30	33.61
June 7	32.84	Sept. 5	33.13	Nov. 13	33.43	Jan. 20, 1961	33.69
July 26	32.90	Oct. 31	33.13	Dec. 18	33.52	Feb. 17	33.71
Aug. 30	32.90	Nov. 14	33.08	Jan. 29, 1960	33.55	Apr. 7	33.67
Sept. 27	32.86	Dec. 26	33.10	Feb. 26	33.60	May 5	33.77
Oct. 11	32.91	Jan. 30, 1959	33.17	Mar. 11	33.68	July 28	33.70
Nov. 1	32.73	Feb. 27	33.22	Apr. 29	33.71	Aug. 25	33.74
Dec. 27	32.83	Mar. 27	33.31	May 27	33.71	Sept. 29	33.75
Jan. 31, 1958	32.91	Apr. 24	33.34	June 10	33.67	Oct. 27	33.78
Feb. 7	32.97	May 8	33.33	July 8	33.61	Nov. 24	33.78
Mar. 28	33.06						

Chippewa County

Ch-28/5W/1-38. Fagen School. SW $\frac{1}{4}$ SW $\frac{1}{4}$ . Drilled public-supply water-table well in sandstone of Cambrian age, diam 4 in, reported depth 42 ft, cased to 42. Lsd about 1,100 ft above msl. MP hole in pumpbase, 1.00 ft above lsd. Highest water level 17.42 below lsd, Apr. 17, 1957; lowest 19.24 below lsd, July 21, 1959. Records available: 1956-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 10, 1956	18.09	June 17, 1958	18.75	Oct. 13, 1959	19.03	Dec. 5, 1960	18.13
Apr. 17, 1957	17.42	Sept. 16	19.10	Dec. 15	18.77	Mar. 20, 1961	18.51
Aug. 22	18.70	Dec. 16	19.17	Mar. 15, 1960	19.01	June 6	18.07
Dec. 12	18.71	May 12, 1959	19.16	June 13	18.35	Sept. 13	18.59
Mar. 11, 1958	19.00	July 21	19.24	Sept. 12	18.47	Dec. 20	17.91

Clark County

Ck-26/3W/4-1. Formerly Ck 1. Wisconsin Conservation Dept. North Mound Tower. SE $\frac{1}{4}$ SE $\frac{1}{4}$ . Drilled domestic artesian well in sandstone of Cambrian age, diam 6 in, reported depth 150 ft, cased to 53. MP hole in pumpbase, at lsd. Highest water level 64.84 below lsd, Aug. 13, 1956; lowest 69.75 below lsd, Dec. 22, 1961. Records available: 1953-61.

Feb. 21, 1957	66.07	June 19, 1958	67.77	Oct. 15, 1959	69.49	Dec. 6, 1960	69.01
May 23	66.43	Sept. 18	68.26	Dec. 17	69.45	Mar. 22, 1961	69.32
Aug. 22	66.86	Dec. 18	68.50	Mar. 17, 1960	69.54	June 8	68.94
Dec. 12	67.05	May 14, 1959	69.26	June 15	68.22	Sept. 15	69.57
Mar. 13, 1958	67.99	July 23	69.41	Sept. 13	68.34	Dec. 22	69.75

Columbia County

Co-11/9/36-22. Formerly Co 22. Wisconsin Fur and Game Farm. NE $\frac{1}{4}$ NE $\frac{1}{4}$ . Drilled unused water-table well in sandstone of Cambrian age, diam 6 in, depth 75 ft. MP rim of casing, at lsd. Highest water level 50.92 below lsd, Oct. 13, 1955; lowest 58.24 below lsd, Nov. 17, 1959. Records available: 1949-61.

Feb. 19, 1957	53.58	May 20, 1958	55.75	Sept. 3, 1959	57.76	Nov. 9, 1960	55.64
May 20	54.21	Aug. 26	56.38	Nov. 17	58.24	Feb. 10, 1961	55.55
Aug. 22	54.15	Nov. 24	57.02	Feb. 4, 1960	58.07	May 10	55.60
Oct. 25	54.47	Feb. 16, 1959	57.63	May 11	57.56	Aug. 10	55.35
Feb. 11, 1958	55.12	June 8	57.06	Aug. 10	55.37	Nov. 21	55.26

Co-12/9/5-28. Formerly Co 28. Flanders. SE $\frac{1}{4}$ NW $\frac{1}{4}$ . Drilled unused water-table well in sandstone of Cambrian age, diam 6 in, depth 71 ft. MP top of casing, 2.00 ft above lsd. Highest water level 0.09 below lsd, Nov. 21, 1961; lowest 3.05 below lsd, Aug. 26, 1958. Records available: 1949, 1951-55, 1957-61.

Feb. 13, 1957	2.21	May 20, 1958	1.61	Sept. 3, 1959	2.58	Nov. 9, 1960	0.49
May 20	1.01	Aug. 26	3.05	Nov. 17	1.05	Feb. 10, 1961	1.81
Aug. 22	2.40	Nov. 24	2.70	Feb. 4, 1960	1.20	May 12	.65
Oct. 25	1.98	Feb. 16, 1959	2.83	May 11	.10	Aug. 10	1.35
Feb. 11, 1958	2.36	June 8	1.55	Aug. 10	1.01	Nov. 21	.09

Crawford County

Cr-10/4/22-15. J. H. Kettner. NE $\frac{1}{4}$ SW $\frac{1}{4}$ . Drilled domestic water-table well in sandstone of Cambrian age, diam 5 in, reported depth 130 ft. MP top of first elbow on breather pipe, 1.00 ft above lsd. Highest water level 48.57 below lsd, Aug. 16, 1960; lowest 51.42 below lsd, Nov. 19, 1958. Records available: 1957-61.

Aug. 21, 1957	51.07	Nov. 19, 1958	51.42	Feb. 18, 1960	49.51	Feb. 16, 1961	49.36
Nov. 14	50.86	Feb. 19, 1959	51.35	May 17	49.04	May 19	49.40
Feb. 12, 1958	50.94	June 25	50.78	Aug. 16	48.57	Aug. 18	49.79
June 13	51.20	Sept. 16	50.00	Nov. 16	48.89	Dec. 6	49.16
Aug. 21	51.39	Nov. 23	49.56				

Dane County

Dn-7/9/23-5. Formerly Dn 5. State of Wisconsin. South wing of State Capitol Bldg. NE $\frac{1}{4}$ NE $\frac{1}{4}$ . Drilled unused artesian well in sandstone of Cambrian age, diam 8 in, depth 346 ft (previously reported 316 ft), cased to 265. Lsd 930 ft above msl. MP top of 8-in pipe tee, 3.50 ft below lsd. Highest water level 83.37 below lsd, Jan. 2, 1961; lowest 105.28 below lsd, July 21, 1946. Records available: 1946-54, 1956-61. Affected primarily by pumping of nearby municipal wells. Measurements previously reported for 1956 were in error. Corrected measurements are: Nov. 30, 1956, 85.69; Dec. 31, 86.22.

Dn-7/9/23-5-- Continued.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	86.43	87.16	87.16	87.31	87.48	87.32	88.10	89.58	88.63	89.07	87.26	88.15
10	86.66	87.21	87.31	87.03	88.01	87.80	88.20	90.20	88.15	88.78	86.71	88.38
15	86.79	87.32	87.30	87.00	87.61	88.14	88.81	89.73	88.38	88.42	87.44	88.92
20	86.93	87.22	87.30	86.93	87.36	88.35	88.85	89.62	88.25	88.59	87.86	88.41
25	87.13	87.16	87.30	86.87	87.05	89.04	88.85	89.86	87.85	87.98	88.26	88.06
Eom	87.21	87.15	87.37	87.09	86.80	88.93	89.21	89.30	88.12	87.49	88.20	87.63

1958

5	88.05	88.01	88.25	86.47	86.23	87.56	88.07	91.52	90.68	89.70	88.25	87.89
10	88.11	88.30	88.35	85.82	87.25	86.95	88.04	91.86	90.26	89.35	88.61	88.12
15	88.46	88.33	87.69	85.67	89.39	87.26	88.82	92.00	90.37	88.96	88.61	88.25
20	88.51	88.35	86.83	86.68	88.93	87.10	89.44	92.12	90.39	89.19	88.52	88.38
25	88.49	88.08	86.54	86.74	88.57	87.31	90.50	91.75	90.16	88.96	88.65	88.18
Eom	88.39	88.45	86.41	86.22	e88.60	87.43	91.06	90.99	89.82	88.18	88.33	87.96

1959

5	87.85	89.24	89.22	87.70	87.60	88.71	88.29	88.29	e87.95	e86.65	85.92	85.53
10	88.60	89.25	88.95	87.51	88.52	89.12	87.88	e88.50	e86.90	86.49	85.50	85.79
15	88.77	89.41	89.17	86.98	88.19	89.20	87.79	e88.20	e86.85	86.09	85.43	85.85
20	88.91	89.58	89.27	87.08	88.02	88.98	88.38	e88.30	e86.80	86.22	85.47	86.14
25	89.33	89.42	89.34	87.29	88.40	89.19	88.86	e88.25	e86.75	86.29	85.36	85.73
Eom	89.51	89.47	88.53	87.21	88.52	89.01	89.10	88.20	e86.70	86.26	85.21	84.77

1960

5	84.46	85.38	e85.65	85.54	86.08	86.30	86.25	88.74	88.81	86.42	86.22	e86.00
10	85.20	85.31	86.12	85.80	85.62	85.49	86.81	88.43	89.19	86.78	85.95	e85.25
15	85.18	85.44	86.02	85.10	85.54	85.92	87.36	87.47	88.29	87.26	85.52	e84.50
20	85.19	85.65	86.04	85.29	85.91	86.90	88.06	87.99	87.51	86.89	86.36	e83.75
25	85.09	e85.45	86.15	85.72	85.76	e87.45	88.30	88.14	87.44	86.49	86.01	e83.55
Eom	85.20	e85.50	85.73	86.19	85.56	87.74	88.52	88.20	87.01	86.28	86.35	84.10

1961

5	84.20	85.64	e85.75	84.22	85.32	86.94	88.87	89.48	89.82	86.82	86.42	85.67
10	84.61	85.65	e85.55	84.74	e85.40	87.91	88.35	89.31	90.08	87.15	86.13	85.90
15	85.17	e85.65	85.43	84.87	e85.60	88.28	89.38	89.36	89.75	87.63	86.17	e85.75
20	85.22	e85.60	85.43	85.10	e85.80	88.74	88.77	90.26	88.13	87.01	85.96	85.84
25	85.25	e85.55	85.12	84.60	e86.00	88.11	88.97	89.48	87.88	86.24	85.41	85.24
Eom	85.05	85.72	84.99	85.16	e86.25	89.38	89.19	90.22	87.55	86.03	85.49	e84.75

e Estimated.

## Dodge County

Dg-11/16/5-4. Formerly Dg 4. City of Horicon. NW $\frac{1}{4}$ SW $\frac{1}{4}$ . Drilled unused artesian well in sandstone of Cambrian age and St. Peter Sandstone of Middle Ordovician age, diam 8 in, depth 475 ft, cased to 140. Lsd 980 ft above msl. MP top of concrete floor, 5.00 ft below lsd. Highest water level 112.53 below lsd, May 9, 1960; lowest 122.57 below lsd, Sept. 18, 1953. Records available: 1947-61.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	e116.50	e116.30	115.79	e115.50	115.38	114.95	117.51	117.00	118.02	e117.70	116.80	116.00
10	116.58	e116.25	116.11	e115.80	116.00	115.10	117.72	116.71	117.98	117.69	116.40	116.32
15	e116.20	116.00	116.31	e115.70	115.54	115.01	117.57	117.49	117.69	117.62	116.05	115.87
20	e116.30	116.13	116.11	e115.80	115.11	115.63	118.58	118.23	e117.90	117.11	115.55	116.01
25	e116.50	116.10	115.50	e115.90	114.88	115.07	116.67	117.16	118.00	117.20	115.88	115.18
Eom	e116.40	116.10	e115.70	115.95	114.93	116.77	117.25	117.79	e117.85	116.97	115.57	115.75

1958

5	115.87	116.32	116.17	115.90	e116.30	116.99	118.50	120.21	118.85	118.90	118.48	118.08
10	116.22	116.79	115.94	115.85	116.74	116.89	119.01	118.95	118.91	118.88	118.88	118.42
15	116.11	116.48	115.99	116.15	116.74	117.02	119.70	119.01	119.19	119.06	118.32	117.99
20	116.20	117.10	116.58	115.91	116.73	117.07	119.38	119.12	118.95	118.90	118.03	118.32
25	115.97	116.34	116.12	116.36	116.44	117.51	120.60	118.70	118.95	118.60	118.13	118.01
Eom	116.14	116.02	116.21	116.15	116.63	118.50	119.68	118.64	118.75	118.39	117.92	118.00

1959

5	118.08	118.30	118.11	e116.00	115.93	116.35	116.93	118.07	119.87	e117.30	115.28	115.18
10	118.41	118.55	118.06	116.02	115.65	116.64	117.50	118.00	119.48	116.60	115.39	115.34
15	118.22	118.19	117.83	115.87	115.70	116.67	118.48	118.68	118.90	116.98	115.28	115.01
20	118.02	118.38	117.94	115.65	115.63	117.71	118.50	119.12	e118.50	117.01	115.40	115.27
25	118.10	118.22	117.48	115.89	115.57	117.93	118.04	119.72	e118.10	116.00	115.28	115.09
Eom	118.53	118.13	116.80	115.71	115.51	118.00	119.32	119.63	e117.70	115.95	115.24	114.07

e Estimated.

Dg-11/16/5-4--Continued.

1960

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	114.18	114.00	114.69	113.84	113.92	113.69	114.25	115.85	115.56	114.90	114.79	114.52
10	e114.50	114.31	114.83	114.02	113.09	114.05	115.70	e115.75	e116.00	e115.00	114.93	114.62
15	e114.40	114.51	114.84	114.32	113.18	113.98	115.48	e115.50	e115.70	115.03	114.85	114.68
20	e114.30	114.66	114.68	113.77	113.26	114.11	115.72	e115.25	e115.40	114.92	114.69	114.73
25	e114.20	114.53	114.75	113.90	113.47	114.20	116.19	e115.00	e115.10	114.67	114.64	114.60
Eom	e114.10	114.68	113.95	114.00	114.03	114.02	116.19	114.74	e114.80	114.39	114.72	e114.50

1961

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	114.88	115.19	e114.65	113.94	114.40	115.87	117.43	116.70	118.69	116.33	115.39	115.29
10	e114.80	115.08	114.41	113.99	114.29	115.54	117.39	117.20	118.99	116.40	115.34	115.13
15	e114.85	115.22	114.46	113.99	114.49	115.41	116.51	117.70	117.07	116.24	115.61	115.47
20	e114.90	115.04	114.28	113.80	114.54	115.16	117.40	117.85	117.00	116.30	115.19	115.36
25	e114.95	114.55	114.06	113.50	114.71	115.18	117.26	117.98	116.99	116.06	115.12	115.04
Eom	e115.00	114.77	113.81	113.82	115.79	117.20	117.00	118.55	116.47	115.40	115.25	115.23

e Estimated.

Door County

Dr-29/27/30-7. Formerly Dr 7. Fred Peterson. NE $\frac{1}{4}$ NE $\frac{1}{4}$ . Drilled unused artesian well in Niagara Dolomite of Middle Silurian age, diam 4 in, depth 111 ft. MP hole in pumpbase, 1.00 ft above lsd. Highest water level 12.18 below lsd, May 24, 1947; lowest 52.40 below lsd, Dec. 7, 1949. Records available: 1946-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 13, 1957	45.97	May 7, 1958	36.80	Sept. 9, 1959	46.30	Feb. 1, 1961	49.92
May 14	20.73	Aug. 6	46.28	Dec. 9	35.13	May 3	40.01
Aug. 7	45.39	Nov. 6	46.30	Feb. 8, 1960	42.93	Aug. 1	45.14
Nov. 6	46.06	Mar. 4, 1959	44.50	May 3	19.19	Oct. 5	35.99
Feb. 5, 1958	44.37	June 8	46.29	Aug. 1	46.31		

Dr-26/23/22-11. Formerly Dr 11. Wilfred LeMense. NW $\frac{1}{4}$ SW $\frac{1}{4}$ . Drilled stock artesian well in St. Peter Sandstone of Middle Ordovician age, diam 6 in, reported depth 816 ft, cased to 60. Lsd 630 ft above msl. MP hole in side of casing, 1.00 ft above lsd. Highest water level 40.95 below lsd, Oct. 25, 1955; lowest 60.63 below lsd, Nov. 6, 1957. Records available: 1950-61. Affected by cessation of pumping from Green Bay municipal wells, August 1957, and by regional pumping.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 13, 1957	59.24	May 7, 1958	59.20	Dec. 9, 1959	50.91	Feb. 1, 1961	46.60
May 14	59.80	Nov. 6	56.83	Aug. 1, 1960	47.89	May 3	45.61
Aug. 7	60.32	Mar. 4, 1959	54.83	Sept. 6	47.52	Aug. 1	45.79
Nov. 6	60.63	June 9	53.28	Nov. 2	46.70	Oct. 5	43.70
Feb. 5, 1958	60.19	Sept. 9	51.86				

Douglas County

Ds-47/10W/23-1. Formerly Ds 1. Wisconsin Conservation Dept. NE $\frac{1}{4}$ SE $\frac{1}{4}$ . Drilled observation artesian well in sand of Pleistocene age, diam 8 in, depth 40 ft, cased to 40. Lsd 980 ft above msl. MP pointer on float gage, 4.33 ft above lsd. Highest water level 25.51 below lsd, Apr. 3, 1953; lowest 29.59 below lsd, July 29, 1939. Records available: 1937-41, 1944-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25, 1957	27.59	Apr. 11, 1958	28.17	June 26, 1959	27.90	Nov. 25, 1960	27.93
Feb. 22	27.64	May 30	28.27	July 31	28.55	Dec. 16	27.95
Mar. 22	27.67	June 27	28.36	Aug. 28	28.87	Jan. 27, 1961	28.13
Apr. 12	27.58	July 25	28.19	Sept. 18	28.43	Feb. 24	28.34
May 24	27.76	Aug. 29	28.57	Oct. 30	28.27	Mar. 24	28.45
June 21	27.81	Sept. 5	28.43	Nov. 27	28.66	Apr. 7	28.21
July 26	27.85	Oct. 31	28.55	Dec. 25	28.90	May 26	26.95
Aug. 2	27.97	Nov. 7	28.52	Jan. 29, 1960	28.97	June 30	27.53
Sept. 27	28.03	Dec. 26	28.62	Feb. 26	29.03	July 28	27.89
Oct. 25	28.08	Jan. 30, 1959	28.64	Mar. 25	29.05	Aug. 25	27.97
Nov. 15	28.11	Feb. 27	28.65	Apr. 8	28.72	Sept. 15	27.99
Dec. 27	28.18	Mar. 20	28.68	Aug. 5	28.77	Oct. 27	27.88
Jan. 31, 1958	28.33	Apr. 10	28.39	Sept. 30	27.97	Nov. 3	27.89
Feb. 21	28.47	May 15	28.48	Oct. 28	28.02	Dec. 29	27.93
Mar. 28	28.44						

Dunn County

Du-26/13W/31-53. Eau Galle Cheese Co. NW $\frac{1}{4}$ NW $\frac{1}{4}$ . Drilled unused water-table well in sandstone of Cambrian age, diam 5 in, reported depth 75 ft, cased to 54. Lsd about 780 ft above msl. MP top of casing, 6.00 ft below lsd. Highest water level 33.68 below lsd, Dec. 11, 1957; lowest 35.36 below lsd, Sept. 13, 1961. Records available: 1956-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 16, 1956	33.73	June 17, 1958	33.81	Oct. 13, 1959	34.06	Dec. 5, 1960	34.45
Apr. 18, 1957	34.49	Sept. 16	33.94	Dec. 15	34.01	Mar. 20, 1961	34.01
Aug. 21	34.52	Dec. 16	33.99	Mar. 15, 1960	34.44	June 5	34.18
Dec. 11	33.68	May 12, 1959	34.21	June 13	34.14	Sept. 13	35.36
Mar. 11, 1958	33.74	July 21	34.36	Sept. 12	33.84	Dec. 19	35.24

Eau Claire County

EC-26/6W/32-13. Formerly EC 13. Eau Claire County. SW $\frac{1}{4}$ SW $\frac{1}{4}$ . Driven unused water-table well in alluvium, diam 1 $\frac{1}{4}$  in, depth 26 ft, well point 24-26. MP top of casing, 1.50 ft above lsd (since Dec. 20, 1961). Highest water level 10.86 below lsd, Apr. 26, 1956; lowest 14.98 below lsd, Nov. 29, 1951. Records available: 1951-61.

Feb. 21, 1957	13.75	June 17, 1958	13.77	Oct. 13, 1959	13.80	Dec. 5, 1960	13.98
May 23	13.83	Sept. 16	14.02	Dec. 15	13.52	Mar. 20, 1961	13.76
Aug. 23	13.34	Dec. 16	14.42	Mar. 15, 1960	13.96	June 5	12.52
Dec. 13	14.04	May 12, 1959	13.64	June 13	13.07	Sept. 13	13.42
Mar. 11, 1958	13.77	July 21	14.28	Sept. 12	13.46	Dec. 20	13.56

EC-27/9W/27-37. Joseph Estrene. SW $\frac{1}{4}$ NE $\frac{1}{4}$ . Drilled public-supply water-table well in sandstone of Cambrian age, diam 5 in, reported depth 101 ft, cased to 54. MP top of casing, 2.00 ft above lsd. Highest water level 74.67 below lsd, Apr. 19, 1957; lowest 78.84 below lsd, Sept. 12, 1960. Records available: 1956-61.

Oct. 10, 1956	74.91	June 18, 1958	76.57	Oct. 14, 1959	78.14	Dec. 5, 1960	78.00
Apr. 19, 1957	74.67	Sept. 17	77.07	Dec. 16	77.94	Mar. 20, 1961	77.59
Aug. 23	75.55	Dec. 17	76.89	Mar. 15, 1960	77.71	June 6	78.48
Dec. 13	75.80	May 13, 1959	77.35	June 14	78.27	Sept. 13	78.80
Mar. 12, 1958	76.28	July 22	76.07	Sept. 12	78.84	Dec. 20	77.90

Fond du Lac County

FL-15/17/11-12. Formerly FL 12. City of Fond du Lac. NE $\frac{1}{4}$ NW $\frac{1}{4}$ . Drilled unused artesian well in sandstone of Cambrian age and St. Peter Sandstone of Middle Ordovician age, diam 4 in, reported depth 817 ft, cased to 127. Lsd 753 ft above msl. MP top of casing, at lsd. Highest water level 54.44 below lsd, Jan. 11, 1954; lowest 72.26 below lsd, Sept. 17, 1959. Records available: 1953-61. Affected primarily by pumping of nearby municipal wells.

Lowest water level for the day, from recorder graph, 1956

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	e64.25	63.10	64.50	65.22	66.89	67.98	67.75	64.10	64.83	64.91	62.96	62.39
10	64.55	66.28	e65.20	65.55	66.82	66.69	66.39	67.36	64.49	64.04	61.55	61.30
15	62.77	65.13	e65.00	65.00	66.67	69.17	64.14	65.31	64.11	63.34	63.19	62.30
20	65.61	64.60	e64.25	67.08	66.19	68.84	67.38	64.62	65.54	63.70	63.72	63.39
25	64.31	64.25	63.09	67.48	68.54	67.26	66.30	65.54	65.02	64.71	e62.00	58.95
Eom	66.00	66.35	62.15	65.80	66.34	67.33	65.02	66.72	63.20	63.68	61.31	e62.50

1957

5	e61.50	61.60	61.72	60.58	.....	.....	.....	.....	.....	.....	.....	.....
10	62.13	e61.45	60.60	60.68	.....	.....	.....	.....	.....	.....	.....	.....
15	63.10	62.00	59.44	.....	.....	.....	.....	.....	.....	.....	.....	.....
20	59.72	62.05	61.60	.....	.....	.....	.....	.....	.....	.....	.....	.....
25	63.25	61.04	61.51	.....	.....	.....	.....	.....	.....	.....	.....	.....
Eom	62.70	61.15	59.95	.....	.....	.....	.....	.....	.....	.....	.....	.....

1958

5	.....	.....	.....	.....	65.55	68.72	68.42	71.08	69.72	e68.50	67.00	66.20
10	.....	.....	.....	.....	66.43	68.52	68.26	69.25	69.26	68.39	e67.00	e66.10
15	.....	.....	.....	.....	68.63	68.42	68.74	71.20	69.01	69.00	e67.50	e66.00
20	.....	.....	.....	65.57	69.26	69.43	67.25	70.90	69.78	67.55	e67.25	e66.50
25	.....	.....	.....	66.78	68.61	68.30	70.05	69.72	69.32	67.91	e67.75	e66.90
Eom	.....	.....	.....	67.11	66.19	67.84	70.62	70.10	68.92	e67.00	e67.40	e67.00

e Estimated.

FL-15/17/11-12-- Continued.

1959

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	64.12	67.33	66.50	e67.02	68.48	69.23	67.70	71.01	70.42	68.38	68.73	66.64
10	65.80	65.62	65.86	67.01	67.80	70.08	70.03	70.79	71.32	67.97	67.24	66.46
15	67.00	65.34	65.07	67.74	67.61	69.83	69.79	70.24	71.53	69.32	66.55	66.98
20	66.69	66.53	67.63	66.62	67.54	71.17	69.18	69.73	70.85	68.43	66.82	65.50
25	65.10	66.48	67.98	67.28	67.90	70.58	70.57	71.18	70.50	67.48	66.49	67.10
Eom	67.27	65.79	66.09	66.90	67.10	70.31	69.90	69.72	70.42	67.50	66.75	66.48

1960

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	64.35	64.38	64.57	61.17	67.06	64.44	e63.00	65.26	62.73	64.36	60.88	60.10
10	63.57	64.54	64.62	62.32	65.85	65.18	62.98	63.42	64.74	61.92	62.35	60.48
15	65.57	64.01	64.29	63.33	64.91	66.09	65.14	63.71	65.24	61.90	61.00	59.92
20	64.75	64.96	62.73	63.94	66.53	64.80	63.52	63.75	63.15	61.95	60.19	59.97
25	64.50	64.49	64.52	63.54	66.06	63.08	63.59	63.79	62.92	60.98	61.29	58.91
Eom	63.10	63.27	63.75	66.32	65.95	65.01	62.11	65.12	63.77	62.12	62.10	58.20

1961

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	57.65	58.79	e59.00	60.33	60.03	59.30	60.26	64.30	63.56	64.02	60.48	61.75
10	57.89	61.97	61.07	59.29	59.01	60.13	60.80	62.71	64.55	62.76	62.75	59.73
15	57.98	61.59	59.31	59.46	58.97	60.33	61.31	62.52	64.54	62.23	61.04	60.30
20	57.81	59.90	59.20	60.82	59.34	60.07	62.51	62.88	64.76	62.76	60.72	59.27
25	56.63	60.18	59.64	58.64	61.59	60.04	63.48	63.74	64.57	62.19	60.31	56.35
Eom	60.71	59.02	61.04	58.22	59.18	60.93	62.66	64.18	63.40	62.01	61.34	56.28

e Estimated.

FL-17/19/30-19. Formerly FL 19. John Steffin. NW $\frac{1}{4}$ NE $\frac{1}{4}$ . Drilled stock artesian well in St. Peter Sandstone of Middle Ordovician age, diam 6 to 4 in, reported depth 695 ft, cased to 590. Lsd 895 ft above msl. MP top of casing, 1.50 ft above lsd. Highest water level 132.75 below lsd, Jan. 8, 1948; lowest 150.73 below lsd, Aug. 1, 1961. Records available: 1948-61. Affected by regional pumping.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 12, 1957	144.94	May 6, 1958	146.99	Sept. 9, 1959	150.44	Nov. 2, 1960	149.64
May 13	145.54	Aug. 5	148.15	Dec. 8	149.14	Feb. 1, 1961	149.73
Aug. 13	145.71	Nov. 4	147.88	Feb. 8, 1960	148.47	June 2	149.66
Nov. 5	146.00	Mar. 3, 1959	147.52	May 3	149.49	Aug. 1	150.73
Feb. 4, 1958	146.01	June 8	148.50	Aug. 1	149.98	Nov. 7	150.16

FL-15/18/11-300. Formerly FL 300. City of Fond du Lac. NW $\frac{1}{4}$ SW $\frac{1}{4}$ . Drilled observation artesian well in Niagara Dolomite of Middle Silurian age, diam 8 to 6 in, depth 135 ft, cased to 16. Lsd 995 ft above msl. MP top of casing, 1.00 ft above lsd. Highest water level 2.03 below lsd, Sept. 6, 1956; lowest 11.25 below lsd, Sept. 8, 1959. Records available: 1956-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 7, 1957	4.82	Aug. 5, 1958	9.60	Dec. 8, 1959	5.80	Nov. 2, 1960	3.80
May 13	3.83	Nov. 4	10.87	Feb. 8, 1960	4.99	Feb. 1, 1961	5.31
Aug. 13	5.81	Feb. 4, 1959	10.09	May 3	3.05	May 3	3.63
Nov. 5	7.46	June 8	6.26	June 1	3.17	Aug. 1	6.04
Feb. 4, 1958	6.38	Sept. 8	11.25	Aug. 1	4.65	Nov. 7	3.08
May 6	5.61						

## Forest County

Fr-41/14/18-2. Formerly Fr 2. Wisconsin State Highway Comm. Wisconsin-Michigan Power Co. Brule River Profile well 5. NW $\frac{1}{4}$ SE $\frac{1}{4}$ . Driven observation water-table well in sand and gravel of Pleistocene age, diam 1 $\frac{1}{2}$  in, depth 18 ft, well point 15-18. Lsd 1,551.69 ft above msl. MP top of casing, 1.70 ft above lsd. Highest water level 7.96 below lsd, Apr. 29, 1954; lowest 11.88 below lsd, May 16, 1949. Records available: 1948-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4, 1957	10.85	Apr. 30, 1958	10.75	July 30, 1959	11.57	Oct. 29, 1960	11.33
31	10.74	June 2	11.12	Aug. 31	10.90	Dec. 2	10.05
Feb. 28	10.17	30	11.29	Oct. 2	8.72	29	10.91
Mar. 28	10.83	Aug. 1	11.20	Nov. 2	10.16	Jan. 31, 1961	10.84
May 1	10.64	Sept. 2	11.47	30	10.68	Mar. 2	10.23
30	11.33	Oct. 1	11.62	Dec. 30	10.44	30	10.48
July 1	11.26	30	11.58	Feb. 2, 1960	10.41	May 2	10.08
Aug. 1	11.57	Dec. 1	11.41	29	10.34	June 1	10.55
30	11.58	30	10.85	Mar. 30	10.37	29	10.86
Sept. 30	11.49	Jan. 30, 1959	10.69	May 2	8.88	July 31	11.06
Oct. 31	11.59	Feb. 26	10.60	31	9.87	Aug. 31	11.27
Dec. 2	11.14	Mar. 31	10.67	June 30	10.42	Oct. 2	11.11
Jan. 31, 1958	10.70	Apr. 30	10.88	Aug. 8	11.31	31	11.24
Feb. 27	10.65	June 1	11.12	Sept. 1	10.77	Nov. 29	11.26
Apr. 1	11.37	July 1	11.36	29	11.12	Dec. 29	10.92

Grant County

Gr-5/ZW/6-5. Formerly Gr 5. Oscar Gilbertson. SW $\frac{1}{4}$ SE $\frac{1}{4}$ . Drilled unused water-table well in dolomite of Prairie du Chien Group of Lower Ordovician age (previously reported limestone), diam 5 in, depth 35 ft, cased to 5. MP edge of pumpbase, 0.50 ft above lsd. Highest water level 8.90 below lsd, July 16, 1947; lowest 18.24 below lsd, Feb. 18, 1959. Records available: 1946-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 21, 1957	16.85	June 12, 1958	17.15	Sept. 15, 1959	13.93	Nov. 16, 1960	12.73
Apr. 24	16.99	Aug. 20	17.39	Nov. 23	10.18	Feb. 15, 1961	14.57
July 23	15.13	Nov. 18	18.21	Feb. 18, 1960	11.57	May 18	14.10
Nov. 13	16.40	Feb. 18, 1959	18.24	May 17	9.23	Aug. 17	14.66
Feb. 11, 1958	17.18	June 24	14.81	Aug. 16	11.29	Dec. 5	9.10

Green County

Gn-2/7/21-1. Formerly Gn 1. Charles Segner. NW $\frac{1}{4}$ NW $\frac{1}{4}$ . Drilled unused water-table well in Platteville Formation of Middle Ordovician age, diam 6 in, depth 75 ft. MP top of casing, 4.50 ft above lsd. Highest water level 48.18 below lsd, May 17, 1960; lowest 68.63 below lsd, Jan. 21, 1957. Records available: 1946-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 21, 1957	68.63	June 12, 1958	61.43	Sept. 15, 1959	58.83	Nov. 16, 1960	57.29
Apr. 24	63.12	Aug. 20	63.19	Nov. 23	51.47	Feb. 15, 1961	59.80
July 23	58.90	Nov. 18	63.58	Feb. 18, 1960	53.47	May 18	58.71
Nov. 13	61.73	Feb. 18, 1959	63.80	May 17	48.18	Aug. 17	61.12
Feb. 11, 1958	61.86	June 24	60.36	Aug. 16	57.04	Dec. 5	52.22

Iowa County

Iw-6/3/32-32. North Survey School. SW $\frac{1}{4}$ SW $\frac{1}{4}$ . Drilled public-supply artesian well in Galena Dolomite of Middle Ordovician age, diam 6 in, depth 92 ft. Lsd 1, 200 ft above msl. MP top of casing, at lsd. Highest water level 39.40 below lsd, May 17, 1960; lowest 63.24 below lsd, Nov. 22, 1958. Records available: 1957-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 5, 1957	59.31	Nov. 22, 1958	63.24	Feb. 18, 1960	54.40	Jan. 24, 1961	59.11
Nov. 14	60.80	May 30, 1959	58.95	May 17	39.40	Apr. 26	57.87
Feb. 12, 1958	62.88	June 20	60.09	Aug. 16	56.49	Aug. 18	61.26
May 24	62.30	Sept. 16	57.80	Nov. 19	58.10	Dec. 6	48.88
Aug. 21	62.76	Nov. 24	49.56				

Jackson County

Ja-20/3W/30-5. Formerly Ja 5. Henry Lange. NE $\frac{1}{4}$ SW $\frac{1}{4}$ . Drilled unused (previously reported domestic) artesian well in sandstone of Cambrian age, diam 10 in, depth 190 ft, cased to 54. MP hole in pumpbase, at lsd. Highest water level 16.99 below lsd, Oct. 21, 1954; lowest 22.60 below lsd, Dec. 19, 1958. Records available: 1953-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 21, 1957	21.38	June 20, 1958	20.84	Oct. 15, 1959	18.45	Dec. 6, 1960	18.57
May 24	20.87	Sept. 19	22.29	Dec. 17	18.33	Mar. 22, 1961	19.99
Aug. 23	20.66	Dec. 19	22.60	Mar. 17, 1960	19.67	June 8	18.67
Dec. 13	21.01	May 14, 1959	21.15	June 8	17.71	Sept. 15	19.69
Mar. 14, 1958	21.76	July 23	19.71	Sept. 13	17.29	Dec. 22	19.59

Jefferson County

Je-7/14/25-9. Formerly Je 9. Ladish Malting Co. Formerly Chicago & North Western Ry. SE $\frac{1}{4}$ SW $\frac{1}{4}$ . Drilled industrial (previously reported railroad) artesian well in sandstone of Cambrian age, diam 8 in, reported depth 716 ft, cased to 326. Lsd 813 ft above msl. MP pumpbase, 2.10 ft above lsd. Highest water level 15.16 below lsd, Feb. 28, 1949; lowest 50.65 below lsd, May 28, 1958. Records available: 1946-61. Fluctuation caused primarily by local pumping.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 28, 1957	37.71	May 28, 1958	50.65	Dec. 3, 1959	35.88	Feb. 28, 1961	32.32
May 29	43.77	Aug. 27	49.70	Apr. 1, 1960	33.66	May 26	47.89
Aug. 29	49.59	Nov. 26	45.46	May 25	40.98	Aug. 31	44.28
Nov. 26	40.48	Feb. 27, 1959	43.98	Aug. 30	39.57	Nov. 30	36.97
Feb. 26, 1958	38.54	May 28	48.08	Nov. 22	48.79		



Juneau County

Ju-17/2/21-8. Formerly Ju 8. Camp Douglas. SW $\frac{1}{4}$ SW $\frac{1}{4}$ . Drilled unused water-table well in sandstone of Cambrian age, diam 4 in, depth 64 ft. MP top of casing, 1.00 ft above lsd. Highest water level 4.72 below lsd, June 13, 1960; lowest 10.39 below lsd, Dec. 15, 1958. Records available: 1949-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 19, 1957	8.86	June 16, 1958	9.03	Oct. 12, 1959	6.10	Dec. 5, 1960	5.75
May 22	8.38	Sept. 15	9.62	Dec. 14	5.50	Feb. 14, 1961	7.09
Aug. 20	8.17	Dec. 15	10.39	Mar. 14, 1960	6.64	May 24	6.01
Dec. 10	8.52	Apr. 13, 1959	9.80	June 13	4.72	Aug. 23	6.92
Mar. 10, 1958	9.24	July 20	7.60	Sept. 12	5.11	Dec. 5	6.83

Kenosha County

Ke-2/22/27-4. Formerly Ke 4. Sunset Ridge Memorial Park. NW $\frac{1}{4}$ SE $\frac{1}{4}$ . Drilled domestic and irrigation water-table well in Niagara Dolomite of Middle Silurian age, diam 6 in, reported depth 190 ft. Lsd 725 ft above msl. MP top of casing, 7.00 ft below lsd. Highest water level 73.70 below lsd, Apr. 16, 1952; lowest 87.44 below lsd, Aug. 31, 1961. Records available: 1946-61. Affected by regional pumping.

Jan. 31, 1957	83.39	Apr. 30, 1958	78.59	Sept. 30, 1959	85.54	Nov. 22, 1960	80.39
Apr. 30	83.03	July 31	82.91	Dec. 3	82.08	Feb. 28, 1961	80.99
July 31	81.31	Oct. 30	82.98	Mar. 4, 1960	79.61	May 26	81.79
Oct. 31	81.16	Feb. 28, 1959	82.90	May 25	79.83	Aug. 31	87.44
Jan. 31, 1958	78.51	July 14	86.29	Aug. 30	80.54	Nov. 30	82.65

Ke-2/22/11-6. Formerly Ke 6. Kenosha County. NW $\frac{1}{4}$ NW $\frac{1}{4}$ . Drilled irrigation artesian well in sandstone of Cambrian age, diam 10 to 8 in, reported depth 1,751 ft, cased to 492. Lsd 639 ft (previously reported 630 ft) above msl. MP top of casing, 0.80 ft above lsd (since 1957). Highest water level 21.10 below lsd, Dec. 3, 1947; lowest 72.08 below lsd, Nov. 30, 1961. Records available: 1946-61. Affected by regional pumping.

Jan. 31, 1957	53.93	Apr. 29, 1958	57.82	Sept. 30, 1959	62.71	Feb. 28, 1961	67.05
Apr. 30	55.37	July 30	59.38	Dec. 3	62.30	May 26	68.11
July 30	55.82	Oct. 29	59.48	Mar. 4, 1960	64.26	Aug. 31	70.59
Oct. 30	56.40	Jan. 29, 1959	59.56	May 25	64.55	Nov. 30	72.08
Jan. 30, 1958	56.32	July 14	62.65	Nov. 22	65.88		

Lafayette County

Lf-3/5/25-1. Formerly Lf 1. Ernest J. Legler. NW $\frac{1}{4}$ SW $\frac{1}{4}$ . Drilled unused water-table well in Prairie du Chien Group of Lower Ordovician age, diam 6 in, depth 55 ft. Lsd 820 ft above msl. MP bent edge of casing, 0.50 ft above lsd. Highest water level 16.00 below lsd, June 15, 1947; lowest 23.44 below lsd, Aug. 8, 1956. Records available: 1946-61.

Jan. 21, 1957	22.98	June 12, 1958	22.45	Sept. 15, 1959	22.85	Nov. 16, 1960	22.58
Apr. 24	22.15	Aug. 20	23.12	Nov. 23	21.67	Feb. 15, 1961	22.97
July 23	20.34	Nov. 18	23.17	Feb. 18, 1960	22.25	May 18	22.62
Nov. 13	22.57	Feb. 18, 1959	23.34	May 17	18.53	Aug. 17	22.96
Feb. 11, 1958	22.29	June 24	22.82	Aug. 16	22.87	Dec. 5	21.36

Lf-1/2/33-57. Formerly Lf 57. Coulthard Estate. Shullsburg. NW $\frac{1}{4}$ NW $\frac{1}{4}$ . Drilled un-used artesian well in Galena Dolomite of Middle Ordovician age and Platteville Formation of Middle Ordovician age, diam 10 in, reported depth 265 ft, cased to 16. Lsd 1,000 ft above msl. MP top of casing, 3.00 ft above lsd. Highest water level 63.67 below lsd, Apr. 29, 1952; lowest 130.99 below lsd, Nov. 6, 1959. Records available: 1952-61. Affected by pumping from nearby mines. Recording gage discontinued, 1961.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	91.25	91.87	92.31	92.73	93.19	93.58	94.35	94.51	94.54	94.61	94.66	94.72
10	91.49	e91.96	92.35	92.86	93.30	94.04	94.39	94.48	94.55	94.62	94.67	94.72
15	91.49	e91.92	92.58	92.90	93.46	94.18	e94.39	94.51	94.55	94.61	94.69	94.73
20	91.50	92.11	92.57	93.06	93.37	94.17	e94.40	94.52	94.56	94.65	94.68	94.73
25	91.67	92.15	92.60	93.11	93.42	94.22	94.41	94.52	94.60	94.65	94.70	e94.73
Eom	91.73	92.17	92.68	93.10	93.43	94.33	94.47	94.54	94.54	94.66	94.70	e94.74

e Estimated.

Lf-1/2/33-57--Continued.

1958												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	e96.00	e97.50	99.71	109.59	113.91	116.99	118.99	120.38	121.69	122.95	124.10	125.18
10	e96.25	e97.75	101.92	110.69	114.47	117.71	119.17	120.60	121.98	123.73	124.27	e25.30
15	e96.50	e98.00	103.48	111.42	114.56	117.71	119.50	120.86	122.01	123.71	124.37	e25.33
20	e96.75	e98.25	106.78	112.04	115.07	118.09	119.65	121.02	122.14	123.29	124.55	125.61
25	e97.00	e98.50	107.83	112.95	115.57	118.42	119.90	121.26	122.51	123.51	124.62	125.71
Eom	e97.25	e98.75	108.90	113.28	116.43	118.59	120.23	121.56	122.80	123.63	125.03	125.78
1959												
5	e126.02	126.98	127.84	128.69	129.05	129.63	130.11	130.66	130.65	130.86	130.88	130.03
10	126.16	127.46	127.40	128.66	129.14	129.69	130.27	130.52	130.86	130.84	130.46	129.95
15	126.37	127.40	127.72	128.62	129.29	129.82	130.33	130.58	130.73	130.76	130.55	129.71
20	126.53	127.48	128.22	128.87	129.39	129.99	130.49	130.51	130.63	130.96	130.25	129.69
25	126.69	127.58	128.41	128.96	129.31	130.16	130.60	130.56	130.69	130.79	130.29	129.72
Eom	126.80	127.71	128.43	129.04	129.59	130.12	130.60	130.65	130.85	130.57	129.86	129.85
1960												
5	129.71	128.21	e127.25	125.67	122.91	118.05	115.72	114.56	114.00	114.03	114.76	115.02
10	129.47	128.09	e127.10	125.04	121.86	117.51	115.22	114.47	114.21	114.37	114.91	115.05
15	e129.30	127.93	e126.95	124.74	120.80	116.78	115.25	114.52	114.19	114.51	114.44	115.03
20	128.12	127.98	126.93	124.24	120.81	116.77	115.13	114.06	114.07	114.49	114.90	115.31
25	128.76	127.52	126.74	123.74	118.83	116.42	114.71	114.21	114.29	114.43	114.65	115.35
Eom	128.46	127.56	126.08	123.48	118.62	115.90	114.72	114.07	114.23	114.16	115.43	115.54
1961												
5	e115.71	116.12	116.36	116.31	116.42	116.27	116.39	116.35	116.50	.....	.....	h114.03
10	e115.88	115.72	116.48	116.32	116.53	116.30	116.33	116.38	116.40	.....	.....	.....
15	e116.03	116.18	116.37	116.13	116.54	116.68	116.23	116.42	116.63	.....	.....	.....
20	e116.18	116.31	116.56	116.39	116.44	116.28	116.24	116.48	116.27	.....	.....	.....
25	116.26	115.89	116.42	116.31	116.42	116.41	116.48	116.30	.....	.....	.....	.....
Eom	115.73	116.31	116.12	116.39	116.31	116.31	116.43	116.33	.....	.....	.....	.....

e Estimated.

h Tape measurement.

Lf-4/4/35-78. Formerly Lf 78. Wisconsin Conservation Dept. SW $\frac{1}{4}$ SE $\frac{1}{4}$ . Drilled unused artesian well in St. Peter Sandstone of Middle Ordovician age, diam 6 in, depth 29 ft, cased to 4. MP top of casing, at lsd. Highest water level 4.78 below lsd, Apr. 7, 1959; lowest 19.81 below lsd, Mar. 3, 1959. Records available: 1953-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1, 1957	19.42	May 6, 1958	15.88	Aug. 4, 1959	14.32	Nov. 1, 1960	13.76
Feb. 5	19.49	June 3	16.67	Sept. 1	14.96	Dec. 6	13.09
Mar. 5	19.42	July 1	17.29	Oct. 6	14.26	Jan. 3, 1961	13.74
Apr. 2	19.20	Aug. 5	17.95	Nov. 3	13.23	Feb. 7	14.60
May 7	19.34	Sept. 2	18.18	Dec. 1	13.29	Mar. 7	14.53
June 4	10.14	Oct. 7	18.61	Jan. 5, 1960	9.67	Apr. 5	6.28
Aug. 6	16.68	Nov. 4	19.11	Mar. 1	13.71	May 2	10.77
Sept. 3	15.95	Dec. 2	19.32	Apr. 5	5.33	June 6	11.56
Oct. 1	17.66	Jan. 6, 1959	19.71	May 3	8.00	July 5	13.40
Nov. 5	18.13	Feb. 3	19.47	June 7	11.56	Aug. 1	14.36
Dec. 3	18.23	Mar. 3	19.81	July 5	9.72	Sept. 5	13.85
Jan. 7, 1958	18.22	Apr. 7	4.78	Aug. 2	12.32	Oct. 3	12.14
Feb. 4	18.30	May 5	11.39	Sept. 6	12.82	Nov. 7	7.18
Mar. 4	18.47	June 2	14.47	Oct. 4	13.38	Dec. 5	12.19
Apr. 1	18.49	July 7	15.15				

Lf-1/2/35-121. Formerly Lf 121, Arthur Hancock. SE $\frac{1}{4}$ SE $\frac{1}{4}$ . Drilled unused artesian well in Galena Dolomite of Middle Ordovician age, diam 6 in, depth 237 ft, cased to 20. Lsd 1,030 ft above msl. MP top south side of casing, 1.00 ft above lsd. Highest water level 62.71 below lsd, July 20, 1961; lowest 78.72 below lsd, Apr. 14, 1957. Records available: 1953-61. Recording gage discontinued, 1961.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	77.73	78.23	78.04	77.81	78.46	77.61	76.13	74.61	73.11	72.94	73.56	73.98
10	77.98	78.03	78.06	78.41	78.06	77.40	76.32	73.93	72.89	73.16	73.95	74.16
15	77.88	78.07	78.25	78.62	78.26	77.23	76.01	73.70	72.55	72.90	73.21	74.24
20	77.78	78.40	78.33	78.35	77.76	76.92	75.76	73.57	72.59	73.44	73.47	73.80
25	78.15	77.84	78.19	78.27	77.92	76.55	75.60	73.21	72.78	73.35	73.75	74.58
Eom	77.80	78.17	78.55	78.42	77.82	76.36	74.82	73.23	72.81	73.24	73.87	74.53

Lf-1/2/35-121--Continued.

1958

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	74.95	74.42	74.82	74.03	73.73	73.21	72.58	72.76	73.43	74.10	74.45	74.38
10	74.48	74.79	74.84	e74.10	73.21	72.90	e72.67	72.80	73.56	74.13	74.86	75.87
15	74.59	74.77	74.64	74.26	73.43	72.85	72.60	72.93	73.46	74.30	74.86	75.88
20	74.51	75.06	74.71	73.84	73.28	72.81	72.65	72.84	73.52	74.98	e74.50	76.05
25	74.09	74.56	74.76	74.33	73.08	72.59	72.50	73.04	e73.50	74.32	74.33	76.15
Eom	74.35	74.34	74.55	73.80	72.73	72.68	72.71	73.20	73.90	74.72	75.88	76.33

1959

5	76.28	78.02	76.92	76.66	75.67	74.73	74.13	73.70	e73.55	73.64	72.49	70.64
10	76.25	78.15	e76.15	76.78	75.14	74.62	74.20	73.70	73.96	73.45	71.83	70.69
15	75.81	76.76	75.75	76.39	75.51	74.62	74.21	73.70	73.61	73.32	71.86	70.33
20	75.93	e76.71	e75.90	76.32	75.10	e74.40	73.94	73.78	73.81	73.42	71.18	70.64
25	e76.75	76.74	e76.30	76.00	75.20	74.18	74.09	73.77	e73.75	72.48	70.65	70.44
Eom	e77.75	e76.55	76.59	75.68	74.78	74.38	73.95	73.63	73.93	72.58	70.94	70.24

1960

5	70.15	68.69	69.06	e68.34	67.47	66.44	66.52	67.07	68.67	68.27	69.15	68.34
10	69.83	67.86	68.83	e68.14	e67.20	66.47	66.50	e67.10	67.99	68.59	69.28	68.49
15	e69.50	e68.38	68.98	e67.90	67.02	66.04	66.73	e67.30	67.96	68.77	68.57	68.50
20	e69.60	69.20	68.84	67.88	66.84	66.50	66.83	e67.55	68.12	68.89	68.77	68.31
25	69.30	68.70	68.89	67.62	66.51	66.51	66.77	67.54	68.26	68.81	68.38	e68.25
Eom	69.28	68.97	e68.53	67.52	66.47	66.33	66.97	67.66	68.31	68.30	68.96	e68.29

1961

5	e68.33	69.46	69.53	67.34	66.54	64.21	63.46	62.92	63.44	.....	.....	h58.96
10	e68.36	68.82	69.72	67.35	65.70	63.98	63.47	62.95	63.51	.....	.....	.....
15	e68.40	69.24	69.47	66.76	65.13	64.32	63.03	63.12	63.64	.....	.....	.....
20	e68.43	69.38	69.90	67.09	65.07	63.68	62.71	63.31	63.11	.....	.....	.....
25	e68.55	69.14	69.53	66.48	64.62	63.63	62.79	63.11	.....	.....	.....	.....
Eom	68.86	69.62	67.61	66.46	64.48	63.48	62.95	63.18	.....	.....	.....	.....

e Estimated.

h Tape measurement.

## Langlade County

La-31/11/20-118. Formerly La 118. Wisconsin Public Service Corp. NE $\frac{1}{4}$ NW $\frac{1}{4}$ . Driven observation water-table well in sand of Pleistocene age, diam 1 $\frac{1}{2}$  in, depth 21 ft, well point 19-21. Lsd 1,510.45 ft above msl. MP top of casing, 0.50 ft above lsd. Highest water level 6.38 below lsd, May 15, 1960; lowest 13.84 below lsd, Feb. 28, 1949. Records available: 1942-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7, 1957	12.60	Sept. 3, 1957	12.23	May 26, 1958	11.15	Feb. 2, 1959	13.23
Feb. 25	13.15	Oct. 28	12.25	June 30	11.51	May 11, 1960	7.50
Mar. 11	12.74	Nov. 11	12.35	Aug. 25	11.86	Aug. 10	8.97
Apr. 1	12.55	Dec. 30	12.36	Sept. 22	12.05	Nov. 9	9.85
May 27	11.85	Jan. 27, 1958	12.64	Oct. 27	11.90	Feb. 9, 1961	10.94
June 26	11.99	Feb. 24	12.95	Nov. 17	12.60	May 10	10.45
July 8	12.30	Mar. 17	12.80	Dec. 29	12.80	Aug. 10	11.26
Aug. 26	12.44	Apr. 7	11.58	Jan. 26, 1959	13.14	Nov. 15	11.05

## Lincoln County

Ln-34/6/36-25a. Formerly Ln 25a. U.S. Geol. Survey. SE $\frac{1}{4}$ NE $\frac{1}{4}$ . Driven observation water-table well in deposits of Pleistocene age, diam 1 $\frac{1}{2}$  in, depth 22 ft, well point 20-22. MP top of pipe, 3.00 ft above lsd. Highest water level 6.38 below lsd, May 15, 1960; lowest 10.00 below lsd, Aug. 31, 1959. Records available: 1955-61.

Jan. 20, 1957	9.46	Apr. 15, 1958	8.41	July 6, 1959	9.04	Oct. 24, 1960	8.71
Feb. 10	9.55	May 19	8.35	Aug. 31	10.00	Nov. 27	8.51
Mar. 10	9.45	June 30	8.82	Sept. 13	8.49	Dec. 18	8.58
Apr. 14	8.41	July 27	8.57	Oct. 18	7.71	Jan. 29, 1961	9.26
May 13	8.57	Aug. 26	9.11	Nov. 22	7.83	Feb. 6	9.40
June 30	8.91	Sept. 9	8.59	Dec. 27	8.34	Mar. 27	8.16
July 30	9.41	Oct. 19	8.61	Jan. 24, 1960	8.45	Apr. 9	8.21
Aug. 20	9.86	Nov. 11	8.35	Feb. 28	8.75	May 29	7.82
Sept. 10	9.71	Dec. 21	8.82	Mar. 27	8.87	June 28	8.59
Oct. 21	9.71	Jan. 25, 1959	9.36	Apr. 10	8.06	July 10	8.95
Nov. 5	9.50	Feb. 15	9.52	May 1	7.74	Aug. 29	9.39
Dec. 15	9.22	Mar. 8	9.60	June 27	7.47	Sept. 25	9.31
Jan. 26, 1958	9.42	Apr. 5	8.75	July 25	8.18	Oct. 3	9.06
Feb. 16	9.60	May 17	8.45	Aug. 8	8.60	Nov. 26	8.47
Mar. 10	9.25	June 23	8.99	Sept. 6	8.51	Dec. 26	8.60

## Marathon County

Mr-26/3/33-7. Formerly Mr 7. City of Marshfield. SE $\frac{1}{4}$ SE $\frac{1}{4}$ . Drilled unused water-table well in sand and gravel of Pleistocene age, diam 7 in, depth 49 ft, cased to 30, screened 30-49. MP top of casing, 1.00 ft above lsd. Highest water level 16.92 below lsd, June 12, 1950; lowest 34.85 below lsd, Aug. 6, 1960. Records available: 1950-61. Affected primarily by pumping of nearby municipal wells.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	28.75	28.21	27.70	27.60	27.35	27.96	29.07	e30.13	31.06	e31.75	32.15	32.15
10	e28.69	28.27	27.61	27.50	27.21	28.07	29.32	e30.25	31.20	31.82	32.15	32.29
15	e28.60	28.37	27.79	27.49	27.26	28.31	29.40	e30.35	e31.25	32.04	32.16	e32.35
20	e28.60	28.12	27.79	27.44	27.48	e28.45	29.66	30.59	31.44	32.10	32.24	32.29
25	e28.25	e28.05	27.75	27.40	27.67	e28.58	e29.75	30.71	31.66	32.10	32.01	32.27
Eom	28.11	e27.95	27.69	27.42	27.90	28.69	30.02	30.82	31.73	32.10	e32.13	32.35

1958

5	e32.50	32.50	32.58	32.65	32.69	32.90	33.02	33.24	33.26	33.34	e33.35	33.50
10	32.61	32.45	32.56	32.61	32.82	33.00	32.97	33.24	33.29	33.42	e33.40	33.50
15	32.54	32.51	32.55	32.63	32.84	32.94	33.02	33.00	e33.30	33.42	33.40	33.46
20	e32.51	32.52	32.54	32.68	32.84	e32.95	33.09	33.24	33.35	33.32	33.36	33.57
25	e32.45	32.54	32.51	e32.65	32.85	33.05	33.09	33.19	33.25	33.43	33.50	33.57
Eom	32.50	32.62	32.52	32.72	32.88	33.02	33.06	33.23	33.35	e33.40	33.51	33.66

1959

5	33.71	e33.80	e33.90	34.21	34.16	34.38	e34.32	34.43	34.57	34.55	34.69	34.72
10	33.70	e33.81	e33.95	34.18	34.10	34.27	e34.36	34.42	e34.53	e34.65	e34.67	34.67
15	33.69	e33.82	e34.00	34.20	34.16	34.18	e34.39	34.48	34.52	34.57	e34.64	34.60
20	33.71	33.83	34.10	34.16	34.22	e34.24	34.37	e34.47	e34.55	34.65	34.56	34.61
25	33.75	33.83	34.14	34.25	34.11	34.24	34.48	34.58	e34.60	34.67	34.69	34.49
Eom	33.80	e33.84	34.18	34.20	34.20	34.28	34.43	e34.55	34.53	34.57	34.53	34.62

1960

5	34.59	34.31	e34.30	e34.25	34.09	34.42	34.00	34.82	33.51	e33.25	33.13	32.85
10	34.76	34.33	34.25	e34.25	33.63	34.20	e33.92	34.78	e33.45	33.28	33.09	32.92
15	34.52	e34.35	34.30	34.36	33.77	34.11	33.87	33.52	e33.35	33.14	33.09	32.83
20	e34.40	34.36	34.42	34.23	34.03	34.02	33.84	33.60	33.34	33.04	33.10	e32.85
25	34.36	34.36	34.35	34.27	34.30	34.07	e34.60	33.55	33.34	32.99	32.92	e32.90
Eom	34.37	34.31	34.32	34.33	34.22	34.00	34.75	33.43	33.40	33.01	32.95	32.92

1961

5	32.79	32.91	e32.90	e32.75	e32.90	32.70	e32.75	32.93	e32.90	32.83	33.98	e33.00
10	32.80	32.00	e32.90	e32.90	32.94	e32.70	32.70	32.91	32.97	e32.95	e33.85	33.32
15	32.81	32.88	e32.95	33.00	33.01	e32.70	32.80	32.86	32.91	e33.10	e33.90	e33.20
20	32.86	32.85	e32.95	33.05	32.83	32.77	32.86	33.00	32.93	e33.25	33.75	33.25
25	32.82	e32.85	32.85	e32.95	32.74	e32.80	32.89	33.03	32.83	e33.40	33.82	33.10
Eom	32.88	e32.85	e32.80	e32.90	32.62	e32.70	e32.90	32.97	32.91	e33.55	e33.30	e33.00

e Estimated.

Mr-27/9/31-28. Formerly Mr 28. U. S. Geol. Survey. NE $\frac{1}{4}$ NE $\frac{1}{4}$ . Driven observation water-table well in sand and gravel of Pleistocene age, diam 1 $\frac{1}{2}$  in, depth 27 ft, well point 25-27. Lsd 1, 229 ft above msl. MP top of pipe, 0.80 ft above lsd. Highest water level 17.30 below lsd, Sept. 10, 1945; lowest 26.09 below lsd, Mar. 30, 1959. Records available: 1944-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 21, 1957	23.42	Apr. 28, 1958	24.90	July 27, 1959	25.57	Oct. 3, 1960	19.62
Feb. 25	23.65	May 26	25.04	Aug. 24	25.63	Nov. 7	19.67
Mar. 11	23.69	June 30	25.17	Sept. 8	25.65	Dec. 27	19.89
Apr. 29	23.69	July 28	25.25	Oct. 5	25.28	Jan. 30, 1961	20.05
May 27	23.82	Aug. 25	25.34	Nov. 2	24.89	Feb. 27	20.25
June 17	23.92	Sept. 29	25.46	Dec. 28	23.62	Mar. 27	20.33
July 29	24.15	Oct. 27	25.55	Jan. 4, 1960	23.65	Apr. 17	19.81
Aug. 26	24.26	Nov. 24	25.63	Feb. 2	22.92	May 29	20.02
Sept. 30	24.43	Dec. 29	25.74	Mar. 12	22.84	June 26	20.11
Oct. 28	24.55	Jan. 26, 1959	25.84	Apr. 4	22.37	July 31	20.30
Nov. 25	24.63	Feb. 23	25.95	May 2	22.14	Aug. 28	20.42
Dec. 23	24.83	Mar. 30	26.09	June 6	20.94	Sept. 25	20.55
Jan. 27, 1958	24.93	Apr. 13	25.75	July 5	20.25	Oct. 30	20.71
Feb. 24	25.07	May 4	25.62	Aug. 1	19.99	Nov. 27	20.86
Mar. 10	25.00	June 29	25.55	Sept. 5	19.68	Dec. 4	20.99

Marinette County

Mt-30/23/19-5. Formerly Mt 5. City of Peshtigo. SE $\frac{1}{4}$ NE $\frac{1}{4}$ . Drilled unused artesian well in sandstone of Cambrian age and St. Peter Sandstone of Middle Ordovician age, diam 5 in, depth 703 ft, cased to 31. MP top of casing, 0.50 ft above lsd. Highest water level 14.18 below lsd, Dec. 28, 1959; lowest 28.25 below lsd, Aug. 20, 1955. Records available: 1947-61. Affected by pumping of nearby wells.

## Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	18.62	18.47	18.25	18.15	17.27	22.73	22.27	25.37	24.75	25.77	18.28	16.70
10	18.77	18.90	18.65	17.90	21.51	22.39	23.50	25.78	24.73	22.28	18.72	16.59
15	18.15	18.49	18.20	e17.30	22.25	24.03	22.82	25.60	25.14	20.18	18.29	16.82
20	18.98	18.92	18.28	17.18	21.89	24.19	25.80	25.23	25.70	19.90	16.60	16.61
25	18.73	18.60	17.42	16.63	23.18	24.50	25.50	25.78	25.49	19.23	16.10	15.02
Eom	18.75	18.60	18.27	16.82	22.71	25.79	26.13	25.79	24.42	18.49	16.43	16.42

1958

5	e15.90	17.50	18.07	18.00	18.39	23.70	20.10	24.97	19.42	18.40	17.99	18.22
10	16.70	17.50	17.82	16.63	17.40	23.20	21.26	24.37	18.93	18.48	18.20	17.71
15	16.60	18.14	18.20	16.94	22.07	e23.50	20.89	24.10	18.20	18.42	17.99	18.33
20	16.50	18.50	18.22	18.15	23.28	24.20	22.76	24.75	18.95	18.12	17.79	18.73
25	16.60	18.32	17.84	17.59	22.88	23.51	23.85	23.00	19.10	17.92	17.39	18.27
Eom	17.23	18.34	18.19	17.50	23.37	24.31	24.22	20.30	18.52	17.86	17.82	18.61

1959

5	18.23	19.02	19.50	17.62	21.16	23.72	19.30	24.92	22.32	17.61	15.52	15.99
10	18.49	18.51	18.81	17.70	22.00	24.03	22.99	22.59	21.94	17.28	16.04	16.72
15	18.19	19.10	18.82	17.34	22.09	22.12	23.59	24.09	22.40	17.13	16.62	16.52
20	18.83	19.01	e18.55	17.52	22.55	24.82	22.75	22.81	e22.05	17.18	16.65	16.93
25	19.32	19.11	18.47	17.54	20.97	23.58	24.33	21.82	22.36	16.35	16.16	16.77
Eom	19.12	19.35	17.67	17.62	23.03	22.80	25.02	20.79	18.31	15.73	15.60	15.50

1960

5	15.73	16.91	18.36	17.77	16.56	21.58	18.07	23.88	21.59	21.22	19.50	18.03
10	16.46	17.71	18.63	17.73	16.72	19.49	19.37	23.10	24.26	20.05	19.68	18.51
15	16.31	17.29	18.14	17.10	18.07	20.02	23.02	21.97	25.00	20.40	19.29	18.49
20	16.74	17.99	18.72	16.53	16.25	19.30	23.08	24.00	24.35	20.54	19.43	18.49
25	16.43	18.16	18.71	17.30	19.61	22.34	22.42	24.45	24.57	19.04	19.33	e18.00
Eom	16.92	17.88	17.75	17.17	20.27	17.16	23.50	24.27	23.97	20.30	19.03	18.91

1961

5	17.69	19.72	19.53	18.00	18.41	22.88	21.65	24.11	22.39	22.64	e21.50	18.30
10	18.25	19.92	19.41	18.50	18.25	25.09	23.49	24.28	24.93	20.81	20.66	18.80
15	18.60	19.52	19.10	18.51	18.83	24.49	24.58	23.98	25.24	23.76	19.10	19.13
20	18.76	19.83	18.42	18.47	22.12	23.73	24.71	24.98	25.10	23.52	18.14	e18.50
25	18.84	19.50	18.50	18.41	22.94	23.90	24.23	25.51	23.65	e24.25	18.83	e17.50
Eom	18.59	19.86	18.26	18.31	22.82	25.06	22.43	25.17	25.31	e23.50	18.94	18.74

e Estimated.

Mt-37/20/34-7. Formerly Mt 7. Wisconsin Conservation Dept. NW $\frac{1}{4}$ NE $\frac{1}{4}$ . Drilled unused water-table well in deposits of Pleistocene age, diam 8 in, reported depth 33 ft. MP pointer on float gage, 4.00 ft above lsd. Highest water level 18.01 below lsd, May 17, 1960; lowest 23.26 below lsd, Nov. 2, 1948. Records available: 1939-61 (previously reported 1948-56). Measurements for 1939-47 are included below.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 8, 1939	21.05	Nov. 1, 1940	21.47	July 17, 1942	20.57	Mar. 24, 1944	22.20
Apr. 1	19.95	Dec. 18	20.96	Aug. 31	20.80	Apr. 5	22.22
May 26	19.82	Jan. 31, 1941	21.13	Sept. 17	20.92	May 1	21.79
June 9	19.81	Feb. 28	21.24	Oct. 31	20.83	June 14	21.61
July 31	20.13	Mar. 22	21.30	Nov. 29	20.90	July 31	22.05
Aug. 31	20.55	Apr. 2	21.14	Dec. 23	21.03	Aug. 31	22.38
Sept. 29	20.86	May 31	20.87	Jan. 31, 1943	21.15	Sept. 20	22.45
Oct. 30	21.12	June 30	21.26	Feb. 20	21.18	Oct. 31	22.58
Nov. 30	21.35	July 31	21.60	Mar. 22	21.10	Nov. 10	22.60
Dec. 2	21.59	Aug. 29	21.90	Apr. 1	20.30	Dec. 31	22.67
Jan. 31, 1940	21.67	Sept. 1	21.69	May 31	20.19	Jan. 6, 1945	22.67
Feb. 29	21.76	Oct. 1	20.64	June 14	20.24	Feb. 27	22.64
Mar. 29	21.95	Nov. 1	19.88	July 31	20.50	Mar. 6	22.65
Apr. 1	21.81	Dec. 31	20.02	Aug. 31	20.77	Apr. 3	21.38
May 16	21.27	Jan. 31, 1942	20.22	Sept. 30	21.12	May 15	21.36
June 6	21.11	Feb. 28	20.40	Oct. 31	21.31	June 3	21.09
July 21	21.22	Mar. 12	20.48	Nov. 30	21.37	July 31	21.03
Aug. 13	21.23	Apr. 30	19.92	Dec. 31	21.63	Aug. 28	21.40
Sept. 30	21.41	May 31	20.19	Jan. 29, 1944	21.82	Sept. 25	21.55
Oct. 29	21.55	June 30	20.37	Feb. 29	22.05	Oct. 30	21.68

## Mt-37/20/34-7--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 6, 1945	21.53	Aug. 19, 1947	22.02	May 27, 1958	21.54	Mar. 22, 1960	20.82
Dec. 25	21.24	Sept. 23	22.21	June 24	21.83	Apr. 5	20.20
Jan. 1, 1956	21.26	Oct. 28	22.39	July 1	21.76	May 3	19.75
Feb. 26	21.14	Nov. 4	22.35	Aug. 26	21.77	June 28	18.57
Mar. 5	21.09	Dec. 23	22.40	Sept. 30	21.83	July 26	19.11
Apr. 30	20.97	Jan. 22, 1957	22.62	Oct. 7	21.85	Aug. 30	19.57
May 21	21.20	Feb. 5	22.67	Dec. 30	21.61	Sept. 27	19.75
June 4	21.22	Mar. 12	22.64	Jan. 27, 1959	21.81	Oct. 25	20.06
July 30	21.38	Apr. 2	22.01	Feb. 24	21.95	Nov. 1	20.02
Aug. 27	21.67	May 7	21.58	Mar. 24	22.03	Jan. 31, 1961	20.71
Sept. 24	21.91	June 25	21.73	Apr. 7	21.41	Feb. 28	20.97
Oct. 22	22.08	July 30	22.23	May 26	21.20	Mar. 14	21.04
Nov. 5	22.04	Aug. 27	22.44	June 30	21.64	Apr. 18	20.36
Dec. 31	22.18	Sept. 3	22.41	July 28	21.89	May 9	20.34
Jan. 28, 1947	22.20	Oct. 15	22.50	Aug. 18	22.02	June 20	20.56
Feb. 25	22.31	Nov. 26	22.80	Sept. 1	21.55	July 25	20.96
Mar. 4	22.34	Dec. 17	21.75	Oct. 6	20.58	Aug. 29	21.30
Apr. 1	21.92	Jan. 28, 1958	21.89	Nov. 24	20.24	Sept. 26	21.50
May 27	21.37	Feb. 25	22.08	Dec. 22	20.59	Oct. 10	21.46
June 24	21.54	Mar. 18	21.96	Jan. 12, 1960	20.40	Nov. 28	21.48
July 29	21.73	Apr. 1	21.83	Feb. 23	20.63	Dec. 26	21.52

## Marquette County

Mq-16/8/12-9. Formerly Mq 9. Village of Westfield. SW $\frac{1}{4}$ SE $\frac{1}{4}$ . Drilled unused artesian well in sandstone of Cambrian age, diam 6 in, depth 274 ft. MP top of casing, 1.00 ft above lsd. Highest water level 15.06 below lsd, May 20, 1952; lowest 17.88 below lsd, Feb. 16, 1959. Records available: 1949-61.

Feb. 13, 1957	16.81	Aug. 26, 1958	17.31	Sept. 3, 1959	17.36	Nov. 9, 1960	15.89
May 20	16.48	Nov. 24	17.72	Nov. 17	16.91	Feb. 10, 1961	16.23
Aug. 22	16.54	Feb. 16, 1959	17.88	Feb. 4, 1960	16.72	May 12	15.94
Oct. 25	16.73	Apr. 13	17.49	May 11	16.15	Aug. 10	16.46
Feb. 11, 1958	16.92	June 8	17.04	Aug. 10	15.73	Nov. 21	15.88
May 20	16.98						

Mq-15/9/17-11. Formerly Mq 11. U.S. Geol. Survey. NW $\frac{1}{4}$ SW $\frac{1}{4}$ . Driven observation water-table well in sand of Pleistocene age, diam 1 $\frac{1}{2}$  in, depth 12 ft, well point 10-12. MP top of casing, 2.00 ft above lsd. Highest water level 0.57 below lsd, May 3, 1954; lowest 4.72 below lsd, Aug. 26, 1958. Records available: 1950-61. Affected by artificial draining of nearby marsh.

Feb. 13, 1957	2.94	Aug. 26, 1958	4.72	Sept. 3, 1959	3.55	Nov. 9, 1960	1.71
May 20	1.54	Nov. 24	3.97	Nov. 17	1.68	Feb. 10, 1961	4.41
Aug. 22	3.86	Feb. 16, 1959	3.55	Feb. 4, 1960	2.18	May 12	2.42
Oct. 25	3.58	Apr. 13	1.41	May 11	.80	Aug. 10	4.00
Feb. 11, 1958	3.49	June 8	2.44	Aug. 10	1.04	Nov. 21	1.42
May 20	2.51						

## Milwaukee County

MI-7/21/12-36. Formerly MI 36. A. O. Smith Corp. NE $\frac{1}{4}$ SE $\frac{1}{4}$ . Drilled unused artesian well in St. Peter Sandstone of Middle Ordovician age, diam 14 in, reported depth 1,091 ft, cased to 774. Lsd 673 ft above msl. MP top of flange, 3.00 ft above lsd. Highest water level 134.26 below lsd, June 25, 1947; lowest 222.61 below lsd, Sept. 26, 1961. Records available: 1946-61. Affected by regional pumping.

Jan. 7, 1957	201.84	Apr. 29, 1958	195.40	July 28, 1959	207.38	Oct. 27, 1960	206.78
Feb. 28	193.39	May 28	203.81	Aug. 27	208.47	Nov. 21	205.94
Mar. 28	192.79	June 26	205.57	Sept. 29	210.83	Dec. 27	200.62
Apr. 30	192.88	July 30	208.98	Nov. 3	203.58	Jan. 26, 1961	197.34
May 29	197.33	Aug. 27	208.36	Dec. 2	201.03	Feb. 27	199.63
June 26	201.07	Sept. 29	205.25	30	195.96	Mar. 30	196.40
July 30	205.98	Oct. 29	200.09	Jan. 28, 1960	188.85	Apr. 27	199.04
Aug. 29	212.43	Nov. 25	194.97	Mar. 3	187.54	May 25	203.10
Sept. 26	210.90	Dec. 29	189.23	31	184.93	June 26	212.35
Oct. 30	209.00	Jan. 28, 1959	183.00	Apr. 28	186.73	July 27	218.03
Nov. 25	207.09	Feb. 27	182.70	May 24	188.60	Aug. 30	219.23
Dec. 30	201.12	Mar. 30	182.54	June 27	193.52	Sept. 26	222.61
Jan. 30, 1958	197.80	Apr. 29	185.61	July 28	199.89	Oct. 25	221.18
Feb. 26	196.44	May 27	192.10	Aug. 29	204.25	Nov. 26	216.64
Mar. 27	192.97	June 29	206.79	Sept. 29	210.99	Dec. 28	210.81

MI-5/22/24-95. Formerly MI 95. Allis Chalmers Mfg. Co. SE $\frac{1}{4}$ SW $\frac{1}{4}$ . Drilled unused artesian well in sandstone of Cambrian age and St. Peter Sandstone of Middle Ordovician age, diam 8 in, reported depth 1,622 ft. Lsd 656 ft above msl. MP edge of manhole, at lsd (since Nov. 29, 1961). Highest water level 116.16 below lsd, May 5, 1952; lowest 146.00 below lsd, Nov. 22, 1960. Records available: 1952-61. Affected by regional pumping.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30, 1957	128.76	Apr. 29, 1958	133.59	May 28, 1959	134.48	May 24, 1960	139.25
Apr. 30	129.38	July 30	135.09	Sept. 29	137.20	Aug. 30	139.55
July 30	130.70	Oct. 29	134.34	Dec. 2	137.75	Nov. 22	146.00
Oct. 30	132.15	Jan. 29, 1959	133.80	Mar. 3, 1960	140.85	Nov. 29, 1961	145.29
Jan. 30, 1958	132.74						

MI-7/22/17-120. Formerly MI 120. Nunn-Bush Shoe Co. North 5th and Hadley Sts., Milwaukee. SE $\frac{1}{4}$ NW $\frac{1}{4}$ . Drilled unused artesian well in Niagara Dolomite of Middle Silurian age, diam 10 in, reported depth 400 ft, cased to 104. Lsd 685 ft above msl. MP top of concrete, 8.75 ft below lsd. Highest water level 81.82 below lsd, May 20, 1946; lowest 102.85 below lsd, Oct. 3, 1955. Records available: 1946-49, 1951-61. Affected by regional pumping.

Jan. 30, 1957	100.98	Apr. 29, 1958	99.53	Sept. 29, 1959	102.03	Dec. 8, 1960	102.16
Apr. 30	100.75	July 30	100.29	Dec. 2	102.20	Mar. 9, 1961	100.14
July 30	100.59	Oct. 29	102.09	Mar. 3, 1960	101.79	June 16	101.77
Oct. 30	100.72	Jan. 28, 1959	100.92	May 24	101.73	Aug. 31	101.81
Jan. 30, 1958	99.70	June 29	102.24	Sept. 7	102.35	Dec. 4	102.33

MI-8/22/4-146. Formerly MI 146. Stanley Larsen. 9090 N. Lake Dr., Milwaukee. SW $\frac{1}{4}$ SE $\frac{1}{4}$ . Drilled unused artesian well in Niagara Dolomite of Middle Silurian age (previously reported limestone), diam 5 in, depth 116 ft. Lsd 680 ft above msl. MP top of casing, 5.00 ft below lsd. Highest water level 58.70 below lsd, June 20, 1946; lowest 84.80 below lsd, Sept. 29, 1959. Records available: 1946-61. Affected by regional pumping.

Jan. 30, 1957	69.55	Apr. 29, 1958	76.70	Sept. 29, 1959	84.80	Nov. 21, 1960	77.98
Apr. 30	73.73	July 30	83.17	Dec. 2	82.42	Feb. 27, 1961	76.52
July 30	79.46	Oct. 29	80.94	Mar. 3, 1960	81.16	May 25	75.73
Oct. 30	76.91	Jan. 28, 1959	79.83	May 24	66.41	Aug. 30	84.54
Jan. 20, 1958	75.89	July 14	83.60	Aug. 29	80.24	Nov. 29	81.63

MI-6/21/32-148. Formerly MI 148. Milwaukee County. NE $\frac{1}{4}$ SE $\frac{1}{4}$ . Drilled unused water-table well in Niagara Dolomite of Middle Silurian age, diam 5 in, depth 180 ft, cased to 43. Lsd 774 ft above msl. MP top of casing, 1.00 ft above lsd. Highest water level 25.44 below lsd, May 3, 1951; lowest 35.77 below lsd, Feb. 11, 1959. Records available: 1946-61.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	34.23	34.55	33.85	33.91	33.97	33.35	32.76	33.17	33.50	33.91	34.14	34.22
10	34.31	34.17	34.00	34.15	33.93	33.78	32.97	33.08	33.45	33.90	34.43	34.37
15	34.27	33.68	34.24	34.06	34.07	33.37	32.98	33.15	33.41	33.72	34.11	34.46
20	34.10	33.72	34.20	33.95	33.92	32.98	32.75	33.18	33.55	34.04	34.24	34.30
25	34.15	33.50	34.17	34.18	33.91	32.91	32.90	33.24	33.73	34.02	34.23	34.44
Eom	34.24	33.63	34.30	34.07	33.44	32.87	32.87	33.29	33.60	34.05	34.23	34.55

1958

5	34.53	34.67	34.56	33.88	34.00	34.13	34.16	34.40	34.52	34.70	34.64	34.87
10	34.50	34.68	34.23	34.02	33.88	33.92	34.23	34.40	34.58	34.62	34.87	34.89
15	34.48	34.84	34.02	33.87	34.02	34.01	34.35	34.41	34.48	34.54	34.83	34.72
20	34.50	34.93	34.00	33.77	34.08	34.10	34.38	34.40	34.42	34.37	34.77	34.98
25	34.43	34.90	33.95	34.25	34.10	34.10	34.40	34.52	34.69	34.56	34.70	35.05
Eom	34.67	34.67	33.92	33.95	34.00	34.18	34.45	34.53	34.65	34.50	35.01	35.01

1959

5	35.25	35.52	35.43	30.63	30.07	30.42	30.98	30.98	31.84	31.74	29.47	29.72
10	35.06	35.67	34.45	30.57	29.77	30.56	31.16	31.10	31.99	31.14	28.93	29.95
15	35.00	35.57	33.80	30.25	30.13	30.71	31.32	31.24	31.76	30.80	29.33	29.81
20	35.26	35.63	33.35	30.46	30.21	30.77	31.02	31.36	31.67	30.94	29.21	30.16
25	35.29	35.57	31.86	30.39	30.27	30.77	30.94	31.49	31.65	30.19	29.41	30.16
Eom	35.57	35.43	31.06	30.25	30.28	31.05	30.94	31.58	31.91	29.50	29.68	29.70

1960

5	29.28	28.46	e29.00	26.14	26.93	27.69	30.15	29.22	30.94	30.64	30.95	30.76
10	29.31	28.44	e28.75	26.41	26.32	27.87	30.35	28.88	31.23	31.15	30.99	30.87
15	28.53	28.78	e28.50	26.40	27.15	27.56	29.13	29.70	30.31	30.87	30.71	30.87
20	28.36	29.16	e28.25	26.27	26.38	28.09	29.35	29.00	30.18	30.82	30.67	31.14
25	28.35	28.96	e28.00	26.54	26.50	29.18	30.35	29.64	30.31	31.06	30.46	e31.30
Eom	28.40	29.40	e27.75	26.38	26.98	28.86	30.68	29.30	30.41	30.76	31.07	31.26

e Estimated.

MI-6/21/32-148--Continued.

Day	1961											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	31.31	32.23	32.25	29.85	29.34	29.97	31.66	31.16	32.54	31.20	31.50	30.73
10	31.47	32.01	31.86	30.06	29.30	30.21	31.29	31.48	32.79	31.43	31.10	30.96
15	31.71	32.48	31.56	30.10	29.63	30.33	31.42	32.22	32.16	31.43	31.21	e31.10
20	31.93	32.44	31.11	30.08	29.46	e30.50	31.44	32.12	31.86	31.58	30.96	e31.25
25	32.21	32.02	30.40	29.47	29.53	e30.70	31.27	31.95	31.73	31.50	30.80	e31.40
Eom	31.97	32.24	30.16	28.98	29.77	31.23	31.13	32.38	31.53	31.19	30.54	e31.60

e Estimated.

## Monroe County

Mo-15/4W/34-2. Formerly Mo 2. Joseph Anderson. SE $\frac{1}{4}$ SE $\frac{1}{4}$ . Drilled unused water-table well in sandstone of Cambrian age, diam 5 in, depth 44 ft. Lsd 1, 100 ft above msl. MP top of casing, 0.50 ft above lsd. Highest water level 5.06 below lsd, June 26, 1952; lowest 18.23 below lsd, Mar. 27, 1959. Records available: 1934-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28, 1957	12.88	Apr. 26, 1958	14.10	July 27, 1959	14.03	Nov. 27, 1960	8.18
Feb. 24	13.56	May 27	14.97	Aug. 27	11.48	Dec. 26	8.75
Mar. 28	13.10	June 26	15.09	Sept. 26	11.67	Jan. 27, 1961	9.38
Apr. 26	13.12	July 26	15.45	Oct. 25	10.11	Feb. 27	9.54
May 26	12.64	Aug. 26	16.06	Nov. 28	10.11	Mar. 30	7.40
June 26	10.30	Sept. 26	16.77	Dec. 27	11.00	Apr. 25	7.30
July 26	9.50	Oct. 27	16.79	Jan. 30, 1960	10.49	May 27	8.00
Aug. 26	11.59	Nov. 20	17.15	Feb. 28	12.29	June 26	7.38
Sept. 27	12.57	Dec. 25	17.62	Mar. 28	12.72	July 26	8.65
Oct. 28	13.68	Jan. 27, 1959	17.60	Apr. 27	11.30	Aug. 29	10.02
Nov. 25	13.95	Feb. 27	18.14	June 27	7.05	Sept. 26	10.20
Dec. 26	14.36	Mar. 27	18.23	July 27	7.07	Oct. 26	10.30
Jan. 26, 1958	14.74	Apr. 26	12.50	Aug. 26	7.20	Nov. 26	9.52
Feb. 26	14.10	May 25	11.50	Sept. 26	8.10	Dec. 26	10.16
Mar. 27	14.50	June 27	12.88	Oct. 26	8.51		

Mo-18/2W/29-17. Formerly Mo 17. U. S. Army, Camp McCoy. NW $\frac{1}{4}$ SW $\frac{1}{4}$ . Drilled unused artesian well in sandstone of Cambrian age, diam 9 in, depth 192 ft, cased to 109. MP top of casing, 1.00 ft above lsd. Highest water level 1.78 below lsd, July 1, 1952; lowest 6.56 below lsd, Apr. 15, 1957. Records available: 1949-61.

## Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	4.61	5.05	5.96	6.37	4.04	3.66	3.26	3.63	3.67	3.83	4.05	3.79
10	4.71	e5.28	6.04	6.51	3.99	3.62	3.37	3.67	3.77	3.84	4.09	3.91
15	4.75	e5.45	5.78	6.56	4.02	3.40	3.41	3.68	3.68	3.86	4.04	3.85
20	4.79	5.55	5.98	6.47	3.88	3.37	3.38	3.67	3.72	3.91	4.00	3.87
25	4.90	5.74	6.23	4.35	3.85	3.22	3.35	3.68	3.78	3.97	3.91	3.86
Eom	5.15	5.84	6.15	4.15	3.77	3.27	3.55	3.67	3.81	3.98	3.90	3.92

1958

5	3.90	4.17	4.17	4.22	3.70	3.99	4.34	4.48	4.58	4.96	4.97	5.45
10	4.10	4.15	4.17	3.84	3.78	4.02	4.23	4.41	4.52	4.85	5.02	5.48
15	4.02	4.27	4.21	3.73	3.84	4.05	4.16	4.55	4.62	4.82	5.02	5.10
20	4.05	4.24	4.25	3.65	3.88	4.22	4.15	4.63	4.49	5.22	4.85	5.13
25	4.07	4.23	4.33	3.77	3.90	4.22	4.34	4.56	4.67	4.95	4.95	4.85
Eom	4.20	4.14	4.27	3.67	3.93	4.24	4.43	4.63	4.82	5.01	5.13	4.85

1959

5	4.92	4.92	4.95	4.27	3.73	3.48	4.37	4.37	3.62	3.23	2.86	3.20
10	5.03	4.94	5.17	4.02	3.63	3.64	4.54	4.56	3.33	3.29	2.75	3.31
15	5.14	4.90	5.16	3.96	3.76	3.82	4.67	4.75	3.72	3.59	2.70	3.41
20	4.98	5.01	5.11	3.34	3.75	4.06	3.48	4.25	3.90	2.67	2.75	2.04
25	5.20	5.04	4.93	3.43	3.83	4.15	3.85	4.49	4.07	2.67	2.95	2.24
Eom	5.37	5.10	4.73	3.65	3.40	4.26	4.29	3.55	3.14	2.73	3.04	2.66

1960

5	1.99	3.13	4.18	4.65	3.90	2.14	2.50	3.52	3.94	4.01	3.67	4.07
10	2.19	3.16	4.41	4.66	2.49	2.34	2.67	3.61	4.05	4.14	3.63	4.13
15	2.49	3.35	4.65	4.64	2.09	2.54	2.86	3.75	4.20	4.25	3.66	4.20
20	2.69	3.63	4.71	4.22	2.20	2.55	3.01	3.81	4.17	4.29	3.80	4.26
25	2.65	3.62	4.76	4.02	2.04	2.56	3.20	3.84	4.03	4.35	3.87	4.30
Eom	2.94	3.83	4.60	3.99	2.07	2.38	3.35	3.86	3.93	4.36	4.02	4.39

e Estimated.



Mo-18/ZW/29-17--Continued.

1961

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	4.41	4.78	4.97	3.54	3.70	3.96	4.16	4.65	5.05	5.10	3.85	3.70
10	4.51	4.69	4.97	3.57	3.76	3.96	4.26	4.68	5.11	5.03	3.67	3.88
15	4.56	4.85	5.06	3.70	3.85	3.99	4.38	4.74	5.16	3.46	3.98	3.93
20	4.62	4.89	5.06	3.66	3.80	3.99	4.47	4.90	5.22	3.59	3.89	3.96
25	4.67	4.88	4.72	3.54	3.80	3.99	4.45	4.99	5.30	3.70	3.29	4.03
Eom	4.74	4.94	3.51	3.60	3.80	4.10	4.64	5.06	5.55	3.89	3.50	4.20

## Onesida County

On-37/6/27-23. Formerly On 23. U. S. Geol. Survey. NE $\frac{1}{4}$ NE $\frac{1}{4}$ . Driven observation water-table well in sand of Pleistocene age, diam 1 $\frac{1}{4}$  in, depth 37 ft, well point 35-37. Lsd 1,529 ft above msl. MP top of casing, 1.00 ft above lsd. Highest water level 27.31 below lsd, Aug. 18, 1952; lowest 32.96 below lsd, July 25, 1949. Records available: 1944-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29, 1957	30.25	Apr. 1958	31.93	July 1, 1959	32.73	Oct. 26, 1960	29.02
Feb. 26	30.43	May	31.96	Aug. 8	32.54	Nov. 29	29.20
Mar. 26	30.60	June	31.99	Sept. 2	32.39	Dec. 26	29.35
Apr. 30	30.73	July	32.01	Oct. 6	31.88	Jan. 31, 1961	29.57
May 22	30.80	Aug.	32.82	Nov. 2	32.38	Feb. 28	29.76
June 25	30.90	Sept.	31.97	Dec. 7	30.82	Mar. 20	29.86
July 30	30.81	Oct.	32.03	Jan. 26, 1960	30.76	Apr. 18	29.88
Aug. 27	30.87	Nov.	32.77	Feb. 29	32.03	May 2	29.89
Sept. 17	30.98	Dec.	32.20	Mar. 8	31.05	June 1	29.56
Oct. 29	31.03	Jan. 27, 1959	32.28	Apr. 12	31.13	July 31	29.40
Nov. 26	31.18	Feb. 26	32.42	May 1	30.87	Aug. 30	29.59
Dec. 31	31.38	Mar. 24	32.55	June 3	29.59	Sept. 25	29.74
Jan. 1958	31.51	Apr. 29	32.70	July 7	28.94	Oct. 29	29.98
Feb.	31.68	May 18	32.73	Aug. 29	28.89	Nov. 28	30.05
Mar.	31.80	June 1	32.70	Sept. 15	28.85	Dec. 29	30.20

## Outagamie County

On-21/18/24-2. Formerly On 2. City of Kaukauna. Kaukauna Water & Electric Co. NE $\frac{1}{4}$ SW $\frac{1}{4}$ . Drilled unused artesian well in sandstone of Cambrian age, diam 12 in, reported depth 700 ft, cased to 208. Lsd 645 ft above msl. MP top of casing, 8.00 ft above lsd. Highest water level 6.44 above lsd (previously reported below lsd), Apr. 7, 1947; lowest 55.80 below lsd, Aug. 14, 1959. Records available: 1946-61. Affected by pumping of nearby wells.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	e18.00	17.18	17.81	16.58	18.15	26.38	30.73	42.51	41.92	42.22	35.61	22.19
10	20.22	e17.50	15.40	15.90	24.00	27.15	33.79	44.38	41.80	41.10	34.00	20.68
15	21.70	20.00	16.47	16.41	23.18	28.11	34.78	46.93	39.71	38.19	28.59	19.28
20	23.19	21.00	16.62	20.63	22.71	30.14	38.92	47.15	44.22	32.22	25.89	20.97
25	23.50	19.89	16.59	21.64	24.20	29.10	39.63	45.00	41.62	38.57	23.74	17.62
Eom	18.68	18.18	15.24	21.70	26.12	30.50	41.69	43.70	41.15	36.88	20.80	18.52

1958

5	17.20	16.56	16.58	14.31	e22.00	34.65	37.18	e48.00	43.49	39.98	42.60	22.95
10	18.02	15.38	16.75	14.71	23.91	34.94	38.10	49.15	43.92	42.95	36.43	23.08
15	17.90	15.72	16.37	18.60	28.52	34.80	39.93	48.25	43.39	42.28	38.90	21.12
20	16.75	16.70	17.58	21.12	30.82	40.22	40.70	47.41	43.20	41.30	32.15	22.90
25	16.51	16.08	16.22	23.92	29.15	37.75	46.13	44.42	45.68	42.70	26.92	22.80
Eom	17.40	17.48	15.33	21.92	32.90	38.85	45.70	44.00	43.21	44.02	23.62	19.89

1959

5	18.72	19.99	20.22	e19.80	30.85	41.75	42.96	53.74	53.91	44.10	42.98	31.85
10	20.72	18.96	18.77	19.79	30.10	43.86	47.49	52.11	53.03	45.58	32.35	31.00
15	19.08	18.90	18.20	22.45	31.84	44.37	50.30	55.65	50.05	44.30	34.30	30.22
20	18.91	20.15	19.79	21.58	34.99	e48.00	50.53	54.71	46.80	44.30	34.38	29.25
25	19.00	20.59	21.32	23.42	34.39	48.22	52.61	53.71	52.54	41.30	33.26	28.76
Eom	19.42	19.75	20.10	25.00	35.50	46.27	53.70	53.62	47.02	41.90	32.49	28.94

e Estimated.

Ou-21/18/24-2--Continued.

1960												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	27.97	27.44	29.85	27.42	28.20	29.50	e33.00	39.71	34.52	39.43	35.90	25.80
10	27.37	27.11	30.35	28.31	24.17	32.22	33.50	38.99	41.09	36.52	32.12	26.39
15	27.82	26.79	29.45	30.60	22.90	33.79	39.80	37.20	41.05	37.15	30.78	26.90
20	27.41	27.62	28.64	29.54	24.34	32.24	41.05	40.11	39.24	37.89	27.95	26.20
25	28.00	32.67	28.82	27.58	26.69	35.00	36.30	39.80	33.90	36.40	26.50	23.73
Eom	27.03	29.91	28.22	28.51	25.30	34.65	39.01	40.11	41.01	33.05	27.76	25.78
1961												
5	24.82	21.99	e22.00	23.20	23.08	31.50	29.20	42.24	42.60	39.84	33.00	27.72
10	25.20	23.40	21.73	20.80	22.89	32.37	34.10	42.52	45.95	37.51	32.30	25.47
15	24.24	23.10	21.80	22.40	23.15	33.80	39.21	43.04	46.32	36.68	30.45	27.12
20	24.23	21.25	19.40	22.03	25.04	34.04	39.22	44.57	43.53	37.30	27.80	26.21
25	24.00	24.06	22.31	21.87	26.12	33.19	38.60	45.05	40.10	35.90	28.30	24.30
Eom	e23.60	21.93	24.10	21.43	26.20	38.59	e41.00	44.43	41.03	35.64	29.72	e24.00

e Estimated.

Ou-22/16/20-95. Formerly Ou 95. August H. Seehawer. NE $\frac{1}{4}$ NW $\frac{1}{4}$ . Drilled unused water-table well in sand and gravel of Pleistocene age, diam 6 in, reported depth 112 ft, cased to 111. Lsd 777 ft above msl. MP top of casing, 1.00 ft above lsd. Highest water level 6.36 below lsd, Apr. 26, 1955; lowest 13.20 below lsd, Oct. 7, 1959. Records available: 1952-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 14, 1957	7.91	May 21, 1958	7.66	Oct. 7, 1959	13.20	Nov. 3, 1960	8.02
May 15	7.56	Aug. 7	9.37	Dec. 10	8.66	Mar. 8, 1961	8.26
Aug. 8	7.93	Nov. 7	9.95	Feb. 10, 1960	8.46	May 5	7.49
Nov. 7	7.89	Apr. 9, 1959	8.63	May 5	7.58	Aug. 3	8.79
Feb. 6, 1958	7.98	June 10	9.55	Aug. 1	7.89	Nov. 9	7.11

## Portage County

Pt-24/10/28-15. Formerly Pt 15. Lawrence Krogwold. NE $\frac{1}{4}$ SW $\frac{1}{4}$ . Driven unused water-table well in sand of Pleistocene age, diam 2 in, depth 52 ft, screened 50-52 (previously reported depth 53 ft, screened 51-53). Lsd 1,133 ft above msl. MP rim of casing, 1.50 ft above lsd. Highest water level 33.50 below lsd, July 10, 1952; lowest 38.81 below lsd, Nov. 12, 1959. Records available: 1950-61.

Jan. 26, 1957	36.06	May 27, 1958	37.60	Sept. 10, 1959	38.39	Nov. 28, 1960	35.98
Feb. 25	36.27	June 26	37.69		38.48	Dec. 26	36.07
Mar. 15	36.34	July 30	37.83	Oct. 30	38.76	Jan. 20, 1961	36.14
Apr. 20	36.31	Aug. 20	37.86	Nov. 12	38.81	Feb. 23	36.20
May 29	36.43	Sept. 27	37.94	Dec. 11	38.74	Mar. 29	36.27
July 26	36.49	Oct. 28	38.00	Jan. 10, 1960	38.22	Apr. 10	36.12
Aug. 23	36.58	Nov. 24	38.18	Feb. 27	38.07	May 8	35.90
Sept. 25	36.71	Dec. 29	38.29	Mar. 18	38.11	June 26	35.88
Oct. 17	37.79	Jan. 31, 1959	38.49	Apr. 1	37.93	July 26	35.92
Nov. 30	36.94	Feb. 26	38.66	May 13	37.61	Aug. 12	35.95
Dec. 30	37.05	Mar. 30	38.76	June 1	37.09	Sept. 9	35.71
Jan. 25, 1958	37.17	Apr. 10	38.15	July 12	36.42	Oct. 13	35.47
Feb. 21	37.29	May 31	38.06	Aug. 15	36.25	Nov. 14	35.32
Mar. 26	37.42	June 15	38.09	Sept. 16	36.12	Dec. 1	35.30
Apr. 30	37.53	July 17	38.26	Oct. 3	36.03		

Pt-22/7/35-35. Formerly Pt 35. U.S. Geol. Survey. NW $\frac{1}{4}$ NW $\frac{1}{4}$ . Driven observation water-table well in sand of Pleistocene age, diam 1 $\frac{1}{2}$  in, depth 11 ft, well point 9-11. Lsd 1,055 ft above msl. MP top of casing, 1.00 ft above lsd. Highest water level 0.99 below lsd, Apr. 9, 1951; lowest 5.95 below lsd, Dec. 1, 1952. Records available: 1950-61.

Jan. 20, 1957	4.80	Apr. 21, 1958	4.50	July 27, 1959	5.00	Oct. 31, 1960	4.90
Feb. 4	4.90	May 26	5.20	Aug. 10	5.10	Nov. 28	4.40
Mar. 5	4.40	June 30	5.10	Sept. 21	5.10	Dec. 27	4.50
Apr. 1	4.30	July 21	5.50	Oct. 18	4.20	Jan. 16, 1961	4.55
May 26	5.60	Aug. 24	5.35	Nov. 16	4.10	Feb. 13	5.20
June 24	4.60	Sept. 29	5.50	Dec. 21	4.40	Mar. 13	5.20
July 29	4.90	Oct. 27	5.20	Jan. 26, 1960	4.50	Apr. 28	3.50
Aug. 26	5.20	Nov. 2	5.25	Feb. 29	4.90	May 28	4.40
Sept. 9	5.25	Dec. 21	5.10	Mar. 14	5.00	June 26	4.70
Oct. 7	5.25	Jan. 28, 1959	5.25	Apr. 18	4.60	July 31	5.10
Nov. 11	5.40	Feb. 23	5.60	May 2	4.00	Aug. 7	5.20
Dec. 16	4.65	Mar. 11	5.60	June 27	4.40	Sept. 25	5.25
Jan. 27, 1958	4.85	Apr. 1	5.15	July 25	5.10	Oct. 23	4.60
Feb. 24	5.00	May 4	4.25	Aug. 29	5.25	Nov. 20	3.90
Mar. 10	5.00	June 29	4.80	Sept. 12	5.20	Dec. 28	4.00

Price County

Pr-40/1/24-6. Formerly Pr 6. Wisconsin Conservation Dept. NE $\frac{1}{4}$ SW $\frac{1}{4}$ . Jetted unused water-table well in sand and gravel of Pleistocene age, diam 8 in, depth 13 ft, cased to 13 (previously reported depth 15 ft, cased to 15). Lsd 1,490 ft above msl. MP top of casing, 5.00 ft above lsd. Highest water level 0.41 above lsd, June 29, 1946; lowest 5.67 below lsd, Oct. 31, 1948. Records available: 1937-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31, 1957	4.07	Apr. 1, 1958	2.92	July 31, 1959	2.50	Oct. 29, 1960	2.00
Feb. 23	4.32	May 17	2.57	Aug. 15	2.66	Nov. 26	1.45
Mar. 9	4.05	June 28	3.00	Sept. 5	1.44	Dec. 1	2.21
Apr. 30	2.00	July 26	1.79	Oct. 31	.55	Jan. 31, 1961	2.94
May 11	2.44	Aug. 29	2.13	Nov. 30	1.39	Feb. 11	3.13
June 15	2.59	Sept. 29	1.51	Dec. 19	1.75	Mar. 1	2.95
July 31	3.37	Oct. 4	1.78	Jan. 31, 1960	2.17	Apr. 8	1.05
Aug. 17	3.91	Nov. 29	1.68	Feb. 29	2.62	May 1	1.90
Sept. 1	3.13	Dec. 20	2.35	Mar. 19	2.77	June 30	1.81
Oct. 19	3.41	Jan. 31, 1959	3.18	Apr. 9	.71	July 22	2.01
Nov. 1	3.25	Feb. 28	3.68	May 31	.55	Aug. 31	2.60
Dec. 31	3.64	Mar. 14	3.68	June 4	.75	Sept. 30	2.70
Jan. 31, 1958	4.12	Apr. 1	2.43	July 16	1.55	Oct. 1	2.70
Feb. 22	4.50	May 31	1.81	Aug. 27	1.90	Nov. 30	2.19
Mar. 8	3.43	June 27	2.92	Sept. 17	1.18	Dec. 31	2.90

Racine County

Ra-3/19/32-1. Formerly Ra 1. City of Burlington. NE $\frac{1}{4}$ NW $\frac{1}{4}$ . Drilled unused artesian well in Niagara Dolomite of Middle Silurian age, diam 6 in, reported depth 600 ft. Lsd 770 ft above msl. MP top of 4-in pipe on top of casing, 5.00 ft above lsd. Highest water level 18.04 below lsd, May 25, 1960; lowest 37.05 below lsd, Sept. 3, 1947. Records available: 1946-61. Affected by pumping of nearby wells.

Jan. 31, 1957	25.10	Apr. 30, 1958	21.98	Sept. 30, 1959	23.63	Nov. 22, 1960	20.16
Apr. 30	23.80	July 31	28.10	Dec. 3	21.07	Feb. 28, 1961	20.83
July 30	27.14	Oct. 30	23.46	Mar. 4, 1960	19.85	May 26	20.54
Oct. 31	27.89	Mar. 31, 1959	20.14	May 25	18.04	Aug. 31	22.41
Jan. 31, 1958	22.66	July 28	22.45	Aug. 30	19.97	Nov. 30	20.08

Rock County

Ro-2/12/2-3. Formerly Ro 3. School for the Blind. Janesville. SW $\frac{1}{4}$ NE $\frac{1}{4}$ . Drilled unused artesian well in sandstone of Cambrian age and St. Peter Sandstone of Middle Ordovician age, diam 10 in, reported depth 470 ft, cased to 113. Lsd 824 ft above msl. MP  $\frac{1}{4}$ -in hole in casing, 2.00 ft above lsd. Highest water level 54.47 below lsd, Apr. 16, 1952; lowest 59.07 below lsd, Sept. 29, 1948. Records available: 1947-61.

Jan. 31, 1957	57.32	Apr. 30, 1958	57.75	Sept. 30, 1959	57.70	Nov. 22, 1960	54.73
May 1	57.27	July 31	57.11	Dec. 3	56.81	Feb. 28, 1961	55.68
July 31	57.53	Oct. 30	58.19	Feb. 25, 1960	56.08	May 26	54.79
Oct. 31	57.80	Mar. 31, 1959	57.55	May 25	54.86	Aug. 31	55.52
Jan. 31, 1958	57.85	July 28	57.65	Aug. 30	54.66	Nov. 30	55.10

Rusk County

Ru-33/8W/11-37. Tony Shydowski. NE $\frac{1}{4}$ SW $\frac{1}{4}$ . Drilled domestic and stock water-table well in sand and gravel of Pleistocene age, diam 4 in, reported depth 77 ft, cased to 27. MP top of casing, 0.50 ft above lsd. Highest water level 11.59 below lsd, Sept. 13, 1960; lowest 13.80 below lsd, Oct. 17, 1956. Records available: 1956-61.

Oct. 17, 1956	13.80	June 19, 1958	13.03	Oct. 15, 1959	12.33	Dec. 6, 1960	11.60
Apr. 18, 1957	13.00	Sept. 18	12.68	Dec. 17	12.75	Mar. 22, 1961	11.63
Aug. 22	13.60	Dec. 18	12.92	Mar. 16, 1960	13.26	June 8	13.30
Dec. 12	13.33	May 14, 1959	12.66	June 14	12.47	Sept. 14	13.39
Mar. 13, 1958	13.24	July 23	13.09	Sept. 13	11.59	Dec. 21	12.96

Ru-35/3W/14-89. Hawkins Cemetery. SE $\frac{1}{4}$ NE $\frac{1}{4}$ . Drilled public-supply water-table well in sand and clay of Pleistocene age, diam 6 in, depth 25 ft. MP top of casing, 1.00 ft above lsd. Highest water level 13.33 below lsd, Oct. 15, 1959; lowest 18.26 below lsd, Dec. 22, 1961. Records available: 1957-61.

Ru-35/3W/14-89--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 18, 1957	17.83	Sept. 18, 1958	15.34	Dec. 17, 1959	13.97	Mar. 21, 1961	17.05
Aug. 22	17.03	Dec. 18	15.32	Mar. 16, 1960	16.19	June 8	15.85
Dec. 12	16.89	May 14, 1959	17.57	June 14	14.49	Sept. 14	17.69
Mar. 13, 1958	17.92	July 23	16.70	Sept. 13	15.94	Dec. 22	18.26
June 19	16.37	Oct. 15	13.33	Dec. 6	14.77		

Sauk County

Sk-10/6/3-1. Formerly Sk 1. Badger Ordnance Works. SW $\frac{1}{4}$ SE $\frac{1}{4}$ . Drilled unused artesian well in sandstone of Cambrian age, diam 16 in, depth 426 ft, cased to 203. Lsd 917 ft above msl. MP top of casing, 1.43 ft above lsd. Highest water level 58.45 below lsd, May 20, 1953; lowest 85.30 below lsd, May 11, 1951. Records available: 1946-61. Affected by pumping of nearby wells.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	62.14	62.54	62.75	62.72	63.04	62.79	62.65	62.94	62.84	62.85	62.87	62.62
10	62.33	62.54	62.74	63.05	62.94	62.73	62.87	62.72	62.76	62.82	62.85	62.82
15	62.31	62.59	62.86	63.14	62.95	62.69	62.79	62.71	62.62	62.87	62.82	62.82
20	62.17	62.77	62.90	63.00	62.78	62.60	62.75	62.84	62.74	62.87	62.77	62.87
25	62.44	62.61	62.92	62.94	62.93	62.63	62.87	62.74	62.76	62.92	62.72	62.82
Eom	62.34	62.72	63.05	63.05	62.89	62.66	62.75	62.78	62.79	62.92	62.67	62.83

1958

5	62.95	63.19	63.54	63.51	63.82	63.92	64.11	64.36	65.25	80.25	74.77	68.07
10	62.99	63.28	63.60	63.71	63.80	63.97	64.22	64.39	67.26	80.71	e72.57	67.87
15	63.00	63.40	63.52	63.67	63.80	64.02	64.20	64.43	74.02	81.04	e72.07	67.42
20	63.01	63.51	63.62	63.54	63.91	64.07	64.25	64.34	76.81	81.19	70.84	e67.17
25	62.82	63.29	63.61	63.87	63.84	63.99	64.22	64.45	78.39	81.72	69.79	e67.12
Eom	63.10	63.31	63.70	63.85	e63.97	64.17	64.35	64.93	79.50	79.69	69.17	e67.07

1959

5	e68.60	e68.10	e67.80	e67.80	65.48	65.26	65.32	e74.00	e70.50	e67.50	65.96	65.75
10	e68.50	e68.20	e67.85	e67.60	65.20	65.23	65.95	e73.25	e70.00	e67.00	66.02	65.83
15	e68.30	e68.30	e67.80	65.90	65.41	65.32	68.27	e72.50	e69.50	66.42	66.22	65.74
20	e68.20	e68.25	e67.70	65.80	65.31	65.37	74.38	e72.00	e69.00	66.52	65.96	65.83
25	e68.10	e68.00	e67.75	65.59	65.28	65.24	77.25	e71.50	e68.50	66.03	65.67	65.67
Eom	e68.00	e67.90	e67.90	65.45	65.20	65.41	e75.77	e71.00	e68.00	66.31	65.82	65.57

1960

5	65.51	65.10	65.17	64.91	65.39	e69.25	64.08	65.73	68.53	68.12	65.62	64.60
10	65.32	64.70	65.10	65.05	69.64	e67.50	61.73	66.76	68.41	68.06	65.44	64.69
15	65.15	65.14	65.12	64.76	72.33	66.76	60.95	67.48	68.71	67.51	65.05	64.80
20	65.25	65.23	65.08	64.67	72.68	65.49	62.31	67.85	68.63	66.80	65.07	64.85
25	65.16	65.12	65.12	64.65	73.48	65.18	62.26	67.94	68.21	66.23	64.78	64.43
Eom	65.14	65.17	64.91	64.63	e72.00	63.81	64.63	68.14	68.14	65.57	64.88	64.43

1961

5	64.37	64.58	64.53	64.34	64.85	66.78	67.83	68.32	69.43	67.64	e66.55	63.51
10	64.43	64.31	64.64	64.64	65.83	67.32	68.12	68.40	69.48	67.83	e65.20	63.61
15	64.37	64.50	64.77	63.99	65.97	67.63	68.15	68.35	68.90	68.00	e64.85	63.65
20	64.33	64.47	64.79	64.19	66.90	67.66	68.24	68.67	68.40	66.79	e64.50	63.33
25	64.74	64.23	64.71	63.91	66.69	67.61	68.06	68.86	68.37	e66.25	e64.15	63.73
Eom	64.45	64.43	64.62	64.40	66.99	67.89	68.39	68.84	68.29	e65.90	e63.80	63.75

e Estimated.

Sk-11/6/1-6. Formerly Sk 6. A. W. Rohn. Baraboo Iron Works. SE $\frac{1}{4}$ SW $\frac{1}{4}$ . Drilled unused artesian well in sandstone of Cambrian age, diam 5 to 4 in, depth 318 ft, cased to 266. Lsd 819 ft above msl. MP top of casing, 5.00 ft above lsd. Highest water level 7.61 above lsd, Apr. 18, 1959; lowest 2.19 below lsd, June 20, 1959. Records available: 1946-61. Affected by pumping of nearby wells.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 19, 1957	+2.86	Oct. 13, 1957	+2.55	July 19, 1958	+1.93	Apr. 25, 1959	+2.41
Feb. 23	2.81	Nov. 2	2.45	Aug. 16	1.54	May 10	+1.57
Mar. 2	2.59	Dec. 21	2.47	Sept. 6	1.36	June 20	-2.19
Apr. 13	2.58	Jan. 17, 1958	2.56	Oct. 25	1.68	July 11	+1.31
May 4	2.55	Feb. 15	2.32	Nov. 1	1.73	Aug. 22	1.08
June 29	2.36	Mar. 29	2.23	Dec. 13	1.67	Dec. 19	1.27
July 20	2.55	Apr. 26	2.48	Jan. 10, 1959	1.65	Feb. 13, 1960	1.32
Aug. 10	2.36	May 3	2.00	Feb. 21	1.74	Mar. 26	1.61
Sept. 21	2.30	June 21	2.22	Mar. 22	1.73	Apr. 16	2.30

Sk-11/6/1-6--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 7, 1960	+2.81	Oct. 8, 1960	+2.16	Mar. 11, 1961	+3.39	Aug. 12, 1961	+3.63
June 4	2.65	Nov. 19	3.41	Apr. 15	2.80	Sept. 9	2.73
July 16	2.85	Dec. 25	3.26	May 27	3.51	Oct. 14	3.21
Aug. 13	2.05	Jan. 21, 1961	3.49	June 24	3.26	Nov. 4	3.68
Sept. 24	2.18	Feb. 11	2.96	July 28	3.45	Dec. 30	3.31

Shawano County

Sh-26/18/30-1. Formerly Sh 1. Harry Sievert. NW $\frac{1}{4}$ NW $\frac{1}{4}$ . Drilled unused water-table well in limestone, diam 6 in, depth 132 ft. Lsd 917 ft above msl. MP hole in pumpbase, 1.00 ft above lsd. Highest water level 53.47 below lsd, Dec. 6, 1951; lowest 64.60 below lsd, Jan. 11, 1956. Records available: 1947-61.

Feb. 14, 1957	63.52	May 21, 1958	61.05	Sept. 10, 1959	62.85	Nov. 3, 1960	55.54
May 15	61.52	Aug. 7	62.98	Dec. 10	59.29	Feb. 2, 1961	57.41
Aug. 8	62.74	Nov. 7	62.94	Feb. 9, 1960	59.42	May 4	56.32
Nov. 7	63.32	Mar. 5, 1959	64.33	May 5	56.51	Aug. 3	58.94
Feb. 6, 1958	62.80	June 10	62.06	Aug. 1	56.75	Nov. 9	56.78

Taylor County

Ta-31/4W/24-1. Village of Gilman. NE $\frac{1}{4}$ NE $\frac{1}{4}$ . Drilled public-supply water-table well in drift of Pleistocene age, diam 18 to 16 in, reported depth 24 ft, cased to 16, screened 16-24. MP top of casing, 2.00 ft above lsd. Highest water level 8.92 below lsd, Mar. 21, 1961; lowest 13.11 below lsd, Oct. 15, 1959. Records available: 1957-61. Affected by pumping of nearby wells.

Apr. 17, 1957	9.42	Sept. 18, 1958	10.26	Oct. 15, 1959	13.11	Sept. 13, 1960	9.62
Aug. 22	10.69	Dec. 18	11.60	Dec. 17	10.26	Dec. 6	9.21
Dec. 12	9.97	May 14, 1959	9.31	Mar. 16, 1960	10.65	Mar. 21, 1961	8.92
Mar. 13, 1958	10.13	July 23	9.72	June 14	10.16	Dec. 22	9.98
June 19	10.08						

Trempealeau County

Tr-19/8W/35-1. Formerly Tr 1. Mrs. William Davidson. SW $\frac{1}{4}$ SW $\frac{1}{4}$ . Drilled unused water-table well in sandstone of Cambrian age, diam 6 in. MP top of casing, 1.00 ft above lsd. Highest water level 133.18 below lsd, Jan. 13, 1955; lowest 143.16 below lsd, Sept. 12, 1961. Records available: 1947-61.

Feb. 20, 1957	135.25	June 17, 1958	136.82	Oct. 13, 1959	139.66	Dec. 5, 1960	140.97
May 23	135.31	Sept. 16	138.43	Dec. 15	140.33	Mar. 20, 1961	140.64
Aug. 21	137.42	Dec. 16	139.05	Mar. 15, 1960	140.76	June 5	140.74
Dec. 11	136.63	May 12, 1959	139.43	June 13	141.41	Sept. 12	143.16
Mar. 11, 1958	137.50	July 21	140.09	Sept. 12	141.04	Dec. 19	142.66

Tr-19/9W/33-9. Formerly Tr 9. Village of Centerville. SE $\frac{1}{4}$ SE $\frac{1}{4}$ . Drilled public-supply water-table well in drift of Pleistocene age, diam 6 in, reported depth 71 ft, cased to 66, screened 66-71. MP top of breather pipe, at lsd. Highest water level 49.22 below lsd, July 11, 1956; lowest 56.64 below lsd, June 13, 1960. Records available: 1953-61. Affected by pumping of nearby wells.

Feb. 20, 1957	50.97	June 17, 1958	54.99	Dec. 15, 1959	56.30	Mar. 20, 1961	55.82
May 23	51.86	Sept. 16	55.15	Mar. 15, 1960	56.50	June 5	55.41
Aug. 21	52.62	Dec. 16	55.68	June 13	56.64	Sept. 12	55.81
Dec. 11	53.39	May 12, 1959	55.76	Sept. 12	56.31	Dec. 19	55.84
Mar. 11, 1958	54.00	Oct. 13	56.20	Dec. 5	55.60		

Vilas County

Vi-40/10/10-21. Formerly Vi 21. U. S. Geol. Survey. NE $\frac{1}{4}$ NE $\frac{1}{4}$ . Driven observation water-table well in sand of Pleistocene age, diam 1 $\frac{1}{2}$  in, depth 27 ft, well point 25-27. MP top of casing, 1.00 ft above lsd. Highest water level 11.84 below lsd, June 1, 1960; lowest 16.86 below lsd, Mar. 21, 1949. Records available: 1944-61.

Jan. 29, 1957	14.68	June 24, 1957	14.57	Nov. 25, 1957	15.29	Apr. 1, 1958	15.90
Feb. 25	14.85	July 30	14.74	Dec. 30	15.45	May 13	15.35
Mar. 20	14.99	Aug. 28	14.91	Jan. 28, 1958	15.59	June 25	15.35
Apr. 15	14.62	Sept. 25	15.01	Feb. 24	15.72	July 21	15.43
May 15	14.45	Oct. 29	15.16	Mar. 24	15.87	Aug. 27	15.07

## Vi-40/10/10-21--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 29, 1958	15.26	July 27, 1959	15.95	June 27, 1960	12.15	Apr. 24, 1961	13.85
Oct. 27	15.45	Aug. 26	16.09	July 19	12.52	May 10	13.89
Nov. 24	15.59	Sept. 8	16.10	Aug. 30	13.01	June 26	13.71
Dec. 29	15.77	Oct. 7	14.71	Sept. 28	13.22	July 18	14.00
Jan. 28, 1959	15.80	Nov. 2	14.12	Oct. 25	13.47	Aug. 14	13.89
Feb. 24	16.07	Dec. 30	14.05	Nov. 29	13.74	Sept. 25	13.82
Mar. 23	16.22	Jan. 18, 1960	15.16	Dec. 28	13.91	Oct. 31	14.05
Apr. 21	18.89	Feb. 29	14.47	Jan. 25, 1961	14.09	Nov. 28	14.12
May 4	18.90	Apr. 5	14.55	Feb. 28	14.35	Dec. 26	14.18
June 22	15.83	May 2	13.55	Mar. 21	14.49		

## Washburn County

Wb-39/12W/31-1. Formerly Wb 1. Wisconsin Conservation Dept. NE $\frac{1}{4}$ SW $\frac{1}{4}$ . Driven observation water-table well in sand of Pleistocene age, diam 1 $\frac{1}{2}$  in, depth 18 ft, well point 16-18. Lsd 1,064 ft (previously reported 1,065 ft) above msl. MP top of casing, 1.70 ft above lsd. Highest water level 2.60 below lsd, Sept. 3, 1957; lowest 6.20 below lsd, May 18, 1953. Records available: 1948-61.

Jan. 21, 1957	5.36	Apr. 14, 1958	4.40	July 27, 1959	4.35	Oct. 10, 1960	4.57
Feb. 25	5.27	May 12	4.47	Aug. 3	4.51	Nov. 28	4.67
Mar. 4	5.20	June 30	4.07	Sept. 7	4.15	Dec. 19	4.82
Apr. 29	4.99	July 21	3.74	Oct. 26	4.50	Jan. 30, 1961	4.95
May 6	4.89	Aug. 18	4.24	Nov. 30	4.73	Feb. 20	5.25
June 3	4.51	Sept. 8	4.35	Dec. 14	4.92	Mar. 6	4.97
July 29	3.80	Oct. 27	4.45	Jan. 11, 1960	4.87	Apr. 10	4.67
Aug. 5	4.07	Nov. 17	4.72	Feb. 29	5.05	June 26	4.44
Sept. 30	4.26	Dec. 29	5.05	Mar. 7	5.10	July 31	4.39
Oct. 14	4.51	Jan. 26, 1959	4.90	Apr. 18	4.80	Aug. 7	4.30
Nov. 11	4.71	Feb. 16	5.27	May 9	4.68	Sept. 25	4.81
Dec. 9	4.65	Mar. 9	5.13	June 6	4.25	Oct. 2	4.90
Jan. 20, 1958	4.75	Apr. 14	4.88	July 25	4.34	Nov. 13	5.15
Feb. 17	4.60	May 4	4.77	Aug. 1	4.21	Dec. 11	5.22
Mar. 24	4.60	June 15	5.00	Sept. 26	4.18		

## Washington County

Wn-11/19/14-3. Formerly Wn 3. City of West Bend. City Hall. NE $\frac{1}{4}$ NE $\frac{1}{4}$ . Drilled unused artesian well in St. Peter Sandstone of Middle Ordovician age, diam 8 in, reported depth 1,200 ft, cased to 75. Lsd 920 ft above msl. MP top of casing, 3.00 ft below lsd. Highest water level 9.89 below lsd, Nov. 21, 1960; lowest 19.99 below lsd, July 29, 1958. Records available: 1946-61. Affected by pumping of nearby wells.

Jan. 29, 1957	14.08	Apr. 28, 1958	15.25	Sept. 28, 1959	18.53	Nov. 21, 1960	9.89
Apr. 29	13.28	July 29	19.99	Dec. 1	16.70	Feb. 27, 1961	11.96
July 29	16.02	Oct. 28	16.85	Mar. 2, 1960	15.21	May 24	13.03
Oct. 29	16.10	Jan. 27, 1959	18.29	May 24	14.67	Aug. 29	14.37
Jan. 29, 1958	15.74	July 13	16.34	Aug. 29	11.00	Nov. 28	12.98

## Waukesha County

Wk-6/19/2-14. Formerly Wk 14. Veterans Administration Hospital. State Highway 59 and County Highway "Y", Waukesha. SE $\frac{1}{4}$ NW $\frac{1}{4}$ . Drilled unused artesian well in sandstone of Cambrian age and St. Peter Sandstone of Middle Ordovician age, diam 8 in, reported depth 1,300 ft. Lsd 875.03 ft above msl. MP top of casing, at lsd. Highest water level 249.86 below lsd, July 6, 1947; lowest 347.88 below lsd, Aug. 28, 1959. Records available: 1946-61. Affected primarily by pumping of nearby municipal wells.

## Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	325.00	323.60	328.02	327.90	328.81	332.21	332.18	337.80	330.10	335.40	337.65	334.60
10	318.77	326.37	329.24	328.16	330.93	331.38	334.70	340.63	332.12	338.49	339.04	335.00
15	316.92	328.21	327.80	322.76	329.00	334.02	336.49	340.04	329.60	338.40	333.50	337.42
20	317.17	324.60	329.11	326.90	326.50	335.30	335.51	338.00	336.39	339.22	333.90	338.10
25	316.88	325.28	326.95	327.70	325.20	333.78	335.64	337.11	333.61	337.00	332.00	336.78
Eom	320.97	327.45	324.00	327.40	329.60	331.26	336.80	338.07	335.90	338.69	330.08	334.79

e Estimated.

Wk-6/19/2-14-- Continued.

1958												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	334.69	334.89	335.69	329.99	334.00	337.24	335.38	342.58	343.14	341.15	337.69	337.12
10	335.65	335.22	333.31	332.38	335.75	336.63	338.59	342.57	341.55	341.12	339.62	333.00
15	336.20	335.13	325.00	329.90	336.95	336.51	338.69	344.17	341.40	340.90	339.89	334.40
20	333.10	335.39	322.43	332.63	337.60	338.22	339.29	344.29	344.82	337.12	338.40	338.38
25	334.60	333.92	321.52	332.70	338.35	335.64	342.00	342.63	343.12	338.80	337.90	335.48
Eom	334.86	334.79	320.70	332.66	340.07	331.10	342.94	344.02	340.40	338.00	336.90	335.50

	1959											
5	333.80	337.89	335.01	334.03	337.67	341.19	339.90	342.00	347.65	343.00	343.90	345.99
10	334.40	335.35	335.20	334.93	336.38	344.04	343.47	340.33	347.14	342.30	344.90	342.45
15	333.61	336.10	334.62	333.11	339.49	341.30	343.76	343.53	345.03	344.00	342.00	339.34
20	335.48	336.94	335.00	334.60	337.68	344.17	343.93	346.26	347.13	342.90	345.24	344.21
25	335.00	335.46	336.90	334.70	338.49	344.53	345.56	345.70	346.69	341.50	345.48	341.10
Eom	335.67	336.73	336.21	335.98	339.81	341.30	342.51	346.07	344.32	346.23	343.84	339.52

1960												
5	335.65	339.00	334.75	332.85	335.46	336.73	336.56	339.62	341.00	338.07	338.28	336.20
10	334.45	338.00	334.92	331.95	333.87	339.77	340.37	340.02	342.18	339.61	339.31	335.80
15	334.41	337.00	335.36	332.50	332.65	337.09	340.28	338.48	341.87	338.98	335.42	335.50
20	330.99	336.00	332.18	333.70	335.39	336.63	338.51	339.80	338.92	337.09	336.52	335.25
25	334.40	335.00	334.35	333.70	334.64	337.70	339.53	339.41	338.23	336.60	337.10	335.00
Eom	337.70	335.30	331.99	335.72	333.13	340.53	338.60	341.31	338.88	337.75	336.50	332.90

	1961											
5	331.60	338.87	333.06	331.60	325.12	333.10	340.38	343.89	343.58	344.48	341.33	340.38
10	332.00	329.80	329.34	334.14	324.57	332.48	342.13	341.03	343.25	343.83	342.76	341.78
15	332.56	329.05	329.53	334.40	329.50	335.78	343.58	341.37	342.75	343.16	341.31	340.47
20	333.96	333.84	332.56	334.33	333.20	335.60	341.73	342.34	342.25	343.41	341.12	337.89
25	333.90	334.14	328.49	332.20	334.55	336.30	342.09	341.68	342.00	342.97	340.29	338.05
Eom	336.31	333.44	329.50	331.23	333.20	339.61	342.31	343.61	342.67	344.25	340.73	338.37

e Estimated.

Wk-5/19/2-31. Formerly Wk 31. William M. Foss. NE $\frac{1}{4}$ NW $\frac{1}{4}$ . Drilled unused artesian well in Niagara Dolomite of Middle Silurian age (previously reported limestone), diam 6 in, depth 508 ft, cased to 434. Lsd 962 ft (previously reported 963 ft) above msl. MP top of casing, 1.00 ft above lsd. Highest water level 129.02 below lsd, Aug. 4, 1952; lowest 138.14 below lsd, Feb. 2, 1959. Records available: 1947-61.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	135.50	135.64	135.48	135.29	135.46	135.46	135.31	135.82	135.97	136.21	136.39	136.38
10	135.62	135.60	135.50	135.43	135.42	135.45	135.52	135.69	135.97	136.31	136.40	136.40
15	135.55	135.48	135.51	135.44	135.55	135.40	135.46	135.74	135.97	136.22	136.25	136.45
20	135.53	135.54	135.46	135.40	135.51	135.32	135.44	135.89	136.02	136.32	136.30	136.60
25	135.56	135.42	135.44	135.39	135.53	135.27	135.57	135.82	136.16	136.30	136.33	136.55
Eom	135.50	135.43	135.51	135.46	135.49	135.34	135.55	135.88	136.14	136.33	136.33	136.47

1958												
5	136.50	136.72	136.82	136.65	136.77	136.97	137.23	137.72	137.69	137.83	137.81	137.70
10	136.53	136.70	136.77	136.75	136.76	136.90	137.44	137.77	137.75	137.79	137.87	137.80
15	136.56	136.75	136.76	136.69	136.88	137.00	137.36	137.65	137.73	137.76	137.81	137.75
20	136.60	136.80	136.73	136.67	136.93	137.09	137.55	137.84	137.71	137.74	137.75	137.81
25	136.63	136.84	136.75	136.77	137.00	137.08	137.55	137.80	137.74	137.80	137.78	137.75
Eom	136.61	136.76	136.66	136.70	136.94	137.20	137.57	137.66	137.79	137.86	137.86	137.92

1959												
5	137.93	138.00	138.07	136.80	135.89	135.94	136.10	136.10	136.25	136.48	135.59	134.87
10	137.93	137.95	137.89	136.60	135.76	136.09	136.10	136.15	136.30	136.21	135.22	134.98
15	137.82	137.95	137.57	136.40	135.80	136.04	136.15	136.15	136.30	136.16	135.22	134.87
20	137.93	137.90	137.53	136.20	135.80	136.12	136.15	136.20	136.35	136.17	135.03	134.89
25	137.95	137.95	137.23	136.00	135.85	136.20	136.15	136.20	136.40	135.71	134.89	134.75
Eom	138.11	137.97	136.95	135.86	135.82	136.16	136.12	136.25	136.55	135.73	134.99	134.61

1960												
5	134.43	133.44	133.37	132.45	131.14	130.48	130.52	130.69	130.94	131.10	131.37	131.07
10	134.30	133.23	133.31	132.14	130.81	130.50	130.54	130.66	131.02	131.16	131.39	131.08
15	133.91	133.41	133.33	131.77	130.69	130.33	130.61	130.75	131.09	131.22	131.30	131.02
20	133.80	133.40	133.30	131.58	130.54	130.47	130.66	130.72	131.02	131.24	131.16	131.15
25	133.64	133.34	133.34	131.34	130.47	130.45	130.66	130.79	131.04	131.27	131.12	131.20
Eom	133.53	133.35	133.04	131.19	130.41	130.50	130.69	130.88	131.09	131.33	131.11	131.15

e Estimated.

Wk-5/19/2-31--Continued.

1961												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	131.16	131.58	131.65	130.85	130.34	130.39	130.88	131.16	131.58	131.25	131.26	130.85
10	131.29	131.50	131.54	130.90	130.27	130.41	131.15	131.22	131.73	131.25	131.12	130.99
15	131.26	131.63	131.48	130.75	130.19	130.58	131.09	131.38	131.49	131.34	131.14	131.04
20	131.28	131.66	131.51	130.91	130.42	130.64	131.08	131.45	131.50	131.32	131.02	130.99
25	131.50	131.55	131.27	130.59	130.26	130.40	131.10	131.51	131.47	131.26	130.96	131.00
Eom	131.47	131.69	131.01	130.40	130.35	130.98	131.16	131.57	131.34	131.22	130.95	131.06

e Estimated.

Waupaca County

Wp-21/13/25-2. Formerly Wp 2. Village of Fremont. NE $\frac{1}{4}$ SW $\frac{1}{4}$  (previously reported sec. 26). Drilled public-supply artesian well in sandstone of Cambrian age, diam 8 in, reported depth 205 ft, cased to 109. Lsd 764 ft above msl. MP hole in cap, 1.00 ft above lsd. Highest water level 10.81 below lsd, Apr. 23, 1951; lowest 15.91 below lsd, Feb. 23, 1954. Records available: 1950-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 14, 1957	13.27	Apr. 4, 1959	13.98	Mar. 19, 1960	14.39	Feb. 25, 1961	14.20
Apr. 23, 1958	14.28	May 2	13.95	Apr. 2	14.31	Mar. 4	14.18
June 20	14.87	June 30	13.87	May 7	13.86	Apr. 1	13.82
July 9	14.45	July 4	14.95	June 25	13.67	May 20	13.40
Aug. 1	14.92	Aug. 22	14.47	July 9	13.47	June 17	13.60
Sept. 5	14.95	Sept. 21	14.49	Aug. 20	14.10	July 29	13.53
Oct. 16	15.12	Oct. 17	14.38	Sept. 24	13.40	Aug. 5	13.50
Nov. 8	14.39	Nov. 14	13.57	Oct. 22	13.22	Sept. 2	13.28
Dec. 27	13.87	Dec. 19	14.48	Nov. 19	13.85	Oct. 7	13.29
Jan. 26, 1959	14.75	Jan. 30, 1960	14.50	Dec. 24	13.81	Nov. 4	12.72
Feb. 7	14.85	Feb. 6	14.50	Jan. 28, 1961	13.97	Dec. 30	13.38
Mar. 14	14.77						

Waushara County

Ws-19/8/15-9. Formerly Ws 9. University of Wisconsin Experiment Farm. Hancock. NE $\frac{1}{4}$ NW $\frac{1}{4}$ . Jetted observation water-table well in sand and gravel of Pleistocene age, diam 4 in, depth 26 ft. Lsd 1,090 ft above msl. MP top of casing, 1.00 ft above lsd. Highest water level 15.03 below lsd, May 14, 1952; lowest 22.64 below lsd, Apr. 5, 1959. Records available: 1951-61. Affected by pumping of nearby wells.

Lowest water level for the day, from recorder graph, 1957

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	19.04	19.18	19.36	19.58	19.55	19.25	18.84	18.90	19.15	e19.39	19.62	19.80
10	19.06	19.22	19.39	19.62	19.50	19.16	18.82	18.95	19.18	e19.43	19.63	19.83
15	e19.09	19.27	e19.44	19.64	19.42	19.09	18.80	e18.98	19.22	e19.48	19.63	19.83
20	19.09	19.30	e19.48	19.66	19.39	19.01	18.79	e19.03	19.26	e19.52	19.67	19.87
25	19.11	19.32	e19.52	19.65	19.36	18.94	18.79	19.06	e19.31	19.57	19.73	19.91
Eom	19.15	19.33	19.55	19.61	19.31	18.88	18.83	19.12	e19.35	19.61	19.76	19.96

1958												
5	19.98	20.20	20.32	20.49	20.52	20.54	20.68	20.86	21.12	21.29	21.49	21.72
10	20.01	20.21	20.34	20.53	20.52	20.56	20.71	20.88	21.13	21.32	21.54	21.75
15	20.03	20.26	20.36	20.54	20.52	20.57	20.74	20.91	21.15	21.35	21.58	21.77
20	20.08	20.28	20.39	20.54	20.53	20.59	20.76	20.95	21.19	21.37	21.61	21.81
25	20.08	20.32	20.43	20.54	20.54	20.63	20.79	20.99	21.22	21.40	21.70	21.85
Eom	20.20	20.31	20.46	20.52	20.54	20.65	20.82	21.11	21.26	21.46	21.70	21.89

1959												
5	21.93	22.16	22.40	22.64	22.33	21.89	21.81	21.75	21.69	21.77	20.96	e20.20
10	21.98	22.20	22.46	22.62	22.26	21.86	21.80	21.74	21.70	21.75	20.74	e20.15
15	22.00	22.25	22.50	22.62	22.18	21.85	21.79	21.73	21.70	21.70	20.52	e20.10
20	22.05	22.38	22.54	22.57	22.11	21.84	21.78	21.72	21.73	21.66	e20.35	e20.05
25	22.07	22.39	22.59	22.50	22.04	21.83	21.77	21.71	21.76	21.44	e20.30	e20.00
Eom	22.13	22.40	22.62	22.42	21.96	21.82	21.76	21.70	21.77	21.18	e20.25	e19.95

1960												
5	e20.00	e19.70	e19.95	e19.70	e19.20	e17.84	17.83	18.07	18.26	18.00	18.10	
10	e19.95	e19.70	e19.90	e19.65	e19.10	e17.79	17.71	17.98	18.12	18.16	18.05	18.13
15	e19.90	e19.75	e19.90	e19.60	18.63	e17.78	17.71	18.00	18.16	18.10	18.04	18.16
20	e19.85	e19.80	e19.85	e19.50	18.22	e17.77	17.72	18.00	18.20	18.07	18.11	e18.18
25	e19.80	e19.85	e19.80	e19.40	e18.07	e17.76	17.73	18.06	18.25	18.00	18.10	e18.20
Eom	e19.75	e19.90	e19.75	e19.30	e17.95	e17.76	17.80	18.07	18.29	17.96	18.13	e18.22

e Estimated.



Ws-19/8/15-9--Continued.

1961											
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. Dec.
5	e18.25	e18.42	18.56	18.36	17.91	17.62	17.78	18.05	18.14	18.30	e18.20 17.70
10	e18.28	18.44	18.61	18.28	17.80	17.62	17.83	18.11	18.15	18.30	e18.05 17.70
15	e18.30	18.46	18.64	18.19	17.70	17.65	17.85	18.10	18.19	18.33	e17.90 17.70
20	e18.33	18.50	18.69	18.15	17.67	17.65	17.90	18.10	18.20	18.32	e17.85 17.70
25	e18.36	18.51	18.70	18.09	17.64	17.70	17.96	18.09	18.25	18.33	e17.80 17.75
Eom	e18.39	18.51	18.50	18.01	17.62	17.71	18.01	18.11	18.26	18.34	e17.75

e Estimated.

Ws-20/11/2-53. Oshkosh Council, Boy Scouts of America. SE $\frac{1}{4}$ NE $\frac{1}{4}$ . Drilled domestic water-table well in sand and gravel of Pleistocene age, diam 6 in, depth 177 ft, cased to 172, screened 172-177. Lsd 923 ft above msl. MP top of casing, 1.00 ft above lsd. Highest water level 36.62 below lsd, June 13, 1956; lowest 40.41 below lsd, Mar. 4, 1959. Records available: 1956-61.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 6, 1956	37.87	May 14, 1958	38.58	Mar. 4, 1959	40.41	May 5, 1960	38.55
Apr. 9	37.10	Aug. 1	39.02	Apr. 13	40.16	June 13	37.14
June 13	36.62	26	39.22	Sept. 4	39.93	Aug. 11	37.65
Nov. 20	37.08	Sept. 4	39.29	Nov. 2	39.67	Nov. 10	37.58
Feb. 27, 1957	37.66	Oct. 9	39.54	Dec. 1	39.32	Feb. 9, 1961	37.77
May 22	37.24	Nov. 6	39.74	Jan. 4, 1960	39.09	May 10	36.90
July 17	37.99	Dec. 4	39.89	Feb. 5	38.80	Aug. 11	37.49
Oct. 25	38.16	Jan. 7, 1959	40.10	Mar. 8	38.89	Nov. 22	36.76
Feb. 11, 1958	38.59	Feb. 2	40.25				

Winnebago County

Wi-18/16/23-6. Formerly Wi 6. City of Oshkosh. Board of Education. Wisconsin Ave. and Algoma Blvd. NE $\frac{1}{4}$ NE $\frac{1}{4}$ . Drilled unused artesian well in St. Peter Sandstone of Middle Ordovician age, diam 8 in, reported depth 200 ft. Lsd 765 ft above msl. MP  $\frac{1}{4}$ -in bushing on top of well, 6.00 ft below lsd. Highest water level 27.25 below lsd, Apr. 13, 1951; lowest 39.75 below lsd, Sept. 1, 1960. Records available: 1950-61. Affected by pumping of nearby wells.

Jan. 10, 1957	29.66	May 21, 1958	30.79	Oct. 7, 1959	35.22	Nov. 3, 1960	34.44
May 15	28.54	Sept. 5	31.93	Dec. 10	33.09	Mar. 8, 1961	36.50
Sept. 5	31.16	Nov. 7	30.62	Feb. 10, 1960	34.07	May 5	35.37
Nov. 7	30.48	Feb. 5, 1959	31.32	May 5	35.36	Aug. 3	39.25
Mar. 6, 1958	29.48	July 8	31.99	Sept. 1	39.75	Nov. 9	33.81

Wood County

Wd-23/4/2-29. Formerly Wd 29. Elmer Aschenbrenner. NE $\frac{1}{4}$ NE $\frac{1}{4}$ . Drilled unused water-table well in sand of Pleistocene age, diam 8 to 6 in, depth 18 ft. MP top of casing, 0.40 ft above lsd. Highest water level 2.86 below lsd, Apr. 23, 1951; lowest 13.99 below lsd, Feb. 15, 1954. Records available: 1944-61.

Jan. 28, 1957	12.06	Apr. 7, 1958	6.45	July 29, 1959	9.29	Oct. 31, 1960	7.10
Feb. 25	12.62	May 26	6.35	Aug. 17	9.19	Nov. 28	6.00
Mar. 4	12.18	June 30	6.60	Sept. 7	8.07	Dec. 26	6.60
Apr. 29	7.49	July 28	7.16	Oct. 12	5.70	Jan. 30, 1961	7.40
May 6	8.34	Aug. 25	9.80	Nov. 30	5.01	Feb. 27	8.73
June 24	6.45	Sept. 29	11.34	Dec. 21	5.68	Mar. 6	8.39
July 29	7.23	Oct. 6	10.90	Jan. 25, 1960	6.07	Apr. 10	7.33
Aug. 26	8.71	Nov. 10	8.14	Feb. 29	7.10	May 29	6.83
Sept. 30	10.16	Dec. 29	9.92	Mar. 28	7.28	June 5	7.30
Oct. 28	11.86	Jan. 26, 1959	11.70	Apr. 4	7.00	July 10	7.37
Nov. 4	12.29	Feb. 16	12.00	May 2	5.92	Aug. 28	7.01
Dec. 2	10.29	Mar. 9	12.30	June 27	6.20	Sept. 4	7.05
Jan. 27, 1958	7.38	Apr. 6	6.13	July 25	6.76	Oct. 2	6.83
Feb. 10	7.79	May 4	5.35	Aug. 22	7.30	Nov. 27	5.80
Mar. 3	6.94	June 22	7.00	Sept. 12	6.16	Dec. 26	6.10

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