

# Water Levels and Artesian Pressures in Observation Wells in the United States in 1950

## Part 3. North-Central States

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

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GEOLOGICAL SURVEY WATER-SUPPLY PAPER 1167

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



**UNITED STATES DEPARTMENT OF THE INTERIOR**

**Oscar L. Chapman, *Secretary***

**GEOLOGICAL SURVEY**

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**WATER LEVELS AND ARTESIAN PRESSURES**  
**IN OBSERVATION WELLS IN THE UNITED STATES**  
**IN 1950**

**Part 3. NORTH-CENTRAL**

Introduction

By A. N. Sayre

The publication of records of water levels and artesian pressures annually in the United States was begun by the Geological Survey in 1935. Prior to 1940 the records were published in a single volume--1935, 777; 1936, 817; 1937, 840; 1938, 845; 1939, 886. Since 1940 records have been published in six volumes, covering the northeastern, southeastern, north-central, south-central, northwestern, and southwestern sections of the country. Hawaii is included in the southwestern section. The following table gives the numbers of water-supply papers from 1940 through 1950.

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

Ground-water investigations are concerned with the availability of usable water supplies, land drainage, flood control, construction of waterways and dams, mine drainage, and other problems to which the principles of ground-water hydrology are pertinent. Water levels in wells indicate the stages of the aquifers; they show the extent to which water supplies are depleted by drought or by heavy pumping, and the extent to which they are replenished in seasons of abundant rainfall or melting snow. The recorded changes of pressure in artesian wells also indicate depletion or replenishment of the artesian supplies.

This volume gives records of water levels and artesian pressures in observation wells in the north-central States (Illinois, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, and Wisconsin). Of the 1,672 wells listed, 100 are equipped with recording gages. Descriptive matter for some wells is given in previous reports. For wells not previously reported, complete records of water levels are given. For wells whose previous records have been published, this volume gives only the current records.

Before 1943, the water levels and artesian pressures for some wells were given in feet above or below the measuring points and for other wells, in feet above or below sea level or, above or below various assumed datum planes. In 1943, a precise datum plane was selected at each well which was approximately the land surface. The water levels and artesian heads for all wells listed in this volume are referred to land-surface datum or mean sea level. Water levels above this datum are preceded by a plus (+) sign, those below this datum have no sign, but are understood to be minus (-), unless otherwise indicated.

Measurements of water levels and artesian pressures in wells were made under the direction of the district supervisors of the Ground Water Branch in the several States. Verda M. Dougherty edited the reports; Rodney Hart edited the illustrations; and Penn Livingston had general charge of the nation-wide observation-well program. This volume was typed by Mrs. Joyce Wells.

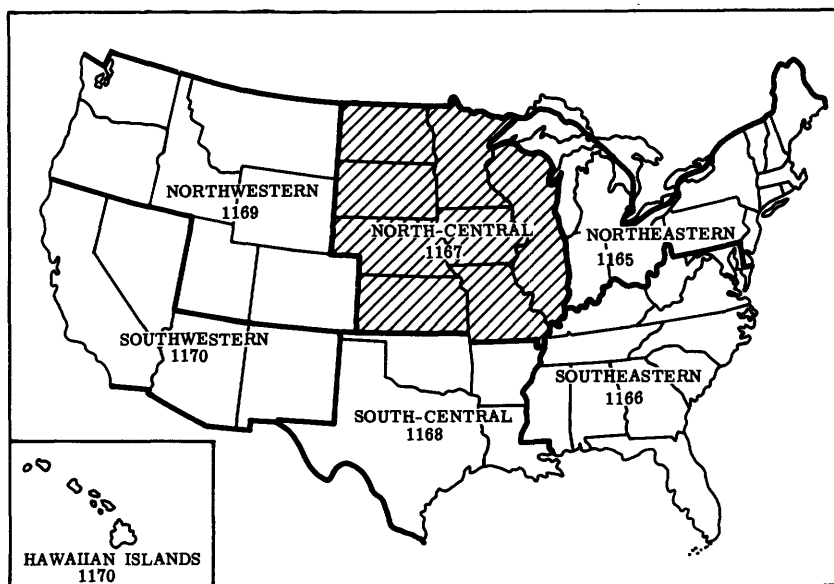


Figure 1. --Outline map of the United States showing areas included in each of the six water-supply papers on water levels and artesian pressures in observation wells in 1950. The shaded area indicates the States included in this volume.



# ILLINOIS

By J. B. Cooper

## Scope of Water-Level Program

Measurements of water level were continued in 1950 in the well at Princeton, in Bureau County. This well is equipped with a float-tape gage, and was first measured in November 1942; observations have been made at approximately weekly intervals since that time. A total of 51 measurements was made in this well in 1950.

## Fluctuations of Water Level

The water level in the well at Princeton during 1950 followed the general pattern of previous years, as indicated by figure 2. The high water level occurred in the spring and was followed by progressively lower levels through the remainder of the year. The high of 4.79 feet recorded on April 29 is 4.07 feet higher than the 1949 high. Water levels during the second half of the year were slightly higher than those of the previous year. The low of 18.38 feet recorded on December 30 is 2.61 feet above the 1949 low.

## Well Description and Water-Level Measurements

### Bureau County

16-9-9. R. E. Neff. Princeton. Records available: 1942-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	15.71	Apr. 8	6.79	July 8	10.79	Oct. 14	16.86
14	14.21	15	5.49	15	12.00	21	17.51
21	12.69	22	6.68	23	12.33	28	17.66
28	12.49	29	4.79	30	12.84	Nov. 4	17.99
Feb. 4	13.00	May 6	5.60	Aug. 5	13.80	11	17.99
11	13.11	13	6.19	12	14.60	18	18.10
18	12.79	18	6.98	19	15.05	25	18.19
25	13.11	28	7.70	26	15.69	Dec. 2	17.85
Mar. 4	12.01	June 3	8.70	Sept. 2	16.21	9	17.79
11	9.69	10	10.39	16	17.19	16	18.20
18	10.59	17	8.98	23	16.00	23	18.29
25	10.51	24	7.99	30	16.79	30	18.38
Apr. 1	9.24	July 1	9.39	Oct. 7	17.10		

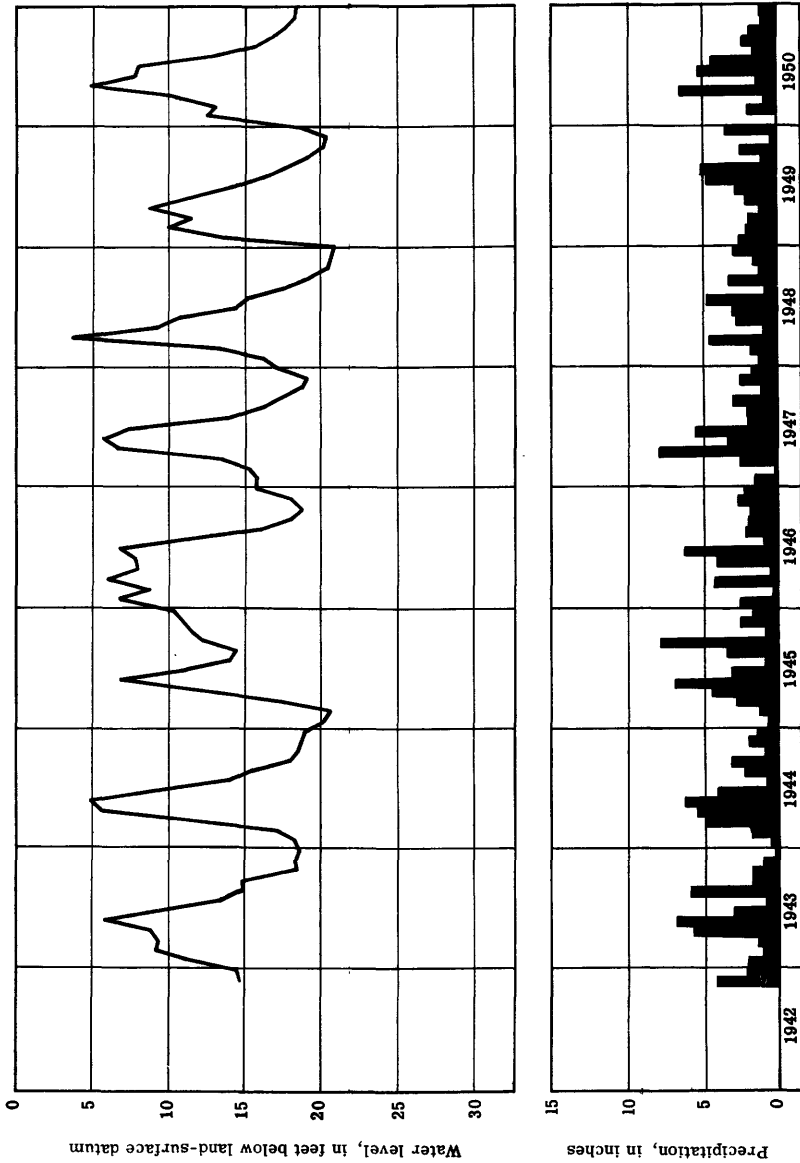


Figure 2. --- Fluctuations of water level in well 16-9-9 at Princeton, Ill., and monthly precipitation at Tiskilwa, November 1942 to December 1950.

# IOWA

By J. B. Cooper, C. W. Lane, and H. G. Hershey

## Scope of Water-Level Program

The observation-well program in Iowa was continued in 1950 in cooperation with the State Geological Survey. Measurements were made in 196 wells; 25 of which were equipped with recording gages. (See fig. 3.) Approximately 1,800 tape measurements were made in 1950.

## Fluctuations of Water Levels

The average total precipitation over the State in 1950 was 29.12 inches, about 2.25 inches below normal. Except for March, precipitation averaged above-normal amounts during the first 7 months of the year, but the deficiency in soil moisture that developed late in 1949 was not overcome until May. Even during the wet months, inequalities in distribution caused some areas to suffer from lack of moisture at the same time that excessively heavy rains caused soil erosion and floods in nearby areas. Precipitation became deficient in mid-August. Amounts were well below normal during the remainder of the year. As in 1949, a serious water shortage developed in some rural areas, especially in the south-central counties and in the northwest.

The general conditions throughout the State are shown by the following table:

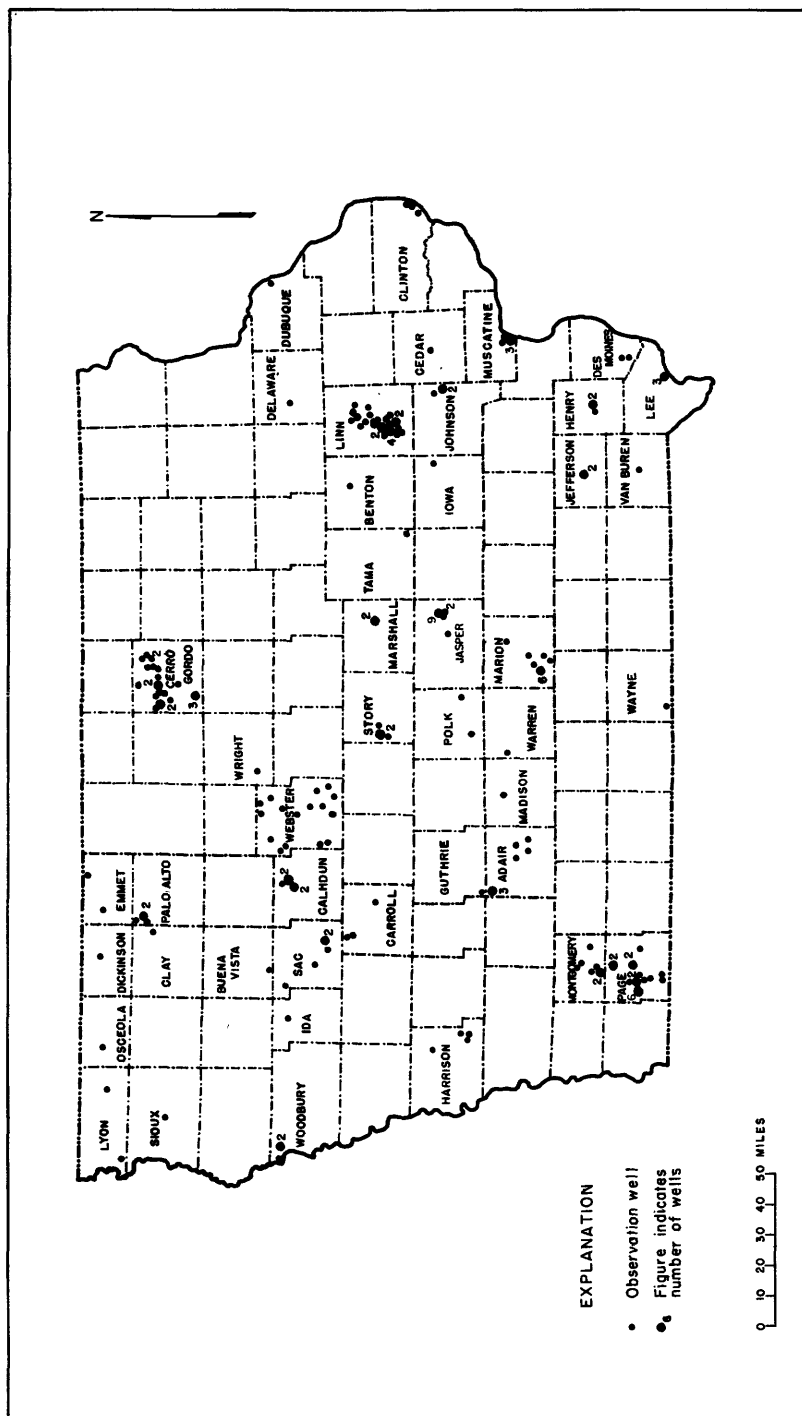
Average net change in water levels in shallow wells in Iowa and annual precipitation and departure from normal, at the nearest U. S. Weather Bureau station, 1950.

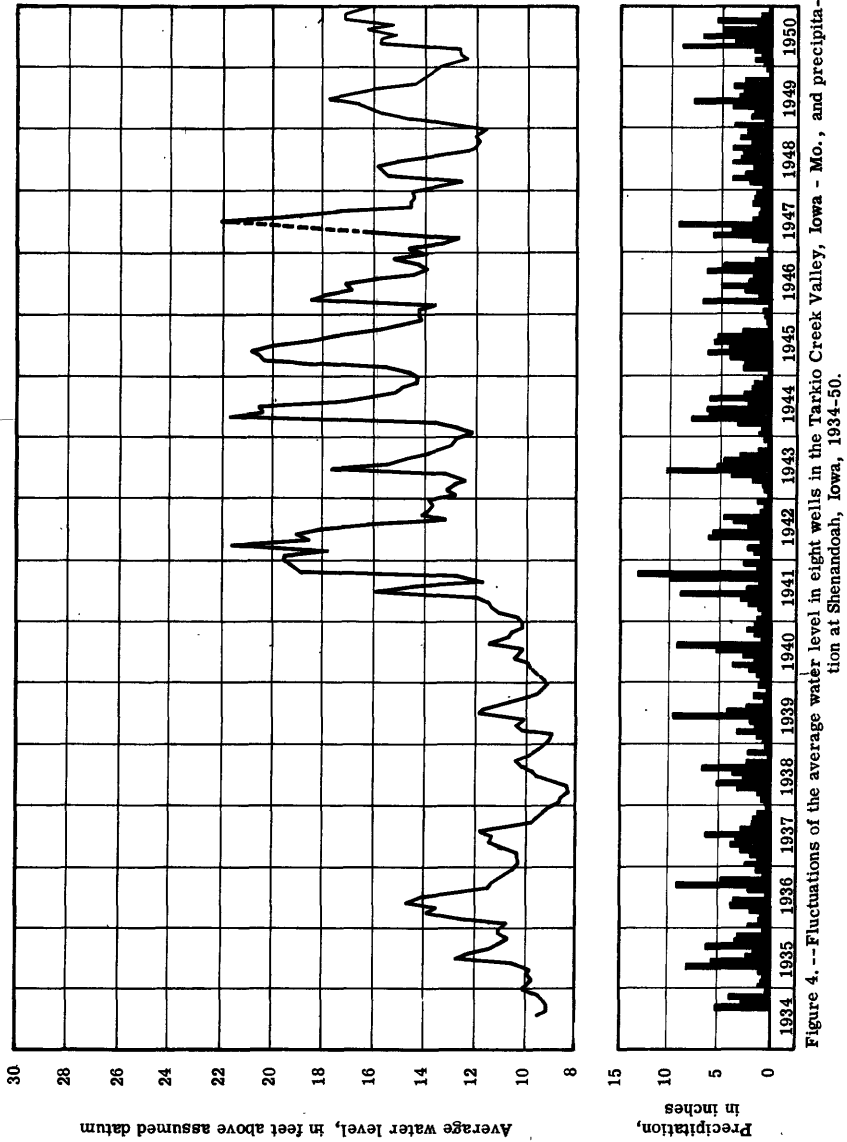
County	No. of wells	Average net change in water levels (ft.)	Precipitation (inches)	
			Annual	Departure from normal
Adair	4	-0.48	30.48	-1.01
Buena Vista	1	-.69	22.71	-5.80
Calhoun	3	-1.10	28.13	-3.61
Cerro Gordo	8	+.72	30.74	+.24
Clay-Palo Alto	2	+.44		
Jasper	2	-1.27	25.45	-7.95
Jefferson	2	+1.68		
Linn	5	+1.87	33.21	+2.37
Madison	1	-.74	27.18	-3.91
Marion	3	-3.55	24.44	-8.38
Montgomery-Page	20	+2.10	36.28	+3.83
Muscatine	2	-1.22	31.72	-1.97
Polk	2	-.75	21.63	-9.34
Sac	2	+.97		
Story	2	+.65	25.96	-4.79
Warren	1	-4.13	26.11	-5.78
Webster	8	+2.42	29.77	-1.36

Shallow observation wells were established in 1934 in the Tarkio Creek area, which covers parts of Montgomery and Page Counties in Iowa, and Atchison County in Missouri. Measurements have been made at least once a month for almost the entire period of record. Records of wells in the Missouri part of the area are given in the section of this report that deals with that State. The general upward trend of the water levels is indicated by the average of the readings in eight wells (Nos. 1, 5, 6, 7, 10, 12, 15, and 17).

Average water levels, in feet above assumed datum planes, in eight observation wells in the Tarkio Creek area, Iowa-Mo., 1950

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan.	13.16	Apr.	12.48	July	15.09	Oct.	17.10
Feb.	12.23	May	15.70	Aug.	16.22	Nov.	17.02
Mar.	12.43	June	15.63	Sept.	15.15	Dec.	16.25





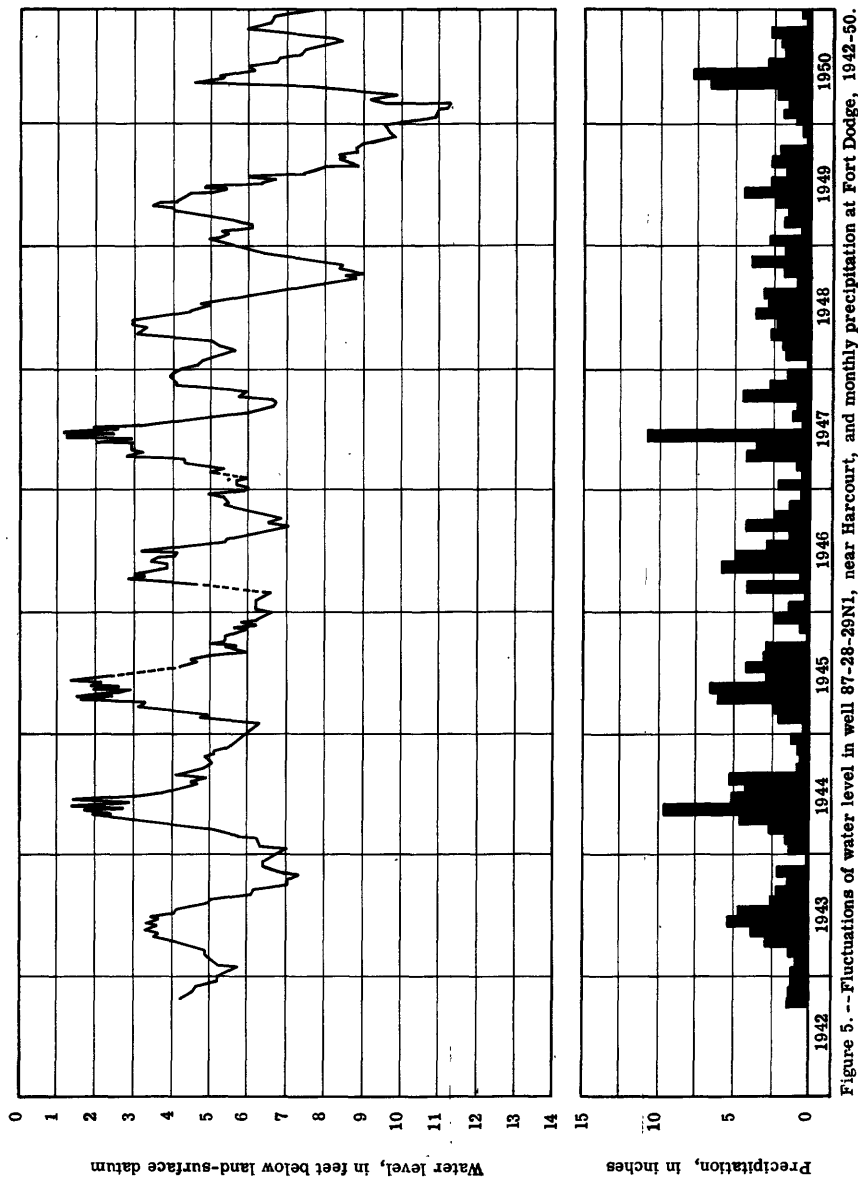


Figure 5. --Fluctuations of water level in well 87-28-29N1, near Harcourt, and monthly precipitation at Fort Dodge, 1942-50.

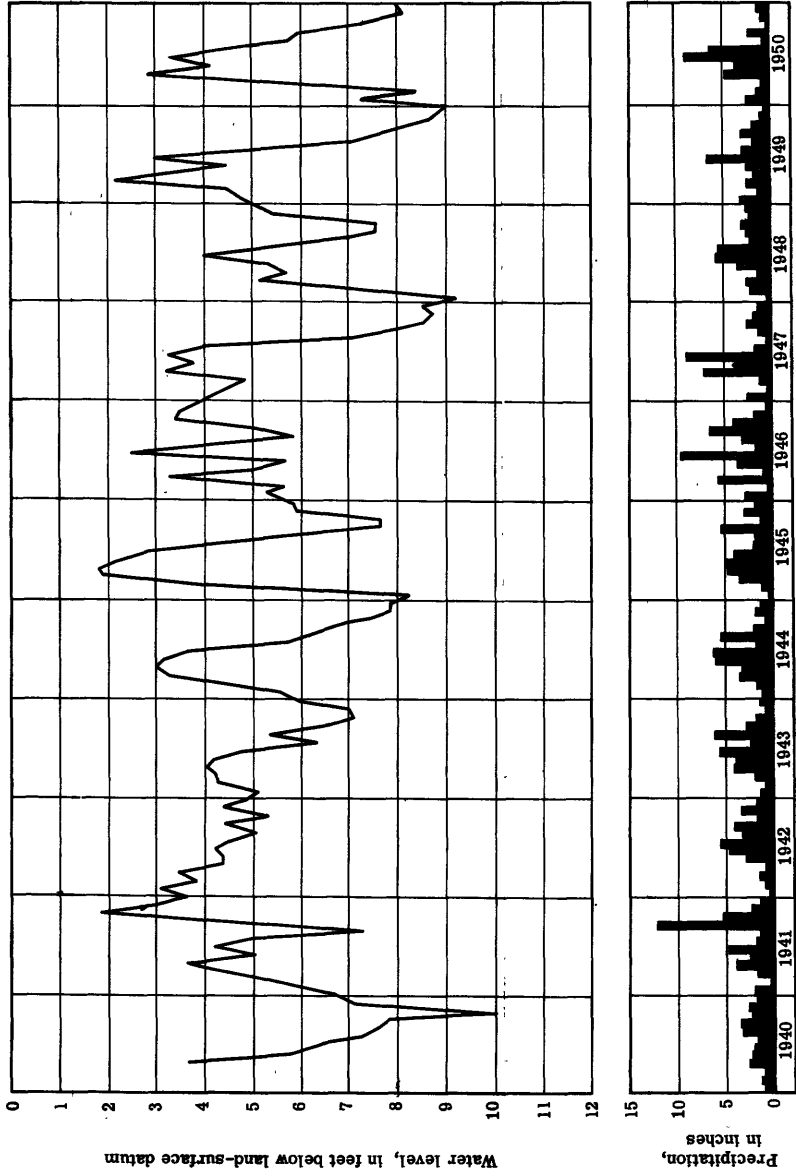


Figure 6. --- Fluctuations of water level in well 84-6-20N1, near Marion, and monthly precipitation at Cedar Rapids, from April 1940 to December 1950.

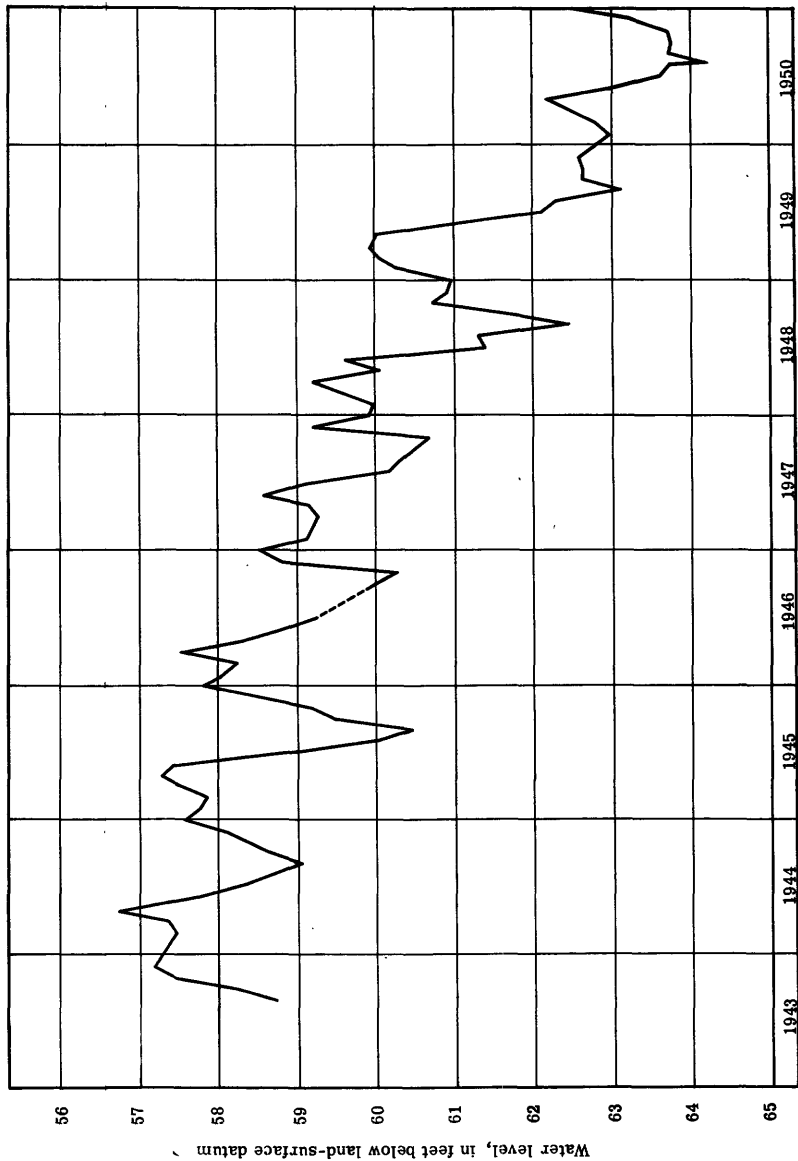


Figure 7. --Fluctuations of water level in well 83-7-21K1 caused by pumping in vicinity of Cedar Rapids, August 1943 to December 1950.



The fluctuation of the average water level as indicated by these wells and the precipitation at Shenandoah since 1934 are shown by months in figure 4. The fluctuation of the water level in well 87-28-29N1 representative of shallow observation wells and domestic farm wells which tap the same water-bearing beds in glacial drift is shown in figure 5. The monthly precipitation at Fort Dodge, shown also on the graph, correlates closely with fluctuations of water level. Figure 6 shows the depth to the water table in well 84-6-20N1. Close correlation between precipitation and the water-level fluctuations in this well is evident. Well 83-7-21K1 (fig. 7) is illustrative of artesian rock wells affected by seasonal withdrawals for industrial and air-conditioning purposes. This is an unused well completed at a depth of 156 feet in the upper part of dolomite of Silurian age which is locally about 400 feet thick. Most wells in Cedar Rapids develop water supplies for air-conditioning and industrial use from these strata. On December 31, 1950, the water level was 62.58 feet, which is 5.36 feet below its stage of December 31, 1943.

#### Well-Numbering System

The numbers assigned to observation wells in Iowa, other than those in the Tarkio Creek area, show the location of the wells according to the rectangular system for subdivision of public land. Each well number is made up of three segments, separated by hyphens. The first and second segments indicate the township and range. The third segment includes the section, followed by a letter representing the 40-acre subdivision of the section, as shown by the following diagram, and the serial number of the particular well. The letter E is added to the second segment representing the range when a well is east of the fifth principal meridian. For other wells, it is understood that the range indicated is west of the meridian. For example, the number 76-31-25P1 indicates a well in T. 76 N., R. 31 W., in the SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 25, serial number 1.

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 in feet below land-surface datum unless otherwise indicated.)

##### Adair County

77-33-5C1. U. S. Geol. Survey. On land owned by L. C. Krouse. Records available: 1949-50. Measurement discontinued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	2.96	Mar. 19	2.46	May 28	2.84	Aug. 14	3.82
8	3.20	26	3.31	June 4	2.56	Sept. 4	4.18
14	4.19	Apr. 2	2.59	11	3.15	11	4.35
22	2.43	9	3.46	19	2.36	17	4.46
28	3.54	16	3.59	July 2	3.13	25	4.62
Feb. 5	4.26	24	3.42	10	3.41	Oct. 23	4.04
20	2.74	May 7	2.42	17	3.55	30	4.12
26	3.05	14	2.88	24	2.62	Dec. 10	4.22
Mar. 5	2.67	22	2.43	30	3.81	18	4.12

77-33-5E1. U. S. Geol. Survey. On land owned by L. C. Krouse. Drilled well, diameter 1 $\frac{1}{4}$  inches, depth 38 feet. Records available: 1950. Measurement discontinued.

June 4	2.25	July 17	3.21	Sept. 4	3.93	Oct. 23	3.56
11	2.90	24	4.49	11	3.99	30	3.69
19	1.39	30	3.52	17	4.12	Dec. 10	3.87
July 2	2.92	Aug. 14	3.38	25	4.20	18	3.86
10	3.22						

77-33-8E1. U. S. Geol. Survey. On land owned by Carl Warner. Records available: 1949-50. Measurement discontinued.

Jan. 1	4.08	Mar. 19	2.97	May 28	2.34	Aug. 14	2.45
8	4.10	26	2.41	June 4	2.25	Sept. 4	2.79
14	4.67	Apr. 2	2.82	11	2.51	11	2.91
22	4.23	9	3.29	19	.31	17	3.00
28	4.13	16	3.05	July 2	1.07	25	3.21
Feb. 5	3.65	24	2.74	10	2.55	Oct. 23	3.19
20	3.40	May 7	3.02	17	2.77	30	3.39
26	3.58	14	1.96	24	2.06	Dec. 10	3.52
Mar. 5	3.18	22	3.41	30	2.35	18	3.50

## 12 WATER LEVELS AND ARTESIAN PRESSURES, 1950, NORTH-CENTRAL STATES

76-31-25P1. Mutual Benefit Life Insurance Co. Records available: 1942-50. Mar. 24, 4.44. Measurement discontinued.

76-31-29F1. Mutual Benefit Life Insurance Co. Records available: 1942-50. Mar. 24, 14.07; June 20, 12.15; Oct. 5, 15.05; Dec. 21, 16.55.

75-31-15B1. John E. Soderberg. Records available: 1940-50. Mar. 24, 5.56; June 20, 4.42; Oct. 5, 5.88. Measurement discontinued.

75-30-17E1. F. E. Robert. Records available: 1942-50. Mar. 24, 0.00; June 20, 0.06; Oct. 5, 0.66; Dec. 21, 2.19.

### Benton County

85-10-16M3. City of Vinton well 3. Records available: 1939-42. Measurement discontinued.

### Buena Vista County

90-37-3E1. Emil Schmitz. Records available: 1940-48. Measurement discontinued.

90-37-23D1. Biggens Bros. Records available: 1940-47. Measurement discontinued.

90-37-34B1. Ed Zinn. Records available: 1940-50. Mar. 21, 10.36; June 20, 8.77; Sept. 19, 12.52; Dec. 19, 12.12.

### Calhoun County

89-32-28N1. Frank Laird. Records available: 1940-50. Mar. 28, 4.41; June 21, 4.28; Sept. 20, 6.02; Dec. 20, 6.22.

89-32-33F1. Iowa State Conservation Commission. Records available: 1948-50. Mar. 28, 15.85; June 21, 20.35; Sept. 20, 18.26; Dec. 20, 17.67.

89-32-33N1. Ben Burns. Records available: 1940-49. No measurement made in 1950.

88-33-1E1. Ben Burns. Records available: 1940-50. Mar. 28, 11.84; June 21, 13.72.

88-33-1D1. Bernard Kutz. Records available: 1940-50. Mar. 28, 12.95; June 21, 10.20; Sept. 20, 13.40; Dec. 20, 14.05.

### Carroll County

85-35-7N1. City of Breda. Records available: 1942-50. Mar. 20, 193.06; June 20, 219.38, pumping at time of measurement.

85-35-18D1. City of Breda. Records available: 1940-50. Mar. 20, 204.75; June 20, 194.18; Sept. 19, 195.17; Dec. 19, 192.00.

84-34-25F1. City of Carroll test hole 1. Records available: 1939-49. No measurement made in 1950.

### Cedar County

80-2-6D1. City of Tipton. Affected by pumping of nearby wells. Highest water level 55.2, Aug. 14; lowest 117.5, Nov. 8. Records available: 1949-50.

Daily high and low water levels, from recorder graph

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	57.90	90.60	58.15	92.50	57.75	91.80	57.65	93.60	57.50	93.05	56.40	91.10
2	56.80	93.10	57.05	93.60	57.60	93.65	58.30	91.40	59.30	92.55	56.45	92.30
3	57.40	90.00	57.15	87.95	57.80	89.15	57.00	92.35	58.30	91.75	56.60	90.80
4	56.80	93.80	56.50	92.90	56.85	93.00	57.20	92.85	57.90	.....	56.50	91.50
5	58.50	93.80	57.00	93.40	57.35	93.65	57.80	93.35	58.55	92.20	56.35	92.00
6	57.80	92.80	57.65	93.55	56.30	92.50	58.10	93.30	59.30	94.60	56.30	91.80
7	57.70	91.70	57.80	93.80	55.55	93.40	57.40	89.00	58.55	92.80	56.15	92.30
8	56.80	93.30	58.20	92.60	58.80	93.95	56.70	92.90	56.45	89.60	56.55	92.25
9	57.80	91.80	57.20	93.25	58.40	92.50	57.45	91.90	56.95	.....	56.70	92.00
10	56.80	93.50	57.40	93.45	57.30	93.20	57.25	91.30	57.40	93.90	56.70	92.55
11	57.70	91.60	57.55	93.00	56.30	94.35	56.15	92.90	61.95	94.50	56.60	92.40
12	56.70	93.10	57.50	92.10	58.30	90.80	57.70	93.60	58.00	92.80	57.30	92.90
13	57.30	93.10	56.80	93.30	56.60	92.05	58.55	93.40	58.05	91.70	57.40	92.45

80-2-6D1--Continued.

Daily high and low water levels, from recorder graph

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
14	57.80	92.75	57.25	93.20	56.95	94.15	58.20	93.35	56.80	98.50	57.05	91.60
15	57.20	93.30	57.50	91.90	58.00	94.20	58.20	93.15	56.25	93.10	56.30	91.65
16	57.80	93.05	56.90	93.70	57.70	93.25	56.50	93.05	57.60	90.90	56.50	91.55
17	57.10	92.50	58.20	93.20	57.60	92.45	58.00	92.80	56.25	92.85	56.00	92.30
18	57.10	92.10	57.60	93.60	57.50	93.40	57.65	92.10	57.30	91.85	58.05	93.50
19	57.45	93.40	57.40	92.25	57.80	91.80	57.50	92.75	56.40	92.10	57.40	92.10
20	.....	93.00	57.70	93.10	57.95	93.25	57.65	93.25	56.55	92.50	56.75	92.10
21	57.20	87.20	57.15	93.25	56.70	84.30	56.10	93.30	56.15	91.30	56.30	91.80
22	56.30	92.40	57.50	89.10	56.10	93.10	56.55	88.70	56.30	92.00	56.45	92.00
23	57.00	93.05	56.60	93.55	56.40	93.80	57.50	92.45	56.40	91.40	56.30	91.80
24	57.10	91.75	58.25	93.50	58.75	92.40	56.50	92.10	56.15	92.80	56.30	91.95
25	57.10	91.80	58.10	90.70	57.70	92.90	57.60	90.85	57.25	91.50	56.30	91.55
26	57.30	93.45	57.30	94.10	56.95	92.75	57.05	92.90	56.55	92.60	56.20	92.10
27	57.75	93.10	59.05	93.35	57.25	92.40	57.70	93.10	.....	92.15	57.00	92.40
28	57.25	92.45	57.30	92.90	57.40	90.10	57.85	92.50	56.50	90.60	56.70	91.90
29	57.15	93.60			56.80	93.30	57.20	92.90	55.75	92.15	56.60	92.20
30	58.45	89.15			58.10	94.10	57.30	92.45	56.45	91.80	56.70	92.25
31	57.05	93.50			59.20	92.75						

Daily high and low water levels, from recorder graph

Day	July		August		September		October		November	
	High	Low	High	Low	High	Low	High	Low	High	Low
1	56.00	90.10	56.80	93.35	59.60	93.70	57.45	116.30	57.55	116.15
2	56.50	92.30	58.45	92.80	58.15	117.40	57.50	115.60	57.90	116.20
3	56.75	91.50	56.90	92.00	57.50	117.10	57.40	116.05	58.05	116.05
4	56.40	92.35	56.30	90.30	58.00	116.90	57.25	115.80	58.10	115.85
5	56.70	91.30	56.50	.....	58.20	116.00	57.20	115.70	58.00	114.60
6	56.00	90.60	56.90	92.50	57.30	115.00	56.80	115.75	58.05	114.50
7	56.25	92.50	57.20	93.10	57.50	115.60	57.05	115.35	57.95	116.60
8	56.65	92.25	58.45	92.30	57.60	116.00	56.95	115.00	.....	117.50
9	56.50	91.60	57.30	91.00	57.30	114.10	56.90	115.70	.....	.....
10	56.30	92.10	56.80	91.60	56.80	115.60	57.20	115.10	.....	.....
11	56.50	91.90	57.20	91.80	57.70	116.00	57.10	114.05	.....	.....
12	56.30	91.80	58.10	92.60	57.50	115.60	57.00	115.85	.....	.....
13	56.40	91.80	56.80	92.05	57.05	116.10	57.35	115.05	.....	.....
14	56.60	92.55	55.20	92.00	57.30	115.30	57.00	114.60	.....	.....
15	56.60	92.05	56.80	92.30	56.80	115.85	57.30	116.10	.....	.....
16	56.60	92.65	57.00	92.30	57.00	115.60	57.60	114.50	.....	.....
17	57.45	91.60	57.10	92.30	56.75	115.20	57.40	116.00	.....	.....
18	56.80	92.40	57.25	93.30	57.00	116.00	57.45	115.80	.....	.....
19	56.60	91.95	57.80	93.40	57.30	116.15	57.70	116.45	.....	.....
20	56.80	92.30	58.40	92.80	57.30	115.90	57.95	116.05	.....	.....
21	56.80	92.45	56.05	92.30	57.10	115.40	57.55	115.90	.....	.....
22	56.75	92.00	56.30	89.75	57.25	116.00	57.60	116.70	.....	.....
23	56.45	90.80	57.00	93.10	57.10	115.80	58.75	115.05	.....	.....
24	56.00	92.50	58.20	92.80	57.35	115.20	57.65	116.35	.....	.....
25	56.95	92.35	57.70	92.60	56.55	114.00	58.00	116.35	.....	.....
26	56.65	91.70	57.70	92.60	56.70	116.30	58.00	115.30	.....	.....
27	56.30	92.10	57.50	92.50	57.20	115.65	56.95	113.15	.....	.....
28	56.15	90.55	57.40	92.70	56.95	116.05	57.00	116.15	.....	.....
29	56.00	90.40	57.40	92.55	56.35	114.15	57.90	116.50	.....	.....
30	55.50	92.35	56.90	89.90	57.70	115.80	57.70	115.70	.....	.....
31	57.10	92.45	56.75	.....			57.80	115.90		

## Cerro Gordo County

97-21-9E1. E. H. Phillips. Records available: 1941-50. Mar. 30, 95.47; July 6, 97.29; Sept. 28, 97.70.

97-20-24H1. Mrs. Vinnie Shanks. Records available: 1941-50. Mar. 30, 14.44; July 6, 10.77; Sept. 28, 25.28; Dec. 29, 10.97.

97-20-28L1. American Crystal Sugar Co. Records available: 1943-50. Mar. 30, 186.20; July 6, 185.10.

97-19-30R1. E. Stebens. Records available: 1941-50. Mar. 30, 11.45; July 6, 10.45; Sept. 28, 11.13; Dec. 29, 12.29.

## 14 WATER LEVELS AND ARTESIAN PRESSURES, 1950, NORTH-CENTRAL STATES

96-22-7Q1. W. S. Overgaard. Records available: 1941-49. Measurement discontinued.

96-22-14C1. Fred Stephens. Records available: 1940-49. Measurement discontinued.

96-22-20C1. The Willow Inn. Records available: 1940-50. Mar. 29, 5.51; July 6, 5.04; Sept. 27, 5.92; Dec. 28, 6.36.

96-22-20L1. Boy Scouts of America. Records available: 1940-50. Mar. 29, 37.49; July 6, 40.68; Sept. 27, 37.35; Dec. 28, 37.79.

96-22-23Q1. H. R. Anderson. Records available: 1940-49. Measurement discontinued.

96-22-25D2. U. S. Geol. Survey. Records available: 1940-50. July 6, 6.40; Sept. 27, 7.25; Dec. 28, 7.61.

96-21-13E1. Mason City & Clear Lake Railway. Records available: 1940-50. Mar. 30, 6.56; July 6, 5.88; Sept. 27, 6.28; Dec. 29, 6.59.

96-21-17C1. Clear Lake Sand & Gravel Co. Records available: 1940-50. Mar. 30, 17.66; July 6, 17.73; Sept. 27, 17.75; Dec. 29, 18.70.

96-21-17M1. Sam Kennedy. Records available: 1940-50. Mar. 30, 2.73; July 6, 2.77; Sept. 27, 2.78; Dec. 29, 2.89.

96-21-18H1. Sam Kennedy. Records available: 1940-50. Mar. 30, 11.56; July 6, 10.81.

96-20-3P1. Minneapolis & St. Louis Railroad Co. Weekly recording gage installed Nov. 21, 1950. Records available: 1941-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 6	h46.03	Nov. 25	47.39	Dec. 1	47.42	Dec. 27	48.56
Sept. 28	h46.92	26	47.25	22	48.67	28	48.49
Nov. 21	47.65	27	47.33	23	48.57	29	h48.76
22	47.60	28	47.46	24	48.73	30	48.71
23	47.86	29	47.38	25	48.42	31	48.55
24	47.38	30	47.50	26	48.72		

h Tape measurement.

96-20-3L2. City of Mason City Well 8. First measured and reported in 1941; abandoned as observation well in 1947. Measurement resumed. Records available: 1941-46, 1950. Sept. 28, 223.50; Nov. 21, 226.10; Dec. 29, 227.90.

96-20-9J1. Glen Swartz. In Mason City. Drilled unused well in limestone of Devonian age. Diameter 10 inches, depth 195 feet. Records available: 1950. Dec. 1, 10.05; Dec. 11, 10.95; Dec. 19, 11.10; Dec. 26, 10.90; Dec. 29, 9.75.

96-20-16J1. City of Mason City well 11. Records available: 1939-43, 1947-50. July 6, 217.67.

95-22-3B1. Knut Olson. Records available: 1941-50. Mar. 29, 20.10; July 6, 18.14; Sept. 27, 17.64; Dec. 28, 17.75.

95-22-5M1. School district. Records available: 1941-49. Measurement discontinued.

95-21-27Q1. Dave Blankenship. Records available: 1941-50. Mar. 30, 26.00; July 5, 20.08; Sept. 27, 22.08; Dec. 28, 24.72.

94-22-24J1. First National Bank, Thornton. Records available: 1941-50. Mar. 30, 11.76; July 5, 10.47; Sept. 27, 11.33; Dec. 28, 11.90.

94-22-24J2. Town of Thornton. Records available: 1941-47. No measurement made in 1950.

94-22-24J3. Mel Bowen. Records available: 1941-49. Measurement discontinued.

### Clay County

96-35-3R1. Allis Wilson. Records available: 1940-50. June 21, 2.94; Sept. 20, 5.46; Dec. 20, 5.04.

Clinton County

81-6E-22H1. E. I. du Pont de Nemours & Co. well 2. Records available: 1940-48. No measurement made in 1950.

81-7E-6K1. W. Atlee Burpee Co. Records available: 1940-45, 1947, 1949-50. Mar. 13, 104.01.

81-7E-7B1. Clinton Water Works Co. well 5. Records available: 1945-49. No measurement made in 1950.

Delaware County

89-5-29J1. City of Manchester well 2. Highest water level 22.65, July 7; lowest 45.42, Dec. 22. Records available: 1949-50.

Daily high and low water levels, from recorder graph

Day	January		February		March		April		May	
	High	Low	High	Low	High	Low	High	Low	High	Low
1	23.20	.....	24.26	43.45	24.95	42.30	24.40	43.55	25.99	43.63
2	23.40	.....	24.50	43.55	23.80	43.20	24.47	43.07	24.94	37.36
3	23.05	.....	24.42	43.50	24.00	41.63	24.53	41.70	25.14	43.49
4	24.05	32.35	24.58	41.60	23.80	41.60	24.66	42.47	24.81	41.54
5	23.75	.....	24.65	42.58	23.60	41.50	24.92	.....	24.12	.....
6	23.90	33.20	24.30	42.90	23.20	41.75	24.67	.....	26.72	43.32
7	23.55	41.10	24.15	42.80	24.18	42.00	24.56	43.73	25.11	43.40
8	23.50	42.50	24.66	43.10	25.45	.....	24.93	44.10	24.70	43.93
9	23.40	40.05	25.23	42.70	24.10	.....	24.92	43.35	25.09	44.21
10	23.90	42.95	24.59	42.68	24.47	.....	24.51	.....	.....	44.80
11	23.78	42.43	24.20	42.60	24.49	.....	25.24	.....	25.94	.....
12	23.80	43.10	24.40	42.90	24.50	32.72	24.13	.....	25.41	44.66
13	24.00	41.10	24.16	42.76	23.90	32.95	24.78	.....	25.76	44.65
14	23.78	41.25	24.01	43.00	24.72	.....	25.26	.....	25.73	44.15
15	23.45	42.40	24.34	41.70	24.10	.....	25.05	.....	25.03	44.72
16	23.65	42.50	24.45	42.50	24.13	.....	24.97	.....	25.70	43.80
17	23.54	35.85	24.70	42.60	24.33	.....	24.56	43.81	25.79	43.81
18	23.70	41.85	24.76	42.80	24.47	.....	24.69	43.56	25.80	43.86
19	23.52	40.50	24.80	42.92	24.30	33.00	24.69	44.15	25.69	43.81
20	23.72	43.20	24.38	38.70	24.00	.....	24.90	44.10	25.99	43.93
21	24.20	41.70	25.03	42.90	24.50	.....	25.03	.....	25.15	43.72
22	23.90	42.40	24.43	43.30	24.87	.....	24.67	33.17	24.87	43.80
23	24.00	42.30	24.57	43.15	25.50	.....	24.13	.....	24.79	43.88
24	23.40	42.62	24.53	42.52	25.05	.....	24.33	33.27	24.88	43.61
25	24.00	42.70	25.00	42.55	24.55	.....	24.09	41.96	26.57	44.07
26	23.80	40.85	25.17	43.29	25.10	.....	24.98	.....	25.16	44.06
27	24.20	43.40	24.70	40.30	24.45	.....	25.27	38.62	25.05	44.00
28	24.70	43.35	25.18	43.10	24.30	.....	24.38	44.01	25.04	43.50
29	24.36	43.00	.....	.....	25.07	43.75	25.00	43.95	24.37	43.79
30	24.43	43.30	.....	.....	24.93	42.20	24.49	43.24	24.76	43.31
31	24.35	43.05	.....	.....	25.07	43.10	.....	.....	24.63	43.05

Daily high and low water levels, from recorder graph

Day	June		July		August		September		December	
	High	Low	High	Low	High	Low	High	Low	High	Low
1	24.52	43.51	23.12	42.90	.....	44.40	24.12	.....	.....	.....
2	24.46	43.61	24.48	42.92	25.42	44.57	24.20	.....	.....	.....
3	24.53	43.98	23.40	42.77	24.64	43.27	24.63	.....	.....	.....
4	24.75	43.06	23.94	42.36	23.73	43.12	25.22	.....	.....	.....
5	23.99	43.53	23.37	42.32	23.80	43.40	24.51	.....	.....	.....
6	24.33	43.82	23.17	42.14	25.53	43.41	25.91	.....	.....	.....
7	24.82	44.34	22.65	43.31	24.18	43.37	24.48	.....	.....	.....
8	25.91	43.78	26.95	43.40	24.27	43.15	25.54	.....	.....	.....
9	25.35	43.97	24.02	42.72	24.88	43.72	24.68	.....	.....	.....
10	25.74	43.99	23.44	42.96	24.91	43.32	25.25	.....	.....	.....
11	25.09	43.36	23.88	43.22	24.73	43.62	24.15	.....	.....	.....
12	24.36	43.27	24.59	42.84	24.66	43.86	24.63	.....	.....	.....
13	24.50	43.52	23.65	42.69	24.38	43.62	24.25	.....	25.70	.....
14	24.24	43.75	23.72	42.84	23.66	43.69	24.44	.....	25.40	44.06
15	25.26	43.16	23.90	42.76	24.47	43.70	24.44	.....	25.17	42.75
16	24.23	44.35	23.25	42.42	24.42	43.68	24.59	.....	25.52	43.21
17	25.18	43.54	23.37	.....	24.67	43.57	24.40	.....	24.89	.....
18	24.62	43.05	.....	.....	24.50	.....	24.63	.....	24.87	.....

89-5-29J1--Continued.

Daily high and low water levels, from recorder graph										
Day	June		July		August		September		December	
	High	Low	High	Low	High	Low	High	Low	High	Low
19	24.09	42.52	23.48	42.32	24.57	43.72	24.28	.....	25.35	.....
20	23.78	42.31	23.28	42.32	24.57	42.95	25.62	.....	25.68	.....
21	23.51	42.37	23.29	42.52	23.85	42.60	24.32	.....	26.88	44.35
22	23.80	42.33	23.18	42.62	23.56	42.72	25.02	.....	26.07	45.42
23	23.24	42.77	23.29	42.22	25.11	43.64	24.84	.....	26.24	45.02
24	24.08	42.49	23.04	42.42	24.97	43.82	24.89	.....	25.97	.....
25	23.95	42.46	23.32	42.44	26.04	43.89	26.47	.....	25.69	43.83
26	23.48	42.26	23.37	42.72	24.74	43.32	25.22	.....	25.49	44.96
27	25.14	42.42	23.91	42.94	24.39	43.17	24.52	.....	25.96	44.16
28	23.97	42.41	25.09	43.40	24.55	42.72	.....	.....	25.76	44.20
29	23.55	42.47	25.43	.....	24.61	42.69	.....	.....	25.81	44.24
30	23.50	42.32	.....	43.12	24.40	.....	.....	.....	27.00	44.68
31	.....	.....	23.34	.....	23.78	.....	.....	.....	26.30	.....

## Des Moines County

69-3-6A1. Iowa Ordinance Plant well 3. Drilled unused well, in St. Peter sandstone of Ordovician age. Diameter 16 inches, depth 1,205 feet. Land-surface datum is 717 feet above sea-level datum. Recording gage installed on well Mar. 23, 1950. Records available: 1950.

Daily noon water level, from recorder graph										
Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	163.76	.....	164.69	164.90	165.46	165.77	166.18	165.87	165.56
2	.....	163.46	.....	164.49	164.89	165.59	165.83	166.18	166.20	165.43
3	.....	163.65	.....	164.65	164.84	165.62	165.88	166.40	166.32	165.75
4	.....	163.93	h164.08	164.69	164.94	165.60	166.09	166.35	.....	165.76
5	.....	164.23	.....	164.54	165.00	165.69	166.19	166.18	.....	165.92
6	.....	164.28	.....	164.60	165.08	165.74	166.15	h165.97	.....	165.80
7	.....	163.92	.....	164.67	165.12	165.71	166.07	166.10	.....	165.53
8	.....	164.13	.....	164.64	165.14	165.68	166.01	.....	.....	165.78
9	.....	163.96	.....	164.63	165.13	165.74	165.92	166.21	.....	165.73
10	.....	163.62	.....	164.71	165.20	165.75	165.85	166.10	166.38	165.92
11	.....	164.15	164.58	164.85	165.18	165.86	165.93	166.01	166.31	165.59
12	.....	164.26	164.44	164.76	165.10	165.89	166.01	166.25	166.28	165.67
13	.....	164.37	164.38	164.58	165.31	165.91	166.07	166.19	166.29	165.73
14	.....	164.37	164.17	164.68	165.37	165.78	166.06	166.11	165.99	165.72
15	.....	164.40	164.39	164.68	165.25	165.79	166.01	166.27	.....	165.92
16	.....	.....	164.47	164.69	165.26	165.83	166.04	166.21	.....	165.96
17	.....	.....	164.47	164.93	165.24	165.78	166.21	166.32	166.20	166.09
18	.....	.....	164.45	164.64	165.35	165.78	166.11	166.22	165.78	166.09
19	.....	164.22	164.37	164.67	165.11	165.75	166.12	166.20	165.60	165.86
20	.....	164.22	163.46	164.61	165.38	165.88	166.06	166.29	166.17	166.12
21	.....	.....	164.33	164.71	165.36	165.75	165.90	166.13	165.93	165.95
22	.....	.....	164.39	164.56	165.32	165.74	.....	166.11	165.83	165.94
23	h163.23	.....	164.34	.....	165.27	165.82	.....	166.33	166.09	165.72
24	163.34	163.79	164.32	h164.49	165.40	165.85	.....	166.23	166.17	165.90
25	163.49	163.81	164.42	164.60	165.50	.....	.....	166.36	h165.97	165.62
26	162.99	164.04	164.63	164.77	165.47	.....	.....	166.14	.....	166.05
27	162.70	164.23	164.59	164.90	165.47	.....	.....	165.99	166.03	166.01
28	163.13	.....	164.50	164.86	165.44	.....	.....	166.07	166.04	165.65
29	163.81	.....	164.45	164.90	165.39	.....	166.19	166.25	.....	165.74
30	163.94	.....	164.39	164.93	165.30	165.75	166.16	166.10	.....	165.72
31	163.58	.....	164.61	.....	165.32	165.76	.....	166.00	.....	165.64

h Tape measurement.

69-3-6R1. Iowa Ordinance Plant well 2. Drilled well, diameter 19 inches, depth 675 feet. Land-surface datum is 699 feet above sea-level datum. Well originally drilled to 795 feet. Probably taps water in limestone of Devonian age from 660 to 735 feet and limestone of Mississippian age from 7 to 240 feet. Recording gage installed Mar. 23, 1950. Records available: 1950.

Daily noon water level, from recorder graph										
Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	82.83	82.97	82.78	82.66	82.45	82.26	.....	82.11	82.25
2	.....	82.66	82.82	82.66	82.58	82.56	82.30	82.36	82.31	81.95
3	.....	82.65	82.68	82.70	82.57	82.62	82.36	.....	82.43	82.13
4	.....	82.77	82.63	82.79	82.60	82.60	82.48	.....	.....	82.20

69-3-6R1--Continued.

Daily noon water level, from recorder graph

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	.....	83.04	82.39	82.72	82.66	82.63	82.59	.....	.....	82.30
6	.....	83.19	82.69	82.71	82.71	82.68	82.60	h82.26	.....	82.33
7	.....	82.95	82.96	82.78	82.74	82.64	82.50	82.21	.....	82.10
8	.....	82.99	83.03	82.76	82.75	82.57	82.40	82.24	h82.12	82.13
9	.....	82.92	82.71	82.73	82.71	82.57	82.30	82.33	.....	82.18
10	.....	82.63	82.89	82.75	82.71	82.55	82.19	82.27	82.39	82.31
11	.....	82.85	82.99	82.88	82.69	82.57	82.21	82.18	82.43	82.16
12	.....	83.02	82.90	82.81	82.61	82.61	82.29	82.34	82.38	82.12
13	.....	83.09	82.75	82.84	82.67	82.59	82.36	82.38	82.42	82.17
14	.....	83.12	82.67	82.67	82.71	82.51	82.42	82.27	82.29	82.18
15	.....	83.13	82.66	82.63	82.62	82.46	82.36	82.39	82.09	82.27
16	.....	83.01	82.75	82.57	82.55	82.46	82.36	82.41	82.19	82.38
17	.....	82.84	82.77	82.75	82.51	82.44	82.48	82.48	82.38	82.47
18	.....	82.75	82.76	82.60	82.59	82.46	82.45	82.46	82.12	82.51
19	.....	82.86	82.71	82.52	82.43	82.41	82.40	82.37	81.86	82.35
20	.....	82.88	82.75	82.51	82.55	82.53	82.34	82.43	82.18	82.48
21	.....	82.87	82.69	82.56	82.67	82.44	82.18	82.32	82.21	82.44
22	.....	82.77	82.69	82.52	82.64	82.37	.....	82.24	82.12	82.33
23	82.88	.....	82.68	.....	82.57	82.38	.....	82.37	82.17	82.23
24	82.76	.....	82.64	h82.47	82.59	82.41	.....	82.35	82.33	82.26
25	82.89	.....	82.67	82.54	82.67	82.42	.....	82.43	h82.47	82.23
26	82.49	.....	82.85	82.61	82.61	82.41	.....	82.32	82.26	82.30
27	82.17	82.86	82.88	82.75	82.58	82.35	.....	82.13	82.27	82.49
28	82.36	82.97	82.80	82.68	82.52	82.31	.....	82.20	82.41	82.24
29	82.90	82.91	82.74	82.70	82.47	82.30	82.39	82.35	82.36	82.17
30	83.13	82.89	82.59	82.64	82.37	82.27	.....	82.31	82.24	82.22
31	82.89	.....	82.69	.....	82.36	82.27	.....	82.24	.....	82.17

h Tape measurement.

Dickinson County

99-36-6G1. Charles Miller. Records available: 1940-50. Mar. 23, 4.22; June 20, 2.47; Sept. 19, 5.64; Dec. 20, 5.85.

Dubuque County

89-3E-7Q1. City of Dubuque well 2. Highest water level 41.2, Jan. 3; lowest 103.4, Apr. 1. Records available: 1947-50.

Daily high and low water levels, from recorder graph

Day	January		February		March		April		May	
	High	Low	High	Low	High	Low	High	Low	High	Low
1	54.0	88.4	47.0	90.4	51.4	95.6	58.1	103.4	51.4	89.0
2	42.0	83.1	52.9	93.1	53.1	96.2	48.3	81.0	48.5	91.0
3	41.2	80.8	54.4	95.5	52.3	95.6	52.4	94.3	51.2	92.9
4	43.7	88.6	51.7	94.8	52.0	97.4	52.7	93.6	56.8	89.4
5	47.7	93.8	56.5	85.9	54.0	86.2	54.2	96.7	45.3	89.9
6	59.5	101.1	48.0	91.5	47.4	96.0	53.5	99.4	48.7	89.6
7	56.2	59.5	52.2	93.0	57.1	96.0	55.0	96.1	50.2	92.5
8	55.0	71.5	51.4	93.1	54.5	96.4	58.7	96.7	50.2	93.1
9	56.6	86.7	52.0	94.8	52.5	96.9	47.7	83.7	52.3	91.0
10	54.3	84.5	51.9	94.6	53.0	95.4	51.8	94.6	48.6	79.0
11	52.5	81.2	.....	94.7	54.0	95.9	55.1	94.2	46.5	89.4
12	49.7	87.4	.....	.....	50.0	88.1	52.3	93.4	53.7	93.6
13	53.0	84.4	47.7	88.4	47.4	95.4	49.9	95.2	51.3	89.4
14	51.2	85.3	50.5	89.9	51.8	95.4	54.6	95.9	47.7	92.7
15	57.7	90.3	50.7	94.1	52.1	96.1	58.3	92.2	53.7	93.4
16	51.0	79.4	51.0	94.1	51.7	95.4	49.2	82.8	46.5	.....
17	52.5	88.2	45.7	96.5	50.7	96.1	52.4	91.5	51.5	93.4
18	45.8	84.6	51.5	91.4	52.3	101.2	54.5	90.6	51.0	92.9
19	48.4	92.4	57.3	86.1	48.3	79.3	51.8	90.4	51.5	93.0
20	48.9	.....	46.5	91.0	49.5	95.6	53.9	94.9	50.8	91.2
21	51.7	94.9	49.5	92.2	53.5	95.2	52.7	92.8	51.9	92.2
22	57.3	88.5	49.8	92.5	52.3	94.1	44.8	83.7	56.7	84.7
23	44.6	87.2	48.5	95.6	50.7	95.6	49.1	90.0	45.8	92.1
24	49.0	91.9	55.8	96.0	53.7	95.3	51.5	89.4	48.6	86.6
25	46.5	90.8	48.7	91.7	57.7	96.1	50.2	90.5	46.2	90.0

89-3E-7Q1--Continued.

Daily high and low water levels, from recorder graph

Day	January		February		March		April		May	
	High	Low	High	Low	High	Low	High	Low	High	Low
26	56.3	....	58.7	89.5	45.5	81.0	52.4	96.1	50.1	91.9
27	56.4	92.5	50.2	92.4	52.5	92.8	52.8	90.3	49.3	91.6
28	49.2	90.8	49.7	95.3	53.3	94.1	57.3	91.3	56.2	91.6
29	57.1	86.6			53.2	95.8	46.9	90.2	45.4	83.4
30	44.7	87.9			58.3	100.8	50.5	89.6	47.7	91.4
31	49.2	90.8			53.4	94.6			49.9	91.9

Daily high and low water levels, from recorder graph

Day	June		September		October		November	
	High	Low	High	Low	High	Low	High	Low
1	52.0	93.7	....	....	56.3	95.5	63.2	....
2	53.0	94.6	....	....	52.0	93.9	60.4	86.9
3	50.5	92.0	....	....	51.3	95.0	....	....
4	46.0	90.7	....	....	49.5	95.4	....	....
5	47.3	91.4	....	....	....	94.4	....	....
6	....	....	....	....	55.0	90.7	....	....
7	....	....	....	....	48.6	81.2	....	....
8	....	....	....	....	53.4	94.3	....	....
9	....	....	....	....	53.8	93.4	....	....
10	....	....	....	....	55.1	96.6	....	....
11	....	....	53.2	91.5	54.6	97.0	....	....
12	....	....	52.3	92.6	55.3	95.7	....	....
13	....	....	54.7	95.8	58.3	95.7	....	....
14	....	....	55.6	95.9	51.5	95.6	....	....
15	....	....	56.3	99.6	54.5	96.0	....	....
16	....	....	57.7	100.5	56.8	97.4	....	....
17	....	....	....	89.0	59.8	98.3	....	....
18	....	....	52.5	94.6	56.2	97.8	....	....
19	....	....	53.6	97.1	56.5	95.9	....	....
20	....	....	53.7	93.5	51.4	84.2	....	....
21	....	....	53.0	97.6	50.4	95.0	....	....
22	....	....	57.5	....	55.3	97.2	....	....
23	....	....	51.3	95.6	57.0	100.7	....	....
24	....	....	....	86.3	58.8	100.3	....	....
25	....	....	53.5	97.7	62.0	97.5	....	....
26	....	....	51.8	99.5	57.0	86.5	....	....
27	....	....	53.1	96.6	54.1	100.4	....	....
28	....	....	52.7	95.2	58.4	100.0	....	....
29	....	....	52.8	92.8	64.0	100.4	....	....
30	....	....	52.6	87.0	60.5	101.0	....	....
31	....	....	....	....	59.7	97.1	....	....

Emmet County

100-32-11R1. Okamanpedan State Park. Records available: 1939-50. Mar. 23, 83.49; June 21, 63.75; Sept. 20, 84.42; Dec. 20, 63.52.

99-34-14B1. City of Esterville well 3. Records available: 1939, 1943, 1945, 1947-48. Measurement discontinued.

Guthrie County

78-33-33N1. U. S. Geol. Survey. On land owned by Fred W. Fett. Water levels affected by nearby pumping wells. Records available: 1949-50. Measurement discontinued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	4.65	Mar. 19	5.20	May 28	4.33	Aug. 14	4.12
8	4.86	26	5.12	June 4	4.06	Sept. 4	4.39
14	5.16	Apr. 2	5.13	11	4.32	11	4.87
22	5.13	9	5.32	19	3.50	17	5.32
28	5.08	16	5.06	July 2	3.62	25	5.78
Feb. 5	3.09	24	4.98	10	3.78	Oct. 23	5.49
20	5.31	May 7	4.90	17	3.68	30	5.52
26	5.40	14	4.53	24	3.82	Dec. 10	7.07
Mar. 5	5.08	22	4.43	30	4.02	18	7.39



Henry County

71-6-9B1. City of Mount Pleasant well 2. Records available: 1945-50. Mar. 22, 144.20; June 19, 146.16; Oct. 3, 147.17; Dec. 20, 147.39.

71-6-9B2. City of Mount Pleasant well 4. Records available: 1946-50. Mar. 22, 139.25; June 19, 144.93; Oct. 3, 145.97; Dec. 20, 142.63. Pumping 200 gpm, June 19 and Oct. 3.

71-6-9M1. City of Mount Pleasant well 3. Records available: 1945-50. Mar. 22, 82.60; June 19, 83.74; Oct. 3, 84.73; Dec. 20, 84.80.

Ida County

89-40-35D1. City of Holstein well 3. Records available: 1939, 1945, 1948-50. Dec. 19, 320.98.

Iowa County

80-9-31L1. Amana Society. Records available: 1942-46. Measurement discontinued.

Jasper County

80-18-31C1. P. W. Beukema. Records available: 1940-50. Mar. 24, 23.20; June 22, 20.28; Oct. 6, 23.79; Dec. 22, 25.23.

80-17-17K1. Iowa State Conservation Commission core hole 8. Records available: 1947-50. Apr. 18, 72.45; May 3, 72.09; May 11, 71.98; May 31, 72.51; June 5, 72.20; Sept. 29, 72.49.

80-17-17K2. Iowa State Conservation Commission test hole 19. Drilled well, diameter 7 inches, depth 122 feet. Land-surface datum is 903 feet above sea-level datum. Hole cased to depth of 27 feet 1 inch below land surface. Taps water in Red Rock channel sandstone of Pennsylvanian age from 25 to 115 feet and in limestone of Mississippian age from 120 to 122 feet. Recording gage installed on well Oct. 25, 1950. Records available: 1950.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 31	59.07	Oct. 27	59.10	Nov. 18	58.77	Dec. 9	58.98
June 1	59.16	28	59.14	19	58.97	10	59.00
5	58.94	29	59.16	20	59.25	11	58.95
6	59.10	30	59.07	21	58.98	14	58.86
14	59.13	31	58.98	22	58.94	15	59.04
July 6	58.86	Nov. 1	59.09	23	59.18	16	59.02
14	58.82	2	59.19	24	59.13	17	59.04
20	58.99	3	59.25	25	58.99	18	59.00
28	58.91	4	59.06	26	58.88	19	58.94
Aug. 4	59.00	5	58.80	27	58.98	20	59.00
11	59.38	6	59.19	28	59.02	21	58.84
21	58.92	7	59.13	29	58.88	22	58.96
29	59.12	8	58.92	30	58.91	23	58.84
Sept. 7	59.08	9	58.79	Dec. 1	58.71	24	59.02
17	59.23	10	58.78	2	58.82	25	58.74
22	59.10	11	58.95	3	58.97	26	59.02
29	59.14	12	58.86	4	58.96	27	58.87
Oct. 6	58.89	13	58.90	5	59.09	28	58.73
12	59.29	14	58.81	6	58.90	29	58.89
20	59.16	15	58.82	7	58.73	30	58.83
25	59.12	16	59.29	8	58.98	31	58.73
26	59.00	17	59.02				

80-17-17L1. Iowa State Conservation Commission test hole 1. Drilled well in Red Rock channel sandstone of Pennsylvanian age from 34 to 75 feet and in limestone of Mississippian age from 75 to 94 feet. Diameter 7 inches, depth 94 feet. Land-surface datum is 859 feet above sea-level datum. Hole cased to depth of 41 feet 5 inches below land surface. Recording gage installed July 14, 1950. Records available: 1950. May 11, 15.66, tape measurement; May 31, 16.01, tape measurement.

Daily noon water level, from recorder graph

Day	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	h16.04	.....	15.31	15.59	15.60	15.07	14.57
2	.....	.....	.....	15.60	15.63	15.11	14.57
3	.....	.....	15.46	15.61	15.63	15.15	14.68
4	.....	.....	15.44	15.65	15.58	15.03	14.64
5	h16.02	.....	15.45	15.63	15.51	15.06	14.74

80-17-17L1--Continued.

Daily noon water level, from recorder graph

Day	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	h18.09	.....	15.46	15.63	15.45	14.97	14.70
7	.....	.....	15.47	15.63	15.47	14.98	14.60
8	.....	.....	15.49	15.64	15.50	15.09	14.69
9	.....	.....	15.49	15.64	15.46	15.00	14.66
10	.....	.....	15.50	15.60	15.63	15.00	14.72
11	.....	.....	15.53	15.54	15.66	14.91	14.58
12	.....	.....	15.50	15.52	15.70	14.99	14.64
13	.....	.....	15.49	15.56	15.68	14.92	.....
14	.....	h15.70	15.45	15.56	15.76	h14.78	h14.62
15	.....	15.69	15.50	15.57	15.82	14.76	14.75
16	.....	15.72	15.52	15.66	15.81	14.95	14.73
17	.....	15.73	15.51	15.66	15.97	14.79	14.75
18	.....	15.78	15.55	15.63	15.94	14.70	14.70
19	.....	15.71	15.58	15.62	16.06	14.78	14.67
20	h14.80	h15.83	15.57	15.59	16.47	14.94	14.70
21	.....	15.85	15.53	15.59	16.39	14.77	14.60
22	.....	15.85	15.55	15.65	16.33	14.70	14.66
23	.....	15.84	15.58	15.67	16.25	14.85	14.58
24	.....	15.87	15.58	15.68	16.20	14.84	14.70
25	.....	15.90	15.63	15.65	16.00	14.75	14.56
26	.....	15.89	15.60	15.64	15.44	14.70	14.79
27	.....	15.70	15.60	15.59	15.32	14.74	14.68
28	.....	15.40	15.57	15.65	15.27	14.76	14.53
29	.....	15.36	15.55	15.60	15.22	14.66	14.64
30	.....	15.34	15.55	15.59	15.15	14.68	14.60
31	.....	15.24	15.57	.....	15.07	.....	14.56

h Tape measurement.

80-17-17L2. State Conservation Commission test hole 2. Drilled well, Red Rock channel sandstone of Pennsylvanian age from 28 to 55 feet and in limestone of Mississippian age from 55 to 85 feet. Diameter 7 inches, depth 85 feet. Records available: 1950.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 26	7.89	June 22	6.80	Aug. 29	7.62	Oct. 28	7.32
May 3	7.83	July 6	7.36	Sept. 7	7.68	Nov. 3	7.28
11	7.53	14	7.53	17	7.75	14	6.96
31	7.89	20	7.67	22	7.68	21	6.98
June 1	7.87	28	7.37	29	7.61	Dec. 1	6.70
5	7.96	Aug. 4	7.61	Oct. 6	7.48	14	6.81
6	7.91	11	8.88	12	7.75	22	6.82
20	6.53	21	7.86	20	8.29	.....	.....

80-17-17L3. Iowa State Conservation Commission test hole 3. Drilled well, in Red Rock channel sandstone of Pennsylvanian age from 29 to 59 feet and in limestone of Mississippian age from 59 to 76 feet. Diameter 7 inches, depth 76 feet. Land-surface datum is 852 feet above sea-level datum. Hole cased to depth of 37 feet below land surface. Records available: 1950.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 26	9.05	June 22	7.78	Aug. 29	8.61	Oct. 28	8.30
May 4	8.96	July 6	8.48	Sept. 1	8.69	Nov. 3	8.21
11	8.61	14	8.67	17	9.78	14	7.85
31	9.04	20	8.85	22	8.69	21	7.86
June 1	9.05	28	8.40	29	8.63	Dec. 1	7.60
5	9.06	Aug. 4	8.52	Oct. 6	8.48	14	7.72
6	9.09	11	8.69	12	8.79	22	7.72
20	7.52	21	8.70	20	9.68	.....	.....

80-17-17L4. Iowa State Conservation Commission test hole 4. Drilled well, in Red Rock channel sandstone of Pennsylvanian age from 27 to 75 feet and in limestone of Mississippian age from 75 to 85 feet. Diameter 7 inches, depth 85 feet. Land-surface datum is 852 feet above sea-level datum. Hole cased to depth of 32 feet 5 inches below land surface. Recording gage installed Apr. 26, 1950. Records available: 1950.

Daily noon water level, from recorder graph

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	8.81	8.76	.....	.....	8.27	8.23	7.63	7.15
2	.....	8.74	8.69	.....	.....	8.30	8.28	7.68	7.18
3	.....	8.76	8.75	.....	.....	8.26	8.27	7.71	7.30
4	.....	h8.68	8.76	.....	h8.09	8.30	8.22	7.58	7.27
5	.....	8.60	8.75	.....	.....	8.33	8.18	7.46	7.38

80-17-17L4--Continued.

Daily noon water level, from recorder graph

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	....	8.85	8.81	h8.18	....	8.30	8.09	7.61	7.27
7	....	8.91	8.84	....	....	8.27	8.14	7.55	7.15
8	....	8.73	8.84	....	....	8.38	8.15	7.46	7.30
9	....	7.94	8.77	....	....	8.36	8.11	7.60	7.30
10	....	8.35	8.81	....	....	8.29	8.30	7.59	7.34
11	....	8.37	8.90	....	8.22	8.21	8.34	7.48	7.19
12	....	8.35	8.74	....	8.24	8.22	8.37	7.54	....
13	....	8.34	8.73	....	8.28	8.23	8.37	7.50	....
14	....	8.38	8.62	h8.36	8.27	8.26	8.43	....	7.25
15	....	8.48	....	....	8.20	8.24	8.46	7.34	7.34
16	....	8.51	....	....	8.22	8.31	8.44	7.55	7.32
17	....	8.54	....	....	8.23	8.30	8.56	7.41	7.32
18	....	8.55	....	....	8.24	8.30	8.60	7.28	7.29
19	....	8.59	....	....	8.25	8.26	8.89	7.39	7.20
20	....	8.60	h7.28	h8.53	8.23	8.24	9.40	7.54	7.29
21	....	8.49	....	....	8.20	8.22	9.20	7.36	7.26
22	....	8.60	....	....	8.23	8.28	9.14	7.32	7.27
23	....	8.60	....	....	8.28	8.30	9.03	7.49	7.20
24	....	8.61	....	....	8.27	8.32	9.06	7.48	7.32
25	....	8.57	....	....	8.30	8.28	8.74	7.38	7.15
26	h8.84	8.70	....	....	8.29	8.26	7.98	7.32	7.40
27	8.87	8.68	....	....	8.20	8.22	7.86	7.36	7.25
28	8.87	8.61	....	h7.98	....	8.28	7.82	7.39	7.13
29	8.78	8.63	....	....	8.19	8.23	7.79	7.25	7.24
30	8.79	8.63	....	....	8.25	8.22	7.71	7.27	7.20
31	....	8.72	....	....	8.26	....	7.63	....	7.12

h Tape measurement.

80-17-17L5. State Conservation Commission test hole 24. Drilled well in Red Rock channel sandstone of Pennsylvanian age from 17 to 65 feet and in limestone of Mississippian age from 65 to 79 feet. Diameter 7 inches, depth 79 feet. Land-surface datum is 851 feet above sea-level datum. Hole cased to depth of 30 feet below land surface. Records available: 1950.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 1	8.20	July 14	7.80	Sept. 29	8.05	Oct. 20	8.48
5	8.15	Aug. 4	8.09	Oct. 6	7.92	Nov. 3	7.78
6	8.24	Sept. 7	8.11	12	8.13	21	7.43
July 6	7.72	17	8.15				

80-17-17M1. State Conservation Commission test hole 30. Drilled well in Red Rock channel sandstone of Pennsylvanian age from 105 to 180 feet and limestone of Mississippian age from 180 to 197 feet, diameter 7 inches, depth 197 feet. Recording gage installed June 14, 1950. Records available: 1950.

Daily noon water level, from recorder graph

Day	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	122.06	122.10	122.20	122.17	122.01
2	.....	.....	122.20	122.05	122.32	122.54	122.00
3	.....	.....	122.12	122.04	122.51	122.41	122.32
4	.....	.....	122.13	121.86	122.36	122.35	122.26
5	h121.80	.....	122.18	121.84	122.09	121.87	122.66
6	.....	h122.18	122.12	121.93	121.87	122.36	122.26
7	h122.23	122.16	122.03	122.08	122.02	122.37	122.07
8	.....	122.10	122.03	122.07	122.28	122.09	122.38
9	.....	122.04	122.06	121.97	122.27	122.46	122.52
10	.....	122.09	122.10	121.87	122.13	122.61	122.27
11	.....	122.01	122.18	122.09	122.13	122.39	122.25
12	.....	121.93	122.14	122.16	122.41	122.48	122.34
13	.....	122.14	122.09	122.29	122.25	122.42	.....
14	h122.14	122.04	121.95	122.28	122.29	121.97	122.31
15	121.96	121.83	122.02	122.16	122.35	121.69	122.59
16	122.90	121.90	122.03	122.23	122.27	122.51	122.60
17	122.26	121.99	122.21	122.35	122.38	122.36	122.66
18	121.87	122.12	122.03	122.12	122.25	121.89	122.42
19	122.01	121.86	122.24	122.22	122.32	122.02	122.53
20	121.91	122.23	122.04	122.08	122.28	122.65	122.52
21	122.02	122.20	h121.94	122.01	122.08	122.32	122.22
22	121.84	122.07	121.98	122.20	122.20	122.29	h122.33
23	121.73	122.00	122.07	122.22	122.38	122.60	122.13

80-17-17M1--Continued.

Daily noon water level, from recorder graph							
Day	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
24	121.98	122.14	122.08	122.41	122.31	122.56	122.46
25	121.93	122.08	122.26	122.29	122.38	122.40	122.09
26	122.16	122.01	122.19	122.24	122.05	122.20	122.75
27	122.28	122.00	122.12	122.07	122.11	122.41	122.29
28	122.06	h121.94	122.11	122.32	122.22	122.40	122.15
29	122.13	121.87	122.12	122.18	122.33	122.14	122.36
30	122.09	121.79	122.15	122.16	122.20	122.29	122.22
31		121.91	122.12		122.08		122.10

h Tape measurement.

80-17-17M2. State Conservation Commission test hole 31. Drilled well in Red Rock channel sandstone of Pennsylvanian age, from 90 to 170 feet and in limestone of Mississippian age from 170 to 189 feet, diameter 7 inches, depth 189. Records available: 1950.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 7	108.38	Aug. 11	108.58	Sept. 29	108.57	Nov. 3	109.01
July 6	108.55	21	108.33	Oct. 6	108.15	14	108.35
14	108.43	29	108.52	12	108.81	21	108.74
20	108.58	Sept. 7	108.50	20	108.75	Dec. 1	108.32
28	108.30	17	108.74	28	108.63	22	108.70
Aug. 4	108.50	22	108.50				

80-17-20E1. State Conservation Commission test hole A-17. Records available: 1948-50. Apr. 18, 50.50; June 1, 50.43; June 14, 50.54; June 22, 50.13; Aug. 11, 50.71; Oct. 6, 50.37; Dec. 14, 50.84.

80-17-28D1. State Conservation Commission test hole A-2. Records available: 1948-50. Apr. 18, 3.70, tape measurement.

Daily noon water level, from recorder graph										
Day	Jan.	Feb.	Mar.	May	June	July	Aug.	Oct.	Nov.	Dec.
1	5.00	5.00	4.60	....	3.65	....	4.00	....	5.64	5.70
2	4.88	5.03	4.60	h3.48	3.63	....	4.10	....	5.73	5.68
3	4.85	5.03	4.49	3.50	3.75	....	4.15	....	5.76	5.77
4	5.00	5.05	4.49	3.50	3.77	....	4.20	....	5.81	5.77
5	5.06	4.99	4.10	3.40	3.76	....	4.20	....	5.59	5.83
6	5.04	5.00	3.70	3.68	3.78	h3.15	4.20	....	5.71	5.77
7	5.10	4.92	3.32	3.80	3.79	3.20	4.22	....	5.74	5.71
8	5.00	4.80	3.60	3.66	3.81	3.25	4.30	....	5.65	5.79
9	4.95	4.80	3.78	2.22	3.83	3.27	4.32	....	5.73	5.80
10	5.10	4.70	3.80	2.40	3.88	3.36	4.40	....	5.77	5.83
11	5.11	4.66	3.80	2.56	3.92	3.35	4.40	....	5.72	5.75
12	4.98	4.75	3.91	2.62	3.87	3.37	4.40	5.61	5.74	5.78
13	4.85	4.63	3.95	2.70	3.86	3.44	4.40	5.58	5.73	5.80
14	4.88	4.65	3.98	2.80	3.91	3.46	4.40	5.60	5.62	5.79
15	4.80	4.70	3.98	2.98	3.88	3.48	4.48	5.60	5.59	5.80
16	4.95	4.77	3.98	3.10	3.96	3.55	4.55	5.60	5.77	5.80
17	4.78	4.75	3.95	3.12	3.95	3.59	4.60	5.61	5.73	5.84
18	4.90	4.80	4.01	3.20	....	3.62	4.60	5.62	5.59	5.82
19	4.91	4.80	....	3.27	....	3.59	4.65	5.61	5.66	5.80
20	4.90	4.76	....	3.35	....	3.67	4.70	5.63	5.79	5.81
21	4.85	4.70	....	3.35	....	3.72	....	5.60	5.75	5.81
22	4.85	4.71	....	3.37	....	3.75	....	5.61	5.70	5.81
23	4.86	4.71	....	3.40	....	3.77	....	5.68	5.81	5.77
24	4.78	4.80	....	3.40	....	3.80	....	5.66	5.80	5.82
25	4.80	4.80	....	3.45	....	3.81	....	5.69	5.79	5.73
26	5.05	4.81	....	3.55	....	3.81	....	5.61	5.76	5.89
27	5.00	4.78	....	3.60	....	3.90	....	5.61	5.78	5.83
28	4.80	4.70	....	3.50	....	3.90	....	5.65	5.80	5.76
29	5.00	....	....	3.50	....	3.92	....	5.69	5.78	5.83
30	5.01	....	....	3.57	....	3.95	....	5.66	5.77	5.99
31	5.00	....	....	3.62	....	3.95	....	5.64	....	6.16

h Tape measurement.

80-17-28D2. State Conservation Commission test hole A-11. Records available: 1948-50.

## 80-17-28D2--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 11	5.11	May 11	2.60	June 14	3.04	Oct. 12	5.68
Apr. 18	3.75	May 25	3.56	July 6	3.12	Dec. 14	5.88
May 3	3.56	June 1	3.75	July 14	3.56		

## Jefferson County

72-10-25A1. City of Fairfield well 1. Records available: 1949-50.

## Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	18.25	17.53	17.07	16.49	16.08	15.69	15.47	15.31	15.14	14.97	14.88
2	.....	18.21	17.60	16.99	16.45	16.06	15.68	15.49	15.31	15.14	15.04	14.84
3	.....	18.21	17.54	16.99	16.39	16.05	15.67	15.50	15.31	15.17	15.06	14.92
4	.....	18.20	17.52	16.97	16.38	16.06	15.64	15.50	15.34	15.18	15.05	14.93
5	.....	18.11	17.48	17.00	16.29	16.05	15.65	15.50	15.38	15.13	14.97	14.97
6	.....	18.08	17.44	17.00	16.39	16.03	15.67	15.50	15.38	15.10	15.02	14.98
7	.....	18.10	17.31	16.94	16.47	16.03	15.67	15.50	15.38	15.09	15.04	14.92
8	.....	17.95	17.41	16.95	16.47	16.05	15.67	15.44	15.35	15.09	14.97	14.94
9	.....	17.96	17.45	16.90	16.28	15.99	15.68	15.43	15.32	15.09	14.97	14.96
10	.....	18.82	17.93	17.43	16.80	16.33	16.00	15.68	15.43	15.30	15.09	15.03
11	.....	18.85	17.94	17.34	16.89	16.36	16.05	15.68	15.42	15.28	15.06	15.02
12	.....	18.76	17.91	17.39	16.90	16.32	16.01	15.62	15.42	15.29	15.09	15.04
13	.....	18.58	17.81	17.38	16.90	16.29	15.91	15.61	15.41	15.30	15.09	15.04
14	.....	18.69	17.79	17.34	16.90	16.27	15.90	15.61	15.39	15.30	15.06	14.99
15	.....	18.58	17.79	17.33	16.89	16.27	15.87	15.60	15.35	15.30	15.08	14.95
16	.....	18.69	17.80	17.32	16.84	16.28	15.86	15.59	15.35	15.30	15.10	14.95
17	.....	18.57	17.79	17.25	16.80	16.29	15.88	15.51	15.36	15.30	15.10	14.96
18	.....	18.60	17.76	17.30	16.77	16.28	15.72	15.52	15.37	15.29	15.09	14.89
19	.....	18.60	17.79	17.29	16.78	16.27	15.68	15.49	15.37	15.29	15.09	14.83
20	.....	18.59	17.72	17.23	16.78	16.27	15.68	15.50	15.40	15.25	15.09	14.92
21	.....	18.51	17.63	17.21	16.77	16.20	15.69	15.51	15.39	15.13	15.05	14.91
22	.....	18.45	17.62	17.18	16.71	16.09	15.68	15.51	15.37	15.13	15.04	14.89
23	.....	18.41	17.61	17.18	16.61	16.09	15.64	15.50	15.37	15.13	15.08	14.90
24	.....	18.28	17.61	17.11	16.56	16.09	15.64	15.50	15.37	15.18	15.07	14.92
25	.....	18.28	17.61	17.15	16.45	16.11	15.64	15.51	15.38	15.18	15.08	14.91
26	.....	18.39	17.62	17.00	16.49	16.17	15.67	15.50	15.38	15.18	15.04	14.86
27	.....	18.38	17.56	16.95	16.51	16.17	15.70	15.49	15.37	15.15	15.01	14.87
28	.....	18.20	17.45	17.00	16.56	16.12	15.70	15.48	15.33	15.16	15.01	14.90
29	.....	18.24		17.13	16.49	16.09	15.70	15.46	15.33	15.15	15.03	14.89
30	.....	18.29		17.16	16.49	16.08	15.69	15.44	15.32	15.13	15.02	14.87
31	.....	18.25		17.08		16.08		15.44	15.31		14.99	14.93

72-10-26A1. Dr. Charles Carter. Records available: 1942-50. Jan. 10, 27.32; Feb. 6, 27.04; Mar. 22, 26.48; June 19, 24.37; Aug. 10, 26.49; Oct. 18, 29.08; Dec. 20, 28.46.

## Johnson County

80-5-9K2. U. S. Geol. Survey. Records available: 1940-50. May 1, 1.29; May 2, 1.49; May 5, 0.94. Measurement discontinued.

## Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	Day	Jan.	Feb.	Mar.	Apr.
1	3.72	3.48	3.39	2.82	17	2.21	3.75	3.06	2.34
2	3.66	3.58	3.35	2.81	18	2.45	3.80	3.19	2.43
3	3.48	3.68	3.37	2.93	19	2.58	3.86	3.23	2.52
4	3.60	3.78	3.52	2.81	20	2.66	3.88	3.27	2.41
5	....	3.80	2.96	2.17	21	2.67	3.86	3.35	2.71
6	....	3.81	2.34	2.29	22	3.73	3.90	3.31	2.82
7	4.02	....	1.89	2.31	23	3.81	3.93	3.31	2.75
8	3.99	3.63	2.04	2.50	24	3.80	4.00	3.26	1.59
9	4.03	3.54	2.33	2.56	25	3.19	4.04	3.25	.86
10	4.17	3.46	2.44	1.63	26	2.75	4.06	2.84	1.07
11	4.25	3.48	2.54	1.31	27	2.87	4.04	2.33	1.30
12	4.23	3.49	2.69	1.52	28	2.92	3.94	2.45	1.45
13	2.60	3.49	2.81	1.78	29	3.12		2.68	1.30
14	2.68	3.51	2.89	1.94	30	3.23		3.80	1.36
15	2.79	3.59	2.91	2.07	31	3.35		3.72	
16	2.17	3.70	2.99	2.24					

## 24 WATER LEVELS AND ARTESIAN PRESSURES, 1950, NORTH-CENTRAL STATES

80-5-22M1. Chicago, Rock Island &amp; Pacific Railway. Records available: 1941-50.

Daily noon water level from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1	18.54	16.33	15.60	13.98	8.51	12.51	11.13	11.55	15.81	17.63
2	18.47	16.34	15.51	13.87	8.73	12.61	9.75	11.65	15.92	17.66
3	18.36	16.38	15.16	13.86	8.98	12.78	8.33	11.76	16.02	17.70
4	18.31	16.41	14.91	13.91	9.13	12.93	8.03	11.86	16.14	17.72
5	18.23	16.43	14.69	13.92	7.80	13.02	8.22	12.02	16.26	17.73
6	18.17	16.25	14.24	13.76	7.27	13.13	8.59	12.16	16.35	17.74
7	18.13	16.23	14.07	13.39	7.28	13.29	9.02	12.34	16.42	17.76
8	18.10	16.23	14.21	13.27	7.51	13.42	9.45	12.51	16.48	.....
9	18.02	16.14	14.29	13.16	7.61	13.54	9.75	12.70	16.54	.....
10	17.96	16.12	14.20	12.79	7.34	13.68	10.17	12.88	16.60	.....
11	17.97	16.07	14.36	12.46	7.02	13.86	10.54	13.08	16.68	.....
12	17.95	16.11	14.46	12.00	7.02	13.97	10.86	13.25	16.78	.....
13	17.80	16.11	14.54	11.65	7.35	13.96	10.64	13.40	16.86	.....
14	17.80	16.06	14.58	11.46	7.80	13.30	10.18	13.50	16.94	.....
15	17.73	16.05	14.63	11.41	8.38	12.68	9.91	13.62	16.99	.....
16	17.70	16.11	14.63	11.37	8.98	12.00	9.88	13.78	17.05	.....
17	17.69	16.20	14.68	11.41	9.47	11.76	10.06	13.92	17.12	.....
18	17.60	16.24	14.80	11.53	9.61	11.42	10.30	14.09	17.16	.....
19	17.60	16.24	14.84	11.77	9.97	9.10	10.40	14.21	17.21	.....
20	17.62	16.34	14.81	11.98	10.35	7.46	10.09	14.39	17.25	.....
21	17.59	16.36	14.82	12.13	10.64	7.01	9.68	14.50	17.27	.....
22	17.55	16.23	14.86	12.24	10.88	7.12	9.37	14.61	17.32	.....
23	17.54	16.25	14.89	12.31	11.05	7.49	9.29	14.75	17.36	.....
24	17.54	16.23	14.88	12.37	11.20	8.11	9.45	14.90	17.42	.....
25	17.45	16.27	14.94	11.72	11.37	8.70	9.75	15.05	17.45	.....
26	17.13	16.41	14.69	9.37	11.61	9.20	10.01	15.19	17.49	.....
27	16.89	15.91	14.25	8.24	11.78	9.74	10.29	15.30	17.52	.....
28	16.72	15.60	14.16	7.94	11.88	10.05	10.58	15.41	17.55	.....
29	16.24		14.30	7.98	12.01	10.43	10.87	15.52	17.57	.....
30	16.28		14.32	8.19	12.11	10.76	11.14	15.62	17.60	.....
31	16.32		14.08		12.31		11.38	15.72		.....

80-5-22M2. Chicago, Rock Island & Pacific Railway. Records available: 1941-50.  
Jan. 9, 18.08; Mar. 31, 17.02; May 9, 15.30; May 26, 15.84; July 10, 16.35.Lee County67-5-14C1. U. S. Geol. Survey. Drilled well in sand of Mississippi River valley. Diameter  $1\frac{1}{4}$  inches, depth 12 feet. Land-surface datum is 528 feet above sea-level datum. Records available: 1950. June 2, 3.56; June 5, 3.60; July 17, 3.97; July 24, 3.97.67-5-14L1. U. S. Geol. Survey. Drilled well in sand of Mississippi River valley. Diameter  $1\frac{1}{4}$  inches, depth 12.9 feet. Land-surface datum is 528.5 feet above sea-level datum. Records available: 1950. June 2, 6.89; June 5, 6.94; July 17, 7.52; July 24, 7.49.67-5-14P1. U. S. Geol. Survey. Drilled well in sand of Mississippi River valley. Diameter  $1\frac{1}{4}$  inches, depth 17.2 feet. Land-surface datum is 529.5 feet above sea level datum. Records available: 1950. June 2, 10.13; June 5, 10.19; July 17, 10.99; July 24, 10.66.Linn County

85-6-19J1. U. S. Geol. Survey. Records available: 1940-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	6.15	Apr. 27	4.68	July 31	4.37	Oct. 31	5.84
Feb. 27	5.91	May 31	5.07	Aug. 31	5.67	Nov. 30	5.91
Mar. 31	5.00	June 30	5.01	Sept. 29	5.40	Dec. 29	6.00

85-6-26D2. U. S. Geol. Survey. Records available: 1940-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	7.80	Apr. 27	2.56	July 31	1.10	Oct. 31	5.70
Feb. 27	7.23	May 31	3.60	Aug. 31	4.20	Nov. 30	6.25
Mar. 31	3.84	June 30	2.45	Sept. 29	4.81	Dec. 29	6.77

85-6-29B1. Earl Balderson. Records available: 1940-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	64.68	Apr. 27	64.38	July 31	61.16	Oct. 31	63.30
Feb. 27	64.69	May 31	63.55	Aug. 31	61.83	Nov. 30	63.68
Mar. 31	64.60	June 30	62.45	Sept. 29	62.63	Dec. 29	64.42

85-6-30D1. Weaver Witwer. Records available: 1942, 1946, 1948-49. No measurement made in 1950.

84-7-11R1. Clifford Burns. Formerly E. E. Badham. Records available: 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	9.76	Apr. 27	5.56	July 31	4.34	Oct. 31	7.34
Feb. 27	9.76	May 31	4.74	Aug. 31	6.06	Nov. 30	7.18
Mar. 31	8.17	June 30	4.12	Sept. 29	6.45	Dec. 29	7.48

84-7-13E2. U. S. Geol. Survey. Records available: 1940-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	10.40	Apr. 27	3.28	July 31	2.45	Oct. 31	6.32
Feb. 27	10.55	May 31	2.98	Aug. 31	4.88	Nov. 30	6.87
Mar. 31	4.69	June 30	2.75	Sept. 29	4.52	Dec. 29	6.92

84-6-20N1. U. S. Geol. Survey. Records available: 1940-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	7.31	Apr. 27	2.86	July 31	4.43	Oct. 31	7.42
Feb. 27	8.39	May 31	4.14	Aug. 31	5.72	Nov. 30	8.12
Mar. 31	5.74	June 30	3.44	Sept. 29	5.99	Dec. 29	7.99

84-6-22F1. C. A. Wissler. Records available: 1940-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	9.44	Apr. 27	5.23	July 31	5.18	Oct. 31	8.25
Feb. 27	10.58	May 31	4.03	Aug. 31	7.06	Nov. 30	9.10
Mar. 31	9.43	June 30	3.39	Sept. 29	7.95	Dec. 29	9.47

83-7-1B1. City of Marion. Records available: 1941-50. Jan. 31, 11.81; Mar. 31, 9.87; Oct. 31, 11.45.

83-7-2P1. Mr. Hellenbeck. Records available: 1940-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	32.23	Apr. 27	31.08	July 31	29.54	Oct. 31	31.82
Feb. 27	32.27	May 31	30.02	Aug. 31	30.84	Nov. 30	32.07
Mar. 31	32.26	June 30	26.25	Sept. 29	31.32	Dec. 29	32.15

83-7-11E1. Louis Maresh. Records available: 1941-48. Measurement discontinued.

83-7-16D1. City of Cedar Rapids. In Shaver Park. Records available: 1940-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 27	89.75	May 31	84.88	Aug. 31	88.05	Nov. 30	89.61
Mar. 31	88.88	June 30	84.67	Sept. 29	88.76	Dec. 29	90.24
Apr. 27	88.68	July 31	86.51	Oct. 31	89.42		

83-7-16J1. City of Cedar Rapids. In Daniels Park. Records available: 1940-44, 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	35.52	Apr. 27	36.26	July 31	36.41	Oct. 31	36.20
Feb. 27	34.35	May 31	36.04	Aug. 31	37.19	Nov. 30	35.73
Mar. 31	35.28	June 30	36.09	Sept. 29	36.90	Dec. 29	35.08

83-7-17L1. City of Cedar Rapids. In Ellis Park. Records available: 1940-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	21.27	May 31	20.56	Aug. 31	20.91	Oct. 31	21.09
Mar. 31	18.78	June 30	20.14	Sept. 29	21.05	Nov. 30	21.17
Apr. 27	20.11	July 31	20.72				

83-7-21K1. Wapsi Valley Creamery. Highest water level 61.58, May 14; lowest 64.18, Aug. 10. Records available: 1943-50.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	62.14	63.02	62.66	62.42	62.08	63.21	63.43	63.99	63.86	63.82	63.82	63.18
2	61.99	62.91	62.72	61.88	62.06	63.09	62.71	63.82	63.82	63.82	63.77	62.95
3	62.56	62.86	62.64	62.21	62.13	63.07	62.80	63.87	63.77	63.76	63.64	62.86
4	62.68	62.96	62.65	62.41	62.14	62.71	62.72	63.78	63.12	63.66	63.62	62.91
5	62.70	62.21	62.09	62.52	62.44	62.59	63.04	63.68	63.45	63.61	63.12	62.91
6	62.71	62.71	62.25	62.52	62.42	62.88	63.39	63.61	63.43	63.63	63.21	62.87
7	62.79	62.96	62.55	62.55	62.21	63.08	63.49	63.63	63.46	63.69	63.44	62.85
8	62.18	63.01	62.49	62.59	62.13	63.37	63.51	63.85	63.63	63.65	63.59	62.84
9	62.53	62.91	62.38	62.04	62.11	63.54	63.55	64.02	63.48	63.54	63.61	62.78
10	62.79	62.79	62.17	61.93	62.06	63.58	63.54	64.18	63.69	63.57	63.66	62.82
11	62.76	62.72	62.70	62.41	62.06	63.14	63.73	64.06	63.79	63.62	63.20	62.81
12	62.75	62.61	62.91	62.43	62.11	63.30	63.92	63.83	63.76	63.51	63.04	62.88
13	62.71	62.56	62.52	62.43	61.67	63.28	63.78	63.60	63.68	63.46	63.10	62.74
14	62.68	62.63	62.26	62.00	61.58	63.56	63.74	63.49	63.79	63.38	63.11	62.72
15	62.62	62.64	62.29	61.97	62.03	63.69	63.75	63.71	63.79	63.31	63.44	62.80

83-7-21K1--Continued.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	62.48	62.65	62.34	61.97	62.35	63.82	63.71	63.94	63.74	63.25	63.59	62.75
17	62.52	62.68	62.32	62.10	62.43	63.62	63.78	64.06	63.77	63.35	63.53	62.69
18	62.63	62.26	62.35	62.42	62.40	63.17	63.89	63.93	63.71	63.60	63.06	62.69
19	62.64	62.07	61.83	62.47	62.30	62.95	63.97	63.28	64.05	63.58	63.05	62.74
20	62.55	62.48	62.09	62.46	62.62	62.95	63.88	62.97	63.99	63.61	63.26	62.75
21	62.66	62.67	62.25	62.46	62.57	63.06	63.81	63.26	.....	63.38	63.20	62.74
22	62.63	62.68	62.38	62.41	62.43	63.35	63.96	63.53	.....	63.24	63.42	62.79
23	62.65	62.65	62.42	62.46	62.74	63.55	63.78	63.40	.....	63.25	62.62	62.79
24	62.62	62.69	62.45	62.25	63.04	63.47	63.74	63.79	.....	63.42	62.93	62.80
25	62.66	62.68	62.40	62.26	63.22	63.31	63.85	63.98	.....	63.53	62.95	61.96
26	62.95	62.68	62.25	62.27	63.23	63.36	64.00	63.35	.....	63.54	62.84	62.58
27	62.95	62.62	62.33	62.26	63.09	63.48	64.05	63.13	63.59	63.55	63.09	62.58
28	62.66	62.76	62.52	62.24	62.83	63.45	64.07	63.42	63.68	63.63	63.26	62.63
29	62.24	.....	62.51	62.07	62.90	63.46	64.07	63.75	63.63	63.23	63.20	62.74
30	62.59	.....	62.38	62.14	62.66	63.51	63.94	63.72	63.70	63.36	63.25	62.65
31	62.92	.....	62.44	.....	62.89	.....	63.68	63.68	.....	63.66	.....	62.58

83-7-21L1. City of Cedar Rapids. Highest water level 47.93, Apr. 10; lowest 81.65, Aug. 9. Records available: 1940-50.

Daily high and low water levels, from recorder graph

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	53.23	55.29	58.30	64.07	57.42	62.13	56.19	59.06	.....	58.86	69.60	73.08
2	52.26	54.69	56.70	59.90	58.65	62.05	54.70	57.55	55.17	59.94	70.45	73.30
3	51.95	60.61	56.58	64.40	57.08	61.27	52.28	58.45	55.50	59.81	68.00	72.17
4	55.72	58.56	56.50	62.90	56.67	60.86	55.46	59.13	54.98	.....	.....	.....
5	55.65	60.05	53.54	56.50	54.40	58.50	56.80	61.91	.....	.....	.....	.....
6	55.54	57.89	52.18	63.63	53.24	64.12	57.24	61.30	.....	.....	.....	.....
7	55.88	58.74	59.36	64.31	59.35	64.19	57.73	61.85	54.64	57.91	.....	.....
8	53.00	57.18	59.20	65.68	56.87	59.35	57.53	61.91	53.22	58.50	.....	.....
9	51.92	57.96	57.20	63.35	56.61	59.20	50.10	58.93	55.46	58.57	.....	.....
10	55.75	59.00	57.18	61.42	55.05	57.73	57.93	58.34	55.05	58.32	.....	77.40
11	56.38	59.09	57.07	61.01	52.40	56.40	56.25	60.40	55.34	60.99	71.54	76.35
12	55.89	58.63	56.60	59.02	50.18	52.40	56.98	62.06	56.51	63.27	70.17	73.90
13	55.70	59.03	55.68	59.00	49.20	56.12	57.17	59.70	.....	58.70	69.89	76.60
14	55.06	58.01	57.16	58.87	54.16	57.60	56.00	58.45	53.20	56.31	73.59	79.68
15	52.95	56.94	56.40	59.02	54.89	58.25	53.50	56.35	51.48	62.00	73.81	79.82
16	52.38	57.44	56.29	59.21	55.49	58.64	.....	.....	58.42	64.34	74.52	80.76
17	54.95	57.92	56.54	64.10	55.18	58.46	.....	58.62	60.96	64.78	72.60	77.15
18	55.47	57.60	53.80	59.25	55.15	58.47	57.02	59.60	59.27	63.83	69.85	72.50
19	55.18	56.78	53.83	56.02	52.70	57.55	56.85	60.01	57.98	67.04	68.80	69.90
20	54.69	57.69	53.40	60.71	51.08	59.60	56.87	61.67	63.80	66.80	68.79	71.03
21	55.66	63.31	57.10	59.60	54.72	60.18	57.26	61.91	57.30	65.70	68.85	75.43
22	55.10	57.20	56.34	62.34	55.50	59.20	57.35	61.92	55.35	67.64	70.48	76.58
23	54.60	58.05	56.38	59.13	56.54	59.43	57.46	59.60	65.37	70.81	72.18	77.57
24	55.16	57.28	56.72	58.83	56.04	59.26	56.57	59.45	68.85	73.72	73.07	77.32
25	55.65	.....	56.28	59.93	56.02	59.16	.....	.....	70.78	74.74	72.52	75.80
26	.....	.....	57.34	59.18	55.24	57.90	56.53	59.63	70.20	72.75	71.45	76.45
27	.....	.....	56.32	60.66	54.78	63.94	56.57	59.48	67.90	70.25	72.53	76.34
28	55.00	63.60	56.90	62.57	56.77	63.24	56.19	59.12	.....	.....	71.85	76.12
29	53.35	55.07	.....	.....	56.00	62.64	53.00	57.05	.....	.....	71.95	74.95
30	52.17	64.02	.....	.....	56.19	61.90	.....	.....	.....	.....	71.62	75.03
31	58.70	65.90	.....	.....	56.45	60.76	.....	.....	.....	71.01	.....	.....

Daily high and low water levels, from recorder graph

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	71.05	75.26	.....	.....	70.10	74.48	68.94	71.85	69.61	74.55	.....	66.80
2	69.07	72.45	.....	.....	71.08	74.80	67.66	71.01	.....	.....	.....	.....
3	67.70	75.70	.....	.....	70.70	73.40	.....	69.17	.....	.....	59.91	63.23
4	68.40	71.35	.....	.....	66.04	70.70	.....	68.27	.....	.....	.....	.....
5	66.50	73.36	.....	76.16	65.22	69.87	.....	67.63	61.55	.....	.....	.....
6	71.03	75.23	72.54	75.20	66.05	70.75	65.18	.....	60.16	70.12	.....	.....
7	71.62	75.95	70.66	76.02	65.90	71.91	65.92	68.50	65.26	72.40	.....	.....
8	72.15	76.40	72.90	77.42	68.28	71.60	64.62	67.15	.....	.....	.....	.....
9	72.62	74.70	74.76	81.65	66.80	73.93	63.66	71.12	.....	.....	.....	62.09
10	71.06	78.05	74.66	80.65	70.15	73.15	64.48	69.03	.....	.....	58.54	62.29



83-7-21L1--Continued.

Daily high and low water levels, from recorder graph

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
11	.....	.....	74.57	77.90	68.86	73.98	64.80	70.39	.....	64.92	57.27	68.33
12	.....	.....	73.30	74.63	.....	.....	.....	67.97	60.14	65.15	.....	.....
13	.....	.....	70.50	73.30	.....	.....	65.53	67.69	.....	.....	.....	.....
14	.....	.....	68.78	73.40	.....	.....	64.67	70.68	.....	.....	.....	.....
15	.....	75.94	70.28	75.98	.....	.....	64.98	68.80	.....	.....	.....	.....
16	72.08	74.38	72.36	77.30	.....	.....	64.18	69.51	.....	.....	.....	.....
17	70.92	.....	73.45	78.08	.....	.....	65.96	73.90	.....	.....	.....	.....
18	.....	.....	73.10	75.94	.....	.....	67.93	76.40	.....	63.98	.....	.....
19	.....	.....	69.74	73.10	.....	.....	.....	.....	61.40	63.73	.....	.....
20	.....	.....	67.10	69.74	.....	.....	67.95	73.90	59.49	70.48	.....	.....
21	.....	.....	65.69	70.91	.....	.....	66.05	68.83	59.44	70.49	.....	.....
22	.....	.....	68.74	75.07	.....	.....	.....	63.75	68.62	70.51	.....	.....
23	.....	.....	.....	.....	.....	.....	63.12	71.73	.....	70.84	.....	.....
24	.....	.....	.....	.....	.....	.....	64.72	72.51	.....	69.13	.....	62.24
25	.....	.....	.....	.....	.....	.....	66.00	72.66	59.43	69.08	.....	.....
26	.....	.....	.....	.....	69.22	69.22	67.89	72.80	57.67	59.70	.....	.....
27	.....	.....	.....	69.60	67.13	69.94	65.88	73.02	56.83	68.84	.....	.....
28	.....	.....	.....	.....	67.84	70.02	66.70	72.67	60.48	69.40	.....	.....
29	.....	.....	.....	.....	67.55	71.04	64.30	66.70	59.25	69.13	.....	.....
30	.....	.....	.....	.....	68.38	72.25	63.53	73.42	.....	69.50	.....	.....
31	.....	.....	.....	.....	.....	.....	71.30	74.86	.....	.....	.....	.....

83-7-21P1. Kresge Co. In Cedar Rapids. Records available: 1941-50. Apr. 27, 72.11; May 31, 81.43; Oct. 31, 82.31; Nov. 30, 73.12; Dec. 29, 68.52.

83-7-21Q1. Iowa Theater. In Cedar Rapids. Records available: 1941-49. Measurement discontinued.

83-7-23G1. City of Cedar Rapids. In Bever Park. Records available: 1940-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	2.67	Apr. 27	2.34	July 31	2.92	Oct. 31	2.85
Feb. 27	2.58	May 31	2.46	Aug. 31	3.12	Dec. 29	2.88
Mar. 31	2.44	June 30	2.63	Sept. 29	3.14		

83-7-24A1. John Zrudsky. Records available: 1940-50.

Feb. 27	29.45	May 31	28.06	Aug. 31	28.91	Oct. 31	29.41
Mar. 31	29.38	June 30	33.60	Sept. 29	29.16	Dec. 29	29.59
Apr. 27	28.75	July 31	27.62				

83-7-28G2. Cedar Rapids Gas Co. In Cedar Rapids. Records available: 1940-48. Measurement discontinued.

83-7-32G1. Floyd Felter. In Cedar Rapids at corner of Twenty-second Ave. SW and Eleventh St. NE. Records available: 1940-50.

Jan. 31	85.04	Apr. 27	86.60	July 31	86.74	Oct. 31	86.93
Feb. 27	85.33	May 31	85.40	Aug. 31	87.44	Nov. 30	86.58
Mar. 31	85.70	June 30	85.76	Sept. 29	87.38	Dec. 29	86.42

83-7-33F1. Hedges Co. Realtors. In Cedar Rapids at corner of Twenty-second Ave. and K St. SW. Records available: 1940-50.

Jan. 31	72.99	Apr. 27	73.82	July 31	73.27	Oct. 31	73.23
Feb. 27	73.07	May 31	73.96	Aug. 31	73.27	Nov. 30	73.27
Mar. 31	73.23	June 30	73.31	Sept. 29	73.23	Dec. 29	73.26

83-6-30B1. Mr. Katz. Records available: 1940-50.

Jan. 31	51.61	Apr. 27	52.70	July 31	50.33	Oct. 31	51.38
Feb. 27	51.32	May 31	50.76	Aug. 31	50.84	Dec. 29	51.74
Mar. 31	50.50	June 30	50.02	Sept. 29	51.14		

82-7-3A1. Central Iowa Power Cooperative well 1. Drilled well in dolomite of Silurian age, diameter 12 inches, depth 434 feet. Drilled in May 1949 and cased to 109 feet. Land-surface datum is 722 feet above sea-level datum. Records available: 1950. Apr. 27, 27.85; May 31, 22.41; June 30, 32.90; Aug. 31, 30.22; Sept. 29, 28.94; Oct. 31, 32.76; Nov. 30, 28.58.

82-7-3A2. Central Iowa Power Cooperative well 2. Drilled well in dolomite of Silurian age, diameter 12 inches, depth 446 feet. Drilled in July 1949 and cased to depth of 105 feet. Land-surface datum is 722 feet above sea-level datum. Records available: 1950.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 27	38.91	June 30	31.87	Sept. 29	30.51	Nov. 30	29.59
May 31	21.48	Aug. 31	32.30	Oct. 31	33.97	Dec. 29	31.69

#### Lyon County

99-44-26R1. Henry Hansmann. Records available: 1940-43, 1947-50. Mar. 23, 2.20; June 20, 1.75; Sept. 19, 4.27; Dec. 19, 4.54.

98-48-24M1. A. C. Hanson. Records available: 1939-43, 1948. No measurement made in 1950.

#### Madison County

75-28-2B1. Glen Newton. Records available: 1940-50. Mar. 24, 15.29; June 20, 16.14; Oct. 5, 15.89; Dec. 21, 15.82.

#### Marion County

76-19-5N1. City of Knoxville well 4. Records available: 1949-50.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	.....	17.30	17.14	15.70	16.66	16.26	17.02	18.16	19.08	.....
2	.....	.....	.....	17.46	17.12	15.62	16.40	16.23	16.88	18.02	19.46	.....
3	.....	.....	.....	17.53	17.15	15.48	16.00	16.33	17.00	18.07	19.49	.....
4	20.20	21.47	19.50	17.59	17.18	15.59	15.61	16.46	17.04	17.98	19.58	.....
5	20.23	21.60	19.28	17.58	17.19	15.90	16.10	16.51	16.84	18.00	19.51	.....
6	20.21	21.52	18.90	.....	17.69	15.80	.....	16.60	16.70	18.01	19.40	.....
7	.....	21.65	18.27	.....	18.00	15.93	.....	16.47	16.81	17.95	19.52	.....
8	.....	21.54	.....	17.53	18.10	16.02	.....	16.65	16.44	18.07	.....	.....
9	20.31	21.50	.....	17.52	17.85	16.07	.....	16.62	16.84	.....	.....	.....
10	20.26	21.42	.....	17.48	17.76	16.42	.....	16.88	16.24	.....	.....	.....
11	20.35	21.34	17.40	17.38	17.57	16.14	.....	17.01	16.47	.....	19.69	.....
12	20.81	21.23	17.28	17.33	17.17	16.35	.....	17.13	16.62	.....	19.62	.....
13	.....	21.05	17.22	.....	16.77	16.18	.....	17.02	16.54	.....	19.58	.....
14	21.14	20.84	17.12	.....	16.34	16.25	.....	18.98	16.66	19.08	19.60	.....
15	21.12	20.71	.....	17.04	16.14	16.28	16.44	17.06	16.67	19.00	.....	.....
16	.....	.....	.....	17.19	15.91	16.45	16.26	17.28	16.82	18.88	.....	.....
17	.....	.....	.....	17.12	15.77	16.62	16.21	17.29	.....	18.80	.....	.....
18	.....	20.60	17.00	17.34	15.64	16.48	16.09	17.25	.....	18.99	19.66	19.39
19	.....	.....	.....	17.48	15.73	16.32	16.06	17.60	.....	19.10	19.76	19.44
20	.....	.....	.....	.....	16.04	16.01	15.95	17.80	.....	19.18	.....	19.40
21	21.30	.....	.....	.....	15.94	15.20	15.68	17.97	.....	19.24	.....	19.46
22	21.38	.....	.....	17.10	15.70	.....	15.70	17.75	.....	19.20	.....	19.48
23	21.12	.....	.....	16.91	15.66	.....	15.56	17.70	19.16	19.01	.....	19.51
24	21.24	.....	17.06	16.83	15.61	.....	15.62	17.79	19.06	19.05	.....	.....
25	21.41	20.40	17.02	16.86	15.62	15.18	15.48	17.60	18.97	19.07	19.58	.....
26	.....	.....	16.84	16.92	15.74	14.70	15.39	17.44	19.10	19.09	19.75	.....
27	.....	.....	16.72	16.97	15.70	.....	15.49	17.42	19.17	19.15	.....	.....
28	.....	.....	16.77	17.02	15.80	.....	15.70	17.44	19.16	19.43	.....	.....
29	.....	.....	16.73	17.06	15.61	.....	16.02	17.42	19.16	19.36	.....	.....
30	.....	.....	16.77	17.11	15.77	.....	16.14	17.28	19.20	19.24	.....	.....
31	.....	.....	16.80	.....	15.55	.....	16.03	17.10	.....	19.28	.....	.....

75-20-22H1. Union Central Life Insurance Co. Records available: 1940-50. Mar. 23, 8.00; June 20, 7.42; Oct. 5, 8.98; Dec. 21, 9.40.

75-20-31C2. Amanda Elliot. Records available: 1940-50. Mar. 23, 15.77; June 20, 14.10; Oct. 5, 20.09.

74-21-11F1. Town of Melcher test hole 5 (1945). Records available: 1945-46, 1948-50.

74-21-11F1--Continued.

Daily noon water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	71.18	69.17	70.57	74.08	77.04	78.59	79.45	77.26	74.80	76.11
2	.....	.....	71.24	69.27	71.10	73.82	76.84	79.00	79.55	76.83	75.16	75.51
3	.....	.....	70.98	.....	71.00	73.81	.....	78.87	79.72	77.00	75.02	75.31
4	.....	.....	70.80	.....	70.98	73.79	76.84	78.69	79.76	77.04	74.53	74.98
5	.....	.....	70.68	.....	70.94	73.35	76.96	78.63	79.45	76.85	74.13	74.65
6	.....	.....	70.48	.....	70.98	73.35	77.02	78.77	79.06	76.48	74.09	74.47
7	.....	74.40	.....	.....	70.98	73.27	77.10	79.35	78.95	76.17	74.39	.....
8	.....	74.20	.....	.....	70.80	73.28	76.93	79.55	79.20	75.88	74.12	.....
9	.....	74.08	.....	.....	69.74	73.36	76.93	79.56	79.30	75.94	73.99	.....
10	h79.69	73.85	71.49	.....	70.22	73.36	76.76	79.52	79.20	75.59	73.62	.....
11	79.68	72.91	71.20	.....	70.24	73.42	77.30	79.65	79.05	.....	73.30	72.76
12	79.26	72.91	71.20	.....	70.47	73.66	77.47	79.55	79.14	.....	73.67	72.50
13	78.71	72.90	71.15	.....	70.72	73.70	77.35	79.52	79.25	.....	73.22	72.31
14	78.77	72.88	71.00	.....	70.57	73.70	77.37	79.38	79.18	.....	.....	72.09
15	78.32	.....	70.88	68.23	70.35	74.10	77.20	79.42	78.96	.....	75.36	71.92
16	78.40	.....	70.76	68.20	70.59	74.51	77.07	79.57	78.83	.....	75.86	71.76
17	78.03	75.35	70.52	68.05	71.14	75.10	77.02	79.60	79.12	.....	75.56	71.62
18	.....	75.25	69.88	67.95	71.10	.....	77.06	79.62	79.21	.....	75.71	71.42
19	.....	75.25	69.83	68.18	70.98	.....	76.92	79.63	79.17	.....	75.96	71.09
20	77.38	75.04	69.64	68.21	70.82	76.97	77.01	79.65	79.10	.....	76.52	71.01
21	77.14	74.63	69.50	68.58	71.15	77.33	77.26	79.63	78.80	73.10	76.83	70.74
22	76.81	74.58	69.40	.....	71.38	77.34	77.17	79.39	78.74	73.80	77.11	70.51
23	76.35	74.40	69.32	68.52	71.81	77.20	77.12	79.47	78.63	74.60	77.65	70.23
24	76.27	74.36	69.14	69.38	71.97	77.23	77.07	79.44	78.67	75.10	78.24	70.08
25	.....	.....	69.14	69.21	72.10	77.19	77.31	79.49	78.33	75.42	78.39	69.88
26	.....	.....	69.75	69.06	72.05	77.17	77.25	79.42	77.86	75.16	78.12	.....
27	.....	71.40	69.84	69.38	72.08	77.30	76.99	79.20	77.31	74.75	77.74	.....
28	.....	71.10	69.65	69.91	72.45	77.36	77.08	79.22	77.56	74.25	77.47	.....
29	.....	.....	69.51	70.47	73.20	77.09	77.57	79.23	77.53	.....	77.04	69.51
30	.....	.....	69.34	70.65	74.00	77.02	77.72	79.32	77.48	73.60	76.50	69.40
31	.....	.....	69.24	.....	74.00	.....	78.07	79.36	.....	74.23	.....	69.23

h Tape measurement.

74-21-11F3. George Weir, Sr. In Melcher. Drilled well in glacial drift, diameter 12 inches, depth 30 feet. Records available: 1950.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 31	6.40	Oct. 5	9.50	Nov. 9	11.00	Dec. 7	9.80
Sept. 7	7.75	12	9.80	16	11.00	14	10.80
14	8.80	19	10.20	22	9.70	21	10.80
21	8.80	26	10.30	30	10.60	28	10.90
28	9.00	Nov. 3	11.00				

74-21-11K1. Town of Melcher test hole 3 (1945). Records available: 1945-50.

Daily high and low water levels, from recorder graph												
Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	97.43	98.36	85.90	86.11	83.56	83.81	81.69	81.95	86.37	91.98	93.98	95.56
2	96.35	97.43	85.90	85.99	83.41	83.81	81.43	81.69	88.89	90.97	93.25	95.17
3	95.31	96.35	85.76	85.97	83.21	83.41	81.55	81.73	87.97	90.35	93.24	94.58
4	.....	95.31	85.50	85.80	83.05	83.21	81.73	81.96	88.44	90.77	91.65	93.24
5	.....	.....	85.11	85.50	83.05	83.18	81.96	82.13	88.05	89.07	91.06	92.56
6	93.57	.....	85.11	85.21	82.46	83.05	81.65	82.13	87.47	88.11	91.06	92.76
7	93.08	93.58	85.07	85.24	82.21	82.63	81.47	81.65	86.74	87.47	91.37	93.73
8	91.93	93.08	84.88	85.05	82.63	83.30	81.56	81.75	85.66	86.83	91.91	93.34
9	91.13	90.93	84.83	84.98	83.21	83.33	81.17	81.57	85.37	89.65	91.72	93.70
10	91.10	91.69	84.76	84.86	82.58	83.21	80.94	81.37	87.26	88.34	92.05	94.51
11	90.78	91.69	84.80	84.95	82.58	82.98	81.37	81.71	86.87	90.47	92.84	94.33
12	90.19	90.78	84.59	84.79	82.82	82.97	81.63	81.70	88.36	91.73	92.69	94.73
13	89.62	90.19	84.44	84.59	82.74	82.86	81.55	81.68	88.56	90.18	92.88	96.05
14	89.30	90.21	84.33	84.49	82.53	82.73	81.49	81.70	87.42	88.56	95.62	97.45
15	89.02	90.70	84.35	84.52	82.48	82.65	81.58	82.83	87.08	91.05	97.17	99.17
16	89.25	89.72	84.44	84.57	82.26	82.54	81.63	82.04	89.31	93.18	99.17	102.14
17	.....	.....	84.09	84.45	82.19	82.47	81.55	81.80	90.30	92.09	101.41	103.07
18	.....	.....	84.13	84.46	82.47	82.59	81.58	83.94	89.42	90.99	102.23	103.70
19	.....	.....	84.25	84.46	82.33	82.59	82.78	83.78	88.56	89.72	101.55	103.18
20	88.08	88.65	83.62	84.25	82.20	82.33	82.69	86.73	88.04	91.90	100.75	102.95

74-21-11K1--Continued.

Daily high and low water levels, from recorder graph

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
21	87.45	88.08	83.53	83.78	82.06	82.21	84.98	90.22	91.31	93.43	101.25	103.46
22	87.22	87.45	83.52	83.78	82.07	82.16	86.79	88.80	90.51	93.70	99.57	101.25
23	86.84	87.23	83.53	83.76	81.89	82.16	85.55	86.79	92.89	95.11	99.86	101.95
24	86.39	86.85	83.75	83.98	81.89	82.18	85.21	89.33	92.21	94.18	98.59	100.10
25	86.61	86.99	83.84	84.07	81.71	82.19	87.33	90.89	91.47	92.81	98.72	100.83
26	86.99	87.39	83.79	84.08	81.13	81.71	88.78	92.12	91.00	93.07	98.26	100.46
27	86.51	87.30	83.02	83.78	81.13	81.44	89.69	91.72	91.11	94.43	96.74	99.21
28	85.82	86.51	83.00	83.57	81.44	82.16	88.65	90.27	94.43	97.53	97.91	99.86
29	86.02	86.57			82.16	82.47	87.43	88.65	97.53	99.67	98.37	100.30
30	86.15	86.57			82.08	82.47	86.66	87.43	95.90	97.90	98.19	100.27
31	86.14	86.19			81.66	82.08			95.29	96.90		

Daily high and low water levels, from recorder graph

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	99.39	100.98	102.45	103.80	99.83	101.06	93.92	95.40	95.68	99.35	91.95	93.59
2	98.40	100.51	100.55	102.58	100.76	101.83	93.50	96.43	96.91	99.63	91.41	91.95
3	98.81	101.16	99.80	101.22	100.51	101.49	96.10	97.85	96.42	98.38	90.57	91.40
4	98.79	100.31	99.34	100.80	98.86	100.53	95.50	96.99	94.38	96.42	89.77	90.57
5	97.81	100.36	98.88	100.95	97.23	98.83	94.05	95.72	92.70	94.38	89.40	89.77
6	98.56	100.60	99.97	101.68	96.68	98.33	93.40	94.77	92.02	94.18	88.19	89.40
7	99.06	101.08	100.90	102.00	98.34	99.91	92.62	93.74	92.02	94.70	87.46	88.19
8	98.94	100.70	100.82	102.70	99.91	100.92	92.41	94.77	91.62	93.02	87.23	87.46
9	100.19	101.91	100.13	101.57	99.18	99.99	92.18	93.63	90.88	91.62	86.88	87.23
10	100.99	102.93	99.85	101.62	98.49	100.34	91.79	94.20	89.88	90.88	86.25	86.88
11	99.01	100.99	100.25	102.20	97.99	99.69	91.94	93.04	88.89	89.88	84.75	86.25
12	100.37	101.59	99.41	100.98	99.49	100.55	90.89	91.94	88.63	93.62	85.47	84.75
13	99.88	102.05	99.45	101.47	98.31	99.49	89.74	90.89	91.91	95.70	85.15	85.47
14	100.25	101.77	98.82	100.63	97.99	99.89	89.16	89.74	95.23	97.25	84.85	85.15
15	100.71	102.30	100.47	101.70	97.18	98.34	88.37	89.16	97.11	99.07	84.80	84.95
16	100.25	101.37	99.58	101.10	98.35	99.90	.....	88.37	97.39	100.41	84.66	84.80
17	100.40	102.10	100.06	101.78	99.83	100.81	.....	.....	96.98	100.02	84.41	84.66
18	100.49	102.27	99.38	101.04	98.92	100.01	87.14	88.63	95.83	98.58	83.88	84.41
19	100.23	102.22	99.96	101.70	99.25	100.21	87.14	87.67	97.18	99.07	83.77	83.89
20	99.88	101.89	99.42	100.96	98.08	99.25	86.74	89.59	97.81	101.33	83.65	83.89
21	99.72	101.45	99.50	101.45	97.55	98.50	89.59	93.88	100.64	102.24	83.20	83.65
22	99.98	101.63	98.93	100.69	97.10	98.27	93.88	97.08	101.88	102.26	82.95	83.29
23	100.79	102.47	99.49	101.29	97.80	98.85	97.07	98.83	103.26	104.48	82.76	82.95
24	97.38	100.79	98.76	100.48	96.18	97.81	98.03	99.86	103.76	104.81	82.85	83.04
25	96.58	97.74	99.22	101.12	94.76	96.18	95.93	98.03	101.44	103.76	82.34	82.85
26	95.45	96.64	97.83	99.22	94.33	95.81	93.63	95.93	100.43	101.44	82.48	82.92
27	94.77	97.21	99.07	100.19	95.81	97.35	91.03	93.81	97.93	100.43	.....	.....
28	97.21	99.56	98.21	99.84	96.43	98.04	90.84	91.74	96.35	97.93	.....	.....
29	99.25	100.49	99.57	100.67	95.86	97.94	89.84	90.84	94.69	96.35	.....	.....
30	98.53	100.73	98.85	100.33	95.39	97.11	89.29	93.83	93.59	94.69	81.91	82.15
31	100.73	102.45	99.59	100.88			93.83	97.97			81.56	81.91

74-21-11K2. Town of Melcher. In Melcher. Drilled unused well in glacial drift, diameter 18 inches, depth 25 feet. Records available: 1950.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 23	9.00	June 8	8.80	Aug. 17	11.32	Oct. 26	13.80
30	8.50	15	8.30	24	11.28	Nov. 3	13.90
Apr. 6	8.80	20	7.97	31	11.60	9	13.90
13	8.50	22	8.20	Sept. 7	12.50	16	12.80
20	8.40	29	9.60	14	12.40	22	12.40
27	8.30	July 6	8.50	21	13.80	30	12.30
May 4	8.00	13	10.80	28	12.90	Dec. 7	12.60
11	6.40	20	10.80	Oct. 5	12.20	14	12.30
18	7.10	27	11.30	12	12.40	21	12.50
25	7.70	Aug. 3	12.20	19	13.80	28	12.60
June 1	8.10	10	12.40				

74-21-11Q1. Charles Thomas. In Melcher. Drilled unused well in glacial drift, diameter 12 inches, depth 28 feet. Records available: 1950.

## 74-21-11Q1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 23	12.52	June 8	9.00	Aug. 17	10.90	Oct. 26	14.20
30	12.40	15	7.10	24	11.00	Nov. 3	14.30
Apr. 6	12.40	20	5.64	31	10.90	9	14.40
13	12.30	22	5.90	Sept. 7	11.85	16	14.30
20	12.70	29	7.40	14	13.10	22	13.90
27	13.60	July 6	8.50	21	13.20	30	15.00
May 4	12.20	13	9.60	28	14.00	Dec. 7	15.10
11	6.20	20	9.80	Oct. 5	13.90	14	15.20
18	7.50	27	10.90	12	16.60	21	15.30
25	8.00	Aug. 3	11.70	19	14.10	28	15.20
June 1	7.20	10	12.20				

74-21-11J1. Henry Carter. In Melcher. Drilled unused well in glacial drift, diameter 12 inches, depth 24 feet. Records available: 1950.

Mar. 23	7.77	June 8	5.60	Aug. 17	9.72	Oct. 26	13.00
30	7.50	15	4.90	24	9.60	Nov. 3	13.10
Apr. 6	7.80	20	2.05	31	10.20	9	13.20
13	7.30	22	2.40	Sept. 7	10.57	16	13.20
20	7.10	29	4.50	14	10.70	22	13.10
27	8.00	July 6	6.20	21	11.80	30	13.00
May 4	7.90	13	5.30	28	11.90	Dec. 7	13.10
11	1.70	20	5.70	Oct. 5	11.80	14	13.50
18	3.30	27	6.60	12	12.00	21	13.60
25	4.00	Aug. 3	9.40	19	12.90	28	13.30
June 1	4.80	10	9.90				

74-20-22C1. Grant DeWitt. Records available: 1942-50. Mar. 23, 18.26; June 20, 14.98; Oct. 5, 18.62; Dec. 21, 25.18.

74-20-33D1. T. V. Beebout. Records available: 1940-50. Mar. 23, 14.50; June 20, 15.08; Oct. 5, 15.47; Dec. 21, 16.33.

Marshall County

## 84-18-22H1. City of Marshalltown. Records available: 1949-50.

Mar. 30	10.15	Sept. 5	9.24	Oct. 4	9.39	Nov. 16	11.20
May 16	7.57	18	9.91	11	9.18	22	11.79
June 23	6.04	19	10.30	16	9.38	Dec. 21	13.04
July 5	5.70	25	9.92	24	9.80		

## 84-18-24Q1. City of Marshalltown. Records available: 1949-50.

Mar. 30	8.41	Sept. 5	11.01	Oct. 4	9.55	Nov. 16	14.69
May 16	7.64	18	11.10	11	11.68	22	14.57
June 19	5.97	19	13.72	16	10.80	Dec. 21	15.43
July 5	7.42	25	10.06	24	12.43		

Montgomery County

71-36-6J1. Donald Templeton. Drilled well, diameter 1½ inches, depth 38 feet. Records available: 1950.

Apr. 26	30.99	July 28	18.22	Sept. 27	16.23	Nov. 28	15.02
May 23	27.57	Aug. 15	17.36	Oct. 27	15.77	Dec. 29	14.94
June 23	21.49	30	14.57				

Tarkio Creek area

(Wells in the Tarkio Creek area are numbered consecutively beginning with 1.)

## 7. E. F. Holquist. SE¼SE¼ sec. 11, T. 71 N., R. 38 W. Records available: 1934-50.

Jan. 27	23.12	Apr. 26	22.60	July 28	12.77	Oct. 27	9.28
Feb. 24	23.20	May 23	13.66	Aug. 30	9.71	Nov. 28	12.99
Mar. 29	22.27	June 22	24.73	Sept. 27	14.06	Dec. 29	16.74

## 72. O. A. Milner. SE¼SW¼ sec. 24, T. 72 N., R. 38 W. Records available: 1937-50.

Apr. 26	12.05	July 28	10.61	Sept. 27	11.85	Nov. 28	10.63
May 23	10.47	Aug. 30	11.15	Oct. 27	9.67	Dec. 29	11.78
June 22	11.32						

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73. U. S. Geol. Survey. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 25, T. 72 N., R. 38 W. Records available: 1937-49. Measurement discontinued.

78. Mr. Mainquist. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 35, T. 71 N., R. 38 W. Records available: 1937-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	7.20	May 23	7.74	Aug. 15	1.65	Oct. 27	1.18
Feb. 24	6.15	June 22	4.30	30	1.22	Nov. 28	12.99
Mar. 29	5.84	July 28	4.12	Sept. 27	2.89	Dec. 29	14.53
Apr. 26	6.03						

79. U. S. Geol. Survey. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 35, T. 71 N., R. 38 W. Records available: 1937-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 24	11.50	May 23	9.88	Aug. 15	7.70	Oct. 27	10.27
Mar. 29	11.70	June 23	11.28	30	9.00	Nov. 28	12.18
Apr. 26	15.27	July 28	8.91	Sept. 27	13.40	Dec. 29	14.77

81. L. G. Bergren. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 24, T. 71 N., R. 38 W. Records available: 1937-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	8.65	Apr. 26	8.09	June 23	7.52	Aug. 15	5.50
Feb. 24	6.90	May 23	6.68	July 28	7.02	30	6.51
Mar. 29	7.55						

82. U. S. Geol. Survey. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 29, T. 72 N., R. 37 W. Records available: 1937-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	21.03	May 23	15.49	Aug. 15	10.70	Oct. 27	13.46
Feb. 24	20.78	June 23	16.02	30	13.65	Nov. 28	15.05
Mar. 29	20.89	July 28	17.43	Sept. 27	16.12	Dec. 29	16.45
Apr. 26	21.27						

## Muscatine County

76-2-10J1. Grain Processing Corp. Water levels affected by nearby pumping well. Records available: 1949-50. Mar. 22, 9.64; June 19, 7.34; Oct. 3, 14.40; Dec. 20, 15.20.

76-2-10J2. Grain Processing Corp. Water levels affected by nearby pumping well. Records available: 1949-50. Mar. 22, 10.04; June 19, 7.99; Oct. 3, 14.87; Dec. 20, 15.78.

76-2-10J3. Grain Processing Corp. Water levels affected by nearby pumping well. Records available: 1949-50. Mar. 22, 10.75.

76-2-14D1. City of Muscatine test well 4. Records available: 1939-50. Mar. 22, 11.07; June 19, 7.18; Oct. 3, 13.37; Dec. 20, 14.38.

76-2-15A1. City of Muscatine test well 5. Records available: 1940-50. Mar. 22, 10.40; June 19, 7.09; Oct. 3, 12.76; Dec. 20, 13.75.

## Osceola County

99-41-18C2. City of Sibley. Records available: 1940-47. No measurement made in 1950.

## Page County

69-36-31A1. Shulze Baking Co. In Clarinda. Dug well in sand of Pleistocene age, diameter 2 $\frac{1}{2}$  feet, depth 13 feet. Recording gage installed Apr. 27, 1950. Records available: 1950.

### Daily noon water level, from recorder graph

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	....	8.66	8.89	9.15	....	9.31	8.99	....
2	.....	....	8.66	9.00	9.27	....	7.74	9.04	h9.38
3	.....	....	8.82	9.07	9.33	....	8.78	9.08	9.45
4	.....	....	8.91	9.17	8.69	....	9.01	9.04	9.41
5	.....	....	8.92	9.23	9.01	....	9.05	8.96	9.55
6	.....	....	....	9.32	9.15	....	9.07	9.14	9.52
7	.....	....	h9.23	....	9.26	....	8.67	9.13	9.45
8	.....	....	9.33	....	7.76	h8.64	....	8.58	9.51
9	.....	....	8.00	....	h8.02	8.69	....	8.98	9.57
10	.....	....	8.42	....	8.20	8.73	....	9.05	9.62
11	.....	....	8.63	....	8.38	8.85	....	9.06	9.53
12	.....	....	8.67	....	5.35	8.89	....	....	9.58
13	.....	....	8.75	....	5.99	8.96	....	....	9.61

69-36-31A1--Continued.

Daily noon water level, from recorder graph

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
14	.....	.....	7.92	.....	6.32	9.02	.....	.....	9.62
15	.....	.....	h8.22	.....	5.84	.....	.....	h9.04	9.68
16	.....	.....	.....	.....	6.31	.....	.....	9.21	9.70
17	.....	.....	8.17	h6.76	h6.90	.....	.....	9.09	9.74
18	.....	.....	.....	.....	7.11	.....	.....	9.00	9.73
19	.....	.....	.....	.....	7.24	.....	.....	9.16	9.72
20	.....	8.65	.....	.....	7.29	.....	.....	9.25	9.77
21	.....	7.69	.....	.....	7.42	.....	.....	9.21	9.73
22	.....	8.02	.....	h8.32	7.57	.....	.....	9.22	9.75
23	.....	8.14	.....	8.41	7.67	.....	.....	.....	9.71
24	.....	8.26	.....	.....	7.80	.....	.....	.....	.....
25	.....	7.89	.....	.....	.....	.....	.....	h9.34	.....
26	.....	8.09	.....	h8.62	.....	.....	.....	9.36	h9.80
27	10.17	.....	.....	8.69	.....	.....	.....	9.36	9.78
28	10.20	.....	.....	8.76	.....	.....	h8.89	9.41	9.72
29	10.11	.....	h8.75	8.85	.....	.....	8.93	9.36	9.73
30	10.09	8.38	8.82	8.93	.....	h9.19	8.91	.....	9.73
31	.....	8.57	.....	9.03	.....	.....	8.88	.....	9.68

h Tape measurement.

5. John Toft. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 7, T. 68 N., R. 38 W. Records available: 1934-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 23	15.28	May 22	8.82	Aug. 16	10.43	Oct. 25	10.28
Mar. 9	15.36	June 22	6.95	28	11.02	Nov. 27	11.36
27	14.95	July 21	8.79	Sept. 25	12.75	Dec. 26	13.93
Apr. 20	13.65						

6. T. Slickerveer. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 18, T. 69 N., R. 38 W. Records available: 1934-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	4.72	Apr. 26	4.98	July 28	3.93	Oct. 25	2.18
Feb. 24	5.04	May 23	3.39	Aug. 28	2.27	Nov. 28	2.58
Mar. 28	4.60	June 23	3.60	Sept. 25	2.26	Dec. 29	3.68

10. R. Palmquist. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 17, T. 70 N., R. 37 W. Records available: 1934-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	21.54	Apr. 26	25.88	July 28	24.11	Oct. 27	18.49
Mar. 10	25.74	May 23	20.66	Aug. 15	23.90	Nov. 28	23.22
29	25.76	June 22	21.82	30	22.10	Dec. 29	24.00

11. R. Palmquist. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 17, T. 70 N., R. 37 W. Records available: 1934-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	6.42	Apr. 26	6.75	July 28	6.50	Oct. 27	3.93
Mar. 10	6.65	May 23	4.87	Aug. 30	6.10	Nov. 28	6.44
29	6.70	June 22	6.00	Sept. 27	6.03	Dec. 29	5.06

12. Amil Windhorst. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 20, T. 69 N., R. 37 W. Records available: 1934-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	28.63	Apr. 26	32.47	July 28	31.02	Oct. 27	27.09
Feb. 24	30.40	May 23	31.42	Aug. 30	30.95	Nov. 28	22.18
Mar. 29	30.84	June 22	31.32	Sept. 27	31.24	Dec. 29	25.38

13. Amil Windhorst. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 20, T. 69 N., R. 37 W. Records available: 1934-46, 1949-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	22.40	Apr. 26	22.85	July 28	20.90	Oct. 27	17.14
Feb. 24	20.10	May 23	21.89	Aug. 30	21.07	Nov. 28	16.64
Mar. 29	22.14	June 22	20.65	Sept. 27	21.04	Dec. 29	20.58

15. Metropolitan Life Insurance Co. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 21, T. 67 N., R. 38 W. Records available: 1934-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 23	7.05	Apr. 25	6.87	July 21	4.78	Oct. 25	8.98
Feb. 23	6.80	May 22	6.10	Aug. 28	5.41	Nov. 27	4.79
Mar. 27	6.69	June 22	5.75	Sept. 25	5.90	Dec. 28	4.20
Apr. 20	7.82						

17. Albert Nordholm. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 20, T. 67 N., R. 38 W. Records available: 1934-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 23	17.20	Apr. 25	18.03	July 21	16.55	Oct. 25	12.60
Feb. 23	17.98	May 22	17.57	Aug. 28	15.05	Nov. 27	17.54
Mar. 27	18.14	June 22	16.78	Sept. 25	16.32	Dec. 26	16.89
Apr. 20	18.07						

44A. Elsie Nordstrom. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 35, T. 69 N., R. 39 W. Records available: 1937-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 23	21.27	Apr. 25	19.61	Aug. 16	8.90	Oct. 25	13.98
Feb. 23	21.82	May 22	14.53	28	12.42	Nov. 27	15.60
Mar. 29	16.79	June 22	11.38	Sept. 25	14.50	Dec. 28	17.70
Apr. 20	10.09	July 21	10.24				

47. Elsie Nordstrom. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 35, T. 69 N., R. 39 W. Records available: 1937-50.

Jan. 23	19.00	Apr. 25	19.30	Aug. 16	15.62	Oct. 25	15.44
Feb. 23	17.48	May 22	17.35	28	15.72	Nov. 27	16.60
Mar. 29	18.91	June 22	16.03	Sept. 25	16.92	Dec. 28	17.00
Apr. 20	19.08	July 21	16.09				

70. John Snyder. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 30, T. 69 N., R. 38 W. Records available: 1937-50.

Jan. 23	7.56	Apr. 25	7.09	Aug. 16	4.53	Oct. 25	4.54
Mar. 9	6.75	May 22	2.55	28	5.49	Nov. 27	6.40
29	6.57	June 22	2.30	Sept. 25	6.32	Dec. 28	6.84
Apr. 20	7.88	July 21	3.84				

71. John Snyder. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 30, T. 69 N., R. 38 W. Records available: 1937-50.

Jan. 23	7.28	Apr. 25	7.24	Aug. 16	6.11	Oct. 25	4.46
Mar. 9	7.08	May 22	5.87	28	6.19	Nov. 27	6.25
29	6.91	June 22	5.06	Sept. 25	6.58	Dec. 28	6.48
Apr. 20	7.19						

76. Metropolitan Life Insurance Co. SE $\frac{1}{2}$ SW $\frac{1}{4}$  sec. 29, T. 68 N., R. 38 W. Records available: 1937-50.

Jan. 23	12.59	Apr. 20	12.14	June 22	12.05	Sept. 25	12.87
Feb. 23	11.57	25	12.19	July 21	11.20	Nov. 27	12.06
Mar. 27	11.88	May 22	11.65	Aug. 28	12.18	Dec. 28	12.10

80. Mr. Burton. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 34, T. 69 N., R. 38 W. Records available: 1937-50.

Feb. 24	29.54	May 23	26.82	Aug. 16	25.28	Oct. 27	18.62
Mar. 29	28.84	June 22	26.33	30	23.89	Nov. 28	24.40
Apr. 26	30.14	July 28	25.76	Sept. 27	27.37	Dec. 29	24.36

83. Elsie Nordstrom. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 35, T. 69 N., R. 39 W. Records available: 1938-50.

Jan. 23	22.56	May 22	21.48	Aug. 16	16.94	Oct. 25	15.88
Feb. 23	22.74	June 22	19.02	28	16.79	Nov. 27	16.08
Mar. 29	22.36	July 21	17.85	Sept. 25	17.30	Dec. 28	16.64
Apr. 25	22.67						

84. Elsie Nordstrom. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 35, T. 69 N., R. 39 W. Records available: 1938-50.

Jan. 23	21.49	May 22	19.99	Aug. 16	17.10	Oct. 25	16.05
Feb. 23	19.78	June 22	18.82	28	16.86	Nov. 27	15.98
Mar. 29	20.86	July 21	17.89	Sept. 25	15.80	Dec. 28	16.34
Apr. 25	22.08						

85. Elsie Nordstrom. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 35, T. 69 N., R. 39 W. Records available: 1939-49. Measurement discontinued.

86. Elsie Nordstrom. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 35, T. 69 N., R. 39 W. Records available: 1938-50.

Jan. 23	13.53	May 22	14.93	Aug. 16	12.29	Oct. 25	11.20
Feb. 23	16.05	June 22	13.67	28	12.15	Nov. 27	10.95
Mar. 29	16.59	July 21	14.77	Sept. 25	12.24	Dec. 28	11.24
Apr. 25	16.86						

87. Elsie Nordstrom. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 35, T. 69 N., R. 39 W. Records available: 1938-50.

Jan. 23	11.77	May 22	9.09	Aug. 16	6.54	Oct. 25	7.65
Feb. 23	11.69	June 22	6.90	28	6.61	Nov. 27	6.96
Mar. 29	11.75	July 21	7.18	Sept. 25	7.80	Dec. 28	4.77
Apr. 25	12.07						



Palo Alto County

97-34-29N1. J. D. Westergard. Records available: 1940-50. Mar. 24, 0.50; June 21, 1.42; Sept. 20, 1.68; Dec. 20, 1.44.

97-34-29N2. J. D. Westergard. Records available: 1940-41. Measurement discontinued.

97-34-30Q1. Norman Broadwell. About 150 feet north of normal shore line of Lost Island Lake. Records available: 1940-45, 1948-50. Mar. 24, 18.10; June 21, 17.52; Sept. 20, 17.92.

96-34-6J1. Electric Park. Records available: 1940-50. Mar. 24, 1.61; June 21, 2.46; Sept. 20, 2.65; Dec. 20, 1.79.

Polk County

78-24-4P1. S. S. Kresge Co. In Des Moines. Records available: 1943-50. Mar. 24, 30.15; June 22, 32.01; Oct. 5, 32.02; Dec. 22, 31.13.

79-22-22A1. J. G. Reed. Records available: 1940-50. Mar. 24, 6.33; June 23, 5.46; Oct. 6, 7.38; Dec. 22, 8.55.

Poweshiek County

78-15-1R1. J. F. Mulcahey. Records available: 1943-49. Measurement discontinued.

Sac County

89-38-11J1. Owner unknown. Measurement discontinued. Records available: 1942-49.

89-38-26A2. City of Schaller. In Schaller. Records available: 1940-50. Mar. 21, 220.47; June 20, 220.43; Sept. 19, 220.73.

87-37-21A1. Wayne Ogren., Records available: 1942-50. Mar. 21, 5.41; June 20, 6.43; Sept. 19, 5.94.

86-36-2C1. John Christian. Records available: 1940-50. Mar. 21, 4.47; June 20, 1.10; Sept. 19, 6.31; Dec. 19, 5.23.

86-36-2E1. Albert Culver, Jr. Records available: 1940-50. June 20, 0.00; Sept. 19, 0.49.

86-36-4N1. Iowa State Conservation Commission. Records available: 1940-50. Mar. 21, 5.45; June 20, 3.90; Sept. 19, 5.60; Dec. 19, 5.85.

Sioux County

95-45-5A1. City of Sioux Center. In Sioux Center. Records available: 1939-45, 1948-49. No measurement made in 1950.

Story County

63-24-2Q1. City of Ames well 2. In Ames. Highest water level 45.71, June 20, 1950; lowest 58.67, Apr. 27, 1950. Records available: 1947-50.

Daily high and low water levels, from recorder graph

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	51.74	56.13	56.95	57.25	.....	.....	53.08	53.38	50.36	55.52	48.99	53.90
2	51.17	56.13	56.99	57.20	.....	.....	52.96	53.26	50.56	55.65	53.75	53.97
3	51.44	56.20	56.88	57.22	.....	57.06	49.07	53.35	54.90	55.15	49.33	54.08
4	51.52	56.40	56.68	57.22	51.83	57.20	53.35	53.63	50.19	55.70	53.59	53.77
5	51.30	56.26	56.72	57.02	51.46	57.05	53.50	53.67	54.32	55.66	48.71	53.71
6	56.20	56.45	52.20	56.83	51.01	56.65	49.26	53.42	49.57	54.35	53.64	53.93
7	56.28	56.52	56.43	57.42	50.87	56.35	53.41	54.25	54.12	54.28	.....	.....
8	56.25	56.51	57.23	57.70	50.23	55.79	49.76	54.32	49.45	54.28	.....	.....
9	56.34	56.48	51.92	57.69	50.22	55.76	49.18	54.38	48.86	53.97	.....	.....
10	56.36	56.64	56.65	57.15	50.32	55.64	49.76	54.23	48.40	53.32	.....	.....
11	56.44	56.66	56.25	56.65	50.16	55.58	50.01	54.35	52.90	53.17	.....	.....
12	56.45	56.67	56.23	56.51	53.96	54.11	49.58	54.51	48.50	53.10	.....	.....
13	56.42	56.72	56.30	57.02	53.94	54.03	49.51	54.55	53.02	53.32	.....	.....
14	56.48	56.72	56.85	57.11	53.88	54.01	49.66	54.36	48.36	53.43	.....	.....
15	56.47	56.74	52.33	57.08	53.82	54.00	54.30	54.61	53.20	53.38	.....	.....

83-24-2Q1--Continued.

Daily high and low water levels, from recorder graph

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
16	51.62	56.68	51.75	57.10	53.69	53.85	50.19	54.59	48.64	53.38	.....	.....
17	56.33	56.80	53.10	57.16	52.34	53.85	49.53	54.70	53.30	53.57	.....	.....
18	56.50	56.74	51.92	56.47	49.50	53.46	49.77	54.46	48.74	53.51	.....	.....
19	56.54	57.46	56.38	56.62	49.59	53.48	54.45	54.74	53.43	53.70	.....	51.52
20	52.18	57.41	51.38	56.62	49.24	53.25	49.64	54.89	48.84	53.61	45.71	51.77
21	56.52	56.80	52.80	57.07	53.20	53.40	54.86	55.05	50.19	53.78	46.06	52.02
22	55.90	57.52	56.28	57.12	49.45	54.16	50.19	55.01	48.58	53.66	46.07	51.94
23	51.62	57.18	51.62	56.31	53.37	54.18	54.87	55.06	53.50	53.87	46.95	52.12
24	56.85	57.31	.....	.....	49.46	53.93	50.06	54.97	53.63	54.00	46.71	52.40
25	52.17	57.44	.....	.....	53.18	54.01	50.29	54.98	49.16	53.99	46.43	52.47
26	57.03	57.73	.....	.....	53.05	53.30	53.45	58.54	49.51	53.87	46.66	52.38
27	52.23	57.21	.....	.....	48.88	53.14	50.37	58.67	53.60	53.78	47.05	.....
28	56.78	57.06	.....	.....	52.57	53.77	54.17	55.00	48.83	53.70	.....	.....
29	56.95	57.20	.....	.....	53.75	54.10	55.00	55.29	53.52	53.72	.....	.....
30	56.94	57.08	.....	.....	49.18	53.90	50.35	55.11	48.90	53.70	.....	.....
31	56.91	57.05	.....	.....	53.16	53.93	.....	.....	53.55	53.77	.....	.....

Daily high and low water levels, from recorder graph

Day	September		October		November		December	
	High	Low	High	Low	High	Low	High	Low
1	.....	.....	50.74	56.41	51.54	56.88	50.79	56.32
2	.....	.....	50.66	56.24	51.11	56.68	50.70	56.34
3	.....	.....	50.81	56.29	51.29	56.72	50.75	56.34
4	.....	.....	50.76	56.35	51.22	56.75	50.65	56.26
5	.....	.....	50.66	56.16	51.10	56.61	.....	.....
6	.....	.....	51.08	56.28	56.15	56.80	.....	.....
7	.....	.....	50.99	56.24	51.26	56.66	.....	.....
8	.....	.....	50.69	56.22	51.29	56.65	.....	.....
9	.....	.....	50.66	56.18	51.17	56.75	.....	.....
10	.....	.....	50.94	56.28	51.32	56.74	.....	.....
11	.....	.....	50.80	56.23	51.41	56.74	.....	.....
12	.....	.....	50.78	56.26	51.33	56.77	.....	.....
13	.....	.....	50.94	56.30	51.14	56.62	.....	.....
14	.....	.....	51.13	56.46	51.28	56.70	.....	.....
15	.....	.....	50.98	56.51	51.30	56.74	.....	.....
16	.....	.....	50.84	56.37	51.39	56.75	.....	.....
17	.....	.....	51.49	56.42	51.28	56.77	.....	.....
18	.....	56.45	51.16	56.54	50.82	56.25	.....	.....
19	51.32	56.42	51.29	56.50	50.78	56.25	.....	.....
20	51.27	56.48	51.22	56.53	50.70	56.33	.....	.....
21	50.83	56.16	51.21	56.58	50.77	56.35	.....	.....
22	50.97	56.36	51.13	56.49	50.77	56.35	.....	.....
23	50.51	56.11	51.01	56.45	50.75	56.24	.....	.....
24	50.69	56.24	51.16	56.50	50.56	56.23	.....	.....
25	50.57	56.14	51.10	56.54	50.92	56.26	.....	.....
26	50.82	56.14	51.13	56.53	50.61	56.14	.....	.....
27	50.75	56.18	51.21	56.55	50.55	56.25	.....	.....
28	50.80	56.22	51.27	56.61	50.93	56.28	.....	.....
29	50.77	56.22	51.17	56.60	50.82	56.33	.....	.....
30	51.07	56.52	51.12	56.53	50.80	56.33	.....	.....
31	.....	.....	51.53	56.63	.....	.....	.....	.....

83-24-4Q1. Iowa State College. In Ames. Records available: 1939-50. Mar. 23, 43.04; June 19, 42.88; Sept. 18, 46.33; Dec. 18, 43.90.

83-24-4R1. Iowa State College. Records available: 1942-50. Mar. 23, 23.62; June 19, 23.60; Sept. 18, 23.56; Dec. 18, 24.44.

83-24-20J1. Agricultural Engineering Experiment Station. Records available: 1939-50. Mar. 23, 15.67; June 19, 6.32; Sept. 18, 12.48; Dec. 18, 13.24.

#### Tama County

82-13-13R1. City of Belle Plaine. Records available: 1945-49. No measurement made in 1950.

Van Buren County

69-10-36F1. Town of Keosauqua. In Keosauqua. Records available: 1949-50. Mar. 22, 20.05; June 19, 19.80; Oct. 4, 21.18; Dec. 20, 22.51.

Warren County

77-25-12R1. Mr. Vorse. Measurement discontinued. Records available: 1942-49.

76-25-8Q1. Iowa State College. Records available: 1940-50. June 20, 11.24; Oct. 5, 27.47; Dec. 21, 27.15.

Wayne County

67-23-20Q1. L. P. Bryan. Records available: 1940, 1942, 1948. No measurement made in 1950.

Webster County

90-30-26A1. County of Webster. Records available: 1942-50. Mar. 28, 24.26; June 22, 20.04; Sept. 20, 15.33; Dec. 20, 16.44.

90-28-1B1. Ed Askland. Records available: 1942-43, 1945-50. Mar. 29, 12.82; June 22, 4.17; Dec. 21, 13.03.

90-28-8Q1. Mr. Hovey. Records available: 1942-50. Mar. 29, 10.53; June 22, 6.25; Sept. 20, 9.57; Dec. 21, 10.18.

90-27-31N1. C. S. Knudson. Records available: 1942-43, 1948-50. Mar. 29, 13.06; June 22, 8.27; Sept. 20, 8.91; Dec. 21, 9.54.

89-30-18J1. Dan Cain. Records available: 1942-50. Mar. 28, 19.25; June 22, 14.42; Sept. 20, 18.31; Dec. 20, 19.34. Measurement discontinued.

89-30-23R1. Johnson Township Consolidated School. Records available: 1942-45, 1947-50. June 22, 35.36; Sept. 20, 35.20; Dec. 20, 35.29.

89-28-21Q2. Litchfield Real Estate Co. In Fort Dodge. Records available: 1942-43. Measurement discontinued.

88-29-11C1. Charles Madson. Records available: 1942-50. Mar. 29, 9.22; June 22, 5.32; Sept. 21, 6.90; Dec. 21, 7.25.

87-30-30R1. School District No. 9. Records available: 1942-50. Mar. 29, 5.11; June 22, 5.33; Sept. 21, 4.50; Dec. 21, 9.20.

87-28-5Q1. R. Schultz. Records available: 1942-50. Mar. 29, 5.64; Dec. 21, 4.82. Measurement discontinued.

87-28-29N1. Grant Spangler. Highest water level 4.47, May 11; lowest 11.39, Mar. 2. Records available: 1942-50.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	9.66	10.83	.....	.....	h7.93	5.74	.....	7.11	7.87	.....	.....	6.59
2	9.68	10.83	h11.39	.....	7.99	.....	.....	7.22	7.94	h8.26	.....	6.59
3	9.65	10.87	11.23	.....	.....	.....	6.33	7.24	7.99	.....	.....	6.74
4	9.64	10.85	11.16	.....	.....	.....	6.45	7.25	8.08	.....	.....	6.75
5	.....	.....	11.19	.....	.....	.....	6.51	7.32	8.09	.....	.....	6.92
6	.....	10.91	11.08	.....	.....	.....	6.58	7.35	8.08	.....	.....	6.93
7	.....	10.96	9.70	.....	.....	.....	6.61	7.36	8.05	.....	.....	6.81
8	.....	10.96	.....	.....	.....	.....	6.66	7.41	8.05	.....	.....	6.91
9	.....	10.95	.....	.....	.....	.....	6.70	7.45	8.07	.....	.....	6.98
10	.....	10.94	.....	.....	.....	h5.85	6.76	7.48	8.06	.....	.....	7.06
11	10.22	11.00	.....	.....	h4.47	5.93	6.79	h7.52	8.15	.....	.....	8.98
12	10.18	11.05	.....	.....	4.50	5.92	6.80	7.52	8.24	7.44	.....	7.05
13	10.13	11.08	9.41	h8.96	4.60	5.98	6.81	7.47	.....	7.32	.....	7.08
14	.....	11.03	9.26	8.95	4.75	6.12	6.74	7.41	.....	7.26	.....	7.11
15	.....	11.04	9.33	8.89	.....	6.15	6.66	.....	.....	7.17	.....	7.23
16	.....	11.13	9.44	.....	.....	6.27	6.69	.....	.....	7.02	.....	7.25
17	.....	11.13	9.45	.....	.....	6.37	6.74	.....	.....	6.85	h6.57	7.30
18	.....	11.19	9.56	.....	.....	6.25	6.83	.....	.....	6.69	.....	7.30
19	10.51	11.20	9.64	.....	.....	6.14	6.74	.....	.....	6.60	.....	7.29
20	10.51	11.21	9.66	.....	.....	6.08	6.78	h7.64	.....	6.48	.....	7.33

87-28-29N1--Continued.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	10.43	11.22	9.70	8.70	h5.36	6.02	6.78	7.62	8.51	6.28	....	7.33
22	10.41	11.23	9.82	8.64	5.04	5.86	6.74	7.63	8.57	6.23	....	7.35
23	10.43	11.24	9.85	8.53	4.91	5.76	6.73	7.68	8.55	....	....	7.33
24	10.29	11.24	9.87	8.39	5.03	5.80	6.81	7.71	8.53	....	....	7.45
25	.....	11.25	9.88	....	5.15	5.79	6.85	7.79	8.51	....	....	7.36
26	.....	.....	9.79	....	5.19	5.92	6.87	7.80	8.55	5.82	....	7.53
27	.....	.....	9.66	....	5.19	5.99	6.90	7.78	8.42	5.83	....	7.53
28	.....	.....	9.89	....	5.23	5.98	6.93	7.77	....	5.85	h6.66	7.41
29	.....	.....	10.28	....	5.37	6.06	6.96	7.77	....	5.93	h6.60	7.51
30	10.79	.....	9.80	....	5.48	6.12	6.97	h7.80	....	5.94	6.61	7.55
31	10.85	.....	9.34	....	5.57	.....	7.01	7.82	....	5.95	.....	7.52

h Tape measurement.

87-27-18M1. I. B. Marsh. Records available: 1942-50. Mar. 29, 135.11; June 22, 130.44; Sept. 21, 131.30.

86-30-5C1. E. C. Monson. Records available: 1942-50. Mar. 29, 61.07; June 22, 60.29; Sept. 21, 61.15; Dec. 21, 60.90.

86-29-14A1. F. E. Castenson. Records available: 1942-50. Mar. 29, 7.61; June 22, 3.02; Sept. 21, 3.67; Dec. 21, 7.57.

86-28-14H1. Town of Dayton. Records available: 1942-48. No measurement in 1950.

86-27-4D1. Mr. Davis. Records available: 1942-50. Mar. 29, 107.51; June 22, 105.88; Sept. 21, 106.55.

Woodbury County

89-48-23B1. City of Sioux City Riverside Station well. Records available: 1939-44; 1949-50.

Daily noon water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	15.90	16.26	.....	14.46	13.10	13.96	13.59	.....	14.47	.....	.....	.....
2	15.88	16.26	.....	14.40	13.18	14.00	13.63	14.05	14.49	.....	.....	.....
3	15.97	.....	15.97	14.22	13.32	14.07	13.63	14.02	14.50	.....	.....	.....
4	16.05	.....	15.99	14.01	13.38	14.01	13.59	.....	14.55	.....	.....	.....
5	16.02	.....	15.77	14.09	.....	13.98	13.61	.....	14.72	14.75	.....	.....
6	16.02	.....	15.53	14.07	.....	14.07	13.74	.....	14.74	.....	.....	.....
7	16.16	.....	15.34	14.09	.....	14.09	13.80	.....	.....	.....	14.88	.....
8	15.99	16.26	15.36	14.03	13.51	14.15	13.88	.....	.....	.....	.....	.....
9	16.03	16.11	15.40	.....	13.47	14.18	13.90	.....	.....	.....	.....	.....
10	16.17	16.06	15.46	.....	13.54	14.17	13.98	14.03	.....	14.88	.....	.....
11	16.12	16.04	15.51	.....	13.20	.....	13.98	14.07	14.88	.....	.....	.....
12	16.08	15.97	15.47	14.04	13.05	14.13	13.92	13.94	14.89	.....	.....	15.15
13	16.06	15.98	15.43	.....	13.03	14.22	14.00	13.37	14.89	.....	14.87	.....
14	.....	15.97	15.40	.....	13.10	14.21	13.95	13.89	.....	.....	.....	.....
15	.....	16.07	15.45	.....	13.27	14.05	13.91	13.97	.....	.....	.....	.....
16	16.13	16.06	15.46	.....	13.33	.....	13.96	14.02	.....	14.91	.....	.....
17	16.09	15.99	15.46	.....	13.45	.....	14.01	14.12	.....	.....	14.89	.....
18	16.16	16.12	15.49	.....	13.44	.....	14.02	14.12	15.00	.....	.....	.....
19	16.18	16.04	.....	.....	13.48	.....	13.80	14.16	15.05	.....	.....	.....
20	16.12	15.98	.....	.....	13.35	13.35	13.85	14.11	.....	.....	.....	.....
21	16.13	16.06	.....	13.15	.....	13.47	13.74	14.05	.....	.....	.....	.....
22	16.14	16.00	h15.71	13.35	.....	13.49	13.69	14.10	.....	.....	.....	.....
23	16.15	16.01	15.54	13.70	.....	13.48	13.68	14.14	.....	.....	.....	.....
24	16.14	16.02	15.43	14.17	.....	13.60	13.71	14.18	.....	.....	15.05	.....
25	16.15	16.06	15.15	14.63	.....	13.62	13.75	14.24	.....	.....	.....	.....
26	16.24	16.01	14.89	14.05	13.74	.....	13.80	14.21	.....	.....	.....	.....
27	16.19	15.89	14.85	13.60	13.73	.....	13.86	14.19	14.83	14.87	.....	.....
28	16.13	.....	14.72	13.35	13.72	13.53	13.91	14.21	.....	.....	.....	.....
29	16.25	.....	14.42	13.23	13.78	13.48	13.96	14.28	.....	.....	.....	.....
30	16.23	.....	14.36	13.10	.....	13.56	.....	14.32	.....	.....	.....	.....
31	16.20	.....	14.33	.....	.....	.....	14.35	.....	.....	.....	.....	.....

h Tape measurement.

89-47-22B1. City of Sioux City well Lowell 4. Records available: 1939-48. Measurement discontinued.

89-47-22B2. City of Sioux City well Lowell 3. Records available: 1949-50.

Daily high and low water levels, from recorder graph

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	24.78	25.23	22.69	23.54	23.62	25.00	22.39	23.38	21.01	21.64	21.97	22.82
2	25.17	25.44	23.20	23.65	23.99	24.92	22.15	22.39	21.05	22.33	22.82	23.42
3	24.31	25.35	23.65	24.04	24.16	24.57	22.22	23.90	21.89	22.78	22.52	23.47
4	24.31	25.71	23.98	24.14	24.07	25.05	22.89	23.40	21.70	22.58	21.42	22.72
5	25.05	24.01	23.09	24.02	25.05	26.37	22.94	24.12	21.59	22.49	21.82	22.68
6	23.09	24.18	23.00	23.47	25.70	26.48	22.94	23.65	21.29	22.54	22.68	23.20
7	22.75	23.18	23.27	23.82	25.02	25.82	22.52	23.38	21.25	22.07	23.19	24.11
8	23.19	23.00	23.43	24.27	24.40	25.44	23.50	22.73	21.13	21.99	23.22	24.24
9	22.63	23.62	24.27	24.73	24.95	25.52	21.59	22.73	21.77	22.55	23.92	24.94
10	23.39	23.55	23.30	24.75	24.35	25.46	21.38	21.70	22.10	22.73	24.66	25.24
11	23.25	23.83	23.61	24.40	24.79	25.25	21.67	23.03	22.08	22.88	24.74	25.58
12	22.32	23.45	23.44	23.96	25.22	25.60	22.15	23.05	22.14	22.75	24.32	24.81
13	22.07	23.40	23.44	23.62	24.10	25.61	22.00	23.30	21.15	22.45	24.38	25.63
14	22.93	23.48	23.24	23.43	23.46	24.62	23.30	23.67	21.94	22.36	25.18	26.00
15	22.73	22.93	23.30	23.62	23.89	24.74	22.41	23.55	21.98	22.46	24.75	25.65
16	22.34	22.73	23.52	23.61	24.08	24.63	22.23	22.85	22.43	22.62	24.07	26.05
17	22.07	24.20	23.35	23.88	23.53	24.74	22.03	22.86	22.19	.....	23.43	24.07
18	24.10	24.65	23.12	23.82	23.25	23.60	22.41	22.95	.....	.....	23.03	23.43
19	22.52	24.97	22.62	23.12	22.83	23.25	21.79	22.77	.....	.....	22.20	23.03
20	21.28	22.52	22.37	23.85	22.79	23.60	22.33	22.82	.....	.....	22.16	23.07
21	20.68	21.28	23.85	24.42	22.07	23.13	22.82	22.90	.....	.....	22.64	23.32
22	20.35	20.68	24.13	24.46	22.04	23.37	22.82	22.88	.....	.....	23.17	24.01
23	19.99	20.41	23.61	24.13	22.92	23.87	22.43	22.85	.....	.....	23.35	23.99
24	19.82	20.15	23.62	24.10	23.03	23.68	22.03	22.84	.....	.....	23.81	24.37
25	20.05	20.30	24.00	25.22	22.20	23.45	21.59	22.31	.....	.....	23.68	24.38
26	20.30	21.80	25.22	26.26	21.49	22.20	21.86	22.63	.....	.....	24.09	24.52
27	21.80	22.05	24.91	26.44	21.55	22.61	22.63	22.92	.....	.....	23.90	24.15
28	21.84	22.32	23.91	24.91	22.16	23.43	22.32	22.92	.....	.....	23.60	24.17
29	22.33	22.66	.....	.....	22.85	23.55	21.63	22.77	.....	.....	24.11	24.30
30	22.47	22.66	.....	.....	22.83	23.64	21.38	22.12	.....	.....	24.14	24.33
31	22.48	23.55	.....	.....	22.83	23.60	.....	.....	.....	.....	.....	.....

Daily high and low water levels, from recorder graph

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	24.13	24.24	.....	.....	21.29	22.16	21.06	21.18	21.14	21.75	22.89	23.12
2	24.19	25.43	.....	.....	21.04	22.24	21.26	21.20	21.06	21.79	22.93	23.22
3	24.05	24.83	.....	.....	20.97	22.03	20.30	21.17	21.31	21.92	22.46	23.25
4	22.20	24.37	.....	.....	21.04	22.03	20.40	21.00	21.45	21.96	22.05	22.98
5	22.06	22.81	.....	.....	20.85	21.79	20.78	20.87	20.55	21.45	22.98	23.62
6	22.35	23.62	.....	.....	20.80	22.52	20.10	20.88	20.48	21.52	23.24	23.52
7	23.01	23.62	.....	23.10	22.52	23.08	20.33	20.87	21.18	22.31	22.88	23.29
8	22.87	23.04	21.68	22.59	22.43	23.10	20.09	20.86	21.55	22.80	22.64	22.89
9	21.55	22.92	21.79	22.49	22.37	22.98	19.84	20.70	22.22	22.84	22.66	22.90
10	21.46	22.50	22.17	23.03	22.29	23.00	19.67	20.39	22.52	23.17	21.96	22.92
11	22.15	22.92	22.58	23.31	21.98	22.66	19.52	20.57	22.59	23.28	21.52	22.36
12	22.43	23.45	21.87	23.35	21.15	22.73	20.55	20.68	21.06	22.59	22.36	22.56
13	22.77	23.66	21.70	22.04	22.20	22.63	20.55	20.72	21.19	21.99	22.53	22.64
14	22.21	23.67	21.55	22.90	21.64	22.29	20.69	20.76	21.93	22.07	22.61	22.85
15	22.05	23.46	22.41	23.47	21.82	22.48	19.65	20.83	22.07	22.35	22.85	23.65
16	22.62	23.49	22.52	23.78	21.65	22.03	19.77	20.48	21.53	22.60	23.65	23.99
17	22.53	22.97	22.92	23.88	21.37	21.67	19.99	20.61	22.60	22.86	22.60	24.00
18	22.35	23.00	22.57	23.62	21.31	22.00	19.92	20.54	22.40	22.84	22.35	23.33
19	22.06	22.83	21.50	22.82	21.10	22.52	20.27	20.79	21.78	22.40	23.33	23.85
20	22.83	22.95	20.84	21.50	21.99	22.58	20.68	20.85	21.69	22.64	23.63	23.96
21	22.57	23.36	20.71	21.76	21.18	22.54	20.67	20.87	22.11	22.82	23.34	23.97
22	23.36	23.57	21.58	21.95	.....	.....	20.82	20.96	22.68	23.14	22.48	23.87
23	23.08	23.62	21.68	22.48	.....	.....	20.47	20.96	22.24	23.22	22.28	23.29
24	.....	.....	22.03	22.78	.....	.....	19.77	20.47	21.81	22.81	22.04	22.87
25	.....	.....	22.37	22.93	.....	21.87	19.59	20.03	22.77	23.20	21.66	22.69
26	.....	.....	.....	23.05	20.70	22.09	19.30	19.75	22.31	23.22	22.23	23.02
27	.....	.....	.....	.....	20.83	21.98	19.54	19.64	21.85	22.79	22.90	23.07
28	.....	.....	.....	23.02	21.00	22.36	19.62	19.75	22.80	23.07	22.95	23.17
29	.....	.....	22.13	22.94	20.81	21.89	19.61	19.77	23.00	23.22	23.19	23.32
30	.....	.....	22.07	22.72	20.29	21.35	19.58	20.82	23.11	23.17	23.18	23.37
31	.....	.....	21.68	22.29	.....	.....	20.52	21.14	.....	.....	21.90	23.18

## Wright County

91-26-27L1. City of Eagle Grove. Dug well in sand of Pleistocene age, diameter 12 feet, depth 49 feet. Land-surface datum is 1,115 feet above sea-level datum. Weekly recording gage installed Mar. 15, 1950. Records available: 1950. Measurement discontinued.

Daily high and low water levels, from recorder graph

Day	March		April		May		June	
	High	Low	High	Low	High	Low	High	Low
1	.....	.....	16.62	34.88	15.97	35.05	16.70	34.20
2	.....	.....	16.72	35.23	16.41	35.70	16.38	35.54
3	.....	.....	16.66	33.49	16.53	34.51	16.90	34.08
4	.....	.....	16.50	34.70	16.55	33.55	16.90	34.10
5	.....	.....	16.76	34.80	16.48	34.60	16.45	35.97
6	.....	.....	16.96	36.95	16.57	35.90	16.78	36.80
7	.....	.....	17.62	37.08	16.87	33.88	17.20	33.50
8	.....	.....	17.74	36.98	16.30	34.00	17.10	39.90
9	.....	.....	17.28	34.37	16.39	35.60	21.50	38.80
10	.....	.....	16.50	36.13	16.45	34.65	19.20	37.54
11	.....	.....	17.10	35.90	16.50	34.04	18.60	35.80
12	.....	.....	17.53	37.40	16.70	34.23	17.80	37.35
13	.....	.....	17.83	36.93	16.38	34.69	18.50	38.08
14	.....	.....	17.50	35.00	16.30	33.00	18.63	38.31
15	18.60	.....	17.69	36.15	16.20	34.93	18.30	41.00
16	16.43	35.00	17.59	35.10	16.50	33.88	21.84	41.00
17	17.10	35.94	16.70	35.42	16.20	32.63	19.48	37.80
18	.....	.....	16.88	34.84	16.05	35.27	18.43	36.12
19	.....	.....	16.89	35.67	16.70	35.36	17.32	35.26
20	.....	.....	17.03	35.82	16.75	35.75	17.21	35.79
21	.....	.....	16.95	35.40	16.70	34.04	17.33	35.48
22	.....	36.30	16.75	35.77	16.10	35.53	16.90	35.85
23	17.60	36.80	17.01	35.71	16.60	34.35	17.00	36.35
24	17.40	35.80	16.61	35.50	16.49	35.08	17.10	35.20
25	17.62	36.75	16.37	34.05	16.91	34.53	16.95	34.20
26	17.30	33.58	16.24	34.96	16.98	35.71	16.20	36.50
27	16.48	36.38	16.62	34.17	17.10	33.74	16.95	36.10
28	17.02	35.60	16.65	34.00	17.00	35.10	16.80	36.50
29	17.10	35.26	16.79	35.06	16.40	36.60	16.85	36.10
30	16.57	35.70	16.60	32.93	16.95	35.25	16.86	35.70
31	16.58	34.72	.....	.....	16.50	34.32	.....	.....

Daily high and low water levels, from recorder graph

Day	July		August		September		October		November	
	High	Low	High	Low	High	Low	High	Low	High	Low
1	16.70	35.35	16.71	33.40	16.90	35.80	17.19	34.94	.....	36.05
2	16.80	35.90	16.67	35.80	16.90	35.40	16.55	33.65	18.20	37.00
3	16.20	35.40	16.75	35.10	17.00	35.10	16.52	37.82	18.30	35.60
4	16.30	34.55	16.65	35.83	16.45	34.80	18.08	36.27	18.10	36.00
5	16.05	34.50	16.46	35.46	16.50	.....	17.42	36.37	17.58	35.80
6	15.70	34.40	16.42	34.92	.....	36.30	17.26	36.56	17.18	36.33
7	15.74	35.54	15.83	35.93	17.18	36.53	16.86	36.39	17.55	36.18
8	15.98	35.08	16.34	36.14	17.26	36.36	16.75	35.25	17.42	34.94
9	16.24	34.47	16.60	37.10	17.49	36.14	16.33	35.85	16.62	35.42
10	15.76	35.16	16.90	36.85	17.52	35.72	16.64	36.14	16.61	35.31
11	15.90	35.60	17.00	37.10	16.65	35.75	16.84	34.76	17.12	35.90
12	16.56	36.39	16.95	34.60	16.88	36.08	16.78	35.16	17.10	34.58
13	17.13	35.48	16.65	34.10	17.01	36.65	16.56	36.41	16.32	36.27
14	16.92	35.23	16.10	35.45	17.32	37.62	16.56	37.08	.....	.....
15	16.81	35.76	16.40	36.00	17.80	37.90	16.86	35.26	.....	.....
16	17.44	35.24	16.40	36.00	17.87	37.72	16.36	35.06	.....	.....
17	16.97	33.03	.....	35.80	18.00	37.50	16.26	35.76	.....	.....
18	16.17	35.37	16.74	34.84	17.42	36.32	16.81	35.59	.....	.....
19	16.75	35.30	16.68	35.78	17.45	37.40	16.98	34.88	.....	.....
20	17.87	36.31	16.67	36.02	18.37	37.30	16.98	35.38	.....	.....
21	17.54	36.55	16.51	35.96	18.72	37.60	17.00	36.07	.....	.....
22	17.55	34.43	16.50	36.20	18.47	37.20	17.08	34.09	.....	.....
23	17.06	35.51	16.54	36.20	18.58	37.25	16.23	35.05	.....	.....
24	16.54	35.51	16.70	35.40	18.55	36.22	16.55	36.40	.....	.....
25	17.25	37.15	17.04	36.34	17.60	37.15	16.91	36.20	.....	.....
26	17.70	34.45	17.28	35.28	18.15	38.60	16.88	35.75	.....	.....
27	16.80	35.65	16.82	34.47	18.30	37.00	16.87	36.50	.....	.....
28	16.94	35.85	15.96	34.86	17.70	36.70	17.10	36.70	.....	.....
29	17.30	37.12	16.00	37.10	17.21	35.74	17.20	35.50	.....	.....
30	17.39	36.77	17.20	35.80	16.87	35.42	16.59	35.75	.....	.....
31	16.85	36.51	17.00	36.40	.....	.....	16.70	36.40	.....	.....

## KANSAS

By Betty J. Mason, LaVonne Godwin, and W. W. Wilson

### Scope of Water-Level Program

The observation-well program in Kansas was continued in 1950 in cooperation with the State Geological Survey, the Division of Water Resources of the State Board of Agriculture, and the Division of Sanitation of the State Board of Health. In addition to the State agencies, the city of Wichita cooperated in Harvey, McPherson, and Sedgwick Counties. Also, the observation-well program in the Missouri Basin, begun in 1945, was continued in cooperation with the Bureau of Reclamation. Measurements for some of the wells in the Missouri Basin program are included in this report. Measurements for all of the 311 wells are given in a mimeographed report, entitled "Ground-water data collected in the Missouri River Basin units in Kansas during 1950." Measurements were made in 587 wells, 11 of which were equipped with recording gages. During the year, 8 wells were added and 55 were discontinued.

Results of cooperative ground-water investigations in Rice County,<sup>1</sup> Barton and Stafford Counties,<sup>2</sup> and northeastern Kansas<sup>3</sup> were published in 1950.

### Well Descriptions and Water-Level Measurements

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

#### Allen County

24-18-33baa. Arnold Estate. Highest water level 8.87, Mar. 1, 1949; lowest 13.18, June 7, 1948. Records available: 1948-50. Oct. 5, 10.93; Dec. 29, 13.02.

24-21-33dcd. J. F. Harris. Highest water level 37.35, Mar. 1, 1949; lowest 41.02, Oct. 5, 1950. Records available: 1948-50. Oct. 5, 41.02; Dec. 29, 39.30.

#### Atchison County

5-18-3dd. Lee Savage. Highest water level 0.75, Apr. 15, 1949; lowest 2.57, Nov. 27, 1948, Feb. 9, 1949. Records available: 1948-50. Jan. 17, 2.13; Sept. 26, 1.34; Dec. 27, 2.06.

6-21-32d. L. A. Walker. Highest water level 3.19, Apr. 15, 1949; lowest 8.76, Nov. 27, 1948. Records available: 1948-50. Jan. 17, 3.95; Sept. 26, 6.56; Dec. 27, 6.82.

#### Barber County

1. D. S. Shaw. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 19, T. 31 S., R. 15 W. Highest water level 63.34, Mar. 15, 1950; lowest 82.99, Oct. 17, 1940. Records available: 1940-50. Mar. 15, 63.34; June 13, 64.64; Sept. 26, 65.13; Dec. 18, 65.78.

3. Mrs. Griever. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 12, T. 32 S., R. 12 W. Highest water level 8.57, June 19, 1947; lowest 15.42, Oct. 21, 1940. Records available: 1940-50. Mar. 15, 12.85; June 13, 13.10. Measurement discontinued.

4. Madge Evans. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 4, T. 32 S., R. 12 W. Highest water level 12.50, June 22, 1949; lowest 16.30, Aug. 20, 1943. Records available: 1940-50. Mar. 16, 14.23; June 13, 14.22; Dec. 19, 14.57.

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1 Fent, O. S., Geology and ground-water resources of Rice County, Kansas: Kansas Geol. Survey Bull. 85, pp. 1-142, figs. 1-10, pls. 1-11, 1950.

2 Latta, B. F., Geology and ground-water resources of Barton and Stafford Counties, Kansas: Kansas Geol. Survey Bull. 88, pp. 1-228, figs. 1-18, pls. 1-11, 1950.

3 Frye, J. C., and Walters, K. L., Subsurface reconnaissance of glacial deposits in northeastern Kansas: Kansas Geol. Survey Bull. 86, part 6, pp. 141-158, pls. 1-2, 1950.

5. R. Kenney. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 1, T. 33 S., R. 12 W. Highest water level 17.62, Mar. 20, 1948; lowest 30.15, Sept. 24, 1941. Records available: 1940-50. Mar. 16, 17.89; June 13, 18.35; Sept. 26, 18.65; Dec. 18, 19.22.

8. P. Brack. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 17, T. 34 S., R. 15 W. Highest water level 8.87, Nov. 21, 1941; lowest 17.48 Mar. 21, 1941. Records available: 1940-50. Sept. 26, 15.52; Dec. 18, 16.32.

9. V. D. Wells. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 18, T. 34 S., R. 15 W. Highest water level 1.13, Sept. 25, 1948; lowest 4.54, Aug. 21, 1943. Records available: 1940-50. June 13, 1.88; Dec. 18, 1.87.

10. G. H. Davis. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 11, T. 35 S., R. 15 W. Highest water level 102.20, Mar. 15, 1945; lowest 107.72, Sept. 25, 1948. Records available: 1940-50. Mar. 15, 106.29; June 13, 105.40; Sept. 26, 104.10; Dec. 18, 105.49.

13. J. A. Hrencher. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 17, T. 32 S., R. 10 W. Highest water level 4.22, Sept. 21, 1949; lowest 16.99, Oct. 22, 1940. Records available: 1940-50. Mar. 16, 8.02; June 13, 10.03; Dec. 18, 9.27.

#### Barton County

1. F. Panning. SE. corner sec. 3, T. 20 S., R. 11 W. Highest water level 0.16, June 23, 1949; lowest 5.49, Aug. 21, 1946. Records available: 1942-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 18	4.60	Apr. 18	4.84	July 17	4.48	Nov. 21	3.07
Feb. 15	4.65	May 16	4.97	Sept. 20	.69	Dec. 20	3.04
Mar. 17	4.77	June 28	4.87	Oct. 16	1.71		

16. Teichmann. NE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 12, T. 20 S., R. 13 W. Highest water level 25.78, Sept. 21, 1949; lowest 30.69, Jan. 23, 1947. Records available: 1942-50.

Jan. 18	26.12	Apr. 18	26.52	July 17	26.75	Oct. 16	26.25
Feb. 15	26.25	May 16	26.42	Aug. 29	26.72	Nov. 21	26.08
Mar. 17	26.76	June 28	26.69	Sept. 20	26.79	Dec. 20	26.10

43. M. Hagen. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 20, T. 20 S., R. 11 W. Highest water level 14.00, Sept. 20, 1950; lowest 21.21, Jan. 19, 1944. Records available: 1942-50.

Jan. 18	16.78	Apr. 18	17.25	July 17	17.80	Nov. 21	14.47
Feb. 15	16.97	May 16	17.41	Sept. 20	14.00	Dec. 20	14.85
Mar. 17	17.12	June 28	17.86	Oct. 16	14.13		

100. Unruh. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 11, T. 20 S., R. 15 W. Highest water level 27.05, June 23, 1949; lowest 35.14, Nov. 16, 1947. Records available: 1944-50.

Jan. 19	34.05	Apr. 19	34.35	July 17	32.93	Oct. 17	31.43
Feb. 16	34.47	May 16	34.06	Aug. 30	30.21	Nov. 21	32.48
Mar. 17	34.62	June 29	33.46	Sept. 19	30.67	Dec. 21	32.86

103. F. Konareck. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 33, T. 17 S., R. 12 W. Highest water level 0.25, Aug. 29, 1950; lowest 7.66, Aug. 21, 1946. Records available: 1944-50.

Jan. 18	4.97	Apr. 18	5.21	July 17	4.05	Oct. 16	2.17
Feb. 16	5.02	May 16	5.51	Aug. 29	.25	Nov. 21	3.19
Mar. 17	5.09	June 28	5.90	Sept. 19	.82	Dec. 20	3.55

107. Carter Oil Co. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 10, T. 17 S., R. 11 W. Highest water level 98.28, Apr. 20, 1949; lowest 101.60, Feb. 20, 1946. Records available: 1944-50.

Jan. 18	98.75	Apr. 18	99.18	July 17	99.16	Oct. 16	97.46
Feb. 16	98.89	May 16	99.03	Aug. 29	97.60	Nov. 21	97.65
Mar. 17	98.86	June 28	99.40	Sept. 19	97.45	Dec. 20	98.02

109. J. C. Cook. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 28, T. 18 S., R. 15 W. Highest water level 1.68, Aug. 30, 1950; lowest 14.61, July 10, 1946. Records available: 1944-50.

Jan. 19	12.11	Apr. 19	12.50	July 17	13.09	Oct. 17	4.74
Feb. 16	12.19	May 16	12.55	Aug. 30	1.68	Nov. 22	6.90
Mar. 17	12.30	June 28	12.91	Sept. 19	4.02	Dec. 21	7.45

110. Prudential Life Insurance Co. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 33, T. 17 S., R. 14 W. Highest water level 14.44, Oct. 16, 1950; lowest 23.00, Oct. 20, 1948. Records available: 1944-50.

Jan. 19	19.53	Apr. 19	19.32	July 17	19.60	Oct. 16	14.44
Feb. 16	19.44	May 16	19.02	Aug. 29	15.46	Nov. 22	14.79
Mar. 17	19.38	June 28	19.46	Sept. 19	15.17	Dec. 20	15.09



131. F. W. Gagleman. SE corner sec. 22, T. 19 S., R. 15 W. Highest water level 8.80, Aug. 30, 1950; lowest 14.81, Sept. 23, 1948. Records available: 1944-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 19	12.47	Apr. 19	12.71	July 17	13.66	Oct. 17	9.59
Feb. 16	12.50	May 16	12.80	Aug. 30	8.80	Nov. 22	9.86
Mar. 17	12.67	June 29	13.68	Sept. 19	9.45	Dec. 21	10.02

#### Bourbon County

1. City of Fort Scott. NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 29, T. 25 S., R. 25 E. Highest water level 180.25, Mar. 29, 1946; lowest 191.25, Oct. 30, 1950. Records available: 1942-47, 1950. Oct. 30, 191.25; Nov. 29, 190.44.

2. City of Fort Scott. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 30, T. 25 S., R. 25 E. Records available: 1942-47. No measurement made in 1950.

25-23-27bbb. Harold Comstock. Highest water level 4.80, Oct. 5, 1950; lowest 6.13, May 6, 1948. Records available: 1948-50. Oct. 5, 4.80; Dec. 29, 5.27.

25-24-13dda. John Ibson. Highest water level 4.37, Mar. 1, 1949; lowest 7.51, Oct. 15, 1948. Records available: 1948-50. Oct. 5, 4.50; Dec. 29, 6.43.

#### Brown County

Measurements discontinued in wells 1, 3, 4, 5, and 6.

2-15-25dd. Henry Rieger. Highest water level 8.92, Apr. 15, 1949; lowest 9.92, Nov. 27, 1948. Records available: 1948-50. Jan. 17, 9.60; Sept. 26, 9.52; Dec. 27, 9.73.

4-17-17ada. H. C. Brown. Highest water level 33.35, July 15, 1949; lowest 37.19, Nov. 27, 1948. Records available: 1948-50. Jan. 17, 35.63; Sept. 26, 35.08; Dec. 27, 36.25.

#### Chase County

18-9-29cc. Peak & Hatcher Co. Highest water level 18.94, Sept. 5, 1950; lowest 24.63, Oct. 3, 1947. Records available: 1947-50. Mar. 6, 22.88; June 22, 19.86; Sept. 5, 18.94.

19-7-10da. Herbert T. Drake. Highest water level 4.38, Sept. 5, 1950; lowest 12.00, Mar. 6, 1950. Records available: 1948-50. Mar. 6, 12.00; June 22, 10.32; Sept. 5, 4.38.

19-9-30cc. E. E. Andrews. Highest water level 35.20, Sept. 5, 1950; lowest 41.22, June 8, 1948. Records available: 1947-50. Mar. 6, 38.82; June 22, 36.97; Sept. 5, 35.20.

20-6-31bd. B. S. Thompson. Highest water level 20.18, Sept. 5, 1950; lowest 25.25, Mar. 27, 1948. Records available: 1947-50. Mar. 6, 23.45; June 22, 22.88; Sept. 5, 20.18.

20-7-13cb. Geo. W. Storkey. Highest water level 8.87, Sept. 5, 1950; lowest 19.09, Mar. 27, 1948. Records available: 1947-50. Mar. 6, 14.25; June 22, 10.96; Sept. 5, 8.87.

20-8-2bd. School District. Highest water level 8.35, Sept. 5, 1950; lowest 10.96, Mar. 6, 1950. Records available: 1947-50. Mar. 6, 10.96; June 22, 10.80; Sept. 5, 8.35.

20-8-16aa. Gerald Brough. Highest water level 4.47, Sept. 5, 1950; lowest 10.57, Sept. 26, 1947. Records available: 1947-50. Mar. 6, 5.96; June 22, 5.79; Sept. 5, 4.47.

20-9-26dd. Ethel Welch Bell. Highest water level 13.65, Sept. 5, 1950; lowest 16.40, Mar. 6, 1950. Records available: 1947-50. Mar. 6, 16.40; June 22, 15.57; Sept. 5, 13.65.

21-7-21cc. Stella Moore. Records available: 1947-49. Measurement discontinued.

22-6-11cc. Margaret Smith. Highest water level 4.65, Sept. 5, 1950; lowest 7.95, Sept. 23, 1947. Records available: 1947-50. Mar. 6, 7.51; June 22, 6.67; Sept. 5, 4.65.

#### Cherokee County

1. W. L. Stiles. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 2, T. 34 S., R. 23 E. Highest water level 5.50, May 26, 1943; lowest 14.6, Jan. 25, 1944. Records available: 1942-45, 1948, 1950. Measurement resumed June 10, 1948. June 10, 1948, 12.83; Nov. 27, 1950, 12.9.

105a. Barnsdale Zinc Co. Highest water level 146.19, Nov. 27, 1950; lowest 161.56, Feb. 29, 1944. Records available: 1942-44, 1950. Measurement resumed Nov. 27, 1950. Nov. 27, 146.19.

3. Fleming. Center SW $\frac{1}{4}$  sec. 19, T. 32 S., R. 24 E. Highest water level 196.53, July 23, 1943; lowest 206.75, Nov. 27, 1950. Records available: 1943, 1950. Measurement resumed Nov. 27, 1950. Nov. 27, 206.75.

#### Cheyenne County

1-38-2cdc. Published as 1-38-1cd in previous reports. Paul O'Brien. Highest water level 21.90, June 8, 1949; lowest 23.02, Aug. 3, 1948. Records available: 1948-50. July 12, 22.58; Sept. 11, 22.85; Nov. 10, 22.79.

1-38-8ddb. Published as 1-38-8dd in previous reports. H. O. Haines. Highest water level 11.24, Feb. 25, 1947; lowest 13.32, Sept. 7, 1947. Records available: 1946-50. July 12, 12.66; Sept. 11, 12.73; Nov. 10, 12.60.

1-38-10ccb. Published as 1-38-10cc in previous reports. School District. Records available: 1946-49. Measurement discontinued.

1-38-17cdd. Published as 1-38-17cd in previous reports. F. J. Ostick. Highest water level 11.32, June 8, 1947, and June 8, 1949; lowest 12.57, Oct. 5, 1948. Records available: 1946-50. July 12, 12.14; Sept. 11, 12.22.

2-39-2cbb. Published as 2-39-2cb in previous reports. Vera Gorthy. Highest water level 12.42, Sept. 11, 1950; lowest 19.03, Mar. 28, 1946. Records available: 1946-50. July 12, 14.58; Sept. 11, 12.42; Nov. 10, 13.23.

2-39-10bba. Published as 2-39-10bb in previous reports. A. L. Pugh. Highest water level 25.27, July 29, 1947; lowest 27.10, Aug. 3, 1948. Records available: 1947-50. Sept. 11, 26.78; Nov. 10, 26.03.

2-39-17baa. Published as 2-39-17ba in previous reports. Myrtle E. Armstrong. Highest water level 10.38, June 8, 1947; lowest 12.56, Sept. 7, 1947. Records available: 1946-50. July 12, 11.86; Sept. 11, 11.28; Nov. 10, 11.25.

2-39-27bbb. Published as 2-39-27bb in previous reports. G. W. Best. Highest water level 16.79, Sept. 11, 1950; lowest 19.50, Mar. 27, 1946. Records available: 1946-50. July 12, 18.09; Sept. 11, 16.79; Nov. 10, 17.70.

2-39-19ccc. Published as 2-40-25db in previous reports. A. C. Keller. Highest water level 15.52, Aug. 2, 1949; lowest 16.45, Oct. 5, 1948. Records available: 1948-50. July 12, 16.08; Sept. 11, 15.97; Nov. 10, 15.98.

3-40-9baa. Published as 3-40-9ba in previous reports. P. G. Walter. Highest water level 11.69, Feb. 25, 1947; lowest 13.10, Sept. 7, 1947. Records available: 1946-50. July 12, 12.41; Sept. 11, 12.53; Nov. 10, 12.28.

3-40-16daa. Published as 3-40-16da in previous reports. J. L. Finley. Records available: 1946-49. Measurement discontinued.

3-40-22aba. Published as 3-40-22ab in previous reports. T. Holleman and others. Highest water level 10.02, July 29, 1947; lowest 15.18, Mar. 9, 1946. Records available: 1946-50. July 12, 13.29; Sept. 11, 12.10; Nov. 10, 11.10.

3-40-28cbb. Published as 3-40-28bd in previous reports. D. Danielson. Highest water level 10.02, Mar. 20, 1946; lowest 12.75, Aug. 16, 1946. Records available: 1946-50. July 12, 12.35; Sept. 11, 12.08; Nov. 10, 12.08.

3-40-33dda. Published as 3-40-33dd in previous reports. H. L. Harkins. Highest water level 11.90, July 29, 1947; lowest 14.50, Mar. 4, 1946. Records available: 1946-50. July 12, 13.26; Sept. 11, 12.81; Nov. 10, 13.22.

3-41-13ccd. Published as 3-41-13cc in previous reports. F. Walz. Highest water level 7.83, Nov. 16, 1949; lowest 15.78, Aug. 16, 1946. Records available: 1946-50. July 12, 10.42; Sept. 11, 8.13; Nov. 10, 9.85.

4-41-2aad. Published as 4-41-2aa. W. E. Johnson. Highest water level 20.04, July 12, 1950; lowest 28.53, Oct. 4, 1949. Records available: 1946-50. July 12, 20.04; Nov. 10, 25.42.

4-41-32ddb. Published as 4-41-32dd in previous reports. Simon E. Matson. Highest water level 113.31, Nov. 10, 1950; lowest 114.76, Aug. 16, 1946. Records available: 1946-47, 1949-50, June 8, 1949, 113.39; Aug. 2, 113.65; Oct. 4, 113.57; Nov. 16, 113.57; Dec. 18, 113.53; July 12, 1950, 114.45; Nov. 10, 113.31.

4-42-24cac. Jake Waltz. Highest water level 24.50, June 8, 1949; lowest 25.89, Sept. 7, 1947. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 17, 1946	25.78	Sept. 7, 1947	25.89	Aug. 3, 1948	25.38	Oct. 4, 1949	25.02
Oct. 22	25.50	Dec. 5	24.97	Oct. 4,	25.83	Nov. 16	24.85
Dec. 13	25.09	Feb. 3, 1948	25.14	Dec. 8	25.17	Dec. 18	24.80
Feb. 25, 1947	24.85	Apr. 3	24.85	June 8, 1949	24.50	July 12, 1950	25.18
June 8	24.90	June 8	25.20	Aug. 2	25.14	Nov. 10	24.96
July 29	25.50						

4-42-34dbb. Published as 4-42-34db in previous reports. Grace B. Sheldon. Records available: 1946-49. Measurement discontinued.

5-42-4aac. Published as 5-42-4aa in previous reports. A. Corder. Highest water level 21.83, Dec. 5, 1947, June 8, 1948; lowest 23.68, Aug. 2, 1949. Records available: 1946-50. Dec. 2, 23.22.

#### Clark County

6. District School. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 7, T. 35 S., R. 21 W. Highest water level 26.61, Dec. 18, 1950; lowest 27.69, Oct. 5, 1943. Records available: 1940-43, 1950. Measurement resumed Mar. 15, 1950. Mar. 15, 26.64; June 13, 26.76; Dec. 18, 26.61.

#### Coffey County

19-17-9ab. Atchison, Topeka & Santa Fe Railway. Records available: 1948-49. Measurement discontinued.

20-15-34dcb. G. Skillman. Highest water level 1.71, Mar. 1, 1949; lowest 8.35, Nov. 26, 1948. Records available: 1948-50. Dec. 29, 6.10.

22-15-34da. B. D. Harreld. Highest water level 8.22, Apr. 18, 1949; lowest 16.90, Oct. 15, 1948. Records available: 1948-50. Dec. 29, 16.39.

#### Comanche County

1. A. A. Carpenter. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 8, T. 33 S., R. 20 W. Highest water level 36.20, Sept. 22, 1949; lowest 40.52, June 20, 1941. Records available: 1940-50. Dec. 18, 36.32.

9. H. R. Burnette. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 13, T. 32 S., R. 17 W. Records available: 1940-50. June 13, 84.70; Dec. 18, 85.36.

#### Cowley County

1. City of Winfield. SW. corner SE $\frac{1}{4}$  sec. 18, T. 32 S., R. 3 E. Highest water level 11.99, Jan. 2, 1945; lowest 27.31, June 1, 1946. Records available: 1943-50. Jan. 12, 14.94.

2. U. S. Army & Fairchild Aircraft Co. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 19, T. 33 S., R. 4 E. (Strother Field well 5) Records available: 1943-49. Measurement discontinued.

40. City of Winfield. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 19, T. 32 S., R. 3 E. Highest water level 10.82, May 16, 1945; lowest 17.49, Mar. 1, 1947. Records available: 1944-50. Jan. 12, 14.76.

42. U. S. Geol. Survey. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 21, T. 32 S., R. 3 E. Highest water level 25.23, June 28, 1947; lowest 28.98, Aug. 30, 1946. Records available: 1944-50. Jan. 12, 26.16.

#### Crawford County

No measurement made in 1950.

#### Douglas County

13-20-11bab. Armstrong Martin. Highest water level 12.50, Dec. 29, 1950; lowest 19.88, Nov. 26, 1948. Records available: 1948-50. Dec. 29, 12.50.

14-19-23ccc. C. A. Puckett. Highest water level 3.54, Mar. 1, 1949; lowest 5.26, Oct. 15, 1948. Records available: 1948-50. Dec. 29, 3.92.

Edwards County

1. M. Shouse. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 35, T. 24 S., R. 19 W. Highest water level 4.53, June 22, 1949; lowest 7.97, Sept. 13, 1946. Records available: 1944-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 18	6.38	Apr. 18	6.73	July 17	6.80	Oct. 16	5.82
Feb. 15	6.09	May 16	6.77	Aug. 29	5.39	Nov. 21	6.13
Mar. 16	6.55	June 28	6.90	Sept. 19	5.52	Dec. 20	6.18

2. Owner unknown. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 7, T. 24 S., R. 18 W. Highest water level 1.10, Aug. 23, 1948; lowest 3.50, Feb. 14, 1945. Records available: 1944-50. Measurement discontinued.

Jan. 18	0.91	Apr. 18	1.85	July 17	1.69	Oct. 16	0.38
Feb. 15	1.24	May 16	2.00	Aug. 29	.37	Nov. 21	.38
Mar. 16	1.58	June 28	1.92	Sept. 19	.44		

10. E. F. Lippoldt. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 22, T. 23 S., R. 19 W. Highest water level 63.42, July 2, 1947; lowest 68.20, Mar. 13, 1946. Records available: 1944-50.

Jan. 18	63.90	May 16	65.04	Aug. 29	65.05	Nov. 16	63.99
Feb. 15	64.17	June 28	64.19	Sept. 19	64.04		
Apr. 18	64.85	July 17	64.39				

Ellis County

1. City of Hays. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 4, T. 14 S., R. 18 W. Highest water level 19.30, Mar. 20, 1948; lowest 26.30, Aug. 20, 1946. Records available: 1946-48, 1950. Apr. 14, 23.15.

Measurements discontinued in wells 2, 3, and 4.

215. A. H. Romine. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 7, T. 11 S., R. 16 W. Highest water level 13.05, Apr. 21, 1948; lowest 17.70, Oct. 15, 1947. Records available: 1941-50. Jan. 19, 15.75; Apr. 19, 16.32; Oct. 17, 13.28.

218. W. W. Bemis. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 16, T. 12 S., R. 17 W. Highest water level 13.00, Sept. 7, 1944; lowest 54.67, Dec. 22, 1943. Records available: 1941-50. Jan. 19, 44.21; Apr. 19, 48.05; July 18, 48.15; Oct. 17, 35.12.

14-16-17cb. J. M. Schippers. Highest water level 17.67, July 6, 1949; lowest 19.88, Nov. 16, 1950. Records available: 1946-50. Feb. 10, 18.91; Mar. 16, 18.80; Apr. 14, 19.19; June 1, 19.00; Nov. 16, 19.88.

14-16-36bc. Published as 14-16-36bb in previous reports. Tony Wagner. Highest water level 19.26, Feb. 10, 1950; lowest 21.74, May 10, 1947. Records available: 1946-50. Feb. 10, 19.26; Mar. 16, 19.39; Apr. 14, 19.58; June 1, 19.65; Nov. 16, 19.86.

14-18-12bb. J. Brull. Highest water level 23.34, Dec. 30, 1949; lowest 27.15, July 30, 1946. Records available: 1946-50. Feb. 10, 23.37; Mar. 16, 23.89; June 1, 23.59; Nov. 16, 22.98.

14-18-26aa. F. J. Befort. Highest water level 17.90, July 7, 1949; lowest 20.85, Jan. 8, 1948. Records available: 1946-50. Feb. 10, 20.06; Mar. 16, 19.97; Apr. 14, 20.15; June 1, 20.00; Nov. 16, 18.24.

14-20-35dc. Published reported as 14-20-35dd. F. A. Pfannenstiel. Highest water level 13.95, July 7, 1949; lowest 16.29, Aug. 8, 1946 and Mar. 16, 1950. Records available: 1946-50. Feb. 10, 15.07; Mar. 16, 16.29; Apr. 14, 15.22.

15-16-6dd. Ted Thalen. Highest water level 21.07, Nov. 16, 1950; lowest 24.33, Aug. 9, 1946. Records available: 1946-50. Mar. 16, 21.80; Apr. 13, 22.49; June 1, 21.41; Nov. 16, 21.07.

15-16-13bb. Ethyl M. Witt. Highest water level 13.87, June 4, 1948; lowest 14.85, July 17, 1946. Records available: 1946-50. Feb. 10, 14.46; Mar. 16, 14.35; Apr. 14, 14.57; June 1, 14.49; Nov. 16, 14.27.

15-17-19ab. Liker. Highest water level 139.38, Feb. 10, 1950; lowest 140.50, July 22, 1946. Records available: 1946-50. Feb. 10, 139.38.

15-17-25bc. Published as 15-17-25cb. Geo. Meder. Highest water level 11.25, June 1, 1950; lowest 12.99, Feb. 10, 1950. Records available: 1946-50. Mar. 16, 12.10; Apr. 14, 12.30; June 1, 11.25; Nov. 16, 11.52; Feb. 10, 12.99.

15-18-1bb. Mat Rohr. Highest water level 17.27, Aug. 22, 1949; lowest 28.22, July 24, 1946. Records available: 1946-50. Feb. 10, 18.10; Mar. 16, 18.54; Apr. 14, 18.61; June 1, 18.40; Nov. 16, 17.87.

15-18-16bb. T. W. Wolf. Highest water level 5.62, July 23, 1947; lowest 9.55, July 12, 1946. Records available: 1946-50. Feb. 10, 8.90; Mar. 16, 8.90; Apr. 14, 9.18; June 1, 5.85.

15-19-6aa. Aug. Leiker. Highest water level 51.65, Dec. 30, 1949; lowest 53.12, Aug. 22, 1949. Records available: 1946-50. Feb. 10, 51.86; Mar. 16, 52.70. Measurement discontinued.

15-19-13ab. Pete Wolfe. Highest water level 6.08, July 23, 1947; lowest 9.30, Oct. 8, 1947. Records available: 1946-50. Feb. 10, 7.27; Mar. 16, 6.90; Apr. 14, 7.30; Nov. 16, 6.90.

15-19-35aa. J. Zimmerman. Highest water level 59.45, Jan. 8, 1948; lowest 70.70, Apr. 8, 1948. Records available: 1946-50. Feb. 10, 59.67; Mar. 16, 59.70; Apr. 14, 59.85.

### Finney County

1. Mrs. A. M. Reid. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 9, T. 24 S., R. 33 W. Records available: 1939-50.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	5.43	5.50	5.56	5.64	....	6.21	....	4.34	4.79	5.09	5.32
2	....	5.43	5.49	5.56	5.62	....	6.22	....	4.39	4.74	5.12	5.34
3	....	5.43	5.47	5.56	5.64	....	6.20	....	4.44	4.70	5.13	5.34
4	....	5.43	5.48	5.61	5.64	....	6.21	....	4.46	4.66	5.14	5.34
5	....	5.45	5.47	5.62	5.66	....	6.22	....	4.48	4.63	5.15	5.37
6	....	5.44	5.44	5.59	5.69	....	....	....	4.49	4.64	5.18	5.36
7	....	5.45	5.47	5.59	5.70	....	....	4.96	4.51	4.68	5.20	5.35
8	....	5.45	5.51	5.61	5.70	....	....	4.97	4.54	4.70	5.22	5.38
9	....	5.47	5.50	5.61	5.72	....	....	5.01	4.56	....	5.24	5.40
10	....	5.48	5.50	5.65	5.74	....	....	5.05	4.58	....	5.25	5.38
11	5.50	5.52	5.51	5.65	5.76	....	....	4.12	4.61	....	5.25	5.39
12	5.51	5.51	5.53	5.66	5.77	....	....	4.17	4.64	....	5.26	5.39
13	5.52	5.50	5.53	5.67	5.78	....	6.22	4.27	4.66	....	5.27	5.40
14	5.53	5.52	5.52	5.68	5.79	....	6.22	4.33	4.68	....	5.27	5.41
15	5.50	5.51	5.52	5.69	5.80	....	6.23	4.35	4.68	....	5.28	5.41
16	5.49	5.51	5.55	5.69	5.81	....	6.25	4.40	4.64	4.82	5.31	5.42
17	5.50	5.53	5.54	....	5.77	....	6.26	4.44	4.59	4.83	5.29	5.42
18	5.48	5.51	5.54	....	5.70	....	6.26	4.38	4.57	4.85	5.27	5.42
19	5.46	5.52	5.55	....	5.72	....	6.28	4.38	4.57	4.88	5.28	5.42
20	5.46	5.55	5.55	....	5.60	....	6.28	4.40	4.60	4.90	5.32	5.42
21	5.47	5.55	5.57	....	5.36	....	6.22	4.37	4.64	4.91	5.32	5.42
22	5.48	5.54	5.55	....	5.43	....	6.05	4.37	4.65	4.93	5.32	5.42
23	5.49	5.55	5.53	....	5.49	....	6.06	4.37	4.69	4.93	5.33	5.42
24	5.50	5.52	5.53	....	5.64	....	6.06	4.39	4.72	4.94	5.35	5.40
25	5.46	5.52	5.50	....	5.86	....	5.74	4.37	4.72	4.96	5.34	5.38
26	5.42	5.52	5.48	....	....	....	5.60	4.30	4.72	4.98	5.35	5.40
27	5.45	5.55	5.52	5.64	....	....	5.27	4.28	4.73	5.00	5.35	5.38
28	5.49	5.52	5.55	5.64	....	....	4.96	4.29	4.76	5.01	5.36	5.38
29	5.45	....	5.58	5.65	....	....	5.00	4.29	4.76	5.03	5.35	5.39
30	5.46	....	5.58	5.65	....	6.21	....	4.29	4.78	5.05	5.33	5.39
31	5.45	....	5.57	....	....	....	....	4.30	....	5.08	....	5.37

2. Maggie B. Smith, NE. corner NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 30, T. 26 S., R. 32 W. Records available: 1939-48. No measurement made in 1950.

5. E. Alberta Reeves. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 19, T. 21 S., R. 32 W. Highest water level 16.31, Sept. 13, 1950; lowest 22.54, Jan. 28, 1940. Records available: 1939-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 23	18.65	June 26	18.85	Sept. 13	16.31	Nov. 14	16.44
Mar. 21	18.76	Aug. 16	16.94	Oct. 9	16.45	Dec. 11	16.54
May 11	18.77						

6. T. E. Meakel. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 36, T. 21 S., R. 29 W. Highest water level 15.25. June 21, 1940; lowest 20.82, June 22, 1946. Records available: 1939-50.

Jan. 24	17.64	June 29	15.57	Aug. 30	12.98	Oct. 10	12.74
Apr. 25	17.81	July 19	15.22	Sept. 20	12.96	Dec. 21	12.50

8. O. G. Reeve. SW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 13, T. 26 S., R. 33 W. Highest water level 72.81, Nov. 28, 1950; lowest 75.25, June 21, 1940. Records available: 1939-50. Feb. 23, 73.57, May 24, 73.10; Aug. 31, 72.96; Nov. 28, 72.81.

13. Edwin Wehrley. NE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 13, T. 25 S., R. 31 W. Highest water level 40.76, May 5, 1942; lowest 4.63, Sept. 23, 1939. Records available: 1939-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 18	2.88	Apr. 18	3.48	July 17	3.62	Nov. 21	2.84
Feb. 15	2.78	May 16	3.44	Sept. 19	2.51	Dec. 20	2.91
Mar. 17	2.95	June 28	3.97	Oct. 16	2.58		

23. J. E. Ely. SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 4, T. 23 S., R. 32 W. Highest water level 39.22, Jan. 26, 1950; lowest 45.30, Feb. 17, 1940. Records available: 1939-50. Jan. 26, 39.22; Apr. 25, 40.44; July 20, 40.75.

26. Garden City Experiment Station. SW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 3, T. 24 S., R. 32 W. Highest water level 61.59, Oct. 21, 1949; lowest 71.60, Apr. 24, 1941. Records available: 1939-50. Jan. 26, 67.44; Apr. 26, 68.82, July 20, 68.30; Oct. 19, 66.56.

1002. United States Army. SW $\frac{1}{4}$  sec. 27, T. 24 S., R. 31 W. Highest water level 116.97, Dec. 20, 1950; lowest 123.50, Jan. 12, 1949. Records available: 1942-50.

Jan. 21	112.29	Apr. 18	117.59	Sept. 19	112.52	Nov. 21	112.22
Feb. 15	112.60	May 16	112.20	Oct. 16	113.16	Dec. 20	116.97
Mar. 17	112.26	Aug. 29	112.30				

1005. United States Army. SW $\frac{1}{4}$  sec. 27, T. 24 S., R. 31 W. Highest water level 107.38, Jan. 17, 1948; lowest 127.45, Jan. 12, 1949. Records available: 1942-50.

Jan. 21	113.92	Apr. 18	118.20	July 17	113.92	Oct. 16	116.45
Feb. 15	114.12	May 16	113.93	Aug. 29	119.03	Nov. 21	112.12
Mar. 17	113.60	June 13	115.58	Sept. 19	114.17	Dec. 20	114.76

#### Ford County

8. F. H. Diehl. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 34, T. 26 S., R. 25 W. Highest water level 0.86, May 13, 1942; lowest 8.17, Nov. 7, 1939. Records available: 1938-50.

38. F. Burns. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 1, T. 26 S., R. 24 W. Highest water level 26.73, Jan. 9, 1946; lowest 42.08, May 16, 1940. Records available: 1938-50.

41. J. J. Burghardt. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 11, T. 25 S., R. 2 W. Records available: 1938-48. Measurement discontinued.

57. Andrew Bogner. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 22, T. 26 S., R. 26 W. Records available: 1938-48. No measurement made in 1950.

59. Ward Byers. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 21, T. 26 S., R. 26 W. Highest water level 13.63, Aug. 29, 1950; lowest 26.98, Aug. 9, 1946. Records available: 1938-50.

Jan. 18	15.36	Apr. 18	19.06	Aug. 29	13.63	Nov. 21	14.90
Feb. 15	15.37	May 16	15.57	Sept. 19	14.60	Dec. 20	15.14
Mar. 17	15.77	July 17	15.59	Oct. 16	13.96		

65. John N. Clark. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 33, T. 26 S., R. 25 W. Records available: 1938-48. No measurement made in 1950.

79C. O. N. Nevins. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 23, T. 26 S., R. 24 W. Highest water level 13.25, July 2, 1942; lowest 20.19, Sept. 13, 1946. Records available: 1938-50. Jan. 18, 17.40; Feb. 15, 17.08. Measurement discontinued.

96. Henry Hattrup. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 23, T. 26 S., R. 21 W. Highest water level 6.32, Apr. 19, 1945; lowest 10.22, Sept. 5, 1939. Records available: 1938-50. Jan. 18, 7.60; Apr. 18, 7.69; July 17, 8.25; Oct. 16, 7.65.

237. Atchison, Topeka & Santa Fe Railway. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 28, T. 25 S., R. 22 W. Records available: 1939-49. No measurement made in 1950.

1003. United States Army. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 13, T. 26 S., R. 26 W. Highest water level 94.35, July 4, 1944; lowest 109.52, Aug. 19, 1943. Records available: 1942-50.

Jan. 18	101.03	Apr. 18	103.15	June 28	105.80	Oct. 16	101.00
Feb. 15	103.05	May 16	104.25	Aug. 29	101.22	Nov. 21	101.28
Mar. 17	101.53						

Franklin County

17-19-11da. L. W. Seright. Highest water level 6.10, July 21, 1949; lowest 8.72, Nov. 26, 1948. Records available: 1948-50. Dec. 29, 8.30.

Grant County

1. F. C. Williams.  $SE\frac{1}{4}SE\frac{1}{4}$  sec. 30, T. 27 S., R. 37 W. Records available: 1941-48. No measurement made in 1950.

4. F. J. Andes.  $SE\frac{1}{4}SE\frac{1}{4}$  sec. 9, T. 27 S., R. 38 W. Highest water level 84.26, Mar. 24, 1945; lowest 87.52, May 14, 1941. Records available: 1941-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	84.90	Apr. 20	84.92	Aug. 14	84.98	Nov. 15	84.82
Feb. 20	85.02	June 22	84.67	Sept. 14	84.87	Dec. 26	84.81
Mar. 14	84.90						

5. C. L. Jury.  $NE\frac{1}{4}SE\frac{1}{4}$  sec. 4, T. 27 S., R. 37 W. Highest water level 66.77, Feb. 15, 1946; lowest 69.15, Aug. 16, 1949. Records available: 1941-50. Feb. 21, 66.20; May 9, 68.58; Aug. 14, 66.61; Nov. 15, 66.01.

7. Ethel W. Hoffman. Sec. 36, T. 28 S., R. 36 W. Highest water level 80.63, Nov. 15, 1950; lowest 82.76, Sept. 25, 1943. Records available: 1941-50. Feb. 20, 80.96; May 9, 81.24; Aug. 14, 81.04; Nov. 15, 80.63.

8. E. O. Stuart.  $NW\frac{1}{4}NW\frac{1}{4}$  sec. 33, T. 29 S., R. 35 W. Records available: 1941-48. No measurement made in 1950.

11. J. A. Hoffman.  $SE\frac{1}{4}SW\frac{1}{4}$  sec. 26, T. 28 S., R. 38 W. Highest water level 45.99, May 10, 1945; lowest 50.39, Oct. 12, 1950. Records available: 1941-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	49.00	Apr. 20	49.17	July 13	49.90	Oct. 12	50.39
Feb. 20	49.04	May 9	49.37	Aug. 14	49.97	Nov. 15	50.25
Mar. 14	49.07	June 22	49.79	Sept. 14	50.32	Dec. 26	50.18

13. Fred Powell.  $NW\frac{1}{4}NE\frac{1}{4}$  sec. 5, T. 29 S., R. 36 W. Records available: 1941-48. No measurement made in 1950.

14. Mr. Hall.  $NE\frac{1}{4}SW\frac{1}{4}$  sec. 31, T. 28 S., R. 26 W. Records available: 1941-49. No measurement made in 1950.

400. State Board of Agriculture, Division of Water Resources.  $SE\frac{1}{4}NE\frac{1}{4}$  sec. 6, T. 28 S., R. 38 W. Highest water level 52.78, Feb. 28, 1945; lowest 57.64, Sept. 14, 1950. Records available: 1944-50.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	56.13	56.34	56.77	57.20	57.45	57.17	57.03	57.56	57.52	57.10	56.95
2	.....	56.13	56.36	56.78	57.23	57.46	57.16	57.01	57.58	57.48	57.09	56.95
3	.....	56.11	56.37	56.79	57.24	57.47	57.18	57.00	57.60	57.47	57.09	56.95
4	.....	56.10	56.37	56.82	57.26	57.48	57.19	56.99	57.61	57.47	57.08	56.95
5	.....	56.08	56.36	56.85	57.28	57.47	57.21	56.99	57.62	57.47	57.07	56.95
6	56.24	56.07	56.35	56.87	57.28	57.47	57.22	56.98	57.63	57.47	57.07	56.95
7	56.24	56.06	56.33	56.90	57.28	57.47	57.24	56.97	57.63	57.47	57.07	.....
8	56.25	56.05	56.31	56.94	57.26	57.48	57.23	56.96	57.64	57.46	57.06	.....
9	56.26	56.05	56.31	56.96	57.26	57.49	57.21	56.95	57.64	57.44	57.05	.....
10	56.27	56.05	56.32	56.99	57.29	57.50	57.20	56.97	57.65	57.42	57.05	.....
11	56.28	56.04	56.32	57.02	57.31	57.50	57.17	56.98	57.65	57.41	57.04	.....
12	56.26	56.06	56.35	57.06	57.33	57.49	57.16	56.99	57.65	57.38	57.04	.....
13	56.25	56.07	56.40	57.09	57.35	57.46	57.15	57.03	57.65	57.36	57.04	.....
14	52.22	56.10	56.42	57.11	57.36	57.45	57.14	57.08	57.64	57.35	57.04	.....
15	56.20	56.11	56.44	57.13	57.38	57.43	57.14	57.14	57.64	57.32	57.04	.....
16	56.19	56.12	56.47	57.15	57.40	57.42	57.13	57.21	57.63	57.31	57.03	.....
17	56.18	56.14	56.49	57.16	57.40	57.42	57.12	57.26	57.61	57.28	57.03	.....
18	56.18	56.15	56.53	57.15	57.40	57.44	57.11	57.31	57.63	57.26	57.02	.....
19	56.17	56.17	56.55	57.10	57.40	57.45	57.11	57.35	57.66	57.24	57.01	.....
20	56.17	56.18	56.55	57.05	57.40	57.45	57.11	57.38	57.68	57.22	57.00	.....
21	56.16	56.20	56.55	57.03	57.40	57.43	57.13	57.39	57.70	57.21	56.99	.....
22	56.15	56.23	56.55	57.02	57.40	57.40	57.13	57.41	57.68	57.19	56.98	.....
23	56.15	56.23	56.59	57.02	57.39	57.39	57.13	57.42	57.66	57.19	56.98	.....
24	56.15	56.25	56.62	57.02	57.39	57.36	57.13	57.45	57.64	57.17	56.98	.....
25	56.15	56.28	56.65	57.03	57.39	57.33	57.12	57.46	57.61	57.16	56.98	.....

400--Continued.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	56.16	56.30	56.68	57.09	57.40	57.29	57.12	57.47	57.59	57.15	56.97	56.90
27	56.15	56.32	56.69	57.14	57.40	57.26	57.08	57.48	56.56	57.14	56.96	56.88
28	56.14	56.32	56.70	57.15	57.41	57.22	57.07	57.50	57.56	57.13	56.96	56.88
29	56.14		56.70	57.17	57.42	57.20	57.03	57.52	57.57	57.12	56.95	56.88
30	56.14		56.73	57.19	57.43	57.18	57.03	57.53	57.55	57.12	56.95	56.88
31	56.14		56.75		57.44		57.04	57.55		57.11		56.88

Gray County

1. G. A. Hard. NW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 20, T. 25 S., R. 29 W. Highest water level 3.41, Aug. 29, 1950; lowest 7.56, Oct. 8, 1940. Records available: 1939-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 18	5.68	Apr. 18	6.22	July 17	6.39	Oct. 16	5.10
Feb. 15	5.68	May 16	6.28	Aug. 29	3.41	Nov. 21	5.75
Mar. 17	6.05	June 28	6.35	Sept. 19	5.24	Dec. 27	5.91

3. N. A. Mans. NE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 7, T. 28 S., R. 27 W. Highest water level 162.80, Dec. 15, 1947; lowest 169.33, Sept. 21, 1948. Records available: 1939-50. Mar. 17, 162.94; June 13, 162.97; Sept. 26, 162.76; Dec. 27, 162.94.

11. J. D. Wetmore. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 35, T. 29 S., R. 28 W. Highest water level 56.34, Sept. 26, 1950; lowest 59.74, Aug. 18, 1943. Records available: 1947-50. Mar. 17, 56.60; June 13, 56.90; Sept. 26, 56.34; Dec. 27, 56.46.

Greeley County

16-41-20ba. J. Howell. Highest water level 127.96, Jan. 6, 1949; lowest 133.02, July 20, 1949. Records available: 1947-50. Jan. 25, 130.55; Mar. 21, 130.50; May 11, 130.44; July 26, 130.25; Sept. 21, 131.24; Oct. 14, 130.50.

17-40-22ccd. Owner unknown. Highest water level 136.53, June 24, 1948; lowest 146.78, Nov. 12, 1948. Records available: 1947-50. Jan. 25, 138.92; Mar. 21, 139.67; May 11, 139.31; July 26, 140.95; Sept. 21, 139.27; Oct. 14, 139.00.

18-39-10ad. Owner unknown. Records available: 1947-49. Measurement discontinued.

18-41-26aa. Aaron Sell. Highest water level 100.21, Sept. 20, 1948; lowest 102.90, June 24, 1948. Records available: 1947-50. Jan. 25, 100.25; Mar. 21, 100.44; May 11, 100.37; July 26, 100.35; Sept. 21, 100.45.

19-43-25aad. Owner unknown. Highest water level 90.70, Aug. 7, 1947; lowest 100.69, May 24, 1949. Records available: 1947-50. May 11, 92.34; July 26, 91.68.

Hamilton County

2a. Robert Hazlett. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 21, T. 23 S., R. 43 W. Drilled well, diameter 40 inches, depth 29 feet. South well of a battery of three irrigation wells. Measurements prior to 1949 published under well 2. A correction of 0.6 foot should be added to all measurements for the period 1944 to 1948 to correct for height of measuring point. Highest water level 12.80, May 25, 1949; lowest 15.95, Aug. 19, 1948. Records available: 1944-50. Feb. 24, 13.97; Mar. 27, 14.39; May 12, 13.81; Nov. 28, 13.28.

3. B. Rees. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 8, T. 24 S., R. 40 W. Highest water level 11.57, July 7, 1942; lowest 14.67, Nov. 16, 1939. Records available: 1939-50.

Jan. 30	13.58	May 10	14.05	Aug. 17	12.60	Nov. 28	12.97
Feb. 24	13.81	June 23	13.08	Sept. 21	13.11	Dec. 22	13.21
Apr. 21	14.18	July 28	12.79	Oct. 27	13.45		

6. Belle Heinlen. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 24, T. 24 S., R. 39 W. Highest water level 25.09, Nov. 28, 1950; lowest 53.90, Sept. 14, 1946. Records available: 1939-50.

Jan. 30	53.17	Apr. 21	53.22	July 28	53.10	Oct. 27	25.32
Feb. 24	53.05	May 10	53.49	Aug. 17	52.82	Nov. 28	25.09
Mar. 27	53.10	June 23	53.50	Sept. 21	51.10	Dec. 22	26.71

7. I. E. Martin. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 16, T. 23 S., R. 40 W. Highest water level 42.25, Dec. 2, 1944; lowest 46.00, Nov. 27, 1940. Records available: 1939-50. Feb. 24, 43.75; May 10, 43.68; Aug. 17, 43.87; Nov. 28, 43.99.



Harvey County

(Wells not affected by pumping.)

72. Anna Hertzler. SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 16, T. 22 S., R. 1 W. Highest water level 17.28, June 2, 1945; lowest 25.85, Nov. 7, 1937. Records available: 1937-48. Measurement discontinued.

294. Owner of well, J. B. Schmidt; lessee, Hollow Oil Co. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 17, T. 22 S., R. 3 W. Highest water level 31.14, Dec. 27, 1948; lowest 43.64, Dec. 1, 1937. Records available: 1937-48. No measurement made in 1950.

325. A. L. Gouldener. SW. corner SE $\frac{1}{4}$  sec. 19, T. 23 S., R. 3 W. Highest water level 5.16, May 1, 1945; lowest 12.92, Apr. 1, 1938. Records available: 1937-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	8.52	May 4	9.71	Sept. 1	9.79	Nov. 1	9.77
Mar. 31	9.71	June 6	10.01	Oct. 4	9.67	Dec. 1	9.87
Apr. 10	9.91	Aug. 4	9.86				

701. Dr. V. E. Cheskey. NE. corner NW $\frac{1}{4}$  sec. 3, T. 23 S., R. 1 W. Highest water level 29.26, July 6, 1949; lowest 44.23, Nov. 2, 1938. Records available: 1938-50. Jan. 1, 31.69; Feb. 2, 31.86; Mar. 31, 31.83; May 4, 31.89; July 29, 32.10.

817. City of Wichita. NW. corner sec. 1, T. 24 S., R. 2 W. Highest water level 6.13, Apr. 20, 1945; lowest 17.12, Oct. 25, 1940. Records available: 1938-50.

Jan. 12	15.09	May 4	15.58	Sept. 1	12.88	Nov. 1	13.40
Feb. 12	15.18	June 6	15.77	Oct. 3	12.89	Dec. 1	14.07
Mar. 31	15.30	29	15.64				

824. City of Wichita. SE. corner sec. 22, T. 24 S., R. 1 W. Highest water level 5.77, May 4, 1945; lowest 18.16, Nov. 5, 1940. Records available: 1938-50.

Jan. 12	10.56	May 4	11.22	Sept. 1	8.62	Nov. 1	9.81
Feb. 2	10.78	June 29	11.93	Oct. 3	9.28	Dec. 1	10.02
Mar. 31	10.97	Aug. 4	6.94				

831. City of Wichita. NE. corner sec. 19, T. 24 S., R. 1 W. Highest water level 11.53, May 4, 1945; lowest 20.54, Nov. 5, 1940. Records available: 1938-49. Measurement discontinued.

832. City of Wichita. NE. corner sec. 19, T. 24 S., R. 1 W. Highest water level 12.41, May 4, 1945; lowest 20.35, Nov. 5, 1940. Records available: 1938-49. Measurement discontinued.

833. City of Wichita. SW. corner sec. 19, T. 24 S., R. 1 W. Highest water level 5.11, Oct. 2, 1945; lowest 15.79, May 27, 1947. Records available: 1938-50.

Jan. 12	12.73	Apr. 4	13.85	Sept. 1	12.61	Nov. 1	13.35
Feb. 2	12.99	Aug. 4	12.37	Oct. 3	12.83	Dec. 1	13.73
Mar. 31	13.70						

852. City of Wichita. NE. corner sec. 29, T. 24 S., R. 1 W. Highest water level 9.27, May 6, 1944; lowest 16.66, Nov. 5, 1940. Records available: 1938-49. Measurement discontinued.

853. City of Wichita. NW. corner sec. 13, T. 24 S., R. 2 W. Highest water level 6.03, Sept. 30, 1945; lowest 11.97, June 29, 1950. Records available: 1938-50.

Jan. 12	10.61	Apr. 10	11.62	June 29	11.97	Oct. 3	10.20
Feb. 2	10.92	May 4	11.51	Aug. 4	9.50	Nov. 1	10.81
Mar. 31	11.51	June 6	11.71	Sept. 1	10.08	Dec. 1	11.20

854. City of Wichita. SW. corner sec. 23, T. 23 S., R. 2 W. Highest water level 5.24, Apr. 27, 1945; lowest 14.87, Nov. 1, 1940. Records available: 1938-50.

Jan. 12	10.83	May 4	11.59	Aug. 4	8.97	Nov. 1	10.15
Feb. 2	11.16	June 6	11.78	Sept. 1	9.35	Dec. 1	10.31
Mar. 3	11.24	28	12.40	Oct. 3	9.44		

875. Owner of well, City of Wichita; owner of property, A. B. Havely. SE. corner sec. 17, T. 23 S., R. 3 W. Highest water level +0.98, Mar. 2, 1945; lowest 6.19, Jan. 12, 1950. Records available: 1939-50.

Jan. 12	6.19	Mar. 31	3.66	June 28	4.55	Oct. 3	2.71
Feb. 2	3.74	May 4	3.73	Aug. 4	2.41	Nov. 1	3.51
3	3.55	June 6	3.87	Sept. 1	2.66	Dec. 1	3.19

876. Owner of well, City of Wichita; owner of property, A. B. Havely. SE. corner sec. 17, T. 23 S., R. 3 W. Highest water level 21.79, Dec. 22, 1944; lowest 27.83, Nov. 8, 1940. Records available: 1939-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	22.41	Mar. 31	25.74	June 28	26.27	Oct. 3	24.44
Feb. 2	25.45	May 4	25.92	Aug. 4	26.37	Nov. 1	24.70
3	25.45	June 6	26.11	Sept. 1	25.28	Dec. 1	24.90

877. Owner of well, City of Wichita; owner of property, A. B. Havely. SE. corner sec. 17, T. 23 S., R. 3 W. Records available: 1939-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	12.98	13.25	13.49	13.54	13.75	13.90	14.00	13.80	13.28	13.13	13.32	13.44
2	12.97	13.27	13.49	13.52	13.75	13.84	14.01	13.74	13.28	13.17	13.33	13.47
3	12.98	13.29	13.43	13.55	13.75	13.87	14.01	13.69	13.28	13.17	13.35	13.47
4	13.03	13.29	13.42	13.61	13.77	13.88	14.02	13.69	13.28	13.17	13.35	13.47
5	13.03	13.29	13.42	13.63	13.78	13.87	14.03	13.60	13.29	13.16	13.31	13.51
6	13.08	13.27	13.41	13.63	13.79	13.87	14.04	13.59	13.29	13.13	13.33	13.51
7	13.10	13.28	13.43	13.59	13.78	13.87	14.08	13.55	13.28	13.17	13.33	13.50
8	13.10	13.31	13.48	13.52	13.79	13.87	14.08	13.48	13.28	13.19	13.35	13.53
9	13.06	13.32	13.48	13.52	13.82	13.90	14.08	13.47	13.27	13.19	13.38	13.56
10	13.09	13.32	13.44	13.58	13.83	13.91	14.08	13.44	13.27	13.18	13.40	13.56
11	13.11	13.30	13.47	13.61	13.83	13.91	14.09	13.41	13.29	13.20	13.38	13.54
12	13.10	13.29	13.48	13.61	13.81	13.90	14.10	13.40	13.29	13.21	13.38	13.55
13	13.08	13.32	13.49	13.61	13.81	13.89	14.10	13.39	13.29	13.21	13.37	13.56
14	13.08	13.33	13.49	13.70	13.83	13.92	14.10	13.38	13.23	13.20	13.36	13.57
15	13.08	13.34	13.45	13.69	13.84	13.92	14.06	13.38	13.23	13.20	13.40	13.60
16	13.14	13.35	13.46	13.68	13.81	13.92	14.06	13.37	13.20	13.22	13.42	13.60
17	13.14	13.34	13.46	13.71	13.81	13.92	14.02	13.37	13.20	13.22	13.41	13.62
18	13.12	13.37	13.45	13.73	13.85	13.92	14.02	13.38	13.19	13.22	13.41	13.62
19	13.15	13.37	13.45	13.72	13.86	13.93	14.00	13.38	13.18	13.22	13.41	13.62
20	13.16	13.36	13.49	13.70	13.87	13.91	14.01	13.37	13.16	13.25	13.46	13.63
21	13.15	13.35	13.50	13.69	13.87	13.92	14.02	13.37	13.16	13.24	13.45	13.64
22	13.12	13.36	13.51	13.67	13.87	13.92	14.02	13.35	13.17	13.26	13.43	13.65
23	13.12	13.37	13.50	13.71	13.87	13.93	14.01	13.35	13.15	13.27	13.50	13.67
24	13.12	13.41	13.51	13.72	13.89	13.96	14.02	13.34	13.15	13.28	13.50	13.68
25	13.19	13.44	13.50	13.72	13.89	13.99	14.01	13.35	13.15	13.28	13.49	13.67
26	13.21	13.45	13.44	13.73	13.89	14.00	14.00	13.34	13.14	13.22	13.46	13.70
27	13.24	13.44	13.50	13.73	13.89	14.00	14.00	13.28	13.13	13.27	13.46	13.70
28	13.20	13.44	13.56	13.77	13.89	13.99	13.99	13.28	13.12	13.30	13.48	13.69
29	13.23		13.60	13.79	13.87	14.00	13.91	13.28	13.12	13.30	13.48	13.68
30	13.23		13.60	13.78	13.89	14.00	13.90	13.28	13.12	13.30	13.44	13.63
31	13.24		13.56		13.89		13.85	13.28		13.30		13.62

880. Owner of well, City of Wichita; owner of property, Peter Miller. SE. corner sec. 11, T. 24 S., R. 3 W. Highest water level 2.56, Sept. 30, 1945; lowest 8.74, June 28, 1950. Records available: 1938-50.

Jan. 12	7.96	Apr. 10	8.45	June 28	8.74	Nov. 1	8.07
Feb. 2	8.09	May 4	8.36	Sept. 1	7.63	Dec. 1	8.64
Mar. 31	8.36	June 6	8.15	Oct. 3	8.05		

881. Owner of well, City of Wichita; owner of property, Peter Miller. SE. corner sec. 11, T. 24 S., R. 3 W. Highest water level 3.23, Sept. 30, 1945; lowest 8.47, June 28, 1950. Records available: 1938-50.

Jan. 12	7.69	May 4	8.22	Sept. 1	8.02	Nov. 1	8.40
Feb. 2	7.83	June 6	8.45	Oct. 3	7.68	Dec. 1	8.35
May 31	8.12	28	8.47				

888. Owner of well, City of Wichita; owner of property, C. K. Ellis. NW. corner sec. 17, T. 23 S., R. 2 W. Highest water level 0.43, July 27, 1945; lowest 8.95, Oct. 27, 1939. Records available: 1939-50.

Jan. 12	6.53	June 6	7.33	Sept. 1	4.66	Nov. 1	5.65
Feb. 2	6.74	29	7.95	Oct. 4	4.83	Dec. 1	5.56
May 4	6.93						

889. Owner of well, City of Wichita; owner of property, C. K. Ellis. NW. corner sec. 17, T. 23 S., R. 2 W. Highest water level 0.89, May 6, 1944; lowest 9.04, June 29, 1950. Records available: 1939-50.

## 889--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	7.71	May 4	7.93	Sept. 1	4.82	Nov. 1	6.36
Feb. 2	7.92	June 6	8.58	Oct. 4	5.62	Dec. 1	6.50
Mar. 31	7.77	29	9.04				

890. Owner of well, City of Wichita; owner of property, J. F. Jorgenson. NE. corner SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 21, T. 24 S., R. 3 W. Highest water level 0.10, May 2, 1945; lowest 7.07, Nov. 5, 1940. Records available: 1939-50.

Feb. 2	4.23	May 4	4.38	Sept. 1	4.47	Nov. 1	4.71
Mar. 31	4.38	June 6	4.81	Oct. 4	4.43	Dec. 1	4.73
Apr. 10	4.76	28	5.45				

891. Owner of well, City of Wichita; owner of property, Arthur McMurry. SE. corner sec. 31, T. 24 S., R. 3 W. Highest water level 0.46, May 11, 1942; lowest 4.68, Sept. 26, 1946. Records available: 1939-50.

Feb. 2	3.14	June 6	3.72	Sept. 1	1.52	Nov. 1	2.96
Mar. 31	3.28	28	4.02	Oct. 4	2.64	Dec. 1	3.19
May 4	3.55						

892. Owner of well, City of Wichita; owner of property, Arthur McMurry. SE. corner sec. 31, T. 24 S., R. 3 W. Highest water level 0.70, Sept. 1, 1950; lowest 3.92, Oct. 3, 1940. Records available: 1939-50.

Feb. 2	2.36	June 6	2.70	Sept. 1	0.70	Nov. 1	2.18
Mar. 31	2.49	28	3.24	Oct. 4	1.81	Dec. 1	2.38
May 4	2.77						

893. Owner of well, City of Wichita; owner of property, Arthur McMurry. SE. corner sec. 31, T. 24 S., R. 3 W. Highest water level 0.18, Sept. 1, 1950; lowest 3.77, Jan. 27, 1941. Records available: 1939-50.

Feb. 2	2.02	June 6	2.30	Sept. 1	0.18	Nov. 1	1.87
Mar. 31	2.26	28	2.95	Oct. 4	1.53	Dec. 1	2.14
May 4	2.48						

1174. City of Wichita. SW. corner sec. 32, T. 24 S., R. 1 W. Highest water level 2.28, May 1, 1945; lowest 11.11, Jan. 29, 1948. Records available: 1940-49. Measurement discontinued.

1187. City of Wichita. NW. corner sec. 29, T. 24 S., R. 1 W. Highest water level 3.68, May 4, 1945; lowest 10.44, Dec. 5, 1947. Records available: 1941-50.

Jan. 12	9.26	May 4	10.08	Aug. 4	5.33	Nov. 1	9.12
Feb. 2	9.45	June 6	10.25	Sept. 1	7.66	Dec. 1	9.55
Mar. 31	9.95	29	10.34	Oct. 3	8.19		

(Wells that are pumped or affected by pumping.)

3. Mrs. Emma Linn Webster. SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Highest water level 7.09, June 12, 1940; lowest 27.71, Jan. 29, 1948. Records available: 1937-49. Measurement discontinued.

66d. City of Newton. SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 32, T. 23 S., R. 1 W. Highest water level 26.30, July 8, 1949; lowest 61.14, Sept. 3, 1947. Records available: 1943-49. Measurement discontinued.

86. City of Halstead. NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 35, T. 23 S., R. 2 W. Highest water level 10.69, Apr. 28, 1944; lowest 28.79, June 28, 1950. Records available: 1941-50.

Jan. 12	18.23	Mar. 31	18.59	June 6	18.88	Aug. 4	12.19
Feb. 2	18.68	May 4	19.52	28	28.79	Sept. 1	15.04

87. City of Halstead. NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 35, T. 23 S., R. 2 W. Highest water level 8.86, Apr. 28, 1944; lowest 32.79, Sept. 8, 1945. Records available: 1941-49. Measurement discontinued.

87a. City of Halstead. NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 35, T. 23 S., R. 2 W. Highest water level 9.62, Apr. 28, 1944; lowest 32.99, May 3, 1946. Records available: 1941-49. Measurement discontinued.

506. Owner of well, City of Wichita; owner of property, W. G. Backhaus. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 28, T. 23 S., R. 2 W. Records available: 1937-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	15.29	15.40	15.26	15.74	15.73	16.12	15.77	11.40	10.46	12.24	13.67	14.28
2	15.23	15.44	15.26	15.73	15.67	16.09	15.75	10.57	10.65	12.25	13.73	14.32
3	15.19	15.44	15.22	15.72	15.62	16.08	15.77	.....	10.71	12.06	13.82	14.33
4	15.23	15.44	15.23	15.72	15.61	15.90	15.78	4.96	10.93	11.73	13.83	14.35
5	15.23	15.43	15.25	15.72	15.62	15.40	15.82	5.25	11.43	11.73	13.85	14.45
6	15.23	15.40	15.24	15.69	15.65	15.28	15.75	5.25	11.68	11.94	13.93	14.45
7	15.24	15.40	15.31	15.64	15.70	15.40	15.68	5.25	11.86	12.01	13.94	14.47
8	15.24	15.41	15.36	15.61	15.74	15.58	15.71	5.25	12.02	12.01	14.03	14.57
9	15.20	15.41	15.36	15.61	15.80	15.75	15.84	5.25	12.21	.....	14.10	14.61
10	15.23	15.40	15.34	15.65	15.86	15.75	15.86	5.25	12.40	.....	14.11	14.61
11	15.23	15.40	15.38	15.65	15.89	14.93	15.92	7.65	.....	.....	14.09	14.62
12	15.21	15.39	15.38	15.66	15.90	14.72	15.97	8.13	12.60	.....	14.08	14.63
13	15.22	15.41	15.38	15.67	15.92	14.72	15.98	8.18	12.67	12.76	14.08	14.63
14	15.22	15.41	15.38	15.67	15.94	14.91	16.02	8.23	12.59	12.81	14.06	14.63
15	15.24	15.41	15.42	15.68	15.98	15.07	16.02	8.29	12.40	12.84	14.08	14.67
16	15.24	15.40	15.48	15.70	16.02	15.20	16.02	8.37	11.61	12.90	14.13	14.70
17	15.22	15.38	15.53	15.70	16.03	15.35	15.88	8.46	10.94	12.95	14.13	14.73
18	15.30	15.40	15.56	15.71	16.02	15.49	15.36	8.77	10.54	13.00	14.09	14.74
19	15.39	15.40	15.59	15.72	16.07	15.52	14.82	9.26	10.77	13.07	14.17	14.77
20	15.42	15.38	15.60	15.70	16.02	15.57	14.67	9.62	10.96	13.15	14.23	14.78
21	15.42	15.36	15.62	15.68	16.04	15.58	13.16	9.93	11.20	13.18	14.21	14.78
22	15.38	15.36	15.66	15.69	16.06	15.60	12.94	10.26	11.33	13.29	14.19	14.75
23	15.33	15.34	15.66	15.73	16.10	15.70	13.53	10.55	11.47	13.31	14.26	14.67
24	15.26	15.34	15.68	15.78	16.10	15.83	13.69	10.75	11.59	13.36	14.30	14.66
25	15.28	15.33	15.67	15.80	16.23	15.92	13.98	10.99	11.67	13.31	14.28	14.63
26	15.30	15.33	15.64	15.82	16.22	16.01	13.99	11.08	11.76	13.40	14.28	14.61
27	15.28	15.28	15.65	15.82	16.20	16.08	13.99	11.03	11.84	13.41	14.29	14.61
28	15.20	15.25	15.69	15.82	16.20	16.08	13.99	10.51	11.91	13.50	14.31	14.51
29	15.28		15.71	15.77	16.20	16.08	13.72	10.07	11.97	13.54	14.31	14.43
30	15.31		15.71	15.76	16.16	16.03	13.48	.....	12.10	13.58	14.29	14.44
31	15.36		15.72		16.15		13.04	.....		13.60		14.33

507. Owner of well, City of Wichita; owner of property, W. G. Backhaus. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 28, T. 23 S., R. 2 W. Highest water level 3.23, May 6, 1944; lowest 15.73, Sept. 15, 1947. Records available: 1938-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3	11.91	June 6	13.68	Sept. 1	9.28	Nov. 1	11.92
Mar. 31	13.79	29	14.93	Oct. 3	10.66	Dec. 1	12.15
May 4	12.18	Aug. 4	6.33				

821. City of Wichita. NW. corner sec. 6, T. 24 S., R. 2 W. Highest water level 12.03, Aug. 21, 1939; lowest 26.56, Oct. 21, 1949. Records available: 1938-50.

Jan. 12	21.62	June 6	22.99	Sept. 1	23.33	Nov. 1	23.32
Mar. 31	22.58	29	23.54	Oct. 3	23.24	Dec. 1	23.17
Apr. 10	22.58	Aug. 4	23.32				

839. City of Wichita. NE. corner sec. 35, T. 24 S., R. 2 W. Highest water level 10.62 Aug. 21, 1939; lowest 19.55, Dec. 1, 1950. Records available: 1938-50.

Jan. 12	16.99	Apr. 10	18.65	June 29	19.42	Oct. 3	19.07
Feb. 2	17.09	May 4	18.54	Aug. 4	18.78	Nov. 1	19.00
Mar. 31	18.54	June 6	18.99	Sept. 1	18.88	Dec. 1	19.55

872. Owner of well, City of Wichita; owner of property, D. C. Buller. SE. corner sec. 31, T. 23 S., R. 2 W. Highest water level 17.65, Mar. 11, 1939; lowest 35.36, June 29, 1950. Records available: 1938-50.

Feb. 2	34.65	Apr. 10	31.17	Aug. 4	33.33	Nov. 1	34.12
3	34.65	June 6	34.04	Sept. 1	33.54	Dec. 1	32.91
Mar. 31	31.17	29	35.36	Oct. 3	34.55		

873. Owner of well, City of Wichita; owner of property, D. C. Buller. SE. corner sec. 31, T. 23 S., R. 2 W. Highest water level 17.61, Mar. 11, 1939; lowest 51.13, Feb. 3, 1950. Records available: 1938-50. Feb. 3, 51.13.

874. Owner of well, City of Wichita; owner of property, D. C. Buller. SE. corner sec. 31, T. 23 S., R. 2 W. Highest water level 20.04, May 27, 1940; lowest 32.40, Feb. 3, 1950. Records available: 1938-50. Feb. 3, 32.40.

878. Owner of well, City of Wichita; owner of property, C. Cadwell. SE. corner sec. 1, T. 24 S., R. 3 W. Highest water level 16.25, June 3, 1940; lowest 31.05, Oct. 13, 1947. Records available: 1938-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	27.42	May 4	27.46	Aug. 4	27.76	Nov. 1	27.91
Feb. 2	27.47	June 6	27.49	Sept. 1	27.66	Dec. 1	27.88
Mar. 31	27.47	29	27.63	Oct. 3	27.85		

879. Owner of well, City of Wichita; owner of property, C. Cadwell. SE. corner sec. 1, T. 24 S., R. 3 W. Highest water level 17.52, May 27, 1940; lowest 29.88, Mar. 31, 1950. Records available: 1938-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	29.93	May 4	29.86	Aug. 4	30.87	Nov. 1	30.74
Feb. 2	30.04	June 6	30.34	Sept. 1	30.81	Dec. 1	30.60
Mar. 31	29.88	29	30.60	Oct. 3	30.71		

883. Owner of well, City of Wichita; owner of property, Maggie Holle. NW. corner sec. 26, T. 24 S., R. 2 W. Highest water level 13.35, Aug. 21, 1939; lowest 25.07, June 6, 1950. Records available: 1939-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	22.79	May 4	23.78	Sept. 1	23.95	Nov. 1	23.22
Mar. 31	22.90	June 6	25.07	Oct. 3	23.58	Dec. 1	24.76
Apr. 10	22.90	29	24.47				

884. Owner of well, City of Wichita; owner of property, Maggie Holle. NW. corner sec. 26, T. 24 S., R. 2 W. Highest water level 13.34, Aug. 21, 1939; lowest 25.39, Jan. 29, 1948. Records available: 1939-50. Feb. 3, 22.68; Apr. 17, 23.03; May 4, 24.22; Aug. 4, 24.34; Oct. 4, 24.09.

885. Owner of well, City of Wichita; owner of property, Maggie Holle. NW. corner sec. 26, T. 24 S., R. 2 W. Highest water level 13.22, Aug. 21, 1939; lowest 25.00, May 4, 1950, Aug. 4, 1950. Records available: 1939-50. Feb. 3, 23.38; Apr. 17, 22.68, May 4, 25.00; Aug. 4, 25.00; Oct. 4, 23.55.

886. Owner of well, City of Wichita; owner of property, F. H. Haiber. NE. corner NW $\frac{1}{4}$  sec. 16, T. 24 S., R. 2 W. Highest water level 2.34, Aug. 21, 1939; lowest 20.26, Aug. 4, 1950. Records available: 1939-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	18.58	June 6	17.78	Aug. 25	17.63	Nov. 1	18.87
Feb. 25	17.07	28	20.18	Sept. 1	18.79	25	18.01
Mar. 25	18.26	29	19.14	25	17.73	Dec. 1	17.52
Apr. 26	18.85	July 28	19.80	Oct. 3	18.09	28	17.98
May 25	19.04	Aug. 4	20.26	25	17.78		

887. Owner of well, City of Wichita; owner of property, F. H. Haiber. NE. corner NW $\frac{1}{4}$  sec. 16, T. 24 S., R. 2 W. Highest water level 2.72, May 27, 1940; lowest 21.77, Aug. 4, 1950. Records available: 1939-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	18.53	May 4	18.27	Aug. 4	21.77	Nov. 1	19.87
Mar. 31	18.86	June 6	18.37	Sept. 1	19.91	Dec. 1	17.87
Apr. 10	18.86	29	20.02	Oct. 3	18.94		

894. Owner of well, City of Wichita; owner of property, H. A. Lawrence. NE. corner sec. 18, T. 24 S., R. 2 W. Highest water level 9.56, May 27, 1940; lowest 24.16, May 4, 1948. Records available: 1938-50. Feb. 3, 23.46.

895. Owner of well, City of Wichita; owner of property, H. A. Lawrence. NE. corner sec. 18, T. 24 S., R. 2 W. Highest water level 10.04, May 27, 1940; lowest 27.08, Jan. 5, 1949. Records available: 1938-50. Feb. 3, 24.35.

1186. City of Wichita. SW. corner sec. 13, T. 24 S., R. 2 W. Highest water level 7.23, Sept. 30, 1945; lowest 13.88, Dec. 15, 1947. Records available: 1941-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	9.55	May 4	12.20	Aug. 4	11.39	Nov. 1	13.08
Feb. 2	12.47	June 6	13.19	Sept. 1	12.75	Dec. 1	13.27
Mar. 31	13.09	29	13.50	Oct. 3	12.66		

1189. City of Wichita. SW. corner sec. 16, T. 24 S., R. 2 W. Highest water level 8.50, Apr. 26, 1942; lowest 15.65, Apr. 17, 1950. Records available: 1942-50. Feb. 3, 14.81; Apr. 17, 15.65; Oct. 4, 15.20.

1192. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 30, T. 23 S., R. 2 W. Highest water level 14.27, May 3, 1945; lowest 17.26, Dec. 3, 1947. Records available: 1941-50. Measurement discontinued.

2072. Owner, Peter Hoops and others; tenant, N. T. Unruh. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 5, T. 24 S., R. 2 W. Highest water level 27.09, May 5, 1947; lowest 37.11, May 19, 1947. Records available: 1941-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	36.80	June 6	36.99	Aug. 4	37.08	Oct. 3	37.12
Mar. 31	36.90	29	36.70	Sept. 1	37.09	Nov. 1	37.08

M-1. City of Wichita. NW. corner sec. 29, T. 23 S., R. 2 W. Highest water level 18.56, Apr. 13, 1939; lowest 104.0, Jan. 3, 1950, Feb. 5, 1950, June 30, 1950. Records available: 1939-50.

Jan. 3	104.0	Mar. 31	101.0	June 30	104.0	Sept. 30	98.0
Feb. 5	104.0	May 2	90.0	Aug. 1	31.0	Oct. 31	33.0
Mar. 1	31.0	June 5	100.0	30	32.0	Nov. 30	32.5

M-1a. City of Wichita. NW. corner sec. 29, T. 23 S., R. 2 W. Highest water level 17.47, June 3, 1940; lowest 42.36, June 30, 1950. Records available: 1939-50.

Jan. 3	37.39	Mar. 31	39.63	June 30	42.36	Sept. 30	36.96
Feb. 5	41.28	May 2	39.49	Aug. 1	28.35	Oct. 31	29.67
Mar. 1	27.30	June 5	40.79	30	28.81	Nov. 30	29.01

M-1b. City of Wichita. NW. corner sec. 29, T. 23 S., R. 2 W. Highest water level 15.94, June 3, 1940; lowest 39.80, June 30, 1950. Records available: 1939-50.

Mar. 1	26.22	June 5	38.27	Aug. 30	27.84	Oct. 31	28.65
31	37.15	30	39.80	Sept. 30	34.37	Nov. 30	27.99
May 2	36.90	Aug. 1	27.57				

M-2. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 29, T. 23 S., R. 2 W. Highest water level 18.33, May 4, 1939; lowest 155.00, Sept. 2, 1949. Records available: 1939-50.

Jan. 3	45.0	Mar. 31	93.0	June 30	48.0	Sept. 30	40.0
Feb. 5	48.0	May 2	41.0	Aug. 1	43.5	Oct. 31	90.0
Mar. 1	38.0	June 5	86.0	30	44.0	Nov. 30	90.0

M-2a. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 29, T. 23 S., R. 2 W. Highest water level 17.84, June 3, 1940; lowest 41.44, June 30, 1950. Records available: 1939-50.

Jan. 3	39.23	Mar. 31	38.74	June 30	41.44	Sept. 30	34.69
Feb. 5	37.83	May 2	37.15	Aug. 1	32.37	Oct. 31	33.81
Mar. 1	29.90	June 5	39.30	30	32.90	Nov. 30	33.07

M-2b. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 29, T. 23 S., R. 2 W. Highest water level 20.25, May 27, 1940; lowest 45.02, Feb. 5, 1950. Records available: 1939-50.

Jan. 3	39.43	Mar. 31	39.90	June 30	44.00	Sept. 30	35.67
Feb. 5	45.02	May 2	36.91	Aug. 1	39.70	Oct. 31	38.18
Mar. 1	35.80	June 5	41.00	30	39.90	Nov. 30	38.09

M-2c. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 29, T. 23 S., R. 2 W. Highest water level 31.58, Feb. 6, 1946; lowest 41.32, June 30, 1950. Records available: 1946-50.

Mar. 1	29.79	June 5	39.77	Aug. 30	32.60	Oct. 31	34.08
31	39.44	30	41.32	Sept. 30	35.02	Nov. 30	32.27
May 2	37.00	Aug. 1	32.48				

M-3. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 29, T. 23 S., R. 2 W. Highest water level 23.20, May 8, 1939; lowest 111.50, Sept. 2, 1949. Records available: 1939-50.

Jan. 3	43.5	Mar. 31	102.0	June 30	45.0	Sept. 30	86.0
Feb. 5	46.0	May 2	39.0	Aug. 1	44.5	Oct. 31	42.0
Mar. 1	39.5	June 5	44.0	30	42.0	Nov. 30	43.0

M-3a. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 29, T. 23 S., R. 2 W. Highest water level 19.93, May 27, 1940; lowest 47.08, Jan. 5, 1949. Records available: 1939-50.

Jan. 3	41.06	Mar. 31	45.02	June 30	42.96	Sept. 30	41.78
Feb. 5	44.25	May 2	35.82	Aug. 1	42.45	Oct. 31	40.43
Mar. 1	36.10	June 5	41.30	30	41.73	Nov. 30	40.79

M-3b. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 29, T. 23 S., R. 2 W. Highest water level 23.13, May 27, 1940; lowest 48.96, Sept. 2, 1949. Records available: 1939-50.

Jan. 3	44.85	Mar. 31	48.12	June 30	46.48	Sept. 30	43.27
Feb. 5	48.64	May 2	39.12	Aug. 1	46.74	Oct. 31	44.10
Mar. 1	40.33	June 5	45.08	30	46.33	Nov. 30	45.03

M-4. City of Wichita. SE corner sec. 30, T. 23 S., R. 2 W. Highest water level 23.12, May 27, 1940; lowest 94.63, July 10, 1947. Records available: 1939-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	48.0	Mar. 31	45.0	June 30	90.0	Sept. 30	40.0
Feb. 5	94.5	May 2	40.0	Aug. 1	91.0	Oct. 31	47.0
Mar. 1	85.0	June 5	48.0	30	89.0	Nov. 30	48.5

M-4a. City of Wichita. SE corner sec. 30, T. 23 S., R. 2 W. Highest water level 22.87, May 27, 1940; lowest 51.93, Oct. 3, 1948. Records available: 1939-50.

Jan. 3	41.73	Mar. 31	42.75	June 30	48.17	Sept. 30	38.25
Feb. 5	50.56	May 2	38.68	Aug. 1	47.36	Oct. 31	42.82
Mar. 1	42.04	June 5	44.18	30	47.31	Nov. 30	43.53

M-4b. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 30, T. 23 S., R. 2 W. Highest water level 23.91, May 27, 1940; lowest 48.91, Feb. 5, 1950. Records available: 1939-50.

Jan. 3	44.74	Mar. 31	42.90	June 30	47.85	Sept. 30	38.81
Feb. 5	48.91	May 2	39.22	Aug. 1	46.90	Oct. 31	42.95
Mar. 1	41.99	June 5	44.26	30	46.90	Nov. 30	43.53

M-5. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 32, T. 23 S., R. 2 W. Highest water level 20.33, May 16, 1939; lowest 132.5, Aug. 1, 1950. Records available: 1939-50.

Jan. 3	102.0	Mar. 31	38.0	June 30	46.0	Sept. 30	34.0
Feb. 5	106.0	May 2	93.0	Aug. 1	132.5	Oct. 31	46.0
Mar. 1	40.0	June 5	98.0	30	104.5	Nov. 30	104.0

M-5a. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 32, T. 23 S., R. 2 W. Highest water level 17.79, June 3, 1940; lowest 42.06, Sept. 30, 1949. Records available: 1939-50.

Jan. 3	34.05	Mar. 31	30.65	June 30	34.55	Sept. 30	33.15
Feb. 5	34.39	May 2	32.71	Aug. 1	32.89	Oct. 31	33.69
Mar. 1	32.73	June 5	32.62	30	33.12	Nov. 30	32.53

M-5b. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 32, T. 23 S., R. 2 W. Highest water level 17.82, May 27, 1940; lowest 43.00, Feb. 27, 1947. Records available: 1939-50.

Jan. 3	33.70	May 2	32.83	Aug. 1	32.64	Oct. 31	33.48
Feb. 5	33.85	June 5	32.27	30	32.87	Nov. 30	32.29
Mar. 1	32.62	30	34.30	Sept. 30	33.06		

M-6. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 32, T. 23 S., R. 2 W. Highest water level 19.05, May 27, 1940; lowest 105.00, Sept. 2, 1949. Records available: 1939-50.

Jan. 3	86.0	Mar. 31	33.0	June 30	94.0	Sept. 30	95.0
Feb. 5	88.0	May 2	90.0	Aug. 1	34.5	Oct. 31	99.0
Mar. 1	84.0	June 5	88.0	30	35.0	Nov. 30	34.0

M-6a. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 32, T. 23 S., R. 2 W. Highest water level 18.63, June 3, 1940; lowest 39.43, Dec. 3, 1947. Records available: 1939-50.

Jan. 3	35.67	Mar. 31	31.99	June 30	36.24	Sept. 30	35.15
Feb. 5	35.57	May 2	34.83	Aug. 1	34.03	Oct. 31	35.48
Mar. 1	34.73	June 5	34.00	30	34.42	Nov. 30	33.83

M-6b. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 32, T. 23 S., R. 2 W. Highest water level 18.46, June 3, 1940; lowest 36.88, Oct. 3, 1948. Records available: 1939-50.

Jan. 3	35.23	May 2	34.39	Aug. 1	33.70	Oct. 31	35.00
Feb. 5	35.13	June 5	33.69	30	34.05	Nov. 30	33.48
Mar. 1	34.30	30	35.79	Sept. 30	34.80		

M-7. City of Wichita. NW corner SW $\frac{1}{4}$  sec. 16, T. 24 S., R. 2 W. Highest water level 11.03, June 13, 1939; lowest 48.0, Mar. 31, 1950, June 30, 1950. Records available: 1939-50.

Jan. 3	26.0	Mar. 31	48.0	June 30	48.0	Sept. 29	47.0
Feb. 1	27.5	May 2	48.0	Aug. 1	27.33	Oct. 31	47.5
Mar. 1	47.5	June 5	28.0	30	25.0	Nov. 30	26.8

M-7a. City of Wichita. NW corner SW $\frac{1}{4}$  sec. 16, T. 24 S., R. 2 W. Highest water level 11.20, Aug. 21, 1939; lowest 29.94, Mar. 31, 1950. Records available: 1939-50.

Jan. 3	23.73	Mar. 31	29.94	June 30	30.07	Sept. 30	29.89
Feb. 1	24.92	May 2	29.07	Aug. 1	26.20	Oct. 31	29.49
Mar. 1	29.32	June 5	26.07	30	24.80	Nov. 30	25.58

M-7b. City of Wichita. NW corner SW $\frac{1}{4}$  sec. 16, T. 24 S., R. 2 W. Highest water level 11.24, Aug. 21, 1939; lowest 28.11, June 30, 1950. Records available: 1939-50.

## M-7b--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	24.07	Mar. 31	27.55	June 30	28.11	Sept. 30	27.80
Feb. 1	25.20	May 2	26.58	Aug. 1	26.46	Oct. 31	27.41
Mar. 1	27.06	June 5	26.26	30	25.14	Nov. 30	25.87

M-8. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 6, T. 24 S., R. 2 W. Highest water level 15.93, May 27, 1940; lowest 115.0, Aug. 30, 1950. Records available: 1939-50.

Jan. 3	33.0	Mar. 31	30.0	June 30	113.0	Sept. 30	33.0
Feb. 5	32.5	May 2	31.0	Aug. 1	33.0	Oct. 31	33.0
Mar. 1	31.5	June 5	30.5	30	115.0	Nov. 30	111.0

M-8a. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 6, T. 24 S., R. 2 W. Highest water level 14.72, June 3, 1940; lowest 41.08, Sept. 30, 1950. Records available: 1939-50.

Jan. 3	30.99	Mar. 31	29.57	June 30	31.35	Sept. 30	41.08
Feb. 5	30.50	May 2	30.07	Aug. 1	31.29	Oct. 31	28.99
Mar. 1	26.46	June 5	29.77	30	31.77	Nov. 30	31.18

M-8b. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 6, T. 24 S., R. 2 W. Highest water level 13.30, June 3, 1940; lowest 32.01, Oct. 3, 1948. Records available: 1939-50.

Jan. 3	29.65	Mar. 31	27.92	June 30	30.10	Sept. 30	29.65
Feb. 5	29.25	May 2	28.84	Aug. 1	30.80	Oct. 31	29.58
Mar. 1	29.10	June 5	28.83	30	30.33	Nov. 30	29.73

M-9. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Highest water level 10.82, May 27, 1940; lowest 76.00, Sept. 30, 1949. Records available: 1939-50.

Jan. 3	30.0	Mar. 31	30.0	June 30	29.12	Sept. 30	30.0
Feb. 1	29.5	May 2	29.0	Aug. 1	75.5	Oct. 31	72.0
Mar. 1	30.0	June 5	71.0	30	30.0	Nov. 30	30.0

M-9a. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Highest water level 10.40, May 27, 1940; lowest 30.19, Jan. 5, 1949. Records available: 1939-50.

Jan. 3	27.76	Mar. 31	27.14	June 30	27.85	Sept. 30	28.47
Feb. 1	27.05	May 2	27.07	Aug. 1	29.07	Oct. 31	28.60
Mar. 1	27.63	June 5	27.20	30	28.56	Nov. 30	27.62

M-9b. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Highest water level 9.12, May 27, 1940; lowest 29.84, Jan. 5, 1949. Records available: 1939-50.

Jan. 3	26.60	Mar. 31	25.90	June 30	26.64	Sept. 30	27.24
Feb. 1	26.83	May 2	25.85	Aug. 1	27.42	Oct. 31	27.01
Mar. 1	26.23	June 5	26.56	30	27.92	Nov. 30	26.48

M-10. City of Wichita. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Highest water level 12.05, May 27, 1940; lowest 88.0, Nov. 30, 1949. Records available: 1939-50.

Jan. 3	32.5	Mar. 31	86.0	June 30	33.0	Sept. 30	34.0
Feb. 1	32.0	May 2	32.0	Aug. 1	35.0	Oct. 31	32.5
Mar. 1	86.0	June 5	33.0	30	34.0	Nov. 30	32.0

M-10a. City of Wichita. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Highest water level 11.24, May 27, 1940; lowest 35.91, Dec. 3, 1947. Records available: 1939-50.

Jan. 3	29.32	Mar. 31	32.31	June 30	30.02	Sept. 30	30.94
Feb. 1	28.86	May 2	28.90	Aug. 1	32.07	Oct. 31	30.09
Mar. 1	33.23	June 5	30.10	30	31.20	Nov. 30	29.17

M-10b. City of Wichita. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Highest water level 10.44, May 27, 1940; lowest 31.00, May 4, 1948, Oct. 3, 1948. Records available: 1939-50.

Jan. 3	28.47	Mar. 31	28.87	June 30	28.96	Sept. 30	29.70
Feb. 1	27.84	May 2	27.83	Aug. 1	30.49	Oct. 31	29.17
Mar. 1	29.95	June 5	28.93	30	30.10	Nov. 30	28.18

M-11. City of Wichita. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Highest water level 7.11, May 27, 1940; lowest 65.79, Aug. 3, 1945. Records available: 1939-50.

Jan. 3	53.81	Mar. 31	52.75	June 30	25.26	Sept. 30	26.03
Feb. 1	24.16	May 2	24.35	Aug. 1	55.48	Oct. 31	25.35
Mar. 1	24.26	June 5	52.35	30	55.19	Nov. 30	53.41

M-11a. City of Wichita. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Highest water level 6.38, May 27, 1940; lowest 26.96, Jan. 5, 1949. Records available: 1939-50.



## M-11a--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	25.82	Mar. 31	25.42	June 30	24.18	Sept. 30	24.99
Feb. 1	23.07	May 2	23.20	Aug. 1	26.10	Oct. 31	24.05
Mar. 1	23.0	June 5	24.50	30	26.01	Nov. 30	26.06

M-11b. City of Wichita. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Highest water level 7.67, May 27, 1940; lowest 27.45, Sept. 2, 1949. Records available: 1939-50.

Jan. 3	25.98	Mar. 31	25.38	June 30	25.40	Sept. 30	26.20
Feb. 1	24.39	May 2	24.48	Aug. 1	26.20	Oct. 31	25.34
Mar. 1	24.35	June 5	24.74	30	26.12	Nov. 30	26.07

M-12. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 9, T. 24 S., R. 2 W. Highest water level 11.41, Aug. 21, 1939, lowest 82.0, Sept. 2, 1949, Aug. 1, 1950, Aug. 30, 1950. Records available: 1939-50.

Jan. 3	27.0	Mar. 31	80.0	June 30	27.0	Sept. 30	79.0
Feb. 1	78.5	May 2	32.0	Aug. 1	82.0	Oct. 31	32.0
Mar. 1	28.0	June 5	29.0	30	82.0	Nov. 30	30.0

M-12a. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 9, T. 24 S., R. 2 W. Highest water level 10.73, May 27, 1940; lowest 35.75, Aug. 30, 1950. Records available: 1939-50.

Jan. 3	26.87	Mar. 31	35.14	June 30	29.82	Sept. 30	35.29
Feb. 1	34.95	May 2	30.57	Aug. 1	36.37	Oct. 31	30.49
Mar. 1	27.90	June 6	29.05	30	35.75	Nov. 30	28.32

M-12b. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 9, T. 24 S., R. 2 W. Highest water level 11.70, Aug. 21, 1939, Nov. 27, 1940; lowest 36.93, Aug. 1, 1950. Records available: 1939-50.

Jan. 3	28.72	Mar. 31	35.70	June 30	31.00	Sept. 30	36.04
Feb. 1	35.46	May 2	31.59	Aug. 1	36.93	Oct. 31	31.58
Mar. 1	28.95	June 5	30.15	30	36.38	Nov. 30	29.39

M-13. City of Wichita. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 17, T. 24 S., R. 2 W. Highest water level 8.27, Aug. 21, 1939; lowest 63.30, Oct. 31, 1950. Records available: 1939-50.

Jan. 3	61.66	Mar. 31	60.92	June 30	62.12	Sept. 30	26.95
Feb. 1	25.68	May 2	62.4	Aug. 1	27.07	Oct. 31	63.30
Mar. 1	60.9	June 5	25.42	30	26.70	Nov. 30	61.45

M-13a. City of Wichita. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 17, T. 24 S., R. 2 W. Highest water level 7.89, May 27, 1940; lowest 27.57, Jan. 5, 1949. Records available: 1939-50.

Jan. 3	25.53	Mar. 31	25.58	June 30	26.64	Sept. 30	25.16
Feb. 1	23.40	May 2	25.79	Aug. 1	25.33	Oct. 31	26.48
Mar. 1	25.25	June 5	24.85	30	25.24	Nov. 30	26.41

M-13b. City of Wichita. NW. corner NE $\frac{1}{4}$  sec. 17, T. 24 S., R. 2 W. Highest water level 7.63, May 27, 1940; lowest 27.44, Jan. 5, 1949. Records available: 1939-50.

Jan. 3	25.76	Mar. 31	25.60	June 30	26.94	Sept. 30	26.06
Feb. 1	25.36	May 2	25.93	Aug. 1	26.05	Oct. 31	26.55
Mar. 1	25.18	June 5	25.76	30	26.27	Nov. 30	26.60

M-14. City of Wichita. NW. corner NW $\frac{1}{4}$  sec. 16, T. 24 S., R. 2 W. Highest water level 9.07, May 27, 1940; lowest 59.08, Jan. 5, 1949. Records available: 1939-50.

Jan. 3	55.0	Mar. 31	30.0	June 30	53.0	Sept. 30	33.0
Feb. 1	54.0	May 2	31.0	Aug. 1	51.0	Oct. 31	32.5
Mar. 1	26.0	June 5	49.0	30	32.5	Nov. 30	49.0

M-14a. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 16, T. 24 S., R. 2 W. Highest water level 8.31, Apr. 4, 1939; lowest 36.60, June 30, 1950. Records available: 1939-50.

Jan. 3	36.06	Mar. 31	28.90	June 30	36.60	Sept. 30	29.97
Feb. 1	34.40	May 2	30.02	Aug. 1	32.65	Oct. 31	32.40
Mar. 1	25.62	June 5	33.18	30	32.22	Nov. 30	35.90

M-14b. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 9, T. 24 S., R. 2 W. Highest water level 8.16, May 13, 27, 1940, June 3, 1940; lowest 33.06, Jan. 5, 1949. Records available: 1939-50.

Jan. 3	31.15	Mar. 31	28.80	June 30	31.62	Sept. 30	29.87
Feb. 1	30.11	May 2	29.50	Aug. 1	28.99	Oct. 31	31.22
Mar. 1	25.81	June 5	30.75	20	31.26	Nov. 30	32.30

M-15. City of Wichita. SE. corner NE $\frac{1}{4}$  sec. 9, T. 24 S., R. 2 W. Highest water level 13.92, Apr. 17, 1939; lowest 80.82, Jan. 7, 1947. Records available: 1939-50.

## M-15--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	25.0	Mar. 31	26.5	June 29	28.0	Sept. 29	27.0
Feb. 1	30.0	May 2	30.0	Aug. 1	62.0	Oct. 31	60.5
Mar. 1	28.5	June 6	56.50	30	60.5	Nov. 30	64.0

M-15a. City of Wichita.  $SE\frac{1}{4}NE\frac{1}{4}$  sec. 9, T. 24 S., R. 2 W. Highest water level 12.49, May 27, 1940; lowest 35.74, Aug. 1, 1950. Records available: 1939-50.

Jan. 3	23.63	Mar. 31	25.54	June 29	27.36	Sept. 30	25.66
Feb. 1	28.29	May 2	28.19	Aug. 1	35.74	Oct. 31	31.74
Mar. 1	27.00	June 6	32.07	30	33.60	Nov. 30	30.61

M-15b. City of Wichita.  $SE\frac{1}{4}NE\frac{1}{4}$  sec. 9, T. 24 S., R. 2 W. Highest water level 13.45, May 27, 1940; lowest 33.70, Aug. 30, 1950. Records available: 1939-50.

Jan. 3	24.62	Mar. 31	26.53	June 29	28.37	Sept. 29	26.53
Feb. 1	29.28	May 2	29.13	Aug. 1	32.80	Oct. 31	32.84
Mar. 1	27.95	June 6	32.22	30	33.70	Nov. 30	30.50

M-16. City of Wichita. SE. corner  $SE\frac{1}{4}$  sec. 9, T. 24 S., R. 2 W. Highest water level 10.71, Aug. 21, 1939; lowest 71.0, Aug. 1, 1950. Records available: 1939-50.

Jan. 3	27.0	Mar. 31	28.0	June 29	30.0	Sept. 29	30.0
Feb. 1	70.0	May 2	69.0	Aug. 1	71.0	Oct. 31	33.0
Mar. 1	28.4	June 6	30.0	30	33.0	Nov. 30	31.0

M-16a. City of Wichita.  $SE\frac{1}{4}SE\frac{1}{4}$  sec. 9, T. 24 S., R. 2 W. Highest water level 10.93, Aug. 21, 1939; lowest 33.38, Aug. 1, 1950. Records available: 1939-50.

Jan. 3	21.98	Mar. 31	24.04	June 29	25.64	Sept. 29	24.50
Feb. 1	30.70	May 2	30.50	Aug. 1	33.38	Oct. 31	26.81
Mar. 1	29.40	June 6	25.98	30	26.92	Nov. 30	25.00

M-16b. City of Wichita.  $SE\frac{1}{4}SE\frac{1}{4}$  sec. 9, T. 24 S., R. 2 W. Highest water level 11.02, May 27, 1940; lowest 25.92, Aug. 1, 1950. Records available: 1939-50.

Jan. 3	21.92	Mar. 31	22.74	June 29	24.08	Sept. 29	24.11
Feb. 1	24.05	May 2	24.46	Aug. 1	25.92	Oct. 31	24.93
Mar. 1	23.93	June 5	24.52	30	25.08	Nov. 30	24.27

M-17. City of Wichita.  $NE\frac{1}{4}SE\frac{1}{4}$  sec. 16, T. 24 S., R. 2 W. Highest water level 6.58, Aug. 21, 1939; lowest 61.0, Oct. 31, 1950. Records available: 1939-50.

Jan. 3	50.0	Mar. 31	20.0	June 29	59.0	Sept. 29	60.0
Feb. 1	57.5	May 2	22.0	Aug. 1	21.5	Oct. 31	61.0
Mar. 1	19.5	June 6	21.3	30	20.75	Nov. 30	24.0

M-17a. City of Wichita.  $NE\frac{1}{4}SE\frac{1}{4}$  sec. 16, T. 24 S., R. 2 W. Highest water level 5.66, Aug. 21, 1939; lowest 27.28, Mar. 31, 1950. Records available: 1939-50.

Jan. 3	16.17	Mar. 31	27.28	June 29	19.04	Sept. 30	17.84
Feb. 1	17.49	May 2	17.80	Aug. 1	18.85	Oct. 31	18.70
Mar. 1	17.20	June 6	17.94	30	17.79	Nov. 30	18.34

M-17b. City of Wichita.  $NE\frac{1}{4}SE\frac{1}{4}$  sec. 16, T. 24 S., R. 2 W. Highest water level 4.01, Aug. 21, 1939; lowest 17.49, June 29, 1950. Records available: 1939-50.

Jan. 3	14.40	Mar. 31	15.86	June 29	17.49	Sept. 30	16.45
Feb. 1	15.96	May 2	16.38	Aug. 1	17.42	Oct. 31	17.12
Mar. 1	15.81	June 6	16.47	30	16.43	Nov. 30	16.80

M-18. City of Wichita.  $SE\frac{1}{4}SW\frac{1}{4}$  sec. 22, T. 24 S., R. 2 W. Highest water level 10.00, Aug. 21, 1939; lowest 58.4, Nov. 30, 1950. Records available: 1939-50.

Jan. 3	51.0	Mar. 31	54.3	June 29	55.4	Sept. 29	21.87
Feb. 1	19.88	May 2	21.65	Aug. 1	21.68	Oct. 31	22.47
Mar. 1	56.0	June 6	52.40	30	57.7	Nov. 30	58.4

M-18a. City of Wichita.  $SE\frac{1}{4}SW\frac{1}{4}$  sec. 22, T. 24 S., R. 2 W. Highest water level 9.62, Aug. 21, 1939; lowest 35.75, Nov. 30, 1950. Records available: 1939-50.

Jan. 3	31.84	Mar. 31	35.17	June 29	25.42	Sept. 29	20.30
Feb. 1	17.97	May 2	20.38	Aug. 1	20.62	Oct. 31	21.15
Mar. 1	34.36	June 6	24.96	30	35.58	Nov. 30	35.75

M-18b. City of Wichita.  $SE\frac{1}{4}SW\frac{1}{4}$  sec. 22, T. 24 S., R. 2 W. Highest water level 9.38, Aug. 21, 1939; lowest 27.78, Nov. 30, 1950. Records available: 1939-50.

## M-18b--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	20.86	Mar. 31	27.33	June 29	27.49	Sept. 29	20.10
Feb. 1	18.56	May 2	19.93	Aug. 1	20.20	Oct. 31	20.67
Mar. 1	26.45	June 6	27.30	30	27.52	Nov. 30	27.78

M-19. City of Wichita. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 27, T. 24 S., R. 2 W. Highest water level 10.82, Aug. 21, 1939; lowest 47.0, Aug. 1, 1950. Records available: 1939-50.

Jan. 3	21.02	Mar. 31	20.90	June 29	22.50	Sept. 29	43.58
Feb. 1	20.29	May 3	46.3	Aug. 1	47.0	Oct. 31	21.70
Mar. 1	20.37	June 6	40.74	30	21.82	Nov. 30	43.82

M-19a. City of Wichita. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 27, T. 24 S., R. 2 W. Highest water level 13.11, Aug. 21, 1939; lowest 27.08, Sept. 29, 1950. Records available: 1939-50.

Jan. 3	22.34	Mar. 31	22.08	June 29	24.00	Sept. 29	27.08
Feb. 1	21.83	May 3	26.16	Aug. 1	26.55	Oct. 31	23.09
Mar. 1	21.15	June 6	26.78	30	23.17	Nov. 30	26.50

M-19b. City of Wichita. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 27, T. 24 S., R. 2 W. Highest water level 11.47. Aug. 21, 1939; lowest 22.86, Sept. 2, 1947. Records available: 1939-50.

Jan. 3	20.90	Mar. 31	21.27	June 29	22.80	Sept. 29	22.57
Feb. 1	20.70	May 3	22.29	Aug. 1	22.84	Oct. 31	22.16
Mar. 1	20.68	June 6	22.91	30	22.15	Nov. 30	22.79

M-20. City of Wichita. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Highest water level 9.74, May 27, 1940; lowest 86.0, Sept. 30, 1950. Records available: 1939-50.

Jan. 3	29.0	Mar. 31	30.0	June 30	76.0	Sept. 30	86.0
Feb. 1	28.0	May 2	74.0	Aug. 1	30.0	Oct. 31	76.0
Mar. 1	28.0	June 5	74.0	30	31.0	Nov. 30	30.0

M-20a. City of Wichita. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Highest water level 9.28, May 27, 1940; lowest 29.96, May 4, 1948. Records available: 1939-50.

Jan. 3	27.36	Mar. 31	27.64	June 30	28.80	Sept. 30	29.88
Feb. 1	27.55	May 2	28.42	Aug. 1	28.88	Oct. 31	29.35
Mar. 1	27.50	June 5	28.67	30	29.22	Nov. 30	27.92

M-20b. City of Wichita. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 8, T. 24 S., R. 2 W. Highest water level 8.49, May 27, 1940; lowest 30.86, May 4, 1948. Records available: 1939-50.

Jan. 3	28.62	Mar. 31	28.20	June 30	29.29	Sept. 30	30.20
Feb. 1	29.24	May 2	27.03	Aug. 1	29.43	Oct. 31	29.72
Mar. 1	28.10	June 5	29.05	30	29.78	Nov. 30	29.69

M-21. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 26, T. 24 S., R. 2 W. Highest water level 8.32, Aug. 21, 1939; lowest 44.00, Sept. 2, 1949. Records available: 1939-50.

Jan. 3	19.0	Mar. 31	40.0	June 29	19.97	Sept. 30	20.0
Feb. 1	16.0	May 3	39.0	Aug. 1	41.0	Oct. 31	42.0
Mar. 1	16.0	June 6	20.26	30	40.5	Nov. 30	22.0

M-21a. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 26, T. 24 S., R. 2 W. Highest water level 8.50, Aug. 21, 1939; lowest 31.89, Dec. 4, 1946. Records available: 1939-50.

Jan. 3	19.06	Mar. 31	25.40	June 29	19.40	Sept. 30	20.88
Feb. 1	18.68	May 3	24.43	Aug. 1	26.06	Oct. 31	26.75
Mar. 1	17.20	June 6	19.19	30	26.45	Nov. 30	22.86

M-21b. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 26, T. 24 S., R. 2 W. Highest water level 8.08, Aug. 21, 1939; lowest 23.76, Oct. 31, 1950. Records available: 1939-50.

Jan. 3	18.79	Mar. 31	22.38	June 29	18.98	Sept. 29	20.39
Feb. 1	16.77	May 3	21.62	Aug. 1	23.12	Oct. 31	23.76
Mar. 1	16.90	June 6	18.83	30	23.48	Nov. 30	22.22

M-22. City of Wichita. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 26, T. 24 S., R. 2 W. Highest water level 9.20, Aug. 21, 1939; lowest 54.30, Aug. 1, 1950. Records available: 1939-50.

Jan. 3	19.57	Mar. 31	21.06	June 29	52.20	Sept. 29	54.0
Feb. 1	18.75	May 3	21.0	Aug. 1	54.30	Oct. 31	22.23
Mar. 1	19.93	June 6	21.5	30	22.20	Nov. 30	22.64

M-22a. City of Wichita. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 26, T. 24 S., R. 2 W. Highest water level 8.49, Aug. 21, 1939; lowest 27.42, June 29, 1950. Records available: 1939-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	18.19	Mar. 31	19.69	June 29	27.42	Sept. 29	26.45
Feb. 1	17.29	May 3	19.60	Aug. 1	27.20	Oct. 31	20.89
Mar. 1	17.47	June 6	19.85	30	20.84	Nov. 30	21.26

M-22b. City of Wichita. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 26, T. 24 S., R. 2 W. Highest water level 9.28, Aug. 21, 1939; lowest 23.69, Jan. 5, 1949. Records available: 1939-50.

Jan. 3	19.12	Mar. 31	20.69	June 29	22.67	Sept. 29	22.27
Feb. 1	18.08	May 3	20.55	Aug. 1	22.78	Oct. 31	20.98
Mar. 1	18.25	June 6	20.74	30	21.92	Nov. 30	22.29

M-23. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 35, T. 24 S., R. 2 W. Highest water level 7.85, Aug. 21, 1939; lowest 66.5, Nov. 30, 1950. Records available: 1939-50.

Jan. 3	58.5	Mar. 31	65.0	June 29	66.0	Sept. 29	19.0
Feb. 1	16.5	May 3	18.0	Aug. 1	19.5	Oct. 31	18.60
Mar. 1	17.0	June 6	66.0	30	20.0	Nov. 30	66.5

M-23a. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 35, T. 24 S., R. 2 W. Highest water level 9.17, Aug. 21, 1939; lowest 20.77, Jan. 5, 1949. Records available: 1939-50.

Jan. 3	18.90	Mar. 31	18.75	June 29	19.65	Sept. 29	18.07
Feb. 1	15.98	May 3	17.52	Aug. 1	18.27	Oct. 31	18.03
Mar. 1	16.34	June 6	19.29	30	17.98	Nov. 30	20.06

M-23b. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 35, T. 24 S., R. 2 W. Highest water level 7.50, Aug. 21, 1939; lowest 20.33, Jan. 5, 1949. Records available: 1939-50.

Jan. 3	15.45	Mar. 31	17.30	June 29	18.32	Sept. 29	17.29
Feb. 1	15.27	May 3	16.78	Aug. 1	17.40	Oct. 31	17.23
Mar. 1	15.60	June 6	17.92	30	17.17	Nov. 30	18.66

M-24. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 35, T. 24 S., R. 2 W. Highest water level 8.71, Aug. 21, 1939; lowest 48.96, Dec. 3, 1947. Records available: 1939-50.

Jan. 3	17.0	Mar. 31	18.0	June 29	19.5	Sept. 29	19.5
Feb. 1	16.5	May 3	19.0	Aug. 1	19.5	Oct. 31	19.4
Mar. 1	17.5	June 6	19.0	30	19.0	Nov. 30	18.44

M-24a. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 35, T. 24 S., R. 2 W. Highest water level 8.88, Aug. 21, 1939; lowest 21.43, Jan. 29, 1948. Records available: 1939-50.

Jan. 3	15.88	Mar. 31	17.06	June 29	18.75	Sept. 29	18.67
Feb. 1	16.11	May 3	16.64	Aug. 1	18.55	Oct. 31	17.89
Mar. 1	16.57	June 6	18.26	30	18.41	Nov. 30	19.44

M-24b. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 35, T. 24 S., R. 2 W. Highest water level 11.17, Aug. 28, 1939; lowest 25.73, Jan. 29, 1948. Records available: 1939-50.

Jan. 3	17.05	Mar. 31	19.29	June 29	20.95	Sept. 29	21.04
Feb. 1	18.24	May 3	19.92	Aug. 1	21.01	Oct. 31	21.77
Mar. 1	18.74	June 6	20.52	30	20.79	Nov. 30	21.78

M-25. City of Wichita. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 36, T. 24 S., R. 2 W. Highest water level 5.54, Aug. 21, 1939; lowest 58.62, Oct. 31, 1949. Records available: 1939-50.

Jan. 3	12.75	Mar. 31	14.84	June 29	42.76	Sept. 29	49.60
Feb. 1	55.0	May 3	58.5	Aug. 1	45.20	Oct. 31	48.28
Mar. 1	56.0	June 6	15.0	30	45.95	Nov. 30	17.13

M-25a. City of Wichita. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 36, T. 24 S., R. 2 W. Highest water level 5.31, Aug. 21, 1939; lowest 15.91, June 29, 1950. Records available: 1939-50.

Jan. 3	11.95	Mar. 31	13.41	June 29	15.91	Sept. 29	15.08
Feb. 1	14.10	May 3	14.97	Aug. 1	15.21	Oct. 31	15.82
Mar. 1	14.83	June 6	14.83	30	15.08	Nov. 30	15.49

M-25b. City of Wichita. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 1, T. 25 S., R. 2 W. Highest water level 6.89, Aug. 21, 1939; lowest 17.37, June 29, 1950. Records available: 1939-50.

Jan. 3	13.50	Mar. 31	14.99	June 29	17.37	Sept. 29	15.72
Feb. 1	15.44	May 3	16.35	Aug. 1	16.67	Oct. 31	17.31
Mar. 1	16.09	June 6	16.40	30	16.52	Nov. 30	17.12

M-26. City of Wichita. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 22, T. 24 S., R. 2 W. Drilled well, diameter 18 inches. Highest water level 13.96, July 8, 1949; lowest 70.7, Aug. 1, 1950. Records available: 1949-50.

## M-26--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	62.5	Mar. 31	20.0	June 29	21.0	Sept. 29	69.0
Feb. 1	66.0	May 3	20.0	Aug. 1	70.7	Oct. 31	70.0
Mar. 1	20.0	June 6	20.0	30	18.0	Nov. 30	19.40

M-26a. City of Wichita. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 22, T. 24 S., R. 2 W. Drilled well, diameter 1 $\frac{1}{4}$  inches. Highest water level 15.99, Nov. 30, 1949; lowest 20.50, Aug. 1, 1950. Records available: 1949-50.

Jan. 3	17.10	Mar. 30	17.57	June 30	19.35	Sept. 29	19.67
Feb. 1	18.62	May 3	17.95	Aug. 1	20.50	Oct. 31	20.34
Mar. 1	17.90	June 6	18.35	30	17.79	Nov. 30	18.49

M-26b. City of Wichita. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 22, T. 24 S., R. 2 W. Highest water level 11.62, July 7, 1948; lowest 18.09, Aug. 1, 1950. Records available: 1947-50.

Jan. 3	14.94	Mar. 30	16.32	June 30	17.60	Sept. 29	17.18
Feb. 1	16.20	May 3	16.64	Aug. 1	18.09	Oct. 31	17.81
Mar. 1	16.47	June 6	17.07	30	16.55	Nov. 30	17.22

Haskell County

6. Copeland State Bank. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 11, T. 29 S., R. 31 W. Highest water level 154.73, Nov. 20, 1946; lowest 158.66, Feb. 6, 1946. Records available: 1941-50. Feb. 20, 156.13; May 9, 156.14; Aug. 14, 156.08; Nov. 15, 155.93.

7. Etta McCoy. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 2, T. 30 S., R. 32 W. Highest water level 187.08, Aug. 17, 1948; lowest 191.16, Aug. 14, 1950. Records available: 1941-50. Feb. 20, 188.08; Apr. 9, 190.39; Aug. 14, 191.16; Nov. 15, 191.05.

10. Eli Stoops. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 33, T. 30 S., R. 34 W. Highest water level 45.40, Oct. 12, 1950; lowest 51.74, May 18, 1949. Records available: 1941-50.

Jan. 17	48.98	Apr. 20	49.49	July 13	49.42	Oct. 12	45.40
Feb. 20	49.09	May 9	49.59	Aug. 14	47.27	Nov. 15	46.20
Mar. 14	49.17	June 22	49.65	Sept. 14	46.27	Dec. 26	46.83

11. L. C. Leonard. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 20, T. 30 S., R. 32 W. Highest water level 180.07, Nov. 15, 1949; lowest 186.60, May 6, 1947. Records available: 1941-50. Water levels in 1949 are incorrect. May 19, 184.79; Aug. 16, 180.68; Nov. 15, 180.07. 1950: Feb. 20, 183.70.

12. Sybol Smith. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 11, T. 30 S., R. 32 W. Highest water level 179.40, Nov. 3, 1941; lowest 187.64, Aug. 16, 1949. Records available: 1941-50. Water levels in 1949 are incorrect: Feb. 8, 184.41; May 19, 183.81; Aug. 16, 187.34. 1950: May 9, 185.25; Aug. 14, 184.60; Nov. 15, 181.30.

Hodgeman County

3. W. J. Fox. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 12, T. 21 S., R. 22 W. Highest water level 26.95, Nov. 18, 1950; lowest 34.77, Sept. 20, 1940. Records available: 1940-50. Jan. 20, 28.97; Apr. 19, 29.39; July 19, 30.56; Nov. 18, 26.95.

4. William Macey. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 13, T. 22 S., R. 22 W. Highest water level 17.74, Oct. 18, 1950; lowest 27.52, Oct. 2, 1941. Records available: 1940-50. Jan. 20, 21.79; Apr. 19, 20.39; July 19, 23.80; Oct. 18, 17.74.

5. Ray Klein. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 36, T. 22 S., R. 22 W. Highest water level 25.58, Oct. 18, 1950; lowest 33.08, Oct. 29, 1940, Aug. 20, 1946. Records available: 1940-50. Measurements discontinued.

Jan. 20	28.95	Mar. 17	28.36	June 29	30.65	Sept. 20	25.92
Feb. 16	29.06	May 17	30.15	July 19	29.26	Oct. 18	25.58

Jackson County

5-15-22db. Fred Bergman Estate. Highest water level 18.14, Jan. 17, 1950; lowest 21.36, Feb. 9, 1949. Records available: 1948-50. Jan. 17, 18.14; Sept. 26, 18.49; Dec. 27, 18.45.

7-15-3ca. Fred Shafer. Highest water level 5.85, July 3, 1948; lowest 7.22, Oct. 14, 1948. Records available: 1948-50. Jan. 17, 6.15, Sept. 26, 6.58; Dec. 27, 6.35.

9-15-23dcb. B. F. Albright. Highest water level 3.42, Apr. 15, 1949; lowest 8.31, Oct. 14, 1948. Records available: 1948-50. Jan. 17, 5.69; Sept. 26, 6.11; Dec. 27, 5.84.

#### Jefferson County

11-19-27bcc. School district. Highest water level 23.66, July 15, 1949; lowest 27.56, Jan. 17, 1950. Records available: 1948-50. Jan. 17, 27.56; Sept. 26, 25.14; Dec. 27, 26.28.

11-19-29bc. Bill Green. Highest water level 12.67, July 15, 1949; lowest 24.87, Nov. 27, 1948. Records available: 1948-50. Jan. 17, 22.40; Sept. 26, 16.06; Dec. 27, 20.13.

#### Jewell County

6. H. C. Doud. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 5, T. 3 S., R. 9 W. Highest water level 36.60, Oct. 26, 1949; lowest 46.76, Oct. 13, 1937. Records available: 1934-44, 1946-50. Feb. 5, 14.05; Apr. 13, 12.20; Sept. 20, 17.75.

8. Will Zadina. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 17, T. 3 S., R. 9 W. Highest water level 3.87, June 24, 1947; lowest 68.06, Aug. 23, 1934. Records available: 1934-44, 1946-50. Feb. 5, 17.88; Mar. 9, 17.36; Apr. 13, 18.15; Sept. 20, 11.43.

12. M. W. Howe. Lot 4 of sec. 30, T. 3 S., R. 9 W. Highest water level 54.62, June 24, 1947; lowest 77.79, June 8, 1938. Records available: 1934-50. Feb. 5, 64.77; Mar. 9, 64.81; Apr. 13, 64.98; Sept. 20, 58.72.

14. C. Walker. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 24, T. 3 S., R. 9 W. Highest water level 14.53, June 24, 1947; lowest 46.69, Mar. 20, 1934. Records available: 1934-44, 1946-50. Feb. 5, 21.09; Mar. 9, 23.88; Apr. 13, 23.43; Sept. 20, 20.23.

22. Meyer Miles. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 10, T. 5 S., R. 9 W. Highest water level 8.98, Sept. 20, 1950; lowest 25.68, Aug. 10, 1934. Records available: 1934-50. Feb. 5, 10.18; Mar. 9, 10.73; Apr. 13, 11.59; Sept. 20, 8.98.

30. Fred Vay Wey. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 28, T. 4 S., R. 9 W. Highest water level 16.60, May 25, 1950; lowest 43.45, Sept. 20, 1940. Records available: 1934-44, 1946-50. Mar. 24, 18.10; May 25, 16.60; July 25, 13.90; Aug. 25, 17.90. Measurement discontinued.

34. Glen Kinder. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 18, T. 3 S., R. 10 W. Highest water level 5.88, July 1, 1949; lowest 33.92, Aug. 19, 1940. Records available: 1939-44, 1946-50. Feb. 5, 11.46; Mar. 9, 13.07; Apr. 13, 12.55; Sept. 20, 6.14.

41. Walter Dietz. Lot 16 of sec. 6, T. 5 S., R. 9 W. Highest water level 8.72, Sept. 21, 1950; lowest 27.38, May 23, 1941. Records available: 1934-44, 1946-50. Feb. 5, 12.78; Mar. 9, 12.49; Apr. 13, 12.68; Sept. 21, 8.72.

44. Cleo Gimple. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 13, T. 4 S., R. 9 W. Highest water level 5.00, Aug. 2, 1944; lowest 24.03, May 9, 1935. Records available: 1934-44, 1946-50. Feb. 5, 9.23; Mar. 9, 9.20; Apr. 13, 9.40.

45. Victor Yapp. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 24, T. 4 S., R. 10 W. Highest water level 17.52, Sept. 21, 1950; lowest 34.39, Dec. 21, 1940. Records available: 1934-50. Feb. 5, 19.55; Mar. 9, 20.42; Apr. 13, 20.07; Sept. 21, 17.52.

46. Ralph Wierenga. Lot 3 of sec. 19, T. 5 S., R. 9 W. Highest water level 0.36, June 24, 1947; lowest 17.54, Aug. 30, 1934. Records available: 1934-44, 1946-50. Feb. 5, 4.30; Mar. 9, 4.90; Apr. 13, 3.80; Sept. 21, 2.21.

47. Meyer Miles. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 3, T. 5 S., R. 9 W. Highest water level 0.98, June 24, 1947; lowest 13.84, May 9, 1935. Records available: 1934-44, 1946-50. Feb. 5, 4.30; Mar. 9, 7.80; Apr. 13, 6.57; Sept. 20, 2.3.

49. E. Underwood. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 5, T. 3 S., R. 9 W. Highest water level 13.15, June 24, 1947; lowest 46.83, Nov. 24, 1934. Records available: 1934-44, 1946-50. Feb. 5, 17.10; Mar. 9, 17.39; Apr. 13, 17.78.

64. Chris Vandeventer, former owner. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 6, T. 3 S., R. 8 W. Highest water level 53.00, June 24, 1947; lowest 65.90, Jan. 19, 1938. Records available: 1935-44, 1946-50. Feb. 5, 57.30; Mar. 9, 57.25; Apr. 13, 57.29.

65. Mrs. B. M. Parkhurst. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 23, T. 3 S., R. 9 W. Highest water level 9.62, Nov. 23, 1942; lowest 38.10, Aug. 20, 1940. Records available: 1939-50. Feb. 5, 11.90; Mar. 9, 10.79; Apr. 13, 10.81; Sept. 20, 9.9.

66. A. E. Cook farm. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 1, T. 5 S., R. 10 W. Highest water level 8.27, Feb. 5, 1950; lowest 27.55, Oct. 23, 1940. Records available: 1937-44, 1946-50. Feb. 5, 8.27; Mar. 9, 12.85; Apr. 13, 13.37. Measurement discontinued.

69. Walter Dietz. NW $\frac{1}{4}$  lot 2 of sec. 7, T. 5 S., R. 9 W. Highest water level 6.31, Sept. 17, 1946; lowest 24.50, Aug. 19, 1940. Records available: 1939-44, 1946-50. Feb. 5, 10.87; Mar. 9, 9.67; Apr. 13, 11.03; Sept. 21, 7.37.

1-6-5da. U. S. Geol. Survey. Highest water level 3.80, June 20, 1949; lowest 9.90, Dec. 21, 1948. Records available: 1947-50. Jan. 23, 8.65; Feb. 24, 9.67.

1-6-5dd. U. S. Geol. Survey. Highest water level 9.14, Aug. 19, 1948; lowest 30.65, May 20, 1948. Records available: 1947-50. Jan. 23, 21.30; Feb. 24, 22.23.

1-7-1bb. U. S. Geol. Survey. Highest water level 4.29, June 20, 1949; lowest 11.40, Jan. 23, 1950. Records available: 1947-50. Jan. 23, 11.40; Feb. 24, 11.18.

1-7-2da. U. S. Geol. Survey. Highest water level 1.57, June 20, 1949; lowest 8.30, Feb. 24, 1950. Records available: 1947-50. Jan. 23, 8.10; Feb. 24, 8.30.

#### Johnson County

12-23-29bcc. William Johnson. Highest water level 2.80, June 10, 1949; lowest 8.39, Oct. 15, 1948. Records available: 1948-50. Dec. 29, 8.14.

12-25-31aaa. C. M. Webb. Highest water level 1.86, May 4, 1948; lowest 2.59, Dec. 29, 1950. Records available: 1948-50. Dec. 29, 2.59.

14-25-8bb. Mrs. Alice Allison. Highest water level 2.37, Mar. 1, 1949; lowest 10.48, Nov. 26, 1948. Records available: 1948-50. Dec. 29, 9.02.

#### Kearny County

13. D. S. Nicholson. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 15, T. 25 S., R. 37 W. Highest water level 1.47, May 9, 1942; lowest 8.93, Dec. 20, 1939. Records available: 1939-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	5.43	Apr. 21	5.03	July 28	4.30	Oct. 27	5.25
Feb. 24	5.49	May 12	5.00	Aug. 18	4.38	Nov. 28	4.82
Mar. 27	5.34	June 23	4.58	Sept. 22	4.02	Dec. 22	4.85

16. C. B. Campbell. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 15, T. 23 S., R. 35 W. Highest water level 33.17, Aug. 17, 1950; lowest 47.81, July 3, 1941. Records available: 1939-50. Feb. 24, 33.70; May 23, 34.85; Aug. 17, 33.17.

19. E. M. Beymer. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 8, T. 26 S., R. 38 W. Highest water level 129.83, Feb. 21, 1950; lowest 134.67, Nov. 15, 1945. Records available: 1939-50. Feb. 21, 129.83; May 23, 129.85; Aug. 17, 130.03; Aug. 28, 129.86.

28. Harry Tate. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 26, T. 22 S., R. 37 W. Highest water level 121.33, Aug. 16, 1948; lowest 123.85, Feb. 19, 1940; Oct. 22, 1940. Records available: 1939-50. Feb. 24, 121.72; May 11, 121.67; Aug. 16, 121.78; Nov. 24, 121.91.

#### Kingman County

1. A. A. Mueller. SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 1, T. 30 S., R. 8 W. Highest water level 11.27, Mar. 31, 1948; lowest 15.25, Nov. 12, 1946. Records available: 1945-50. Jan. 11, 13.58.

2. L. A. Brammer. SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 3, T. 30 S., R. 6 W. Highest water level 7.69, Jan. 9, 1946; lowest 13.80, Nov. 20, 1946. Records available: 1945-50. Jan. 11, 10.26.

4. N. Lawson. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 9, T. 27 S., R. 9 W. Highest water level 58.20, Feb. 19, 1947; lowest 65.13, Feb. 6, 1947. Records available: 1945-50. Jan. 11, 58.98.

6. Jane Garrett. NE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 3, T. 29 S., R. 6 W. Highest water level 25.64, Oct. 3, 1949; lowest 32.68, Aug. 29, 1946. Records available: 1945-50. Jan. 11, 25.76.

7. S. Schrag. SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 5, T. 27 S., R. 5 W. Highest water level 42.91, Oct. 3, 1949; lowest 48.73, Sept. 25, 1948. Records available: 1945-50. Jan. 11, 43.06.

8. John McClure. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 10, T. 27 S., R. 7 W. Highest water level 5.05, Oct. 3, 1949; lowest 8.32, Sept. 30, 1946. Records available: 1945-50. Jan. 11, 5.35.

10. W. H. Stevens. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 11, T. 30 S., R. 5 W. Records available: 1945-48. No measurement made in 1950.

11. S. Bolinger. SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 12, T. 28 S., R. 5 W. Highest water level 5.96, Oct. 3, 1949; lowest 13.75, July 13, 1946. Records available: 1945-50. Jan. 11, 6.02.

#### Kiowa County

4. H. E. Davis. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 4, T. 28 S., R. 16 W. Highest water level 67.54, Dec. 19, 1950; lowest 76.07, Aug. 20, 1943. Records available: 1940-50. Mar. 16, 68.36; June 14, 68.02; Sept. 27, 67.56; Dec. 19, 67.54.

7. A. C. Weaver. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 23, T. 27 S., R. 18 W. Highest water level 20.45, Sept. 27, 1950; lowest 32.51, Mar. 22, 1941. Records available: 1940-50. Mar. 16, 24.35; June 14, 24.77; Sept. 27, 20.45; Dec. 19, 22.92.

8. E. E. Miller. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 18, T. 27 S., R. 18 W. Highest water level 16.65, Sept. 27, 1950; lowest 26.62, Apr. 28, 1941. Records available: 1940-50. Mar. 16, 18.18; June 14, 18.27; Sept. 27, 16.65; Dec. 19, 16.82.

10. J. E. Ely. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 23, T. 30 S., R. 18 W. Highest water level 104.67, Sept. 18, 1945; lowest 120.18, June 23, 1948. Records available: 1940-50. Mar. 15, 110.58; June 13, 110.34; Sept. 26, 110.29; Dec. 19, 110.22.

19. C. Williamson. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 21, T. 27 S., R. 17 W. Highest water level 28.63, Dec. 19, 1950; lowest 37.30, June 19, 1944. Records available: 1941, 1944-50. Mar. 16, 29.15; June 14, 29.48; Dec. 19, 28.63.

#### Labette County

1. J. Ballah. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 33, T. 31 S., R. 21 E. Highest water level 1.20, Oct. 1, 1945; lowest 15.49, Oct. 16, 1946. Records available: 1942-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	9.08	Apr. 1	9.43	July 1	10.56	Oct. 1	11.34
16	8.78	16	8.84	16	7.59	16	11.89
Feb. 2	9.42	May 1	8.98	Aug. 1	7.02	Nov. 1	11.96
16	8.56	16	9.09	16	8.98	16	12.09
Mar. 2	8.78	June 1	7.13	Sept. 1	8.51	Dec. 1	12.92
16	8.44	16	7.70	16	8.30	16	12.98

2. C. Givens. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 27, T. 31 S., R. 21 E. Highest water level 0.28, Aug. 1 1948; lowest 13.62, Oct. 17, 1943. Records available: 1942-50.

Jan. 1	0.99	Apr. 1	1.30	July 1	6.48	Oct. 1	5.34
16	0.77	16	1.32	16	3.00	16	5.99
Feb. 2	1.17	May 1	1.42	Aug. 1	1.87	Nov. 1	6.68
16	.73	16	1.51	16	3.73	16	6.86
Mar. 2	.92	June 1	.89	Sept. 1	2.58	Dec. 1	6.93
16	.72	15	3.65	16	2.51	16	7.09

3. B. H. Foster. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 34, T. 31 S., R. 21 E. Highest water level 0.28, Aug. 1, 1948; lowest 11.52, Sept. 16, 1946. Records available: 1942-50.

Jan. 1	2.36	Apr. 1	2.88	July 1	5.96	Oct. 1	5.51
16	1.96	16	3.94	16	2.99	16	5.36
Feb. 2	2.77	May 1	3.70	Aug. 1	1.98	Nov. 1	6.00
16	1.80	16	3.79	16	4.38	16	6.78
Mar. 2	1.95	June 1	1.48	Sept. 1	4.57	Dec. 1	6.96
16	1.76	16	3.95	16	4.28	16	7.21

4. Roy Schierenberg. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 3, T. 32 S., R. 21 E. Highest water level 4.21, May 1, 1945; lowest 14.77, Oct. 16, 1946. Records available: 1942-50.

Jan. 1	10.17	Apr. 1	9.06	July 1	8.58	Oct. 1	8.49
16	9.52	16	9.11	16	7.48	16	8.95
Feb. 2	9.66	May 1	8.92	Aug. 1	7.14	Nov. 1	9.36
16	8.54	16	9.03	16	7.75	16	9.82
Mar. 2	8.56	June 1	6.78	Sept. 1	8.06	Dec. 1	10.01
16	8.52	16	7.64	16	7.93	16	10.11



Lane County

17-30-13. F. L. Burmeister. NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 13, T. 17 S., R. 30 W. Highest water level 83.83, Feb. 1, 1950; lowest 86.36, Feb. 23, 1950. Records available: 1950. Feb. 1, 83.83; Feb. 23, 86.36; Apr. 26, 86.30; Oct. 10, 85.69; Dec. 11, 85.60.

18-27-13ccc. C. H. Merriweather. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 13, T. 18 S., R. 27 W. Highest water level 87.71, Dec. 11, 1950; lowest 88.00, Oct. 10, 1950. Records available: 1950. Feb. 1, 87.80; Feb. 23, 87.88; Apr. 26, 87.78; June 26, 87.89; Aug. 16, 87.81; Oct. 10, 88.00; Dec. 11, 87.71.

18-28-15ccc. C. S. and F. E. Boone. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 15, T. 18 S., R. 28 W. Highest water level 55.70, Dec. 11, 1950; lowest 56.28, June 26, 1950. Records available: 1950. Feb. 1, 55.89; Feb. 23, 55.87; Apr. 26, 56.04; June 26, 56.28; Aug. 16, 56.02; Oct. 10, 55.79; Dec. 11, 55.70.

18-29-13cb. Lane County Airport Assn. NW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 13, T. 18 S., R. 29 W. Highest water level 56.35, Dec. 11, 1950; lowest 57.06, Apr. 26, 1950. Records available: 1950. Feb. 1, 56.85; Feb. 23, 56.87; Apr. 26, 57.06; June 26, 56.79; Aug. 16, 56.77; Oct. 10, 56.47; Dec. 11, 56.35.

19-30-3daa. John Kees. NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 3, T. 19 S., R. 30 W. Highest water level 68.68, Dec. 11, 1950; lowest 69.52, June 26, 1950. Records available: 1950. Feb. 1, 69.38; Feb. 23, 69.35; Apr. 26, 69.32; June 26, 69.52; Aug. 16, 69.32; Oct. 10, 68.71; Dec. 11, 68.68.

Leavenworth County

8-22-7c. Mrs. Joe Kennedy. Highest water level 1.44, Apr. 15, 1949; lowest 9.53, Nov. 27, 1948. Records available: 1948-50. Jan. 17, 2.49; Sept. 26, 4.62; Dec. 27, 8.35.

10-22-34ad. A. K. Mussett. Highest water level 0.78, Jan. 17, 1950; lowest 4.01, Dec. 27, 1950. Records available: 1948-50. Jan. 17, 0.78; Sept. 26, 2.77; Dec. 27, 4.01.

Lincoln County

11-7-32dc. Lincoln Golf Club. Highest water level 72.9, Mar. 7, 1950; lowest 74.67, Sept. 8, 1947. Records available: 1947-50. Feb. 6, 74.25; Mar. 7, 72.9; Apr. 11, 73.99; May 26, 73.98; Sept. 20, 73.62; Nov. 20, 73.95.

12-6-12cd. Harry W. Woody. Highest water level 11.64, Aug. 9, 1948; lowest 15.52, Jan. 12, 1948. Records available: 1947-50. Feb. 6, 12.76; Feb. 21, 14.72; Mar. 7, 14.4; July 24, 14.55.

12-6-16cc. O. Anderson. Highest water level 19.00, Sept. 20, 1950; lowest 24.87, Nov. 28, 1947. Records available: 1947-50. Feb. 6, 23.07; Mar. 7, 22.1; Apr. 11, 24.70; Sept. 20, 19.00; Nov. 19, 19.82.

12-7-18aa. Mr. Hendrickson. Lowest water level 23.55, May 26, 1950. Records available: 1947-50. Feb. 6, 23.15; Mar. 7, 23.36; Apr. 11, 23.50; May 26, 23.55; Sept. 20, 23.55; Nov. 20, 20.75.

12-7-19dd. H. R. Behern. Highest water level 9.80, July 11, 1949; lowest 13.18, Jan. 12, 1948. Records available: 1947-50. Feb. 6, 12.55; Mar. 7, 12.3; Apr. 11, 12.13; May 26, 12.28; Sept. 20, 11.14; Nov. 19, 10.70.

12-7-23aa. R. E. Ancell. Highest water level 8.36, Apr. 26, 1949; lowest 13.43, Jan. 12, 1948. Records available: 1947-50. Feb. 6, 11.79; Mar. 7, 12.2, Apr. 1, 11.80; May 26, 11.85, Nov. 19, 11.07.

12-7-34ad. A. Rittman. Highest water level 49.1, Mar. 7, 1950; lowest 50.84, Feb. 21, 1947. Records available: 1947-50. Feb. 6, 50.50; Mar. 7, 49.1; Apr. 11, 50.61; May 26, 50.60; Sept. 20, 50.40; Nov. 19, 50.05.

12-8-6aa. Darrell Dean. Highest water level 5.92, Apr. 28, 1947; lowest 10.53, Sept. 8, 1947. Records available: 1947-50. Feb. 6, 8.30; Mar. 7, 8.38; Apr. 11, 8.40; May 26, 8.45; Sept. 20, 6.18; Nov. 20, 6.12.

12-8-8cd. S. C. Meredith. Highest water level 10.30, Sept. 20, 1950; lowest 14.30, Jan. 12, 1948. Records available: 1947-50. Feb. 6, 13.84; Mar. 7, 13.76; Apr. 11, 14.13; May 26, 13.18; Sept. 20, 10.30; Nov. 20, 11.14.

12-8-11cb. Jim and Ed Herby. Highest water level 14.89, Sept. 20, 1950; lowest 19.41, Mar. 7, 1950. Records available: 1947-50. Feb. 6, 19.23; Mar. 7, 19.41; Apr. 11, 17.90; May 26, 18.60; Sept. 20, 14.89; Nov. 20, 17.45.

12-9-10ad. Harry Cromwell. Highest water level 17.85, May 26, 1950; lowest 20.26, Jan. 12, 1948. Records available: 1947-50. Feb. 6, 19.08; Mar. 7, 19.24; Apr. 11, 18.59; May 26, 17.85; Sept. 20, 18.28; Nov. 20, 17.91.

12-10-8bb. G. Meitler. Highest water level 13.50, Sept. 20, 1950; lowest 16.58, Jan. 12, 1948. Records available: 1947-50. Feb. 6, 15.47; Mar. 7, 15.55; Apr. 11, 15.90; May 26, 16.00; Sept. 20, 13.50; Nov. 20, 14.00.

12-10-13aa. Soenger Estate. Highest water level 16.92, July 11, 1949; lowest 24.48, Jan. 12, 1948. Records available: 1947-50. Feb. 6, 20.80; Mar. 7, 21.40; Apr. 11, 21.98; May 26, 22.00; Sept. 20, 18.15; Nov. 20, 18.23.

12-10-17ab. Gorge School district. Highest water level 23.70, Sept. 20, 1950; lowest 28.49, Dec. 7, 1948. Records available: 1947-50. Feb. 6, 25.25; Sept. 20, 23.70; Nov. 20, 24.07.

12-10-21dd. F. D. Meyer. Highest water level 25.56, Sept. 20, 1950; lowest 27.85, Apr. 26, 1949. Records available: 1947-50. Feb. 6, 27.10; Mar. 7, 26.98; Apr. 11, 27.39; May 26, 27.40; Sept. 20, 25.56; Nov. 20, 25.80.

#### Linn County

19-24-36aa. Mr. Newby. Highest water level 9.41, July 6, 1948; lowest 14.13, Dec. 29, 1950. Records available: 1946-50. Dec. 29, 14.13.

22-25-6cb. E. C. Smith. Highest water level 9.91, Apr. 18, 1949; lowest 14.62, Dec. 29, 1950. Records available: 1946-50. Dec. 29, 14.62.

23-25-7daa. O. M. Grigsby. Highest water level 1.64, Mar. 1, 1949; lowest 17.21, May 5, 1948. Records available: 1946-50. Dec. 29, 15.65.

#### Logan County

1. Octon Estate. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 2, T. 11 S., R. 32 W. Highest water level 96.42, Jan. 22, 1944; lowest 99.29, Jan. 6, 1947. Records available: 1942-50. Jan. 24, 97.21; Apr. 25, 96.92; July 25, 97.34; Oct. 9, 97.40.

2. J. J. Schultz. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 34, T. 11 S., R. 32 W. Records available: 1942-50. Apr. 25, 62.49. Measurement discontinued Oct. 9, 1950.

#### McPherson County

##### Smoky Hill Valley

Measurements discontinued in wells 243, 249, 260, 262, 309, 310, and 311.

17-3-17dd. U. S. Geol. Survey. Highest water level 22.95, Nov. 20, 1950; lowest 26.39, Mar. 6, 1950. Records available: 1946-50. Feb. 4, 24.96; Mar. 6, 26.39; Apr. 11, 26.30; May 31, 26.28; Sept. 19, 23.17; Nov. 20, 22.95.

17-3-18dd. U. S. Geol. Survey. Highest water level 23.33, Sept. 19, 1950; lowest 28.40, Jan. 6, 1948. Records available: 1946-50. Feb. 4, 26.78; Mar. 6, 25.90; Apr. 11, 26.05; May 31, 26.45; Sept. 19, 23.33; Nov. 20, 24.01.

17-3-30dd. U. S. Geol. Survey. Highest water level 21.59, Nov. 20, 1950; lowest 31.36, Jan. 6, 1948. Records available: 1946-50. Feb. 4, 29.85; Mar. 6, 29.90; Apr. 11, 29.55; May 31, 29.90; Sept. 19, 26.61; Nov. 20, 21.59.

17-4-25dd. U. S. Geol. Survey. Highest water level 21.33, Sept. 19, 1950; lowest 26.15, Nov. 20, 1950. Records available: 1946-50. Feb. 4, 24.09; Mar. 6, 24.15; Apr. 11, 25.49; Sept. 19, 21.33; Nov. 20, 26.15.

#### Meade County

33. W. L. Woodruff. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 34, T. 33 S., R. 26 W. Highest water level 37.33, Nov. 23, 1942; lowest 39.05, Dec. 20, 1949. Records available: 1939-49. No measurement made in 1950.

34. School District. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 17, T. 33 S., R. 27 W. Highest water level 143.28, Dec. 14, 1944; lowest 150.39, Oct. 29, 1939. Records available: 1939-50. Mar. 14, 146.94; June 13, 146.72; Dec. 27, 147.03.

45. Joseph Rocke. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 31, T. 30 S., R. 27 W. Highest water level 0.42, Dec. 20, 1949; lowest 4.10, Aug. 31, 1939. Records available: 1939-50. Mar. 15, 0.60; June 13, 1.50; Sept. 26, 1.10; Dec. 27, 1.80.

61. John Meyer. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 26, T. 31 S., R. 27 W. Highest water level 58.10, Sept. 26, 1950; lowest 60.77, May 17, 1940. Records available: 1939-50. Mar. 15, 58.40; June 13, 58.25; Sept. 26, 58.10; Dec. 27, 57.98.

77. J. W. Wood. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 4, T. 32 S., R. 28 W. Highest water level 60.38, Dec. 26, 1950; lowest 67.12, Sept. 9, 1943. Records available: 1939-50. Sept. 26, 61.83; Dec. 26, 60.38.

234. Christopher Sobba. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 23, T. 30 S., R. 27 W. Records available: 1939-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	11.96	11.97	12.05	.....	12.82	13.09	15.14	12.91	12.31	12.17	12.70	12.21
2	11.96	11.98	12.05	.....	12.89	12.97	14.68	12.89	12.31	12.20	12.74	12.27
3	11.97	11.99	12.01	.....	13.08	13.00	14.40	12.87	12.29	12.35	.....	12.28
4	11.96	11.98	12.02	.....	.....	12.99	14.16	12.83	12.29	12.36	.....	.....
5	11.95	11.96	12.02	.....	14.56	12.95	13.92	12.72	12.28	12.34	.....	.....
6	11.96	11.95	11.98	.....	14.56	12.91	13.68	12.71	12.27	12.32	.....	.....
7	11.97	11.94	12.03	13.01	14.53	12.91	13.52	12.66	12.25	12.33	.....	.....
8	11.94	11.97	12.04	12.99	14.64	13.04	13.38	12.66	12.24	12.28	.....	12.31
9	11.92	11.97	12.01	12.92	14.64	13.12	13.27	12.63	12.22	12.24	.....	12.32
10	11.96	11.95	11.99	.....	14.53	13.12	13.21	12.60	12.22	12.19	.....	12.32
11	11.95	11.94	12.03	.....	14.36	13.11	.....	12.56	12.22	12.26	.....	12.27
12	11.91	11.94	12.05	.....	14.09	13.05	13.15	12.55	12.22	12.40	.....	12.26
13	11.94	11.98	12.05	.....	13.90	13.01	13.09	12.55	12.21	12.43	.....	.....
14	11.94	11.98	12.02	.....	13.73	13.22	13.08	12.54	12.21	12.46	.....	.....
15	11.96	12.01	12.04	.....	13.57	13.39	12.99	12.53	12.18	12.48	.....	.....
16	11.97	11.97	12.05	.....	13.43	13.47	13.02	12.49	12.17	12.51	.....	12.41
17	11.94	12.00	12.03	.....	13.36	13.54	13.05	12.48	12.18	12.52	.....	12.48
18	11.94	12.02	12.08	13.20	13.27	13.61	13.04	12.47	12.18	12.51	.....	12.48
19	11.97	12.01	12.08	13.23	13.22	13.61	13.05	12.44	12.17	12.51	.....	12.47
20	11.97	11.97	12.08	13.04	13.19	13.75	13.03	12.46	12.19	12.50	.....	12.47
21	11.94	11.97	12.09	12.95	13.10	13.88	12.99	12.38	12.44	12.46	.....	12.44
22	11.93	11.97	12.10	12.93	12.99	14.07	12.98	12.37	12.45	12.42	.....	12.39
23	11.89	11.98	12.15	12.91	12.97	14.17	12.96	12.31	12.41	12.41	.....	12.31
24	11.91	11.99	12.18	12.92	12.98	14.27	.....	12.33	12.38	12.34	12.28	12.32
25	11.99	11.99	12.21	12.92	13.19	14.32	.....	12.34	12.34	12.33	12.26	12.28
26	.....	12.03	12.24	12.83	13.23	14.24	.....	12.33	12.30	12.28	12.26	12.31
27	11.95	12.02	12.35	.....	13.25	15.35	.....	12.26	12.24	12.31	12.24	12.31
28	11.92	11.99	12.55	12.77	13.26	15.79	13.29	12.35	12.23	12.37	12.25	12.26
29	11.96	.....	12.67	12.82	13.23	15.86	13.24	12.33	12.22	12.39	12.25	12.26
30	11.96	.....	12.71	12.83	13.19	15.88	13.08	12.32	12.17	14.41	12.23	12.27
31	11.96	.....	12.75	.....	13.12	.....	12.98	12.31	.....	12.52	.....	12.22

Miami County

16-25-5ccc. C. E. Moews. Highest water level 2.64, Mar. 1, 1949; lowest 5.35, Oct. 15, 1948. Records available: 1948-50. Dec. 29, 5.33.

Mitchell County

6-8-34ccc. Owner unknown. Highest water level 16.65, July 29, 1947; lowest 18.59, Feb. 7, 1950. Records available: 1946-50. Feb. 7, 18.59; Mar. 8, 17.98; Apr. 12, 17.73; June 3, 17.30; Sept. 20, 17.36; Nov. 15, 17.17.

6-9-27ab. L. Lowdermilk. Highest water level 22.36, June 24, 1947; lowest 26.78, Oct. 27, 1947. Records available: 1935-50. Feb. 7, 25.73; Mar. 8, 26.21; Apr. 12, 26.19; June 3, 27.50; Sept. 20, 22.13; Nov. 15, 22.94.

6-9-30da. M. D. Vint. Highest water level 23.93, Nov. 15, 1950; lowest 29.30, Nov. 29, 1948. Records available: 1946-50. Feb. 7, 27.61; Mar. 8, 26.79; Apr. 12, 28.13; June 3, 27.00; Sept. 21, 23.96; Nov. 15, 23.93.

7-6-30bcc. Den F. Gise. Highest water level 20.60, Dec. 10, 1946; lowest 30.32, July 28, 1948. Records available: 1946-50. Feb. 7, 30.40; Mar. 8, 28.39; Apr. 12, 29.27; June 3, 30.22; Sept. 20, 24.40; Nov. 15, 23.50.

7-6-34cba. Thelma Spicker. Highest water level 23.18, June 29, 1949; lowest 32.19, Nov. 29, 1948. Records available: 1946-50. Feb. 7, 27.95; Mar. 8, 27.78; Apr. 12, 28.38; June 3, 27.15; Oct. 20, 22.55; Nov. 15, 23.86.

7-7-7aaa. A. McDysan. Highest water level 26.14, Sept. 20, 1950; lowest 30.35; Apr. 21, 1948. Records available: 1946-50. Feb. 7, 29.10; Mar. 8, 29.45; Apr. 12, 29.39; June 3, 28.70; Sept. 20, 26.14; Nov. 15, 26.27.

7-7-15dcc. V. R. Schmidt. Highest water level 16.80, Sept. 20, 1950; lowest 22.90, May 27, 1948. Records available: 1946-50. Feb. 7, 21.50; Mar. 8, 21.97; Apr. 12, 21.90; June 3, 20.95; Sept. 20, 16.80; Nov. 15, 17.41.

7-8-5cbb. Paul Meers. Highest water level 22.02, Sept. 20, 1950; lowest 29.18, Nov. 29, 1948. Records available: 1946-50. Feb. 7, 26.90; Mar. 8, 28.58; Apr. 12, 28.78; June 3, 25.10; Sept. 20, 22.02; Nov. 15, 23.88.

7-9-2bcc. F. Day. Highest water level 25.00, Sept. 20, 1950; lowest 33.10, June 3, 1950. Records available: 1946-50. Feb. 7, 29.78; Mar. 8, 30.27; Apr. 12, 30.40; June 3, 33.10; Sept. 20, 25.00; Nov. 15, 25.68.

7-10-10ccc. J. P. Kaster. Highest water level 24.52, Sept. 21, 1950; lowest 26.84, Oct. 14, 1946. Records available: 1946-50. Mar. 8, 26.59; Apr. 12, 26.30; June 3, 25.05; Sept. 21, 24.52; Nov. 15, 24.93.

8-6-12dda. Mrs. R. E. McKee. Highest water level 30.57, Sept. 20, 1950; lowest 34.13, Sept. 29, 1948. Records available: 1946-50. Feb. 7, 32.10; Mar. 8, 32.19; Apr. 12, 32.47; June 3, 32.00; Sept. 20, 30.57; Nov. 15, 31.98.

#### Morton County

22. E. A. Wilcox. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 14, T. 31 S., R. 43 W. Highest water level 70.85, Nov. 16, 1950; lowest 75.45, Jan. 6, 1941. Records available: 1939-50. Feb. 21, 71.79; May 10, 71.88; Aug. 15, 71.11; Nov. 16, 70.85.

65. John Hentschel. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 8, T. 33 S., R. 42 W. Highest water level 52.29, May 25, 1948; lowest 54.15, Mar. 13, 1941. Records available: 1939-50, Feb. 21, 51.95; May 10, 52.48; Aug. 15, 51.32; Nov. 16, 50.91.

117. W. C. Washburne. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 4, T. 34 S., R. 42 W. Highest water level 160.60, May 19, 1949; lowest 166.54, May 25, 1948. Records available: 1939-50. Feb. 21, 162.68; May 10, 161.03; Aug. 15, 160.92.

#### Ness County

1. J. E. Ficken. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 32, T. 20 S., R. 23 W. Highest water level 30.05, Jan. 20, 1950; lowest 34.91, Aug. 27, 1940. Records available: 1940-50. Jan. 20, 30.05; Apr. 18, 30.30; Nov. 18, 27.90.

2. C. L. Whitley. SW. corner sec. 20, T. 20 S., R. 22 W. Highest water level 20.53, Nov. 18, 1950; lowest 27.03; Apr. 18, 1950. Records available: 1940-50. Jan. 20, 22.92; Apr. 18, 27.03; July 19, 24.03; Nov. 18, 20.53.

#### Norton County

1-21-35dc. H. S. Whitaker. Highest water level 29.34, Dec. 30, 1949; lowest 33.74, Oct. 7, 1948. Records available: 1946-50. Feb. 9, 29.49; Apr. 14, 29.40; June 1, 31.90; Sept. 22, 29.69; Nov. 19, 29.40.

2-21-1bb. Verner Ross. Highest water level 20.99, July 7, 1949; lowest 27.01, June 24, 1946. Records available: 1946-50. Feb. 9, 23.54; Mar. 13, 24.60; Apr. 14, 23.70; June 1, 23.80; Sept. 22, 22.44; Nov. 19, 23.27.

2-21-2bd. Vernon J. Hamilton. Highest water level 22.14, July 7, 1949; lowest 26.19, Oct. 7, 1948. Records available: 1946-50. Feb. 9, 23.49; Mar. 13, 23.49; Apr. 14, 23.43; Sept. 22, 22.45; Nov. 19, 23.24.

2-21-11aa. W. B. Woods. Highest water level 28.66, Dec. 30, 1949; lowest 34.85, Oct. 7, 1948. Records available: 1945-50. Feb. 9, 29.03; Mar. 13, 28.75; Apr. 14, 28.99; June 1, 34.25; Nov. 19, 28.97.

2-21-18aa. Mr. Hrypkema. Highest water level 41.77, Apr. 14, 1950; lowest 43.48, Feb. 9, 1950. Records available: 1947-50. Feb. 9, 43.48; Mar. 13, 42.72; Apr. 14, 41.77; June 1, 42.49; Sept. 22, 42.22; Nov. 19, 42.26.

2-21-19dd. C. C. Alexander. Highest water level 62.30, Sept. 22, 1950; lowest 64.90, Oct. 7, 1947. Records available: 1946-50. Feb. 9, 63.00; Mar. 13, 63.13; Apr. 14, 63.20; June 1, 63.90; Sept. 22, 62.30; Nov. 19, 62.84.

2-22-11dc. K. Wilmot. Highest water level 60.79, Apr. 14, 1950; lowest 67.35, May 7, 1947. Records available: 1946-50. Feb. 9, 65.17; Mar. 13, 61.29; Apr. 14, 60.79; June 1, 60.80; Sept. 22, 65.82; Nov. 19, 66.89.

2-22-26ac. Percy G. Whitaker. Highest water level 26.63, Apr. 14, 1950; lowest 29.80, Apr. 26, 1949. Records available: 1946-50. Feb. 9, 28.49; Mar. 13, 28.38; Apr. 14, 26.63; June 1, 28.75; Sept. 22, 27.74; Nov. 19, 29.04.

2-22-28aa. H. E. Fisher. Highest water level 47.30, July 31, 1947; lowest 49.70, Sept. 2, 1949. Records available: 1947-50. Feb. 9, 48.78; Mar. 13, 48.89; Apr. 14, 48.71; June 1, 48.50; Sept. 22, 48.79; Nov. 19, 49.23.

2-23-36cd. R. L. Brooks. Highest water level 26.93, July 31, 1947; lowest 31.59, Mar. 13, 1950. Records available: 1946-50. Feb. 9, 28.19; Mar. 13, 31.59; Apr. 14, 27.27; June 1, 27.50; Sept. 22, 27.38; Nov. 19, 28.68.

2-23-8aa. Mary J. Rogers. Highest water level 36.01, Sept. 22, 1950; lowest 38.85, Apr. 14, 1950. Records available: 1947-50. Feb. 9, 38.43; Mar. 13, 38.37; Apr. 14, 38.85; June 1, 38.25; Sept. 22, 36.01; Nov. 19, 37.25.

### Osborne County

6-11-34aa. W. E. Lowdon. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 34, T. 6 S., R. 11 W. Records available: 1945-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	35.21	Mar. 6	35.48	Apr. 30	35.62	June 23	34.92
12	35.20	15	35.42	May 7	35.62	July 1	34.97
20	35.25	21	35.49	15	35.58	9	35.00
28	35.19	30	35.58	24	35.34	17	35.08
Feb. 5	35.37	Apr. 7	35.48	June 1	35.20	24	35.03
11	35.30	15	35.57	8	35.06	31	34.94
20	35.32	21	35.54	15	34.98	Aug. 8	34.91
28	35.43						

6-11-36aa. J. M. Irey. Records available: 1945-48. No measurement made in 1950.

6-12-20bb. C. M. Storer. Highest water level 36.30, Nov. 26, 1945; lowest 43.06, Jan. 28, 1946. Records available: 1945-50. Feb. 8, 38.33; Mar. 9, 38.38; Apr. 13, 38.70; June 3, 39.60.

6-12-23cd. C. Fink. Highest water level 22.29, Sept. 21, 1950; lowest 27.17, Apr. 26, 1946. Records available: 1945-50. Feb. 8, 24.96; Mar. 9, 25.07; Apr. 13, 26.00; June 3, 25.09; Sept. 21, 22.29.

6-13-12ba. F. L. Smith. Highest water level 37.31, Sept. 21, 1950; lowest 40.95, Dec. 15, 1947. Records available: 1945-50. Jan. 8, 37.97; Mar. 9, 38.09; Apr. 13, 37.90; June 3, 37.70; Sept. 21, 37.31.

7-11-21da. J. A. Harrison. Records available: 1946-50. Feb. 7, 32.78; Mar. 8, 32.89; Apr. 12, 33.17; May 26, 34.25; Sept. 21, 29.42. Measurement discontinued.

7-11-26aa. Published incorrectly as 7-11-23dd in previous reports. W. Sharp. Highest water level 13.85, May 26, 1950; lowest 25.67, Aug. 27, 1947. Records available: 1946-50. Feb. 7, 22.19; Mar. 8, 22.34; Apr. 12, 14.93; May 26, 13.86; Sept. 21, 17.22; Nov. 15, 26.42.

7-12-28ab. C. E. Galley. Highest water level 29.72, Sept. 21, 1950; lowest 34.60, Jan. 7, 1947. Records available: 1946-50. Feb. 7, 32.67; Mar. 8, 33.30; Apr. 12, 32.87; May 26, 31.70; Sept. 21, 29.72; Nov. 15, 30.22.

7-13-15da. J. W. Bathurst. Highest water level 35.79, Sept. 21, 1950; lowest 38.94, Sept. 30, 1947, Apr. 23, 1949. Records available: 1946-50. Feb. 7, 38.23; Mar. 9, 38.38; Apr. 12, 38.47; May 26, 38.80; Sept. 21, 35.79; Nov. 15, 36.90.

7-14-6cb. J. A. Guttery. Highest water level 22.22, Nov. 15, 1950; lowest 24.19, Nov. 29, 1948. Records available: 1946-50. Feb. 7, 23.64; Mar. 8, 23.21; Apr. 12, 23.50; May 26, 23.45; Sept. 21, 22.29; Nov. 15, 22.22.

7-14-10dd. John Clark. Highest water level 29.93, Sept. 21, 1950; lowest 32.22, Feb. 4, 1947. Records available: 1946-50. Feb. 7, 31.36; Mar. 8, 31.58; Apr. 12, 31.45; May 26, 31.45; Sept. 21, 29.93; Nov. 15, 30.10.

7-15-8cc. F. Dibble. Highest water level 14.80, May 26, 1950; lowest 27.75, Apr. 12, 1950. Records available: 1946-50. Feb. 7, 23.23; Mar. 8, 25.78; Apr. 12, 27.75; May 26, 14.80; Sept. 21, 21.99; Nov. 15, 21.70.

7-15-12dc. Tom Hale, Jr. Highest water level 10.60, June 29, 1949; lowest 27.75, Apr. 12, 1950. Records available: 1946-50. Feb. 7, 23.23; Mar. 8, 25.78; Apr. 12, 27.75; May 26, 14.80; Sept. 21, 21.99, Nov. 15, 21.70.

#### Pawnee County

7. Ralph Lupfer. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 18, T. 22 S., R. 17 W. Highest water level 21.32, Sept. 19, 1950; lowest 29.17, Jan. 20, 1948. Records available: 1940-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 18	26.05	Apr. 18	26.40	Aug. 29	22.37	Nov. 21	22.67
Feb. 15	26.12	May 16	25.48	Sept. 19	21.32	Dec. 20	22.96
Mar. 16	26.17	June 20	26.63	Oct. 16	21.93		

8. F. B. Reed. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 6, T. 22 S., R. 16 W. Highest water level 7.01, Aug. 29, 1950; lowest 18.32, Sept. 30, 1940. Records available: 1940-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 18	13.25	Apr. 18	14.88	Aug. 29	7.01	Nov. 21	9.77
Feb. 15	13.32	May 16	14.09	Oct. 16	7.07	Dec. 20	10.65
Mar. 16	13.30	July 17	14.00				

14. B. Unruh. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 29, T. 21 S., R. 15 W. Highest water level 14.17, Oct. 16, 1950; lowest 17.72, July 21, 1944. Records available: 1944-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 18	14.72	Apr. 18	14.68	July 17	14.50	Oct. 16	14.17
Feb. 18	14.73	May 16	14.76	Aug. 29	14.26	Nov. 21	14.20
Mar. 16	14.64	June 28	14.64	Sept. 19	14.21	Dec. 20	14.21

#### Phillips County

1-19-19cc. Al Skelton. Highest water level 14.95, July 7, 1949; lowest 26.01, Nov. 19, 1950. Records available: 1947-50. Feb. 9, 17.80; Mar. 13, 17.45; Apr. 14, 18.50; June 1, 17.80; Sept. 22, 24.43; Nov. 19, 26.01.

1-20-13ad. A. C. Van Kooten. Highest water level 20.15, Sept. 22, 1950; lowest 29.35, Oct. 8, 1948. Records available: 1947-50. Feb. 9, 26.49; Mar. 13, 25.24; Apr. 14, 27.40; June 1, 26.65; Sept. 22, 20.15; Nov. 19, 26.55.

1-20-30cc. C. C. Williams. Highest water level 77.00, Sept. 22, 1950; lowest 79.16, Nov. 19, 1950. Records available: 1947-50. Feb. 9, 77.19; Mar. 13, 77.15; Apr. 14, 77.05; June 1, 78.65; Sept. 22, 77.00; Nov. 19, 79.16.

1-20-34ba. Harold Parker. Highest water level 26.58, July 7, 1949; lowest 30.50, Oct. 8, 1948. Records available: 1947-50. Feb. 9, 26.80; Mar. 13, 26.9; Apr. 14, 27.03. Measurement discontinued.

4-17-25cd. Minnie Gray. Highest water level 80.39, Feb. 8, 1950; lowest 86.27, Sept. 25, 1946. Records available: 1946-50. Feb. 8, 80.39; Mar. 9, 82.39; Apr. 13, 80.45. Measurement resumed Feb. 8, 1950.

4-17-31bc. C. B. Brower. Highest water level 48.00, Apr. 13, 1950; lowest 52.72, Oct. 6, 1948. Records available: 1946-50. Feb. 8, 51.19; Mar. 10, 51.89; Apr. 13, 48.00; June 2, 51.40; Sept. 22, 50.19.

4-18-30ab. Sutley Estate. Highest water level 9.43, July 8, 1949; lowest 20.29, Sept. 25, 1946. Records available: 1946-50. Feb. 8, 12.08; Mar. 10, 12.20; Apr. 13, 12.00.

4-19-21dd. F. Kinter. Records available: 1946-50. Feb. 8, 9.58; Mar. 10, 9.5; Apr. 13, 9.35; June 2, 9.70. Measurement discontinued.

4-19-35ab. Glen Seeger. Highest water level 11.52, Sept. 22, 1950; lowest 14.17, Nov. 30, 1948, Mar. 10, 1950. Records available: 1946-50. Feb. 8, 13.59; Mar. 10, 14.17; Apr. 13, 13.90; June 2, 13.60; Sept. 22, 11.52.

4-20-21cc. F. Albright. Highest water level 48.20, Sept. 22, 1950; lowest 48.92, Feb. 6, 1946. Records available: 1946-50. Feb. 8, 48.49; Mar. 10, 48.39; Apr. 13, 48.48; June 2, 48.40; Sept. 22, 48.20.

5-16-3aa. M. W. Hardman. Highest water level 37.75, July 8, 1949; lowest 44.76, Dec. 17, 1945. Records available: 1945-50. Feb. 8, 41.64; Mar. 9, 40.88; Apr. 13, 43.60; June 3, 41.10.

5-17-1aa. Phillips County. Highest water level 0.73, Mar. 31, 1948; lowest 7.60, Nov. 21, 1945. Records available: 1945-50. Feb. 8, 4.24; Mar. 9, 4.03; Apr. 13, 4.20; June 2, 3.10; Sept. 22, 1.40.

5-17-3cd. Owner unknown. Highest water level 1.18, May 6, 1947; lowest 27.00, June 12, 1946. Records available: 1946-50. Mar. 9, 7.61; Apr. 13, 7.85; June 2, 7.80.

5-17-12aa. E. R. Downing and others. Highest water level 51.23, Sept. 22, 1950; lowest 54.20, Sept. 30, 1947. Records available: 1946-50. Feb. 8, 51.57, Mar. 9, 52.53; Apr. 13, 51.70; June 2, 51.30, Sept. 22, 51.23.

#### Pratt County

26-13-5ada. Z. K. Russell. NE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 5, T. 26 S., R. 13 W. Highest water level 2.95, June 27, 1950; lowest 4.50, June 14, 1950. Records available: 1950. Mar. 16, 3.25; June 14, 4.50; June 27, 2.95; Dec. 19, 3.53.

26-13-33bad. E. R. Taylor. SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 33, T. 26 S., R. 13 W. Highest water level 36.34, June 27; lowest 37.55, June 14. Records available: 1950. Mar. 16, 37.52; June 14, 37.55; June 27, 36.34.

#### Reno County

86. Mrs. Barb. SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 12, T. 23 S., R. 6 W. 307 East Sixth Street. Records available: 1946-49. Measurement discontinued.

#### Republic County

1-5-7bb. U. S. Geol. Survey. Highest water level 3.77, Sept. 30, 1950; lowest 8.83, Nov. 2, 1948. Records available: 1947-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 23	6.94	Apr. 25	7.19	July 31	6.05	Sept. 30	3.77
Feb. 24	7.09	May 30	6.77	Aug. 24	5.73	Nov. 30	6.50
Mar. 27	6.97	June 29	7.20				

1-5-7cb. U. S. Geol. Survey. Highest water level 17.44, Oct. 18, 1950; lowest 22.04, Feb. 7, 1949. Records available: 1947-50.

Jan. 23	19.87	Apr. 25	20.37	July 31	19.85	Oct. 18	17.44
Feb. 24	20.16	May 30	20.34	Aug. 24	19.45	Nov. 20	17.97
Mar. 27	20.17	June 29	20.43	Sept. 30	18.28	Dec. 18	18.44

40. City of Republic. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 31, T. 1 S., R. 4 W. Records available: 1942-48. No measurement made in 1950.

158a. A. J. Dickerman. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 1, T. 3 S., R. 4 W. Drilled observation well, diameter 8 inches, depth 43 feet below land-surface datum. Highest water level 14.37, Dec. 25, 1950; lowest 17.06, Oct. 1, 1949. Records available: 1949-50.

Jan. 25	16.18	Apr. 25	16.21	July 25	16.19	Oct. 25	15.63
Feb. 25	16.09	May 25	16.17	Aug. 25	16.07	Nov. 25	14.88
Mar. 25	16.21	June 25	16.68	Sept. 25	15.73	Dec. 25	14.37

188. City of Courtland. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 16, T. 3 S., R. 5 W. Highest water level 9.40, June 28, 1947; lowest 18.40, Nov. 25, 1943. Records available: 1942-50. Jan. 27, 16.1; Apr. 27, 16.1; June 24, 16.2; July 21, 15.4; Oct. 25, 14.3; Dec. 29, 14.8.

202. C. E. Erickson. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 36, T. 4 S., R. 1 W. Highest water level 33.50, Aug. 3, 1943, Apr. 27, 1946; lowest 35.74, Aug. 29, 1943. Records available: 1942-50.

Jan. 30	33.90	June 27	34.30	Sept. 26	34.00	Nov. 27	34.00
Feb. 24	34.00	Aug. 27	34.00	Oct. 26	34.20	Dec. 28	34.20
Apr. 26	34.20	Aug. 31	34.00				

209. Glenn B. Snapp. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 1, T. 4 S., R. 3 W. Records available: 1942-47. No measurement made in 1950.

230. Lloyd Hosser. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 21, T. 4 S., R. 4 W. Records available: 1942-45. Measurement discontinued.

Rice County

18-6-13bc. F. Kasperek. Highest water level 11.43, Nov. 17, 1950; lowest 13.14, Jan. 6, 1948. Records available: 1946-50. Feb. 3, 12.47; Mar. 6, 12.70, Apr. 15, 12.59; May 30, 12.60; Sept. 23, 12.47; Nov. 17, 11.43.

18-7-10ad. G. J. O'Neill. Highest water level 30.44, Sept. 23, 1950; lowest 43.54, Sept. 16, 1946. Records available: 1946-50. Feb. 3, 42.78; Mar. 6, 41.79; Apr. 15, 42.94; May 30, 42.05; Sept. 23, 30.44; Nov. 17, 37.19.

18-8-10dc. C. Dobrinski. Highest water level 39.43, Nov. 17, 1950; lowest 42.18, Dec. 5, 1946. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 27, 1949	40.75	Oct. 24, 1949	40.90	Feb. 6, 1950	41.18	Sept. 23, 1950	40.08
July 6	40.74	Feb. 3, 1950	41.50	May 30	41.10	Nov. 17	39.43
Aug. 29	40.72						

19-6-13dd. W. M. Myers. Highest water level 40.10, Nov. 17, 1950; lowest 41.12, Jan. 6, 1948. Records available: 1946-50. Feb. 3, 40.64; Mar. 6, 40.89; Apr. 15, 40.59; May 30, 40.90; Sept. 23, 40.40; Nov. 17, 40.10.

19-7-24ab. J. P. Pulliam. Highest water level 33.30, Aug. 6, 1948; lowest 36.51, Apr. 15, 1950. Records available: 1946-50. Feb. 3, 36.09; Mar. 6, 35.96; Apr. 15, 36.51; May 30, 34.40; Nov. 17, 34.39.

19-10-22bc. J. R. Bowman. Highest water level 1.02, Sept. 23, 1950; lowest 8.00, Oct. 4, 1946. Records available: 1946-50. Feb. 3, 5.15; Mar. 6, 5.6; Apr. 15, 5.41; May 30, 4.5; Sept. 23, 1.02; Nov. 17, 1.42.

20-6-23cd. School district. Highest water level 4.57, Apr. 17, 1948; lowest 21.90, Apr. 15, 1950. Records available: 1946-50. Feb. 3, 18.27; Mar. 6, 18.07; Apr. 15, 21.90; May 30, 15.49; Sept. 23, 6.34; Nov. 17, 11.10.

20-6-36bb. J. W. Harder. Records available: 1946-50. Feb. 3, 8.69; Mar. 6, 7.96. Measurement discontinued.

20-10-28ba. H. Thompson. Highest water level 8.90, Sept. 23, 1950; lowest 13.39, Oct. 4, 1946. Records available: 1946-50. Feb. 3, 12.18; Mar. 6, 12.10; Apr. 15, 12.33; May 30, 12.40; Sept. 23, 8.90; Nov. 17, 10.51.

21-8-20cc. R. J. Dill. Highest water level 5.57, Aug. 29, 1949; lowest 8.76, Oct. 3, 1947. Records available: 1946-50. Feb. 3, 7.27; Mar. 6, 7.07; Apr. 15, 7.46; May 30, 7.5; Sept. 23, 5.67; Nov. 17, 6.63.

Russell County

45. Jacob Flegler. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 11, T. 15 S., R. 14 W. Highest water level 18.39, July 12, 1945; lowest 24.28, Aug. 20, 1941. Records available: 1941-50. Jan. 19, 21.52; Mar. 19, 21.40; July 18, 22.79; Oct. 17, 18.82.

80. Joseph Furthmyer, Jr. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 9, T. 14 S., R. 15 W. Highest water level 3.40, Apr. 14, 1942; lowest 7.76, June 29, 1943. Records available: 1941-50. Jan. 19, 5.42; Mar. 19, 5.29; July 18, 5.30; Oct. 17, 5.22.

81. Joseph Furthmyer, Jr. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 9, T. 14 S., R. 15 W. Highest water level 101.85, Aug. 29, 1941; lowest 134.71, July 10, 1947. Records available: 1941-50. Jan. 19, 121.72; Apr. 19, 122.38; July 18, 119.06; Oct. 17, 118.53.

117. Marie Dutt and others. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 18, T. 13 S., R. 14 W. Highest water level 4.70, Apr. 13, 1942; lowest 10.61, Dec. 20, 1943. Records available: 1941-50. Jan. 19, 6.40; Apr. 19, 7.29; Oct. 17, 5.54.

146. D. P. Steinle. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 24, T. 14 S., R. 12 W. Highest water level 14.59, Apr. 8, 1943; lowest 16.20, Sept. 1, 1942. Records available: 1941-50. Jan. 19, 15.20; Apr. 19, 15.36; July 18, 14.66; Oct. 17, 14.79.

148. John Peni x. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 13, T. 14 S., R. 13 W. Highest water level 3.81, Apr. 8, 1943; lowest 7.92, Oct. 2, 1941. Records available: 1941-50. Jan. 19, 6.13; Apr. 19, 6.30; July 18, 6.55; Oct. 17, 6.36.

149. George Boxberger, Jr. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 22, T. 14 S., R. 14 W. Highest water level 18.18, July 22, 1949; lowest 21.54, June 29, 1943. Records available: 1941-50. Jan. 19, 18.88; Apr. 19, 19.27; July 18, 18.20; Oct. 17, 19.22.



152. D. D. Beisel. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 10, T. 14 S., R. 12 W. Highest water level 10.30, Apr. 14, 1948; lowest 26.45, Sept. 22, 1941. Records available: 1941-50. Jan. 19, 12.46; Apr. 19, 12.36; July 18, 11.32; Oct. 17, 10.83.

#### Saline County

15-2-17cd. U. S. Geol. Survey. Highest water level 20.89, Nov. 20, 1950; lowest 25.44, Jan. 6, 1948. Records available: 1946-50. Feb. 4, 23.95; Mar. 6, 24.20; Apr. 11, 24.53; May 31, 24.10; Sept. 19, 21.6; Nov. 20, 20.89.

15-2-18cd. U. S. Geol. Survey. Highest water level 20.96, Nov. 18, 20, 1950; lowest 25.50, Jan. 6, 1948. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 4	24.59	May 31	24.40	Oct. 16	21.33	Nov. 20	20.96
Mar. 6	24.28	Sept. 19	21.86	Nov. 18	20.96	Dec. 19	21.91
Apr. 11	24.70						

15-2-30dc. U. S. Geol. Survey. Highest water level 19.06, July 1, 1948; lowest 22.42, Sept. 5, 1946. Records available: 1946-50. Feb. 4, 21.52; Mar. 6, 21.80; Apr. 11, 21.35; May 31, 21.90; Sept. 19, 19.64.

15-3-24dd. U. S. Geol. Survey. Highest water level 17.49, Aug. 6, 1948; lowest 20.64, Jan. 6, 1948. Records available: 1946-50. Feb. 4, 18.60; Mar. 6, 19.59; Apr. 11, 20.29; May 31, 19.65; Sept. 19, 19.95; Nov. 20, 19.51.

15-3-36ab. U. S. Geol. Survey. Highest water level 19.44, Nov. 20, 1950; lowest 27.35, Jan. 6, 1948. Records available: 1946-50. Feb. 4, 26.60; Mar. 6, 26.73; Apr. 11, 26.65; May 31, 26.70; Sept. 19, 26.02; Nov. 20, 19.44.

16-2-7bb. U. S. Geol. Survey. Highest water level 18.30, Aug. 6, 1948; lowest 22.08, Aug. 1, 1946. Records available: 1946-50. Feb. 4, 20.17; Mar. 6, 20.20; Apr. 11, 20.70; May 31, 20.05; Sept. 19, 18.67; Nov. 20, 19.27.

16-2-18cc. U. S. Geol. Survey. Highest water level 20.31, Sept. 19, 1950; lowest 26.52, Dec. 1, 1947, Jan. 6, 1948. Records available: 1946-50. Feb. 4, 25.30; Mar. 6, 25.00; Apr. 11, 25.20; May 31, 25.10; Sept. 19, 20.31; Nov. 20, 21.56.

16-2-19ab. U. S. Geol. Survey. Highest water level 17.99, Sept. 19, 1950; lowest 24.67, Dec. 1, 1947. Records available: 1946-50. Feb. 4, 23.35; Mar. 6, 22.09; Apr. 11, 23.58; Sept. 19, 17.99; Nov. 20, 18.66.

16-3-13cd. U. S. Geol. Survey. Highest water level 20.43, Nov. 20, 1950; lowest 24.38, Jan. 6, 1948. Records available: 1946-50. Feb. 4, 23.10; Mar. 6, 22.90; Apr. 11, 23.35; May 31, 22.95; Sept. 19, 21.15; Nov. 20, 20.43.

16-3-26dc. U. S. Geol. Survey. Highest water level 16.32, Nov. 20, 1950; lowest 21.60, Jan. 6, 1948. Records available: 1946-50. Feb. 6, 20.29; Mar. 6, 20.43; Apr. 11, 20.65; May 31, 20.55; Sept. 19, 16.87; Nov. 20, 16.32.

16-3-34dd. U. S. Geol. Survey. Highest water level 18.14, Nov. 20, 1950; lowest 23.15, Jan. 6, 1948. Records available: 1946-50. Mar. 2, 22.01; Apr. 11, 21.15; May 31, 22.00; Sept. 19, 18.76; Nov. 20, 18.14.

#### Scott County

1. Mrs. Rosine Smith. NW corner sec. 9, T. 20 S., R. 33 W. Highest water level 55.89, May 14, 16, 1934; lowest 68.46, Nov. 4, 1947. Records available: 1931-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 23	65.65	May 11	67.46	Aug. 16	68.08	Nov. 14	66.78
Mar. 21	66.83	June 26	66.72	Sept. 13	68.40	Dec. 11	67.13
Apr. 25	67.59	July 25	67.28	Oct. 9	66.42		

1A. Division of Water Resources, Kansas State Board of Agriculture. NW $\frac{1}{4}$  sec. 3, T. 20 S., R. 33 W. Highest water level 53.42, Aug. 16, 18, 1940; lowest 58.99, Aug. 6, 7, 1950. Records available: 1940-50.

1A--Continued.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	58.07	57.89	57.99	58.07	58.28	58.69	58.85	58.96	58.61	58.41	58.35	58.30
2	58.07	57.88	57.98	58.08	58.30	58.70	58.86	58.97	58.58	58.41	58.37	58.30
3	58.06	57.88	57.99	58.09	58.31	58.71	58.86	58.98	58.57	58.39	58.37	58.30
4	58.05	57.87	58.00	58.10	58.31	58.71	58.86	58.98	58.57	58.38	58.37	58.29
5	58.03	57.87	58.00	58.10	58.33	58.71	58.86	58.98	58.56	58.38	58.37	58.30
6	58.03	57.87	57.98	58.09	58.33	58.72	58.87	58.99	58.54	58.37	58.38	.....
7	58.02	57.86	58.00	58.10	58.34	58.73	58.87	58.99	58.53	58.36	58.38	58.27
8	58.02	57.86	.....	58.10	58.37	58.74	58.88	58.98	58.52	58.36	58.39	58.26
9	58.01	57.85	.....	58.10	58.38	58.75	58.89	58.97	58.51	58.36	58.39	58.25
10	58.00	57.85	.....	58.11	58.39	58.76	58.89	58.95	58.50	58.36	.....	58.24
11	58.00	57.84	.....	58.11	58.40	58.77	58.89	58.94	58.49	58.36	.....	58.23
12	57.99	57.83	.....	58.11	58.41	58.77	58.90	58.94	58.48	58.35	.....	58.20
13	58.00	57.83	.....	58.11	58.42	58.79	58.91	58.93	58.47	58.34	.....	58.19
14	58.00	57.83	.....	58.12	58.43	58.80	58.91	58.92	58.47	58.33	58.34	58.20
15	57.99	57.83	.....	58.12	58.44	58.80	58.92	58.91	58.47	58.32	58.35	58.19
16	57.99	57.85	.....	58.13	58.45	58.81	58.92	58.91	58.47	58.31	58.36	58.20
17	57.99	57.85	.....	58.14	58.47	58.81	58.92	58.89	58.46	58.30	58.36	58.20
18	57.98	57.90	.....	58.16	58.48	58.82	58.93	58.86	58.46	58.30	58.34	58.21
19	57.98	57.90	.....	58.17	58.50	58.83	58.94	58.85	58.45	58.29	58.34	58.20
20	57.97	57.91	.....	58.17	58.51	58.83	58.94	58.83	58.45	58.29	58.35	58.21
21	57.96	57.92	58.05	58.17	58.53	58.83	58.94	58.82	58.45	58.29	58.34	58.21
22	57.95	57.93	58.05	58.18	58.55	58.83	58.94	58.79	58.44	58.29	58.33	58.21
23	57.94	57.93	58.05	58.19	58.57	58.84	58.95	58.76	58.44	58.29	58.33	58.20
24	57.94	57.93	58.04	58.20	58.58	58.84	58.94	58.75	58.44	58.29	58.34	58.20
25	57.93	57.95	58.03	58.20	58.59	58.85	58.94	58.73	58.44	58.29	.....	58.20
26	57.93	57.96	58.04	58.22	58.60	58.85	58.94	58.72	58.42	58.29	58.33	58.20
27	57.92	57.96	58.06	58.22	58.61	58.85	58.94	58.70	58.42	58.29	58.32	58.20
28	57.91	57.98	58.07	58.23	58.63	58.85	58.96	58.67	58.42	58.30	58.32	58.19
29	57.91	.....	58.08	58.26	58.65	58.85	58.96	58.65	58.42	58.31	58.31	58.20
30	57.91	.....	58.07	58.28	58.66	58.85	58.96	58.64	58.41	58.32	58.32	58.20
31	57.90	.....	58.07	.....	58.68	.....	58.96	58.63	.....	58.33	.....	58.20

2. E. E. Coffin. NE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec. 25, T. 18 S., R. 33 W. Highest water level 30.95, Apr. 25, 1939; lowest 40.81, Dec. 11, 1947. Records available: 1934-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	37.71	May 11	37.22	Aug. 16	37.50	Nov. 14	35.70
Feb. 23	37.37	June 26	37.65	Sept. 13	35.84	Dec. 11	36.77
Apr. 25	37.04	July 25	37.68	Oct. 9	36.41		

2A. Division of Water Resources, Kansas State Board of Agriculture. SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  sec. 26 T. 18 S., R. 33 W. Highest water level 31.58, Aug. 10, 1944; lowest 38.33, Sept. 16, 1946. Records available: 1944-50.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	35.80	35.66	35.48	35.54	36.55	37.08	36.73	35.92	34.12	33.28	32.41	31.89
2	35.77	35.68	35.43	35.56	36.49	37.06	36.70	35.86	34.05	33.26	32.38	31.94
3	35.77	35.67	35.40	35.63	36.48	37.06	36.67	35.79	34.00	33.21	32.39	31.93
4	35.78	35.63	35.42	35.78	36.46	37.05	.....	35.73	33.96	33.13	32.32	31.86
5	35.78	35.61	35.40	35.86	36.49	37.02	.....	35.68	33.92	33.03	32.28	31.80
6	35.78	35.61	35.37	35.89	36.58	36.99	.....	35.60	33.89	32.99	32.33	31.92
7	35.78	35.61	35.40	35.97	36.64	36.96	.....	35.55	33.88	33.03	32.27	31.83
8	35.74	35.61	35.45	36.07	36.64	36.97	.....	35.48	33.93	32.99	32.26	31.86
9	35.73	35.60	35.39	36.16	36.69	36.97	.....	35.43	33.95	32.92	32.32	31.91
10	35.78	35.58	35.38	36.20	36.75	36.95	.....	35.34	34.01	.....	32.27	31.87
11	35.74	35.56	35.39	36.28	36.80	36.91	.....	35.28	34.09	32.86	32.19	31.82
12	35.72	35.55	35.41	36.34	36.83	36.88	.....	35.21	34.12	32.83	32.18	31.79
13	35.73	35.57	35.42	36.43	36.87	36.86	.....	35.14	34.18	32.79	32.17	31.80
14	35.70	35.57	35.39	36.51	36.88	36.85	.....	35.08	34.22	32.76	32.13	31.82
15	35.73	35.56	35.38	36.57	36.88	36.85	.....	35.03	34.17	32.72	32.18	31.88
16	35.73	35.54	35.39	36.60	36.89	36.90	.....	34.97	34.12	32.72	32.21	31.90
17	35.70	35.52	35.37	36.59	36.91	36.94	.....	34.92	34.04	32.70	32.13	31.90
18	35.71	35.55	35.38	36.63	36.90	36.93	.....	34.85	33.94	32.65	32.07	31.89
19	35.73	35.53	35.40	36.68	36.92	36.92	.....	34.78	33.87	32.66	32.08	31.89
20	35.70	35.48	35.38	36.72	36.95	36.89	.....	34.74	33.78	32.63	32.16	31.88
21	35.69	35.47	35.39	36.75	36.97	36.87	.....	34.67	33.75	32.60	32.09	31.87
22	35.67	35.48	35.37	36.75	36.98	36.84	.....	34.59	33.67	32.59	32.06	31.85

2A--Continued.

Daily mean water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
23	35.65	35.44	35.36	36.72	36.99	36.83	.....	34.55	33.65	32.56	32.11	31.84
24	35.65	35.45	35.37	36.70	37.01	36.81	.....	34.51	33.62	32.55	32.08	31.83
25	35.69	35.47	35.33	36.70	37.04	36.80	36.15	34.47	33.52	32.51	32.02	31.80
26	35.73	35.47	35.32	36.65	37.06	36.80	36.12	34.40	33.46	32.46	32.01	31.89
27	35.69	35.42	35.39	36.64	37.06	36.79	36.09	34.36	33.40	32.46	31.99	31.84
28	35.63	35.46	35.45	36.60	37.06	36.77	36.04	34.29	33.37	32.46	31.99	31.79
29	35.68		35.50	36.59	37.08	36.77	36.02	34.24	33.30	32.44	31.95	31.80
30	35.68		35.49	36.59	37.08	36.75	35.98	34.21	33.30	32.41	31.93	31.79
31	35.66		35.49		37.10		35.94	34.16		32.38		31.73

3. Claude Hughes. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 21, T. 18 S., R. 33 W. Highest water level 69.39, Feb. 11, 1943; lowest 91.99, Oct. 13, 1948. Records available: 1934, 1939-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	79.74	May 11	83.08	Aug. 16	86.40	Nov. 14	81.14
Feb. 23	79.40	June 26	83.79	Oct. 10	83.45	Dec. 11	81.50
Mar. 21	79.22	July 25	81.40				

19. J. Dyer. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 12, T. 18 S., R. 33 W. Highest water level 45.38, Apr. 18, 1940; lowest 58.09, Feb. 17, 1949. Records available: 1939-50.

Jan. 24	51.06	Apr. 25	52.02	July 25	52.08	Oct. 9	50.70
Feb. 23	51.90	May 11	53.01	Aug. 16	52.99	Nov. 14	50.22
Mar. 21	50.74	June 26	52.82	Sept. 13	50.95	Dec. 11	49.84

32. E. J. Roark. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 25, T. 19 S., R. 33 W. Highest water level 37.79, Apr. 20, 22, 1939; lowest 44.88, Dec. 16, 1949. Records available: 1939-50.

Jan. 24	42.74	Apr. 25	43.40	Sept. 13	42.62	Nov. 14	41.77
Feb. 23	42.72	May 11	43.53	Oct. 9	42.17	Dec. 11	41.79
Mar. 21	42.97						

48. P. Roark. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 25, T. 20 S., R. 33 W. Highest water level 28.72, Nov. 14, 1950; lowest 31.52, Apr. 24, 1944. Records available: 1939-50.

Jan. 24	29.40	Apr. 25	29.96	July 25	29.96	Oct. 9	28.73
Feb. 23	29.48	May 11	30.08	Aug. 16	29.39	Nov. 14	28.72
Mar. 21	29.59	June 26	30.40	Sept. 13	28.86	Dec. 11	29.00

50. F. M. Houstin. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 28, T. 19 S., R. 32 W. Highest water level 92.69, Oct. 9, 1950; lowest 97.95, Aug. 6, 1943. Records available: 1939-50. Oct. 9, 92.69.

Sedgwick County

11. J. H. Heim. SE. corner sec. 22, T. 26 S., R. 3 W. Highest water level 51.34, Aug. 4, 1945; lowest 60.34, July 4, 1938. Records available: 1937-50. Jan. 12, 54.85; Feb. 2, 55.06; Mar. 31, 55.23.

12. Dr. A. D. Updegraph. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 26, T. 25 S., R. 1 W. Highest water level 11.06, May 7 and May 8, 1944; lowest 18.99, Apr. 1, 2, 8, 9, 11, 12, 1938. Records available: 1937-50.

Jan. 12	16.18	Apr. 10	16.66	June 29	16.99	Oct. 31	14.89
25	16.34	25	16.85	Aug. 4	15.58	Nov. 1	15.35
Feb. 2	16.35	May 4	16.88	Sept. 1	14.62	24	15.66
24	16.49	24	17.04	25	14.75	Dec. 1	15.70
Mar. 24	16.67	June 6	17.00	Oct. 26	15.25	22	15.96
31	16.66	26	16.95				

26. Wichita Water Co. SW $\frac{1}{4}$  sec. 18, T. 27 S., R. 1 W. Records available: 1937-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	11.47	11.46	11.56	11.78	12.12	12.27	12.74	9.90	7.68	10.41	11.08	11.31
2	11.43	11.47	11.57	11.77	12.17	12.20	12.70	8.30	7.50	10.42	11.11	11.35
3	11.39	11.47	11.57	11.81	12.22	12.10	12.64	7.83	7.36	10.38	11.12	11.35
4	11.39	11.50	11.59	11.82	12.26	12.04	12.54	7.46	7.23	10.40	11.12	11.35
5	11.41	11.50	11.59	11.83	12.30	11.92	12.47	6.98	7.45	10.40	.....	11.38
6	11.40	11.50	11.59	11.82	12.30	11.83	12.45	6.30	7.87	9.66	.....	11.52
7	11.37	11.49	11.64	11.81	12.28	11.81	12.43	6.07	8.26	9.05	.....	11.66
8	11.34	11.51	11.65	11.82	12.21	11.77	12.41	5.96	8.60	8.75	.....	11.72
9	11.28	11.51	11.65	11.81	12.17	11.76	12.40	6.14	8.84	8.80	.....	11.72
10	11.36	11.51	11.63	11.85	12.14	11.61	12.35	6.37	9.07	9.15	.....	11.71

26--Continued.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	11.39	11.49	11.67	11.85	12.12	11.83	12.27	6.56	9.24	9.45	.....	11.63
12	11.40	11.43	11.66	11.84	12.10	11.83	12.21	6.66	9.41	9.70	.....	11.59
13	11.39	11.41	11.76	11.84	12.16	11.88	12.18	6.73	9.57	9.89	.....	11.51
14	11.39	11.37	11.77	11.85	12.22	11.97	12.15	6.83	9.63	9.95	.....	11.42
15	11.40	11.38	11.70	11.85	12.28	12.08	12.16	6.87	9.63	10.08	.....	11.34
16	11.40	11.40	11.68	11.85	12.33	12.20	12.14	6.88	9.62	10.19	.....	11.35
17	11.37	11.42	11.67	11.84	12.35	12.38	12.01	6.88	9.47	10.28	.....	11.37
18	11.36	11.43	11.68	11.85	12.39	12.49	11.90	6.85	9.39	10.37	11.27	11.37
19	11.40	.....	11.69	11.85	12.42	12.57	11.76	6.72	9.26	10.48	11.32	11.37
20	11.40	.....	11.71	11.83	12.43	12.63	11.60	6.56	9.37	10.58	11.33	11.37
21	11.38	11.47	11.71	11.82	12.44	12.67	11.50	6.34	9.57	10.67	11.31	11.36
22	11.39	11.47	11.69	11.82	12.47	12.69	11.45	6.45	9.79	10.74	11.29	11.35
23	11.40	11.48	11.70	11.81	12.49	12.72	11.30	6.92	9.93	10.77	11.32	11.36
24	11.46	11.50	11.70	11.84	12.52	12.72	11.04	7.40	10.02	10.81	11.32	11.37
25	11.49	11.52	11.72	11.84	12.55	12.75	10.97	7.90	10.09	10.84	11.33	11.36
26	11.49	11.54	11.75	11.84	12.56	12.79	11.02	8.30	10.17	10.88	11.34	11.42
27	11.26	11.54	11.77	11.84	12.56	12.80	11.06	8.37	10.24	10.91	11.33	11.43
28	11.16	11.53	11.77	11.88	12.49	12.81	11.20	8.35	10.30	10.95	11.33	11.43
29	11.25	.....	11.77	12.02	12.41	12.81	11.20	8.34	10.36	10.98	11.33	11.45
30	11.36	.....	11.77	12.07	12.37	12.78	11.21	8.04	10.40	11.02	11.31	.....
31	11.43	.....	11.77	.....	12.32	.....	11.10	7.82	.....	11.03	.....	.....

307. J. R. Clark. NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 1, T. 25 S., R. 2 W. Records available: 1937-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	15.62	15.80	15.74	16.27	17.84	18.98	19.21	18.91	19.10	19.42	20.28	19.96
2	15.64	15.90	15.99	16.24	17.84	19.05	19.21	18.40	19.13	19.42	20.29	19.92
3	15.99	15.98	16.73	16.52	17.76	19.07	19.18	18.06	19.17	19.49	20.31	19.92
4	16.01	16.00	16.87	16.52	17.84	19.09	19.09	17.81	19.22	19.49	20.30	19.92
5	16.01	15.96	17.00	16.49	17.84	19.10	18.97	17.68	19.25	19.50	20.23	19.92
6	16.03	15.86	17.12	16.43	17.79	19.10	18.92	17.61	19.28	19.61	20.14	19.92
7	15.98	15.82	17.16	16.30	17.72	19.10	19.10	17.51	19.28	19.61	20.08	19.91
8	15.98	15.80	17.24	16.21	17.61	19.11	19.30	17.20	19.28	19.61	19.98	19.90
9	15.84	15.79	17.31	16.50	17.48	19.33	19.39	17.14	19.28	19.63	19.93	19.91
10	15.64	15.78	17.47	16.50	17.46	19.38	19.48	17.21	19.29	19.66	19.89	19.91
11	15.63	15.77	17.49	16.51	17.43	19.44	19.49	17.29	19.34	19.71	19.95	19.89
12	15.64	15.74	17.52	16.51	17.40	19.48	19.49	17.29	19.34	19.76	20.08	19.90
13	15.72	15.67	17.56	16.89	17.84	19.50	19.49	17.30	19.33	19.88	20.13	19.90
14	15.75	15.64	17.62	16.85	17.84	19.52	19.53	17.31	19.31	19.90	20.19	19.89
15	15.75	15.64	17.51	17.02	17.95	19.53	19.53	17.35	19.28	19.90	20.27	19.82
16	15.75	15.66	17.12	17.03	18.19	19.54	19.46	17.37	19.14	19.97	20.32	19.76
17	15.75	15.67	16.80	17.04	18.32	19.53	19.43	17.33	19.09	19.98	20.38	19.70
18	15.57	15.68	16.60	17.04	18.38	19.46	19.35	17.19	18.98	20.01	20.39	19.70
19	15.39	15.68	16.61	17.04	18.56	19.36	19.15	17.13	18.92	20.02	20.39	19.82
20	15.35	15.68	16.62	17.04	18.61	19.25	18.98	17.29	18.88	20.04	20.38	19.93
21	15.39	15.68	16.65	18.04	18.61	19.11	18.98	17.40	18.87	20.02	20.36	20.01
22	15.42	15.64	16.66	18.04	18.61	19.10	18.87	17.41	18.85	20.01	20.32	20.07
23	15.44	15.61	16.67	18.06	18.70	19.09	18.84	17.41	18.92	20.03	20.27	20.13
24	15.49	15.50	16.73	18.06	18.81	19.00	18.84	17.41	18.97	20.04	20.22	20.17
25	15.49	15.56	16.73	18.06	18.86	19.00	18.84	18.68	18.94	20.06	20.17	20.27
26	15.49	15.61	16.78	18.04	18.86	18.98	18.82	18.78	19.07	20.10	20.15	20.38
27	15.65	15.65	16.78	18.04	18.72	18.96	18.92	18.78	19.16	20.14	20.10	20.48
28	15.62	15.70	16.61	18.16	18.73	18.92	19.03	18.71	19.30	20.14	20.08	20.49
29	15.58	.....	16.51	18.15	18.79	19.03	19.10	18.72	19.35	20.14	20.01	20.58
30	15.58	.....	16.42	18.02	18.84	19.21	19.11	18.85	19.37	20.15	19.98	20.59
31	15.62	.....	16.33	.....	18.89	.....	19.11	18.98	.....	20.19	.....	20.60

502. Kansas Gas &amp; Electric Co. NW. corner sec. 29, T. 26 S., R. 1 E. Highest water level 12.49, Mar. 20, 1944; lowest 29.70, Dec. 2, 1949. Records available: 1943-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 16	27.2	Apr. 7	28.5	July 3	18.2	Oct. 4	25.1
Feb. 3	16.0	May 10	29.2	Aug. 9	18.1	Nov. 1	26.0
Mar. 10	28.0	June 2	28.9	Sept. 8	25.1	Dec. 20	27.2

800. City of Wichita. SW. corner sec. 33, T. 26 S., R. 1 E. Records available: 1938-49. No measurement made in 1950.

802. City of Wichita. NW. corner sec. 1, T. 27 S., R. 1 W. Highest water level 1.96, May 11, 1942; lowest 8.46, Dec. 5, 1947. Records available: 1939-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	7.22	May 4	6.19	Aug. 4	3.47	Nov. 1	7.13
Feb. 2	7.69	June 6	8.09	Sept. 1	6.85	Dec. 1	7.54
Mar. 31	7.99	30	8.43	Oct. 2	6.54		

804. City of Wichita. SE. corner sec. 16, T. 26 S., R. 1 W. Highest water level 0.10, Aug. 4, 1950; lowest 5.20, Sept. 26, 1946. Records available: 1938-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	3.05	May 4	3.71	Aug. 4	0.10	Nov. 1	2.65
Feb. 2	3.32	June 6	3.66	Sept. 1	.98	Dec. 1	2.94
Mar. 31	3.41	30	3.65	Oct. 3	2.12		

805. City of Wichita. NW. corner NE $\frac{1}{4}$  sec. 19, T. 26 S., R. 1 W. Highest water level 1.57, May 2, 1945; lowest 6.27, Sept. 26, 1946. Records available: 1938-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	3.52	May 4	4.22	Aug. 4	1.99	Nov. 1	3.79
Feb. 2	3.76	June 6	4.22	Sept. 1	2.86	Dec. 1	3.77
Mar. 31	3.84	28	4.32	Oct. 3	3.50		

807. City of Wichita. NW. corner sec. 10, T. 26 S., R. 2 W. Highest water level 18.98, July 6, 1949; lowest 23.04, Jan. 2, 1941. Records available: 1938-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	20.85	May 4	21.30	Aug. 4	21.13	Nov. 1	21.18
Feb. 2	21.03	June 6	21.56	Sept. 1	20.28	Dec. 1	20.92
Mar. 31	21.09	29	21.72	Oct. 3	20.52		

808. City of Wichita. SW. corner NW $\frac{1}{4}$  sec. 18, T. 26 S., R. 2 W. Highest water level 19.31, Sept. 2, 1949; lowest 23.47, Mar. 4, 1941. Records available: 1938-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	19.96	May 4	20.43	Aug. 4	20.61	Nov. 1	20.67
Feb. 2	20.16	June 6	20.65	Sept. 1	20.45	Dec. 1	20.63
Mar. 31	20.18	28	20.80	Oct. 3	20.48		

809. City of Wichita. NW. corner sec. 21, T. 26 S., R. 1 E. Highest water level 6.77, Apr. 29, 1944; lowest 14.68, Jan. 2, 1941. Records available: 1938-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	11.40	May 4	12.20	Aug. 4	8.46	Nov. 1	10.10
Feb. 2	11.71	June 6	12.49	Sept. 1	8.43	Dec. 1	10.42
Mar. 3	11.97	29	12.88	Oct. 3	9.29		

810. City of Wichita. NE. corner SE $\frac{1}{4}$  sec. 35, T. 25 S., R. 1 W. Highest water level 1.94, Apr. 28, 1944; lowest 13.38, Aug. 30, 1940. Records available: 1936-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	11.93	Apr. 10	12.48	June 29	12.60	Oct. 3	10.87
Feb. 2	11.94	May 4	12.65	Aug. 4	7.11	Nov. 1	11.46
Mar. 31	12.48	June 6	12.44	Sept. 1	9.52	Dec. 1	11.86

811. City of Wichita. SE. corner sec. 33, T. 25 S., R. 1 W. Highest water level 3.69, May 6, 1944; lowest 9.57, July 8, 1946. Records available: 1938-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	7.28	Apr. 10	7.63	June 30	8.34	Oct. 3	5.98
Feb. 2	7.46	May 4	7.89	Aug. 4	4.98	Nov. 1	6.45
Mar. 31	7.63	June 6	8.16	Sept. 1	5.34	Dec. 1	6.88

812. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 27, T. 25 S., R. 1 W. Highest water level 6.54, Sept. 27, 1948; lowest 18.91, Feb. 10, 1947. Records available: 1938-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	7.55	Apr. 10	7.87	June 30	8.59	Oct. 3	8.73
Feb. 2	7.74	May 4	8.21	Aug. 4	8.72	Nov. 1	8.74
Mar. 31	7.87	June 6	8.41	Sept. 1	8.65	Dec. 1	8.74

814. City of Wichita. SE. corner sec. 14, T. 25 S., R. 1 W. Highest water level 9.64, June 28, 1949; lowest 17.11, Dec. 3, 1940, Jan. 2, Feb. 3, Mar. 4, May 1, 1941. Records available: 1938-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	12.58	Apr. 10	13.34	June 29	14.06	Oct. 3	11.51
Feb. 2	11.85	May 4	13.63	Aug. 4	12.19	Nov. 1	11.94
Mar. 31	13.34	June 6	13.98	Sept. 1	11.50	Dec. 1	12.33

815. City of Wichita. NE corner sec. 17, T. 25 S., R. 1 W. Highest water level 7.65, May 11, 1945; lowest 14.04, Jan. 24, 31, 1941. Records available: 1938-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	11.07	Apr. 10	12.14	June 30	12.75	Oct. 3	11.17
Feb. 2	11.29	May 4	12.28	Aug. 4	11.80	Nov. 1	11.55
Mar. 31	12.14	June 6	12.55	Sept. 1	11.23	Dec. 1	11.92

816. City of Wichita. SW. corner sec. 7, T. 25 S., R. 1 W. Highest water level 5.32, Oct. 8, 1945; lowest 18.47, Mar. 3, 1947. Records available: 1938-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	10.41	Apr. 10	12.01	June 30	13.45	Oct. 3	12.21
Feb. 2	10.86	May 4	12.32	Aug. 4	11.49	Nov. 1	12.83
Mar. 31	12.01	June 6	12.93	Sept. 1	11.85	Dec. 1	13.39

825. City of Wichita. NE. corner sec. 3, T. 25 S., R. 1 W. Highest water level 5.49, May 4, 1945; lowest 15.18, Dec. 5, 1947. Records available: 1938-50.

Jan. 12	9.09	May 4	9.82	Aug. 4	7.97	Nov. 1	9.31
Mar. 31	9.40	June 6	9.98	Sept. 1	8.57	Dec. 1	9.43
Apr. 10	9.40	29	10.38	Oct. 3	8.87		

826. City of Wichita. NE. corner sec. 5, T. 25 S., R. 1 W. Records available: 1938-49. No measurement in 1950.

830. City of Wichita. SW. corner sec. 30, T. 25 S., R. 2 W. Highest water level 23.32, June 2, 1949; lowest 28.62, Oct. 3, 1940. Records available: 1938-50.

Jan. 12	25.16	May 4	25.94	Aug. 4	24.98	Nov. 1	25.69
Feb. 2	25.43	June 6	26.07	Sept. 1	24.76	Dec. 1	25.82
Mar. 31	25.55	28	26.62	Oct. 3	25.24		

834. City of Wichita. SW. corner sec. 9, T. 25 S., R. 3 W. Highest water level 5.87, May 8, 1944; lowest 11.70, Oct. 3, 1940. Records available: 1938-50.

Jan. 12	8.45	May 4	9.20	Aug. 4	7.32	Nov. 1	8.48
Feb. 2	8.67	June 6	9.42	Sept. 1	7.01	Dec. 1	8.77
Mar. 31	8.86	28	9.83	Oct. 3	7.90		

838. City of Wichita. NE. corner NW $\frac{1}{4}$  sec. 33, T. 25 S., R. 3 W. Highest water level 17.90, July 6, 1949; lowest 26.91, Nov. 5, 1940. Records available: 1938-50.

Jan. 12	21.73	May 4	22.82	Aug. 4	22.02	Nov. 1	22.61
Feb. 2	22.11	June 6	23.23	Sept. 1	21.69	Dec. 1	22.80
Mar. 31	22.38	28	23.63	Oct. 3	22.14		

840. Owner of property, C. A. Berger, owner of well, City of Wichita. NE. corner sec. 9, T. 25 S., R. 2 W. Highest water level 0.53, Sept. 30, 1945; lowest 8.64, June 29, 1950. Records available: 1940-50.

Jan. 12	7.25	May 4	8.25	June 29	8.64	Sept. 4	5.78
Feb. 2	7.39	June 6	8.47	Aug. 4	5.78	Oct. 1	6.64
Mar. 31	8.18						

842. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 16, T. 25 S., R. 2 W. Highest water level 1.39, Oct. 4, 1945; lowest 7.62, Sept. 26, 1946. Records available: 1939-50.

Jan. 12	5.74	May 4	6.17	Aug. 4	3.56	Oct. 3	4.55
Feb. 2	5.90	June 6	6.19	Sept. 1	4.12	Dec. 1	5.49
Mar. 31	6.05	29	6.66				

845. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 5, T. 27 S., R. 1 E. Highest water level 8.20, May 8, 1944; lowest 16.90, Mar. 31, 1950. Records available: 1939-50. Mar. 31, 16.90; May 4, 16.71; June 6, 15.98; Aug. 4, 11.11.

846. City of Wichita. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 6, T. 27 S., R. 1 E. Highest water level 11.35, May 8, 1944; lowest 18.21, Dec. 5, 1947. Records available: 1939-49. No measurement in 1950.

847. City of Wichita. SW. corner SE $\frac{1}{4}$  sec. 6, T. 27 S., R. 1 E. Highest water level 10.55, May 8, 1944; lowest 18.36, Dec. 5, 1947. Records available: 1939-50. Jan. 12, 16.46; Feb. 2, 16.67; June 30, 16.68; Sept. 1, 13.52; Oct. 3, 15.50; Nov. 1, 15.91; Dec. 1, 16.18.

870. W. Williams. NW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 18, T. 25 S., R. 2 W. Highest water level 1.64, Nov. 9, 1945; lowest 8.30, Nov. 5, 1940. Records available: 1940-50. Jan. 12, 6.38; Feb. 2, 6.44; Mar. 31, 6.25; May 4, 7.07; June 6, 5.79; June 29, 6.00; Oct. 3, 10.49.

3004. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 1, T. 25 S., R. 3 W. Driven observation well, diameter 1 $\frac{1}{2}$  inches, depth 20 feet below land-surface datum. Records available: 1949-50. Feb. 3, 8.82; Apr. 17, 8.41; June 29, 8.91; Oct. 4, 6.94.

M-27. City of Wichita. NW. corner NW $\frac{1}{4}$  sec. 2, T. 25 S., R. 2 W. Drilled observation well, diameter 18 inches, depth 215 feet below land-surface datum. Records available: 1947, 1949-50.

## M-27--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 1	18.0	June 6	58.0	Aug. 30	57.5	Oct. 31	57.0
31	58.0	29	58.0	Sept. 29	18.0	Nov. 30	57.0
May 3	56.0	Aug. 1	19.0				

M-27a. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 2, T. 25 S., R. 2 W. Drilled observation well, diameter 1 $\frac{1}{2}$  inches, depth 80 feet below land-surface datum. Records available: 1947, 1949-50.

Jan. 3	17.31	Mar. 31	21.64	June 29	22.87	Sept. 29	19.42
Feb. 1	20.53	May 3	22.40	Aug. 1	19.86	Oct. 31	22.83
Mar. 1	17.48	June 6	22.25	30	23.03	Nov. 30	23.25

M-27b. City of Wichita. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 3, T. 25 S., R. 2 W. Highest water level 12.62, Oct. 4, 1948; lowest 21.73, Nov. 30, 1950. Records available: 1947, 1949-50.

Jan. 3	16.87	Mar. 31	20.05	June 29	21.32	Sept. 29	18.87
Feb. 1	19.05	May 3	20.79	Aug. 1	19.46	Oct. 31	21.27
Mar. 1	17.12	June 6	20.68	30	21.43	Nov. 30	21.73

M-28. City of Wichita. NE. corner NW $\frac{1}{4}$  sec. 2, T. 25 S., R. 2 W. Drilled observation well, diameter 18 inches, depth 220 feet below lsd. Records available: 1947, 1949-50.

Jan. 3	18.0	Mar. 31	18.5	June 29	20.0	Sept. 29	16.0
Feb. 1	17.0	May 3	18.0	Aug. 1	69.0	Oct. 31	16.0
Mar. 1	65.0	June 6	20.0	Aug. 30	69.0	Nov. 30	16.5

M-28a. City of Wichita. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 2, T. 25 S., R. 2 W. Drilled observation well, diameter 1 $\frac{1}{2}$  inches, depth 78 feet below land-surface datum. Records available: 1947, 1949-50.

Jan. 3	17.85	Mar. 31	18.57	June 29	20.32	Sept. 29	21.15
Feb. 1	17.23	May 3	19.22	Aug. 1	21.32	Oct. 31	20.39
Mar. 1	18.93	June 6	19.69	30	21.57	Nov. 30	20.79

M-28b. City of Wichita. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 2, T. 25 S., R. 2 W. Highest water level 12.55, Oct. 4, 1948; lowest 20.19, Aug. 30, 1950. Records available: 1947-50.

Jan. 3	14.90	Mar. 31	17.83	June 29	19.57	Sept. 29	19.50
Feb. 1	16.52	May 3	18.49	Aug. 1	20.10	Oct. 31	19.68
Mar. 1	16.67	June 6	19.14	30	20.19	Nov. 30	20.02

M-29. City of Wichita. NW. corner NW $\frac{1}{4}$  sec. 11, T. 25 S., R. 2 W. Drilled observation well, diameter 18 inches, depth 225 feet. Records available: 1947, 1949-50.

Jan. 3	20.0	Mar. 31	19.0	June 29	55.0	Sept. 29	58.0
Feb. 1	56.5	May 3	60.0	Aug. 1	62.0	Oct. 31	20.0
Mar. 1	58.5	June 6	20.0	30	20.0	Nov. 30	21.0

M-29a. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 11, T. 25 S., R. 2 W. Drilled observation well, diameter 1 $\frac{1}{2}$  inches, depth 97 feet. Records available: 1947, 1949-50.

Jan. 3	16.29	Mar. 31	15.95	June 29	30.20	Sept. 29	30.87
Feb. 1	30.25	May 3	31.15	Aug. 1	32.57	Oct. 31	17.44
Mar. 1	29.66	June 6	17.72	30	18.65	Nov. 30	19.59

M-29b. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 11, T. 25 S., R. 2 W. Highest water level 8.61, Aug. 30, 1950; lowest 24.52, May 3, 1950. Records available: 1947-50.

Jan. 3	15.39	Mar. 31	14.91	June 29	11.15	Sept. 29	8.94
Feb. 1	24.05	May 3	24.52	Aug. 1	9.40	Oct. 31	10.38
Mar. 1	23.12	June 6	16.47	30	8.61	Nov. 30	9.87

M-30. City of Wichita. NE. corner NW $\frac{1}{4}$  sec. 11, T. 25 S., R. 2 W. Drilled observation well, diameter 18 inches, depth 225 feet. Records available: 1947, 1949-50.

Jan. 3	17.0	Mar. 31	14.5	June 29	52.0	Sept. 29	18.0
Feb. 1	55.5	May 3	18.0	Aug. 1	18.0	Oct. 31	17.0
Mar. 1	16.0	June 6	17.0	30	58.0	Nov. 30	59.5

M-30a. City of Wichita. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 11, T. 25 S., R. 2 W. Drilled observation well, diameter 1 $\frac{1}{2}$  inches, depth 70 feet. Records available: 1947, 1949-50.

Jan. 3	13.50	Mar. 31	14.43	June 29	21.06	Sept. 31	15.49
Feb. 1	21.47	May 3	15.50	Aug. 1	15.95	Nov. 30	23.58
Mar. 1	13.83	June 6	15.02	30	22.85		

M-30b. City of Wichita. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 11, T. 25 S., R. 2 W. Highest water level 7.39, Oct. 4, 1948; lowest 20.62, Nov. 30, 1950. Records available: 1947-50.

## M-30b--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	13.72	Mar. 31	12.73	June 29	18.25	Sept. 29	16.70
Feb. 1	18.18	May 3	15.46	Aug. 1	16.05	Oct. 31	16.24
Mar. 1	13.67	June 6	15.65	30	19.98	Nov. 30	20.62

M-31. City of Wichita. NW corner NW $\frac{1}{4}$  sec. 12, T. 25 S., R. 2 W. Drilled observation well, diameter 1 $\frac{1}{2}$  inches, depth 197 feet below land surface datum. Records available: 1947, 1949-50.

Jan. 3	51.0	Mar. 31	16.0	June 29	52.0	Sept. 29	56.0
Feb. 1	15.5	May 3	18.0	Aug. 1	18.5	Oct. 31	59.0
Mar. 1	16.0	June 6	56.0	30	55.0	Nov. 30	19.0

M-31a. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 12, T. 25 S., R. 2 W. Drilled observation well, diameter 1 $\frac{1}{2}$  inches, depth 85 feet below land surface datum. Records available: 1947, 1949-50.

Jan. 3	18.90	Mar. 31	13.14	June 29	20.52	Sept. 29	22.16
Feb. 1	13.30	May 3	15.34	Aug. 1	16.90	Oct. 31	23.71
Mar. 1	12.86	June 6	21.92	30	21.76	Nov. 30	17.74

M-31b. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 12, T. 25 S., R. 2 W. Highest water level 8.34, July 7, 1948; lowest 22.50, Oct. 31, 1950. Records available: 1947-50.

Jan. 3	17.83	Mar. 31	14.46	June 29	19.72	Sept. 29	20.89
Feb. 1	14.52	May 3	16.68	Aug. 1	18.16	Oct. 31	22.50
Mar. 1	14.16	June 6	21.07	30	20.58	Nov. 30	19.07

M-32. City of Wichita. NE corner NW $\frac{1}{4}$  sec. 12, T. 25 S., R. 2 W. Drilled observation well, diameter 18 inches, depth 185 feet below land-surface datum. Records available: 1947, 1949-50.

Jan. 3	48.0	Mar. 31	14.5	June 29	50.0	Sept. 29	17.0
Feb. 1	14.5	May 3	51.0	Aug. 1	15.0	Oct. 31	17.5
Mar. 1	13.5	June 6	52.0	30	16.5	Nov. 30	55.0

M-32a. City of Wichita. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 12, T. 25 S., R. 2 W. Drilled observation well, diameter 1 $\frac{1}{2}$  inches, depth 71 feet below land-surface datum. Records available: 1947, 1949-50.

Jan. 3	15.60	Mar. 31	12.86	June 29	18.09	Sept. 29	15.48
Feb. 1	12.46	May 3	17.72	Aug. 1	13.78	Oct. 31	16.44
Mar. 1	12.83	June 6	18.54	30	14.68	Nov. 30	19.87

M-32b. City of Wichita. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 12, T. 25 S., R. 2 W. Highest water level 8.40, Oct. 4, 1948; lowest 19.23, Nov. 30, 1950. Records available: 1947-50.

Jan. 3	14.79	Mar. 31	14.73	June 29	18.07	Sept. 29	16.12
Feb. 1	15.12	May 3	17.16	Aug. 1	16.70	Oct. 31	17.27
Mar. 1	14.72	June 6	17.97	30	15.32	Nov. 30	19.23

M-33. City of Wichita. NE corner SE $\frac{1}{4}$  sec. 1, T. 25 S., R. 2 W. Drilled observation well, diameter 18 inches, depth 170 feet. Records available: 1947, 1949-50.

Jan. 3	52.0	Mar. 31	18.0	June 29	60.0	Sept. 29	17.0
Feb. 1	17.5	May 3	57.0	Aug. 1	59.0	Oct. 31	62.0
Mar. 1	54.0	June 6	20.0	30	57.0	Nov. 30	20.0

M-33a. City of Wichita. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 1, T. 25 S., R. 2 W. Drilled observation well, diameter 1 $\frac{1}{2}$  inches, depth 54 feet. Records available: 1947, 1949-50.

Jan. 3	13.63	Mar. 31	14.15	June 29	18.02	Sept. 29	15.31
Feb. 1	13.95	May 3	16.83	Aug. 1	16.03	Oct. 31	17.96
Mar. 1	15.95	June 6	16.14	30	15.92	Nov. 30	16.92

M-33b. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 1, T. 25 S., R. 2 W. Highest water level 6.82, Oct. 4, 1948; lowest 15.67, June 29, 1950. Records available: 1947-50.

Jan. 3	11.25	Mar. 31	12.20	June 29	15.67	Sept. 29	13.30
Feb. 1	12.08	May 3	14.38	Aug. 1	13.64	Oct. 31	15.60
Mar. 1	13.64	June 6	15.14	Aug. 30	13.63	Nov. 30	14.94

M-34. City of Wichita. SW corner SW $\frac{1}{4}$  sec. 6, T. 25 S., R. 1 W. Drilled observation well, diameter 18 inches, depth 150 feet. Records available: 1947, 1949-50.

Jan. 3	14.32	Mar. 31	50.8	June 29	19.79	Sept. 29	49.44
Feb. 1	3.30	May 3	50.8	Aug. 1	17.37	Oct. 31	53.00
Mar. 1	16.43	June 6	54.0	30	16.32	Nov. 30	55.55



M-34a. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 6, T. 25 S., R. 1 W. Drilled observation well, diameter 1 $\frac{1}{2}$  inches, depth 85 feet. Records available: 1947, 1949-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	12.83	Mar. 31	18.71	June 29	18.32	Sept. 29	20.25
Feb. 1	18.26	May 3	20.25	Aug. 1	17.08	Oct. 31	21.69
Mar. 1	14.94	June 6	21.26	30	14.80	Nov. 30	22.34

M-34b. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 6, T. 25 S., R. 1 W. Highest water level 5.64, July 7, 1948; lowest 25.52, Oct. 31, 1950. Records available: 1947-50.

Jan. 3	11.55	Mar. 31	13.29	June 29	16.44	Sept. 29	14.02
Feb. 1	12.05	May 3	14.50	Aug. 1	15.45	Oct. 31	25.52
Mar. 1	13.35	June 6	15.40	30	13.19	Nov. 30	16.66

M-35. City of Wichita. NE. corner NW $\frac{1}{4}$  sec. 7, T. 25 S., R. 1 W. Drilled observation well, diameter 1 $\frac{1}{2}$  inches, depth 83 feet. Records available: 1947, 1949-50.

Jan. 3	40.42	Mar. 31	15.89	June 29	46.5	Sept. 29	50.00
Feb. 1	15.17	May 3	44.8	Aug. 1	49.27	Oct. 31	25.52
Mar. 1	45.0	June 6	18.0	30	46.05	Nov. 30	48.60

M-35a. City of Wichita. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 7, T. 25 S., R. 1 W. Drilled observation well, diameter 1 $\frac{1}{2}$  inches, depth 83 feet. Records available: 1947, 1949-50.

Jan. 3	17.54	Mar. 31	15.55	June 29	17.99	Sept. 29	18.87
Feb. 1	15.62	May 3	15.85	Aug. 1	18.87	Oct. 31	19.09
Mar. 1	15.22	June 6	16.69	30	18.69	Nov. 30	18.99

M-35b. City of Wichita. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 6 T. 25 S., R. 1 W. Highest water level 10.60, Sept. 2, 1949; lowest 20.95, June 29, 1950. Records available: 1947-50.

Jan. 3	16.09	Mar. 31	16.34	June 29	20.95	Sept. 29	18.90
Feb. 1	15.64	May 3	18.12	Aug. 1	20.36	Oct. 31	18.67
Mar. 1	17.30	June 6	18.71	30	17.94	Nov. 30	20.94

#### Seward County

15. R. H. Hitch. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 21, T. 32 S., R. 33 W. Highest water level 15.88, May 3, 1944; lowest 18.67, Nov. 24, 1947. Records available: 1940-50.

Jan. 17	17.64	May 9	17.73	Aug. 14	17.15	Nov. 15	17.61
Feb. 20	17.59	July 13	17.50	Sept. 14	17.01	Dec. 26	17.87
Mar. 14	17.63						

106. Kansas City Life Insurance Co. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 8, T. 32 S., R. 34 W. Highest water level 204.56, Apr. 18, 1947; lowest 210.95, Mar. 8, 1949. Records available: 1940-50.

Apr. 20	205.68	Aug. 14	205.52	Oct. 12	205.62	Dec. 26	205.75
July 13	205.87	Sept. 14	206.44	Nov. 15	205.70		

108. C. D. Day. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 6, T. 31 S., R. 34 W. Records available: 1940-47, 1949. Measurement discontinued.

122. Mrs. Flora Atwell. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 9, T. 33 S., R. 31 W. Highest water level 200.16, Feb. 20, 1950; lowest 205.76, Oct. 21, 1947. Records available: 1940-50.

Jan. 17	201.36	May 9	202.73	Sept. 14	200.48	Nov. 15	200.88
Feb. 20	200.16	June 22	201.86	Oct. 12	200.94	Dec. 26	203.11
Apr. 20	201.26	July 13	201.12				

159. Liberal Gas Co. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 3, T. 35 S., R. 34 W. Records available: 1940-50. Jan. 17, 89.04; Feb. 20, 88.82, Mar. 14, 88.69. Measurement discontinued.

31-34-17cb. Carrie Young. Highest water level 120.08, Apr. 20, 1950; lowest 120.86, Mar. 14, 1950. Records available: 1950. Feb. 14, 120.76; Mar. 14, 120.86; Apr. 20, 120.08.

#### Shawnee County

11-15-16c. Division of Water Resources, State Board of Agriculture. Records available: 1950.

11-15-16c--Continued.

Daily mean water level, from recorder graph

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	23.76	22.97	23.45	23.61	24.10
2	.....	23.77	22.98	23.43	23.66	24.12
3	26.22	23.77	23.01	23.42	23.66	24.14
4	26.20	23.77	23.03	23.39	23.68	24.15
5	26.15	23.79	23.04	23.37	23.68	24.19
6	26.13	23.82	23.06	23.35	23.69	24.22
7	26.11	23.82	23.06	23.34	23.72	24.22
8	26.10	23.77	23.07	23.35	23.72	24.24
9	26.07	23.62	23.08	23.34	23.76	24.25
10	26.00	23.52	23.08	23.34	23.81	24.29
11	25.87	23.45	23.11	23.35	23.81	24.30
12	25.73	23.39	23.12	23.36	23.82	24.31
13	25.57	23.33	23.14	23.37	23.83	24.33
14	25.38	23.28	23.16	23.37	23.83	24.35
15	25.17	23.18	23.16	23.38	23.83	24.36
16	24.99	23.10	23.17	23.39	23.87	24.38
17	24.87	23.01	23.20	23.40	23.90	24.40
18	24.74	22.94	23.21	23.42	23.89	24.41
19	24.59	22.90	23.23	23.42	23.88	24.43
20	24.42	22.88	23.24	23.44	23.93	24.46
21	24.24	22.85	23.28	23.44	23.95	24.47
22	24.08	22.85	23.34	23.42	23.96	24.48
23	23.96	22.87	23.35	23.49	23.98	24.49
24	23.88	22.89	23.37	23.50	24.02	24.51
25	23.84	22.94	23.40	23.51	24.03	24.52
26	23.80	22.94	23.41	23.52	24.04	24.54
27	23.74	22.93	23.43	23.53	24.06	24.56
28	23.72	22.93	23.44	23.56	24.09	24.57
29	23.70	22.93	23.44	23.58	24.12	24.59
30	23.70	22.94	23.44	23.60	24.10	24.61
31	23.73	22.95		23.61		24.62

11-16-5bc. C. C. Busey. Highest water level 1.27, Apr. 15, 1949; lowest 11.80, Nov. 27, 1948. Records available: 1948-50. Jan. 17, 4.49; Sept. 26, 5.11; Dec. 27, 7.52.

Sherman County

8-37-28abb. Albert Vohs. Highest water level 107.30, July 14, 1948; lowest 107.85, Jan. 6, 1949. Records available: 1948-50. Jan. 25, 107.48; Apr. 25, 107.33; July 25, 107.45, Oct. 9, 107.41.

8-39-19caa. Wm. Hall (City of Goodland). Highest water level 148.91, Apr. 25, 1950; lowest 152.38, Oct. 9, 1950. Records available: 1950. Apr. 25, 148.91; July 25, 150.64; Oct. 9, 152.38.

8-40-24baa. Victoria Van Drasek Estate. Highest water level 135.92, Apr. 25, 1950; lowest 137.25, Jan. 25, 1950. Records available: 1948-50. Jan. 25, 137.25; Apr. 25, 135.92; Oct. 9, 136.64.

9-39-30cbb. Charles Glenn. Highest water level 118.44, Oct. 10, 1950; lowest 118.90, Apr. 14, 1949. Records available: 1948-50. Jan. 25, 118.50; Apr. 26, 118.53; July 25, 118.47; Oct. 10, 118.44.

Smith County

4-14-34bc. Laura Davis. Highest water level 42.15, Nov. 21, 1945 and Feb. 8, 1950; lowest 43.05, Sept. 25, 1946. Records available: 1945-50. Feb. 8, 42.15; Mar. 9, 42.69; Apr. 13, 42.79; June 3, 42.70; Sept. 22, 42.34.

4-15-31bb. W. Lala. Highest water level 34.43, Sept. 22, 1950; lowest 36.26, Nov. 30, 1948. Records available: 1945-50. Feb. 8, 35.39; Mar. 9, 35.43; Apr. 13, 35.70; June 3, 35.70; Sept. 22, 34.43.

4-15-35bc. H. R. Dannenburg. Highest water level 32.20, Sept. 22, 1950; lowest 37.99, June 12, 1948. Records available: 1945-50. Feb. 2, 35.49; Mar. 9, 35.62; Apr. 13, 36.00; June 3, 36.30; Sept. 22, 32.20.

5-13-4dc. Roy Eller. Highest water level 16.95, Sept. 21, 1950; lowest 35.28, Dec. 17, 1945. Records available: 1945-50. Feb. 8, 21.03; Mar. 9, 21.10; Apr. 13, 19.00; June 3, 18.20; Sept. 21, 16.95.

5-13-25cc. Zelma Carter. Highest water level 42.85, Sept. 21, 1950; lowest 46.53, Jan. 28, 1946. Records available: 1945-50. Feb. 8, 43.01; Mar. 9, 43.45. Apr. 13, 43.27; June 3, 43.20; Sept. 21, 42.85.

5-13-33ba. W. L. Gearhart and others. Highest water level 22.05, Sept. 21, 1950; lowest 30.46, Jan. 2, 1948. Records available: 1945-50. Feb. 8, 26.79; Mar. 9, 26.49; Apr. 13, 26.73, June 3, 25.40; Sept. 21, 22.05.

5-14-3bc. Walter Felsburg. Highest water level 34.75, Sept. 22, 1950; lowest 40.50, Oct. 27, 1947. Records available: 1946-50. Feb. 8, 35.84; Mar. 9, 36.83; Apr. 13, 36.79; June 3, 37.50; Sept. 22, 34.75.

5-15-2dc. George K. Wan hoff. Highest water level 30.99, Sept. 22, 1950; lowest 33.84 Nov. 30, 1948. Records available: 1945-50. Feb. 8, 32.12; Mar. 9, 32.37; Apr. 13, 32.45; June 3, 32.70; Sept. 22, 30.99.

#### Stafford County

3. B. Fritzmeier. SW. corner SW $\frac{1}{4}$  sec. 12, T. 23 S., R. 12 W. Records available: 1942-50. Jan. 18, 17.54; Feb. 15, 17.52; Mar. 16, 18.16. Measurement discontinued.

19. Atlantic Refining Co. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 27, T. 21 S., R. 13 W. Highest water level +0.40, Sept. 20, 1950; lowest 11.04, Aug. 1, 1942. Records available: 1942-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 18	2.44	May 18	1.77	Aug. 29	0.40	Nov. 21	1.08
Feb. 15	2.42	June 28	2.42	Sept. 20	+ 4.0	Dec. 20	1.70
Apr. 18	2.13	July 17	1.20	Oct. 16	.98		

#### Stanton County

13. Leah Y. Carrithers. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 21, T. 27 S., R. 40 W. Highest water level 45.27, Feb. 9, 1949; lowest 51.83, Apr. 23, 1940. Records available: 1939-50. Feb. 21, 45.87; Aug. 15, 45.78.

93. J. Plummer. Center NE $\frac{1}{4}$  sec. 11, T. 29 S., R. 41 W. Highest water level 174.16, Nov. 26, 1947; lowest 180.65, Nov. 16, 1949. Records available: 1939-50. Feb. 2, 174.57; May 10, 174.97; Nov. 16, 174.47.

146. C. M. Harrison. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 27, T. 30 S., R. 43 W. Highest water level 33.32, Nov. 16, 1950; lowest 46.30, Apr. 22, May 14, June 18, 1940. Records available: 1939-50. Feb. 21, 34.51; May 10, 34.67, Aug. 15, 34.06; Nov. 16, 33.32.

#### Stevens County

10. T. P. Patterson. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 21, T. 33 S., R. 37 W. Highest water level 79.92, Feb. 21, 1948; lowest 93.20, May 10, 1945. Records available: 1942-50. Aug. 14, 63.76; Nov. 14, 84.18.

12. Mack Greenwood. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 28, T. 33 S., R. 36 W. Highest water level 107.25, Nov. 15, 1950; lowest 113.38, July 28, 1942. Records available: 1942-50. Feb. 21, 108.18; May 9, 108.05; Aug. 14, 107.63; Nov. 15, 107.25.

30. Central Life Assurance Co. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 15, T. 33 S., R. 36 W. Highest water level 101.14, Nov. 15, 1950; lowest 106.64, Sept. 23, 1943. Records available: 1942-50. Feb. 21, 101.32; May 9, 101.20; Aug. 14, 101.17; Nov. 15, 101.14.

#### Sumner County

1. U. S. Geol. Survey. On township road right-of-way in NW. corner sec. 1, T. 30 S., R. 1 E. Records available: 1944-48. Measurement discontinued.

2. U. S. Geol. Survey. On township road right-of-way in NE. corner of sec. 6, T. 30 S., R. 1 E. Records available: 1944-48. Measurement discontinued.

#### Thomas County

7. George Strait. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 18, T. 8 S., R. 36 W. Highest water level 122.99, July 20, 1949; lowest 128.02, Oct. 14, 1946. Records available: 1942-50. Jan. 24, 125.20; Apr. 25, 124.32; July 25, 124.85; Oct. 9, 125.35.

9. Mr. Sloan. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 26, T. 7 S., R. 33 W. Records available: 1942-48. Measurement discontinued.

26. T. A. Ryan. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 27, T. 8 S., R. 32 W. Highest water level 111.15, Apr. 25, 1950; lowest 117.55, Oct. 13, 1948. Records available: 1942-50. Jan. 24, 111.90; Apr. 25, 111.15.

28. Katherine B. Hood. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 20, T. 10 S., R. 31 W. Records available: 1942-48. Measurement discontinued.

33. Arch Ball. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 7, T. 9 S., R. 33 W. Highest water level 115.34, July 25, 1950; lowest 121.30, Apr. 14, 1949. Records available: 1942-50. Jan. 24, 116.71; Apr. 25, 116.05; July 25, 115.34.

62. H. A. Hills. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 27, T. 10 S., R. 34 W. Records available: 1942-48. Measurement discontinued.

8-34-2aa. U. S. Dept. of Agriculture and Kansas Agricultural Experiment station. NE $\frac{1}{4}$  sec. 2, T. 8 S., R. 34 W. Records available: 1947-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	113.35	Apr. 6	113.21	July 6	113.75	Oct. 5	113.61
12	113.32	13	113.30	13	113.74	12	113.55
19	113.38	20	113.28	20	113.80	19	113.54
26	113.36	27	113.35	27	113.85	27	113.53
Feb. 2	113.33	May 4	113.37	Aug. 3	113.84	Nov. 2	113.50
9	113.31	11	113.43	10	113.88	9	113.47
16	113.27	18	113.40	17	113.94	16	113.42
23	113.35	25	113.60	24	113.89	23	113.43
Mar. 2	113.19	June 1	113.43	31	113.83	30	113.34
9	113.31	8	113.55	Sept. 7	113.78	Dec. 7	113.28
16	113.29	15	113.60	14	113.75	14	113.29
23	113.33	22	113.59	22	113.75	21	113.26
30	113.18	29	113.68	28	113.62	28	113.23

#### Trego County

14-22-36. U. S. Geol. Survey. Highest water level 39.65, Nov. 15, 1950; lowest 43.11, Mar. 16, 1950. Records available: 1949-50. Feb. 10, 42.85; Mar. 16, 43.11; Apr. 14, 42.35; June 1, 40.90; Nov. 15, 39.65.

#### Wallace County

11-40-15ddd. School District. Highest water level 38.44, Apr. 14, 1949; lowest 42.69, May 17, 1948. Records available: 1948-50. Jan. 25, 42.54; Apr. 26, 42.01; July 26, 42.21; Oct. 9, 42.07.

12-40-14bba. W. P. Kirkham. Highest water level 19.72, July 20, 1949; lowest 20.75, May 18, 1948. Records available: 1948-50. Jan. 25, 19.77; Apr. 26, 19.74; July 26, 20.34; Oct. 9, 20.42.

13-40-10abb. J. Mumma. Highest water level 16.08, May 18, 1948; lowest 20.10, Oct. 14, 1948. Records available: 1948-50. Jan. 25, 19.12; Apr. 26, 19.71; July 26, 19.27; Oct. 9, 19.07.

14-40-34ddd. Owner unknown. Highest water level 87.45, Apr. 26, 1950; lowest 88.50, Oct. 13, 1949. Records available: 1948-50. Jan. 25, 87.80; Apr. 26, 87.45; July 26, 87.79; Oct. 9, 87.50.

15-40-23bbb. Broadway School District. Highest water level 76.36, Oct. 10, 1950; lowest 78.06, Jan. 6, 1949. Records available: 1948-50. Jan. 25, 76.90; Apr. 26, 76.79; July 26, 76.66; Oct. 10, 76.36.

#### Wichita County

16-37-26abb. Richard G. Hobson. Highest water level 86.40, Apr. 14, 1949; lowest 90.52, Dec. 16, 1949. Records available: 1947-50. Feb. 24, 87.54; Apr. 26, 87.70; June 26, 87.35; Aug. 16, 87.27; Oct. 10, 87.25; Dec. 11, 87.32.

18-35-14bb. A. C. Felt. Highest water level 81.33, Aug. 11, 1949; lowest 83.37, Oct. 12, 1949. Records available: 1947-50. Feb. 24, 83.18; Apr. 26, 83.18; Aug. 16, 83.09; Oct. 10, 83.01; Dec. 11, 83.27.

18-37-11dcc. L. L. Barngrober. Highest water level 71.25, Aug. 16, 1948; lowest 72.34, Sept. 7, 1947. Records available: 1947-50. Feb. 24, 71.88.

20-36-14dad. Elmer Hartman. Highest water level 94.80, June 23, 1948; lowest 104.87, Aug. 4, 1947. Records available: 1947-50. Apr. 26, 95.35; June 26, 94.88; Aug. 16, 94.86; Oct. 10, 94.86; Dec. 11, 94.83.

Woodson County

25-16-11ddd. John Yohon. Highest water level 4.23, May 6, 1948; lowest 9.72, Dec. 29, 1950. Records available: 1948-50. Dec. 29, 9.72.

Wyandotte County

97. U. S. Geol. Survey. NW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 15, T. 11 S., R. 25 E. Highest water level 15.15, July 11, 1945; lowest 29.90, Dec. 31, 1948. Records available: 1944-50. Dec. 29, 20.84.

100. U. S. Geol. Survey. SE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 22, T. 11 S., R. 25 E. Highest water level 15.82, July 11, 1945; lowest 33.45, Dec. 31, 1948. Records available: 1944-50. Dec. 29, 24.34.

101. U. S. Geol. Survey. NW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 23, T. 11 S., R. 25 E. Highest water level 25.02, July 11, 1945; lowest 44.55, Dec. 31, 1948. Records available: 1944-48, 1950. Dec. 29, 37.55.

119. U. S. Geol. Survey. SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 20, T. 11 S., R. 25 E. Highest water level 21.33, July 11, 1945; lowest 35.56, Dec. 31, 1948. Records available: 1944-50. Dec. 29, 34.12.

121. U. S. Geol. Survey. NE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 20, T. 11 S., R. 25 E. Records available: 1944-48. No measurement made in 1950.

## MINNESOTA

By John E. Powell

### Scope of Water-Level Program

The observation-well program in Minnesota in 1950 was continued in cooperation with the Division of Waters of the State Department of Conservation. Periodic measurements were made in 12 wells and water-level determinations were obtained from 3 wells equipped with recording gages. Reports were completed on investigations of the ground-water resources in the vicinity of Cloquet, in Carlton County, and at the Camp Ripley Military Reservation near Little Falls, in Morrison County.

### Precipitation

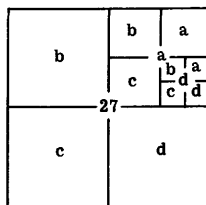
Except for the month of February, precipitation from January to May was average. Early spring thaws in March caused some minor flooding of streams in the southern part of the State. Severe flooding along the Red River of the North and its tributaries and along the Mississippi River near Aitkin occurred during April and May as a result of the general spring breakup and accompanying precipitation. Less-than-average precipitation occurred in June, August, and September, but above-average precipitation occurred in July. The first fall snows came in October, a month of above-average precipitation. November was drier than usual, but December was wetter than usual with record-breaking snows in the Duluth and Minneapolis areas.

### Fluctuations of Water Levels

As in previous years, the water levels were low during the winter, the lowest stages occurring in March and April before the spring breakup. Owing to recharge resulting from downward percolation of the meltwater from the accumulated winter snows, the water levels began to rise in April and, in most of the wells, attained highest stages in May. In some wells the water levels continued to rise for several months after the spring breakup and did not attain highest stages until June, August, September, or October.

### Well-Numbering System

Except for wells at Camp Ripley in Morrison County, wells are numbered in accordance with the Bureau of Land Management system of land subdivision. The first numeral of a well number indicates the township, the second the range, and the third the section in which the well is situated. The lower-case letters, a, b, c, and d, following the section number locate the quarter sections (160-acre tract), the second the quarter-quarter section (40-acre tract), and the third the quarter-quarter-quarter section (10-acre tract). The letters are assigned in a counterclockwise direction, beginning in the northeast quarter. The number of lower-case letters indicate the accuracy of the well location; if the location is known within a 10-acre tract, three lower-case letters are shown in the well number. When there is more than one well in the smallest significant tract, consecutive numbers beginning with 1 are added as suffixes. Below is a graphical illustration of this method of well numbering within a section of 640 acres.



Section 27

## Well Descriptions and Water-Level Measurements

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

Brown County

108.30.9. Erwin Kjelshus. Records available: 1942-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	8.44	May 1	5.54	July 18	6.58	Oct. 10	11.03
Feb. 1	8.39	9	4.57	25	6.32	16	11.02
8	8.59	17	4.51	Aug. 3	6.85	25	11.41
16	8.72	22	4.11	10	7.25	Nov. 3	12.20
24	8.78	June 2	4.45	16	7.43	10	12.63
Mar. 4	7.42	7	4.55	23	7.96	13	12.71
14	8.05	14	4.76	Sept. 5	8.97	25	12.66
25	7.45	21	4.96	12	9.74	Dec. 2	11.97
Apr. 3	5.95	24	5.12	19	11.00	10	11.83
10	6.17	July 3	5.68	25	11.44	16	11.76
16	6.05	11	6.16	Oct. 3	11.50	23	11.06
24	6.03						

Carlton County

49.17.18dcc2. Andrew Ketola. Records available: 1949-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	7.50	Apr. 9	8.45	July 9	5.75	Oct. 8	7.20
8	7.83	16	5.45	16	6.07	15	7.44
15	8.06	23	5.54	23	6.04	23	7.44
22	8.26	30	5.47	30	7.10	29	7.65
29	8.49	May 7	5.43	Aug. 6	7.45	Nov. 5	7.56
Feb. 5	8.66	15	5.41	13	7.97	12	7.66
12	8.78	21	5.38	20	8.36	19	7.13
19	8.83	28	5.35	27	8.36	26	7.26
26	8.86	June 4	5.42	Sept. 3	8.75	Dec. 3	7.34
Mar. 5	8.98	11	5.44	10	9.07	10	7.52
12	9.10	18	5.54	17	9.14	17	7.62
19	9.22	25	5.36	24	9.22	24	7.67
26	9.21	July 2	5.38	Oct. 1	6.32	31	7.71
Apr. 2	8.86						

49.17.22cbb. U. S. Bureau of Indian Affairs. Records available: 1949-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	37.68	Apr. 8	38.17	July 8	34.82	Oct. 14	34.38
14	37.69	15	38.15	22	34.59	20	34.40
21	37.74	22	37.95	28	34.59	28	34.41
28	37.77	29	37.91	Aug. 5	34.31	Nov. 4	34.48
Feb. 2	37.79	May 6	37.86	12	34.36	10	34.53
11	37.79	13	37.46	19	34.33	15	34.59
17	37.89	20	36.62	26	34.25	25	34.61
25	37.90	27	36.19	Sept. 2	34.32	Dec. 2	35.19
Mar. 4	37.95	June 2	35.84	9	34.38	9	35.11
10	37.98	9	36.06	16	34.17	16	34.89
18	38.05	17	35.38	23	34.28	23	34.94
25	38.03	24	36.05	29	34.29	29	34.99
Apr. 1	38.13	July 1	34.87	Oct. 7	34.24		

49.17.27cbb. Marge Bodway. Records available: 1949-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	40.08	Apr. 8	40.46	July 8	37.22	Oct. 7	36.91
14	40.04	15	40.47	15	37.19	14	36.97
21	40.09	22	40.43	22	37.15	20	36.75
28	40.11	29	40.42	28	37.04	28	36.84
Feb. 2	40.14	May 6	40.37	Aug. 5	36.95	Nov. 4	36.95
11	40.19	13	40.12	12	36.97	10	37.19
17	40.23	20	38.67	19	36.89	15	37.21
25	40.31	27	38.19	26	36.95	25	37.24
Mar. 4	40.29	June 2	38.08	Sept. 2	36.89	Dec. 2	37.19
10	40.42	9	37.54	9	36.91	9	37.21
18	40.43	17	37.66	16	36.91	16	37.34
25	40.45	24	37.62	23	36.93	23	37.69
Apr. 1	40.43	July 1	37.33	29	36.94	29	37.73

49. 17. 28adc. James, Alfred, and Laura Jolicoeur. Records available: 1949-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	3.07	Apr. 8	2.93	July 8	2.94	Oct. 7	3.09
14	3.09	15	2.89	15	2.91	14	3.13
21	3.04	22	2.74	22	2.87	20	3.13
28	3.09	29	2.72	28	2.86	28	3.16
Feb. 2	3.01	May 6	2.58	Aug. 5	3.14	Nov. 4	3.19
11	3.01	13	2.54	12	3.17	10	3.22
17	2.94	20	2.62	19	3.07	15	3.22
25	2.89	27	2.72	26	3.12	25	3.22
Mar. 4	2.87	June 2	2.73	Sept. 2	3.13	Dec. 2	3.27
10	2.89	9	2.82	9	3.17	9	3.22
18	2.92	17	2.91	16	3.09	16	3.27
25	3.03	24	2.93	23	3.12	23	2.93
Apr. 1	2.98	July 1	2.96	29	3.16	29	2.97

## Clay County

137. 45. 30cbb1. City of Barnesville. Records available: 1949-50.

## Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.83	7.17	7.30	6.46	6.00	4.60	5.63	6.50	6.76	6.75	6.56	6.59
2	6.80	7.19	7.27	6.36	5.98	4.69	5.67	6.29	6.78	6.73	6.56	6.65
3	6.80	7.21	7.26	6.38	5.69	4.77	5.69	6.31	6.79	6.69	6.56	6.62
4	6.83	7.21	7.25	6.37	5.67	4.80	5.73	6.36	6.83	6.65	6.54	6.66
5	6.85	7.21	7.27	6.37	5.12	4.91	5.77	6.37	6.84	6.61	6.54	6.66
6	6.87	7.22	7.16	6.29	5.12	4.97	5.79	6.37	6.84	6.56	6.58	6.63
7	6.90	7.23	6.87	6.22	4.87	5.03	5.81	6.41	6.85	6.59	6.55	6.61
8	6.83	7.22	....	6.19	4.35	5.08	5.83	6.42	6.88	6.59	6.56	6.65
9	6.85	7.22	....	6.18	4.27	5.11	5.82	6.44	6.87	6.58	6.60	6.68
10	6.95	7.25	6.94	6.19	4.31	5.17	5.83	6.41	6.88	6.57	6.56	6.68
11	6.93	7.25	6.89	6.25	4.32	5.19	5.84	6.44	6.88	6.56	6.60	6.68
12	6.97	7.26	6.89	6.23	4.33	5.20	5.87	6.48	6.82	6.58	6.57	6.68
13	6.96	7.26	6.91	6.22	4.26	5.01	5.89	6.48	6.78	6.58	6.56	6.69
14	6.98	7.22	6.93	6.21	4.33	5.11	5.89	6.52	6.78	6.60	6.54	6.69
15	6.98	7.25	....	6.15	4.36	5.18	5.86	6.52	6.76	6.57	6.59	6.70
16	6.99	7.23	....	6.15	4.36	5.26	5.89	6.58	6.78	6.61	6.61	6.72
17	6.99	7.25	....	6.12	4.03	5.28	5.90	6.57	6.78	6.61	6.55	6.72
18	7.00	7.27	7.04	6.17	4.03	5.29	5.92	6.58	6.74	6.45	6.56	6.70
19	7.04	7.24	7.01	6.17	4.05	5.33	5.92	6.57	6.75	6.46	6.57	6.72
20	7.05	7.23	7.01	6.17	3.59	5.39	5.97	6.59	6.72	6.46	6.60	6.73
21	7.05	7.26	6.99	6.13	3.57	5.41	5.98	6.60	6.71	6.47	6.62	6.71
22	7.08	7.23	7.00	6.12	3.70	5.47	6.01	6.61	6.71	6.46	6.59	6.71
23	7.07	7.27	6.95	6.12	3.82	5.51	6.05	6.66	6.69	6.47	6.62	6.75
24	7.08	7.28	6.90	6.11	3.97	5.58	6.06	6.66	6.71	6.46	6.63	6.74
25	7.13	7.29	6.81	6.10	4.08	5.55	6.09	6.66	6.71	6.46	6.63	6.72
26	7.13	7.26	6.74	6.10	4.16	5.58	6.11	6.66	6.71	6.45	6.61	6.76
27	7.10	7.23	6.54	6.11	4.27	5.58	6.15	6.65	6.72	6.46	6.61	6.68
28	7.12	7.26	6.58	6.11	4.35	5.56	6.15	6.68	6.73	6.49	6.60	6.73
29	7.16	....	6.59	6.08	4.42	5.56	6.19	6.69	6.73	6.53	6.59	6.74
30	7.13	....	6.55	6.02	4.46	5.59	6.21	6.72	6.74	6.55	6.62	6.73
31	7.18	....	6.50	....	4.52	....	6.23	6.73	....	6.55	....	6.72

139. 45. 1ccd2. City of Hawley. Records available: 1949-50. Jan. 10, 17.89, tape measurement; Feb. 24, 16.95, tape measurement.

## Daily lowest water level, from recorder graph

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	16.84	15.74	15.58	16.72	17.89	17.57	16.60	16.88	17.15
2	.....	16.80	15.67	15.72	16.59	17.88	17.23	16.76	16.87	17.05
3	.....	16.87	.....	15.69	16.59	17.91	17.51	16.72	16.85	16.73
4	.....	17.01	.....	15.43	16.51	17.63	17.57	17.37	17.10	17.37
5	.....	16.54	15.91	16.02	16.50	17.78	17.76	17.14	16.41	17.19
6	.....	16.91	15.35	15.97	16.72	17.79	17.59	17.10	16.81	16.93
7	.....	16.75	15.23	15.97	16.78	17.88	17.78	17.11	17.27	16.94
8	.....	16.91	15.36	15.85	16.95	17.77	17.54	16.43	17.27	17.46
9	.....	16.43	15.15	15.85	16.39	17.87	17.54	17.47	16.82	17.02
10	.....	16.60	15.08	16.24	16.94	17.64	17.45	17.14	17.44	16.67



139.45.1ccd2--Continued.

Daily lowest water level, from recorder graph

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	16.84	16.73	15.27	15.70	17.48	17.67	17.45	16.91	16.90	17.13
12	16.94	16.99	15.35	15.97	16.85	17.52	17.38	16.89	16.66	16.99
13	16.60	16.88	15.41	16.22	16.93	17.07	17.48	16.94	16.89	16.92
14	16.60	16.75	15.36	16.37	16.69	17.55	17.51	17.02	16.83	17.00
15	16.62	16.58	15.25	16.39	18.25	17.56	16.89	16.67	16.84	17.17
16	16.62	16.86	15.34	16.38	18.43	17.60	17.13	17.08	16.77	17.14
17	16.60	16.93	15.27	16.43	17.86	17.45	16.88	17.07	16.75	16.73
18	16.57	16.95	15.25	15.76	16.87	17.38	17.11	18.00	16.99	17.03
19	16.64	17.32	15.19	16.49	16.98	17.43	17.03	16.73	16.61	17.37
20	16.66	17.01	15.40	16.73	17.48	16.99	17.48	16.94	17.05	17.12
21	16.53	16.94	15.50	16.81	16.85	17.62	16.88	17.53	16.97	17.15
22	16.65	16.71	15.33	16.82	18.48	17.52	17.06	16.49	17.01	17.13
23	16.48	16.43	15.67	16.75	18.48	17.59	17.03	17.46	16.74	16.90
24	16.69	16.38	15.75	16.78	17.38	17.69	16.52	16.96	17.19	16.68
25	h15.93	16.38	15.86	16.80	17.57	17.48	17.45	17.27	16.91	16.61
26	.....	16.45	15.95	16.88	17.16	17.59	17.64	17.07	16.69	16.93
27	.....	15.97	15.83	16.87	18.02	17.00	17.55	16.88	16.99	16.95
28	15.62	15.87	15.84	16.83	18.04	17.48	17.53	16.93	16.99	17.09
29	15.75	15.83	15.79	16.77	18.01	17.45	17.04	16.73	16.92	16.96
30	15.73	15.77	15.71	16.71	17.85	17.55	17.15	16.87	17.01	17.02
31	h15.90	.....	15.59	.....	17.85	17.61	.....	16.90	.....	16.73

h Tape measurement.

139.47.5cc3. City of Moorhead, test hole MS-1. Records available: 1947-50. Oct. 19, 21.95, tape measurement.

Daily lowest water level, from recorder graph

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Dec. 1	22.14	Dec. 9	22.20	Dec. 17	22.14	Dec. 25	22.17
2	22.08	10	22.20	18	22.13	26	22.17
3	21.98	11	22.20	19	22.13	27	22.17
4	21.89	12	22.20	20	22.13	28	22.17
5	21.88	13	22.19	21	22.12	29	22.16
6	21.88	14	22.19	22	22.12	30	22.16
7	21.88	15	22.18	23	22.17	31	22.16
8	21.86	16	22.18	24	22.17		

139.47.6aaa. U. S. Geol. Survey. Records available: 1949-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 18	19.90	Apr. 1	19.22	May 12	19.13	Dec. 2	19.44
25	19.95	15	19.33	19	19.08	9	19.50
Mar. 3	19.10	22	19.33	26	18.92	16	19.50
10	19.15	29	19.33	June 3	18.85	23	19.45
17	19.16	May 6	19.16	Oct. 29	19.40	30	19.40
24	19.20						

139.48.7dcc1. City of Moorhead, supply well 4. Records available: 1947-50. Oct. 19, 167.60.

## Itasca County

146.27.26bd. Corps of Engineers, U. S. Army. Records available: 1943-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	20.19	Apr. 11	20.67	July 10	17.01	Oct. 9	18.69
10	19.45	17	20.39	18	16.92	16	18.69
17	19.53	25	20.55	31	16.95	23	18.89
24	19.65	May 1	20.48	Aug. 7	16.33	30	18.59
Feb. 2	20.19	8	20.34	13	16.69	Nov. 7	19.04
7	20.05	15	19.99	21	16.52	13	19.23
14	20.29	22	19.79	28	17.95	20	19.18
21	20.49	June 6	18.34	Sept. 5	18.17	27	19.48
28	20.49	12	18.29	11	17.98	Dec. 4	19.73
Mar. 6	20.69	19	17.94	18	17.99	11	19.33
13	20.69	26	17.33	25	18.39	18	19.51
20	20.69	July 3	17.34	Oct. 1	18.69	26	19.66
Apr. 3	21.49						

Morrison County

R-10. Camp Ripley Military Reservation. Records available: 1949-50. Jan. 10, 9.22; Feb. 1, 9.12; May 3, 9.17; May 12, 9.15. Measurement discontinued.

R-14. Camp Ripley Military Reservation. Records available: 1949-50. Jan. 10, 16.34; Feb. 1, 16.38; May 3, 14.01; May 12, 13.95. Measurement discontinued.

R-16. Camp Ripley Military Reservation. Records available: 1949-50. Jan. 10, 12.96; Feb. 1, 13.00; May 3, 12.96; May 12, 12.92.

St. Louis County

56.17.4. Herman A. Katola. Records available: 1943-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	6.69	Apr. 9	7.27	July 2	5.43	Oct. 8	6.00
8	6.75	16	7.09	9	5.21	16	5.91
15	6.81	23	5.73	16	5.46	22	5.98
22	7.00	30	5.80	23	5.45	29	6.14
29	7.11	May 7	4.50	30	5.89	Nov. 5	6.24
Feb. 5	7.18	11	5.21	Aug. 6	5.96	12	6.37
12	7.21	14	4.43	13	6.20	19	6.42
19	7.26	18	5.54	20	6.44	26	6.52
26	7.30	21	4.32	27	6.59	Dec. 3	6.60
Mar. 5	7.35	26	4.34	Sept. 3	6.73	10	6.69
12	7.60	June 4	4.73	10	7.00	17	6.76
19	7.49	11	5.21	17	7.06	24	7.39
26	7.50	18	5.54	24	6.33	31	6.92
Apr. 2	7.35	25	5.71	Oct. 1	6.54		

## MISSOURI

By J. B. Cooper

### Scope of Water-Level Program

Water-level measurements were made in 13 wells in Atchison County, in 1950 as part of the Tarkio Creek Valley observation-well program. Measurements of the observation well in Grundy County were continued on a weekly basis. The water levels in the two Phelps County wells were measured monthly by engineers from the Rolla office of the Surface Water Branch.

### Fluctuations of Water Levels

In the Grundy County well the low measurement of 8.60 feet below land-surface datum recorded on December 30 is the lowest on record. The year started with a measurement of 6.17 feet on January 8. The maximum fluctuation of water level was 3.94 feet with the highest reading of 4.66 feet occurring on March 5. The water level was 1.68 feet lower at the end of 1950 than at the end of 1949.

Fluctuations of water levels in wells in Atchison County, together with the other wells in the Tarkio Creek area, are discussed in the section of this volume that deals with Iowa.

### Well-Numbering System

The numbers assigned to the observation wells in Missouri show the location of the well according to the rectangular system for subdivision of public land. The system used is explained fully in the Iowa section of this report.

### Well Descriptions and Water-Level Measurements

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

#### Atchison County

##### Tarkio Creek area

66-40-13B1. Formerly 1. W. R. Marshall. Records available: 1934-48, 1950.  
Aug. 17, 8.58; Aug. 28, 8.87; Sept. 25, 10.18; Oct. 25, 8.48; Nov. 27, 3.35; Dec. 28, 9.47.

66-40-1N1. Formerly 2. H. W. Klutas. Records available: 1934-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 23	12.26	Apr. 25	10.02	July 21	9.30	Oct. 25	8.28
Feb. 23	9.79	May 22	9.22	Aug. 28	9.14	Nov. 27	9.48
Mar. 27	9.87	June 22	10.45	Sept. 25	9.55	Dec. 28	9.70
Apr. 20	10.00						

65-40-10R1. Formerly 20. U. S. Geol. Survey. Records available: 1937-50.

Jan. 23	21.10	Apr. 25	23.37	July 21	21.43	Sept. 25	23.72
Feb. 23	17.32	May 22	22.68	Aug. 17	21.40	Nov. 27	22.82
Mar. 27	20.36	June 22	21.86	28	20.39	Dec. 28	22.90
Apr. 20	22.76						

65-40-11E1. Formerly 21. U. S. Geol. Survey. Records available: 1937-50.

Jan. 23	19.89	Apr. 25	22.36	Aug. 17	20.71	Oct. 25	19.35
Feb. 23	21.56	May 22	22.32	28	20.36	Nov. 27	20.34
Mar. 27	21.89	July 21	21.05	Sept. 25	19.87	Dec. 28	21.43
Apr. 20	22.28						

66-40-35H1. Formerly 22. J. A. McAllister. Records available: 1937-50.

## 66-40-35H1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 23	11.85	Apr. 25	11.67	Aug. 28	11.04	Nov. 27	11.20
Mar. 27	11.40	May 22	11.24	Sept. 25	11.66	Dec. 28	11.32
Apr. 20	11.76	Aug. 17	11.95	Oct. 25	10.92		

## 66-40-26R1. Formerly 24. U. S. Geol. Survey. Records available: 1937-50.

Jan. 23	2.62	Apr. 25	3.49	Aug. 17	4.47	Oct. 25	4.33
Feb. 23	3.02	May 22	3.53	Aug. 28	4.49	Nov. 27	5.50
Mar. 27	3.27	July 21	6.55	Sept. 25	4.37	Dec. 28	4.55
Apr. 20	3.40						

## 66-40-12N2. Formerly 25. Edwin Rolf. Measurement discontinued. Records available: 1937-49.

## 66-40-12N1. Formerly 29. Edwin Rolf. Records available: 1937-48, 1950. Aug. 17, 14.00; Aug. 28, 16.76; Sept. 25, 15.79; Oct. 25, 10.86; Nov. 27, 12.88; Dec. 28, 13.24.

## 66-40-13D1. Formerly 31. W. F. Marshall. Records available: 1937-50.

Jan. 23	4.27	Apr. 25	4.47	July 21	2.61	Oct. 25	3.48
Mar. 27	4.36	May 22	4.08	Aug. 28	4.00	Nov. 27	3.90
Apr. 20	3.92	June 22	3.54	Sept. 25	4.14	Dec. 28	4.19

## 66-40-13C1. Formerly 32. W. F. Marshall. Records available: 1937-50.

Jan. 23	14.53	Apr. 25	14.60	July 21	12.00	Oct. 25	15.18
Feb. 23	13.60	May 22	13.07	Aug. 28	12.56	Nov. 27	12.87
Mar. 27	14.33	June 22	12.72	Sept. 25	12.99	Dec. 28	13.10
Apr. 20	14.48						

## 66-40-13C2. Formerly 33. W. F. Marshall. Records available: 1937-50.

Jan. 23	16.41	Apr. 25	16.17	July 21	16.18	Oct. 25	14.68
Feb. 23	14.19	May 22	14.09	Aug. 28	15.85	Nov. 27	16.04
Mar. 27	15.64	June 22	15.10	Sept. 25	16.22	Dec. 28	16.33
Apr. 20	16.10						

## 66-40-13B2. Formerly 34. W. F. Marshall. Records available: 1937-50.

Jan. 23	5.43	Apr. 25	6.31	Aug. 17	2.57	Oct. 25	6.99
Feb. 23	5.98	May 22	2.77	Aug. 28	4.07	Nov. 27	9.80
Mar. 27	5.76	June 22	3.76	Sept. 25	4.12	Dec. 28	4.57
Apr. 20	6.38	July 21	3.90				

## 66-40-13B3. Formerly 35. W. F. Marshall. Records available: 1937-50.

Jan. 23	19.89	Apr. 25	21.86	July 21	16.25	Oct. 25	14.55
Feb. 23	21.82	May 22	20.70	Aug. 28	18.56	Nov. 27	19.12
Mar. 27	19.57	June 22	18.04	Sept. 25	19.58	Dec. 28	21.22
Apr. 20	21.62						

## 66-40-13A1. Formerly 36. George Rolf. Records available: 1937-50.

Jan. 23	28.46	Apr. 25	30.08	July 21	26.95	Oct. 25	25.06
Feb. 23	28.51	May 22	30.14	Aug. 28	26.84	Nov. 27	24.60
Mar. 27	24.02	June 22	29.72	Sept. 25	26.52	Dec. 28	26.28
Apr. 20	30.00						

## Grundy County

## 61-24-17R1. Formerly U. S. 113. W. W. Brummitt. Formerly Wiley H. Estes. 105 E. Fourth St., Trenton. Records available: 1942-50.

Jan. 8	6.17	Apr. 9	5.04	July 9	5.54	Oct. 8	6.90
15	6.08	15	4.92	16	6.16	10	6.80
21	5.48	23	4.96	23	5.30	23	7.32
29	5.98	30	5.24	30	6.34	29	7.58
Feb. 4	5.54	May 6	5.28	Aug. 6	6.52	Nov. 5	7.67
13	5.08	14	5.46	14	6.88	12	7.26
19	5.20	21	5.18	20	6.32	19	7.82
27	5.36	28	5.50	28	6.84	26	7.90
Mar. 5	4.66	June 4	5.18	Sept. 4	6.62	Dec. 3	7.98
12	5.48	11	5.04	10	6.78	11	7.97
19	5.16	18	5.40	17	6.92	18	8.16
25	4.98	25	5.22	24	6.83	24	8.24
Apr. 2	5.02	July 1	5.30	Oct. 1	6.98	30	8.60

Phelps County37-10-13K1. Formerly U. S. 98. S. V. Allen. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 13, T. 37 N., R. 10 W.

Records available: 1942-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	7.07	Apr. 30	7.01	July 31	6.98	Oct. 31	7.67
Feb. 28	6.56	June 1	6.52	Aug. 31	7.17	Dec. 1	7.95
Mar. 31	6.90	July 2	6.99	Sept. 30	7.88		

37-10-24A1. Formerly U. S. 98A. Fred Pillman. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 24, T. 37 N., R. 10 W.

Records available: 1942-50.

Jan. 31	6.18	Apr. 30	5.97	July 31	8.77	Oct. 31	11.84
Feb. 28	4.76	June 1	4.21	Aug. 31	7.45	Dec. 1	12.50
Mar. 31	5.24	July 2	6.30	Sept. 30	10.51		

# NEBRASKA

By R. S. Brown and H. S. Unger

## Scope of Water-Level Program

The observation-well program in Nebraska, begun in 1934 in cooperation with the Conservation and Survey Division, University of Nebraska, was continued in 1950. Many of the well records in this report have been compiled as a part of the Missouri Basin Development program. Since 1945, the observation-well program has been supported in large part by Missouri Basin funds. As a result of this participation, the number of measurements made and the number of wells in which water-level measurements are obtained has been increased. Likewise, the cooperative test-drilling program has been expanded. Water level measurements for wells not listed in this report but which have been published in previous water-level reports are kept in open file pending publication in other forms. Measurements of water levels made in 368 wells are given in this report. The following organizations cooperated informally: Fish and Wildlife Service in Garden County, Central Nebraska Public Power and Irrigation District in Lincoln County, Platte Valley Public Power and Irrigation District in Keith County, and the State Department of Roads and Irrigation in Morrill County.

## Precipitation

The average annual precipitation in Nebraska in 1950 was 22.21 inches, 0.52 inches below normal and 3.15 inches below that of 1949.

## Pumpage

The following tables give the total pumpage for the public supplies of Lincoln and Grand Island. The Lincoln public supply is pumped from 12 wells in the flood plain of the Platte River about 3 miles north of Ashland. Pumping began in August 1932, and by the end of 1950 a total of approximately 59,868 million gallons of water had been withdrawn from the ground-water reservoir. The public supply at Grand Island is pumped from a group of wells in the Platte Valley in sands and gravels of Pleistocene age.

Monthly pumpage, in millions of gallons, for the public supply of Lincoln

	1932	1933	1934	1935	1936	1937	1938
Jan. ....	204.2	136.6	181.1	186.2	203.8	208.7	
Feb. ....	187.0	164.2	167.2	193.0	190.7	192.2	
Mar. ....	205.0	188.5	199.2	204.4	200.6	211.1	
Apr. ....	210.0	194.8	193.6	188.8	158.5	189.5	
May ....	213.8	236.0	188.7	234.8	262.9	216.4	
June ....	263.6	249.9	192.0	296.4	254.5	245.8	
July ....	212.6	308.9	236.9	334.5	322.5	304.9	
Aug. 98.5	197.2	278.1	255.8	319.8	317.7	298.9	
Sept. 186.1	169.4	206.5	181.3	228.2	297.6	201.6	
Oct. 204.9	132.6	176.9	154.0	236.4	204.8	207.2	
Nov. 201.8	106.4	196.6	90.1	209.2	217.1	116.3	
Dec. 203.2	133.9	171.7	182.9	201.2	188.8	141.1	
Total	894.5	2,235.7	2,508.7	2,228.8	2,832.9	2,619.5	2,533.7

	1939	1940	1941	1942	1943	1944
Jan. ....	196.1	195.8	193.4	198.5	248.2	281.4
Feb. ....	185.6	182.8	181.2	178.4	227.6	246.1
Mar. ....	212.9	193.9	195.1	199.3	253.5	274.0
Apr. ....	223.7	177.1	173.8	213.8	246.9	274.3
May ....	284.6	246.5	289.2	243.4	290.0	297.2
June ....	267.4	290.7	286.3	292.4	324.6	353.1
July ....	325.0	374.3	387.4	372.5	379.8	381.0
Aug. ....	300.6	290.7	377.8	399.8	377.1	361.0
Sept. ....	324.3	314.1	277.0	269.3	334.0	343.3
Oct. ....	232.7	264.4	201.2	234.1	304.8	327.1

Monthly pumpage, in millions of gallons, for the public supply of Lincoln--Continued

	1939	1940	1941	1942	1943	1944
Nov.	222.8	170.8	197.7	200.5	237.4	291.4
Dec.	203.4	201.5	205.3	241.8	263.9	307.5
Total	2,979.1	2,902.3	2,980.4	3,043.8	3,487.8	3,737.4

	1945	1946	1947	1948	1949	1950
Jan.	310.1	286.9	329.1	333.3	362.0	341.7
Feb.	283.9	259.8	299.0	309.8	325.7	311.5
Mar.	317.7	288.3	333.8	334.8	355.8	340.5
Apr.	313.3	330.7	325.5	213.7	361.1	339.4
May	319.6	327.2	335.0	356.7	381.3	369.7
June	312.1	353.0	326.7	349.4	374.2	391.8
July	365.6	374.2	375.4	407.2	412.9	403.7
Aug.	361.0	340.0	399.5	409.3	416.3	398.6
Sept.	334.7	341.8	380.2	392.1	398.0	394.1
Oct.	324.0	341.3	384.7	392.8	344.2	400.9
Nov.	311.5	312.8	313.8	361.1	355.5	333.9
Dec.	291.9	312.5	325.8	363.0	351.4	319.1
Total	3,845.4	3,868.3	4,108.5	4,223.0	4,438.4	4,219.9

a Plant shut down 1 week.

Average daily pumpage, in millions of gallons, for public supply of Lincoln

	1937	1938	1939	1940	1941	1942	1943
1932	5.84	7.72	1942	8.34	1947	11.25	
1933	6.12	6.94	1943	9.53	1948	11.54	
1934	6.87	8.16	1944	10.20	1949	12.16	
1935	6.10	7.95	1945	10.54	1950	11.56	
1936	7.76	8.11	1946	10.60			

Monthly pumpage, in millions of gallons, for public supply of Grand Island

	1936	1937	1938	1939	1940	1941	1942	1943
Jan.	133.8	93.0	98.9	107.4	125.7	100.6	126.0	156.6
Feb.	95.6	83.3	88.2	89.7	99.8	82.5	88.4	151.6
Mar.	111.8	96.7	112.5	108.5	100.9	108.1	132.5	177.0
Apr.	154.3	131.3	140.7	154.8	144.8	111.1	128.9	212.3
May	172.8	165.1	162.2	195.8	190.6	159.7	137.2	223.6
June	215.1	173.6	181.9	209.8	229.2	134.9	251.9	244.3
July	291.2	236.3	242.4	248.2	245.6	254.5	225.1	301.3
Aug.	241.0	239.3	189.8	251.1	240.6	251.3	250.4	299.6
Sept.	194.6	194.7	199.0	241.5	198.8	174.3	202.3	250.1
Oct.	153.6	163.0	191.4	192.2	172.8	148.4	198.4	235.2
Nov.	104.2	139.3	135.7	144.1	132.6	134.7	168.9	188.9
Dec.	104.4	101.6	112.2	131.6	118.4	131.1	161.3	189.4
Total	1,972.4	1,817.2	1,854.9	2,074.5	1,999.8	1,791.2	2,071.3	2,629.9

	1944	1945	1946	1947	1948	1949	1950
Jan.	189.7	228.1	210.3	218.3	216.5	240.3	226.3
Feb.	178.3	209.3	196.5	195.5	190.3	224.0	213.3
Mar.	209.6	269.3	218.7	230.6	209.6	238.6	233.5
Apr.	196.1	205.9	258.0	251.9	252.7	238.9	263.6
May	224.9	213.4	247.7	298.2	273.8	246.3	273.8
June	228.7	225.0	304.4	238.5	278.2	261.4	357.8
July	275.2	289.5	342.4	322.5	345.8	385.2	316.9
Aug.	320.6	288.3	354.8	399.6	311.7	360.2	322.7
Sept.	234.8	271.8	250.6	314.2	317.0	280.8	313.4
Oct.	228.8	231.7	245.7	244.8	268.4	253.2	286.5
Nov.	227.0	215.6	211.5	206.5	216.4	222.9	240.8
Dec.	223.6	214.2	217.6	213.0	222.6	226.5	238.8
Total	2,737.3	2,860.1	3,058.2	3,133.6	3,103.0	3,178.3	3,287.4

Average daily pumpage, in millions of gallons, for public supply of Grand Island

1918	a1.64	1927	a2.12	1935	5.34	1943	7.20
1919	a1.53	1928	a2.51	1936	5.41	1944	7.50
1920	a1.44	1929	3.65	1937	5.00	1945	7.84
1921	a1.59	1930	3.52	1938	5.08	1946	8.38
1922	a1.76	1931	4.16	1939	5.68	1947	8.58
1923	a1.83	1932	4.11	1940	5.47	1948	8.48
1924	a2.04	1933	4.90	1941	4.90	1949	8.71
1925	a2.15	1934	5.72	1942	5.67	1950	9.01
1926	a2.29						

a Does not include water pumped for condenser use at municipal electric plant.

### Well-Numbering System

The well-numbering system adopted in the Missouri Basin is now being used in Nebraska. The State has been divided into two principal divisions. The numbers of wells east of the sixth principal meridian, which passes through Columbus, are preceded by the capital letter A. Those west of Columbus have no preceding letter. The first number indicates the township, the second the range, and the third the section. The lower-case letters, which follow the section number, indicate the position of the well within the section, the first letter indicating the quarter section and the second letter the quarter-quarter section. The letters a, b, c, and d are applied in counterclockwise direction beginning with a in the northeast quadrant. The last numeral indicates the serial number of the well within the tract of land indicated by the last letter. No number is shown unless more than one well is within the given tract of land.

### Well Descriptions and Water-Level Measurements

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

#### Adams County

5-9-9dc. D. McClary. Drilled irrigation well, diameter 18 inches, Records available: 1947-50. Jan. 27, 37.28; Mar. 24, 37.25; June 9, 36.84; July 28, 36.55; Sept. 20, 36.55; Dec. 4, 37.42.

5-11-10bc. University of Nebraska. Highest water level 8.65, July 28. Records available: 1937-38, 1940-41, 1946-50. Jan. 27, 9.55; Mar. 24, 9.55; June 9, 9.04; July 28, 8.65; Dec. 4, 9.63.

6-9-4cb. Larson. Highest water level 102.76, Dec. 4. Drilled irrigation well, diameter 18 inches. Records available: 1947-50. Jan. 26, 102.82; Mar. 24, 102.90; June 9, 102.94; July 28, 102.85; Sept. 20, 102.81; Dec. 4, 102.76.

6-10-23bb. University of Nebraska. Records available: 1936-40, 1942, 1946-50. Jan. 27, 7.57; Mar. 24, 7.45; June 9, 4.24; July 28, 3.41; Sept. 20, 3.84; Dec. 4, 5.50.

6-11-22cc. Owner unknown. Drilled irrigation well, diameter 18 inches. Highest water level 90.30, Mar. 24; lowest, 91.03, Sept. 20 and Dec. 4. Records available: 1950. Mar. 24, 90.30; June 9, 90.90; July 28, 90.67; Sept. 20, 91.03; Dec. 4, 91.03.

7-9-12dc. Eugene Halloran. Drilled irrigation well, diameter 24 inches. Highest water level 110.84, June 9. Records available: 1948-50. Jan. 27, 110.90; Mar. 24, 110.94; June 9, 110.84; Sept. 25, 110.98; Dec. 5, 111.14.

7-10-23ab. Henry Fricke. Near Hastings. Records available: 1934-38, 1948-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	102.03	102.03	101.97	101.93	101.77	101.80	102.15	102.17	101.92	101.73	101.67	.....
2	101.99	102.03	101.94	101.86	101.75	101.84	102.08	102.13	101.90	101.81	101.65	.....
3	102.05	102.00	101.93	101.90	101.78	101.83	102.17	102.10	102.02	101.74	101.65	.....
4	102.08	102.00	101.93	101.90	101.77	101.80	102.13	102.12	102.04	101.71	101.57	101.55
5	102.04	101.98	101.92	101.89	101.89	101.74	102.07	102.08	102.06	101.65	101.65	101.55
6	102.05	101.99	101.87	101.83	101.86	101.84	102.12	101.97	101.90	101.75	101.65	101.48
7	102.00	101.98	102.06	101.86	101.84	101.90	102.07	101.95	102.02	101.73	101.58	101.42
8	101.97	101.99	102.01	101.86	101.80	101.90	102.03	101.96	102.03	101.72	101.64	101.46
9	101.96	101.97	101.93	101.78	101.84	101.95	102.05	101.97	101.96	101.66	101.64	101.47
10	102.06	101.98	101.92	101.94	101.89	102.05	102.05	102.05	102.02	101.70	101.60	101.46
11	101.95	101.97	101.94	101.93	101.88	101.93	102.02	102.18	101.95	101.73	101.57	101.44
12	101.98	101.98	101.92	101.86	101.84	102.00	102.07	102.14	101.98	101.69	101.58	101.43



7-10-23ab--Continued.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
13	101.97	101.98	101.90	101.84	101.85	102.10	102.07	102.08	101.96	101.64	101.58	101.43
14	101.87	101.97	101.90	101.81	101.85	102.08	101.98	102.05	101.92	101.67	101.53	101.46
15	101.97	101.98	101.93	101.81	101.87	102.11	102.00	102.16	101.87	101.64	101.66	101.47
16	101.93	101.96	101.92	101.82	101.89	102.03	102.00	102.14	101.87	101.68	101.65	101.46
17	101.92	102.02	101.93	101.80	101.90	101.96	102.03	102.18	101.87	101.66	101.54	101.45
18	101.98	102.02	101.92	101.86	101.89	101.94	101.98	102.03	101.84	101.65	101.53	101.41
19	101.98	101.94	101.91	101.86	101.89	101.98	101.98	102.00	.....	101.68	101.64	101.45
20	101.95	101.91	101.87	101.81	101.87	101.99	101.95	101.95	.....	101.64	101.64	101.42
21	101.93	101.97	101.89	101.78	101.82	102.08	101.94	101.98	101.84	101.65	101.57	101.41
22	101.93	101.95	101.89	101.78	101.85	102.10	102.02	101.99	101.80	101.65	101.54	101.41
23	101.88	101.99	101.90	101.80	101.94	102.15	101.97	102.07	101.78	101.65	101.64	101.43
24	101.87	101.99	101.93	101.84	101.96	102.14	102.03	102.00	101.78	101.67	101.55	101.44
25	101.97	102.00	101.85	101.84	101.93	102.05	101.92	102.00	101.74	101.63	101.57	101.52
26	101.97	101.97	101.91	101.84	101.90	102.13	101.90	101.96	101.72	101.63	101.54	101.52
27	101.98	101.97	101.92	101.83	101.87	102.10	101.92	101.92	101.77	101.63	101.54	101.43
28	102.11	101.98	101.95	101.79	101.87	102.12	102.00	101.93	101.77	101.64	101.55	101.40
29	102.11		101.95	101.84	101.80	102.09	102.07	101.93	101.70	101.61	101.52	101.43
30	102.03		101.91	101.83	101.80	102.12	102.10	101.88	101.71	101.59	.....	101.40
31	102.02		101.94		101.84		102.17	101.87		101.58		101.45

7-11-3cb. Katzberg. Drilled irrigation well, diameter 18 inches. Highest water level 111.22, Sept. 25. Records available: 1947-50. Mar. 24, 111.40; June 9, 111.48; July 28, 111.27; Sept. 25, 111.22; Dec. 5, 111.68.

7-12-15ca. R. Karr. Drilled irrigation well, diameter 18 inches. Highest water level 96.08, Sept. 25. Records available: 1947-50. Jan. 27, 96.66; Mar. 23, 96.58; June 8, 96.30, July 27, 96.10; Sept. 25, 96.08; Dec. 5, 96.14.

8-9-14ac. C. Anderson. Drilled unused irrigation well, diameter 18 inches. Highest water level 109.33, July 29. Records available: 1948-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	.....	.....	110.64	110.10	109.88	.....	109.58	109.64	.....
2	.....	.....	.....	109.76	109.55	.....	109.53	109.65	.....
3	.....	.....	.....	110.10	109.65	.....	109.56	109.48	.....
4	.....	.....	.....	110.30	109.64	.....	109.60	109.35	.....
5	.....	.....	.....	110.36	110.02	.....	109.62	.....	.....
6	.....	110.10	109.35	110.16	.....	.....	109.67	.....	101.52
7	.....	110.06	110.35	109.77	.....	.....	109.65	.....	.....
8	.....	110.13	110.58	.....	.....	.....	109.45	.....	.....
9	.....	110.03	110.39	.....	.....	109.75	109.54	.....	.....
10	.....	110.04	110.12	.....	.....	109.99	109.59	.....	.....
11	.....	109.96	110.17	.....	109.92	109.79	109.54	.....	.....
12	110.25	110.02	110.20	.....	109.76	109.48	109.76	.....	.....
13	110.11	110.16	110.13	.....	109.63	109.54	109.76	.....	.....
14	110.20	110.23	109.90	.....	109.67	109.70	109.53	.....	.....
15	.....	.....	109.98	.....	109.75	109.66	109.38	.....	.....
16	.....	.....	110.07	.....	109.80	109.83	109.49	.....	.....
17	.....	.....	110.00	.....	109.86	109.81	109.69	.....	.....
18	.....	.....	110.21	.....	109.66	109.68	109.64	.....	.....
19	.....	.....	110.12	.....	109.85	109.74	109.59	.....	.....
20	.....	.....	110.00	.....	109.87	109.62	109.65	.....	.....
21	.....	.....	110.05	109.61	109.78	109.65	109.63	.....	.....
22	.....	110.14	110.07	109.63	109.66	109.47	109.45	.....	.....
23	.....	110.36	109.82	109.62	109.56	.....	109.53	.....	.....
24	.....	110.48	110.04	109.98	109.86	.....	109.61	.....	.....
25	.....	110.63	109.91	109.99	110.01	.....	109.56	.....	109.91
26	109.99	110.66	109.46	109.98	109.99	.....	109.47	.....	109.87
27	109.65	110.31	110.08	110.05	.....	.....	109.41	.....	109.99
28	110.08	110.49	110.51	109.88	.....	.....	109.37	.....	110.06
29	110.22		110.63	109.98	.....	.....	109.33	.....	109.79
30	110.23		110.51	110.00	.....	109.55	109.35	.....	109.72
31	.....		110.08	.....	.....	.....	109.57	.....	.....

8-10-26da. Staltz. Drilled irrigation well, depth 162 feet. Highest water level 96.94, Sept. 25. Records available: 1948-50. Jan. 27, 96.97; Mar. 24, 96.97; June 9, 97.00; July 28, 96.97; Sept. 25, 96.94; Dec. 5, 97.30.

8-12-8ab. E. Woodman. Records available: 1946-50. Jan. 6, 7.65; Mar. 6, 7.53; May 11, 6.90; July 3, 6.86; Sept. 12, 6.61; Nov. 3, 6.74.

#### Antelope County

24-6-2aa. University of Nebraska. Highest water level 2.72, Apr. 7. Records available: 1934-42, 1944-50. Apr. 7, 2.72.

#### Banner County

19-54-15bb. Bert Rodgers. Drilled irrigation well, diameter 18 inches, depth 50 feet. Lowest water level 24.39, Oct. 19. Records available: 1949-50. Jan. 27, 23.41; Feb. 20, 23.38; Mar. 28, 23.39; May 9, 23.33; May 29, 23.19; Sept. 21, 24.10; Oct. 19, 24.39.

19-55-29ac. Fred Grant. Lowest water level 35.60, Aug. 20. Records available: 1934-42, 1949-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	31.75	May 9	33.39	July 17	35.05	Sept. 21	35.25
Feb. 20	32.13	29	33.68	Aug. 20	35.60	Oct. 19	34.74
Mar. 28	32.70	June 22	34.12				

#### Blaine County

22-24-33ca. University of Nebraska. Highest water level 1.04, Mar. 8. Records available: 1934-50.

Jan. 11	3.43	Apr. 4	2.30	Aug. 23	4.27	Oct. 18	3.96
23	3.31	May 4	2.89	Sept. 6	4.00	Nov. 16	3.89
Feb. 6	3.22	June 15	2.68	20	3.48	Dec. 13	3.66
23	2.89	July 12	4.24	Oct. 6	3.69	18	3.59
Mar. 8	1.04	Aug. 14	4.06	16	3.91	26	3.64

23-22-22cb. University of Nebraska. Records available: 1936-42, 1949-50. July 12, 16.12.

24-25-7aa. University of Nebraska. Records available: 1936-42. Measurement discontinued.

#### Boone County

18-7-4ca. University of Nebraska. Highest water level 10.82, July 24. Records available: 1937-42, 1948-50.

Jan. 5	13.94	Mar. 30	13.43	June 21	13.31	Oct. 23	13.35
Feb. 6	13.79	Apr. 27	13.73	July 24	10.82	Dec. 29	13.44
27	13.27	May 29	13.18	Aug. 21	14.33		

19-5-28cd. Lawrence Bryan. Highest water level 31.62, July 25. Records available: 1948-50.

Jan. 10	33.80	Mar. 28	33.21	June 22	33.13	Aug. 22	32.38
Feb. 9	33.56	Apr. 25	33.60	July 25	31.62	Oct. 24	33.14
Mar. 2	33.47	May 23	33.34				

19-8-16cc. C. J. Dresch. Highest water level 43.72, Aug. 21. Records available: 1948-50.

Jan. 5	44.54	Mar. 30	44.13	June 21	44.20	Oct. 23	44.07
Feb. 6	44.45	Apr. 27	44.16	July 24	43.78	Dec. 29	44.45
27	44.31	May 26	44.06	Aug. 21	43.72		

20-6-23bb. W. W. Redler. Highest water level 28.15, July 25. Records available: 1948-50.

Jan. 10	31.19	Mar. 28	30.42	June 22	29.66	Aug. 22	28.86
Feb. 2	31.45	Apr. 25	30.61	July 25	28.15	Oct. 24	29.13
Mar. 2	31.38	May 23	30.43				

21-7-26ca. University of Nebraska. Highest water level 14.13, Aug. 22. Records available: 1936-42, 1948-50.

## 21-7-26ca--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	16.96	Mar. 28	16.27	June 22	16.30	Aug. 22	14.13
Feb. 9	16.82	Apr. 26	16.30	July 25	14.26	Oct. 24	14.92
Mar. 2	16.81	May 23	16.13				

## Box Butte County

24-47-1db. U. S. Geol. Survey. Records available: 1946-50. Jan. 24, 11.39; Apr. 5, 11.27; Aug. 14, 11.94; Oct. 16, 11.96; Dec. 18, 11.84.

24-48-10bb. U. S. Geol. Survey. Lowest water level 12.26, Nov. 20-23. Records available: 1946-50.

## Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
1	11.24	11.35	11.44	11.53	11.64	11.65	11.58	11.40	.....	11.89	12.17
2	11.24	11.35	11.44	11.53	11.64	11.65	11.57	11.40	.....	11.91	12.17
3	11.25	11.36	11.44	11.53	11.64	11.65	11.57	11.40	.....	11.92	12.17
4	11.25	11.36	11.45	11.55	11.63	11.65	11.57	11.40	.....	11.93	12.17
5	11.26	11.37	11.45	11.56	11.63	11.65	11.56	11.40	.....	11.94	12.17
6	11.26	11.37	11.46	11.57	11.63	11.65	11.55	11.40	.....	11.96	12.18
7	11.27	11.37	11.47	11.57	11.64	11.66	11.55	11.40	.....	11.97	12.18
8	11.27	11.38	11.47	11.57	11.64	11.66	11.54	11.47	.....	11.98	12.19
9	11.27	11.38	11.47	11.58	11.65	11.66	11.53	11.41	.....	11.98	12.19
10	.....	11.38	11.48	11.58	11.65	11.66	11.52	11.21	.....	12.00	12.20
11	.....	11.38	11.48	11.58	11.65	11.65	11.52	11.21	.....	12.01	12.21
12	.....	11.39	11.48	11.59	11.65	11.64	11.51	.....	.....	12.02	12.21
13	.....	11.39	11.49	11.59	11.64	11.63	11.50	.....	.....	12.02	12.21
14	.....	11.40	11.49	11.59	11.64	11.63	11.50	.....	.....	12.03	12.21
15	.....	11.40	11.49	11.60	11.64	11.63	11.49	.....	.....	12.04	j12.22
16	.....	11.41	11.50	11.60	11.64	11.63	11.48	.....	.....	12.06	j12.23
17	.....	11.41	11.50	11.61	11.63	11.63	11.47	.....	.....	12.07	j12.24
18	.....	11.41	11.50	11.62	11.63	11.63	11.46	.....	.....	12.07	j12.25
19	.....	11.41	11.51	11.62	11.63	11.63	11.44	.....	.....	12.08	j12.25
20	.....	11.42	11.51	11.62	11.64	11.63	11.43	.....	.....	12.09	12.26
21	.....	11.42	11.51	11.62	11.64	11.63	11.42	.....	11.70	12.10	12.26
22	.....	11.42	11.51	11.62	11.64	11.63	11.42	.....	11.72	12.11	12.26
23	.....	11.42	11.52	11.62	11.64	11.62	11.42	.....	11.73	12.11	12.26
24	.....	11.43	11.52	11.62	11.64	11.62	11.42	.....	11.77	12.12	.....
25	11.32	11.43	11.52	11.62	11.64	11.62	11.42	.....	11.78	12.13	.....
26	11.32	11.43	11.52	11.63	11.64	11.62	11.41	.....	11.81	12.13	.....
27	11.33	11.43	11.52	11.63	11.64	11.61	11.41	.....	11.83	12.14	.....
28	11.33	11.43	11.53	11.63	11.64	11.60	11.41	.....	11.85	12.15	.....
29	11.33		11.53	11.63	11.64	11.59	11.41	.....	11.86	12.16	.....
30	11.34		11.53	11.64	11.64	11.58	11.41	.....	11.88	12.16	.....
31	11.34		11.53		11.65		11.41	.....		12.17	

j Interpolated.

24-52-13cbb1. Dr. G. D. Shepard. Records available: 1938, 1940, 1942, 1944, 1946-50. Jan. 24, 78.54; Apr. 4, 77.51; Aug. 15, 77.88; Dec. 19, 77.53.

24-52-35aa. G. A. Bailey. Records available: 1938-41, 1946-50. Jan. 24, 97.95; Apr. 4, 97.69; Aug. 15, 97.86; Oct. 17, 97.17; Dec. 19, 97.67.

25-48-4dd. U. S. Geol. Survey. Highest water level 63.14, Jan. 25; lowest 64.23, Oct. 16. Records available: 1946-50. Jan. 25, 63.14; Apr. 5, 63.96; Aug. 15, 63.94; Oct. 16, 64.23; Dec. 18, 63.15.

25-48-30ad. Mrs. Effie A. Wells. Records available: 1938-42, 1944, 1946-47, 1949-50. Jan. 25, 12.98; Apr. 4, 13.06; Aug. 15, 13.65; Oct. 16, 13.35; Dec. 18, 13.55.

25-50-31ab. Martin Jacobsen. Highest water level 100.52, Jan. 23. Records available: 1934-42, 1944, 1946-50. Jan. 23, 100.52; Apr. 4, 102.69; Aug. 15, 102.51; Oct. 17, 102.38; Dec. 19, 102.37.

26-47-35dd. U. S. Geol. Survey. Formerly University of Nebraska. Drilled observation well, diameter  $1\frac{1}{2}$  inches. Lowest water level 13.81, Oct. 17. Records available: 1946-50. Jan. 25, 13.18; Apr. 5, 12.82; Aug. 15, 13.63; Oct. 17, 13.81; Dec. 18, 13.63.

26-50-12dc. Mrs. L. A. Rosenberg. Highest water level 100.46, Aug. 15. Records available: 1938-42, 1946-50. Apr. 5, 100.58; Aug. 15, 100.46; Oct. 17, 100.60; Dec. 18, 100.71.

26-51-25bcc1. O. T. Wilkins. Highest water level 95.46, Oct. 17. Records available: 1938-42, 1944, 1946-50. Jan. 24, 95.63; Apr. 4, 95.69; Aug. 15, 95.53; Oct. 17, 95.46; Dec. 18, 95.51.

26-52-10bc. G. E. Dyer. Records available: 1938-40, 1942, 1946-50. Jan. 24, 95.01; Aug. 15, 95.21; Oct. 17, 95.09; Dec. 18, 94.51.

27-47-23bad. J. F. Shramek. Records available: 1938-42, 1944, 1946-50. Jan. 25, 16.96; Mar. 5, 18.37; Aug. 15, 17.72; Oct. 17, 17.60; Dec. 18, 18.22.

27-49-21cb. E. S. Wildy. Records available: 1935-42, 1944-50. Jan. 25, 117.12; Apr. 5, 117.49; Aug. 15, 117.84; Oct. 17, 117.49; Dec. 18, 117.46.

27-51-6bb. Louis Homrighausen. Highest water level 219.80, Oct. 17; lowest 223.43, Jan. 24. Records available: 1946-50. Jan. 24, 223.43; Apr. 4, 220.17; Aug. 15, 221.92; Oct. 17, 219.80; Dec. 19, 221.89.

28-51-6dd. University of Nebraska. Highest water level 1.62, Jan. 24. Records available: 1935-42, 1944-50. Jan. 24, 1.62; Apr. 4, 1.70; Aug. 15, 3.29; Oct. 17, 2.84; Dec. 19, 2.06.

#### Brown County

30-21-19cc. Consumers Public Power District. Drilled unused domestic well. Land-surface datum 2,510.87 feet above msl. Stevens Type F 8-day recording gage installed Apr. 6. Records available: 1947-50. Feb. 7, 38.56, tape measurement. Mar. 28, 38.41, tape measurement.

Daily lowest daily water level, from recorder graph

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	38.34	38.26	38.27	38.11	.....	37.98	37.85	.....
2	.....	38.38	38.28	38.23	38.11	.....	37.99	37.86	.....
3	.....	38.36	38.27	38.20	38.12	.....	37.98	37.85	.....
4	.....	38.34	38.25	38.24	38.14	.....	37.96	37.81	.....
5	.....	38.36	38.23	38.20	.....	38.04	37.96	37.84	.....
6	38.36	38.38	38.23	38.20	.....	38.03	37.99	37.83	.....
7	38.41	38.39	38.25	38.18	.....	38.03	37.99	.....	.....
8	38.40	38.36	38.27	38.21	38.22	38.03	37.97	.....	.....
9	38.36	38.34	38.25	38.18	38.19	38.03	37.97	.....	.....
10	38.36	38.34	38.25	38.18	38.10	38.03	.....	.....	.....
11	38.36	38.32	38.23	38.18	38.11	38.03	37.94	.....	.....
12	38.36	38.33	38.23	38.22	38.11	38.03	37.94	.....	.....
13	38.36	38.31	38.25	38.18	38.06	38.03	37.94	h37.78	.....
14	38.34	38.30	38.28	38.28	38.11	38.02	37.94	.....	.....
15	38.34	38.33	38.32	38.18	38.09	38.02	37.92	.....	.....
16	38.34	.....	38.24	38.20	38.09	38.02	37.96	.....	.....
17	38.34	38.33	38.27	38.17	38.08	38.03	.....	.....	.....
18	38.34	38.33	38.32	38.17	38.06	38.02	37.88	.....	.....
19	.....	38.33	38.23	38.15	38.06	38.01	37.88	.....	.....
20	.....	.....	38.23	38.15	38.05	38.04	37.86	.....	.....
21	.....	.....	38.23	38.14	38.05	38.03	37.87	.....	.....
22	.....	.....	38.24	38.14	38.04	38.00	37.86	.....	.....
23	.....	38.30	38.27	38.14	38.04	38.00	37.86	.....	.....
24	38.36	38.30	38.23	38.16	38.07	38.03	37.87	.....	.....
25	38.34	38.30	38.26	38.13	38.09	37.99	37.85	.....	h37.59
26	38.37	38.28	38.24	38.13	38.04	37.97	.....	.....	h37.62
27	38.36	38.26	38.22	38.12	38.03	38.00	.....	.....	.....
28	38.36	38.26	38.22	38.12	38.03	37.98	.....	.....	.....
29	38.34	38.26	38.20	38.16	38.03	38.01	.....	.....	.....
30	38.34	38.26	38.26	38.12	38.02	38.04	37.83	h37.68	.....
31	.....	38.27	.....	38.14	38.02	.....	37.85	.....	.....

h Tape measurement.

30-22-19aa. Roy Snyder. Drilled stock well, diameter 6 inches, depth 63 feet. Stevens Type F 8-day recording gage installed Aug. 21. Highest water level 36.19, Dec. 13-14. Records available: 1947-50. Feb. 8, 37.82, tape measurement; Mar. 29, 37.35, tape measurement.

30-22-19aa--Continued.

Daily lowest water level, from recorder graph

Day	May	Aug.	Sept.	Oct.	Nov.	Dec.
1	h37.26	.....	36.53	36.45	36.33	36.22
2	.....	.....	36.52	36.50	36.34	36.23
3	.....	.....	36.51	36.50	36.34	36.23
4	.....	.....	36.51	36.49	36.33	36.24
5	.....	.....	36.52	36.45	36.30	36.27
6	.....	.....	36.52	36.44	36.32	36.27
7	.....	.....	36.52	36.46	.....	36.22
8	.....	.....	36.52	36.46	.....	36.21
9	.....	.....	36.52	36.45	.....	36.23
10	.....	.....	36.52	36.43	.....	36.23
11	.....	.....	36.52	36.43	.....	36.20
12	.....	.....	36.50	36.43	.....	36.20
13	.....	.....	36.50	36.42	36.28	36.19
14	.....	h37.96	36.50	36.41	36.27	36.19
15	.....	.....	36.49	36.41	36.30	36.20
16	.....	.....	36.50	36.41	36.30	36.20
17	.....	.....	36.50	36.39	36.28	36.20
18	.....	.....	36.48	36.39	36.25	36.20
19	.....	.....	36.48	36.40	36.27	.....
20	.....	.....	36.48	36.40	36.29	.....
21	.....	36.80	36.50	36.38	36.28	.....
22	.....	36.77	36.50	36.38	36.27	.....
23	.....	36.71	36.48	36.38	36.29	.....
24	.....	36.66	36.48	36.35	36.29	.....
25	.....	36.64	36.48	36.35	36.26	.....
26	.....	36.61	36.48	36.33	36.25	.....
27	.....	36.57	36.48	36.33	36.24	.....
28	.....	36.56	36.46	36.32	36.25	.....
29	h37.24	36.56	36.47	36.32	36.25	.....
30	.....	36.54	36.45	36.32	36.23	.....
31	.....	36.53	.....	36.32	.....	.....

h Tape measurement.

30-22-27dc. T. S. Bower. Records available: 1934-45, 1947-50. May 31, 15.08; June 27, 15.08; Sept. 11, 15.34; Oct. 9, 14.87; Oct. 31, 14.97.

30-23-13bc. M. A. Miles. Drilled irrigation well, diameter 18 inches. Highest water level 37.72, Nov. 1. Records available: 1941, 1944, 1947-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	38.36	May 1	38.14	June 28	37.96	Oct. 11	37.91
Mar. 22	38.27	29	38.03	Sept. 8	38.14	Nov. 1	37.72

30-23-21bc. U. S. Geol. Survey. Jetted observation well, diameter 3/4 inch, depth 12.6 feet. Land surface datum is 2,525.7 feet above mean sea level. Highest water level 2.22, Sept. 26; lowest 3.22, July 6. Records available: 1950. July 6, 3.22; Sept. 26, 2.22; Nov. 1, 2.75.

Buffalo County

8-16-12cc. M. M. Garvin. Records available: 1930, 1932-50. Jan. 3, 5.92; Mar. 1, 5.92; May 10, 5.75; July 5, 6.36; Sept. 13, 5.58; Nov. 7, 5.13.

8-17-1da. University of Nebraska. Records available: 1931-50. Jan. 4, 7.95; Mar. 1, 7.64; May 10, 6.70; July 5, 8.05; Sept. 6, 8.78; Nov. 7, 8.64.

9-13-5cb. F. M. Scott. Records available: 1930-50. Jan. 3, 18.25; Mar. 1, 18.14; May 1, 17.72; July 3, 17.34; Nov. 7, 18.84.

9-13-9cc. Smith. Records available: 1930-40, 1945-50. Jan. 3, 12.29; Mar. 1, 12.45; May 1, 12.18; July 3, 11.85; Sept. 13, 12.56; Nov. 7, 12.10.

9-14-1dc. U. S. Geol. Survey. Drilled observation well, diameter 8 inches, depth 37.5 feet. Highest water level 15.54, Aug. 14. Records available: 1946-50.

9-14-1dc--Continued.

Daily lowest water level, from recorder graph

Day	Jan.	Mar.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	17.12	16.95	16.55	16.35	16.22	15.72	16.47	16.78	16.62	16.50
2	17.11	16.95	16.53	16.35	16.23	15.72	16.47	16.83	16.62	16.55
3	17.09	16.87	16.55	16.37	16.24	15.66	16.51	16.83	16.67	16.55
4	17.10	16.87	16.55	16.35	16.25	15.63	16.53	16.82	16.68	16.57
5	17.11	16.85	16.65	16.29	16.27	15.62	16.56	16.73	16.58	16.61
6	17.11	16.83	16.65	16.28	16.27	15.62	16.57	16.73	16.64	16.59
7	17.11	16.85	16.66	16.27	16.25	15.62	16.62	16.76	16.62	16.49
8	17.10	16.85	16.60	16.30	16.23	15.62	16.68	16.78	16.63	16.52
9	17.06	16.84	16.62	16.30	16.21	15.60	16.73	16.75	16.67	16.55
10	17.11	16.78	16.63	16.30	16.12	15.58	16.77	16.75	16.67	16.55
11	17.11	16.78	16.62	16.28	16.06	15.57	16.81	16.75	16.59	16.49
12	17.11	16.78	16.57	16.28	16.03	15.56	16.82	16.75	16.60	16.49
13	17.06	16.78	16.55	16.24	16.02	15.56	16.83	16.70	16.60	16.48
14	17.09	16.79	16.52	16.27	15.97	15.54	16.83	16.73	16.55	16.50
15	17.09	16.80	16.52	16.25	15.91	15.60	16.80	16.70	16.63	16.51
16	17.09	16.80	16.52	16.29	15.90	15.71	16.82	16.71	16.63	16.51
17	17.09	16.80	16.52	16.29	15.92	15.81	16.83	16.71	16.60	16.51
18	17.09	16.80	16.49	16.28	15.87	15.90	16.81	16.67	16.55	16.50
19	17.08	.....	16.51	16.28	15.86	15.94	16.85	16.72	16.63	16.50
20	17.08	.....	16.48	16.25	15.85	15.93	16.80	16.70	16.63	16.48
21	17.09	.....	16.45	16.25	15.83	15.97	16.83	16.66	16.50	16.47
22	.....	.....	16.43	16.21	15.81	16.04	16.83	16.68	16.59	16.47
23	.....	.....	16.40	16.22	15.79	16.13	16.80	16.68	16.64	16.47
24	.....	.....	16.41	16.22	15.79	16.23	16.81	16.68	16.63	16.47
25	.....	.....	16.42	16.25	15.77	16.28	16.78	16.67	16.58	16.48
26	.....	.....	16.42	16.28	15.76	16.33	16.76	16.61	16.58	16.53
27	.....	.....	16.39	16.26	15.74	16.35	16.78	16.63	16.56	16.49
28	.....	.....	16.37	16.25	15.72	16.38	16.79	16.63	16.56	16.42
29	.....	.....	16.35	16.25	15.70	16.43	16.75	16.62	16.55	16.44
30	.....	.....	16.37	16.23	15.69	16.45	16.75	16.60	16.53	16.43
31	.....	.....	16.37	.....	15.72	16.46	.....	16.57	.....	16.42

9-14-13cb. Mrs. Maude E. Davis. Records available: 1930-50. Jan. 3, 18.18; Mar. 1, 18.22; May 10, 18.10; July 3, 18.15; Sept. 13, 17.96; Nov. 7, 17.93.

9-14-19dd. Robert D. Lewis. Records available: 1930-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	24.56	Apr. 29	24.38	July 29	23.95	Sept. 28	23.74
Feb. 28	24.59	May 29	23.35	Sept. 2	24.73	Nov. 1	24.91
Mar. 28	24.47	June 30	24.14				

9-14-34bb. C. Nicholson. Records available: 1930-50. Jan. 4, 11.20; Mar. 1, 10.97; May 10, 11.04; July 5, 12.80; Sept. 13, 12.31; Nov. 7, 11.57.

9-15-11cb. C. Aldeen. Records available: 1932-42, 1944-50. Jan. 4, 25.70; Mar. 1, 25.78; May 10, 25.62; July 5, 25.64; Sept. 13, 23.77; Nov. 7, 24.13.

9-15-34bb. J. Wolford. Records available: 1930-37, 1939, 1945-50. Jan. 4, 20.04; Mar. 1, 20.06; May 10, 20.47; July 5, 19.70; Sept. 13, 20.45; Nov. 7, 19.30.

9-17-31cd. U. S. Geol. Survey. Records available: 1946-50. Jan. 4, 11.30; Mar. 1, 12.32; May 10, 11.59; July 5, 10.75; Sept. 6, 10.51; Nov. 7, 10.21.

9-18-31cc. Mrs. Dworak. Drilled irrigation well, diameter 24 inches. Records available: 1946-50. Jan. 4, 11.32; Mar. 1, 11.12; May 8, 11.00; July 5, 10.96; Sept. 6, 10.74; Nov. 8, 11.18.

10-13-24bc. B. M. Bentley. Records available: 1930-40, 1944, 1946-50. Jan. 3, 23.27; Mar. 1, 23.18; May 1, 22.90; July 3, 22.60; Sept. 13, 21.03; Nov. 7, 25.00.

10-17-21cd. W. M. Buettner. Highest water level 27.23, Mar. 27. Records available: 1934-42, 1949-50.

Jan. 5	28.63	Mar. 27	27.23	July 17	28.39	Nov. 2	28.52
Feb. 7	28.52	May 4	28.22	Sept. 7	29.15	30	28.30
Mar. 1	28.52	June 9	28.19	Oct. 3	28.71		

Butler County

A14-3-8ba. University of Nebraska. Records available: 1940-42, 1946, 1948. No measurement made in 1950.

A16-1-14ad. Owner unknown. Drilled irrigation well, diameter 18 inches, depth 33 feet. Land-surface datum is 1,434.34 feet above msl. Records available: 1946-50. Aug. 28, 1946, 7.62. Mar. 3, 1947, 7.69. Mar. 24, 1948, 6.77. Apr. 19, 1949, 5.38. Mar. 7, 1950, 6.29.

A16-2-14cc. U. S. Geol. Survey. Driven observation well, diameter 1½ inches. Records available: 1946-50. Jan. 9, 4.79; Mar. 7, 4.88; May 3, 3.89; June 28, 4.52; Sept. 6, 5.13; Oct. 26, 5.05.

A16-3-1dc. A. J. Viglicky. Lowest water level 12.81, Oct. 26. Records available: 1946-50. Jan. 9, 12.38; Mar. 7, 11.29; May 3, 11.68; June 28, 12.23; Sept. 6, 12.34; Oct. 26, 12.81.

A17-4-28cd. E. J. Duda. Records available: 1946-50. Jan. 9, 21.52; Mar. 7, 20.70; May 3, 20.53; June 28, 21.10; Sept. 6, 21.46; Oct. 26, 21.68.

Chase County

5-36-7ba. U. S. Geol. Survey. Driven observation well, diameter 1½ inches. Lowest water level 16.86, Dec. 7. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 19	15.80	June 1	15.91	Aug. 11	16.17	Oct. 16	16.16
Mar. 1	15.81	July 11	16.29	Sept. 19	16.11	Dec. 7	16.86
Apr. 4	15.85						

5-37-4dad. U. S. Bureau of Reclamation. Highest water level 79.10, Dec. 28. Records available: 1949-50.

Jan. 18	86.17	June 1	85.99	Sept. 19	86.22	Dec. 7	81.93
Mar. 1	85.86	July 11	86.18	Oct. 16	86.20	28	79.10
Apr. 4	86.24	Aug. 11	86.14				

j Seepage from Enders Dam.

5-38-4aa. U. S. Bureau of Reclamation. Lowest water level 11.44, July 11. Records available: 1949-50.

Jan. 19	11.16	June 1	11.05	Aug. 11	11.39	Oct. 16	11.29
Mar. 1	11.10	July 11	11.44	Sept. 19	11.27	Dec. 7	11.21
Apr. 6	11.08						

6-37-32dc. U. S. Bureau of Reclamation. Highest water level 11.90, Dec. 31. Records available: 1948-50.

## Daily lowest water level, from recorder graph

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	18.87	18.89	18.86	.....	.....	19.19	19.14	18.84	16.46
2	.....	18.84	18.86	18.92	.....	.....	19.20	19.18	18.86	16.33
3	.....	18.81	18.88	18.92	.....	.....	19.21	19.17	18.86	16.22
4	.....	18.78	18.86	18.92	.....	.....	19.21	19.15	18.82	16.04
5	.....	18.76	18.84	18.92	.....	.....	19.21	19.11	18.78	15.98
6	.....	18.72	18.80	18.93	.....	.....	19.21	19.14	18.79	15.83
7	.....	18.75	18.80	18.97	.....	19.15	19.22	19.15	18.75	15.68
8	.....	18.75	18.79	18.99	.....	19.16	19.23	19.16	18.72	15.56
9	.....	18.74	18.80	19.02	.....	19.17	.....	19.14	18.72	15.40
10	.....	18.83	18.81	19.03	.....	19.18	.....	19.15	18.67	15.23
11	.....	18.83	18.80	19.02	19.17	19.18	19.23	19.16	18.57	15.02
12	.....	18.83	18.84	19.02	19.19	19.17	19.24	19.13	18.53	14.87
13	.....	18.83	18.83	19.05	19.19	19.17	19.24	19.13	18.48	14.70
14	.....	18.84	18.82	19.05	19.15	19.17	19.23	19.12	18.37	14.55
15	.....	18.85	18.82	19.07	19.18	.....	19.19	19.14	18.31	14.40
16	.....	18.85	18.85	19.07	19.18	.....	19.18	19.17	18.29	14.24
17	.....	18.83	18.85	19.00	19.16	.....	19.15	19.14	18.12	14.09
18	.....	18.87	18.85	19.00	19.19	19.19	19.15	19.14	18.02	13.92
19	.....	18.87	18.85	19.00	.....	19.21	19.17	19.16	17.92	13.76
20	.....	18.87	18.86	18.97	.....	19.21	19.16	19.14	17.88	13.61
21	.....	18.83	18.86	18.97	.....	19.19	19.17	19.15	17.74	13.47
22	.....	18.83	18.86	18.97	.....	19.19	19.16	19.16	17.64	13.30
23	.....	18.84	18.87	18.97	.....	19.22	19.15	19.16	17.56	13.14
24	.....	18.89	18.89	19.00	.....	19.24	19.15	19.21	17.45	13.00
25	.....	18.89	18.91	19.08	.....	19.24	19.14	19.20	17.30	12.81

6-37-32dc--Continued.

Daily lowest water level, from recorder graph

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	.....	18.90	18.89	19.08	.....	19.23	19.13	19.15	17.19	12.69
27	.....	18.90	18.82	19.07	.....	19.23	19.16	19.16	17.06	12.53
28	.....	18.90	18.83	19.09	19.08	19.24	19.15	19.08	16.92	12.36
29	.....	18.92	18.83	19.08	19.09	19.23	19.12	18.85	16.76	12.24
30	18.81	18.92	18.88	.....	19.12	19.22	19.13	18.76	16.60	12.10
31	18.87	.....	18.88	.....	.....	19.20	.....	18.78	.....	11.90

a Enders Dam officially closed this date and reservoir commenced filling. Subsequent water-level record shows effect.

7-38-28cc. Roy Hust. Drilled irrigation well, diameter 18 inches. Highest water level 75.07, Oct. 5, Nov. 4, and Dec. 28. Records available: 1944, 1948-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	75.32	75.34	75.38	75.39	75.25	75.22	75.17	75.20	75.14	75.17	75.18	.....
2	75.30	75.37	75.38	75.28	75.17	75.27	75.17	75.18	75.13	75.24	75.23	.....
3	75.36	75.33	75.32	75.40	75.22	75.28	75.19	75.12	75.14	75.22	75.23	.....
4	75.39	75.33	75.32	75.44	75.20	75.24	75.20	75.12	75.13	75.18	75.07	.....
5	75.41	75.26	75.32	75.44	75.30	75.16	75.20	75.13	75.14	75.07	75.15	.....
6	75.42	75.28	75.24	75.33	75.30	75.14	75.18	75.14	75.11	75.15	75.17	.....
7	75.32	75.29	75.44	75.31	75.34	75.23	75.25	75.15	75.11	75.18	75.09	75.08
8	75.29	75.34	75.43	75.31	75.26	75.25	75.13	75.16	75.12	75.18	75.18	75.18
9	75.22	75.28	75.35	75.25	75.30	75.26	75.17	75.16	75.09	75.14	75.22	75.22
10	75.41	75.28	75.33	75.42	75.33	75.28	75.17	75.14	75.14	75.16	75.17	75.21
11	75.33	75.25	75.37	75.43	75.32	75.22	75.14	75.11	75.13	75.19	75.09	75.12
12	75.33	75.32	75.37	75.34	75.25	75.13	75.22	75.12	75.12	75.16	75.13	75.09
13	75.33	75.33	75.35	75.35	75.24	75.17	75.22	75.12	75.15	75.12	75.12	75.10
14	75.24	75.29	75.31	75.30	75.20	75.21	75.10	75.11	75.13	75.15	75.08	75.15
15	75.40	75.31	75.35	75.28	75.22	75.26	75.13	75.12	75.12	75.09	75.24	75.15
16	75.33	75.29	75.33	75.29	75.24	75.24	75.17	75.15	75.13	75.18	75.23	75.16
17	75.33	75.33	75.28	75.27	75.26	75.20	75.20	75.20	75.13	75.14	75.08	75.15
18	75.40	75.35	75.36	75.34	75.19	75.22	75.15	75.16	75.13	75.14	75.03	75.13
19	75.45	75.28	75.34	75.35	75.28	75.22	75.16	75.18	75.13	75.19	75.24	75.14
20	75.36	75.21	75.31	75.32	75.25	75.17	75.19	75.14	75.14	75.13	75.23	75.13
21	75.35	75.37	75.33	75.22	75.25	75.17	75.20	75.10	75.19	75.11	75.16	75.13
22	75.31	75.37	75.32	75.21	75.19	75.11	75.17	75.08	75.16	75.15	75.21	75.12
23	75.29	75.25	75.31	75.20	75.17	75.14	75.17	75.09	75.16	75.13	75.23	75.13
24	75.33	75.26	75.32	75.31	75.25	75.15	75.20	75.14	75.14	75.17	.....	75.14
25	75.40	75.33	75.21	75.30	75.31	75.25	75.17	75.16	75.12	75.11	.....	75.17
26	75.45	75.33	75.26	75.32	75.25	75.27	75.15	75.14	75.08	75.12	.....	75.19
27	75.40	75.27	75.35	75.32	75.23	75.22	75.14	75.12	75.18	75.12	.....	75.10
28	75.31	75.34	75.45	75.26	75.20	75.25	75.11	75.14	75.17	75.14	.....	75.07
29	75.37	.....	75.47	75.32	75.21	75.22	75.12	75.15	75.08	75.12	.....	75.12
30	75.32	.....	75.46	75.30	75.27	75.18	75.13	75.12	75.14	75.08	.....	75.10
31	75.31	.....	75.39	.....	75.27	.....	75.19	75.13	.....	75.13	.....	75.14

## Cherry County

28-28-1cc. U. S. Geol. Survey. Jetted observation well, diameter  $\frac{3}{4}$  inch, depth 14 feet. Land-surface datum is 2,929.09 feet above mean sea level. Records available: 1950. Dec. 6, 5.28.

29-28-13aa. U. S. Geol. Survey. Driven observation well, diameter  $1\frac{1}{4}$  inches, depth 14 feet. Land-surface datum is 2,926.31 feet above mean sea level. Highest water level 1.97, June 1, 1950; lowest 4.50, Nov. 2, 1949. Records available: 1949-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 2, 1949	4.50	Apr. 27, 1950	3.50	June 29, 1950	2.78	Oct. 3, 1950	3.11
Dec. 12	4.44	May 12	2.11	Aug. 4	3.48	Dec. 6	3.83
Feb. 28, 1950	4.12	June 1	1.97	31	3.82		

30-28-1ad. U. S. Geol. Survey. Jetted observation well, diameter  $\frac{3}{4}$  inch, depth 10 feet. Land-surface datum is 2,878.14 feet above mean sea level. Highest water level 3.24, May 13; lowest 4.12, Jan. 27 and Dec. 11. Records available: 1950.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	4.12	Apr. 14	3.44	June 1	3.64	Oct. 3	3.74
Mar. 15	3.60	May 13	3.24	29	3.62	Dec. 11	4.12



30-28-36aa. U. S. Geol. Survey. Driven observation well, diameter  $1\frac{1}{4}$  inches, depth 12 feet. Land-surface datum is 2,896.36 feet above mean sea level. Highest water level 2.03, May 12, 1950; lowest 3.76, June 28, 1950. Records available: 1949-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 3, 1949	3.56	Apr. 27, 1950	2.35	June 28, 1950	3.76	Oct. 3, 1950	2.28
Dec. 2	2.95	May 12	2.03	Aug. 4	3.39	Dec. 6	2.58
Feb. 28, 1950	2.18	June 1	2.45	31	2.73		

30-29-14ac. U. S. Geol. Survey. Driven observation well, diameter  $1\frac{1}{4}$  inches, depth 14 feet. Land-surface datum is 2,927.06 feet above mean sea level. Highest water level 1.62, May 13; lowest 2.79, Dec. 7. Records available: 1949-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 2, 1949	2.55	May 13, 1950	1.62	July 10, 1950	2.40	Oct. 11, 1950	2.68
Mar. 14, 1950	2.19	June 6	2.08	Sept. 12	2.53	Dec. 7	2.79
Apr. 19	1.97						

30-29-22bb. U. S. Geol. Survey. Driven observation well, diameter  $1\frac{1}{4}$  inches, depth 12 feet. Land-surface datum is 2,950.42 feet above mean sea level. Highest water level 0.87, May 10, 1950; lowest 3.93, Oct. 28, 1949. Records available: 1949-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 28, 1949	3.93	May 10, 1950	.87	July 7, 1950	3.19	Sept. 12, 1950	3.64
Mar. 13, 1950	2.12	June 2	1.63	Aug. 4	3.54	Oct. 11	3.24

30-30-34cd. U. S. Geol. Survey. Jetted observation well, diameter  $\frac{3}{4}$  inch, depth 21 feet. Land-surface datum is 3,048.61 feet above mean sea level. Records available: 1950. Nov. 7, 7.55.

31-25-21bd. Incorrectly published as 31-25-20ad in previous reports. University of Nebraska. Highest water level 1.50, May 16. Records available: 1936-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 9	3.06	June 28	2.72	Sept. 28	3.05	Nov. 30	2.69
May 16	1.50	July 31	3.54	Oct. 30	2.95	Dec. 26	2.53
26	1.39	Aug. 30	3.64				

31-28-1ad. U. S. Geol. Survey. Jetted observation well, diameter  $\frac{3}{4}$  inch, depth 9 feet. Land-surface datum is 2,843.90 feet above mean sea level. Highest water level 0.42, May 9; lowest 3.35, Dec. 7. Records available: 1950.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	3.23	May 9	0.42	June 1	1.13	Oct. 3	3.12
Mar. 15	2.08	13	.79	29	2.15	Dec. 7	3.35
Apr. 14	.72						

31-28-31bb. U. S. Geol. Survey. Jetted observation well, diameter  $\frac{3}{4}$  inch, depth 11 feet. Records available: 1950. Dec. 27, 1.86.

32-27-18cb. U. S. Geol. Survey. Jetted observation well, diameter  $\frac{3}{4}$  inch, depth 17 feet. Land-surface datum is 2,781.30 feet above mean sea level. Highest water level 6.64, June 1; lowest 7.65, Mar. 15. Records available: 1950.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	7.47	Apr. 14	7.53	June 1	6.64	Dec. 7	7.28
Mar. 15	7.65	May 13	6.98	29	6.88		

33-27-17cb. University of Nebraska. Records available: 1936-48, 1950. June 6, 2.43.

No measurements made in 1950 in wells 34-27-31da, 34-31-3ad, 34-36-1dc, and 34-38-14bc.

### Cheyenne County

14-47-26cb. University of Nebraska. Records available: 1940-42, 1944, 1947, 1950. June 22, 19.51.

14-48-27cc. Frank Partrey. Drilled irrigation well, diameter 20 inches, reported depth 110.0 feet. Records available: 1950. June 24, 38.85.

14-49-34bb. Harry Brewer. Drilled irrigation well, diameter 18 inches, reported depth 100 feet. Records available: 1950. June 21, 24.58.

14-50-35ac. F. C. Mather Estate. Records available: 1934-40, 1942, 1944, 1947, 1950. June 22, 31.91.

14-52-5ca. Wm. Goding. Well 90 in previous reports. To convert water levels from assumed datum, as published in previous reports, to water levels below land-surface datum, subtract from 127.82. Lowest water level 29.89, June 22. Records available: 1934-40, 1950. June 22, 29.89.

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14-52-11ac. Earl Johnson. Drilled irrigation well, diameter 18 inches, reported depth 92 feet. Records available: 1950. June 24, 33.00.

Clay County

5-6-26bd. B. Wm. Merrill. Drilled unused domestic well, diameter 4 inches. Highest water level 76.05, June 7 and 8. Recorder removed. Records available: 1948-50. Measurement discontinued.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	76.12	76.12	76.14	76.10	76.11	76.09
2	76.11	76.12	76.14	76.09	76.10	76.09
3	76.11	76.12	76.13	76.11	76.09	76.08
4	76.11	76.12	76.12	76.11	76.09	76.07
5	76.11	76.12	76.11	76.12	76.10	76.06
6	76.11	76.13	76.10	76.12	76.10	76.06
7	76.13	76.13	76.13	76.09	76.12	76.05
8	76.12	76.14	76.13	76.09	76.11	76.05
9	76.13	76.14	76.13	76.08	76.10	76.07
10	76.13	86.15	76.13	76.10	76.10	76.15
11	76.13	76.15	76.12	76.10	76.10	76.15
12	76.11	76.14	76.12	76.10	76.09	76.15
13	76.12	76.14	76.12	76.10	76.08	76.16
14	76.11	76.14	76.12	76.09	76.07	76.16
15	76.13	76.14	76.11	76.10	76.07	76.17
16	76.13	76.14	76.11	76.10	76.07	76.18
17	76.13	76.14	76.10	76.11	76.07	76.17
18	76.14	76.14	76.09	76.10	76.10	.....
19	76.13	76.15	76.08	76.10	76.09	.....
20	76.12	76.14	76.08	76.09	76.10	.....
21	76.13	76.14	76.07	76.08	76.10	.....
22	76.12	76.13	76.08	76.08	76.09	.....
23	76.12	76.13	76.07	76.08	76.08	.....
24	76.12	76.13	76.07	76.09	76.10	.....
25	76.12	76.14	76.10	76.09	76.11	.....
26	76.12	76.14	76.10	76.09	76.10	.....
27	76.12	76.13	76.11	76.09	76.09	.....
28	76.12	76.14	76.12	76.09	76.08	.....
29	76.12		76.13	76.10	76.10	.....
30	76.12		76.13	76.11	76.09	.....
31	76.12		76.11		76.09	.....

j Interpolated.

Colfax County

A17-2-22dd. U. S. Geol. Survey. Records available: 1946-50. Jan. 11, 5.65; Mar. 7, 5.27; May 4, 4.56; June 29, 5.24; Sept. 7, 4.85; Oct. 27, 5.43.

A17-3-4cc. U. S. Geol. Survey. Driven observation well, diameter 1½ inches. Records available: 1946-50. Jan. 11, 5.92; Mar. 9, 5.02; May 4, 4.93; June 29, 5.81; Sept. 7, 5.71; Oct. 27, 5.75.

A17-3-23cc. U. S. Geol. Survey. Records available: 1946-50. Jan. 11, 4.85; Mar. 7, 3.69; May 4, 3.75; June 29, 4.42; Sept. 7, 4.85; Oct. 27, 4.77.

A17-4-4bb. E. Maxes. Records available: 1945-50. Jan. 9, 14.10; Mar. 7, 14.17; May 4, 13.90; June 29, 13.54; Sept. 7, 13.13; Oct. 27, 13.94.

Cuming County

A21-6-23bb. University of Nebraska. Highest water level 4.83, Apr. 12. Records available: 1934-44, 1946, 1948, 1950. Apr. 12, 4.83.

A22-6-4aa. Art Miller. Drilled irrigation well, diameter 18 inches, depth 52.0 Records available: 1950. Apr. 5, 9.45.

A22-6-34bd. City of West Point. Drilled public-supply well, diameter 18 inches, depth 42 feet. Records available: 1950. Apr. 5, 4.20.

A23-5-36bd. H. Albers. Drilled irrigation well, diameter 18 inches, depth 52 feet. Records available: 1950. Apr. 5, 9.92.

424-4-30ad. Harry Pumprey. Drilled irrigation well, diameter 18 inches, depth 42 feet. Records available: 1950. Apr. 5, 10. 42.

#### Custer County

13-21-36ca. Jack Lyons. Drilled irrigation well, diameter 18 inches, reported depth 123 feet. Highest water level 51.65, Nov. 30; lowest 51.90, Sept. 7. Records available: 1950. Sept. 7, 51.90; Oct. 3, 51.82; Nov. 2, 51.73; Nov. 30, 51.65.

16-23-35cb. University of Nebraska. Records available: 1936-42. No measurement made in 1950.

17-25-27cc. University of Nebraska. Records available: 1936-42. No measurement made in 1950.

18-17-4ac. Ben Tvrdik. Drilled irrigation well, diameter 32 inches, reported depth 108 feet. Land-surface datum is 2,274.18 feet above mean sea level. Highest water level 12.05, May 31; lowest 12.49, Sept. 28. Records available: 1950. Apr. 13, 12.35; May 31, 12.05; Sept. 28, 12.49.

19-17-9ca. R. E. Probert. Highest water level 68.66, Aug. 30. Records available: 1949-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	69.12	Apr. 26	69.02	Aug. 8	68.74	Sept. 28	68.73
Feb. 3	69.22	June 1	68.85	30	68.66	Nov. 1	68.69
Mar. 13	69.10	July 6	68.99				

19-18-9aa. Leonard Owen. Highest water level 11.16, Mar. 13. Records available: 1934-42, 1945, 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	12.42	Apr. 5	11.96	July 6	11.94	Sept. 28	11.76
Feb. 3	12.33	26	12.04	Aug. 9	11.37	Oct. 30	11.58
Mar. 13	11.16	June 1	11.30	29	11.48		

19-19-2bb. Ralph Slagel. Highest water level 16.55, Aug. 9; lowest 17.56, July 6. Records available: 1949-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	17.00	May 2	16.94	Aug. 9	16.55	Sept. 29	16.71
Feb. 3	17.07	June 1	17.00	31	16.62	Nov. 2	16.87
Apr. 5	17.05	July 6	17.56				

19-20-1cd. Frank Wells. Highest water level 11.74, June 1. Records available: 1949-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	12.12	May 2	11.85	July 6	12.07	Aug. 31	11.81
Feb. 6	12.11	June 1	11.74	Aug. 5	11.79	Oct. 9	11.94
Apr. 6	11.79						

20-20-30aa. Ted Holmes. Highest water level 32.27, Oct. 10. Records available: 1949-50. Jan. 3, 32.57; Feb. 6, 32.67; Apr. 5, 32.58; May 2, 32.60; June 1, 32.62; July 7, 32.69; Oct. 10, 32.27.

20-21-10bc. A. C. Turner. Highest water level 20.52, Jan. 3; lowest 21.94, Aug. 10. Records available: 1949-50. Jan. 3, 20.52; Apr. 27, 20.66; June 2, 20.93; Aug. 10, 21.94; Oct. 10, 20.89; Oct. 30, 21.09.

#### Dawes County

31-52-3dc. T. P. Moody. Records available: 1934-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	18.31	Apr. 1	18.85	June 29	18.25	Nov. 29	18.35
Feb. 1	18.87	May 1	18.85	July 29	18.65	Dec. 3	18.40
Mar. 2	18.85	30	18.06	Nov. 9	18.53	28	18.36

#### Dawson County

9-20-13bc. J. P. Brick. Records available: 1930-50. Jan. 4, 9.12; Mar. 2, 8.96; May 8, 7.80; July 5, 7.94; Sept. 6, 9.51; Nov. 8, 11.72.

9-21-24aa. University of Nebraska. Records available: 1931-43, 1945-50. Jan. 4, 3.74; Mar. 2, 3.47; May 8, 2.25; July 5, 3.18; Sept. 6, 2.64; Nov. 8, 3.57.

9-21-29bc. University of Nebraska. Records available: 1930-50. Jan. 4, 3.30; Mar. 2, 3.05; May 8, 2.50; July 5, 3.72; Sept. 7, 3.51; Nov. 8, 3.21.

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9-21-31da. University of Nebraska. Records available: 1930-50. Jan. 4, 9.22; Mar. 2, 9.02; May 8, 8.59; July 5, 8.60; Sept. 7, 8.68; Nov. 8, 9.14.

9-22-33aa. C. J. Magnuson. Highest water level 30.67, Dec. 7. Records available: 1949-50. Jan. 23, 32.30; Mar. 21, 32.18; June 6, 31.71; July 24, 31.65; Sept. 29, 31.05; Dec. 7, 30.67.

9-23-2dc. Leo Neil. Records available: 1945-50. Jan. 5, 16.22; Mar. 5, 16.18; May 10, 15.90; Sept. 11, 16.43; Nov. 2, 15.32.

9-23-21bb. Oscar Weissert. Highest water level 164.97, Dec. 7. Records available: 1949-50. Jan. 23, 167.23; Mar. 21, 166.81; June 6, 166.24; July 24, 166.09; Sept. 29, 165.72; Dec. 7, 164.97.

10-20-35bb. U. S. Geol. Survey. Records available: 1948-50. Jan. 4, 17.19; Mar. 2, 17.27; May 8, 17.22; July 5, 17.20; Sept. 6, 17.71; Nov. 8, 17.58.

10-21-31da. University of Nebraska. Records available: 1930-50. Jan. 4, 7.10; Mar. 2, 7.15; May 8, 6.94; July 5, 6.95; Sept. 7, 6.73; Nov. 8, 7.00.

10-22-29aa. University of Nebraska. Records available: 1931-43, 1945-50. Jan. 4, 4.08; Mar. 2, 3.82; May 8, 3.48; July 5, 4.04; Sept. 7, 5.18; Nov. 8, 5.13.

10-23-5bb. Vincent Ogorsolka. Records available: 1945-50. Jan. 5, 7.09; Mar. 3, 6.70; May 8, 6.09; July 6, 6.22; Sept. 7, 7.11; Nov. 9, 7.84.

10-23-29bb. U.S. Geol. Survey. Records available: 1946-50. Jan. 5, 6.86; Mar. 5, 6.64; May 10, 6.42; July 7, 7.05; Sept. 11, 6.21; Nov. 2, 6.77.

10-24-7bb. F. C. McDowell. Drilled irrigation well, diameter 18 inches. Records available: 1946-50. Jan. 6, 12.19; Mar. 5, 12.19; May 10, 11.88; July 7, 12.05; Sept. 11, 12.27; Nov. 2, 12.31.

11-19-4dd. Vermas. Lowest water level 55.38, Sept. 7. Records available: 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	55.26	May 4	54.88	Sept. 7	55.38	Nov. 2	54.18
Mar. 1	55.14	June 9	54.79	Oct. 3	55.29	30	54.98
27	54.93						

11-21-31dd. University of Nebraska. Records available: 1930-36, 1940-50. Jan. 4, 25.84; Mar. 2, 26.12; May 8, 26.46; July 5, 25.05; Sept. 6, 23.60; Nov. 8, 24.49.

11-23-23cc. U. S. Geol. Survey. Records available: 1946-50. Jan. 4, 3.70; Mar. 3, 3.00; May 8, 3.02; July 5, 3.10; Sept. 7, 2.90; Nov. 9, 2.69.

11-24-20ca. J. R. Owings. Records available: 1932, 1934-42, 1944-50. Jan. 5, 12.58; Mar. 3, 12.46; May 8, 12.01; July 6, 12.28; Sept. 7, 10.97; Nov. 9, 11.94.

11-25-21cc. E. D. Clark. Records available: 1930-42, 1944-50. Jan. 5, 9.20; Mar. 4, 9.62; May 10, 9.23; July 7, 5.70; Sept. 7, 8.00; Nov. 2, 8.89.

12-25-34cc. John H. Block. Records available: 1932, 1934-40, 1942, 1944-50. Jan. 5, 27.70; Mar. 3, 27.94; May 8, 28.15; July 6, 28.35; Sept. 7, 28.21; Nov. 9, 27.54.

## Deuel County

12-44-18bb. P. Nass. Drilled irrigation well, diameter 18 inches, reported depth 92 feet. Records available: 1950. June 20, 10.60.

13-45-23cb. Albert Williams. Drilled irrigation well, diameter 18 inches, reported depth 23 feet. Records available: 1950. June 20, 12.94.

13-46-3bb. Myron Carlson Ranches. Drilled domestic well, diameter 6 inches, depth 31.50 feet. Records available: 1950. June 21, 13.58.

## Dodge County

A17-6-6aa. University of Nebraska. Records available: 1936-42, 1944-50. Jan. 9, 2.59; Mar. 9, 1.48; May 3, 1.59; June 28, 2.50; Sept. 6, 2.00; Oct. 26, 2.37.

A17-8-16ad. City of Fremont. Records available: 1940-50. Jan. 9, 10.35; Mar. 9, 10.53; May 3, 10.58; June 28, 10.48; Sept. 6, 9.01; Oct. 27, 9.13.

A18-6-25cc. Owner unknown. Records available: 1947-50. Jan. 9, 9.22; Mar. 9, 8.60; May 3, 8.59; June 28, 8.24; Sept. 6, 6.80; Oct. 26, 8.12.

A18-8-28da. City of Fremont. Records available: 1940-50. Jan. 9, 64.45; Mar. 9, 64.36; May 3, 65.25; June 28, 65.26; Sept. 6, 64.23; Oct. 26, 64.17.

A19-7-10cb. State of Nebraska. Drilled unused public-supply well, diameter 12 inches, reported depth 60 feet. Records available: 1950. Apr. 14, 2.40.

A19-8-34ba. B. Havekost. Drilled irrigation well, diameter 18 inches, reported depth 133 feet. Records available: 1950. Apr. 4, 72.38.

### Dundy County

1-37-19ba. U. S. Geol. Survey. Lowest water level 14.47, Oct. 24. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	13.12	June 2	12.91	Aug. 10	14.01	Oct. 24	14.47
Feb. 28	12.59	July 12	13.83	Sept. 20	13.50	Dec. 8	13.66
Apr. 21	12.77						

1-37-31cd. U. S. Geol. Survey. Records available: 1946-50.

Jan. 17	4.97	Apr. 25	4.85	July 12	5.27	Oct. 24	5.45
Feb. 28	4.83	June 2	4.95	Sept. 20	5.44	Dec. 8	5.18

1-38-28da. Owner unknown. Drilled unused domestic well, diameter 5 inches. Records available: 1948-50.

Jan. 17	19.46	June 2	19.64	Aug. 10	19.56	Oct. 24	19.84
Mar. 1	19.39	July 12	19.55	Sept. 20	19.67	Dec. 8	19.88
Apr. 21	19.50						

1-39-21ac. Louis Krutsinger. Records available: 1935-43, 1946-50.

Jan. 17	5.32	June 2	5.21	Aug. 10	5.10	Oct. 24	5.35
Feb. 28	5.31	July 12	5.35	Sept. 20	5.40	Dec. 8	4.67
Apr. 21	5.13						

1-40-29bb. U. S. Geol. Survey. Highest water level 10.12, Aug. 22-23. Records available: 1946-50.

### Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	11.53	11.53	.....	11.45	11.50	11.55	11.80	12.01	10.25	10.44	10.76	10.94
2	11.53	11.53	.....	11.45	11.49	11.56	11.80	12.02	10.26	10.47	10.78	10.96
3	11.52	11.53	.....	11.45	11.49	11.57	11.81	12.01	10.29	10.48	10.79	10.96
4	11.52	11.53	.....	11.47	11.49	11.58	11.82	11.95	10.30	10.49	10.79	10.96
5	11.51	11.53	.....	11.47	11.49	11.58	11.83	11.87	10.31	10.47	10.79	10.98
6	11.52	.....	.....	11.47	11.50	11.59	11.83	11.80	10.32	10.47	10.81	10.98
7	11.52	.....	.....	11.45	11.51	11.60	11.84	11.75	10.34	10.51	10.81	10.97
8	11.53	.....	.....	11.45	11.51	11.60	11.85	11.70	10.36	10.52	10.83	10.97
9	11.53	.....	.....	11.45	11.51	11.61	11.86	11.65	10.37	10.52	10.84	10.98
10	11.52	.....	11.43	11.46	11.51	11.62	11.87	11.45	10.40	10.54	10.84	10.98
11	11.51	.....	11.43	11.47	11.50	11.62	11.87	11.09	10.42	10.55	10.83	10.97
12	11.52	.....	11.44	11.47	11.50	11.63	11.88	10.88	10.43	10.56	10.85	10.97
13	11.52	.....	11.45	11.47	11.49	11.64	11.88	10.68	10.45	10.56	10.85	10.98
14	11.52	.....	11.44	11.47	11.48	11.65	11.89	10.54	10.47	10.57	10.84	10.98
15	11.52	.....	11.44	11.47	11.48	11.66	11.90	10.33	10.47	10.58	10.87	10.99
16	11.52	.....	11.44	11.47	11.48	11.67	11.91	10.24	10.40	10.60	10.88	11.00
17	11.52	.....	11.44	11.47	11.48	11.68	11.92	10.19	10.32	10.61	10.87	11.00
18	11.54	.....	11.44	11.47	11.48	11.68	11.92	10.16	10.27	10.62	10.87	11.00
19	11.55	.....	11.45	11.47	11.48	11.69	11.93	10.14	10.26	10.64	10.88	11.01
20	11.55	.....	11.45	11.47	11.49	11.70	11.94	10.14	10.25	10.65	10.90	11.01
21	11.55	.....	11.45	11.47	11.50	11.70	11.94	10.13	10.27	10.66	10.90	11.02
22	11.54	.....	11.45	11.47	11.50	11.71	11.95	10.12	10.28	10.67	10.90	11.02
23	11.54	.....	11.45	11.47	11.50	11.72	11.95	10.12	10.30	10.68	10.92	11.02
24	11.53	.....	11.45	11.47	11.50	11.73	11.96	10.15	10.31	10.70	10.92	11.02
25	11.53	.....	11.45	11.48	11.51	11.74	11.97	10.17	10.32	10.70	10.93	11.02
26	11.53	.....	11.43	11.48	11.53	11.75	11.98	10.19	10.33	10.71	10.93	11.03
27	11.54	.....	11.44	11.49	11.54	11.76	11.98	10.20	10.36	10.72	10.93	11.03
28	11.54	.....	11.45	11.49	11.54	11.77	11.98	10.22	10.39	10.73	10.94	11.03
29	11.53	.....	11.47	11.49	11.54	11.78	11.99	10.24	10.39	10.74	10.94	11.04
30	11.53	.....	11.47	11.50	11.54	11.79	12.00	10.24	10.40	10.74	10.94	11.04
31	11.53	.....	11.46	.....	11.55	.....	12.00	10.24	.....	10.75	.....	11.03

## 1-41-20dd. U. S. Geol. Survey. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	2.43	June 2	3.08	Aug. 10	3.03	Oct. 24	3.16
Mar. 1	2.54	July 12	3.45	Sept. 20	2.64	Dec. 8	2.68
Apr. 21	2.93						

## 1-41-27ca. U. S. Geol. Survey. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	2.94	June 2	4.39	Aug. 10	4.19	Oct. 24	4.51
Mar. 1	3.91	July 11	4.45	Sept. 20	4.29	Dec. 8	3.26
Apr. 21	4.04						

## 1-42-36aa. U. S. Geol. Survey. Highest water level 9.37, Aug. 10. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	11.33	June 2	10.48	Aug. 10	9.37	Oct. 24	11.07
Mar. 1	10.99	July 12	10.24	Sept. 20	10.22	Dec. 8	10.60
Apr. 21	11.33						

## 2-36-31bc. U. S. Geol. Survey. Highest water level 20.64, Apr. 14. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	20.87	June 29	21.22	Aug. 29	21.35	Nov. 29	21.42
Feb. 28	20.68	July 12	21.38	Sept. 20	21.55	Dec. 8	21.35
Apr. 14	20.64	28	21.42	27	21.56	28	21.18
May 26	20.75	Aug. 10	21.45	Oct. 24	21.69		

Franklin County

## 1-13-2bc. U. S. Geol. Survey. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	8.34	Apr. 22	9.01	July 21	8.64	Oct. 20	8.88
Feb. 23	8.47	May 22	8.62	Aug. 29	8.54	Dec. 26	8.86
Mar. 24	8.63	June 21	8.97	Sept. 21	8.47		

## 1-14-7bb1. University of Nebraska. Records available: 1940-42, 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 21	3.27	Apr. 21	3.30	July 21	4.31	Oct. 20	3.67
Feb. 22	2.98	May 22	3.05	Aug. 29	3.28	Dec. 26	3.31
Mar. 23	3.15	June 21	4.08	Sept. 21	3.01		

## 1-16-14ab. C. Howel. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 21	40.14	Apr. 21	39.89	Aug. 29	41.45	Oct. 20	40.78
Feb. 22	39.85	May 22	39.75	Sept. 21	40.81	Dec. 26	40.53
Mar. 23	39.76	June 21	40.20				

## 2-14-34ad. State of Nebraska. Records available: 1947-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	50.15	Apr. 22	50.15	July 21	50.06	Oct. 20	50.04
Feb. 22	50.10	May 22	50.08	Aug. 29	50.04	Dec. 26	50.07
Mar. 24	50.10	June 21	50.12	Sept. 21	50.05		

4-14-10da. Gilgen Bros. Records available: 1935-40, 1942, 1947-49. No measurement made in 1950.

Furnas County

3-21-12dc. U. S. Geol. Survey. Records available: 1946-50. Feb. 10, 1949, 5.92; Apr. 7, 3.62; June 11, 3.61; Aug. 5, 5.69; Oct. 8, 6.18; Nov. 19, 5.35; Dec. 21, 5.22.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	4.82	June 27	5.62	Aug. 17	6.02	Oct. 24	6.35
Mar. 20	4.43	July 21	5.96	Sept. 18	6.16	Dec. 12	5.60
May 5	4.43						

3-22-2ba. U. S. Geol. Survey. Lowest water level 9.00, Dec. 12. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 19	8.82	June 23	7.46	Aug. 18	8.12	Oct. 25	8.96
Mar. 17	8.45	July 22	7.98	Sept. 19	8.64	Dec. 12	9.00
May 12	8.29						

3-25-4bb. U. S. Geol. Survey. Highest water level 3.29, July 27. Recorder removed. Records available: 1946-50.

3-25-4bb--Continued.

Daily lowest daily water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	5.53	5.55	5.15	4.99	5.10	4.45	5.06	3.66	4.48
2	5.53	5.55	5.12	5.00	5.11	4.45	5.09	3.73	4.50
3	5.51	5.54	5.11	5.00	5.12	4.45	5.12	3.79	4.51
4	5.51	5.54	5.11	5.00	5.12	4.45	5.14	3.86	4.53
5	5.50	5.54	5.11	5.02	5.12	4.46	5.14	3.92	4.55
6	5.49	5.53	5.11	5.02	5.11	4.47	5.14	3.97	4.57
7	5.49	5.52	5.10	5.02	5.11	4.49	5.12	3.99	4.59
8	5.49	5.51	5.10	5.02	5.11	4.51	5.10	4.02	4.61
9	5.48	5.51	5.10	5.02	5.08	4.56	5.09	4.04	4.63
10	5.48	5.50	5.10	5.03	5.04	4.58	5.08	4.07	4.65
11	5.47	5.49	5.10	5.03	5.03	4.62	5.08	4.09	4.67
12	5.47	5.47	5.09	5.04	5.02	4.65	5.08	4.13	4.69
13	5.47	5.45	5.09	5.05	5.00	4.67	5.08	4.15	4.71
14	5.46	5.44	5.09	5.05	4.95	4.70	5.08	4.17	4.73
15	5.45	5.42	5.09	5.05	4.92	4.73	5.08	4.18	4.75
16	5.44	5.40	5.08	5.05	4.90	4.75	5.09	4.21	4.76
17	5.42	5.38	5.06	5.05	4.90	4.77	5.10	4.24	4.78
18	5.42	5.36	5.06	5.05	4.90	4.78	5.11	4.27	4.79
19	5.42	5.35	5.06	5.05	4.89	4.79	5.12	4.29	....
20	5.59	5.33	5.06	5.05	4.86	4.81	5.13	4.31	....
21	5.59	5.31	5.06	5.05	4.81	4.82	5.14	4.32	....
22	5.59	5.29	5.05	5.05	4.76	4.84	5.15	4.34	....
23	5.59	5.26	5.04	5.05	4.74	4.85	5.15	4.36	....
24	5.59	5.24	5.02	5.05	4.74	4.87	5.16	4.38	....
25	5.59	5.23	5.00	5.05	4.74	4.90	5.17	4.40	....
26	5.58	5.21	4.99	5.06	4.74	4.92	5.17	4.42	....
27	5.58	5.19	4.98	5.06	4.73	4.95	3.29	4.44	....
28	5.57	5.17	4.98	5.07	4.59	4.98	3.38	4.45	....
29	5.56		4.98	5.08	4.58	5.00	3.46	4.45	....
30	5.56		4.98	5.09	4.50	5.04	3.54	4.46	....
31	5.55		4.99		4.46		3.60	4.47	

j Interpolated from Feb. 12 to Mar. 1.

4-22-29ad. U. S. Geol. Survey. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 7	15.91	May 27	15.64	July 21	15.48	Oct. 24	15.90
Mar. 20	15.72	June 23	15.44	Aug. 17	15.57	Dec. 12	15.95
May 8	15.65	29	15.48	Sept. 18	15.68		

4-23-23bd. O. V. Moore. Records available: 1936-44, 1946-50.

Jan. 20	29.33	June 23	29.19	Aug. 17	29.51	Oct. 24	29.69
Mar. 17	29.10	July 21	29.51	Sept. 18	29.45	Dec. 12	29.43
May 8	29.27						

4-23-30cc. Breming Bros. Records available: 1946-50.

Jan. 19	53.19	June 23	53.02	Aug. 18	53.74	Oct. 25	53.45
Mar. 17	53.03	July 22	53.27	Sept. 19	53.53	Dec. 12	53.38
May 12	53.06						

4-24-15cc. U. S. Geol. Survey. Records available: 1946-50.

Jan. 20	13.28	June 21	11.45	Aug. 21	11.64	Oct. 19	11.71
Mar. 17	13.08	July 20	11.74	Sept. 19	11.55	Dec. 12	12.12
May 9	12.61						

Garden County

17-44-22cc. Dr. G. H. Morris. Lowest water level 27.57, Oct. 18. Records available: 1935-42, 1944-46, 1948-50. Jan. 26, 27.14; Apr. 6, 27.04; Aug. 16, 26.93; Oct. 18, 27.57; Dec. 20, 27.22.

18-46-27cc. University of Nebraska. Records available: 1934-42, 1944, 1946, 1948-50. Jan. 26, 4.49; Apr. 6, 4.68; Aug. 16, 2.94; Oct. 18, 4.07; Dec. 20, 4.28.

21-44-35ca. Crescent Lake Migratory Bird Refuge. Records available: 1933-50.

## 21-44-35ca--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	2.90	Mar. 24	2.20	July 7	3.50	Sept. 22	3.30
13	2.80	31	2.20	14	3.70	29	3.30
20	2.90	Apr. 7	2.30	21	3.00	Oct. 6	3.30
27	2.80	14	2.10	31	3.10	13	3.40
Feb. 3	2.80	21	2.40	Aug. 4	3.20	19	3.50
10	2.60	28	2.50	11	3.30	27	3.50
17	2.60	June 2	2.10	18	3.50	Nov. 13	3.60
24	2.50	9	3.10	25	3.50	27	3.20
Mar. 3	2.40	16	3.10	31	3.50	Dec. 4	3.20
10	2.40	23	3.10	Sept. 8	3.70	8	3.20
17	2.40	30	3.30				

## 21-45-3bd. Crescent Lake Migratory Bird Refuge. Records available: 1934-50.

Jan. 6	3.40	Mar. 17	3.20	June 23	3.80	Aug. 31	4.10
13	3.40	24	3.10	30	3.90	Oct. 6	2.00
20	3.50	31	3.10	July 7	2.00	13	2.00
27	3.50	Apr. 7	2.00	14	2.20	19	2.00
Feb. 4	3.50	14	2.90	21	3.90	27	2.00
10	3.40	21	2.90	31	3.80	Nov. 3	4.00
17	3.30	28	2.90	Aug. 4	3.80	13	4.00
24	3.30	June 2	3.40	11	4.10	17	4.10
Mar. 3	3.30	9	3.50	18	4.10	27	4.10
10	3.30	16	3.80	25	4.10		

Gosper County

6-21-29cc. Forrester. Highest water level 121.67, Dec. 7. Records available: 1948-50. Jan. 23, 122.60; June 5, 122.37; July 24, 122.19; Sept. 28, 122.22; Dec. 7, 121.67.

7-21-6bc. Andy Larson Estate. Highest water level 103.68, Dec. 7. Records available: 1934-40, 1948-50. Jan. 23, 105.78; Mar. 20, 105.51; June 6, 104.95; July 25, 104.80; Sept. 29, 104.34; Dec. 7, 103.68.

7-21-15bb. Sophia Swartz. Drilled unused domestic well, diameter 3 inches, depth 221 feet. Highest water level 197.18, Dec. 7; lowest 199.49, Mar. 20. Records available: 1950. Jan. 23, 199.43; Mar. 20, 199.49; June 12, 199.02; July 25, 199.10; Sept. 29, 197.90; Dec. 7, 197.18.

7-22-8bb. Owner unknown. Highest water level 237.67, Sept. 29. Records available: 1947-50. Jan. 23, 239.97; Mar. 21, 239.57; June 6, 238.82; July 24, 238.40; Sept. 29, 237.67.

8-21-3dc. Jeffrey Bros. Records available: 1946-50. Jan. 6, 13.48; Mar. 6, 13.40; May 10, 13.02; July 7, 12.63; Sept. 11, 12.61; Nov. 2, 13.43.

8-22-8cd. Central Nebraska Public Power and Irrigation District. Records available: 1940-50. Jan. 23, 127.80; Mar. 21, 127.51.

Grant County

24-36-30bb. University of Nebraska. Records available: 1934-42, 1946-50. Jan. 23, 5.12; Apr. 3, 4.80; Aug. 14, 4.25; Oct. 16, 4.95; Dec. 18, 4.81.

24-40-36bb. University of Nebraska. Records available: 1934-42, 1944-50. Jan. 23, 13.85; Apr. 3, 13.88; Aug. 14, 14.06; Oct. 16, 14.12; Dec. 18, 14.17.

Greeley County

17-10-10cb. University of Nebraska. Highest water level 13.11, Aug. 21. Records available: 1935-42, 1949-50. May 29, 14.10; June 21, 14.06; July 24, 13.34; Aug. 21, 13.11; Oct. 23, 13.72; Dec. 29, 13.49.

17-12-6dc. Wilber Fuss. Lowest water level 13.76, Feb. 27. Records available: 1948-50. Jan. 4, 13.60; Feb. 27, 13.76; Mar. 31, 13.58; May 2, 13.63; June 6, 13.51.

17-12-9bb. E. E. Williams. Highest water level 16.45, July 13. Records available: 1948-50.

Jan. 4	19.33	May 2	18.22	July 13	16.45	Oct. 5	18.56
Feb. 27	17.56	June 6	18.36	Sept. 11	18.62	Nov. 3	18.77
Mar. 31	18.28						



20-9-20db. University of Nebraska. Highest water level 6.85, July 24. Records available: 1937-41, 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	9.11	Mar. 30	7.52	June 21	8.37	Oct. 23	8.26
Feb. 6	9.06	Apr. 27	8.36	July 24	6.85	Dec. 29	8.43
27	9.02	May 29	8.65	Aug. 21	7.88		

20-10-14ab. Albert Glaser. Drilled irrigation well, diameter 18 inches, reported depth 90 feet. Highest water level 7.85, July 24. Records available: 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 22, 1948	10.52	Aug. 4, 1949	11.88	Feb. 6, 1950	10.32	June 21, 1950	9.71
Sept. 29	11.21	Sept. 20	10.00	27	10.19	July 24	7.85
Apr. 28, 1949	8.93	Nov. 1	10.22	Mar. 30	10.05	Aug. 21	8.46
June 8	8.96	30	10.50	Apr. 27	10.05	Oct. 23	8.98
July 5	8.79	Jan. 5, 1950	10.33	May 29	9.94	Dec. 29	9.50

### Hall County

9-10-4dc. L. C. Hilsbeck. Highest water level 3.15, May 11. Records available: 1946-50. Jan. 6, 5.85; Mar. 6, 4.86; May 11, 3.15; July 8, 5.53; Sept. 12, 4.92; Nov. 3, 4.63.

9-11-21bb. U. S. Geol. Survey. Highest water level 6.86, May 11. Records available: 1946-50. Jan. 6, 7.87; Mar. 6, 7.40; May 11, 6.86; July 8, 7.83; Sept. 11, 7.84; Nov. 3, 7.70.

9-12-9ba. E. F. Ohlman. Records available: 1930-50. Jan. 3, 20.83; Feb. 28, 20.98; May 1, 20.90; July 3, 20.35; Nov. 7, 20.40.

10-9-28cc. Owner unknown. Records available: 1946-50. Jan. 6, 13.75; Mar. 14, 13.43; May 5, 13.60; July 8, 13.80; Sept. 12, 13.91; Nov. 3, 13.80.

10-11-15dc. W. A. Bouton. Records available: 1930-50. Jan. 3, 17.54; Feb. 28, 17.78; May 1, 17.76; July 3, 18.45; Sept. 13, 18.48; Nov. 7, 17.99.

10-11-30bc. J. M. Weldon. Records available: 1930-50. Jan. 3, 18.52; Feb. 28, 18.70; May 1, 18.82; July 3, 18.62.

11-9-27bc. City of Grand Island. Records available: 1942-50. Jan. 6, 9.56; Feb. 27, 9.13; Apr. 11, 10.28; May 5, 9.64; July 8, 9.91; Sept. 12, 9.06; Nov. 3, 9.65; Nov. 21, 10.70; Dec. 29, 9.70.

11-10-16bb. U. S. Geol. Survey. Records available: 1946-50. Jan. 3, 8.71; Feb. 28, 8.97; May 1, 9.05; July 3, 8.85; Sept. 13, 8.49; Nov. 6, 8.56.

11-11-25cc. U. S. Geol. Survey. Records available: 1946-50.

### Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	14.89	.....	15.00	15.02	15.02	14.78	.....	13.68	13.74	14.12	14.20	14.26
2	14.88	.....	15.00	15.02	15.00	14.76	.....	13.68	13.78	14.16	14.22	14.28
3	14.88	.....	14.95	15.01	14.99	14.77	14.90	13.67	13.97	14.17	14.23	14.29
4	14.90	.....	14.95	15.00	14.99	14.77	14.81	13.65	14.09	14.17	14.23	14.28
5	14.91	.....	14.95	15.00	15.02	14.75	14.82	13.67	14.21	14.15	14.18	14.32
6	14.91	.....	14.95	14.99	15.03	14.74	14.81	13.67	14.26	14.13	14.22	14.32
7	14.92	.....	14.95	15.00	15.04	14.74	14.79	13.66	14.27	14.11	14.22	14.28
8	14.89	.....	14.99	15.02	15.02	14.75	14.76	13.67	14.22	14.15	14.23	14.29
9	14.85	.....	14.99	15.02	15.03	14.75	14.74	13.67	14.18	14.15	14.25	14.32
10	14.92	.....	14.98	15.01	15.04	14.76	14.71	13.66	14.17	14.13	14.25	14.32
11	14.92	.....	14.99	14.98	15.03	14.76	14.44	13.66	14.17	14.14	14.23	14.30
12	14.88	.....	15.00	14.98	15.01	14.75	13.96	13.53	14.18	14.15	14.24	14.31
13	14.92	.....	14.96	14.95	14.98	14.73	13.77	13.48	.....	14.15	14.25	14.31
14	14.92	.....	14.92	14.98	14.97	14.75	13.66	13.46	14.19	14.13	14.22	14.32
15	14.93	.....	14.96	14.99	14.96	14.75	13.58	13.45	14.18	14.14	14.25	14.33
16	14.94	.....	15.00	14.99	14.95	14.76	13.55	13.44	14.21	14.14	14.27	14.34
17	14.93	.....	15.01	15.01	14.97	14.76	13.57	13.45	14.22	14.15	14.27	14.35
18	14.93	.....	15.01	15.01	14.95	14.75	13.57	13.45	14.22	14.15	14.23	14.35
19	14.94	14.96	14.99	15.00	14.97	14.76	13.60	13.47	14.23	14.17	14.25	14.35
20	14.94	14.96	14.99	15.02	14.97	14.76	13.61	13.48	14.22	14.17	14.27	14.35
21	14.93	14.98	14.95	15.02	14.92	14.75	13.63	13.48	14.23	14.15	14.25	14.35
22	14.91	14.98	14.99	15.02	14.85	14.75	13.63	13.48	14.23	14.18	14.25	14.35
23	14.92	14.97	15.02	.....	14.80	14.75	13.64	13.48	14.20	14.18	14.28	14.35
24	14.91	14.97	15.02	.....	14.77	14.75	13.66	13.50	14.18	14.18	14.28	14.36
25	14.92	14.98	15.02	.....	14.78	14.75	13.66	13.53	14.17	14.18	14.27	14.34

11-11-25cc--Continued.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	.....	14.98	14.98	.....	14.78	14.78	13.66	13.57	14.14	14.17	14.27	14.37
27	.....	14.97	14.98	.....	14.78	14.78	13.66	13.60	14.12	14.17	14.27	14.37
28	.....	14.98	14.97	.....	14.78	14.78	13.66	13.62	14.12	14.18	14.28	14.33
29	.....		14.98	.....	14.79	14.78	13.65	13.66	14.12	14.19	14.28	14.34
30	.....		15.02	.....	14.79	.....	13.65	13.68	14.12	14.19	14.27	14.35
31	.....		15.01	.....	14.78		13.66	13.72		14.18		14.32

11-11-32cb. F. Hughes. Records available: 1930-41, 1943-50. Jan. 3, 35.15; Feb. 28, 34.94; May 1, 34.64; July 3, 34.59; Sept. 13, 34.79; Nov. 6, 34.66.

11-11-36cb. E. Batie. Records available: 1930-40, 1943-50. Jan. 3, 21.84; Feb. 28, 21.95; May 1, 21.92; July 3, 21.70; Sept. 13, 21.53; Nov. 6, 21.40.

12-9-32aa2. Hall County Farm. Records available: 1946-50. Jan. 3, 11.68; Mar. 3, 11.65; May 1, 11.48; July 3, 11.34; Sept. 13, 11.27; Nov. 6, 11.28.

12-11-24cd. U. S. Geol. Survey. Driven observation well. Records available: 1946-50. Jan. 3, 7.66; Feb. 28, 7.73; May 1, 7.64; July 3, 6.78; Sept. 13, 6.64; Nov. 6, 7.33.

Hamilton County

11-6-13cb. O. S. Swedberg. Records available: 1934-42, 1944, 1946-50. Mar. 18, 92.93.

11-8-28bc. H. J. Rathje. Drilled irrigation well. Records available: 1946-50. Jan. 9, 30.20; Mar. 14, 29.94; May 5, 29.89; July 8, 30.32; Sept. 12, 30.09; Nov. 3, 30.00.

12-7-21dc. U. S. Geol. Survey. Lowest water level 11.47, July 8. Records available: 1949-50. Jan. 9, 10.67; Mar. 14, 9.85; May 5, 10.92; July 8, 11.47; Sept. 12, 10.67; Nov. 3, 11.25.

13-6-27cc. Harry G. Lock. Records available: 1935-40, 1942, 1944, 1946-50. Jan. 9, 9.55; Mar. 14, 8.97; May 3, 9.06; June 28, 9.58; Sept. 6, 9.17; Oct. 26, 9.35.

14-5-35aa. U. S. Geol. Survey. Drilled observation well, diameter 1½ inches, depth 11.5 feet. Land-surface datum is 1,643.67 feet above mean sea level. Highest water level 2.79, Mar. 10; lowest 3.82, June 28. Records available: 1949-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 11, 1949	3.64	Jan. 9, 1950	3.43	May 3, 1950	3.07	Sept. 6, 1950	3.51
Sept. 1	3.72	Mar. 10	2.79	June 28	3.82	Oct. 26	3.38
Nov. 7	3.40						

Harlan County

1-17-1da. U. S. Geol. Survey. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 21	6.22	Apr. 21	5.40	July 21	6.65	Oct. 20	6.95
Feb. 22	5.76	May 22	4.89	Aug. 21	6.10	Dec. 26	6.62
Mar. 23	5.45	June 21	5.96	Sept. 21	6.99		

2-18-33cd. C. A. Feese. Records available: 1934-42, 1944, 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	11.27	May 4	11.48	Aug. 18	11.35	Oct. 25	11.61
Mar. 22	11.06	June 27	11.10	Sept. 18	11.59	Dec. 12	11.72

2-19-28dd. University of Nebraska. Records available: 1940-41, 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	8.60	June 27	9.05	Aug. 18	8.37	Oct. 25	9.73
Mar. 22	8.60	July 22	9.06	Sept. 18	9.15	Dec. 12	9.71
May 4	8.71						

3-20-25cc. U. S. Geol. Survey. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	14.80	June 27	14.67	Aug. 18	15.02	Oct. 25	15.85
Mar. 22	14.35	July 21	14.33	Sept. 18	15.44	Dec. 12	15.44
May 5	14.37						

Hayes County

5-33-31dc. University of Nebraska. Records available: 1936-44, 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 19	12.96	May 26	13.88	Aug. 11	11.27	Oct. 16	12.48
Mar. 6	12.89	June 29	14.41	Sept. 20	11.81	Dec. 6	12.85
Apr. 14	13.06	July 11	13.19				

5-34-30ba. U. S. Geol. Survey. Lowest water level 11.84, Dec. 6. Records available: 1946-50.

Jan. 17	10.11	May 26	10.72	Aug. 11	11.13	Oct. 16	11.01
Mar. 6	10.60	July 11	11.13	Sept. 20	11.09	Dec. 6	11.84
Apr. 6	10.75						

5-35-16dd. U. S. Geol. Survey. Lowest water level 9.74, Dec. 7. Records available: 1946-50.

Jan. 19	7.68	May 26	8.59	Aug. 11	8.97	Oct. 16	8.87
Mar. 6	8.66	July 11	9.21	Sept. 20	8.97	Dec. 7	9.74
Apr. 6	8.50						

Hitchcock County

2-33-6cb. U. S. Geol. Survey. Records available: 1946-50.

Feb. 2	8.88	June 5	9.18	Aug. 9	9.44	Oct. 17	9.90
Mar. 10	8.97	July 13	9.66	Sept. 12	9.98	Dec. 8	9.74
Apr. 26	9.02						

2-35-21bc. O. Brownfield. Records available: 1934-41, 1946-50.

Jan. 17	20.18	Apr. 14	19.96	July 12	20.15	Sept. 20	20.13
Feb. 23	20.00	June 2	19.96	Aug. 10	19.80	Oct. 24	20.24

2-35-24aa. U. S. Geol. Survey. Records available: 1946-50.

Feb. 2	5.09	June 5	4.92	Aug. 9	4.50	Oct. 17	5.87
Mar. 10	4.74	July 13	5.94	Sept. 12	5.67	Dec. 8	6.33
Apr. 26	4.94						

3-31-14bc. U. S. Geol. Survey. Records available: 1946-50.

Jan. 19	14.68	May 26	14.93	Aug. 11	14.25	Oct. 18	13.97
Feb. 23	14.45	July 10	14.99	Sept. 18	13.33	Dec. 6	13.95
Apr. 14	14.80						

3-32-11bb. U. S. Geol. Survey. Lowest water level 14.16, July 10. Records available 1946-50.

Jan. 19	13.08	May 26	13.68	Aug. 9	13.90	Oct. 18	13.19
Feb. 23	13.15	July 10	14.16	Sept. 19	13.99	Dec. 6	13.92
Apr. 14	13.40						

3-32-26dd. E. Meintz. Records available: 1946-50.

Jan. 17	28.31	June 2	28.10	Aug. 12	27.73	Oct. 20	29.36
Feb. 23	28.14	July 14	28.78	Sept. 22	28.13	Dec. 7	28.14
Apr. 26	28.05						

3-33-35dc. S. H. Lawrence. Records available: 1935-43, 1946-50.

Jan. 17	10.19	June 2	9.94	Aug. 12	10.73	Oct. 17	11.06
Feb. 23	9.94	July 13	9.99	Sept. 12	10.95	Dec. 8	11.32
Apr. 26	9.82						

4-33-23ad. U. S. Geol. Survey. Records available: 1946-50.

Jan. 19	12.29	June 1	13.02	Aug. 11	13.25	Oct. 18	13.39
Mar. 6	12.28	July 11	13.67	Sept. 19	13.34	Dec. 6	13.09
Apr. 14	12.01						

Holt County

27-9-34da. University of Nebraska. Records available: 1934-50.

## 27-9-34da--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	8.69	Apr. 12	6.60	June 26	7.44	Sept. 28	8.44
Feb. 1	8.62	26	7.45	July 7	7.24	Oct. 9	6.71
22	8.56	May 10	6.06	19	6.94	25	7.64
Mar. 1	8.58	26	7.00	Aug. 2	7.94	Nov. 9	7.89
14	7.47	June 3	7.05	15	7.18	21	7.96
29	6.16	6	7.13	30	8.06	Dec. 20	7.69
Apr. 5	5.21	12	7.77	Sept. 13	8.53		

29-11-9bb. Highest water level 5.99, Apr. 25. Records available: 1947-50. Feb. 2, 6.70; Apr. 25, 5.99; May 19, 6.06; June 7, 6.20; July 3, 6.43; Sept. 22, 6.35.

29-13-13dd. Highest water level 38.18, Sept. 22. Records available: 1947-50. Feb. 3, 38.89; Apr. 25, 38.78; May 19, 38.75; June 7, 38.45; July 3, 38.49; Sept. 22, 38.18.

30-13-27cc. Highest water level 26.01, Sept. 22. Records available: 1947-50. Feb. 3, 27.41; Apr. 25, 27.19; May 19, 27.16; June 7, 26.76; July 3, 26.93; Sept. 22, 26.01.

30-14-23dd. Highest water level 29.86, Sept. 22. Records available: 1947-48, 1950. Feb. 3, 30.65; Apr. 25, 30.52; May 19, 30.56; July 3, 30.24; Sept. 22, 29.86.

31-14-35cb. Highest water level 26.33, June 7. Records available: 1947-50. Feb. 3, 26.90; Apr. 25, 26.52; May 19, 26.56; June 7, 26.33; July 3, 26.71; Sept. 22, 26.44.

## Hooker County

24-31-18cb. U. S. Bureau of Reclamation. Drilled observation well, diameter 1½ inches, depth 41.6 feet. Highest water level 32.51, Oct. 5, 1950; lowest 32.75, Oct. 19, 1948. Records available: 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 26, 1948	32.68	July 27, 1948	32.68	Sept. 20, 1948	32.66	Oct. 5, 1950	32.51
June 15	32.71	Aug. 10	32.67	Oct. 11	32.62	16	32.62
July 1	32.69	23	32.68	19	32.75	Dec. 18	32.66
14	32.68	Sept. 6	32.73	Aug. 14, 1950	32.67		

24-35-23dd. University of Nebraska. Records available: 1934-42, 1944-50. Jan. 23, 20.55; Apr. 3, 20.61; Aug. 14, 20.42; Oct. 16, 20.63; Dec. 18, 20.61.

## Howard County

13-9-27ca. Placke Estate. Highest water level 15.47, Aug. 16. Records available: 1934-42, 1944, 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 11	16.68	Mar. 30	16.56	May 31	16.25	Sept. 6	15.63
Mar. 3	16.56	May 3	16.41	Aug. 16	15.47	29	15.85

13-11-11ba. Town of Dannebrog. Drilled unused public-supply well, diameter 8 inches, depth 32 feet. Land-surface datum is 1,869.74 feet above mean sea level. Stevens Type F 8-day recorder installed April 11. Highest water level 25.59, July 25; lowest 27.04, Oct. 1. Records available: 1950.

## Daily lowest water level, from recorder graph

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	26.25	26.73	26.05	26.66	27.04	26.87	26.73
2	.....	.....	26.28	26.76	26.05	26.69	27.03	26.89	26.76
3	.....	26.24	26.34	26.79	26.06	26.72	27.02	26.92	26.77
4	.....	26.24	26.34	26.82	.....	26.76	.....	26.94	26.76
5	.....	26.24	26.31	26.86	.....	26.81	.....	26.84	26.85
6	.....	26.33	26.33	26.89	.....	26.81	26.83	26.85	26.85
7	.....	26.36	26.34	26.89	.....	26.79	26.92	26.85	26.81
8	.....	26.36	26.41	26.84	.....	26.87	26.97	26.83	26.73
9	.....	26.30	26.44	26.50	.....	26.90	26.97	26.92	26.80
10	.....	26.34	26.54	26.10	.....	26.90	26.99	26.93	26.81
11	26.23	.....	26.54	.....	.....	26.90	27.00	26.87	26.77
12	26.26	.....	26.48	25.89	.....	26.93	27.01	26.82	26.73
13	26.26	.....	26.52	25.87	.....	26.93	26.98	26.82	26.73
14	26.26	.....	26.50	25.88	26.04	26.93	27.01	26.78	26.74
15	26.25	.....	26.51	25.99	26.10	26.90	27.01	26.76	26.76

13-11-11ba--Continued.

Daily lowest water level, from recorder graph

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	26.23	.....	26.58	25.96	26.17	26.91	26.97	26.83	26.80
17	26.21	.....	26.57	26.00	26.23	26.91	26.98	26.83	26.82
18	26.24	.....	26.39	26.00	26.23	26.88	26.96	26.77	26.81
19	26.27	.....	26.32	25.92	26.28	26.92	26.97	26.75	26.78
20	26.27	.....	26.38	25.93	26.28	26.92	26.97	26.80	26.78
21	26.25	.....	26.39	25.95	26.28	26.92	26.96	26.80	26.77
22	26.21	26.14	26.39	25.96	26.28	26.94	26.94	26.79	26.74
23	26.21	26.14	26.45	25.96	26.34	26.95	26.94	26.81	26.74
24	26.18	26.21	26.51	25.65	26.39	26.96	26.92	26.87	26.75
25	26.19	26.35	26.57	25.59	26.46	26.95	26.92	26.87	26.74
26	26.22	26.35	26.69	25.68	26.47	26.96	26.89	26.83	26.77
27	26.25	26.33	26.69	25.72	26.46	26.94	26.85	26.81	26.78
28	26.29	26.28	26.69	25.73	26.45	26.97	26.89	26.80	26.73
29	26.29	26.21	26.75	25.81	26.56	26.95	26.89	26.80	26.72
30	.....	26.15	26.75	25.84	26.57	27.00	26.86	26.78	26.73
31		26.25		25.93	26.60		26.82		26.70

13-11-29cb. U. S. Geol. Survey. Highest water level 2.79, Apr. 10; lowest 5.46, Oct. 31.  
Records available: 1949-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	4.99	Apr. 10	2.79	July 7	5.44	Oct. 4	5.29
Feb. 10	4.53	May 3	4.95	Aug. 16	5.17	31	5.46
Mar. 6	4.19	31	4.66	Sept. 7	5.22		

13-12-29ba. Mrs. Olga Young. Records available: 1934-42, 1948-50.

Jan. 9	25.94	Apr. 10	25.72	July 7	25.90	Oct. 4	26.27
Feb. 10	27.22	May 3	25.76	Aug. 16	25.80	31	26.27
Mar. 6	25.90	31	25.71	Sept. 7	26.13		

14-10-14bb. University of Nebraska. Highest water level 4.21, Aug. 17. Records available: 1934-42, 1944, 1948-50.

Jan. 9	6.75	Apr. 10	5.99	July 7	6.11	Sept. 8	5.46
Mar. 6	6.33	May 3	6.28	Aug. 17	4.21	Oct. 4	5.58

14-10-28dd. School District. Records available: 1949-50.

Jan. 9	5.37	Apr. 10	5.35	July 7	8.22	Sept. 8	5.17
Feb. 10	5.19	May 3	5.06	Aug. 17	4.91	Oct. 31	4.81
Mar. 6	5.25	31	5.22				

15-9-9aa. Wilber Edwards. Highest water level 31.00, Oct. 6-7, 1949; Oct. 5, 6, and 31, 1950; and Nov. 5, 1950. Records available: 1948-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	31.19	31.34	31.47	31.51	31.54	31.60	31.66	31.30	31.06	31.03	31.07	31.10
2	31.15	31.36	31.44	31.42	31.47	31.60	31.67	31.30	31.06	31.10	31.09	31.15
3	31.19	31.34	31.37	31.48	31.49	31.64	31.67	31.26	31.07	31.09	31.11	31.15
4	31.23	31.32	31.39	31.54	31.48	31.63	31.68	.....	31.08	31.09	31.04	31.18
5	31.25	31.28	31.40	31.55	31.54	31.57	31.70	.....	31.08	31.00	31.00	31.24
6	31.25	31.40	31.37	.....	31.58	31.57	31.70	.....	31.07	31.00	31.05	31.23
7	31.24	31.42	31.35	.....	31.60	31.57	31.69	.....	31.05	31.04	31.03	31.12
8	31.18	31.44	31.48	.....	31.55	31.61	31.67	.....	31.04	31.07	31.05	31.12
9	31.13	31.42	31.48	.....	31.55	31.64	.....	.....	31.04	31.04	31.09	31.19
10	31.20	31.43	31.44	31.56	.....	31.65	31.67	.....	31.05	31.04	31.12	31.20
11	31.21	31.41	31.49	31.59	.....	31.64	.....	.....	31.03	31.06	31.09	31.14
12	31.21	31.42	31.49	31.58	31.55	31.59	31.70	.....	31.04	31.06	31.10	31.14
13	31.31	31.45	31.47	31.57	31.53	31.61	31.71	.....	31.01	31.02	31.11	31.14
14	31.31	31.45	31.43	31.54	31.52	31.62	31.65	31.11	31.04	31.03	31.05	31.14
15	31.31	31.48	31.43	31.53	31.56	31.63	31.60	31.12	31.02	31.02	31.10	31.19
16	31.31	31.45	31.45	31.52	31.55	31.67	31.60	31.11	31.02	31.04	31.06	31.20
17	31.31	.....	31.44	31.52	31.58	31.66	31.63	31.14	31.04	31.04	31.03	31.21
18	31.31	.....	31.46	31.50	31.55	31.63	31.61	31.13	31.06	31.02	31.05	31.19
19	31.44	.....	31.47	31.52	31.57	31.65	31.58	31.11	31.05	31.06	31.13	31.20
20	31.43	.....	31.44	31.52	.....	31.63	31.59	31.11	31.06	31.04	31.16	31.20

15-9-9aa--Continued.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	31.40	31.37	31.43	31.47	.....	31.64	31.58	31.06	31.05	31.03	31.12	31.19
22	31.26	31.37	31.46	31.45	31.54	31.61	31.55	31.04	31.05	31.06	31.10	31.19
23	31.29	31.36	31.43	31.43	31.54	31.60	31.50	31.05	31.04	31.06	.....	31.21
24	31.31	31.40	31.45	31.48	31.57	31.63	31.51	31.06	31.06	31.06	31.15	31.22
25	31.33	31.43	.....	31.49	31.62	31.67	31.47	31.05	31.03	31.05	31.16	31.22
26	31.49	31.46	.....	31.52	31.62	31.71	31.44	31.03	31.01	31.01	31.16	31.28
27	.....	31.40	.....	31.53	31.60	31.70	31.41	31.02	31.04	31.03	31.13	31.25
28	.....	31.44	.....	31.52	31.56	31.68	31.34	31.05	31.05	31.03	31.15	31.18
29	.....	.....	31.54	31.54	31.56	31.69	31.31	31.06	31.01	31.03	31.14	31.21
30	31.33	.....	31.55	31.55	31.59	31.68	31.28	31.05	31.01	31.02	31.12	31.21
31	31.34	.....	31.50	.....	31.61	.....	31.29	31.05	.....	31.00	.....	31.18

15-10-19ab. Harry Ward. Records available: 1948-50. Jan. 4, 11.25; Feb. 9, 11.13; May 2, 10.77; June 6, 10.79; Sept. 11, 10.36; Oct. 25, 10.66; Oct. 31, 10.69.

16-11-19cb1. Ray Parker. Unused drilled irrigation well, diameter 18 inches, depth 96 feet. Land-surface datum is 1,905.77 feet above mean sea level. Stevens Type F 8-day recorder installed Dec. 15. Highest water level 41.63 Oct. 6; lowest 42.39, Aug. 28. Records available: 1950.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 28	h42.39	Dec. 15	42.11	Dec. 21	42.09	Dec. 27	42.10
Oct. 6	h41.63	16	42.11	22	42.08	28	42.07
Nov. 3	h42.22	17	42.11	23	42.09	29	42.09
Dec. 8	42.13	18	42.09	24	42.09	30	42.08
9	42.14	19	42.10	25	42.12	31	42.09
13	42.11	20	42.09	26	42.14		

h Tape measurement.

## Kearney County

5-14-16cb. Nels Peterson. Records available: 1947-50. Jan. 26, 142.05; Mar. 22, 141.49; June 8, 141.32; July 26, 141.30; Sept. 26, 141.20; Dec. 5, 141.47.

5-14-33bb. Mrs. Ingeborg Nielson. Highest water level 157.51, Sept. 26. Records available: 1948-50. Jan 26, 158.12; Mar. 22, 158.02; June 8, 157.73; July 26, 157.65; Sept. 26, 157.51; Dec. 5, 157.88.

5-15-3ba. Thomsen. Highest water level 102.95, Dec. 7. Records available: 1947-50. Jan. 25, 103.90.

Daily lowest water level, from recorder graph

Day	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	104.12	103.85	.....	103.61	103.53	103.92	103.66	103.60	103.51	.....
2	.....	104.09	103.51	.....	103.63	103.50	103.94	103.60	103.49	103.29	.....
3	.....	103.67	103.83	.....	103.72	103.53	103.87	103.67	103.10	103.10	.....
4	.....	103.67	104.02	.....	103.69	103.57	103.79	103.68	103.13	103.32	.....
5	.....	103.69	104.09	.....	103.42	103.61	103.91	103.73	103.36	103.16	.....
6	103.69	103.54	103.85	.....	103.38	103.60	103.91	103.75	103.47	.....	103.25
7	.....	104.00	103.61	.....	103.36	103.52	103.74	103.77	103.31	.....	102.95
8	.....	.....	103.61	.....	103.58	103.48	103.84	103.73	103.28	.....	103.12
9	.....	.....	103.40	.....	103.65	103.50	103.84	.....	103.38	.....	103.27
10	103.78	.....	104.00	.....	103.72	103.55	103.75	.....	103.38	.....	103.27
11	103.80	.....	104.08	.....	103.63	103.54	103.77	.....	103.17	.....	102.98
12	103.86	.....	103.91	.....	103.38	103.75	103.77	.....	103.29	.....	103.00
13	103.93	.....	103.88	.....	103.38	103.76	103.73	.....	103.23	.....	102.98
14	103.90	.....	103.67	.....	103.51	103.59	103.68	.....	103.33	.....	103.15
15	103.93	.....	103.59	.....	103.51	103.53	103.73	.....	103.31	.....	103.19
16	103.91	.....	103.55	.....	103.65	103.54	103.80	.....	103.19	.....	.....
17	103.92	.....	103.55	103.64	103.65	103.73	103.87	.....	103.36	.....	.....
18	104.07	.....	103.77	103.48	103.54	103.70	103.84	.....	103.33	.....	.....
19	103.96	.....	103.81	103.65	103.58	103.66	103.82	.....	103.17	.....	.....
20	103.66	.....	103.63	103.65	103.45	103.71	103.79	.....	103.30	.....	.....
21	103.78	.....	103.46	103.61	103.48	103.72	103.55	.....	103.30	.....	.....
22	103.78	103.66	103.40	103.51	103.33	103.66	103.50	.....	103.29	.....	.....
23	103.81	103.65	103.37	103.40	103.37	103.65	103.55	.....	103.27	.....	.....
24	103.87	103.71	103.71	103.64	103.45	103.71	103.63	.....	103.06	.....	.....
25	104.10	103.55	103.72	103.69	103.68	103.68	103.67	103.36	103.15	.....	.....

## 5-15-3ba--Continued.

Daily lowest water level, from recorder graph

Day	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	104.10	103.31	103.61	103.70	103.78	103.63	103.65	103.38	103.28	.....	.....
27	103.78	103.77	103.78	103.66	103.72	103.65	103.63	103.22	103.25	.....	.....
28	104.04	104.15	103.64	103.45	103.70	103.58	103.58	103.19	103.15	.....	.....
29		104.25	.....	103.40	103.70	103.54	103.61	103.32	103.04	.....	.....
30		104.16	.....	103.61	103.55	103.57	103.60	103.60	103.35	.....	.....
31		103.85	.....	103.68	.....	103.82	103.62	.....	103.46	.....	.....

5-16-30da. R. R. Caswell. Highest water level 135.70, Mar. 22. Records available: 1947-50. Mar. 22, 135.70; June 8, 136.28; July 26, 136.04; Sept. 26, 136.12; Dec. 6, 135.88.

6-13-16db. V. M. Youngson. Highest water level 85.89, Sept. 26. Records available: 1947-50. Jan. 26, 86.75; Mar. 22, 86.48; June 8, 86.22; July 26, 86.00; Sept. 26, 85.89; Dec. 5, 86.07.

6-14-21db. Eva L. Larson. Highest water level 103.20, July 27; lowest 104.62, Dec. 5. Records available: 1947-50. Jan. 26, 103.95; Mar. 22, 103.50; June 8, 103.25; July 27, 103.20; Sept. 26, 103.25; Dec. 5, 104.62.

6-15-1cb. Roy Youngson. Highest water level 67.83, Dec. 6. Records available: 1948-50. Jan. 26, 69.57; Mar. 23, 69.23; June 8, 69.15; July 27, 68.84; Sept. 26, 68.13; Dec. 6, 67.83.

6-16-14ad. George Johnson. Highest water level 79.23, Sept. 26. Records available: 1948-50. Jan. 26, 80.24; Mar. 22, 79.92; June 7, 79.55; July 27, 79.53; Sept. 26, 79.23; Dec. 6, 79.47.

6-16-20bb. Elmer E. Carlson. Highest water level 81.43, Sept. 26. Records available: 1934-42, 1946-50. Jan. 26, 82.82; Mar. 22, 82.40; June 7, 82.92; July 27, 81.71; Sept. 26, 81.43.

7-13-20aa. Charles Gleason. Highest water level 52.93, Jan. 26. Records available: 1947-50. Jan. 26, 52.93; Mar. 23, 54.50; June 8, 54.41; July 27, 53.74; Sept. 26, 53.53; Dec. 5, 53.45.

7-14-20ba. George Burchall. Highest water level 73.70, Sept. 26. Records available: 1948-50. Jan. 26, 75.05; Mar. 23, 74.98; June 8, 74.85; July 27, 74.44; Sept. 26, 73.70; Dec. 5, 73.71.

7-16-8dc. Israel Kring Estate. Highest water level 13.52, July 27. Records available: 1947-50. Jan. 26, 16.61; Mar. 22, 16.43; June 7, 13.90; July 27, 13.52; Sept. 26, 16.01; Dec. 6, 16.00.

8-14-13db. Hardon Yensen. Records available: 1930-50. Jan. 6, 8.05; Mar. 6, 7.60; May 1, 6.85; July 8, 8.00; Sept. 12, 8.27; Nov. 3, 8.07.

8-15-21dc. Raffety. Records available: 1946-50. Jan. 6, 6.04; Mar. 6, 5.77; May 11, 3.78; Nov. 13, 5.79.

8-16-28aa. U. S. Geol. Survey. Records available: 1946-50. Jan. 6, 6.73; Mar. 6, 6.32; May 11, 5.33; July 8, 6.35; Sept. 12, 6.03; Nov. 3, 6.34.

Keith County

13-35-6dd. Central Nebraska Public Power and Irrigation District. Lowest water level 11.52, Dec. 2. Records available: 1938-46, 1948-50. Feb. 9, 11.23; Apr. 13, 11.32; June 1, 11.07; Aug. 9, 10.94; Oct. 20, 11.29; Dec. 2, 11.52.

13-36-8cc. U. S. Geol. Survey. Measurements supplied through courtesy of Platte Valley Public Power and Irrigation District. Records available: 1946-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	....	....	3.05	3.75	4.05	....	3.74	3.49	3.66	3.84	....
2	....	....	....	3.05	3.76	4.07	....	3.81	3.71	3.68	3.80	....
3	....	....	....	3.05	3.78	4.11	....	3.86	3.91	3.71	3.73	....
4	....	....	....	....	3.78	4.13	....	3.92	4.07	3.71	3.69	....
5	3.50	....	....	....	3.78	4.16	....	3.96	4.22	3.70	3.64	....

13-36-8cc--Continued.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	....	3.30	....	....	3.77	4.19	4.52	3.96	4.33	3.74	3.64	3.46
7	....	3.27	....	....	3.68	4.22	4.56	3.95	4.44	3.79	....	3.49
8	....	3.22	....	....	3.64	4.25	4.56	3.76	4.52	3.81	....	3.54
9	....	3.17	....	....	3.63	4.26	4.55	3.62	....	3.80	....	3.57
10	....	3.12	....	3.00	3.66	4.26	4.56	3.64	....	3.81	....	3.57
11	....	3.09	....	3.05	3.69	4.25	4.56	3.64	3.72	3.84	....	3.49
12	....	3.08	....	3.11	....	4.25	4.57	3.57	3.74	3.84	....	3.45
13	....	3.08	3.12	3.13	....	4.25	4.55	3.63	3.75	3.84	....	3.40
14	....	....	3.13	3.15	....	4.28	4.54	3.71	3.75	3.86	....	3.38
15	....	....	3.09	3.19	3.84	4.30	4.57	3.77	3.73	3.86	....	3.33
16	....	....	3.00	3.23	3.87	4.33	4.57	3.81	3.57	3.90	....	3.31
17	....	....	2.91	3.26	3.90	4.36	4.54	....	3.42	3.91	....	3.29
18	3.44	....	2.95	3.32	3.92	4.36	....	....	3.48	3.89	....	3.31
19	3.45	....	2.98	3.38	3.95	4.25	....	....	3.53	3.88	....	3.34
20	3.45	....	2.92	3.41	3.96	4.25	....	....	3.55	3.87	....	3.36
21	3.43	2.98	....	3.45	3.97	4.22	....	....	3.58	3.85	3.43	3.37
22	3.39	3.00	....	3.48	4.00	4.23	....	....	3.58	3.85	3.43	3.38
23	....	3.04	....	3.51	4.02	4.29	....	....	3.58	3.85	3.45	3.39
24	....	3.04	....	3.55	4.04	4.34	....	4.12	3.58	3.86	3.45	3.41
25	....	3.05	....	....	4.04	4.42	3.58	4.15	3.55	3.86	3.39	3.42
26	....	3.05	....	3.65	4.04	4.46	3.55	4.15	3.51	3.85	3.38	3.41
27	....	2.99	2.93	3.69	4.02	....	3.30	4.08	3.52	3.85	3.31	3.40
28	....	3.02	2.98	3.71	4.01	....	3.31	4.06	3.58	3.87	....	3.34
29	....	....	3.02	3.73	4.03	....	3.45	2.90	3.59	3.87	....	3.32
30	3.42	....	3.03	3.75	4.05	....	3.56	1.89	3.64	3.86	....	3.32
31	....	....	3.04	....	4.05	....	3.66	2.27	....	3.83	....	3.34

13-36-9ad. U. S. Geol. Survey. Measurements supplied through courtesy of Platte Valley Public Power and Irrigation District. Records available: 1946-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	....	....	0.86	1.44	2.28	....	....	1.89	....	2.09	1.44
2	....	....	....	.88	1.54	2.36	....	2.57	2.02	1.86	2.09	1.42
3	....	....	....	.75	....	2.42	....	2.62	2.18	1.89	2.00	1.46
4	....	....	....	.36	1.61	2.46	....	2.62	2.23	1.88	1.99	1.43
5	h1.98	....	....	.32	1.60	2.54	....	2.62	2.32	1.91	1.97	....
6	....	1.00	....	....	.55	2.63	3.11	2.70	2.36	1.94	1.96	1.54
7	....	.96	....	....	....	2.73	3.20	2.70	2.39	1.93	....	1.59
8	....	.91	....	....	....	2.77	3.21	2.63	2.39	....	....	1.59
9	....	.77	....	....	....	2.80	3.19	2.47	....	1.94	....	1.57
10	....	.67	....	.69	....	2.81	3.22	2.44	....	1.95	....	1.55
11	....	.59	....	.81	....	2.84	3.25	2.38	2.40	1.96	....	1.50
12	....	.54	....	.92	....	2.87	3.25	2.35	2.40	1.96	....	1.44
13	....	.52	0.76	1.03	....	2.89	3.21	2.46	2.28	1.96	....	1.39
14	....	....	.77	1.04	....	2.91	3.24	2.51	2.23	1.96	....	1.32
15	....	....	.75	1.11	1.72	2.93	3.28	2.54	1.90	1.96	....	1.32
16	....	....	.74	1.11	1.80	....	3.28	....	1.97	1.98	....	1.33
17	....	....	.67	1.18	1.88	....	3.25	....	....	1.99	....	1.33
18	h1.60	....	.72	1.29	1.92	....	....	....	....	2.00	....	1.30
19	....	....	.72	1.34	1.99	2.83	....	....	1.97	2.01	....	1.30
20	....	....	.37	1.36	....	2.83	....	....	1.99	2.01	....	1.29
21	....	.14	....	1.38	....	2.86	....	....	2.01	2.01	1.51	1.29
22	....	.15	....	1.42	2.08	2.94	....	....	2.03	2.02	1.52	1.29
23	....	.24	....	1.48	2.21	2.98	....	....	2.03	2.03	1.58	1.30
24	....	.24	....	....	2.25	3.01	....	2.71	....	2.03	1.62	1.30
25	....	.33	....	....	2.25	3.06	2.45	2.74	2.03	2.04	1.60	1.27
26	....	.33	....	1.62	1.76	3.08	2.41	2.65	2.03	2.05	1.51	....
27	....	.34	....	1.65	1.79	....	2.33	2.61	2.03	2.06	1.48	h1.40
28	....	.41	....	1.64	1.89	....	2.39	1.87	2.02	2.08	1.49	....
29	....	....	.76	1.46	1.99	....	2.46	1.79	1.98	2.08	1.50	....
30	h1.17	....	.80	1.36	2.12	....	2.53	1.85	1.97	2.08	1.46	....
31	....	....	.85	....	2.21	....	2.54	....	....	2.07	....	....

h Tape measurement.



13-37-3ab. Records available: 1935-49. No measurement made in 1950.

13-38-3bb. Incorrectly published as 13-38-3ba in previous reports. Central Nebraska Public Power and Irrigation District. Records available: 1936-50. Feb. 9, 12.76; Apr. 13, 12.96; June 1, 13.66; Aug. 9, 12.84; Oct. 20, 13.78; Dec. 2, 13.69.

13-38-6ca. Central Nebraska Public Power and Irrigation District. Lower water level 15.28, Aug. 9. Records available: 1936-50. Feb. 9, 13.96; Apr. 13, 13.85; June 1, 14.29; Aug. 9, 15.28; Oct. 20, 14.79; Dec. 2, 14.37.

13-39-19cd. George McGinley. Lowest water level 43.85, Oct. 19. Records available: 1935-41, 1944, 1947-50. Feb. 9, 42.90; Apr. 13, 42.38; June 1, 43.57; Aug. 9, 43.83; Oct. 19, 43.85; Dec. 1, 43.57.

13-39-34dd. George Peters Estate. Records available: 1935-42, 1947, 1949-50. Apr. 13, 167.03.

13-40-22bb. Central Nebraska Public Power and Irrigation District. Records available: 1939-50. Feb. 9, 6.59; Apr. 14, 6.49; June 1, 8.01. Measurement discontinued.

16-38-7aa. Central Nebraska Public Power and Irrigation District. Measurements supplied through courtesy of Central Nebraska Public Power and Irrigation District. Lowest water level 10.60, Aug. 31, Sept. 30, Oct. 31, Nov. 30, and Dec. 30. Records available: 1936-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	10.30	May 1	10.30	July 31	10.60	Oct. 31	10.60
Feb. 28	10.30	31	10.30	Aug. 31	10.60	Nov. 30	10.60
Mar. 1	10.30	June 30	10.50	Sept. 30	10.60	Dec. 30	10.60

#### Kimball County

14-59-11dd. A. Mortensen. Drilled irrigation well, diameter 18 inches, reported depth 84 feet. Records available: 1950. June 26, 22.15.

15-55-17cc. Kimball Irrigation District. Well 327 in previous reports. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 193.09. Lowest water level 96.07, June 22. Records available: 1935-42, 1950. June 22, 96.07.

15-55-26cc. Henry Meier. Well 394 in previous reports. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 139.39. Records available: 1936-37. Measurement discontinued.

15-55-29db. Gale Russell. Drilled irrigation well, diameter 18 inches, reported depth 85 feet. Records available: 1950. June 28, 46.76.

#### Lancaster County

A10-6-1cc. F. F. Keech. Drilled domestic well, diameter 8 inches, reported depth 70 feet. Highest water level 8.98, July 16, 1949; lowest 21.96, Dec. 17, 1950. Records available: 1949-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 1, 1949	16.61	July 9, 1949	9.32	Nov. 19, 1949	15.48	Apr. 8, 1950	18.66
5	14.49	16	8.98	26	15.81	15	18.78
12	15.06	23	9.29	3	16.30	22	18.84
19	14.89	30	9.70	10	16.51	29	19.09
26	14.51	Aug. 6	10.12	17	16.93	May 6	19.17
Apr. 2	14.30	13	10.66	24	17.46	13	19.35
9	14.04	20	11.22	31	17.80	20	19.29
16	14.00	27	11.72	Jan. 7, 1950	18.09	27	19.35
23	13.85	Sept. 3	12.20	14	18.31	June 3	18.51
30	13.75	10	12.56	21	18.62	10	18.54
May 7	13.62	17	12.31	Feb. 11	19.38	17	18.89
20	11.62	24	12.71	18	19.61	24	18.95
28	10.71	Oct. 1	12.85	25	19.60	July 1	18.46
June 4	10.93	15	13.90	Mar. 4	19.25	8	18.78
11	10.67	22	14.20	11	19.00	15	19.78
18	10.57	30	14.50	18	18.99	22	19.80
25	9.97	Nov. 5	14.89	25	19.04	29	19.89
July 4	9.68	12	14.94	Apr. 1	18.82	Aug. 5	20.17

## A10-6-1cc--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 12, 1950	20.19	Sept. 16, 1950	20.43	Oct. 21, 1950	20.68	Nov. 25, 1950	21.50
19	20.05	23	20.72	27	20.85	Dec. 2	21.60
26	20.12	30	20.73	Nov. 3	20.33	9	21.62
Sept. 2	20.00	Oct. 7	20.44	11	20.15	17	21.96
9	20.26	15	20.47	18	21.36		

A11-8-17dc. Jeary. Drilled irrigation well, diameter 18 inches, reported depth 91 feet. Records available: 1950. May 5, 11.95.

Lincoln County

12-26-35db. R. D. McWha. Records available: 1946-50. Jan. 5, 10.52; Mar. 3, 10.20; May 9, 9.57; July 6, 10.29; Sept. 8, 10.53; Nov. 9, 10.53.

12-27-14aa. University of Nebraska. Records available: 1934-50. Jan. 5, 6.25; Mar. 4, 6.09; May 9, 5.12; July 6, 6.50; Sept. 8, 6.61; Nov. 9, 6.54.

12-27-28dd. U. S. Geol. Survey. Lowest water level 13.29, Nov. 2. Records available: 1947-50. Jan. 5, 12.29; Mar. 4, 12.30; May 9, 12.15; July 6, 12.53; Sept. 11, 12.44; Nov. 2, 13.29.

12-28-9bc. Central Nebraska Public Power and Irrigation District. Highest water level, 4.64, May 9. Records available: 1938-50. Jan. 5, 4.94; Mar. 4, 4.76; May 9, 4.64; July 6, 5.22; Sept. 11, 5.10; Nov. 2, 4.91.

13-28-21da. Central Nebraska Public Power and Irrigation District. Records available: 1938-50. Jan. 5, 4.54; Mar. 4, 3.65; May 9, 1.35; July 6, 4.49; Sept. 8, 5.10; Nov. 9, 5.27.

13-30-21bb. University of Nebraska. Records available: 1934-50. Jan. 5, 11.25; Mar. 4, 12.20; May 9, 11.75; July 6, 11.75; Sept. 8, 11.19; Nov. 2, 11.10.

14-30-9ca. U. S. Geol. Survey. Records available: 1946-50. Jan. 5, 4.68; Mar. 4, 3.94; May 9, 3.27; July 6, 5.00; Sept. 8, 4.17; Nov. 2, 4.35.

14-30-33cd. U. S. Geol. Survey. Records available: 1946-50. Jan. 5, 8.20; Mar. 4, 8.07; May 9, 7.74; July 6, 8.17; Sept. 8, 7.71; Nov. 2, 7.68.

14-33-17da. University of Nebraska. Records available: 1936-46. No measurement made in 1950.

14-33-27da. U. S. Geol. Survey. Measurements supplied through courtesy of Platte Valley Public Power and Irrigation District. Lowest water level 5.96, Mar. 18. Records available: 1943-50.

## Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	5.91	....	....	....	5.35	....	....	4.92	....	5.33	5.54
2	....	5.91	....	....	....	5.36	....	....	....	....	5.39	5.55
3	....	5.92	....	....	....	5.37	....	....	....	....	5.39	5.56
4	....	5.92	....	5.94	....	5.38	....	....	....	....	5.39	5.57
5	5.78	5.92	....	5.94	....	5.38	....	....	....	....	5.39	....
6	5.79	5.93	....	5.92	....	....	....	....	....	....	5.40	5.60
7	5.79	5.93	....	5.90	....	....	....	....	....	....	....	5.61
8	5.80	5.93	....	5.89	....	....	....	....	....	....	....	5.61
9	5.81	5.92	....	5.86	....	....	....	....	....	5.23	....	5.62
10	5.81	5.92	....	5.84	....	5.46	....	....	....	5.24	....	5.63
11	5.82	5.92	....	5.82	....	5.46	....	....	....	5.26	....	5.63
12	5.82	5.92	....	5.80	5.42	5.47	....	....	....	5.26	....	5.64
13	5.83	5.92	5.95	5.79	5.42	5.48	....	....	....	5.27	....	5.64
14	5.84	5.92	5.95	5.76	5.41	5.49	5.45	5.13	....	5.28	....	....
15	5.84	5.92	5.95	5.73	5.41	5.49	5.45	5.14	....	5.29	....	....
16	5.85	....	5.95	5.71	5.41	5.50	5.45	5.16	....	5.30	....	....
17	5.85	....	5.95	5.69	5.41	5.51	5.45	5.18	....	5.31	....	....
18	5.86	....	5.96	5.67	5.39	....	5.44	5.19	....	5.31	....	....
19	5.86	....	5.95	5.66	5.35	5.52	5.43	5.19	4.96	5.32	....	....
20	5.86	5.92	5.95	....	....	5.52	5.41	5.18	4.95	5.32	5.48	....
21	5.87	5.92	5.95	....	....	5.52	5.38	5.17	4.97	5.33	5.48	....
22	5.87	5.92	5.95	....	5.33	5.52	....	....	4.98	5.33	5.49	....
23	5.87	5.91	5.94	....	5.34	5.52	....	....	5.00	5.34	5.50	....
24	5.88	5.91	5.94	....	5.36	5.52	5.28	....	5.02	5.34	5.51	....
25	5.88	5.91	5.94	....	5.37	5.53	5.27	5.19	5.04	5.35	5.51	....

14-33-27da--Continued.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	5.89	5.91	5.94	....	5.38	5.53	5.20	5.20	5.05	5.35	5.52	....
27	....	5.91	5.94	....	5.38	....	5.16	5.22	....	5.36	5.52	5.72
28	....	....	5.95	....	5.37	....	5.12	5.21	....	5.36	5.53	....
29	....	....	....	....	5.36	....	5.10	5.15	....	5.37	5.53	....
30	....	....	....	....	5.35	....	5.09	5.13	....	5.37	5.54	....
31	5.90	....	....	....	5.35	....	5.09	5.09	....	5.38	....	....

No measurement made in wells 15-31-13dd and 16-31-4ab.

Loup County

21-16-22aa. University of Nebraska. Records available: 1935-42, 1948, 1950. Aug. 24, 4.50; Oct. 5, 4.20; Nov. 1, 4.06.

Madison County

22-1-33cb. Alvin Christian. Drilled unused artesian well in sand of Pleistocene age, diameter 8 inches, depth 60 feet. Records available: 1935-50. Apr. 7, 1950, +0.65.

23-2-5aa. J. Bredehoft. Records available: 1934-37, 1940-42, 1944-50. Apr. 7, 4.05.

Merrick County

12-7-7aa. U. S. Geol. Survey. Records available: 1945-50. Jan. 3, 7.01; Feb. 27, 6.94; May 1, 6.79; July 3, 6.69; Sept. 13, 6.48; Nov. 6, 6.79.

12-8-7dc. Owner unknown. Records available: 1946-50. Jan. 3, 9.55; Feb. 27, 9.62; May 1, 9.64; July 3, 9.39; Sept. 13, 11.38; Nov. 6, 9.10.

12-8-28dc. U. S. Geol. Survey. Records available: 1945-50. Jan. 3, 2.35; Feb. 27, 2.05; May 1, 1.86; July 3, 1.80; Sept. 13, 1.61; Nov. 6, 1.96.

13-6-2bc. U. S. Geol. Survey. Records available: 1945-50. Jan. 11, 6.36; Mar. 14, 6.00; May 4, 5.69; June 28, 5.70; Aug. 29, 5.90; Oct. 5, 5.70; Oct. 30, 5.89; Nov. 27, 5.98.

13-6-19cb. U. S. Geol. Survey. Records available: 1945-50. Jan. 3, 5.38; Feb. 27, 5.29; May 1, 5.00; July 3, 5.10; Sept. 13, 4.75; Nov. 6, 5.18.

14-5-9cc2. Owner unknown. Records available: 1947-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 11	6.79	June 29	6.53	Aug. 29	5.70	Nov. 1	6.46
Mar. 14	6.52	Aug. 1	5.99	Oct. 4	6.23	30	6.62
May 4	6.41						

14-6-15bb. U. S. Geol. Survey. Records available: 1945-50. Jan. 11, 4.26; Mar. 14, 3.19; May 4, 3.48; June 28, 4.50; Sept. 5, 3.95; Oct. 4, 3.78; Oct. 30, 4.10; Nov. 27, 3.94.

14-7-21cb. Henry Tsudy. Records available: 1934-42, 1945-50. Jan. 3, 6.72; Feb. 27, 6.52; May 1, 6.27; July 3, 6.94; Sept. 13, 6.93; Nov. 6, 6.89.

15-4-15dd. U. S. Geol. Survey. Lowest water level 8.93, Nov. 30. Records available: 1945-50. Jan. 11, 8.58; Mar. 14, 8.27; May 4, 8.00; June 29, 8.11; Aug. 25, 8.24; Oct. 6, 8.72; Nov. 1, 8.83; Nov. 30, 8.93.

15-4-31cc. U. S. Geol. Survey. Records available: 1945-50.

Jan. 11	4.39	May 4	3.92	Aug. 29	4.24	Nov. 1	4.72
Mar. 14	3.87	June 29	4.40	Oct. 25	4.65	30	4.94

15-5-8dd. U. S. Geol. Survey. Records available: 1946-50.

Jan. 11	12.65	May 26	13.20	Aug. 28	11.73	Nov. 1	12.39
Mar. 14	12.93	June 26	13.29	Oct. 5	12.21	30	12.57
May 4	13.65	Aug. 1	11.71				

15-8-33bc. Dinsdale Bros. Highest water level 10.38, Feb. 6. Records available: 1948-50.

Jan. 10	11.49	Mar. 12	11.15	May 26	11.05	Oct. 2	11.51
Feb. 6	10.38	28	11.11	June 27	12.12	31	11.18
27	11.29	Apr. 28	11.29	Aug. 29	10.92	Nov. 28	11.11

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16-3-7dd. U. S. Geol. Survey. Lowest water level 5.07, Jan. 11. Records available: 1947-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 11	5.07	May 26	3.68	Aug. 23	4.39	Nov. 2	4.95
Mar. 10	4.29	June 23	4.23	Oct. 9	4.66	30	4.98
May 4	4.15	Aug. 3	4.33				

16-3-27cc. Paul Pearson. Records available: 1934-42, 1944-50.

Jan. 11	6.91	May 4	6.46	Aug. 23	6.43	Nov. 2	7.24
Mar. 10	6.02	June 29	7.00	Oct. 9	7.06	30	6.59

## Morrill County

18-52-11dd. J. Barden. Highest water level 23.50, Feb. 20; lowest 24.13, Aug. 20. Records available: 1949-50.

Jan. 27	23.57	May 9	23.76	June 22	23.84	Sept. 21	23.90
Feb. 20	23.50	29	23.82	Aug. 20	24.13	Oct. 9	23.81
Mar. 28	23.54						

19-49-23cc. W. E. Guthrie Estate. Highest water level 9.33, Aug. 20; lowest 11.95, May 9. Records available: 1936-42, 1944, 1948-50.

Jan. 27	11.54	May 9	11.95	July 17	10.04	Oct. 19	10.62
Feb. 20	11.72	29	10.37	Aug. 20	9.33	Nov. 27	11.09
Mar. 28	11.81	June 22	11.02	Sept. 21	9.89		

19-50-30cd. P. Reuter. Highest water level 23.06, Jan. 27. Records available: 1949-50.

Jan. 27	23.06	May 9	23.55	July 17	23.66	Sept. 21	23.44
Feb. 20	23.70	29	23.58	Aug. 20	23.82	Oct. 19	23.35
Mar. 28	23.74	June 22	23.67				

20-49-30ac. Arnold Stewart. Records available: 1946-50. Jan. 26, 16.31; Apr. 6, 17.59; Aug. 15, 15.86; Oct. 18, 17.57; Dec. 19, 18.19.

20-50-28bb. F. Smith. Records available: 1934-42, 1944-50.

Jan. 26	12.84	Apr. 6	13.76	July 17	14.04	Oct. 18	13.50
27	12.49	May 9	13.81	Aug. 16	15.57	19	13.59
Feb. 20	13.78	29	13.75	20	13.71	Nov. 27	13.78
Mar. 28	14.00	June 22	13.81	Sept. 21	13.19	Dec. 20	13.80

20-50-32aa. State Dept. of Roads and Irrigation. Records available: 1930-50.

Jan. 5	4.61	Apr. 15	5.28	July 10	5.48	Sept. 30	4.29
10	4.63	20	5.21	15	5.49	Oct. 5	4.34
15	4.67	25	5.49	20	5.29	10	4.65
20	4.69	30	5.22	25	4.91	17	4.62
25	4.68	May 5	5.21	30	5.15	20	4.62
30	4.54	10	5.11	Aug. 5	5.47	24	4.66
Feb. 5	4.56	15	5.26	10	5.46	30	4.82
11	4.65	20	5.11	15	5.51	Nov. 5	4.63
15	4.70	25	5.02	20	5.02	10	4.54
20	4.72	29	4.96	25	5.22	15	4.64
25	4.75	June 1	4.94	30	4.79	20	4.54
Mar. 5	4.81	5	5.30	Sept. 5	5.21	26	4.48
10	4.79	10	5.33	10	4.77	30	4.52
15	4.81	15	5.34	15	4.27	Dec. 5	4.54
20	4.78	20	4.96	16	4.22	11	4.61
25	4.81	25	5.04	18	4.26	16	4.60
30	4.80	30	5.74	20	4.18	20	4.66
Apr. 5	4.95	July 5	5.24	25	4.26	26	4.68
10	5.02						

22-50-14bc. U. S. Geol. Survey. Records available: 1946-50. Apr. 6, 0.12; Aug. 15, 1.51; Oct. 17, 1.15; Dec. 20, 0.80.

22-50-28bc. Mrs. Jessie Jensen. Highest water level 79.94, Oct. 17. Records available: 1934-42, 1944, 1946-50. Jan. 26, 80.39; Apr. 6, 80.10; Aug. 16, 80.04; Oct. 17, 79.94; Dec. 20, 81.31.

Nance County

15-7-6bb. Owner unknown. Highest water level 63.88, Mar. 28. Records available: 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	65.50	Mar. 28	63.88	June 27	65.73	Oct. 2	65.48
Feb. 9	65.47	Apr. 28	65.59	July 24	65.49	30	65.42
Mar. 3	65.44	May 24	65.67	Aug. 29	65.52	Nov. 28	65.36

16-4-31bc. U. S. Geol. Survey. Records available: 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	5.95	May 26	5.68	Aug. 28	5.45	Nov. 1	6.26
Mar. 14	5.65	June 23	6.05	Oct. 5	6.15	30	6.41
May 4	5.85	Aug. 2	5.04				

16-6-14ac. C. A. Aldrich. Records available: 1936-37, 1939-42, 1947-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	26.58	Mar. 29	25.63	July 25	26.96	Nov. 1	25.76
Feb. 9	26.78	May 23	25.67	Aug. 22	25.68	29	25.72
Mar. 3	26.56	June 22	26.85	Oct. 2	25.66		

17-4-24db. Greek Estate. Records available: 1934-42, 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	6.38	Apr. 28	6.17	July 25	4.55	Oct. 11	5.71
Feb. 8	6.37	May 24	6.04	Aug. 25	4.93	Nov. 28	6.18
Mar. 28	6.04	June 23	5.66				

17-4-25dc. Loup River Public Power District. Records available: 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	11.31	Mar. 29	10.44	June 23	11.19	Nov. 2	11.90
Feb. 8	11.04	Apr. 24	10.78	Aug. 25	11.34	28	11.69
Mar. 3	10.65	May 24	10.74	Oct. 6	11.77		

17-5-35dd. Loup River Public Power District. Highest water level 3.52, July 25. Records available: 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	5.79	Mar. 28	3.79	June 22	5.14	Aug. 22	5.08
Feb. 7	5.49	Apr. 24	4.75	July 25	3.52	Oct. 11	5.71
Mar. 3	3.96	May 23	4.68				

17-6-34ad. Wm. Christiansen. Highest water level 40.30, May 24. Records available: 1935-42, 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	42.98	Mar. 30	43.51	June 21	43.14	Aug. 21	42.21
Feb. 6	42.97	Apr. 27	43.17	July 24	42.61	Dec. 29	42.64
27	43.10	May 24	40.30				

17-7-1ad. Mrs. Anderson. Highest water level 37.15, July 24. Records available: 1949-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	38.38	Mar. 30	37.71	July 24	37.15	Oct. 23	38.25
Feb. 6	38.24	Apr. 27	37.87	Aug. 22	37.48	Dec. 29	38.19
27	37.98	June 21	37.82				

18-4-19ab. Homer Peterson. Highest water level 6.05, July 25. Records available: 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	11.36	Mar. 28	9.58	June 22	9.63	Aug. 22	8.65
Feb. 9	11.19	Apr. 25	10.74	July 25	6.05	Oct. 24	10.74
Mar. 2	10.44	May 23	10.25				

Nuckolls County

1-5-31cb. U. S. Geol. Survey. Highest water level 17.88, Oct. 29. Records available: 1947-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 23	18.68	May 30	18.79	Aug. 22	19.05	Oct. 29	17.88
Mar. 27	18.80	June 29	19.40	Sept. 30	18.27	Dec. 28	18.30
Apr. 24	19.08	July 31	19.09				

1-6-30dd. Marion Day. Highest water level 32.86, Nov. 8, Dec. 8, 14 and 31. Records available: 1946-50

1-6-30dd--Continued.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	33.01	33.02	33.01	33.06	33.08	33.09	33.08	33.06	33.00	33.00	32.89	32.88
2	33.01	33.02	33.01	33.05	33.07	33.08	33.07	33.05	33.00	33.00	32.89	.....
3	33.01	33.02	33.01	33.05	33.06	33.08	33.08	33.05	33.00	33.00	32.89	.....
4	33.02	33.02	33.00	33.05	33.06	33.07	33.08	33.05	33.00	32.99	32.89	32.88
5	33.03	33.02	32.99	33.05	33.06	33.07	33.08	33.04	33.00	32.99	32.88	32.89
6	33.03	33.01	32.99	33.05	33.06	33.06	33.09	33.04	33.00	32.97	32.87	32.89
7	33.03	33.01	32.98	33.05	33.07	33.06	33.09	33.04	33.01	32.97	32.87	32.87
8	33.03	32.99	32.98	33.04	33.07	33.07	33.09	33.04	33.00	32.97	32.86	32.86
9	33.02	32.99	32.98	33.03	33.08	33.07	33.08	33.04	33.00	32.97	32.87	32.87
10	33.01	32.99	32.98	33.03	33.08	33.07	33.09	33.03	32.99	32.96	32.88	32.87
11	33.00	32.99	32.98	33.03	33.09	33.07	33.09	33.03	32.99	32.95	32.88	32.87
12	32.99	32.99	32.98	33.04	33.09	33.07	33.09	33.02	33.00	32.95	32.89	32.87
13	32.99	33.00	32.99	33.04	33.09	33.07	33.09	33.02	33.00	32.94	32.89	32.87
14	32.99	33.00	32.99	33.04	33.08	32.07	33.08	33.01	33.01	32.94	32.89	32.87
15	32.99	33.00	33.00	33.04	33.08	33.08	33.06	33.02	33.01	32.93	32.88	32.97
16	33.00	33.01	33.03	33.03	33.08	33.08	33.04	33.02	33.00	32.93	32.88	32.87
17	33.00	33.01	33.03	33.04	33.08	33.08	33.04	33.02	33.00	32.93	32.88	.....
18	33.01	33.02	33.03	33.03	33.07	33.08	33.05	33.02	33.00	32.93	32.88	32.88
19	33.02	33.01	33.03	33.04	33.07	33.08	33.06	33.02	33.00	32.93	32.88	32.88
20	33.02	33.00	33.03	33.05	33.07	33.08	33.07	33.02	33.00	32.93	32.88	32.87
21	33.02	32.99	33.03	33.05	33.08	33.08	33.07	33.01	33.01	32.93	32.88	32.87
22	33.01	32.99	33.03	33.04	33.08	33.08	33.07	33.01	33.01	32.92	32.88	32.87
23	33.00	32.99	33.03	33.03	33.08	33.07	33.07	33.01	33.01	32.93	32.88	32.87
24	33.00	33.00	33.03	33.02	33.08	33.07	33.07	33.01	33.01	32.93	32.88	32.88
25	33.00	33.00	33.03	33.06	33.09	33.07	33.07	33.01	33.01	32.93	32.88	32.88
26	33.02	33.01	33.02	33.07	33.09	33.07	33.07	33.01	33.00	32.92	32.88	32.89
27	.....	33.01	33.02	33.07	33.09	32.08	33.08	33.01	33.00	32.92	32.89	32.89
28	.....	33.00	33.03	33.07	33.09	33.08	33.07	33.01	32.99	32.91	32.89	32.87
29	33.02		33.05	33.07	33.09	33.09	33.07	33.00	33.00	32.91	32.88	32.87
30	33.02		33.06	33.08	33.08	33.08	33.06	33.00	33.00	32.90	32.88	32.87
31	33.02		33.06		33.09		33.06	33.00		32.89		32.86

1-7-32bb. U. S. Geol. Survey. Records available: 1947-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	3.10	Apr. 24	2.99	July 29	0.86	Oct. 23	1.37
Feb. 23	2.70	May 24	2.92	Aug. 23	.93	Dec. 28	2.35
Mar. 29	2.68	June 24	3.56	Sept. 28	1.08		

1-8-7dd. U. S. Geol. Survey. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	4.33	Apr. 23	3.80	Aug. 23	1.91	Oct. 24	2.98
Feb. 24	4.00	May 24	4.23	Sept. 26	1.08	Dec. 28	3.59
Mar. 28	3.77	June 26	5.23				

1-8-23ab. U. S. Geol. Survey. Drilled observation well, diameter 8 inches, depth 18 feet. Land-surface datum is 1598.45 feet above mean sea level. Stevens Type F 8-day recording gage installed Apr. 20. Highest water level 1.01, July 18; lowest 7.91, July 8-9. Records available: 1950.

Daily lowest water level, from recorder graph

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	7.84	5.85	7.69	3.68	4.52	3.75	4.33	5.13
2	.....	7.82	6.01	7.72	3.81	4.62	3.42	4.37	5.21
3	.....	7.80	6.11	7.76	3.90	4.71	1.31	4.37	5.21
4	.....	7.80	6.22	7.79	4.05	4.80	1.56	4.35	5.26
5	.....	7.79	6.33	7.82	4.14	4.87	1.80	4.45	5.30
6	.....	7.85	6.44	7.85	4.24	4.94	2.05	4.49	5.30
7	.....	7.86	6.55	7.88	4.30	5.01	2.32	4.49	5.29
8	.....	7.83	6.63	7.91	4.40	5.08	2.48	4.57	5.35
9	.....	7.81	6.70	7.91	4.52	5.14	2.60	4.61	5.39
10	.....	7.80	6.75	7.98	4.62	5.21	2.67	4.59	5.40
11	.....	7.77	6.80	2.35	4.69	5.27	2.93	4.65	5.42
12	.....	7.75	6.84	2.43	4.70	5.32	2.99	4.69	5.44
13	.....	7.72	6.87	2.74	4.15	5.39	3.07	4.69	5.45
14	.....	7.71	6.88	3.05	4.17	5.43	3.17	4.69	5.48
15	.....	7.70	6.93	3.33	2.60	5.46	3.21	4.79	5.50

1-8-23ab--Continued.

Daily lowest water level, from recorder graph

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	....	7.71	6.97	3.47	2.90	5.51	3.28	4.80	5.53
17	....	7.73	6.99	3.47	3.15	5.54	3.38	4.79	5.55
18	....	7.72	7.05	1.01	3.33	5.59	3.50	4.79	5.55
19	....	7.74	7.08	1.40	3.38	5.64	3.60	4.91	5.59
20	7.75	7.74	7.13	1.87	3.44	5.47	3.62	....	5.60
21	7.74	....	7.15	2.20	3.59	2.13	3.71	....	5.62
22	7.73	....	7.18	2.46	3.74	2.44	3.80	4.96	5.64
23	7.74	....	7.25	2.58	3.89	2.79	3.87	5.02	5.67
24	7.79	....	7.37	2.54	4.01	3.00	3.92	5.01	5.69
25	7.80	7.71	7.44	2.55	4.10	3.18	3.94	5.07	5.71
26	....	7.71	7.49	2.55	4.12	3.25	4.00	5.07	5.74
27	7.83	7.69	7.52	2.78	4.11	3.44	4.05	5.08	5.74
28	7.82	7.67	7.57	2.98	4.19	3.54	4.12	5.11	5.75
29	7.84	7.66	7.61	3.15	4.23	3.54	4.17	5.11	5.79
30	7.85	5.65	7.65	3.33	4.31	3.68	4.20	5.14	5.80
31		5.81		3.51	4.44		4.24		5.80

a Influence of surface seepage.

## Phelps County

5-18-2cc. C. M. Brown. Highest water level 156.88, Dec. 6. Records available: 1947-50. Jan. 25, 157.80; Mar. 22, 157.45; June 7, 157.10; July 26, 157.43; Sept. 27, 157.86; Dec. 6, 156.88.

5-19-22da. Warp. Records available: 1947-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	202.84	203.23	203.51	203.39	203.20	203.17	202.90	203.14	202.99	202.94	203.06	202.50
2	202.65	203.34	203.48	202.92	202.80	203.20	202.93	203.17	202.92	203.21	203.23	202.93
3	202.86	203.23	202.97	203.32	202.87	203.32	202.97	202.98	203.02	203.20	203.29	202.93
4	203.02	203.17	202.97	203.60	202.87	203.27	202.99	202.89	203.05	203.13	203.04	203.07
5	203.20	202.97	202.99	203.67	203.26	202.92	203.07	202.97	203.07	202.66	202.77	203.33
6	202.20	202.99	202.78	203.40	203.41	202.88	203.06	202.96	202.98	202.75	203.01	203.30
7	203.03	203.01	203.32	203.05	203.49	202.83	202.94	202.96	202.82	203.01	202.83	202.80
8	202.62	203.15	203.53	203.03	203.15	203.05	202.81	203.05	202.84	203.14	203.07	203.01
9	202.94	203.13	203.36	202.88	203.30	203.18	202.86	203.05	202.78	202.93	203.25	203.18
10	203.50	203.05	203.23	203.50	203.43	203.28	202.95	202.92	202.85	202.92	203.23	203.17
11	203.37	203.05	203.32	203.73	203.40	203.16	202.93	202.92	202.97	203.05	202.77	202.78
12	203.37	203.14	203.34	203.47	203.18	202.90	203.12	202.88	202.95	203.05	202.86	202.81
13	203.32	203.23	203.28	203.44	202.99	202.80	203.19	202.93	203.00	202.82	202.87	202.80
14	203.03	203.22	202.97	203.18	202.97	203.00	202.95	202.88	203.00	202.94	202.49	202.99
15	203.13	203.26	203.07	203.06	203.02	203.00	202.72	202.90	202.77	202.84	203.15	203.09
16	203.54	203.23	203.13	203.03	203.13	203.20	202.95	202.89	202.93	202.98	203.25	203.10
17	203.40	203.20	203.05	203.01	203.18	203.18	203.09	203.09	203.00	202.98	202.94	203.11
18	203.67	203.39	203.18	203.27	203.00	203.00	203.05	203.07	202.85	202.85	202.60	203.04
19	203.68	203.32	203.20	203.34	203.20	203.10	203.01	203.07	202.92	203.06	203.10	203.01
20	203.63	202.94	203.05	203.26	203.23	202.96	203.10	203.06	202.80	202.99	203.20	202.95
21	203.35	203.04	203.22	202.90	203.19	202.99	203.12	202.77	203.06	202.81	202.97	202.90
22	203.31	203.04	203.23	202.86	203.04	202.75	203.00	202.73	203.07	202.96	202.80	202.85
23	202.85	203.08	203.07	202.81	202.91	202.75	202.95	202.77	202.90	202.97	203.26	202.90
24	202.80	203.13	203.15	203.25	203.25	202.88	203.05	202.88	203.02	202.96	203.33	202.95
25	203.53	203.47	202.95	203.25	203.45	203.20	203.00	202.95	202.90	202.94	202.93	202.90
26	203.78	203.47	202.55	203.31	203.41	203.36	202.95	202.95	202.78	202.68	202.93	203.22
27	203.56	203.11	203.15	203.36	203.24	203.29	202.87	202.92	202.79	202.92	202.75	203.10
28	203.01	203.40	203.70	203.17	202.95	203.12	202.81	202.86	203.00	202.94	202.83	202.66
29	203.38		203.84	203.36	202.92	203.15	202.76	202.90	202.79	202.90	202.80	202.87
30	203.34		203.83	203.35	203.18	202.98	202.83	202.89	202.79	202.80	202.65	202.87
31	203.20		203.39		203.24		203.00	202.92		202.65		202.67

5-20-16dc. Owner unknown. Highest water level 37.29, July 25. Records available: 1948-50. Jan. 24, 37.84; June 6, 37.44; July 25, 37.29; Sept. 27, 37.94; Dec. 6, 37.62.

6-17-15ad. Carl Rumste. Highest 81.67, Dec. 6. Records available: 1947-50. Jan. 25, 84.00; Mar. 22, 83.59; June 7, 83.55; July 26, 83.20; Sept. 27, 83.38; Dec. 6, 81.67.

6-19-2aa. Central Nebraska Public Power and Irrigation District. Highest water level 103.60, Dec. 7. Records available: 1945-50. Jan. 24, 106.40; Mar. 20, 106.43; June 6, 105.96; July 25, 105.66; Sept. 12, 104.57; Dec. 7, 103.60.

6-19-21dc. Owner unknown. Highest water level 148, June 5 and July 25; lowest 152.60, Sept. 26. Records available: 1948-50. Jan. 24, 148.40; Mar. 20, 148.53; June 5, 148.00; July 25, 148.00; Sept. 26, 152.60; Dec. 6, 149.84.

7-18-3cc. Central Nebraska Public Power and Irrigation District. Highest water level 74.09 Dec. 7. Records available: 1948-50. Jan. 25, 76.30; Mar. 20, 76.50; June 7, 76.59; July 25, 74.85; Sept. 28, 74.22; Dec. 7, 74.09.

7-18-35ab. Anderson. Highest water level 66.42, Dec. 6. Records available: 1948-50. Jan. 25, 68.69; Mar. 22, 68.59; June 7, 67.95; July 26, 67.55; Sept. 26, 67.14; Dec. 6, 66.42.

7-20-28dc. Albert Dahlgren. Highest water level 155.70, July 25. Records available: 1934-36, 1948-50. Jan. 24, 156.89; Mar. 20, 157.22; June 6, 156.62; July 25, 155.70; Sept. 28, 156.39; Dec. 7, 157.14.

8-17-24bc. F. R. Skiles. Records available: 1930-50. Jan. 6, 8.97; Mar. 6, 8.73; May 11, 8.09; July 8, 7.70; Sept. 12, 9.22; Nov. 3, 9.16.

8-18-18cc. Gus A. Nelson. Records available: 1946-50. Jan. 6, 7.37; Mar. 6, 7.20; May 11, 6.88; July 7, 6.72; Sept. 11, 7.16; Nov. 3, 7.04.

8-19-18aa. Central Nebraska Public Power and Irrigation District. Lowest water level 3.52, July 7. Records available: 1949-50. Jan. 6, 2.82; Mar. 6, 1.90; May 10, 1.48; July 7, 3.52; Sept. 11, 3.37; Nov. 2, 2.88.

8-19-33cc. Central Nebraska Public Power and Irrigation District. Highest water level 45.68, Dec. 7. Records available: 1948-50. Jan. 24, 48.40; Mar. 20, 47.80; June 6, 47.49; July 25, 46.96; Sept. 28, 46.04; Dec. 7, 45.68.

8-20-8cd. Mrs. A. D. Matson. Highest water level 3.97, Sept. 11. Records available: 1946-50. Jan. 6, 5.92; Mar. 6, 5.77; May 10, 4.98; July 7, 4.60; Sept. 11, 3.97; Nov. 2, 4.84.

#### Platte County

A17-1-17dd. Loup River Public Power District. Lowest water level 10.90, Oct. 27. Records available: 1935-40, 1942-50. Jan. 11, 9.09; Mar. 8, 8.45; May 4, 8.28; June 29, 8.29; Sept. 7, 8.95; Oct. 27, 10.90.

A17-1-36bc. Loup River Public Power District. Records available: 1935-40, 1942-50. Jan. 11, 6.20; Mar. 9, 5.27; May 4, 4.94; June 29, 5.58; Sept. 7, 5.96; Oct. 27, 6.19.

A18-1-28cd. Loup River Public Power District. Records available: 1935-40, 1942-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	69.80	May 27	70.00	Aug. 29	70.10	Oct. 30	70.10
Feb. 28	69.90	June 29	70.00	Sept. 30	70.00	Nov. 28	69.96
Mar. 31	69.90	July 31	70.10	Oct. 25	69.88	Dec. 27	69.98

16-2-9cc. John F. Nyffeler. Records available: 1946-50.

Jan. 11	3.83	May 4	2.57	Aug. 23	3.48	Nov. 3	3.73
Mar. 10	2.45	June 29	3.53	Oct. 10	3.72	Dec. 1	3.58

16-2-12ab. H. Ernst. Records available: 1934-42, 1944-50.

Jan. 11	9.23	May 4	8.17	Aug. 23	9.58	Nov. 3	9.97
Mar. 10	8.24	June 29	9.09	Oct. 10	9.93	Dec. 1	9.52

17-1-2cc. Loup River Public Power District. Records available: 1935-40, 1942-50.

Jan. 9	10.54	Mar. 29	9.76	June 23	10.10	Aug. 23	10.44
Feb. 8	10.59	Apr. 24	10.31	July 26	10.24	Oct. 11	10.72
Mar. 3	10.34	May 26	10.16				

17-1-34dc. J. C. Ernst. Lowest water level 9.47, Nov. 3. Records available: 1945-50.

Jan. 11	8.82	May 4	8.08	Aug. 23	9.02	Nov. 3	9.47
Mar. 10	8.14	June 29	8.49	Oct. 10	9.32	Dec. 1	9.17



17-2-2cd. E. Schacher. Records available: 1934-42, 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	6.55	Apr. 24	6.11	June 23	5.28	Aug. 23	5.18
Mar. 29	5.90	May 24	5.54	July 26	5.38	Oct. 11	6.07

17-2-6bd. Loup River Public Power District. Records available: 1948-50.

Jan. 9	13.97	Mar. 29	13.36	June 23	13.69	Aug. 23	13.86
Feb. 7	13.85	Apr. 24	13.78	July 26	13.92	Oct. 11	14.28
Mar. 3	13.39	May 24	13.56				

17-3-23ad. Owner unknown. Lowest water level 15.81, Nov. 28. Records available: 1947-50.

Jan. 9	14.84	Mar. 29	15.19	June 23	15.21	Oct. 10	15.55
Feb. 8	15.13	Apr. 24	14.34	July 23	15.32	Nov. 3	15.62
Mar. 3	15.12	May 26	15.18	26	15.27	28	15.81

Polk County

14-4-19ab. U. S. Geol. Survey. Records available: 1946-50. Jan. 9, 4.63; Mar. 10, 3.63; May 3, 4.31; June 28, 5.32; Sept. 6, 5.24; Oct. 26, 5.05.

15-2-7bb. U. S. Geol. Survey. Records available: 1946-50. Jan. 9, 7.77; Mar. 10, 6.66; May 3, 6.91; June 28, 7.50; Sept. 6, 7.80; Oct. 26, 8.13.

15-3-20cc. Ray Norris. Records available: 1946-50. Jan. 9, 6.76; Mar. 10, 5.14; May 3, 5.65; June 28, 6.75; Sept. 6, 6.82; Oct. 26, 6.83.

16-1-14bb. Joe Czafka. Records available: 1946-50. Jan. 9, 5.59; Mar. 9, 5.62; May 3, 4.22; June 28, 5.49; Sept. 6, 5.55; Oct. 26, 5.64.

16-2-23dc. Rudolph Nitsch. Records available: 1946-50. Jan. 9, 7.93; Mar. 9, 7.50; May 3, 7.51; June 28, 7.62; Oct. 26, 6.11.

Red Willow County

2-29-4ad. Rex S. Haberman. Drilled unused irrigation well, diameter 26 inches, depth 40 feet. Recorder installed Sept. 15. Highest water level 27.89, Sept. 23-27; lowest 28.41, Dec. 26-31. Records available: 1950.

Daily lowest water level, from recorder graph

Day	Sept.	Oct.	Nov.	Dec.	Day	Sept.	Oct.	Nov.	Dec.
1	.....	.....	28.15	28.33	16	27.93	28.02	28.24	28.37
2	.....	.....	28.15	28.33	17	27.93	28.03	28.25	28.38
3	.....	.....	28.16	28.33	18	27.92	28.04	28.25	28.38
4	.....	.....	28.16	28.34	19	27.92	28.05	28.26	28.38
5	.....	.....	28.16	28.34	20	27.92	28.06	28.27	28.38
6	.....	.....	28.17	28.35	21	27.91	28.07	28.27	28.38
7	.....	27.92	28.18	28.35	22	27.90	28.06	28.28	28.40
8	.....	27.93	28.19	28.36	23	27.89	28.08	28.29	28.40
9	.....	27.94	28.20	28.36	24	27.89	28.09	28.30	28.40
10	.....	27.95	28.21	28.36	25	27.89	28.09	28.30	28.40
11	.....	27.97	28.21	28.36	26	27.89	28.10	28.31	28.41
12	.....	27.98	28.22	28.36	27	27.89	28.11	28.31	28.41
13	.....	.....	28.23	28.36	28	27.90	28.11	28.32	28.41
14	.....	28.00	28.23	28.37	29	27.90	28.12	28.32	28.41
15	27.95	28.01	28.24	28.37	30	27.90	28.13	28.32	28.41
					31		28.14		28.41

3-26-5bb. Carr. Highest water level 41.89, June 14. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 20	43.42	June 14	41.89	Aug. 15	42.79	Oct. 17	42.64
Mar. 17	43.15	July 19	42.88	Sept. 17	42.74	Dec. 6	42.73
May 4	42.95						

3-27-17cb. U. S. Geol. Survey. Records available: 1946-50.

Jan. 19	9.31	June 9	9.25	Aug. 14	8.61	Oct. 18	9.84
Mar. 8	9.12	July 18	9.83	Sept. 19	9.61	Dec. 5	9.71
May 2	9.37						

3-28-20bb2. Leo D. England. Drilled unused irrigation well, diameter 14 inches, reported depth 36 feet. Recorder installed Oct. 6. Highest water level 7.13, Dec. 30; lowest, 7.86, Nov. 1-2. Records available: 1950. Sept. 29, 7.78, tape measurement.

Daily lowest water level, from recorder graph

Day	Oct.	Nov.	Dec.	Day	Oct.	Nov.	Dec.
1	....	7.86	7.37	17	7.74	7.56	7.28
2	....	7.86	7.41	18	7.78	7.52	7.25
3	....	7.85	7.41	19	7.79	7.57	7.25
4	....	7.78	7.43	20	7.78	7.57	7.23
5	....	7.79	7.45	21	7.80	7.52	7.23
6	7.63	7.80	....	22	7.79	7.52	7.21
7	7.65	7.77	....	23	7.75	7.55	7.22
8	7.65	7.80	....	24	7.77	7.46	7.22
9	7.62	7.79	7.36	25	7.76	7.46	7.26
10	7.63	7.75	7.35	26	7.77	7.46	7.27
11	7.65	7.66	7.30	27	7.81	7.43	7.23
12	7.65	7.65	7.29	28	7.83	7.43	7.18
13	7.68	7.64	7.28	29	7.82	7.42	7.20
14	7.70	7.58	7.29	30	7.81	7.40	7.13
15	7.72	7.64	7.30	31	7.84	....	7.21
16	7.75	7.64	7.27				

3-29-32db. University of Nebraska. Highest water level 4.54, Aug. 13. Records available: 1940-44, 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	5.43	June 8	5.55	Aug. 13	4.54	Oct. 20	6.37
Mar. 8	5.67	July 18	6.31	Sept. 22	6.04	Dec. 11	6.27
May 3	5.88						

3-30-29aa. U. S. Geol. Survey. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	3.11	Apr. 12	3.09	July 10	3.89	Sept. 18	4.24
Mar. 8	2.92	June 8	3.23	Aug. 9	3.26	Dec. 6	3.81

### Rock County

30-17-8db. University of Nebraska. Highest water level 0.98, Sept. 22. Records available: 1934-50. Feb. 3, 3.34; Apr. 1, 1.51; May 19, 1.16; June 7, 1.78; July 3, 1.86; Sept. 22, .98.

30-19-10aa. University of Nebraska. Highest water level +0.44, May 19. Records available: 1940, 1944-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3	2.39	June 7	0.35	Aug. 30	0.91	Oct. 30	0.74
Apr. 1	.31	28	1.34	Sept. 22	+.13	Nov. 30	.57
May 19	+.44	July 3	1.48	28	.35	Dec. 26	.54
30	.14	31	2.06				

### Saunders County

A13-9-24cc. City of Lincoln. Records available: 1933-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	5.62	May 1	4.92	July 28	5.00	Oct. 29	5.55
28	5.62	30	3.95	Aug. 29	4.82	Dec. 1	5.69
Apr. 1	3.60	July 1	5.66	Sept. 28	5.94		

A13-10-30ad. City of Lincoln. Near Ashland. Drilled observation well, diameter 8 inches, depth 20 feet. Recorder installed May 22. Highest water level 5.97, Dec. 19; lowest 9.88, Aug. 5. Records available: 1950.

Daily lowest water level, from recorder graph

Day	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	8.05	9.48	8.77	9.20	9.27	8.88	7.55
2	....	8.13	9.52	8.86	9.22	8.98	8.88	7.71
3	....	7.91	9.54	8.96	9.28	8.66	8.83	7.86
4	....	6.84	9.63	9.06	9.34	8.45	8.83	8.03
5	....	7.00	9.68	9.88	9.32	7.96	8.74	8.05
6	....	7.53	9.48	8.68	9.35	8.11	8.69	7.13
7	....	8.18	9.56	8.73	9.35	8.23	8.70	7.17
8	....	8.47	9.64	8.73	9.39	8.39	8.72	7.33
9	....	8.62	9.43	8.83	9.42	8.45	8.70	7.33
10	....	8.83	9.35	8.83	9.48	8.52	8.80	7.11

A13-10-30ad--Continued.

Lowest daily water level, from recorder graph

Day	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	....	8.93	7.45	8.99	9.49	8.59	9.03	6.92
12	....	9.07	7.48	8.99	9.45	8.70	9.03	6.72
13	....	9.11	7.16	7.32	9.48	8.78	8.86	6.48
14	....	9.16	7.30	7.06	9.47	8.90	8.93	6.48
15	....	9.34	7.68	6.88	9.48	8.92	8.93	6.35
16	....	9.41	7.52	6.99	9.39	9.01	8.51	6.26
17	....	9.40	7.81	7.28	9.34	9.02	8.54	6.10
18	....	9.06	7.79	7.62	9.38	9.02	8.58	6.14
19	....	9.03	7.03	8.08	9.40	8.89	8.61	5.97
20	....	8.49	6.32	8.40	9.35	8.91	8.66	6.03
21	....	8.46	6.48	8.58	9.32	8.91	9.05	6.12
22	7.96	....	6.68	8.58	9.29	8.91	9.05	6.19
23	7.94	....	7.23	8.74	9.30	8.91	8.65	6.16
24	8.15	9.05	7.47	8.88	9.12	8.87	8.23	6.25
25	8.24	9.10	6.88	8.94	9.11	8.87	8.14	6.42
26	8.35	9.14	7.27	9.04	9.10	8.74	8.11	6.44
27	8.43	9.23	7.78	9.07	9.17	8.70	7.78	6.40
28	8.42	9.33	7.97	9.14	9.16	8.79	7.68	6.59
29	8.23	9.40	8.25	9.22	9.24	8.82	7.80	6.63
30	8.23	9.44	8.50	9.26	9.24	8.85	7.76	6.71
31	8.11	....	8.48	9.22	....	8.85	....	6.95

A17-5-23bc. U. S. Geol. Survey. Drilled observation well, diameter  $1\frac{1}{4}$  inches, depth 11.7 feet. Highest water level 4.40, May 13; lowest 6.30, June 28. Records available: 1950. May 13, 4.40; June 28, 6.30; Sept. 6, 5.94; Oct. 26, 6.01.

Scotts Bluff County

22-54-32ab. B. J. Pieper. Records available: 1937-38, 1945. No measurement made in 1950.

22-56-4dd. University of Nebraska. Records available: 1936-37, 1939-42, 1944-45. Measurement discontinued.

22-56-6aa. Carl Gompert. Records available: 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	31.19	May 1	33.50	July 17	33.22	Oct. 12	29.32
Feb. 20	31.67	29	34.17	Aug. 20	32.02	Nov. 27	29.84
Mar. 24	32.51	June 22	34.00	Sept. 21	30.19		

23-56-28ad. University of Nebraska. Records available: 1936-42, 1944-45. No measurement made in 1950.

23-57-5bb. Andrew Oleson. Highest water level 21.05, Oct. 12; lowest 25.73, May 1. Records available: 1948-50.

Jan. 13	22.45	May 1	25.73	Aug. 20	22.72	Oct. 12	21.05
Feb. 20	22.96	29	23.93	Sept. 21	21.84	Nov. 27	21.90
Mar. 24	23.43	June 22	24.21				

Seward County

A11-2-23cc. August Rolfmeier. Records available: 1948-50. June 15, 77.15.

Sheridan County

24-41-34da. University of Nebraska. Records available: 1934-42, 1944-50. Jan. 23, 8.09; Apr. 3, 7.31; Aug. 14, 8.36; Oct. 16, 8.41; Dec. 18, 8.36.

24-42-27ba. U. S. Geol. Survey. Lowest water level 13.28, Oct. 16. Records available: 1946-50. Jan. 23, 13.07; Apr. 3, 13.12; Aug. 14, 13.24; Oct. 16, 13.28; Dec. 18, 13.34.

24-43-15da. University of Nebraska. Records available: 1940-42, 1944-50. Jan. 23, 6.39; Apr. 3, 6.14; Aug. 14, 6.68; Oct. 16, 6.73; Dec. 16, 6.73.

24-44-14da. U. S. Geol. Survey. Highest water level 3.80, Apr. 3. Records available: 1946-50. Jan. 23, 4.49; Apr. 3, 3.80; Aug. 14, 5.79; Oct. 16, 5.18; Dec. 18, 4.77.

24-44-18bb. U. S. Geol. Survey. Records available: 1946-50. Jan. 23, 4.74; Apr. 3, 4.49; Aug. 14, 5.33; Oct. 16, 5.23; Dec. 18, 5.24.

24-46-10cb. U. S. Geol. Survey. Records available: 1946-50. Jan. 24, 5.90; Apr. 5, 5.75; Aug. 14, 6.35; Oct. 16, 6.33; Dec. 18, 6.30.

25-45-32ad. J. Herian. Records available: 1946-50.

Daily lowest water level, from recorder graph

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	32.27	Apr. 7	31.95	June 17	32.37	Aug. 20	33.10
27	32.27	8	31.95	18	32.36	Oct. 16	33.15
28	32.27	9	31.95	19	32.36	17	33.16
29	32.25	10	31.94	20	33.02	18	33.16
30	32.25	11	31.94	Aug. 14	32.87	19	33.17
31	32.25	12	31.93	15	32.91	20	33.17
Feb. 1	32.26	June 13	32.32	16	33.02	21	33.16
2	32.28	14	32.32	17	33.08	22	33.16
Apr. 5	31.93	15	32.32	18	33.11	Dec. 18	h32.92
6	31.96	16	32.37	19	33.12		

h Tape measurement.

29-46-4dc. George Glenn. Drilled domestic well, diameter 6 inches. Highest water level 59.20, Oct. 4; lowest 61.34, May 2. Records available: 1950. May 2, 61.34; July 19, 60.93; Oct. 4, 59.20; Dec. 28, 59.70.

29-46-24ad. Kenneth Pyle. Drilled unused domestic well, diameter 6 inches, depth 94.9 feet. Highest water level 63.10, Oct. 4; lowest 64.46, July 19. Records available: 1950. May 2, 64.32; July 19, 64.46; Aug. 29, 63.60; Oct. 4, 63.10; Dec. 28, 63.62.

31-44-10dd. University of Nebraska. Records available: 1935-42, 1944-47. No measurement made in 1950.

31-46-8ad. University of Nebraska. Records available: 1936-42, 1944-47. No measurement made in 1950.

#### Sherman County

13-13-4dc. Thomas. Lowest water level 122.11, Feb. 7. Records available: 1949-50. Jan. 9, 120.84; Feb. 7, 122.11; Apr. 10, 120.82; May 3, 121.46; Oct. 3, 120.76.

14-14-8ac. Claude Zimmerman. Incorrectly published as 14-14-8db in previous reports. Highest water level 5.79, Aug. 16. Records available: 1948-50.

Jan. 9	8.03	May 3	7.78	July 16	6.99	Sept. 7	6.28
Feb. 7	8.08	June 2	6.64	Aug. 16	5.79	Oct. 4	6.63
Apr. 10	7.56						

14-14-23cb. Lee Heil. Lowest water level 12.65, Jan. 9. Records available: 1949-50. Jan. 9, 12.65; July 6, 11.92; Oct. 3, 12.04.

16-15-28bb. U. S. Geol. Survey. Highest water level 19.89, Aug. 14; lowest 21.31, Jan. 4. Records available: 1949-50.

Jan. 4	21.31	Mar. 31	20.79	July 3	21.02	Oct. 3	20.82
Feb. 3	20.94	Apr. 24	21.17	Aug. 14	19.89	Nov. 7	21.05
Mar. 3	20.69	June 9	20.93	Sept. 12	20.86		

#### Sioux County

24-57-35cb. R. J. Lenhart. Lowest 9.77, May 1. Records available: 1948-50.

Jan. 13	8.34	May 1	9.77	July 17	7.62	Oct. 10	6.58
Feb. 20	8.90	29	9.47	Aug. 20	5.73	Nov. 27	7.71
Mar. 24	9.28	June 22	8.40	Sept. 21	5.48		

#### Stanton County

A22-2-8dd. Carroll. Drilled irrigation well, diameter 16 inches, depth 72 feet. Records available: 1950. Apr. 6, 38.15.

A23-3-7bc. E. Spence. Drilled irrigation well, diameter 16 inches, depth 48 feet. Records available: 1950. Apr. 6, 12.62.

A23-3-11bb. University of Nebraska. Records available: 1936-40, 1942, 1946, 1948, 1950. Apr. 5, 4.11.

Thomas County

24-30-20ab. University of Nebraska. Records available: 1934-42, 1944-50. Jan. 23, 2.54; Apr. 3, 2.55; Aug. 14, 2.68; Oct. 16, 2.77; Dec. 18, 2.57.

Valley County

17-16-26dc. U. S. Geol. Survey. Near Arcadia. Records available: 1943-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.22	....	3.63	4.07	4.21	4.40	5.65	4.75	5.12	5.13	5.15	4.64
2	5.17	4.47	3.63	4.11	4.32	4.52	5.62	4.85	5.17	4.73	5.16	4.61
3	5.10	4.45	3.65	4.11	4.41	4.65	5.43	4.92	5.23	4.15	5.16	4.64
4	5.17	4.43	3.65	3.88	4.45	4.75	5.43	4.83	5.28	4.02	5.14	4.65
5	....	4.37	3.63	4.03	4.45	4.83	5.19	4.62	5.33	4.19	5.11	4.67
6	....	4.31	3.52	4.11	3.90	4.93	5.18	4.64	5.36	4.30	5.14	4.85
7	....	4.24	3.55	4.18	4.13	5.00	5.26	4.71	5.39	4.45	5.14	4.92
8	....	....	3.67	4.23	4.16	5.09	5.27	4.81	5.43	4.55	5.15	4.97
9	....	....	4.70	4.23	3.47	5.17	4.73	4.83	5.46	4.61	5.18	4.97
10	....	....	4.76	4.21	3.75	5.24	4.33	4.58	5.49	4.68	5.20	4.93
11	5.07	....	4.86	4.17	3.97	5.31	4.22	4.62	5.50	4.73	5.20	4.85
12	....	....	4.86	4.25	3.93	j5.39	4.37	4.62	5.50	4.78	5.20	4.76
13	....	4.01	4.85	4.32	3.82	5.47	4.54	4.46	5.47	4.82	5.15	4.64
14	....	4.02	4.77	4.34	4.11	5.47	4.70	4.57	5.41	4.85	5.10	4.55
15	....	4.02	3.69	4.38	4.29	5.22	4.79	4.74	5.40	4.87	5.06	4.54
16	....	4.00	3.42	4.39	4.36	5.23	4.84	4.87	5.36	4.91	5.04	4.53
17	....	3.98	3.13	4.38	4.51	5.17	4.85	4.93	4.99	4.93	5.04	4.54
18	4.98	3.97	3.10	4.46	4.53	4.93	....	4.98	4.95	4.95	5.02	4.55
19	....	3.89	3.14	4.57	3.30	4.77	....	4.77	4.95	4.98	5.00	4.55
20	....	3.81	3.17	4.60	3.31	4.84	3.69	4.33	4.92	5.01	5.01	4.50
21	....	3.80	3.23	4.62	3.38	4.91	3.69	4.46	4.92	5.03	4.99	4.51
22	....	3.77	3.15	4.65	3.69	5.04	3.72	4.60	4.92	5.03	4.82	4.50
23	....	3.80	3.05	4.69	3.98	5.14	3.32	4.75	4.98	5.03	4.72	4.46
24	....	3.80	3.19	4.73	4.14	5.24	3.48	4.87	5.03	5.05	4.82	4.43
25	....	3.81	3.31	4.77	4.28	5.33	3.45	4.97	5.08	5.05	4.86	4.38
26	4.58	3.81	3.38	4.78	4.31	5.41	3.77	4.98	5.11	5.06	4.86	4.33
27	....	3.71	3.65	4.81	3.90	5.55	4.02	4.84	5.16	5.06	4.82	4.46
28	....	3.61	3.87	4.81	3.66	5.55	4.23	4.86	5.20	5.08	4.74	4.56
29	....	....	3.96	4.42	j3.62	5.58	4.37	4.93	5.26	5.10	4.70	4.57
30	....	....	3.97	4.09	j3.91	5.62	4.50	5.00	5.24	5.11	4.66	4.54
31	....	....	4.01	....	j4.20	....	4.62	5.07	....	5.12	....	4.39

j Interpolated

18-13-23dd. W. T. Hutchins. Records available: 1934-42, 1948-50. Jan. 4, 12.27; Mar. 31, 12.76; Aug. 15, 11.16; Sept. 11, 11.16; Oct. 5, 11.72; Nov. 1, 12.17.

18-16-30cc. U. S. Geol. Survey. Highest water level 4.02, Aug. 8; lowest 5.27, Feb. 3 and Mar. 3. Records available: 1949-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	4.06	Apr. 4	4.75	July 5	4.47	Sept. 27	4.37
Feb. 3	5.27	26	4.86	Aug. 8	4.02	Nov. 1	4.24
Mar. 3	5.27	May 31	4.08	29	4.03		

19-13-28bb. Wm. Peterson. Records available: 1948-50.

Jan. 4	13.99	May 2	13.93	Aug. 15	13.18	Sept. 28	13.65
Feb. 28	14.09	June 6	14.00	Sept. 11	13.54	Nov. 1	13.81
Mar. 31	13.92	July 13	13.61				

19-14-6dc. Chas. Verzal. Records available: 1934-42, 1948-50. Mar. 31, 29.38; May 2, 29.72; June 6, 29.91; Aug. 15, 29.31; Sept. 28, 29.11; Nov. 1, 28.83.

Webster County

1-9-9cc. U. S. Geol. Survey. Records available: 1947-50.

Jan. 29	8.10	Apr. 21	8.36	July' 26	5.97	Oct. 23	5.02
Feb. 23	8.35	May 23	8.35	Sept. 5	5.30	Dec. 27	5.52
Mar. 25	8.04	June 23	8.33	22	5.13		

1-11-11ab. U. S. Geol. Survey. Near Red Cloud. Highest water level 1.45, July 18.  
Records available: 1946-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	8.12	8.33	8.42	8.48	8.65	8.47	8.92	3.35	4.68	5.18	6.34	6.96
2	8.11	8.34	8.42	8.46	8.64	8.45	8.94	3.54	4.76	5.23	6.38	6.97
3	8.11	8.35	8.39	8.48	8.64	8.47	8.96	3.69	4.83	5.27	6.41	6.99
4	8.13	8.35	8.40	8.51	8.65	8.49	8.97	3.83	4.91	5.32	6.44	7.00
5	8.14	8.35	8.41	8.52	8.64	8.50	8.98	3.96	4.98	5.37	6.45	7.01
6	8.16	8.35	8.40	8.52	8.67	8.50	9.00	4.08	5.05	5.57	6.48	7.03
7	8.17	8.35	8.36	8.49	8.68	8.51	9.00	4.08	5.10	5.61	6.51	7.05
8	8.15	8.36	8.40	8.50	8.68	8.55	9.00	4.05	5.16	5.64	6.53	7.06
9	8.12	8.36	8.41	8.50	8.69	8.58	9.00	4.13	5.20	5.66	6.56	7.08
10	8.16	8.36	8.41	8.51	8.69	8.61	4.55	4.25	5.25	5.69	6.59	7.10
11	8.17	8.36	8.42	8.54	8.69	8.62	3.68	4.30	5.30	5.72	6.62	7.11
12	8.16	8.37	8.44	8.56	8.69	8.64	3.40	4.30	5.35	5.75	6.64	7.12
13	8.19	8.37	8.45	8.57	8.68	8.66	3.35	4.24	5.39	5.78	6.66	7.14
14	8.20	8.38	8.43	8.57	8.69	8.68	3.44	4.17	5.42	5.80	6.67	7.15
15	8.19	8.39	8.44	8.57	8.69	8.70	3.55	4.20	5.43	5.83	6.69	7.16
16	8.22	8.39	8.45	8.57	8.76	8.71	3.68	4.30	5.43	5.86	6.70	7.16
17	8.21	8.38	8.44	8.57	8.71	8.70	3.69	4.39	5.39	5.88	6.72	7.17
18	8.23	8.39	8.45	8.58	8.71	8.68	1.45	4.48	5.34	5.91	6.74	7.19
19	8.25	8.39	8.46	8.59	8.71	8.65	1.83	4.49	5.32	5.94	6.76	7.19
20	8.26	8.38	8.46	8.60	8.72	8.60	2.00	4.39	5.45	5.96	6.77	7.20
21	8.25	8.36	8.47	8.59	8.71	8.58	2.13	4.27	4.85	5.99	6.79	7.21
22	8.25	8.35	8.47	8.56	8.69	8.59	2.25	4.31	4.80	6.00	6.81	7.22
23	8.25	8.35	8.45	8.57	8.67	8.77	2.26	4.40	4.82	6.02	6.83	7.22
24	8.24	8.40	8.46	8.59	8.67	8.78	1.80	4.52	4.85	6.06	6.85	7.22
25	8.26	8.42	8.46	8.60	8.69	8.80	2.20	4.62	4.88	6.11	6.87	7.23
26	8.29	8.40	8.41	8.61	8.71	8.82	2.33	4.64	4.93	6.14	6.89	7.24
27	8.30	8.39	8.41	8.63	8.72	8.85	2.35	4.59	4.98	6.17	6.91	7.24
28	8.27	8.42	8.45	8.63	8.72	8.87	2.53	4.56	5.04	6.21	6.93	7.24
29	8.29		8.48	8.64	8.71	8.88	2.67	4.58	5.08	6.24	6.94	7.25
30	8.31		8.49	8.66	8.59	8.91	2.82	4.59	5.13	6.27	6.95	7.26
31	8.32		8.47		8.50		3.08	4.61		6.30		7.27

1-12-2bb. U. S. Geol. Survey. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	5.17	Apr. 22	4.80	July 25	2.25	Oct. 23	4.53
Feb. 23	4.93	May 22	4.16	Aug. 29	3.36	Dec. 27	5.07
Mar. 24	4.83	June 23	4.71	Sept. 22	4.15		

2-10-36db. Somerhalder. Highest water level 25.65, June 22, 1935. Records available: 1934-40, 1942, 1946-50.

Jan. 28	26.57	Apr. 22	26.57	July 25	26.48	Oct. 23	26.52
Feb. 23	26.52	May 23	26.62	Sept. 5	24.38	Dec. 27	26.65
Mar. 25	26.54	June 23	26.63	22	26.50		

### York County

11-1-35bb. Wilbur Schlechte. Highest water level 104.65, Mar. 27. Records available: 1948-50. Mar. 27, 104.65; June 15, 104.82.

11-3-36ab. Mother Jewel Home. Highest water level 67.35, June 15. Records available: 1948-50. Mar. 15, 67.45; June 15, 67.35.

11-4-25bc. Bryce Tracy. Highest water level 65.29, June 15. Records available: 1948-50. Mar. 15, 65.50; June 15, 65.29.

11-4-31ba. Herman Fenster. Highest water level 71.40, June 15. Records available: 1948-50. Mar. 15, 71.54; June 15, 71.40.

## NORTH DAKOTA

By J. E. Powell, P. D. Akin, and G. A. LaRocque, Jr.

### Scope of Water-Level Program

The observation-well program in North Dakota was continued in 1950 in cooperation with the State Water Conservation Commission and the State Geological Survey and in connection with the Missouri Basin program. At the end of 1950, water levels were being measured in 194 observation wells, 5 of which were equipped with recording gages. Location of observation wells is shown on figure 8. Water-level records for many of the wells listed in the 1949 report (see Water-Supply Paper 1158) are not continued in the present report. The publication of data for these wells in the annual water-level reports has been discontinued. Water-level data for these wells may be published in project reports. Under the Federal-State cooperative program, field work was done in connection with the investigation of ground-water conditions in the vicinities of the towns of Streeter, Richardton, Bowbells, and Devils Lake. Reports on ground-water conditions in the vicinities of the towns of Wyndmere, Kindred, and Portland were published in mimeographed form; reports on ground-water conditions in the vicinities of the towns of Neche, Litchville, and Mohall were completed and were sent to Washington for review prior to publication.

### Precipitation

As reported by the U. S. Weather Bureau, the average precipitation over the State amounted to 18.23 inches in 1950 or 1.11 inches more than the annual average. The average precipitation for the State was high during the months of January, March, May, September, and December. The greatest monthly departures from the average were +1.16 inches in May and -0.58 inches in August. Departures from average precipitation at stations ranged from +8.63 inches at Mohall to -5.96 inches at the Fargo airport. Below average precipitation occurred in the southeastern part of the State and in a relatively narrow area extending northeastward from the southwest corner of the State into the northeast quarter.

### Fluctuations of Water Levels

The average monthly water levels in selected observation wells in the State from 1937 through 1950 are given in the following table. The average water levels, given in feet above assumed datum planes, are based on water-level measurements in from 8 to 42 observation wells. The averages for 1950 were computed from data from 11 observation wells in which water levels were measured weekly. Of these wells, four are in the Red River drainage basin, one is in the Devils Lake interior drainage basin, and five are in the Missouri River drainage basin. Figure 9 is a graphical presentation of the average monthly water levels and shows the nature and magnitude of the average water-level fluctuations.

Monthly average water levels, in feet above assumed datum planes, in observation wells in North Dakota, 1937-50.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1937	.....	.....	.....	.....	.....	.....	.....	.....	100.31	100.19	100.13	100.05
1938	99.97	99.93	100.12	100.41	100.68	100.35	99.99	99.61	99.59	99.44	99.51	99.54
1939	99.49	99.38	99.38	99.95	99.98	100.07	99.89	99.62	99.41	99.37	99.34	99.31
1940	99.24	99.14	99.13	99.16	99.43	99.52	99.34	99.24	99.07	98.96	98.95	98.92
1941	98.84	98.74	98.83	99.76	99.97	100.43	100.39	99.89	100.16	100.73	100.64	100.26
1942	100.68	100.41	100.43	101.40	101.45	101.67	101.42	101.48	101.48	101.35	100.98	100.73
1943	100.51	100.44	100.40	101.30	102.09	102.73	102.68	102.19	101.91	101.50	100.37	101.26
1944	100.40	100.24	100.02	100.22	100.52	101.15	101.28	101.37	101.67	101.36	101.55	101.59
1945	101.04	100.96	101.06	101.49	101.74	101.71	101.27	100.95	100.71	100.71	100.70	100.54
1946	100.01	100.24	100.18	101.18	101.55	100.97	100.60	100.36	100.07	100.70	100.84	100.67
1947	100.48	100.49	100.33	101.35	101.74	102.25	102.37	101.93	101.49	101.48	101.57	101.51
1948	101.30	100.01	101.10	102.29	104.63	103.74	103.27	102.65	101.73	101.52	101.47	101.32
1949	101.12	100.84	100.96	103.00	103.88	103.36	102.89	102.45	101.97	101.65	101.96	101.84
1950	101.56	101.23	101.16	101.84	103.86	104.02	103.42	102.88	102.55	102.57	102.30	102.06

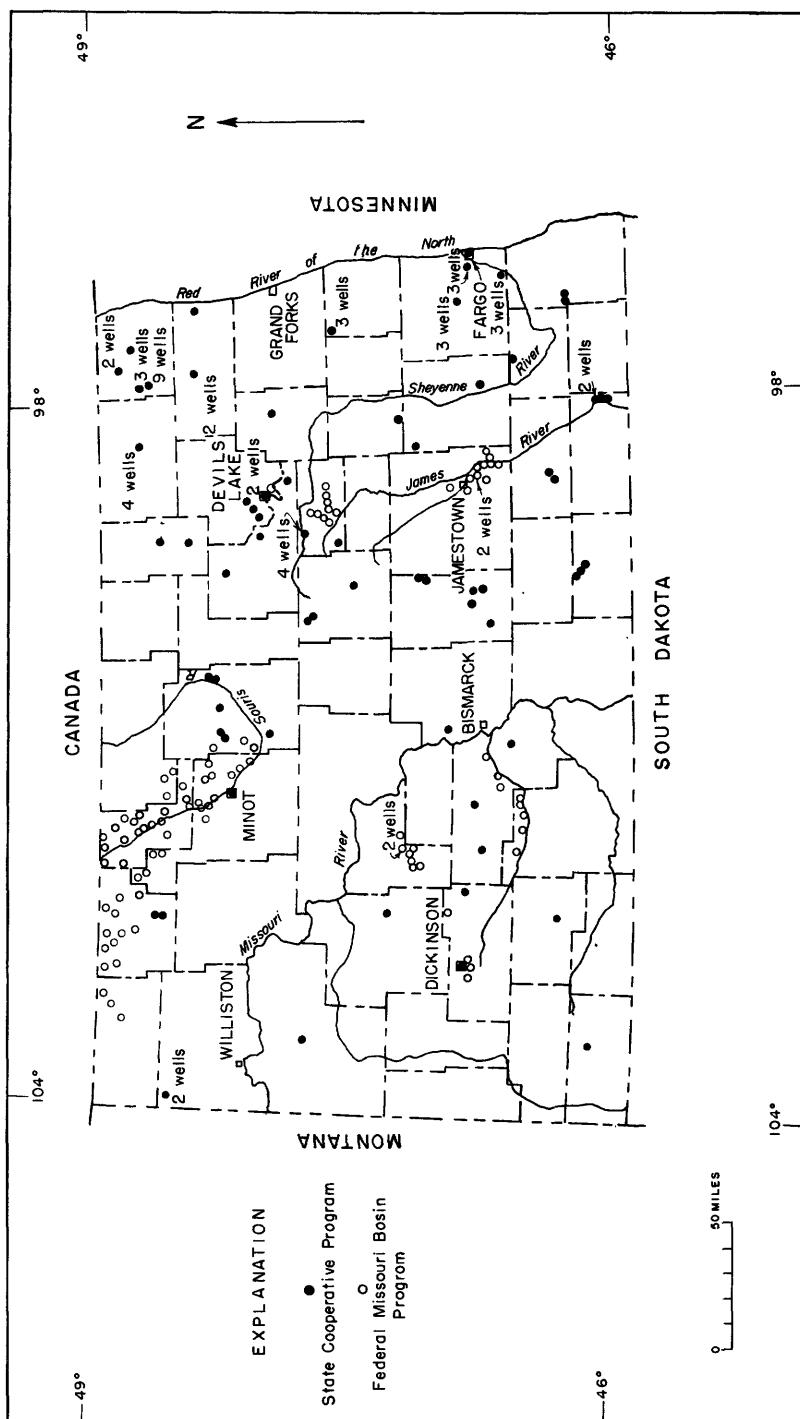


Figure 8. -- Location of observation wells in North Dakota, 1950.



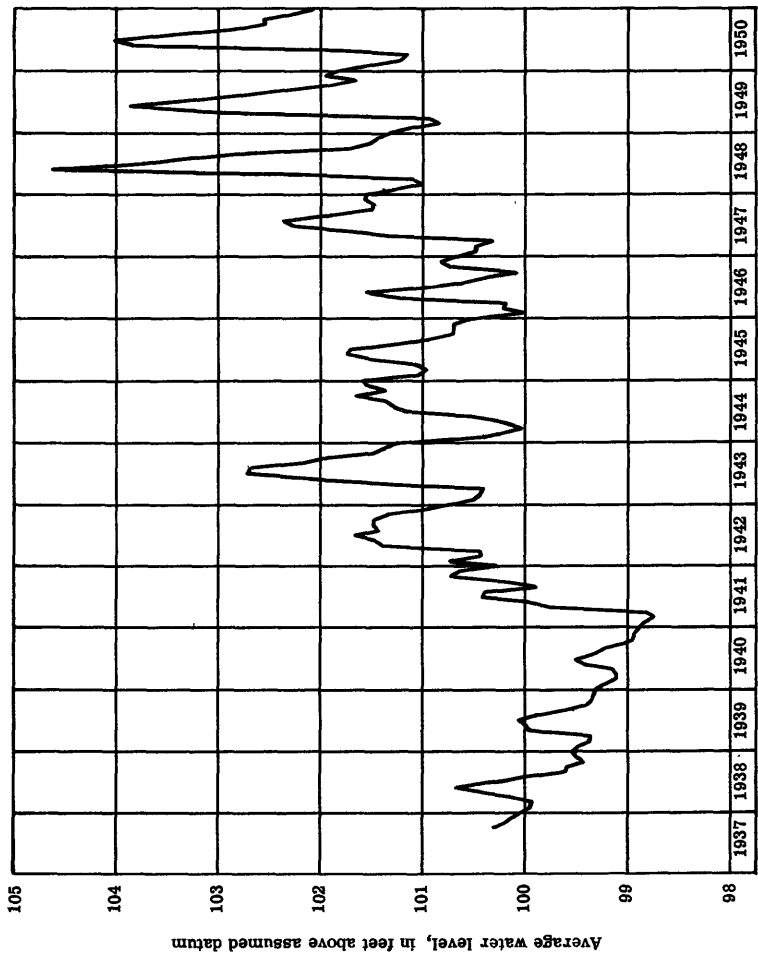


Figure 9. -- Average monthly water levels in selected wells in North Dakota, 1937-50.

As in previous years, the water levels were lowest during the winter months because of the lack of recharge from precipitation when the ground is frozen. The lowest stages of the year occurred in March. The water levels began to rise in April owing to water entering the ground concurrently with the melting of the accumulated winter snows and the thawing of the ground surface during the spring break-up. The water levels rose rapidly in May and reached their highest stages in June. With the advent of the summer season, water losses through evaporation and transpiration proceeded at an increased rate and the water levels began to lower. With the exception of a slight rise that occurred in October, this general lowering continued until the end of the year. At the end of 1950, the average water level in the 11 selected observation wells was 0.5 foot higher than at the end of 1949. This over-all increase in the stage of the water levels reflects the effects of above-average precipitation during the early part of the year and the lower-than-average temperatures that occurred during the summer months and resulted in less-than-average ground-water losses through evaporation and transpiration.

#### Well-Numbering System

The well-numbering system is based upon the location of the well with respect to the land-survey divisions used in North Dakota. The numbers are divided into three parts. The first part, a group of numbers, gives the township north of the base line; the second part, also a group of numbers, gives the range west of the fifth principal meridian. The third part consists of a number followed by lower-case letters which are again followed by a number. In this third part, the first number gives the section in which the well is situated; the lower-case letters give the section subdivisions, the first indicating the quarter section, the second the 40-acre tract within the quarter section, and the third the 10-acre tract within the 40-acre tract. In all cases, the letters a, b, c, and d refer to the NE $\frac{1}{4}$ , the NW $\frac{1}{4}$ , the SW $\frac{1}{4}$ , and SE $\frac{1}{4}$ , respectively. In the third part of the well number, the number following the lower-case letters simply refers to the numerical order in which the wells were scheduled in the smallest tract of land indicated by the last lower-case letter. If, for instance, two wells were scheduled in a tract of land and the locations of the wells were given by the same lower-case letters, then the wells would be designated by the numbers 1 or 2 following the letters. In this report, the locations of most of the wells are given only to the nearest 40-acre tract but the locations of some are given to the nearest 10-acre tract. As an example the first well scheduled in the NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 5, T. 138 N., R. 57 W. is 138-57-5cb1. If a second well were scheduled in this same tract of land, it would be 138-57-5cb2.

#### Well Descriptions and Water-Level Measurements

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

##### Barnes County

138-57-5cb1. H. H. Wilkins. Records available: 1939-47, 1949-50. Aug. 1, 27.87.

143-61-30ccc1. U. S. Geol. Survey test hole in public road right-of-way. Drilled unused water-table well in glacial sand and gravel, diameter 1 $\frac{1}{2}$  inches, depth 66 feet, sandpoint in bottom. Water level affected by pumping of nearby municipal well. Records available: 1950. May 24, 15.29.

##### Benson County

151-63-14aaa. R. L. Schlieve. U. S. Geol. Survey test hole. Drilled unused water-table well in glacial outwash sand and gravel, diameter 1 $\frac{1}{2}$  inches, depth 40 feet, sandpoint in bottom. Records available: 1950. Oct. 11, 17.58; Oct. 21, 18.20; Nov. 2, 19.34; Nov. 15, 19.34.

153-66-21aab. U. S. Geol. Survey test hole in County road right-of-way. Drilled unused water-table well in glacial sand and gravel, diameter 6 inches, depth 103 feet, casing slotted between 83 and 103. Records available: 1950. Sept. 28, 1.69; Oct. 7, 1.25; Oct. 23, 1.57; Nov. 14, 1.82.

156-69-36cal. H. Biltingsrud. Records available: 1940-50. May 24, 6.27.

##### Bottineau County

159-81-19dc. Alfred Nelson. Dug domestic well, diameter 48 inches, depth 12.8 feet. Records available: 1945-50. May 12, 8.37; July 20, 7.08; Nov. 2, 8.72.

159-83-9aa. Martinson Estate. Dug domestic and stock well, diameter 48 inches, depth 61.1 feet. Records available: 1945-50. May 12, 0.68; July 20, 2.50; Oct. 31, 3.77.

160-82-34dd. Owner unknown. Dug stock well, diameter 18 inches. Records available: 1945-50. May 12, 3.79; July 20, 5.41; Oct. 31, 6.61.

Bowman County

131-102-11ca1. City of Bowman. Records available: 1940-42, 1944-50. Oct. 9, 24.82; Nov. 6, 21.38.

Burke County

159-91-4dd1. U. S. Fish and Wildlife Service. Records available: 1940-46, 1949-50. May 25, 75.96.

160-91-21cd1. U. S. Fish and Wildlife Service. Records available: 1940-47, 1949-50. May 25, 58.32.

161-89-20aa. T. Jacobson. Drilled unused well, diameter 5 inches, depth 96 feet. Records available: 1945-50. May 2, 24.16; July 12, 24.24; Nov. 7, 24.30.

161-92-12dd1. Maud Beard. Drilled domestic well, diameter 18 inches, depth 54.4 feet. Records available: 1945-50. May 4, 30.82; July 13, 14.28; Nov. 8, 21.09.

162-89-5dd1. Mrs. P. M. Peterson. Drilled unused well, diameter 3 inches, depth 394 feet. Records available: 1937-50. May 5, 70.23; May 24, 70.06; July 12, 68.84; Nov. 7, 70.23.

162-90-6ba2. Owner unknown. Dug domestic well, diameter 18 inches, depth 35.3 feet. Records available: 1948-50. May 4, 6.74; July 12, 5.39; Nov. 8, 7.30.

162-92-24cc. M. E. Glaspey. Dug domestic well, diameter 48 inches, depth 14 feet. Records available: 1945-50. May 4, 6.58; July 12, 5.06; Nov. 8, 7.88.

162-94-2ba1. Anton Boen. Dug domestic well, diameter 24 inches, depth 20 feet. May 4, 9.34; July 13, 8.26; Nov. 8, 9.05. Records available: 1945-50.

163-90-22cc1. Owner unknown. Drilled domestic and stock well. Records available: 1945-50. May 5, 27.42; July 12, 27.24; Nov. 9, 28.58.

163-92-12cc1. E. Engstrom. Dug domestic well, diameter 24 inches, depth 16 feet. Records available: 1945-50. May 4, 8.76; July 12, 6.00; Nov. 8, 8.21.

163-92-32dd. Owner unknown. Dug stock well, diameter 36 inches. Records available: 1945-50. May 4, 7.24; July 12, 6.81; Nov. 8, 7.92.

163-93-13bd. A. Curtis. Drilled stock well, diameter 18 inches, depth 30 feet. Records available: 1945-50. May 4, 13.09; July 13, 9.59; Nov. 8, 11.79.

163-94-10cd1. A. B. Peterson. Drilled domestic stock well, diameter 18 inches, depth 46 feet. Records available: 1945-50. May 4, 18.67; July 13, 18.20; Nov. 8, 19.75.

Burleigh County

141-80-35cc1. Celia De Long. Records available: 1940-46, 1948-50. Nov. 25, 13.22

Cass County

137-50-29dad4. Village of Kindred. Records available: 1948-50. Jan. 9, 8.71; Feb. 13, 8.72; Mar. 22, 8.55; Apr. 8, 7.59; Apr. 15, 6.80; May 13, 6.37.

137-50-29dda5. Village of Kindred. Records available: 1948-50. Jan. 9, 8.61; Feb. 13, 9.59; Mar. 22, 9.47; Apr. 8, 8.87; Apr. 15, 8.25; May 13, 7.19.

137-50-29ddc1. Village of Kindred. Records available: 1948-50. Jan. 9, 7.90; Feb. 13, 7.89; Mar. 22, 7.02; Apr. 8, 6.47; Apr. 15, 5.43; May 13, 5.11.

139-48-6ccd1. The Pierce Co. 1019 First Ave. North, Fargo. Records available: 1940-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	37.00	.....	36.10	35.84	35.61	35.48	35.92	37.05	.....	38.04	37.15	36.79
2	36.97	.....	36.11	35.82	35.59	35.50	35.89	37.09	40.04	38.02	37.14	36.76
3	36.94	.....	36.11	35.76	35.55	35.53	35.89	.....	40.10	37.98	37.14	35.78
4	36.90	36.35	36.09	35.77	35.53	35.53	35.91	.....	40.11	37.97	37.14	35.78
5	36.87	36.34	36.04	35.80	35.52	35.54	35.93	h37.45	40.11	37.91	.....	35.78
6	36.86	36.32	36.04	35.81	35.34	35.53	35.94	.....	40.11	37.89	.....	35.78
7	36.83	36.32	36.01	35.79	35.50	35.53	35.94	.....	40.09	37.79	.....	35.78

139-48-6ccd1--Continued.

Daily lowest water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
8	.....	36.32	36.02	36.80	35.57	35.55	35.94	.....	40.07	.....	.....	35.78
9	.....	36.31	36.04	36.79	35.55	35.56	35.96	.....	40.06	.....	.....	h36.67
10	.....	36.31	36.04	36.83	35.45	35.58	35.98	.....	.....	.....	.....	36.67
11	.....	36.31	36.06	36.79	35.45	35.59	35.98	.....	.....	.....	.....	36.64
12	.....	36.29	36.06	36.81	35.45	35.59	35.97	37.98	.....	.....	.....	36.63
13	.....	36.29	36.05	36.82	35.43	35.58	36.00	37.98	.....	.....	.....	36.63
14	36.64	36.29	36.02	36.82	35.42	35.60	36.00	37.98	.....	37.66	.....	36.63
15	36.64	36.28	35.99	36.73	35.40	35.61	36.00	37.99	.....	37.65	.....	36.60
16	36.61	36.26	35.99	36.72	35.40	35.64	.....	37.99	.....	37.62	.....	.....
17	36.62	36.24	35.98	36.70	35.40	35.67	.....	37.99	.....	37.59	.....	.....
18	36.61	36.25	35.99	36.67	35.40	35.69	.....	37.99	.....	37.57	.....	.....
19	36.59	36.25	36.00	36.67	35.40	35.69	.....	37.99	.....	37.55	.....	.....
20	36.59	36.25	36.00	36.68	35.39	35.68	.....	.....	.....	37.55	.....	.....
21	36.59	36.23	35.98	36.68	35.69	.....	.....	.....	.....	37.54	.....	.....
22	36.54	36.20	35.95	36.68	35.39	35.69	36.33	.....	.....	37.50	.....	.....
23	36.53	36.16	35.93	35.64	35.38	35.67	36.40	.....	h38.30	37.50	.....	36.51
24	.....	36.15	35.89	35.65	35.37	35.72	36.49	.....	38.29	37.48	.....	36.52
25	.....	36.16	35.88	35.61	35.43	35.73	36.57	h38.00	38.25	37.47	36.91	36.52
26	.....	36.15	35.89	35.60	35.45	35.75	36.06	.....	38.21	37.46	36.91	36.52
27	.....	36.15	35.88	35.61	35.50	35.79	36.72	.....	38.16	37.45	36.90	36.52
28	.....	36.10	35.78	35.63	35.50	35.82	36.79	.....	38.12	37.44	36.87	36.46
29	.....	.....	35.82	35.64	35.50	35.90	36.84	.....	38.11	37.16	36.85	36.43
30	.....	.....	35.84	35.62	35.48	35.92	.....	.....	38.09	37.17	36.82	36.42
31	.....	.....	35.84	.....	35.48	.....	37.01	.....	.....	37.15	.....	.....

h Tape measurement.

139-48-7acbl. City of Fargo. In Island Park. Records available: 1940-50. Measurements reported for Jan. 1 to Jan. 7, 1949, inclusive were 1 foot in error. The correct measurements are as follows: Jan. 1, 1949, 42.69; Jan. 2, 42.63; Jan. 3, 42.67; Jan. 4, 42.67; Jan. 5, 42.54; Jan. 6, 42.51; Jan. 7, 42.51. Jan. 1, 1950, 43.03, tape measurement; Jan. 27, 42.81, tape measurement; Mar. 24, 42.86, tape measurement.

Daily lowest water level, from recorder graph							
Day	Apr.	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	h42.33	.....	42.89	42.89	43.28	43.24	43.46
2	.....	.....	42.89	42.88	43.25	43.30	43.10
3	.....	.....	42.89	42.88	43.28	43.30	43.11
4	.....	.....	42.89	42.88	43.26	43.28	43.10
5	.....	.....	42.82	42.88	43.16	43.21	43.18
6	.....	.....	42.82	42.88	43.13	43.25	43.18
7	.....	42.83	42.82	42.88	43.25	43.25	43.12
8	.....	42.83	42.82	42.88	43.31	43.23	43.07
9	.....	42.83	42.82	43.34	43.31	43.27	43.08
10	.....	42.83	42.82	43.31	43.28	43.27	43.10
11	.....	42.83	42.83	43.30	43.28	43.27	43.05
12	.....	42.83	42.82	43.30	43.29	43.27	43.05
13	.....	42.83	42.82	43.31	43.31	43.27	43.05
14	.....	42.83	42.83	43.32	43.30	43.21	43.05
15	h42.74	42.84	42.84	43.32	43.30	43.20	43.08
16	.....	42.84	42.84	43.32	43.30	43.25	43.08
17	.....	42.84	42.84	43.30	43.32	43.24	43.11
18	.....	42.84	42.84	43.28	43.28	43.16	43.11
19	.....	42.84	42.86	43.29	43.33	43.25	43.10
20	.....	42.84	42.86	43.28	43.32	43.25	43.10
21	.....	42.90	42.86	43.28	43.26	43.24	43.09
22	h42.82	42.90	42.86	42.28	43.26	43.24	43.08
23	.....	42.90	42.87	43.34	43.26	.....	43.47
24	.....	42.90	42.87	43.34	43.26	.....	43.49
25	.....	42.90	42.87	43.31	43.26	43.52	43.49
26	.....	42.90	42.89	43.30	43.21	43.52	43.49
27	.....	42.90	42.89	43.26	43.21	43.51	43.49
28	.....	.....	42.89	43.32	43.21	43.51	43.42
29	.....	.....	42.89	43.32	43.20	43.49	43.42
30	.....	42.89	42.89	43.32	43.21	43.47	43.42
31	.....	42.89	42.89	.....	43.22	.....	.....

h Tape measurement.

## 139-49-1cc1. City of Fargo. Records available: 1937-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	55.00	July 30	73.30	Aug. 25	81.00	Oct. 7	58.50
July 7	56.30	Aug. 4	82.61	Sept. 2	81.05	14	61.30
14	66.30	11	80.44	23	60.64	28	56.26
21	76.05	14	81.00	30	60.57		

## 139-49-6ad1. Union Stockyards. Records available: 1938-50.

## Daily lowest water level, from recorder graph

Day	Jan.	Mar.	Apr.	May	June	July	Aug.	Sept.
1	68.96	.....	68.10	68.55	65.35	.....	.....	.....
2	68.95	.....	68.31	68.43	65.28	.....	.....	h70.55
3	68.95	69.45	68.28	68.42	65.24	.....	.....	.....
4	68.95	69.54	68.26	68.48	65.02	.....	h75.79	.....
5	68.94	69.40	68.23	.....	.....	.....	.....	.....
6	68.94	69.40	68.23	.....	.....	h66.70	.....	.....
7	h68.93	69.30	68.23	.....	.....	.....	.....	.....
8	.....	69.17	68.58	.....	.....	.....	.....	.....
9	.....	69.00	68.60	.....	.....	.....	.....	h70.44
10	.....	68.74	68.58	.....	h65.02	.....	.....	.....
11	.....	.....	68.56	.....	.....	.....	h75.95	.....
12	68.46	.....	68.54	h67.35	.....	.....	.....	.....
13	68.42	.....	68.56	67.30	.....	.....	.....	.....
14	68.48	.....	68.45	67.09	.....	h67.40	.....	.....
15	68.48	.....	68.64	66.97	.....	.....	.....	.....
16	68.47	.....	68.66	66.77	h65.20	.....	.....	h70.50
17	68.46	69.60	68.66	66.65	.....	.....	.....	.....
18	.....	69.64	68.67	66.55	.....	.....	.....	.....
19	.....	69.66	68.68	66.80	.....	.....	h76.28	.....
20	.....	69.68	68.78	66.39	.....	.....	.....	.....
21	h68.46	69.70	68.75	66.30	.....	.....	.....	.....
22	.....	69.74	68.78	66.20	.....	h75.27	.....	.....
23	.....	69.74	69.52	66.13	h65.98	.....	.....	.....
24	.....	69.80	69.44	66.03	.....	.....	.....	.....
25	.....	69.80	69.55	65.97	.....	.....	h69.74	.....
26	.....	69.80	69.56	65.92	.....	.....	.....	.....
27	.....	69.78	69.57	65.88	.....	.....	.....	.....
28	.....	69.76	69.59	65.82	.....	.....	.....	.....
29	.....	69.78	67.62	65.60	.....	.....	.....	.....
30	.....	69.80	68.56	65.48	h66.50	.....	.....	.....
31	.....	69.82	.....	65.45	.....	.....	.....	.....

h Tape measurement.

140-52-14dd1. Mrs. Arthur D. South. Records available: 1937-50. May 23, 9.31.

140-52-14dd3. Mrs. Arthur D. South. Records available: 1937-50. May 23, 11.65.

140-52-14dd4. Mrs. Arthur D. South. Records available: 1937-50. May 23, 12.47.

## Cavalier County

## 161-60-14cd1. City of Langdon. Records available: 1937-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	18.73	Apr. 15	19.51	July 15	15.86	Oct. 14	17.16
14	18.81	22	19.20	22	15.91	21	17.21
21	18.78	29	19.02	29	16.05	28	17.25
Feb. 4	19.03	May 6	19.43	Aug. 5	16.16	Nov. 6	17.29
11	19.12	13	17.42	12	16.35	11	17.34
18	19.23	20	17.04	19	16.53	18	17.21
25	19.29	27	17.21	26	16.77	25	17.44
Mar. 4	19.16	June 3	16.46	Sept. 2	16.80	Dec. 2	17.37
11	19.41	10	16.31	9	16.99	9	17.42
18	19.50	17	16.13	16	16.99	16	17.59
25	19.48	24	16.11	23	17.09	23	17.51
Apr. 1	19.46	July 1	15.91	30	17.09	30	17.64
8	19.57	8	15.83	Oct. 7	17.02		

161-60-14da1. City of Langdon. Records available: 1937-50.

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## 161-60-14da1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	8.33	Apr. 8	10.95	July 8	4.74	Oct. 7	5.77
14	8.55	15	10.90	15	4.33	14	5.78
21	8.88	22	8.05	22	4.11	21	5.96
28	9.17	29	8.75	29	4.13	28	6.07
Feb. 4	9.50	May 6	6.87	Aug. 5	4.13	Nov. 6	6.23
11	9.75	13	7.52	12	4.77	11	6.40
25	10.22	27	5.93	26	5.71	25	6.69
Mar. 4	10.69	June 3	5.44	Sept. 2	6.07	Dec. 2	6.87
11	10.58	10	5.33	9	6.27	9	7.11
18	10.71	17	5.40	16	5.48	16	7.41
25	10.83	24	5.46	23	5.64	23	7.57
Apr. 1	10.85	July 1	5.44	30	6.52	30	7.81

## 161-60-14dc1. City of Langdon. Records available: 1937-50.

Jan. 7	20.67	Apr. 15	20.25	July 15	19.15	Oct. 14	19.55
14	20.77	22	18.67	22	19.15	21	19.60
21	20.89	29	18.91	29	19.19	28	19.64
Feb. 4	21.06	May 6	18.33	Aug. 5	19.35	Nov. 6	19.67
11	21.12	13	18.14	12	19.56	11	19.69
18	21.18	20	18.35	19	19.79	18	19.63
25	21.18	27	18.62	26	19.93	25	19.74
Mar. 4	21.20	June 3	18.85	Sept. 2	20.01	Dec. 2	19.80
11	21.31	10	19.00	9	19.59	9	19.85
18	21.38	17	19.04	16	19.19	16	19.95
25	21.25	24	19.15	23	19.62	23	19.97
Apr. 1	20.61	July 1	18.92	30	19.62	30	20.05
8	20.42	8	19.15	Oct. 7	19.43		

## 161-60-23bc1. City of Langdon. Records available: 1937-50.

Jan. 7	18.45	Apr. 15	20.80	July 15	13.87	Oct. 14	13.16
14	18.68	22	7.80	22	14.12	21	13.41
21	18.94	29	9.40	29	14.36	28	13.64
Feb. 4	19.40	May 6	10.15	Aug. 5	10.56	Nov. 6	13.83
11	20.98	13	9.63	12	10.90	11	14.03
18	19.85	20	9.40	19	11.26	18	14.23
25	20.92	27	10.13	26	11.55	25	14.53
Mar. 4	20.40	June 3	9.61	Sept. 2	11.86	Dec. 2	14.84
11	20.65	10	9.57	9	12.23	9	15.10
18	21.78	17	9.55	16	12.25	16	15.36
25	21.06	24	9.55	23	12.48	23	15.60
Apr. 1	20.93	July 1	14.20	30	12.73	30	15.87
8	20.94	8	9.80	Oct. 7	12.93		

## Dickey County

130-59-9bc1. H. G. Martin, administrator. Records available: 1940-50. May 26, 5.44.

## 131-59-28ba1. City of Oakes. Records available: 1940-50.

Jan. 6	9.10	Apr. 27	8.55	July 17	8.20	Oct. 9	8.77
31	9.18	May 2	8.48	24	8.35	17	8.76
Feb. 7	9.16	9	7.70	31	8.42	23	8.77
14	9.18	16	7.61	Aug. 7	8.50	30	8.74
21	9.19	25	7.56	14	8.52	Nov. 6	8.76
27	9.16	31	7.50	21	8.67	13	8.80
Mar. 6	9.00	June 6	7.67	30	8.70	21	8.85
13	8.84	13	7.84	Sept. 4	8.74	27	8.88
20	8.87	20	7.90	11	8.80	Dec. 4	8.85
28	8.68	28	8.07	18	8.77	11	8.90
Apr. 3	8.67	July 3	8.12	25	8.80	18	8.93
12	8.64	10	8.24	Oct. 2	8.82	27	8.95
19	8.50						

131-59-29aa1. Fred Sletvold. Records available: 1943-50. May 26, 10.20.

131-59-33cc1. Lynus Sitts, Jr. Records available: 1940-50. May 26, 6.36.

## Divide County

162-97-21bb. O. Bakken. Drilled unused well, diameter 18 inches. Records available: 1945-50. May 3, 15.83; July 13, 15.08; Nov. 8, 15.61.

163-95-8bb. Owner unknown. Dug stock well. Records available: 1945-50. May 4, 11.01; July 13, 9.37; Nov. 8, 10.90.

163-96-29dc. L. J. Brady. Dug domestic and stock well. Records available: 1945-50. May 3, 14.42; July 13, 12.72; Nov. 8, 12.79.

#### Dunn County

141-92-28da. Owner unknown. Dug unused well, depth 62.5 feet. Records available: 1946-50. May 16, 43.58; June 16, 43.86; Sept. 14, 43.75.

145-92-25ad1. S. F. Lesmeister. Records available: 1942-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	8.55	Apr. 7	8.49	July 7	8.07	Oct. 6	8.44
13	8.27	14	8.02	14	8.03	13	8.47
20	9.21	21	7.90	21	8.19	20	8.43
27	9.59	28	7.37	28	8.26	27	8.53
Feb. 3	9.69	May 5	7.37	Aug. 4	9.26	Nov. 3	8.59
10	9.71	12	6.92	11	8.44	10	8.51
17	9.81	19	6.36	18	8.51	17	8.46
24	8.91	26	6.98	25	8.53	24	8.38
Mar. 3	9.65	June 2	7.40	Sept. 1	8.57	Dec. 1	8.53
10	9.43	9	8.00	8	8.52	8	8.65
17	9.24	16	8.00	15	8.47	15	8.76
24	8.95	23	7.93	22	8.37	22	8.69
31	8.78	30	7.97	29	8.42	29	8.71

#### Eddy County

148-65-21aa. H. Johnson. Drilled domestic well, diameter 24 inches, depth 28 feet. Records available: 1946-50. May 16, 4.19; July 20, 7.87; Oct. 20, 13.60.

148-66-1aa. S. Nygaard. Dug domestic and stock well, diameter 36 inches, depth 11, 3 feet. Records available: 1946-50. May 4, 5.27; July 20, 6.46; Oct. 20, 7.81.

148-66-10dd. F. Duda. Drilled domestic and stock well, diameter 6 inches, depth 116 feet. Records available: 1945-50. May 4, 28.91; July 20, 27.61; Oct. 20, 28.21.

148-67-28da1. Pfau Estate. Records available: 1940-50. Sept. 14, flow 15 gallons per minute.

149-63-32ab. S. Erman. Dug stock well, diameter 30 inches, depth 43 feet. Records available: 1946-50. May 16, 13.61; Oct. 20, 16.82.

149-64-28cc. R. Rosenberg. Dug unused well, diameter 30 inches, depth 40 feet. Records available: 1946-50. May 16, 1.09; July 20, 4.07; Oct. 20, 8.52.

149-64-31cb. E. Boyle. Dug unused well, diameter 30 inches, depth 10.1 feet. Records available: 1946-50. May 16, 0.90; July 20, 4.81; Oct. 20, 7.39.

149-65-10dd. H. Pierson. Dug domestic and stock well, diameter 30 inches, depth 7.80 feet. Records available: 1946, 1949-50. May 16, +0.5; July 20, 4.11; Oct. 20, 5.65.

149-65-35cb. J. Overdick. Dug domestic and stock well, diameter 36 inches, depth 10 feet. Records available: 1946, 1949-50. May 16, 1.17; July 20, 3.61; Oct. 20, 5.68.

150-65-35cc. O. Anderson. Dug domestic well, diameter 30 inches, depth 11.9 feet. Records available: 1946-50. May 16, 1.53; July 20, 4.5; Oct. 20, 5.88.

150-66-9ba1. Elmer Moe. Records available: 1936, 1938-46, 1948-50. May 27, 17.48; Sept. 14, 17.60.

150-66-9bd1. Gilbert Olson. Records available: 1936, 1938-50. May 27, 12.59; Sept. 14, 12.81.

150-66-9cb1. Stockyards. Records available: 1936-50.

June 10	4.60	July 15	5.70	Aug. 19	6.80	Sept. 16	8.00
17	4.90	22	5.90	26	7.00	23	8.00
24	5.10	29	6.20	Sept. 2	7.02	Nov. 27	8.30
July 1	5.30	Aug. 5	6.50	9	7.60		
8	5.70	12	6.60	14	7.89		

150-66-9cd1. L. S. Rude. Records available: 1936, 1938-50. May 27, 6.99.

#### Grant County

136-85-8aa. Owner unknown. Dug unused well, depth 37.9 feet. May 19, 19.87; July 17, 22.72; Nov. 1, 24.45. Records available: 1946-50.

136-86-12db. Owner unknown. Drilled unused well, diameter 30 inches, depth 34.7 feet. Records available: 1946-50. May 19, 27.33; July 17, 26.22; Oct. 18, 28.04.

136-86-20ac. C. E. Johnson. Drilled stock well, diameter 24 inches, depth 32 feet. Records available: 1946-50. May 19, 27.96; July 17, 27.99; Nov. 1, 28.58.

136-87-20dd. Albert Steigmyer. Dug stock well, diameter 48 inches, depth 17.2 feet. Records available: 1946-50. May 19, 10.34; July 17, 11.41; Nov. 1, 12.52.

136-88-18ca. John Renner. Dug stock well, diameter 48 inches, depth 30.2 feet. May 19, 26.95; July 17, 28.30; Nov. 1, 28.21. Records available: 1946-50.

#### Griggs County

144-59-20bc1. Griffith Loan & Investment Co. Records available: 1940-50. May 27, 18.39.

#### Hettinger County

133-93-5bd1. L. F. Everhart. Records available: 1938-42, 1946-50. June 30, 49.38; July 13, 49.40; Oct. 27, 50.00.

#### Kidder County

138-73-9cc1. Herman Peterson. Records available: 1937-50. May 26, 7.66.

139-71-10bc1. Village of Tappen. Records available: 1940-50. May 26, 3.69.

139-71-27cc1. Philip Mitteleider. Records available: 1940-50. May 26, +1.51.

139-72-10ca1. Chas Woesnner. Records available: 1940-50. May 26, 8.87.

142-70-12ac1. Mrs. Fagereng. Records available: 1940-45, 1950. Measurement resumed 1950. Aug. 30, 32.54.

142-70-23ab1. Mrs. Fagereng. Records available: 1940-50. Aug. 30, 19.60.

#### La Moure County

133-64-3bc1. Town of Edgeley. Records available: 1940-50. May 26, 23.69.

134-64-24dc1. Mrs. Fidela Davis. Records available: 1939-50. May 26, +0.60.

#### McHenry County

152-76-6bc1. Minneapolis, St. Paul & Sault Ste. Marie Railway Co. Records available: 1940-48, 1950. Aug. 30, 10.47; Sept. 14, 13.05.

154-80-14dc2. Albert Jensen. Drilled stock well, diameter 6 inches, depth 12.8 feet. Records available: 1945-50. May 16, 2.75; July 27, 4.90; Oct. 25, 6.85.

154-80-34dd. Andrena Whitt. Drilled stock well, diameter 24 inches, depth 34 feet. Records available: 1945-50. May 16, 10.52; July 27, 8.60; Oct. 25, 9.08.

155-79-8aa1. Cities Service. Records available: 1940-42, 1945-50. May 24, 5.81; Aug. 31, 6.99.

156-76-11bd1. Village of Towner. Records available: 1940-50. May 24, 11.10.

156-78-36bc1. Denbigh Forest Experimental Station well 1. U. S. Forest Service. Records available: 1932-41, 1943-50. May 24, 2.10; Sept. 13, 4.21.

156-78-36bc2. Denbigh Forest Experimental Station well 2. U. S. Forest Service. Records available: 1932-41, 1943-50. May 24, 1.06; Sept. 13, 2.30.

156-79-33dc1. Harold H. Sullwold. Records available: 1940-50. May 24, 4.68; Sept. 13, 7.30.



156-80-16cd. Owner unknown. Drilled unused well, diameter 18 inches, depth 23.7 feet. Records available: 1945-50. May 15, 18.40; July 26, 18.09; Oct. 26, 18.97.

157-75-31cd1. U. S. Forest Service. Records available: 1940-50. May 24, 2.60; Sept. 13, 2.80.

#### McIntosh County

132-70-28da1. Dan Nigisch. Records available: 1940-50. May 27, 14.52.

132-71-15aa1. Town of Wishek. Records available: 1940-46, 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	24.06	Apr. 12	23.72	June 26	23.89	Sept. 26	22.96
9	24.06	17	23.60	July 7	22.64	Oct. 12	23.05
16	24.02	26	23.55	11	22.91	18	23.12
23	24.05	May 1	23.54	18	22.72	Nov. 1	23.16
30	24.09	8	23.44	25	23.96	10	23.11
Feb. 6	24.13	15	23.18	Aug. 2	23.03	17	23.09
13	24.17	22	22.88	14	22.87	24	23.12
21	24.14	29	22.82	28	22.92	25	23.14
28	24.19	June 8	23.04	Sept. 6	22.19	Dec. 15	23.19
Mar. 13	24.14	14	23.28	13	23.04	21	23.21
21	24.13	20	23.09	18	22.98	28	23.21
Apr. 3	24.02						

132-71-24ad1. Federal Land Bank. Records available: 1940-50. May 27, 7.37.

#### McKenzie County

150-100-12cc1. Chas. E. Fleck. Records available: 1938-50.

Jan. 7	113.57	May 13	113.53	Aug. 5	113.56	Nov. 4	113.34
14	113.64	20	113.73	12	113.55	11	113.55
21	113.53	27	113.50	19	113.67	18	113.43
Mar. 4	113.70	June 3	113.73	26	113.61	25	113.73
11	113.70	10	113.83	Sept. 2	113.65	Dec. 2	113.62
18	113.83	18	113.67	9	113.60	9	113.83
25	113.55	24	113.85	18	113.60	16	113.64
Apr. 8	113.25	July 1	113.65	23	113.55	23	113.66
15	113.69	8	113.67	30	113.25	30	113.21
22	113.61	15	113.64	Oct. 21	113.65		
29	113.73	22	113.63	28	113.60		

#### Mercer County

143-88-4cd3. Robert Keogh. Drilled stock well, depth 30 feet. Records available: 1948-50. May 16, 10.59; June 16, 12.53; Sept. 14, 15.91.

143-88-14bb. Owner unknown. Dug unused well, diameter 24 inches, depth 21.1 feet. Records available: 1946-50. May 16, 10.03; June 16, 11.53; Sept. 14, 13.33.

143-89-10cc1. Owner unknown. Drilled unused well, diameter 5 inches, depth 100 feet. Records available: 1946-50. May 16, 48.58; June 16, 48.52; Sept. 14, 49.70.

143-89-12ba. H. D. Spear. Driven stock well, diameter 5 inches, depth 37.0 feet. Records available: 1946-50. May 16, 9.48; June 16, 9.72; Sept. 14, 10.31.

143-89-21aa. Paul Goehring. Dug domestic well, diameter 36 inches, depth 28.5 feet. Records available: 1946-49. No measurement made in 1950.

144-87-14aa. Otto E. Oster. Dug domestic and stock well, diameter 36 inches. Records available: 1946-50. May 16, 12.57; Sept. 14, 15.25.

144-88-25cb. John Meyers. Drilled domestic well, depth 63.3 feet. Records available: 1946-50. May 16, 24.04; June 16, 23.75; Sept. 14, 22.98.

144-88-25cc. D. Koehler. Drilled domestic and stock well, diameter 18 inches, depth 23.2 feet. Records available: 1946-50. May 16, 11.15; Sept. 14, 16.57.

#### Morton County

136-81-6dc1. Joe Lanz, Jr. Records available: 1941-50.

## 136-81-6dc1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	21.70	Mar. 27	21.72	June 19	21.17	Oct. 16	20.55
9	21.69	Apr. 3	21.73	26	21.04	23	20.55
16	21.69	10	21.72	July 3	20.40	30	20.60
23	21.70	17	21.70	10	20.14	Nov. 6	20.65
30	21.70	24	21.67	17	20.21	13	20.70
Feb. 6	21.68	May 1	21.69	24	20.30	20	20.70
13	21.69	8	21.66	31	20.36	27	20.71
20	21.70	15	21.61	Sept. 11	20.43	Dec. 4	20.75
27	21.70	22	21.55	18	20.50	11	20.80
Mar. 6	21.67	29	21.40	25	20.48	18	20.85
13	21.69	June 5	21.32	Oct. 2	20.50	25	20.85
20	21.70	12	21.28	9	20.50		

137-84-1dd1. Stark. Dug domestic and stock well, diameter 5 inches, depth 17.6 feet. Records available: 1946-50. May 17, 6.47; July 17, 9.76; Nov. 1, 11.47.

137-84-10cc1. Clemens Schmitz. Drilled stock well, diameter 24 inches, depth 47.4 feet. Records available: 1946-50. May 18, 32.43; July 17, 31.86; Nov. 1, 32.54.

139-82-34db. Owner unknown. Dug unused well, diameter 48 inches, depth 56.5 feet. Records available: 1946-50. May 17, 28.23; July 26, 30.03; Oct. 31, 32.24.

## 139-85-15cc1. Fred Lehde. Records available: 1941-50.

Mar. 13	31.93	June 11	29.10	Aug. 19	30.29	Nov. 5	31.19
18	32.07	17	29.10	26	30.27	11	31.29
25	32.09	24	29.17	Sept. 2	30.36	21	31.37
Apr. 22	29.14	July 1	29.21	17	30.46	25	31.40
29	29.48	15	29.39	23	30.45	Dec. 3	31.47
May 8	30.70	22	29.79	Oct. 7	30.80	9	31.57
20	29.36	29	29.81	16	31.00	16	32.08
27	29.20	Aug. 7	30.05	21	31.07		
June 3	29.27	12	30.12	Nov. 2	31.21		

139-88-32ab1. Henry Polenberg. Records available: 1941-47, 1949-50. May 25, 14.95.

Nelson County

152-58-18daa. Incorrectly published as 152-58-17bc3 in 1949 report. Ole Norum. Records available: 1948-50.

Jan. 7	4.85	Apr. 8	4.90	July 8	3.20	Oct. 7	4.30
14	4.90	15	4.55	15	2.90	14	4.10
21	4.90	22	3.00	22	3.30	21	4.20
28	5.00	29	1.30	29	4.40	28	4.35
Feb. 4	5.10	May 6	.40	Aug. 5	4.00	Nov. 4	4.40
11	5.20	13	.30	12	4.10	11	4.45
18	5.35	20	.30	19	4.30	18	4.45
25	5.45	27	.80	26	5.00	25	4.55
Mar. 4	5.60	June 3	1.10	Sept. 2	5.25	Dec. 2	4.60
11	5.65	10	1.44	9	5.40	9	4.70
18	5.75	17	1.30	16	5.00	16	4.85
25	5.80	24	1.40	23	4.60	23	5.00
Apr. 1	5.15	July 1	1.80	30	4.55	30	5.15

Pembina County

160-56-8dca1. Paul B. Olafson. Records available: 1946-50. Aug. 1, 3.20.

160-56-9ccb1. Ole Soli. Records available: 1946-48, 1950. Aug. 1, 5.52.

160-56-9dcc1. J. Anderson. Records available: 1946-50. Aug. 1, 4.60.

160-56-16aaa1. S. J. Hanson. Records available: 1946-50. Aug. 1, 5.70.

160-56-16aab1. S. J. Hallgrimson. Records available: 1946-50. Aug. 1, 5.40.

160-56-16aab2. Lutheran parsonage. Records available: 1946-50. Aug. 1, 6.40.

160-56-16aab3. H. J. Hallgrimson. Records available: 1946-50. Aug. 1, 4.70.

160-56-16aab4. H. J. Hjaltalin. Records available: 1946-50. Aug. 1, 5.40.

160-56-16acc1. H. Olafson. Records available: 1946-50. Aug. 1, 2.85.

180-56-16ada1. Oscar Byron. Records available: 1946-50. Aug. 1, 8.77.

160-56-16ada3. Incorrectly published as 160-59-16ada3 in previous water-supply papers from 1946-49. Walter Hallison. Records available: 1946-50. Aug. 1, 9.12.

160-56-16adb1. H. Olafson. Records available: 1946-50. Aug. 1, 5.70.

161-56-22bb1. E. J. Lander Co. Records available: 1941-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	8.56	Apr. 8	8.77	July 8	4.53	Oct. 7	7.48
14	8.58	15	8.54	15	4.73	14	7.48
21	8.62	22	7.46	22	5.04	21	7.52
28	8.73	29	6.74	29	5.29	28	7.53
Feb. 4	8.76	May 6	5.17	Aug. 5	5.69	Nov. 4	7.54
11	8.83	13	3.34	12	6.12	11	7.67
25	8.94	27	3.54	26	6.84	25	7.62
Mar. 4	8.99	June 3	3.87	Sept. 2	7.06	Dec. 2	7.67
11	9.02	10	4.06	9	7.38	9	7.74
18	9.07	17	4.29	16	7.12	16	7.74
25	9.00	24	4.53	23	7.17	23	7.74
Apr. 1	8.81	July 1	4.53	30	7.37	30	7.78

162-53-31cc1. Garnett A. Snell. Records available: 1941-50.

Jan. 7	8.63	Apr. 8	9.23	July 8	5.48	Oct. 7	7.74
14	8.68	15	8.98	15	5.92	14	7.58
21	8.77	22	8.23	22	6.34	21	7.39
28	8.87	29	7.85	29	6.81	28	7.56
Feb. 4	9.03	May 6	6.72	Aug. 5	7.18	Nov. 4	7.58
11	9.08	13	5.14	12	7.50	11	7.67
18	9.15	20	3.92	19	7.88	18	7.64
25	9.40	27	3.92	26	8.22	25	7.70
Mar. 4	9.26	June 3	4.30	Sept. 2	8.46	Dec. 2	7.76
11	9.33	10	4.78	9	8.58	9	7.82
18	9.39	17	5.22	16	8.05	18	7.94
25	9.40	24	5.68	23	8.06	23	8.08
Apr. 1	9.25	July 1	4.98	30	7.94	30	8.26

162-55-3dd1. Albert C. McCurdy. Records available: 1941-50.

Jan. 1	8.03	Apr. 23	8.28	June 12	4.76	Sept. 24	7.42
8	8.18	30	6.46	18	5.09	Oct. 1	7.60
15	8.45	May 6	4.97	25	5.45	8	7.55
23	8.61	14	3.32	July 2	5.34	15	7.47
29	8.76	19	2.88	9	5.80	22	7.55
Feb. 2	8.92	20	2.97	16	5.95	29	7.63
12	9.05	21	3.09	23	6.16	Nov. 5	7.73
19	9.14	22	3.22	30	6.39	12	7.80
26	9.22	23	3.26	Aug. 6	6.68	19	7.84
Mar. 5	9.29	24	3.49	13	6.92	26	7.90
12	9.38	25	3.55	20	7.18	Dec. 3	7.95
19	9.42	26	3.63	27	7.40	10	8.05
26	9.38	27	3.72	Sept. 3	7.63	17	8.14
Apr. 9	8.38	28	3.72	10	7.86	24	8.24
16	7.97	June 4	4.21	17	7.35	31	8.35

162-55-3dd2. Albert C. McCurdy. Records available: 1946-50. Aug. 1, 9.90.

#### Ramsey County

153-64-2dac. Howard Maher. Drilled unused artesian (?) well in Pierre shale, diameter 4 inches, depth 67 feet. Records available: 1950. Sept. 14, 3.04; Sept. 26, 3.02; Oct. 10, 2.99; Oct. 23, 2.98; Nov. 15, 3.01.

153-64-5aa1. Ray Young. Records available: 1942-50. May 24, 20.80.

153-64-25ca1. Camp Grafton Military Reserve. Records available: 1943-50. May 27, 57.06; Sept. 26, 50.70; Oct. 10, 50.67; Oct. 23, 50.57; Nov. 15, 51.90.

153-65-14ac1. Mrs. Bonnie Boland. Records available: 1937-50. May 27, 55.84; Sept. 26, 54.17; Oct. 10, 54.05; Oct. 23, 53.97.

154-64-34ddd6. Fairmount Foods. Drilled unused artesian (?) well in Pierre shale, diameter 6 inches, depth 112 feet. Reportedly cased to 60 feet and open hole below. Records available: 1950. Sept. 26, 51.44; Oct. 10, 51.09; Oct. 23, 52.10; Nov. 15, 62.34.

154-64-35cbc. William Johnson. Drilled unused artesian (?) well in Pierre shale, diameter 4 inches, depth 91 feet. Records available: 1950. Sept. 26, 27.87; Oct. 10, 27.84; Oct. 23, 27.79; Nov. 15, 29.08.

#### Ransom County

136-56-3ab1. Melfird Skranstad. Records available: 1940-46, 1948-50. Aug. 30, 12.40.

#### Renville County

158-82-7cc. J. T. Phillips. Dug stock well, diameter 36 inches, depth 12 feet. Records available: 1945-50. May 12, 0.27; July 24, 2.04; Oct. 30, 2.25.

158-83-20cc. Owner unknown. Dug unused well, diameter 48 inches, depth 18.4 feet. Records available: 1945-50. May 12, 2.73; July 24, 4.72; Oct. 30, 5.67.

158-84-35dd. H. J. Linnards. Bored unused well, diameter 18 inches, depth 52 feet. Records available: 1945-50. May 8, 16.94; July 10, 16.65; Oct. 30, 15.54.

159-84-10cd. J. O. Bolander. Dug domestic stock well, depth 12 feet. Records available: 1945-50. May 12, 3.78; July 10, 3.75; Oct. 31, 5.00.

159-85-7bc1. Ralph Johnson. Bored domestic well, diameter 18 inches. Records available: 1945-50. May 11, 7.65; July 11, 2.66; Oct. 31, 3.58.

159-85-12aa. J. P. Lundberg. Dug domestic well, diameter 36 inches, depth 14 feet. Records available: 1945-50. May 11, 3.15; July 10, 3.93; Oct. 31, 11.85.

160-85-9cc. Owner unknown. Dug domestic well, diameter 18 inches, depth 18 feet. Records available: 1946-50. May 10, 1.10; July 11, 4.78; Oct. 31, 5.16.

161-84-6cb. Owner unknown. Dug domestic and stock well. Records available: 1945-50. May 10, 0.69; July 18, 3.33; Nov. 6, 4.04.

161-84-13cd2. Fred Paris. Drilled unused well, diameter 18 inches, depth 13.2 feet. Records available: 1940-50. May 10, 1949, 4.22; Sept. 17, 7.30; May 10, 1950, 2.00; July 18, 4.27; Nov. 6, 4.77.

161-85-20aa1. Owner unknown. Drilled unused well, diameter 3 inches. Records available: 1937-50. May 9, 82.09; July 11, 82.20; Nov. 6, 82.21.

161-85-34cc1. Harry Klatt. Bored domestic well, diameter 18 inches, depth 23 feet. Records available: 1945-50. May 10, 12.45; July 11, 5.08; Nov. 6, 5.64.

162-84-9cd. Owner unknown. Dug unused well, diameter 72 inches, depth 19.1 feet. Records available: 1945-50. May 8, 3.12; July 17, 5.06; Nov. 6, 6.35.

162-86-13ab1. August Bahl. Dug unused well, diameter 10 inches, depth 15 feet. Records available: 1945-50. May 8, 3.63; July 17, 4.03; Nov. 6, 4.67.

162-87-17aa. Owner unknown. Dug domestic and stock well, diameter 48 inches, depth 30.4 feet. Records available: 1945-50. May 9, 10.30; July 17, 7.10; Nov. 9, 10.80.

163-85-5cd. George Eltz. Dug unused well, diameter 30 inches, depth 19.3 feet. Records available: 1945-50. May 8, 4.98; July 17, 6.49; Nov. 6, 8.90.

163-85-36aa. Owner unknown. Dug stock well. Records available: 1945-50. May 8, 1.65; July 17, 3.34; Nov. 6, 4.34.

163-86-9aa. Owner unknown. Dug domestic well, diameter 36 inches. Records available: 1945-50. May 8, 3.30; July 17, 6.97; Nov. 6, 8.91.

163-87-5dc. Owner unknown. Dug, stock well, diameter 36 inches, depth 14.5 feet. Records available: 1945-50. May 5, 1.11; July 17, 1.22; Nov. 9, 2.25.

Richland County

133-52-32cd1. Owner unknown. Records available: 1946-50. May 23, 4.65.

133-52-33cdd. John Liljemark. Records available: 1937-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	6.98	Apr. 15	4.39	July 15	5.10	Oct. 7	6.68
14	7.06	22	3.43	22	5.43	14	6.64
21	7.18	29	3.10	29	5.93	21	6.68
28	7.31	May 6	2.77	Aug. 5	6.27	28	6.72
Feb. 4	7.43	13	1.35	12	6.60	Nov. 4	6.77
11	7.43	20	1.10	19	6.85	13	6.68
18	7.48	27	1.60	26	7.01	18	6.60
25	7.52	June 3	1.68	Sept. 2	8.01	25	6.64
Mar. 4	7.57	10	1.64	9	7.35	Dec. 2	6.81
11	6.93	17	2.60	16	7.43	9	7.10
18	6.85	24	3.85	23	7.18	16	7.18
25	6.77	July 1	4.43	29	5.93	23	7.31
Apr. 8	5.02	8	4.60	30	7.35	30	7.43

Stark County

139-91-2ba1. Roland and George Funk. Records available: 1940-50. May 25, 2.22; Aug. 31, 4.25.

139-96-3bbc1. City of Dickinson. Records available: 1947-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	130.60	138.85	142.90	142.33	.....	140.14	.....	135.04	133.75	111.52	.....	129.20
2	130.15	139.18	142.77	142.20	.....	140.08	.....	137.03	134.38	109.93	125.40	126.07
3	127.18	.....	142.51	142.85	144.58	140.03	120.28	136.14	134.43	109.65	129.02	124.75
4	127.17	.....	142.87	143.28	144.56	139.60	118.18	137.43	133.60	109.40	127.47	128.22
5	127.17	.....	142.90	.....	144.52	139.55	115.35	138.12	134.33	108.23	123.75	122.00
6	127.50	139.34	142.83	.....	.....	139.08	118.60	132.10	134.73	107.85	126.82	122.25
7	127.50	139.73	.....	.....	.....	139.46	117.32	132.10	135.27	107.59	129.02	126.50
8	127.50	139.73	.....	.....	.....	139.50	115.90	132.10	135.27	107.91	118.50	128.58
9	127.10	139.90	.....	.....	.....	129.19	124.20	132.08	134.58	108.37	126.50	127.05
10	128.48	140.16	.....	.....	144.88	128.70	137.02	127.25	124.55	108.37	128.44	128.87
11	127.26	140.44	.....	144.24	144.87	127.52	.....	126.15	119.03	.....	117.40	128.22
12	127.42	140.78	.....	144.22	144.74	133.78	.....	124.80	118.65	.....	124.50	122.25
13	127.46	141.08	143.15	144.13	144.51	137.30	137.35	.....	117.30	.....	127.08	128.70
14	127.45	141.36	143.21	144.00	144.61	135.20	137.70	.....	127.34	.....	129.43	128.83
15	127.63	141.40	143.32	144.03	144.76	129.60	138.82	.....	116.97	.....	117.25	121.13
16	127.80	141.40	143.43	144.10	144.90	135.08	137.72	.....	116.43	.....	125.02	121.65
17	127.84	141.75	143.63	145.06	144.93	137.74	130.00	.....	114.60	.....	128.00	122.75
18	127.61	141.75	143.81	144.33	144.65	126.40	129.67	130.65	113.67	105.83	128.00	122.95
19	127.90	141.75	143.74	.....	139.60	132.98	128.35	129.06	113.05	.....	128.76	126.45
20	127.82	141.87	143.71	.....	138.40	133.88	126.10	129.10	112.60	.....	124.80	128.93
21	127.37	141.92	143.75	.....	142.10	134.23	131.94	131.85	125.85	.....	130.73	117.55
22	127.57	141.70	143.62	.....	143.04	134.64	132.91	124.60	126.00	.....	129.00	119.13
23	127.57	142.06	143.50	.....	143.75	135.13	132.42	125.25	114.60	.....	130.15	120.25
24	134.30	142.28	141.85	.....	143.94	135.22	132.82	126.35	112.85	118.68	124.85	120.05
25	.....	142.48	142.10	.....	144.10	127.80	133.27	129.32	111.60	125.80	127.83	120.85
26	136.58	142.53	136.00	.....	144.10	124.72	133.62	131.10	122.30	115.10	126.33	120.55
27	136.77	142.26	139.90	.....	144.10	123.17	133.93	130.10	113.40	121.10	127.83	123.73
28	137.56	142.65	141.10	.....	144.00	130.87	133.40	131.60	122.70	124.80	129.55	122.09
29	138.06	.....	141.67	.....	142.14	131.64	135.33	132.05	114.90	126.85	.....	124.95
30	138.25	.....	141.73	.....	141.55	125.40	135.30	132.97	112.50	127.30	129.10	120.30
31	138.70	.....	142.33	.....	142.01	.....	135.50	134.21	.....	127.15	.....	120.60

h Tape measurement.

139-96-12bb. S. L. Carroll. Drilled domestic and stock well, diameter 24 inches, depth 68 feet. Records available: 1946-50. May 5, 49.92; June 17, 50.22; Oct. 31, 70.75.

139-96-14ab. F. Johnson. Drilled unused well, diameter 12 inches, depth 81 feet. Records available: 1946-50. May 15, 58.71; June 17, 71.38; Oct. 31, 70.04.

139-97-14da. Owner unknown. Drilled domestic well, diameter 5 inches, depth 30 feet. Records available: 1946-50. May 15, 20.68; June 17, 21.65; Oct. 31, 22.73.

Stutsman County

137-63-11aa. E. Hanson. Drilled domestic and stock well, diameter 18 inches, depth 22.3 feet. Records available: 1946-50. May 3, 11.52; July 19, 11.19; Oct. 18, 12.29.

138-62-4dc. J. Crouch. Dug unused well, diameter 36 inches, depth 19.3 feet. Records available: 1946-50. May 3, 15.11; July 19, 8.73; Oct. 18, 14.00.

138-62-7cb. M. Ukestad. Dug stock well, diameter 30 inches, depth 37 feet. Records available: 1946-50. May 3, 32.74; July 19, 31.61; Oct. 18, 31.68.

138-63-11ba. E. Steege. Dug domestic and stock well, diameter 18 inches, depth 56.7 feet. Records available: 1946-50. May 3, 40.18; Oct. 18, 50.22.

138-63-26ac. H. Beckman. Drilled domestic and stock well, diameter 24 inches, depth 71.6 feet. Records available: 1946-50. May 3, 67.88; Oct. 18, 67.85.

138-64-12bb. A. Lambrecht. Drilled domestic and stock well, diameter 18 inches, depth 26.5 feet. Records available: 1946-50. May 3, 1.65; July 19, 1.30; Oct. 18, 0.61.

139-63-4dd. E. Attleson. Dug domestic and stock well, diameter 48 inches, depth 28.3 feet. Records available: 1946-50. May 3, 22.19; July 19, 23.71; Oct. 18, 24.66.

139-63-20ca. A. Meeker. Dug domestic and stock well, diameter 36 inches, depth 25 feet. Records available: 1946-50. May 3, 17.28; July 19, 14.73; Oct. 18, 15.41.

139-63-20db. Elmer Mathias. Dug domestic and stock well, diameter 36 inches, depth 22.1 feet. May 3, 15.44; July 19, 12.94; Oct. 18, 13.81. Records available: 1948-50.

139-63-24cb2. H. W. Anderberg. Dug stock well, diameter 60 inches, depth 4 feet. Records available: 1948-50. July 19, 1.90; Oct. 18, 0.0, well flowing.

139-64-5ab. Owner unknown. Drilled unused well, diameter 2 $\frac{1}{4}$  inches. Records available: 1946-50. May 2, 33.36; July 19, 29.80; Oct. 18, 30.21.

140-64-9da. A. Roeszler. Dug domestic well, diameter 36 inches, depth 14.7 feet. Records available: 1946-50. May 3, 7.01; July 19, 10.30; Oct. 18, 10.78.

Towner County

158-66-20d1. S. L. Isaacson. Records available: 1942-44, 1947-50. Sept. 26, 20.08.

160-66-28ba1. Bank of North Dakota. Records available: 1937-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	14.25	Apr. 15	14.15	July 15	13.91	Oct. 14	14.13
14	14.27	22	14.13	22	13.92	21	14.13
21	14.27	29	14.13	29	13.94	28	14.13
28	14.25	May 6	14.13	Aug. 5	13.96	Nov. 4	14.11
Feb. 4	14.23	13	14.11	12	13.98	11	14.11
11	14.21	20	14.09	19	14.01	18	14.13
18	14.18	27	14.05	26	14.03	25	14.13
25	14.18	June 3	14.01	Sept. 2	14.05	Dec. 2	14.13
Mar. 4	14.17	10	13.99	9	14.05	9	13.98
11	14.19	17	13.97	16	14.07	16	14.15
18	14.19	24	13.94	23	14.09	23	14.13
25	14.17	July 1	13.92	30	14.11	30	14.11
Apr. 1	14.15	8	13.92	Oct. 7	14.11		

Trails County

148-53-18aa1. City of Hatton. Records available: 1937-50.

June 3	4.22	July 22	5.36	Sept. 10	8.04	Oct. 21	8.30
11	4.90	30	6.54	17	8.12	28	8.37
17	4.80	Aug. 6	6.82	24	8.05	Nov. 10	8.42
25	4.30	12	7.20	30	8.15	17	8.46
July 2	5.12	20	7.46	Oct. 6	8.20	24	8.56
8	5.70	26	7.66	15	8.45	Dec. 2	8.60
15	5.90	Sept. 2	7.96				

148-53-18ab1. City of Hatton. Records available: 1938-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 3	3.33	July 22	5.70	Sept. 10	7.97	Oct. 21	7.91
11	4.01	30	6.21	17	7.85	28	8.13
17	4.25	Aug. 6	6.65	24	7.89	Nov. 10	7.97
25	4.65	12	6.61	30	8.02	17	8.01
July 2	4.79	20	7.11	Oct. 6	7.95	24	8.05
8	5.17	26	7.45	15	8.01	Dec. 2	8.07
15	5.40	Sept. 2	7.75				

148-53-18ad3. City of Hatton. Records available: 1938-50.

June 3	3.70	July 22	6.40	Sept. 10	8.22	Oct. 21	8.32
11	5.00	30	6.96	17	8.32	28	8.32
17	4.82	Aug. 6	7.34	24	8.20	Nov. 10	8.30
25	3.24	12	7.04	30	8.30	17	8.46
July 2	4.94	20	8.08	Oct. 6	8.19	24	8.34
8	6.76	26	8.32	15	8.28	Dec. 2	8.46
15	6.55	Sept. 2	8.52				

Walsh County

157-51-16dc2. Henry Dipple. Records available: 1937-50. Aug. 1, 5.00.

157-55-17cc1. C. D. Lewis. Records available: 1939-50. Aug. 1, 3.99.

157-55-17cd1. C. D. Lewis. Records available: 1937-38, 1946-50. Aug. 1, 2.61.

Ward County

154-81-27dd. A. M. Foss. Dug domestic well, diameter 48 inches, depth 29 feet. Records available: 1945-50. May 16, 16.76; July 27, 11.75; Oct. 25, 13.15.

154-82-13ad. Owner unknown. Dug unused well, diameter 48 inches, depth 29.1 feet. Records available: 1945-50. May 16, 18.45; July 27, 18.87; Oct. 25, 19.19.

155-82-14dd. John Balerud. Drilled unused well, diameter 4 inches, depth 120 feet. Records available: 1945-50. May 5, 37.99; July 10, 37.49; Oct. 26, 37.32.

155-83-23baal. City of Minot. Records available: 1944-50.

Daily lowest water level, from recorder graph

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	49.08	50.83	50.71	50.30	51.46	51.01	50.82	48.55
2	.....	50.23	50.90	49.31	52.36	52.18	51.02	.....	50.97
3	.....	50.53	50.18	48.54	52.56	52.18	51.02	.....	50.91
4	.....	49.01	50.35	48.56	53.63	51.43	51.06	51.00	50.95
5	.....	48.83	52.10	49.38	52.28	52.18	51.03	50.94	50.90
6	.....	50.38	52.91	50.38	52.23	52.38	51.06	51.01	50.26
7	48.08	50.32	52.68	52.23	51.93	52.05	51.95	52.73	49.86
8	50.91	50.28	49.30	51.76	51.86	52.08	51.01	52.66	48.64
9	50.28	48.85	49.13	50.70	50.43	51.83	51.03	52.88	50.88
10	49.10	50.12	50.43	52.78	51.98	51.98	51.06	52.81	49.80
11	50.08	50.53	50.43	52.28	52.02	50.38	51.03	53.08	49.38
12	50.43	49.06	48.91	52.32	51.98	50.32	51.94	53.13	49.61
13	50.50	50.23	50.91	50.99	50.45	50.87	51.92	52.66	50.97
14	50.82	50.28	50.47	51.58	52.03	50.94	51.09	52.68	50.94
15	50.57	50.08	50.60	51.11	51.33	50.96	51.23	52.73	50.06
16	49.56	49.66	49.42	50.92	51.46	50.95	51.09	52.58	50.04
17	49.45	49.59	50.59	49.48	51.53	51.00	50.88	52.65	49.73
18	50.77	50.19	49.23	50.12	51.16	50.99	50.95	52.64	49.36
19	50.97	50.48	50.28	51.26	51.29	50.97	53.01	52.48	49.63
20	49.50	50.28	50.43	50.83	49.95	50.99	52.86	52.52	50.01
21	49.28	50.15	50.28	49.43	49.80	50.97	52.82	52.61	49.66
22	51.13	50.54	51.23	50.70	51.14	50.99	52.85	52.50	.....
23	50.38	49.68	50.79	49.31	51.24	51.97	52.80	52.56	49.98
24	49.63	49.57	50.87	51.30	49.80	51.01	52.80	52.64	48.29
25	49.95	51.44	50.78	51.32	51.93	51.02	52.77	52.61	48.39
	50.21	50.62	49.40	51.66	51.18	50.75	.....	49.93	50.01
	50.38	51.01	49.24	53.18	49.58	51.97	51.08	49.78	49.58

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155-83-23baa1--Continued.

Daily lowest water level, from recorder graph

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
28	49.23	50.58	50.76	53.60	51.14	51.97	50.96	49.68	48.28
29	50.18	50.20	50.38	53.53	51.13	51.00	51.03	50.60	49.63
30	50.12	50.49	50.68	52.18	51.30	51.00	51.08	50.95	49.63
31		50.56		50.58	51.31		51.08		49.64

156-81-4aa. Abel Beaton. Drilled domestic well, diameter 1½ inches, depth 185 feet. Records available: 1945-50. May 15, 1.15; July 26, 3.78; Oct. 26, 5.68.

156-82-10bc1. Roy Tripp. Drilled domestic and stock well, diameter 24 inches, depth 35 feet. Records available: 1945-50. May 15, 9.00; July 10, 5.05; Oct. 26, 7.30.

156-83-19bc1. D. Olson. Drilled unused well, diameter 30 inches, depth 32.8 feet. Records available: 1945-50. May 17, 5.90; July 10, 5.95; Oct. 26, 9.19.

156-84-3bb. Owner unknown. Dug stock well, diameter 36 inches, depth 42 feet. Records available: 1945-50. May 8, 16.47; July 10, 12.67; Oct. 26, 14.29.

157-82-22dd. Owner unknown. Drilled unused well, diameter 48 inches. Records available: 1945-50. May 17, 4.85; July 25, 7.05; Oct. 30, 9.77.

157-83-7dd2. H. A. Kluver. Dug stock well, diameter 20 inches, depth 29 feet. Records available: 1945-50. May 8, 12.16; July 24, 7.85; Oct. 30, 8.29.

157-84-20cc. Public School. Dug unused well, depth 30 feet. Records available: 1945-50. May 11, 15.20; July 10, 12.12; Oct. 30, 13.02.

157-84-22ad. A. M. Bock. Dug domestic and stock well, depth 23 feet. Records available: 1945-50. May 8, 9.80; July 10, 3.87; Oct. 30, 5.91.

159-87-1dc1. C. Sorenson. Dug domestic well, diameter 36 inches, depth 24 feet. May 11, 10.95; July 11, 8.74; Oct. 31, 9.93. Records available: 1945-50.

160-87-13cd. Roy Cole. Dug domestic well, diameter 36 inches, depth 30 feet. May 10, 2.68; July 11, 4.46; Oct. 31, 3.54. Records available: 1945-50.

160-88-4dc. Levi Emmel. Drilled unused well, diameter 18 inches. Records available: 1945-50. May 11, 2.82; July 11, 5.94; Oct. 31, 8.02.

161-88-28aa. State Highway Department. Drilled domestic well, diameter 18 inches. Records available: 1945-50. Apr. 6, 1.31, ponded water nearby; May 11, 0.31; July 11, 1.42; Nov. 9, 4.15.

Wells County

147-70-23aa1. Hayden Jones. Records available: 1940-50. Sept. 14, 5.47.

150-72-21cd1. City of Harvey. Records available: 1937-50. Sept. 14, 0.95.

150-72-28ba1. City of Harvey. Records available: 1937-48, 1950. Sept. 14, 7.06.

Williams County

159-103-24da1. Incorrectly published as 159-103-24ad1 in previous reports. Hans O. Lottestad. Records available: 1939-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	24.48	Apr. 9	26.03	July 16	15.37	Oct. 22	21.59
8	24.64	16	24.74	23	16.61	29	21.77
15	24.82	23	24.26	30	16.91	Nov. 5	22.04
22	24.93	30	23.93	Aug. 6	17.07	12	22.44
29	25.05	May 1	23.22	12	17.16	19	22.49
Feb. 5	25.24	14	17.54	19	18.30	26	22.73
12	25.35	21	11.81	26	18.71	Dec. 3	23.04
19	25.46	28	12.23	Sept. 3	19.13	10	23.38
26	25.58	June 4	12.46	10	19.56	17	27.65
Mar. 5	25.69	11	12.77	17	20.06	24	23.81
12	25.77	18	12.77	24	20.35	31	23.95
19	25.87	25	13.53	Oct. 1	20.70		
26	25.92	July 2	14.44	8	20.99		
Apr. 2	25.96	9	14.90	15	21.29		



159-103-24da2. Incorrectly published as 159-103-24ad2 in previous reports. Hans O. Lottstad. Records available: 1938-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	17.84	Apr. 9	19.46	July 9	11.15	Oct. 8	14.76
8	17.97	16	19.12	16	11.47	15	15.05
15	18.10	23	18.87	23	12.83	22	15.31
22	18.19	30	18.67	30	13.02	29	15.51
29	18.37	May 1	16.94	Aug. 6	11.66	Nov. 5	15.57
Feb. 5	18.42	14	13.42	12	11.92	12	16.06
12	18.57	21	9.65	19	12.43	19	16.09
19	18.61	28	9.75	26	12.85	26	16.37
26	18.81	June 4	9.97	Sept. 3	13.22	Dec. 3	16.79
Mar. 5	18.90	11	9.83	10	13.58	10	16.80
12	19.01	18	9.67	17	13.94	17	17.02
19	19.09	25	10.37	24	14.25	24	17.20
26	19.20	July 2	11.04	Oct. 1	14.54	31	17.40
Apr. 2	19.31						

## SOUTH DAKOTA

By George A. LaRocque, Jr.

### Scope of Water-Level Program

The observation-well program, started in 1935, was continued through cooperation with the State Geological Survey until 1946. Beginning in 1946, the measurements have been continued as part of the Missouri River Basin program. The observation-well program has been carried on to determine the general index of the change in ground-water levels throughout the State; and in conjunction with the ground-water investigation in areas which may be irrigated. Ground-water investigation in the Oahe area, completed through 1950, includes an inventory of wells for about two-thirds of the area; the collection of water samples from about 1,500 wells in the glacial drift for partial or complete chemical analysis; the collection of water samples from about 100 wells in the Dakota sandstone for complete chemical analysis; the compilation of a map of the surficial outwash channels; the partial supervision of the test-drilling and observation-well installation program of the Bureau of Reclamation; and the measurement of about 350 observation wells that are either privately or Government owned. The Sand Lake-Crow Creek area investigation is for the purpose of collecting and compiling data necessary to evaluate the requirements for the disposal of excess ground and surface water. The purpose of the Rapid Valley investigation was to determine if there was an excess of ground water which could be recovered and put to beneficial use. The Belle Fourche area investigation was a reconnaissance to determine the scope and requirements of a future general or detailed investigation. The Angostura area work was a continuation of the collection of pre-irrigation ground-water level data.

There are two distinct sources of non-bedrock ground water in South Dakota. East of the Missouri River, meager to copious quantities of ground water may be obtained from the aquifers deposited during one or more of the periods of glaciation. Most of the aquifers probably were deposited during substages of the Wisconsin glacial stage. The ground water in most of the glacial aquifers is confined. There are a few flowing wells, but the usual range in depth to water is from about 10 feet to 50 feet below land surface, and depths to water of about 100 feet are not uncommon. West of the Missouri River most non-bedrock ground water is produced from alluvium or terrace deposits. The ground water may or may not be confined; local variations seem to predominate rather than there being regional or large-area variations.

### Precipitation

During 1950 the precipitation in the eastern one-third and in the western one-third of the State was generally below the long-term average, but in the central one-third precipitation was above the long-term average. The period of melting and thawing of the winter's accumulation of snow and ice was longer and later in the year than usual, and the average summer temperature was generally below normal. Notwithstanding the fact that precipitation was generally below average, the net result of the unusually long period of thawing combined with below-average summer temperatures was favorable for the recharge of the State's non-bedrock aquifers.

### Fluctuations of Water Levels

In eastern South Dakota, changes in ground-water levels do not usually reflect changes in the quantity of ground water in storage, but they are an indication of changes in hydrostatic pressures. In western South Dakota, the changes in ground-water levels are generally a measure of the change in quantity of ground water in storage. The following table is a brief summary of changes in ground-water level for 1950.

Summary of Changes in Ground-Water Levels

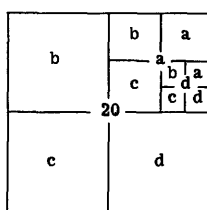
Area (County)	Number of wells	Change from spring of 1949 to spring of 1950 (feet)	Change from fall of 1949 to fall of 1950 (feet)	Net change	
				1949 (feet)	1950 (feet)
James River valley (Beadle, Brown, Edmunds, Faulk, Hand, Jerauld, Marshall, San- born, Spink)	37	+1.19	+0.78	+0.56	+1.51

Summary of Changes in Ground-Water Levels--Continued

Area (County)	Number of wells	Change from spring of 1949 to spring of 1950 (feet)	Change from fall of 1949 to fall of 1950 (feet)	Net change	
				1949 (feet)	1950 (feet)
Big Sioux River valley (Codington, Minnehaha)	2	-0.31	+0.15	+0.06	-0.29
General (Walworth)	1	+ .80	+6.54	-3.35	+ .30
Average		+1.11	+ .89	+ .44	+1.40
Rapid Valley (Pennington)	2	+2.20	-2.60	-1.83	+3.06
Angostura (Custer, Fall River)	33	- .14	- .29	+ .13	- .42
General (Corson, Haakon, Perkins, Shannon)	4	+1.57	-1.37	+ .35	+1.67
Average		+ .16	- .52	+ .05	.03
Missouri Trench (Yankton)	1	-1.11	-1.14	+1.90	+1.64
Average		+0.62	-0.18	+0.27	+0.71

## Well-Numbering System

Wells are numbered in accordance with the Bureau of Land Management system of land subdivision. The first numeral of a well number indicates the township, the second the range, and the third the section in which the well is situated. The lower-case letters, a, b, c, and d, following the section number indicate the well location within the section: the first letter denotes the quarter section (160-acre tract), the second the quarter-quarter section (40-acre tract), and the third the quarter-quarter-quarter section (10-acre tract). The letters are assigned in a counterclockwise direction, beginning in the northeast quarter. The number of lower-case letters indicate the accuracy of the well location; if the location is known within a 10-acre tract, three lower-case letters are shown in the well number. When there is more than one well in the smallest significant tract, consecutive numbers beginning with 1 are added as suffixes. Well numbers preceded by the capital letters A and D designate wells in the northeast and southeast quadrants, respectively, of the Black Hills meridian and base line system. Well numbers not preceded by a capital letter designate wells in the 5th or 6th principal meridian and base line systems. Below is a graphical illustration of this method of well numbering within a section of 640 acres.



Section 20

## Well Descriptions and Water-Level Measurements

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

## Beadle County

112-61-34ddd. Formerly 112-61-34cd. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{2}$  inches, depth 24 feet. Records available: 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 21	10.80	Apr. 21	10.30	Aug. 28	9.41	Nov. 30	9.00
Feb. 21	10.51	May 11	10.07	Sept. 26	9.21	Dec. 28	9.03
Mar. 20	10.51	June 26	10.41	Oct. 26	8.98		

112-62-31cccc. Formerly 112-62-31cc. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Records available: 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 21	13.99	Apr. 21	13.76	July 20	13.27	Oct. 26	12.31
Feb. 21	13.98	May 11	13.46	Aug. 28	12.90	Nov. 30	12.29
Mar. 20	13.92	June 26	13.34	Sept. 18	12.82	Dec. 28	12.27

112-62-34cccc. Formerly 112-62-34cc. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Records available: 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 21	10.13	Apr. 21	10.87	July 20	9.87	Nov. 30	4.82
Feb. 21	9.41	May 11	10.71	Sept. 18	6.30	Dec. 28	5.04
Mar. 20	10.69	June 26	10.08	Oct. 26	4.25		

112-63-31cccc. Formerly 112-63-31cc2. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Records available: 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 21	10.07	Apr. 19	10.60	July 20	8.43	Oct. 26	8.13
Feb. 21	10.37	May 11	9.99	Aug. 28	8.29	Nov. 30	8.25
Mar. 20	10.63	June 26	8.92	Sept. 18	8.39	Dec. 28	8.39

112-63-34cccc. Formerly 112-63-34cc. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24.6 feet. Records available: 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 21	13.62	Apr. 21	13.41	July 20	12.90	Nov. 30	12.12
Feb. 21	13.50	May 11	13.26	Aug. 28	12.56	Dec. 28	12.16
Mar. 20	13.56	June 26	13.10	Oct. 26	12.09		

112-64-34cccc. Formerly 112-64-34cc. U. S. Bureau of Reclamation. Drilled observation well, in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Records available: 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	6.88	Apr. 19	2.92	Aug. 23	4.93	Nov. 30	4.19
Feb. 21	6.90	May 11	1.14	Sept. 18	5.76	Dec. 28	2.41
Mar. 20	6.48	July 17	4.09	Oct. 26	3.62		

113-60-31cccc. Formerly 113-60-31cc. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 21 feet. Records available: 1949-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 18	9.60	Apr. 19	5.72	July 17	5.19	Oct. 23	6.42
Feb. 21	9.51	May 11	3.79	Aug. 21	6.97	Nov. 28	6.96
Mar. 20	9.21	June 23	5.44	Sept. 20	5.65	Dec. 28	7.91

113-63-34cccc1. Formerly 113-63-34cc. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Jan. 18, 3.85. Measurement discontinued, see records for substitute well 113-63-34cccc2. Records available: 1948-50.

113-63-34cccc2. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter 1 inch, depth 40 feet. See well 113-63-34cccc1 for period July 23, 1948 - Jan. 18, 1950. Records available: 1950.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 20	3.88	May 11	1.13	July 17	3.98	Oct. 23	2.76
Mar. 21	3.34	June 8	2.92	Aug. 24	4.96	Nov. 28	3.96
Apr. 3	2.10	23	3.73	Sept. 21	3.21	Dec. 28	3.22
27	2.20						

113-64-31cccc1. Formerly 113-64-31cc. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Records available: 1948-50. Jan. 18, 6.97; Feb. 20, 6.68; Mar. 21, 6.39; Apr. 3, 4.96; May 12, 3.92; June 2, 3.50.

113-64-31cccc2. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 44 feet. See record for well 113-64-31cccc1 for period, July 23, 1948 to June 2, 1950, and companion well 113-64-31cccc3 for period after July 17, 1950. June 17, 2.80; Oct. 24, 2.59; Nov. 29, 3.21; Dec. 30, 2.79. Records available: 1950.

113-64-31cccc3. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 18.5 feet. See record for well 113-64-31cccc1 for period, July 23, 1948 to June 2, 1950, and companion well 113-64-31cccc2 for period after June 17, 1950. July 17, 2.92; Aug. 24, 3.68; Sept. 17, 3.70; Oct. 28, 2.70; Nov. 29, 2.92; Dec. 30, 2.82. Records available: 1950.

113-64-34cccc1. Formerly 113-64-34cc. U. S. Bureau of Reclamation. Drilled observation well, in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Records available: 1948-50. Jan. 18, 8.64; Feb. 20, 9.23; Mar. 21, 9.32; Apr. 3, 9.00; Apr. 19, 8.43; May 12, 7.58.

113-64-34cccc2. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter 1 inch, depth 40 feet. See record for well 113-64-34cccc1 for period July 24, 1948, to May 12, 1950. Records available: 1950. June 26, 3.52; July 17, 4.62; Aug. 24, 6.91; Sept. 17, 8.00; Oct. 24, 6.26; Nov. 29, 6.86; Dec. 30, 6.94.

113-65-34cccc1. Formerly 113-65-34cc. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Records available: 1948-50. Jan. 18, 10.80; Feb. 20, dry; Mar. 21, dry, Apr. 21, dry; Apr. 3, dry; Apr. 19, dry; May 12, dry; June 8, 10.80. Measurement discontinued, see records for substitute well 113-65-34cccc2.

113-65-34cccc2. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter 1 inch, depth 40.0 feet. See records for well 113-65-34cccc1 for period July 28, 1948, to June 8, 1950. Records available: 1950. June 26, 8.35; July 17, 9.36; Aug. 24, 11.46; Sept. 17, 12.58; Oct. 24, 12.02; Nov. 29, 12.65; Dec. 30, 12.45.

#### Brown County

121-64-33dddd. Formerly 121-64-33dd. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Records available: 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 22	18.00	June 27	9.48	Sept. 23	13.61	Nov. 29	16.06
Apr. 20	12.91	July 21	10.05	Oct. 25	14.94	Dec. 22	16.49
May 22	10.64	Aug. 28	11.96				

123-64-22ad. G. Reitz. Dug unused well in glacial drift, diameter 60 inches, depth 15 feet. Records available: 1946-50.

Jan. 26	10.80	June 8	7.75	Aug. 16	9.39	Oct. 18	9.73
Mar. 31	10.48	July 21	8.90	Sept. 21	9.82	Dec. 6	9.96
May 22	7.31						

124-61-19ab. U. S. Geol. Survey. Drilled observation well in glacial drift, diameter  $3/4$  inch, depth 15 feet. Records available: 1950. Sept. 19, 6.55; Oct. 31, 6.57; Nov. 27, 6.57; Dec. 29, 6.75, measurement by U. S. Fish and Wildlife Service.

126-61-6aa. U. S. Geol. Survey. Drilled observation well in glacial drift, diameter  $3/4$  inch, depth 17.1 feet. Sept. 2, 7.98; Oct. 30, 7.76; Nov. 27, 7.91; Dec. 28, 7.48, measurement by U. S. Fish and Wildlife Service. Records available: 1950.

126-62-3bb. U. S. Geol. Survey. Drilled observation well in glacial drift, diameter  $3/4$  inch, depth 14.0 feet. Records available: 1950. Sept. 20, 12.37; Oct. 30, 12.52; Nov. 28, 13.18; Dec. 28, 13.2, measurement by U. S. Fish and Wildlife Service.

126-62-34ab. U. S. Geol. Survey. Drilled observation well in glacial drift, diameter  $3/4$  inch, depth 15.6 feet. Records available: 1950. Sept. 21, 4.32; Oct. 30, 4.49; Nov. 27, 4.05; Dec. 27, 5.05, measurement by U. S. Fish and Wildlife Service.

127-61-19dd. U. S. Geol. Survey. Drilled observation well in glacial drift, diameter  $3/4$  inch, depth 15.0 feet. Records available: 1950. Sept. 20, 5.25; Oct. 30, 4.14; Nov. 27, 4.35; Dec. 28, 4.65, measurement by U. S. Fish and Wildlife Service.

128-61-26bbb. U. S. Geol. Survey. Drilled observation well in glacial drift, diameter  $3/4$  inch, depth 24.85 feet. Records available: 1950. Sept. 20, 12.72; Oct. 30, 12.59; Nov. 28, 12.38; Dec. 28, 12.20, measurement by U. S. Fish and Wildlife Service.

#### Charles Mix County

96-65-4dd. Amundsen. Drilled unused well, diameter 18 inches. Highest water level 3.46, Jan. 27, 1950; lowest 14.27, Oct. 5, 1948. Records available: 1946-50. Jan. 27, 3.46; Mar. 2, 6.79.

#### Codington County

117-52-5bb. Desmond. Dug unused well in glacial drift, diameter 36 inches, depth 12 feet. Highest water level 2.25, Apr. 10, 1947; lowest 6.77, Oct. 5, 1949. Records available: 1946-50. Mar. 29, 6.18; July 26, 5.60; Aug. 14, 5.26; Sept. 7, 6.42; Oct. 20, 6.20; Nov. 10, 6.25; Dec. 5, 6.37.

#### Corson County

A-20-28-35bd. J. Corken. Dug domestic well, diameter 36 inches, depth 19 feet. Highest water level 10.65, July 2, 1950; lowest, dry, many times. Records available: 1946-50. July 2, 10.65; July 10, 10.75; Aug. 23, 12.07; Oct. 3, 11.42; Oct. 23, 12.44; Dec. 20, 13.23.

#### Custer County

D-6-8-13aad. W. Sneider. Dug unused well in alluvial sand and gravel of Quaternary age. Diameter 60 inches, depth 17.6 feet. Highest water level 13.85, Aug. 9, 1948; lowest 18.27, Jan. 31, 1947. Records available: 1946-50. Feb. 9, 15.78; Apr. 29, 15.79; May 25, 15.74; June 22, 15.73; July 16, 16.17; Sept. 9, 16.02; Oct. 20, 15.99; Nov. 28, 16.07.

D-6-8-24ddc. E. Mohler. Dug domestic and stock well in terrace sand and gravel of Quaternary age. Diameter 48 inches, depth 41.3 feet. Highest water level 37.07, Mar. 3, Apr. 29, 1948; lowest 38.00, July 2, 1948. Records available: 1946-50. Feb. 9, 37.08; Apr. 29, 37.09; May 25, 37.11; June 22, 37.19; July 16, 37.27; Sept. 9, 37.41; Oct. 20, 37.37; Nov. 28, 37.51.

D-6-8-25dab. H. W. Mohler. Dug domestic and stock well in terrace sand and gravel of Quaternary age. Diameter 48 inches. Highest water level 32.12, July 2, 1947; lowest 33.31, Oct. 29, 1946. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 9	32.42	May 25	32.47	July 16	32.55	Oct. 20	32.59
Apr. 29	32.38	June 22	32.51	Sept. 9	32.61	Nov. 28	32.47

D-6-8-26aac. Owner unknown. Dug unused well, diameter 48 inches, depth 37.9 feet. Highest water level 31.41, July 2, 1947; lowest 37.48, Sept. 5, 1946. Records available: 1946-50.

Feb. 9	32.82	May 25	33.57	July 16	34.28	Oct. 20	34.32
Apr. 29	33.32	June 22	33.72	Sept. 9	34.31	Nov. 28	34.43

D-6-9-8ccb. U. S. Government. Dug unused well in terrace sand and gravel of Quaternary age, diameter 60 inches, depth 39 feet. Highest water level 35.07, Dec. 8, 1948; lowest 35.90, July 2, 1948. Records available: 1946-50.

Feb. 9	35.20	May 25	35.19	July 16	35.23	Oct. 20	35.24
Apr. 29	35.20	June 22	35.22	Sept. 9	35.27	Nov. 28	35.29

D-6-9-8dcc2. U. S. Government. Dug unused well in terrace sand and gravel of Quaternary age, diameter 48 inches, depth 21 feet. Highest water level 16.33, Dec. 10, 1947; lowest 17.95, June 5, 1947. Records available: 1946-50.

Feb. 9	16.75	May 25	16.94	July 16	16.92	Oct. 20	16.92
Apr. 29	16.88	June 22	16.89	Sept. 9	16.96	Nov. 28	17.11

D-6-9-18acc2. U. S. Government. Dug unused well in alluvial sand and gravel of Quaternary age, diameter 60 inches. Highest water level 5.88, July 2, 1947; lowest 8.60, July 2, 1948. Records available: 1946-50. Apr. 28, 7.91; May 25, 7.88; June 22, 8.02; July 16, 8.12; Sept. 9, 8.28; Oct. 20, 8.29; Nov. 28, 8.33.

D-6-9-18dcc2. L. J. Berfiend. Dug domestic and stock well in terrace sand and gravel of Quaternary age, diameter 48 inches, depth 37.3 feet. Highest water level 31.48, Dec. 29, 1949; lowest 32.61, May 1, 1947. Records available: 1946-50.

Feb. 9	31.71	May 25	31.67	July 16	31.61	Oct. 20	31.65
Apr. 29	31.69	June 22	31.59	Sept. 9	31.67	Nov. 28	31.69

D-6-9-19bda. U. S. Government. Dug domestic well in terrace sand and gravel of Quaternary age, diameter 48 inches, depth 32 feet. Highest water level 30.70, Nov. 28, 1949; lowest 34.70, May 1, 1947. Records available: 1946-50. Feb. 9, 30.91; Apr. 29, 31.39; May 25, 31.67; July 16, 31.68; Sept. 9, 31.72; Oct. 20, 31.73; Nov. 28, 31.68.

D-6-9-20bcd. U. S. Government. Dug unused well in terrace sand and gravel of Quaternary age, diameter 42 inches, depth 12 feet. Highest water level 9.14, Aug. 5, 1947; lowest 10.87, May 1, 1947. Records available: 1946-50.

Feb. 9	9.92	May 25	10.06	July 16	10.04	Oct. 20	10.05
Apr. 29	9.99	June 22	10.03	Sept. 9	10.07	Nov. 28	10.20

#### Edmunds County

121-66-10cb. G. Price. Dug stock well in glacial drift, diameter 36 inches, depth 10.8 feet. Highest water level 5.60, Apr. 29, 1948; lowest 12.20, Sept. 28, 1950. Records available: 1946-50. May 22, 9.53; July 21, 10.46; Sept. 28, 12.20.

#### Fall River County

D-7-7-25ccc. U. S. Government. Dug unused well in alluvial sand and gravel of Quaternary age, diameter 48 inches, depth 13 feet. Highest water level 10.28, May 25, 1950; lowest 11.63, Apr. 19, 1946. Records available: 1946-50.

Feb. 9	10.42	May 25	10.28	July 15	10.41	Oct. 20	10.39
Apr. 29	10.33	June 22	10.32	Sept. 9	10.60	Nov. 28	10.50

D-7-7-27bab. C. Fleming. Dug unused well in alluvial sand and gravel of Quaternary age, diameter 48 inches, depth 21.7 feet. Highest water level 17.79, May 25, 1950; lowest 19.40 July 2, 1948. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 9	18.01	May 25	17.79	July 15	18.36	Oct. 20	18.34
Apr. 29	17.87	June 22	18.37	Sept. 9	18.37	Nov. 28	18.48

D-7-7-34aba. C. E. Chamberlain. Dug irrigation well in alluvial sand and gravel of Quaternary age, diameter 24 inches, depth 23.7 feet. Highest water level 15.46, Aug. 4, 1947; lowest 21.23, Oct. 2, 1946. Records available: 1946-50. Feb. 9, 18.29; Apr. 28, 18.01; May 25, 17.79; June 22, 17.85. Measurement discontinued.

D-7-7-35baa. A. W. Gamet. Dug stock well in terrace sand and gravel of Quaternary age, diameter 36 inches, depth 31.7 feet. Highest water level 27.13, Nov. 28, 1949; lowest 29.00, July 2, 1948. Records available: 1946-50.

Feb. 9	27.43	May 25	27.26	July 15	27.71	Oct. 20	27.85
Apr. 29	27.31	June 22	27.56	Sept. 9	27.83	Nov. 28	27.49

D-7-8-10cba. D. Moiser. Dug domestic well in alluvial sand and gravel of Quaternary age, diameter 36 inches, depth 16.1 feet. Highest water level 12.45, July 2, 1947; lowest 15.16, Sept. 30, 1946. Records available: 1946-50.

Feb. 9	14.27	May 25	14.19	July 15	14.27	Oct. 20	14.26
Apr. 29	14.23	June 22	14.21	Sept. 9	14.31	Nov. 28	14.41

D-7-8-11ccd. Worth Gamet. Dug domestic and stock well in terrace sand and gravel of Quaternary age, diameter 48 inches, depth 38 feet. Highest water level 28.33, Aug. 10, 1949; lowest 34.27, Apr. 19, 1946. Records available: 1946-50.

Feb. 9	28.77	May 25	28.89	July 15	28.80	Oct. 20	28.79
Apr. 29	28.86	June 22	28.79	Sept. 9	28.86	Nov. 28	28.96

D-7-8-14ddd. Ward Gamet. Drilled unused well in eolian sand of Quaternary age, diameter 24 inches, depth 57.5 feet. Highest water level 48.01, July 2, 1949; lowest 49.90, July 2, 1948. Records available: 1946-50.

Feb. 9	48.09	May 25	48.12	July 15	48.12	Oct. 20	48.18
Apr. 29	48.08	June 22	48.09	Sept. 9	48.17	Nov. 28	48.22

D-7-8-17cbc. P. Fleming. Dug domestic and stock well in terrace sand and gravel of Quaternary age, diameter 48 inches, depth 35 feet. Highest water level 24.02, July 1, 1947; lowest 29.04, Apr. 19, 1946. Records available: 1946-50.

Feb. 9	25.27	May 25	25.25	July 15	25.06	Oct. 20	25.03
Apr. 29	25.19	June 22	25.27	Sept. 9	24.99	Nov. 28	25.17

D-7-8-19cab. W. G. Tice. Dug unused well in terrace sand and gravel of Quaternary age, diameter 25 inches, depth 16.1 feet. Highest water level 12.83, July 1, 1947; lowest 14.15, Jan. 3, 1947, July 2, 1948. Records available: 1946-50.

Feb. 9	13.55	May 25	13.54	July 15	13.68	Oct. 20	13.66
Apr. 29	13.57	June 22	13.67	Sept. 9	13.70	Nov. 28	13.78

D-7-8-20ddc. R. Gamet. Dug domestic and stock well in eolian sand of Quaternary age, diameter 48 inches, depth 71.5 feet. Highest water level 69.99, Aug. 10, 1949; lowest 72.00, July 2, 1948. Records available: 1946-50.

Feb. 9	70.54	May 25	70.61	July 15	70.60	Oct. 20	70.52
Apr. 29	70.58	June 22	70.58	Sept. 9	70.56	Nov. 28	70.68

D-7-8-21ddc. J. Eng. Dug domestic and stock well in terrace sand and gravel of Quaternary age, diameter 48 inches, depth 88 feet. Highest water level 60.98, Aug. 10, 1949; lowest 62.90, July 2, 1948. Records available: 1946-50.

Feb. 9	61.11	May 25	61.27	July 15	61.21	Oct. 20	61.17
Apr. 29	61.21	June 22	61.22	Sept. 9	61.16	Nov. 28	61.29

D-7-8-29ccc. U. S. Government. Dug unused well, diameter 48 inches, depth 73.3 feet. Highest water level 71.74, Feb. 20, 1948; lowest 73.00, July 2, 1948. Records available: 1946-50.

Feb. 9	72.11	May 25	72.10	July 15	72.04	Oct. 20	72.08
Apr. 29	72.03	June 22	72.07	Sept. 9	72.01	Nov. 28	72.07

D-7-8-33bbb. A. J. Sedar. Dug unused well, diameter 48 inches. Highest water level 16.52, Sept. 26, 1949; lowest 23.45, June 5, 1946. Records available: 1946-50.

Feb. 9	16.93	May 25	17.96	July 15	17.97	Oct. 20	17.91
Apr. 29	17.66	June 22	17.99	Sept. 9	17.94	Nov. 28	17.37

D-8-6-1bad. U. S. Government. Dug unused well in alluvial sand and gravel of Quaternary age, diameter 60 inches, depth 26.3 feet. Highest water level 22.24, Feb. 9, 1950; lowest 23.50, July 2, 1948. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 9	22.24	May 25	22.26	July 15	22.30	Oct. 20	22.31
Apr. 28	22.29	June 22	22.29	Sept. 9	22.33	Nov. 28	22.36

D-8-6-9dca. U. S. Government. Dug unused well, diameter 36 inches, depth 44.6 feet. Highest water level 40.96, Sept. 9, 1950; lowest 43.60, July 2, 1948. Records available: 1946-50. Measurement discontinued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 9	41.59	May 25	41.49	July 15	41.38	Oct. 20	40.97
Apr. 28	41.47	June 22	41.49	Sept. 9	40.96	Nov. 28	41.05

D-8-6-10daa. U. S. Government. Dug unused well in terrace sand and gravel of Quaternary age, diameter 48 inches, depth 42.1 feet. Highest water level 38.37, Aug. 10, 1949; lowest 41.94, Oct. 20, 1950. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 9	41.17	May 25	39.06	July 15	40.21	Oct. 20	41.94
Apr. 28	39.52	June 22	38.29	Sept. 9	41.39	Nov. 28	39.19

D-8-6-13aac. A. J. Kieffer. Dug unused well in eolian sand of Quaternary age, diameter 24 inches, depth 11.7 feet. Highest water level 7.01, June 30, 1947; lowest 9.00, July 2, 1948. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 9	8.23	May 25	7.80	July 15	8.36	Oct. 20	8.51
Apr. 28	7.90	June 22	8.25	Sept. 9	8.74	Nov. 28	8.49

D-8-6-13bad. A. J. Kieffer. Dug domestic well in eolian sand of Quaternary age, diameter 24 inches, depth 13.0 feet. Highest water level 8.70, Aug. 4, 1947; lowest 10.36, Oct. 2, 1946. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 9	9.97	May 25	9.87	July 15	10.01	Oct. 20	9.96
Apr. 28	9.67	June 22	9.92	Sept. 9	9.97	Nov. 28	10.12

D-8-6-15bcd1. W. J. Beck. Drilled domestic and stock well, diameter 8 inches, depth 160 feet. Highest water level 66.34, Dec. 11, 1947; lowest 77.61, Sept. 30, 1946. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 9	71.39	May 25	72.65	July 15	72.83	Oct. 20	73.10
Apr. 28	71.93	June 22	72.69	Sept. 9	73.49	Nov. 28	73.77

D-8-6-16aba. Airport, Hot Springs. Drilled domestic well, diameter 6 inches, depth 120 feet. Highest water level 38.21, Apr. 28, 1950; lowest 40.70, July 2, 1948. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 9	38.45	May 25	38.29	July 15	38.81	Oct. 20	38.88
Apr. 28	38.21	June 22	38.30	Sept. 9	39.12	Nov. 28	39.71

D-8-7-5acc. E. Hagerman. Dug unused well in terrace sand and gravel of Quaternary age, depth 49.3 feet. Highest water level 42.64, Apr. 28, 1950; lowest 45.62, June 4, 1947. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 9	42.81	May 25	42.74	July 15	42.77	Oct. 20	42.68
Apr. 28	42.64	June 22	42.68	Sept. 9	42.83	Nov. 28	42.96

D-8-7-6dcd. A. Mills. Dug domestic and stock well in terrace sand and gravel of Quaternary age, diameter 48 inches, depth 37.3 feet. Highest water level 32.81, Apr. 28, 1950; lowest 35.60, July 2, 1948. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 9	33.40	May 25	32.88	July 15	33.10	Oct. 20	33.06
Apr. 28	32.81	June 22	32.91	Sept. 9	33.08	Nov. 28	33.11

D-8-7-7bbb2. H. Kneuple. Dug domestic and stock well in terrace sand of Quaternary age, diameter 48 inches. Highest water level 2.83, July 1, 1947; lowest 7.98, Aug. 7, 1946. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 9	6.46	May 25	4.29	July 15	5.79	Oct. 20	6.51
Apr. 28	5.29	June 22	5.61	Sept. 9	6.43	Nov. 28	6.43

D-8-7-8dcc. Hazel Reigler. Dug unused well in eolian sand of Quaternary age, diameter 36 inches, depth 21.2 feet. Highest water level 14.89, Dec. 29, 1949; lowest 17.51, June 5, 1946. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 9	15.11	May 25	16.14	July 15	16.23	Oct. 20	16.32
Apr. 28	15.94	June 22	16.15	Sept. 9	16.31	Nov. 28	16.38



Faulk County

117-66-35cd. J. Haider. Dug stock well in glacial drift, diameter 48 inches, depth 45 feet. Highest water level 8.29, July 29, 1950; lowest 14.65, Aug. 25, 1948. Records available: 1946-50. June 5, 8.40; July 29, 8.29; Sept. 25, 11.69.

117-68-36aa. J. Sievers. Drilled stock well in glacial drift, diameter 24 inches, depth 18.1 feet. Highest water level 5.20, June 5, 1950; lowest 8.77, Apr. 13, 1946. Records available: 1946-50. June 5, 5.20; July 20, 6.79; Sept. 25, 7.90.

118-66-21ba. V. Elliott. Dug domestic and stock well in glacial drift; diameter 36 inches, depth 7.4 feet. Highest water level 3.79, Nov. 15, 1946; lowest 6.65, Sept. 19, 1949. Records available: 1946-50. June 5, 4.36; July 21, 5.35; Sept. 25, 5.62.

119-66-2ab. G. Cihak. Dug domestic and stock well in glacial drift, diameter 24 inches, depth 36.9 feet. Highest water level 23.84, Apr. 22, 1947; lowest 27.93, June 13, 1946. Records available: 1946-50. June 5, 24.75; July 21, 25.34; Sept. 21, 24.88.

Haakon County

A-1-25-6dd. A. Elrod. Dug stock well, diameter 24 inches, depth 30 feet. Highest water level 22.27, May 27, 1949; lowest 23.49, Jan. 5, 1948. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	22.85	Apr. 27	22.43	Aug. 22	22.57	Oct. 23	22.82
Feb. 13	23.19	June 22	22.40	Sept. 13	22.77	Nov. 14	22.81
Mar. 2	23.11	July 31	22.65	Oct. 3	22.87	Dec. 11	22.81
31	22.77						

A-8-24-4aa. W. B. Alleman. Dug unused well, diameter 60 inches, depth 20 feet. Highest water level 7.15, May 12, 1950; lowest 11.52, Sept. 30, 1947. Records available: 1946-50.

Feb. 8	9.62	May 12	7.15	July 11	9.04	Oct. 2	9.56
Mar. 8	9.49	22	7.55	Aug. 1	9.41	Dec. 22	8.55
May 1	8.26	June 21	8.51	21	9.63		

Hand County

112-66-36ddd2. Formerly 112-66-36dd2. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter 1½ inches, depth 24 feet. Highest water level 14.03, Sept. 5, 1948; lowest 16.95, Dec. 13, 1949. Records available: 1948-50.

Jan. 21	16.04	May 11	15.26	Aug. 23	15.38	Nov. 30	15.59
Mar. 20	15.81	June 26	14.87	Sept. 17	15.38	Dec. 28	15.53
Apr. 19	15.49	July 17	14.92	Oct. 26	15.37		

112-69-3dc. C. Loozey. Dug stock well in glacial drift, diameter 48 inches, depth 30 feet. Highest water level 2.65, May 12, 1950; lowest 19.42, Nov. 28, 1948. Records available: 1946-50.

Apr. 3	6.26	July 16	6.73	Sept. 9	8.31	Oct. 20	9.14
May 12	2.65	Aug. 14	7.67	28	8.92	Dec. 2	9.30
June 6	4.24						

113-66-34cccc1. Formerly 113-66-34cc. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter 1½ inches, depth 24 feet. Highest water level 3.40, May 12, 1950; lowest 7.99, Oct. 20, 1949. Records available: 1948-50. Jan. 18, 7.42; Mar. 20, 7.18; Apr. 19, 4.60; May 12, 3.40. Measurement discontinued, see records for substitute well 113-66-34cccc2.

113-66-34cccc2. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter 1½ inches, depth 40 feet. See records for well 113-66-34cccc1 for period July 23, 1948, to May 12, 1950. Highest water level 3.70, July 17, 1950; lowest 6.10, Sept. 17, 1950. Records available: 1950. June 26, 4.60; July 17, 3.70; Aug. 23, 5.50; Sept. 17, 6.10; Oct. 24, 5.20; Nov. 29, 5.30; Dec. 29, 5.30.

113-67-34cccc1. Formerly 113-67-34cc. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter 1½ inches, depth 24 feet. Highest water level 5.09, June 26, 1950; lowest 10.96, July 23, 1948. Records available: 1948-50. Jan. 18, 6.65; Apr. 19, 5.80; May 12, 5.46; June 26, 5.09. Measurement discontinued, see records for substitute well 113-67-34cccc2.

113-67-34cccc2. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter 1½ inches, depth 40 feet. Highest water level 7.67, July 17, 1950; lowest 9.22, Dec. 29, 1950. July 17, 7.67; Aug. 23, 8.29; Sept. 17, 8.70; Oct. 24, 8.97; Nov. 29, 9.12; Dec. 29, 9.22. Records available: 1950.

Jerauld County

108-63-5dd. G. Orth. Drilled domestic well in glacial drift, diameter 24 inches, depth 66 feet. Highest water level 30.28, Aug. 23, 1948; lowest 35.72, Sept. 27, 1949. Records available: 1947-50. May 19, 34.41; July 21, 35.00; Sept. 28, 35.60.

108-64-6cc1. A. C. Crouch. Dug well in glacial drift, diameter 18 inches, depth 23.3 feet. Highest water level 12.59, Sept. 9, 1948; lowest 21.66, Sept. 29, 1949. Records available: 1946-50. May 15, 19.12; July 16, 19.66; Sept. 26, 19.80.

Marshall County

126-58-8cc. U. S. Geol. Survey. Drilled observation well in glacial drift, diameter  $\frac{3}{4}$  inch, depth 21 feet. Highest water level 14.85, Sept. 20, 1950; lowest 15.32, Dec. 29, 1950. Records available: 1950. Sept. 20, 14.85; Oct. 31, 14.95; Nov. 27, 15.29; Dec. 29, 15.32, measurement by U. S. Fish and Wildlife Service.

126-59-12cd. U. S. Geol. Survey. Drilled observation well in glacial drift, diameter  $\frac{3}{4}$  inch, depth 23.7 feet. Highest water level 8.58, Oct. 31, 1950; lowest 8.85, Nov. 20, 1950. Records available: 1950. Sept. 20, 8.65; Oct. 31, 8.58; Nov. 20, 8.85; Dec. 28, 8.81, measurement by U. S. Fish and Wildlife Service.

127-58-19cc. U. S. Geol. Survey. Drilled observation well in glacial drift, diameter  $\frac{3}{4}$  inch, depth 15.0 feet. Highest water level 7.75, Dec. 29, 1950; lowest 7.98, Nov. 28, 1950. Sept. 19, 7.95; Oct. 31, 7.78; Nov. 28, 7.98; Dec. 29, 7.75, measurement by U. S. Fish and Wildlife Service.

127-59-33ad. U. S. Geol. Survey. Drilled observation well in glacial drift, diameter  $\frac{3}{4}$  inch, depth 21.0 feet. Highest water level 8.82, Oct. 31, 1950; lowest 9.14, Nov. 27, 1950. Sept. 19, 8.86; Oct. 31, 8.82; Nov. 27, 9.14; Dec. 29, 9.05, measurement by U. S. Fish and Wildlife Service.

Minnehaha County

101-49-33bb. C. Donaldson. Dug unused well in glacial drift, diameter 30 inches, depth 12 feet. Highest water level 7.90, May 13, 1947; lowest 10.35, Mar. 14, 1950. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 14	10.35	Aug. 2	9.93	Sept. 27	10.06	Nov. 22	9.89
June 2	9.31	31	10.34	Oct. 19	9.92	Dec. 14	9.99
28	9.58						

Pennington County

A-1-8-17ddd1. E. H. Hoff. Dug stock well in alluvial sand and gravel, depth 18 feet. Highest water level 3.58, May 19, 1950; lowest 13.64, Feb. 20, 1947. Records available: 1946-50.

Jan. 23	9.33	Apr. 18	4.10	July 20	10.70	Oct. 20	9.75
Feb. 21	8.09	May 19	3.58	Sept. 20	9.15	Nov. 20	9.20
Mar. 23	6.31	June 21	6.02				

A-1-14-5ab1. A. Trople. Dug stock well, depth 16.6 feet. Highest water level 1.54, Mar. 9, 1949; lowest 7.80, Dec. 8, 1949. Records available: 1946-50.

Mar. 2	5.76	May 26	3.65	July 26	5.75	Sept. 28	6.03
24	4.44	June 14	4.58	Aug. 15	4.10	Oct. 17	5.95
Apr. 14	3.67	July 3	5.00	Sept. 6	5.76	Nov. 16	4.74
May 5	5.10						

Perkins County

A-21-16-15cd. Ronald Ham. Drilled stock well, diameter  $1\frac{1}{4}$  inches, depth 24.5 feet. Highest water level 17.05, May 1, 1950; lowest 19.80, Oct. 15, 1946. Records available: 1946-50. May 1, 17.05; Aug. 21, 18.08; Oct. 9, 17.44.

A-21-16-21bc1. Carl Lutz. Drilled domestic well, diameter 6 inches, depth 32 feet. Highest water level 25.41, May 1, 1950; lowest 28.80, Oct. 15, 1946. Records available: 1946-50. May 1, 25.41; July 21, 27.19; Oct. 9, 27.35.

A-21-16-21bc2. Carl Lutz. Dug stock well, diameter 60 inches. Highest water level 7.58, May 1, 1950; lowest 11.33, Dec. 8, 1949. Records available: 1946-50. May 1, 7.58; Aug. 21, 9.95; Oct. 9, 10.56.

A-21-16-29ba. Barnett. Dug domestic well, diameter 30 inches, depth 17.0 feet. Highest water level 10.67, May 1, 1950; lowest 14.22, Oct. 6, 1948. Records available: 1946-50. May 1, 10.67; July 21, 12.40; Oct. 8, 13.34.

Sanborn County

106-61-1bd2. Herman Torgenson. Formerly John Nichols. Drilled domestic well in glacial drift, diameter 1 inch, depth 14 feet. Highest water level 8.26, May 8, 1949; lowest 12.47, Sept. 28, 1949. Records available: 1949-50. May 22, 9.53; July 21, 10.46; Sept. 28, 12.20.

108-61-31bc. George Doering. Drilled well, diameter 3 inches, depth 15 feet. Highest water level 6.16, June 13, 1946; lowest 10.57, Oct. 9, 1947. Records available: 1946-47, 1949-50. May 18, 10.07; July 21, 10.06; Sept. 28, 10.00.

108-62-1cc. H. H. Grant. Dug domestic well in glacial drift, diameter 30 inches, depth 48.0 feet. Highest water level 33.80, June 4, 1947; lowest 49.16, May 12, 1950. Records available: 1947-50. May 12, 49.16; July 21, 46.60; Sept. 28, 46.81.

Shannon County

B-38-47-18ac1. Owner unknown. Drilled stock well, depth 20.4 feet. Highest water level 7.60, Jan. 5, 1948; lowest 14.05, Mar. 4, 1947. Records available: 1946-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	11.80	Apr. 11	10.79	July 6	11.31	Oct. 23	10.70
Feb. 27	11.50	May 2	10.78	24	11.00	Nov. 13	10.60
Mar. 22	10.50	June 12	11.22	Sept. 26	10.74	Dec. 11	10.70

Spink County

114-62-33bc. F. E. McDonald. Dug and drilled domestic and stock well in glacial drift, diameter 36 inches, depth 35.4 feet. Highest water level 21.71, Apr. 28, 1948; lowest 25.00, Nov. 14, 1948. Records available: 1946-50. May 3, 22.42; July 19, 22.60; Sept. 22, 24.80.

114-65-8cb. H. L. Binger. Drilled stock well in glacial drift, diameter 18 inches, depth 27.3 feet. Highest water level 16.49, May 15, 1950; lowest 19.72, Nov. 15, 1948. Records available: 1946-50. May 15, 16.49; July 19, 18.50; Sept. 26, 18.47.

115-62-7dddd. Formerly 115-62-7dd. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 26.5 feet. Highest water level 20.58, May 22, 1950; lowest 25.50, Mar. 1, 1949. Records available: 1948-50.

Feb. 21	22.71	June 26	24.46	Sept. 22	24.22	Nov. 29	24.62
Apr. 20	24.65	July 19	24.09	Oct. 24	24.58	Dec. 22	24.60
May 22	20.58	Aug. 25	24.67				

115-63-4aaaa. Formerly 115-63-4aa. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Highest water level 10.80, July 26, 1948; lowest 17.80, Sept. 22, 1950. Records available: 1948-50.

Jan. 20	16.54	Apr. 20	17.20	July 19	17.68	Oct. 24	17.49
Feb. 21	16.75	May 22	14.50	Aug. 25	17.70	Nov. 29	17.04
Mar. 22	16.95	June 27	17.48	Sept. 22	17.80	Dec. 22	16.65

115-65-5cd1. M. J. Handcock. Dug domestic well in glacial drift, diameter 18 inches, depth 17.8 feet. Highest water level 9.63, Apr. 28, 1948; lowest 12.54, Sept. 26, 1950. Records available: 1946-50. May 10, 10.51; July 20, 12.15; Sept. 26, 12.54.

116-63-36ddd. Formerly 116-63-36dd. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Highest water level 22.10, Jan. 6, Mar. 1, Apr. 1, 1949; lowest 24.80, July 26, 1948. Records available: 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 21	22.58	May 22	22.98	Aug. 25	22.47	Nov. 29	22.43
Mar. 22	22.54	June 27	22.52	Sept. 22	22.48	Dec. 22	22.40
Apr. 20	22.53	July 19	22.55	Oct. 24	22.39		

116-64-3db. L. J. Hillested. Dug domestic and stock well in glacial drift, diameter 18 inches, depth 22 feet. Highest water level 9.88, Dec. 7, 1950; lowest 14.90, July 21, 1950. Records available: 1946-50.

Jan. 26	13.20	June 7	12.51	Aug. 15	12.87	Oct. 18	13.32
Feb. 20	13.65	July 21	14.90	Sept. 7	13.33	Nov. 10	13.37
Apr. 1	12.62	25	12.82	25	13.20	Dec. 7	9.88
May 10	13.24						

119-64-3bbbb. Formerly 119-64-3bb. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Highest water level 11.70, July 26, 1948; lowest dry, Feb. 21, Mar. 21, 1950. Records available: 1948-50.

Feb. 21	(f)	May 22	15.17	Aug. 25	18.52	Nov. 29	21.04
Mar. 21	(f)	June 27	16.68	Sept. 23	19.86	Dec. 22	21.21
Apr. 20	18.23	July 21	17.85	Oct. 25	20.45		

f Dry.

120-63-6bbbb. Formerly 120-63-6bb. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Highest water level 18.20, July 26, 1948; lowest 21.81, Oct. 25, 1950. Records available: 1948-50.

Jan. 20	20.67	Apr. 20	21.00	July 21	20.12	Oct. 25	21.81
Feb. 21	20.81	May 22	20.66	Aug. 28	20.03	Nov. 29	20.54
Mar. 21	20.90	June 27	20.29	Sept. 23	20.20	Dec. 22	20.61

120-63-31ccdd. Formerly 120-63-31cc. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Highest water level 18.80, July 26, 1948; lowest 23.75, May 22, 1950. Records available: 1948-50.

Apr. 20	22.30	July 21	21.52	Sept. 23	21.41	Nov. 29	21.35
May 22	23.75	Aug. 25	21.50	Oct. 25	21.28	Dec. 22	21.35
June 27	21.86						

120-64-16ddd. Formerly 120-64-16dd. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 26 feet. Highest water level 21.50, July 26, 1948; lowest dry, Apr. 20, 1950. Records available: 1948-50.

Jan. 20	24.58	Apr. 20	(f)	July 21	23.08	Oct. 25	22.35
Feb. 21	24.70	May 22	24.70	Aug. 28	22.56	Nov. 29	22.47
Mar. 21	25.40	June 26	23.87	Sept. 21	22.47	Dec. 22	22.50

f Dry.

120-65-36ddd. Formerly 120-65-36dd. U. S. Bureau of Reclamation. Drilled observation well in glacial drift, diameter  $1\frac{1}{4}$  inches, depth 24 feet. Highest water level 4.20, July 26, 1948; lowest 10.50, Feb. 21, 1950. Records available: 1948-50.

Jan. 20	10.29	Apr. 19	9.40	July 21	6.88	Oct. 25	8.62
Feb. 21	10.50	May 22	6.00	Aug. 25	7.59	Nov. 29	8.75
Mar. 21	10.36	June 27	6.41	Sept. 22	8.25	Dec. 22	9.04

#### Walworth County

121-76-2dc. M. Anderson. Dug domestic well in alluvial sand and gravel, diameter 36 inches, depth 25 feet. Highest water level 4.20, June 6, 1950; lowest 12.23, May 16, 1943. Records available: 1943, 1947-50. Feb. 7, 8.50; June 6, 4.20; July 20, 5.37; Aug. 3, 5.46.

#### Yankton County

93-56-14aa. Mrs. J. M. Kayser. Drilled well, depth 80 feet. Highest water level 41.27, June 28, 1950; lowest 47.52, June 11, 1947. Records available: 1946-50.

Jan. 10	44.84	Mar. 16	45.15	July 25	44.30	Oct. 18	45.84
27	44.84	June 1	45.17	Aug. 29	45.85	Nov. 20	46.02
Mar. 1	45.68	28	41.27	Sept. 25	45.14	Dec. 13	46.34

## WISCONSIN

By W. J. Drescher, A. H. Harder, and R. E. Audini

### Scope of Water-Level Program

The observation-well program in Wisconsin was continued in 1950. The program was expanded to include 193 observation wells of which 28 are equipped with recording gages and 4 with nonrecording gages. Cooperation in furnishing water levels is acknowledged from the State Conservation Department, the Commanding Officer of Camp Williams, the State Public Service Corporation, the Wisconsin Valley Improvement Company, the Baraboo City Water Department, and the University of Wisconsin experimental farm at Hancock.

Investigation of the ground-water resources of Wisconsin in cooperation with the University of Wisconsin was continued during 1950. Special studies were continued in the Milwaukee-Waukesha, Brown County, Langlade County, and Marshfield areas. Special studies were begun in Portage County, Lafayette County, and in the Niellsville area. The studies in the Marshfield and Niellsville area were geophysical investigations of possible aquifers and reports are in preparation.

### Fluctuations of Water Levels

Precipitation in Wisconsin in 1950 averaged 30.54 inches which is 0.22 inches above normal. In 1949 precipitation was 2.52 inches below normal. The greatest precipitation occurred in the southwestern part of the State and the least in the central part.

The precipitation was generally reflected by water levels in shallow wells in the State. Following are net changes in water levels in representative wells from December 1949 to December 1950. Figure 10 shows fluctuations of water levels in water-table wells Sw-7 and Pr-6 in northern Wisconsin.

Well No.	County	Net Change	Well No.	County	Net Change
As 1	Ashland	+0.22	Ln 25	Lincoln	-0.59
Bn 13	Brown	+ .45	Mr 28	Marathon	-.60
Bf 1	Buffalo	-.08	Mq 9	Marquette	-.15
Bt 2	Burnett	-.39	Mo 2	Monroe	-2.39
Dn 3	Dane	+3.99	On 23	Oneida	+ .97
Dg 3	Dodge	+2.27	Pt30	Portage	-.52
Dr 7	Door	+6.33	Pr 6	Price	-.04
Ds 1	Douglas	+ .41	Sw 7	Sawyer	+ .03
Gr 4	Grant	+ .18	Sh 4	Shawano	+ .03
Gn 3	Green	+ .32	Ve 4	Vernon	-.52
Je 1	Jefferson	+1.47	Vi 21	Vilas	+1.01
Ju 8	Juneau	+ .78	Ww 9	Walworth	+ .19
Lf 10	Lafayette	-1.34	Wk 22	Waukesha	-.08
La 26	Langlade	+ .29	Ws 3	Waushara	-.50
			Wd 29	Wood	+2.26

In the Milwaukee-Waukesha area most deep artesian wells showed a net decline during 1950. The lowest water levels, however, were not so low as in 1949. The following table shows net changes, annual highest and lowest water levels with dates, and the total seasonal fluctuation in the wells in the Milwaukee-Waukesha area during 1950. Well Wk 14 is not included in the wells described above. All measurements are in feet below land-surface datum. Figure 11 shows the hydrograph of well M1 36, a representative well in Milwaukee County.

Well No.	Location	Net Change	Highest	Date	Lowest	Date	Seasonal Fluctuation
M136	27th & Hopkins Sts. Milwaukee	-3.99	159.09	May 14	180.93	Aug. 20	21.84
M179	Forest Home Cemetery Milwaukee	-13.31	184.28	Apr. 2	221.23	Oct. 19	36.95
M1132	White Manor Homes, Milwaukee	-16.08	206.24	Apr. 18	232.24	Nov. 3	26.00
Wk 2	Elm Grove Convent, Elm Grove	+5.66	69.20	May 14	75.21	July 15	6.01
Wk 14	Veterans Hospital, Waukesha	-2.35	292.84	Feb. 19	303.98	Nov. 17	11.14

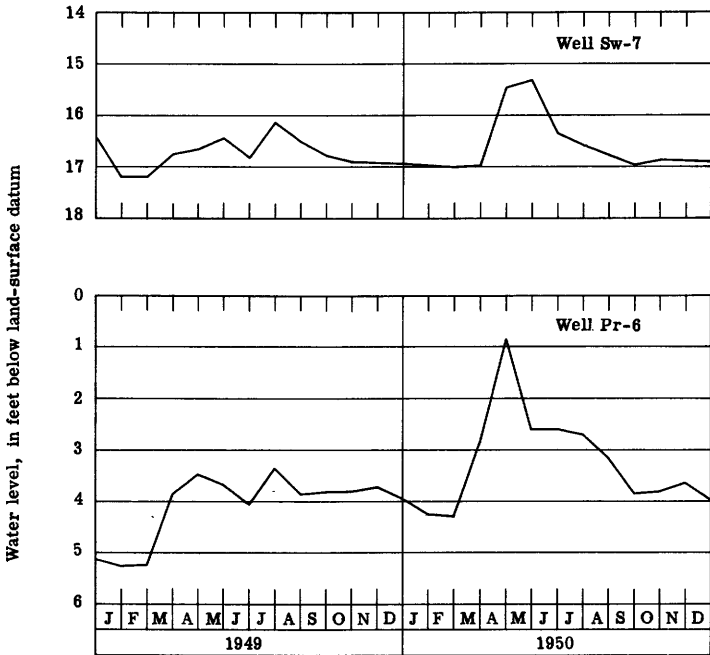


Figure 10.--Fluctuations of water levels in water-table wells Sw-7 and Pr-6 in northern Wisconsin.

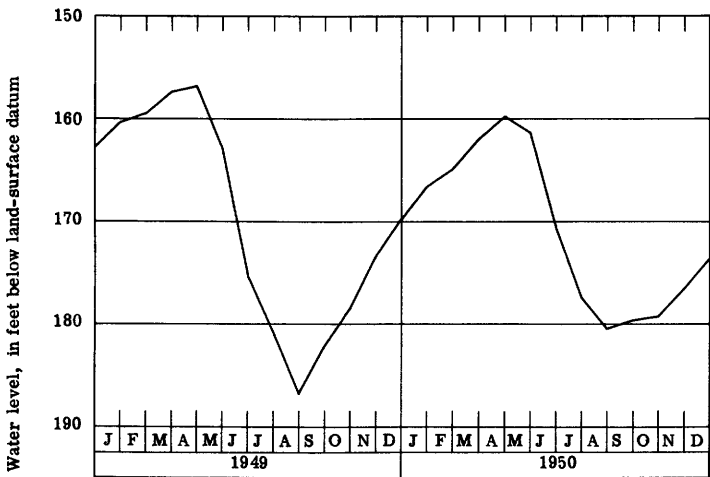


Figure 11.--Fluctuations of water level in artesian well M1-36, Milwaukee.

Artesian water levels in the Green Bay area continued to decline in 1950. The net decline in well Bn 9 in Green Bay showed a net decline of about 36 feet. The lowest water level in Bn 9 was 315.07 on August 5, 6.09 feet lower than the lowest in 1949. Well Bn 11 in DePere showed a net decline of 14.89 feet. The lowest water level in Bn 11 was 136.89 on August 21, 4.99 feet lower than the lowest in 1949. Artesian water levels in wells away from heavily pumped areas showed no significant changes during 1950 except in southeastern Wisconsin where they continued a downward trend. Well Ra 5 at Sturtevant in Racine County showed a net decline of 10.69 feet compared with a decline of 5.58 feet in 1949.

### Well-Numbering System

Wells are numbered consecutively within each county. The counties are designated by a two-letter abbreviation derived from the county name. For instance, Bn 9 designates well number 9 in Brown County.

### Well Descriptions and Water-Level Measurements

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

#### Ashland County

As 1. Lake Superior District Power Co. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 6, T. 46 N., R. 4 W., near power dam. Records available: 1943-45, 1947-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	2.81	Apr. 3	2.05	July 3	3.09	Oct. 2	3.15
9	2.61	10	1.05	10	3.15	9	3.10
16	2.69	17	1.35	17	3.15	16	3.07
23	2.65	24	1.75	24	3.15	23	3.08
30	2.69	May 1	1.79	31	3.07	30	3.11
Feb. 6	2.67	8	1.55	Aug. 7	3.25	Nov. 6	2.99
13	2.64	15	2.05	14	3.35	13	3.00
20	2.63	22	2.15	28	3.69	20	2.51
27	2.61	29	2.35	Sept. 5	3.85	27	2.65
Mar. 6	2.53	June 5	2.49	11	3.83	Dec. 11	2.63
13	2.47	12	2.75	18	3.79	18	2.65
20	2.45	19	2.95	25	3.69	26	2.71
27	2.05	26	2.98				

#### Brown County

Bn 9. Larsen Canning Co. 320 North Broadway, Green Bay. Records available: 1947-50.

#### Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	259.40	.....	249.65	256.94	.....	302.50	312.08	.....	301.68	298.35	291.36
2	.....	259.41	.....	243.68	256.60	.....	297.32	314.00	.....	302.62	298.68	289.80
3	238.36	.....	.....	247.37	258.01	.....	297.03	314.30	.....	302.43	300.88	285.97
4	241.63	262.84	.....	.....	255.20	.....	.....	315.00	.....	303.82	300.07	285.23
5	.....	258.10	.....	.....	257.37	.....	287.75	315.07	.....	304.83	297.30	285.60
6	.....	.....	.....	.....	256.75	.....	286.18	310.10	.....	305.40	297.49	285.34
7	.....	259.24	.....	.....	250.79	.....	289.00	310.89	.....	305.11	297.89	284.60
8	.....	.....	.....	250.19	.....	.....	285.30	310.60	.....	299.49	298.05	282.77
9	.....	.....	.....	245.11	.....	.....	.....	311.79	.....	307.39	299.03	279.95
10	246.92	.....	.....	247.13	.....	.....	287.20	310.73	.....	299.38	297.94	276.37
11	250.28	.....	.....	243.12	.....	.....	290.15	311.23	.....	300.63	297.23	279.22
12	.....	.....	.....	251.24	.....	.....	291.88	311.75	.....	302.82	291.52	279.63
13	.....	.....	.....	250.35	.....	.....	291.21	308.50	307.68	305.27	290.83	279.19
14	.....	.....	255.00	253.12	.....	.....	290.92	309.12	307.53	305.18	290.54	278.98
15	248.32	249.16	254.23	254.52	.....	.....	293.19	309.87	309.07	301.42	294.84	281.73
16	.....	256.06	254.30	249.40	.....	.....	293.61	312.40	309.81	304.03	296.18	281.82
17	.....	252.62	.....	253.48	.....	.....	292.11	313.33	307.35	303.52	299.63	274.26
18	.....	252.50	.....	.....	.....	.....	293.60	312.80	306.80	303.49	299.05	276.32
19	.....	251.72	244.10	.....	.....	.....	302.39	312.62	306.90	304.11	294.53	276.62
20	.....	.....	249.30	.....	.....	.....	295.90	309.70	307.38	304.52	295.57	278.96
21	.....	.....	248.28	255.58	.....	.....	295.72	307.42	305.90	304.85	295.24	275.68
22	.....	.....	250.81	258.01	.....	.....	296.53	308.16	306.68	300.10	294.57	279.13
23	.....	.....	251.71	251.73	.....	290.83	296.85	.....	304.33	299.41	296.26	278.43
24	.....	.....	252.68	256.71	.....	298.72	293.68	.....	301.48	299.33	292.77	272.38
25	.....	.....	252.50	255.13	.....	295.28	294.28	.....	302.00	300.08	290.44	270.13

Bn 9--Continued.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	.....	.....	251.71	.....	.....	298.92	295.52	.....	303.30	302.02	286.80	.....
27	.....	.....	251.10	256.04	.....	299.00	296.22	.....	304.50	302.63	288.25	266.71
28	.....	.....	243.47	256.35	.....	301.67	305.87	.....	306.09	301.77	288.47	266.47
29	.....	.....	251.60	257.63	.....	302.81	310.62	.....	305.58	298.10	286.98	270.30
30	.....	.....	252.05	251.99	.....	304.79	309.11	.....	305.32	297.68	286.62	271.84
31	.....	.....	250.55	.....	.....	.....	311.65	.....	.....	298.35	.....	266.45

Bn 11. City of De Pere. Corner of Broadway and George Sts. Records available: 1946-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	115.10	122.57	116.82	116.24	113.21	116.91	122.50	126.43	131.20	128.82	132.38	133.77
2	113.80	120.33	117.03	116.24	113.60	119.32	120.28	128.65	134.14	128.25	133.08	132.22
3	114.08	123.64	117.11	115.92	113.82	119.61	120.21	131.78	128.70	128.18	134.72	131.97
4	114.70	120.44	117.10	116.09	115.13	116.11	119.77	129.80	128.18	128.54	135.09	132.96
5	114.96	120.32	117.00	116.29	114.25	119.14	119.54	129.41	127.93	128.62	127.59	132.92
6	120.28	119.67	117.09	116.25	114.39	119.70	124.80	125.54	131.82	.....	133.88	132.72
7	115.87	119.62	116.73	116.04	115.03	121.89	123.40	130.02	132.00	.....	133.78	132.62
8	115.41	121.48	115.84	116.00	118.30	123.10	125.89	130.25	131.83	128.61	133.11	132.20
9	114.92	118.98	116.81	115.91	.....	.....	123.75	130.30	133.22	128.32	133.02	.....
10	120.46	119.49	118.49	.....	115.77	.....	130.18	.....	129.77	127.60	134.55	.....
11	117.00	119.25	116.91	.....	118.50	118.22	127.02	.....	128.67	132.50	134.91	.....
12	116.05	119.12	116.89	115.48	118.50	120.70	124.23	.....	131.61	132.63	133.29	131.75
13	115.57	118.76	119.80	115.74	115.61	122.25	126.92	.....	128.79	132.36	133.89	131.64
14	115.35	118.63	116.24	115.72	115.39	122.69	126.22	.....	131.58	134.41	134.50	131.66
15	115.35	116.76	116.87	115.52	119.40	123.10	123.47	132.00	132.58	134.40	133.67	132.07
16	118.14	117.14	116.91	114.15	119.38	122.30	123.50	129.41	129.44	135.60	135.09	132.89
17	116.70	119.26	116.98	112.56	121.32	122.25	125.42	133.90	128.82	132.51	134.34	131.10
18	118.48	116.80	117.20	113.37	120.17	118.63	127.32	135.35	133.20	132.34	133.12	132.25
19	119.56	117.25	117.27	113.80	121.90	122.90	129.55	135.90	128.78	134.55	131.50	131.85
20	120.51	115.84	116.93	114.70	122.39	123.80	128.42	129.10	129.00	133.20	133.25	131.52
21	120.75	116.71	116.70	114.70	116.50	123.69	127.62	136.89	128.80	132.65	132.94	131.51
22	120.72	116.89	116.27	114.64	118.98	125.79	128.09	135.50	128.65	127.60	132.91	131.00
23	123.14	117.41	115.89	114.63	121.90	124.70	124.38	135.72	128.82	125.89	132.58	129.87
24	121.28	117.49	115.79	113.58	120.96	119.30	126.50	136.20	128.78	132.05	132.78	129.92
25	121.26	117.52	116.20	114.15	119.90	119.90	123.97	132.31	128.49	131.07	132.42	128.79
26	122.17	116.93	116.12	113.53	120.83	119.92	123.88	134.37	132.52	131.40	132.11	.....
27	122.30	115.80	115.15	113.33	120.21	120.77	123.90	128.60	129.35	131.70	134.50	131.42
28	122.42	116.49	116.08	113.92	116.19	120.85	125.40	133.30	129.15	131.11	133.20	130.50
29	122.53	.....	116.45	114.00	119.20	126.58	129.35	132.78	131.64	126.17	133.25	130.50
30	122.08	.....	116.86	113.71	115.21	127.45	124.97	134.18	129.00	133.10	133.21	130.33
31	.....	.....	116.71	.....	119.94	.....	126.22	131.30	.....	133.42	.....	129.99

Bn 13. William Herber. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 18, T. 24 N., R. 20 E. Records available: 1947-50. Feb. 9, 19.49; Apr. 7, 18.74; May 25, 17.85; July 28, 18.84; Sept. 21, 20.14; Nov. 22, 20.39.

Bn 14. Village of Pulaski. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 6, T. 25 N., R. 19 E. Records available: 1947-50. Feb. 9, 38.71; July 28, 38.72; Sept. 22, 38.95.

Bn 15. Larsen Canning Co. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 35, T. 24 N., R. 19 E. Records available: 1947-50. Feb. 9, 10.95; Apr. 7, 8.91; May 25, 8.73; July 28, 10.20; Sept. 21, 11.90; Nov. 22, 12.91.

Bn 16. Larsen Canning Co. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 35, T. 24 N., R. 19 E. Records available: 1947-50. Feb. 9, 18.07; Apr. 7, 18.44; May 25, 17.58; July 28, 20.53; Sept. 21, 22.86; Nov. 22, 23.55.

Bn 43. Harry Nick. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 2, T. 24 N., R. 20 E. Records available: 1948-50. Feb. 8, 21.52; Apr. 6, 21.07; May 25, 19.59; July 27, 23.68; Sept. 21, 29.89; Nov. 21, 30.45.

Bn 51. Larsen Orchards. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 29, T. 24 N., R. 20 E. Records available: 1948-50. Feb. 9, 118.73; Apr. 7, 115.24; May 25, 114.35; July 28, 116.88; Sept. 21, 119.33; Nov. 22, 118.83.

Bn 52. Suamico Dairy and Locker Co. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 22, T. 25 N., R. 20 E. Drilled industrial well, diameter 6 inches, depth 540 feet. Records available: 1948-50.



## Bn 52--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 6, 1948	+6.5	May 5, 1949	+5.75	Dec. 8, 1949	+5.00	July 27, 1950	+5.5
Nov. 9	+6.5	June 9	+5.75	Feb. 9, 1950	+5.00	Sept. 21	+4.75
Jan. 6, 1949	+6.5	July 21	+5.75	May 25	+5.25	Nov. 21	+3.5
Mar. 3	+5.25	Sept. 22	+7.00				

Bn 54. William O. Dulgar. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 30, T. 24 N., R. 20 E. Drilled domestic well, diameter 6 inches, depth 275 feet. Records available: 1948-50.

Oct. 5, 1948	91.80	May 6, 1949	92.48	Dec. 9, 1949	93.48	May 25, 1950	92.26
Nov. 10	91.41	June 10	90.61	Feb. 9, 1950	92.49	July 28	92.70
Jan. 7, 1949	91.06	July 22	91.84	Apr. 7	92.86	Nov. 22	93.93
Mar. 4	91.07						

Bn 63. Joseph C. Michaels. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 15, T. 24 N., R. 20 E. Records available: 1948-50. May 25, 101.26; July 27, 115.83; Sept. 21, 122.59; Nov. 21, 119.57.

Bn 72. Gregoire Denis. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 13, T. 24 N., R. 21 E. Records available: 1949-50. Feb. 8, 233; Apr. 6, 239; May 24, 240.

Bn 75. L. Keyser. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 28, T. 22 N., R. 20 E. Records available: 1949-50. Feb. 7, 99.98; Apr. 5, 100.04; May 24, 99.36; July 26, 100.92; Sept. 20, 101.77; Nov. 20, 103.07.

Bn 76. Wisconsin Public Service Corp. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 24, T. 24 N., R. 20 E. Drilled industrial well, diameter 5 inches, depth 500 feet. Records available: 1950. Apr. 26, 166.33; July 27, 199.78; Sept. 20, 205.23; Nov. 21, 201.24.

Bn 78. Carl Jenkins. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 7, T. 25 N., R. 21 E. Records available: 1949-50. Feb. 8, +20.5; May 25, +17.5; July 27, +15.5; Sept. 21, +17.5; Nov. 21, +9.0.

Buffalo County

Bf 1. Donald C. De Marce. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 29, T. 21 N., R. 12 W. Records available: 1947-50. Mar. 1, 30.51; Apr. 4, 30.01; May 31, 29.51; July 20, 30.28; Nov. 4, 30.54; Dec. 14, 30.48.

Burnett County

Bt 2. Wisconsin Conservation Department, NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 17, T. 39 N., R. 16 W. Records available: 1937-50.

Jan. 1	34.54	Apr. 1	34.13	July 1	34.66	Oct. 1	34.81
Feb. 1	34.51	May 6	33.83	Aug. 1	34.77	Dec. 1	34.76
Mar. 1	34.61	June 3	34.61	Sept. 1	34.80		

Calumet County

Ca 4. Harold Krueger. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 12, T. 20 N., R. 19 E. Records available: 1947-50. Feb. 7, 28.49; Apr. 5, 28.63; May 24, 29.26; July 26, 29.38; Sept. 19, 29.73; Nov. 20, 30.10.

Ca 5. R. A. Huebner. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 17, T. 20 N., R. 20 E. Records available: 1947-50. Feb. 7, 113.32; Apr. 5, 130.35; May 24, 143.22; July 26, 104.77; Sept. 19, 105.89; Nov. 20, 109.81.

Columbia County

Co 13. F. Stollfus. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 29, T. 13 N., R. 11 E. Records available: 1949-50. Jan. 11, 57.87; Feb. 23, 57.51; Mar. 23, 57.68; May 15, 57.70; Aug. 15, 57.58; Oct. 11, 57.98; Nov. 25, 58.02.

Co 17. Vogel and Baas. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 1, T. 12 N., R. 12 E. Measurement discontinued after Aug. 15, 1950. Records available: 1949-50.

Jan. 11	15.07	Apr. 7	9.86	July 28	4.67	Sept. 22	9.41
Feb. 23	15.25	May 15	10.01	Aug. 15	7.40	Nov. 22	11.95
Mar. 23	12.82	26	10.45				

Co 22. Wisconsin Fur and Game Farm. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 36, T. 11 N., R. 9 E. Records available: 1949-50. Jan. 11, 54.10; Feb. 23, 53.78; May 15, 54.43; Aug. 18, 55.32; Oct. 11, 54.88; Nov. 29, 55.10.

Co 23. H. Storanot. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 16, T. 10 N., R. 9 E. Drilled stock well, diameter 6 inches. Records available: 1949-50. Oct. 5, 1949, 141.25; Jan. 10, 1950, 144.25; Feb. 23, 141.17; May 15, 141.67; Aug. 18, 141.93; Nov. 29, 142.27.

Co 25. H. Landsverk. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 8, T. 11 N., R. 11 E. Records available: 1949-50. Jan. 11, 80.77; Feb. 23, 80.96; Mar. 23, 81.07; May 15, 80.52; Aug. 15, 79.27; Oct. 11, 79.51; Nov. 29, 79.94.

Co 28. Mr. Flanders. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 5, T. 12 N., R. 9 E. Records available: 1949-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2.24	2.59	2.52	1.13	0.75	1.37	1.88	1.49	1.90	1.88	2.24	2.28
2	2.21	2.61	2.52	1.13	.80	1.37	1.90	1.55	1.95	1.93	2.26	2.24
3	2.08	2.63	2.55	1.13	.83	1.21	1.91	1.59	2.02	1.97	2.26	2.05
4	2.05	2.65	2.56	1.13	.83	1.31	1.87	1.60	2.07	2.01	2.26	2.07
5	2.08	2.65	2.53	1.13	.82	1.42	1.95	1.67	2.11	2.04	2.26	2.10
6	2.13	2.66	2.22	1.13	.93	1.51	2.00	1.72	2.13	2.07	2.29	2.10
7	2.19	2.66	2.02	1.13	.98	1.57	2.04	1.77	2.16	2.08	2.30	2.09
8	2.21	2.65	1.80	1.15	.98	1.62	2.07	1.79	2.17	1.91	2.30	2.05
9	2.23	2.61	1.76	1.15	.90	1.62	2.10	1.82	2.18	1.77	2.25	2.05
10	2.28	2.59	1.77	1.15	.81	1.54	2.12	1.84	2.20	1.83	2.22	2.04
11	2.29	2.57	1.80	.92	.87	1.61	2.15	1.74	2.20	1.87	2.26	2.03
12	2.30	2.56	1.83	.95	.91	1.66	2.15	1.81	2.20	1.92	2.29	2.03
13	2.30	2.53	1.85	1.00	.94	1.66	2.14	1.87	2.20	1.99	2.31	2.02
14	2.18	2.53	1.88	1.03	1.01	1.10	2.14	1.90	2.22	2.01	2.32	2.02
15	2.21	2.53	1.92	1.04	1.07	1.24	2.17	1.94	2.25	2.02	2.31	2.04
16	2.27	2.52	1.93	1.04	1.10	1.37	2.17	1.98	2.27	2.04	2.16	2.05
17	2.30	2.52	1.94	1.03	1.12	1.45	1.70	2.02	2.28	2.05	2.02	2.07
18	2.37	2.51	1.96	1.00	1.17	1.46	1.62	2.04	2.28	2.06	2.03	2.08
19	2.41	2.51	1.96	.98	1.21	1.50	1.63	2.07	2.15	2.10	2.07	2.12
20	2.43	2.50	1.96	1.00	1.26	1.59	.97	2.10	2.06	2.11	2.12	2.12
21	2.45	2.50	1.95	1.02	1.28	1.67	1.07	2.12	2.05	2.13	2.14	2.13
22	2.47	2.49	1.90	1.02	1.31	1.70	1.15	2.13	1.64	2.14	2.16	2.13
23	2.48	2.49	1.84	1.03	1.35	1.77	1.18	2.16	1.72	2.14	2.19	2.13
24	2.48	2.46	1.65	1.03	1.38	1.49	1.23	2.18	1.75	2.16	2.26	2.13
25	2.48	2.48	1.54	.64	1.34	1.58	1.30	2.21	1.80	2.17	2.28	2.14
26	2.47	2.50	1.43	.68	.98	1.70	1.37	2.21	1.83	2.18	2.29	2.17
27	2.47	2.51	1.22	.73	1.06	1.78	1.42	2.19	1.85	2.19	2.30	2.17
28	2.48	2.52	1.11	.76	1.13	1.82	1.48	2.17	1.85	2.20	2.30	2.17
29	2.53		1.14	.79	1.20	1.86	1.56	1.83	1.85	2.21	2.30	2.19
30	2.54		1.15	.79	1.20	1.87	1.57	1.79	1.86	2.22	2.28	2.20
31	2.57		1.14		1.27		1.57	1.83		2.22		2.20

## Dane County

Dn 3. Gerald Hendrickson. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 32, T. 5 N., R. 8 E. Records available: 1946-50. Feb. 28, 66.92; Apr. 3, 66.94; May 30, 66.67; July 19, 64.87; Oct. 3, 60.97; Dec. 13, 62.39.

Dn 4. J. N. Hanley. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 34, T. 9 N., R. 11 E. Records available: 1946-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	48.91	.....	49.71	49.74	49.72	49.77	49.53	44.98	45.29	45.32	45.52	46.23
2	48.86	49.37	49.78	49.74	49.70	49.76	49.51	45.04	45.33	45.34	45.62	46.10
3	48.88	.....	49.65	49.73	49.63	49.80	49.50	45.04	45.43	.....	45.64	46.26
4	49.16	.....	49.61	49.81	49.69	49.78	49.50	45.00	45.49	45.34	45.56	46.38
5	49.16	49.30	49.67	49.90	49.59	49.71	49.51	45.03	45.54	45.24	45.43	46.45
6	49.00	49.39	49.69	49.90	49.91	49.80	49.56	45.01	45.50	45.17	45.69	46.40
7	49.19	49.44	49.45	49.83	49.99	49.84	49.55	44.93	45.45	45.15	45.70	46.17
8	49.12	49.35	49.84	49.88	49.94	49.80	49.55	44.89	45.41	45.25	45.57	46.43
9	48.84	49.37	49.88	49.77	49.70	49.74	49.54	44.92	45.40	45.26	45.79	46.44
10	49.25	49.37	49.82	49.58	49.79	49.85	49.55	44.92	45.41	45.22	45.81	46.50
11	49.31	49.53	49.75	49.82	49.79	49.88	49.53	44.99	45.52	45.13	45.84	46.40
12	49.00	49.53	49.78	49.81	49.69	49.81	49.46	44.95	45.54	45.26	45.79	46.41
13	48.98	49.41	49.68	49.80	49.65	49.72	49.58	44.96	45.62	45.28	45.83	46.50
14	49.31	49.30	49.73	49.79	49.65	49.74	49.58	44.89	45.62	45.26	45.78	46.52
15	.....	49.44	49.78	49.76	49.77	49.71	49.54	44.88	45.62	45.34	45.67	46.66
16	.....	49.51	49.73	49.66	49.80	49.86	49.52	44.91	45.77	45.27	45.99	46.69
17	.....	49.52	49.83	49.61	49.78	49.86	47.95	45.02	45.82	45.33	45.99	46.74

## Dn 4--Continued.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
18	.....	49.61	49.90	49.66	49.79	49.64	48.99	45.02	45.74	45.27	45.78	46.74
19	49.29	49.61	49.89	49.68	49.78	49.56	48.97	45.02	45.80	45.32	45.87	46.74
20	49.29	49.60	49.70	49.68	49.81	49.59	42.86	45.04	45.75	45.34	46.09	46.82
21	49.07	49.43	49.66	49.71	49.76	49.64	45.55	44.97	45.72	45.25	46.04	46.78
22	49.08	49.43	49.72	49.70	49.75	49.59	46.21	44.98	45.66	45.31	45.99	46.79
23	49.16	49.50	49.76	49.72	49.77	49.54	46.28	45.08	45.69	45.42	46.11	46.64
24	49.13	49.67	49.86	49.67	49.81	49.61	46.08	45.10	45.69	45.37	46.14	46.85
25	49.31	49.68	49.89	49.64	49.89	49.58	45.90	45.21	45.52	45.42	46.14	46.84
26	49.45	49.68	49.73	49.79	49.90	49.53	45.66	45.19	45.51	45.40	.....	47.02
27	49.26	49.59	49.52	49.82	49.86	49.63	45.46	45.12	45.40	45.34	.....	46.99
28	49.13	49.57	49.98	49.87	49.75	49.51	45.30	45.12	45.43	45.42	46.21	46.75
29	.....	.....	50.04	49.81	49.74	49.51	45.16	45.19	45.35	45.49	46.13	46.91
30	.....	.....	49.99	49.71	49.68	49.53	45.03	45.19	45.30	45.41	46.23	46.90
31	.....	.....	49.80	.....	49.76	.....	44.98	45.22	.....	45.36	.....	46.95

Dn 5. State of Wisconsin. In State Capitol Building, south wing. Records available: 1946-50. Feb. 10, 90.80; Apr. 12, 90.61; May 12, 90.26; July 11, 91.12; Sept. 14, 88.96, Nov. 16, 88.07.

## Dodge County

Dg 3. A. A. Corrigan. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 15, T. 13 N., R. 13 E. Records available: 1946-50. Feb. 9, 12.73; Apr. 7, 10.62; May 26, 11.05; July 28, 5.77; Sept. 22, 8.88; Nov. 22, 10.77.

Dg 4. Village of Horicon. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 5, T. 11 N., R. 16 E. Records available: 1947-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	119.80	.....	119.95	119.40	119.31	119.10	120.15	120.95	120.10	121.58	120.76	120.47
2	119.31	119.84	120.21	119.51	118.90	119.13	120.19	121.08	.....	120.86	120.85	120.62
3	119.87	120.40	119.90	119.14	118.90	119.31	120.21	120.27	.....	121.50	121.32	119.77
4	119.79	119.82	119.53	119.85	119.44	119.18	119.92	119.95	.....	121.63	120.92	120.46
5	120.41	119.99	119.89	119.25	118.85	119.30	120.05	119.87	.....	121.63	120.14	120.78
6	120.00	119.64	119.80	119.23	118.99	120.02	120.40	120.25	120.15	121.52	120.50	120.79
7	119.91	119.63	119.08	119.72	119.12	119.53	120.50	119.96	120.47	121.10	120.78	120.95
8	119.88	119.59	119.66	119.29	119.63	119.78	119.99	120.30	120.50	120.60	121.01	120.70
9	120.10	120.22	119.70	118.89	119.40	120.18	119.83	119.98	119.92	120.40	121.12	120.21
10	119.86	119.61	120.32	119.23	119.02	119.53	120.68	120.18	119.90	120.42	121.15	119.94
11	119.89	119.74	119.68	118.80	119.50	119.50	120.92	120.05	120.32	121.11	121.15	120.40
12	120.40	119.60	119.63	118.84	119.00	119.60	120.93	120.00	120.45	120.80	121.13	120.67
13	119.80	120.12	119.70	119.52	118.92	119.45	121.00	119.82	120.50	120.88	120.70	120.73
14	119.60	119.62	120.10	119.00	119.37	118.80	120.95	119.38	120.91	120.92	120.68	121.26
15	119.40	120.10	120.30	119.50	119.08	118.79	120.40	120.12	120.77	120.74	120.69	121.47
16	120.19	119.73	119.83	118.87	119.78	119.39	119.75	119.69	121.22	120.84	120.95	120.67
17	119.82	120.37	120.31	119.20	119.13	118.95	118.65	119.58	120.43	120.90	120.95	120.18
18	119.76	119.84	120.01	118.86	119.24	118.60	119.43	119.50	120.97	120.83	120.90	119.82
19	119.92	119.82	120.01	118.93	119.17	119.18	119.72	119.39	121.00	121.60	119.72	120.47
20	120.24	120.27	119.84	119.18	119.25	118.92	119.09	119.59	121.04	121.38	120.27	120.56
21	119.92	119.60	120.60	119.68	119.43	119.05	119.53	119.22	121.14	121.37	120.59	120.69
22	120.24	119.23	119.68	119.09	119.40	119.04	.....	120.13	121.03	120.78	120.76	121.33
23	119.83	119.35	120.28	119.58	119.32	119.08	.....	119.53	121.09	120.55	120.76	120.98
24	119.79	119.39	119.70	118.71	119.65	118.88	.....	119.50	121.22	120.83	121.05	120.04
25	119.82	120.12	119.63	118.63	119.20	118.80	.....	119.54	121.58	120.92	121.13	119.80
26	119.72	119.39	119.38	119.27	119.07	119.88	119.95	119.89	121.64	120.95	120.64	120.30
27	.....	120.11	119.53	119.02	119.35	120.13	120.08	119.05	121.68	120.92	120.54	120.21
28	.....	119.58	119.44	119.42	118.75	120.58	120.33	119.20	121.46	120.95	121.06	119.86
29	.....	.....	119.55	119.09	118.67	121.23	120.89	118.88	121.53	120.50	120.88	119.62
30	.....	.....	119.97	118.77	118.67	121.25	120.70	118.88	121.63	120.35	121.39	120.30
31	.....	.....	119.96	.....	118.91	.....	120.70	119.47	.....	120.85	.....	.....

Dg 9. Ashippun Fire Department. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 30, T. 9 N., R. 17 E. Records available: 1946-50. Feb. 7, 12.40; Apr. 5, 10.40; May 12, 7.91; July 26, 5.66; Sept. 14, 10.14; Nov. 16, 10.96.

Dg 10. Ashippun Fire Department. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 30, T. 9 N., R. 17 E. Records available: 1946-50. Feb. 7, 11.47; Apr. 5, 10.90; May 12, 10.37; July 26, 10.34; Sept. 14, 10.68; Nov. 16, 10.43.

Dg 11. F. C. Etscheid. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 1, T. 9 N., R. 13 E. Records available: 1946-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	48.11	48.71	.....	49.44	49.01	45.94	38.32	28.61	30.82	33.73	34.98	36.46
2	48.10	48.73	49.43	49.43	48.92	45.79	38.24	29.00	30.83	34.07	35.09	36.31
3	48.01	48.78	49.39	49.49	48.81	45.52	38.24	29.16	31.10	.....	35.09	36.55
4	48.38	48.86	49.38	49.52	48.77	45.35	38.20	29.16	31.18	34.29	34.93	36.76
5	48.38	48.81	49.51	49.61	48.70	45.08	38.41	29.23	31.26	34.24	34.85	36.86
6	48.24	48.75	49.52	49.61	48.70	44.99	38.60	29.40	31.26	34.36	35.31	36.85
7	48.39	48.83	49.38	49.42	48.75	44.94	38.81	29.61	31.23	34.50	35.47	36.77
8	48.35	48.82	49.49	49.44	48.73	44.70	39.03	29.81	31.21	34.65	35.47	37.25
9	48.15	48.69	49.54	49.38	48.34	44.48	39.12	29.87	31.24	34.65	35.61	37.39
10	48.62	48.67	49.50	49.26	48.52	44.32	39.10	30.01	31.44	34.50	35.64	37.48
11	48.64	48.88	49.33	49.35	48.55	44.20	38.98	30.04	31.52	34.34	35.61	37.46
12	48.34	48.90	49.40	49.34	48.49	43.91	38.88	30.02	31.52	34.44	35.55	37.31
13	48.26	48.84	49.42	49.35	48.47	43.73	39.10	30.08	31.27	34.46	35.49	37.38
14	48.53	48.67	49.44	49.34	48.42	43.25	39.11	30.28	31.30	34.60	35.61	37.48
15	48.54	48.70	49.52	49.25	48.46	42.48	39.01	30.46	31.25	34.73	35.77	37.46
16	48.72	48.83	49.50	49.24	48.47	41.54	38.90	30.67	31.24	34.71	36.04	37.70
17	48.68	48.88	49.44	49.24	48.32	41.02	38.23	30.95	31.41	34.69	36.04	37.77
18	48.62	48.97	49.62	49.28	48.18	40.28	37.30	31.10	31.40	34.65	35.86	37.77
19	48.73	49.07	49.64	49.39	48.06	39.76	36.64	31.45	31.25	34.57	35.85	37.78
20	48.77	49.09	49.57	49.42	48.01	39.35	35.19	31.55	30.92	34.57	35.94	37.87
21	48.58	48.99	49.51	49.47	47.95	39.17	32.40	31.57	30.56	34.35	35.94	37.87
22	48.58	49.00	49.53	49.47	47.81	39.01	29.71	31.64	29.98	34.33	35.90	37.88
23	48.69	49.00	49.58	49.39	47.74	38.92	.....	31.84	30.18	34.40	36.24	37.66
24	48.62	.....	49.67	49.40	47.70	38.91	.....	31.93	31.18	34.30	36.28	38.00
25	48.70	.....	.....	49.39	47.70	38.82	.....	32.18	31.97	34.38	36.22	38.02
26	48.95	.....	49.65	49.47	47.35	38.52	27.76	32.19	32.39	34.38	36.12	38.24
27	48.95	.....	49.31	49.47	47.01	38.58	27.56	32.05	32.72	34.23	35.22	38.25
28	48.57	.....	49.76	49.38	46.77	38.49	27.48	31.67	33.14	34.15	36.32	38.02
29	48.85	.....	49.87	49.29	46.53	38.45	27.67	31.24	33.31	34.26	36.32	38.24
30	48.85	.....	49.87	49.12	46.24	38.36	27.94	31.04	33.53	34.48	36.42	38.25
31	48.68	.....	49.77	.....	45.99	.....	28.11	30.92	.....	34.63	.....	38.30

Dg 12. Baker Canning Co. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 10, T. 12 N., R. 17 E. Well cleaned and shot between June 12 and July 26 causing lower static level. Records available: 1946-50. Feb. 7, 46.58; Apr. 5, 45.02; May 12, 42.27; July 26, 75.80; Nov. 16, 73.38.

Dg 14. Chicago & North Western Railway. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 21, T. 10 N., R. 15 E. Records available: 1946-50. Apr. 5, 44.24; May 12, 42.64; July 11, 44.54; Sept. 14, 46.63; Nov. 16, 46.62.

Dg 15. Mayville Construction Co. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 13, T. 12 N., R. 16 E. Records available: 1946-50. Feb. 7, 22.18; Apr. 5, 21.86; May 12, 20.77; July 26, 19.98; Sept. 14, 20.35; Nov. 16, 20.36.

Dg 17. F. C. Etscheid. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 1, T. 9 N., R. 13 E. Records available: 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	78.32	Apr. 25	83.44	July 17	68.06	Oct. 10	42.04
11	78.62	May 2	82.43	25	23.32	17	43.16
18	80.23	9	80.02	Aug. 1	36.63	24	43.74
25	82.50	16	82.36	8	42.76	31	45.52
Feb. 1	82.75	23	83.09	15	47.62	Nov. 7	46.73
8	81.08	30	79.20	22	52.48	14	49.89
14	80.01	June 6	78.04	29	51.04	21	49.37
22	81.73	13	79.84	Sept. 5	51.24	27	51.56
Mar. 1	81.12	20	73.05	12	51.09	Dec. 5	52.02
15	82.78	27	70.76	19	55.73	12	56.89
22	77.50	July 4	67.81	25	46.81	19	56.54
Apr. 5	81.83	11	72.48	Oct. 3	44.86	26	60.05
18	81.89						

## Door County

Dr 5. City of Sturgeon Bay. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 8, T. 27 N., R. 26 E. Records available: 1946-50. Feb. 8, 6.35; Apr. 6, 0.84; May 24, 2.62; July 27, 6.22; Sept. 20, 7.31; Nov. 21, 8.17.

Dr 7. Fred Peterson. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 30, T. 29 N., R. 27 E. Records available: 1946-50. Feb. 8, 46.40; Apr. 6, 19.70; May 24, 43.46; July 27, 46.40; Sept. 20, 46.40; Nov. 21, 46.07.

Dr 11. Charles Telephore. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 22, T. 26 N., R. 23 E. Drilled stock well, diameter 6 inches, depth 816 feet. Records available: 1950. Aug. 1, 46.60; Sept. 20, 42.16; Nov. 21, 43.98.

Dr 12. William J. Destree. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 19, T. 27 N., R. 24 E. Drilled domestic well, diameter 6 inches. Records available: 1950. Aug. 2, 39.19; Sept. 20, 53.11, recently pumped; Nov. 21, 44.52.

#### Douglas County

Dr 1. Wisconsin Conservation Department. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 23, T. 47 N., R. 10 W. Records available: 1937-41, 1944-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	28.92	Apr. 1	29.02	June 24	28.69	Sept. 16	28.58
14	28.95	8	29.05	July 1	28.66	23	28.58
21	28.97	15	29.01	8	28.65	30	28.57
28	28.97	22	28.75	15	28.63	Oct. 7	28.45
Feb. 4	28.98	29	28.95	22	28.62	14	28.51
11	28.99	May 6	28.85	29	28.61	21	28.51
18	29.00	13	28.84	Aug. 5	28.60	28	28.52
25	29.01	20	28.82	12	28.60	Dec. 2	28.47
Mar. 4	29.00	27	28.80	19	28.59	9	28.47
11	29.00	June 3	28.74	26	28.57	16	28.49
18	29.00	10	28.73	Sept. 2	28.57	23	28.46
25	28.49	17	28.72	9	28.58	30	28.47

#### Fond du Lac County

F1 10. City of Fond du Lac. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 11, T. 15 N., R. 17 E. Records available: 1946-50. July 1, 56.77; Sept. 19, 55.61, tape measurement; Nov. 20, 54.22, tape measurement.

#### Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	50.96	51.56	51.40	51.98	52.18	53.75
2	50.67	51.56	51.49	51.59	52.59	53.69
3	50.61	51.71	51.59	51.79	52.64	53.63
4	51.19	51.73	51.58	52.10	52.72	53.35
5	51.45	51.11	51.17	52.41	52.68	53.35
6	51.46	51.19	51.32	52.57	52.88	53.69
7	51.62	51.45	51.37	52.43	52.59	54.45
8	51.01	51.43	51.57	52.68	52.83	55.15
9	51.04	51.55	51.97	52.20	52.73	55.35
10	51.33	51.49	52.04	51.80	53.35	55.35
11	51.60	51.53	51.97	52.05	53.33	55.17
12	51.45	51.17	51.48	52.31	53.39	55.00
13	51.19	50.98	51.57	52.42	53.23	55.47
14	51.37	51.01	51.60	52.60	52.87	55.46
15	50.90	51.28	51.89	52.50	53.02	55.65
16	51.24	51.36	51.88	52.09	53.42	55.71
17	51.04	51.50	51.90	52.08	53.63	56.15
18	51.29	51.41	52.02	52.36	53.35	56.15
19	51.53	51.07	51.69	52.64	53.71	55.43
20	51.67	51.13	51.56	52.74	53.75	55.63
21	51.50	51.18	51.68	52.95	53.22	56.27
22	50.95	51.26	51.65	52.75	53.47	56.68
23	51.18	51.35	51.89	52.28	53.63	56.50
24	51.20	51.38	52.19	52.30	53.97	56.82
25	51.30	51.41	52.13	52.31	54.09	56.32
26	51.68	50.91	51.60	52.57	54.31	56.36
27	51.81	51.18	51.60	52.86	54.01	56.41
28	51.41	51.07	51.94	52.95	53.56	56.57
29	51.04		52.19	52.82	53.65	56.62
30	51.40		52.29	52.30	53.49	56.64
31	51.52		52.27		53.55	

Fl 16. Mrs. Amanda Kohn. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 23, T. 13 N., R. 18 E. Records available: 1946-50. Feb. 7, 7.27; Apr. 5, 5.00; May 12, 6.11. Measurement discontinued.

Fl 19. John Steffin. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 30, T. 17 N., R. 19 E. Records available: 1948-50. Apr. 5, 136.81; May 24, 136.26; July 26, 136.97; Sept. 19, 137.64; Nov. 20, 137.76.

Fl 20. City of Fond du Lac. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 3, T. 15 N., R. 17 E. Drilled unused test well, diameter 6 inches, depth 700 feet. Records available: 1950.

Daily lowest water level, from recorder graph

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	80.60	77.98	75.08	73.97	71.99
2	.....	81.04	78.01	75.30	74.14	71.60
3	.....	81.05	77.78	75.22	74.05	71.65
4	.....	81.23	77.67	75.10	73.76	71.70
5	.....	80.91	77.43	75.20	73.38	71.71
6	.....	80.72	77.37	75.17	73.62	71.62
7	(a)	80.70	77.12	75.08	73.64	71.07
8	80.30	80.57	76.85	75.01	73.47	71.31
9	80.18	80.60	76.60	74.82	73.59	71.15
10	80.77	80.64	76.54	74.64	73.47	71.05
11	81.17	80.52	76.52	74.50	73.27	70.94
12	81.37	80.14	76.39	74.53	73.12	70.87
13	81.26	79.76	75.91	74.48	73.10	70.98
14	81.08	79.80	75.75	74.33	72.73	70.95
15	80.74	80.04	75.68	74.32	72.60	71.26
16	80.72	80.16	75.76	74.15	73.03	71.54
17	80.65	80.38	75.87	74.22	73.14	71.33
18	80.86	79.95	75.48	74.10	.....	71.18
19	80.59	79.49	75.58	74.57	.....	71.17
20	80.41	79.35	75.57	74.58	.....	71.29
21	80.25	78.92	75.38	74.45	72.00	71.22
22	80.01	78.77	75.25	74.32	71.63	71.52
23	79.82	78.57	75.38	74.30	72.17	71.12
24	79.69	78.62	75.21	74.26	72.26	71.36
25	79.83	78.67	75.05	74.32	72.06	71.34
26	79.68	78.42	75.05	74.32	71.65	71.32
27	79.72	78.35	74.87	73.98	72.05	71.17
28	79.92	78.12	75.01	73.92	71.94	70.84
29	80.53	78.17	75.06	73.77	71.70	71.23
30	80.26	78.00	75.10	73.52	71.85	70.96
31	80.62	77.93		73.58		70.78

a Recording gage installed July 7.

Fl 21. Wisconsin Central Railroad. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 33, T. 16 N., R. 17 E. Drilled industrial artesian well in St. Peter and Potsdam sandstones, diameter 8 inches, reported depth 450 feet. Records available: 1950. Sept. 19, 33.88; Nov. 20, 33.37.

#### Grant County

Gr 1. Carl Doeringfeld. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 7, T. 6 N., R. 2 W. Measurement discontinued. Records available: 1946-48.

Gr 2. Carl Doeringfeld. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 7, T. 6 N., R. 2 W. Measurement discontinued. Records available: 1946-48.

Gr 4. Henry Jones Estate. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 26, T. 6 N., R. 1 W. Records available: 1946-50. Apr. 3, 67.89; July 19, 66.72; Oct. 3, 67.36; Dec. 13, 67.17.

Gr 5. Clarence Gratz. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 6, T. 5 N., R. 2 W. Records available: 1946-50. Feb. 28, 17.33; Apr. 3, 16.56; May 30, 14.46; July 19, 11.23; Oct. 3, 13.14; Dec. 13, 14.63.

#### Green County

Gn 1. Charles Segner. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 21, T. 2 N., R. 7 E. Records available: 1946-50. Feb. 28, 63.36; Apr. 3, 61.50; May 30, 60.83; July 19, 58.90; Oct. 3, 60.30; Dec. 13, 62.18.

Gn 2. Earl Waddington. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 18, T. 3 N., R. 6 E. Records available: 1946-50. Feb. 28, 134.67; Apr. 3, 135.28; May 30, 135.29; July 19, 135.00; Oct. 3, 135.06; Dec. 13, 134.67.

Gn 3. John Waelti, Jr. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 23, T. 2 N., R. 7 E. Records available: 1947-50. Feb. 28, 34.26; Apr. 3, 34.30; May 30, 33.73; July 19, 33.27; Oct. 3, 33.29; Dec. 13, 33.94.

### Jackson County

Ja 1. L. Epstein. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 20, T. 20 N., R. 2 W. Records available: 1947-50. May 31, 17.77; July 10, 17.5; Oct. 5, 18.51; Dec. 15, 17.55.

### Jefferson County

Je 1. Edmond and James Long. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 3, T. 6 N., R. 13 E. Records available: 1946-50. May 10, 0.50; July 13, 2.70; Sept. 12, 3.10; Nov. 9, 3.53.

Je 9. Chicago & North Western Railway. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 25, T. 7 N., R. 14 E. Records available: 1946-50. Mar. 28, 18.16; May 10, 23.15; July 13, 26.69; Sept. 12, 22.05.

### Juneau County

Ju 8. Wisconsin National Guard Camp. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 21, T. 17 N., R. 2 E. Records available: 1949-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	9.36	9.54	....	8.79	8.18	7.65	6.84	6.93	7.11	7.50	7.87	....
2	9.36	9.55	9.75	8.77	8.12	7.66	6.82	6.90	7.09	7.58	7.93	....
3	9.36	9.62	9.80	8.75	8.14	7.67	6.82	6.84	7.11	7.57	7.93	....
4	9.49	9.58	9.78	8.75	....	....	6.81	6.93	7.13	7.56	7.93	....
5	9.41	9.56	9.76	8.75	8.20	....	....	6.82	7.42	7.56	7.93	8.33
6	9.43	9.56	9.72	8.82	8.02	....	6.86	6.73	7.24	7.65	7.94	8.33
7	9.40	9.57	9.56	8.74	8.00	....	6.85	6.84	7.35	7.61	7.95	8.33
8	9.40	9.57	9.41	8.73	8.10	....	6.86	6.74	7.26	7.60	7.96	8.38
9	9.39	9.74	9.26	8.72	7.93	....	6.88	6.98	7.24	7.60	7.98	8.38
10	9.41	9.61	9.31	8.90	8.11	....	7.12	6.98	7.25	7.65	7.99	8.38
11	9.42	9.62	9.24	8.73	7.87	....	6.96	6.81	7.27	7.67	....	8.39
12	9.42	9.61	9.23	8.68	7.89	7.93	7.15	6.92	7.28	7.66	....	8.40
13	9.63	9.61	9.23	8.65	7.81	7.69	6.97	6.97	7.30	7.65	....	8.41
14	9.48	9.73	9.23	8.67	7.78	7.60	7.00	7.10	7.31	7.65	....	8.42
15	9.43	9.66	9.36	8.62	7.98	7.46	6.89	7.14	7.32	7.66	8.10	8.44
16	9.43	9.63	9.33	8.58	7.78	7.58	7.00	7.18	....	7.75	8.07	8.44
17	9.44	9.72	9.38	8.71	7.87	7.43	6.84	7.16	....	7.72	8.07	8.46
18	9.49	9.66	9.37	8.56	7.76	7.59	7.00	7.18	....	7.71	8.07	8.46
19	9.47	9.64	9.36	8.54	7.73	7.42	....	7.27	7.40	7.72	8.07	8.47
20	9.52	9.64	9.37	8.53	7.71	7.64	....	7.05	7.50	7.72	8.18	8.48
21	9.48	9.73	9.38	8.61	7.70	7.47	6.75	7.24	7.40	7.73	8.16	8.54
22	9.47	9.68	9.39	8.52	7.86	7.55	6.68	7.29	7.38	7.75	....	8.54
23	9.52	....	9.43	8.50	7.72	....	6.89	7.33	7.39	7.76	....	8.54
24	9.50	9.75	9.35	8.72	7.83	7.20	6.89	7.40	7.40	7.77	8.19	8.54
25	9.49	9.70	9.24	8.49	7.74	....	6.82	7.44	7.50	7.78	8.19	8.54
26	9.50	9.72	9.16	8.39	....	....	6.73	7.44	7.47	7.79	8.18	....
27	9.66	9.70	9.08	8.33	....	....	6.94	7.24	7.45	7.80	....	8.56
28	9.56	9.77	9.02	8.53	7.63	6.79	6.95	7.46	7.47	7.82	....	8.56
29	9.53	....	8.90	8.26	7.76	6.79	6.98	7.22	7.47	7.83	....	8.57
30	9.55	....	8.85	8.20	7.64	6.92	6.80	7.08	7.49	7.86	....	8.58
31	9.54	....	8.84	....	7.84	....	6.86	7.31	....	7.86	....	8.59

Ju 9. W. Surriet. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 17, T. 16 N., R. 3 E. Records available: 1949-50. July 21, 12.47. Measurement discontinued.

### Kenosha County

Ke 1. Standard Products Laboratories. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 10, T. 1 N., R. 21 E. Measurement discontinued after Nov. 14, 1950. Records available: 1946-50. Feb. 6, 59.56; May 10, 54.21; Sept. 12, 76.56; Nov. 14, 78.46.

Ke 3. Stanley Ruzicki and William Schutzen. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 8, T. 1 N., R. 21 E. Records available: 1946-50. Feb. 6, 107.43; May 10, 105.11; July 24, 106.70; Sept. 12, 112.41; Nov. 14, 109.65.

Ke 4. Sunset Ridge Memorial Park. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 27, T. 2 N., R. 22 E. Records available: 1946-50. Feb. 6, 78.42; Apr. 3, 77.78; May 10, 77.07; July 24, 77.03; Sept. 12, 76.93; Nov. 14, 77.04.

Ke 5. J. Bishop.  $SE\frac{1}{4}SE\frac{1}{4}$  sec. 20, T. 2 N., R. 22 E. Records available: 1946-50. Feb. 6, 3.40; Apr. 3, 1.96; May 10, 2.75; July 24, 2.40; Sept. 12, 4.30; Nov. 14, 4.59.

Ke 6. Kenosha County.  $NW\frac{1}{4}NW\frac{1}{4}$  sec. 11, T. 2 N., R. 22 E. Records available: 1946-50. Feb. 6, 36.04; May 10, 35.59; July 24, 35.40; Sept. 12, 36.00; Nov. 14, 36.59.

#### Lafayette County

Lf 1. Erickson.  $NW\frac{1}{4}SW\frac{1}{4}$  sec. 25, T. 3 N., R. 5 E. Records available: 1946-50. Feb. 28, 22.55; Apr. 3, 21.80; May 30, 20.56; July 19, 19.81; Oct. 3, 21.69; Dec. 13, 22.57.

Lf 10. Wallace Wedig.  $NE\frac{1}{4}NE\frac{1}{4}$  sec. 9, T. 2 N., R. 1 E. Records available: 1947-50. Feb. 28, 24.73; Apr. 3, 24.80; May 30, 23.56; July 19, 22.47; Oct. 3, 24.76; Dec. 13, 25.69.

Lf 11. Ed Wiegel.  $SE\frac{1}{4}SE\frac{1}{4}$  sec. 4, T. 2 N., R. 1 E. Records available: 1947-50. Feb. 28, 32.38; Apr. 3, 32.72; May 30, 32.60; July 19, 31.94; Oct. 3, 32.88; Dec. 13, 33.49.

Lf 12. Pearl Ogelthre and others.  $SE\frac{1}{4}SW\frac{1}{4}$  sec. 33, T. 2 N., R. 4 E. Records available: 1947-50. Feb. 28, 36.72; Apr. 3, 29.94; May 30, 29.67; July 19, 27.09; Oct. 3, 36.00; Dec. 13, 37.79.

#### Langlade County

La 2.  $SW\frac{1}{4}NE\frac{1}{4}$  sec. 25, T. 31 N., R. 11 E. Records available: 1948-50. Feb. 24, 127.15; Mar. 21, 124.55; May 17, 126.61; July 22, 125.90; Oct. 12, 126.10; Nov. 30, 126.01.

La 3. James Veelak.  $SW\frac{1}{4}NW\frac{1}{4}$  sec. 4, T. 31 N., R. 12 E. No measurement made in 1950. Records available: 1948-49.

La 9. Harvey Guenther.  $SW\frac{1}{4}NE\frac{1}{4}$  sec. 35, T. 31 N., R. 10 E. Records available: 1948-50. Mar. 22, 15.22; May 16, 13.58; July 22, 14.06; Oct. 11, 14.51; Nov. 30, 14.81.

La 22. Gus Wierschke.  $SW\frac{1}{4}NE\frac{1}{4}$  sec. 13, T. 31 N., R. 11 E. Measurement discontinued after May 17, 1950. Records available: 1948-50. May 17, 10.51.

La 23. Felix Zelowski.  $NE\frac{1}{4}NE\frac{1}{4}$  sec. 4, T. 30 N., R. 11 E. Measurement discontinued after May 16, 1950. Records available: 1948-50. May 16, 8.46.

La 26. U. S. Geol. Survey.  $SE\frac{1}{4}NE\frac{1}{4}$  sec. 7, T. 31 N., R. 11 E. Records available: 1944-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	10.12	Apr. 8	8.01	July 10	7.25	Oct. 8	8.69
8	9.69	15	6.84	16	7.26	17	8.83
15	9.79	22	6.33	23	7.32	22	9.01
23	9.79	29	6.33	30	7.41	29	9.04
28	10.03	May 7	6.22	Aug. 6	7.58	Nov. 5	9.06
Feb. 4	10.19	14	6.01	13	7.69	12	9.22
12	10.26	21	6.13	20	7.85	19	9.31
18	10.33	29	6.34	27	8.01	27	9.42
25	10.38	June 4	6.39	Sept. 3	8.09	Dec. 3	9.49
Mar. 4	10.41	11	6.59	17	8.44	17	9.69
19	10.37	25	6.79	24	8.48	23	9.69
25	10.33	July 2	7.04	Oct. 1	8.59	31	9.83
Apr. 1	8.18	9	7.17				

La 30. Felix Zelowski.  $NW\frac{1}{4}NW\frac{1}{4}$  sec. 1, T. 31 N., R. 11 E. Measurement discontinued after July 22, 1950. Records available: 1948-50. Mar. 21, 25.83; May 17, 23.40; July 22, 23.72.

La 44. J. Jacobus.  $NE\frac{1}{4}NW\frac{1}{4}$  sec. 32, T. 32 N., R. 11 E. Records available: 1948-50. Mar. 22, 24.07; May 16, 23.64; July 22, 23.15; Oct. 12, 22.99.

La 45. Star Neva School.  $NW\frac{1}{4}SW\frac{1}{4}$  sec. 22, T. 32 N., R. 11 E. Measurement discontinued after July 11, 1950. Records available: 1948-50. May 16, 34.06; July 11, 34.44.

La 64. Wisconsin Conservation Department.  $NW\frac{1}{4}SE\frac{1}{4}$  sec. 20, T. 31 N., R. 11 E. Records available: 1948-50.

Jan. 2	16.19	Feb. 6	16.25	Mar. 13	16.20	Apr. 17	14.32
9	16.03	13	16.28	20	16.33	24	14.91
13	16.08	20	16.30	27	16.08	May 1	14.08
23	16.14	27	16.36	Apr. 3	15.17	8	13.97
30	16.19	Mar. 6	16.39	10	14.85	15	13.62



La 64--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 22	13.78	July 24	14.47	Sept. 17	15.26	Nov. 13	15.77
29	13.80	31	14.54	25	15.34	20	15.82
June 5	13.80	Aug. 7	14.63	Oct. 2	15.41	27	15.87
12	14.08	14	14.72	9	15.45	Dec. 4	15.92
19	14.18	21	14.84	16	15.48	11	15.98
26	14.25	28	14.93	23	15.59	18	16.04
July 3	14.32	Sept. 4	15.03	30	15.65	25	16.09
10	14.47	11	15.15	Nov. 6	15.74	31	16.14
17	14.50						

La 68. J. Schafel.  $NE\frac{1}{4}SE\frac{1}{4}$  sec. 12, T. 31 N., R. 11 E. Measurement discontinued after May 16, 1950. Records available: 1948-50. May 16, 3.35.

La 71. Fred Anstutz.  $SW\frac{1}{4}NW\frac{1}{4}$  sec. 6, T. 31 N., R. 10 E. Records available: 1948-50. Feb. 24, 13.28; Mar. 22, 13.42; May 16, 11.08; July 22, 11.45; Oct. 11, 12.35; Nov. 30, 12.82.

La 74. C. Pickner.  $NW\frac{1}{4}NW\frac{1}{4}$  sec. 34, T. 32 N., R. 11 E. Measurement discontinued after May 16, 1950. Records available: 1948-50. May 16, 24.55.

La 78. Owner unknown.  $NE\frac{1}{4}NW\frac{1}{4}$  sec. 1, T. 33 N., R. 10 E. Measurement discontinued after May 16, 1950. Records available: 1949-50. May 16, 77.90.

La 86. A. F. Hoeft.  $NW\frac{1}{4}SE\frac{1}{4}$  sec. 16, T. 32 N., R. 10 E. Records available: 1948-50. Feb. 24, 9.78; Mar. 22, 10.77; May 16, 7.83; July 22, 8.65; Oct. 11, 12.20; Nov. 30, 9.59.

La 87. Felix Zelowski.  $SE\frac{1}{4}SW\frac{1}{4}$  sec. 10, T. 32 N., R. 10 E. Measurement discontinued after May 16, 1950. Records available: 1948-50. May 16, 5.49.

La 88. John Lucht.  $SW\frac{1}{4}NW\frac{1}{4}$  sec. 27, T. 31 N., R. 11 E. Measurement discontinued after May 17, 1950. Records available: 1948-50. May 17, 31.12.

La 90. Arnold Schmiede.  $SE\frac{1}{4}SE\frac{1}{4}$  sec. 24, T. 32 N., R. 11 E. Measurement discontinued. Records available: 1948-50.

La 100. Kretz.  $NW\frac{1}{4}NE\frac{1}{4}$  sec. 18, T. 30 N., R. 11 E. Measurement discontinued. Records available: 1948-49.

La 107. Carlsen.  $SW\frac{1}{4}NW\frac{1}{4}$  sec. 26, T. 32 N., R. 12 E. Records available: 1948-50. Feb. 24, 115.04; Mar. 21, 117.30; May 17, 117.43; July 22, 117.07; Oct. 12, 117.68; Nov. 30, 117.10.

La 108. Frank Psenika, Jr.  $NW\frac{1}{4}NE\frac{1}{4}$  sec. 7, T. 32 N., R. 11 E. Measurement discontinued after May 16, 1950. Records available: 1948-50. May 16, 47.37.

La 110. Dolezel.  $SE\frac{1}{4}SE\frac{1}{4}$  sec. 26, T. 32 N., R. 10 E. Measurement discontinued after May 16, 1950. Records available: 1948-50. May 16, 9.05.

La 111. Pilecy.  $NE\frac{1}{4}SE\frac{1}{4}$  sec. 4, T. 31 N., R. 10 E. Measurement discontinued after May 16, 1950. Records available: 1948-50. May 16, 5.63.

La 118. Wisconsin Public Service Corp.  $NE\frac{1}{4}NW\frac{1}{4}$  sec. 20, T. 31 N., R. 11 E. Records available: 1942-50.

Jan. 4	13.34	Mar. 28	13.36	June 19	10.96	Aug. 30	12.1
9	13.3	Apr. 3	12.79	July 5	11.13	Sept. 6	12.2
17	13.37	11	12.31	10	11.20	12	12.26
23	13.44	19	11.28	12	11.2	20	12.36
31	13.5	24	11.07	19	11.27	Oct. 9	12.61
Feb. 7	13.5	May 1	10.95	24	11.3	16	12.69
20	13.6	15	10.66	Aug. 2	11.45	25	12.8
27	13.65	22	10.64	7	11.5	31	12.84
Mar. 6	13.7	29	10.72	14	11.63	Nov. 13	12.99
13	13.6	June 5	10.75	22	11.88	Dec. 6	13.2
20	13.61	12	10.86				

La 200. Antigo Water Department.  $NE\frac{1}{4}NW\frac{1}{4}$  sec. 29, T. 31 N., R. 11 E. Records available: 1948-50.

La 200--Continued.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.30	....	6.66	4.46	4.74	4.96	5.35	5.83	5.90	5.74	5.89	6.07
2	6.30	....	6.67	4.45	4.74	5.02	5.33	5.84	6.01	5.76	5.88	6.07
3	6.06	6.57	6.67	4.60	4.86	5.02	5.33	5.82	6.01	5.77	5.91	6.02
4	6.07	6.63	6.65	4.58	4.86	5.00	5.32	5.69	5.93	5.82	5.91	6.02
5	6.16	6.61	6.67	4.60	4.79	4.99	5.32	6.06	5.92	5.82	5.83	6.08
6	6.17	6.58	6.59	4.60	4.76	5.13	5.42	6.12	5.97	5.82	5.83	6.08
7	6.26	6.57	6.60	4.61	4.83	5.14	5.42	6.06	5.97	5.82	5.90	6.02
8	6.27	6.64	6.29	4.78	4.80	5.27	5.53	6.07	5.99	5.72	5.90	6.02
9	6.27	6.62	6.30	4.91	4.78	5.27	5.53	6.16	5.99	5.71	5.98	6.04
10	6.27	6.62	6.39	4.91	4.78	5.19	5.59	6.18	5.97	5.77	5.98	6.04
11	6.33	6.62	6.40	4.51	4.88	5.18	5.59	6.08	5.96	5.77	6.00	6.04
12	6.34	6.58	6.39	4.40	4.87	5.15	5.56	6.08	5.94	5.81	6.00	6.04
13	6.35	6.58	6.39	4.38	4.87	5.14	5.56	5.97	5.94	5.81	5.97	6.06
14	6.35	6.61	6.46	4.35	4.84	5.23	5.66	5.95	5.95	5.85	5.97	6.06
15	6.31	6.61	6.47	4.32	4.89	5.23	5.67	6.01	5.96	5.85	5.97	6.09
16	6.32	6.64	6.48	4.25	4.87	5.33	5.70	6.01	5.99	5.77	5.97	6.09
17	6.37	6.64	6.48	4.06	4.91	5.32	5.70	6.07	6.00	5.74	5.94	....
18	6.39	6.63	6.54	4.01	4.88	5.27	5.65	6.07	5.84	5.83	5.94	....
19	6.46	6.65	6.55	4.14	5.00	5.22	5.66	6.13	5.74	5.83	5.87	....
20	6.46	6.83	....	4.14	4.99	5.29	5.45	6.13	5.82	5.88	5.86	....
21	6.48	6.64	....	4.31	5.03	5.29	5.46	6.07	5.83	5.88	5.94	6.16
22	6.48	6.65	....	4.30	5.03	5.19	5.59	6.07	5.85	5.82	5.94	6.16
23	6.47	6.67	....	4.33	5.07	5.05	5.60	6.13	5.85	5.81	....	6.28
24	6.47	6.64	6.43	4.32	5.07	5.18	5.48	6.13	5.88	5.88	....	6.29
25	6.50	6.64	6.45	4.33	5.04	5.10	5.48	6.13	5.88	5.88	....	6.20
26	6.51	6.65	6.18	4.31	5.03	5.27	5.57	6.12	5.89	5.88	....	6.20
27	6.51	6.65	5.87	4.47	5.14	5.27	5.57	6.00	5.89	5.87	....	....
28	6.50	6.64	5.37	4.47	5.12	5.35	5.73	5.95	5.89	5.88	....	....
29	6.53	....	4.72	4.70	5.15	5.35	5.73	5.83	5.89	5.88	5.92	6.29
30	....	....	4.56	4.69	5.15	5.35	5.75	5.83	5.74	5.86	5.98	6.29
31	....	....	4.34	....	4.98	....	5.75	5.90	....	5.86	....	6.26

La 270. U. S. Geol. Survey. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 23, T. 31 N., R. 10 E. Records available: 1949-50. May 16, 3.54.

Lincoln County

Ln 25. U. S. Geol. Survey. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 36, T. 34 N., R. 6 E. Records available: 1944-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	5.55	Apr. 30	4.53	July 24	5.17	Oct. 16	6.18
15	5.67	May 8	4.35	31	5.60	23	6.06
21	5.74	15	4.51	Aug. 7	5.95	30	6.19
28	5.68	22	4.74	14	6.09	Nov. 6	6.06
Feb. 12	5.84	29	4.90	21	6.20	12	6.14
20	5.83	June 4	4.91	28	5.91	19	5.83
Mar. 6	5.83	12	5.22	Sept. 4	6.39	27	6.01
12	5.51	19	5.47	11	6.56	Dec. 3	6.06
19	5.70	26	5.36	18	5.88	10	6.07
Apr. 2	4.97	July 4	5.34	25	6.35	17	6.14
7	4.87	10	5.72	Oct. 2	6.39	26	6.19
16	4.44	17	5.33	9	6.01	31	6.21

Marathon County

Mr 1. George Chrudimsky. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 25, T. 30 N., R. 10 E. Records available: 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	37.89	Mar. 18	38.22	May 20	36.62	July 22	36.27
14	37.95	25	38.27	27	36.52	29	36.28
21	37.69	Apr. 1	37.97	June 3	36.45	Aug. 5	36.32
28	37.82	8	37.96	10	36.46	12	36.31
Feb. 4	38.02	15	38.12	17	36.44	19	36.32
11	38.12	22	37.07	24	36.20	26	36.17
25	38.12	29	36.96	July 1	36.27	Sept. 2	36.27
Mar. 4	38.14	May 6	36.85	8	36.32	9	36.42
11	37.17	13	36.74	15	36.31	16	36.46

Mr 1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 23	36.52	Oct. 21	36.55	Nov. 18	36.81	Dec. 16	37.07
30	36.54	28	36.69	25	36.92	23	37.12
Oct. 7	36.59	Nov. 4	36.77	Dec. 2	36.97	30	37.17
14	36.62	11	36.80	9	36.99		

Mr 3. George Hunt. NW $\frac{1}{4}$  sec. 26, T. 30 N., R. 10 E. Records available: 1948-50.  
May 16, 3.40. Measurement discontinued.

Mr 7. City of Marshfield. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 33, T. 26 N., R. 3 E. Drilled unused test well, diameter 7 inches, depth 49 feet. Records available: 1950.

Daily lowest water level, from recorder graph

Day	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	17.03	19.93	20.09	20.49	21.50	21.04	20.61
2	17.03	20.04	20.04	20.54	21.50	21.03	20.60
3	17.02	20.18	20.01	20.60	21.58	21.01	20.60
4	17.00	20.27	19.98	20.66	21.59	.....	20.60
5	17.00	20.38	19.95	20.70	21.60	.....	20.57
6	17.01	20.48	19.93	20.75	21.60	.....	20.55
7	17.01	.....	19.89	20.79	21.60	20.93	20.55
8	17.02	.....	19.86	20.84	21.61	20.90	20.54
9	17.04	20.65	19.84	20.86	21.60	20.89	20.54
10	17.03	20.61	19.80	20.90	21.65	20.88	.....
11	17.02	20.58	19.78	20.93	21.66	20.86	.....
12	17.05	20.57	19.76	20.98	21.67	20.84	20.52
13	17.29	20.65	19.73	21.01	21.67	20.83	20.51
14	17.56	20.66	19.70	21.05	21.67	20.82	20.51
15	17.76	20.70	19.71	21.09	.....	20.80	20.51
16	17.97	20.67	19.66	21.12	.....	20.80	20.50
17	18.14	20.68	19.64	21.15	21.62	20.78	20.50
18	18.32	20.68	19.63	21.19	21.53	20.76	.....
19	18.48	20.64	19.60	21.22	21.48	20.76	20.48
20	18.62	20.53	19.59	21.25	21.43	20.75	20.48
21	18.77	20.61	19.56	21.29	21.38	20.73	20.47
22	18.92	20.65	19.56	21.32	21.36	20.73	20.48
23	18.97	20.63	19.70	21.37	21.32	20.71	20.46
24	19.07	20.58	19.82	21.40	21.28	20.70	20.46
25	19.25	20.48	19.93	21.43	21.25	.....	20.45
26	19.35	20.41	20.01	21.47	21.21	.....	.....
27	19.46	20.34	20.10	.....	.....	.....	.....
28	19.58	20.28	20.19	21.51	.....	20.63	.....
29	19.70	20.22	20.28	21.50	21.12	20.62	.....
30	19.82	20.17	20.34	21.51	21.10	20.62	.....
31		20.13	20.42		21.07		.....

Mr 27. Conrad Kreamsreiter. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 24, T. 29 N., R. 3 E. Records available: 1944-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	8.55	Apr. 24	8.61	July 20	7.05	Oct. 13	8.02
16	8.59	30	8.42	24	6.47	19	8.07
26	8.45	May 8	8.02	Aug. 2	6.48	24	8.92
30	8.46	17	7.46	7	6.53	30	8.03
Feb. 9	8.71	21	7.37	23	6.76	Nov. 7	8.29
21	8.74	29	6.94	29	7.08	14	8.31
Mar. 14	8.79	June 8	6.43	Sept. 4	7.45	24	8.53
23	8.89	19	6.49	13	7.49	Dec. 4	8.63
29	9.95	25	6.78	18	7.50	14	8.69
Apr. 5	9.98	July 5	6.77	25	7.69	20	8.80
13	8.83	12	6.87	Oct. 4	7.88	28	8.94
18	8.66						

Mr 28. U. S. Geol. Survey. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 31, T. 27 N., R. 9 E. Records available: 1944-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	23.55	Feb. 6	23.69	Mar. 13	23.89	Apr. 17	23.70
9	23.58	13	23.67	20	23.90	24	23.50
16	23.61	20	23.63	27	23.92	May 1	23.55
23	23.63	27	23.59	Apr. 3	23.95	8	23.56
30	23.64	Mar. 6	23.85	10	23.87	15	23.58

Mr 28--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 29	23.63	Aug. 7	23.82	Oct. 2	24.06	Nov. 13	24.20
June 8	23.63	21	23.92	9	24.09	27	24.32
12	23.62	28	23.95	16	24.17	Dec. 4	24.36
July 3	23.70	Sept. 4	23.96	23	24.17	11	24.40
10	23.74	11	24.00	30	24.23	18	24.44
17	23.76	18	24.01	Nov. 6	24.26	26	24.49
24	23.78	25	24.02				

## Marinette County

Mt 1. R. S. Skidmore. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 6, T. 30 N., R. 24 E.

Records available: 1946-50. Feb. 8, 9.67; July 27, 24.45; Sept. 21, 21.25; Nov. 21, 14.98.

Mt 5. City of Peshtigo. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 19, T. 30 N., R. 23 E. Records available:

1947-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	23.50	24.92	24.83	22.97	17.24	24.46	25.03	24.45	25.72	26.08	25.35	26.36
2	24.53	24.87	24.77	23.51	17.57	24.32	24.87	24.53	25.98	24.90	25.61	26.67
3	23.30	24.87	24.71	22.89	18.10	24.54	22.20	24.96	26.00	25.45	25.86	26.29
4	.....	24.79	25.25	22.97	17.75	24.53	23.27	25.27	23.85	25.34	25.68	26.49
5	.....	25.08	25.12	23.54	.....	24.30	.....	25.47	.....	25.41	25.85	26.35
6	.....	24.84	23.92	23.29	18.40	24.59	23.11	25.27	24.70	25.43	26.35	26.38
7	.....	24.88	24.11	23.22	17.82	25.17	23.88	25.00	25.10	25.74	26.17	25.91
8	.....	25.02	24.28	23.69	17.82	25.70	24.73	24.81	25.54	25.76	25.75	25.71
9	.....	24.71	24.00	23.16	17.95	25.17	24.70	24.75	25.95	25.34	25.68	26.02
10	.....	24.83	23.94	.....	18.06	25.44	25.14	24.91	26.12	25.42	25.72	26.14
11	.....	25.29	24.11	.....	18.06	25.27	25.37	.....	26.14	25.45	25.97	25.20
12	.....	25.05	23.94	.....	17.64	25.60	25.27	25.08	25.77	25.47	25.74	25.59
13	.....	23.96	24.12	.....	.....	25.68	24.80	25.42	25.69	25.43	25.72	25.77
14	.....	24.25	24.24	22.71	.....	25.68	25.18	24.53	25.58	25.60	25.87	25.71
15	.....	24.60	24.57	22.85	19.45	25.65	26.00	25.33	25.41	25.77	26.07	25.90
16	23.80	24.57	24.25	23.01	19.86	25.73	25.55	25.22	26.00	25.46	25.68	26.25
17	24.19	24.49	24.50	22.81	20.23	25.70	24.44	25.19	26.47	25.98	25.98	26.30
18	24.63	24.94	24.82	22.80	20.24	25.70	24.74	25.28	24.68	26.34	25.59	26.29
19	24.50	24.92	25.20	22.71	20.00	24.50	24.57	25.48	25.15	26.15	25.72	26.07
20	24.44	23.98	24.25	22.34	20.07	25.00	24.60	25.58	25.58	26.00	25.89	25.90
21	24.32	24.70	24.24	22.29	20.25	25.38	24.74	.....	25.46	26.27	26.24	25.87
22	24.53	25.13	24.47	22.60	20.27	25.60	24.88	.....	25.50	26.22	26.33	25.81
23	24.45	24.94	24.08	22.54	.....	25.65	24.56	.....	24.78	26.19	26.60	26.04
24	24.50	24.95	24.04	21.80	.....	.....	24.08	.....	25.85	26.04	26.71	25.67
25	24.85	25.07	24.22	21.66	.....	.....	24.50	.....	24.85	25.92	26.58	25.52
26	24.86	24.70	23.80	19.65	.....	24.09	24.75	.....	25.26	25.85	26.68	25.90
27	25.12	24.90	23.51	18.78	.....	.....	25.03	25.00	25.35	25.69	25.87	.....
28	25.32	24.87	23.10	.....	.....	25.12	25.47	.....	25.42	25.70	26.06	.....
29	25.15	.....	23.40	.....	.....	25.16	25.95	.....	25.73	25.89	26.10	.....
30	24.13	.....	23.03	.....	.....	24.83	25.75	.....	25.70	25.03	26.12	.....
31	24.70	.....	22.88	.....	.....	.....	23.78	.....	.....	25.17	.....	.....

## Marquette County

Mq 2. G. Thompson. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 8, T. 15 N., R. 10 E. Measurement discontinued after May 19, 1950. Records available: 1949-50. Jan. 11, 5.80; Feb. 23, 5.41; Mar. 23, 5.04; May 19, 4.80.

Mq 5. L. Wilson. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 21, T. 14 N., R. 10 E. Records available: 1949-50. Jan. 11, 44.73; Feb. 23, 44.88; Mar. 23, 44.26; May 19, 43.05; Aug. 15, 43.55; Oct. 11, 44.04; Nov. 29, 44.59.

Mq 7. J. Croarken. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 33, T. 16 N., R. 10 E. Drilled unused domestic well, diameter 6 inches. Records available: 1949-50. Oct. 12, 1949; 32.96; Jan. 11, 1950, 33.61; Feb. 23, 34.20; Mar. 23, 34.63; May 19, 33.53; Aug. 15, 32.77; Oct. 11, 32.71.

Mq 9. Village of Westfield. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 12, T. 16 N., R. 8 E. Records available: 1949-50. Jan. 10, 17.05; Feb. 23, 17.18; Mar. 23, 17.20; May 19, 16.87; Aug. 15, 16.57; Oct. 11, 16.78; Nov. 29, 16.98.

Mq 11. U. S. Geol. Survey. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 17, T. 15 N., R. 9 E. Driven observation well, diameter  $1\frac{1}{4}$  inches, depth 12 feet. Records available: 1950. Oct. 17, 2.28; Dec. 1, 2.16.

Milwaukee County

M1 7. Milwaukee County. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 13, T. 8 N., R. 21 E. In Brown Deer Park. Records available: 1946-50. Jan. 31, 55.08; Apr. 4, 53.46; May 11, 48.89; Sept. 13, 66.27.

M1 8. Milwaukee County. In McGovern Park in NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 35, T. 8 N., R. 21 E. Records available: 1946-50. Mar. 7, 140.63; Apr. 4, 139.43; May 11, 137.05; Sept. 13, 149.71.

M1 36. A. O. Smith Corp. 3533 North 27th St., Milwaukee. Records available: 1946-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	169.84	166.56	165.08	161.49	159.66	161.65	170.85	177.73	180.54	179.70	179.60	176.58
2	169.34	166.68	.....	161.49	159.54	161.73	170.89	178.16	180.55	179.52	180.00	176.19
3	168.66	166.73	.....	161.13	159.33	162.00	170.85	178.41	180.42	179.53	180.17	176.04
4	168.91	166.84	.....	161.02	159.29	162.05	170.91	178.69	180.33	179.53	180.19	176.03
5	168.94	166.81	164.86	161.26	159.10	162.07	171.03	178.86	180.18	179.55	180.10	176.09
6	168.90	166.36	164.86	161.27	159.35	162.40	171.27	178.97	179.98	179.51	180.00	176.07
7	169.18	166.59	164.40	161.05	159.63	162.74	171.59	178.90	179.85	179.36	180.00	175.70
8	169.18	166.49	164.42	161.09	159.57	163.15	171.92	178.88	179.75	179.40	179.87	175.69
9	168.47	166.44	164.66	160.99	159.12	163.61	172.26	179.05	179.71	179.31	179.90	175.68
10	168.38	166.40	164.66	160.56	159.27	164.36	172.66	179.44	179.61	179.14	179.93	175.60
11	168.54	166.69	164.36	160.29	159.33	164.88	173.04	179.82	179.58	179.07	179.93	175.44
12	168.21	166.66	164.34	160.35	159.21	165.29	173.54	180.07	179.69	179.34	179.84	175.14
13	167.86	166.52	164.09	160.36	159.16	165.98	174.39	180.18	179.89	179.37	179.53	175.06
14	167.72	.....	163.89	160.42	159.09	166.67	174.98	180.07	179.99	179.21	179.22	175.09
15	167.52	.....	163.69	160.40	159.13	167.04	175.50	180.07	180.08	179.48	178.82	175.20
16	167.29	.....	163.62	160.26	159.30	167.70	175.93	180.28	180.30	179.38	178.76	175.25
17	166.26	.....	163.27	159.90	159.37	168.01	176.50	180.66	180.36	179.21	178.86	175.24
18	166.93	166.18	163.41	159.73	159.59	167.99	176.94	180.71	180.22	179.18	178.61	175.17
19	167.10	165.65	163.41	.....	159.67	167.96	177.14	180.85	180.10	179.22	178.20	174.97
20	167.12	166.18	163.04	159.94	159.89	168.08	177.57	180.93	180.08	179.35	178.25	175.10
21	166.83	165.69	162.69	160.01	159.85	168.30	177.73	180.74	180.00	179.24	178.19	175.06
22	166.54	165.48	162.39	159.98	159.93	168.38	177.82	180.65	179.97	179.23	177.95	174.92
23	166.41	165.38	162.44	159.89	160.16	168.69	177.78	180.67	180.18	179.26	177.88	174.85
24	166.19	165.65	162.32	159.68	160.45	169.15	177.63	180.78	180.22	179.21	177.87	174.73
25	166.22	165.65	162.41	159.46	160.83	169.37	177.67	180.89	179.99	179.38	177.78	174.73
26	166.84	165.63	162.24	159.65	161.21	169.57	177.63	180.89	179.86	179.39	177.12	174.51
27	166.84	165.48	161.49	159.81	161.33	169.95	177.64	180.79	179.80	179.33	176.88	174.51
28	166.61	164.86	161.65	159.93	161.38	170.12	177.60	180.66	179.76	179.42	176.87	174.10
29	166.71	.....	161.98	159.97	161.39	170.38	177.56	180.54	179.76	179.45	176.76	173.89
30	166.71	.....	161.96	159.81	161.28	170.68	177.48	180.48	179.72	179.40	176.54	173.89
31	166.56	.....	161.85	.....	161.41	.....	177.49	180.45	.....	179.29	.....	173.76

M1 45. Milwaukee Journal. 333 West State St., Milwaukee. Records available: 1946-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	94.83	87.77	.....	63.40	49.69	.....	61.54	60.15	60.75	59.22	58.12	51.15
2	94.29	88.85	.....	63.50	49.51	.....	60.08	60.33	60.33	60.20	55.90	51.48
3	93.90	88.98	.....	63.83	54.60	.....	.....	60.65	58.70	60.51	53.35	51.48
4	94.16	88.90	.....	63.60	53.39	57.50	58.00	60.80	55.20	58.49	52.35	51.97
5	94.20	87.99	.....	61.99	55.76	.....	.....	60.37	59.05	59.18	51.72	52.30
6	93.67	87.93	.....	61.87	55.69	.....	.....	59.85	60.37	58.92	53.51	52.24
7	93.50	87.62	74.69	61.70	54.00	.....	.....	59.02	61.55	59.70	54.68	52.06
8	93.41	87.48	70.11	62.26	53.77	.....	.....	59.73	61.75	58.45	52.97	51.93
9	90.36	87.34	70.10	62.22	56.20	.....	.....	59.40	61.40	58.74	52.05	51.93
10	87.62	87.36	70.10	61.49	56.62	.....	.....	60.11	59.90	59.20	51.47	51.73
11	86.82	88.30	69.49	61.40	57.58	57.70	.....	59.87	60.73	59.69	51.33	51.54
12	86.97	88.19	69.31	.....	57.68	58.01	59.21	59.36	61.22	59.21	51.16	51.42
13	87.35	87.88	68.72	.....	57.49	58.48	60.26	57.66	61.22	58.78	50.84	51.43
14	87.70	86.14	68.31	.....	55.40	.....	60.40	58.23	61.67	58.34	50.79	51.44
15	87.99	85.80	67.70	.....	51.54	.....	60.22	58.85	61.57	56.89	53.98	51.51
16	88.78	85.14	67.28	.....	52.58	.....	59.00	59.13	61.00	58.61	52.00	51.57
17	88.78	84.16	66.86	.....	54.10	.....	59.77	60.03	59.20	59.47	50.93	51.66
18	88.32	83.36	66.57	.....	55.52	57.80	60.49	59.56	60.18	59.49	50.57	51.69
19	86.59	82.80	66.40	.....	56.54	57.83	60.70	59.38	61.67	60.76	50.12	51.57
20	85.62	82.75	65.99	52.01	56.70	.....	60.88	57.38	61.51	59.55	50.38	51.91

## M1 45--Continued.

Daily lowest water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	87.42	82.59	65.23	52.82	54.70	59.35	61.15	57.68	61.58	58.85	50.33	51.87
22	87.61	80.93	71.05	53.72	54.78	61.30	61.00	58.22	61.63	56.95	50.16	51.86
23	87.71	78.15	69.60	53.00	56.98	61.99	60.25	58.83	59.50	56.93	50.08	51.17
24	87.99	77.28	67.43	52.17	58.01	62.13	59.79	59.63	59.28	55.70	50.14	49.55
25	88.10	.....	66.00	51.50	.....	60.52	60.43	59.63	57.54	56.20	50.12	49.22
26	88.21	.....	65.32	52.83	.....	.....	60.70	59.07	57.70	58.00	49.60	48.72
27	87.74	.....	64.41	52.45	57.00	.....	61.20	57.30	58.00	58.51	49.49	48.72
28	87.30	.....	64.17	51.03	55.50	61.65	61.30	57.96	59.48	58.79	49.51	48.37
29	88.02	.....	64.52	51.01	56.34	.....	60.98	58.19	60.72	56.98	49.51	48.10
30	87.69	.....	64.41	50.27	54.60	.....	60.33	58.38	60.69	58.68	50.42	48.09
31	87.60	.....	64.15	.....	57.11	.....	59.79	60.12	.....	59.01	.....	47.82

M1 56. National Enameling & Stamping Co. North 10th St. & West St. Paul Avenue, Milwaukee. Records available: 1946-50. Feb. 1, 81.21; Apr. 4, 70.93; May 11, 79.49; July 25, 113.12; Sept. 13, 118.51; Nov. 15, 109.15.

M1 79. Forest Home Cemetery. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 7, T. 6 N., R. 22 E. Records available: 1946-50.

Daily lowest water level, from recorder graph												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	194.02	199.30	189.51	185.55	187.33	199.38	.....	219.73	209.79	210.24	214.36	210.80
2	192.56	199.51	190.20	184.28	195.19	193.00	206.60	219.63	209.80	217.22	214.80	210.78
3	191.65	199.27	190.03	185.04	195.02	191.62	199.75	219.82	208.32	211.55	214.72	210.86
4	193.00	198.20	189.61	185.75	189.12	189.78	198.57	213.25	206.50	211.22	218.73	209.74
5	194.13	196.73	187.57	186.50	188.18	189.81	197.98	211.26	214.28	211.34	213.62	210.31
6	195.02	195.87	187.87	186.76	187.99	190.63	206.30	215.11	208.55	211.52	219.35	210.67
7	195.20	196.61	187.83	186.68	187.63	200.08	205.80	216.13	207.60	211.64	214.20	210.67
8	194.21	196.28	188.18	186.57	195.07	194.00	206.00	217.30	214.19	210.62	213.77	210.56
9	193.35	196.26	189.00	184.85	188.51	201.90	199.83	217.76	208.53	215.52	214.18	210.60
10	195.05	195.74	189.01	184.70	187.57	195.18	208.83	218.27	206.48	210.99	214.33	210.25
11	196.13	195.41	188.18	185.62	187.52	193.62	211.42	211.98	205.75	211.11	214.39	208.98
12	196.58	193.38	186.85	185.91	187.48	201.70	213.40	210.00	206.18	211.80	214.05	209.38
13	196.74	192.98	186.78	186.14	187.46	195.50	215.35	209.65	.....	212.28	212.65	209.97
14	196.70	192.70	187.23	186.31	193.68	194.89	216.53	216.85	.....	212.62	212.70	210.14
15	196.26	192.72	187.80	186.22	187.45	194.92	210.30	218.50	.....	212.73	213.06	210.51
16	197.12	192.73	187.88	184.55	187.80	203.55	208.55	212.11	.....	211.08	213.40	210.62
17	197.30	192.63	187.57	184.46	188.05	197.71	207.00	219.08	.....	211.72	213.44	210.50
18	198.44	192.02	187.41	.....	188.31	196.32	216.05	220.34	.....	212.36	213.22	210.28
19	199.12	190.40	186.08	186.24	188.48	195.68	210.33	213.90	.....	221.23	212.23	210.75
20	199.50	190.17	185.90	186.65	188.50	204.01	210.30	210.50	208.28	215.20	210.13	211.15
21	198.40	190.13	.....	187.17	195.62	.....	210.89	217.32	208.70	214.17	211.40	211.11
22	197.00	190.43	.....	187.17	188.88	205.98	211.13	211.30	209.30	212.47	211.74	211.12
23	197.35	190.71	.....	185.50	189.23	.....	210.90	210.82	214.72	211.32	.....	211.00
24	197.28	191.10	.....	185.84	190.00	.....	218.10	218.00	209.70	212.17	.....	209.25
25	197.77	190.64	.....	186.41	191.00	.....	216.60	212.53	208.56	212.89	.....	207.91
26	.....	189.08	.....	192.29	191.60	203.50	212.77	211.18	214.43	213.26	.....	207.81
27	.....	188.93	.....	196.20	191.35	203.00	218.00	210.42	210.19	221.83	.....	208.42
28	.....	189.21	.....	189.93	198.84	.....	221.67	208.39	209.62	216.05	.....	208.95
29	196.99	.....	186.50	188.77	192.05	.....	215.50	216.03	209.83	215.03	210.00	209.53
30	197.98	.....	186.55	188.10	190.53	.....	217.79	210.56	210.24	213.05	210.47	209.63
31	198.68	.....	186.15	.....	190.16	.....	219.22	209.45	.....	213.42	.....	208.75

M1 88. Milwaukee Vinegar Works. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 25, T. 6 N., R. 22 E. Records available: 1946-50. Feb. 1, 125.48; Apr. 4, 130.52.

M1 91. U. S. Government. In Greendale in NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 34, T. 6 N., R. 21 E. Records available: 1946-50. Feb. 21, 228.53; Apr. 4, 226.10; May 11, 224.40; July 25, 230.19; Sept. 13, 233.22; Nov. 15, 224.70.

M1 94. Milwaukee County. In Whitnall Park. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 32, T. 6 N., R. 21 E. Records available: 1946-50. Jan. 31, 226.22; Apr. 4, 223.27; May 11, 222.42; July 25, 226.11; Sept. 15, 230.29.

M1 118. A. Schaefer. 5465 North 51st St., Milwaukee. Records available: 1946-50. Feb. 8, 31.61; Apr. 4, 29.49; May 11, 27.54; July 25, 30.72; Sept. 13, 30.25; Nov. 15, 29.80.

M1 120. Nunn Bush Shoe Co. North 5th and West Hadley Sts., Milwaukee. Records available: 1946-49. No measurement made in 1950.

M1 121. F. M. Nimphius. 311 Marion St., Milwaukee. Records available: 1946-50. Feb. 1, 60.53; Apr. 4, 60.01; May 11, 60.76; July 25, 60.70; Sept. 13, 60.85; Nov. 15, 61.19.

M1 124. Good Hope Cemetery. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 23, T. 6 N., R. 21 E. Records available: 1946-50. Feb. 8, 130.28; Apr. 4, 129.52; May 11, 135.91; Sept. 13, 139.14; Nov. 15, 143.38.

M1 125. Good Hope Cemetery. South 43d St. and West Cold Spring Road. Records available: 1946-50. Feb. 8, 123.78; Apr. 4, 123.58; May 11, 128.69; July 25, 138.32; Sept. 13, 131.85; Nov. 15, 135.20.

M1 130. Milwaukee County. In Greenfield Park in NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 6, T. 6 N., R. 21 E. Records available: 1946-50. Feb. 8, 62.26; Apr. 4, 62.07; May 11, 60.86; July 25, 60.94; Sept. 13, 61.95; Nov. 15, 62.48.

M1 132. White Manor Water Cooperative. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 13, T. 6 N., R. 21 E. Records available: 1946-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	213.03	215.61	209.42	207.12	208.01	211.31	219.65	229.06	228.52	228.65	231.54	229.31
2	212.60	215.88	209.54	207.12	208.01	211.31	.....	229.03	228.81	228.60	232.10	229.30
3	211.54	215.92	209.55	206.83	.....	211.38	.....	229.04	228.62	228.41	232.24	229.49
4	210.93	215.99	209.51	206.75	.....	211.37	.....	228.98	228.66	228.53	232.23	229.50
5	210.97	215.94	209.22	207.12	.....	211.18	.....	229.05	227.98	228.68	232.16	229.49
6	211.03	215.12	209.22	207.23	.....	211.78	218.21	229.01	227.27	228.68	231.84	229.47
7	211.77	214.70	208.67	207.11	.....	212.50	218.05	228.71	228.98	228.65	231.84	229.26
8	211.84	214.52	208.58	207.33	.....	213.27	218.54	228.43	226.92	228.71	231.65	229.34
9	211.34	214.20	208.79	207.29	.....	214.03	218.51	228.74	227.01	228.50	232.00	229.34
10	211.42	214.11	208.79	206.81	.....	215.07	219.16	228.77	227.00	228.06	232.20	229.27
11	211.78	213.96	208.65	206.44	208.06	215.17	219.95	228.88	226.92	227.90	232.33	229.10
12	211.90	213.92	208.63	206.51	208.03	215.63	220.86	228.93	226.56	228.40	232.35	228.69
13	212.11	213.46	208.46	206.64	208.12	215.48	222.00	228.89	226.36	228.67	232.05	228.63
14	213.15	212.71	208.23	206.75	208.09	215.67	223.17	228.30	226.47	229.04	231.65	228.68
15	213.25	212.18	208.27	206.78	208.05	215.82	224.48	227.85	226.75	229.20	231.16	228.97
16	213.45	211.96	208.27	206.76	208.17	216.21	224.76	227.85	227.23	229.19	231.33	229.17
17	213.45	211.79	208.16	206.48	208.31	216.70	224.89	227.98	227.38	228.78	231.45	229.34
18	213.75	211.49	208.34	206.24	208.52	216.70	225.37	228.19	227.35	228.97	231.34	229.33
19	214.26	211.42	208.35	.....	208.70	216.47	225.81	228.73	227.13	229.53	231.05	229.12
20	214.41	211.16	207.94	206.53	209.14	216.20	226.55	228.75	227.37	230.00	231.00	229.36
21	214.45	210.49	207.48	206.85	209.15	216.55	226.98	228.49	227.81	230.35	230.79	229.36
22	214.52	210.09	207.27	207.12	209.07	216.93	227.37	227.97	228.07	230.35	230.37	229.48
23	214.50	209.90	207.39	207.32	209.52	217.39	227.48	227.61	228.63	230.07	230.44	229.48
24	214.31	210.20	207.42	207.31	209.69	218.01	227.54	227.80	228.67	229.66	230.44	229.45
25	214.36	210.21	207.65	206.92	210.08	218.25	227.72	228.27	228.50	229.75	230.09	229.45
26	215.24	210.17	207.58	206.91	210.78	218.34	228.17	228.59	228.15	229.94	229.42	228.90
27	215.26	210.07	206.71	207.24	211.14	218.85	228.65	228.68	228.01	230.38	229.33	228.70
28	215.23	209.35	206.87	207.53	211.24	218.89	229.20	228.61	228.11	231.10	229.34	228.31
29	215.73	.....	207.31	207.80	211.25	219.18	229.81	228.18	228.26	231.45	229.26	228.66
30	215.74	.....	207.31	207.89	211.19	219.57	229.81	228.13	228.56	231.46	229.22	228.95
31	215.57	.....	207.24	.....	211.09	.....	229.32	228.26	.....	231.33	.....	229.11

M1 135. Leonard Budzein. 920 West Armour Ave., Town of Lake. Records available: 1946-50. Feb. 1, 11.24; Apr. 4, 8.13; May 11, 8.80; July 25, 6.95; Sept. 13, 9.22; Nov. 15, 9.53.

M1 146. Mr. Heuel. 9090 Lake Drive, Milwaukee. Records available: 1946-50. Feb. 8, 63.58; Apr. 4, 63.09; May 11, 62.83; July 25, 63.60; Sept. 13, 65.91; Nov. 15, 64.85.

M1 148. Milwaukee County. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 32, T. 6 N., R. 21 E. Records available: 1946-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	33.71	33.34	33.65	31.55	30.69	30.89	30.75	29.97	30.62	30.70	31.20	31.77
2	33.62	33.27	33.75	31.55	30.55	30.83	30.66	30.08	30.69	30.75	31.33	31.57
3	33.54	33.27	33.63	31.62	30.44	31.00	30.68	30.08	30.73	30.82	31.33	31.77
4	34.03	33.32	33.54	31.66	30.40	30.96	30.73	30.08	30.80	30.82	31.19	31.82
5	34.07	33.23	33.52	31.83	30.26	30.93	.....	30.15	30.90	30.72	31.09	31.97
6	33.88	33.20	33.54	31.82	30.68	30.97	30.72	30.10	30.77	30.65	31.42	31.87
7	34.04	33.31	33.16	31.57	30.88	31.05	30.69	30.08	30.72	30.68	31.43	31.57

Ml 148--Continued.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
8	34.02	33.23	33.18	31.68	30.80	31.02	30.74	30.14	30.70	30.82	31.22	31.90
9	33.54	33.22	33.25	31.61	30.36	30.94	30.82	30.09	30.74	30.88	31.47	31.87
10	35.03	33.17	33.09	31.33	30.62	31.25	30.95	30.14	30.72	30.77	31.50	31.89
11	34.28	33.46	32.68	31.52	30.65	31.29	30.85	30.28	30.77	30.73	31.52	31.84
12	33.90	33.42	32.74	31.54	30.46	31.26	30.79	30.26	30.77	30.92	31.50	31.74
13	33.73	33.28	32.65	31.47	30.45	31.08	30.90	30.26	30.99	31.01	31.50	31.80
14	34.06	33.11	32.61	31.41	30.35	30.97	30.95	30.30	30.90	31.02	31.41	31.81
15	33.88	33.32	32.77	31.33	30.63	30.84	30.99	30.30	30.89	31.00	31.24	31.98
16	34.07	33.45	32.73	31.21	30.71	30.84	30.87	30.31	30.97	30.95	31.54	32.00
17	33.98	33.49	32.66	31.15	30.72	30.92	30.88	30.43	31.09	30.97	31.63	32.03
18	33.83	33.49	32.85	31.06	30.72	30.78	31.06	30.43	30.95	30.88	31.35	32.03
19	33.96	33.55	32.85	.....	30.65	30.61	30.93	.....	31.00	30.92	31.41	31.89
20	33.96	33.59	32.61	31.09	30.69	30.53	30.78	30.45	30.94	31.02	31.75	.....
21	33.63	33.26	32.56	31.16	30.68	30.68	30.75	30.35	31.02	30.85	31.67	.....
22	33.59	33.33	32.39	31.13	30.80	30.61	30.50	30.44	30.87	31.00	31.56	.....
23	33.73	33.39	32.50	31.06	30.79	30.56	30.29	30.47	30.86	31.09	31.74	.....
24	33.59	33.72	32.32	31.09	30.72	30.69	30.22	30.55	30.88	31.04	31.75	.....
25	33.78	33.97	32.32	30.90	30.89	30.69	30.17	30.63	30.68	31.18	31.72	.....
26	34.10	33.76	32.29	30.97	30.70	30.05	30.56	30.70	31.12	31.44	.....	.....
27	33.99	33.61	31.52	30.96	30.91	30.80	29.99	30.52	30.71	31.02	31.73	.....
28	33.37	33.46	31.91	30.95	30.76	30.70	29.92	30.50	30.70	31.13	31.81	.....
29	33.54		32.20	30.82	30.70	30.70	29.90	30.53	30.67	31.18	31.72	.....
30	33.54		32.06	30.63	30.67	30.69	29.90	30.50	30.68	31.16	31.76	.....
31	33.31		31.75		30.85		29.91	30.59		31.10		.....

Ml 153. Lakeside Laboratories. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 11, T. 8 N., R. 21 E. Records available: 1948-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	34.19	33.77	33.47	32.52	31.35	32.17	34.11	34.03	35.16	35.22	35.47	35.02
2	34.08	33.71	33.55	32.54	31.33	32.24	34.01	34.25	35.24	35.20	35.62	34.46
3	33.75	33.72	33.53	32.48	31.32	32.27	33.89	34.33	35.36	35.29	35.69	34.54
4	34.26	33.76	33.49	32.46	31.32	32.36	33.90	34.35	35.47	35.27	35.55	34.72
5	34.29	33.68	33.45	32.72	31.06	32.45	34.05	34.38	35.55	35.42	35.50	34.80
6	34.21	33.43	33.45	32.74	31.17	33.03	34.16	34.44	35.68	35.41	35.88	34.73
7	34.36	33.63	33.06	32.50	31.52	33.42	34.62	34.49	35.76	35.32	35.85	34.41
8	34.37	33.51	33.25	32.67	31.41	33.81	34.88	34.65	35.72	35.36	35.70	34.50
9	33.84	33.44	33.51	32.58	31.04	33.97	35.05	34.97	35.54	35.32	35.78	35.48
10	34.15	33.34	33.44	32.27	31.23	34.35	35.14	35.18	35.55	35.21	35.86	34.41
11	34.31	33.65	33.26	32.24	31.23	34.50	35.28	35.24	35.50	35.17	35.85	34.36
12	34.05	33.60	33.27	32.29	31.12	34.53	35.44	35.15	35.42	35.33	35.85	34.21
13	33.88	33.55	33.23	32.26	31.05	35.48	35.73	35.27	35.45	35.35	35.73	34.19
14	34.17	33.23	33.22	32.27	30.99	34.47	35.85	35.29	35.45	35.34	35.63	34.22
15	34.09	33.22	33.23	32.21	31.20	34.32	36.11	35.42	35.43	35.42	35.39	35.28
16	34.30	33.40	33.23	32.08	31.43	33.84	36.18	35.38	35.62	35.45	35.55	34.29
17	34.26	33.40	33.14	31.83	31.46	33.99	35.93	35.48	35.71	35.64	35.67	34.35
18	34.12	33.46	33.38	31.76	31.50	33.77	35.72	35.47	35.55	35.67	35.53	34.29
19	34.28	33.54	33.39	.....	31.44	33.38	35.67	35.35	35.59	35.51	35.33	34.23
20	34.28	33.56	33.16	31.86	31.57	33.49	35.15	35.38	35.46	35.60	35.65	34.36
21	33.99	33.25	32.98	.....	31.45	33.67	34.98	35.34	35.22	35.41	35.64	34.33
22	33.76	33.14	32.83	.....	31.58	33.72	34.80	35.37	35.06	35.40	35.51	34.14
23	33.85	33.12	32.99	.....	31.73	33.87	34.44	35.39	35.19	35.46	35.62	34.17
24	33.70	33.43	32.88	.....	31.79	33.99	34.18	35.50	35.57	35.42	35.67	34.07
25	33.71	33.50	32.95	.....	31.96	33.96	34.09	35.73	35.54	35.80	35.66	34.23
26	34.09	33.53	32.77	31.52	32.05	33.78	34.00	35.64	35.45	35.81	35.03	34.39
27	34.04	33.45	32.16	31.50	32.04	34.02	33.96	35.55	35.45	35.74	35.21	34.41
28	33.67	33.19	32.63	31.59	31.96	34.02	33.98	35.23	35.34	35.70	35.23	34.21
29	33.89		33.00	31.56	31.91	34.03	34.04	35.00	35.30	35.70	35.07	34.07
30	.....		32.97	31.41	31.91	34.05	33.88	34.98	35.19	35.60	35.01	34.09
31	.....		32.87		31.94		.....	34.99		35.44		34.09

Ml 229. Andrew J. Albert. 5827 North 40 th St., Milwaukee. Records available: 1949-50.



MI 229--Continued.

## Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	34.18	33.19	33.42	31.48	29.99	29.88	30.28	29.30	29.67	30.40	30.88	30.89
2	33.83	33.30	33.44	31.44	29.98	29.34	30.32	29.30	29.81	30.31	31.06	30.71
3	33.39	33.30	33.42	31.48	29.81	29.68	30.31	29.31	29.78	30.28	31.06	30.90
4	33.73	33.36	33.34	31.40	29.80	29.68	30.60	29.41	30.06	30.24	30.96	31.06
5	33.74	33.35	33.35	31.38	29.49	30.01	30.92	29.49	30.18	29.88	30.83	31.10
6	33.65	33.31	33.29	31.40	29.97	30.51	31.08	29.62	30.28	29.78	31.01	31.07
7	33.89	33.35	32.87	31.35	30.20	30.90	31.30	30.08	30.19	29.89	31.03	30.68
8	33.89	33.22	32.84	31.50	30.10	31.27	31.68	29.97	30.05	30.03	30.91	30.70
9	33.44	33.15	32.87	31.47	29.63	31.19	31.73	30.23	30.38	30.06	30.98	30.73
10	33.90	33.18	32.79	31.10	29.78	31.28	32.20	30.30	30.25	29.99	31.06	30.79
11	33.96	33.51	32.62	30.23	29.78	31.51	32.32	30.18	30.12	29.95	31.13	30.71
12	33.71	33.51	32.62	30.69	29.62	31.49	32.28	30.06	30.12	30.13	31.12	30.57
13	33.56	33.28	32.40	30.85	29.74	31.30	32.85	30.03	30.22	30.18	31.08	30.63
14	33.65	33.02	32.40	30.91	29.73	30.82	32.75	30.00	30.22	30.22	31.02	30.64
15	33.51	.....	.....	30.88	29.88	30.58	33.05	30.41	30.28	30.35	30.73	30.62
16	33.57	.....	32.51	30.86	29.86	30.30	32.82	30.37	30.58	30.31	30.90	30.91
17	33.53	.....	32.45	30.78	29.81	30.30	31.53	29.70	30.62	30.40	30.95	30.94
18	33.41	33.48	32.64	30.73	29.83	30.20	31.42	29.68	30.41	30.39	30.77	30.93
19	33.57	33.50	32.64	30.80	29.83	29.90	31.20	29.55	30.51	30.45	30.72	30.75
20	33.64	33.42	32.31	30.80	30.04	30.10	29.26	29.56	30.43	30.50	31.00	30.88
21	33.39	33.10	32.19	30.83	30.02	30.39	29.12	29.46	30.23	30.50	30.99	30.83
22	33.51	33.08	32.11	30.84	30.84	30.50	29.17	29.51	29.89	30.54	30.81	30.66
23	33.52	33.29	32.06	30.84	30.08	30.55	29.20	29.73	30.00	30.64	31.01	30.60
24	33.48	33.53	27.03	30.68	30.05	30.54	28.90	29.67	30.00	30.57	31.09	30.79
25	33.39	33.57	31.99	29.40	29.99	30.30	28.81	29.99	29.99	30.67	31.10	30.78
26	33.46	33.63	31.94	29.62	29.91	30.19	28.78	29.92	30.08	30.67	30.68	30.98
27	33.44	33.52	31.30	29.98	29.90	30.51	28.81	29.81	30.12	30.60	30.98	30.96
28	32.96	33.24	31.80	30.10	29.74	30.48	28.90	29.62	30.20	30.77	31.01	30.69
29	33.33		32.03	30.10	29.69	30.28	29.08	29.46	30.15	31.01	30.95	30.75
30	33.33		.....	30.07	29.67	30.29	29.05	29.47	30.28	30.87	30.89	30.74
31	33.19		.....		29.72		29.17	29.54		30.92		30.80

MI 230. E. Runge. 4723 West Villard Ave., Milwaukee. Records available: 1949-50. Feb. 8, 13.24; Apr. 4, 11.13; May 11, 8.93; July 25, 12.01; Sept. 13, 11.59; Nov. 15, 11.65.

MI 231. R. J. Cerletty. 8900 North 76th St., Milwaukee. Drilled domestic well, diameter 6 inches, depth 80 feet. Records available: 1949-50. Feb. 8, 11.24; Apr. 4, 9.93; May 11, 9.42; July 25, 9.75; Sept. 13, 11.68; Nov. 15, 12.02.

MI 232. Milwaukee House of Correction. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 22, T. 5 N., R. 21 E. Drilled, industrial well, diameter 22 inches, depth 1,842 feet. Records available: 1950. May 4, 177.5; Oct. 11, 192.0; Nov. 16, 191.5.

## Monroe County

Mo 2. Jos. Anderson. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 34, T. 15 N., R. 4 W. Records available: 1939-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	11.52	May 26	10.26	July 26	11.53	Oct. 29	13.52
Feb. 26	13.30	June 7	11.24	Aug. 25	12.49	Nov. 26	14.46
Mar. 26	11.20	25	9.68	Sept. 27	13.52	Dec. 26	14.59
Apr. 25	10.88						

Mo 10. Dennis Shea. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 5, T. 15 N., R. 3 W. Records available: 1939-50.

Jan. 28	10.89	Apr. 27	10.65	June 26	10.19	Sept. 29	11.01
Feb. 25	10.9	May 30	10.56	July 25	10.48	Oct. 27	10.98
Mar. 25	10.71	June 7	10.73	Aug. 29	11.08		

Mo 11. John Sullivan. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 27, T. 16 N., R. 3 W. Records available: 1939-50.

Jan. 29	6.70	Apr. 29	7.10	June 29	6.85	Sept. 29	7.30
Feb. 28	7.15	May 29	7.10	July 29	7.10	Nov. 29	6.60
Mar. 29	7.20	June 7	7.53	Aug. 29	7.30	Dec. 29	6.65

Mo 12. Melvin Olson. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 32, T. 16 N., R. 4 W. Records available: 1939-50.

Jan. 30	27.14	Apr. 30	27.10	June 6	27.14	Aug. 31	27.11
Mar. 30	27.11	May 31	27.12	July 29	27.10	Oct. 30	27.12

Mo 13. Walter Parks. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 3, T. 16 N., R. 4 W. Records available: 1939-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 21	10.80	Mar. 28	10.98	June 3	10.87	Nov. 8	11.11
Feb. 13	10.97	Apr. 25	10.60	June 6	10.88	Dec. 11	10.2

Mo 17. U. S. Army. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 29, T. 18 N., R. 2 W. Drilled unused municipal well, diameter 9 inches, depth 192 feet. Records available: 1949-50.

Daily lowest water level, from recorder graph

Day	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	3.40	3.99	4.08	4.35	4.65	4.84
2	3.54	3.50	3.92	4.09	4.43	4.69	4.84
3	3.58	3.49	3.95	4.06	4.43	4.66	4.81
4	3.58	3.54	4.00	4.11	4.38	4.63	4.86
5	3.56	3.55	4.02	4.12	4.41	4.53	4.90
6	3.51	3.62	3.90	4.15	4.42	4.66	4.84
7	3.65	3.67	3.90	4.13	4.41	4.68	4.77
8	3.73	3.67	3.93	4.12	4.41	4.62	4.91
9	3.62	3.70	3.92	4.16	4.40	4.70	4.89
10	3.63	3.73	3.90	4.14	4.43	4.76	4.91
11	3.63	3.68	3.89	4.20	4.43	4.71	4.84
12	3.64	3.66	3.92	4.21	4.48	4.65	4.90
13	3.59	3.83	3.95	4.21	4.52	4.71	4.92
14	3.47	3.77	3.95	4.11	4.47	4.74	4.93
15	3.38	3.80	4.05	4.12	4.50	4.75	4.94
16	3.46	3.80	4.05	4.14	4.50	4.75	4.96
17	3.36	3.74	4.08	4.16	4.56	4.79	4.92
18	3.16	3.78	4.08	4.15	4.52	4.70	4.92
19	3.27	3.75	4.07	4.30	4.55	4.67	4.98
20	3.33	3.73	4.03	4.32	4.55	4.80	5.00
21	3.31	3.76	4.03	4.33	4.51	4.74	4.97
22	3.32	3.74	4.04	4.36	4.53	4.80	4.98
23	3.37	3.75	4.20	4.38	4.52	4.76	4.92
24	3.32	3.83	4.13	4.38	4.55	4.77	4.93
25	3.25	3.83	4.17	4.32	4.60	4.82	4.93
26	3.29	3.88	4.12	4.33	4.58	4.77	4.99
27	3.30	3.90	4.02	4.37	4.59	4.82	4.99
28	3.35	3.91	3.99	4.37	4.64	4.91	5.01
29	3.38	3.94	4.03	4.32	4.62	4.82	5.01
30	3.47	3.86	4.03	4.33	4.59	4.82	4.99
31		3.97	4.04		4.62		4.92

Oconto CountyOc 1. Oconto Utilities. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 19, T. 28 N., R. 22 E. Records available: 1946-50. Feb. 8, 2.15; May 20, 1.59; July 27, 5.70; Sept. 21, 1.40; Nov. 21, 1.48.Oneida CountyOn 8. Wisconsin Conservation Department at McNaughton State Forestry Camp, in SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 26, T. 38 N., R. 7 E. Records available: 1936-38, 1946-49. Measurement discontinued.On 22. Wisconsin Valley Improvement Co. Rainbow Snow Course, in NW $\frac{1}{4}$  sec. 18, T. 39 N., R. 8 E. Records available: 1946-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	17.60	17.69	18.06	18.61	18.36	16.29	15.60	15.57	15.88	16.38	16.86	16.74
2	17.58	17.69	18.08	18.62	18.33	16.22	15.57	15.58	15.89	16.42	16.88	16.73
3	17.55	17.70	18.09	18.64	18.26	16.19	15.57	15.58	15.90	16.43	16.88	16.72
4	17.56	17.72	18.09	18.66	18.23	16.15	15.55	15.58	15.92	16.43	16.88	16.75
5	17.56	17.72	18.14	18.68	18.14	16.08	15.55	15.59	15.93	16.44	16.86	16.77
6	17.56	17.72	18.15	18.68	18.10	16.07	15.55	15.59	15.92	16.45	16.91	16.76
7	17.57	17.73	18.15	18.71	18.10	16.05	15.54	15.59	15.93	16.48	16.91	16.76
8	17.57	17.73	18.19	18.71	17.99	16.02	15.54	15.59	15.95	16.52	16.88	16.73
9	17.55	17.74	18.22	18.71	17.81	15.98	15.53	15.60	15.97	16.52	16.84	16.74
10	17.57	17.74	18.23	18.71	17.78	15.99	15.53	15.62	15.98	16.52	16.84	16.75
11	17.58	17.77	18.25	18.74	17.74	15.97	15.53	15.63	16.00	16.54	16.84	16.75
12	17.58	17.77	18.26	18.75	17.59	15.89	15.52	15.63	16.00	16.57	.....	16.74

On 22--Continued.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
13	17.58	17.78	18.28	18.76	17.50	15.84	15.54	15.64	16.02	16.58	.....	16.74
14	17.59	17.78	18.30	18.77	17.40	15.84	15.54	15.64	16.04	16.59	16.82	16.74
15	17.59	17.77	18.32	18.77	17.36	15.81	15.54	15.64	16.08	16.61	16.78	16.75
16	.....	17.79	.....	18.77	17.32	15.81	15.55	15.65	16.11	16.62	16.80	16.75
17	.....	17.80	.....	18.78	17.22	15.81	15.56	15.70	16.13	16.64	16.80	.....
18	.....	17.82	.....	18.78	17.17	15.75	15.57	15.70	16.14	16.64	16.76	.....
19	.....	17.85	.....	18.77	17.09	15.71	15.57	15.71	16.17	16.68	16.77	16.77
20	.....	17.87	18.40	18.75	17.02	15.72	15.58	15.72	16.17	16.68	16.78	16.77
21	.....	17.89	18.42	18.73	16.95	15.72	15.58	15.74	16.19	16.69	.....	16.77
22	.....	17.90	18.45	18.71	16.87	15.69	15.57	15.74	16.20	16.70	16.75	16.76
23	.....	17.93	18.46	18.67	16.80	15.68	15.56	15.79	16.25	16.72	.....	16.75
24	17.63	17.96	18.49	18.66	16.72	15.70	15.58	15.79	16.25	16.73	.....	16.77
25	17.64	.....	18.50	18.61	16.70	15.69	15.58	15.84	16.28	16.75	.....	16.78
26	17.67	.....	18.50	18.57	16.65	15.65	15.58	15.84	16.30	16.75	.....	.....
27	17.67	.....	18.51	18.57	16.56	15.66	15.58	15.84	16.31	16.77	16.75	.....
28	17.65	18.03	18.58	18.53	16.47	15.61	15.56	15.85	16.34	16.78	16.75	16.76
29	17.67	.....	18.60	18.49	16.42	15.60	15.55	15.86	16.34	16.79	16.74	16.78
30	.....	.....	18.60	18.43	16.36	15.60	15.57	15.86	16.37	16.83	16.74	16.78
31	17.69	.....	18.60	.....	16.30	.....	15.57	15.87	.....	16.83	.....	16.79

On 23. U. S. Geol. Survey. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 27, T. 37 N., R. 6 E. Records available: 1944-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	32.50	Apr. 14	32.64	July 10	30.99	Oct. 10	31.87
11	32.55	17	32.12	17	30.97	18	31.15
17	32.60	24	32.27	25	30.84	25	31.24
23	32.55	May 4	32.24	31	30.84	Nov. 2	31.30
31	32.57	9	32.12	Aug. 9	30.83	7	31.27
Feb. 8	32.74	19	31.20	16	30.81	15	31.25
15	32.75	23	31.65	23	30.81	24	31.28
20	32.73	31	31.47	30	30.87	29	31.37
Mar. 2	32.70	June 8	31.45	Sept. 7	30.88	Dec. 6	31.40
6	32.84	11	31.36	21	30.82	15	31.38
15	32.77	18	31.16	27	31.81	22	31.41
28	32.84	28	31.05	Oct. 2	31.84	29	31.50
Apr. 3	32.87	July 6	31.02	.....	.....	.....	.....

On 24. U. S. Geol. Survey. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 9, T. 36 N., R. 9 E. Records available: 1944-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	21.50	Apr. 23	21.15	July 18	20.38	Oct. 10	21.08
10	21.45	May 1	20.94	25	20.45	18	21.16
20	21.42	9	20.86	Aug. 2	20.62	25	21.19
29	21.44	15	20.65	9	20.66	Nov. 1	21.25
Feb. 6	21.55	22	20.48	16	20.68	11	21.25
14	21.55	28	20.40	21	20.74	17	21.35
22	21.65	June 6	20.50	29	20.85	23	21.41
28	21.66	12	20.35	Sept. 5	20.85	Dec. 1	21.37
Mar. 10	21.75	19	20.30	13	20.89	6	21.38
24	21.75	26	20.32	18	20.98	14	21.45
Apr. 1	21.74	July 5	20.39	25	20.97	21	21.45
8	21.64	11	20.39	Oct. 3	20.97	29	21.53
16	21.55	.....	.....	.....	.....	.....	.....

## Outagamie County

On 2. Kaukauna Water & Electric Co. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 24, T. 21 N., R. 18 E. Records available: 1946-50. Feb. 28, 11.47.

Daily highest water level, from recorder graph

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	11.97	7.37	+0.87	13.08	22.01	21.95	25.95	22.84	20.16	15.71
2	12.30	4.58	3.20	13.89	19.04	22.32	26.12	21.14	20.63	15.65
3	12.34	3.77	2.89	14.44	17.18	22.40	21.90	23.00	.....	12.35
4	11.40	6.93	3.52	14.61	15.90	22.90	19.89	23.57	.....	11.61
5	8.94	7.97	4.17	15.09	16.20	.....	18.50	23.71	.....	.....

## Ou 2--Continued.

Daily highest water level, from recorder graph

Day	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	8.50	7.04	4.37	15.93	14.60	.....	22.60	23.74	.....	.....
7	.....	6.70	2.20	16.37	.....	.....	23.88	24.10	.....	.....
8	.....	4.86	1.31	16.98	.....	.....	24.53	.....	.....	.....
9	.....	1.20	4.51	17.35	.....	23.28	24.77	.....	17.73	.....
10	.....	.11	5.51	17.31	.....	23.78	22.90	.....	16.35	.....
11	.....	3.91	7.18	16.75	18.41	23.86	21.69	23.11	.....	.....
12	.....	6.32	7.99	16.40	20.04	24.27	24.09	23.12	.....	.....
13	.....	7.42	7.20	17.32	20.40	20.32	24.13	.....	.....	.....
14	.....	8.16	3.23	17.72	21.18	19.27	24.60	.....	.....	.....
15	.....	4.01	2.53	17.76	21.25	22.98	24.75	.....	.....	.....
16	10.15	2.00	5.00	18.50	19.92	23.81	23.79	.....	.....	.....
17	9.50	1.43	5.42	18.60	19.42	24.82	20.69	.....	.....	.....
18	8.38	6.81	6.30	16.83	20.51	24.91	20.40	22.35	.....	.....
19	5.41	8.01	7.90	16.31	20.38	24.87	23.40	22.47	.....	.....
20	4.21	8.30	8.51	17.92	20.05	20.13	24.00	22.83	.....	.....
21	7.32	8.05	7.49	18.21	20.20	19.62	25.63	21.99	16.02	.....
22	7.55	2.37	6.78	18.68	20.63	23.94	24.95	17.21	16.50	.....
23	8.70	+.31	9.59	19.66	19.50	24.49	24.10	16.20	16.60	.....
24	8.89	+1.33	11.42	20.20	19.11	25.15	.....	19.99	15.79	.....
25	5.50	3.06	12.11	19.57	20.70	25.41	.....	.....	15.91	.....
26	3.20	4.37	12.51	19.30	21.30	25.05	.....	.....	12.08	.....
27	2.38	5.52	11.98	19.60	22.01	22.13	24.21	.....	10.96	.....
28	5.66	6.21	11.81	20.19	22.30	21.35	24.75	.....	15.12	.....
29	8.13	4.81	11.42	20.70	22.62	23.92	23.78	.....	15.16	.....
30	8.85	.21	12.83	21.52	21.85	24.60	24.90	.....	15.45	.....
31	9.15		12.52		21.19	25.20		.....		.....

Ou 3. Vanden Huefel.  $SE\frac{1}{2}NE\frac{1}{4}$  sec. 2, T. 23 N., R. 18 E. Records available: 1947-50. July 28, 37.92; Sept. 21, 39.07.

Ou 5. Kaukauna Water & Electric Co.  $SW\frac{1}{2}SE\frac{1}{4}$  sec. 4, T. 21 N., R. 19 E. Records available: 1947-50. Feb. 7, 23.08; Apr. 5, 23.68; May 24, 23.37; July 26, 25.70; Sept. 20, 27.85; Nov. 20, 27.89.

Portage County

Pt 1. Newton and Emery Bade.  $SE\frac{1}{2}SW\frac{1}{4}$  sec. 27, T. 24 N., R. 6 E. Driven unused stock well, diameter 6 inches, depth 36 feet. Records available: 1950. July 13, 18.21; Oct. 17, 17.74; Nov. 30, 18.42.

Pt 6. N. Weisbrot.  $SE\frac{1}{2}NW\frac{1}{4}E\frac{1}{2}$  sec. 31, T. 24 N., R. 9 E. Driven unused stock well, diameter 2 inches, depth 22 feet. Records available: 1950. July 21, 14.27; Oct. 1, 14.77; Oct. 8, 14.86.

Pt 15. L. Krogwold.  $NE\frac{1}{2}SW\frac{1}{4}$  sec. 28, T. 24 N., R. 10 E. Driven unused domestic well, diameter 2 inches, depth 53 feet. Records available: 1950.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 24	35.29	Oct. 18	35.59	Nov. 25	35.84	Dec. 10	35.94
Sept. 10	35.34	Nov. 15	35.80	Nov. 30	35.87	Dec. 26	36.05

Pt 28. James Burns.  $SW\frac{1}{2}SW\frac{1}{4}$  sec. 15, T. 21 N., R. 9 E. Drilled irrigation well, diameter 12 inches, depth 112 feet. Records available: 1950. Aug. 11, 74.32; Oct. 19, 75.75; Nov. 29, 74.44.

Pt 30. U. S. Geol. Survey.  $SE\frac{1}{2}NW\frac{1}{4}$  sec. 1, T. 22 N., R. 8 E. Records available: 1944-50.

Jan. 1	13.35	Mar. 19	13.85	May 21	12.48	July 31	12.72
9	13.42	23	13.98	28	12.43	Aug. 6	12.72
17	13.39	26	13.69	June 4	12.48	13	12.61
22	13.40	Apr. 2	12.97	11	12.48	15	12.83
29	13.44	10	12.97	18	12.56	20	11.94
Feb. 5	13.60	16	12.76	27	12.68	27	12.86
11	13.63	22	12.65	July 2	12.68	Sept. 4	12.80
20	13.75	30	12.64	9	12.71	8	13.02
23	13.84	May 7	12.53	10	12.83	11	12.95
26	13.79	14	12.46	16	12.85	17	13.02
Mar. 5	13.81	15	12.56	18	12.88	25	13.07
12	13.81	19	12.55	24	12.76	28	13.14

## Pt 30--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 1	13.14	Oct. 22	13.29	Nov. 17	13.63	Dec. 3	13.61
8	13.80	29	13.38	19	13.59	18	13.74
11	13.28	Nov. 5	13.41	27	13.60	25	13.76
15	13.22	12	13.49	29	13.76	31	14.60
19	13.37	16	13.63				

Pt 34. U. S. Geol. Survey. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 34, T. 23 N., R. 7 E. Driven observation well, diameter 1 $\frac{1}{2}$  inches, depth 24 feet. Records available: 1950.

Sept. 8	16.89	Nov. 5	17.32	Nov. 26	17.52	Dec. 17	17.72
Oct. 11	17.14	12	17.22	Dec. 3	17.56	21	17.75
22	17.21	19	17.27	10	17.66	31	17.84
29	17.28						

Pt 40. U. S. Geol. Survey. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 2, T. 24 N., R. 8 E. Driven observation well, diameter 1 $\frac{1}{2}$  inches, depth 12 feet. Records available: 1950. Sept. 27, 8.58; Oct. 17, 8.78; Nov. 16, 9.10; Nov. 30, 9.28.

Pt 41. U. S. Geol. Survey. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 35, T. 21 N., R. 7 E. Driven observation well, diameter 1 $\frac{1}{2}$  inches, depth 12 feet. Records available: 1950.

Sept. 27	5.01	Oct. 19	5.20	Nov. 22	5.50	Dec. 21	5.74
Oct. 5	5.07	Nov. 2	5.30	30	5.60	28	5.79
12	5.13	9	5.39	Dec. 7	5.66		

Pt 42. U. S. Geol. Survey. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 30, T. 23 N., R. 9 E. Driven observation well, diameter 1 $\frac{1}{2}$  inches, depth 15 feet. Records available: 1950. Oct. 10, 9.47; Oct. 19, 6.11; Nov. 29, 9.76.

## Price County

Pr 6. State Conservation Department. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 24, T. 40 N., R. 1 W. Records available: 1937-38, 1946-50.

Jan. 1	3.96	Mar. 30	2.85	June 30	2.59	Oct. 1	3.84
7	4.00	Apr. 1	2.85	July 1	2.59	8	3.74
14	4.02	8	3.10	8	2.66	15	3.67
21	4.07	15	2.63	15	2.90	22	3.72
28	4.27	22	1.12	29	2.71	31	3.80
31	4.25	29	.86	Aug. 1	2.71	Nov. 1	3.80
Feb. 1	4.25	May 1	.86	5	2.74	4	3.76
4	4.30	6	.11	12	3.04	11	3.72
11	4.30	13	1.52	19	2.78	18	3.51
25	4.30	20	2.18	26	3.04	25	3.59
28	4.30	27	2.67	29	3.14	30	3.62
Mar. 1	4.30	30	2.60	Sept. 1	3.14	Dec. 1	3.62
4	4.30	June 1	2.60	9	3.41	9	3.76
11	4.33	10	1.82	16	3.60	16	3.83
18	4.33	17	2.54	23	3.70	23	3.93
25	4.33	24	2.80	30	3.84	31	4.00

## Racine County

Ra 3. City of Burlington. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 32, T. 3 N., R. 19 E. Records available: 1946-50. Feb. 6, 20.00; Apr. 3, 18.49; May 10, 17.69; July 24, 13.34; Sept. 12, 13.53; Nov. 14, 13.95.

Ra 4. Pure Milk Association. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 34, T. 3 N., R. 20 E. Records available: 1946-50. Feb. 6, 50.46; Apr. 3, 51.17; Sept. 12, 47.19; Nov. 14, 48.97.

Ra 5. Chicago, Milwaukee & St. Paul Railway Co. In Sturtevant, in SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 21, T. 3 N., R. 22 E. Records available: 1946-50. Feb. 6, 125.98; Apr. 3, 125.06; May 10, 128.35; July 24, 129.78; Sept. 12, 126.48; Nov. 14, 129.01.

Ra 6. LeRoy Radtke. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 18, T. 4 N., R. 23 E. Records available: 1946-50. Apr. 4, 25.20; May 11, 24.52; July 25, 25.51; Sept. 13, 24.71; Nov. 15, 23.12.

Ra 8. Harold Wollmer. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 10, T. 4 N., R. 21 E. Records available: 1946-50. Jan. 31, 67.48; Apr. 4, 67.67; July 25, 69.98; Sept. 13, 68.10.

Ra 14. Kilbourn Club. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 30, T. 4 N., R. 22 E. Drilled industrial well, diameter 8 inches, depth 1,025 feet. Records available: 1950. Apr. 20, 164.57; May 11, 162.46; July 25, 162.42; Sept. 13, 159.05; Nov. 15, 163.33.

Rock County

Ro 3. School for the Blind. In Janesville, in SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 2, T. 2 N., R. 12 E. Records available: 1947-50. Feb. 6, 57.73; Apr. 3, 57.16; May 10, 57.16; July 24, 57.16; Sept. 12, 57.26; Nov. 14, 57.69.

St. Croix County

Sc 2. Casey Estate. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 31, T. 28 N., R. 19 W. Records available: 1947-50. Mar. 1, 51.59; Apr. 4, 50.50; May 31, 49.46; July 20, 49.62; Oct. 4, 50.64; Dec. 14, 51.58.

Sauk County

Sk 1. Badger Ordnance Works. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 3, T. 10 N., R. 6 E. Records available: 1946-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	75.04	75.19	76.70	75.97	.....	75.54	78.98	75.27	78.38	78.70	78.12	78.62
2	74.44	75.31	77.31	75.60	.....	76.34	78.39	76.07	78.38	77.95	78.84	78.71
3	74.62	75.31	77.32	74.91	74.80	76.70	77.60	76.78	77.91	77.44	79.30	78.59
4	74.19	74.92	77.09	74.51	75.27	76.59	76.73	77.43	77.22	77.95	79.36	78.02
5	74.96	74.44	76.34	75.32	75.88	76.03	76.19	77.50	76.43	78.57	78.90	77.75
6	75.74	73.74	75.80	76.11	76.07	75.86	76.09	77.19	76.17	79.11	77.97	78.19
7	75.97	74.14	75.18	76.86	75.97	76.52	76.84	76.40	76.84	79.20	77.60	78.69
8	75.86	74.82	75.77	76.95	75.47	77.17	77.03	76.06	77.54	78.93	78.05	79.58
9	74.94	75.63	76.38	76.65	75.23	77.84	76.83	76.60	77.69	78.29	79.01	79.58
10	75.22	76.32	76.77	75.74	76.08	78.71	76.28	77.37	77.34	77.53	79.63	79.41
11	75.73	76.44	76.74	75.52	76.57	79.39	.....	78.04	76.69	78.13	79.63	78.57
12	76.22	76.26	76.65	76.22	76.64	79.87	76.67	78.14	76.58	78.79	79.29	77.97
13	76.16	75.59	75.96	76.87	76.38	80.10	77.42	77.80	77.32	79.13	78.42	78.63
14	76.01	75.22	75.83	76.97	75.92	80.40	77.47	76.97	77.97	79.14	77.62	79.16
15	75.57	75.95	76.48	76.69	75.27	80.70	77.11	76.60	78.48	78.91	78.04	79.29
16	75.13	76.03	76.92	76.06	75.42	81.25	76.39	77.14	78.49	78.07	79.06	79.14
17	74.74	75.99	76.92	75.29	76.03	81.45	75.65	77.82	78.20	77.49	79.51	78.58
18	74.20	75.42	76.89	75.34	76.14	81.28	75.45	78.23	77.30	78.00	79.54	77.83
19	74.82	75.62	76.46	76.11	76.52	80.36	76.08	78.24	76.60	78.79	79.08	77.36
20	75.39	76.10	75.64	76.64	76.72	79.33	76.89	77.98	76.58	79.18	78.52	78.07
21	75.42	76.79	75.42	76.65	76.55	79.55	76.99	77.04	77.16	79.18	78.04	78.58
22	75.18	76.90	76.14	76.31	75.99	79.58	76.73	76.55	77.74	78.75	78.47	78.74
23	74.69	76.74	76.25	75.63	75.81	79.44	76.10	77.14	77.95	77.97	78.63	78.62
24	74.66	76.87	75.99	74.96	76.63	79.49	75.38	77.68	77.82	77.42	78.52	78.12
25	75.32	76.95	75.72	.....	77.06	79.06	75.25	78.23	77.07	78.03	78.05	77.59
26	75.54	76.88	75.13	.....	77.61	77.97	75.91	78.27	76.69	78.48	77.19	76.81
27	75.41	76.32	74.19	74.58	77.77	77.50	76.55	77.81	77.34	79.08	76.47	76.43
28	74.82	75.89	74.92	74.76	77.55	78.04	76.71	76.99	78.11	79.08	76.47	77.12
29	74.44		75.87	74.57	76.89	78.49	76.50	76.77	78.74	78.90	77.16	78.07
30	74.39		76.45	.....	76.13	78.98	75.96	77.41	78.82	78.11	78.15	78.18
31	74.47		76.43		75.57		75.29	77.94		77.38		78.07

Sk 6. Baraboo Iron Co. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 1, T. 11 N., R. 6 E. Records available: 1946-50.

Water level above land-surface datum

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	3.08	Apr. 7	3.51	June 30	3.54	Oct. 6	2.91
15	2.98	15	3.17	July 7	3.18	14	2.80
21	3.09	22	3.21	14	3.11	22	2.91
26	2.71	27	3.21	18	2.80	28	2.75
Feb. 1	2.61	May 6	3.27	Aug. 5	3.18	Nov. 4	2.83
10	3.05	12	3.12	12	3.06	11	2.66
18	2.94	20	2.94	19	2.92	17	2.61
25	2.78	27	3.05	27	2.69	21	2.76
Mar. 4	2.58	31	2.66	Sept. 2	2.05	Dec. 1	2.61
12	3.07	June 9	3.18	8	2.68	7	2.78
15	2.94	18	3.62	15	2.57	16	2.84
24	3.19	25	3.63	23	2.93	23	2.81
Apr. 1	3.19						

Sk 7. U. S. Government, War Assets Administration. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 19, T. 10 W., R. 7 E. Measurement discontinued after June 2, 1950. Records available: 1948-50. Mar. 2, 88.32; Apr. 5, 87.84; June 2, 87.39.

Sk 11. Wilbur S. Grant. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 15, T. 10 N., R. 6 E. Records available: 1948-50. Apr. 5, 88.69; June 2, 88.77; July 21, 89.05; Oct. 5, 89.10; Dec. 15, 89.20.

Sk 12. Devils Lake State Park. SW $\frac{1}{4}$  sec. 13, T. 11 N., R. 6 E. Records available: 1948-50. June 7, 128.08.

Sk 13. University of Wisconsin Engineer Camp. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 24, T. 11 N., R. 6 E. Records available: 1948-49. No measurement made in 1950.

Sk 14. Devils Lake State Park. SE $\frac{1}{4}$  sec. 24, T. 11 N., R. 6 E. Records available: 1948-49. No measurement made in 1950.

Sk 15. Devils Lake State Park. SW $\frac{1}{4}$  sec. 19, T. 11 N., R. 7 E. Records available: 1948-50. June 7, 204.49.

#### Sawyer County

Sw 7. Wisconsin Conservation Department. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 28, T. 41 N., R. 9 W. Records available: 1937-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	16.98	Apr. 29	15.46	July 29	16.58	Oct. 28	16.87
Feb. 25	17.01	May 27	15.32	Aug. 26	16.78	Nov. 25	16.88
Mar. 25	16.98	June 24	16.37	Sept. 30	16.98	Dec. 30	16.90

#### Shawano County

Sh 1. Harry Sievert. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 30, T. 26 N., R. 18 E. Records available: 1947-50. Feb. 9, 62.71; Apr. 7, 62.24; May 25, 61.59; July 28, 61.26; Sept. 22, 61.78; Nov. 22, 62.84.

Sh 2. District School. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 2, T. 26 N., R. 16 E. Records available: 1947-50. Feb. 9, 53.84; Apr. 7, 52.24; May 25, 49.52; July 28, 51.71; Sept. 22, 52.14; Nov. 22, 53.51.

Sh 3. George Martin. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 2, T. 26 N., R. 16 E. Records available: 1947-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	15.05	.....	15.58	.....	.....	7.32	9.53	10.92	11.96	12.76	13.48	14.18
2	15.05	.....	15.60	.....	4.27	7.43	9.64	11.00	11.97	12.80	13.54	14.17
3	15.00	.....	15.61	.....	4.42	7.51	9.66	11.05	12.02	12.81	13.57	14.20
4	15.05	.....	15.62	.....	4.51	7.55	9.73	11.11	12.07	12.84	13.57	14.26
5	15.07	.....	15.63	.....	4.58	7.63	9.80	11.15	12.08	12.85	13.56	14.30
6	15.07	.....	15.62	.....	4.80	7.80	9.85	11.18	12.08	12.85	13.62	14.30
7	15.10	.....	15.61	4.31	5.10	7.90	9.91	11.20	12.07	12.88	13.64	14.29
8	15.10	.....	14.20	4.34	5.12	7.95	9.97	11.26	12.08	12.94	13.64	14.31
9	15.06	15.38	14.08	4.37	5.09	7.99	10.02	11.28	12.09	12.95	13.70	14.34
10	15.06	15.38	13.78	4.36	5.30	8.14	10.09	11.34	12.12	12.96	13.75	14.36
11	15.13	15.41	13.65	2.42	5.36	8.22	10.12	11.38	12.15	12.98	13.79	14.36
12	15.13	15.44	13.64	.12	5.43	8.25	10.15	11.43	12.17	13.05	13.80	14.37
13	15.13	15.44	13.63	.88	5.48	8.34	10.25	11.47	12.21	13.07	13.82	14.40
14	15.14	15.43	13.65	1.51	5.63	8.43	10.31	11.47	12.24	13.10	13.82	14.43
15	15.14	15.43	13.70	1.81	5.82	8.45	10.35	11.53	12.29	13.13	13.82	14.47
16	15.17	15.44	13.72	1.92	5.88	8.63	10.42	11.53	12.36	13.14	13.87	14.50
17	15.18	15.45	13.78	1.76	5.97	8.69	10.50	11.62	12.38	13.16	13.89	14.53
18	15.19	15.47	13.90	1.82	.....	8.69	10.57	11.62	12.38	13.16	13.89	14.54
19	15.22	15.50	13.94	1.82	.....	8.70	10.62	11.83	12.42	13.20	13.92	14.56
20	15.23	15.50	13.95	.....	.....	8.83	10.68	11.65	12.42	13.22	13.97	14.58
21	.....	15.50	13.98	.....	.....	8.89	10.70	11.67	12.45	13.25	13.98	14.58
22	.....	15.50	13.99	.....	.....	8.93	10.73	11.67	12.45	13.28	14.00	14.59
23	.....	15.51	14.05	.....	.....	9.02	10.75	11.75	12.54	13.30	14.02	14.59
24	.....	15.53	11.78	.....	.....	9.14	10.74	11.79	12.56	13.32	14.07	14.62
25	.....	15.55	11.62	.....	6.88	9.18	10.69	11.87	12.59	13.35	14.08	14.65
26	.....	15.57	9.03	.....	.....	7.00	9.24	10.65	11.87	12.62	13.37	14.07
27	.....	15.58	.....	.....	7.05	9.32	10.68	11.88	12.64	13.38	14.11	14.68
28	.....	15.57	.....	.....	7.11	9.37	10.74	11.89	12.68	13.40	14.14	14.68
29	.....	.....	.....	.....	7.17	9.43	10.78	11.93	12.70	13.42	14.14	14.72
30	.....	.....	.....	.....	7.19	9.52	10.83	11.93	12.73	13.43	14.16	14.74
31	.....	.....	.....	.....	7.23	.....	10.87	11.92	.....	13.43	.....	14.75

Sh 4. John Short. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 28, T. 25 N., R. 17 E. Records available: 1947-50. Feb. 9, 8.35; Apr. 7, 6.96; July 28, 6.78; Sept. 22, 7.82; Nov. 22, 8.32.

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Sh 5. Lew and Sylvester Jarosinski. NE $\frac{1}{4}$  sec. 4, T. 25 N., R. 18 E. Records available: 1948-50. Feb. 9, 21.13; May 25, 18.68; July 28, 17.67; Sept. 22, 19.13; Nov. 22, 20.46.

## Trempealeau County

Tr 1. Mrs. Wm. Davidson. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 35, T. 19 N., R. 8 W. Records available: 1947-50. Mar. 1, 141.69; Apr. 4, 140.60; May 31, 141.67; July 20, 140.63; Oct. 4, 141.10; Dec. 14, 141.20.

## Vernon County

Ve 4. Albert Storbakken. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 14, T. 14 N., R. 5 W. Records available: 1939-50. Mar. 1, 10.61; Apr. 4, 8.60; June 7, 10.73; July 19, 10.13; Oct. 3, 10.67; Dec. 14, 10.78.

Ve 6. M. H. Willenburg. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 26, T. 14 N., R. 7 W. Records available: 1939-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 23	49.49	Apr. 22	49.50	June 28	50.43	Sept. 28	46.40
Feb. 28	46.50	May 18	49.38	July 29	49.50	Oct. 18	50.45
Mar. 21	49.39	June 7	49.78	Aug. 22	50.42	Nov. 25	50.47

Ve 9. F. Lenser. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 14, T. 14 N., R. 7 W. Records available: 1939-50. Mar. 1, 48.33; Apr. 4, 47.61; June 7, 47.80; July 19, 47.53; Oct. 3, 48.01; Dec. 14, 48.41.

Ve 14. Chris Benrud. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 6, T. 14 N., R. 4 W. Records available: 1939-50. Mar. 1, 7.49; Apr. 4, 7.40; May 30, 7.65; July 19, 7.19; Oct. 3, 7.73; Dec. 14, 7.68.

## Vilas County

Vi 3. Wisconsin Conservation Department. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 9, T. 41 N., R. 10 E. Records available: 1948-50.

Jan. 7	7.65	Apr. 1	8.08	July 1	7.56	Sept. 23	8.02
14	7.77	8	8.27	8	8.05	30	7.90
21	7.52	15	8.00	15	8.31	Oct. 7	7.81
28	7.13	22	7.65	22	8.32	14	7.87
Feb. 4	7.15	29	7.40	29	8.34	21	7.98
11	7.17	May 13	6.90	Aug. 5	7.98	28	7.98
18	7.31	20	6.96	12	7.48	Dec. 2	7.18
25	7.35	27	6.97	19	8.02	9	7.07
Mar. 4	7.79	June 3	7.28	26	8.33	16	7.06
11	7.88	10	7.21	Sept. 2	8.24	23	7.35
18	8.01	17	7.31	9	8.37	30	7.55
25	7.98	24	7.50	16	8.31		

Vi 21. U. S. Geol. Survey. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 10, T. 40 N., R. 10 E. Records available: 1944-50.

Jan. 3	16.56	Apr. 12	16.75	July 10	14.90	Oct. 9	15.23
9	16.52	17	16.46	15	14.99	17	15.27
23	16.55	25	15.64	18	14.92	25	15.30
31	16.55	May 2	15.61	25	14.93	30	15.32
Feb. 6	16.62	8	15.51	Aug. 1	14.94	Nov. 7	15.36
13	16.63	16	15.31	8	14.97	14	15.39
19	16.65	22	15.18	21	14.98	20	15.41
27	16.69	31	15.07	29	15.02	28	15.43
Mar. 7	16.71	June 6	15.01	Sept. 5	15.07	Dec. 5	15.47
14	16.74	12	14.99	11	15.10	12	15.50
21	16.75	21	14.99	19	15.14	19	15.52
28	16.78	26	15.01	26	15.17	28	15.57
Apr. 3	16.79	July 5	14.91	Oct. 3	15.21		

## Walworth County

Ww 1. Village of Genoa Junction. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 35, T. 1 N., R. 18 E. Records available: 1946-50. Feb. 6, 27.52; Apr. 3, 27.20; May 10, 26.80; July 24, 27.23; Sept. 12, 27.88; Nov. 14, 28.15.

Ww 2. G. Bergstrom. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 22, T. 1 N., R. 16 E. Records available: 1946-50. Feb. 6, 67.71; Apr. 3, 67.54; May 10, 67.45; July 12, 67.16; July 24, 67.35; Nov. 14, 67.40.



Ww 4. United Milk Products. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 33, T. 1 N., R. 15 E. Records available: 1946-50. Feb. 6, 58.64; Apr. 3, 58.75; May 10, 57.18; July 24, 57.50; Sept. 12, 56.21; Nov. 14, 57.15.

Ww 5. H. Phillips. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 36, T. 4 N., R. 16 E. Measurement discontinued. Records available: 1947-50.

Ww 9. Stewart Bros. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 33, T. 3 N., R. 15 E. Records available: 1947-50. Feb. 6, 77.54; Apr. 3, 77.55; May 10, 77.41; July 24, 77.40; Sept. 12, 77.13; Nov. 14, 77.29.

#### Washburn County

Wb 1. Wisconsin Conservation Department. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 31, T. 39 N., R. 12 W. Records available: 1948-50.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	5.40	Mar. 27	4.57	June 19	5.19	Sept. 11	5.39
9	5.86	Apr. 3	4.64	26	5.07	18	5.08
16	5.66	10	4.46	July 3	4.44	25	5.28
23	5.72	17	4.36	10	4.87	Oct. 2	4.70
30	5.68	24	4.46	17	4.91	9	4.98
Feb. 6	5.78	May 1	4.60	24	4.72	16	5.04
13	5.74	8	4.46	31	4.96	23	5.13
20	5.78	15	4.40	Aug. 7	5.19	30	5.15
26	5.70	22	4.61	14	5.28	Dec. 4	5.32
Mar. 6	5.48	29	4.77	21	5.24	11	5.22
13	5.58	June 5	4.34	28	5.38	18	5.21
20	5.58	12	4.95	Sept. 4	5.37	25	5.31

#### Washington County

Wn 1. John Thiesen. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 10, T. 11 N., R. 18 E. Measurement discontinued after Feb. 7, 1950. Records available: 1946-50. Feb. 7, 52.34.

Wn 2. City of Hartford. East side of North Rural St., between power house and railroad. Records available: 1946-50.

#### Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	48.58	.....	.....	44.37	46.49	45.47	46.62	45.90	43.40	44.81	46.72	47.15
2	47.46	43.01	41.80	44.92	46.52	45.47	46.08	46.00	44.78	45.61	46.06	45.57
3	47.36	43.13	42.12	45.00	45.85	45.37	46.07	45.45	43.57	45.91	45.95	46.34
4	48.53	43.09	42.03	44.90	45.49	45.20	46.12	45.50	44.67	45.65	45.90	46.79
5	48.78	42.59	41.88	45.67	45.17	45.03	45.80	44.50	44.77	47.00	46.13	48.03
6	48.79	42.84	41.31	45.69	45.22	45.37	45.40	44.60	44.20	46.03	46.80	48.10
7	48.70	43.18	40.62	45.65	45.32	45.28	45.40	45.58	43.59	46.57	47.19	47.25
8	48.61	43.18	40.59	45.53	45.38	43.40	45.68	45.50	45.23	46.32	47.23	46.51
9	48.68	43.23	40.70	45.63	45.50	43.52	45.99	45.30	44.87	45.22	47.80	46.21
10	49.91	43.25	40.84	45.51	45.30	44.07	46.28	45.38	43.71	46.71	47.00	46.25
11	48.91	43.29	40.78	45.99	45.32	44.29	47.20	45.39	45.50	46.03	46.10	46.01
12	48.49	.....	40.22	47.20	44.80	44.50	47.35	44.30	45.81	46.20	46.00	47.00
13	48.50	.....	40.50	47.16	45.09	44.50	47.79	43.60	44.89	46.02	46.37	46.30
14	48.47	.....	40.50	46.48	45.20	44.32	47.88	44.12	45.80	46.84	47.10	46.98
15	47.88	.....	40.88	46.62	45.29	44.40	47.18	44.02	45.13	46.87	47.23	47.61
16	47.57	.....	41.20	47.28	45.30	44.07	46.71	43.87	46.00	47.10	46.48	47.42
17	44.92	.....	41.15	47.14	45.49	44.21	46.79	44.45	45.18	46.25	47.96	46.83
18	43.88	.....	41.02	47.09	45.75	44.20	46.80	43.85	44.48	46.70	47.99	46.21
19	43.80	.....	40.83	46.61	45.60	44.23	46.48	43.47	46.25	45.99	47.44	46.11
20	43.75	.....	40.89	46.76	45.21	44.21	44.31	44.62	46.19	46.01	46.81	47.01
21	43.43	.....	41.19	46.68	45.00	44.17	44.25	44.62	45.10	46.70	46.28	46.67
22	43.16	.....	40.90	46.70	45.12	44.40	45.23	44.10	44.17	46.30	45.87	47.59
23	42.88	.....	40.73	46.79	46.55	44.45	45.20	44.02	44.72	46.49	45.48	46.80
24	42.92	.....	40.46	46.74	46.95	44.38	45.29	44.72	44.70	47.25	45.22	47.00
25	42.82	.....	40.31	.....	46.55	44.36	45.40	44.83	44.64	47.31	44.88	47.23
26	.....	.....	40.10	46.52	46.73	44.73	45.43	45.08	45.21	47.32	45.08	47.78
27	.....	.....	39.19	46.72	46.12	45.18	44.88	45.15	44.66	46.70	45.54	47.70
28	.....	.....	39.83	46.70	45.93	46.00	45.11	44.00	46.15	45.50	46.42	47.70
29	.....	.....	42.18	46.33	45.73	46.10	46.03	43.55	45.81	45.00	45.70	47.00
30	.....	.....	43.69	46.42	45.40	46.50	46.07	43.70	45.73	46.10	47.05	47.00
31	.....	.....	43.98	.....	45.28	.....	45.85	43.70	.....	46.30	.....	47.00

Wn 3. City of West Bend. Basement of city police station. Records available: 1946-50. Feb. 7, 15.61; Apr. 5, 15.00; May 12, 14.73; July 26, 15.33; Sept. 14, 15.07; Nov. 16, 14.16.

Waukesha County

Wk 2. Sisters of Notre Dame. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 24, T. 7 N., R. 20 E. Records available: 1946-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	77.24	76.62	74.07	70.07	69.94	70.64	71.80	.....	71.73	72.04	72.55	.....
2	77.08	76.58	74.33	69.94	69.91	70.54	71.90	.....	.....	72.09	72.73	.....
3	77.75	76.57	74.34	70.04	69.85	70.32	72.01	70.94	.....	72.19	72.58	.....
4	77.20	76.57	74.04	70.22	69.82	69.98	72.44	70.85	.....	72.22	72.47	.....
5	77.28	76.41	74.13	70.61	69.30	70.02	72.45	71.01	.....	72.07	72.48	.....
6	77.13	76.39	74.27	69.52	69.44	70.58	72.65	71.22	.....	71.92	72.70	.....
7	77.24	76.55	73.94	70.09	69.83	70.78	72.83	71.62	72.28	71.93	72.92	.....
8	77.28	73.62	74.33	70.27	69.77	71.11	73.04	71.72	72.14	71.95	72.69	.....
9	76.83	73.57	74.53	70.23	69.36	71.74	73.43	71.68	72.77	72.01	72.65	.....
10	77.20	73.56	74.17	69.91	69.46	72.03	74.03	71.79	73.90	71.93	72.79	.....
11	77.24	73.78	74.06	70.04	69.43	72.50	74.39	71.88	.....	71.75	72.72	.....
12	76.91	73.87	74.10	69.89	69.32	72.76	74.34	71.83	.....	71.95	72.76	.....
13	76.56	73.70	74.26	69.87	69.49	72.44	74.54	72.22	.....	71.97	72.77	.....
14	77.08	73.44	74.12	69.94	69.20	72.28	74.95	.....	72.13	71.93	72.79	72.34
15	76.85	73.50	74.05	69.91	69.51	71.82	75.21	.....	72.14	72.20	72.38	72.21
16	77.12	73.70	72.81	69.76	69.60	71.44	75.07	.....	72.33	72.18	72.71	72.21
17	77.02	73.67	71.74	69.42	69.74	71.45	74.62	72.01	72.35	72.18	72.63	72.26
18	76.93	73.57	71.58	69.32	69.83	71.10	74.46	71.85	72.37	71.94	72.36	72.15
19	76.97	73.92	71.39	.....	69.89	70.94	74.02	71.96	72.43	71.93	72.52	72.10
20	76.93	73.84	70.87	69.53	70.25	70.86	73.52	71.94	72.29	72.06	73.01	72.08
21	76.65	73.70	70.64	69.89	70.63	71.03	73.30	71.98	72.02	72.17	73.06	71.79
22	76.59	73.57	70.55	69.88	70.62	71.25	73.03	72.00	71.90	72.11	73.03	71.79
23	76.67	73.63	70.47	70.32	.....	71.48	72.91	72.30	72.03	72.03	73.14	71.50
24	76.36	73.94	70.39	70.33	.....	71.65	72.84	72.21	72.13	71.91	.....	71.64
25	76.50	73.94	70.49	69.94	70.40	71.61	72.79	72.30	72.27	72.02	.....	71.46
26	76.98	74.19	70.27	70.07	70.24	71.82	72.63	72.13	72.32	71.89	.....	71.67
27	76.81	74.16	70.64	70.39	70.26	72.00	72.53	72.07	72.20	71.96	.....	71.52
28	76.40	73.90	70.14	70.47	70.22	71.87	72.38	71.73	72.11	72.16	.....	71.28
29	76.84	.....	70.38	70.34	70.31	71.74	72.47	71.79	71.97	72.42	.....	71.42
30	76.75	.....	70.21	70.00	70.41	71.78	.....	71.69	71.96	72.64	.....	71.58
31	76.76	.....	70.00	.....	70.48	.....	.....	71.88	.....	72.63	.....	71.68

Wk 3. Village of Menomonee Falls. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 10, T. 8 N., R. 20 E. Records available: 1946-50. Feb. 1, 25.24; Apr. 4, 24.61; May 11, 24.61; Sept. 13, 28.06.

Wk 14. Veterans Administration Hospital. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 2, T. 6 N., R. 19 E. Records available: 1946-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	296.28	298.07	297.67	298.39	.....	297.00	303.11	302.00	301.04	301.48	301.56	303.03
2	294.51	297.36	297.75	298.24	296.85	298.41	299.89	302.29	302.30	300.77	303.58	302.15
3	294.68	298.67	299.11	296.53	298.64	296.54	298.81	302.00	301.70	302.65	303.45	301.80
4	296.02	296.78	296.63	297.45	298.50	294.95	.....	302.69	298.86	302.68	303.21	301.55
5	296.10	296.36	296.12	299.77	297.65	296.94	298.69	302.68	299.30	302.60	302.18	302.54
6	297.66	296.11	297.42	299.61	298.60	297.17	299.37	301.83	301.48	303.17	301.06	302.40
7	297.49	297.84	297.15	299.24	297.33	299.43	301.02	300.40	301.56	301.00	300.70	302.73
8	297.25	297.14	299.18	299.55	296.53	299.40	300.47	301.70	300.70	299.98	302.41	303.07
9	295.51	297.01	299.25	297.24	298.61	301.15	299.75	301.97	301.94	300.90	302.78	302.98
10	298.01	298.77	299.92	296.69	298.52	300.83	299.13	302.50	299.55	301.19	303.14	302.18
11	297.99	298.23	298.26	297.49	298.85	300.10	.....	303.12	299.12	300.50	304.24	300.52
12	297.81	296.90	296.55	296.50	298.25	298.08	.....	301.72	300.92	302.43	301.97	300.32
13	294.33	295.21	297.74	299.26	299.20	298.59	300.21	300.90	301.67	302.28	302.49	303.04
14	298.38	294.51	298.36	295.17	296.65	299.90	301.70	300.15	301.53	301.67	301.71	302.90
15	296.22	296.72	299.15	295.81	297.15	301.10	303.08	300.60	302.80	301.27	303.38	303.32
16	295.74	297.57	300.04	294.30	297.20	300.92	302.40	302.02	301.04	300.15	303.82	301.43
17	295.66	297.44	299.65	293.10	298.90	300.73	300.72	302.47	300.27	301.96	303.98	300.40
18	297.46	297.13	300.31	295.32	298.73	299.84	301.27	303.17	300.56	301.93	303.15	300.72
19	297.78	292.84	297.51	299.79	298.30	298.15	301.90	301.84	301.78	301.90	302.02	302.35
20	296.31	293.88	295.14	299.87	299.33	298.88	303.40	300.98	302.30	303.58	300.99	302.57
21	297.17	295.84	296.25	300.61	297.65	300.49	303.30	300.98	303.21	301.12	300.83	302.00
22	295.81	298.36	296.35	300.64	297.40	301.06	302.75	300.91	303.15	300.32	302.67	303.53

Wk 14--Continued.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
23	295.51	296.16	298.53	298.72	298.00	301.60	302.02	300.88	303.33	300.60	301.51	300.94
24	296.37	298.03	296.23	296.70	299.70	302.36	300.35	302.82	301.57	302.02	300.24	302.08
25	296.00	297.23	297.21	297.60	299.89	300.05	300.42	302.76	301.02	302.42	301.65	297.61
26	298.32	296.08	296.47	298.98	299.55	299.32	302.32	302.59	302.58	302.07	298.91	300.05
27	298.12	295.28	296.83	300.45	299.86	300.90	303.22	301.54	302.95	303.03	299.09	300.85
28	296.67	296.98	298.06	298.47	297.70	301.11	302.70	299.37	303.03	300.54	301.31	300.72
29	295.00		299.00	299.43	296.45	302.80	303.77	300.37	303.80	301.90	301.93	302.01
30	295.71		300.40	.....	297.41	303.07	303.40	299.92	303.03	299.76	301.55	300.18
31	298.01		298.59		296.38		302.05	302.47		301.00		299.37

Wk 20. G. W. Aeppler. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 6, T. 7 N., R. 17 E. Records available: 1946-50. Feb. 7, 29.67; Apr. 5, 28.92; May 11, 31.18; Sept. 14, 31.01; Nov. 15, 29.82.

Wk 22. Mrs. Bartholomew. 112 Maple Ave., Big Bend. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 24, T. 5 N., R. 19 E. Records available: 1946-50. Feb. 6, 27.13; Mar. 28, 26.95; May 10, 26.78; July 12, 27.85; Sept. 12, 26.80; Nov. 14, 27.10.

Wk 29. Mr. Roese, Riviera Tavern. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 14, T. 7 N., R. 18 E. Records available: 1946-50. Feb. 7, 66.81; Mar. 29, 62.94; May 11, 68.42; July 11, 64.41; Oct. 10, 69.15.

Wk 31. Fulton Farms. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 2, T. 5 N., R. 19 E. Records available: 1947-50.

Daily lowest water level, from recorder graph

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	134.44	134.54	134.76	134.38	133.71	133.79	133.77	133.39	133.50	133.63	133.87	134.14
2	134.40	134.57	134.79	134.38	133.69	133.70	133.75	133.44	133.51	133.65	133.96	134.03
3	134.28	134.57	134.77	134.33	133.62	133.68	133.74	133.45	133.55	133.67	133.99	134.06
4	134.49	134.57	134.76	.....	133.60	133.67	133.75	133.42	133.59	133.67	133.95	134.17
5	134.51	134.56	134.74	134.30	133.56	133.66	133.76	133.45	133.62	133.67	133.90	134.22
6	134.49	134.44	134.74	134.32	133.64	133.73	133.79	133.47	133.63	133.67	133.97	134.22
7	.....	134.62	.....	134.25	133.78	133.81	133.80	133.44	133.59	133.66	134.00	135.07
8	.....	134.57	.....	134.29	133.78	133.79	133.83	133.43	133.57	133.65	133.96	.....
9	134.38	134.52	.....	134.25	133.63	133.77	133.83	133.42	133.56	133.66	134.02	.....
10	134.54	134.51	.....	134.08	133.64	133.79	133.84	133.45	133.53	133.68	134.06	.....
11	.....	134.63	.....	134.03	133.69	133.85	133.83	133.48	133.56	133.67	134.06	.....
12	134.53	134.63	.....	134.05	133.63	133.82	133.80	133.50	133.57	133.77	134.07	.....
13	134.48	134.61	.....	134.05	133.56	133.75	133.80	133.50	133.60	133.77	134.04	.....
14	134.53	134.45	.....	134.10	133.59	133.68	133.84	133.47	133.60	133.77	134.04	134.11
15	134.50	134.45	134.72	134.03	133.61	133.66	133.82	133.47	133.60	133.79	133.94	134.14
16	134.59	.....	134.68	133.98	133.66	133.68	133.80	133.49	133.67	133.80	134.00	134.15
17	134.59	.....	134.65	133.85	133.74	133.70	133.53	133.70	133.70	133.81	134.05	134.19
18	134.52	.....	134.76	.....	133.74	133.68	133.75	133.54	133.68	133.79	133.98	134.19
19	134.60	.....	134.76	133.85	133.66	133.60	133.72	133.53	133.62	133.76	133.94	134.18
20	134.60	.....	134.68	133.87	133.68	133.59	133.60	133.56	133.63	133.82	134.09	134.26
21	134.50	.....	.....	133.88	133.64	133.65	133.61	133.63	133.60	133.76	134.08	134.26
22	134.42	134.52	.....	133.80	133.60	133.63	133.58	133.55	133.52	133.79	134.03	134.20
23	134.50	134.58	.....	133.87	133.62	133.58	133.53	133.54	133.56	133.83	134.09	134.18
24	134.43	134.68	.....	133.80	133.63	133.58	133.47	133.59	133.62	133.83	134.15	134.21
25	134.42	134.71	.....	133.71	133.63	133.63	133.50	133.61	133.61	133.90	134.15	134.21
26	134.64	134.76	.....	133.75	133.68	133.62	133.45	133.60	133.61	133.90	133.97	134.28
27	134.64	134.74	.....	133.79	133.69	133.70	133.50	133.55	133.61	133.84	134.09	134.28
28	134.51	134.62	.....	133.82	133.68	133.68	133.43	133.43	133.61	133.89	134.11	.....
29	134.56		134.63	133.81	133.70	133.74	133.39	133.47	133.61	133.89	134.11	.....
30	134.56		134.63	133.76	133.62	133.75	133.37	133.45	133.62	133.89	134.11	.....
31	134.54		134.57		133.64		133.43	133.45		133.86		.....

Wk 32. Western United Dairy Co. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 23, T. 5 N., R. 18 E. Records available: 1947-50. Feb. 6, 47.84; Apr. 3, 47.64; May 10, 47.23; July 24, 47.09; Sept. 12, 47.04; Nov. 14, 47.15.

Wk 34. A. N. McGeoch Co. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 19, T. 5 N., R. 18 E. Records available: 1947-50. Feb. 6, 37.09; Apr. 3, 36.10; May 10, 36.24; July 24, 33.78; Nov. 14, 36.88.

#### Waupaca County

Wp 2. Village of Fremont. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 26, T. 21 N., R. 13 E. Drilled fire well, diameter 8 inches, depth 205 feet. Records available: 1950.

## 198 WATER LEVELS AND ARTESIAN PRESSURES, 1950, NORTH-CENTRAL STATES

## Wp 2--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 3	13.66	Aug. 29	13.89	Oct. 2	14.10	Nov. 6	14.38
14	13.71	Sept. 12	13.92	10	14.18	20	14.59
21	13.88	25	14.12	23	14.17	Dec. 11	14.57

Wp 4. E. H. Christensen. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 33, T. 21 N., R. 11 E. Driven unused domestic well, diameter 1 $\frac{1}{4}$  inches, depth 24 feet. Records available: 1950.

Aug. 4	9.14	Sept. 10	9.48	Oct. 18	9.82	Dec. 6	10.36
14	9.16	18	9.56	23	9.80	13	10.37
21	9.28	25	9.62	Nov. 19	10.16	22	10.46
29	9.38	Oct. 11	9.76	30	10.25	29	10.46
Sept. 4	9.39						

## Waushara County

Ws 1. University of Wisconsin Experimental Farm. Hancock, NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 15, T. 19 N., R. 8 E. Records available: 1947-50.

Jan. 9	10.95	Apr. 10	10.15	June 23	10.04	Aug. 21	9.99
20	11.07	20	10.20	July 5	10.05	Sept. 13	10.10
23	11.10	25	10.21	10	10.10	20	10.21
Feb. 6	11.22	May 8	10.27	17	10.12	25	10.20
17	11.36	18	10.25	24	10.03	Oct. 17	10.40
Mar. 6	11.30	23	10.14	31	10.03	30	10.49
15	11.21	31	10.11	Aug. 9	9.99	Nov. 27	10.72
21	11.40	June 5	10.07	14	9.95	Dec. 28	10.91
Apr. 4	9.24	12	10.13				

Ws 2. Village of Plainfield. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 14, T. 2 N., R. 8 E. Measurement discontinued after Mar. 23, 1950. Records available: 1949-50. Jan. 10, 19.17; Feb. 23, 19.62; Mar. 23, 19.78.

Ws 3. Follett. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 5, T. 18 N., R. 8 E. Records available: 1949-50. Jan. 10, 55.04; Feb. 23, 55.29; Mar. 23, 55.45; May 19, 55.56; Aug. 15, 55.99; Oct. 11, 55.84; Nov. 29, 55.28.

Ws 4. Village of Hancock. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 10, T. 19 N., R. 8 E. Dug fire well, diameter 72 inches, depth 25 feet. Records available: 1950. Jan. 11, 10.83; Feb. 23, 11.14; Mar. 23, 11.15; May 19, 9.82; Aug. 15, 11.15; Oct. 11, 10.28; Nov. 29, 10.75.

Ws 7. U. S. Geol. Survey. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 10, T. 20 N., R. 8 E. Driven observation well, diameter 1 $\frac{1}{4}$  inches, depth 17 feet. Records available: 1950.

Sept. 25	12.84	Oct. 23	13.14	Nov. 20	13.48	Dec. 11	13.76
Oct. 2	12.90	30	13.21	27	13.57	18	13.84
9	12.98	Nov. 6	13.32	Dec. 4	13.66	26	13.99
16	13.06						

## Winnebago County

Wi 1. Oak Hill Cemetery. SE $\frac{1}{4}$  sec. 20, T. 20 N., R. 17 E. Records available: 1946-50. Feb. 9, 58.70; Apr. 7, 57.37; May 26, 57.84; July 28, 58.97; Sept. 22, 59.35; Nov. 22, 59.81.

## Wood County

Wd 29. Elmer Aschenbrenner. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 2, T. 23 N., R. 4 E. Records available: 1944-50.

Jan. 2	12.19	Apr. 3	8.43	July 3	6.21	Oct. 9	6.79
7	12.14	10	7.45	11	6.26	16	6.87
16	13.26	17	6.42	19	6.20	23	6.94
23	12.19	24	6.28	24	5.98	30	7.18
30	12.44	May 1	5.95	31	5.94	Nov. 6	7.22
Feb. 7	12.19	9	5.90	Aug. 7	6.09	13	7.34
13	12.14	15	6.23	15	6.16	20	7.42
20	12.36	22	6.38	21	6.27	28	7.76
27	12.50	30	6.14	Sept. 4	6.38	Dec. 4	8.29
Mar. 6	13.45	June 5	6.12	11	6.35	12	8.84
13	13.40	13	6.34	18	6.32	18	8.78
20	12.20	19	5.94	25	6.40	26	9.99
27	9.99	26	6.31	Oct. 2	6.72		