

Water Levels and Artesian Pressure in Observation Wells in the United States in 1949

Part 3. North-Central States

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

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



UNITED STATES DEPARTMENT OF THE INTERIOR

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PREFACE

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**WATER LEVELS AND ARTESIAN PRESSURE IN OBSERVATION WELLS
IN THE UNITED STATES IN 1949**

Part 3. NORTH-CENTRAL STATES

INTRODUCTION

By A. N. Sayre and others

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; and 1939, 886. Beginning with 1940 the records have been published in six volumes, covering the northeastern, southeastern, north-central, south-central, northwestern, and southwestern sections of the country. Hawaii is included in the southwestern section. The following table gives the numbers of water-level reports from 1940 through 1949.

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

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.

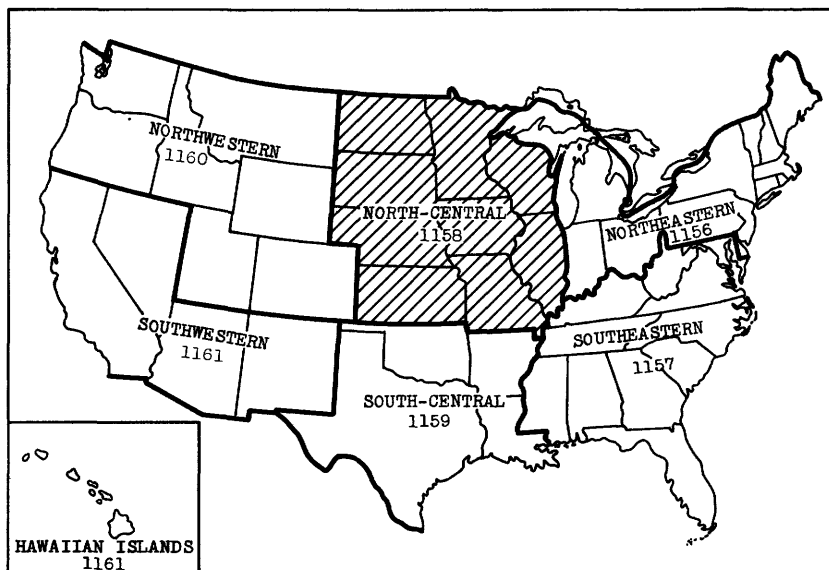


Figure 1.--Outline map of the United States showing States included in each of the six water-supply papers on water levels and artesian pressures in observation wells in 1949. The shaded area indicates the States included in this volume.

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 2,769 wells listed, 91 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. Water levels above this datum are preceded by a plus (+) sign, those below this datum have no sign but are understood to be minus (-).

Measurement 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.



ILLINOIS

By J. B. Cooper

PROGRAM OF WORK

Measurements of water level were continued in 1949 in the well at Princeton, in Bureau County, as a part of the Nation-wide network of observation wells. This well, equipped with a float-tape gage, was first observed in November 1942; observations have been made at approximately weekly intervals since that time. A total of 51 measurements was made in this well during 1949.

FLUCTUATIONS OF WATER LEVEL

The water level during 1949 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. Water levels during the first 6 months of the year were generally lower than those of previous years. The high of 8.86 feet below land-surface datum recorded on April 23 was 5.26 feet lower than the 1948 high. Water levels during the second half of the year were similar to those of the previous year with a low of 20.99 feet recorded on December 17.

Departure from average, in feet, 1949

January	+1.05	April	-0.47	July	+1.95	October	-2.30
February	+3.43	May	-4.14	August	-1.40	November	-2.76
March	-1.17	June	-3.91	September	-2.18	December	-2.76

WELL DESCRIPTION AND WATER-LEVEL MEASUREMENTS

Bureau County

U. S. 112. R. E. Neff. In Princeton, in sec. 9, T. 16 N., R. 9 W. Measurements made by Nick Hansen. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	19.15	Apr. 16	9.21	July 16	16.00	Oct. 15	20.10
15	18.61	23	8.86	23	16.21	23	20.11
22	18.19	30	8.87	30	16.32	29	20.21
29	13.69	May 7	9.44	Aug. 6	16.19	Nov. 5	20.30
Feb. 5	14.85	14	10.44	13	16.32	12	20.29
12	14.99	21	11.35	20	17.01	19	20.33
19	11.79	28	11.74	27	17.51	27	20.42
26	10.01	June 4	12.51	Sept. 3	18.11	Dec. 3	20.45
Mar. 5	11.40	11	13.61	10	18.69	10	20.51
12	11.68	18	13.50	17	19.00	17	20.99
19	11.75	25	14.35	24	19.30	24	19.23
26	11.58	July 2	15.11	Oct. 1	19.70	31	18.61
Apr. 2	10.05	9	15.68	8	19.85		

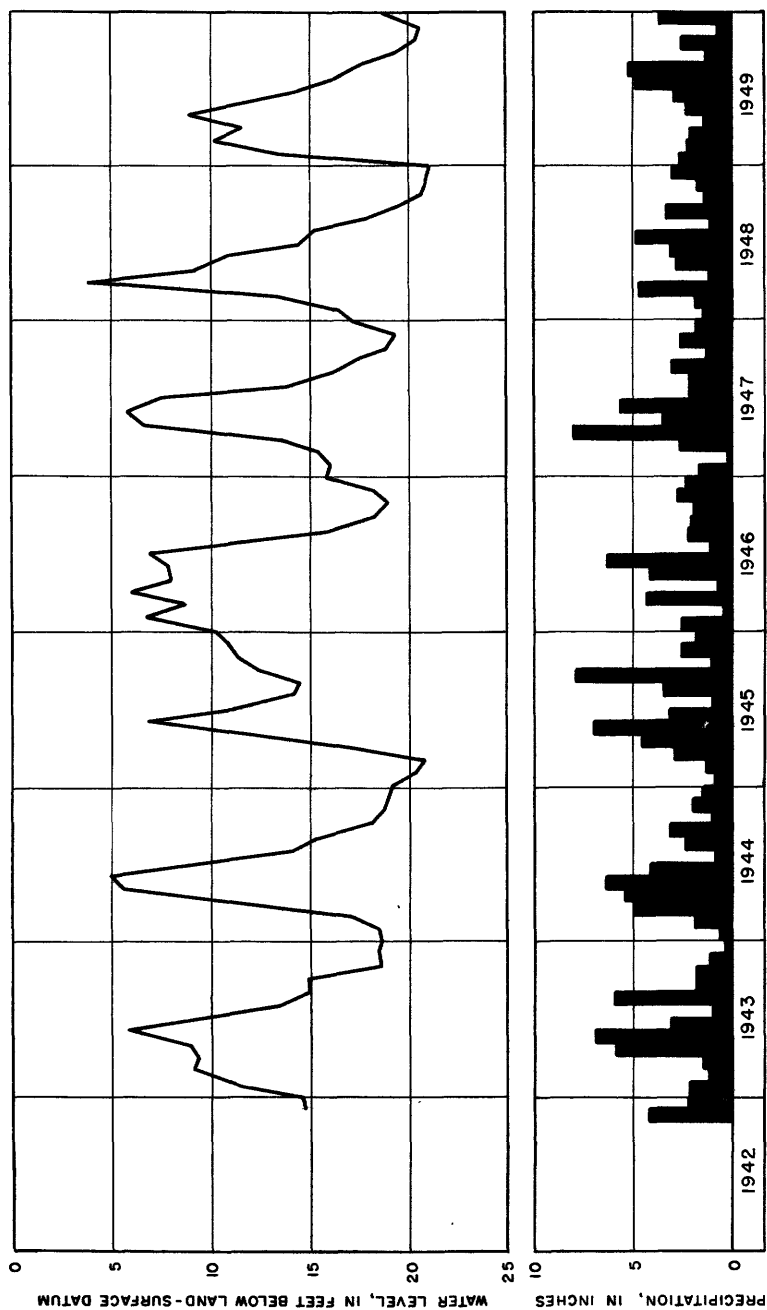


Figure 2.--hydrograph of well near Princeton, Ill., and monthly precipitation at U. S. weather bureau station near Tiskilwa from November 1942 to December 1949.

IOWA

By J. B. Cooper and C. W. Lane

PROGRAM OF WORK

Measurements of the water level in observation wells in Iowa were continued in 1949 in cooperation with the Iowa Geological Survey. Most of the observation wells were established in 1938. In a few observation wells in the Tarkio Creek Valley, in southwestern Iowa, measurements were begun in 1934 through a program organized by the Federal Geological Survey in which the Soil Conservation Service of the United States Department of Agriculture participated for several years. All of these wells are now included in one program for the State.

Past records of the water-level measurements made in the wells in the Tarkio Creek area are published in Water-Supply Papers 777, 817, 840, 845, 886, 908, 938, 988, 1018, 1025, 1073, 1098, and 1128, and those for the wells established in 1938 first appear in Water-Supply Paper 886.

At the beginning of 1949 measurements were being made in 161 wells in 38 counties throughout the State. During the year 2 wells were dropped from the program, and 21 wells were added, making a total of 180 wells in 42 counties in the observation-well program at the end of the year. (See fig. 3). Automatic water-stage recorders were being maintained on 16 wells at the close of the year. Water-level measurements were being made weekly on 8 wells, monthly on 50 wells, and quarterly on most of the remaining wells. Approximately, 1,160 wetted-tape measurements were made in 1949 as contributions to the observation-well program. In addition, many water-level measurements were made in connection with pumping tests and in gathering data on new wells throughout the State. These additional measurements and descriptions of wells are not included in this report.

FLUCTUATIONS OF WATER LEVELS

The average total precipitation over the State in 1949 was 28.06 inches, about 3.31 inches below normal. Above-normal precipitation occurred over most of the State during January, March, and June. During the remaining months it was below normal.

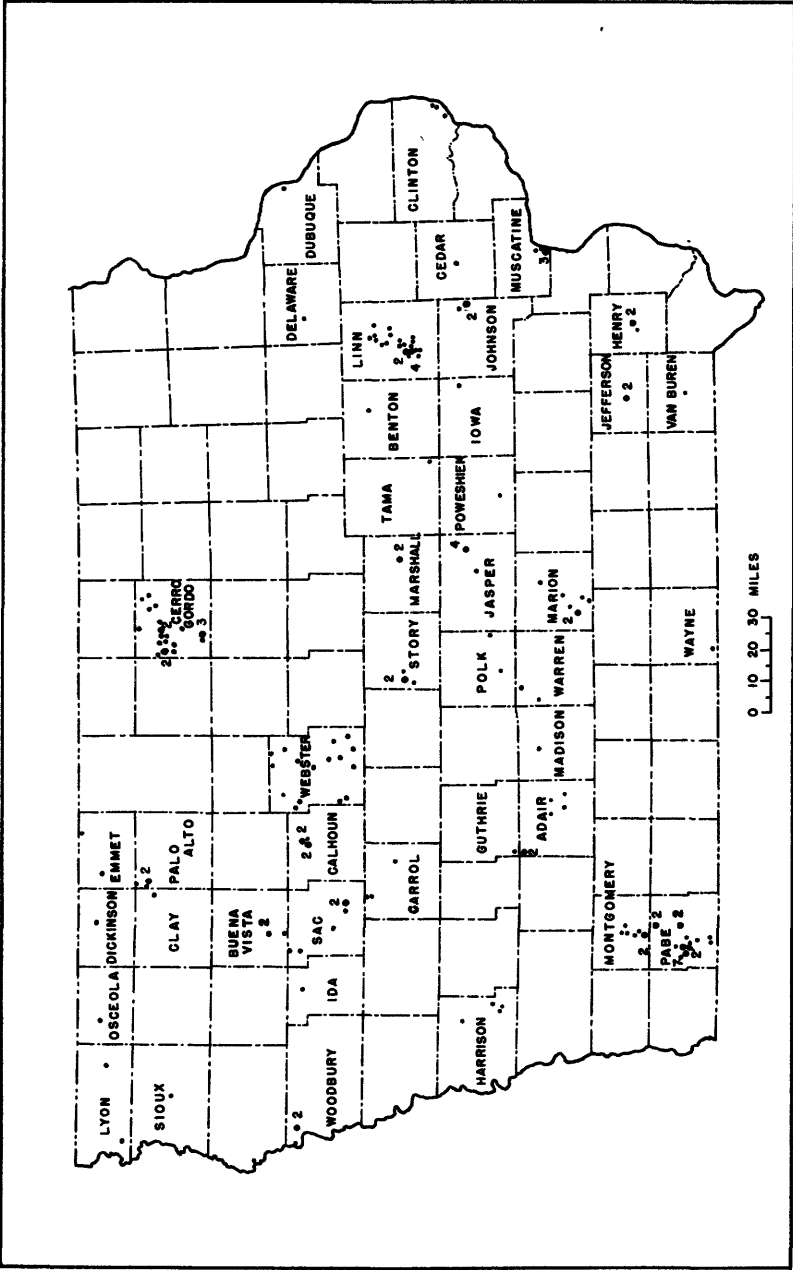


Figure 3.--Map of Iowa showing locations of observation wells, 1949.

The following table shows the average net change in the water level between December 1948 and December 1949 in groups of shallow wells, by counties, and the precipitation for 1949 and the departure from normal at the nearest U. S. Weather Bureau station.

Average net change in water levels, in feet, in shallow wells in Iowa and annual precipitation and departure from normal, in inches, at the nearest U. S. Weather Bureau Station, 1949

County	No. of wells	Average net change	Precipitation	Departure from normal
Adair	3	-0.66	33.60	+2.11
Buena Vista	1	-.35	22.38	-6.13
Calhoun	4	-.90	25.10	-6.64
Cerro Gordo	9	-.75	27.00	-3.50
Clay-Palo Alto	a 3	-.23	25.85	-2.42
Jefferson	1	-.58	34.25	-.07
Johnson	1	-2.47	30.02	-4.48
Linn	5	-3.27	29.51	-1.38
Madison	1	-.65	26.15	-5.71
Marion	4	-1.26		
Montgomery-Page	b17	+1.11	31.68	-.77
Muscatine	2	+5.57	34.95	+1.26
Polk	2	-.64	29.41	-1.56
Poweshiek	1	-.58	30.35	-3.05
Sac	3	-.57	23.16	-5.55
Story	2	-3.39	23.89	-6.86
Warren	1	+2.32	31.73	+6.4
Webster	7	-1.78	22.61	-8.52

a These wells, 1 in Clay County and 2 in Palo Alto County, are all in the vicinity of Lost Island Lake.

b These wells, 4 in Montgomery County and 13 in Page County, are in the Tarkio Creek Valley which occupies parts of both counties.

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. Water-level measurements have been made in this group of wells at least once a month for almost the entire period of record. In 1949, these measurements were made by Dean W. Knox, local observer. Records of the water levels in wells in the Missouri part of the area are given in the section of this report that deals with that State.

Measurements in eight wells (Nos. 1, 5, 6, 7, 10, 12, 15, and 17) were used in computing the average water level for each month in 1949. These averages are given in the following table.

Average water levels, in feet above assumed datum planes, in 8 observation wells in the Tarkio Creek area, Iowa-Mo., 1949

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan.	13.02	Apr.	16.03	July	16.86	Oct.	14.19
Feb.	14.49	May	16.73	Aug.	16.01	Nov.	13.81
Mar.	15.54	June	17.80	Sept.	14.46	Dec.	13.53

The fluctuation of the average water level in this area as indicated by these eight wells and the precipitation at Shenandoah since 1934 are shown by months in figure 4.

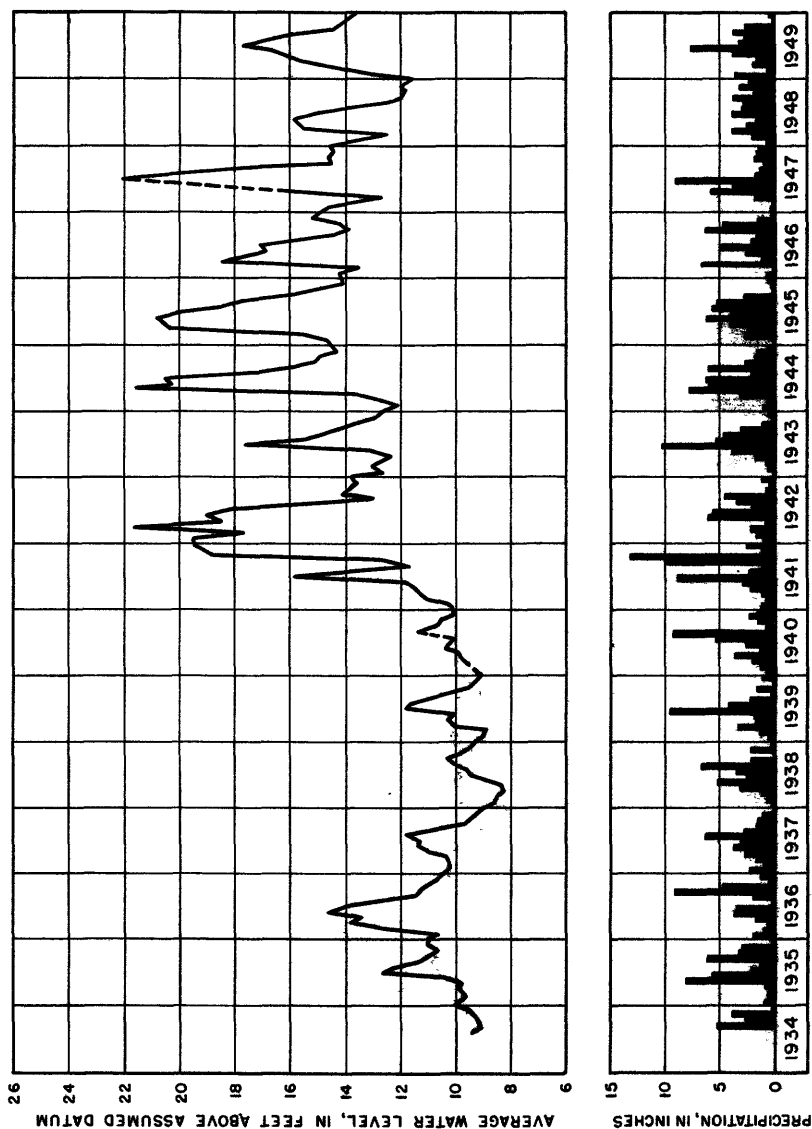


Figure 4.--Graphs showing fluctuations of the average water level in the Tarkio Creek Valley, Iowa-Mo., and precipitation at Shenandoah, Iowa, from Sept. 1934 to Dec. 1949.

The fluctuation of the water level during the period of record in a shallow unused well in the southern part of Webster County, near Harcourt, is shown in figure 5. This well is 41.8 feet deep, taps water in the glacial drift, and is representative of several shallow observation wells in the county which tap the same water-bearing bed. The monthly precipitation at Fort Dodge, shown also on the graph, correlates closely with fluctuations of water level.

Figure 6 shows the depth of the water table below land-surface datum in well 84-6-20N1, an observation well 11.7 feet deep tapping water in glacial drift. Wetted-tape measurements were made during the last week of each month to obtain these data. The well is in central Linn County about 5 miles northeast of Cedar Rapids. Close correlation between precipitation, as recorded at the U. S. Weather Bureau station in Cedar Rapids, and the water-level fluctuations in this well is evident. This well is representative of several shallow observation wells in the county and of many domestic farm wells which tap the same water-bearing bed.

Well 83-7-21K1, figure 7, at Cedar Rapids, Linn County, is illustrative of artesian rock wells affected by industrial and seasonal withdrawals for normal industrial use and air-conditioning purposes. This is an unused well completed at a depth of 156 feet in the upper part of Silurian dolomite, which is locally about 400 feet thick. Most wells in Cedar Rapids develop water supplies for air-conditioning and industrial use from these strata. The observation well is about half a mile from the heavily pumped areas of downtown Cedar Rapids. The well was first measured in August 1943. On December 31, 1949, the water level was 62.74 feet below land-surface datum, which is 5.52 feet below its stage of December 31, 1943.

WELL-NUMBERING SYSTEM

The numbers assigned by the Federal Geological Survey to its 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 diagram, and the serial number of the particular well.

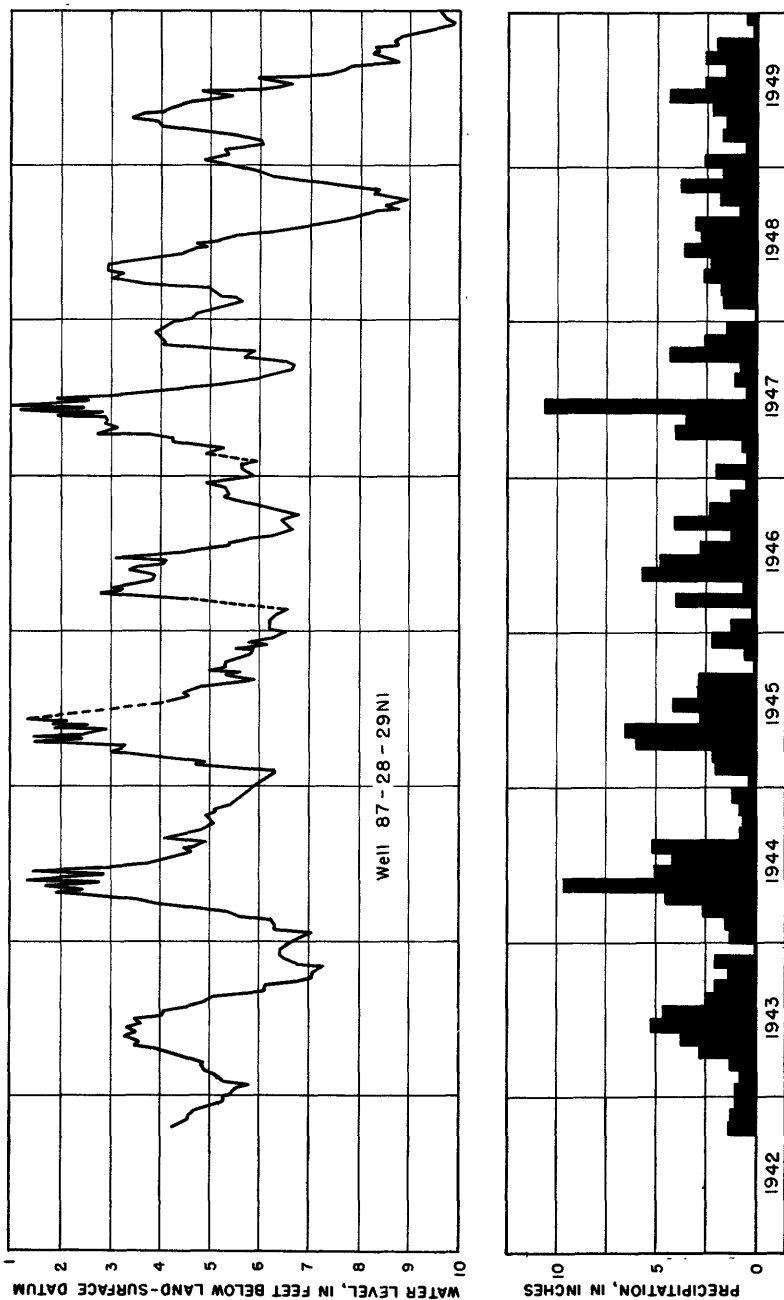


Figure 5.--Hydrograph of well near Harcourt and precipitation at Fort Dodge, Webster County, Iowa, from October 1942 to December 1949.

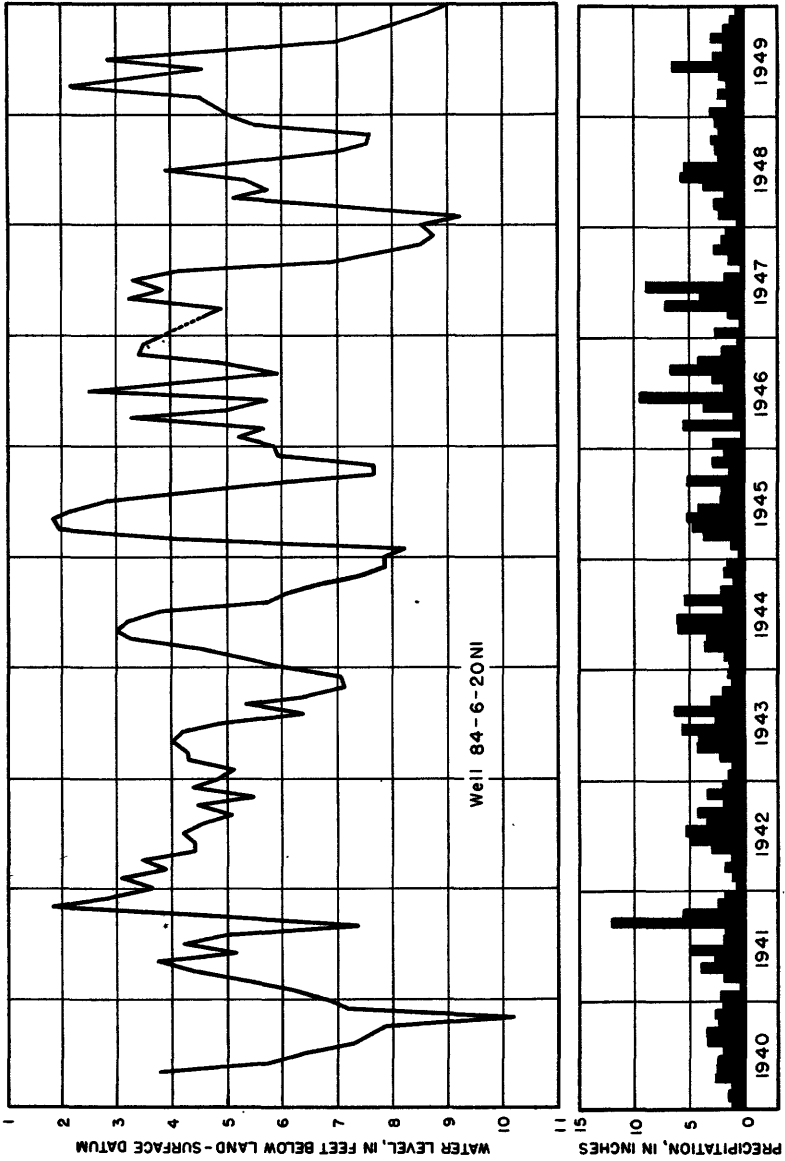


Figure 6.--Hydrograph of well near Marion and monthly precipitation at Cedar Rapids, Linn County, Iowa, from April 1940 to December 1949.

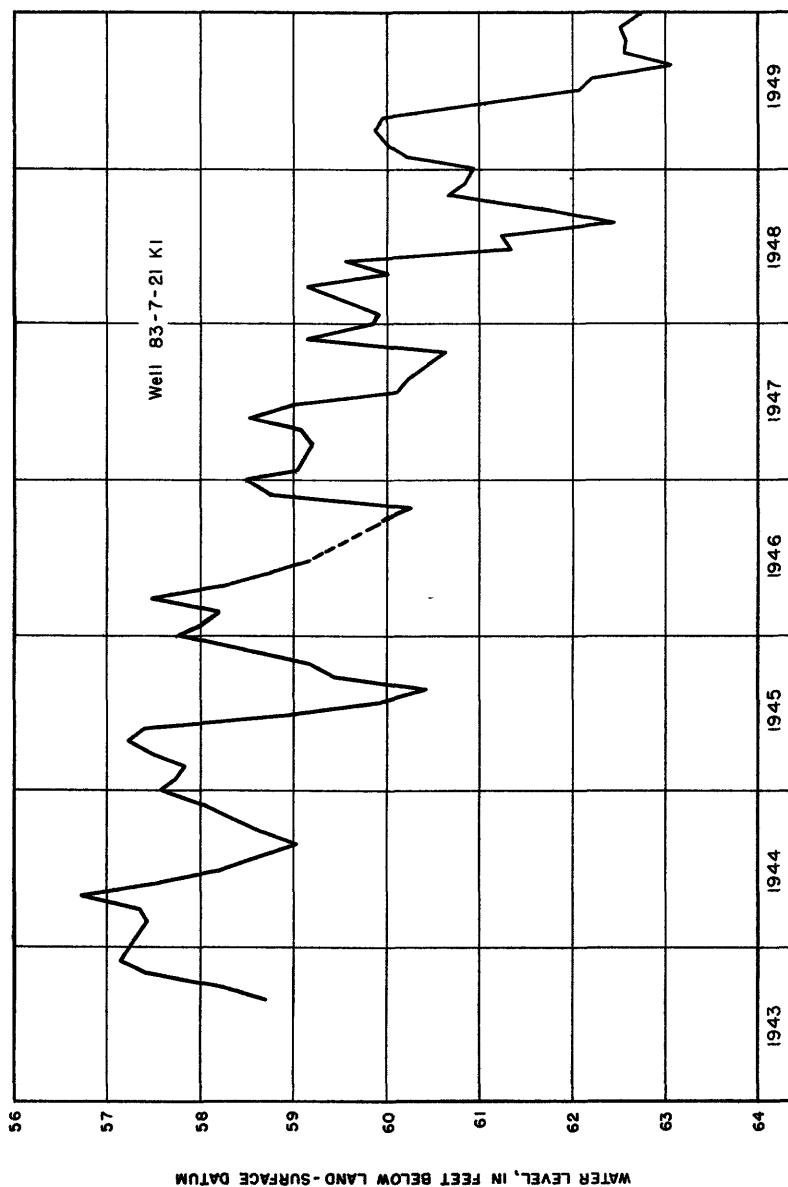


Figure 7.--Hydrograph of well at Cedar Rapids, Linn County, Iowa, from Aug. 1943 to Dec. 1949 showing fluctuations of water level caused by pumping in the vicinity.

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

The letter E is added to the second segment representing the range when a well is east of the fifth principal meridian. In the numbers of the other wells, it is understood that the range indicated is west of the meridian.

For example, the number 76-31,25Pl indicates a well in T. 76 N., R. 31 W., in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 25, whose serial number is 1.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Adair County

77-33-5C1. Geological Survey, U. S. Dept. of Interior. On land owned by L. C. Krouse, in NW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 5, T. 77 N., R. 33 W. Bored well, diameter 1 $\frac{1}{4}$ inches, depth 37.2 feet. Measuring point, top of pipe, 2.9 feet above land-surface datum. Measurements made by Clyde Filbert. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 22	3.97	Nov. 13	4.05	Dec. 3	4.11	Dec. 17	4.09
29	4.01	20	4.10	10	4.32	24	4.24
Nov. 5	4.07	27	4.06				

77-33-8E1. Geological Survey, U. S. Dept. of Interior. On land owned by Carl Warner in SE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 8, T. 77 N., R. 33 W. Bored well, diameter 1 $\frac{1}{4}$ inches, depth 20 feet. Measuring point, top of pipe, 2.5 feet above land-surface datum. Measurements made by Clyde Filbert. Records available: 1949.

Oct. 22	3.88	Nov. 13	3.96	Dec. 3	4.05	Dec. 17	3.81
29	3.81	20	3.91	10	3.96	24	3.82
Nov. 5	3.80	27	4.07				

76-31-25Pl. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 25, T. 76 N., R. 31 W. Records available: 1942-49. Mar. 29, 2.18; June 21, 3.50; Sept. 22, 6.10; Dec. 20, 6.76.

76-31-29Fl. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 29, T. 76 N., R. 31 W. Records available: 1942-49. Mar. 29, 8.90; June 21, 11.41; Sept. 22, 14.42; Dec. 20, 15.96.

75-31-15B1. John E. Soderberg. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 15, T. 75 N., R. 31 W. Records available: 1940-49. Mar. 29, 1.56; June 21, 6.17; Sept. 22, 5.30; Dec. 20, 6.01.

75-30-17E1. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 17, T. 75 N., R. 30 W. Records available: 1942-49. Mar. 29, 0.55; June 21, 1.23; Sept. 22, 2.00; Dec. 20, 0.42.

Benton County

85-10-16M3. City of Vinton well 3. Records available: 1939-42. No measurements made in 1949.

Buena Vista County

Vicinity of Storm Lake

90-37-3E1. Emil Schmitz. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 3, T. 90 N., R. 37 W. Records available: 1940-48. No measurements made in 1949.

90-37-23D1. Biggens Bros. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 23, T. 90 N., R. 37 W. Records available: 1940-47. No measurements made in 1949.

90-37-34B1. Ed Zinn. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 34, T. 90 N., R. 37 W. Records available: 1941-49. Mar. 29, 8.45; June 21, 7.64; Sept. 27, 11.28; Dec. 21, 11.43.

Calhoun County

Vicinity of Twin Lakes

89-32-28N1. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 28, T. 89 N., R. 32 W. Records available: 1940-49. Mar. 30, 4.00; June 24, 4.47; Sept. 29, 6.32; Dec. 22, 5.69.

89-32-33F1. Iowa State Conservation Commission. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 33, T. 89 N., R. 32 W. Records available: 1948-49. Mar. 30, 14.56; June 24, 17.21; Sept. 29, 16.24; Dec. 22, 16.20.

89-32-33N1. Ben Burns. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 33, T. 89 N., R. 32 W. Records available: 1940-49. Mar. 30, 2.15; June 24, 4.50.

88-33-1B1. Ben Burns. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, T. 88 N., R. 33 W. Records available: 1940-49. Mar. 30, 8.49; June 24, 11.82; Sept. 29, 13.40; Dec. 22, 14.70.

88-33-1D1. Bernard Kutz. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 1, T. 88 N., R. 33 W. Records available: 1940-49. Mar. 30, 11.21; June 24, 9.73; Sept. 29, 11.43; Dec. 22, 12.74.

Carroll County

85-35-7N1. City of Breda. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 7, T. 85 N., R. 35 W. Records available: 1942-49. Mar. 29, 196.38; June 21, 188.52; Sept. 27, 189.75; Dec. 20, 189.00.

85-35-18D1. City of Breda. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 18, T. 85 N., R. 35 W. Records available: 1940-49. Mar. 29, 191.07; June 21, 191.20; Sept. 27, 191.38; Dec. 20, 191.57.

84-34-25F1. City of Carroll test hole 1. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 25, T. 84 N., R. 34 W. Records available: 1939-49. Mar. 29, 38.87; June 20, 48.55; Sept. 26, 45.76; Dec. 19, 40.99.

Cedar County

80-2-6D1. City of Tipton. NE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 6, T. 80 N., R. 2 W. Drilled well, completed prior to 1889 at a depth of 2,696 $\frac{1}{2}$ feet; later filled to 1,000 feet, diameter 8 inches, cased to 225 feet. Measuring point, top of metal well cover, 2.2 feet above land-surface datum which is 815 feet above sea-level datum. Principal aquifer Silurian dolomite from 135 feet to 500 feet. Original static water level reported as 56 feet below land surface. Affected by pumping of nearby wells. Continuous water-stage recorder installed on well Sept. 28, 1949. Highest observed water level, 55.6 on Oct. 27; lowest, 96.3 on Nov. 16. Records available: 1949.

80-2-6D1--Continued.

Daily high and low water levels, from recorder charts

Day	September		October		November		December	
	High	Low	High	Low	High	Low	High	Low
1	58.4	93.5	59.6	92.5	57.8	93.3
2	58.7	91.4	60.6	92.4	58.0	92.4
3	57.1	92.6	60.0	93.0	57.3	92.9
4	59.3	94.1	61.7	93.4	57.8	92.0
5	59.1	92.0	61.5	92.8	57.3	94.0
6	57.5	93.0	62.7	93.3	57.7	90.1
7	57.8	92.3	61.0	93.5	57.0	94.5
8	57.3	92.8	62.0	93.5	59.2	93.4
9	57.8	92.3	61.6	93.6	58.5	94.0
10	57.0	91.8	60.6	93.6	58.0	93.2
11	57.7	93.3	61.8	93.6	57.6	91.2
12	58.0	94.5	60.5	93.6	57.3	93.8
13	65.5	95.8	61.3	93.9	58.8	91.3
14	64.5	96.0	61.2	93.3	58.0	94.0
15	58.9	90.6	62.1	94.8	58.4	93.2
16	58.6	93.6	63.9	96.3	57.8	93.8
17	58.8	93.6	60.6	94.9	58.0	91.1
18	58.3	94.0	59.3	94.5	57.6	93.9
19	58.6	92.6	58.6	93.9	57.9	92.8
20	58.4	93.4	57.1	93.0	57.7	92.6
21	58.2	87.5	58.2	93.8	57.3	93.6
22	57.2	93.5	58.1	93.9	57.8	92.5
23	58.1	93.8	57.0	93.2	58.1	93.8
24	57.6	88.9	57.3	91.5	58.3	93.8
25	56.8	93.5	57.0	92.3	58.5	92.6
26	57.1	91.8	57.1	93.1	58.0	92.5
27	55.6	93.0	57.7	91.5	58.0	92.8
28	57.0	93.1	57.7	94.1	56.9	93.3	57.6	94.3
29	58.5	93.4	57.9	94.2	58.0	92.1	58.6	93.3
30	58.8	92.3	58.5	90.8	57.8	93.8	57.0	91.8
31			56.7	90.1			57.8	92.4

Cerro Gordo County

97-21-9E1. E. H. Phillips. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 9, T. 97 N., R. 21 W. Records available: 1941-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 15	96.85	June 23	97.83	Dec. 27	90.60
Apr. 1	95.11	Sept. 28	97.80		

97-20-24H1. Mrs. Vinnie Shanks. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 24, T. 97 N., R. 20 W. Records available: 1941-49. Jan. 15, 13.22; Apr. 1, 14.50; June 23, 9.70; Sept. 28, 11.82.

97-20-28L1. American Crystal Sugar Co. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 28, T. 97 N., R. 20 W. Records available: 1943-49. Jan. 14, 187.10; Apr. 1, 187.06; June 23, 190.84; Dec. 28, 188.96.

97-19-30R1. E. Stebbens. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 30, T. 97 N., R. 19 W. Records available: 1941-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 15	10.91	June 23	10.70	Dec. 27	12.51
Apr. 1	9.58	Sept. 28	11.93		

96-22-7Q1. W. S. Overgaard. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 7, T. 96 N., R. 22 W. Records available: 1941-49. Jan. 14, 25.64.

96-22-14C1. Fred Stephens. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 14, T. 96 N., R. 22 W. Records available: 1940-49. Jan. 14, 34.78; Apr. 1, 33.60; June 22, 35.22.

96-22-20C1. The Willow Inn. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 20, T. 96 N., R. 22 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 14	6.59	June 22	6.03	Dec. 28	6.80
Apr. 1	2.96	Sept. 28	8.00		

96-22-20L1. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 20, T. 96 N., R. 22 W. Records available: 1940-49.

Jan. 14	35.64	June 22	38.12	Dec. 28	36.74
Apr. 1	35.57	Sept. 28	37.02		

96-22-23Q1. H. R. Anderson. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 23, T. 96 N., R. 22 W. Records available: 1940-49. Jan. 14, 24.18; Apr. 1, 23.85; June 22, 22.91.

96-22-25D2. Geological Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 25, T. 96 N., R. 22 W. Records available: 1940-49.

Jan. 14	7.42	June 22	7.18	Dec. 28	7.81
Apr. 1	5.34	Sept. 28	7.92		

96-21-13E1. Mason City & Clear Lake Railway. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 13, T. 96 N., R. 21 W. Records available: 1940-49.

Jan. 14	7.08	June 22	6.28	Dec. 28	7.21
Apr. 1	5.25	Sept. 28	6.57		

96-21-17C1. Clear Lake Sand & Gravel Co. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 17, T. 96 N., R. 21 W. Records available: 1940-49.

Jan. 14	19.09	June 22	18.80	Dec. 28	20.78
Apr. 1	17.87	Sept. 28	18.28		

96-21-17M1. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 17, T. 96 N., R. 21 W. Records available: 1940-49.

Jan. 14	2.82	June 22	2.90	Dec. 28	2.90
Apr. 1	2.48	Sept. 28	2.86		

96-21-18H1. Sam Kennedy. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T. 96 N., R. 21 W. Records available: 1940-49.

Jan. 14	11.42	June 22	11.49	Dec. 28	12.04
Apr. 1	10.47	Sept. 28	11.32		

96-20-3P1. Minneapolis & St. Louis Railroad Co. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, T. 96 N., R. 20 W. Records available: 1941-49.

Jan. 14	48.94	June 23	49.70	Dec. 28	50.36
Apr. 1	47.87	Sept. 29	55.07		

96-20-16J1. City of Mason City well 11. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T. 96 N., R. 20 W. New measuring point, top of well cover 1.2 feet above land-surface datum, 0.2 foot higher than preceding measuring point and 0.3 foot lower than original measuring point used for measurements of 1939-43. Records available: 1939-43, 1947-49. Jan. 15, 217.80; Apr. 1, 210.56; Oct. 9, 222.98; Dec. 28, 219.70.

96-22-3B1. Knut Olson. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 3, T. 95 N., R. 22 W. First measured in 1941; reported as abandoned in 1944, but periodic measurements have been made since that time. Records available: 1941-49.

Mar. 31, 1944	17.33	July 19, 1946	16.55	July 15, 1948	17.90
July 29	15.70	Oct. 14	16.47	Oct. 12	19.73
Oct. 5	16.41	Dec. 22	15.76	Jan. 14, 1949	20.30
Dec. 22	17.24	May 6, 1947	16.76	Mar. 31	19.42
Mar. 30, 1945	16.80	Nov. 3	19.48	June 22	18.42
July 3	14.34	Dec. 20	19.77	Sept. 28	19.80
Sept. 12	15.88	Apr. 22, 1948	19.25	Dec. 28	20.50
Dec. 27	17.69				

95-22-5M1. School district. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 5, T. 95 N., R. 22 W. Records available: 1941-49. Mar. 31, 6.33; June 22, 6.05.

95-21-27Q1. Dave Blankenship. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 27, T. 95 N., R. 21 W. New measuring point, hole in pump base, 2.5 feet above land-surface datum and 0.1 foot above previous measuring point. Records available: 1941-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 15	24.78	June 23	22.30	Dec. 27	26.04
Apr. 1	23.00	Sept. 29	24.15		

94-22-24J1. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24, T. 94 N., R. 22 W. Records available: 1941-49.

Jan. 14	12.98	June 23	11.31	Dec. 28	12.79
Mar. 31	10.99	Sept. 29	11.97		

94-22-24J2. Town of Thornton. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24, T. 94 N., R. 22 W. Records available: 1941-47. No measurements made in 1949.

94-22-24J3. Mel Bowen. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24, T. 94 N., R. 22 W. Records available: 1941-49. Jan. 14, 14.33; Mar. 31, 14.14; June 23, 18.17.

Clay County

96-35-3R1. Allis Wilson. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 3, T. 96 N., R. 35 W. Records available: 1940-49. Mar. 30, 3.76; June 22, 4.32; Sept. 28, 5.36; Dec. 21, 5.91.

Clinton County

81-6E-22H1. E. I. du Pont de Nemours & Co. well 2. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 22, T. 81 N., R. 6 E. Records available: 1940-45. No measurements made in 1949.

81-7E-6K1. W. Atlee Burpee Co. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 6, T. 81 N., R. 7 E. Records available: 1940-45, 1947, 1949. Jan. 17, 96.65.

81-7E-7B1. Clinton Water Works Co. well 5. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 7, T. 81 N., R. 7 E. Measurement made by Clinton Water Works Co. Records available: 1945-49. Feb. 9, 99.10.

Decatur County

69-25-29R1. Sam Gassett. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 29, T. 69 N., R. 25 W. Records available: 1940, 1942, 1948. Abandoned, measurements discontinued.

Delaware County

89-5-29J1. City of Manchester well 2. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 29, T. 89 N., R. 5 W. Unused drilled well, diameter 14 inches, completed in 1927 at a depth of 213 feet, cased to 40 feet. 13 $\frac{1}{2}$ -inch diameter open hole from 40 feet to 213 feet. Measuring point, top of iron plate over well top, 2 feet above land-surface datum, which is 945 feet above sea-level datum. Aquifer is Silurian dolomite. Original static water level reported as 15 feet below land surface. Affected by daily pumping of well 3, 21 feet distant and well 4, about 300 feet distant. Continuous water-stage recorder installed Oct. 5, 1949. Highest observed water level, 21.5, on Oct. 11; lowest, 42.5 on Nov. 29 and Dec. 25. Records available: 1949.

Daily high and low water levels, from recorder charts

Day	October		November		December	
	High	Low	High	Low	High	Low
1	22.0	....	22.5	....
2	22.4	30.1	24.0	42.4
3	21.7	....	22.9	....
4	22.1	40.5	22.9	....
5	22.4	....	22.6	....

89-5-29J1--Continued.

Daily high and low water levels, from recorder charts						
Day	October		November		December	
	High	Low	High	Low	High	Low
6	....	....	22.0	....	23.4	31.3
7	....	....	21.7	30.4	22.9	31.2
8	....	....	22.0	....	22.6	....
9	....	....	23.1	....	23.1	....
10	21.6	29.4	22.0	30.0	25.5	....
11	21.5	30.1	22.1	40.5	23.4	....
12	21.8	29.7	22.2	29.7	23.6	....
13	21.7	29.7	21.9	41.0	23.2	....
14	21.8	29.8	22.3	39.4	23.3	....
15	22.1	29.6	22.2	29.5	23.7	....
16	21.9	29.5	21.7	41.3	23.5	....
17	21.9	29.8	22.6	41.4	23.8	....
18	21.9	29.6	21.9	40.8	23.7	....
19	21.7	29.5	22.0	40.9	23.6	....
20	21.7	30.3	21.7	41.9	23.9	32.3
21	22.2	30.4	22.8	41.1	23.0	....
22	21.8	38.0	22.5	39.2	25.5	....
23	21.7	28.4	22.2	41.2	23.3	37.6
24	22.2	37.1	22.0	25.5	23.0	32.7
25	21.7	....	21.9	41.8	24.1	42.5
26	22.2	....	22.0	25.5	23.4	....
27	22.0	....	21.8	42.0	24.2	....
28	23.5	....	23.1	40.8	23.6	32.0
29	22.7	....	22.2	42.5	23.2	....
30	22.4	....	22.8	....	24.4	32.3
31	22.1	....	....	....	23.6	32.0

Dickinson County

99-36-6G1. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T. 99 N., R. 36 W. Records available: 1941-49. June 21, 3.87; Sept. 27, 3.40.

Dubuque County

89-3E-7Q1. City of Dubuque well 2. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 7, T. 89 N., R. 3 E. Highest observed water level, 22.3, on Mar. 28; lowest, 94.6, on Apr. 7. Records available: 1947-49.

Daily high and low water levels, from recorder charts												
Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	27.3	67.1	26.3	66.7	....	....	28.2	67.8	32.3	....	41.8	79.6
2	28.6	65.0	27.8	66.2	34.5	68.0	32.3	70.3	32.2	....	39.6	77.2
3	24.2	59.4	27.3	71.8	28.2	....	....	....	39.2	....	36.7	74.7
4	27.0	65.4	28.7	71.2	37.7	75.9	....	44.3	43.4	....	45.0	76.3
5	26.8	66.1	31.8	70.0	37.2	72.5	36.8	75.5	41.6	....	45.6	71.1
6	27.0	68.0	33.2	71.4	34.1	69.1	75.5	94.1	40.5	....	34.6	78.4
7	27.1	69.4	26.1	63.3	40.4	73.5	42.1	94.6	37.9	....	38.4	87.4
8	31.0	68.8	24.4	64.7	35.6	71.3	34.1	81.2	43.1	71.7	40.6	....
9	33.6	68.3	30.6	56.6	45.7	71.6	39.3	74.1	27.7	71.2	40.5	84.0
10	27.8	64.8	27.9	68.3	32.8	63.3	36.0	73.0	33.3	75.5	42.3	....
11	29.3	65.7	28.2	69.6	28.4	67.0	28.6	65.0	35.0	75.8	41.4	84.4
12	25.8	67.0	35.9	73.9	30.4	65.4	31.6	70.8	34.9	75.8	51.1	79.0
13	24.3	65.2	34.1	69.9	28.1	66.7	26.9	63.7	37.0	....	39.7	79.5
14	29.2	70.4	28.2	65.2	24.7	63.8	35.9	70.7	35.3	80.0	39.8	79.2
15	28.6	66.5	27.5	66.0	27.2	64.5	38.5	75.0	46.2	80.1	38.5	80.6
16	33.0	67.5	26.2	67.5	27.9	66.8	30.5	67.3	30.4	76.7	37.4	85.4
17	23.8	61.3	27.6	68.5	28.0	66.7	33.7	68.3	32.0	75.3	....	....
18	24.2	64.4	29.6	69.5	26.2	66.0	27.0	63.2	40.6	78.5	47.6	82.4
19	28.3	70.1	32.6	68.6	32.0	67.4	27.6	68.5	33.7	77.2	50.6	80.3
20	29.2	69.3	34.3	69.6	28.2	67.4	29.6	69.9	28.6	73.6	36.5	81.1
21	27.0	73.0	27.9	65.2	29.4	63.3	30.0	69.9	36.9	75.6	....	....
22	34.0	72.6	27.6	67.8	28.2	65.6	32.5	72.3	37.4	73.5	....	....

89-3E-7Q1--Continued.

Daily high and low water levels, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
23	33.2	68.7	....	69.2	23.5	66.3	35.0	73.5	31.6	72.0	....	....
24	28.2	64.5	....	....	26.8	64.3	36.8	73.1	34.2	76.0	....	....
25	30.8	72.2	....	....	29.2	65.8	29.1	65.0	34.8	77.1	....	....
26	32.5	70.4	....	....	37.4	71.0	33.3	71.8	34.7	76.9	....	....
27	28.1	70.4	....	....	30.3	68.2	31.8	69.7	42.5	77.6	....	....
28	29.3	70.9	....	....	22.8	63.0	33.2	70.3	36.9	79.2	....	....
29	30.2	71.7	....	....	27.3	66.6	34.4	69.5	40.9	73.8	....	....
30	33.1	68.5	....	....	35.4	67.5	35.4	68.5	32.6	73.2	....	....
31	28.8	62.7	....	....	26.8	67.4	....	....	32.6	77.5	....	....

Daily high and low water levels, from recorder charts

Day	August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low
1	....	....	38.8	85.8	41.2	76.2	40.3	72.7	57.2	78.6
2	....	....	41.1	85.5	51.4	77.0	38.5	74.6	55.0	83.5
3	....	....	42.0	85.7	38.4	70.7	38.7	82.1	60.4	88.6
4	....	....	51.8	73.1	42.3	79.0	39.6	75.8	60.4	76.0
5	....	....	45.1	71.1	38.9	75.3	51.0	85.0	38.9	86.4
6	....	....	36.6	67.6	40.5	75.3	55.3	76.6	46.5	89.8
7	....	....	36.6	74.1	43.4	77.5	35.6	72.7	45.2	81.1
8	....	....	36.4	81.1	47.5	77.6	49.1	75.5	43.7	81.7
9	....	....	37.9	83.2	53.9	78.5	39.9	75.8	46.0	86.0
10	....	....	43.7	82.6	36.2	78.1	42.0	77.6	47.5	87.8
11	....	....	50.5	84.1	43.0	84.5	41.4	78.5	60.7	81.7
12	....	....	35.0	68.2	45.3	77.8	42.4	77.0	41.1	87.5
13	....	....	39.8	82.9	41.8	78.4	49.2	78.0	46.0	88.6
14	....	....	41.4	87.1	43.5	78.8	36.7	75.0	45.6	85.6
15	....	....	45.5	84.2	47.2	78.6	40.7	77.9	46.2	88.8
16	....	....	42.0	86.2	46.6	79.2	43.6	78.9	46.0	86.4
17	....	....	43.4	88.5	36.5	72.0	42.5	79.5	50.8	86.8
18	....	....	41.5	80.2	42.5	77.0	49.2	80.1	57.4	90.3
19	....	....	41.7	73.4	36.5	70.1	44.8	79.0	44.5	82.5
20	....	....	41.8	78.7	50.3	78.1	53.7	80.0	49.4	90.0
21	....	....	42.9	78.6	48.5	78.3	37.8	77.1	46.8	90.8
22	....	....	47.5	76.7	40.9	78.1	43.7	80.1	45.5	87.0
23	....	....	41.9	76.6	49.8	77.6	44.4	80.1	45.6	90.6
24	....	....	45.4	76.6	37.8	73.9	45.0	80.7	48.6	91.5
25	57.0	78.0	48.0	77.7	43.0	77.0	43.8	78.7	54.8	90.4
26	55.5	86.0	37.7	80.2	37.8	75.2	42.3	79.2	41.7	81.2
27	58.2	90.7	40.7	86.2	39.6	74.7	58.1	82.7	42.5	85.8
28	55.7	....	42.4	75.5	41.3	77.4	37.8	79.5	42.7	87.1
29	40.0	86.8	40.2	76.6	40.8	75.6	60.9	86.2	44.2	88.9
30	42.8	80.0	42.0	79.6	48.0	76.6	65.0	79.7	48.2	91.7
31	41.0	86.3	....	....	34.3	71.7	....	....	44.2	89.2

Emmet County

100-32-11R1. Okamanpedan State Park. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 11, T. 100 N., R. 32 W. Records available: 1939-49. Mar. 30, 62.63; June 22, 62.86; Sept. 28, 63.89; Dec. 21, 63.61.

99-34-14B1. City of Estherville well 3. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 14, T. 99 N., R. 34 W. Records available: 1939, 1943, 1945, 1947-48. No measurements made in 1949.

Guthrie County

78-33-33N1. Geological Survey, U. S. Dept. of Interior. On land owned by Fred W. Fett, in NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 33, T. 78 N., R. 33 W. Bored observation well, diameter 1 $\frac{1}{2}$ inches, depth 38.8 feet. Measuring point, top of pipe, 1.3 feet above land-surface datum. Affected by nearby pumping wells. Measurements made by Clyde Filbert. Records available: 1949.

78-33-33N1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 22	2.03	Nov. 13	2.95	Dec. 3	3.52	Dec. 17	4.02
29	2.68	20	3.03	10	5.35	24	4.68
Nov. 5	2.80	27	5.44				

Harrison County

80-42-11Q1. City of Woodbine. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 11, T. 80 N., R. 42 W. Measurements made by Mr. Dean, Woodbine Water Works. Records available: 1940, 1942-49. Apr. 1, 13.50; Nov. 15, 15.90; Nov. 30, 16.45.

79-41-34N1. Mutual Benefit Life Insurance Co. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 34, T. 79 N., R. 41 W. Records available: 1939-47. No measurements made in 1949.

78-42-11A1. Mutual Benefit Life Insurance Co. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 11, T. 78 N., R. 42 W. Records available: 1939-48. No measurements made in 1949.

78-42-12Q1. Mutual Benefit Life Insurance Co. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 12, T. 78 N., R. 42 W. Records available: 1939-47. No measurements made in 1949.

Henry County

71-6-9B1. City of Mount Pleasant well 2. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 9, T. 71 N., R. 6 W. Records available: 1945-49. Apr. 5, 142.50; June 20, 142.30; Sept. 23, 172.28; Dec. 19, 171.00. Pumping approximately 200 gallons a minute at time of measurements on Sept. 23 and Dec. 19.

71-6-9B2. City of Mount Pleasant well 4. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 9, T. 71 N., R. 6 W. Records available: 1945-49. Apr. 5, 141.95; June 20, 138.17; Sept. 23, 138.85; Dec. 19, 142.95. Pumping approximately 200 gallons a minute at time of measurements on Apr. 5 and Dec. 19.

71-6-9M1. City of Mount Pleasant well 3. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 9, T. 71 N., R. 6 W. Records available: 1945-49. Apr. 5, 80.56; June 20, 81.20; Sept. 23, 81.88; Dec. 19, 82.00.

Ida County

89-40-35D1. City of Holstein well 3. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 35, T. 89 N., R. 40 W. Records available: 1939, 1945, 1948-49. Mar. 29, 325.0.

Iowa County

80-9-3L1. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 3, T. 80 N., R. 9 W. Records available: 1942-46. No measurements made in 1949.

Jasper County

80-18-31C1. P. W. Beukema. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 31, T. 80 N., R. 18 W. Records available: 1940-49. Mar. 30, 20.20; June 22, 21.26; Sept. 21, 22.50; Dec. 22, 23.52.

80-17-17K1. State Conservation Commission core hole 8. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 17, T. 80 N., R. 17 W. Records available: 1947-49. June 22, 71.62; Sept. 21, 71.98; Dec. 1, 72.65.

80-17-20E1. State Conservation Commission. SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 20, T. 80 N., R. 20 W. Drilled as test hole at prospective dam site area in October 1948, diameter 6 inches, depth 110 feet. Cased with 5 3/16-inch pipe to depth of 104 feet. Taps water in Red Rock channel sandstone of Pennsylvanian age. Top of casing, 2.3 feet above land-surface datum which is 886.7 feet above sea-level datum. Records available: 1948-49. Nov. 2, 1948, 49.68; June 22, 1949, 49.44; Sept. 21, 1949, 50.12; Dec. 1, 1949, 50.55.

80-17-28D1. State Conservation Commission. SW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 28, T. 80 N., R. 28 W. Drilled as test hole at prospective dam site area in August 1948, diameter 6 inches, depth 55 feet. Cased with 5 3/16-inch pipe to depth of 50 feet. Taps water in Red Rock channel sandstone of Pennsylvanian age. Top of casing, 3 feet above land-surface datum, which is 836.2 feet above sea-level datum. Continuous water-stage recorder installed Mar. 1, 1949. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Aug. 24, 1948	6.89	Sept. 18, 1948	4.94	Oct. 5, 1948	4.85
Sept. 3	4.77	24	4.87		

Water level at noon, from recorder charts, 1949

Day	Apr.	May	June	July	Sept.	Oct.	Nov.	Dec.
1	....	3.09	3.76	2.69	....	4.62	4.63	4.97
2	....	3.20	3.30	2.73	....	4.62	4.64	....
3	....	3.23	3.30	2.77	....	4.62	4.67	....
4	2.21	3.28	3.32	2.88	....	4.65	4.77	....
5	2.21	3.28	3.37	2.94	....	4.65	4.73	....
6	2.27	3.34	3.38	2.76	....	4.64	4.73	....
7	2.42	3.35	3.47	2.78	....	4.64	4.71	....
8	2.58	....	3.54	3.92	....	4.63	4.71	....
9	2.67	....	3.58	3.00	....	4.63	4.71	....
10	2.70	....	3.59	3.11	....	4.57	4.71	....
11	2.79	....	3.60	3.16	....	4.60	4.71	....
12	2.79	....	3.60	3.19	....	4.64	4.71	....
13	2.79	....	3.68	3.22	....	4.64	4.72	....
14	2.82	....	3.32	3.22	....	4.67	4.72	....
15	2.89	....	3.32	3.43	....	4.67	4.72	....
16	2.85	3.55	3.35	3.32	....	4.67	4.73	....
17	2.72	3.54	3.40	3.34	....	4.67	4.87	....
18	2.74	3.55	3.50	3.36	....	4.67	4.87	....
19	2.85	3.55	3.53	3.43	....	4.66	4.75	....
20	2.86	3.57	3.58	3.46	....	4.66	4.99	....
21	2.86	3.57	3.60	3.46	....	....	4.93	....
22	2.87	3.55	3.63	3.56	4.57	....	4.91	....
23	2.93	3.60	3.63	3.60	4.57	....	4.89	5.00
24	3.04	3.67	3.63	3.61	4.57	....	4.85	5.00
25	3.04	3.67	1.55	3.63	4.57	....	4.82	4.95
26	3.08	3.72	1.77	3.69	4.57	....	4.78	5.00
27	3.15	3.72	2.05	2.95	4.58	....	4.78	5.00
28	3.19	3.72	2.53	....	4.60	....	4.78	5.02
29	3.19	3.73	2.33	....	4.61	4.60	4.79	5.05
30	3.20	3.73	2.45	....	4.62	4.60	4.97	5.04
31		3.76		....		4.62		5.02

80-17-28D2. State Conservation Commission. SW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 28, T. 80 N., R. 17 W. Bored as test hole at prospective dam site in September 1948. Cased with 1 $\frac{1}{2}$ -inch drive pipe and well point to a depth of 14 feet. Measuring point, top of pipe, 1.2 feet above land-surface datum which is 836.4 feet above sea-level datum. Taps water in alluvial sand deposits. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Sept. 18, 1948	5.17	May 16, 1949	3.72	Nov. 17, 1949	4.88
24	5.07	June 22	3.69	Dec. 1	5.04
29	4.94	Sept. 21	4.59	22	5.05
Oct. 5	4.97				

Jefferson County

72-10-25A1. City of Fairfield well 1. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T. 72 N., R. 10 W., near Fairfield Water-Supply Reservoir No. 1, 270 feet south of dam. Unused city well, diameter 6 inches, depth 150 feet. Measuring point, top of casing, at land-surface datum which is 725 feet above sea-level datum. Taps water in Pleistocene sand and gravel at depth of 148 feet. Recorder installed Feb. 7, 1949. Records available: 1949.

72-10-25A1--Continued.

Water level at noon, from recorder charts											
Day	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	34.86	27.19	23.90	21.78	20.32	19.42	30.70	25.78	22.05	20.41
2	.....	34.41	27.06	23.89	21.68	20.31	19.32	31.65	25.56	22.01	20.44
3	.....	33.99	26.93	23.81	21.68	20.26	20.00	32.46	25.35	21.98	20.33
4	.....	33.54	26.80	23.76	21.66	20.22	19.80	33.18	25.20	21.88	20.35
5	.....	33.17	26.61	23.69	21.60	20.19	19.68	33.90	25.00	21.90	20.32
6	.....	32.89	26.48	23.62	21.54	20.09	19.60	34.52	24.75	21.78	20.16
7	43.65	32.58	26.38	23.57	21.50	20.07	19.52	35.10	24.61	21.70	20.18
8	43.67	32.21	26.29	23.45	21.48	20.05	19.48	35.67	24.50	21.60	20.22
9	43.78	31.86	26.20	23.37	21.44	20.00	19.42	36.20	24.39	21.50	20.16
10	42.63	31.62	26.09	23.33	21.41	20.00	19.48	36.69	24.16	21.44	20.00
11	43.32	31.35	25.95	23.27	21.34	20.00	19.40	37.00	24.08	21.29	19.86
12	43.50	31.11	25.81	23.19	21.25	19.93	19.87	35.50	24.00	21.32	19.94
13	43.62	30.87	25.69	23.10	21.20	19.90	19.50	37.00	23.90	21.25	19.95
14	43.70	30.65	25.50	23.04	21.06	19.86	19.40	37.00	23.80	21.20	19.95
15	43.73	30.46	25.41	22.98	21.06	19.83	20.00	34.37	23.70	21.47	19.86
16	43.84	30.19	25.33	22.90	21.03	19.82	19.90	32.45	23.55	21.10	19.78
17	43.93	29.95	25.18	22.82	20.98	19.79	19.63	31.32	23.46	21.12	19.74
18	43.94	29.76	25.16	22.74	20.97	19.72	19.52	30.50	23.35	21.10	19.71
19	44.02	29.58	25.09	22.70	20.94	19.72	19.40	29.85	23.20	20.92	19.68
20	44.16	29.30	24.97	22.64	20.88	19.68	19.38	29.25	23.10	20.93	19.58
21	42.40	29.08	24.83	22.47	20.80	19.62	19.32	28.75	22.95	20.95	19.49
22	40.06	28.85	24.71	22.35	20.79	19.63	19.28	28.27	22.90	20.86	19.45
23	38.75	28.67	24.64	22.34	20.71	19.63	19.68	27.92	22.84	20.80	19.49
24	37.75	28.44	24.59	22.33	20.49	19.60	23.80	27.60	22.80	20.68	19.49
25	37.15	28.33	24.47	22.29	20.40	19.58	25.85	27.24	22.65	20.70	19.42
26	36.45	28.07	24.39	22.25	20.42	19.52	27.36	26.92	22.62	20.58	19.41
27	35.85	27.87	24.32	22.19	20.41	19.50	28.59	26.66	22.50	20.58	19.37
28	35.35	27.79	24.27	22.16	20.33	19.50	25.31	26.42	22.40	20.49	.....
29		27.68	24.15	22.09	20.33	19.39	24.60	26.21	22.30	20.49	.....
30		27.47	24.02	22.02	20.32	19.36	27.92	26.00	22.25	20.48	.....
31		27.24		21.97		19.36	29.47		22.20		.....

72-10-26A1. Dr. Charles Carter. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 26, T. 72 N., R. 10 W.
Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 24	26.49	May 23	24.10	July 19	24.72	Nov. 16	27.66
Apr. 5	25.35	June 20	24.58	Sept. 23	27.87	Dec. 19	27.48

Johnson County

80-5-9K2. Geological Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 9, T. 80 N., R. 5 W. Highest observed water level, 0.70, on Mar. 31; lowest, 5.77, on Sept. 3. Records available: 1940-49.

Water level at noon, from recorder charts												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	3.82	3.39	....	0.77	2.71	....	2.81	5.08	5.74	4.87	4.96	5.22
2	3.87	3.46	....	.84	2.83	....	3.01	5.16	5.76	4.89	5.07	5.25
3	3.95	3.43	1.73	1.02	2.92	....	3.18	5.22	5.77	4.92	5.11	5.18
4	2.87	3.53	1.35	1.22	2.99	3.96	3.32	5.26	5.45	4.96	5.12	5.26
5	2.08	3.58	....	1.27	3.05	4.01	3.44	5.30	5.53	4.97	5.18	5.26
6	2.45	3.58	....	1.42	3.12	4.04	3.53	5.35	5.60	4.89	5.12	5.14
7	2.57	3.66	....	1.55	3.18	4.14	3.62	5.39	5.54	4.96	5.11	5.26
8	2.56	3.68	....	1.71	3.20	4.22	3.71	5.43	5.56	5.02	5.12	5.33
9	2.77	3.79	....	1.93	3.23	4.28	3.78	5.48	5.65	5.06	5.12	5.26
10	2.94	3.84	....	2.04	3.32	4.33	3.90	5.53	5.72	4.97	5.12	5.22
11	3.03	3.82	....	2.12	3.36	4.38	3.98	5.50	5.66	5.07	5.15	5.11
12	3.08	3.72	1.99	2.21	3.39	4.41	4.04	5.08	3.88	5.12	5.16	5.04
13	3.13	3.78	2.09	2.30	3.43	4.46	4.11	5.04	3.33	5.15	4.96	5.05
14	3.25	3.78	2.14	2.39	3.51	3.91	4.20	5.08	3.52	5.17	4.95	5.05
15	2.84	3.81	2.21	1.49	3.55	3.83	4.28	5.17	3.64	5.17	4.98	5.03

80-5-9K2--Continued.

Water level at noon, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	1.81	3.90	2.16	1.43	3.57	3.89	4.36	5.25	3.76	5.15	5.00	5.01
17	2.12	3.92	2.20	1.19	3.59	3.98	4.42	5.29	3.85	5.18	5.06	5.01
18	2.35	3.60	2.25	1.51	3.60	4.08	4.47	5.35	3.99	5.17	5.10	5.04
19	2.65	1.91	2.37	1.69	3.64	4.16	4.55	5.28	4.11	5.15	4.98	5.08
20	....	2.07	2.39	1.82	3.69	4.23	4.58	5.20	4.18	5.13	5.11	5.06
21	....	2.10	2.29	1.93	3.67	4.20	4.60	5.28	4.29	4.78	5.20	5.06
22	2.92	2.16	1.13	1.55	3.53	4.27	4.69	5.36	4.31	4.74	5.10	5.11
23	2.90	1.60	1.24	1.77	3.54	4.29	4.76	5.43	4.46	4.81	5.13	5.18
24	2.68	.86	1.30	2.02	3.61	2.15	4.78	5.50	4.51	4.87	5.05	5.22
25	2.84	....	1.39	2.12	3.61	1.06	4.82	5.56	4.56	4.84	5.15	5.16
26	2.91	....	1.03	2.24	3.67	1.60	4.84	5.61	4.62	4.93	5.06	5.18
27	2.93	....	.90	2.36	3.71	1.87	4.87	5.66	4.66	4.92	5.15	5.16
28	3.09	....	.89	2.43	3.77	1.96	4.93	5.66	4.76	4.94	5.10	5.21
29	3.22	....	.98	2.55	3.81	2.21	5.00	5.72	4.80	4.94	5.18	5.20
30	3.23	....	.91	2.66	....	2.50	5.01	5.61	4.83	5.00	5.22	5.14
31	3.23	....	.70	....	....	....	5.06	5.62	....	5.05	....	3.90

80-5-22M1. Chicago, Rock Island & Pacific Railway. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22, T. 80 N., R. 5 W. Records available: 1941-49.

Water level at noon, from recorder charts

Day	Jan.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	8.09	11.03	14.15	12.42	17.15	....	17.82	18.19	18.51
2	7.57	11.26	14.20	12.57	17.20	18.28	17.84	18.19	18.52
3	10.43	7.40	11.48	14.30	12.70	17.27	18.32	17.87	18.22
4	10.40	7.04	11.62	14.37	12.85	17.33	18.33	17.90	18.22
5	10.20	7.69	11.71	14.39	13.07	17.38	18.36	17.93	18.26
6	10.28	8.01	11.80	14.38	13.28	17.44	18.39	17.93	18.29
7	10.51	8.46	11.93	14.48	13.50	17.49	18.42	17.95	18.29
8	10.62	8.90	11.98	14.63	13.72	17.55	18.45	17.98	18.29
9	10.76	9.34	12.04	14.74	13.92	17.62	18.55	18.02	18.30
10	10.80	9.70	12.20	14.80	14.15	17.68	18.56	18.04	18.30
11	al4.91	....	10.87	9.93	12.31	14.86	14.35	17.73	18.57	18.06	18.32
12	10.97	10.09	12.38	14.93	14.51	....	18.58	18.10	18.34
13	11.12	10.23	12.46	15.02	14.70	....	18.56	18.13	18.35
14	11.28	10.43	12.59	15.09	14.88	....	18.44	18.17	18.36
15	11.45	10.65	12.72	15.09	15.08	....	18.27	18.20	18.37
16	11.51	10.74	12.83	14.98	15.27	....	18.13	18.23	18.37
17	11.64	10.35	12.99	14.88	15.43	....	18.02	18.25	18.39
18	11.77	10.21	13.05	14.86	15.60	....	17.92	18.27	18.41
19	11.97	10.21	13.17	14.88	15.78	....	17.85	18.30	18.39
20	12.04	10.16	13.31	14.89	15.93	....	17.80	18.32	18.43
21	12.02	10.12	13.31	14.97	16.06	....	17.75	18.32	18.44
22	11.99	10.13	13.34	15.09	16.23	....	17.72	18.33	18.43
23	11.94	10.20	13.52	15.15	16.37	....	17.70	18.33	18.43
24	11.66	10.33	13.64	14.93	16.48	....	17.70	18.33	18.43
25	11.44	10.39	13.64	13.92	16.58	....	17.70	18.31	18.43
26	11.34	10.42	13.64	12.97	16.68	....	17.70	18.30	18.45
27	10.67	10.62	13.63	12.52	16.77	....	17.70	18.28	18.45
28	10.01	10.81	13.67	12.34	16.87	....	17.72	18.25	18.46
29	9.45	10.88	13.72	12.28	16.96	....	17.75	18.23	18.47
30	9.10	10.93	13.87	12.30	17.04	....	17.78	18.20	18.49
31	al3.94	....	8.63	....	14.06	....	17.11	....	18.21	....	18.56

a Tape measurement.

80-5-22M2. Chicago, Rock Island & Pacific Railway. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22, T. 80 N., R. 5 W. Records available: 1941-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 11	16.92	June 17	16.97	Sept. 9	18.71	Nov. 10	18.40
31	16.71	May 5	16.40	Oct. 3	18.47	Dec. 28	18.82
Mar. 2	16.42	Sept. 2	18.57				

Linn County

85-6-19J1. Geological Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19, T. 85 N., R. 6 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 28	5.19	May 31	4.90	Aug. 30	6.60	Nov. 29	5.47
Mar. 31	3.62	June 29	4.72	Sept. 29	5.69	Dec. 28	5.68
Apr. 28	5.17	July 29	5.83	Oct. 31	5.35		

85-6-26D1. Geological Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 26, T. 85 N., R. 6 W. Records available: 1940-48. Destroyed, measurements discontinued.

85-6-26D2. Replacement for well 85-6-26D1. Geological Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 26, T. 85 N., R. 6 W., on west side of right-of-way of Linn County road "C", 1.5 feet east of fence line. Augured well, diameter 3 inches, depth 13.5 feet. Measuring point, top of casing, 1.0 foot above land-surface datum and 0.70 foot above measuring point for 85-6-26D1. Water levels reported continue record begun in 1940. Records available: 1940-49.

Apr. 28	5.60	July 29	4.27	Sept. 29	6.85	Nov. 29	7.62
May 31	5.93	Aug. 30	6.08	Oct. 31	7.25	Dec. 28	7.92
June 29	1.24						

85-6-26D1. Earl Balderson. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 29, T. 85 N., R. 6 W. Records available: 1940-49.

Jan. 31	63.51	Apr. 27	60.89	July 29	61.05	Oct. 31	63.51
Feb. 28	63.22	May 31	60.60	Aug. 30	62.28	Nov. 29	63.93
Mar. 31	61.52	June 29	61.02	Sept. 29	63.25	Dec. 28	64.42

85-6-30D1. Weaver Witwer. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 30, T. 85 N., R. 6 W. Records available: 1942, 1946, 1948-49. Apr. 28, 12.90; May 31, 14.07; June 29, 12.85.

84-7-11R1. E. E. Radham. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 11, T. 84 N., R. 7 W. Records available: 1948-49.

Jan. 31	5.74	Apr. 27	3.72	July 29	7.02	Oct. 31	9.77
Feb. 28	5.53	May 31	4.86	Aug. 30	9.06	Nov. 29	9.87
Mar. 31	3.78	June 29	4.97	Sept. 29	9.89	Dec. 28	10.06

84-7-13E2. Geological Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 13, T. 84 N., R. 7 W. Records available: 1940-49.

Jan. 31	5.03	Apr. 27	2.30	July 29	5.69	Oct. 31	10.13
Feb. 28	3.17	May 31	3.90	Aug. 30	8.22	Nov. 29	10.90
Mar. 31	1.60	June 28	3.53	Sept. 29	9.13	Dec. 28	11.48

84-6-20N1. Geological Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 20, T. 84 N., R. 6 W. Records available: 1940-49.

Jan. 31	4.78	Apr. 27	3.34	July 29	4.80	Oct. 31	8.13
Feb. 28	4.10	May 31	4.54	Aug. 30	6.93	Nov. 29	8.63
Mar. 31	3.16	June 29	2.84	Sept. 29	7.58	Dec. 28	8.98

84-6-22F1. C. A. Wissler. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 84 N., R. 6 W. Records available: 1940-49.

Mar. 31	3.11	June 29	4.67	Aug. 30	8.28	Oct. 31	9.56
Apr. 27	3.43	July 29	6.55	Sept. 29	9.03	Dec. 29	10.87
May 31	4.70						

83-7-13R1. City of Marion. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, T. 83 N., R. 7 W. Records available: 1941-49. Mar. 31, 6.70; Apr. 27, 8.34; Aug. 30, 10.45; Dec. 28, 11.37.

83-7-2P1. Mr. Hollenbeck. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 2, T. 83 N., R. 7 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	31.03	June 29	30.05	Sept. 29	31.69	Nov. 29	32.08
Feb. 28	30.84	July 29	30.87	Oct. 31	31.92	Dec. 28	32.20
May 31	30.59	Aug. 30	31.45				

83-7-11E1. Louis Maresh. In Cedar Rapids, in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 11, T. 83 N., R. 7 W. Records available: 1941-48. No measurements made in 1949.

83-7-16D1. City of Cedar Rapids. In Shaver Park. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 16, T. 83 N., R. 7 W. Records available: 1940-49.

Feb. 28	86.84	May 31	83.97	Aug. 30	89.05	Nov. 29	89.80
Mar. 31	84.18	June 29	86.70	Sept. 29	89.80	Dec. 28	90.10
Apr. 27	84.53	July 29	87.91	Oct. 31	89.73		

83-7-16J1. City of Cedar Rapids. In Daniels Park, in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T. 83 N., R. 7 W. Records available: 1940-49.

Jan. 31	34.69	Apr. 27	34.28	July 29	36.33	Oct. 31	36.17
Feb. 28	34.74	May 31	35.55	Aug. 30	36.60	Nov. 29	36.65
Mar. 31	33.80	June 29	36.10	Sept. 29	36.58	Dec. 28	35.53

83-7-17L1. City of Cedar Rapids. In Ellis Park, in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 17, T. 83 N., R. 7 W. Records available: 1940-49.

Jan. 31	20.21	Apr. 28	19.90	July 29	21.16	Oct. 31	21.36
Feb. 28	20.16	May 31	20.30	Aug. 30	21.57	Nov. 29	21.23
Mar. 31	17.90	June 29	20.36	Sept. 29	21.47	Dec. 28	21.80

83-7-21K1. Wapsi Valley Creamery. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 21, T. 83 N., R. 7 W. Highest observed water level, 59.20, on Apr. 3; lowest, 63.36, on Aug. 18. Records available: 1943-49.

Water level at noon, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	60.04	60.53	60.29	59.92	59.64	61.36	61.79	62.35	62.94	62.59	62.71	62.62
2	59.97	60.53	60.45	59.37	60.07	61.35	61.72	62.63	62.90	62.17	62.72	62.65
3	60.31	60.48	60.50	59.20	60.36	61.63	61.55	62.72	62.47	62.50	62.69	62.29
4	60.55	60.58	60.50	59.56	60.67	61.10	61.43	62.79	62.20	62.73	62.70	62.64
5	60.45	60.44	60.13	59.79	60.81	60.94	61.93	62.33	62.12	62.69	62.65	62.60
6	60.43	59.79	59.58	59.87	60.99	61.25	62.24	62.55	62.47	62.66	62.57	62.65
7	60.46	60.13	59.78	59.97	60.50	61.53	62.32	62.35	62.63	62.67	62.53	62.77
8	60.44	59.36	59.91	60.07	60.09	61.47	62.24	62.79	62.63	62.94	62.68	62.77
9	59.93	60.45	59.92	59.54	60.35	61.48	62.04	63.08	62.71	62.61	62.66	62.69
10	60.25	60.47	59.96	59.40	60.70	61.65	61.75	63.18	62.22	62.72	62.63	62.35
11	60.53	60.43	60.02	59.70	60.67	61.40	62.00	63.14	62.01	62.38	62.69	62.13
12	60.55	60.54	59.96	59.76	60.71	61.39	62.27	63.14	62.35	62.37	62.67	62.53
13	60.54	59.96	59.43	60.02	61.03	61.43	62.45	62.67	62.50	62.84	62.57	62.67
14	60.59	60.11	59.76	60.10	60.68	61.87	62.49	62.39	62.46	62.80	62.53	62.70
15	60.44	60.52	59.99	59.99	60.40	61.89	62.50	62.74	62.41	62.51	62.57	62.65
16	59.73	60.58	60.04	59.53	60.71	61.49	62.29	63.13	62.41	62.71	62.46	62.57
17	60.33	60.61	60.11	59.44	60.97	61.94	61.39	63.34	62.40	62.64	62.46	62.25
18	60.38	60.00	60.67	59.73	61.09	61.60	62.37	63.50	61.39	62.76	62.52	62.13
19	60.33	60.33	59.93	59.97	61.11	61.44	62.59	63.21	61.39	62.70	61.41	62.43
20	60.39	59.96	59.47	60.06	60.78	61.75	62.53	63.67	61.99	62.79	62.33	62.69
21	60.50	60.17	59.89	60.69	60.21	62.10	62.50	62.36	62.52	62.51	62.37	62.71
22	60.54	60.53	60.04	59.08	59.78	62.35	62.36	.....	62.56	62.79	62.25	62.76
23	59.30	60.56	60.04	60.12	60.18	62.25	62.72	.....	62.63	62.73	62.32	62.74
24	60.25	60.53	60.04	59.60	60.90	62.24	62.13	.....	62.28	62.65	61.73	62.70
25	60.51	60.49	60.19	59.84	60.90	62.00	62.43	.....	61.98	62.65	62.23	62.06
26	60.54	60.16	59.64	60.16	61.03	61.39	62.80	.....	62.27	62.74	61.89	61.94
27	60.48	59.70	59.47	60.25	61.05	61.35	62.82	.....	62.54	62.63	61.89	62.46
28	60.63	60.02	59.80	60.32	60.64	61.59	62.91	62.63	62.61	62.64	62.30	62.71
29	60.52	.....	60.02	60.41	60.56	61.91	62.98	62.80	62.60	62.61	62.25	62.79
30	59.91	.....	59.91	59.97	60.48	62.08	62.83	63.07	62.57	62.59	62.51	62.81
31	60.24	.....	59.90	.....	61.02	.....	62.23	63.05	.....	62.57	.....	62.74

83-7-21L1. City of Cedar Rapids. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T. 83 N., R. 7 W.
Highest observed water level, 38.62, on Apr. 4; lowest, 79.35, on Aug. 18.
Records available: 1940-49.

Daily high and low water levels, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	.....	.....	48.78	53.95	48.90	54.00	.....	.....	46.80	51.43	65.50	69.16
2	.....	.....	49.13	52.12	50.40	54.01	.....	.....	46.29	52.87	64.83	70.63
3	.....	.....	48.30	50.71	.....	.....	40.59	43.25	50.68	64.00	65.80	71.37
4	.....	.....	49.34	52.66	.....	.....	38.62	47.47	54.92	66.17	.....	.....
5	.....	.....	44.58	49.45	44.50	49.13	45.64	48.69	56.64	66.80	64.12	68.55
6	.....	.....	43.25	44.58	42.50	44.51	46.55	49.90	59.65	68.16	58.31	70.50
7	.....	.....	43.20	48.10	41.01	47.46	47.22	51.91	57.13	65.84	66.80	70.28
8	.....	.....	46.94	51.36	44.07	48.51	48.42	53.05	50.80	57.80	66.53	69.40
9	.....	.....	47.77	51.51	45.02	48.78	45.34	49.55	49.34	62.82	.....	.....
10	.....	.....	47.95	52.26	46.19	49.71	43.02	45.34	54.63	60.62	.....	.....
11	.....	.....	47.88	51.51	46.71	49.98	41.86	49.30	55.07	62.95	.....	71.50
12	.....	.....	.....	.....	44.32	48.44	43.97	49.36	54.66	65.99	65.58	69.90
13	.....	.....	.....	.....	42.32	44.32	47.83	50.56	59.43	73.16	59.60	72.70
14	48.79	53.79	.....	.....	40.94	47.68	48.84	51.69	57.60	65.48	68.25	73.59
15	44.61	48.49	.....	.....	44.92	51.37	47.46	51.22	53.16	61.01	68.15	74.01
16	.....	.....	.....	.....	46.12	52.21	46.80	49.01	50.92	65.75	68.27	73.78
17	.....	53.27	.....	.....	46.20	51.47	42.70	47.70	57.17	67.67	68.81	74.70
18	47.47	51.28	.....	.....	46.04	48.27	.....	.....	60.24	68.07	68.79	73.14
19	49.24	52.61	.....	.....	45.93	52.43	.....	.....	60.73	66.89	66.99	71.95
20	49.73	53.60	43.72	47.12	43.55	45.93	.....	.....	54.23	62.66	60.39	74.82
21	48.70	54.41	43.21	53.58	42.54	49.45	.....	.....	50.24	56.72	69.08	77.14
22	46.36	51.31	52.55	55.54	45.46	51.16	.....	.....	45.64	50.56	70.70	77.90
23	44.19	46.36	49.96	55.89	45.58	50.26	.....	.....	45.75	61.02	70.34	76.88
24	43.11	51.04	51.22	55.97	46.07	50.86	.....	.....	57.42	63.73	73.12	76.72
25	48.65	53.25	51.37	56.01	47.14	51.10	.....	.....	57.80	64.23	69.39	72.98
26	48.69	53.60	45.90	55.49	44.30	48.61	49.74	53.59	58.17	64.84	66.61	70.32
27	49.20	51.48	42.93	45.90	41.76	44.30	50.54	55.08	55.29	65.36	61.48	70.42
28	49.90	52.83	42.23	49.75	.....	.....	51.09	54.51	56.49	63.51	65.90	75.15
29	46.70	52.69	.....	.....	.....	.....	50.57	57.20	56.64	59.35	67.03	73.03
30	44.26	46.70	.....	.....	.....	.....	50.32	56.37	51.61	58.14	65.24	72.30
31	43.51	50.23	.....	.....	.....	.....	.....	.....	55.60	69.50	.....	.....

Daily high and low water levels, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	64.81	71.09	65.05	72.98	65.15	68.42	58.59	63.31	56.15	64.40	56.39	60.81
2	66.04	73.30	69.32	74.59	64.37	.....	55.67	61.76	57.05	62.91	52.49	59.60
3	67.79	71.30	.....	.....	.....	.....	54.53	64.91	57.54	60.74	52.50	57.99
4	66.61	68.41	.....	.....	58.75	63.60	60.01	65.09	56.45	58.70	56.42	58.51
5	66.54	75.69	.....	.....	57.20	61.70	58.79	63.59	56.70	58.65	55.79	58.87
6	70.52	77.49	.....	.....	55.76	63.98	58.31	63.30	55.72	57.45	56.13	59.71
7	70.72	76.19	.....	.....	59.53	63.48	58.68	66.15	55.00	61.23	58.88	61.85
8	69.87	76.80	.....	.....	.....	.....	63.30	70.60	56.77	62.52	57.52	59.61
9	70.41	74.15	.....	.....	.....	.....	59.09	68.69	57.02	59.42	56.68	59.26
10	67.44	72.32	.....	.....	.....	.....	57.22	65.16	56.73	59.36	51.25	58.02
11	64.71	73.09	.....	.....	53.79	59.67	62.13	65.21	57.09	60.20	53.20	57.05
12	68.98	75.03	.....	.....	55.24	65.53	61.73	64.83	57.08	60.78	52.27	58.20
13	70.00	75.42	.....	.....	60.45	64.22	64.66	70.91	55.78	58.00	56.12	62.63
14	70.14	75.86	68.86	72.79	59.25	62.76	64.50	71.72	55.50	58.90	56.88	59.18
15	70.42	77.00	67.00	76.21	58.94	62.89	.....	.....	54.95	58.57	56.50	58.35
16	69.95	74.13	72.41	79.05	58.92	63.87	58.41	62.00	54.27	57.04	55.88	58.68
17	67.76	71.82	73.81	78.34	57.66	62.05	57.48	63.65	54.06	57.55	54.66	57.70
18	65.53	73.95	74.68	79.35	55.72	57.66	58.87	63.34	54.30	58.37	53.67	55.70
19	70.55	76.68	72.52	76.18	55.14	61.74	58.62	62.93	53.52	56.75	52.95	58.72
20	70.66	75.48	69.75	74.50	57.53	63.64	59.10	64.38	53.74	56.00	56.70	59.86
21	70.08	76.20	65.40	71.06	58.94	64.58	59.86	63.53	52.82	57.63	55.99	60.27
22	71.18	78.11	62.34	70.70	59.53	64.67	59.45	63.25	51.17	56.46	57.24	59.08
23	71.39	76.12	67.19	75.28	59.83	65.22	58.45	61.45	50.99	56.11	57.05	59.22
24	68.58	74.59	69.31	77.19	57.50	62.36	57.41	62.18	49.94	54.80	54.55	58.56
25	66.71	75.00	72.00	77.22	55.75	57.50	57.95	63.37	49.36	58.15	52.00	54.55
26	72.49	76.79	71.93	77.51	54.60	64.30	58.43	63.77	53.06	55.40	51.60	53.90
27	72.28	77.51	70.00	76.60	58.80	63.69	58.02	62.50	52.76	55.04	51.72	58.48

83-7-21LL--Continued.

Daily high and low water levels, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
28	72.69	77.58	64.25	70.00	.....	64.09	57.31	59.30	54.79	58.51	.....	.....
29	73.24	79.25	62.10	70.50	59.12	63.16	57.40	58.98	45.81	57.91	.....	.....
30	72.30	75.60	66.45	72.41	58.03	63.70	56.63	58.32	55.54	58.32	.....	.....
31	67.50	73.90	66.81	70.32			56.04	59.28			.....	.....

83-7-21Pl. Kresge Co. In Cedar Rapids, in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T. 83 N., R. 7 W. Records available: 1941-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 31	59.11	Mar. 31	66.43	Sept. 29	76.10
Feb. 28	58.02	Apr. 28	68.23	Dec. 28	68.85

83-7-21Q1. Iowa Theater. In Cedar Rapids, in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 21, T. 83 N., R. 7 W., at corner of First Ave. SE. and Third St. NE. Records available: 1941-49. Jan. 31, 55.55; Feb. 28, 53.53; Apr. 28, 69.92.

83-7-23G1. City of Cedar Rapids. In Bever Park, in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 23, T. 83 N., R. 7 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	2.78	Apr. 28	2.12	July 29	2.87	Oct. 31	2.68
Feb. 28	2.60	May 31	2.26	Aug. 30	3.20	Nov. 30	2.59
Mar. 31	1.94	June 29	2.42	Sept. 29	3.17	Dec. 28	2.58

83-7-24A1. John Zrudsky. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 24, T. 83 N., R. 7 W. Records available: 1940-49.

Jan. 31	29.30	Apr. 28	27.94	July 29	31.16	Oct. 31	29.54
Feb. 28	28.48	May 31	28.59	Aug. 30	32.60	Nov. 30	29.76
Mar. 31	27.84	June 29	28.06	Sept. 29	29.39	Dec. 28	30.00

83-7-28G2. Cedar Rapids Gas Co. In Cedar Rapids, in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 28, T. 83 N., R. 7 W., at corner of Eight Ave., SE. and First St., NE. Records available: 1940-48. No measurements made in 1949.

83-7-32G1. Floyd Felter. In Cedar Rapids, in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 32, T. 83 N., R. 7 W., at corner of Twenty-second Ave., SW. and Eleventh St., NE. Records available: 1940-49.

Jan. 31	84.87	Apr. 28	83.82	July 29	86.18	Oct. 31	85.29
Feb. 28	84.65	May 31	84.54	Aug. 30	86.88	Nov. 29	84.77
Mar. 31	83.48	June 29	85.56	Sept. 29	85.92	Dec. 28	84.99

83-7-33F1. In Cedar Rapids, in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 33, T. 83 N., R. 7 W., at corner of Twenty-second Ave. and K St., SW. Records available: 1940-49.

Jan. 31	72.85	Apr. 28	75.15	July 29	72.91	Oct. 31	72.80
Feb. 28	72.94	May 31	72.66	Aug. 30	72.88	Nov. 29	72.88
Mar. 31	75.95	June 29	72.87	Sept. 29	72.79	Dec. 28	72.92

83-6-30B1. Mr. Katz. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 30, T. 83 N., R. 6 W. Records available: 1940-49.

Jan. 31	51.03	Apr. 27	49.85	July 29	52.32	Oct. 31	51.36
Feb. 28	52.60	May 31	50.36	Aug. 30	51.00	Nov. 30	51.57
Mar. 31	49.78	June 29	50.22	Sept. 29	51.23	Dec. 28	51.56

Lyon County

99-44-26R1. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 26, T. 99 N., R. 44 W. Records available: 1940-43, 1947-49. Mar. 29, 1.11; June 21, 3.40; Sept. 27, 3.73.

98-48-24M1. A. C. Hanson. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T. 98 N., R. 48 W. Records available: 1939-43, 1948. No measurements made in 1949.

Madison County

76-28-2B1. Glen Newton. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 2, T. 76 N., R. 28 W. Records available: 1940-49. Mar. 29, 14.24; June 21, 15.39; Sept. 22, 15.40; Dec. 20, 15.08.

Marion County

76-19-5N1. City of Knoxville well 4. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 5, T. 76 N., R. 19 W. Unused gravel-packed city well, diameter 40 inches at surface to 24 inches below surface, depth 47 feet. Measuring point, hole in wooden recorder platform, 2.3 feet above land-surface datum. Taps water in sand and gravel in alluvium of Des Moines river valley. Affected by nearby pumping wells. Recorder installed Dec. 7, 1949. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Dec. 8	20.28	Dec. 17	20.14	Dec. 20	20.18	Dec. 25	20.24
9	20.36	18	20.17	21	20.20	26	20.20
10	20.64	19	20.19	24	20.22	27	20.19
11	20.30						

75-20-22H1. Union Central Life Insurance Co. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 22, T. 75 N., R. 20 W. New measuring point, top of brick well curb, at land-surface datum, 0.80 foot below previous measuring point. Records available: 1940-49. Mar. 29, 6.94; June 21, 7.90; Sept. 22, 8.45; Dec. 9, 8.89.

75-20-31C2. Miss Amanda Elliot. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 31, T. 75 N., R. 20 W. Records available: 1940-49. Mar. 29, 6.67; June 21, 9.77; Sept. 22, 19.68; Dec. 9, 18.37.

74-21-11F1. Town of Melcher test hole 5 (1945). SE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 11, T. 74 N., R. 21 W. Records available: 1945-46, 1948-49.

Water level at noon, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
1	85.94	87.53	.....	87.24	87.14	87.08	86.87	86.51	86.62	86.65	.....
2	86.89	87.53	.....	87.27	87.13	87.00	86.87	86.51	86.58	86.64	.....
3	86.90	87.52	.....	87.28	87.17	87.00	86.86	86.52	86.55	86.61	.....
4	86.90	87.33	.....	87.30	87.18	87.02	86.83	86.54	86.52	86.56	.....
5	86.90	87.23	.....	87.28	87.18	87.07	86.78	86.53	86.54	86.54	.....
6	86.93	87.18	.....	87.27	87.25	87.07	86.78	86.52	86.59	86.45	.....
7	86.92	87.10	.....	87.26	87.31	87.07	86.76	.....	86.60	86.45	.....
8	87.19	.....	.....	87.25	87.30	87.10	86.77	.....	86.62	86.44	.....
9	87.49	87.08	.....	87.24	87.28	87.10	86.89	.....	86.62	86.46	.....
10	87.56	87.11	.....	87.23	87.28	87.09	86.88	.....	86.58	86.30	.....
11	87.43	87.09	.....	87.11	87.29	87.08	86.91	.....	.....	86.43	.....
12	87.30	86.98	.....	86.93	87.28	87.02	86.87	86.52	.....	86.40	.....
13	87.29	87.11	.....	.....	87.22	.....	86.87	86.52	86.60	86.41	.....
14	87.14	87.13	.....	86.95	87.22	.....	86.80	86.52	86.63	86.50	.....
15	.....	87.09	.....	87.02	87.22	.....	86.80	86.52	86.62	86.46	.....
16	.....	87.08	.....	87.11	87.26	.....	86.77	86.49	86.55	86.41	86.29
17	.....	.....	.....	87.12	87.23	.....	86.76	86.49	86.50	86.38	86.31
18	.....	.....	.....	87.11	87.27	86.95	86.74	86.51	86.50	86.37	86.13
19	.....	.....	.....	87.28	87.22	86.95	86.74	86.42	86.53	86.35	86.14
20	.....	.....	.....	87.28	87.20	86.95	86.69	86.58	86.52	86.30	86.29
21	.....	.....	.....	87.26	87.00	86.97	86.71	86.62	.....	86.20	86.26
22	.....	.....	.....	87.32	87.06	86.97	86.72	86.60	86.65	86.25	86.17
23	.....	.....	.....	87.31	87.08	86.92	86.70	86.60	86.70	86.25	86.03
24	.....	86.97	.....	87.32	87.10	86.87	86.70	86.58	86.71	86.40	.....
25	.....	87.15	.....	87.30	87.10	86.70	86.65	86.58	86.69	.....	.....
26	.....	87.18	.....	87.27	87.09	86.78	86.59	86.57	86.62	.....	.....
27	.....	.....	.....	87.27	87.09	86.78	86.58	86.60	86.62	.....	.....
28	.....	.....	.....	.....	87.05	86.80	86.57	86.60	86.62	.....	.....
29	.....	.....	.....	.....	87.05	86.88	86.57	86.60	86.64	.....	.....
30	.....	.....	87.30	87.30	87.07	86.88	86.58	86.60	86.65	.....	.....
31	87.54	.....	87.15	.....	87.11	.....	86.58	86.65	.....	.....	.....

74-21-11K1. Town of Melcher test hole 3 (1945). NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 11,
T. 74 N., R. 21 W. Highest observed water level, 98.36, on Dec. 31;
lowest, 108.85, on Dec. 4, 6, and 7. Records available: 1945-49.

Daily high and low water levels, from recorder charts

Day	January		February		March		April	
	High	Low	High	Low	High	Low	High	Low
1	106.21	106.84	106.24	106.85	107.31	107.86	108.07	108.27
2	106.57	107.02	106.14	106.75	106.97	107.78	108.73	108.29
3	106.84	107.17	105.86	106.27	107.16	107.90	108.80	108.30
4	106.37	107.25	105.49	106.37	106.89	107.75	107.46	108.07
5	105.65	106.45	105.63	106.46	107.37	107.97	108.07	108.13
6	105.69	106.90	105.66	106.58	107.09	107.87	107.62	108.08
7	105.93	106.96	106.44	106.77	107.77	108.07	107.46	107.81
8	106.12	107.19	106.77	107.09	107.30	107.96	107.75	107.84
9	107.19	107.63	106.48	107.15	107.45	108.14	107.60	107.77
10	107.41	107.81	106.95	107.17	107.17	107.90	107.12	107.66
11	106.95	107.88	106.35	107.18	107.41	108.04	107.06	107.17
12	106.63	107.56	107.16	107.58	107.54	108.19	106.74	107.56
13	106.74	107.64	106.81	107.68	107.29	108.06	107.16	107.97
14	106.75	107.65	107.05	107.66	107.90	108.23	107.26	108.10
15	106.65	107.58	106.46	107.37	107.48	108.12	107.12	107.95
16	106.74	107.60	106.61	107.51	107.38	108.08	107.95	108.13
17	106.68	107.61	107.03	107.73	107.68	108.26	107.42	108.20
18	106.78	107.67	106.73	107.60	107.40	108.13	107.96	108.23
19	106.95	107.68	107.11	107.78	107.87	108.29	107.47	108.29
20	106.80	107.68	106.38	107.11	107.60	108.19	107.63	108.33
21	107.04	107.83	106.02	106.63	107.63	108.30	107.47	108.17
22	107.25	107.87	106.04	107.09	107.37	108.02	107.39	108.21
23	106.80	107.68	106.58	107.29	108.04	108.25	107.30	108.10
24	107.68	107.95	107.13	107.45	107.53	108.11	107.55	108.21
25	107.10	107.95	107.44	107.71	108.11	108.34	107.39	108.02
26	106.96	107.65	107.03	107.73	107.80	108.35	107.55	108.12
27	107.00	107.57	107.18	107.77	107.56	108.23	107.37	108.03
28	106.79	107.35	107.09	107.79	107.87	108.36	107.31	108.09
29	106.53	107.26			107.56	108.02	107.55	108.22
30	106.44	107.13			108.03	108.23	107.41	108.18
31	106.25	106.85			107.63	108.26		

Daily high and low water levels, from recorder charts

Day	May		June		July		August	
	High	Low	High	Low	High	Low	High	Low
1	107.45	108.22	107.54	108.17	108.43	108.65	107.85	108.44
2	107.43	108.22	107.25	108.05	108.54	108.65	108.06	108.44
3	107.57	108.31	108.05	108.29	108.15	108.65	107.97	108.46
4	107.39	108.22	108.05	108.37	108.53	108.63	108.07	108.50
5	107.59	108.28	107.73	108.45	108.17	108.65	108.05	108.51
6	107.73	108.37	108.12	108.43	107.95	108.52	107.96	108.55
7	107.50	108.21	108.43	108.46	108.50	108.60	107.95	108.48
8	107.50	108.24	108.47	108.54	108.17	108.65	108.03	108.50
9	107.57	108.35	108.25	108.54	108.22	108.63	108.23	108.54
10	107.42	108.24	108.11	108.56	107.94	108.49	108.05	108.57
11	107.88	108.39	107.86	108.46	107.90	108.50	108.23	108.57
12	107.56	108.29	108.46	108.56	108.07	108.55	108.07	108.59
13	107.91	108.39	108.31	108.57	107.94	108.48	107.77	108.40
14	107.94	108.43	107.37	108.59	107.35	108.41	108.03	108.48
15	107.46	108.22	107.76	108.41	107.83	108.43	108.12	108.55
16	107.34	108.15	108.41	108.55	108.53	108.55	108.25	108.56
17	107.51	108.24	107.77	108.60	108.55	108.61	108.24	108.63
18	107.53	108.29	108.12	108.47	108.12	108.65	108.10	108.63
19	107.40	108.11	107.70	108.55	108.40	108.65	108.32	108.62
20	107.25	107.94	107.99	108.51	108.17	108.65	108.13	108.64
21	107.14	108.00	108.26	108.54	108.55	108.65	108.24	108.65
22	107.30	108.08	107.73	108.37	108.65	108.65	108.21	108.65
23	107.39	108.12	108.04	108.55	108.12	108.65	108.07	108.65
24	107.21	107.97	107.70	108.37	108.03	108.65	108.17	108.57
25	107.47	108.12	108.24	108.54	108.07	108.57	108.08	108.63
26	107.23	107.97	107.76	108.56	107.95	108.57	108.15	108.60
27	107.42	108.08	108.03	108.47	107.90	108.47	108.10	108.65

74-21-11K1--Continued.

Daily high and low water levels, from recorder charts

Day	May		June		July		August	
	High	Low	High	Low	High	Low	High	Low
28	107.74	108.23	108.15	108.55	107.93	108.48	108.38	108.65
29	107.45	108.15	107.95	108.60	108.05	108.47	108.22	108.65
30	107.33	108.04	108.11	108.53	107.90	108.48	108.23	108.65
31	107.21	107.97			107.84	108.47	108.25	108.65

Daily high and low water levels, from recorder charts

Day	September		October		November		December	
	High	Low	High	Low	High	Low	High	Low
1	108.37	108.65	107.91	108.43	108.06	108.60	108.33	108.82
2	108.26	108.65	107.93	108.45	108.00	108.60	108.15	108.79
3	108.15	108.63	108.05	108.46	107.95	108.55	108.43	108.82
4	108.23	108.60	108.05	108.52	108.00	108.53	108.22	108.85
5	108.20	108.62	108.18	108.45	107.95	108.54	108.28	108.81
6	108.30	108.65	108.15	108.56	107.94	108.45	108.33	108.85
7	108.20	108.65	108.13	108.57	108.05	108.46	108.24	108.85
8	108.14	108.65	108.05	108.59	108.10	108.55	108.17	108.83
9	108.25	108.65	108.05	108.52	108.00	108.56	107.90	108.43
10	108.02	108.59	108.06	108.53	107.89	108.53	107.75	108.26
11	108.00	108.61	107.91	108.53	107.90	107.52	107.61	107.97
12	108.31	108.62	107.65	108.28	107.87	108.50	107.33	107.61
13	108.23	108.65	108.00	108.45	108.05	108.45	107.10	107.33
14	108.00	108.48	108.00	108.47	108.09	108.55	106.85	107.10
15	108.15	108.55	107.90	108.53	108.05	108.56	106.64	106.85
16	108.05	108.55	108.00	108.45	108.05	108.53	106.45	106.64
17	108.03	108.53	108.00	108.45	108.02	108.53	106.25	106.45
18	108.07	108.47	108.10	108.54	107.99	108.55	106.11	106.25
19	108.05	108.49	108.05	108.54	108.02	108.50	105.80	106.11
20	108.05	108.47	107.97	108.53	108.02	108.55	105.64	105.80
21	108.13	108.53	107.97	108.52	108.03	108.55	105.33	105.64
22	108.05	108.54	107.85	108.51	108.05	108.55	105.24	105.33
23	107.99	108.52	107.77	108.43	107.93	108.65	104.95	105.24
24	107.95	108.51	107.89	108.42	108.13	108.55	.....	.....
25	108.05	108.45	107.93	108.43	107.91	108.63	.....	.....
26	108.07	108.52	107.86	108.45	108.05	108.55	102.95	103.65
27	108.10	108.52	108.00	108.42	108.25	108.65	101.99	102.95
28	108.04	108.54	108.05	108.46	108.39	108.75	101.18	101.89
29	107.91	108.45	108.05	108.53	108.35	108.78	100.39	101.18
30	107.93	108.45	108.06	108.55	108.40	108.78	99.35	100.39
31			108.07	108.62			98.36	99.35

74-20-22C1. Grant DeWitt. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 74 N., R. 20 W. Records available: 1942-49. Mar. 29, 9.74; June 20, 9.66; Sept. 22, 12.55; Dec. 9, 17.77.

74-20-33D1. T. V. Beebout. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 33, T. 74 N., R. 20 W. Records available: 1940-49. Mar. 29, 12.98; June 20, 12.02; Sept. 22, 12.89; Dec. 9, 13.60.

Marshall County

84-18-22H1. City of Marshalltown. CSL NE $\frac{1}{4}$ sec. 22, T. 84 N., R. 18 W. Test well at city well field drilled in May 1949, diameter 3 inches, depth 225 feet. Measuring point, top of 3-inch casing, 4.5 feet above land-surface datum. Taps water in Pleistocene sand and gravel. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 20	14.05	June 28	13.92	July 4	13.58	July 11	12.68
21	13.65	29	11.08	5	13.37	14	15.08
22	15.54	30	9.72	6	13.57	15	15.21
23	13.65	July 1	14.21	7	14.77	16	13.40
24	12.62	2	14.92	8	15.04	17	13.82
27	12.89	3	13.85	9	13.35	Aug. 2	15.00

84-18-22H1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 3	15.00	Sept. 6	13.92	Sept. 19	13.33	Sept. 30	13.29
4	15.15	7	13.79	20	13.29	Oct. 1	13.29
5	15.30	8	13.58	21	13.25	3	13.00
6	15.40	9	13.71	22	13.29	4	13.00
8	15.30	10	13.75	23	13.25	5	12.90
9	15.06	12	13.63	24	13.29	6	12.80
25	14.80	13	13.58	26	13.25	7	12.70
Sept. 1	14.17	14	13.58	27	13.25	8	12.60
2	14.17	15	13.58	28	13.33	10	12.50
3	14.21	16	13.54	29	13.29	11	12.42
5	14.00	17	13.50				

84-18-24Q1. City of Marshalltown. SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T. 84 N., R. 18 W. Unused well at city sewage disposal plant. Diameter 8 inches, depth 200 feet. Cased to 190 feet with 8-inch pipe, finished with 12 feet of 8-inch 40 slot steel screen. Measuring point, top of 8-inch casing, 1.4 feet above concrete floor and 1.8 feet above land-surface datum. Chief aquifer Pleistocene sand and gravel from 145 feet to 200 feet. Records available: 1949.

May 20	7.97	June 24	10.43	Aug. 9	15.33	Sept. 30	12.56
June 16	12.63	July 16	13.28	Sept. 8	12.93		

Montgomery County

Tarkio Creek area

(Wells in the Tarkio Creek area are numbered consecutively beginning with 1; measurements made by Dean W. Knox.)

7. E. F. Holquist. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 11, T. 71 N., R. 38 W. Records available: 1934-49.

Mar. 25	15.41	July 22	14.22	Sept. 26	20.08	Nov. 24	22.06
May 25	11.89	Aug. 24	16.82	Oct. 26	21.34	Dec. 26	22.73
June 20	11.80						

72. O. A. Milner. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T. 72 N., R. 38 W. Records available: 1937-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 22	3.84	Apr. 27	3.50	June 20	5.90
Mar. 25	5.38	May 25	3.77		

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

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 22	13.89	May 25	15.48	Aug. 24	15.97	Oct. 24	17.75
Mar. 25	11.17	June 20	14.17	Sept. 26	16.92	Nov. 24	18.04
Apr. 27	13.55	July 22	15.16				

78. Mr. Mainquist. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 35, T. 71 N., R. 38 W. Records available: 1937-49.

Feb. 22	1.68	May 25	1.81	Aug. 24	5.38	Nov. 24	6.62
Mar. 25	1.43	June 20	1.38	Sept. 26	6.54	Dec. 26	6.31
Apr. 27	1.89	July 22	2.22	Oct. 26	5.58		

79. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 35, T. 71 N., R. 38 W. Records available: 1937-49.

Mar. 25	6.37	June 20	6.55	Aug. 24	13.63	Oct. 26	15.27
Apr. 27	8.18	July 22	8.62	Sept. 26	14.00	Nov. 24	15.55
May 25	8.34						

81. L. G. Bergren. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 24, T. 71 N., R. 38 W. Records available: 1937-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 25	4.98	July 22	7.65	Sept. 26	8.60	Nov. 24	8.17
Apr. 27	6.18	Aug. 24	8.27	Oct. 26	7.26	Dec. 26	8.37
May 25	6.58						

82. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 29, T. 72 N., R. 37 W. Records available: 1937-49.

Jan. 31	15.30	Apr. 27	13.51	July 22	14.40	Oct. 26	16.18
Feb. 22	10.82	May 25	12.20	Aug. 24	16.60	Nov. 24	19.46
Mar. 25	12.60	June 20	12.60	Sept. 26	18.46	Dec. 26	20.62

Muscatine County

76-2-10J1. Grain Processing Corporation. In Muscatine, in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 76 N., R. 2 W. Drilled observation well, depth 45 feet. Cased with $\frac{1}{4}$ -inch galvanized-iron pipe. Measuring point, top of pipe, 0.8 foot above land-surface datum. Taps water in alluvial sand and gravel in Mississippi River flood plain. Affected by nearby pumping well. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level
Mar. 17	7.80	June 20	9.45	Dec. 19	11.66
21	8.20	Sept. 23	10.80		

76-2-10J2. Grain Processing Corporation. In Muscatine, in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 76 N., R. 2 W. Drilled observation well, depth 45 feet. Cased with $\frac{1}{4}$ -inch galvanized-iron pipe. Measuring point, top of pipe, 0.6 foot above land-surface datum. Taps water in alluvial sand and gravel in Mississippi River flood plain. Affected by nearby pumping well. Records available: 1949.

Mar. 17	8.39	June 20	10.07	Dec. 19	13.31
21	8.84	Sept. 23	11.50		

76-2-10J3. Grain Processing Corporation. In Muscatine, in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 76 N., R. 2 W. Drive point well, depth 25 feet. Cased with $\frac{1}{4}$ -inch galvanized-iron pipe. Measuring point, top of pipe, 0.1 foot below land-surface datum. Taps water in alluvial sand and gravel in Mississippi River flood plain. Affected by nearby pumping well. Records available: 1949. Mar. 17, 9.48; Mar. 21, 9.86; Sept. 23, 12.13; Dec. 19, 13.58.

76-2-14D1. City of Muscatine test well 4. In Muscatine, in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 14, T. 76 N., R. 2 W. Records available: 1939-49. Mar. 22, 10.69; June 20, 12.68; Sept. 23, 12.92; Dec. 19, 13.03.

76-2-15A1. City of Muscatine test well 5. In Muscatine, in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 15, T. 76 N., R. 2 W. Records available: 1940-49. Mar. 22, 10.10; June 20, 11.96; Sept. 23, 12.18; Dec. 19, 12.66.

Osceola County

99-41-18C2. City of Sibley. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 18, T. 99 N., R. 41 W. Records available: 1940-47. No measurements made in 1949.

Page County

Tarkio Creek area

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

5. John Toft. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 7, T. 68 N., R. 38 W. Records available: 1934-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 22	13.06	May 23	9.20	Aug. 22	12.98	Nov. 23	15.32
Mar. 24	11.48	June 22	6.80	Sept. 22	14.28	Dec. 19	15.59
Apr. 25	10.60	July 19	8.78	Oct. 24	15.14		

6. T. Slickerveer. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 18, T. 69 N., R. 38 W. Records available: 1934-49.

Feb. 22	4.20	May 25	2.23	Aug. 24	4.38	Nov. 24	3.76
Mar. 25	3.04	June 20	2.03	Sept. 26	4.22	Dec. 26	4.26
Apr. 27	2.73	July 22	2.68	Oct. 26	3.52		

10. R. Palmquist. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 17, T. 70 N., R. 37 W. Records available: 1934-49.

Feb. 22	24.05	May 25	23.46	Aug. 24	18.37	Nov. 24	25.05
Mar. 25	24.50	June 20	21.30	Sept. 26	24.73	Dec. 26	25.48
Apr. 27	23.58	July 22	24.49	Oct. 26	25.08		

11. R. Palmquist. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 17, T. 70 N., R. 37 W. Records available: 1934-49.

Feb. 22	6.92	May 25	4.55	Aug. 24	6.14	Nov. 23	6.44
Mar. 25	5.98	June 20	5.50	Sept. 26	6.30	Dec. 26	6.67
Apr. 27	5.70	July 22	6.32	Oct. 26	6.38		

12. Amil Windhorst. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 20, T. 69 N., R. 37 W. Records available: 1934-49.

Feb. 22	27.41	May 25	25.40	Aug. 24	21.57	Nov. 24	23.74
Mar. 25	26.09	June 20	21.23	Sept. 26	21.30	Dec. 26	23.20
Apr. 27	25.65	July 22	20.72	Oct. 26	22.42		

13. Amil Windhorst. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 20, T. 69 N., R. 37 W. Abandoned in 1947; reopened in 1949 and measurements resumed. Records available: 1934-46, 1949. Sept. 26, 17.94; Oct. 26, 19.38; Nov. 24, 20.53; Dec. 26, 21.76.

15. Metropolitan Life Insurance Co. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 21, T. 67 N., R. 38 W. Records available: 1934-49.

Mar. 24	5.82	June 22	3.35	Sept. 22	6.27	Nov. 23	6.65
Apr. 25	5.12	July 19	3.68	Oct. 24	6.40	Dec. 19	6.85
May 23	2.50	Aug. 22	5.60				

17. Albert Nordholm. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 20, T. 67 N., R. 38 W. Records available: 1934-49.

Feb. 21	16.69	May 23	16.50	Aug. 22	17.33	Nov. 23	18.05
Mar. 24	15.68	June 22	16.48	Sept. 22	17.78	Dec. 19	18.17
Apr. 25	15.98	July 19	16.64	Oct. 24	18.09		

44A. Elsie Nordstrom. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 35, T. 69 N., R. 39 W. Records available: 1937-49.

Mar. 24	15.57	June 22	15.51	Sept. 22	19.70	Nov. 23	20.82
Apr. 25	16.62	July 19	17.57	Oct. 24	20.10	Dec. 19	21.47
May 23	18.30	Aug. 22	17.88				

47. Elsie Nordstrom. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 35, T. 69 N., R. 39 W. Records available: 1937-49.

Jan. 31	21.20	May 23	18.10	Aug. 22	17.60	Nov. 23	19.60
Mar. 24	17.40	June 22	18.47	Sept. 22	19.06	Dec. 19	20.13
Apr. 25	17.85	July 19	17.85	Oct. 24	19.28		

70. John Snyder. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 30, T. 69 N., R. 38 W. Records available: 1937-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 24	0.96	June 22	2.98	Sept. 22	6.48	Nov. 23	6.79
Apr. 25	2.46	July 19	5.08	Oct. 24	6.34	Dec. 19	7.82
May 23	1.32	Aug. 22	6.25				

71. John Snyder. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 30, T. 69 N., R. 38 W. Records available: 1937-49.

Mar. 24	5.76	May 23	4.56	Oct. 24	6.79	Dec. 19	7.09
Apr. 25	6.00	June 22	4.33	Nov. 23	7.09		

76. Metropolitan Life Insurance Co. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 29, T. 68 N., R. 38 W. Records available: 1937-49.

Mar. 24	13.33	June 22	11.07	Aug. 22	13.94	Nov. 23	11.82
Apr. 25	11.20	July 19	10.28	Oct. 24	11.81	Dec. 19	12.03
May 23	8.68						

80. Mr. Burton. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 34, T. 69 N., R. 38 W. Records available: 1937-49.

Jan. 31	30.55	Apr. 27	27.55	July 22	23.44	Oct. 26	29.02
Feb. 22	27.67	May 25	26.25	Aug. 24	26.07	Nov. 24	29.78
Mar. 25	24.83	June 20	22.84	Sept. 26	28.32	Dec. 26	30.85

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

Mar. 24	22.08	June 22	19.14	Aug. 22	19.36	Nov. 23	21.18
Apr. 25	20.84	July 19	19.54	Oct. 26	20.93	Dec. 19	21.58
May 23	20.99						

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

Mar. 24	21.85	June 22	19.89	Aug. 22	19.08	Nov. 23	20.63
Apr. 25	21.00	July 19	19.21	Oct. 26	20.47	Dec. 19	20.22
May 23	20.58						

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

Date	Water level	Date	Water level	Date	Water level
Mar. 24	18.74	May 23	18.38	July 19	16.13
Apr. 25	18.14	June 22	17.55	Aug. 22	17.10

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

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 24	14.96	June 22	14.43	Aug. 22	14.29	Nov. 23	15.52
Apr. 25	14.95	July 19	14.13	Oct. 26	15.38	Dec. 19	17.74
May 23	15.30						

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

Mar. 24	9.34	June 22	8.53	Aug. 22	9.28	Nov. 23	10.92
Apr. 25	8.80	July 19	8.76	Oct. 26	11.50	Dec. 19	11.16
May 23	10.07						

Palo Alto County

Vicinity of Lost Island Lake

97-34-29N1. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 29, T. 97 N., R. 34 W. Records available: 1940-49. Mar. 30, 0.52; June 22, 1.87; Sept. 28, 2.68.

97-34-29N2. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 29, T. 97 N., R. 34 W. Records available: 1940-48. Flowing; no measurements made in 1949.

97-34-30Q1. Norman Broadwell. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 30, T. 97 N., R. 34 W., about 150 feet north of normal shore line of Lost Island Lake. Records available: 1940-45, 1948-49. Mar. 30, 17.43; June 22, 17.11; Sept. 28, 17.51; Dec. 21, 18.26.

96-34-6J1. Electric Park. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 6, T. 96 N., R. 34 W. Records available: 1940-49. Mar. 30, 1.38; June 22, 2.94; Sept. 28, 2.33; Dec. 21, 1.80.

Polk County

78-24-4P1. S. S. Kresge Co. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 4, T. 78 N., R. 24 W. Records available: 1943-49. Mar. 29, 29.40; June 22, 32.35; Sept. 21, 32.09; Dec. 21, 30.29.

79-22-22A1. J. G. Reed. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 22, T. 79 N., R. 22 W. Records available: 1940-49. Mar. 30, 5.29; June 22, 6.59; Sept. 21, 6.93; Dec. 22, 7.90.

Poweshiek County

78-15-1R1. J. F. Mulcahey. Formerly owned by Ben Harding. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 1, T. 78 N., R. 15 W. Records available: 1943-49. Mar. 30, 1.29; June 23, 10.59; Sept. 21, 13.70; Dec. 22, 13.50.

Sac County

89-38-11J1. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 11, T. 89 N., R. 38 W. Records available: 1942-49. Mar. 29, 1.92; June 21, 3.37.

89-38-26A2. City of Schaller. In Schaller, in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 26, T. 89 N., R. 38 W. Records available: 1940-49. Mar. 29, 220.62; June 21, 220.51; Sept. 27, 220.44; Dec. 20, 221.04.

87-37-21A1. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 21, T. 87 N., R. 37 W. 300 feet east of Clinton School No. 5, in corner of field. Unused dug well, diameter 6 feet, depth 17 feet. Measuring point, top of concrete curb, 2.6 feet above land-surface datum. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level
June 17, 1942	4.78	Sept. 29, 1944	4.69	May 2, 1947	5.18
Sept. 25	4.83	Dec. 17	5.02	Mar. 25	7.58
Dec. 15	5.45	Mar. 26, 1945	4.79	July 14	5.79
Mar. 24, 1943	6.62	June 28	3.86	Oct. 7	10.42
June 28	6.93	Sept. 29	4.69	Dec. 15	5.60
Sept. 16	6.00	Dec. 17	5.09	Mar. 29, 1949	7.24
Dec. 14	7.11	July 16, 1946	5.75	June 21	5.56
Mar. 21, 1944	4.84	Oct. 15	6.34	Sept. 27	6.32
July 23	4.31	Dec. 18	6.39	Dec. 20	6.72

86-36-2C1. John Christian. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 2, T. 86 N., R. 36 W. Records available: 1940-49. Mar. 29, 3.68; June 21, 4.26; Sept. 27, 8.12; Dec. 20, 6.64.

86-36-2E1. Albert Culver, Jr. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 2, T. 86 N., R. 36 W. Records available: 1940-49. Mar. 29, 0.20; June 21, 0.15; Sept. 27, 0.65; Dec. 20, 1.20.

86-36-4N1. State Conservation Commission. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 4, T. 86 N., R. 36 W. Records available: 1940-49. Mar. 29, 4.53; June 21, 5.15; Sept. 27, 6.01; Dec. 20, 6.38.

Sioux County

95-45-5A1. City of Sioux Center. In Sioux Center, in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 5, T. 95 N., R. 45 W. Records available: 1939-45, 1948-49. June 21, 268.35.

Story County

83-24-2Q1. City of Ames well 2. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 2, T. 83 N., R. 24 W. Highest observed water level, 46.03, on Mar. 7; lowest, 58.98, on Aug. 9. Records available: 1947-49.

Daily high and low water levels, from recorder charts

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	53.85	54.16	.....	.....	48.26	54.22	47.04	52.80	52.93	53.25	55.39	57.74
2	50.44	53.92	.....	.....	53.92	54.23	47.00	52.87	52.97	53.28	54.40	57.66
3	53.74	54.36	.....	.....	53.45	53.92	46.93	52.80	52.83	53.30	54.32	54.61
4	53.56	54.22	.....	.....	47.49	53.45	47.07	52.96	53.20	54.55	54.29	54.72
5	53.47	54.80	.....	.....	47.93	52.60	47.40	52.98	54.42	54.65	54.29	54.71
6	54.41	54.97	.....	.....	46.58	52.29	51.27	51.47	49.17	54.74	54.32	55.78
7	54.35	54.55	.....	.....	46.03	52.13	51.37	51.62	53.15	53.50	55.47	55.71
8	54.30	54.52	.....	.....	52.06	52.32	51.50	51.75	53.25	53.53	55.40	55.72
9	50.33	54.35	.....	.....	46.66	52.30	51.62	51.75	52.90	53.52	55.54	55.83
10	53.85	54.05	.....	.....	47.39	52.75	51.65	51.83	52.87	53.17	.....	.....
11	50.68	54.15	.....	.....	46.59	52.77	51.62	51.90	52.90	53.10	.....	.....
12	53.79	54.01	.....	.....	52.72	53.02	51.77	51.97	53.00	54.82	.....	.....
13	50.32	53.87	.....	.....	46.99	52.89	51.85	52.23	54.79	55.03	.....	.....
14	53.74	53.96	.....	.....	47.25	53.07	51.83	52.45	54.94	55.20	.....	.....
15	53.66	53.92	55.04	55.40	47.55	53.21	52.15	52.37	49.58	55.04	.....	.....
16	53.33	53.75	49.75	55.25	47.50	53.24	52.15	52.35	53.24	53.49	.....	.....
17	53.26	54.32	55.15	55.41	47.51	53.32	47.90	52.25	53.35	53.55	.....	.....
18	49.62	54.36	55.21	55.42	47.62	53.39	51.28	52.12	53.33	54.97	.....	.....
19	54.21	54.48	49.57	55.31	47.62	53.44	51.92	52.13	54.95	54.25	.....	.....
20	49.70	54.33	49.53	55.21	47.28	53.40	51.90	52.10	49.31	55.13	.....	.....
21	49.19	57.01	49.44	55.10	47.29	53.32	51.89	52.16	53.57	55.07	56.02	57.08
22	56.53	57.81	49.48	55.13	47.57	53.37	51.93	53.89	49.27	53.57	50.72	56.40
23	54.98	57.74	49.36	55.06	47.12	53.19	48.40	53.89	52.93	55.10	52.07	47.76
24	49.93	56.62	54.75	55.04	47.13	52.97	52.00	52.31	49.53	55.12	55.80	56.10
25	.....	.....	49.11	54.76	47.17	53.11	52.02	52.34	49.83	55.17	50.57	55.90
26	.....	.....	54.41	54.66	47.11	53.02	52.30	52.50	53.94	54.31	50.34	55.76
27	.....	.....	48.66	54.42	46.80	52.83	52.37	52.77	54.14	54.47	50.06	55.08
28	.....	.....	54.06	54.39	46.94	52.72	52.67	52.97	54.17	54.57	54.85	56.20
29	.....	.....	.....	.....	47.25	52.95	52.73	52.98	54.22	55.13	55.95	56.35
30	.....	.....	.....	.....	46.98	52.97	52.80	53.17	54.84	55.22	55.75	56.33
31	.....	.....	.....	.....	47.03	52.95	.....	.....	49.88	55.60	.....	.....

Daily high and low water levels, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	55.66	56.05	50.92	56.53	56.55	57.03	51.95	57.14	55.75	55.94	57.17	57.38
2	55.15	55.78	51.30	56.20	51.45	57.03	51.95	57.24	55.70	56.07	57.21	57.45
3	51.77	55.45	55.70	56.07	51.28	56.90	51.70	57.16	55.76	56.56	57.24	57.46
4	50.36	55.14	55.95	56.59	51.08	56.90	52.10	57.17	56.48	56.98	52.47	57.39
5	55.14	56.01	55.11	56.76	51.07	56.73	55.22	57.31	52.06	56.48	56.77	57.30
6	50.60	57.32	55.65	56.12	51.10	56.67	51.80	57.44	52.08	56.66	57.17	57.43
7	53.75	56.05	55.75	56.77	51.56	56.68	51.63	57.37	56.66	57.03	57.26	57.45
8	53.64	55.72	56.50	57.68	51.60	56.75	51.90	57.31	52.62	57.02	55.05	57.40
9	53.66	55.83	56.66	58.98	51.45	56.94	52.00	57.33	51.92	57.04	57.21	57.44
10	55.76	57.37	56.64	58.83	51.45	56.97	51.73	57.21	56.48	57.05	52.22	57.43
11	55.94	58.04	55.56	57.02	51.28	56.57	51.80	57.24	56.92	57.18	57.16	57.30
12	51.33	57.85	51.62	57.05	51.15	56.37	51.88	57.26	51.88	57.18	56.77	57.27
13	55.86	57.60	.....	.....	50.96	56.53	51.94	57.33	51.92	56.89	52.00	56.94
14	56.13	57.60	.....	.....	50.96	54.54	52.09	57.27	56.26	57.01	56.26	56.64
15	50.92	56.19	.....	.....	54.51	54.71	52.04	57.31	51.81	57.13	56.49	56.70

83-24-2Q1--Continued.

Daily high and low water levels, from recorder charts

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
16	56.03	57.72	.....	.....	54.51	55.83	52.15	56.76	54.25	56.95	56.44	56.75
17	56.18	57.55	.....	.....	51.74	56.82	51.88	56.01	56.01	57.32	52.00	56.71
18	51.06	56.35	.....	.....	50.98	57.33	52.51	56.60	56.51	57.36	51.75	56.61
19	51.08	56.30	.....	.....	50.96	57.05	53.40	56.66	56.17	56.51	54.40	56.64
20	56.10	57.38	55.22	55.55	51.51	57.08	52.22	56.44	56.14	56.43	51.56	56.73
21	51.37	56.53	55.42	56.70	51.50	57.01	51.94	56.31	56.75	57.07	51.73	56.56
22	51.25	56.45	51.42	56.80	51.49	57.05	51.91	56.34	56.99	57.19	51.70	56.55
23	50.74	56.45	51.26	56.90	51.43	57.24	51.48	56.66	52.35	57.22	51.75	56.56
24	50.69	56.43	51.43	56.95	57.08	57.30	50.25	56.30	52.29	57.01	51.75	56.54
25	50.79	57.04	56.66	57.05	51.46	57.30	51.88	56.57	55.52	56.08	51.52	56.46
26	56.18	58.29	51.40	57.14	51.34	57.00	51.88	56.42	55.92	56.34	51.45	56.48
27	56.21	56.59	51.54	57.07	51.65	57.01	53.64	56.50	55.85	56.11	51.54	56.54
28	51.56	56.54	51.55	57.07	53.00	57.78	50.70	56.81	55.85	57.06	51.84	56.56
29	56.31	56.77	51.68	56.75	51.62	57.07	56.69	56.89	57.06	57.32	51.95	56.55
30	51.22	56.22	51.69	56.86	52.11	57.11	51.66	56.99	57.15	57.35	51.75	56.50
31	56.26	56.58	51.67	56.87			55.96	56.71			51.60	56.54

83-24-4Q1. Iowa State College. In Ames, in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 4, T. 83 N., R. 24 W. Records available: 1939-49. Mar. 28, 42.05; June 20, 43.98; Sept. 25, 43.92; Dec. 19, 43.65.

83-24-20J1. Agricultural Engineering Experiment Station. Near Ames, in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 20, T. 83 N., R. 24 W. Records available: 1959-49. Mar. 28, 8.95; June 20, 10.73; Sept. 25, 17.38; Dec. 19, 16.71.

83-24-4R1. Iowa State College. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 4, T. 83 N., R. 24 W. Records available: 1942-49. Mar. 28, 20.03; June 20, 19.11; Sept. 25, 20.69; Dec. 19, 22.26.

Tama County

82-13-13R1. City of Belle Plaine. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 82 N., R. 13 W. Records available: 1945-49. Jan. 16, 6.06; May 16, 8.56.

Van Buren County

69-10-36F1. Town of Keosauqua. In Keosauqua, in vacant lot near railroad station. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 36, T. 69 N., R. 36 W. Abandoned test hole, depth 485 feet. Cased with 10-inch casing from 0.8 foot above land surface to 30 feet and 8-inch casing from 73 feet to 178 feet. Measuring point, hole in iron plate over top of 10-inch casing, 0.8 foot above land-surface datum which is 582 feet above sea level. Taps water in Mississippian formation. Records available: 1949. Nov. 16, 20.28; Dec. 19, 20.35.

Warren County

77-25-12R1. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 12, T. 77 N., R. 25 W. Records available: 1942-49. Mar. 29, 1.92.

76-25-8Q1. Iowa State College. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 8, T. 76 N., R. 25 W. Records available: 1940-49. Mar. 29, 26.66; June 22, 15.10; Sept. 22, 23.80; Dec. 20, 22.98.

Wayne County

67-23-20Q1. L. P. Bryan. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 20, T. 67 N., R. 23 W. Records available: 1940, 1942, 1948. No measurements made in 1949.

Webster County

90-30-26A1. County of Webster. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 26, T. 90 N., R. 30 W. Records available: 1942-49.

90-30-26A1--Continued.

Date	Water level	Date	Water level	Date	Water level
Mar. 30	12.49	June 23	10.46	Dec. 22	18.53
May 17	8.18	Sept. 29	16.13		

90-28-1B1. Ed Askland. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, T. 90 N., R. 28 W. Records available: 1942-43, 1945-49.

Mar. 31	7.61	June 23	4.61	Dec. 22	15.70
May 20	4.87	Sept. 29	8.40		

90-28-8Q1. Mr. Hovey. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 8, T. 90 N., R. 28 W. Records available: 1942-49. Mar. 31, 5.17; May 20, 7.06; June 23, 7.14.

90-27-31N1. C. S. Knudson. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 31, T. 90 N., R. 27 W. Records available: 1942-43, 1948-49. Mar. 31, 9.53; June 23, 8.72; Sept. 29, 10.73; Dec. 22, 13.25.

89-30-18J1. Dan Cain. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T. 89 N., R. 30 W. Records available: 1942-49.

Mar. 30	14.94	June 23	14.00	Dec. 22	21.06
May 17	11.94	Sept. 29	21.38		

89-30-23R1. Johnson Township Consolidated School. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 23, T. 89 N., R. 30 W. Records available: 1942-45, 1947-49. Mar. 30, 33.91; Sept. 29, 34.38; Dec. 22, 34.94.

89-28-21Q2. Litchfield Real Estate Co. In Fort Dodge, in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 21, T. 89 N., R. 28 W. Records available: 1942-43. No measurements made in 1949.

88-29-11C1. Charles Matson. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 11, T. 88 N., R. 29 W. Records available: 1942-49. Mar. 31, 3.77; June 24, 5.41; Sept. 29, 9.27; Dec. 22, 10.25.

87-30-30R1. School District No. 9. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 30, T. 87 N., R. 30 W. Records available: 1942-49.

Mar. 31	3.62	June 24	6.90	Dec. 22	10.29
May 17	5.85	Sept. 30	8.92		

87-28-5Q1. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 5, T. 87 N., R. 28 W. Records available: 1942-49. Mar. 31, 3.50; June 24, 4.27; Sept. 29, 6.99; Dec. 22, 7.82.

87-28-29N1. Grant Spangler. About 4 miles northeast of Harcourt, in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 29, T. 87 N., R. 28 W. Highest observed water level, 3.24, on Apr. 18; Lowest, 9.89, on Dec. 1, 2, 5, 7, 8, and 9. Records available: 1942-49.

Water level at noon, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.13	5.47	6.02	4.19	3.71	4.73	6.10	6.92	8.51	8.39	8.71	9.89
2	5.11	5.50	....	4.08	3.83	4.75	6.12	7.04	8.53	8.39	8.85	9.89
3	5.30	5.45	....	4.07	3.86	4.89	6.12	7.14	8.57	8.40	8.91	9.81
4	5.33	5.46	....	4.06	3.94	4.93	6.16	7.20	8.59	8.46	8.92	9.88
5	5.25	5.47	....	4.02	4.01	4.97	6.20	7.25	8.75	8.42	9.07	9.89
6	5.32	5.40	....	4.00	4.10	5.00	6.26	7.33	8.80	8.34	9.02	9.79
7	5.34	5.31	....	4.03	4.09	5.12	6.34	7.40	8.79	8.34	8.89	9.89
8	5.29	5.41	....	3.97	4.10	5.18	6.38	7.43	8.81	8.39	8.85	9.89
9	5.53	5.49	....	3.94	4.17	5.20	6.43	7.49	8.83	8.51	8.83	9.89
10	5.47	5.51	....	3.97	4.25	5.21	6.50	7.61	8.82	8.36	8.85	9.87
11	5.20	5.31	....	3.99	4.26	5.25	6.52	7.66	8.77	8.54	8.91	9.67
12	5.01	5.42	....	3.97	4.32	5.29	6.52	7.70	8.75	8.65	9.01	9.80
13	4.85	....	....	3.92	4.25	5.36	6.56	7.70	8.78	8.70	9.09	9.88
14	4.93	....	....	3.87	4.25	5.31	6.59	7.69	8.71	8.80	9.14	9.87
15	4.94	....	5.54	3.96	4.21	5.43	6.64	7.69	8.55	8.74	9.20	9.71
16	5.22	....	....	3.78	4.20	5.48	6.69	7.69	8.42	8.63	9.27	9.51

a Tape measurement at another hour.

87-28-29N1--Continued.

Water level at noon, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
17	5.26	5.67	....	3.45	4.20	5.53	6.70	7.69	8.34	8.58	9.41	9.42
18	5.19	5.86	....	3.24	4.23	5.68	6.74	7.69	8.33	8.49	9.48	9.48
19	5.29	6.04	....	3.25	4.32	5.65	6.86	7.67	8.33	8.44	9.31	9.52
20	5.21	....	....	3.28	4.35	5.68	6.84	7.79	8.27	8.46	9.44	9.47
21	5.22	....	....	3.33	4.30	5.79	6.89	7.82	8.27	8.49	9.64	9.46
22	5.29	....	....	3.38	4.35	5.84	7.02	7.82	8.21	8.58	9.57	9.47
23	5.26	5.04	....	3.44	4.37	5.82	6.92	7.82	8.28	8.72	9.57	....
24	5.36	....	....	3.52	4.37	5.78	6.79	7.82	8.27	8.82	9.49	....
25	5.36	....	5.18	3.52	4.33	5.71	6.80	7.88	8.24	8.74	9.66	....
26	....	....	5.06	3.60	4.42	5.75	6.89	7.94	8.22	8.84	9.58	9.31
27	....	....	4.87	3.67	4.46	5.78	6.82	8.05	8.26	8.78	9.67	9.37
28	....	....	4.75	3.69	4.52	5.88	6.73	8.14	8.33	8.80	9.62	9.40
29	....	....	4.51	3.69	4.56	5.91	6.83	8.22	8.37	8.75	9.75	9.53
30	....	....	4.32	3.66	4.62	5.97	6.92	8.30	8.39	8.82	9.85	9.67
31	5.35	....	4.25	....	4.67	....	6.94	8.35	....	8.87	....	9.61

a Tape measurement at another hour.

87-27-18M1. J. B. Marsh. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 18, T. 87 N., R. 27 W. Records available: 1942-49. Mar. 31, 137.66; June 24, 129.46; Sept. 29, 132.54; Dec. 22, 134.70.

86-30-50C1. E. C. Monson. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 5, T. 86 N., R. 30 W. Records available: 1942-49. May 17, 59.46; June 24, 59.62; Sept. 30, 60.66; Dec. 22, 62.03.

86-29-14A1. F. E. Castenson. Near Harcourt, in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 14, T. 86 N., R. 29 W. Records available: 1942-49. Mar. 31, 5.37; June 24, 5.60.

86-28-14H1. Town of Dayton. In Dayton, in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 14, T. 86 N., R. 28 W. Records available: 1942-48. No measurements made in 1949.

86-27-4D1. Mr. Davis. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 4, T. 86 N., R. 27 W. Records available: 1942-49. Mar. 31, 109.29; June 24, 105.42; Sept. 30, 106.57; Dec. 22, 106.61.

Woodbury County

89-48-23B1. City of Sioux City Riverside Station well. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 23, T. 89 N., R. 48 W. Recorder installed Apr. 19. Records available: 1939-44, 1949.

Water level at noon, from recorder charts

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	14.38	....	14.83	....	15.45	14.98	....	15.43
2	14.51	....	14.82	....	15.45	14.99	....	15.38
3	14.52	....	14.86	....	15.46	15.01	....	15.42
4	14.60	....	14.90	....	15.05	15.09	....	15.46
5	14.62	....	14.96	....	15.16	15.06	....	15.40
6	14.70	....	15.00	....	15.20	....	....	15.39
7	14.68	....	15.01	....	15.28	....	....	15.54
8	14.67	....	15.03	....	15.34	....	....	15.57
9	14.70	....	15.04	....	15.36	....	15.04	15.60
10	14.73	....	15.06	15.36	15.35	....	15.07	15.55
11	14.82	....	15.11	15.35	15.87	....	15.05	15.55
12	14.83	....	15.08	15.23	14.00	....	15.15	15.61
13	14.85	....	14.97	14.80	14.14	....	15.10	15.70
14	14.93	....	15.09	14.84	....	....	....	15.64
15	14.91	....	15.12	14.85	....	....	....	15.58
16	14.90	....	15.15	14.88	....	....	....	15.46
17	14.90	....	15.25	14.94	14.49	....	....	15.60
18	14.97	....	15.26	15.00	14.54	14.93	....	15.65
19	13.70	15.01	....	15.22	15.00	14.62	14.97	....	15.64
20	13.74	14.98	....	15.30	15.09	14.61	14.98	....	15.67
21	13.83	14.80	14.95	15.30	15.10	14.75	14.96	15.30	15.70

89-48-23B1--Continued.

Water level at noon, from recorder charts									
Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
22	13.90	14.80	14.72	15.26	15.05	14.75	.....	15.32	15.76
23	14.01	14.82	14.59	15.34	15.12	14.82	.....	15.27	15.81
24	14.06	14.83	14.54	15.38	15.15	14.80	.....	15.31	15.76
25	14.08	14.85	14.43	15.21	15.21	14.81	.....	15.35	.....
26	14.20	14.88	14.54	15.04	15.21	14.86	.....	15.28	15.86
27	14.28	.....	14.60	15.15	15.26	14.88	.....	15.29	15.84
28	14.30	.....	14.65	15.14	15.31	14.95	.....	15.35	15.95
29	14.31	.....	14.65	15.07	15.30	14.95	.....	15.38	15.96
30	14.34	.....	14.74	.....	15.38	14.98	.....	15.42	15.91
31	.....	.....	.....	.....	15.46	.....	.....	.....	15.98

89-47-22B1. City of Sioux City well Lowell 4. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 22, T. 89 N., R. 47 W. Records available: 1939-48. No measurements made in 1949.

89-47-22B2. City of Sioux City well Lowell 3. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 22, T. 89 N., R. 47 W. Abandoned municipal supply well, diameter 26 inches, depth 343 feet. Measuring point, hole in wooden platform on top of casing, 8.2 feet below concrete floor of pumphouse, 2 feet above land-surface datum. Chief aquifer is Dakota sandstone of Cretaceous age. Affected by nearby pumping wells. Recorder installed Apr. 18, 1949. Records available: 1949.

Daily high and low water level, from recorder charts										
Day	April		May		June		July		August	
	High	Low	High	Low	High	Low	High	Low	High	Low
1	.....	.....	24.00	26.50	.....	.....	27.10	28.00	25.50	26.80
2	.....	.....	24.00	27.30	.....	.....	27.30	27.50	26.60	27.40
3	.....	.....	26.30	27.50	.....	.....	27.20	27.40	27.40	27.50
4	.....	.....	27.30	27.80	.....	.....	27.00	27.30	27.50	27.60
5	.....	.....	27.20	27.40	.....	.....	27.00	28.00	27.60	27.30
6	.....	.....	27.40	27.50	.....	.....	28.00	28.50	27.50	27.60
7	.....	.....	26.30	27.40	.....	.....	27.70	28.50	27.40	27.60
8	.....	.....	24.40	26.70	25.90	27.70	27.70	28.50	29.20	27.30
9	.....	.....	24.30	26.10	26.60	27.90	28.60	28.80	28.30	28.80
10	.....	.....	25.60	26.40	26.90	27.90	26.50	28.70	27.90	28.60
11	.....	.....	25.40	26.50	25.80	27.00	26.30	27.00	27.80	28.50
12	.....	.....	26.00	26.60	26.00	26.70	27.00	27.20	27.70	28.90
13	.....	.....	26.60	26.80	26.10	28.00	26.90	27.90	27.40	28.70
14	.....	.....	26.80	27.00	26.80	28.00	25.20	26.50	27.70	28.30
15	.....	.....	24.70	26.90	27.10	27.20	25.20	26.90	27.60	27.80
16	.....	.....	24.40	26.20	26.50	27.10	26.90	27.10	27.80	28.60
17	.....	.....	25.70	27.40	26.60	27.20	25.70	27.10	28.00	29.30
18	24.20	25.10	27.00	28.10	27.20	27.30	25.90	27.80	27.90	28.50
19	24.30	25.00	26.80	28.20	27.00	27.20	26.50	28.00	27.90	28.20
20	24.50	25.10	26.50	27.20	26.90	28.50	25.40	27.70	27.80	27.90
21	24.30	25.80	25.60	26.60	27.70	28.50	26.60	28.30	27.40	28.00
22	24.00	25.70	25.30	25.60	26.20	27.80	26.40	27.20	26.90	27.40
23	24.90	25.50	25.30	27.40	26.50	28.80	27.20	27.30	26.80	27.90
24	24.40	25.70	25.10	27.20	27.60	28.90	27.10	27.30	27.30	27.80
25	24.00	25.80	25.70	26.30	27.10	27.70	27.10	28.40	27.70	28.60
26	25.50	27.30	25.50	26.90	25.50	27.10	28.40	29.20	28.10	29.20
27	26.20	27.40	25.10	26.50	25.70	27.30	28.60	28.80	28.80	29.40
28	26.60	26.70	26.10	.....	26.30	26.90	28.90	28.90	28.10	28.80
29	25.40	26.70	.....	.....	26.10	26.60	26.70	29.00	27.90	28.10
30	26.50	26.60	.....	.....	27.10	27.80	26.30	26.70	27.80	28.80
31	.....	.....	.....	.....	.....	.....	25.00	26.30	27.00	27.80

Daily high and low water levels, from recorder charts								
Day	September		October		November		December	
	High	Low	High	Low	High	Low	High	Low
1	26.70	27.10	26.40	27.10	25.20	25.60	23.90	24.60
2	25.90	26.80	26.10	26.40	24.90	25.30	24.60	25.00
3	25.90	27.70	26.10	27.80	24.80	24.90	24.90	25.40
4	27.10	27.50	26.20	26.90	24.20	25.00	25.40	25.70

89-47-22B2--Continued.

Daily high and low water levels, from recorder charts

Day	September		October		November		December	
	High	Low	High	Low	High	Low	High	Low
5	26.90	27.20	25.90	26.20	23.50	24.20	25.70	26.20
6	26.70	26.90	25.90	26.60	23.00	23.50	25.00	26.20
7	26.70	26.80	26.60	27.80	22.70	23.00	24.50	25.00
8	26.60	27.00	27.80	28.40	22.50	22.80	24.50	24.70
9	26.50	26.70	26.80	28.30	22.80	23.70	24.20	24.80
10	26.10	26.50	26.80	27.90	23.00	24.20	24.40	25.70
11	26.00	26.80	27.90	28.50	22.80	23.10	24.50	24.90
12	26.20	27.10	27.60	28.20	22.50	22.80	23.60	24.80
13	26.20	26.70	27.60	27.60	22.40	22.70	23.20	23.60
14	26.20	26.40	27.30	27.60	22.70	24.70	.....	.....
15	26.40	26.60	27.10	27.30	23.40	23.80	23.60	23.90
16	26.60	26.70	26.70	27.20	23.40	23.90	23.80	24.30
17	26.50	26.60	26.20	26.60	23.40	24.60	24.00	25.20
18	26.40	26.50	25.70	26.20	23.40	23.70	24.80	25.50
19	26.40	26.50	25.50	25.70	23.00	23.70	25.10	25.60
20	26.10	26.40	25.30	25.50	22.80	23.00	24.50	25.90
21	26.20	27.30	25.20	25.40	22.80	23.90	24.00	24.40
22	27.30	27.70	25.20	25.30	23.30	23.90	24.10	24.70
23	27.10	27.50	25.20	25.40	23.00	23.70	24.20	24.80
24	26.60	27.10	25.40	25.50	22.80	23.00	23.70	25.30
25	26.30	26.60	25.50	25.60	22.30	22.80	25.30	25.40
26	25.60	26.40	25.50	25.70	22.30	22.40	25.40	25.70
27	26.40	27.20	25.50	25.70	22.00	22.40	24.80	25.90
28	26.20	27.20	25.40	25.70	22.10	22.90	24.60	25.60
29	26.20	26.40	25.30	25.50	22.90	24.90	24.50	24.90
30	26.40	27.30	25.40	25.50	23.10	24.40	24.70	25.80
31			25.10	25.40			25.00	26.10

KANSAS

By Wanda H. Hansen

PROGRAM OF WORK

The observation-well program in Kansas was continued in 1949 in co-operation with the State Geological Survey of Kansas, 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 named, the city of Wichita cooperated in Harvey, McPherson, and Sedgwick Counties. Also, an observation-well program was carried on in the Missouri Basin in cooperation with the Bureau of Reclamation as part of the program of the Interior Department for development of the Missouri River Basin. Two counties not heretofore included were added to the program in 1949 and one was dropped making 68 counties in which wells were observed at the end of the year.

Results of cooperative ground-water investigations in the following areas were published in 1949: Geology and ground-water resources of a part of south-central Kansas with special reference to the Wichita municipal water supply;¹ Geology and ground-water resources of Pawnee and Edwards Counties;² Geology and ground-water resources of Norton County and northwestern Phillips County;³ and Ground-water conditions in the Smoky Hill Valley in Saline, Dickinson, and Geary Counties.⁴

¹ Williams, C. C., and Lohman, S. W., Geology and ground-water resources of a part of south-central Kansas with special reference to the Wichita municipal water supply: Kansas Geol. Survey Bull. 79, 455 pp., 35 pls., 31 figs.

² McLaughlin, T. G., Geology and ground-water resources of Pawnee and Edwards Counties, Kansas: Kansas Geol. Survey Bull. 80, 189 pp., 9 pls., 12 figs.

³ Frye, J. C., and Leonard, A. R., Geology and ground-water resources of Norton County and northwestern Phillips County, Kansas: Kansas Geol. Survey Bull. 81, 144 pp., 10 pls., 11 figs.

⁴ Latta, B. F., Ground-water conditions in the Smoky Hill Valley in Saline, Dickinson, and Geary Counties, Kansas: Kansas Geol. Survey Bull. 84, 152 pp., 6 pls., 13 figs.

At the beginning of 1949, periodic water-level measurements were being made in 590 observation wells in the State. During the year measurements were discontinued in 47 wells and begun or resumed in 35 wells. At the end of the year 578 wells were under observation. Of the wells measured in 1949, 174 were measured bimonthly, 104 were measured quarterly, 223 monthly, 15 semimonthly, 8 weekly, and water-stage recorders were maintained on 10. The recorders on four of these wells--one in Finney County, one in Grant County, and two in Scott County--are maintained by the Division of Water Resources of the State Board of Agriculture. During the year 3,032 wetted-tape measurements were made in the State. For convenience, the data given in this paragraph have been arranged in tabular form, by counties, as follows:

Observation-well program, in Kansas, by counties, in 1949

County	Observer	At beginning of year	Discontinued	Added	At end of year
Allen	W. W. Wilson	2	0	0	2
Atchison	W. W. Wilson	2	0	0	2
Barber	H. C. Corrigan	8	0	0	8
Barton	H. C. Corrigan	10	1	0	9
Bourbon	W. W. Wilson	4	0	0	4
Brown	W. W. Wilson	7	0	0	7
Chase	Howard O'Connor	0	0	10	10
Cheyenne	Ferd G. Schnittker	19	1	0	18
Clark	H. C. Corrigan	2	2	0	0
Coffey	W. W. Wilson	3	0	0	3
Comanche	H. C. Corrigan	2	0	0	2
Cowley	C. K. Bayne	4	0	0	4
Crawford	(g)	3	0	0	3
Douglas	W. W. Wilson	2	0	0	2
Edwards	H. C. Corrigan	3	0	0	3
Ellis	(a)	20	0	0	20
Finney	H. C. Corrigan	10	0	0	10
Ford	H. C. Corrigan	12	2	0	10
Franklin	W. W. Wilson	1	0	0	1
Grant	H. C. Corrigan	9	0	0	9
Gray	H. C. Corrigan	7	4	0	3
Greeley	H. C. Corrigan	12	7	0	5
Hamilton	H. C. Corrigan	5	1	0	4
Harvey	(b)	127	0	3	130
Haskell	H. C. Corrigan	5	0	0	5
Hodgeman	H. C. Corrigan	3	0	0	3
Jackson	W. W. Wilson	3	0	0	3
Jefferson	W. W. Wilson	2	0	0	2
Jewell	(c)	21	1	1	21
Johnson	W. W. Wilson	3	0	0	3
Kearny	H. C. Corrigan	6	2	0	4
Kingman	C. K. Bayne	10	2	0	8
Kiowa	H. C. Corrigan	5	0	0	5
Labette	John Wayenburg	4	0	0	4
Leavenworth	W. W. Wilson	2	0	0	2
Lincoln	(d)	15	0	0	15
Linn	W. W. Wilson	3	0	0	3
Logan	H. C. Corrigan	3	1	0	2
McPherson	(e)	11	0	0	11

*See footnotes at end of table.

Observation-well program, in Kansas, by counties, in 1949--continued

County	Observer	At beginning of year	Discon- tinued	Added	At end of year
Meade	H. C. Corrigan	7	1	0	6
Miami	W. W. Wilson	1	0	0	1
Mitchell	(d)	11	0	0	11
Morton	H. C. Corrigan	3	0	0	3
Ness	H. C. Corrigan	2	0	0	2
Norton	(d)	11	0	0	11
Osborne	(d)	13	0	0	13
Pawnee	H. C. Corrigan	3	0	0	3
Phillips	(d)	14	1	0	13
Reno	C. K. Bayne	1	0	0	1
Republic	(f)	8	1	1	8
Rice	(d)	14	4	0	10
Russell	H. C. Corrigan	10	2	0	8
Saline	(d)	11	0	0	11
Scott	H. C. Corrigan	10	1	0	9
Sedgwick	(b)	38	0	19	57
Seward	H. C. Corrigan	5	0	0	5
Shawnee	W. W. Wilson	1	0	0	1
Sherman	H. C. Corrigan	3	0	0	3
Smith	(d)	8	0	0	8
Stafford	H. C. Corrigan	3	1	0	2
Stanton	H. C. Corrigan	3	0	0	3
Stevens	H. C. Corrigan	5	2	0	3
Sumner	(g)	2	0	0	2
Thomas	H. C. Corrigan	9	2	0	7
Trego	A. R. Leonard	0	0	1	1
Wallace	H. C. Corrigan	5	0	0	5
Wichita	H. C. Corrigan	13	8	0	5
Woodson	W. W. Wilson	1	0	0	1
Wyandotte	V. C. Fishel	5	0	0	5
		590	47	35	578

a H. C. Corrigan, A. R. Leonard, D. W. Berry, or W. C. Connor.

b C. K. Bayne, O. K. Brandon, R. A. Kreager, G. L. Hall, or S. A. Smith.

c D. W. Berry, W. C. Connor, or Gerald Sanders.

d D. W. Berry or W. C. Connor.

e C. K. Bayne or W. C. Connor.

f A. J. Dickerman, Lee P. Davidson, or C. Erickson.

g No measurements made in 1949.

Frequency of measurement of wells and number of wetted-tape measurements made in Kansas, by counties, in 1949

County	Bimonthly	Quarterly	Monthly	Semi- monthly	Weekly	Equipped with recorders	Wetted- tape measure- ments
Allen	2	0	0	0	0	0	8
Atchison	2	0	0	0	0	0	8
Barber	0	8	0	0	0	0	26
Barton	0	0	9	0	0	0	103
Bourbon	2	0	0	0	0	0	8
Brown	2	0	0	0	0	0	8
Cheyenne	19	0	0	0	0	0	93
Clark	0	2	0	0	0	0	3
Coffey	3	0	0	0	0	0	12
Comanche	0	2	0	0	0	0	8
Cowley	4	0	0	0	0	0	10
Crawford	0	0	0	0	0	0	0
Douglas	2	0	0	0	0	0	8
Edwards	0	0	3	0	0	0	32
Ellis	14	2	0	0	0	0	73

Frequency of measurement of wells and number of wetted-tape measurements made in Kansas, by counties, in 1949--Continued

County	Bimonthly	Quarterly	Monthly	Semi-monthly	Weekly	Equipped with recorders	Wetted-tape measurements
Finney	0	3	5	0	0	1	67
Ford	1	4	3	0	0	0	42
Franklin	1	0	0	0	0	0	4
Grant	0	3	2	0	0	1	33
Gray	0	2	1	0	0	0	20
Greeley	5	0	0	0	0	0	25
Hamilton	0	3	2	0	0	0	29
Harvey	0	8	101	7	7	2	793
Haskell	0	4	1	0	0	0	26
Hodgeman	0	2	1	0	0	0	16
Jackson	3	0	0	0	0	0	12
Jefferson	2	0	0	0	0	0	8
Jewell	0	0	22	0	0	0	129
Johnson	2	0	0	0	0	0	12
Kearny	0	2	2	0	0	0	20
Kingman	0	9	0	0	0	0	19
Kiowa	0	5	0	0	0	0	19
Labette	0	0	0	4	0	0	92
Leavenworth	2	0	0	0	0	0	8
Lincoln	15	0	0	0	0	0	75
Linn	3	0	0	0	0	0	12
Logan	0	2	0	0	0	0	7
McPherson	4	5	0	0	0	0	35
Meade	0	5	0	0	0	1	11
Miami	1	0	0	0	0	0	4
Mitchell	11	0	0	0	0	0	53
Morton	0	3	0	0	0	0	10
Ness	0	2	0	0	0	0	7
Norton	11	0	0	0	0	0	54
Osborne	11	0	0	0	0	0	54
Pawnee	0	0	3	0	0	0	36
Phillips	13	0	0	0	0	0	64
Reno	0	1	0	0	0	0	4
Republic	0	0	6	0	0	0	50
Rice	12	0	0	0	0	0	49
Russell	0	8	0	0	0	0	30
Saline	11	0	0	0	0	0	55
Scott	0	1	6	0	0	2	71
Sedgwick	0	0	47	4	1	2	382
Seward	1	0	4	0	0	0	40
Shawnee	1	0	0	0	0	0	4
Sherman	0	3	0	0	0	0	10
Smith	8	0	0	0	0	0	45
Stafford	0	0	2	0	0	0	15
Stanton	0	3	0	0	0	0	9
Stevens	0	3	0	0	0	0	11
Sumner	0	0	0	0	0	0	0
Thomas	0	3	0	0	0	1	9
Trego	0	0	1	0	0	0	3
Wallace	0	4	0	0	0	0	19
Wichita	5	0	0	0	0	0	24
Woodson	1	0	0	0	0	0	4
Wyandotte	0	2	0	0	0	0	2
	174	104	221	15	8	10	3,032

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Allen County

Highest and lowest water levels for the period of record
in 2 wells in Allen County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
24-18-33baa	2	8.87	Mar. 1, 1949	13.18	June 7, 1948
24-21-33dcd	2	37.35	Mar. 1, 1949	40.58	June 7, 1948

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 2 wells in Allen County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise for period of record
24-18-33baa	4.31	+1.97	2.51
24-21-33dcd	3.23	-.38	1.68

24-18-33baa. Arnold Estate. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 33, T. 24 S., R. 18 E. Records available: 1948-49. Mar. 1, 8.87; Apr. 18, 10.50; June 10, 11.10; July 21, 10.36.

24-21-33dcd. J. F. Harris. SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 33, T. 24 S., R. 21 E. Records available: 1948-49. Mar. 1, 37.35; Apr. 18, 37.75; June 10, 37.97; July 21, 37.73.

Atchison County

Highest and lowest water levels for the period of record
in 2 wells in Atchison County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
5-18-3dd	2	0.75	Apr. 15, 1949	2.57	Nov. 27, 1948
6-21-32d	2	3.19	Apr. 15, 1949	8.76	Feb. 9, 1949 Nov. 27, 1948

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 2 wells in Atchison County

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise for period of record
5-18-3dd	1.82	1.68	0.76
6-21-32d	5.57	5.15	.91

5-18-3dd. Lee Savage. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 3, T. 5 S., R. 18 E. Records available: 1948-49. Feb. 9, 2.57; Apr. 15, 0.75; June 13, 1.57; July 15, 0.89.

6-21-32d. Owner unknown. SE $\frac{1}{4}$ sec. 32, T. 6 S., R. 21 E. Records available: 1948-49. Feb. 9, 5.60; Apr. 15, 3.19; June 13, 4.47; July 15, 3.61.

Barber County

Highest and lowest water levels for the period of record
in 8 wells in Barber County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
1	9	63.35	Dec. 21, 1949	82.99	Oct. 17, 1940
3	9	8.57	June 19, 1947	15.42	Oct. 21, 1940
4	9	12.50	June 22, 1949	16.50	Aug. 20, 1940

Highest and lowest water levels for the period of record
in 8 wells in Barber County--Continued

Well	Length of record (years)	Highest level	Date	Lowest level	Date
5	9	17.62	Mar. 20, 1948	30.15	Sept. 24, 1941
8	9	8.87	Nov. 21, 1941	17.48	Mar. 21, 1941
9	9	1.13	Sept. 25, 1948	4.54	Aug. 21, 1943
10	9	102.20	Mar. 15, 1945	107.72	Sept. 25, 1948
13	9	4.22	Sept. 21, 1949	16.99	Oct. 22, 1940

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 8 wells in Barber County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
1	19.64	+6.32	+20.64
3	6.85	-.40	+5.82
4	3.80	+2.17	+2.67
5	12.53	+1.13	+11.13
8	8.61	+1.52	+4.12
9	3.41	+.65	+2.37
10	5.52	-.18	-1.05
13	12.77	+.71	+9.25

1. D. S. Shaw. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 19, T. 31 S., R. 15 W. Records available: 1940-49. Mar. 9, 68.42; June 21, 66.78; Sept. 22, 65.24; Dec. 21, 63.35.

3. Mrs. Griever. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 12, T. 32 S., R. 12 W. Records available: 1940-49. Mar. 9, 10.30; June 22, 9.00; Sept. 21, 12.49; Dec. 21, 12.60.

4. Madge Evans. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 4, T. 32 S., R. 12 W. Records available: 1940-49. Mar. 9, 13.57; June 22, 12.50; Sept. 21, 13.23.

5. R. Kenney. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 1, T. 33 S., R. 12 W. Records available: 1940-49. Mar. 9, 18.30; June 22, 18.07; Sept. 22, 17.85; Dec. 21, 17.72.

8. P. Brooks. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 17, T. 34 S., R. 15 W. Records available: 1940-49. Mar. 9, 9.67; June 22, 8.92; Sept. 22, 12.99.

9. V. D. Wells. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T. 34 S., R. 15 W. Records available: 1940-49. Sept. 22, 1.39.

10. G. H. Davis. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 11, T. 35 S., R. 15 W. Records available: 1940-49. Mar. 9, 104.72; Sept. 22, 104.85; Dec. 21, 104.90.

13. J. A. Hrencher. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 17, T. 32 S., R. 10 W. Records available: 1940-49. Mar. 9, 6.32; June 22, 6.09; Sept. 21, 4.22; Dec. 21, 7.74.

Barton CountyHighest and lowest water levels for the period of record
in 9 wells in Barton County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
1	8	0.16	June 23, 1949	5.49	Aug. 21, 1946
16	7	25.78	Sept. 21, 1949	33.34	July 11, 1947
43	7	14.39	July 21, 1949	21.21	Jan. 19, 1944
100	6	27.05	June 23, 1949	35.14	Dec. 7, 1947
103	6	1.00	Apr. 27, 1945	7.66	Aug. 21, 1946
107	6	92.28	Apr. 20, 1949	101.60	Oct. 28, 1945
109	6	8.48	June 23, 1949	14.61	July 10, 1946
110	6	16.15	June 6, 1945	23.00	Oct. 20, 1948
131	6	9.78	July 13, 1945	14.81	Sept. 23, 1948

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 9 wells in Barton County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
1	5.33	-0.13	-1.69
16	7.56	+2.21	+3.21
43	6.32	+1.51	+4.59
100	8.09	+5.58	-4.49
103	6.66	-.06	-1.63
107	9.32	+1.15	+1.36
109	6.13	+1.01	+1.90
110	6.85	+2.67	-1.90
131	5.03	+1.83	+7.1

1. F. Panning. SE. corner sec. 3, T. 20 S., R. 11 W. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	4.12	Apr. 20	3.51	July 21	2.07	Oct. 19	4.15
Feb. 10	4.34	May 17	3.54	Aug. 18	3.38	Nov. 17	4.35
Mar. 10	2.80	June 23	.16	Sept. 21	4.09	Dec. 22	4.64

16. Teichmann. NE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 12, T. 20 S., R. 13 W. Records available: 1942-49.

Jan. 12	28.72	Apr. 20	23.39	July 21	26.16	Oct. 19	25.85
Feb. 10	28.00	May 17	28.44	Aug. 18	25.82	Nov. 17	25.95
Mar. 10	28.42	June 23	27.42	Sept. 21	25.78	Dec. 22	26.12

43. M. Hagen. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 20, T. 20 S., R. 11 W. Records available: 1942-49.

Jan. 12	18.10	May 17	17.12	Sept. 21	15.58	Nov. 17	16.40
Mar. 10	17.22	July 21	14.39	Oct. 19	16.14	Dec. 22	16.62
Apr. 20	17.19	Aug. 18	14.86				

100. Unruh. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 11, T. 20 S., R. 15 W. Records available: 1944-49.

Jan. 13	33.49	May 17	30.97	Aug. 18	32.00	Oct. 20	33.32
Mar. 10	33.10	June 23	27.05	Sept. 20	33.00	Nov. 18	33.39
Apr. 20	33.65	July 21	30.70				

103. F. Konareck. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 33, T. 17 S., R. 12 W. Records available: 1944-49.

Jan. 13	4.97	Apr. 20	4.22	July 21	3.44	Oct. 19	4.49
Feb. 10	2.20	May 17	4.67	Aug. 18	3.90	Nov. 17	4.76
Mar. 10	3.60	June 23	1.45	Sept. 21	4.33	Dec. 23	4.96

107. Carter Oil Co. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 17 S., R. 11 W. Records available: 1944-49.

Jan. 13	99.00	Apr. 20	92.23	July 21	97.60	Oct. 19	98.07
Feb. 10	99.20	May 17	98.20	Aug. 18	97.58	Nov. 17	98.65
Mar. 10	98.60	June 23	97.03	Sept. 21	97.98	Dec. 23	98.62

109. J. C. Cook. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 28, T. 18 S., R. 15 W. Records available: 1944-49.

Jan. 13	12.71	Apr. 20	11.79	July 22	10.40	Oct. 20	10.98
Feb. 11	12.29	May 18	11.79	Aug. 19	11.19	Nov. 18	11.54
Mar. 10	11.30	June 23	8.48	Sept. 20	11.93	Dec. 23	11.92

110. Prudential Life Insurance Co. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 33, T. 17 S., R. 14 W. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	22.20	Apr. 20	20.89	July 22	19.42	Oct. 20	20.00
Feb. 11	20.90	May 17	20.39	Aug. 19	19.84	Nov. 18	19.82
Mar. 10	21.10	June 23	19.95	Sept. 20	20.05	Dec. 23	19.59

112. P. P. Kingston. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 34, T. 16 S., R. 14 W. Records available: 1944-48. Measurements discontinued, Apr. 20, 1949.

131. F. W. Gagleman. SE. corner sec. 22, T. 19 S., R. 15 W. Records available: 1944-49.

Jan. 13	14.18	May 18	13.26	Aug. 19	12.17	Nov. 18	12.48
Mar. 10	13.40	June 23	11.93	Sept. 20	13.04	Dec. 23	12.47
Apr. 20	13.32	July 22	12.21	Oct. 20	12.71		

Bourbon County

Highest and lowest water levels for the period of record in 2 wells in Bourbon County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
25-23-27bbb	2	4.87	July 21, 1949	6.13	May 6, 1948
25-24-13dda	2	4.37	Mar. 1, 1949	7.51	Oct. 15, 1948

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 2 wells in Bourbon County

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise for period of record
25-23-27bbb	1.26	0.65	1.26
25-24-13dda	3.14	.12	.33

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. Records available: 1942-47. No measurements made in 1949.

2. City of Fort Scott. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 30, T. 25 S., R. 25 E. Records available: 1942-47. No measurements made in 1949.

25-23-27bbb. Harold Comstock. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 27, T. 25 S., R. 23 E. Records available: 1948-49. Mar. 1, 5.39; Apr. 18, 5.29; June 10, 5.16; July 21, 4.87.

25-24-13dda. John Ibson. NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 25 S., R. 24 E. Records available: 1948-49. Mar. 1, 4.37; Apr. 18, 5.20; June 10, 5.46; July 21, 5.41.

Brown County

Highest and lowest water levels for the period of record in 2 wells in Brown County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
2-15-25dd	2	8.92	Apr. 15, 1949	8.92	Nov. 27, 1948
4-17-17ada	2	33.35	July 15, 1949	37.19	Nov. 27, 1948

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 2 wells in Brown County

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise (+) or net decline (-) for period of record
2-15-25dd	1.10	0.20	-0.49
4-17-17ada	3.84	3.84	+2.46

1. City of Hiawatha. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 31, T. 2 S., R. 17 E. Records available: 1946-47. No measurements made in 1949.

3. City of Hiawatha. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 36, T. 2 S., R. 16 E. Records available: 1945-47. No measurements made in 1949.

4. City of Hiawatha. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 29, T. 2 S., R. 17 E. Records available: 1945-47. No measurements made in 1949.

5. City of Hiawatha. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 29, T. 2 S., R. 17 E. Records available: 1945-47. No measurements made in 1949.

6. City of Hiawatha. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 29, T. 2 S., R. 17 E. Records available: 1945-47. No measurements made in 1949.

2-15-25dd. Henry Rieger. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 25, T. 2 S., R. 15 W. Records available: 1948-49. Feb. 9, 9.58; Apr. 15, 8.92; June 13, 9.62; July 15, 9.72.

4-17-17ada. H. C. Brown. NE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 17, T. 4 S., R. 17 W. Records available: 1948-49. Feb. 9, 36.70; Apr. 15, 36.43; June 13, 36.10; July 15, 33.35.

Chase County

Highest and lowest water levels for the period of record in 10 wells in Chase County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
18-9-29cc	3	19.48	Mar. 26, 1948	24.63	Oct. 3, 1947
19-7-10da	2	7.70	Aug. 13, 1948	10.51	Apr. 14, 1948
19-9-30cc	3	37.75	July 14, 1949	41.22	June 8, 1948
20-6-31bd	3	21.87	July 14, 1949	25.25	Mar. 27, 1948
20-7-13cb	3	11.70	Aug. 13, 1948	19.09	Mar. 27, 1948
20-8-2bd	3	9.46	Aug. 12, 1948	10.33	July 14, 1949
20-8-16aa	3	5.81	July 14, 1949	10.57	Sept. 26, 1947
20-9-26dd	3	15.38	Aug. 12, 1949	15.88	June 8, 1948
21-7-21cc	3	63.68	Mar. 27, 1948	69.34	Sept. 17, 1947
22-6-11cc	3	6.64	Mar. 27, 1948	7.95	Sept. 23, 1947

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 10 wells in Chase County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
18-9-29cc	5.15	-0.72	+2.72
19-7-10da	2.81	-.58	+2.43
19-9-30cc	3.47	+.96	+2.58
20-6-31bd	3.38	+.23	+2.18
20-7-13cb	7.39	-1.55	+1.69
20-8-2bd	.87	-.87	-.31
20-8-16aa	4.76	+.99	+4.76
20-9-26dd	.50	-.22	+.09
21-7-21cc	5.66	-4.35	+1.31
22-6-11cc	1.31	-.37	+.94

18-9-29cc. Peak & Hatcher Co. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 39, T. 18 S., R. 9 E. Drilled well, diameter 8.5 inches, depth 33.3 feet below land-surface datum. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Oct. 3, 1947	24.63	June 8, 1948	23.79	July 14, 1949	21.91
Mar. 26, 1948	19.48	Aug. 12	21.19		

19-7-10da. Herbert T. Drake. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 19 N., 7 W. Dug well, diameter approximately 42 inches, depth 22.7 feet below land-surface datum. Records available: 1948-49. Apr. 14, 1948 10.51; Aug. 13, 1948, 7.70; July 14, 1949, 8.08.

19-9-30cc. E. E. Andrews. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 30, T. 19 S., R. 9 E. Drilled well, diameter 8.5 inches, depth 65.1 feet below land-surface datum. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Sept. 26, 1947	40.33	June 8, 1948	41.22	July 14, 1949	37.75
Mar. 26, 1948	39.11	Aug. 12	38.71		

20-6-31bd. B. S. Thompson. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 31, T. 20 S., R. 6 E. Drilled well, diameter 6.5 inches, depth 42.5 feet below land-surface datum. Records available: 1947-49. Sept. 23, 1947, 24.05; Mar. 27, 1948, 25.25; Aug. 13, 1948, 22.10; July 14, 1949, 21.87.

20-7-13cb. Geo. W. Storkey. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 13, T. 20 S., R. 7 E. Dug well, diameter 48 inches, depth 55.0 feet below land-surface datum. Records available: 1947-49. Sept. 8, 1947, 14.94; Mar. 27, 1948, 19.09; Aug. 13, 1948, 11.70; July 14, 1949, 13.25.

20-8-2bd. School District. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 2, T. 20 S., R. 8 E. Drilled well, diameter 5 inches, depth 21.1 feet below land-surface datum. Records available: 1947-49. Sept. 26, 1947, 10.02; Mar. 26, 1948, 10.21; Aug. 12, 1948, 9.46; July 14, 1949, 10.33.

20-8-16aa. Gerald Brough. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 16, T. 20 S., R. 8 E. Drilled well, diameter 7 inches, depth 32.4 feet below land-surface datum. Records available: 1947-49. Sept. 26, 1947, 10.57; Mar. 26, 1948, 7.53; Aug. 12, 1948, 6.80; July 14, 1949, 5.81.

20-9-26dd. Ethel Welch Bell. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 26, T. 20 S., R. 9 E. Drilled well, diameter 7 inches, depth 28.6 feet below land-surface datum. Records available: 1947-49. Sept. 4, 1947, 15.69; June 8, 1948, 15.88; Aug. 12, 1948, 15.38; July 14, 1949, 15.60.

21-7-21cc. Stella Moore. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T. 21 S., R. 7 E. Drilled well, diameter 7 inches, depth 98.3 feet below land-surface datum. Records available: 1947-49. Sept. 17, 1947, 69.34; Mar. 27, 1948, 63.68; July 14, 1949, 68.03.

22-6-11cc. Margaret Smith. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 11, T. 22 S., R. 6 E. Drilled well, diameter 5.5 inches, depth 85.5 feet below land-surface datum. Records available: 1947-49. Sept. 23, 1947, 7.95; Mar. 27, 1948, 6.64; July 14, 1949, 7.01.

Cheyenne County

Highest and lowest water levels for the period of record
in 19 wells in Cheyenne County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
1-38-1cd	2	21.90	June 8, 1949	23.09	Oct. 5, 1948
1-38-8dd	4	11.24	Feb. 25, 1947	13.32	Sept. 7, 1947
1-38-10cc	4	19.97	June 8, 1949	21.67	Oct. 22, 1946
1-38-17cd	4	11.32	June 8, 1947	12.57	Oct. 5, 1948
			June 8, 1949		
2-39-2cb	4	13.56	Dec. 18, 1949	19.03	Mar. 28, 1946

Highest and lowest water levels for the period of record
in 19 wells in Cheyenne County--Continued

Well	Length of record (years)	Highest level	Date	Lowest level	Date
2-39-10bb	3	25.27	July 29, 1947	27.10	Aug. 3, 1948
2-39-17ba	4	10.38	June 8, 1947	12.56	Sept. 7, 1947
2-39-27bb	4	17.20	Oct. 4, 1949	19.50	Mar. 27, 1946
2-40-25db	2	15.52	Aug. 2, 1949	16.45	Oct. 5, 1948
3-39-6aa	4	4.94	June 8, 1949	8.73	Dec. 5, 1947
3-40-9ba	4	11.69	Feb. 25, 1947	13.10	Sept. 7, 1947
3-40-16da	4	9.67	June 8, 1949	11.90	Sept. 7, 1947
3-40-22ab	4	10.02	July 29, 1947	15.18	Mar. 9, 1946
3-40-28bd	4	10.02	Mar. 20, 1946	12.75	Aug. 16, 1946
3-40-33dd	4	11.90	July 29, 1947	14.50	Mar. 4, 1946
3-41-13cc	4	7.83	Nov. 16, 1949	15.78	Aug. 16, 1946
4-41-2aa	4	23.67	Mar. 1, 1946	23.53	Oct. 4, 1949
4-42-34db	4	8.73	June 8, 1949	10.31	Sept. 7, 1947
5-42-4aa	4	21.83	Dec. 5, 1947	23.68	Aug. 2, 1949
			June 8, 1948		

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 19 wells in Cheyenne County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
1-38-1cd	1.19	+0.24	-0.07
1-38-8dd	2.08	+ .60	+ .37
1-38-10cc	1.70	+ .70	+1.18
1-38-17cd	1.25	+ .39	- .15
2-39-2cb	5.47	+1.76	+3.71
2-39-10bb	1.83	+ .43	- .01
2-39-17ba	2.18	(a)	+ .31
2-39-27bb	2.30	+ .57	+1.88
2-40-25db	.93	- .08	.00
3-39-6aa	3.79	+1.96	+ .06
3-40-9ba	1.41	+ .55	- .50
3-40-16da	2.23	+ .91	- .46
3-40-22ab	5.16	+2.19	+1.12
3-40-28bd	2.73	+ .73	-2.11
3-40-33dd	2.60	+ .06	+1.61
3-41-13cc	7.95	+2.55	+5.25
4-41-2aa	4.86	+ .61	-1.70
4-42-34db	1.58	+ .54	+ .23
5-42-4aa	1.85	+ .03	+ .23

a No measurement made in 1948.

1-38-1cd. Paul O'Brien. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 1, T. 1 S., R. 38 W. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
June 8	21.90	Oct. 4	22.75	Dec. 18	22.56
Aug. 2	22.72	Nov. 16	22.62		

1-38-8dd. Owner unknown. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 8, T. 1 S., R. 38 W. Records available: 1946-49.

June 8	12.77	Oct. 4	12.55	Dec. 18	12.15
Aug. 2	14.83	Nov. 16	12.30		

a Pumped recently.

1-38-10cc. School district. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 10, T. 1 S., R. 38 W. Records available: 1946-49.

June 8	19.97	Oct. 4	20.65	Dec. 18	20.44
Aug. 2	20.20	Nov. 16	20.40		

1-38-17cd. F. J. Ostick. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 17, T. 1 S., R. 38 W. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
June 8	11.32	Oct. 4	12.12	Dec. 18	11.89
Aug. 2	12.06	Nov. 16	11.99		

2-39-2cb. Owner unknown. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 2, T. 2 S., R. 39 W. Records available: 1946-49.

June 8	14.22	Oct. 4	13.84	Dec. 18	13.56
Aug. 2	13.70	Nov. 16	13.79		

2-39-10bb. Owner unknown. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 10, T. 2 S., R. 39 W. Records available: 1947-49.

June 8	26.55	Oct. 4	26.35	Dec. 18	25.76
Aug. 2	26.28	Nov. 16	25.85		

2-39-17ba. Owner unknown. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 17, T. 2 S., R. 39 W. Records available: 1946-49.

June 8	12.01	Oct. 4	11.38	Dec. 18	10.72
Aug. 2	11.92	Nov. 16	10.85		

2-39-27bb. Owner unknown. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 27, T. 2 S., R. 39 W. Records available: 1948-49.

June 8	17.56	Oct. 4	17.20	Dec. 18	17.62
Aug. 2	17.41	Nov. 16	17.39		

2-40-25db. Owner unknown. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 25, T. 2 S., R. 40 W. Records available: 1948-49.

June 8	15.88	Oct. 4	15.74	Dec. 18	15.77
Aug. 2	15.52	Nov. 12	15.80		

3-39-6aa. Owner unknown. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T. 3 S., R. 39 W. Records available: 1946-49. June 8, 4.94; Aug. 2, 6.91; Oct. 4, 6.42. Measurements discontinued Oct. 4, 1949.

3-40-9ba. Owner unknown. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 9, T. 3 S., R. 40 W. Records available: 1946-49.

June 8	12.31	Oct. 4	12.35	Dec. 18	12.25
Aug. 2	12.30	Nov. 16	12.25		

3-40-16da. Owner unknown. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T. 3 S., R. 40 W. Records available: 1946-49.

June 8	9.67	Oct. 4	9.82	Dec. 18	10.20
Aug. 2	10.40	Nov. 16	10.22		

3-40-22ab. Owner unknown. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 22, T. 3 S., R. 40 W. Records available: 1946-49.

June 8	11.71	Oct. 4	10.50	Dec. 18	11.87
Aug. 2	10.77	Nov. 16	11.49		

3-40-28bd. Owner unknown. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 28, T. 3 S., R. 40 W. Records available: 1946-49.

June 8	10.92	Oct. 4	11.53	Dec. 18	11.40
Aug. 2	12.13	Nov. 16	11.48		

3-40-33dd. Owner unknown. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 33, T. 3 S., R. 40 W. Records available: 1946-49.

June 8	13.20	Oct. 4	12.23	Dec. 18	12.83
Aug. 2	13.44	Nov. 16	12.74		

3-41-13cc. Owner unknown. $S\frac{1}{2}SW\frac{1}{4}$ sec. 13, T. 3 S., R. 41 W. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
June 8	10.73	Oct. 4	8.02	Dec. 18	9.45
Aug. 2	9.80	Nov. 16	7.83		

4-41-2aa. Owner unknown. $NE\frac{1}{4}NE\frac{1}{4}$ sec. 2, T. 4 S., R. 41 W. Records available: 1946-49.

June 8	24.55	Oct. 4	28.53	Dec. 18	25.37
Aug. 2	25.56	Nov. 16	25.34		

4-42-34db. Owner unknown. $NW\frac{1}{4}SE\frac{1}{4}$ sec. 34, T. 4 S., R. 42 W. Records available: 1946-49.

June 8	8.73	Oct. 4	9.32	Dec. 18	9.19
Aug. 2	9.08	Nov. 16	9.20		

5-42-4aa. Owner unknown. $NE\frac{1}{4}NE\frac{1}{4}$ sec. 4, T. 5 S., R. 42 W. Records available: 1946-49.

June 8	22.22	Oct. 4	22.84	Dec. 18	22.65
Aug. 2	23.68	Nov. 16	22.80		

Clark County

Highest and lowest water levels for the period of record
in 2 wells in Clark County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
5	9	25.68	Nov. 26, 1942	29.36	June 5, 1946
12	9	67.02	Nov. 26, 1942	74.05	Dec. 16, 1947

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 2 wells in Clark County

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise for period of record
5	3.68	0.32	1.39
12	7.03	4.03	.54

5. Winnie Floyd. $NW\frac{1}{4}NW\frac{1}{4}$ sec. 12, T. 33 S., R. 25 W. Records available: 1940-49. Mar. 9, 27.90; June 21, 27.34. Measurements discontinued June 21, 1949.

12. Ralph Gardner. $SW\frac{1}{4}SW\frac{1}{4}$ sec. 11, T. 33 S., R. 24 W. Records available: 1940-49. Mar. 9, 67.56. Measurements discontinued, Mar. 9, 1949.

Coffey County

Highest and lowest water levels for the period of record
in 3 wells in Coffey County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
10-17-9ab	2	2.25	Apr. 18, 1949	6.01	Nov. 26, 1948
20-15-34dcb	2	1.71	Mar. 1, 1949	8.35	Nov. 26, 1948
22-15-34da	2	8.22	Apr. 18, 1949	16.90	Oct. 15, 1948

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 3 wells in Coffey County

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise (+) or net decline (-) for period of record
19-17-9ab	3.76	2.36	+0.25
20-15-34dcb	6.64	2.35	-.70
22-15-34da	6.68	5.33	-3.19

19-17-9ab. Atchison, Topeka & Santa Fe Railway. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 9, T. 19 S., R. 17 E. Records available: 1948-49. Mar. 1, 3.89; Apr. 18, 2.25; June 10, 4.24; July 21, 3.65.

20-15-34dcb. Owner unknown. NW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 34, T. 20 S., R. 15 E. Records available: 1948-49. Mar. 1, 1.71; Apr. 18, 2.29; June 10, 4.05; July 21, 6.00.

22-15-34da. B. D. Harreld. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 34, T. 22 S., R. 15 E. Records available: 1948-49. Mar. 1, 10.92; Apr. 18, 8.22; June 10, 9.60; July 21, 11.57.

Comanche County

Highest and lowest water levels for the period of record in 2 wells in Comanche County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
1	9	36.20	Sept. 22, 1949	40.52	June 20, 1941
9	9	85.44	Sept. 17, 1947	98.30	Dec. 20, 1946

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 2 wells in Comanche County

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise (+) or net decline (-) for period of record
1	4.32	1.45	+3.55
9	12.86	3.15	-.11

1. A. A. Carpenter. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 8, T. 35 S., R. 20 W. Records available: 1940-49. Mar. 9, 37.82; June 27, 37.22; Sept. 22, 36.20; Dec. 20, 36.62.

9. H. R. Burnette. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 32 S., R. 17 W. Records available: 1940-49. Mar. 9, 91.50; June 21, 90.68; Sept. 22, 89.35; Dec. 21, 89.05.

Cowley County

Highest and lowest water levels for the period of record in 4 wells in Cowley County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
1	7	11.99	Jan. 2, 1945	27.31	June 1, 1946
2	6	16.19	July 5, 1947	23.04	Jan. 10, 1948
40	6	10.82	May 16, 1945	16.06	Feb. 8, 1947
42	6	25.23	June 28, 1947	28.98	Aug. 30, 1946

Difference between highest and lowest recorded water levels and net change in water levels, in 1949 and for period of record, in 4 wells in Cowley County

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise (+) or net decline (-) for period of record
1	15.32	0.27	+0.01
2	6.85	.00	-2.34
40	5.24	.45	-2.40
42	3.75	.24	+2.56

1. City of Winfield. SW. corner SE $\frac{1}{4}$ sec. 18, T. 32 S., R. 3 E. Records available: 1944-49. Jan. 14, 14.78; Mar. 31, 14.63; July 2, 14.51.

2. United States 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: 1946-49. Jan. 14, 18.86.

40. City of Winfield. NW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 19, T. 32 S., R. 3 E. Records available: 1944-49. Jan. 14, 13.67; Mar. 31, 13.56; July 2, 13.22.

42. Geological Survey, U. S. Dept. of Interior. SW. corner sec. 21, T. 32 S., R. 3 E. Records available: 1944-49. Jan. 14, 26.15; Mar. 31, 26.03; July 2, 25.91.

Crawford County

1. John P. Biddle. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 5, T. 31 S., R. 25 E. Records available: 1942-46. No measurement made in 1949.

24. City of Girard. SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 24, T. 29 S., R. 23 E. Records available: 1942-48. No measurement made in 1949.

88. Kansas City Railway Co. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 20, T. 30 S., R. 25 E. Records available: 1944-46. No measurement made in 1949.

Douglas County

Highest and lowest water levels for the period of record in 2 wells in Douglas County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
13-20-11bab	2	16.32	July 21, 1949	19.88	Nov. 26, 1948
14-19-23ccc	2	3.54	Mar. 1, 1949	5.26	Oct. 15, 1948

a Pumping recently.

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 2 wells in Douglas County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
13-20-11bab	3.56	+3.56	+2.58
14-19-23ccc	1.72	-.21	-.28

13-20-11bab. Armstrong Martin. NW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 11, T. 13 S., R. 20 E. Records available: 1948-49. Mar. 1, 18.45; Apr. 18, 18.63; June 10, 18.28; July 21, 16.32, pumping recently.

14-19-23ccc. C. A. Puckett. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 23, T. 14 S., R. 19 E. Records available: 1948-49. Mar. 1, 3.54; Apr. 18, 3.71; June 10, 3.85; July 21, 3.95.

Edwards County

Highest and lowest water levels for the period of record
in 3 wells in Edwards County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
1	6	4.53	June 22, 1949	7.97	Sept. 13, 1946
2	6	+1.10	Aug. 23, 1948	3.50	Feb. 14, 1945
10	6	63.42	July 2, 1947	68.20	Mar. 13, 1946

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 3 wells in Edwards County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise for period of record
1	3.44	+0.01	0.15
2	4.60	-.28	3.13
10	4.78	-.08	.67

1. Owner unknown. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 35, T. 24 S., R. 19 W., north well of a battery of 3 wells. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	6.40	Apr. 20	6.03	July 21	5.70	Oct. 19	6.24
Feb. 10	6.02	May 17	5.87	Aug. 18	6.35	Nov. 17	6.33
Mar. 9	5.78	June 22	4.53	Sept. 20	6.60	Dec. 22	6.13

2. Owner unknown. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, T. 24 S., R. 18 W. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	0.47	May 17	+0.22	Aug. 18	+1.00	Nov. 17	+0.56
Mar. 9	.32	June 22	+.57	Sept. 20	+.61	Dec. 22	.04
Apr. 20	.10	July 21	+.66	Oct. 19	3.84		

10. Owner unknown. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22, T. 23 S., R. 19 W. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	65.10	June 22	64.40	Sept. 20	64.97	Nov. 17	64.46
Apr. 20	64.97	July 21	64.82	Oct. 19	64.37	Dec. 22	64.26
May 17	64.50						

Ellis County

Highest and lowest water levels for the period of record
in 2 wells in Ellis County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
215	8	13.05	Apr. 21, 1949	17.70	Oct. 15, 1947
218	8	13.00	Sept. 7, 1944	54.67	Dec. 22, 1943

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 2 wells in Ellis County

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise (+) or net decline (-) for period of record
215	4.65	0.62	-1.35
218	41.67	.78	+18.72

1. City of Hays. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 4, T. 14 S., R. 18 W. Records available: 1948. No measurement made in 1949.

2. City of Hays. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, T. 14 S., R. 18 W. Records available: 1948. No measurement made in 1949.

3. City of Hays. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 3, T. 14 S., R. 18 W. Records available: 1948. No measurement made in 1949.

4. City of Hays. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 33, T. 13 S., R. 18 W. Records available: 1948. No measurement made in 1949.

215. A. H. Romine. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, T. 11 S., R. 16 W. Records available: 1941-49. Jan. 13, 16.34; Apr. 21, 13.05; July 22, 13.70; Oct. 20, 15.67.

218. W. W. Bemis. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 16, T. 12 S., R. 17 W. Records available: 1941-49. Jan. 13, 42.94; Apr. 21, 42.97; July 22, 22.65; Oct. 20, 35.22.

Ellis County

Smoky Hill Valley

Highest and lowest water levels for the period of record
in 14 wells in Ellis County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
14-16-17cb	3	17.67	July 6, 1949	19.62	Oct. 9, 1948
14-16-36bb	3	19.32	Dec. 30, 1949	21.74	May 10, 1947
14-18-12bb	3	23.34	Dec. 30, 1949	27.15	July 30, 1946
14-18-26aa	3	17.90	July 7, 1949	20.85	Jan. 8, 1948
14-20-35dd	3	13.95	July 7, 1949	16.29	Aug. 8, 1946
15-16-6dd	3	22.00	Oct. 22, 1949	24.33	Aug. 9, 1946
15-16-13bb	3	13.87	June 4, 1948	14.85	July 17, 1946
15-17-19ab	3	139.40	July 7, 1949	140.50	July 22, 1946
15-17-25cb	3	11.52	July 23, 1947	12.46	Oct. 22, 1949
15-18-1bb	3	17.27	Aug. 22, 1949	28.22	July 24, 1946
15-18-16bb	3	5.62	July 23, 1947	9.55	July 12, 1946
15-19-6aa	3	51.65	Dec. 30, 1949	53.12	Aug. 22, 1949
15-19-13ab	3	6.08	July 23, 1947	9.30	Oct. 8, 1947
15-19-35aa	3	59.45	Jan. 8, 1948	70.70	Apr. 8, 1948

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 14 wells in Ellis County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise for period of record
14-16-17cb	1.95	+1.09	1.07
14-16-36bb	2.42	+.60	.45
14-18-12bb	3.81	+.62	3.81
14-18-26aa	2.95	+.11	.62
14-20-35dd	2.34	+.78	1.41
15-16-6dd	2.33	+.61	2.33
15-16-13bb	.98	-.13	.50
15-17-19ab	1.10	+.52	.98
15-17-25cb	.94	+.06	.09
15-18-1bb	10.95	+1.20	10.12
15-18-16bb	3.93	.00	.85
15-19-6aa	1.47	+.41	.94
15-19-13ab	3.22	+1.55	1.57
15-19-35aa	11.25	+1.24	.38

14-16-17cb. Owner unknown. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 17, T. 14 S., R. 16 W. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 26	18.67	Aug. 22	18.81	Dec. 30	18.53
July 6	17.67	Oct. 22	18.38		

14-16-36bb. Tony Wagner. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 36, T. 14 S., R. 16 W. Records available: 1947-49. Apr. 26, 20.05; July 6, 19.48; Oct. 22, 19.70; Dec. 30, 19.32.

14-18-12bb. J. Brull. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 12, T. 14 S., R. 18 W. Records available: 1947-49.

Apr. 26	23.50	Aug. 22	24.33	Dec. 30	23.34
July 6	23.54	Oct. 22	24.07		

14-18-26aa. F. J. Befort. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 26, T. 14 S., R. 18 W. Records available: 1947-49. July 7, 17.90; Aug. 22, 19.17; Oct. 22, 20.35; Dec. 30, 20.14.

14-20-35dd. F. A. Pfannestiel. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 35, T. 14 S., R. 20 W. Records available: 1947-49.

Apr. 26	16.08	Aug. 22	14.27	Dec. 30	14.88
July 7	13.95	Oct. 22	14.57		

15-16-6dd. Ted Thalen. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 6, T. 15 S., R. 16 W. Records available: 1947-49. Apr. 26, 22.34, pumping; July 6, 22.17; Aug. 22, 23.20, pumping; Oct. 22, 22.00.

15-16-13bb. Owner unknown. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 13, T. 15 S., R. 16 W. Records available: 1947-49.

Apr. 26	14.13	Aug. 22	14.07	Dec. 30	14.35
July 6	13.92	Oct. 22	14.39		

15-17-19ab. Likier. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 19, T. 15 S., R. 17 W. Records available: 1947-49.

Apr. 26	139.70	Aug. 22	139.66	Dec. 30	139.52
July 7	139.40	Oct. 22	139.52		

15-17-25cb. George Meder. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 25, T. 15 S., R. 17 W. Records available: 1947-49.

Apr. 26	12.44	Aug. 22	11.90	Dec. 30	12.01
July 6	12.39	Oct. 22	12.46		

15-18-1bb. Mat Rohr. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 1, T. 15 S., R. 18 W. Records available: 1947-49.

Apr. 26	17.98	Aug. 22	17.27	Dec. 30	18.10
July 7	17.85	Oct. 22	17.98		

15-18-16bb. T. W. Wolf. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 16, T. 15 S., R. 18 W. Records available: 1947-49.

Apr. 26	6.64	Aug. 22	8.18	Dec. 30	8.70
July 7	5.79	Oct. 22	8.71		

15-19-6aa. Aug Leiker. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T. 15 S., R. 19 W. Records available: 1947-49.

Apr. 26	52.06	Aug. 22	53.12	Dec. 30	51.65
July 7	51.95	Oct. 22	51.97		

15-19-13ab. Pete Wolfe. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 15 S., R. 19 W. Records available: 1947-49. Apr. 26, 6.56; Aug. 22, 7.25; Oct. 22, 7.50.

15-19-35aa. J. Zimmerman. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 35, T. 15 S., R. 19 W. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 26	60.02	Aug. 22	63.69	Dec. 30	59.78
July 7	62.09	Oct. 22	61.77		

Finney County

Highest and lowest water levels for the period of record
in 9 wells in Finney County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
1	14	5.00	June 1, 1947	11.46	Mar. 8, 1941
5	10	17.75	June 17, 1949	22.54	Jan. 28, 1940
6	10	15.25	June 21, 1940	20.82	June 22, 1946
8	10	73.10	Nov. 25, 1949	75.25	June 21, 1940
13	10	.76	May 5, 1942	4.63	Sept. 23, 1939
23	10	39.23	July 20, 1949	45.30	Feb. 17, 1940
26	10	61.59	Oct. 21, 1949	71.60	Apr. 24, 1941
1002	10	111.51	May 25, 1945	123.50	Jan. 12, 1949
1005	5	a 107.38	Jan. 17, 1948	127.45	Jan. 12, 1949

a Pumping recently.

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 9 wells in Finney County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
1		+0.56	+3.45
5	4.79	-.55	+2.80
6	5.57	+2.02	+1.2
8	2.15	+.35	+1.94
13	3.87	-.06	+1.71
23	6.07	+2.34	+5.96
26	10.01	+7.19	+9.76
1002	11.99	+5.55	-14.90
1005	20.07	+3.40	+.42

1. Mrs. A. M. Reid. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 9, T. 24 S., R. 33 W. Records available: 1939-49.

Mean daily water level, from recorder charts

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	6.64	Jan. 23	6.58	Mar. 22	6.22	Apr. 30	5.89
5	6.65	24	6.60	23	6.22	May 1	5.95
6	6.66	25	6.60	24	6.21	2	6.01
7	6.65	26	6.58	25	6.21	3	6.04
8	6.62	27	6.58	26	6.21	4	6.07
9	6.64	28	6.61	Apr. 16	6.12	5	6.08
10	6.65	29	6.60	17	6.10	6	6.08
11	6.65	30	6.58	18	6.10	7	6.10
12	6.63	31	6.59	19	6.11	8	6.11
13	6.61	Feb. 1	6.59	20	6.10	9	6.11
14	6.60	2	6.57	21	6.10	10	6.12
15	6.61	3	6.58	22	6.13	11	6.13
16	6.63	4	6.58	23	6.15	12	6.14
17	6.61	5	6.57	24	6.14	13	6.15
18	6.61	6	6.57	25	6.15	14	6.16
19	6.60	7	6.57	26	6.15	15	6.17
20	6.59	8	6.58	27	5.82	16	6.19
21	6.59	9	6.57	28	5.79	17	6.20
22	6.58	Mar. 21	6.22	29	5.84	18	6.20

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 1949.

5. E. Alberta Reeves. SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 19, T. 21 S., R. 32 W. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	19.15	May 24	19.14	Aug. 11	18.78	Nov. 23	18.65
Mar. 4	19.35	June 17	17.75	Sept. 28	18.70	Dec. 16	19.65
Apr. 14	19.30	July 19	18.79	Oct. 12	18.76		

6. T. E. Meakel. NW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 36, T. 21 S., R. 29 W. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	18.50	Apr. 22	17.94	July 15	16.05	Sept. 24	16.06
Feb. 11	18.02	May 5	17.57	Aug. 19	16.52	Dec. 17	16.02
Mar. 5	17.27	June 24	15.46				

8. O. G. Reeve. SW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 25 S., R. 33 W. Records available: 1939-49. Feb. 16, 73.29; May 19, 73.49; Aug. 25, 73.20; Nov. 25, 73.10.

13. Edwin Wehrley. NE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 13, T. 25 S., R. 31 W. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	2.85	Apr. 20	2.95	July 21	2.52	Oct. 19	3.01
Feb. 10	2.89	May 17	2.31	Aug. 18	2.89	Nov. 17	2.91
Mar. 8	2.42	June 23	1.38	Sept. 20	2.72	Dec. 23	2.92

23. J. E. Ely. SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 4, T. 23 S., R. 32 W. Records available: 1939-49. Jan. 5, 41.80; Apr. 19, 41.10; July 20, 39.23.

26. Graden City Experiment Station. SW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 3, T. 24 S., R. 32 W. Records available: 1939-49. Jan. 20, 69.14; Apr. 19, 68.32; July 27, 67.44; Oct. 21, 61.59.

1002. Dept. of the Army. SW $\frac{1}{4}$ sec. 27, T. 24 S., R. 31 W. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	123.50	Apr. 19	116.90	July 21	112.38	Oct. 19	113.80
Feb. 9	120.95	May 17	116.18	Aug. 18	113.57	Nov. 17	115.80
Mar. 8	122.60	June 23	112.23	Sept. 20	112.23	Dec. 23	114.10

1005. Dept. of the Army. SW $\frac{1}{4}$ sec. 27, T. 24 S., R. 31 W. Records available: 1942-46, 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	127.45	Apr. 19	115.20	July 21	114.00	Nov. 17	116.67
Feb. 9	125.57	May 17	114.19	Sept. 20	116.77	Dec. 23	114.62
Mar. 8	112.60	June 23	113.94	Oct. 19	117.08		

Ford County

Highest and lowest water levels for the period of record
in 8 wells in Ford County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
8	11	0.86	May 13, 1942	8.17	Nov. 7, 1939
38	11	26.73	Jan. 9, 1946	42.08	May 16, 1940
59	11	14.12	July 17, 1947	26.98	Aug. 9, 1946
79C	11	13.25	July 2, 1942	20.19	Sept. 13, 1946
96	11	6.32	Apr. 19, 1945	10.22	Sept. 5, 1939
237	11	83.72	May 25, 1943	86.42	Nov. 8, 1939
1002	6	101.94	Dec. 10, 1947	a 184.09	Nov. 26, 1942
1003	6	94.35	July 4, 1944	109.52	Aug. 19, 1943

a Pumping.

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 8 wells in Ford County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
8	7.31	+1.01	+0.81
38	15.55	+3.20	+9.58
59	12.86	+1.18	+1.31
79C	6.94	+2.27	+1.30
96	3.90	+5.55	+2.19
237	2.70	-.56	-.24
1002	82.15	+1.15	-.24
1003	15.17	+2.36	+1.83

8. F. H. Diehl. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 34, T. 26 S., R. 25 W. Records available: 1938-49. Jan. 12, 6.22; Apr. 20, 5.80; Oct. 19, 5.58.

38. F. Buns. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, T. 26 S., R. 24 W. Records available: 1938-49. Apr. 20, 34.32; July 21, 33.28; Oct. 19, 31.85.

41. J. J. Burghardt. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 11, T. 25 S., R. 2 W. Records available: 1938-48. No measurements made in 1949.

57. Andrew Bogner. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 22, T. 26 S., R. 26 W. Records available: 1938-48. No measurements made in 1949.

59. Ward Byers. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 21, T. 25 S., R. 26 W. Records available: 1938-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	16.56	Apr. 30	24.11	July 11	24.81	Oct. 25	15.48
Feb. 19	16.47	May 24	25.70	Aug. 9	26.98	Nov. 27	15.28
Mar. 12	16.31	June 20	16.84	Sept. 13	25.73	Dec. 10	15.35

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 measurements made in 1949.

79C. O. N. Nevins. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 23, T. 26 S., R. 24 W. Records available: 1938-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	18.95	Aug. 18	16.56	Oct. 19	17.42	Dec. 21	17.22
July 21	16.85	Sept. 20	16.45	Nov. 17	17.30		

96. Henry Hattrup. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 23, T. 26 S., R. 21 W. Records available: 1938-49. Jan. 12, 7.70; Apr. 20, 7.05; July 21, 7.46; Oct. 19, 7.47.

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. Apr. 20, 85.20; July 21, 86.23.

1002. Department of the Army. SE $\frac{1}{4}$ sec. 12, T. 26 S., R. 25 W. Records available: 1942-49. Jan. 12, 104.01. Measurements discontinued Jan. 12, 1949.

1003. Department of the Army. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 26 S., R. 26 W. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	105.25	May 17	107.90	Aug. 18	101.18	Nov. 17	101.19
Mar. 9	106.54	June 21	104.72	Sept. 20	102.15	Dec. 23	101.79
Apr. 20	107.32	July 21	101.38				

1004. Department of the Army. Center of NE $\frac{1}{4}$ sec. 13, T. 26 S., R. 26 E. Records available: 1942-48. Measurements discontinued Dec. 18, 1948.

Franklin County

Highest and lowest water levels for the period of record
in 1 well in Franklin County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
17-19-11da	2	6.10	July 21, 1949	8.72	Nov. 26, 1948

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 1 well in Franklin County

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise for period of record
17-19-11da	2.62	2.62	1.93

17-19-11da. L. W. Seright. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 11, T. 17 S., R. 19 E. Records available: 1948-49. Mar. 1, 8.46; Apr. 18, 7.12; June 10, 6.98; July 21, 6.10.

Grant County

Highest and lowest water levels for the period of record
in 6 wells in Grant County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
4	9	84.26	Mar. 24, 1945	87.52	May 14, 1941
5	9	64.77	Feb. 15, 1946	69.15	Aug. 16, 1949
7	9	81.04	Aug. 13, 1947	82.76	May 14, 1941
					Oct. 25, 1949
11	9	45.99	May 10, 1945	48.96	Dec. 20, 1949
14	9	128.36	Aug. 18, 1948	131.89	Nov. 15, 1949
400	5	52.78	Feb. 28, 1945	57.17	Sept. 7, 1949
					Sapt. 8, 1949

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 6 wells in Grant County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
4	3.26	+0.37	+2.48
5	4.38	+2.20	+ .72
7	1.72	+ .37	+1.08
11	2.97	-.48	-1.73
14	3.53	-1.45	-1.42
400	4.39	-.66	-3.26

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 1949.

4. F. J. Andes. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 9, T. 27 S., R. 38 W. Records available: 1941-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	85.45	Apr. 7	85.40	Aug. 16	85.60	Nov. 15	85.40
Feb. 9	85.68	May 20	85.44	Oct. 25	85.15	Dec. 20	85.04
Mar. 8	85.35	June 20	85.42				

a Pumping recently.

5. C. L. Jury. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 4, T. 27 S., R. 37 W. Records available: 1941-49. Feb. 9, 66.37; May 20, 67.35; Aug. 16, 69.15; Nov. 15, 66.28.

7. Ethel W. Hoffman. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 36, T. 28 S., R. 36 W. Records available: 1941-49. Feb. 9, 81.90; May 20, 81.24; Aug. 16, 81.44; Nov. 15, 81.05.

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 measurements made in 1949.

11. J. A. Hoffman. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 26, T. 28 S., R. 38 W. Records available: 1941-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	48.40	Apr. 7	48.45	July 13	48.58	Oct. 25	48.96
Feb. 9	48.57	May 20	48.59	Aug. 16	48.58	Nov. 15	48.95
Mar. 8	48.42	June 20	48.58	Sept. 15	48.90	Dec. 20	48.96

13. Fred Powell. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 5, T. 29 S., R. 36 W. Records available: 1941-48. No measurements made in 1949.

14. Mr. Hall. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 31, T. 28 S., R. 26 W. Records available: 1941-49. Feb. 9, 132.40; May 20, 130.30; Nov. 15, 131.89.

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. Records available: 1944-49.

Mean daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
1	55.91	55.83	55.77	56.14	56.54	56.25	56.29	56.32	55.77	56.74	56.38
2	55.91	55.86	55.77	56.14	56.55	56.24	56.34	56.30	56.91	56.73	56.38
3	55.91	55.87	55.77	56.14	56.57	56.23	56.39	56.28	56.92	56.70	56.36
4	55.91	55.87	55.77	56.14	56.57	56.23	56.43	56.28	56.93	56.67	56.35
5	55.90	55.87	55.75	56.15	56.59	56.22	56.48	56.28	56.94	56.64	56.34
6	55.89	55.87	55.75	56.18	56.60	.....	56.55	56.27	56.96	56.62	56.34
7	55.88	55.87	55.76	56.20	56.60	.....	56.60	56.27	56.97	56.62	56.33
8	55.88	55.37	55.80	56.22	56.61	.....	56.64	56.27	56.97	56.61	56.32
9	55.88	55.87	55.84	56.24	56.62	.....	56.68	56.28	.....	56.58	56.31
10	55.88	55.87	55.87	56.24	56.62	56.19	.....	56.29	.....	56.58	56.30
11	55.88	55.87	55.90	56.26	56.59	56.19	.....	56.30	.....	56.57	56.30
12	55.87	55.86	55.92	56.27	56.57	56.19	.....	56.32	.....	56.56	56.29
13	55.87	55.86	55.95	56.28	56.57	56.18	.....	56.33	.....	56.54	56.29
14	55.88	55.86	55.97	56.31	56.56	56.17	56.67	56.33	.....	56.52	.....
15	55.88	55.85	55.98	56.35	56.53	56.17	56.65	56.35	56.94	56.50	.....
16	55.88	55.85	55.97	56.38	56.51	56.17	56.60	56.37	56.94	56.50	.....
17	55.88	55.85	55.95	56.41	56.48	56.17	56.56	56.43	56.93	56.48	.....
18	55.88	55.83	55.94	56.44	56.47	56.17	56.54	56.48	56.93	56.48	.....
19	55.88	55.83	55.93	56.47	56.44	56.16	56.53	56.54	56.92	56.46	.....
20	55.87	55.83	55.94	56.49	56.43	56.16	56.51	56.60	56.91	56.45	.....
21	55.88	55.81	55.98	56.50	56.42	56.15	56.50	56.65	56.90	56.45	.....
22	55.88	55.81	56.01	56.50	56.40	56.16	56.49	56.68	56.90	55.44	.....
23	55.88	55.81	56.04	56.50	56.39	56.17	56.47	56.70	56.88	56.43	.....
24	55.89	55.80	56.07	56.52	56.35	56.19	56.46	56.72	56.86	56.42	.....
25	55.89	55.79	56.11	56.52	56.35	56.20	56.44	56.74	56.84	56.42	.....
26	55.88	55.79	56.15	56.54	56.32	56.22	56.42	56.76	56.80	56.43	.....
27	55.88	55.79	56.16	56.55	56.31	56.23	56.41	56.78	56.79	56.42	.....
28	55.87	55.78	56.16	56.55	56.29	56.26	56.40	56.80	56.78	56.42	.....
29	55.87		56.15	56.55	56.28	56.27	56.38	56.82	56.76	56.41	.....
30	55.88		56.15	56.55	56.27	56.28	56.35	56.84	56.75	56.40	.....
31	55.88		56.15		56.26		56.33	56.86		56.39	

a Nearby well pumping on Oct. 1.

Gray County

Highest and lowest water levels for the period of record
in 3 wells in Gray County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
1	10	3.48	June 13, 1941	7.56	Oct. 8, 1940
3	10	162.80	Dec. 15, 1947	169.33	Sept. 21, 1948
11	10	56.53	Dec. 20, 1949	59.74	Aug. 18, 1943

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 3 wells in Gray County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise for period of record
1	4.08	-0.79	1.51
3	6.53	+0.03	1.77
11	3.21	+5.2	2.11

1. G. A. Hard. NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 20, T. 25 S., R. 29 W. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	5.50	Apr. 20	5.32	July 21	5.86	Oct. 19	6.07
Feb. 10	4.91	May 17	5.17	Aug. 18	6.45	Nov. 17	5.84
Mar. 8	5.07	June 23	4.25	Sept. 20	5.97	Dec. 23	5.83

3. N. A. Mans. NE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, T. 28 S., R. 27 W. Records available: 1939-49. Mar. 8, 163.50; June 21, 163.30; Sept. 15, 163.21; Dec. 20, 163.26.

7. P. Brietenbach and others. SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 36, T. 26 S., R. 29 W. Records available: 1939-48. Measurements discontinued in 1949.

8. Owner unknown. NW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 11, T. 26 S., R. 28 W. Records available: 1939-48. Measurements discontinued in 1948.

11. J. D. Wetmore. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 35, T. 29 S., R. 28 W. Records available: 1939-49. Mar. 8, 57.40; June 21, 57.03; Sept. 15, 56.62; Dec. 20, 56.53.

20. H. E. Fischer. SE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 23, T. 25 S., R. 30 W. Records available: 1939-47. Measurements discontinued in 1947.

28. W. H. McLaughton. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 14, T. 27 S., R. 29 W. Records available: 1939-47. Measurements discontinued in 1947.

Greeley County

Highest and lowest water levels for the period of record
in 5 wells in Greeley County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
16-41-20ba	3	127.96	Jan. 6, 1949	133.02	July 20, 1949
17-40-22ccd	3	136.53	June 24, 1948	146.78	Nov. 12, 1948
18-39-10ad	3	109.34	Sept. 20, 1948	109.74	Mar. 4, 1949
18-41-26aa	3	101.00	May 19, 1948	102.90	June 24, 1948
19-43-25aa	3	90.7	Aug. 7, 1947	100.69	May 24, 1949

a Well 25 feet away pumping.

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record in 5 wells in Greeley County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net decline for period of record
16-41-20ba	5.06	-0.69	0.92
17-40-22ccd	10.25	+5.27	1.53
18-39-10ad	.40	-.03	.24
18-41-26aa	1.90	-.02	.14
19-43-25aa	9.99	-1.74	4.09

16-39-10cd. School district. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 10, T. 16 S., R. 39 W. Records available: 1948. Measurements discontinued in 1948.

16-41-20ba. J. Howell. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 20, T. 16 S., R. 41 W. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 6	127.96	May 24	130.38	Sept. 28	132.71
Mar. 4	129.70	July 20	133.02	Nov. 23	131.02

16-43-26aa. Owner unknown. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 26, T. 16 S., R. 43 W. Records available: 1948. Measurements discontinued in 1948.

17-40-22ccd. Owner unknown. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22, T. 17 S., R. 40 W. Records available: 1948-49.

Mar. 4	142.20	July 20	139.04	Nov. 23	141.51
May 24	139.28	Sept. 28	141.01		

17-41-30dd. Owner unknown. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 30, T. 17 S., R. 41 W. Records available: 1948. Measurements discontinued in 1948.

17-42-28bc. F. S. Luther. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 28, T. 17 S., R. 42 W. Records available: 1948. Measurements discontinued in 1948.

18-39-10ad. Owner unknown. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 10, T. 18 S., R. 39 W. Records available: 1948-49. Jan. 6, 109.72; Mar. 4, 109.74.

18-40-34aa. Owner unknown. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 34, T. 18 S., R. 40 W. Records available: 1948. Measurements discontinued in 1948.

18-41-26aa. Aaron Sell. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 26, T. 18 S., R. 41 W. Records available: 1948-49.

Jan. 6	101.79	May 24	101.60	Sept. 28	101.77
Mar. 4	102.74	July 20	101.76	Nov. 23	101.80

19-42-36bc. Owner unknown. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 36, T. 19 S., R. 42 W. Records available: 1948. Measurements discontinued in 1948.

19-43-25aa. Owner unknown. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T. 19 S., R. 43 W. Records available: 1948-49.

Jan. 6	92.25	May 24	a 100.69	Sept. 28	93.31
Mar. 4	91.60	July 20	94.00	Nov. 23	94.79

a Well 25 feet away pumping.

20-39-33aa. Owner unknown. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 33, T. 20 S., R. 39 W. Records available: 1948. Measurements discontinued in 1948.

Hamilton County

Highest and lowest water levels for the period of record
in 5 wells in Hamilton County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
2a	5	12.80	May 25, 1949	15.95	Aug. 19, 1948
3	10	11.57	July 7, 1942	14.67	Nov. 16, 1939
6	10	47.95	Jan. 22, 1948	54.28	Apr. 25, 1949
7	10	42.25	Dec. 2, 1944	46.00	Nov. 27, 1940
16	10	84.38	Dec. 2, 1944	87.99	June 24, 1944

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 5 wells in Hamilton County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise for period of record
2a	3.15	+0.02	13.39
3	3.10	-.41	.82
6	6.33	-.83	.41
7	3.75	-.32	2.03
16	3.61	+1.47	.00

2. R. Holdren. NW $\frac{1}{4}$ sec. 22, T. 23 S., R. 43 W. Measuring point, 0.2 foot above land-surface datum. Records available: 1939-42. Measurements discontinued.

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. Measuring point, top of concrete curb on west side, 0.8 foot above land-surface datum. 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. Records available: 1944-49. Feb. 21, 13.67; May 25, 12.80; Aug. 24, 15.26; Nov. 25, 13.62.

3. B. Rees. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 8, T. 24 S., R. 40 W. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	13.05	Apr. 25	13.34	July 18	12.11	Oct. 24	12.93
Feb. 21	12.99	May 25	13.35	Aug. 24	12.30	Nov. 25	13.14
Mar. 21	13.13	June 27	12.29	Sept. 23	12.67	Dec. 19	13.35

6. Belle Heinlein. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24, T. 24 S., R. 39 W. Records available: 1939-49.

Jan. 17	53.29	Mar. 21	52.00	Sept. 23	52.39	Nov. 25	53.25
Feb. 21	51.94	Apr. 25	54.28	Oct. 24	52.79	Dec. 19	53.03

7. I. E. Martin. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 16, T. 23 S., R. 40 W. Records available: 1939-49. Feb. 21, 43.60; May 25, 43.72; Aug. 24, 43.69; Nov. 25, 43.74.

16. Charles E. Miller. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22, T. 25 S., R. 39 W. Records available: 1939-49. Feb. 21, 85.72. Measurements discontinued, Feb. 21, 1949.

Harvey County

Highest and lowest water levels for the period of record
in 23 wells in Harvey County that are not affected by pumping

Well	Length of record (years)	Highest level	Date	Lowest level	Date
325	12	5.16	May 1, 1945	14.12	June 27, 1949
701	12	29.26	July 6, 1949	44.23	Nov. 2, 1938
817	11	6.13	Apr. 20, 1945	17.12	Oct. 25, 1940
824	11	5.77	May 4, 1945	18.16	Nov. 5, 1940
831	11	11.53	May 4, 1945	20.54	Nov. 5, 1940
832	11	12.41	May 4, 1945	20.35	Nov. 5, 1940
833	11	5.11	Oct. 2, 1945	15.79	May 27, 1947
852	11	9.27	May 6, 1944	16.66	Nov. 5, 1940
853	11	6.03	Sept. 30, 1945	11.93	Feb. 9, 1948
854	11	5.24	Apr. 27, 1945	14.87	Nov. 1, 1940
875	11	+ .98	Mar. 2, 1945	6.04	Oct. 25, 1940
876	11	21.79	Dec. 22, 1944	27.83	Nov. 8, 1940
877	11	9.95	May 6, 1945	14.95	Jan. 27, 1941
880	11	2.56	Sept. 30, 1945	8.38	Mar. 10, 1947
881	11	3.23	Sept. 30, 1945	8.44	Nov. 24, 1947
888	11	+ .43	July 27, 1945	8.95	Oct. 27, 1939
889	11	.89	May 6, 1944	8.95	Oct. 7, 1946
890	11	.10	May 2, 1945	7.07	Nov. 5, 1940
891	11	+ .46	May 11, 1942	4.68	Sept. 26, 1946
892	11	+1.15	May 12, 1944	3.92	Oct. 3, 1940
893	11	+ .87	May 4, 1942	3.77	Jan. 27, 1941
1174	9	2.28	May 1, 1945	11.11	Jan. 29, 1948
1187	9	3.68	May 4, 1945	10.44	Dec. 5, 1947

Difference between highest and lowest recorded water levels and net change
in water level, in 1949 and for period of record, in 23 wells in Harvey
County that are not affected by pumping

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
325	8.96	+1.12	+4.03
701	14.97	+ .11	+8.22
817	10.99	-.92	+ .32
824	12.39	+ .99	+3.74
831	9.01	-.21	+2.02
832	7.94	-.09	+1.65
833	10.68	-.29	-4.14
852	7.39	+ .93	+2.96
853	5.90	-.31	-1.14
854	9.63	-.45	+1.79
875	7.02	+ .33	+1.21
876	6.04	-.25	+ .57
877	5.00	-1.81	+1.78
880	5.82	-.92	-1.70
881	5.21	-.47	-1.65
888	9.38	+1.21	+ .72
889	8.06	-.11	-2.40
890	6.97	-1.08	+1.83
891	5.14	-.91	+ .64
892	5.07	-1.01	-1.19
893	4.64	-.90	+ .88
1174	8.83	+2.60	+2.44
1187	6.76	-.18	+1.34

Highest and lowest water levels for the period of record in 101 wells in Harvey County that are pumped or are affected by pumping

Well	Length of record (years)	Highest level	Date	Lowest level	Date
3	11	7.09	June 12, 1940	27.71	Jan. 29, 1948
66d	11	25.30	July 8, 1949	61.14	Sept. 3, 1947
86	9	10.69	Apr. 28, 1944	20.66	Nov. 7, 1947
87	9	8.86	Apr. 28, 1944	32.79	Sept. 8, 1945
87a	9	9.62	Apr. 28, 1944	32.99	May 3, 1946
506	11	3.61	Apr. 28, 1944	16.67	Oct. 4, 1946
507	11	3.23	May 6, 1944	15.73	Sept. 15, 1947
821	11	12.03	Aug. 21, 1939	26.56	Oct. 21, 1949
839	11	9.62	Aug. 21, 1939	18.79	May 26, 1948
872	11	17.65	Mar. 11, 1939	34.15	Mar. 5, 1948
873	11	17.61	Mar. 11, 1939	35.46	May 1, 1948
874	11	20.04	May 27, 1940	46.30	May 1, 1948
878	11	16.25	June 3, 1940	31.05	Oct. 13, 1947
879	11	17.52	May 27, 1940	30.64	Sept. 1, 1947
			June 3, 1940		
883	11	13.35	Aug. 21, 1939	24.13	Apr. 1, 1947
					May 7, 1947
884	11	13.34	Aug. 21, 1939	24.39	Jan. 29, 1948
885	11	13.22	Aug. 21, 1939	24.92	Nov. 8, 1947
886	11	2.34	Aug. 21, 1939	18.41	May 30, 1948
887	11	2.72	May 27, 1940	20.74	May 26, 1948
894	11	9.56	May 27, 1940	24.16	May 4, 1948
895	11	10.04	May 27, 1940	27.08	Jan. 5, 1949
1186	9	7.23	Sept. 30, 1945	13.88	Dec. 15, 1947
1192	9	14.27	May 3, 1945	17.26	Dec. 3, 1947
2072	8	27.09	May 5, 1947	37.11	May 19, 1947
M-1	11	18.56	Apr. 13, 1939	103.00	Sept. 30, 1949
M-1a	11	17.47	June 3, 1940	38.85	Sept. 30, 1949
M-1b	11	15.94	June 3, 1940	36.44	Sept. 25, 1946
M-2	11	18.33	May 4, 1939	155.00	Sept. 2, 1949
M-2a	11	17.84	June 3, 1940	40.90	Sept. 9, 1940
M-2b	11	20.25	May 27, 1940	40.96	Mar. 8, 1944
M-2c	4	31.58	Feb. 6, 1946	39.76	Aug. 1, 1946
M-3	11	23.20	May 8, 1939	111.50	Sept. 2, 1949
M-3a	11	19.35	May 27, 1940	47.08	Jan. 5, 1949
M-3b	11	23.15	May 27, 1940	48.96	Sept. 2, 1949
M-4	11	23.12	May 27, 1940	94.63	July 10, 1947
M-4a	11	22.87	May 27, 1940	51.93	Oct. 3, 1948
M-4b	11	23.91	May 27, 1940	47.88	Oct. 3, 1948
M-5	11	20.33	May 16, 1939	127.00	Sept. 2, 1949
M-5a	11	17.79	June 3, 1940	42.06	Sept. 30, 1949
M-5b	11	17.82	May 27, 1940	43.00	Feb. 27, 1947
M-6	11	19.05	May 27, 1940	105.00	Sept. 2, 1949
M-6a	11	18.63	June 3, 1940	39.43	Dec. 3, 1947
M-6b	11	18.46	June 3, 1940	36.88	Oct. 3, 1948
M-7	11	11.03	June 13, 1939	46.00	Sept. 30, 1949
M-7a	11	11.20	Aug. 21, 1939	27.92	Sept. 30, 1949
M-7b	11	11.24	Aug. 21, 1939	25.74	Sept. 30, 1949
M-8	11	15.93	May 27, 1940	87.76	Oct. 3, 1948
M-8a	11	14.72	June 3, 1940	37.86	Jan. 29, 1948
M-8b	11	13.30	June 3, 1940	32.01	Oct. 3, 1948
M-9	11	10.82	May 27, 1940	76.00	Sept. 30, 1949
M-9a	11	10.40	May 27, 1940	30.19	Jan. 5, 1949
M-9b	11	9.12	May 27, 1940	29.84	Jan. 5, 1949
M-10	11	12.05	May 27, 1940	88.00	Nov. 30, 1949
M-10a	11	11.24	May 27, 1940	35.81	Dec. 3, 1947
M-10b	11	10.44	May 27, 1940	31.00	May 4, 1948
					Oct. 3, 1948
M-11	11	7.11	May 27, 1940	65.79	Aug. 3, 1945
M-11a	11	6.38	May 27, 1940	26.96	Jan. 5, 1949
M-11b	11	7.67	May 27, 1940	27.45	Sept. 2, 1949
M-12	11	11.41	Aug. 21, 1939	82.00	Sept. 2, 1949
M-12a	11	10.73	May 27, 1940	35.43	Sept. 2, 1949
M-12b	11	11.70	Aug. 21, 1939	36.10	Sept. 2, 1949
			Nov. 27, 1940		

Highest and lowest water levels for the period of record in 101 wells in Harvey County that are pumped or are affected by pumping--Continued

Well	Length of record (years)	Highest level	Date	Lowest level	Date
M-13	11	8.27	Aug. 21, 1939	62.42	Oct. 31, 1949
M-13a	11	7.89	May 27, 1940	27.57	Jan. 5, 1949
M-13b	11	7.63	May 27, 1940	27.44	Jan. 5, 1949
M-14	11	9.07	May 27, 1940	59.08	Jan. 5, 1949
M-14a	11	8.31	Apr. 4, 1939	36.02	May 4, 1948
M-14b	11	8.16	May 13, 1940	33.06	Jan. 5, 1949
			May 27, 1940		
			June 3, 1940		
M-15	11	13.92	Apr. 17, 1939	80.82	Jan. 7, 1947
M-15a	11	12.49	May 27, 1940	34.86	Dec. 3, 1947
M-15b	11	13.45	May 27, 1940	33.35	May 4, 1948
M-16	11	10.71	Aug. 21, 1939	65.50	July 2, 1949
M-16a	11	10.93	Aug. 21, 1939	30.76	Dec. 3, 1947
M-16b	11	11.02	May 27, 1940	24.47	Jan. 5, 1949
M-17	11	6.58	Aug. 21, 1939	56.00	Oct. 31, 1949
M-17a	11	5.66	Aug. 21, 1939	23.11	Jan. 29, 1948
M-17b	11	4.01	Aug. 21, 1939	16.06	Jan. 29, 1948
M-18	11	10.00	Aug. 21, 1939	54.32	Sept. 30, 1949
M-18a	11	9.62	Aug. 21, 1939	33.50	Sept. 30, 1949
M-18b	11	9.38	Aug. 21, 1939	26.14	Feb. 27, 1947
M-19	11	10.82	Aug. 21, 1939	46.35	Sept. 2, 1949
M-19a	11	13.11	Aug. 21, 1939	26.96	Dec. 3, 1947
M-19b	11	11.47	Aug. 21, 1939	22.86	Sept. 2, 1947
M-20	11	9.74	May 27, 1940	78.00	Oct. 31, 1949
M-20a	11	9.28	May 27, 1940	29.96	May 4, 1948
M-20b	11	8.49	May 27, 1940	30.86	May 4, 1948
M-21	11	8.32	Aug. 21, 1939	44.00	Sept. 2, 1949
M-21a	11	8.50	Aug. 21, 1939	31.89	Dec. 4, 1946
M-21b	11	8.08	Aug. 21, 1939	22.04	Nov. 8, 1947
M-22	11	9.20	Aug. 21, 1939	53.35	Sept. 30, 1949
M-22a	11	8.49	Aug. 21, 1939	26.46	Sept. 30, 1949
M-22b	11	9.28	Aug. 21, 1939	23.69	Jan. 5, 1949
M-23	11	7.85	Aug. 21, 1939	48.98	Sept. 25, 1946
M-23a	11	8.27	Aug. 21, 1939	20.77	Jan. 5, 1949
M-23b	11	7.50	Aug. 21, 1939	20.33	Jan. 5, 1949
M-24	11	8.71	Aug. 21, 1939	48.96	Dec. 3, 1947
M-24a	11	8.88	Aug. 21, 1939	21.43	Jan. 29, 1948
M-24b	11	11.17	Aug. 28, 1939	25.73	Jan. 29, 1948
M-25	11	5.54	Aug. 21, 1939	58.62	Oct. 31, 1949
M-25a	11	5.31	Aug. 21, 1939	14.91	Dec. 30, 1947
M-25b	11	6.89	Aug. 21, 1939	14.97	Dec. 3, 1947
M-26b	3	11.62	July 7, 1948	15.61	Oct. 31, 1949

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 101 wells in Harvey County that are pumped or affected by pumping

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
3	20.62	+0.93	-16.52
66d	34.84	+20.78	+19.87
86	9.97	-.51	+35
87	23.93	+1.23	+1.82
87a	23.37	+42	+1.38
506	13.06	-.56	-.74
507	12.50	-1.01	-7.34
821	14.53	-.41	-9.57
839	9.17	-2.62	+2.64
872	16.50	+2.71	-14.30
873	17.85	+1.22	-16.12
874	26.26	+70	-22.35
878	14.80	+1.11	-10.86

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 101 wells in Harvey County that are pumped or affected by pumping--Continued

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
879	13.12	-4.03	-12.32
883	10.67	+1.17	-6.64
884	11.05	-.12	-6.67
885	11.70	-.10	-7.40
886	16.07	+1.73	-12.51
887	18.02	.00	-14.91
894	14.60	-.15	-12.26
895	17.04	+2.07	-13.05
1186	6.65	-.23	-.28
1192	2.99	+1.15	+1.13
2072	10.02	-.49	-3.74
M-1	94.44	+37.38	-13.44
M-1a	21.38	+7.14	-9.96
M-1b	20.50	+5.06	-13.00
M-2	136.67	+6.20	-82.17
M-2a	23.06	+6.67	-14.06
M-2b	20.71	+1.73	-15.73
M-2c	8.18	+6.68	-.26
M-3	88.30	-33.08	-17.30
M-3a	27.15	+7.07	-16.56
M-3b	25.83	+3.16	-17.72
M-4	71.51	+36.36	-22.82
M-4a	29.06	+9.53	-16.80
M-4b	23.97	+5.27	-17.59
M-5	106.67	-70.29	-85.64
M-5a	24.27	+2.31	-15.24
M-5b	25.18	+1.66	-14.83
M-6	85.95	+7.76	-62.81
M-6a	20.80	+1.48	-16.10
M-6b	18.42	+1.98	-15.75
M-7	34.97	+4.28	-14.74
M-7a	16.72	-2.16	-12.95
M-7b	14.50	-1.07	-12.97
M-8	71.83	+54.76	-14.88
M-8a	23.14	+2.45	-15.54
M-8b	18.71	+2.50	-15.70
M-9	65.18	+25.68	-19.00
M-9a	19.79	+1.89	-17.09
M-9b	20.72	+2.17	-17.18
M-10	75.95	-16.19	-74.18
M-10a	24.67	-.94	-21.34
M-10b	20.56	+1.18	-18.67
M-11	58.68	-8.45	-46.47
M-11a	20.58	-.11	-19.41
M-11b	19.78	-.23	-18.20
M-12	70.59	+34.71	-13.85
M-12a	24.70	+7.33	-15.33
M-12b	24.40	+6.31	-15.43
M-13	54.15	+16.61	-15.19
M-13a	19.68	+3.04	-15.58
M-13b	19.81	+1.46	-16.59
M-14	50.01	+32.21	-17.32
M-14a	27.71	+7.41	-18.27
M-14b	24.90	+5.45	-18.58
M-15	66.90	+19.76	-41.08
M-15a	22.37	+2.50	-17.58
M-15b	19.90	+ .97	-16.83
M-16	54.79	+29.88	-17.95
M-16a	19.83	+6.07	-12.40
M-16b	13.45	+ .96	-11.08
M-17	49.42	+28.88	-10.70
M-17a	17.45	+ .55	-8.97
M-17b	12.05	+ .66	-9.27

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 101 wells in Harvey County that are pumped or affected by pumping--Continued

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
M-18	44.32	-3.03	-41.53
M-18a	23.88	-3.38	-22.50
M-18b	16.76	-2.73	-15.23
M-19	35.53	+18.81	-7.72
M-19a	13.85	+5.45	-5.72
M-19b	11.39	+ .05	-6.10
M-20	68.26	+30.86	-17.77
M-20a	20.68	+5.54	-17.51
M-20b	22.37	+ .17	-19.02
M-21	35.68	-8.29	-28.45
M-21a	23.39	- .53	-13.14
M-21b	13.96	-1.23	-10.43
M-22	44.15	-11.52	-40.68
M-22a	17.97	-1.74	-14.15
M-22b	14.41	+ .86	-9.03
M-23	41.13	+28.43	-4.59
M-23a	12.50	+4.43	-3.81
M-23b	12.83	+4.55	-3.80
M-24	40.25	+25.06	-3.79
M-24a	12.55	+2.03	-4.59
M-24b	14.56	-2.51	-4.15
M-25	53.08	-17.41	-49.49
M-25a	9.60	- .66	-5.03
M-25b	8.08	-2.09	-5.69
M-26b	3.99	-2.62	+ .30

Pumpage from city of Wichita wells M-1 to M-26, in millions of gallons, in 1949, and since beginning of pumping on Sept. 1, 1940

Well	Pumpage 1949	Total 1940-49
M-1	321.3	2,634.1
M-2	98.5	1,161.4
M-3	220.9	1,875.1
M-4	11.9	1,457.1
M-5	300.8	2,373.3
M-6	274.2	2,336.2
M-7	480.6	2,975.8
M-8	198.1	2,381.8
M-9	300.0	2,621.6
M-10	223.9	2,311.2
M-11	348.3	2,549.7
M-12	215.0	2,196.7
M-13	411.7	2,571.6
M-14	323.5	2,831.0
M-15	151.4	2,415.7
M-16	268.6	2,301.9
M-17	170.8	2,537.6
M-18	340.8	2,826.8
M-19	194.1	2,013.1
M-20	254.7	1,940.1
M-21	442.1	3,169.5
M-22	178.6	1,288.4
M-23	114.3	2,251.2
M-24	71.2	2,205.1
M-25	248.2	2,308.7
M-26	177.2	177.2
Total	6,340.7	57,711.9

72. Anna Hertzler. SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T. 22 S., R. 1 W. Records available: 1937-48. No measurements made in 1949.

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. Records available: 1937-48. No measurements made in 1949.

325. A. L. Gouldner. SW. corner SE $\frac{1}{4}$ sec. 19, T. 23 S., R. 3 W. Records available: 1937-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 1	9.82	May 31	8.99	July 25	8.04
Mar. 31	10.01	June 27	7.64	Oct. 14	8.74

701. Dr. V. E. Cheskey. NE. corner NW $\frac{1}{4}$ sec. 3, T. 23 S., R. 1 W. Records available: 1938-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	31.79	June 2	29.38	Sept. 2	32.04	Nov. 10	31.72
Mar. 22	30.02	July 6	29.26	Oct. 7	31.71	Dec. 1	31.77
May 3	29.46						

817. City of Wichita. NW. corner sec. 1, T. 24 S., R. 2 W. Records available: 1938-49.

Jan. 2	13.97	Mar. 28	10.01	Sept. 22	13.66	Oct. 21	14.45
19	13.98	July 5	10.04	30	13.90	Nov. 10	14.14
Feb. 8	13.54	Aug. 31	12.80	Oct. 7	14.15	Dec. 1	14.92
15	13.90	Sept. 15	13.41	14	14.31		

824. City of Wichita. SE. corner sec. 22, T. 24 S., R. 1 W. Records available: 1939-49.

Mar. 22	10.26	June 2	9.56	Oct. 7	10.02	Dec. 1	10.45
May 3	9.61	July 6	8.52	Nov. 10	10.40		

831. City of Wichita. NE. corner sec. 19, T. 24 S., R. 1 W. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level
Mar. 22	15.19	June 2	14.89	Sept. 2	16.83
May 3	14.96	July 6	14.62		

832. City of Wichita. NE. corner sec. 19, T. 24 S., R. 1 W. Records available: 1939-49.

Mar. 22	15.56	June 2	15.26	Sept. 2	17.03
May 3	15.31	July 6	15.01		

833. City of Wichita. SW. corner sec. 19, T. 24 S., R. 1 W. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	12.06	June 2	10.26	Sept. 2	10.90	Nov. 10	12.02
Mar. 22	10.44	July 6	9.46	Oct. 7	11.45	Dec. 1	12.40
May 3	10.31						

852. City of Wichita. NE. corner sec. 29, T. 24 S., R. 1 W. Records available: 1939-49. Feb. 2, 13.03; Mar. 22, 12.81; May 3, 12.26; June 2, 12.19.

853. City of Wichita. NW. corner sec. 13, T. 24 S., R. 2 W. Records available: 1938-49.

Jan. 3	10.72	Mar. 28	9.98	Sept. 30	9.43	Oct. 21	9.72
19	10.74	July 5	7.36	Oct. 7	9.49	Nov. 10	8.95
Feb. 8	10.70	Aug. 31	8.98	14	9.69	Dec. 1	10.28
15	10.66	Sept. 15	9.09				

854. City of Wichita. SW. corner sec. 23, T. 23 S., R. 2 W. Records available: 1938-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	10.41	Mar. 28	9.68	Sept. 15	9.62	Oct. 21	10.39
19	10.43	July 5	8.09	30	10.01	Nov. 10	10.50
Feb. 8	10.41	Aug. 31	9.43	Oct. 7	10.14	Dec. 1	10.85
15	10.36						

875. Owner of well, city of Wichita; owner of property, A. B. Havely. SE. corner sec. 17, T. 23 S., R. 3 W. Records available: 1939-49.

Jan. 3	3.36	Mar. 28	1.42	Sept. 8	3.01	Oct. 7	3.24
19	3.61	May 17	+41	15	2.66	14	3.46
Feb. 2	3.92	July 5	1.39	22	2.92	21	3.38
8	3.90	Aug. 24	2.87	30	3.14	Nov. 4	3.41
15	4.62	31	3.12				

876. Owner of well, city of Wichita; owner of property, A. B. Havely. SE. corner sec. 17, T. 23 S., R. 3 W. Records available: 1939-49.

Jan. 3	24.00	Feb. 15	24.01	Aug. 24	24.21	Oct. 7	24.62
19	24.01	Mar. 28	22.40	Sept. 8	24.39	14	24.50
27	24.51	May 17	22.80	15	24.46	21	24.34
Feb. 2	24.10	Aug. 31	24.28	22	24.50	Nov. 4	24.38
8	24.09	July 5	22.48	30	24.59		

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: 1939-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	13.16	13.19	12.77	12.52	.....	11.69	11.56	11.63	11.94	12.25	12.50	.....
2	13.09	13.19	12.72	12.52	12.35	11.72	11.58	11.64	11.93	12.25	12.53	.....
3	13.08	13.14	.....	12.49	12.34	11.74	11.58	11.66	11.92	12.26	12.54	.....
4	13.14	13.15	.....	12.50	12.32	11.73	11.50	11.68	11.93	12.28	12.55	.....
5	13.18	13.15	.....	12.50	12.31	11.67	11.58	11.69	11.94	12.27	.....	12.75
6	13.20	13.16	.....	12.48	12.31	11.62	11.58	11.71	11.97	12.25	.....	12.71
7	13.20	13.16	12.70	12.49	12.31	11.60	11.60	11.72	11.97	12.26	.....	12.79
8	13.18	13.18	12.55	12.49	12.24	11.59	11.65	11.73	11.97	12.32	.....	12.79
9	13.22	13.20	12.56	12.49	12.24	11.60	11.67	11.75	11.98	12.33	.....	12.79
10	13.12	13.20	12.56	12.48	.....	11.61	11.66	11.77	11.98	12.29	.....	12.73
11	13.21	13.17	12.56	12.48	.....	11.61	11.59	.....	11.96	12.36	.....	12.75
12	13.21	13.12	12.55	12.46	.....	11.59	11.56	.....	12.03	12.37	.....	12.81
13	13.21	13.12	12.55	12.44	.....	11.58	11.46	.....	12.06	12.40	.....	12.83
14	13.20	13.10	12.56	12.49	.....	11.48	11.46	.....	12.06	12.41	.....	12.84
15	13.21	13.08	12.56	12.51	.....	11.48	11.45	.....	12.06	12.41	.....	12.84
16	13.26	13.10	12.54	12.51	.....	11.44	.....	.....	12.05	12.40	.....	12.81
17	13.26	13.10	12.52	12.48	11.99	.....	11.43	.....	12.05	12.40	.....	12.78
18	13.22	13.07	12.54	12.50	11.96	.....	11.41	.....	12.10	12.40	.....	12.82
19	13.26	13.05	12.54	.....	11.90	.....	11.43	.....	12.14	12.41	.....	12.82
20	13.26	13.04	12.50	.....	11.89	.....	11.44	.....	12.14	12.43	.....	12.84
21	13.23	13.03	12.44	.....	11.76	.....	11.47	.....	12.15	12.45	.....	12.84
22	13.23	12.98	12.49	.....	11.78	.....	11.48	.....	12.16	12.46	.....	12.85
23	13.21	12.94	12.49	.....	11.78	.....	11.50	.....	12.17	12.50	.....	12.87
24	13.23	12.92	12.49	.....	11.78	.....	11.51	11.88	12.17	12.50	.....	12.87
25	13.23	12.92	12.51	.....	11.77	.....	11.51	11.89	12.17	12.50	12.70	12.90
26	13.21	12.89	12.48	.....	.....	.....	11.52	11.89	12.19	12.50	12.67	12.90
27	13.10	12.79	12.48	.....	.....	11.48	11.52	11.90	12.19	12.50	12.67	12.93
28	13.22	12.79	12.49	.....	.....	11.51	11.56	11.91	12.22	12.49	.....	12.94
29	13.23	.....	12.51	.....	.....	11.52	11.58	11.91	12.23	12.49	.....	12.97
30	13.23	.....	12.50	.....	.....	11.54	11.61	11.92	12.24	12.51	.....	12.97
31	13.17	.....	12.52	.....	11.69	.....	11.63	11.93	.....	12.52	.....	12.98

880. Owner of well, city of Wichita; owner of property, Peter Miller. SE. corner sec. 11, T. 24 S., R. 3 W. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	6.79	Aug. 31	6.49	Sept. 30	6.89	Oct. 14	7.12
Mar. 28	5.88	Sept. 15	6.69	Oct. 7	6.58	Dec. 1	7.75
July 5	5.30						

881. Owner of well, city of Wichita; owner of property, Peter Miller. SE. corner sec. 11, T. 24 S., R. 3 W. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	6.79	Aug. 31	6.82	Oct. 7	7.27	Nov. 10	7.57
Mar. 28	6.56	Sept. 15	7.03	14	7.39	Dec. 1	7.47
July 5	6.07	30	7.21				

888. Owner of well, city of Wichita; owner of property, C. K. Ellis. NW. corner sec. 17, T. 23 S., R. 2 W. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	4.66	July 5	2.22	Oct. 7	6.31	Nov. 10	6.45
19	4.64	Sept. 15	5.58	14	7.55	Dec. 1	6.37
Mar. 28	4.31	30	6.17				

889. Owner of well, city of Wichita; owner of property, C. K. Ellis. NW. corner sec. 17, T. 23 S., R. 2 W. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	6.83	July 5	3.98	Oct. 7	6.71	Nov. 10	7.11
19	5.83	Sept. 15	6.00	14	6.05	Dec. 1	6.80
Mar. 28	5.23	30	6.41				

890. Owner of well, city of Wichita; owner of property, J. F. Gorgenson. NE. corner SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 21, T. 24 S., R. 3 W. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level
Mar. 31	2.06	June 27	1.57	Oct. 20	3.54
May 31	1.68	July 25	1.73		

891. Owner of well, city of Wichita; owner of property, Arthur McMurray. SE. corner sec. 31, T. 24 S., R. 3 W. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 22	1.41	June 2	1.47	Sept. 2	3.08	Nov. 10	2.82
May 3	1.39	July 6	2.19	Oct. 6	3.30	Dec. 9	3.24

892. Owner of well, city of Wichita; owner of property, Arthur McMurray. SE. corner sec. 31, T. 24 S., R. 3 W. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 22	0.36	June 2	0.40	Sept. 2	2.25	Nov. 10	2.41
May 3	.31	July 6	1.08	Oct. 6	2.49	Dec. 9	2.45

893. Owner of well, city of Wichita; owner of property, Arthur McMurray. SE. corner sec. 31, T. 24 S., R. 3 W. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 22	0.22	June 2	0.22	Sept. 2	1.74	Nov. 10	2.10
May 3	.15	July 6	.16	Oct. 6	2.12	Dec. 9	2.17

1174. City of Wichita. SW. corner sec. 32, T. 24 S., R. 1 W. Records available: 1940-49. Jan. 5, 6.74; Apr. 4, 5.48; July 8, 6.56; Oct. 7, 6.34.

1187. City of Wichita. NW. corner sec. 29, T. 24 S., R. 1 W. Records available: 1943-49.

1137--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	8.59	June 2	6.53	Sept. 2	7.98	Nov. 10	8.80
Mar. 22	6.74	July 6	5.78	Oct. 7	8.59	Dec. 1	8.96
May 3	6.42						

Wells 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. Records available: 1943-49. Feb. 15, 27.30; Apr. 4, 25.88.

66d. City of Newton. SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 32, T. 23 S., R. 1 W. Records available: 1943-49. Jan. 6, 46.72; July 8, 26.30.

86. City of Halstead. NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 35, T. 23 S., R. 2 W. Records available: 1943-49. Jan. 6, 17.73; Oct. 7, 18.42; Nov. 10, 18.76; Dec. 1, 18.39.

87. City of Halstead. NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 35, T. 23 S., R. 2 W. Records available: 1943-49. Jan. 6, 16.72.

87a. City of Halstead. NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 35, T. 23 S., R. 2 W. Records available: 1943-49. Jan. 6, 17.77.

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: 1938-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	14.76	11.79	7.68	11.83	.....	8.86	11.51	13.04	14.52	14.55	15.08	15.16
2	14.76	11.85	8.02	11.90	.....	9.35	11.84	13.14	14.55	14.58	15.08	15.16
3	14.77	12.01	.....	11.99	.....	9.75	12.06	13.24	14.58	14.60	15.07	.....
4	14.79	12.15	.....	12.00	.....	9.84	12.20	13.32	14.58	14.61	15.05	.....
5	14.79	12.22	.....	11.96	.....	9.78	12.42	13.40	14.58	14.61	15.06	15.12
6	14.80	12.36	.....	12.01	.....	9.29	12.51	13.48	14.57	14.62	15.06	15.12
7	14.76	12.39	8.12	12.11	.....	8.97	12.62	13.56	14.56	14.63	15.04	15.15
8	14.77	12.49	9.40	12.28	.....	9.26	12.75	13.59	14.55	14.66	15.02	15.15
9	14.81	12.45	9.71	12.35	.....	8.90	12.80	13.61	14.20	14.66	14.99	15.15
10	14.82	12.31	9.94	12.44	.....	8.58	12.71	13.60	14.13	14.64	14.97	15.10
11	14.88	11.94	10.11	12.44	.....	8.57	12.68	.....	14.10	14.67	14.94	15.15
12	14.77	11.08	10.32	12.29	.....	8.57	12.59	.....	14.18	14.66	15.00	15.18
13	14.76	9.63	10.50	12.23	.....	8.66	12.54	.....	14.20	14.62	15.03	15.18
14	14.76	9.05	10.69	12.39	.....	.....	12.48	.....	14.21	14.66	15.06	15.18
15	14.75	8.99	10.77	12.43	.....	.....	.....	.....	14.22	14.71	15.09	15.20
16	14.30	9.58	10.88	12.42	.....	.....	.....	.....	14.23	14.79	15.11	15.22
17	13.41	9.75	11.04	12.51	9.21	.....	.....	.....	14.24	14.87	15.11	15.26
18	12.52	9.66	11.16	12.57	8.66	.....	.....	.....	14.29	14.92	15.14	15.28
19	11.97	9.05	11.26	.....	8.61	.....	.....	.....	14.31	14.97	15.13	15.28
20	12.00	8.59	11.36	.....	.....	.....	.....	.....	14.30	15.04	15.20	15.27
21	12.23	8.58	11.58	.....	.....	.....	.....	.....	14.32	15.09	15.21	15.25
22	.....	8.60	11.61	.....	.....	.....	.....	.....	14.34	15.06	15.20	15.20
23	.....	8.62	11.61	.....	.....	.....	.....	.....	14.35	14.93	15.18	15.18
24	.....	8.57	11.75	.....	.....	.....	.....	14.03	14.35	15.03	15.16	15.16
25	.....	8.06	11.85	.....	.....	.....	.....	14.08	14.58	15.08	15.16	15.23
26	.....	7.28	11.94	.....	.....	.....	.....	14.12	14.43	15.09	15.12	15.26
27	10.30	7.44	12.01	.....	.....	11.73	12.79	14.22	14.46	15.09	15.11	15.32
28	10.91	7.46	12.01	.....	.....	11.87	12.82	14.28	14.60	15.20	15.13	15.34
29	11.23	.....	11.97	.....	.....	11.91	12.84	14.35	14.52	15.18	15.16	15.35
30	11.34	.....	11.95	.....	.....	11.72	12.96	14.44	14.55	15.16	15.16	15.34
31	11.57	.....	11.82	.....	8.84	.....	13.00	14.49	.....	15.15	.....	15.32

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. Records available: 1938-49.

507--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	13.50	Mar. 28	11.86	Aug. 31	14.06	Oct. 7	11.30
19	11.71	May 9	8.91	Sept. 8	11.24	14	11.55
27	9.18	17	7.27	15	10.64	21	13.86
Feb. 2	11.66	July 5	9.70	22	10.42	Nov. 4	12.32
8	11.99	Aug. 24	11.70	30	11.20	11	14.47
15	10.16						

821. City of Wichita. NW. corner sec. 6, T. 24 S., R. 2 W. Records available: 1939-49.

Jan. 3	21.38	July 5	20.99	Sept. 30	21.47	Oct. 21	26.56
19	21.36	Aug. 31	21.35	Oct. 7	21.47	Nov. 10	21.70
Feb. 8	21.21	Sept. 8	21.40	14	21.52	Dec. 1	21.83
Mar. 28	21.26	22	21.43				

839. City of Wichita. NE. corner sec. 35, T. 24 S., R. 2 W. Records available: 1938-49.

Feb. 1	15.43	May 31	13.86	July 25	13.01	Dec. 1	16.82
Mar. 31	15.92	June 27	10.18	Nov. 10	16.72		

872. Owner of well, city of Wichita; owner of property, D. C. Buller. SE. corner sec. 31, T. 23 S., R. 2 W. Records available: 1939-49.

Jan. 5	33.71	Mar. 31	33.82	June 27	31.96	Oct. 7	31.00
Feb. 1	33.70	May 31	33.04	July 25	31.88		

873. Owner of well, city of Wichita; owner of property, D. C. Buller. SE. corner sec. 31, T. 23 S., R. 2 W. Records available: 1939-49.
Jan. 5, 34.86; Apr. 4, 32.83; July 8, 33.76.

874. Owner of well, city of Wichita; owner of property, D. C. Buller. SE. corner sec. 31, T. 23 S., R. 2 W. Records available: 1939-49.
Jan. 5, 44.39; Apr. 4, 43.66; July 8, 43.53.

878. Owner of well, city of Wichita; owner of property, C. Cadwell. SE. corner sec. 1, T. 24 S., R. 3 W. Records available: 1939-49.

Jan. 3	29.43	Mar. 28	27.89	Sept. 30	27.21	Nov. 10	27.25
19	29.45	July 5	27.33	Oct. 7	27.20	Dec. 1	27.34
Feb. 8	29.56	Aug. 31	27.24	14	26.22		

879. Owner of well city of Wichita; owner of property, C. Cadwell. SE. corner sec. 1, T. 24 S., R. 3 W. Records available: 1939-49.

Jan. 3	26.07	Mar.	29.69	Sept. 30	29.93	Nov. 10	30.21
19	26.13	July 5	30.24	Oct. 7	29.89	Dec. 1	30.20
Feb. 8	26.24	Aug. 31	29.74	14	30.13		

883. Owner of well, city of Wichita; owner of property, Maggie Holle. NW. corner sec. 26, T. 24 S., R. 2 W. Records available: 1939-49.

Jan. 5	21.94	Mar. 31	22.00	June 27	20.36	Oct. 7	21.77
Feb. 1	21.81	May 31	20.27	July 25	20.58		

884. Owner of well, city of Wichita; owner of property, Maggie Holle. NW. corner sec. 26, T. 24 S., R. 2 W. Records available: 1939-49.
Jan. 5, 21.90; Apr. 4, 22.54; July 8, 21.83.

885. Owner of well, city of Wichita; owner of property, Maggie Holle. NW. corner sec. 26, T. 24 S., R. 2 W. Records available: 1939-49.
Jan. 5, 22.70; Apr. 4, 22.90; July 8, 22.46.

886. Owner of well, city of Wichita; owner of property, R. H. Haiber. NE. corner NW $\frac{1}{4}$ sec. 16, T. 24 S., R. 2 W. Records available: 1939-49.

886--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	17.69	Apr. 30	17.20	July 27	15.58	Oct. 28	16.64
31	17.57	May 31	16.36	Aug. 25	17.15	Nov. 10	17.73
Feb. 1	17.57	June 27	16.41	Sept. 26	16.24	25	17.63
28	17.64	28	16.41	Oct. 7	17.07	Dec. 24	15.96
Apr. 1	17.72	July 25	15.58				

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. Records available: 1939-49.

Jan. 5	18.39	Mar. 31	18.38	June 27	17.32	Oct. 7	18.39
Feb. 1	18.43	May 31	17.26	July 25	16.48		

894. Owner of well, city of Wichita; owner of property, H. A. Lawrence. NE. corner sec. 18, T. 24 S., R. 2 W. Records available: 1939-49.

895. Owner of well, city of Wichita; owner of property, H. A. Lawrence. NE. corner sec. 18, T. 24 S., R. 2 W. Records available: 1939-49.

Jan. 5, 27.08; Apr. 4, 25.04; July 8, 25.33; Oct. 7, 24.25.

1186. City of Wichita. SW. corner sec. 13, T. 24 S., R. 2 W. Records available: 1942-49.

Jan. 3	12.35	Mar. 28	11.57	Sept. 30	11.74	Oct. 21	12.06
19	12.26	July 5	10.87	Oct. 7	11.97	Nov. 10	12.20
Feb. 8	12.22	Aug. 31	11.60	14	12.04	Dec. 1	12.39
15	12.14	Sept. 15	11.97				

1189. City of Wichita. SW. corner sec. 16, T. 24 S., R. 2 W. Records available: 1942-46, 1949. Measurements resumed Mar. 25, 1949.

1192. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 30, T. 23 S., R. 2 W. Records available: 1941-49. Jan. 5, 15.47; Apr. 4, 15.29.

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. Records available: 1943-49.

Jan. 3	36.23	Mar. 28	36.25	Sept. 30	36.62	Oct. 21	36.61
19	36.21	July 5	36.29	Oct. 7	36.70	Nov. 10	36.65
Feb. 8	36.19	Aug. 31	36.25	14	37.01	Dec. 1	36.70

M-1. City of Wichita. NW. corner sec. 29, T. 23 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	69.06	Sept. 2	31.00	Oct. 31	97.00
July 8	32.01	30	103.00	Dec. 1	32.00

M-1a. City of Wichita. NW. corner sec. 29, T. 23 S., R. 2 W. Records available: 1940-49.

Jan. 5	34.82	Sept. 30	38.85	Dec. 1	28.12
Sept. 2	28.08	Oct. 31	31.57		

M-1b. City of Wichita. NW. corner sec. 29, T. 23 S., R. 2 W. Records available: 1940-49.

Jan. 5	33.63	Sept. 2	27.41	Oct. 31	36.36
Apr. 4	33.53	30	27.20	Dec. 1	29.58

M-2. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 29, T. 23 S., R. 2 W. Records available: 1940-49.

Jan. 5	104.3	Sept. 2	155.00	Oct. 31	41.00
July 8	34.12	30	41.60	Dec. 1	100.50

M-2a. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 29, T. 23 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	36.46	Sept. 30	36.96	Dec. 1	32.39
Sept. 2	32.18	Oct. 31	32.10		

M-2b. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 29, T. 23 S., R. 2 W. Records available: 1940-49.

Jan. 5	36.58	Sept. 2	36.95	Oct. 31	37.05
Apr. 4	36.37	30	37.66	Dec. 1	37.01

M-2c. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 29, T. 23 S., R. 2 W. Records available: 1946-49. Jan. 5, 36.33; Sept. 2, 32.10; Sept. 30, 36.82; Dec. 1, 32.28.

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. Records available: 1940-49.

Jan. 5	75.96	Sept. 2	111.5	Oct. 31	43.50
July 8	43.82	30	40.00	Dec. 1	42.50

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. Records available: 1940-49.

Jan. 5	47.08	Sept. 30	36.93	Dec. 1	39.66
Sept. 2	44.90	Oct. 31	40.49		

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. Records available: 1940-49.

Jan. 5	45.69	Sept. 2	48.96	Oct. 31	44.55
Apr. 4	45.18	30	40.30	Dec. 1	44.72

M-4. City of Wichita. SE. corner sec. 30, T. 23 S., R. 2 W. Records available: 1940-49.

Jan. 5	81.22	Sept. 2	45.62	Oct. 31	47.58
July 8	42.21	30	41.62	Dec. 1	46.00

M-4a. City of Wichita. SE. corner sec. 30, T. 23 S., R. 2 W. Records available: 1940-49.

Jan. 5	50.16	Sept. 30	39.96	Dec. 1	42.40
Sept. 2	42.77	Oct. 31	42.58		

M-4b. City of Wichita. SE. corner sec. 30, T. 23 S., R. 2 W. Records available: 1940-49.

Jan. 5	45.56	Sept. 2	43.72	Oct. 31	42.68
Apr. 4	44.09	30	40.46	Dec. 1	42.61

M-5. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 32, T. 23 S., R. 2 W. Records available: 1940-49.

July 8	31.91	Sept. 30	42.00	Dec. 1	104.00
Sept. 2	127.00	Oct. 31	106.00		

M-5a. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 32, T. 23 S., R. 2 W. Records available: 1940-49.

Jan. 5	35.48	Sept. 30	42.06	Dec. 1	33.60
Sept. 2	33.08	Oct. 31	33.73		

M-5b. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 32, T. 23 S., R. 2 W. Records available: 1940-49.

Jan. 5	33.69	Sept. 2	32.70	Oct. 31	33.37
Apr. 4	33.26	30	31.90	Dec. 1	33.28

M-6. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 32, T. 23 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	91.24	Sept. 30	31.50	Dec. 1	84.00
Sept. 2	105.00	Oct. 31	85.50		

M-6a. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 32, T. 23 S., R. 2 W. Records available: 1940-49.

Jan. 5	36.56	Sept. 30	32.70	Nov. 30	35.38
Sept. 2	33.80	Oct. 31	35.44		

M-6b. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 32, T. 23 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	36.49	July 8	35.83	Sept. 30	32.34	Dec. 1	34.90
Apr. 4	35.73	Sept. 2	34.26	Oct. 31	34.96		

M-7. City of Wichita. NW. corner SW $\frac{1}{4}$ sec. 16, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	31.61	Sept. 30	46.00	Nov. 30	27.00
Sept. 2	26.00	Oct. 31	26.00		

M-7a. City of Wichita. NW. corner SW $\frac{1}{4}$ sec. 16, T. 24 S., R. 2 W. Records available: 1940-49.

Jan. 5	22.90	Sept. 30	27.92	Nov. 30	25.02
Sept. 2	27.10	Oct. 31	23.85		

M-7b. City of Wichita. NW. corner SW $\frac{1}{4}$ sec. 16, T. 24 S., R. 2 W. Records available: 1940-49.

Apr. 4	24.08	Sept. 2	23.75	Oct. 31	24.13
July 8	23.98	30	25.74	Nov. 30	25.12

M-8. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T. 24 S., R. 2 W. Records available: 1940-49.

Jan. 5	86.23	Sept. 30	32.00	Dec. 1	33.00
Sept. 2	33.12	Oct. 31	33.00		

M-8a. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T. 24 S., R. 2 W. Records available: 1940-49.

Jan. 5	32.86	Sept. 30	30.48	Dec. 1	30.84
Sept. 2	30.05	Oct. 31	30.88		

M-8b. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	30.98	July 8	29.76	Sept. 30	28.93	Dec. 1	29.51
Apr. 4	29.99	Sept. 2	28.68	Oct. 31	29.52		

M-9. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	56.57	Sept. 30	76.00	Nov. 30	30.50
Sept. 2	31.00	Oct. 31	30.00		

M-9a. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 8, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	30.19	Sept. 30	28.70	Nov. 30	28.07
Sept. 2	28.50	Oct. 31	27.89		

M-9b. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 8, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	29.84	July 8	29.13	Sept. 30	28.23	Nov. 30	26.92
Apr. 4	28.86	Sept. 2	27.34	Oct. 31	26.50		

M-10. City of Wichita. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 8, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	70.96	Sept. 30	87.00	Nov. 30	88.00
Sept. 2	86.30	Oct. 31	33.00		

M-10a. City of Wichita. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 8, T. 24 S., R. 2 W. Records available: 1940-49.

Jan. 5	32.11	Sept. 30	32.94	Nov. 30	33.30
Sept. 2	34.25	Oct. 31	30.94		

M-10b. City of Wichita. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 8, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	30.69	July 8	30.22	Sept. 30	29.96	Nov. 30	29.82
Apr. 4	30.58	Sept. 2	30.83	Oct. 31	29.69		

M-11. City of Wichita. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 8, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	40.93	Sept. 30	25.92	Nov. 30	54.14
Sept. 2	52.81	Oct. 31	24.75		

M-11a. City of Wichita. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 8, T. 24 S., R. 2 W. Records available: 1940-49.

Jan. 5	26.96	Sept. 30	24.67	Nov. 30	26.49
Sept. 2	26.13	Oct. 31	24.64		

M-11b. City of Wichita. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 8, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	27.06	July 8	26.70	Sept. 30	25.90	Nov. 30	26.52
Apr. 4	26.91	Sept. 2	27.45	Oct. 31	24.84		

M-12. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 9, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	61.92	Sept. 30	30.00	Nov. 30	27.00
Sept. 2	82.00	Oct. 31	29.56		

M-12a. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 9, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	34.84	Sept. 30	28.42	Nov. 30	27.30
Sept. 2	35.45	Oct. 31	29.00		

M-12b. City of Wichita. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 9, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	35.27	July 8	34.51	Sept. 30	29.52	Nov. 30	28.38
Apr. 4	34.97	Sept. 2	36.10	Oct. 31	30.19		

M-13. City of Wichita. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 17, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	41.79	Sept. 30	61.32	Nov. 30	24.92
Sept. 2	61.26	Oct. 31	62.42		

M-13a. City of Wichita. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 17, T. 24 S., R. 2 W. Records available: 1940-49.

Jan. 5	27.57	Sept. 30	25.70	Nov. 30	24.32
Sept. 2	25.70	Oct. 31	25.53		

M-13b. City of Wichita. NW. corner NW $\frac{1}{4}$ sec. 16, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	27.44	July 8	23.98	Sept. 30	26.10	Nov. 30	25.39
Apr. 4	26.87	Sept. 2	26.34	Oct. 31	25.65		

M-14. City of Wichita. NW. corner NW $\frac{1}{4}$ sec. 16, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	59.08	Sept. 30	29.00	Nov. 30	26.00
Sept. 2	53.00	Oct. 31	51.50		

M-14a. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 16, T. 24 S., R. 2 W. Records available: 1940-49.

Jan. 5	34.16	Sept. 30	30.00	Nov. 30	26.58
Sept. 2	34.98	Oct. 31	31.67		

M-14b. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 9, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	33.06	July 8	32.29	Sept. 30	28.59	Nov. 30	26.76
Apr. 4	32.78	Sept. 2	31.70	Oct. 31	28.98		

M-15. City of Wichita. SE. corner NE $\frac{1}{4}$ sec. 9, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	73.28	Sept. 30	53.00	Nov. 30	54.00
Sept. 2	28.27	Oct. 31	53.50		

M-15a.. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 9, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	33.11	Sept. 30	30.09	Nov. 30	30.76
Sept. 6	26.86	Oct. 31	31.25		

M-15b. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 9, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	30.90	July 8	30.11	Sept. 30	30.65	Nov. 30	30.98
Apr. 4	30.72	Sept. 2	27.85	Oct. 31	31.60		

M-16. City of Wichita. SE. corner SE $\frac{1}{4}$ sec. 9, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	59.56	Sept. 30	27.00	Nov. 30	29.50
Sept. 2	65.50	Oct. 31	29.50		

M-16a. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 9, T. 24 S., R. 2 W. Records available: 1940-49.

Jan. 5	30.73	Sept. 30	23.78	Nov. 30	24.26
Sept. 2	28.10	Oct. 31	24.65		

M-16b. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 9, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	24.47	July 8	24.08	Sept. 30	22.28	Nov. 30	22.86
Apr. 4	24.19	Sept. 2	22.48	Oct. 31	22.72		

M-17. City of Wichita. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	47.16	Sept. 30	15.50	Nov. 30	18.00
Sept. 2	16.00	Oct. 31	56.00		

M-17a. City of Wichita. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T. 24 S., R. 2 W. Records available: 1940-49.

Jan. 5	17.43	Sept. 30	14.43	Nov. 30	16.13
Sept. 2	14.60	Oct. 31	16.19		

M-17b. City of Wichita. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	14.80	July 8	14.26	Sept. 30	13.06	Nov. 30	14.65
Apr. 4	14.61	Sept. 2	13.18	Oct. 31	14.59		

M-18. City of Wichita. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	50.08	Sept. 30	54.32	Nov. 30	52.40
Sept. 2	18.84	Oct. 31	19.05		

M-18a. City of Wichita. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	29.59	Sept. 30	33.50	Nov. 30	11.79
Sept. 2	17.80	Oct. 31	18.03		

M-18b. City of Wichita. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	24.04	July 8	22.69	Sept. 30	25.24	Nov. 30	25.73
Apr. 4	23.36	Sept. 2	17.30	Oct. 31	17.57		

M-19. City of Wichita. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 27, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	35.98	Sept. 30	43.73	Nov. 30	19.79
Sept. 2	46.35	Oct. 31	45.00		

M-19a. City of Wichita. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 27, T. 24 S., R. 2 W. Records available: 1940-49.

Jan. 5	22.36	Sept. 30	23.60	Nov. 30	21.12
Sept. 2	22.60	Oct. 31	24.11		

M-19b. City of Wichita. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 27, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	20.59	July 8	20.36	Sept. 30	20.77	Nov. 30	19.94
Apr. 4	20.49	Sept. 2	19.82	Oct. 31	20.50		

M-20. City of Wichita. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 8, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	59.94	Sept. 30	77.00	Nov. 30	29.00
Sept. 2	31.50	Oct. 31	78.00		

M-20a. City of Wichita. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 8, T. 24 S., R. 2 W. Records available: 1940-49.

Jan. 5	28.58	Sept. 30	28.60	Nov. 30	28.35
Sept. 2	29.90	Oct. 31	28.83		

M-20b. City of Wichita. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 8, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	28.91	July 8	28.86	Sept. 30	30.10	Nov. 30	29.00
Apr. 4	28.78	Sept. 2	30.00	Oct. 31	30.09		

M-21. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 26, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	32.69	Sept. 30	20.10	Nov. 30	39.00
Sept. 2	44.00	Oct. 31	17.00		

M-21a. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 26, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	24.09	Sept. 30	19.06	Nov. 30	23.82
Sept. 2	25.10	Oct. 31	17.37		

M-21b. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 26, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	20.82	July 8	20.09	Sept. 30	18.63	Nov. 30	20.82
Apr. 4	20.50	Sept. 2	21.50	Oct. 31	17.04		

M-22. City of Wichita. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 26, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	42.86	Sept. 30	53.35	Nov. 30	53.02
Sept. 2	52.80	Oct. 31	53.20		

M-22a. City of Wichita. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 26, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	24.56	Sept. 30	26.46	Nov. 30	25.70
Sept. 2	26.17	Oct. 31	25.14		

M-22b. City of Wichita. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 26, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	23.69	July 8	23.06	Sept. 30	21.86	Nov. 30	21.15
Apr. 4	23.33	Sept. 2	21.50	Oct. 31	20.30		

M-23. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 35, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	45.14	Sept. 30	14.86	Nov. 30	16.10
Sept. 2	15.50	Oct. 31	14.00		

M-23a. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 35, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	20.77	Sept. 30	14.47	Nov. 30	15.70
Sept. 2	14.00	Oct. 31	15.63		

M-23b. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 35, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	20.33	July 8	19.96	Sept. 30	13.78	Nov. 30	14.96
Apr. 4	20.19	Sept. 2	13.40	Oct. 31	14.84		

M-24. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 35, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	41.26	Sept. 30	15.50	Nov. 30	15.00
Sept. 2	15.00	Oct. 31	16.50		

M-24a. City of Wichita. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 35, T. 24 S., R. 2 W. Records available: 1940-49.

M-24a--Continued.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	17.79	Sept. 30	14.82	Nov. 30	15.60
Sept. 2	14.55	Oct. 31	15.42		

M-24b. City of Wichita. $SE\frac{1}{4}SE\frac{1}{4}$ sec. 35, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	16.90	July 8	15.38	Sept. 30	17.50	Nov. 30	17.60
Apr. 4	16.26	Sept. 2	17.07	Oct. 31	17.70		

M-25. City of Wichita. $SW\frac{1}{4}SE\frac{1}{4}$ sec. 36, T. 24 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	40.53	Sept. 30	11.00	Nov. 30	58.00
Sept. 2	10.30	Oct. 31	58.62		

M-25a. City of Wichita. $SE\frac{1}{4}SE\frac{1}{4}$ sec. 36, T. 24 S., R. 2 W. Records available: 1940-49.

Jan. 5	12.81	Sept. 30	10.08	Nov. 30	13.83
Sept. 2	9.70	Oct. 31	13.08		

M-25b. City of Wichita. $NE\frac{1}{4}NW\frac{1}{4}$ sec. 1, T. 25 S., R. 2 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	12.68	July 8	12.41	Sept. 30	11.53	Nov. 30	14.06
Apr. 4	12.53	Sept. 2	12.00	Oct. 31	14.36		

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. Measuring point, top of casing, 2.0 feet above land-surface datum. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level
July 8	13.96	Sept. 30	65.00	Nov. 30	18.00
Sept. 2	64.00	Oct. 31	65.00		

M-26a. City of Wichita. $SW\frac{1}{4}NW\frac{1}{4}$ sec. 22, T. 24 S., R. 2 W. Drilled well, diameter 1.25 inches. Measuring point, top of pipe, 1.8 feet above land-surface datum. Records available: 1949. Sept. 2, 16.40; Sept. 30, 17.26; Oct. 31, 18.08; Nov. 30, 15.99.

M-26b. City of Wichita. $SW\frac{1}{4}NW\frac{1}{4}$ sec. 22, T. 24 S., R. 2 W. Records available: 1948-49.

Jan. 5	14.42	Sept. 2	13.80	Oct. 31	15.61
Apr. 4	14.36	Sept. 30	14.64	Nov. 30	14.72

Haskell County

By Janet S. Olson

Highest and lowest water levels for the period of record,
in 5 wells in Haskell County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
6	9	154.73	Nov. 20, 1946	158.66	Feb. 6, 1946
7	9	187.08	Aug. 17, 1948	189.34	May 19, 1949
10	9	47.96	Aug. 9, 1943	53.90	May 19, 1949
11	9	183.81	May 19, 1949	187.34	Aug. 16, 1949
12	9	179.40	Nov. 3, 1941	184.68	Nov. 24, 1947

Difference between highest and lowest recorded water levels and net change in water levels, in 1949 and for period of record, in 5 wells in Haskell County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
6	3.93	-0.71	-1.93
7	2.26	+1.11	+3.36
10	5.94	+1.77	+9.90
11	3.53	-1.03	-2.70
12	5.48	+4.68	+3.39

6. Copeland State Bank. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 11, T. 29 S., R. 31 W. Records available: 1941-49. Feb. 8, 156.17; May 19, 156.13; Aug. 16, 156.13; Nov. 15, 158.08.

7. Etta McCoy. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 2, T. 30 S., R. 32 W. Records available: 1941-49. Feb. 8, 187.28; May 19, 189.34; Aug. 16, 187.15; Nov. 15, 187.14.

10. Eli Stoops. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 33, T. 30 S., R. 34 W. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	50.25	Apr. 7	50.17	July 13	49.30	Oct. 25	48.49
Feb. 8	50.08	May 19	53.90	Aug. 16	48.10	Nov. 15	48.74
Mar. 8	50.10	June 20	48.74	Sept. 20	48.23	Dec. 20	48.97

11. L. C. Leonard. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 20, T. 30 S., R. 32 W. Records available: 1941-49. Feb. 8, 184.41; May 19, 185.81; Aug. 16, 187.34.

12. Sybol Smith. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 11, T. 30 S., R. 32 W. Records available: 1941-49. May 19, 184.79; Aug. 16, 180.68; Nov. 15, 180.07.

Hodgeman County

By Janet S. Olson

Highest and lowest water levels for the period of record in 3 wells in Hodgeman County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
3	9	28.89	Oct. 21, 1948	34.77	Sept. 20, 1940
4	9	19.55	Oct. 21, 1948	27.52	Oct. 2, 1941
5	9	26.37	June 23, 1949	33.08	Oct. 29, 1940 Aug. 20, 1946

Difference between highest and lowest recorded water levels and net change in water level, for 1949 and for period of record, in 3 wells in Hodgeman County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise for period of record
3	5.88	-0.42	5.38
4	7.97	-1.30	6.18
5	9.71	+2.39	3.17

3. W. J. Fox. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 12, T. 21 S., R. 22 W. Records available: 1940-49. Jan. 14, 28.90; Apr. 22, 28.84; Oct. 21, 29.31.

4. William Macey. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 13, T. 22 S., R. 22 W. Records available: 1940-49. Jan. 14, 22.60; Apr. 22, 23.13; July 23, 19.12; Oct. 21, 20.85.

5. Ray Klein. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 36, T. 22 S., R. 22 W. Records available: 1940-49.

5--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	29.75	Apr. 22	29.42	Aug. 19	29.59	Nov. 11	29.19
Feb. 11	30.35	June 23	26.37	Sept. 20	30.00	Dec. 23	28.86
Mar. 11	29.00						

Jackson CountyHighest and lowest water levels for the period of record
in 3 wells in Jackson County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
5-15-22db	2	19.35	July 15, 1949	21.36	Feb. 9, 1949
7-15-3ca	2	5.85	July 3, 1948	7.22	Oct. 14, 1948
9-15-23dcb	2	3.42	Apr. 15, 1949	8.31	Oct. 14, 1948

Difference between highest and lowest recorded water levels and net change
in water level, in 1949 and for period of record in 3 wells in Jackson
County

Wells	Difference between highest and lowest levels	Net rise in 1949	Net rise for period of record
5-15-22db	2.01	1.94	0.87
7-15-3ca	1.37	.57	.22
9-15-23dcb	4.89	3.81	2.27

5-15-22db. Fred Bergman Estate. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 22, T. 5 S., R. 15 E.
Records available: 1948-49. Feb. 9, 21.36; Apr. 18, 20.22; June 13, 19.95; July 15, 19.35.7-15-3ca. Fred Shafer. NW $\frac{1}{4}$ of sec. 3, T. 7 S., R. 15 E. Records
available: 1948-49. Feb. 9, 5.91; Apr. 15, 5.88; June 13, 5.93; July 15, 5.95.9-15-23dcb. B. F. Albright. NW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 23, T. 9 S., R. 15 E.
Records available: 1948-49. Feb. 9, 5.59; Apr. 15, 3.42; June 13, 5.99; July 15, 3.96.Jefferson CountyHighest and lowest water levels for the period of record
in 2 wells in Jefferson County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
11-19-27bcc	2	23.66	July 15, 1949	27.43	Nov. 27, 1948
11-19-29bc	2	12.67	July 15, 1949	24.87	Nov. 27, 1948

Difference between highest and lowest recorded water levels and net change
in water level, in 1949 and for period of record, in 2 wells in Jefferson
County

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise for period of record
11-19-27bcc	3.77	3.77	2.74
11-19-29bc	12.20	12.10	8.78

11-19-27bcc. School district. SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 27, T. 11 S., R. 19 E.
Records available: 1948-49. Feb. 9, 26.45; Apr. 15, 24.48; June 13, 25.48; July 15, 23.66.11-19-29bc. Bill Green. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 29, T. 11 S., R. 19 E. Records
available: 1948-49. Feb. 9, 23.01; Apr. 15, 15.00; June 13, 17.31; July 15, 12.67.

Jewell County

By Janet S. Olson

Highest and lowest water levels for the period of record
in 22 wells in Jewell County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
6	15	36.60	Oct. 26, 1949	46.76	Oct. 13, 1937
8	15	3.87	June 24, 1947	68.06	Aug. 23, 1934
12	15	54.62	June 24, 1947	77.79	June 8, 1938
14	15	14.53	June 24, 1947	46.69	Mar. 20, 1934
22	15	9.38	June 24, 1947	25.68	Aug. 10, 1934
30	15	17.08	July 1, 1949	43.45	Sept. 20, 1940
34	15	5.88	July 1, 1949	33.92	Aug. 19, 1940
41	14	10.27	June 24, 1947	27.38	May 23, 1941
44	14	5.00	Aug. 2, 1944	24.03	May 9, 1935
45	14	18.24	June 24, 1947	34.39	Dec. 21, 1940
46	14	.36	June 24, 1947	17.54	Aug. 30, 1934
47	14	.98	June 24, 1947	13.84	May 9, 1935
48	14	6.66	Apr. 25, 1947	27.19	Oct. 25, 1934
49	13	13.15	June 24, 1947	46.83	Nov. 24, 1934
64	13	53.00	June 24, 1947	65.90	Jan. 19, 1938
65	13	9.62	Nov. 23, 1942	38.10	Aug. 20, 1940
66	13	8.67	June 24, 1947	27.55	Oct. 23, 1940
69	12	6.31	Sept. 17, 1946	24.50	Aug. 19, 1940
1-6-5da	3	3.80	June 20, 1949	9.90	Dec. 21, 1948
1-6-5dd	3	9.14	Aug. 19, 1948	30.65	May 20, 1948
1-7-1bb	3	4.29	June 20, 1949	10.80	Nov. 2, 1948
1-7-2da	3	1.57	June 20, 1949	8.00	Dec. 21, 1948

Difference between highest and lowest recorded water levels and net change in water level, for 1949 and for period of record, in 22 wells in Jewell County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
6	10.16	-2.63	+8.76
8	64.19	+6.36	+24.68
12	23.17	+5.59	+10.08
14	32.16	-.05	+23.10
22	16.50	+1.53	+11.66
30	26.37	+6.45	+21.00
34	28.04	+6.30	+7.67
41	17.11	+2.44	+11.82
44	19.03	+7.72	+11.11
45	16.15	+1.18	+12.18
46	17.18	+1.09	+4.28
47	12.86	+1.60	+3.59
48	20.53	+4.65	+1.46
49	33.68	+6.28	+5.98
64	12.90	+5.55	+7.94
65	28.48	+7.85	+25.37
66	18.88	+1.97	+9.93
69	18.19	+9.93	+9.83
1-6-5da	6.10	+1.47	+4.7
1-6-5dd	21.51	-2.32	+11.48
1-7-1bb	6.51	+1.12	-.51
1-7-2da	6.43	+1.09	-.01

6. H. C. Doud. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 5, T. 3 S., R. 9 W. Records available: 1935-44, 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 22	37.82	Aug. 31	37.07	Dec. 28	37.57
July 1	36.46	Oct. 26	36.60		

8. Will Zadina. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 17, T. 3 S., R. 9 W. Records available: 1935-44, 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 22	18.73	Aug. 31	13.96	Dec. 28	17.37
July 1	7.64	Oct. 26	15.20		

12. M. W. Howe. Lot 4 of sec. 30, T. 3 S., R. 9 W. Records available: 1935-49.

Apr. 22	61.93	Aug. 31	62.32	Dec. 28	64.70
July 1	56.50	Oct. 26	63.20		

14. C. Walker. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24, T. 3 S., R. 9 W. Records available: 1935-44, 1946-49.

Apr. 22	21.56	Aug. 31	20.90	Dec. 28	22.35
July 1	19.10	Oct. 26	21.62		

22. Meyer Miles. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 10, T. 5 S., R. 9 W. Records available: 1935-49.

Apr. 22	12.12	Aug. 31	10.89	Dec. 25	11.16
July 1	10.25	Oct. 26	10.66		

30. Fred Van Wye. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 28, T. 4 S., R. 9 W. Records available: 1935-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	25.65	Apr. 28	19.10	July 25	17.29	Oct. 25	18.10
Feb. 25	23.28	May 25	18.10	Aug. 25	18.95	Nov. 25	19.60
Mar. 25	18.97	June 25	17.20	Sept. 25	19.30	Dec. 25	17.90

34. Glen Kindler. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T. 3 S., R. 10 W. Records available: 1936-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 22	6.56	Aug. 31	8.20	Dec. 28	10.50
July 1	5.88	Oct. 26	9.28		

41. Walter Dietz. Lot 16 of sec. 6, T. 5 S., R. 9 W. Records available: 1935-44, 1946-49.

Apr. 22	12.23	Aug. 31	13.04	Dec. 23	12.78
July 1	11.34	Oct. 26	13.38		

44. Cleo Gimple. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 13, T. 4 S., R. 9 W. Records available: 1935-49. Apr. 22, 9.07; July 1, 9.40; Oct. 26, 9.08.

45. Victor Yapp. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T. 4 S., R. 10 W. Records available: 1935-49.

Apr. 22	19.55	Aug. 31	20.57	Dec. 23	19.76
July 1	19.13	Oct. 26	20.10		

46. Ralph Wierenga. Lot 3 of sec. 19, T. 5 S., R. 9 W. Records available: 1936-44, 1946-49.

Apr. 22	3.20	Aug. 31	4.60	Dec. 23	4.50
July 1	2.86	Oct. 26	4.34		

47. Meyer Miles. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, T. 5 S., R. 9 W. Records available: 1936-44, 1946-49.

Apr. 22	6.90	Aug. 31	6.12	Dec. 28	6.04
July 1	3.52	Oct. 26	5.48		

48. Frank Rogers. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 23, T. 4 S., R. 10 W. Records available: 1935-49. Apr. 22, 14.45. Measurements discontinued Apr. 22, 1949.

49. E. Underwood. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 5, T. 3 S., R. 9 W. Records available: 1935-44, 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 22	17.74	Aug. 31	16.69	Dec. 23	16.52
July 1	13.92	Oct. 26	15.47		

64. Chris Vandeventer, former owner. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 6, T. 3 S., R. 8 W. Records available: 1937-44, 1946-49.

Apr. 22	56.04	Aug. 31	57.41	Dec. 23	57.23
July 1	56.23	Oct. 26	56.14		

65. Mrs. B. M. Parkhurst. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 23, T. 3 S., R. 9 W. Records available: 1937-49.

Apr. 22	10.89	Aug. 31	11.39	Dec. 23	10.75
July 1	10.83	Oct. 26	10.75		

66. A. E. Cook farm. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, T. 5 S., R. 10 W. Records available: 1937-44, 1946-49. Measuring point beginning August 1949, top of casing south side, 2.3 feet below old measuring point, 2.3 feet above land-surface datum. Apr. 22, 13.46; July 1, 12.48; Aug. 31, 13.57; Oct. 26, 23.21.

69. Walter Dietz. NW $\frac{1}{4}$ lot 2 of sec. 7, T. 5 S., R. 9 W. Records available: 1937-44, 1946-49.

Apr. 22	10.18	Aug. 31	10.17	Dec. 23	10.40
July 1	9.81	Oct. 26	9.82		

1-6-5da. Geological Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 5, T. 1 S., R. 6 W. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 24	8.58	June 20	3.80	Sept. 23	7.58	Dec. 5	8.09
Apr. 27	8.55	July 29	6.94	Oct. 28	6.98	28	8.43
May 26	5.65	Aug. 17	7.73	Nov. 12	7.62		

1-6-5dd. Geological Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 5, T. 1 S., R. 6 W. Bored observation well, diameter 1.25 inches. Measuring point, top of 1 $\frac{1}{4}$ -inch pipe, 3.0 feet above land-surface datum. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Oct. 13, 1947	30.20	Aug. 19, 1948	9.14	June 20, 1949	18.63
Nov. 14	30.23	Sept. 23	19.00	July 29	18.32
Dec. 17	30.39	Nov. 2	18.32	Aug. 17	18.65
Jan. 15, 1948	30.37	Dec. 21	16.40	Sept. 23	18.07
Feb. 20	30.38	Feb. 7, 1949	18.35	Oct. 28	17.47
Mar. 25	29.94	Mar. 24	17.61	Nov. 12	18.09
May 20	30.65	Apr. 27	18.96	Dec. 5	18.47
July 26	13.51	May 26	14.15	28	18.72

1-7-1bb. Geological Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 1, T. 1 S., R. 7 W. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 7	10.25	May 26	7.50	Aug. 17	9.02	Nov. 12	10.15
Mar. 24	8.78	June 20	4.29	Sept. 22	9.47	Dec. 5	10.40
Apr. 27	8.70	July 29	7.99	Oct. 28	9.97	28	10.44

1-7-2da. Geological Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 2, T. 1 S., R. 7 W. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 7	7.89	May 26	5.10	Aug. 17	5.27	Nov. 12	6.10
Mar. 24	7.06	June 20	1.57	Sept. 23	6.16	Dec. 5	6.51
Apr. 27	6.62	July 29	4.42	Oct. 28	5.57	28	6.91

Johnson County

Highest and lowest water levels for the period of record
in 3 wells in Johnson County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
12-23-29bcc	2	2.80	June 10, 1949	8.39	Oct. 15, 1948
12-25-31aaa	2	1.86	May 4, 1948	2.46	Nov. 26, 1948
14-25-8bb	2	2.37	Mar. 1, 1949	10.48	Nov. 26, 1948

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 3 wells in Johnson County

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise (+) or net decline (-) for period of record
12-23-29bcc	5.59	3.35	+0.48
12-25-31aaa	.60	.11	-.49
14-25-8bb	8.11	5.89	-1.75

12-23-29bcc. William Johnson. SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 29, T. 12 S., R. 23 E. Records available: 1948-49. Mar. 1, 2.94; Apr. 18, 3.17; June 10, 2.80; July 21, 4.82.

12-25-31aaa. C. M. Webb. NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 31, T. 12 S., R. 25 E. Records available: 1948-49. Mar. 1, 1.99; Apr. 18, 2.18; June 10, 1.91; July 21, 2.35.

14-25-8bb. Mrs. Alice Allison. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 8, T. 14 S., R. 25 E. Records available: 1948-49. Mar. 1, 2.37; Apr. 18, 3.10; June 10, 2.59; July 21, 4.57.

Kearny County

By Janet S. Olson

Highest and lowest water levels for the period of record
in 4 wells in Kearny County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
13	10	1.47	May 9, 1942	8.93	Dec. 30, 1939
16	10	35.50	Aug. 24, 1949	47.81	July 3, 1941
19	10	130.20	Nov. 25, 1949	134.67	Nov. 15, 1945
28	10	121.33	Aug. 16, 1948	123.85	Feb. 19, 1940
					Oct. 22, 1940

Difference between highest and lowest recorded water levels and net change in water level, for 1949 and for the period of record, in 4 wells in

Kearny County

Well	Difference between highest and lowest levels	Net rise (+) or Net decline (-) in 1949	Net rise (+) or Net decline (-) for period of record
13	5.76	+0.21	3.35
16	12.31	+1.86	9.98
19	4.47	+1.11	.67
28	2.52	-.37	1.77

1. R. T. Beatty. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 34, T. 24 S., R. 36 W. Records available: 1939-48. Measurements discontinued in 1949.

2. C. E. Worthen. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T. 24 S., R. 36 W. Records available: 1939-48. Measurements discontinued in 1949.

13. D. S. Nicholson. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 15, T. 25 S., R. 37 W. Records available: 1939-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	5.22	Apr. 25	5.15	July 18	5.03	Oct. 26	5.07
Feb. 21	5.15	May 25	5.05	Aug. 24	5.15	Nov. 25	5.22
Mar. 21	5.36	June 27	4.76	Sept. 23	5.15	Dec. 19	5.21

16. C. B. Campbell. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 23 S., R. 35 W. Records available: 1939-49. Feb. 21, 36.78; Aug. 25, 37.88; Aug. 24, 35.50.

19. E. M. Beymer. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 8, T. 26 S., R. 38 W. Records available: 1939-49. Feb. 21, 130.24; Aug. 24, 133.40; Nov. 25, 130.20.

28. Harry Tate. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 26, T. 22 S., R. 37 W. Records available: 1939-49. Mar. 25, 121.61; Aug. 24, 122.00.

Kingman County

Highest and lowest water levels for the period of record in 9 wells in Kingman County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
1	4	11.27	Mar. 31, 1948	15.25	Nov. 12, 1946
2	4	7.69	Jan. 9, 1946	13.80	Nov. 20, 1946
4	4	58.20	Feb. 19, 1947	65.13	Feb. 5, 1947
5	4	19.39	Feb. 8, 1946	20.60	Dec. 5, 1946
6	4	25.64	Oct. 3, 1949	32.68	Aug. 29, 1946
7	4	42.91	Oct. 3, 1949	48.73	Sept. 25, 1948
8	4	5.05	Oct. 3, 1949	8.32	Sept. 30, 1946
11	4	5.96	Oct. 3, 1949	13.75	July 13, 1946
14	4	11.12	July 28, 1945	13.86	Jan. 10, 1947

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 9 wells in Kingman County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
1	3.98	-1.59	-1.74
2	6.11	-.60	-.54
4	6.93	-.43	+4.84
5	1.21	.00	+1.10
6	7.04	+4.55	+5.65
7	5.82	+5.49	+3.63
8	3.27	+1.09	+1.70
11	7.79	+.86	+.67
14	2.74	+.18	-1.59

1. A. A. Mueller. SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 1, T. 30 S., R. 8 W. Records available: 1945-49. Jan. 4, 11.94; Mar. 29, 12.26; July 19, 12.76; Oct. 3, 13.53.
2. L. A. Brammer. SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, T. 30 S., R. 6 W. Records available: 1945-49. Jan. 4, 9.80; Mar. 29, 9.87; July 19, 10.08; Oct. 3, 10.40.
4. Owner unknown. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 9, T. 27 S., R. 9 W. Records available: 1945-49. Jan. 4, 58.62; Mar. 29, 58.78; July 19, 59.63; Oct. 3, 59.05.
5. School district. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 6, T. 29 S., R. 6 W. Records available: 1945-49. Jan. 4, 20.43. Measurements discontinued Jan. 4, 1949.
6. Jane Garrett. NE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 3, T. 29 S., R. 6 W. Records available: 1945-49. Jan. 4, 30.19; Mar. 29, 28.46; July 19, 26.56; Oct. 3, 25.64.
7. S. Schrag. SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 5, T. 27 S., R. 5 W. Records available: 1945-49. Jan. 4, 48.40; Mar. 29, 46.83; July 19, 43.86; Oct. 3, 42.91.
8. John McClure. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 10, T. 27 S., R. 7 W. Records available: 1945-49. Jan. 4, 6.14; Mar. 29, 5.76; July 19, 5.59; Oct. 3, 5.05.
10. W. H. Stephens. 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 1949.
11. S. Bolinger. SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 12, T. 28 S., R. 5 W. Records available: 1945-49. Jan. 4, 6.82; Mar. 29, 6.84; July 19, 6.79; Oct. 3, 5.96.
14. Rilla Martensy. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 22, T. 28 S., R. 7 W. Records available: 1945-49. Jan. 4, 12.89; Mar. 29, 12.71. Measurements discontinued after Mar. 29, 1949.

Kiowa County

By Janet S. Olson

Highest and lowest water levels for the period of record,
in 5 wells in Kiowa County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
4	9	69.61	Dec. 22, 1949	76.07	Aug. 20, 1943
7	9	22.61	Sept. 22, 1949	32.51	Mar. 22, 1941
8	9	18.20	Dec. 22, 1949	26.62	Apr. 28, 1941
10	9	104.67	Sept. 18, 1945	120.19	June 23, 1948
19	9	28.76	Dec. 22, 1949	37.30	June 19, 1945

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for the period of record, in 5 wells in Kiowa County

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise (+) or net decline (-) for period of record
4	6.46	5.10	+5.91
7	9.90	3.40	+8.52
8	8.42	3.23	+7.76
10	15.51	4.09	-4.24
19	8.54	4.41	+10.22

4. H. E. Davis. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 4, T. 28 S., R. 16 W. Records available: 1940-49. Mar. 10, 72.42; June 22, 71.50; Sept. 22, 70.29; Dec. 22, 69.61.

7. A. C. Weaver. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 23, T. 27 S., R. 18 W. Records available: 1940-49. Mar. 10, 26.77; June 22, 23.12; Sept. 22, 22.61; Dec. 22, 23.73.

8. E. E. Miller. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T. 27 S., R. 18 W. Records available: 1940-49. Mar. 10, 26.77; June 22, 23.12; Sept. 22, 22.61; Dec. 22, 23.73.

10. J. E. Ely. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 23, T. 30 S., R. 18 W. Records available: 1940-49. Mar. 9, 115.30; June 21, 112.31; Aug. 22, 111.84; Dec. 22, 111.01.

19. C. Williamson. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 23, T. 27 S., R. 17 W. Records available: 1944-49. Mar. 10, 32.90; Sept. 22, 28.77; Dec. 22, 28.76.

Labette County

Highest and lowest water levels for the period of record
in 4 wells in Labette County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
1	7	1.20	Oct. 1, 1945	15.49	Oct. 16, 1946
2	7	+ .28	Aug. 1, 1948	13.62	Oct. 17, 1943
3	7	.23	Aug. 1, 1948	11.52	Sept. 16, 1946
4	7	4.21	May 1, 1945	14.77	Oct. 16, 1946

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for the period of record, in 4 wells in Labette County

Well	Difference between highest and lowest levels	Net rise in 1949	Net decline for period of record
1	14.29	2.79	2.22
2	13.90	6.00	.70
3	11.24	1.88	2.42
4	10.56	.41	1.65

1. J. Ballah. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 33, T. 31 S., R. 21 E. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	13.39	Apr. 1	6.12	July 1	6.91	Oct. 1	11.00
17	9.28	17	6.82	16	6.08	16	9.93
Feb. 2	9.02	May 1	6.04	Aug. 1	9.93	Nov. 1	9.02
17	7.29	16	6.73	16	11.18	16	9.62
Mar. 1	5.74	June 2	6.14	Sept. 1	12.28	Dec. 1	10.53
17	5.69	16	6.65	16	13.08		

2. C. Givens. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 27, T. 31 S., R. 21 E. Records available: 1943-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	9.88	Apr. 1	.96	July 1	1.34	Oct. 1	5.73
17	1.61	17	1.64	16	.87	16	1.61
Feb. 2	.89	May 1	.83	Aug. 1	5.85	Nov. 1	.94
17	.29	16	1.59	16	7.02	16	1.26
Mar. 1	.74	June 2	1.08	Sept. 1	9.50	Dec. 1	2.34
17	.68	16	1.03	16	11.43		

3. B. H. Foster. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 34, T. 31 S., R. 21 E. Records available: 1943-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	6.78	Apr. 1	2.06	July 1	1.94	Oct. 1	6.64
17	1.19	17	2.92	16	1.44	16	4.81
Feb. 2	1.03	May 1	1.98	Aug. 1	5.79	Nov. 1	2.80
17	1.94	16	3.03	16	6.33	16	3.74
Mar. 1	1.98	June 2	2.02	Sept. 1	7.72	Dec. 1	4.43
17	1.93	16	1.66	16	8.33		

4. Roy Schierenberg. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, T. 32 S., R. 21 E. Records available: 1943-49.

Jan. 2	11.20	Apr. 1	7.42	July 1	7.07	Oct. 1	11.02
17	10.08	17	8.12	16	6.76	16	10.73
Feb. 2	9.40	May 1	7.31	Aug. 1	10.87	Nov. 1	10.04
17	8.18	16	8.01	16	9.98	16	10.26
Mar. 1	8.04	June 2	7.49	Sept. 1	10.58	Dec. 1	10.79
17	8.01	16	6.98	16	10.91		

Leavenworth County

Highest and lowest water levels for the period of record
in 2 wells in Leavenworth County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
8-22-7c	2	1.44	Apr. 15, 1949	9.53	Nov. 27, 1948
10-22-34ad	2	1.11	July 3, 1948	2.91	Aug. 25, 1948

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for the period of record, in 2 wells in Leavenworth County

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise for period of record
8-22-7c	8.09	7.92	3.91
10-22-34ad	1.80	1.35	1.64

8-22-7c. Mrs. Joe Kennedy. SW $\frac{1}{4}$ of sec. 7, T. 8 S., R. 22 E. Records available: 1943-49. Feb. 9, 4.87; Apr. 15, 1.44; June 13, 3.12; July 15, 1.61.

10-22-34ad. A. K. Mussett. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 34, T. 10 S., R. 22 E. Records available: 1948-49. Feb. 9, 2.75; Apr. 15, 1.54; June 13, 2.18; July 15, 1.15.

Lincoln County

Highest and lowest water levels for the period of record
in 15 wells in Lincoln County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
11-7-32dc	3	73.18	July 11, 1949	74.67	Sept. 8, 1947
12-6-12cd	3	11.64	Aug. 9, 1948	15.52	Jan. 12, 1948
12-6-16cc	3	20.08	July 11, 1949	24.87	Nov. 28, 1947
12-7-18aa	3	20.15	July 24, 1947	23.43	Nov. 23, 1947
12-7-19dd	3	9.80	July 11, 1949	13.18	Jan. 12, 1948
12-7-23aa	3	8.36	Apr. 26, 1949	13.43	Jan. 12, 1948
12-7-34ad	3	49.90	Aug. 9, 1948	50.84	Feb. 21, 1947
12-8-6aa	3	5.92	Apr. 28, 1947	10.53	Sept. 8, 1947
12-8-8cd	3	12.50	July 11, 1949	14.30	Jan. 12, 1948
12-3-11cb	3	15.62	July 11, 1949	19.35	Jan. 12, 1948
12-9-10ad	3	17.90	July 11, 1949	20.26	Jan. 12, 1948
					Apr. 6, 1948

Highest and lowest water levels for the period of record
in 15 wells in Lincoln County--Continued

Well	Length of record (years)	Highest level	Date	Lowest level	Date
12-10-8bb	3	13.52	July 11, 1949	16.58	Jan. 12, 1948
12-10-13aa	3	16.92	July 11, 1949	24.48	Jan. 12, 1948
12-10-17ab	3	24.99	July 11, 1949	28.49	Dec. 7, 1948
12-10-21dd	3	25.98	July 24, 1947	27.85	Apr. 26, 1949

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for the period of record, in 15 wells in Lincoln County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
11-7-32dc	1.49	+0.01	+0.05
12-6-12cd	3.88	-1.03	-1.21
12-6-16cc	4.79	+1.91	-1.40
12-7-18aa	3.28	-.25	-2.42
12-7-19dd	3.38	-.70	+.34
12-7-23aa	5.07	-.19	+1.87
12-7-34ad	.94	-.23	+.57
12-8-6aa	4.61	-.47	-1.86
12-8-8cd	1.80	+.70	+.37
12-8-11cb	3.73	-.59	-.66
12-9-10ad	2.36	-.38	+.65
12-10-8bb	3.06	+1.03	+.80
12-10-13aa	7.56	+.23	+3.89
12-10-17ab	3.50	+2.99	+.66
12-10-21dd	1.87	+.22	-.23

11-7-32dc. Owner unknown. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 32, T. 11 S., R. 7 W. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 26	73.85	Aug. 22	73.80	Dec. 27	74.29
July 11	73.18	Oct. 25	73.92		

12-6-12cd. Harry W. Woody. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 12, T. 12 S., R. 6 W. Records available: 1947-49.

Apr. 26	12.79	Aug. 22	12.82	Dec. 14	14.80
July 11	11.82	Oct. 25	13.49		

12-6-16cc. Owner unknown. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 16, T. 12 S., R. 6 W. Records available: 1947-49.

Apr. 26	21.68	Aug. 22	21.92	Dec. 27	22.58
July 11	20.08	Oct. 25	22.45		

12-7-18aa. Mr. Hendrickson. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T. 12 S., R. 7 W. Records available: 1947-49.

Apr. 26	21.50	Aug. 22	22.20	Dec. 27	23.04
July 11	20.45	Oct. 25	22.60		

12-7-19dd. Owner unknown. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19, T. 12 S., R. 7 W. Records available: 1947-49.

Apr. 26	9.84	Aug. 22	10.80	Dec. 27	12.26
July 11	9.80	Oct. 25	12.14		

12-7-23aa. Owner unknown. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 23, T. 12 S., R. 7 W. Records available: 1947-49.

Apr. 26	8.36	Aug. 22	10.06	Dec. 27	11.53
July 11	9.26	Oct. 25	11.05		

12-7-34ad. Owner unknown. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 34, T. 12 S., R. 7 W. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 26	50.25	Aug. 22	50.08	Dec. 27	50.27
July 11	50.15	Oct. 25	50.27		

12-8-6aa. Owner unknown. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T. 12 S., R. 6 W. Records available: 1947-49.

Apr. 26	6.10	Aug. 22	8.59	Dec. 27	8.20
July 11	7.37	Oct. 25	8.18		

12-8-8cd. Owner unknown. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 8, T. 12 S., R. 8 W. Records available: 1947-49.

Apr. 26	14.02	Aug. 22	12.68	Dec. 27	13.30
July 11	12.50	Oct. 25	12.85		

12-8-11cb. Owner unknown. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 11, T. 12 S., R. 8 W. Records available: 1947-49.

Apr. 26	16.68	Aug. 22	18.50	Dec. 27	19.03
July 11	15.62	Oct. 25	18.21		

12-9-10ad. Owner unknown. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 10, T. 12 S., R. 9 W. Records available: 1947-49.

Apr. 26	18.26	Aug. 22	18.14	Dec. 27	18.96
July 11	17.90	Oct. 25	18.56		

12-10-8bb. G. Meitler. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 8, T. 12 S., R. 10 W. Records available: 1947-49.

Apr. 26	15.84	Aug. 22	14.62	Dec. 27	15.40
July 11	13.52	Oct. 25	14.90		

12-10-13aa. Saenger Estate. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 12 S., R. 10 W. Records available: 1947-49.

Apr. 26	19.60	Aug. 22	17.84	Dec. 27	20.19
July 11	16.92	Oct. 25	19.22		

12-10-17ab. Gorge School district. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 17, T. 12 S., R. 10 W. Records available: 1947-49.

Apr. 26	25.95	Aug. 22	25.48	Dec. 27	25.50
July 11	24.99	Oct. 25	25.50		

12-10-21dd. Owner unknown. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 21, T. 12 S., R. 10 W. Records available: 1947-49.

Apr. 26	27.85	Aug. 22	26.64	Dec. 27	27.10
July 11	26.42	Oct. 25	26.92		

a Mill pumping.

Linn County

Highest and lowest water levels for the period of record
in 3 wells in Linn County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
19-24-36aa	2	9.41	July 6, 1948	13.81	Nov. 26, 1948
22-25-6cb	2	9.91	Apr. 18, 1949	13.21	Nov. 26, 1948
23-25-7daa	2	1.64	Mar. 1, 1949	17.21	May 5, 1948

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 3 wells in Linn County

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise (+) or net decline (-) for period of record
19-24-36aa	4.40	2.48	-0.49
22-25-6cb	4.30	.74	+51
23-25-7aa	15.57	6.34	+8.26

19-24-36aa. Mr. Newby. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 36, T. 19 S., R. 24 E. Records available: 1948-49. Mar. 1, 9.80; Apr. 18, 9.97; June 10, 9.68; July 21, 11.33.

22-25-6cb. E. C. Smith. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 6, T. 22 S., R. 25 E. Records available: 1948-49. Mar. 1, 10.83; Apr. 18, 9.91; June 10, 10.63; July 21, 12.47.

23-25-7daa. O. M. Grigsby. NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 7, T. 23 S., R. 25 E. Records available: 1948-49. Mar. 1, 1.64; Apr. 18, 3.18; June 10, 6.57; July 21, 8.95.

Logan County

Highest and lowest water levels for the period of record in 2 wells in Logan County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
1	7	96.42	Jan. 22, 1944	99.29	Jan. 6, 1947
2	7	59.39	Oct. 13, 1948	65.21	Feb. 27, 1944

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 2 wells in Logan County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise for period of record
1	2.87	+0.62	0.05
2	5.82	-.28	.10

1. Octon Estate. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 2, T. 11 S., R. 32 W. Records available: 1942-49. Jan. 5, 97.41; Apr. 14, 97.12; July 19, 97.10; Oct. 10, 97.17.

2. J. J. Schultz. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 34, T. 11 S., R. 32 W. Records available: 1942-49. Jan. 5, 59.85; Apr. 14, 59.80; Oct. 12, 59.67.

4. L. L. Garrison Estate. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 13 S., R. 32 W. Records available: 1942-48. Measurements discontinued Oct. 13, 1948.

McPherson County

Highest and lowest water levels for the period of record in 5 wells in McPherson County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
243	12	80.19	July 8, 1949	83.48	Jan. 6, 1948
249	12	25.26	July 3, 1945	a 36.13	Apr. 2, 1940
262	12	21.51	Aug. 3, 1945	b 41.35	Nov. 2, 1938
309	12	20.74	Apr. 8, 1944	37.26	Mar. 26, 1938
311	12	7.09	May 4, 1945	13.06	Dec. 31, 1939

a Pumping recently.

b Pumping.

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 5 wells in McPherson County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise for period of record
243	3.29	+0.37	2.63
249	10.87	+2.59	2.89
262	19.84	+8.74	5.63
309	16.52	+8.1	3.45
311	5.97	-1.01	1.30

243. Emma Bergstrom. SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 5, T. 19 S., R. 3 W. Records available: 1937-49. Apr. 10, 80.58; July 8, 80.19; Oct. 4, 80.46.

249. Prudential Life Insurance Co. SE corner sec. 5, T. 19 S., R. 3 W. Records available: 1937-49. Apr. 10, 31.56; July 8, 31.20; Oct. 4, 30.80.

260. John Rawson. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 33, T. 17 S., R. 4 W. Records available: 1937-49. No measurement made in 1949.

262. P. A. Olsen. NE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, T. 18 S., R. 5 W. Records available: 1937-49. Apr. 10, 26.19; July 8, 24.83; Oct. 4, 24.45.

309. Mrs. Ida Tuxhorn. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 9, T. 21 S., R. 4 W. Records available: 1937-49. Apr. 10, 29.06; July 8, 28.54; Oct. 4, 28.63.

310. City of Moundridge. SW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 23, T. 21 S., R. 2 W. Records available: 1938-49. No measurement made in 1949.

311. City of Moundridge. SW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 23, T. 21 S., R. 2 W. Records available: 1938-49. Apr. 10, 9.58; July 8, 11.06; Oct. 4, 10.90.

Smoky Hill Valley

Highest and lowest water levels for the period of record in 4 wells in McPherson County, Smoky Hill Valley

Well	Length of record (years)	Highest level	Date	Lowest level	Date
17-3-17dd	4	24.98	July 1, 1949	28.18	Dec. 1, 1947
17-3-18dd	4	25.98	July 1, 1949	28.40	Jan. 6, 1948
17-3-30dd	4	28.49	July 1, 1949	31.36	Jan. 6, 1948
17-4-25dd	4	23.43	Aug. 22, 1949	25.80	Jan. 6, 1948

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 4 wells in McPherson County, Smoky Hill Valley

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise for period of record
17-3-17dd	3.20	1.31	0.79
17-3-18dd	3.32	.95	.99
17-3-30dd	2.87	1.34	.95
17-4-25dd	2.37	.88	.21

17-3-17dd. Geological Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 17, T. 17 S., R. 3 W. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 27	25.88	Aug. 22	26.10	Dec. 22	26.17
July 1	24.98	Oct. 24	26.33		

17-3-18dd. Geological Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T. 17 S., R. 3 W. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 27	26.02	Aug. 22	25.93	Dec. 22	26.45
July 1	25.08	Oct. 24	26.34		

17-3-30dd. Geological Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 30, T. 17 S., R. 3 W. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 27	29.39	Aug. 22	29.08	Dec. 22	29.58
July 1	28.49	Oct. 24	29.54		

17-4-25dd. Geological Survey, U. S. Dept. of Interior. SE. corner sec. 25, T. 17 S., R. 4 W. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 27	24.02	Aug. 22	23.43	Dec. 22	24.09
July 1	23.46	Oct. 24	23.84		

Meade County

By Janet S. Olson

Highest and lowest water levels for the period of record
in 6 wells in Meade County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
33	11	37.33	Nov. 23, 1942	39.05	Dec. 20, 1949
34	11	143.28	Dec. 14, 1944	150.39	Oct. 29, 1939
45	11	.42	Dec. 20, 1949	4.10	Aug. 31, 1939
61	11	58.60	Dec. 20, 1949	60.77	May 17, 1940
77	11	60.53	June 20, 1949	67.12	Sept. 9, 1943
234	11	11.92	Dec. 26, 1949	15.52	Aug. 31, 1949

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for the period of record, in 6 wells in Meade County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
33	1.42	-1.11	-1.46
34	7.11	-.11	-.22
45	3.68	+2.20	+2.95
61	2.17	+.63	+1.96
77	6.59	+.99	-11.90
234	3.60	+1.41	+3.60

33. W. L. Woodruff. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 34, T. 33 S., R. 26 W. Records available: 1939-49. Dec. 20, 39.05.

34. School district. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 17, T. 33 S., R. 27 W. Records available: 1939-49. June 20, 146.90.

45. Joseph Roche. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 31, T. 30 S., R. 27 W. Records available: 1939-49. Mar. 8, 1.77; June 21, 0.65; Sept. 15, 0.85; Dec. 20, 0.42.

55. C. W. Farris. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 30 S., R. 28 W. Records available: 1939-49. Measurements discontinued in 1949.

61. John Meyer. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 26, T. 31 S., R. 27 W. Records available: 1939-49. Mar. 8, 59.18; Sept. 15, 58.88; Dec. 20, 58.60.

77. J. W. Wood. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 4, T. 32 S., R. 28 W. Records available: 1939-49. June 20, 60.53; Sept. 15, 61.22.

234. Christopher Sobba. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 23, T. 30 S., R. 27 W. Records available: 1939-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	13.23	13.04	13.04	12.96	12.79	12.47	12.15	12.75	.....	.....	12.01
2	.....	13.20	13.04	13.01	12.98	12.81	12.57	12.16	12.65	.....	.....	12.01
3	.....	13.19	13.03	13.03	13.00	12.80	12.57	12.17	12.62	.....	.....	12.03
4	.....	13.20	13.02	13.03	12.98	12.77	12.54	12.15	12.55	.....	.....	12.03
5	.....	13.20	13.02	13.03	12.99	12.68	12.49	12.15	12.52	.....	.....	12.01
6	13.25	13.20	13.06	13.02	13.00	12.69	12.46	12.16	12.48	.....	.....	11.98
7	13.25	13.18	13.05	13.02	12.94	12.67	12.44	12.16	12.45	.....	.....	12.01
8	13.21	13.22	13.02	13.02	12.95	12.66	12.43	12.15	12.42	.....	.....	12.01
9	13.27	13.24	13.03	13.03	12.99	12.65	12.45	12.11	12.41	.....	.....	11.98
10	13.30	13.24	13.04	13.06	13.00	12.66	12.40	12.11	12.41	.....	.....	11.93
11	13.27	13.17	13.04	13.06	12.99	12.64	12.37	12.11	12.30	.....	.....	12.01
12	13.25	13.20	13.04	13.03	12.99	12.60	12.23	12.19	12.21	.....	.....	12.03
13	13.22	13.21	13.06	13.01	12.97	12.61	12.24	12.44	.....	.....	.....	12.04
14	13.20	13.19	13.07	13.03	12.94	12.61	12.24	12.58	12.24	12.08	.....	12.02
15	13.25	13.18	13.09	13.04	12.94	12.61	12.24	12.63	12.23	12.08	.....	12.04
16	13.28	13.21	13.03	12.99	12.83	12.58	12.24	12.76	12.19	12.04	.....	11.96
17	13.27	13.20	13.04	13.01	12.81	12.62	12.23	12.82	12.14	12.04	.....	11.98
18	13.23	13.17	13.05	13.01	12.83	12.62	12.24	.....	12.18	12.03	.....	11.99
19	13.23	13.18	13.05	12.99	12.82	12.59	12.24	.....	12.18	12.03	.....	11.99
20	13.19	13.17	13.05	12.98	12.82	12.59	12.26	.....	12.15	12.03	.....	11.97
21	13.17	13.14	13.08	12.99	12.77	12.59	12.26	.....	12.17	12.06	.....	11.95
22	13.17	13.13	13.09	13.05	12.83	12.58	12.17	.....	12.20	12.06	.....	11.95
23	13.17	13.00	13.06	13.07	12.83	12.56	12.18	.....	12.21	12.05	.....	11.95
24	13.20	13.10	13.09	13.07	12.82	12.55	12.25	.....	12.21	12.05	11.95	11.96
25	13.20	13.10	13.09	13.07	12.83	12.59	12.25	.....	12.21	12.02	11.95	11.96
26	13.17	13.07	13.04	13.08	12.81	12.61	12.22	.....	12.23	12.03	11.94	11.92
27	13.12	13.07	13.04	13.08	12.81	12.64	12.17	.....	12.26	12.00	11.93	11.95
28	13.21	13.07	13.04	13.00	12.79	12.65	12.18	.....	12.28	11.99	11.99	11.96
29	13.21		13.05	12.98	12.78	12.45	12.19	.....	12.27	.....	12.01	11.95
30	13.19		13.02	12.95	12.80	12.46	12.20	.....	12.23	.....	12.00	11.96
31	13.23		13.04		12.80		12.19	.....		.....		11.97

Miami County

Highest and lowest water levels for the period of record
in 1 well in Miami County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
16-25-5ccc	2	2.64	Mar. 1, 1949	5.35	Oct. 15, 1948

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 1 well in Miami County

Well	Difference between highest and lowest levels	Net rise in 1949	Net decline for period of record
16-25-5ccc	2.71	1.04	0.70

16-25-5ccc. C. E. Moews. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 5, T. 16 S., R. 25 E. Records available: 1948-49. Mar. 1, 2.64; Apr. 18, 2.97; June 10, 2.71; July 21, 4.24.

Mitchell County

By Janet S. Olson

Highest and lowest water levels for the period of record
in 11 wells in Mitchell County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
6-8-34cc	3	a 16.65	July 29, 1947	a 18.30	Sept. 29, 1947
6-9-27ab	4	22.36	June 24, 1947	31.10	May 11, 1935
6-9-30da	3	26.35	June 29, 1949	29.30	Nov. 29, 1948
7-6-30bc	3	20.60	Dec. 10, 1946	30.32	July 28, 1948
7-6-34cb	3	22.18	June 29, 1949	32.19	Nov. 29, 1948
7-7-7aa	3	28.16	July 29, 1947	30.35	Apr. 21, 1949
7-7-15dc	3	19.47	July 28, 1948	22.90	May 27, 1948
7-8-5cb	3	23.53	June 29, 1949	29.18	Nov. 29, 1948
7-9-2bc	3	27.06	June 29, 1949	32.54	Nov. 29, 1948
7-10-10cc	3	25.25	July 29, 1948	26.84	Oct. 14, 1946
8-6-12dd	3	31.76	Mar. 30, 1948	34.13	Sept. 29, 1947

a Pumping.

Difference between highest and lowest recorded water levels and net change
in water level, in 1949 and for the period of record, in 11 wells in
Mitchell County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
6-8-34cc	1.65	+0.20	+0.28
6-9-27ab	8.74	-.72	+3.58
6-9-30da	2.95	+2.03	-.11
7-6-30bc	9.72	-.14	+.95
7-6-34cb	10.01	+4.55	-3.29
7-7-7aa	2.19	+.36	+.18
7-7-15dc	3.43	+.81	-.11
7-8-5cb	5.65	+1.68	-2.46
7-9-2bc	5.48	+4.41	+.22
7-10-10cc	1.59	+.06	+.96
8-6-12dd	2.37	+.02	+.03

6-8-34cc. Owner unknown. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 34, T. 6 S., R. 8 W. Records
available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 21	a 17.62	July 30	17.85	Dec. 28	17.80
June 29	17.62	Oct. 26	17.50		

a Pumping.

6-9-27ab. L. Lowdermilk. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 27, T. 6 S., R. 9 W. Records
available: 1935-49.

Apr. 21	25.68	July 30	25.28	Dec. 28	26.39
June 29	24.00	Oct. 26	25.25		

6-9-30da. Owner unknown. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 30, T. 6 S., R. 9 W. Records
available: 1947-49.

Apr. 21	28.83	July 30	26.60	Dec. 28	27.27
June 29	26.35	Oct. 26	26.75		

7-6-30bc. Dan F. Gise. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 30, T. 7 S., R. 6 W. Records
available: 1947-49.

Apr. 21	a 29.19	July 30	26.48	Dec. 28	27.60
June 29	a 25.70	Oct. 26	28.76		

a Pumping.

7-6-34cb. Owner unknown. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 34, T. 7 S., R. 6 W. Records available: 1947-49. June 29, 22.18; Aug. 30, 26.50; Oct. 26, 27.70; Dec. 28, 27.64.

7-7-7aa. A. McDysan. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 7, T. 7 S., R. 7 W. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 21	30.35	July 30	28.69	Dec. 28	28.92
June 29	28.63	Oct. 26	28.88		

7-7-15dc. Owner unknown. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 7 S., R. 7 W. Records available: 1947-49.

Apr. 21	21.50	July 30	21.18	Dec. 28	21.47
June 29	20.04	Sept. 26	21.26		

7-8-5cb. Paul Meers. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 5, T. 7 S., R. 8 W. Records available: 1947-49.

Apr. 21	28.48	July 30	26.55	Dec. 28	27.50
June 29	23.53	Oct. 26	26.63		

7-9-2bc. F. Day. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 2, T. 7 S., R. 9 W. Records available: 1947-49. Apr. 21, 31.22; June 29, 27.06; July 30, 28.82; Oct. 26, 28.13.

7-10-10cc. J. P. Kaster. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 10, T. 7 S., R. 10 W. Records available: 1947-49.

Apr. 21	25.57	July 30	25.90	Dec. 28	25.88
June 29	25.28	Oct. 26	25.60		

8-6-12dd. Mrs. R. E. McKee. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 12, T. 8 S., R. 6 W. Records available: 1947-49.

Apr. 21	31.88	Aug. 30	31.85	Dec. 28	31.87
June 29	31.87	Oct. 26	31.85		

Morton County

Highest and lowest water levels for the period of record
in 3 wells in Morton County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
22	11	71.58	Feb. 12, 1947	75.45	Jan. 6, 1941
65	11	47.29	May 25, 1948	53.75	Mar. 13, 1941
117	11	a 160.60	May 19, 1949	166.54	May 25, 1948

a Pumping recently.

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 3 wells in Morton County

Well	Difference between highest and lowest level	Net rise in 1949	Net rise for period of record
22	3.87	0.29	1.01
65	6.46	.10	1.45
117	5.94	1.22	3.98

22. A. F. Wilcox. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 14, T. 31 S., R. 43 W. Records available: 1939-49. Feb. 9, 73.55; May 20, 72.94; Aug. 17, 72.78.

65. John Hentschel. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 8, T. 33 S., R. 42 W. Records available: 1939-49. Feb. 9, 51.80; May 20, 52.04; Aug. 17, 51.84; Nov. 16, 51.76.

117. W. C. Washburn. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 4, T. 34 S., R. 42 W. Records available: 1939-49. Feb. 8, 161.30; May 19, 160.60, pumping recently; Aug. 17, 162.13, pumping recently.

Ness County

Highest and lowest water levels for the period of record
in 2 wells in Ness County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
1	9	30.18	Jan. 14, 1949 Oct. 21, 1949	34.91	Aug. 27, 1940
2	9	22.46	July 23, 1949	25.85	Nov. 8, 1943

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 2 wells in Ness County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise for period of record
1	4.73	+0.04	4.73
2	3.39	-.54	2.16

1. J. E. Ficken. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 32, T. 20 S., R. 23 W. Records available: 1940-49. Jan. 14, 30.18; Apr. 22, 30.40; Oct. 21, 30.18.

2. C. L. Whitley. SW. corner sec. 20, T. 20 S., R. 22 W. Records available: 1940-49. Jan. 14, 22.70; Apr. 22, 22.49; July 23, 22.46; Oct. 21, 23.24.

Norton County

Highest and lowest water levels for the period of record
in 11 wells in Norton County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
1-21-35dc	4	29.34	Dec. 30, 1949	33.74	Oct. 7, 1948
2-21-1bb	4	20.99	July 7, 1949	27.01	June 24, 1946
2-21-2bd	4	22.14	July 7, 1949	26.19	Oct. 7, 1948
2-21-11aa	4	28.66	Dec. 30, 1949	34.85	Oct. 7, 1948
2-21-18aa	3	42.44	Aug. 29, 1947	43.22	Nov. 30, 1948
2-21-19dd	4	63.12	Dec. 30, 1949	64.90	Oct. 7, 1947
2-22-11dc	3	65.65	Sept. 2, 1949	67.35	May 7, 1947
2-22-26ac	3	27.21	July 31, 1947	29.80	Apr. 26, 1949
2-22-28aa	3	47.30	July 31, 1947	49.70	Sept. 2, 1949
2-23-36cd	4	26.93	July 31, 1947	29.30	Oct. 7, 1948
3-23-8aa	3	37.35	July 7, 1949	38.80	Dec. 1, 1948

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 11 wells in Norton County

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise (+) or net decline (-) for period of record
1-21-35dc	4.40	4.40	+3.90
2-21-1bb	6.02	2.03	+2.41
2-21-2bd	4.05	1.77	+2.23
2-21-11aa	6.19	4.41	+2.78
2-21-18aa	.78	.63	+.45
2-21-19dd	1.78	.71	+.84
2-22-11dc	1.70	1.02	+1.25
2-22-26ac	2.59	.92	+.86
2-22-28aa	2.40	.11	+.43
2-23-36cd	2.37	1.33	+.62
3-23-8aa	1.45	.80	-.15

1-21-35dc. H. S. Whitaker. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 35, T. 1 S., R. 21 W. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 25	31.62	Sept. 1	30.08	Dec. 30	29.34
July 7	30.74	Oct. 27	29.70		

2-21-1bb. Verner Ross. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 1, T. 2 S., R. 21 W. Records available: 1946-49.

Apr. 25	24.40	Sept. 1	22.68	Dec. 30	23.43
July 7	20.99	Oct. 27	23.16		

2-21-2bd. Vernon J. Hamilton. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 2, T. 2 S., R. 21 W. Records available: 1946-49.

Apr. 25	24.25	Sept. 1	23.14	Dec. 30	23.53
July 7	22.14	Oct. 27	23.37		

2-21-11aa. W. B. Woods. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 11, T. 2 S., R. 21 W. Records available: 1945-49.

Apr. 25	31.55	Sept. 1	29.34	Dec. 30	28.66
July 7	28.67	Oct. 27	28.73		

2-21-18aa. Mr. Hrypkema. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T. 2 S., R. 21 W. Records available: 1947-49.

Apr. 26	43.04	Sept. 2	42.55	Dec. 30	42.59
July 7	42.49	Oct. 27	42.66		

2-21-19dd. Owner unknown. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19, T. 2 S., R. 21 W. Records available: 1946-49.

Apr. 25	63.92	Sept. 2	63.44	Dec. 30	63.12
July 7	64.23	Oct. 27	63.30		

2-22-11dc. Owner unknown. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 11, T. 2 S., R. 22 W. Records available: 1946-49.

Apr. 26	66.86	Sept. 2	65.65	Dec. 30	65.92
July 7	65.88	Oct. 27	65.80		

2-22-26ac. Percy G. Whitaker. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 26, T. 2 S., R. 22 W. Records available: 1946-49.

Apr. 26	29.80	Sept. 2	28.12	Dec. 30	28.45
July 7	27.28	Oct. 27	28.30		

2-22-28aa. H. E. Fisher. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 28, T. 2 S., R. 22 W. Records available: 1947-49.

Apr. 26	49.10	Sept. 2	49.70	Dec. 30	48.74
July 7	48.95	Oct. 27	48.70		

2-23-36cd. R. L. Brooks. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 36, T. 2 S., R. 23 W. Records available: 1946-49. Apr. 26, 28.39; July 7, 27.38; Sept. 2, 27.71; Oct. 27, 27.83.

3-23-8aa. Owner unknown. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 8, T. 3 S., R. 23 W. Records available: 1947-49.

Apr. 26	38.25	Sept. 2	37.75	Dec. 30	38.00
July 7	37.35	Oct. 27	38.05		

Osborne County

Highest and lowest water levels for the period of record
in 11 wells in Osborne County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
6-12-20bb	4	36.30	Nov. 26, 1945	43.06	Jan. 28, 1946
6-12-23cd	4	24.37	July 8, 1949	27.17	Apr. 26, 1946
6-13-12ba	4	37.85	Mar. 31, 1948	40.95	Dec. 15, 1947
7-11-21da	3	31.83	June 29, 1949	33.86	Nov. 29, 1948
7-11-26dd	3	18.79	Nov. 20, 1946	25.67	Aug. 27, 1947
7-12-28ab	3	31.57	Oct. 26, 1949	34.60	Jan. 7, 1947
7-13-15da	3	36.20	Nov. 7, 1946	a 38.94	Sept. 30, 1947
					b Apr. 23, 1949
7-14-6cb	3	22.70	Sept. 1, 1949	24.19	Nov. 29, 1948
7-14-10dd	3	31.29	Oct. 26, 1949	32.22	Feb. 4, 1947
7-15-8cc	3	22.60	Oct. 26, 1949	23.64	Feb. 16, 1948
7-15-12dc	3	b 10.60	June 29, 1949	b 20.85	Apr. 23, 1948

a Pumping recently.

b Pumping.

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 11 wells in Osborne County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
6-12-20bb	6.76	+2.25	-2.00
6-12-23cd	2.80	+.91	+1.92
6-13-12ba	3.10	+1.54	+2.40
7-11-21da	2.03	+1.04	+.61
7-11-26dd	6.88	-.18	-.06
7-12-28ab	3.03	+1.54	+1.50
7-13-15da	2.74	+.31	-1.36
7-14-6cb	1.49	+1.19	+.70
7-14-10dd	.93	+.87	+1.11
7-15-8cc	1.04	+.40	+.59
7-15-12dc	12.94	-1.45	-5.36

6-11-34aa. W. E. Lowdon. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 34, T. 6 S., R. 11 W. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	36.33	Apr. 7	36.30	July 2	35.76	Oct. 2	35.11
10	36.48	14	36.33	10	35.61	11	35.14
17	36.45	22	36.32	17	35.47	18	35.07
25	36.52	28	36.36	25	35.39	26	35.05
Feb. 2	36.48	May 5	36.35	Aug. 2	35.27	Nov. 3	35.03
10	36.34	13	36.38	9	35.21	10	34.99
18	36.49	20	36.40	18	35.16	17	35.05
25	36.50	27	36.35	27	35.13	25	35.06
Mar. 8	36.41	June 3	36.39	Sept. 5	35.10	Dec. 2	35.06
16	36.36	11	36.22	12	35.09	9	35.02
24	36.29	17	36.06	19	35.09	16	35.06
Apr. 1	36.35	25	35.90	26	35.07	23	35.17

6-11-36aa. J. M. Irey. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 36, T. 6 S., R. 11 W. Records available: 1946-48. No measurement made in 1949.

6-12-20bb. C. M. Storer. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 20, T. 6 S., R. 12 W. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 21	40.15	July 8	37.60	Oct. 27	38.05
Apr. 25	40.17	Sept. 1	38.15	Dec. 29	38.30

6-12-23cd. C. Fink. $SE\frac{1}{2}SW\frac{1}{2}$ sec. 23, T. 6 S., R. 12 W. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 21	25.71	July 8	24.37	Oct. 27	24.65
Apr. 25	25.67	Sept. 1	24.82	Dec. 29	24.92

6-13-12ba. F. L. Smith. $NE\frac{1}{2}NW\frac{1}{2}$ sec. 12, T. 6 S., R. 13 W. Records available: 1946-49.

Apr. 25	39.07	Sept. 1	38.64	Dec. 29	38.10
July 8	38.49	Oct. 27	38.38		

7-11-21da. J. O. Harrison. $NE\frac{1}{2}SE\frac{1}{2}$ sec. 21, T. 7 S., R. 11 W. Records available: 1947-49.

Apr. 23	32.52	Sept. 1	32.06	Dec. 29	32.82
June 29	31.93	Oct. 26	32.53		

7-11-26dd. Published incorrectly as 7-11-23dd in previous reports. Owner unknown. $SE\frac{1}{2}SE\frac{1}{2}$ sec. 23, T. 7 S., R. 11 W. Records available: 1947-49. Apr. 23, 21.33; Oct. 26, 19.68, pumping; Dec. 29, 19.86.

7-12-28ab. C. E. Galley. $NW\frac{1}{2}NE\frac{1}{2}$ sec. 28, T. 7 S., R. 13 W. Records available: 1947-49.

Apr. 23	33.30	Sept. 1	32.32	Dec. 29	32.34
June 29	32.89	Oct. 26	31.57		

7-13-15da. J. W. Bathurst. $NE\frac{1}{2}SE\frac{1}{2}$ sec. 15, T. 7 S., R. 13 W. Records available: 1947-49.

Apr. 23	38.94	Sept. 1	37.85	Dec. 29	38.16
June 29	36.47	Oct. 26	37.58		

a Pumping.

7-14-6cb. J. A. Guttery. $NW\frac{1}{2}SW\frac{1}{2}$ sec. 6, T. 7 S., R. 14 W. Records available: 1947-49.

Apr. 23	23.68	Sept. 1	22.70	Dec. 29	23.00
June 29	22.95	Oct. 26	22.85		

7-14-10dd. John Clark. $SE\frac{1}{2}SE\frac{1}{2}$ sec. 10, T. 7 S., R. 14 W. Records available: 1947-49.

Apr. 23	31.83	Sept. 1	31.32	Dec. 29	31.30
June 29	31.65	Oct. 26	31.29		

7-15-8cc. F. Dibble. $SW\frac{1}{2}SW\frac{1}{2}$ sec. 15, T. 7 S., R. 15 W. Records available: 1947-49.

Apr. 23	23.54	Sept. 1	22.63	Dec. 29	22.70
June 29	22.75	Oct. 26	22.60		

a Pumping.

7-15-12dc. Tom Hale, Jr. $SW\frac{1}{2}SE\frac{1}{2}$ sec. 12, T. 7 S., R. 15 W. Records available: 1947-49. June 29, 10.60, pumping; Sept. 1, 10.92; Oct. 26, 12.20, pumping; Dec. 29, 17.70.

Pawnee County

Highest and lowest water levels for the period of record in 3 wells in Pawnee County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
7	9	23.69	Aug. 23, 1948	29.17	Jan. 20, 1948
8	9	a 7.45	Nov. 8, 1947	18.32	Sept. 30, 1940
14	6	14.70	Aug. 18, 1949	17.72	July 21, 1944
			Sept. 20, 1949		

a Pumping recently.

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 3 wells in Pawnee County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise for period of record
7	5.48	+0.11	1.43
8	10.87	-.73	4.47
14	3.02	+.94	3.01

7. Ralph Lupfer. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T. 22 S., R. 17 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	26.20	Apr. 20	25.90	July 21	24.76	Oct. 19	25.68
Feb. 10	26.25	May 17	25.74	Aug. 18	25.28	Nov. 17	25.84
Mar. 10	25.90	June 23	24.14	Sept. 20	25.55	Dec. 22	26.07

8. F. B. Reed. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 6, T. 22 S., R. 16 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	12.70	Apr. 20	12.66	July 21	10.66	Oct. 19	12.95
Feb. 10	12.74	May 17	12.92	Aug. 18	11.76	Nov. 17	13.02
Mar. 10	12.50	June 23	7.86	Sept. 20	12.59	Dec. 22	13.32

14. B. Unruh. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 29, T. 21 S., R. 15 W. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	14.77	Apr. 20	14.97	July 21	14.83	Oct. 19	14.73
Feb. 10	15.05	May 17	14.92	Aug. 18	14.70	Nov. 17	14.72
Mar. 10	14.98	June 23	14.87	Sept. 20	14.70	Dec. 22	14.71

Phillips County

Highest and lowest water levels for the period of record in 13 wells in Phillips County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
1-19-19cc	2	14.95	July 7, 1949	20.18	Nov. 30, 1948
1-20-13ad	3	25.05	July 31, 1947	29.35	Oct. 8, 1948
1-20-30cc	2	77.03	Dec. 30, 1949	78.43	Jan. 1, 1948
1-20-34ba	2	26.58	July 7, 1949	30.50	Oct. 8, 1948
4-17-31bc	4	50.40	July 8, 1949	52.72	Oct. 6, 1948
4-18-30ab	4	9.43	July 8, 1949	20.29	Sept. 25, 1946
4-19-21dd	4	8.80	July 8, 1949	15.10	Sept. 25, 1946
4-19-35ab	4	12.17	Aug. 29, 1947	14.17	Nov. 30, 1948
4-20-21cc	4	48.46	Mar. 31, 1948	48.92	Feb. 6, 1946
5-16-3aa	4	37.75	July 8, 1949	44.76	Dec. 17, 1945
5-17-1aa	4	.73	Mar. 31, 1948	7.60	Nov. 21, 1945
5-17-3cd	4	1.18	May 6, 1947	27.00	June 12, 1946
5-17-12aa	4	51.49	Dec. 29, 1949	54.20	Sept. 30, 1947

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 13 wells in Phillips County

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise (+) or net decline (-) for period of record
1-19-19cc	5.23	3.49	+0.81
1-20-13ad	4.30	1.60	+1.08
1-20-30cc	1.35	.27	+.79
1-20-34ba	3.92	2.80	+.97
4-17-31bc	2.32	1.44	+.11
4-18-30ab	10.86	5.72	+7.60
4-19-21dd	6.30	2.72	+1.49

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 13 wells in Phillips County--Continued

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise (+) or net decline (-) for period of record
4-19-35ab	2.00	0.83	-0.68
4-20-21cc	.46	.04	+.39
5-16-3aa	7.01	3.85	+3.29
5-17-1aa	6.87	3.37	+3.57
5-17-3cd	25.82	5.91	+5.56
5-17-12aa	2.71	.71	+1.40

1-19-19cc. Al Skelton. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19, T. 1 S., R. 19 W. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 25	17.70	Sept. 1	15.60	Dec. 30	16.69
July 7	14.95	Oct. 27	16.18		

1-20-13ad. Owner unknown. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 1 S., R. 20 W. Records available: 1947-49.

Apr. 25	27.17	Sept. 1	27.99	Dec. 30	26.63
July 7	25.95	Oct. 27	26.89		

1-20-30cc. Owner unknown. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 30, T. 1 S., R. 20 W. Records available: 1947-49.

Apr. 25	77.30	Sept. 1	77.18	Dec. 30	a 77.08
July 7	77.18	Oct. 27	77.20		

a Pumping.

1-20-34ba. Harold Parker. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 34, T. 1 S., R. 20 W. Records available: 1947-49.

Apr. 25	28.77	Sept. 1	27.22	Dec. 30	27.08
July 7	26.58	Oct. 27	27.34		

4-17-25cd. Minnie Gray. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 25, T. 4 S., R. 17 W. Records available: 1946-48. Measurements discontinued Nov. 30, 1948.

4-17-31bc. C. B. Brower. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 31, T. 4 S., R. 17 W. Records available: 1946-49.

Apr. 25	a 51.40	Sept. 1	51.40	Dec. 29	51.28
July 8	50.40	Oct. 27	51.43		

a Pumping slowly.

4-18-30ab. Sutley Estate. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 30, T. 4 S., R. 18 W. Records available: 1946-49.

Apr. 25	14.54	Sept. 1	10.38	Dec. 29	11.70
July 8	9.43	Oct. 27	10.94		

4-19-21dd. F. Kinter. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 21, T. 4 S., R. 19 W. Records available: 1946-49.

Apr. 25	a 13.55	Sept. 1	9.45	Dec. 29	9.39
July 8	8.80	Oct. 27	9.63		

a Pumping.

4-19-35ab. Glen Seeger. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 35, T. 4 S., R. 19 W. Records available: 1946-49. July 8, 13.63; Sept. 1, 13.15; Oct. 27, 13.09; Dec. 29, 13.34, pumping.

4-20-21cc. F. Albright. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T. 4 S., R. 20 W. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 25	48.53	Sept. 1	48.60	Dec. 29	48.53
July 8	48.60	Oct. 27	48.60		

5-16-3aa. M. W. Hardman. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 3, T. 5 S., R. 16 W. Records available: 1946-49.

Apr. 25	41.59	Sept. 1	39.68	Dec. 29	40.75
July 8	37.75	Oct. 27	40.42		

5-17-1aa. Phillips County. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, T. 5 S., R. 17 W. Records available: 1946-49.

Apr. 25	4.57	Sept. 1	1.57	Dec. 29	4.03
July 8	1.94	Oct. 27	2.88		

5-17-3cd. Owner unknown. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, T. 5 S., R. 17 W. Records available: 1946-49.

Apr. 25	5.08	Sept. 1	5.95	Dec. 29	6.18
July 8	1.94	Oct. 27	5.94		

5-17-12aa. E. R. Downing and others. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 12, T. 5 S., R. 17 W. Records available: 1946-49.

Apr. 25	51.83	Sept. 1	51.79	Dec. 29	51.49
July 8	52.09	Oct. 27	51.55		

Reno County

Highest and lowest water levels for the period of record
in 1 well in Reno County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
86	8	10.30	Oct. 26, 1946	19.08	Mar. 31, 1948

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 1 well in Reno County

Well	Difference between highest and lowest level	Net rise in 1949	Net rise for period of record
86	8.78	1.77	0.85

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. Jan. 4, 16.43; Apr. 10, 15.83; July 8, 15.91; Oct. 3, 16.45.

Republic County

Highest and lowest water levels for the period of record
in 5 wells in Republic County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
1-5-7bb	3	4.79	June 20, 1949	8.83	Nov. 2, 1948
1-5-7cb	3	18.83	Oct. 28, 1949	22.04	Feb. 7, 1949
158	8	11.17	June 25, 1945	15.97	Feb. 25, 1943
188	8	9.40	June 28, 1947	18.40	Nov. 25, 1943
202	8	33.50	Aug. 3, 1943	35.74	Aug. 29, 1943
			Apr. 27, 1946		

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 5 wells in Republic County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise for period of record
1-5-7bb	4.04	+2.09	1.71
1-5-7cb	3.21	+2.39	.76
158	4.80	+1.36	2.59
188	9.00	-.70	1.72
202	2.25	+1.10	.55

1-5-7bb. Geological Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, T. 1 S., R. 5 W. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 7	8.68	May 26	5.50	Aug. 17	6.60	Nov. 12	5.95
Mar. 24	7.74	June 20	4.79	Sept. 22	6.54	Dec. 5	6.36
Apr. 27	7.23	July 29	5.95	Oct. 28	5.50	28	6.70

1-5-7cb. Geological Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 7, T. 1 S., R. 5 W. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 7	22.04	May 26	20.75	Aug. 17	19.40	Nov. 12	19.02
Mar. 24	21.85	June 20	19.93	Sept. 22	19.35	Dec. 5	19.30
Apr. 27	21.35	July 29	19.16	Oct. 28	18.83	28	19.59

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 1949.

158. A. J. Dickerman. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 1, T. 3 S., R. 4 W. Records available: 1942-49. Measurements discontinued Aug. 25, 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	14.80	Mar. 25	15.70	June 25	13.31	Aug. 25	13.36
Feb. 25	14.72	May 25	14.08	July 25	13.26		

158a. A. J. Dickerman. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 1, T. 3 S., R. 4 W. Bored observation well, diameter 8 inches, depth 43 feet below land-surface datum. Measuring point, top of platform, 0.5 foot above land-surface datum. Records available: 1949. Oct. 1, 17.06; Oct. 25, 16.77; Nov. 25, 16.25; Dec. 25, 15.78.

188. City of Courtland. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 16, T. 3 S., R. 5 W. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 10	14.50	June 30	13.20	Oct. 26			16.60
Apr. 25	14.30	Sept. 1	16.90				

202. G. E. Erickson. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 36, T. 4 S., R. 5 W. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	34.10	Apr. 27	34.20	Aug. 29	34.00	Oct. 27	34.00
Feb. 27	34.10	May 24	34.00	Sept. 28	34.20	Dec. 23	34.00
Mar. 28	35.40	July 29	34.00				

209. Glenn B. Snapp. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 1, T. 4 S., R. 3 W. Records available: 1942-47. No measurement made in 1949.

230. Lloyd Blosser. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T. 4 S., R. 4 W. Records available: 1942-45. No measurement made in 1949.

Rice County

Highest and lowest water levels for the period of record
in 12 wells in Rice County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
18-6-13bc	4	11.62	Aug. 6, 1948	13.14	Jan. 6, 1948
18-7-10ad	4	37.18	Aug. 5, 1948	43.54	Sept. 16, 1946
18-9-22ad	4	8.88	Aug. 6, 1948	11.50	Dec. 11, 1947
19-6-13dd	4	40.25	July 6, 1949	41.12	Jan. 6, 1948
19-6-17ba	4	5.80	Aug. 6, 1948	13.17	Oct. 3, 1947
19-7-24ab	4	33.30	Aug. 6, 1948	36.12	Feb. 27, 1947
19-7-34ab	4	43.16	July 6, 1949	44.68	Dec. 29, 1946
19-10-22bc	4	1.56	Aug. 5, 1948	8.00	Oct. 4, 1946
20-6-23cd	4	4.57	Apr. 7, 1948	18.83	Feb. 27, 1947
20-6-36bb	4	4.20	Aug. 6, 1948	16.06	Oct. 3, 1947
20-10-28ba	4	9.64	Aug. 5, 1948	13.39	Oct. 4, 1946
21-8-20cc	4	5.57	Aug. 29, 1949	8.76	Oct. 3, 1947

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 12 wells in Rice County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
18-6-13bc	1.52	-0.46	-0.21
18-7-10ad	6.36	+0.01	+0.99
18-9-22ad	2.62	-0.40	+0.35
19-6-13dd	.87	+0.14	+0.15
19-6-17ba	7.37	-0.91	+2.15
19-7-24ab	2.82	-1.28	+0.25
19-7-34ab	1.52	+0.18	+1.29
19-10-22bc	6.44	-0.75	-0.55
20-6-23cd	14.26	-2.27	-0.17
20-6-36bb	11.86	-0.34	+0.64
20-10-28ba	3.75	-0.34	+1.33
21-8-20cc	3.19	-0.95	+1.40

18-6-13bc. F. Kasperek. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 13, T. 18 S., R. 6 W. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 27	12.21	Aug. 29	11.93	Dec. 23	12.19
July 6	11.70	Oct. 24	12.00		

18-7-10ad. G. J. O'Neill. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 10, T. 18 S., R. 7 W. Records available: 1946-49.

Apr.	42.52	Aug. 29	42.54	Dec. 23	42.54
Jul.	42.52	Oct. 24	42.57		

18-8-10dc. C. Dobrinski. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 18 S., R. 8 W. Records available: 1946-48. No measurement made in 1949.

18-9-22ad. O. Brownlee. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 22, T. 18 S., R. 9 W. Records available: 1946-49. Apr. 27, 10.08; July 6, 9.56; Aug. 29, 10.35. Measurements discontinued Aug. 29, 1949.

18-10-2ca. The Bushton News. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 2, T. 18 S., R. 10 W. Records available: 1946-48. Measurements discontinued Dec. 2, 1948.

19-6-13dd. W. M. Myers. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 19 S., R. 6 W. Records available: 1946-49. July 6, 40.25; Aug. 29, 40.39; Oct. 24, 40.70; Dec. 23, 40.50.

19-6-17ba. City of Little River. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 17, T. 19 S., R. 6 W. Records available: 1946-49. July 6, 8.87; Aug. 29, 9.81; Oct. 24, 10.28. Measurements discontinued Oct. 24, 1949.

19-7-24ab. J. P. Pulliam. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 24, T. 19 S., R. 7 W. Records available: 1946-49. July 6, 34.28; Aug. 29, 35.01; Sept. 24, 35.54.

19-7-34ab. B. J. Good. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 34, T. 19 S., R. 7 W. Records available: 1946-49. July 6, 43.16. Measurements discontinued July 6, 1949.

19-10-22bc. J. R. Bowman. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22, T. 19 S., R. 10 W. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 27	3.20	Aug. 29	3.54	Dec. 23	4.93
July 6	2.86	Oct. 24	4.52		

20-6-23cd. School district. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 23, T. 20 S., R. 6 W. Records available: 1946-49.

Apr. 27	6.00	Aug. 29	12.18	Dec. 23	17.12
July 6	8.25	Oct. 24	15.03		

20-6-36bb. J. W. Harder. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 36, T. 20 S., R. 6 W. Records available: 1946-49.

Apr. 27	5.60	Aug. 29	7.41	Dec. 23	7.71
July 6	6.33	Oct. 24	7.12		

20-10-28ba. H. Thompson. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 28, T. 20 S., R. 10 W. Records available: 1946-49.

Apr. 27	11.35	Aug. 29	11.77	Dec. 23	12.00
July 6	10.30	Oct. 24	11.74		

21-8-20cc. R. J. Dill. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 20, T. 21 S., R. 8 W. Records available: 1946-49.

Apr. 27	5.57	Aug. 29	6.77	Dec. 23	6.98
July 6	5.86	Oct. 24	7.23		

Russell County

Highest and lowest water levels for the period of record
in 8 wells in Russell County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
45	8	18.39	July 12, 1945	24.28	Aug. 20, 1941
80	8	3.40	Apr. 14, 1942	7.76	June 29, 1943
81	8	101.85	Aug. 29, 1941	134.71	July 10, 1947
117	8	4.70	Apr. 13, 1942	10.61	Dec. 20, 1943
146	8	14.59	Apr. 8, 1943	16.20	Sept. 1, 1942
148	8	3.81	Apr. 8, 1943	7.92	Oct. 2, 1941
149	8	18.18	July 22, 1949	21.54	June 29, 1943
152	8	10.30	Apr. 14, 1948	26.45	Sept. 22, 1941

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 8 wells in Russell County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
45	5.89	+0.29	+3.23
80	4.36	+.68	-.11
81	32.86	+2.02	-19.03
117	5.91	+.31	+.78
146	1.61	-.16	+.61
148	4.11	+.43	+1.17
149	3.36	+.68	+2.39
152	16.15	+.96	+10.42

45. Jacob Flogler. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 11, T. 15 S., R. 14 W. Records available: 1941-49. Jan. 13, 23.25; Apr. 21, 22.76; July 22, 20.43; Oct. 20, 21.05.

80. Joseph Furthmyer, Jr. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 9, T. 14 S., R. 15 W. Records available: 1941-49. Jan. 13, 5.40; Apr. 21, 5.11; July 22, 5.32; Oct. 20, 4.82.

81. Joseph Furthmyer, Jr. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 9, T. 14 S., R. 15 W. Records available: 1941-49. July 22, 121.55; Oct. 20, 120.88.

95. George J. Gobleman. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 28, T. 11 S., R. 15 W. Records available: 1941-48. Measurements discontinued in 1949.

117. Marie Dutt and others. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T. 13 S., R. 14 W. Records available: 1941-49. Jan. 13, 6.67; Apr. 21, 5.96; July 22, 9.75; Oct. 20, 5.80.

126. Bertha Dewald. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 19, T. 13 S., R. 13 W. Records available: 1941-48. Measurements discontinued in 1949.

146. D. P. Steinle. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 24, T. 14 S., R. 12 W. Records available: 1941-49. Jan. 13, 15.60; Apr. 21, 15.41; July 22, 15.29; Oct. 20, 15.19.

148. John Penex. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 14 S., R. 13 W. Records available: 1941-49. Jan. 13, 6.19; Apr. 21, 6.15; July 22, 6.28; Oct. 20, 6.71.

149. George Boxberger, Jr. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 22, T. 14 S., R. 14 W. Records available: 1941-49. Jan. 13, 19.10; Apr. 21, 18.78; July 22, 18.18; Oct. 20, 18.47.

152. D. D. Beisel. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 14 S., R. 12 W. Records available: 1941-49. Jan. 13, 17.28; Apr. 21, 16.99; July 22, 11.47; Oct. 20, 16.03.

Saline County

Highest and lowest water levels for the period of record in 11 wells in Saline County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
15-2-17cd	4	21.41	July 1, 1949	25.44	Jan. 6, 1948
15-2-18cd	4	22.12	July 1, 1949	25.50	Jan. 6, 1948
15-2-30dc	4	19.06	July 1, 1949	22.42	Sept. 5, 1946
15-3-24dd	4	17.49	Aug. 6, 1948	20.64	Jan. 6, 1948
15-3-36ab	4	23.54	Aug. 6, 1948	27.35	Jan. 6, 1948
16-2-7bb	4	18.50	Aug. 6, 1948	22.08	Aug. 1, 1946
16-2-18cc	4	22.28	July 1, 1949	26.52	Dec. 1, 1947
					Jan. 6, 1948
16-2-19ab	4	19.94	July 1, 1949	24.67	Dec. 1, 1947
16-3-13cd	4	20.70	Apr. 1, 1946	24.38	Jan. 6, 1948
16-3-26dc	4	18.04	July 1, 1949	21.60	Jan. 6, 1948
16-3-34dd	4	19.76	July 1, 1949	23.15	Jan. 6, 1948

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 11 wells in Saline County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
15-2-17cd	4.03	+0.49	+0.24
15-2-18cd	3.33	+ .66	+ .11
15-2-30dc	3.36	+ .03	+ .33
15-3-24dd	3.15	- .71	- .99
15-3-36ab	3.81	- .97	- 1.07
16-2-7bb	3.78	.00	+ .48
16-2-18cc	4.24	+ 1.38	+ 1.40
16-2-19ab	4.73	+ 1.73	+ 1.69
16-3-13cd	3.68	+ .07	- 2.29
16-3-26dc	3.56	+ .80	+ .66
16-3-34dd	3.39	+ .62	+ 1.09

15-2-17cd. Geological Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 17, T. 15 S., R. 2 W. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 27	22.15	Aug. 22	22.42	Dec. 22	23.49
July 1	21.41	Oct. 24	23.12		

15-2-18cd. Geological Survey, U. S. Dept. of Interior. SE corner SW $\frac{1}{4}$ sec. 18, T. 15 S., R. 2 W. Records available: 1946-49.

Apr. 27	23.20	Aug. 22	24.29	Dec. 22	24.01
July 1	22.12	Oct. 24	23.98		

15-2-30dc. Geological Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 30, T. 15 S., R. 2 W. Records available: 1946-49.

Apr. 27	19.72	Aug. 22	20.11	Dec. 22	21.05
July 1	19.06	Oct. 24	20.95		

15-3-24dd. Geological Survey, U. S. Dept. of Interior. SE corner sec. 24, T. 15 S., R. 24 W. Records available: 1946-49.

Apr. 27	17.72	Aug. 22	18.88	Dec. 22	19.89
July 1	18.22	Oct. 24	19.63		

15-3-36ab. Geological Survey, U. S. Dept. of Interior. NW corner NE $\frac{1}{4}$ sec. 36, T. 15 S., R. 3 W. Records available: 1946-49.

Apr. 27	24.22	Aug. 22	25.49	Dec. 22	26.37
July 1	24.58	Oct. 24	26.07		

16-2-7bb. Geological Survey, U. S. Dept. of Interior. NW corner sec. 7, T. 16 S., R. 2 W. Records available: 1946-49.

Apr. 27	18.60	Aug. 22	18.96	Dec. 22	19.72
July 1	18.38	Oct. 24	19.60		

16-2-18cc. Geological Survey, U. S. Dept. of Interior. SW corner sec. 18, T. 16 S., R. 2 W. Records available: 1946-49.

Apr. 27	24.27	Aug. 22	24.55	Dec. 22	24.40
July 1	22.28	Oct. 24	24.63		

16-2-19ab. Geological Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 19, T. 16 S., R. 2 W. Records available: 1946-49.

Apr. 27	22.24	Aug. 22	22.48	Dec. 22	22.21
July 1	19.94	Oct. 24	22.54		

16-3-13cd. Geological Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ SW $\frac{1}{4}$
sec. 13, T. 16 S., R. 3 W. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 27	21.84	Aug. 22	21.92	Dec. 22	22.99
July 1	21.67	Oct. 24	22.63		

16-3-26dc. Geological Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SE $\frac{1}{4}$
sec. 26, T. 16 S., R. 3 W. Records available: 1946-49.

Apr. 27	19.06	Aug. 22	19.11	Dec. 22	19.94
July 1	18.04	Oct. 24	19.74		

16-3-34dd. Geological Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ SE $\frac{1}{4}$
sec. 34, T. 16 S., R. 3 W. Records available: 1946-49.

Apr. 27	20.40	Aug. 22	20.31	Dec. 22	21.47
July 1	19.76	Oct. 24	21.22		

Scott County

Highest and lowest water levels for the period of record
in 9 wells in Scott County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
1	18	55.89	May 14, 1934	68.46	Nov. 4, 1947
1A	9	53.42	May 16, 1934 Aug. 16, 1940 Aug. 18, 1940	58.64	Jan. 6, 1949 Jan. 7, 1949 Jan. 8, 1949 Jan. 9, 1949 Dec. 11, 1947
2	16	30.95	Apr. 25, 1939	40.81	Sept. 16, 1946
2A	6	31.58	Aug. 10, 1944	38.33	Oct. 13, 1948
3	10	67.94	May 30, 1934	91.99	Feb. 17, 1949
19	10	45.38	Apr. 18, 1940	58.09	Dec. 16, 1949
32	10	37.79	Apr. 20, 1939	44.88	
48	10	29.10	Apr. 22, 1939		
50	10	93.60	July 19, 1949	31.63	July 13, 1948
			Oct. 12, 1949	97.95	Aug. 6, 1943

Difference between highest and lowest recorded water levels and net change
in water level, in 1949 and for period of record, in 9 wells in Scott
County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
1	12.57	+0.67	-8.90
1A	5.22	+5.4	-4.63
2	9.86	+1.97	-6.58
2A	6.75	+0.8	-4.70
3	24.05	+2.46	-10.11
19	12.71	+2.07	-4.14
32	7.09	-1.30	-7.09
48	2.53	+1.09	+1.11
50	4.35	+1.39	+4.14

1. Mrs. Rosine Smith. NW. corner sec. 9, T. 20 S., R. 33 W. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	65.74	Apr. 14	65.75	July 19	65.30	Oct. 12	65.65
Feb. 17	65.60	May 24	65.57	Aug. 11	67.08	Nov. 23	65.70
Mar. 4	65.54	June 17	65.35	Sept. 28	65.70	Dec. 16	65.23

1A. Division of Water Resources, Kansas State Board of Agriculture.
NW $\frac{1}{4}$ sec. 3, T. 20 S., R. 33 W. Records available: 1940-49.

Mean daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Nov.	Dec.
1	58.62	.....	58.53	58.34	58.20	58.02	58.17	58.04	58.46	.....	58.31
2	58.62	.....	58.52	58.34	58.20	58.03	58.17	58.06	58.47	.....	58.30
3	58.63	.....	58.52	58.33	58.18	58.04	58.17	58.07	58.47	.....	58.30
4	58.63	.....	58.51	58.32	58.18	58.05	58.15	58.10	58.49	.....	58.30
5	58.63	.....	58.52	58.31	58.18	58.03	58.15	58.13	58.49	58.45	58.28
6	58.64	.....	58.51	58.30	58.17	58.06	58.14	58.15	58.50	58.47	58.28
7	58.64	.....	58.50	58.29	58.17	58.08	58.13	58.16	58.50	58.47	58.27
8	58.64	.....	58.50	58.29	58.17	58.09	58.12	58.17	58.51	58.47	58.26
9	58.64	.....	58.49	58.28	58.16	58.11	58.11	58.18	58.53	58.47	58.25
10	58.63	.....	58.48	58.28	58.16	58.12	58.10	58.21	58.55	58.46	58.24
11	58.63	.....	58.47	58.27	58.16	58.13	58.09	58.23	58.55	58.44	58.24
12	58.62	.....	58.46	58.26	58.15	58.14	58.07	58.24	58.56	58.44	58.24
13	58.61	.....	58.46	58.25	58.15	58.16	58.06	58.25	58.57	58.42	58.24
14	58.61	.....	58.45	58.25	58.15	58.18	58.05	58.26	58.57	58.41	58.23
15	58.60	.....	58.44	58.25	58.13	58.19	58.05	58.27	58.57	58.41	58.22
16	58.60	.....	58.43	58.25	58.13	58.20	58.04	58.28	58.57	58.40	58.22
17	.....	58.60	58.43	58.25	58.13	58.20	58.03	58.30	58.58	58.39	58.21
18	.....	58.60	58.42	58.25	58.12	58.19	58.02	58.32	58.58	58.38	58.20
19	.....	58.60	58.41	58.23	58.12	58.18	58.00	58.34	58.57	58.38	58.19
20	.....	58.59	58.40	58.23	58.11	58.18	57.99	58.35	58.58	58.37	58.18
21	.....	58.59	58.39	58.23	58.10	58.19	57.98	58.36	58.58	58.35	58.18
22	.....	58.58	58.38	58.23	58.09	58.19	57.98	58.36	58.59	58.34	58.17
23	.....	58.57	58.36	58.21	58.08	58.18	57.98	58.37	58.59	58.33	58.16
24	.....	58.57	58.36	58.21	58.08	58.18	57.98	58.38	58.59	58.33	58.14
25	.....	58.57	58.36	58.21	58.07	58.18	57.97	58.40	58.59	58.32	58.13
26	.....	58.56	58.35	58.21	58.07	58.18	57.96	58.40	58.60	58.32	58.11
27	.....	58.56	58.35	58.21	58.06	58.18	57.96	58.41	58.60	58.32	58.10
28	.....	58.54	58.34	58.21	58.05	58.18	57.97	58.42	58.60	58.32	58.08
29	.....	.....	58.35	58.21	58.05	58.17	57.98	58.43	.....	58.32	58.08
30	.....	.....	58.35	58.20	58.04	58.18	58.01	58.44	.....	58.31	58.08
31	.....	.....	58.35	.....	58.03	.....	58.02	58.46	.....	.....	58.08

2. E. E. Coffin. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 25, T. 18 S., R. 33 W. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	39.84	May 24	39.40	Aug. 11	38.35	Nov. 23	38.26
Feb. 17	39.77	June 17	39.08	Sept. 28	38.52	Dec. 16	38.03
Apr. 14	39.85	July 19	38.80				

2A. Division of Water Resources, Kansas State Board of Agriculture.
NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 26, T. 18 S., R. 35 W. Records available: 1944-49.

Mean daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Sept.	Oct.	Nov.	Dec.
1	.....	.....	37.11	36.93	36.94	37.33	36.76	.....	37.62	36.35	36.00
2	.....	.....	37.11	36.92	36.96	37.34	36.76	.....	37.62	36.33	35.99
3	.....	.....	37.09	36.91	36.96	37.36	36.75	.....	37.57	36.32	35.98
4	.....	.....	37.08	36.92	37.01	37.38	36.75	.....	37.57	36.29	36.00
5	37.48	.....	37.07	36.91	37.06	37.40	36.75	.....	37.52	36.28	35.94
6	37.48	.....	37.08	36.89	37.15	37.42	36.75	.....	37.43	36.27	35.94
7	37.46	.....	37.06	36.89	37.16	37.42	36.75	.....	37.33	36.23	35.95
8	37.44	.....	37.04	36.89	37.15	37.41	36.74	.....	37.95	37.24	35.94
9	.....	.....	37.05	36.89	37.16	37.39	36.74	.....	37.90	37.13	35.89
10	.....	.....	37.05	36.90	37.17	37.36	.....	.....	37.83	37.06	35.86
11	.....	.....	37.03	36.90	37.17	37.32	.....	.....	37.76	37.03	36.15
12	.....	.....	37.02	36.88	37.17	37.29	.....	.....	37.70	36.98	36.18
13	.....	.....	37.03	36.86	37.17	37.25	.....	.....	37.64	36.93	36.17
14	.....	.....	37.03	36.90	37.18	37.22	.....	.....	37.59	36.91	36.13
15	.....	.....	37.02	36.93	37.18	37.19	.....	.....	37.54	36.87	36.12
16	.....	.....	37.00	36.91	37.17	37.14	.....	.....	37.48	36.82	36.13
17	.....	37.20	37.00	36.93	37.18	37.10	.....	.....	37.42	36.79	36.12
18	.....	37.20	36.99	36.95	37.20	37.07	.....	.....	37.37	36.76	36.09

2A--Continued.

Mean daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Sept.	Oct.	Nov.	Dec.
19	37.20	36.99	36.97	37.23	37.04	36.58	37.33	36.75	36.07	35.83
20	37.20	36.96	36.96	37.24	37.00	36.64	37.27	36.75	36.08	35.83
21	37.19	36.96	36.98	37.25	36.96	36.78	37.24	36.75	36.09	35.83
22	37.19	36.97	36.98	37.30	36.91	36.91	37.23	36.74	36.05	35.86
23	37.17	36.94	36.99	37.31	36.86	36.96	37.26	36.72	36.03	35.84
24	37.17	36.94	36.98	37.35	36.82	36.99	37.28	36.68	36.04	35.81
25	37.15	36.95	36.96	37.35	36.79	36.98	37.33	36.63	36.05	35.83
26	37.14	36.94	36.96	37.35	36.78	36.98	37.38	36.57	36.03	35.83
27	37.14	36.93	36.99	37.34	36.78	36.98	37.45	36.53	36.00	35.83
28	37.13	36.93	36.99	37.34	36.77	37.00	37.52	36.48	36.01	35.82
29		36.94	36.95	37.34	36.77	37.04	37.55	36.43	36.03	35.82
30		36.91	36.94	37.34	36.76	37.12	37.58	36.42	36.01	35.80
31		36.93		37.33		37.20		36.38		35.80

3. Claude Hughes. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 21, T. 18 S., R. 33 W. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	80.45	Apr. 14	79.20	June 17	79.79	Nov. 23	82.11
Feb. 17	79.20	May 24	86.64	Oct. 12	83.20	Dec. 16	80.39
Mar. 4	79.40						

19. J. Dyer. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 12, T. 18 S., R. 33 W. Records available: 1939-49.

Jan. 5	51.80	Apr. 14	52.57	July 20	51.26	Oct. 12	52.25
Feb. 17	58.09	May 24	52.05	Aug. 11	54.95	Nov. 23	51.54
Mar. 4	51.60	June 17	51.19	Sept. 28	54.87	Dec. 16	51.23

32. E. J. Roark. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 25, T. 19 S., R. 33 W. Records available: 1939-49.

Jan. 5	41.28	Apr. 14	43.50	July 20	43.22	Oct. 12	43.25
Feb. 17	43.70	May 24	43.62	Aug. 11	43.14	Nov. 23	43.05
Mar. 4	43.50	June 17	43.48	Sept. 23	43.14	Dec. 16	44.88

39. Henry F. Poos Estate. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 26, T. 18 S., R. 31 W. Records available: 1939-48. Measurements discontinued in 1949.

48. P. Roark. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T. 20 S., R. 33 W. Records available: 1939-49.

Jan. 5	30.47	Apr. 14	30.60	July 19	29.10	Oct. 12	23.36
Feb. 17	30.54	May 24	30.29	Aug. 11	29.86	Nov. 23	29.29
Mar. 4	30.50	June 17	29.65	Sept. 23	29.38	Dec. 16	29.41

50. F. M. Houston. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 28, T. 19 S., R. 32 W. Records available: 1939-49. Jan. 5, 94.79; Apr. 14, 94.76; July 19, 95.66; Oct. 12, 93.60.

Sedgwick County

By Janet S. Olson

Highest and lowest water levels for the period of record in 38 wells in Sedgwick County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
11	12	51.34	Aug. 4, 1945	60.34	July 4, 1938
12	12	11.06	May 7, 1944	18.99	Apr. 1, 2, 8, 9, 11, 12, 1938
			May 8, 1944		
26	12	5.00	July 24, 1948	23.69	Jan. 29, 1939
307	12	9.08	May 12, 13, 20, 1945	15.59	Dec. 30, 1949

Highest and lowest water levels for the period of record
in 38 wells in Sedgwick County--Continued

Well	Length of record (years)	Highest level	Date	Lowest level	Date
502	7	12.49	Mar. 20, 1944	29.70	Dec. 2, 1949
800	11	7.27	Apr. 29, 1944	19.59	Apr. 5, 1940
802	11	1.96	May 11, 1942	8.46	Dec. 5, 1947
804	11	.59	May 2, 1945	5.20	Sept. 26, 1946
805	11	1.57	May 2, 1945	6.27	Sept. 26, 1946
807	11	18.98	July 6, 1949	23.04	Jan. 2, 1941
808	11	19.51	Sept. 2, 1949	23.47	Mar. 4, 1941
809	11	6.77	Apr. 29, 1944	14.68	Jan. 2, 1941
810	11	1.94	Apr. 28, 1944	13.38	Aug. 30, 1940
811	11	3.69	May 6, 1944	9.57	July 8, 1946
812	11	6.54	Sept. 27, 1948	18.91	Feb. 10, 1947
814	11	9.64	June 28, 1949	17.11	Dec. 3, 1940
					Jan. 2, 1941
					Feb. 3, 1941
					Mar. 4, 1941
815	11	7.65	May 11, 1945	14.04	May 1, 1941
					Jan. 24, 1941
					Jan. 31, 1941
816	11	5.32	Oct. 8, 1945	18.47	Mar. 3, 1947
825	11	5.49	May 4, 1945	15.18	Dec. 5, 1947
828	11	2.12	May 9, 1944	13.01	Nov. 5, 1940
830	11	23.52	June 2, 1949	28.62	Oct. 3, 1940
834	11	5.87	May 8, 1944	11.70	Oct. 3, 1940
838	11	17.90	July 6, 1949	26.91	Nov. 5, 1940
840	11	.53	Sept. 30, 1945	8.30	Mar. 10, 1947
842	11	1.39	Oct. 4, 1945	7.62	Sept. 26, 1946
845	11	8.20	May 8, 1944	16.16	Dec. 5, 1947
846	11	11.55	May 8, 1944	18.21	Dec. 5, 1947
847	11	10.55	May 8, 1944	18.36	Dec. 5, 1947
870	11	1.64	Nov. 9, 1945	8.30	Nov. 5, 1940
M-27b	2	12.62	Oct. 4, 1948	18.96	Sept. 2, 1949
M-28b	2	12.55	Oct. 4, 1948	16.50	Sept. 30, 1949
M-29b	2	9.81	Oct. 4, 1948	23.57	Nov. 30, 1949
M-30b	2	7.59	Oct. 4, 1948	17.43	Nov. 30, 1949
M-31b	2	8.34	July 7, 1948	13.73	Oct. 31, 1949
M-32b	2	8.40	Oct. 4, 1948	13.19	Oct. 31, 1949
M-33b	2	6.82	Oct. 4, 1948	12.02	Nov. 30, 1949
M-34b	2	5.64	July 7, 1948	9.83	Nov. 12, 1947
					Nov. 30, 1949
M-35b	2	10.60	Sept. 2, 1949	13.20	Nov. 5, 1947

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for the period of record, in 38 wells in Sedgwick County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
11	9.00	-1.21	+4.49
12	7.93	-.82	+1.56
26	18.18	+.65	+4.76
307	6.51	-3.64	-3.06
502	7.21	-4.00	-14.09
800	12.42	+3.83	+0.80
802	6.50	+.06	-3.05
804	4.61	-.51	-1.28
805	4.70	+.10	-.51
807	5.06	+.65	+1.63
808	4.16	+3.16	+3.71
809	7.91	+.29	+1.86
810	11.44	-1.52	-1.03
811	5.88	-1.08	+.43
812	12.37	-.03	+4.10

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for the period of record, in 38 wells in Sedgwick County--Continued

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
814	7.47	+0.18	+4.22
815	6.39	+1.24	+2.68
816	13.15	-1.27	+1.59
825	9.69	+0.01	+4.57
826	10.89	+4.04	+3.26
830	5.30	+0.63	-1.11
834	5.83	+0.31	+1.81
838	9.01	+1.38	+4.00
840	7.77	+3.98	+7.12
842	6.23	-1.03	+0.36
845	7.96	-0.84	-1.21
846	6.86	+2.57	+2.06
847	7.81	+0.17	-0.32
870	6.66	-2.59	+0.19
M-27b	6.34	-3.88	-0.45
M-28b	3.95	-3.28	+0.17
M-29b	14.76	-14.76	-11.76
M-30b	10.04	-10.04	-5.83
M-31b	5.39	-4.74	-3.60
M-32b	4.79	-3.96	-1.56
M-33b	5.20	-2.65	+1.27
M-34b	4.19	-1.98	+1.02
M-35b	2.60	-1.51	+0.97

Pumpage from city of Wichita wells M-27 to M-35, in millions of gallons, in 1949

Well	Pumpage 1949	Total 1949
M-27	354.3	354.3
M-28	138.7	138.7
M-29	274.9	274.9
M-30	298.9	298.9
M-31	99.2	99.2
M-32	116.5	116.5
M-33	160.6	160.6
M-34	85.7	85.7
M-35	37.5	37.5
Total	1,566.3	1,566.3

11. J. H. Heim. SE. corner sec. 22, T. 26 S., R. 3 W. Records available: 1937-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 2	53.67	May 3	52.48	Dec. 10	54.75
Mar. 22	53.36	Oct. 6	54.49		

12. Dr. A. D. Updegraph. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 26, T. 25 S., R. 1 W. Records available: 1937-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	15.17	May 31	12.72	Aug. 31	14.65	Nov. 30	15.81
Mar. 31	15.30	June 27	13.90	Sept. 25	15.01	Dec. 23	16.04
Apr. 30	14.44	July 27	14.24	Oct. 7	15.18		

26. Wichita Water Co. SW $\frac{1}{4}$ sec. 18, T. 27 S., R. 1 W. Records available: 1937-49.

26--Continued.

Lowest daily water level, from recorder charts												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	12.17	10.39	8.19	13.73	.....	8.25	9.30	10.76	11.70	11.76	11.41	11.52
2	12.11	10.44	8.45	12.75	.....	8.09	9.45	10.82	11.71	11.80	11.45	11.51
3	12.10	10.56	.....	12.20	.....	8.24	9.58	10.88	11.72	11.82	11.45	11.53
4	12.10	10.65	.....	11.85	.....	8.46	9.70	10.93	11.73	11.84	11.44	.....
5	12.05	10.73	.....	11.61	.....	8.46	9.81	10.98	11.73	11.86	11.46	.....
6	11.97	10.80	.....	11.41	.....	8.06	9.93	11.04	11.68	11.90	11.46	.....
7	12.24	10.88	9.22	11.30	.....	7.82	10.10	11.07	11.69	11.94	11.45	11.55
8	12.17	10.95	9.34	11.21	.....	7.63	10.15	11.12	11.60	11.99	11.45	11.55
9	12.16	10.96	9.46	11.15	.....	7.51	10.21	11.15	11.52	12.00	11.46	11.54
10	12.08	10.96	9.56	11.12	.....	7.49	10.25	11.17	11.42	12.03	11.46	11.51
11	.....	10.76	9.63	11.06	.....	7.33	10.27	.....	11.39	12.03	.....	11.55
12	11.65	10.55	9.72	11.00	.....	7.14	10.27	.....	11.43	12.00	.....	11.56
13	11.60	9.95	9.80	10.97	.....	6.86	10.16	.....	11.44	11.95	.....	11.56
14	11.52	9.23	9.89	11.00	.....	6.80	10.09	.....	11.44	11.44	.....	11.56
15	11.43	9.25	9.94	11.00	.....	.....	10.13	.....	11.40	10.63	.....	11.55
16	11.35	9.23	10.00	10.00	.....	.....	10.21	.....	11.40	10.47	.....	11.52
17	11.10	9.13	10.11	11.01	9.86	.....	10.27	.....	11.43	10.63	.....	11.53
18	10.40	9.03	10.72	11.02	9.63	.....	10.34	.....	11.45	10.78	.....	11.53
19	10.37	8.70	10.56	11.03	9.43	.....	10.42	.....	11.46	10.89	.....	11.53
20	10.53	8.42	10.37	11.02	9.40	.....	10.44	.....	11.47	10.93	.....	11.51
21	10.53	8.41	10.41	11.02	9.24	.....	10.74	.....	11.49	11.05	.....	11.57
22	10.48	8.44	10.42	11.02	9.04	.....	10.74	.....	11.52	11.10	.....	11.67
23	10.35	8.41	10.41	11.03	8.66	.....	10.57	.....	11.55	11.35	.....	11.73
24	10.12	8.20	10.43	11.03	8.60	.....	10.64	11.65	11.57	11.19	.....	11.73
25	10.31	8.00	10.43	11.04	8.40	.....	10.70	11.67	11.60	11.24	.....	11.72
26	10.51	7.76	10.43	11.05	.....	.....	10.76	11.67	11.63	11.27	11.43	11.66
27	9.99	7.73	10.62	.....	.....	8.56	10.76	11.68	11.66	11.23	11.48	11.66
28	10.12	7.93	12.88	.....	.....	8.75	10.76	11.66	11.69	11.55	11.52	11.66
29	10.24	.....	14.13	.....	.....	8.94	10.75	11.66	11.72	11.36	11.52	11.65
30	10.28	.....	14.18	.....	.....	9.13	10.73	11.69	11.74	11.33	11.52	11.58
31	10.35	.....	14.47	.....	8.50	.....	10.71	11.70	.....	11.39	.....	11.52

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: 1937-49.

Lowest daily water level, from recorder charts									
Day	Jan.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	11.95	.....	11.57	11.84	12.65	14.53	14.30	14.91	15.01
2	11.93	.....	11.56	11.86	12.70	14.53	14.30	14.94	.....
3	11.93	.....	11.56	11.88	12.75	14.54	14.32	14.95	.....
4	11.95	.....	11.55	11.93	12.86	14.54	14.34	14.98	.....
5	11.96	.....	11.52	11.95	12.87	14.54	14.34	14.98	15.26
6	11.97	.....	11.47	11.96	13.03	14.54	14.38	14.98	15.26
7	11.87	.....	.....	12.02	12.92	14.54	14.41	14.98	15.31
8	12.00	.....	.....	12.02	13.01	14.58	14.42	15.01	15.34
9	12.04	13.02	.....	12.02	13.02	14.59	14.42	15.00	15.39
10	12.04	13.02	.....	12.02	13.03	14.60	14.41	14.92	15.39
11	12.04	12.99	.....	12.02	13.05	14.61	14.44	14.81	15.41
12	12.05	12.98	.....	12.02	.....	14.67	14.46	14.76	15.49
13	.....	12.97	.....	12.02	.....	14.62	14.46	14.75	15.50
14	.....	12.94	.....	12.02	.....	14.63	14.39	14.74	15.42
15	.....	12.92	.....	12.04	.....	14.66	.....	14.72	15.17
16	.....	12.89	.....	12.05	.....	14.66	.....	14.71	15.07
17	.....	12.62	.....	11.97	.....	14.56	.....	14.71	14.98
18	.....	12.57	.....	11.90	.....	14.47	.....	14.70	14.97
19	.....	12.47	.....	12.39	.....	14.43	.....	14.69	14.88
20	.....	12.38	.....	12.39	.....	14.40	.....	14.68	14.82
21	.....	12.16	.....	12.55	.....	14.36	.....	14.67	14.96
22	.....	12.07	.....	12.54	.....	14.16	.....	14.67	15.10
23	.....	11.97	.....	12.55	.....	14.15	.....	14.65	15.21
24	.....	11.89	.....	12.55	14.23	14.12	.....	14.64	15.32
25	.....	11.87	.....	12.58	14.26	14.15	.....	14.64	15.34
26	.....	.....	.....	12.62	14.27	14.00	.....	14.63	15.40
27	.....	.....	11.74	12.65	14.34	14.10	.....	14.63	15.44
28	.....	.....	11.75	12.68	14.37	14.16	14.88	14.63	15.48
29	.....	.....	11.75	12.68	14.42	14.23	14.88	14.82	15.50
30	.....	.....	11.79	12.60	14.47	14.28	14.90	14.96	15.59
31	.....	11.63	.....	12.61	14.51	.....	14.91	.....	15.60

502. Kansas Gas & Electric Co. NW. corner sec. 29, T. 26 S., R. 1 E. Records available: 1943-49. Pumping prior to each measurement.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	25.20	Apr. 1	24.40	July 1	25.00	Oct. 18	25.00
Feb. 4	23.00	May 9	22.50	Aug. 5	27.70	Nov. 11	26.90
Mar. 4	20.30	June 7	23.30	Sept. 9	27.20	Dec. 2	29.70

800. City of Wichita. SW. corner sec. 33, T. 26 S., R. 1 E. Records available: 1938-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 2	15.86	May 3	15.38	July 6	12.11
Mar. 22	15.67	June 2	13.21		

802. City of Wichita. NW. corner sec. 1, T. 27 S., R. 1 W. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	7.44	May 3	7.34	July 6	5.21	Dec. 9	7.73
Mar. 22	7.56	June 2	6.01	Nov. 10	7.39		

804. City of Wichita. SE. corner sec. 16, T. 26 S., R. 1 W. Records available: 1938-49.

Feb. 2	2.78	June 2	1.40	Sept. 2	2.69	Nov. 10	3.07
Mar. 22	2.36	July 6	1.62	Oct. 6	2.91	Dec. 9	3.37
May 3	2.61						

805. City of Wichita. NW. corner NE $\frac{1}{4}$ sec. 19, T. 26 S., R. 1 W. Records available: 1938-49.

Feb. 2	3.71	June 2	1.80	Sept. 2	3.18	Nov. 10	3.53
Mar. 22	3.86	July 6	2.70	Oct. 6	3.46	Dec. 9	3.62
May 3	3.71						

807. City of Wichita. NW. corner sec. 10, T. 26 S., R. 2 W. Records available: 1938-49.

Mar. 22	21.06	June 2	19.09	Sept. 2	19.53	Nov. 10	20.47
May 3	20.87	July 6	18.98	Oct. 6	20.40	Dec. 9	20.66

808. City of Wichita. SW. corner NW $\frac{1}{4}$ sec. 18, T. 26 S., R. 2 W. Records available: 1938-49.

Feb. 2	22.76	June 2	21.12	Sept. 2	19.31	Nov. 10	19.53
Mar. 22	22.76	July 6	20.86	Oct. 6	19.38	Dec. 9	19.73
May 3	22.38						

809. City of Wichita. NW. corner sec. 21, T. 28 S., R. 1 E. Records available: 1938-49.

Feb. 2	10.76	May 3	10.79	July 6	8.96	Oct. 6	10.30
Mar. 22	10.96	June 2	10.16	Sept. 2	9.74	Nov. 10	10.80

810. City of Wichita. NE. corner SE $\frac{1}{4}$ sec. 35, T. 26 S., R. 1 W. Records available: 1938-49.

Jan. 3	10.14	July 5	9.82	Sept. 22	11.14	Oct. 21	11.52
19	11.50	Aug. 31	10.80	30	11.33	Nov. 10	11.73
Feb. 8	11.66	Sept. 8	10.95	Oct. 7	11.33	Dec. 1	11.93
Mar. 28	10.33	15	11.06				

811. City of Wichita. SE. corner sec. 33, T. 25 S., R. 1 W. Records available: 1938-49.

Jan. 3	5.74	July 5	4.98	Sept. 15	5.99	Oct. 21	6.53
19	5.72	Aug. 31	5.75	30	6.31	Nov. 10	6.77
Feb. 8	5.46	Sept. 8	8.14	Oct. 7	6.39	Dec. 1	7.04
Mar. 28	5.11						

812. City of Wichita. SE. corner sec. 14, T. 25 S., R. 1 W. Records available: 1938-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	7.75	Mar. 28	7.86	Sept. 30	7.22	Oct. 21	7.24
19	7.71	July 5	7.28	Oct. 7	7.22	Nov. 10	7.09
Feb. 8	7.63	Aug. 31	6.30	14	7.23	Dec. 1	7.37

814. City of Wichita. SE. corner sec. 14, T. 25 S., R. 1 W. Records available: 1938-49.

Jan. 31	12.08	May 31	9.88	July 27	10.66	Nov. 10	11.70
Apr. 1	12.16	June 28	9.64	Oct. 7	11.04	Dec. 1	12.08

815. City of Wichita. NE. corner sec. 17, T. 25 S., R. 1 W. Records available: 1938-49.

Jan. 3	11.42	July 5	8.07	Sept. 30	9.45	Oct. 21	9.82
19	11.43	Aug. 31	8.84	Oct. 7	9.57	Nov. 10	10.16
Feb. 8	11.46	Sept. 15	9.15	14	8.59	Dec. 1	10.52
Mar. 28	8.94						

516. City of Wichita. SE. corner sec. 7, T. 25 S., R. 1 W. Records available: 1938-49.

Jan. 3	8.38	July 5	5.95	Sept. 30	8.52	Oct. 21	8.86
19	8.36	Aug. 31	7.98	Oct. 7	8.52	Nov. 10	8.81
Feb. 8	8.30	Sept. 8	8.14	14	8.77	Dec. 1	9.57
Mar. 28	6.89	15	8.23				

825. City of Wichita. NE. corner sec. 3, T. 25 S., R. 1 W. Records available: 1938-49.

Feb. 2	8.87	June 2	8.11	Sept. 2	8.15	Nov. 10	8.75
Mar. 22	9.16	July 6	7.91	Oct. 7	8.52	Dec. 1	9.03
May 3	9.02						

826. City of Wichita. NE. corner sec. 5, T. 25 S., R. 1 W. Records available: 1938-49. Apr. 4, 7.22; July 8, 7.00.

830. City of Wichita. SW. corner sec. 30, T. 25 S., R. 2 W. Records available: 1938-49.

Feb. 2	25.82	June 2	23.32	Sept. 2	24.13	Nov. 10	24.97
Mar. 22	25.78	July 6	23.48	Oct. 6	24.66	Dec. 9	25.23
May 3	25.51						

834. City of Wichita. SW. corner sec. 9, T. 25 S., R. 3 W. Records available: 1938-49.

Feb. 2	8.71	June 2	7.26	Sept. 2	7.63	Nov. 10	8.34
Mar. 22	8.62	July 6	7.39	Oct. 6	8.18	Dec. 9	8.49
May 3	8.39						

838. City of Wichita. NE. corner NW $\frac{1}{4}$ sec. 33, T. 25 S., R. 3 W. Records available: 1938-49.

Mar. 22	22.76	June 2	21.88	Aug. 2	19.15	Nov. 10	20.86
May 3	22.59	July 6	17.90	Oct. 6	20.04	Dec. 9	21.36

840. Owner of property, C. A. Berger; owner of well, city of Wichita. NE. corner sec. 9, T. 25 S., R. 2 W. Records available: 1940-49.

Jan. 3	6.69	July 5	3.73	Oct. 7	6.15	Nov. 10	6.68
19	6.60	Aug. 31	4.20	14	6.27	Dec. 1	4.00
Mar. 28	3.08	Sept. 30	4.96	21	6.41		

842. City of Wichita. SW. corner sec. 16, T. 25 S., R. 2 W. Records available: 1939-49.

Mar. 22	4.72	June 2	3.75	Oct. 6	5.56	Dec. 9	5.89
May 3	4.61	July 6	4.38	Nov. 16	5.77		

845. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 5, T. 27 S., R. 1 E. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 2	15.06	May 3	14.96	July 6	14.11
Mar. 22	15.09	June 2	14.00	Nov. 10	15.98

846. City of Wichita. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 6, T. 27 S., R. 1 E. Records available: 1939-49.

Feb. 2	16.39	May 3	15.82	July 6	14.02
Mar. 22	15.96	June 2	13.82		

847. City of Wichita. SW. corner SE $\frac{1}{4}$ sec. 6, T. 27 S., R. 1 E. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	16.42	May 3	15.99	July 6	14.49	Oct. 6	16.32
Mar. 22	16.08	June 2	14.10	Sept. 2	16.14	Dec. 9	16.47

870. W. Williams. NW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T. 25 S., R. 2 W. Records available: 1940-49.

Mar. 22	3.62	June 2	2.64	Oct. 6	5.09	Dec. 9	6.24
May 3	3.48	July 6	2.71	Nov. 10	5.85		

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 1.25 inches, depth 20 feet below land-surface datum. Measuring point, top of 1 $\frac{1}{4}$ -inch pipe, 0.3 foot above land-surface datum. Records available: 1949. Mar. 25, 5.25; Oct. 6, 7.54.

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. Measuring point, top of casing, 2.0 feet above land-surface datum. Records available: 1947, 1949.

Date	Water level	Date	Water level	Date	Water level
Dec. 1, 1947	13.98	Sept. 2, 1949	48.00	Oct. 31, 1949	15.50
Jan. 1, 1949	14.62	30	49.00	Nov. 30	16.20
July 8	13.96				

a Pumping.

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 $\frac{1}{4}$ inches, depth 80 feet below land-surface datum. Measuring point, top of pipe, 1.6 feet above land-surface datum. Records available: 1947, 1949.

Dec. 1, 1947	16.44	Sept. 30, 1949	20.32	Nov. 30, 1949	16.80
Sept. 2	15.12	Oct. 31	16.03		

M-27b. City of Wichita. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 3, T. 25 S., R. 2 W. Records available: 1948-49.

Apr. 4	13.47	Sept. 30	18.81	Nov. 30	16.50
Sept. 2	18.96	Oct. 31	15.67		

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 land-surface datum. Measuring point, top of casing, 2.0 feet above land-surface datum. Records available: 1947, 1949.

Dec. 17, 1947	15.75	Sept. 2, 1949	17.00	Oct. 31, 1949	15.00
July 8, 1949	14.09	30	16.00	Nov. 30	15.50

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 $\frac{1}{4}$ inches, depth 78 feet below land-surface datum. Measuring point, top of pipe, 1.2 feet above land-surface datum. Records available: 1947, 1949.

M-28a--Continued.

Date	Water level	Date	Water level	Date	Water level
Dec. 17, 1947	15.27	Sept. 30, 1949	17.15	Nov. 30, 1949	16.52
Sept. 2, 1949	14.39	Oct. 31	16.46		

M-28b. City of Wichita. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 2, T. 25 S., R. 2 W. Records available: 1948-49.

Jan. 5	13.74	Sept. 2	16.50	Oct. 31	15.77
Apr. 4	12.96	30	16.50	Nov. 30	15.83

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 below land-surface datum. Measuring point, top of casing, at land-surface datum. Records available: 1947, 1949.

July 1, 1947	13.28	Sept. 2, 1949	a 58.00	Oct. 31, 1949	19.00
July 8, 1949	13.01	30	a 60.00	Nov. 30	a 52.00

a Pumping.

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 $\frac{1}{4}$ inches, depth 97 feet below land-surface datum. Measuring point, top of pipe, 1.1 feet above land-surface datum. Records available: 1947, 1949.

July 1, 1947	12.15	Sept. 30, 1949	29.27	Nov. 30, 1949	29.53
Sept. 2, 1949	29.90	Oct. 31	16.02		

M-29b. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 11, T. 25 S., R. 2 W. Records available: 1948-49.

Apr. 4	10.79	Sept. 30	22.39	Nov. 30	23.57
Sept. 2	10.66	Oct. 31	14.90		

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 below land-surface datum. Records available: 1947, 1949.

Oct. 16, 1947	11.82	Sept. 2, 1949	a 56.00	Oct. 31, 1949	a 55.00
July 8, 1949	7.31	30	15.00	Nov. 30	a 55.00

a Pumping.

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 $\frac{1}{4}$ inches, depth 70 feet below land-surface datum. Measuring point, top of pipe, 1.0 feet above land-surface datum. Records available: 1947, 1949.

Oct. 16, 1947	10.97	Sept. 30, 1949	12.66	Nov. 30, 1949	20.79
Sept. 2, 1949	20.80	Oct. 31	19.48		

M-30b. City of Wichita. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 11, T. 25 S., R. 2 W. Records available: 1948-49.

Jan. 5	8.53	Sept. 2	16.90	Oct. 31	16.27
Apr. 4	8.37	30	12.40	Nov. 30	17.43

M-31. City of Wichita. NW corner NW $\frac{1}{4}$ sec. 12, T. 25 S., R. 2 W. Drilled observation well, diameter 1 $\frac{1}{4}$ inches, depth 197 feet below land-surface datum. Measuring point, top of casing, 210 feet above land-surface datum. Records available: 1947, 1949.

July 16, 1947	10.77	Sept. 2, 1949	14.00	Oct. 31, 1949	15.00
July 8, 1949	9.20	30	13.26	Nov. 30	14.00

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 $\frac{1}{4}$ inches, depth 85 feet below land-surface datum. Measuring point, top of pipe, 1.1 feet above land-surface datum. Records available: 1947, 1949.

M-31a--Continued.

Date	Water level	Date	Water level	Date	Water level
July 16, 1947	9.95	Sept. 30, 1949	11.33	Nov. 30, 1949	12.33
Sept. 2, 1949	12.17	Oct. 31	12.48		

M-31b. City of Wichita. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 12, T. 25 S., R. 2 W. Records available: 1948-49.

Jan. 5	9.98	Sept. 2	13.48	Oct. 31	13.73
Apr. 4	9.96	30	12.60	Nov. 30	13.55

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. Measuring point, top of casing, 2.0 feet above land-surface datum. Records available: 1947, 1949.

Aug. 16, 1947	11.27	Sept. 2, 1949	a 45.00	Oct. 31, 1949	a 48.00
July 8, 1949	9.02	30	a 45.50	Nov. 30	13.00

a Pumping.

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. Measuring point, top of pipe, 1.3 feet above land-surface datum. Records available: 1947, 1949.

Aug. 16, 1947	9.96	Sept. 30, 1949	12.92	Nov. 30, 1949	11.03
Sept. 2, 1949	12.90	Oct. 31	14.17		

M-32b. City of Wichita. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 12, T. 25 S., R. 2 W. Records available: 1948-49.

Jan. 5	10.13	Sept. 2	11.85	Oct. 31	13.19
Apr. 4	10.09	30	11.98	Nov. 30	12.36

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 below land-surface datum. Measuring point, top of casing, 2.0 feet above land-surface datum. Records available: 1947, 1949.

Oct. 29, 1947	11.75	Sept. 2, 1949	10.00	Oct. 31, 1949	14.50
July 8, 1949	7.23	30	12.50	Nov. 30	a 52.50

a Pumping.

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 below land-surface datum. Measuring point, top of pipe, 1.2 feet above land-surface datum. Records available: 1947, 1949. Oct. 29, 1947, 11.98; Sept. 30, 1949, 9.66; Oct. 31, 1949, 11.23; Nov. 31, 1949, 11.23.

M-33b. City of Wichita. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, T. 25 S., R. 2 W. Records available: 1948-49.

Jan. 5	8.09	Sept. 2	7.30	Oct. 31	9.47
Apr. 4	7.57	30	7.82	Nov. 30	12.02

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 below land-surface datum. Measuring point, opening inside pump base, 2.0 feet above land-surface datum. Records available: 1947, 1949.

Nov. 12, 1947	12.60	Sept. 2, 1949	10.35	Oct. 31, 1949	12.15
July 8, 1949	6.96	30	10.95	Nov. 30	a 50.11

a Pumping.

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 83 feet below land-surface datum. Measuring point, top of pipe, 1.5 feet above land-surface datum. Records available: 1947, 1949. Nov. 12, 1947, 12.34; Sept. 30, 1949, 9.53; Oct. 31, 1949, 10.64; Nov. 30, 1949, 15.93.

M-34b. City of Wichita. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 6, T. 25 S., R. 1 W. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	7.81	Sept. 2	7.37	Oct. 31	8.81
Apr. 4	7.79	30	7.93	Nov. 30	9.83

M-35. City of Wichita. NE corner NW $\frac{1}{4}$ sec. 7, T. 25 S., R. 1 W. Drilled observation well, diameter 18 inches, depth 130 feet below land-surface datum. Measuring point, opening on side of pump base, 2.0 feet above land-surface datum. Records available: 1947, 1949.

Nov. 5, 1947	12.91	Sept. 2, 1949	10.55	Oct. 31, 1949	12.00
July 8, 1949	10.30	30	11.11	Nov. 30	12.67

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 below land-surface datum. Measuring point, top of pipe, 1.3 feet above land-surface datum. Records available: 1947, 1949.

Nov. 15, 1947	12.83	Sept. 30, 1949	9.43	Nov. 30, 1949	10.35
Sept. 2, 1949	8.69	Oct. 31	10.35		

M-35b. City of Wichita. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 6, T. 25 S., R. 1 W. Records available: 1948-49.

Jan. 5	11.46	Sept. 2	10.60	Oct. 31	12.23
Apr. 4	10.91	30	11.26	Nov. 30	13.15

Seward County

Highest and lowest water levels for the period of record in 5 wells in Seward County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
15	9	15.88	May 3, 1944	18.67	Nov. 24, 1947
106	9	203.89	Jan. 13, 1947	210.95	Mar. 8, 1949
108	9	106.04	Apr. 12, 1945	110.78	Apr. 21, 1941
122	9	200.66	Jan. 22, 1945	205.76	Oct. 21, 1947
159	9	89.44	Nov. 15, 1949	95.55	Dec. 19, 1940

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 5 wells in Seward County

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise (+) or net decline (-) for period of record
15	2.79	0.08	-0.92
106	7.06	2.75	+1.84
108	4.74	(a)	+3.11
122	5.10	1.57	+1.89
159	6.11	1.02	+5.84

a No measurement made in 1948.

15. R. H. Hitch. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T. 32 S., R. 33 W. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	17.74	June 20	16.64	Sept. 15	17.20	Nov. 15	17.62
Apr. 7	17.64	July 13	17.24	Oct. 25	17.21	Dec. 20	17.64
May 19	17.29						

106. Kansas City Life Insurance Co. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 8, T. 32 S., R. 34 W. Records available: 1940-49.

Jan. 4	207.52	Mar. 8	210.95	June 20	208.24	Sept. 15	206.93
Feb. 8	208.45	May 19	210.45	July 13	206.28	Dec. 20	206.30

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. May 19, 108.27; July 13, 107.22.

122. Mrs. Flora Atwell. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 9, T. 33 S., R. 31 W. Records available: 1940-49.

Jan. 4	204.36	June 20	203.56	Sept. 15	202.70	Nov. 16	202.30
Feb. 8	203.51	July 13	202.45	Oct. 25	202.25	Dec. 20	201.74
Apr. 7	203.36						

159. Liberal Gas Co. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 3, T. 35 S., R. 34 W. Records available: 1940-49.

Jan. 4	90.48	Apr. 7	90.25	July 13	89.80	Oct. 25	89.52
Feb. 8	90.40	May 19	90.04	Aug. 16	89.64	Nov. 15	89.44
Mar. 8	90.25	June 20	89.98	Sept. 15	89.60	Dec. 20	89.54

Shawnee County

Highest and lowest water levels for the period of record
in 1 well in Shawnee County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
11-16-5bc	2	1.27	Apr. 15, 1949	11.80	Nov. 27, 1948

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 1 well in Shawnee County

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise for period of record
11-16-5bc	10.53	8.79	2.38

11-16-5bc. C. C. Busey. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 5, T. 11 S., R. 16 E. Records available: 1948-49. Feb. 9, 7.97; Apr. 15, 1.27; June 13, 1.71; July 15, 3.01.

Sherman County

Highest and lowest water levels for the period of record
in 3 wells in Sherman County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
8-37-28abb	2	107.30	July 14, 1948	107.85	Jan. 6, 1949
8-40-24baa	2	136.49	May 17, 1948	136.85	Oct. 14, 1948
9-39-30cbb	2	118.55	July 20, 1949	118.90	Apr. 14, 1949
			Oct. 13, 1949		

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 3 wells in Sherman County

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise (+) or net decline (-) for period of record
8-37-28abb	0.55	0.18	+0.04
8-40-24baa	.36	.20	-.16
9-39-30cbb	.35	.25	+.13

8-37-28abb. Albert Vohs. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 28, T. 8 S., R. 37 W. Records available: 1948-49. Jan. 6, 107.85; Apr. 14, 107.80; July 20, 107.62; Oct. 12, 107.55.

8-40-24baa. Victoria van Drasek Estate. NE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 24, T. 8 S., R. 40 W. Records available: 1948-49. Apr. 14, 136.68; July 20, 136.49; Oct. 13, 136.65.

9-39-30cbb. Charles Glenn. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 30, T. 9 S., R. 39 W. Records available: 1948-49. Apr. 14, 118.90; July 20, 118.67; Oct. 13, 118.55.

Smith County

Highest and lowest water levels for the period of record
in 8 wells in Smith County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
4-14-34bc	4	42.15	Nov. 21, 1945	43.05	Sept. 25, 1946
4-15-31bb	4	34.92	July 30, 1947	36.26	Nov. 30, 1948
4-15-35bc	4	33.18	Sept. 1, 1949	37.99	June 12, 1946
5-13-4dc	4	19.68	Dec. 29, 1949	35.23	Dec. 17, 1945
5-13-25cc	4	43.05	Oct. 27, 1949	46.53	Jan. 28, 1946
5-13-33ba	4	23.25	July 8, 1949	30.46	Jan. 2, 1948
5-14-3bc	4	34.80	Mar. 26, 1947	40.50	Oct. 27, 1947
5-15-2dc	4	31.55	Sept. 1, 1949	33.84	Nov. 30, 1948

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 8 wells in Smith County

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise (+) or net decline (-) for period of record
4-14-34bc	0.90	0.46	-0.19
4-15-31bb	1.34	.84	+4.48
4-15-35bc	4.81	2.75	+3.37
5-13-4dc	15.60	7.37	+15.42
5-13-25cc	3.48	1.05	+2.23
5-13-33ba	7.21	1.93	-.92
5-14-3bc	5.70	3.04	+6.1
5-15-2dc	2.29	1.84	+1.15

4-14-34bc. Laura Davis. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 34, T. 4 S., R. 14 W. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 21	42.95	July 8	42.69	Dec. 29	42.34
Apr. 25	42.83	Sept. 1	42.61		

4-15-31bb. W. Lala. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 31, T. 4 S., R. 15 W. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 21	36.18	July 8	35.30	Oct. 27	35.30
Apr. 25	35.96	Sept. 1	35.26	Dec. 29	35.42

4-15-35bc. H. R. Dannenburg. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 35, T. 4 S., R. 15 W. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 21	37.69	July 8	34.28	Oct. 27	34.92
Apr. 25	35.57	Sept. 1	33.18	Dec. 29	35.23

5-13-4dc. R. Eller. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 4, T. 5 S., R. 13 W. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 21	27.15	July 8	20.18	Oct. 27	21.10
Apr. 25	22.69	Sept. 1	21.03	Dec. 29	19.68

5-13-25cc. Zelma Carter. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 25, T. 5 S., R. 13 W. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 21	44.15	July 8	43.43	Oct. 27	43.05
Apr. 25	43.80	Sept. 1	43.17	Dec. 29	43.07

5-13-33ba. W. L. Gearhart and others. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 33, T. 5 S., R. 13 W. Records available: 1946-49.

Apr. 25	28.00	Sept. 1	24.39	Dec. 29	27.72
July 8	23.25	Oct. 27	24.57		

5-14-3bc. Walter Felsburg. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 3, T. 5 S., R. 14 W. Records available: 1946-49.

Feb. 21	37.17	July 8	35.80	Oct. 27	37.22
Apr. 25	36.71	Sept. 1	36.95	Dec. 29	35.00

5-15-2dc. G. K. Wanhoff. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 2, T. 5 S., R. 15 W. Records available: 1946-49.

Apr. 25	33.78	Sept. 1	31.55	Dec. 29	32.00
July 8	32.16	Oct. 27	31.63		

Stafford County

Highest and lowest water levels for the period of record
in 2 wells in Stafford County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
3	8	15.01	May 17, 1949	22.23	Nov. 16, 1947
19	8	a .47	Mar. 10, 1949	11.04	Aug. 1, 1942

a Water around well.

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 2 wells in Stafford County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise for period of record
3	7.22	-0.62	0.79
19	10.57	+4.1	9.27

3. B. Fritzmeier. SW. corner SW $\frac{1}{4}$ sec. 12, T. 23 S., R. 12 W. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	17.10	Apr. 20	16.20	July 21	16.46	Oct. 19	17.85
Feb. 10	16.67	May 17	15.01	Aug. 18	17.06	Nov. 17	17.54
Mar. 10	15.67	June 23	15.16	Sept. 21	17.67	Dec. 22	17.60

19. Atlantic Refining Co. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 27, T. 21 S., R. 13 W. Records available: 1942-49. Feb. 10, 1.82; Mar. 10, 0.47, water around well; July 21, 1.77.

26. Stanolind Oil Co. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, T. 22 S., R. 12 W. Records available: 1942-48. Measurements discontinued in 1949.

Stanton County

Highest and lowest water levels for the period of record
in 3 wells in Stanton County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
13	11	45.27	Feb. 9, 1949	51.83	Apr. 23, 1940
93	11	174.16	Nov. 26, 1947	180.65	Nov. 16, 1949
146	11	33.93	Nov. 16, 1949	46.30	Apr. 22, 1940 May 14, 1940 June 18, 1940

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 3 wells in Stanton County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
13	6.56	+2.69	+4.85
93	6.49	-2.04	-5.20
146	12.37	+4.14	+12.30

13. L. Y. Carrithers. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 21, T. 27 S., R. 40 W. Records available: 1939-49. Feb. 9, 45.27; Nov. 15, 46.48.

93. J. Plummer. Center NE $\frac{1}{4}$ sec. 11, T. 29 S., R. 41 W. Records available: 1939-49. Feb. 9, 178.16; Aug. 17, 180.18; Nov. 16, 180.65.

146. C. M. Harrison. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 27, T. 30 S., R. 43 W. Records available: 1939-49. Feb. 9, 37.83; May 20, 37.87; Aug. 17, 35.94; Nov. 16, 33.93.

Stevens County

Highest and lowest water levels for the period of record
in 3 wells in Stevens County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
10	8	79.92	Feb. 21, 1948	a 93.20	May 10, 1945
12	8	108.59	Nov. 16, 1949	113.38	July 28, 1942
30	3	101.81	Nov. 16, 1949	106.84	Sept. 23, 1943

a Affected by pumping.

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 3 wells in Stevens County

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise (+) or net decline (-) for period of record
10	13.28	0.57	-1.99
12	4.79	3.23	+4.79
30	5.03	.73	+4.19

10. T. P. Patterson. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T. 33 S., R. 37 W. Records available: 1942-49. Feb. 8, 83.76; May 19, 83.90; Nov. 16, 83.67.

12. Mack Greenwood. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 28, T. 33 S., R. 38 W. Records available: 1942-49. Feb. 8, 109.20; May 19, 108.95; Aug. 17, 108.71; Nov. 16, 108.59.

21. B. W. Parsons. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 9, T. 31 S., R. 37 W. Records available: 1942-48. Measurements discontinued in 1949.

28. C. E. Dudley. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 34, T. 31 S., R. 36 W. Records available: 1942-48. Measurements discontinued in 1949.

30. Central Life Assurance Co. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 33 S., R. 36 W. Records available: 1942-49. Feb. 8, 102.82; May 19, 102.31; Aug. 17, 102.04; Nov. 16, 101.81.

Sumner County

1. Geological Survey, U. S. Dept. of Interior. On township road right-of-way in NW. corner sec. 1, T. 30 S., R. 1 E. Records available: 1944-48. No measurement made in 1949.

2. Geological Survey, U. S. Dept. of Interior. On township road right-of-way in NE. corner sec. 6, T. 30 S., R. 1 E. Records available: 1944-48. No measurement made in 1949.

Thomas County

Highest and lowest water levels for the period of record
in 4 wells in Thomas County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
7	8	122.99	July 20, 1949	128.02	Oct. 14, 1948
26	8	111.27	Oct. 12, 1949	117.55	Oct. 13, 1948
33	8	116.34	Oct. 12, 1949	121.30	Apr. 14, 1949
8-34-2aa	3	113.34	Dec. 15, 1949	114.65	Jan. 27, 1949
			Dec. 29, 1949		

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 4 wells in Thomas County

Well	Difference between highest and lowest levels	Net rise in 1949	Net rise (+) or net decline (-) for period of record
7	5.03	2.97	-0.53
26	6.28	6.28	+51
33	4.96	3.62	+77
8-34-2aa	1.31	1.06	+69

7. George Strait. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T. 8 S., R. 36 W. Records available: 1942-49. Apr. 14, 124.77; July 20, 122.99; Oct. 12, 125.05.

9. Mr. Sloan. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 26, T. 7 S., R. 33 W. Records available: 1943-48. No measurement made in 1949.

12. W. A. Atha. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 2, T. 7 S., R. 31 W. Records available: 1942-48. Measurements discontinued Oct. 13, 1948.

13. H. V. Christensen. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 8 S., R. 31 W. Records available: 1942-48. Measurements discontinued Jan. 15, 1948.

26. T. A. Ryan. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 27, T. 8 S., R. 32 W. Records available: 1942-49. Apr. 14, 111.40; July 19, 112.50; Oct. 12, 111.27.

28. Katherine B. Hood. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 20, T. 10 S., R. 31 W. Records available: 1946-48. No measurement made in 1949.

33. Arch Ball. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, T. 9 S., R. 33 W. Records available: 1942-49. Apr. 14, 121.30; July 19, 116.40; Oct. 12, 116.34.

62. H. A. Hills. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 27, T. 10 S., R. 34 W. Records available: 1942-48. No measurement made in 1949.

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: 1947-49.

8-34-2as--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	114.53	Apr. 7	114.01	July 7	113.77	Oct. 6	113.51
13	114.60	14	113.98	14	113.76	13	113.52
20	114.62	21	113.98	21	113.77	20	113.45
27	114.65	28	113.93	28	113.71	27	113.47
Feb. 3	114.61	May 5	113.97	Aug. 4	113.64	Nov. 3	113.46
11	114.05	12	113.93	11	113.64	10	113.56
17	114.09	19	113.97	18	113.60	17	113.48
24	114.13	26	113.92	25	113.63	24	113.50
Mar. 3	114.12	June 2	113.94	Sept. 1	113.49	Dec. 1	113.38
10	114.10	9	113.95	8	113.48	8	113.36
17	114.05	16	113.87	15	113.49	15	113.34
24	114.15	23	113.76	22	113.48	22	113.36
31	114.01	30	113.85	29	113.42	29	113.34

Trego County

14-22-36. Geological Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 36, T. 14 S., R. 22 W. Drilled well, diameter $1\frac{1}{2}$ inches, depth 74.5 feet below land-surface datum. Records available: 1949. Oct. 19, 42.65; Oct. 29, 42.57; Dec. 30, 43.74.

Wallace County

Highest and lowest water levels for the period of record
in 5 wells in Wallace County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
11-40-15ddd	2	38.44	Apr. 14, 1949	42.69	May 17, 1948
12-40-14bba	2	19.72	July 20, 1949	22.52	Oct. 14, 1948
13-40-10abb	2	16.08	May 18, 1948	20.10	Oct. 14, 1948
14-40-34ddd	2	88.03	Jan. 6, 1949	88.50	Oct. 13, 1949
15-40-23bbb	2	76.88	July 14, 1948	78.06	Jan. 6, 1949

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 5 wells in Wallace County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
11-40-15ddd	4.25	+0.63	+0.76
12-40-14bba	2.80	+2.80	+1.03
13-40-10abb	4.12	+1.00	-3.02
14-40-34ddd	.47	-.31	-.40
15-40-23bbb	1.18	+1.14	+0.03

11-40-15ddd. School district. SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 11 S., R. 40 W. Records available: 1948-49. Jan. 6, 39.55; Apr. 14, 38.44; July 20, 41.64; Oct. 13, 41.93.

12-40-14bba. W. P. Kirkham. NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 14, T. 12 S., R. 40 W. Measuring point beginning July 1949, top of casing north side, 2.6 above old measuring point, 1.6 above land-surface datum. Records available: 1948-49. Jan. 6, 22.48; Apr. 14, 22.40; July 20, 19.72.

13-40-10abb. J. Mumma. NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 10, T. 13 S., R. 40 W. Records available: 1948-49. Jan. 6, 19.85; Apr. 14, 18.62; July 20, 19.80; Oct. 13, 19.10.

14-40-34ddd. Owner unknown. SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 34, T. 14 S., R. 40 W. Records available: 1948-49. Jan. 6, 88.03; Apr. 14, 88.08; July 20, 88.05; Oct. 13, 88.50.

15-40-23bbb. Broadway School district. NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 23, T. 15 S., R. 40 W. Records available: 1948-49. Jan. 6, 78.06; Apr. 14, 77.18; July 20, 77.58; Oct. 13, 76.94.

Wichita County

Highest and lowest water levels for the period of record
in 5 wells in Wichita County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
16-37-26abb	3	86.40	Apr. 14, 1949	90.52	Dec. 16, 1949
18-35-14bb	3	81.33	Aug. 11, 1949	83.37	Oct. 12, 1949
18-37-11dcc	3	71.25	Aug. 16, 1948	72.34	Sept. 7, 1947
19-37-31bb	3	70.25	Aug. 4, 1948	70.63	July 23, 1948
20-36-14dad	3	94.80	June 23, 1948	104.87	Aug. 4, 1947

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 5 wells in Wichita County

Well	Difference between highest and lowest levels	Net rise (+) or net decline (-) in 1949	Net rise (+) or net decline (-) for period of record
16-37-26abb	4.12	-3.15	-3.02
18-35-14bb	2.04	-.02	-.30
18-37-11dcc	1.09	+.18	+.28
19-37-31bb	.38	+.23	-.15
20-36-14dad	10.07	-.02	+9.88

16-35-26da. F. H. Taylor. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 26, T. 16 S., R. 35 W. Records available: 1948. Measurements discontinued in 1949.

16-36-3dc. Leonard Harper. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 3, T. 16 S., R. 36 W. Records available: 1948. Measurements discontinued in 1949.

16-37-26abb. Richard G. Hobson. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 26, T. 16 S., R. 37 W. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 14	86.40	Aug. 11	87.50	Dec. 16	90.52
June 17	87.26	Oct. 13	90.52		

17-35-22bb. W. and J. D. Meisenheimer. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 17 S., R. 35 W. Records available: 1947-48. Measurements discontinued in 1949.

17-36-17da. John Schwindt. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 17, T. 17 S., R. 36 W. Records available: 1948. Measurements discontinued in 1949.

17-38-4ba. Mary Kiefer. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 4, T. 17 S., R. 38 W. Records available: 1948. Measurements discontinued in 1949.

18-35-14bb. A. C. Felt. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 14, T. 18 S., R. 35 W. Records available: 1948-49.

Feb. 17	83.22	June 17	83.26	Oct. 12	83.37
Apr. 14	83.28	Aug. 11	81.33	Dec. 16	83.30

18-37-11dcc. L. L. Barngrober. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 11, T. 18 S., R. 37 W. Records available: 1948-49.

Feb. 17	72.30	June 17	71.70	Oct. 13	72.17
Apr. 14	72.29	Aug. 11	72.20	Dec. 16	72.02

19-35-4dda. Jake Hagelgantz. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 4, T. 19 S., R. 35 W. Records available: 1947-48. Measurements discontinued in 1949.

19-37-31bb. A. C. Buck. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 31, T. 19 S., R. 37 W. Records available: 1948-49. Dec. 16, 70.40.

20-37-14dad. Elmer Hartman. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 14, T. 20 S., R. 36 W. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 17	94.90	June 17	95.02	Oct. 13	95.14
Apr. 14	94.99	Aug. 11	96.52	Dec. 16	94.99

20-37-20cc. J. P. Stevenson. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 20, T. 20 S., R. 37 W. Records available: 1948. Measurements discontinued in 1949.

20-38-18ad. E. E. Hoard. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T. 20 S., R. 38 W. Records available: 1948. Measurements discontinued in 1949.

Woodson County

Highest and lowest water levels for the period of record
in 1 well in Woodson County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
25-16-11ddd	2	4.23	May 6, 1948	9.56	Nov. 26, 1948

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 1 well in Woodson County

Well	Difference between highest and lowest levels	Net rise in 1949	Net decline for period of record
25-16-11ddd	5.33	1.92	3.41

25-16-11ddd. John Yohon. SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 11, T. 25 S., R. 16 E. Records available: 1948-49. Mar. 1, 4.27; Apr. 18, 4.98; June 10, 5.64; July 21, 7.64.

Wyandotte County

Highest and lowest water levels for the period of record
in 3 wells in Wyandotte County

Well	Length of record (years)	Highest level	Date	Lowest level	Date
97	5	15.15	July 11, 1945	29.90	Dec. 31, 1948
100	5	15.82	July 11, 1945	33.45	Dec. 31, 1948
119	5	21.33	July 11, 1945	35.56	Dec. 31, 1948

Difference between highest and lowest recorded water levels and net change in water level, in 1949 and for period of record, in 3 wells in Wyandotte County

Well	Difference between highest and lowest levels	Net rise in 1949	Net decline for period of record
97	12.75	5.08	2.72
100	17.63	4.45	5.00
119	14.23	.32	9.94

97. Geological Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 11 S., R. 25 E. Records available: 1944-49. Dec. 26, 24.82.

100. Geological Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 22, T. 11 S., R. 25 E. Records available: 1944-49. Dec. 26, 29.00.

101. Geological Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 23, T. 11 S., R. 25 E. Records available: 1944-48. No measurement made in 1949.

119. Geological Survey, U. S. Dept. of Interior. $SE\frac{1}{4}NE\frac{1}{4}NE\frac{1}{4}$ sec. 20, T. 11 S., R. 25 E. Records available: 1944-49. Dec. 26, 35.24.

121. Geological Survey, U. S. Dept. of Interior. $NE\frac{1}{4}NW\frac{1}{4}SE\frac{1}{4}$ sec. 20, T. 11 S., R. 25 E. Records available: 1944-48. No measurements made in 1949.

MINNESOTA

By J. E. Powell

PROGRAM OF WORK

Periodic measurements were made in 11 wells in Minnesota in 1949, and water-level determinations were obtained from 4 wells equipped with automatic water-stage recorders. A total of 1,419 measurements was made during the year. Of this total 940 were obtained from the 4 recorder-equipped wells. Field work was done in connection with the investigation of ground-water resources in the vicinity of Cloquet, in Carlton County, and at the Camp Ripley Military Reservation near Little Falls, in Morrison County.

FLUCTUATIONS OF WATER LEVELS

The maximum and minimum fluctuations in the wells equipped with automatic water-stage recorders are as follows:

Well	County	Maximum	Minimum
M-18 (city of Moorhead)	Clay	169.08	177.96
MS-1 (east of Dilworth)	Clay	19.24	21.70
US-3 (city of Barnesville)	Clay	6.04	7.36
US-2 (city of Hawley)	Clay	15.48	18.45

As in previous years, the water levels were low during the winter, the lowest stages occurring during the months of January and February. The water levels declined slightly from December to March and rose rapidly during April and May due to recharge from melting snow in conjunction with the thawing of the ground surface. The highest water levels of the year were attained in May after which they dropped gradually until the end of the year.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Brown County

108,30.9. (U S 6.) Erwin Kjelshus. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	2.72	Feb. 7	1.83	Mar. 15	1.53	Apr. 24	3.42
11	2.46	15	1.65	21	2.10	May 3	4.00
18	2.30	22	1.34	Apr. 5	3.78	11	4.15
25	2.15	Mar. 1	1.42	11	3.34	18	4.14
Feb. 1	1.94	8	1.75	20	3.37	25	4.28

108.30.9--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 6	4.46	July 26	6.58	Sept. 20	9.08	Nov. 8	9.56
14	4.65	Aug. 2	6.62	26	9.25	18	9.32
21	5.05	10	7.24	Oct. 3	9.42	25	9.10
25	5.13	17	7.70	12	9.34	6	8.90
July 6	5.74	22	8.03	24	9.43	16	8.28
13	6.04	Sept. 2	9.00	Nov. 2	9.53	27	8.15
20	6.58	12	9.20				

Carlton County

49.17.18dccc2. Andrew Ketola. Unused dug well, 48-inch square wooden casing, depth 18 feet. Measuring point, top of well cover, 4.5 feet below land-surface datum. Records available: 1949.

Jan. 2	10.12	Apr. 3	10.00	July 3	5.78	Oct. 2	9.45
9	10.16	10	8.32	10	5.49	9	8.15
16	10.16	17	7.95	17	5.68	16	7.89
23	10.23	24	6.80	24	6.49	23	7.12
30	10.25	May 1	5.49	31	6.00	29	7.04
Feb. 6	10.27	8	5.50	Aug. 6	7.07	Nov. 6	7.18
13	10.30	15	5.77	13	7.36	13	7.00
20	10.37	22	5.88	20	7.75	20	6.89
27	10.34	29	6.20	27	8.17	27	6.96
Mar. 6	10.30	June 5	6.60	Sept. 3	8.88	Dec. 4	7.11
13	10.20	12	6.87	11	8.98	11	6.92
20	10.24	19	6.70	18	9.17	18	6.75
27	10.12	25	6.30	25	9.32	25	7.16

49.17.22cbb. Bureau of Indian Affairs, U. S. Dept. of Interior. Abandoned well, depth 100 feet. Measuring point, top of 5-inch standard pipe casing, 2.05 feet above land-surface datum. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	36.29	Apr. 9	37.15	July 9	37.21	Oct. 8	37.39
16	35.59	16	37.09	16	37.19	15	37.46
22	35.68	23	37.06	23	37.36	22	37.44
28	35.77	28	37.09	28	37.29	29	37.47
Feb. 4	35.92	May 7	37.29	Aug. 6	37.41	Nov. 5	37.51
11	36.79	14	37.30	13	37.59	12	37.49
18	36.77	21	37.31	20	37.39	19	37.52
24	36.79	28	37.30	27	37.45	25	37.54
Mar. 5	36.98	June 4	38.31	Sept. 2	37.41	Dec. 3	37.56
11	36.96	11	37.29	9	37.45	10	37.58
18	37.11	17	37.31	17	37.42	17	37.60
26	37.09	24	37.36	24	37.45	23	37.62
Apr. 2	37.12	July 2	37.19	Oct. 1	37.43	28	37.59

49.17.27cbb. Marge Bodway. Domestic well, equipped with hand pump, depth 52 feet. Measuring point, top of 4-inch standard pipe casing, at land-surface datum. Records available: 1949.

Jan. 6	38.76	Apr. 9	39.54	July 9	39.63	Oct. 8	39.71
16	38.93	16	39.59	16	39.61	15	39.76
22	38.89	23	39.61	23	39.64	22	39.74
28	39.07	28	39.71	28	39.56	29	39.77
Feb. 4	39.19	May 7	39.57	Aug. 6	39.67	Nov. 5	39.89
11	39.16	14	39.59	13	39.66	12	39.86
18	39.31	21	39.58	20	39.64	19	39.71
24	39.37	28	39.63	27	39.61	25	39.73
Mar. 5	39.52	June 4	39.63	Sept. 2	39.61	Dec. 3	39.75
11	39.61	11	39.65	9	39.71	10	39.72
18	39.44	17	39.67	17	39.69	17	39.72
26	39.42	24	39.66	24	39.71	23	40.04
Apr. 2	39.56	July 2	39.68	Oct. 1	39.73	28	40.05

49.17.28adc. James, Alfred, and Laura Jolicoeur. Driven well, depth 15 feet, not equipped with a pump. Measuring point, top of 1-inch galvanized-iron pipe casing, 1.5 feet above land-surface datum. Records available: 1949.

Jan. 6	3.78	Apr. 9	2.42	July 9	3.24	Oct. 8	3.59
16	3.74	16	2.59	16	3.22	15	2.94
22	3.76	23	2.62	23	3.31	22	3.01
28	3.77	28	2.64	28	3.12	29	3.06
Feb. 4	3.82	May 7	2.69	Aug. 6	3.29	Nov. 5	2.99
11	3.78	14	3.28	13	3.62	12	2.94
18	3.61	21	2.74	20	3.64	19	2.96
25	3.71	28	2.74	27	3.81	25	3.01
Mar. 5	3.39	June 4	2.77	Sept. 2	3.86	Dec. 3	3.04
11	3.22	11	2.79	9	3.89	10	3.01
18	2.89	17	2.84	17	3.59	17	3.03
26	2.78	24	2.86	24	3.66	23	3.06
Apr. 2	2.60	July 2	3.07	Oct. 1	3.68	28	3.05

Clay County

137.45.30cbb1. City of Barnesville. Unused drilled well, 10-inch cast-iron pipe casing, depth 73 feet. Measuring point, top of casing, 1.5 feet above land-surface datum. Records available: 1949.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1	7.11	7.20	7.30	6.63	6.52	6.36	6.82	6.07	6.90	....
2	7.12	7.18	7.32	6.62	6.55	6.35	6.66	6.09	6.93	7.27
3	7.13	7.18	7.29	6.68	6.53	6.38	6.68	6.11	6.95	7.27
4	7.11	7.18	7.30	6.58	6.53	6.89	6.68	6.13	6.95	7.27
5	7.09	7.17	7.28	6.57	6.51	6.37	6.67	6.17	6.95	7.23
6	7.10	7.18	7.25	6.58	6.33	6.42	6.48	6.24	6.94	7.27
7	7.09	7.17	7.17	6.60	6.26	6.45	6.43	6.24	6.98	7.27
8	7.18	7.27	7.15	6.59	6.22	6.50	6.42	6.30	6.99	7.29
9	7.18	....	7.10	6.60	6.22	6.52	6.14	6.35	7.00	7.29
10	7.18	7.22	7.07	6.56	6.22	6.54	6.08	6.38	7.05	7.20
11	7.14	7.20	7.06	6.54	6.21	6.57	6.04	6.46	7.04	7.23
12	7.09	7.25	7.05	6.56	6.20	6.57	6.04	6.47	7.06	7.22
13	7.12	7.23	7.03	6.55	6.23	6.56	6.07	6.52	7.09	7.22
14	7.12	7.22	7.02	6.58	6.23	6.55	6.05	6.50	7.07	7.22
15	....	7.24	7.01	6.54	6.23	6.59	6.07	6.52	7.07	7.19
16	7.17	7.27	7.00	6.52	6.24	6.56	6.10	6.56	7.09	6.85
17	7.16	7.22	7.00	6.54	6.24	6.60	6.10	6.60	7.13	6.75
18	7.14	7.30	7.01	6.54	6.25	6.64	6.17	6.63	7.13	6.80
19	7.18	7.32	7.00	6.53	6.26	6.62	6.20	6.67	7.16	6.80
20	7.18	7.30	6.99	6.53	6.23	6.54	6.19	6.68	7.16	6.85
21	7.13	7.29	6.99	6.52	6.20	6.46	6.31	6.69	7.20	7.20
22	7.14	7.31	7.01	6.54	6.20	6.45	6.31	6.71	7.21	7.20
23	7.12	7.31	6.96	6.55	6.24	6.44	6.32	6.73	7.21	7.05
24	7.16	7.35	6.94	6.57	6.24	6.45	6.35	6.77	7.22	7.36
25	7.16	7.36	6.93	6.52	6.29	6.49	6.42	6.81	7.22	7.41
26	7.14	7.33	6.91	6.52	6.28	6.51	6.42	6.82	7.23	7.35
27	7.14	7.34	6.83	6.55	6.30	6.52	6.48	6.84	7.27	7.41
28	7.16	7.33	6.86	6.52	6.28	6.53	6.44	6.94	7.27	7.35
29	7.18		6.90	6.51	6.31	6.54	6.10	6.85	7.30	....
30	7.11		6.96	6.53	6.31	6.58	6.07	6.87	7.29	....
31	7.13		6.86		6.35		6.07	6.87		....

139.45.lccd2. City of Hawley. Unused drilled well, 10-inch cast-iron pipe casing, depth 121.5 feet. Measuring point, top of casing, 2.05 feet above land-surface datum. Records available: 1949.

From recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1	17.26	17.33	17.50	16.29	16.53	17.36	17.34	15.52	17.12	16.67
2	17.10	17.32	17.36	16.34	16.45	17.30	17.30	15.60	17.13	16.58
3	17.41	17.26	17.47	16.23	16.46	17.30	17.04	15.45	16.91	16.76
4	17.52	17.24	17.41	15.95	16.48	17.49	16.75	15.26	16.88	16.75
5	17.41	17.41	17.39	16.11	16.15	17.29	16.73	15.05	17.08	16.77
6	17.38	17.09	17.29	15.42	15.75	17.58	16.63	16.69	17.20	16.79
7	17.36	17.22	17.48	15.42	15.56	17.69	16.35	17.19	16.60	16.85
8	17.39	17.30	17.32	15.43	15.56	17.71	16.23	17.01	16.61	16.91
9	17.21	17.25	17.33	15.28	15.59	17.88	16.18	17.23	16.61	17.14
10	17.43	17.26	17.37	15.23	15.73	17.92	16.03	17.48	16.79	17.17
11	17.34	17.27	17.31	15.39	15.59	17.48	15.94	17.26	16.81	17.15
12	17.40	17.32	17.26	15.40	16.93	17.55	15.97	17.06	16.77	17.10
13	17.37	17.16	16.97	15.58	16.44	17.70	15.99	16.95	16.79	17.10
14	17.41	17.34	17.21	15.72	16.29	17.66	16.00	17.02	16.86	17.13
15	17.35	17.26	17.25	16.11	16.28	17.65	16.00	16.97	16.82	17.09
16	17.19	17.30	17.30	16.27	16.38	17.55	15.81	17.13	16.61	.....
17	17.51	17.27	17.24	16.13	16.30	.....	15.97	17.03	16.83	.....
18	17.36	17.30	17.28	16.12	16.33	.....	15.99	17.01	16.84	.....
19	17.40	17.28	17.28	16.09	16.22	.....	15.97	17.08	16.87	.....
20	17.42	17.11	17.27	.....	16.38	17.64	15.93	17.09	16.79	16.46
21	17.36	17.36	17.26	.....	16.37	17.59	16.30	17.09	15.01	18.11
22	17.34	17.27	17.29	16.19	16.28	17.65	16.71	17.13	16.81	18.13
23	17.14	17.26	17.09	16.27	16.85	17.91	16.50	17.16	16.82	17.87
24	17.27	17.32	17.12	16.30	17.07	17.88	16.67	17.23	16.76	16.67
25	17.31	17.35	17.10	16.28	17.47	17.79	16.61	17.24	16.75	16.87
26	17.31	17.39	17.14	16.55	17.51	17.54	16.43	17.14	16.74	16.84
27	17.30	17.47	17.06	16.42	17.69	17.69	16.39	17.18	16.73	16.66
28	17.30	17.44	17.11	16.59	17.51	17.58	15.52	17.08	16.78	18.20
29	17.31		17.01	16.65	17.36	17.72	15.52	17.10	16.75	.....
30	17.13		16.76	16.55	17.46	17.50	15.50	17.14	17.70	.....
31	17.31		16.54		17.70		15.55	17.27		.....

139.47.5cc3. City of Moorhead test hole MS1. Records available: 1948-49.

From recorder charts

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	19.66	19.13	a20.15	.....	19.59	.....	.....	.....
2	19.78	19.17	.....	.....	19.66	.....	.....	.....
3	19.90	19.83	.....	20.32	.....	.....	.....	.....
4	19.74	20.08	.....	20.32	.....	.....	.....	.....
5	a19.72	20.24	.....	20.34	.....	19.74	.....	21.65
6	19.55	20.24	.....	20.34	.....	19.72	.....	21.69
7	19.65	20.41	.....	20.34	.....	19.86	.....	21.64
8	19.85	20.13	.....	20.28	.....	19.88	.....	21.62
9	20.19	.....	20.19	.....	19.88	.....	21.61
10	20.13	.....	20.02	.....	19.90	.....	21.70
11	20.43	.....	.....	20.68	19.90	21.08	21.61
12	19.47	20.30	.....	.....	20.74	19.90	21.11	21.38
13	19.89	20.41	.....	.....	20.74	19.90	21.15	21.38
14	19.45	20.43	.....	.....	20.70	19.90	21.07	21.39
15	19.40	20.24	.....	.....	.....	19.92	21.00	.....
16	19.35	20.42	.....	.....	.....	.....	20.97	.....
17	19.35	20.48	.....	.....	.....	.....	20.93	.....
18	19.25	20.11	.....	20.69	.....	.....	20.85	.....
19	19.31	20.07	.....	20.72	.....	.....	20.88	.....
20	19.71	20.17	.....	20.73	19.55	21.72	20.82	.....
21	20.03	20.08	.....	20.77	19.80	21.26	20.85	.....
22	19.88	.....	.....	20.75	19.79	21.24	.....	.....
23	19.93	.....	.....	20.73	19.78	21.30	.....	.....
24	19.90	a20.19	.....	20.55	19.77	21.22	.....	.....
25	19.80	.....	.....	20.65	19.59	21.30	.....	.....
26	19.73	.....	.....	19.77	19.72	21.28	.....	.....
27	19.71	.....	.....	19.73	19.70	21.30	.....	.....
28	19.63	.....	21.22	.....	.....
29	19.38	.....	.....	19.65	.....	21.35	.....	.....
30	19.24	19.45	.....	.....	19.59	.....	21.35	.....	.....
31		19.45	.....	.....	19.59	.....	.....	.....	.....

a Tape measurement.

139.48.7dcll. (M18). City of Moorhead supply well 4. Records available: 1948-49.

From recorder charts						
Day	Jan.	Feb.	Mar.	Apr.	May	June
1	177.57	176.10	174.98	.....	173.75	171.60
2	177.25	176.10	174.81	a173.90	174.10	171.60
3	177.40	175.90	174.79	173.90	174.57	171.65
4	177.39	175.90	174.43	173.81	174.03	171.80
5	177.04	175.90	a176.30	173.57	174.15	171.72
6	176.75	175.60	174.66	173.76	174.17	171.65
7	176.70	165.60	174.57	173.90	174.45	172.10
8	177.25	175.75	174.46	173.76	174.43	171.92
9	177.92	176.05	174.66	173.90	174.65	171.70
10	177.96	176.05	174.57	174.20	174.18	172.02
11	177.96	175.57	174.54	174.70	174.15	171.92
12	177.15	175.65	174.46	174.45	174.04	171.79
13	176.70	175.65	174.46	174.43	174.28	171.59
14	176.70	175.50	174.57	173.97	172.85	171.33
15	176.55	175.10	174.55	175.82	172.60	171.25
16	177.11	175.19	174.15	173.53	172.89	171.24
17	177.05	175.17	174.42	172.80	172.69	171.27
18	177.29	175.40	174.34	172.59	172.69	171.45
19	177.25	177.40	a174.34	172.50	172.47	171.34
20	177.25	175.62	.....	172.93	172.42	170.68
21	176.57	175.46	.....	172.84	172.00	170.73
22	a176.80	175.31	.....	173.80	171.86	170.68
23	176.75	174.84	.....	174.81	172.10	170.58
24	176.80	175.07	.....	174.37	172.51	171.48
25	176.80	175.15	.....	174.68	172.13	170.98
26	176.60	174.90	a174.25	174.20	172.45	170.99
27	176.18	175.20	.....	174.21	172.70	171.46
28	176.48	175.20	.....	174.10	172.35	171.47
29	176.50	.....	.....	174.17	171.85	171.59
30	175.85	.....	.....	174.23	171.60	171.70
31	175.70	.....	.....	.....	171.60	.....

a Tape measurement.

From recorder charts					
Day	July	Aug.	Sept.	Oct.	Dec.
1	171.96	.....	173.79	.....	.....
2	.....	.....	172.40	.....	.....
3	.....	171.58	.....	.....	.....
4	.....	171.54	.....	.....	.....
5	.....	171.87	.....	.....	169.20
6	.....	172.10	.....	.....	169.07
7	.....	172.20	.....	.....	169.29
8	.....	172.00	.....	.....	169.75
9	.....	172.43	.....	.....	169.40
10	.....	a172.95	.....	.....	169.08
11	.....	173.18	.....	.....	169.47
12	.....	173.25	.....	.....	169.10
13	.....	173.35	.....	.....	.....
14	172.25	173.16	.....	.....	.....
15	172.21	173.48	.....	.....	.....
16	171.28	173.53	.....	.....	.....
17	171.28	.....	.....	.....	.....
18	171.80	.....	.....	.....	170.99
19	172.10	173.58	.....	.....	.....
20	171.88	173.92	.....	172.63	.....
21	171.93	173.90	.....	172.74	.....
22	.....	173.90	.....	.....	.....
23	.....	173.92	.....	172.79	.....
24	.....	173.82	.....	174.57	.....
25	.....	173.55	.....	174.43	.....
26	.....	173.80	.....	.....	.....
27	.....	173.90	.....	.....	.....
28	.....	173.90	.....	.....	.....
29	.....	173.50	.....	.....	.....
30	.....	173.75	.....	.....	.....
31	.....	173.79	.....	.....	.....

a Tape measurement.

139.47.6aaa. Geological Survey, U. S. Dept. of Interior test hole. Cased for observation well, diameter 3 inches, depth 103 feet. Cased with standard black pipe, slotted at bottom. Measuring point, top of collar on well casing, 2.50 feet above land-surface datum. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 16	16.94	Aug. 19	17.29	Oct. 2	17.83	Oct. 28	18.10
22	17.02	26	17.21	7	17.84	Nov. 4	18.14
27	17.13	Sept. 2	17.20	14	17.96	11	18.19
Aug. 5	17.19	9	17.22	22	18.03	19	18.21
12	17.25	23	17.73				

Itasca County

146.27.26bd. (U S 5) Corps of Engineers, U. S. Army. Records available: 1942-49.

Jan. 3	22.08	Apr. 9	22.60	July 12	21.27	Oct. 17	19.45
27	20.60	20	22.51	24	21.57	25	20.07
31	20.70	25	22.41	Aug. 3	20.10	31	20.09
Feb. 5	24.00	May 2	22.58	15	19.68	Nov. 7	19.39
12	23.80	9	22.37	27	19.39	15	19.49
19	22.60	19	22.31	29	19.37	22	19.42
26	24.00	31	21.76	Sept. 6	19.33	28	19.59
Mar. 5	22.70	June 9	21.87	12	19.27	Dec. 5	19.69
12	22.60	14	21.76	21	19.37	13	19.89
19	22.50	20	21.54	26	19.42	20	19.99
26	22.70	July 1	21.57	Oct. 4	19.38	27	20.09
Apr. 2	22.50	8	21.56	10	19.37		

Morrison County

R-10. Camp Ripley Military Reservation. Geological Survey, U. S. Dept. of Interior test hole. Diameter 5 inches, depth 108.5 feet. Cased for observation purposes to 57.15 feet with $1\frac{1}{4}$ -inch standard black pipe casing. Measuring point is 2.48 feet above land-surface datum. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 20	12.68	June 20	12.66	Aug. 1	11.48	Oct. 11	9.16
26	12.76	27	12.17	9	10.87	20	9.17
May 2	12.73	29	12.58	16	9.68	28	9.10
9	12.66	30	12.47	23	10.68	Nov. 8	9.12
16	12.70	July 5	12.12	30	10.53	21	9.02
23	12.68	11	12.23	Sept. 8	9.22	29	9.00
31	12.62	14	12.62	14	9.20	Dec. 6	9.12
June 6	12.29	18	12.84	19	9.31	10	9.12
13	12.76	26	10.43	28	10.57	21	9.09

R-14. Camp Ripley Military Reservation. Geological Survey, U. S. Dept. of Interior test hole. Diameter, 5 inches, depth 59 feet, cased for observation purposes to 59 feet with 2-inch standard black pipe casing. Measuring point, top of casing, 0.92 foot above land-surface datum. Records available: 1949.

Apr. 20	16.74	June 20	16.34	Aug. 1	15.16	Oct. 11	15.80
26	16.77	27	16.32	9	15.74	20	15.88
May 2	16.82	29	16.38	16	13.66	28	15.93
9	16.76	30	16.40	23	13.56	Nov. 8	15.88
16	16.74	July 5	16.93	30	15.58	21	15.98
23	16.88	11	16.30	Sept. 8	15.34	29	16.04
31	16.82	14	15.96	14	15.78	Dec. 6	16.14
June 6	16.68	18	16.03	19	15.33	10	16.28
13	16.46	26	16.06	28	15.80	21	16.29

R-16. Camp Ripley Military Reservation. Geological Survey, U. S. Dept. of Interior test hole. Diameter 5 inches, depth 77.5 feet. Cased for observation purposes to 58.5 feet with 2-inch standard black pipe casing. Measuring point, top of casing, 2.10 feet above land-surface datum. Records available: 1949.

Apr. 20	13.59	June 20	13.28	Aug. 1	13.26	Oct. 11	13.30
26	15.56	27	13.06	9	13.19	20	13.30
May 2	13.54	29	13.04	16	13.14	28	13.33
9	13.48	30	13.10	23	13.11	Nov. 8	13.50
16	13.56	July 5	13.00	30	13.21	21	13.66
23	13.51	11	13.14	Sept. 8	13.23	29	13.70
31	13.49	14	13.29	14	13.32	Dec. 6	13.05
June 6	13.18	18	13.36	19	13.33	10	13.15
13	13.33	26	13.40	28	13.34	21	13.05

St. Louis County

56,17.4 (U S 4) (Formerly U S 136). Herman A. Katola. Records available: 1943-49.

Jan. 2	8.79	Apr. 3	7.90	June 26	7.21	Oct. 2	7.91
9	8.88	6	7.42	July 3	7.25	9	5.38
16	9.00	10	6.67	10	6.08	16	5.93
23	9.97	17	6.58	17	6.63	23	5.71
30	9.95	27	6.59	24	6.75	30	5.94
Feb. 6	9.12	May 1	6.95	31	6.50	Nov. 6	5.95
13	9.15	8	6.48	Aug. 7	6.71	13	6.14
22	9.17	15	6.75	14	6.98	20	5.64
29	9.25	22	7.04	21	7.95	27	6.02
Mar. 28	9.25	29	7.17	Sept. 4	7.38	Dec. 4	6.18
13	9.30	June 5	6.79	11	7.56	11	6.29
20	9.21	12	7.00	18	7.67	18	6.32
27	8.69	19	7.21	25	7.79	25	6.51

MISSOURI

By J. B. Cooper

PROGRAM OF WORK

Water-level measurements were made in Atchison County in 1949 as part of the Tarkio Creek Valley observation-well program organized by the Federal Geological Survey in 1934 in which the Soil Conservation Service of the United States Department of Agriculture participated for several years.

The Atchison County section consisted of 13 wells in 1949 in which 135 single measurements were made by D. W. Knox, observer of the Tarkio Creek well program.

The measurements of the observation well in Grundy County were continued on a weekly basis. W. H. Estes, owner of the Grundy County well, has been the observer since its establishment and initial measurement in 1942.

The water levels in the two Phelps County wells were measured monthly by engineers from the Rolla office of the surface water branch through the courtesy of H. C. Bolon, district engineer. A total of 25 measurements was made in these two wells in 1949.

FLUCTUATIONS OF WATER LEVELS

In the Grundy County well the low measurement of 8.40 feet below land-surface datum recorded on January 9 is the lowest on record for this well. The year started with a measurement of 8.24 feet below land-surface datum on January 2. The maximum fluctuation of water level was 5.52 feet with the highest reading of 2.88 feet below land-surface datum occurring on June 26. The water level was 1.37 feet higher at the end of 1949 than the end of 1948.

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 DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Atchison CountyTarkio Creek area

1. W. R. Marshall. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 66 N., R. 40 W. Records available: 1934-48. No measurement made in 1949.

2. H. W. Klutas. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 1, T. 66 N., R. 40 W. Records available: 1934-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	9.60	Apr. 25	9.69	July 19	8.43	Oct. 24	9.60
Feb. 21	9.30	May 23	9.69	Aug. 22	8.54	Nov. 23	9.75
Mar. 24	9.70	June 22	9.96	Sept. 22	9.48	Dec. 19	9.88

20. Owner unknown. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 65 N., R. 40 W. Records available: 1937-49.

Jan. 26	19.00	Apr. 25	21.72	July 19	17.24	Oct. 24	20.16
Feb. 21	19.98	May 23	21.85	Aug. 22	19.47	Nov. 23	21.80
Mar. 24	20.60	June 22	20.44	Sept. 22	19.34	Dec. 19	22.24

21. Owner unknown. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 11, T. 65 N., R. 40 W. Records available: 1937-49.

Jan. 26	19.14	Apr. 25	20.88	July 19	17.52	Oct. 24	19.40
Feb. 21	19.18	May 23	20.56	Aug. 22	17.97	Nov. 23	19.94
Mar. 24	19.84	June 22	18.98	Sept. 22	18.86	Dec. 19	20.49

22. J. A. McAllister. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 35, T. 66 N., R. 40 W. Records available: 1937-49.

Mar. 24	10.12	June 22	10.48	Sept. 22	10.75	Nov. 23	11.05
Apr. 25	11.53	July 19	9.74	Oct. 24	10.84	Dec. 19	11.23
May 23	10.67	Aug. 22	10.58				

24. Owner unknown. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 26, T. 66 N., R. 40 W. Records available: 1937-49.

Mar. 24	3.98	June 22	3.20	Sept. 22	3.12	Nov. 23	2.46
Apr. 25	3.69	July 19	3.01	Oct. 24	2.28	Dec. 19	2.67
May 23	3.60	Aug. 22	2.44				

25. Edwin Rolf. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 12, T. 66 N., R. 40 W. Records available: 1937-49.

Jan. 26	36.60	Mar. 24	39.39	May 23	42.06	July 19	33.84
Feb. 21	39.67	Apr. 25	40.76	June 22	41.13	Aug. 22	38.27

29. Edwin Rolf. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 12, T. 66 N., R. 40 W. Records available: 1937-48. No measurement made in 1949.

31. W. F. Marshall. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 13, T. 66 N., R. 40 W. Records available: 1937-49.

Jan. 26	5.92	Apr. 25	3.10	July 19	2.81	Oct. 24	2.92
Feb. 21	4.05	May 23	2.14	Aug. 22	3.36	Nov. 23	3.38
Mar. 24	2.88	June 22	3.00	Sept. 22	3.28	Dec. 19	3.75

32. W. F. Marshall. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 13, T. 66 N., R. 40 W. Records available: 1937-49.

Jan. 26	13.13	Apr. 25	12.14	July 19	8.60	Oct. 24	11.32
Feb. 21	9.40	May 23	13.37	Aug. 22	12.10	Nov. 23	12.93
Mar. 24	12.24	June 22	11.70	Sept. 22	12.56	Dec. 19	13.58

33. W. F. Marshall. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 13, T. 66 N., R. 40 W. Records available: 1937-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	15.52	Apr. 25	16.15	July 19	11.20	Oct. 24	15.76
Feb. 21	14.98	May 23	16.16	Aug. 22	14.39	Nov. 23	16.19
Mar. 24	16.39	June 22	15.42	Sept. 22	14.86	Dec. 19	16.30

34. W. F. Marshall. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 66 N., R. 40 W. Records available: 1937-49.

Jan. 26	4.80	May 23	4.33	Aug. 22	4.34	Nov. 23	4.17
Mar. 24	3.24	June 22	3.44	Sept. 22	5.60	Dec. 19	4.78
Apr. 25	3.56	July 19	3.23	Oct. 24	3.49		

35. W. F. Marshall. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 66 N., R. 40 W. Records available: 1937-49.

Jan. 26	15.50	Apr. 25	18.69	July 19	10.83	Oct. 24	19.08
Feb. 21	21.70	May 23	18.58	Aug. 22	15.78	Nov. 23	20.10
Mar. 24	19.28	June 22	16.23	Sept. 22	17.38	Dec. 19	21.60

36. George Rolf. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 66 N., R. 40 W. Records available: 1937-49.

Jan. 26	29.50	Apr. 25	28.76	July 19	19.15	Oct. 24	25.87
Feb. 21	28.14	May 23	28.14	Aug. 22	20.70	Nov. 23	27.07
Mar. 24	28.58	June 22	26.31	Sept. 22	22.81	Dec. 19	27.96

Grundv County

U. S. 113. Wiley H. Estes. In Trenton, in sec. 17, T. 61 N., R. 24 W., on property of owner at 105 E. Fourth Street. Records available: 1942-49.

Jan. 2	8.24	Apr. 10	4.08	July 10	4.90	Oct. 9	6.34
9	8.40	17	4.64	17	4.18	16	6.54
16	7.60	24	4.75	24	4.24	22	6.22
24	7.42	May 1	4.90	31	4.88	30	6.18
31	7.24	8	5.48	Aug. 7	5.34	Nov. 6	6.48
Feb. 6	7.23	15	5.52	14	5.32	13	6.16
13	5.90	22	5.34	21	5.24	20	6.54
27	5.80	29	5.64	28	5.32	27	6.82
Mar. 6	5.81	June 5	5.24	Sept. 4	5.76	Dec. 4	6.82
12	3.34	12	5.22	11	5.48	10	6.88
20	5.10	19	4.20	18	6.04	17	6.82
27	5.16	26	2.88	25	6.02	25	6.82
Apr. 3	3.82	July 3	4.74	Oct. 2	5.88	30	6.92

Phelps County

U S 98. S. V. Allen. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 37 N., R. 10 W. Records available: 1942-49.

Jan. 31	6.88	May 2	7.02	Aug. 1	9.60	Oct. 31	6.64
Mar. 1	7.09	June 1	7.09	Sept. 1	7.84	Nov. 30	7.41
31	6.85	30	5.72	30	7.22	Dec. 30	6.88

U S 98A. Fred Pillman. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 24, T. 37 N., R. 10 W. Records available: 1942-49.

Jan. 31	9.40	May 31	10.55	Aug. 1	9.10	Oct. 31	6.26
Mar. 1	9.29	June 1	9.86	Sept. 1	10.08	Nov. 30	8.18
31	7.34	July 1	7.67	30	8.56	Dec. 30	7.46
May 2	9.28						

NEBRASKA

By H. A. Waite and others

PROGRAM OF WORK

The State-wide program of water-level measurements in observation wells, begun in 1934, in cooperation with the Conservation and Survey Division, University of Nebraska, was expanded in 1945 as a part of the program for the development of the natural resources of the Missouri River Basin. Since 1945, there has been an increase in the number of wells measured and also in the number of measurements made in each well. The cooperative test-drilling program has been increased due to the inclusion of the observation-well program in the Missouri Basin studies.

Measurements of water levels were made in 1,032 wells including 60 wells in the observation of which the following organizations are cooperating informally: Grand Island Water Department, 45 wells in Hall County; Fish and Wildlife Service, United States Department of the Interior, 9 wells in Garden County; Central Nebraska Public Power and Irrigation District, 1 well in Keith County; Platte Valley Public Power and Irrigation District, 2 wells in Keith County and 2 wells in Lincoln County. Weekly tape measurements for well 20-50-32aa, in Morrill County, were furnished by the Nebraska Department of Roads and Irrigation.

Automatic water-stage recorders were in operation on 23 wells. Of these, the following wells are equipped with 60-day continuous recorders:

- 1-11-11ab (near Red Cloud, Webster County)
- 1-40-29bb (near Haigler, Dundy County)
- 3-25-4bb (near Cambridge, Furnas County)
- 5-15-3ba (near Minden, Kearney County)
- 5-19-22da (near Atlanta, Phelps County)
- 7-10-23ab (near Hastings, Adams County)
- 7-38-28cc (near Imperial, Chase County)
- 9-14-1dc (near Gibbon, Buffalo County)

The following wells which are continued from preceding page, are equipped with 60-day continuous recorders:

11-11-25cc (near Alda, Hall County)

24-48-10bb (near Alliance, Box Butte County)

The remaining wells listed below, are equipped with 8-day recorders:

1-6-30dd (near Superior, Nuckolls County)

5-6-26bd (in Edgar, Clay County)

7-20-31cd (in Bertrand, Phelps County)

8-9-14ac (near Trumbull, Adams County)

13-36-8cc) (near Korty, Keith County)
13-36-9ad)

14-33-27da (near O'Fallons, Lincoln County)

15-9-9aa (near Cushing, Howard County)

17-16-26dc (near Arcadia, Valley County)

24-48-31ba) (near Alliance, Box Butte County)
25-48-14aa)

25-45-32ad (near Antioch, Sheridan County)

30-22-23dd (near Ainsworth, Brown County)

The well near Superior is serviced by personnel of the Bureau of Reclamation at Superior. The two wells near Korty and the one near O'Fallons are serviced by Warren Doolittle of the Platte Valley Public Power and Irrigation District. The well near Ainsworth is serviced by personnel of the Bureau of Reclamation at Ainsworth.

Tables have been included showing the total monthly pumpage for the public supplies for the city of Grand Island and for the city of Lincoln at its well field near Ashland. Monthly measurements of the water level in well A13-9-24cc (U. S. 62) are given under the heading Saunders County. This well is one of eight key wells in Nebraska and the water level in the well is measured by personnel of the Ashland pumping station.

Monthly measurements of the water levels in eight key wells in Nebraska were continued during 1949. These measurements form the basis for statements of water-level conditions in the State published in the monthly Water Resources Review.

In all, exclusive of automatic water-stage recorder measurements, 6,091 individual measurements of water level were made in Nebraska in 1949.

FLUCTUATIONS OF WATER LEVELS

The precipitation in Nebraska in 1949 was 25.36 inches, 2.63 inches above normal and 3.79 inches above that of 1948.

The following table summarizes for each observation well, the highest and lowest water level of record, the net change in water level in 1949, and the net change in water level during the entire period of record:

Length of record, in years, highest and lowest recorded water levels, in feet, net change in water level in 1949, and net change in water level during period of record in 973 wells in Nebraska

Well number	Highest level	Date	Lowest level	Date	Net rise (+) or net decline 1949a/	Net rise (+) or net decline for period of record
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Adams County</u>						
5-9-9dc	35.65	May 26, 1949	37.70	Aug. 20, 1947	0.50	+0.33
5-10-1bb	93.23	May 26, 1949	94.89	Aug. 30, 1948	+0.02	.38
5-11-2bb	85.68	Nov. 21, 1949	86.40	Aug. 30, 1948	+0.47	+0.54
5-11-10bc	8.83	June 3, 1949	10.81	Nov. 13, 1940	.27	+0.32
5-11-25ac	90.77	Apr. 25, 1949	91.19	Oct. 20, 1948	....	+0.13
6-9-4cb	102.84	Nov. 21, 1949	103.40	Nov. 17, 1947	+0.43	+0.56
6-10-8ac	90.07	Sept. 29, 1949	90.55	Nov. 24, 1947	+0.41	+0.45
6-10-23bb	2.05	May 26, 1949	10.43	Apr. 12, 1937	+1.53	+3.48
6-10-31bd	90.99	June 3, 1949	91.70	Aug. 30, 1948	+0.38	+0.23
6-11-30bc	83.47	Nov. 21, 1949	84.12	Oct. 20, 1948	+0.65	+0.65
6-12-12db	99.83	Sept. 29, 1949	100.30	Oct. 20, 1948	+0.27	+0.17
7-9-12dc	111.06	Nov. 12, 1949	111.53	June 28, 1948	+0.18	+0.44
7-10-23ab	99.95	Jan. 22, 1935	102.96	Sept. 18, 1948	+0.45	2.12
		Mar. 14, 1935				
7-10-26da	113.46	Nov. 21, 1949	115.63	Sept. 1, 1948	+0.36	+0.59
7-11-3cb	111.59	Sept. 29, 1949	112.20	May 11, 1948	....	+0.60
7-11-22ad	118.18	Nov. 21, 1949	120.60	Aug. 15, 1947	+0.62	+2.42
7-12-15ca	96.99	Nov. 21, 1949	98.05	Nov. 17, 1947	+0.47	+1.06
7-12-24cc	98.17	Nov. 21, 1949	99.02	Nov. 17, 1947	+0.53	+0.85
8-9-5cc	91.29	Sept. 29, 1949	92.12	Nov. 13, 1947	+0.67	+0.83
8-9-14ac	109.96	July 5, 1949	113.35	Aug. 6, 1949	+0.13	+0.43
8-10-26da	97.32	Nov. 21, 1949	97.43	June 3, 1949	+0.08	+0.08
8-10-32da	103.99	Apr. 12, 1949	104.30	Nov. 11, 1948	+0.10	.15
8-11-13aa	91.25	Sept. 29, 1949	92.68	Aug. 14, 1947	+0.40	+1.36
8-12-1cd	82.93	Nov. 21, 1949	84.05	Oct. 22, 1948	+0.25	+1.12
8-12-8ab	6.15	July 8, 1949	9.72	Sept. 7, 1946	+1.30	+1.89
8-12-22db	81.90	Nov. 21, 1949	84.60	Aug. 13, 1947	+1.14	+2.70

Antelope County

24-6-2aa	3.31	May 24, 1936	7.81	Sept. 12, 1935	+0.16	+1.74
		May 30, 1946				

Banner County

19-54-15bb	22.40	July 13, 1949	24.04	Sept. 15, 1949	....	.58
19-55-29ac	26.38	Oct. 27, 1938	34.52	June 27, 1938	....	+1.05

a Difference between last measurement in preceding year, provided it occurred in October, November, or December, and the last measurement in the year of this report, provided it occurred in October, November, or December.

Length of record, in years, highest and lowest recorded water levels, in feet, net change in water level in 1949, and net change in water level during period of record in 973 wells in Nebraska--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Blaine County</u>						
22-24-33ca	1.16	May 31, 1949	5.65	Aug. 4, 1946	+1.07	+0.18
23-22-22cb	16.08	Sept. 16, 1949	18.12	July 23, 1940	....	+.99
23-22-22cc	2.24	Jan. 7, 1935	4.38	July 1, 1936	+.21	.44

Boone County

18-5-12cc	12.37	Sept. 12, 1949	13.98	Sept. 28, 1948	....	+.46
18-7-4ca	12.65	June 8, 1949	15.17	Oct. 26, 1940	....	+.31
18-7-5ad	4.35	Apr. 28, 1949	6.33	Aug. 6, 1935	....	+.75
18-7-14bb	56.93	Apr. 28, 1949	58.55	May 20, 1948	....	+.48
19-5-4ac	64.54	June 6, 1949	65.71	Aug. 9, 1949	....	+.17
19-5-6aa	41.12	June 8, 1949	42.95	Sept. 28, 1948	....	.14
19-5-7cd	44.26	June 8, 1949	46.32	Sept. 29, 1948	....	+.03
19-5-16db	22.74	June 8, 1949	24.85	Sept. 28, 1948	....	.39
19-5-27dc	12.29	June 8, 1949	15.01	Aug. 9, 1949	....	.13
19-5-28cd	32.51	June 8, 1949	34.88	Sept. 29, 1948	....	.11
19-7-30aa	23.48	Apr. 28, 1949	25.48	Nov. 1, 1949	....	+.37
19-7-31cc	36.19	July 5, 1949	38.22	Aug. 4, 1949	....	+.20
19-8-9bb	69.13	July 5, 1949	69.85	Sept. 29, 1948	....	.30
19-8-14db	25.29	Apr. 28, 1949	26.58	Sept. 29, 1948	....	+.14
19-8-16cc	43.75	Apr. 28, 1949	46.11	Aug. 4, 1949	....	.27
20-6-6dc	67.07	July 6, 1949	69.54	June 8, 1949	....	+.43
20-6-23bb	29.62	June 8, 1949	32.55	Sept. 28, 1948	....	.17
20-6-35ba	44.69	July 6, 1949	52.04	Sept. 22, 1949	....	.14
21-7-26ca	14.89	Apr. 27, 1949	21.07	Oct. 14, 1938	....	+.77

Box Butte County

24-47-1db	11.14	Mar. 25, 1948	12.45	May 14, 1946	+.38	.16
24-48-4bb	13.32	Apr. 11, 1946	15.12	Nov. 25, 1949	.62	1.80
24-48-10bb	9.82	July 14, 1949	11.37	Oct. 22- 29, 1948	+.14	.66
24-48-11dd a	.91	May 11, 1949	7.05	Nov. 12, 1946	+.33	.51
24-48-31ba	37.46	Mar. 28, 1948	39.20	June 8, 16, 18, 30, 1946	+.22	+.64
24-50-10aa	48.68	June 3, 1946	52.02	July 2, 1938	+.58	+2.33
24-52-13cb	74.35	Sept. 14, 1949	78.55	Sept. 1, 1948	+1.08	+.42
24-52-35aa	97.61	July 22, 1940	99.13	May 9, 1946	+.20	+1.05
25-47-31cc	14.29	Aug. 28, 1947	19.26	Nov. 23, 1949	1.08	3.90
25-48-4dd	63.15	July 22, 1946	63.91	Dec. 17, 1946	+.21	.28
25-48-14aa	48.06	Mar. 6, 1946	50.90	May 16, 1946	.52	2.31
25-48-25bb2	70.76	May 29, 1946	81.69	July 13, 1949	.10	3.20
25-48-27db2	67.90	May 13, 1946	72.19	Sept. 15, 1949	.51	3.02
25-48-30ad	12.54	July 11, 1946	15.40	July 11, 1940	....	+1.86
25-49-14da	31.43	May 13, 1946	33.10	July 22, 1940	....	.64
25-50-22aa	131.78	Nov. 22, 1949	132.54	Sept. 13, 1949	1.55	+.22
25-50-31ab	102.60	Sept. 14, 1949	103.41	May 1, 1947	+.31	+.31
25-51-14aa	87.52	July 22, 1940	90.04	Oct. 20, 1941	+.06	.34
26-47-17ad	52.21	July 1, 1948	62.29	Feb. 27, 1946	.62	.29
26-47-35dd	11.83	Mar. 26, 1948	13.64	Sept. 1, 1948	+3.52	.90
26-50-12dc	100.56	July 1, 1948	102.38	Oct. 21, 1948	+.64	+.55
26-51-25bc	95.49	July 22, 1940	96.50	Nov. 12, 1946	+1.03	+.13
26-52-10bc	93.37	July 27, 1938	101.02	Feb. 19, 1947	+.45	1.86
26-52-17ab	73.11	July 12, 1949	75.46	Sept. 1, 1948	+.93	+.46
27-47-12da	6.92	July 12, 1949	12.23	Feb. 18, 1947	+.25	+4.53
27-47-23ba	16.34	Sept. 13, 1949	29.94	Apr. 19, 1935	+1.68	+12.51
27-49-21cb	115.45	Sept. 13, 1949	119.41	Nov. 2, 1940	+.37	+.57
27-50-20aa	173.99	Feb. 27, 1946	178.73	Oct. 20, 1941	+.54	4.73
27-51-6bb	219.86	May 10, 1949	221.17	Sept. 14, 1949	....	+.01
28-51-6dd	1.67	Mar. 27, 1936	4.08	Mar. 27, 1948	....	+.23
28-51-8bc	84.47	May 10, 1949	86.40	July 20, 1940	+.59	+.77

a Influent seepage.

Length of record, in years, highest and lowest recorded water levels, in feet, net change in water level in 1949, and net change in water level during period of record in 973 wells in Nebraska--Continued.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Brown County</u>						
29-21-6cd	2.19	Apr. 20, 1949	9.00	June 17, 1945	+0.70	0.62
29-21-7ab	3.92	Dec. 16, 1947	5.99	Oct. 14, 1948	....	.58
29-22-4ab	.76	Apr. 20, 1949	3.95	Sept. 15, 1948	.46	1.65
30-21-15cd	74.39	Nov. 15, 1948	75.47	Sept. 14, 1948	.60	+ .05
30-21-18bc	55.84	Aug. 30, 1949	58.69	Oct. 17, 1949	.77	.69
30-21-19cc	36.80	Mar. 16, 1948	40.12	Jan. 13, 1948	.65	+ .27
30-21-26bb	37.15	Dec. 5, 1949	47.82	Sept. 14, 1948	....	+1.09
30-21-30bc	37.02	Dec. 6, 1949	38.45	Sept. 15, 1948	+ .79	+ .68
30-22-15cc	41.54	Mar. 17, 1948	49.17	Oct. 17, 1949	+ .28	+ .28
30-22-17cb	45.12	Nov. 14, 1947	46.59	Sept. 15, 1948	+ .47	.74
30-22-19aa	47.88	Dec. 6, 1949	38.73	Apr. 20, 1949	+ .82	+ .32
30-22-23dd	38.49	June 22, 1949	39.47	Sept. 23, 1948	....	.01
30-22-26db	24.95	Nov. 18, 1944	29.00	Aug. 15, 1937	+ .58	+1.31
30-22-27dc	14.02	Aug. 1, 1944	18.87	Aug. 9, 1937	+ .02	+ .10
30-23-1cc	62.94	Apr. 14, 1948	66.13	Oct. 17, 1949	+ .38	+ .30
30-23-13bc	38.40	June 16, 1949	39.50	Nov. 20, 1944	+ .63	+1.08
30-23-21aa	22.44	Aug. 31, 1949	23.73	Dec. 15, 1948	+1.24	+ .34
31-22-23dd	41.58	July 26, 1949	42.95	Oct. 14, 1948	.43	.85

Buffalo County

8-16-3cb	10.22	Sept. 8, 1947	13.22	Aug. 7, 1946	+1.49	+1.50
8-16-10cc	1.70	July 6, 1949	3.79	Sept. 7, 1948	+ .05	+ .98
8-16-12cc	1.59	Apr. 25, 1933	7.80	Jan. 7, 1947	+ .22	.75
8-17-1da	4.18	Oct. 7, 1946	11.90	Nov. 3, 1934	+1.09	+2.70
8-17-4bc	5.26	Dec. 3, 1946	11.19	Sept. 7, 1948	+1.74	1.04
8-17-12dd	.89	Mar. 9, 1948	4.95	Aug. 20, 1936	.37	+1.56
8-18-4cb	7.30	Oct. 7, 1946	10.07	Sept. 7, 1948	.07	.43
9-13-5cb	16.54	May 20, 1931	22.54	Sept. 5, 1946	+1.33	+ .42
9-13-9cc	10.87	July 5, 1949	17.09	Oct. 4, 1946	+1.72	+ .07
9-14-1dc	15.56	July 20, 1949	19.75	Sept. 6, 1946	+1.19	+2.19
9-14-4cc	17.58	July 5, 1949	23.11	Sept. 5, 1946	+1.26	+ .59
9-14-13cb	15.30	July 11, 1947	23.05	Oct. 15, 1941	+1.34	+ .19
9-14-19dd	22.55	June 9, 1931	28.53	Oct. 15, 1941	+1.00	1.70
9-14-21cc	17.49	July 11, 1947	22.11	Nov. 24, 1939	....	1.95
9-14-22bb	15.00	July 11, 1947	19.56	Sept. 5, 1946	+1.28	.10
9-14-34bb	9.20	July 5, 1949	15.68	Oct. 27, 1940	+1.82	.90
9-15-11cb	23.67	July 11, 1947	29.96	Oct. 15, 1941	+ .67	.94
9-15-16cc	31.88	May 4, 1948	35.02	Sept. 5, 1946	....	+2.55
9-15-34bb	16.60	June 16, 1931	25.35	Nov. 3, 1948	+5.53	2.50
9-16-9cb	30.18	July 7, 1949	31.63	Sept. 19, 1949	+ .59	+ .59
9-16-13bc	26.71	July 7, 1949	28.40	Nov. 15, 1948	+ .37	+ .37
9-17-31cd	8.02	Oct. 7, 1946	13.01	Mar. 9, 1948	+ .21	+ .60
9-18-27dd	3.63	Oct. 7, 1946	9.39	July 10, 1946	+1.48	+1.35
9-18-31cc	7.38	Oct. 8, 1946	12.50	Sept. 7, 1948	+ .77	.07
10-13-24bc	17.91	May 13, 1931	26.28	Sept. 5, 1946	+1.63	4.10
10-17-21cd	27.98	July 7, 1949	38.75	Aug. 2, 1949	....	+3.54
10-17-26cb	23.29	Aug. 2, 1949	24.46	Nov. 17, 1948	+1.22	+1.22
10-18-12aa	27.76	July 7, 1949	29.45	Nov. 15, 1948	+ .70	+ .70
11-18-7ac	34.32	June 3, 1949	35.70	Nov. 16, 1948	+1.18	+1.18
11-18-9dc	33.02	July 7, 1949	34.61	Nov. 15, 1948	+ .05	+ .05

Butler County

A16-1-17bc	2.80	July 7, 1947	5.47	Sept. 3, 1946	+ .37	.85
A16-2-14cc	3.22	Apr. 19, 1949	6.35	Oct. 12, 1946	+ .05	.44
A16-2-30bc	20.77	July 12, 1949	22.68	Aug. 6, 1946	+ .25	+ .76
A16-3-1dc	8.11	July 7, 1947	12.45	Jan. 12, 1948	+ .43	1.18
A16-3-8dd	1.54	Mar. 7, 1949	4.86	Sept. 3, 1947	+ .09	+ .42
A16-3-15cd	11.52	July 7, 1947	17.28	Aug. 5, 1946	+ .13	+1.30
A17-4-28cd	19.55	July 7, 1947	22.10	Oct. 11, 1946	+ .20	.39

Length of record, in years, highest and lowest recorded water levels, in feet, net change in water level in 1949, and net change in water level during period of record in 973 wells in Nebraska--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Chase County</u>						
5-36-7ba	14.93	June 9, 1949	16.39	Aug. 15, 1946	0.17	+0.10
5-36-10bb	2.15	Feb. 10, 1949	6.53	Mar. 23, 1949	....	2.46
5-37-2dc	5.39	Feb. 10, 1949	7.46	Aug. 26, 1949	....	1.46
5-37-3cc	23.85	Nov. 18, 1949	25.60	Dec. 9, 1948	+1.34	+1.34
5-37-3cd	5.10	June 9, 1949	6.30	Aug. 26, 1949	....	.11
5-37-4dad	86.15	Nov. 18, 1949	87.26	Apr. 22, 1949	....	+2.27
5-37-9sdb1	63.29	Nov. 18, 1949	68.00	June 9, 1949	....	+4.68
5-37-9adb2	78.95	Nov. 18, 1949	84.74	Apr. 22, 1949	....	+5.02
5-37-9adb3	93.57	Dec. 20, 1949	98.65	Mar. 23, 1949	....	+5.08
5-37-10ba	5.37	June 9, 1949	7.57	Aug. 4, 1949	....	+0.06
5-37-10bbb	4.67	Dec. 19, 1949	7.34	Dec. 9, 1948	....	+2.67
5-37-10bbc	10.95	Dec. 20, 1949	14.62	Dec. 9, 1948	....	+3.67
5-37-10bc	14.99	Dec. 20, 1949	19.21	Mar. 23, 1949	....	+4.19
5-38-3ad	5.92	June 9, 1949	7.03	Aug. 26, 1949	....	.00
5-38-4aa	10.79	June 9, 1949	11.35	Aug. 4, 1949	....	.02
5-38-4ad	4.48	June 9, 1949	5.44	Aug. 26, 1949	....	.23
6-37-32dc	18.90	Mar. 23, 1949	19.65	Oct. 7, 1948	....	+7.75
7-38-20dd	69.49	Dec. 19, 1949	70.92	Nov. 19, 1942	+5.1	+5.50
7-38-28cc	75.23	Dec. 23, 1949	76.85	Dec. 9, 1944	+2.7	+1.45
<u>Cherry County</u>						
31-25-20ad	2.25	May 16, 1945	6.38	Sept. 1936	....	+1.4
<u>Clay County</u>						
5-6-26bd	76.12	Dec. 24, 30, 31, 1949	77.09	July 18, 1948	+85	+88
<u>Golfax County</u>						
A17-2-22dd	3.52	July 8, 1947	6.49	Jan. 13, 1948	+43	+58
A17-3-4cc	4.37	Mar. 8, 1949	6.34	Sept. 4, 1947	+20	+53
A17-3-11dd	6.60	July 7, 1947	10.50	Jan. 3, 1947	+81	+01
A17-3-18dc	1.75	Mar. 23, 1948	4.82	Sept. 4, 1946	+24	.49
A17-3-23cc	2.15	Mar. 24, 1948	5.27	Sept. 3, 1946	+07	.08
A17-3-29aa	6.97	July 8, 1947	8.83	Nov. 1, 1948	+37	+17
A17-4-4bb	11.19	July 8, 1947	17.11	Aug. 6, 1946	+1.82	.18
<u>Custer County</u>						
18-17-3bb	6.47	Dec. 1, 1949	6.49	Nov. 11, 1949	....	+0.1
18-17-9bb	10.99	Oct. 6, 1949	13.73	Dec. 1, 1949	....	2.74
18-17-36dd	1.99	Aug. 31, 1949	2.87	Nov. 9, 1949	....	.84
19-17-9ca	69.04	Nov. 10, 1949	69.38	Sept. 26, 1949	....	+2.4
19-17-17bb	8.53	Nov. 9, 1949	9.14	Dec. 5, 1949	....	.36
19-17-19ad	4.42	Oct. 6, 1949	4.78	Dec. 1, 1949	....	.36
19-17-29cd	10.21	Oct. 6, 1949	11.06	Dec. 1, 1949	....	.85
19-17-34dd	4.21	Dec. 5, 1949	4.34	Nov. 9, 1949	....	+0.7
19-18-9aa	11.98	Mar. 28, 1948	14.98	July 16, 1940	....	+2.36
19-18-10db	7.83	Oct. 6, 1949	8.26	Dec. 1, 1949	....	+2.29
19-18-15ab	3.28	Sept. 5, 1949	3.67	Oct. 6, 1949	....	.20
19-19-1ad	7.55	Nov. 10, 1949	8.39	Oct. 6, 1949	....	+2.0
19-19-2bb	16.80	Nov. 10, 1949	17.51	Aug. 23, 1949	....	+6.2
19-19-4cc	8.95	Nov. 10, 1949	9.83	Sept. 6, 1949	....	+0.7
19-19-9bc	8.17	Dec. 2, 1949	8.75	Oct. 6, 1949	....	+4.47
19-19-12bc	21.30	Sept. 7, 1949	21.38	Oct. 6, 1949	....	.07
19-20-1cd	12.09	Dec. 2, 1949	12.88	Sept. 7, 1949	....	+7.79
19-20-5cb	15.44	Aug. 25, 1949	15.81	Sept. 26, 1949	....	.36
19-20-10aa	16.77	Dec. 2, 1949	17.04	Aug. 23, 1949	....	+2.27
19-20-12db	21.96	Dec. 2, 1949	22.11	Sept. 7, 1949	....	+1.15

Length of record, in years, highest and lowest recorded water levels, in feet, net change in water level in 1949, and net change in water level during period of record in 973 wells in Nebraska--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Custer County--Continued</u>						
20-19-25dd	32.61	Oct. 6, 1949	33.22	Dec. 2, 1949	....	0.61
20-19-31cb	31.64	Sept. 26, 1949	32.02	Aug. 26, 1949	....	+1.14
20-19-33cc	22.65	Sept. 6, 1949	22.87	Dec. 2, 1949	....	.22
20-19-34ab	52.66	Nov. 10, 1949	54.34	Sept. 26, 1949	....	+1.62
20-20-30aa	32.38	Nov. 10, 1949	33.09	Aug. 24, 1949	....	+6.62
20-20-36cc	3.26	Dec. 2, 1949	4.21	Oct. 6, 1949	....	+9.95
20-21-9dd	3.22	Dec. 2, 1949	4.60	Sept. 10, 1949	....	+1.38
20-21-10bc	21.09	Dec. 2, 1949	21.34	Oct. 6, 1949	....	+0.06
20-21-22bc	2.36	Dec. 2, 1949	3.45	Oct. 6, 1949	+1.09

Dawes County

31-52-3dc	15.84	Mar. 30, 1948	21.51	Aug. 27, 1934	1.06	+2.65
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Dawson County

9-19-16ab	6.50	Dec. 3, 1946	10.70	Sept. 7, 1948	+1.67	+0.07
9-19-25bb	5.12	July 6, 1949	9.72	Nov. 4, 1948	+1.77	+1.17
9-19-33bb	5.03	Oct. 8, 1946	9.04	Sept. 6, 1946	+1.02	+2.26
9-20-3dd	8.72	Dec. 3, 1946	12.92	Sept. 7, 1948	+2.70	+2.32
9-20-5bc	18.45	July 1, 1947	23.50	Nov. 4, 1948	+2.34	+3.36
9-20-13bc	6.90	Dec. 3, 1946	11.94	Sept. 7, 1948	+2.75	+1.19
9-20-22cc	7.74	Dec. 3, 1946	12.63	Sept. 6, 1946	+2.21	+0.82
9-20-35dd	2.09	July 7, 1949	5.28	Sept. 7, 1948	+1.60	+1.19
9-21-6ad	1.39	Oct. 8, 1946	8.30	July 11, 1946	+0.82	.90
9-21-7aa	4.52	Oct. 8, 1946	8.99	Aug. 21, 1934	+1.24	.33
9-21-7da	4.13	Oct. 8, 1946	7.32	Nov. 4, 1948	+0.50	+2.20
9-21-12cb	9.29	Oct. 8, 1946	13.19	Aug. 10, 1937	+1.30	.40
9-21-18aa	2.50	Apr. 30, 1944	7.24	Aug. 14, 1934	+0.67	1.02
9-21-18da	2.22	Oct. 8, 1946	6.48	Sept. 21, 1934	+0.58	1.44
9-21-19aa1	1.45	Oct. 8, 1946	5.55	Nov. 41, 1934	+0.46	1.39
9-21-19aa2	+1.23	Feb. 25, 1932	2.75	Aug. 10, 1937	+0.65	1.63
9-21-19da	.95	Feb. 25, 1932	5.86	Sept. 16, 1936	+0.81	.97
9-21-19dd	2.83	Feb. 25, 1932	7.64	Nov. 14, 1934	+1.33	.84
9-21-24aa	1.97	July 12, 1947	6.29	Sept. 21, 1934	+1.40	+0.79
9-21-29bc	.10	May 3, 1947	5.21	Sept. 30, 1940	+0.25	.73
9-21-30da	3.63	Oct. 8, 1946	9.20	Sept. 30, 1940	.11	.61
9-21-31aa1	11.82	Oct. 8, 1946	19.54	Nov. 2, 1940	+0.47	+2.37
9-21-31da	7.68	July 12, 1947	22.50	July 24, 1940	+0.88	+5.65
9-21-31dd	4.16	Oct. 8, 1946	19.82	Nov. 5, 1940	+1.10	+9.14
9-22-25dc	2.17	Apr. 18, 1949	17.28	Nov. 2, 1940	+1.13	+12.44
9-22-26aa	5.69	July 6, 1949	15.62	Aug. 7, 1943	....	+2.81
9-22-33aa	32.83	Nov. 22, 1949	34.56	May 10, 1949	....	+1.73
9-23-2dc	14.02	July 14, 1947	18.24	Aug. 9, 1946	+0.58	+1.12
9-23-3cc	9.89	Mar. 11, 1949	13.15	Sept. 9, 1948	+1.09	.11
9-23-12da	+0.82	Dec. 5, 1946	9.96	Nov. 4, 1940	....	+5.60
9-23-21bb	167.93	Nov. 22, 1949	170.74	May 11, 1949	....	+2.81
9-23-28bb	116.77	Nov. 22, 1949	136.59	May 12, 1949	....	+19.82
9-23-32cc	176.80	Nov. 22, 1949	183.20	Oct. 14, 1948	+0.47	+6.47
9-24-1dc	13.66	Nov. 3, 1949	17.90	Sept. 7, 1946	+0.84	+4.24
10-20-21cb	22.33	July 12, 1947	25.79	Sept. 6, 1946	+0.82	+0.02
10-20-35bb	14.80	July 12, 1947	18.64	Sept. 7, 1948	+1.41	+0.76
10-21-6da	7.00	May 4, 1931	11.88	Sept. 21, 1934	+0.36	1.01
10-21-7aa	5.63	Apr. 6, 1931	12.55	Sept. 21, 1934	+0.79	2.08
10-21-7da	6.10	July 12, 1947	13.44	Sept. 21, 1934	+0.85	1.34
10-21-18aa	4.60	July 12, 1947	12.84	Sept. 21, 1934	+0.96	1.91
10-21-18dd	8.92	July 12, 1947	17.27	Sept. 21, 1934	+1.16	2.20
10-21-19aa	11.88	July 20, 1931	18.80	July 24, 1940	+1.33	2.60
10-21-19da	11.68	May 25, 1931	18.81	July 24, 1940	+1.35	2.42
10-21-23ab	8.15	July 12, 1947	13.94	Aug. 8, 1946	+0.69	+1.16
10-21-30aa	4.37	July 12, 1947	10.02	Aug. 8, 1946	+1.46	2.22
10-21-30da	4.37	July 12, 1947	12.35	Aug. 21, 1934	+1.33	2.51

Length of record, in years, highest and lowest recorded water levels, in feet, net change in water level in 1949, and net change in water level during period of record in 973 wells in Nebraska--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
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Dawson County--Continued

10-21-31da	3.29	June 12, 1935	9.27	Sept. 21, 1934	+1.35	2.17
10-22-11ab	4.53	Oct. 9, 1946	9.69	Aug. 8, 1946	+52	+1.46
10-22-29aa	1.52	July 12, 1947	7.45	Nov. 5, 1940	+1.68	+1.18
10-23-5bb	4.29	Dec. 4, 1946	8.40	July 11, 1946	.15	.81
10-23-29bb	2.02	Oct. 9, 1946	7.70	Nov. 5, 1948	+45	.74
10-23-30bc	5.80	Oct. 9, 1946	12.05	Sept. 9, 1948	+78	.27
10-24-7bb	10.35	Oct. 9, 1946	13.52	July 12, 1946	+18	+92
10-24-15cc	3.63	Apr. 20, 1949	7.83	Sept. 7, 1946	+1.00	+3.07
10-24-17bb	2.72	Nov. 9, 1946	19.78	May 1, 1941	+91	+13.40
11-19-4dd	46.94	July 7, 1949	47.82	Nov. 16, 1948	+47	+47
11-21-31dd	22.77	Sept. 8, 1947	33.28	July 24, 1940	+58	1.35
11-22-28aa	26.08	July 12, 1947	30.89	Sept. 6, 1946	.06	.07
11-23-21bc	12.40	July 12, 1947	15.50	Mar. 10, 1949	+49	.37
11-23-23cc	.42	Oct. 8, 1946	5.28	Sept. 6, 1946	+24	+1.53
11-24-16bb	3.56	Oct. 9, 1946	8.42	Sept. 6, 1946	+47	.60
11-24-20ca	9.52	July 12, 1947	14.97	Sept. 22, 1934	+1.30	+1.10
11-24-24cb	6.91	Dec. 4, 1946	12.40	June 28, 1946	+1.00	+2.68
11-25-8ad	.99	Mar. 10, 1949	5.04	Aug. 4, 1939	+25	+59
11-25-16bb	3.17	Apr. 19, 1949	6.05	Sept. 9, 1947	+39	+84
11-25-19cc	5.25	July 7, 1949	14.30	Oct. 2, 1939	+42	+3.59
11-25-21cc	4.18	Nov. 17, 1931	20.37	Aug. 2, 1933	+28	+2.00
11-25-34bc	11.79	July 6, 1949	14.35	July 12, 1946	+28	+1.64
12-20-36cc	33.57	June 3, 1949	36.32	Sept. 19, 1949	.39	.39
12-24-30ab	42.28	July 6, 1949	44.85	Sept. 9, 1947	1.84	1.70
12-25-34cc	27.50	Nov. 5, 1947	30.40	July 11, 1946	+45	+2.03

Dodge County

A17-5-2bb	2.23	Mar. 8, 1949	4.80	Sept. 3, 1946	+52	+1.21
A17-6-6aa	.68	June 22, 1945	9.65	Mar. 22, 1937	+83	+2.39
A17-6-8bc	1.78	Mar. 8, 1949	6.03	Sept. 3, 1947	+78	1.17
A17-8-4aa	3.35	June 22, 1945	12.21	Feb. 2, 1940	+43	+6.35
A17-8-4dd	3.70	July 7, 1947	13.33	Feb. 3, 1940	+28	+4.61
A17-8-16ad	6.11	June 22, 1945	14.19	Oct. 22, 1940	+20	+3.13
A17-8-22cb	.82	Mar. 23, 1948	8.14	Feb. 3, 1940	...	+4.54
A17-8-28ad	1.19	July 7, 1947	7.29	Feb. 21, 1940	+20	+2.60
A18-5-23bb	6.55	July 7, 1947	8.73	Oct. 11, 1946	+65	+1.06
A18-6-25cc	5.07	July 7, 1947	10.50	Nov. 1, 1948	+2.11	+2.29
A18-7-36cb	.84	July 7, 1947	5.48	July 12, 1948	+80	.00
A18-8-28da	60.86	Oct. 8, 1941	68.72	Mar. 20, 1940	1.02	+3.64
A18-8-28dd	23.63	Oct. 8, 1941	31.92	Feb. 3, 1940	+08	+6.20
A18-8-33aa	3.00	Oct. 8, 1941	9.36	Mar. 20, 1940	.14	+2.25

Dundy County

1-37-7ab	60.27	Dec. 17, 1949	61.88	Oct. 21, 1946	+65	+93
1-37-16dd	37.91	Nov. 15, 1949	39.02	Oct. 21, 1946	.80	.55
1-37-19ba	7.12	Apr. 5, 1949	14.25	Oct. 8, 1947	2.61	.75
1-37-31cd	3.21	Apr. 5, 1949	5.85	Oct. 8, 1947	+11	.82
				Oct. 6, 1948		
1-38-20bc	14.75	Aug. 2, 1949	18.42	Aug. 10, 1946	+51	+3.15
1-38-21cb	4.15	Apr. 5, 1949	9.74	Oct. 28, 1938	+72	+3.37
1-38-26ca	11.55	June 6, 1949	13.90	Oct. 8, 1947	+12	.58
1-38-28da	18.86	June 6, 1949	20.42	Oct. 5, 1948	+65	+1.16
1-38-29ad	7.52	Feb. 8, 1949	9.03	Oct. 5, 1948	+18	+1.05
1-39-21ac	4.27	Apr. 5, 1949	6.23	July 29, 1940	.20	.53
1-39-22cc	10.50	Apr. 5, 1949	13.37	July 8, 1949	.22	.30
1-39-26aa	24.77	Apr. 5, 1949	26.50	Oct. 5, 1948	+82	+73
1-39-30bb	8.23	June 6, 1949	13.12	Oct. 8, 1947	+02	+77
1-40-20cb	1.80	June 6, 1947	4.37	Oct. 8, 1947	+12	+23
		Apr. 5, 1949				
1-40-24cd	7.70	June 6, 1949	9.79	Oct. 8, 1947	+44	+1.40

Length of record, in years, highest and lowest recorded water levels, in feet, net change in water level in 1949, and net change in water level during period of record in 973 wells in Nebraska--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Dundy County--Continued</u>						
1-40-27ab	18.40	June 6, 1949	20.87	Aug. 16, 1946	+0.24	0.93
1-40-29bb	10.72	June 24, 25, 26, 27, 1949	12.58	Oct. 3, 4, 1946	+1.12	+7.1
1-41-20dd	1.75	Apr. 5, 1949	4.26	Aug. 16, 1946	.00	+1.70
1-41-27ca	2.86	Feb. 8, 1949	5.70	Aug. 16, 1946	+8.6	+2.31
1-42-10cd	3.41	Feb. 26, 1947	6.01	Aug. 16, 1946	+1.12	+2.27
1-42-13bb	3.21	Apr. 5, 1949	5.62	Aug. 16, 1946	+0.06	+1.47
1-42-36aa	9.88	Oct. 23, 1946	11.62	Feb. 8, 1949	.02	.48
2-36-24ca	14.28	Feb. 27, 1947	15.65	Oct. 6, 1948	+1.08	.13
2-36-29ac	21.32	Dec. 7, 1947	23.00	Sept. 12, 1949	+7.70	+1.10
2-36-31bc	20.90	June 19, 1949	22.84	Oct. 6, 1948	+1.39	+1.47
2-36-32da	7.20	Aug. 4, 1948	8.55	Apr. 12, 1948	.15	+1.15

Franklin County

1-13-1bc	9.40	June 22, 1949	14.89	Dec. 21, 1948	+1.70	+1.76
1-13-1cc	2.28	June 22, 1949	8.18	Dec. 16, 1947	+1.33	+1.13
1-13-2bc	5.94	June 22, 1949	9.56	Oct. 8, 1948	+6.65	+1.50
1-13-4cb	7.42	June 22, 1949	13.51	Aug. 6, 1948	+1.00	.04
1-13-7bb	2.12	May 23, 1949	7.19	Aug. 6, 1948	+4.48	.33
1-13-12ad	5.00	Mar. 16, 1949	7.38	Nov. 18, 1948	+5.55	+1.14
1-14-1aa	1.60	Dec. 3, 1949	4.66	Nov. 17, 1948	+1.39	+1.56
1-14-2ac	1.78	June 22, 1949	6.75	Nov. 18, 1948	+1.00	+1.10
1-14-4cc	3.34	May 23, 1949	7.09	Nov. 18, 1948	+8.80	+1.12
1-14-5ad	1.40	June 21, 1949	5.79	Nov. 17, 1948	+7.79	+1.14
1-14-6bc	5.34	Oct. 27, 1946	9.05	Oct. 8, 1948	+0.07	.41
1-14-7bb1	.07	May 23, 1949	5.40	Nov. 13, 1940	+6.65	+1.43
1-14-7bb2	3.37	June 22, 1949	7.52	Oct. 9, 1947	+4.48	.93
1-15-3ac	14.82	July 22, 1949	19.05	Nov. 18, 1948	+1.58	+1.64
1-15-3db	4.01	June 22, 1949	8.40	Nov. 18, 1948	+2.24	+7.70
1-15-5ca	.62	Oct. 26, 1946	7.50	Dec. 22, 1948	+1.38	1.53
1-15-6bc	7.11	June 22, 1949	9.21	Nov. 18, 1948	+1.15	+4.48
1-15-7bb	5.53	June 22, 1949	11.16	Nov. 18, 1948	+9.96	+1.09
1-15-7cb	21.65	Apr. 19, 1949	23.55	Nov. 18, 1948	+9.94	+1.53
1-15-8bd	7.45	June 22, 1949	11.50	Nov. 18, 1948	+2.25	+6.62
1-15-8cb	6.78	May 23, 1949	11.98	Nov. 18, 1948	+4.49	.02
1-16-7dd	10.50	July 22, 1949	13.31	Jan. 19, 1949	+9.98	+7.76
1-16-8bb	3.41	June 22, 1949	8.42	Nov. 18, 1949	+5.55	+8.81
1-16-9bc	10.52	Oct. 26, 1946	14.42	Oct. 7, 1948	+5.57	1.01
1-16-9dd	6.90	June 22, 1949	10.93	Dec. 22, 1948	+9.94	+0.03
1-16-10bd	.70	Oct. 26, 1946	6.20	Oct. 8, 1948	+1.59	.17
1-16-14ab	37.40	Oct. 26, 1946	42.41	Aug. 13, 1946	+1.04	.23
1-16-16ad	9.05	June 22, 1949	13.47	Nov. 18, 1948	+1.06	+1.40
2-13-31ad	51.07	Mar. 15, 1949	54.80	Mar. 8, 1946	...	+1.95
2-13-32dd	2.32	June 21, 1949	9.20	Oct. 8, 1948	+1.24	+3.31
2-14-33cc	4.54	Apr. 7, 1949	10.44	Nov. 17, 1948	+2.71	+1.00
2-14-34ad	48.23	Oct. 20, 1949	51.10	Aug. 5, 1948	+3.35	+3.36
4-14-10da	165.82	June 30, 1938	168.86	Aug. 12, 1947	....	1.20

Furnas County

3-21-2cc	6.79	June 10, 1949	10.35	Oct. 7, 1948	+6.62	.53
3-21-12dc	3.40	Oct. 25, 1946	6.70	Oct. 9, 1947	+3.30	.00
3-22-2ba	4.78	July 28, 1947	8.84	Oct. 1, 1948	.04	1.39
				Nov. 19, 1949		
3-25-4bb	3.62	June 20, 21, 22, 1949	7.37	Oct. 3, 1946	+4.46	+1.23
4-21-32cc	11.87	July 31, 1947	16.74	Aug. 31, 1946	+7.77	+5.56
4-22-19ac	21.61	Nov. 19, 1949	22.05	June 10, 1949	....	+4.44
4-22-19ca	1.00	June 10, 1949	5.75	Nov. 19, 1949	....	4.49
4-22-25cc	8.29	Dec. 17, 1946	12.85	Oct. 7, 1948	+1.18	1.13
4-22-29aa	13.10	Dec. 21, 1949	13.32	Aug. 5, 1949	....	+2.20
4-22-29ad	13.64	July 31, 1947	17.60	Aug. 13, 1946	+6.67	+2.19
4-22-29da	14.55	June 11, 1949	15.44	Oct. 7, 1949	....	1.22

Length of record, in years, highest and lowest recorded water levels, in feet, net change in water level in 1949, and net change in water level during period of record in 973 wells in Nebraska--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Furnas County--Continued</u>						
4-22-32dd	7.55	July 28, 1948	12.20	Dec. 6, 1948	+2.12	1.03
4-22-34bb	12.22	Dec. 1, 1947	15.61	June 11, 1948	+.84	.00
4-23-15da	39.22	July 18, 1949	39.58	June 10, 1949	....	+.09
4-23-17bd	28.29	Dec. 21, 1949	28.55	June 10, 1949	....	+.26
4-23-20ab	25.29	July 31, 1947	31.28	Aug. 14, 1946	+.30	+.24
4-23-20bb	17.35	July 18, 1949	19.16	Dec. 21, 1949	....	1.47
4-23-22dc	14.25	June 10, 1949	15.85	July 18, 1949	....	.93
4-23-23bd	28.42	June 10, 1949	30.89	Sept. 13, 1943	+.49	+.09
4-23-27dd	7.08	July 28, 1947	11.65	Aug. 13, 1946	+.39	.92
4-23-30cc	51.84	June 5, 1947	54.69	Aug. 2, 1948	+.56	.88
4-23-36aa	17.06	July 28, 1947	23.17	Aug. 13, 1947	+.72	.53
4-24-13bb	20.10	Oct. 7, 1949	20.85	Sept. 9, 1949	....	+.20
4-24-13cd	15.14	July 31, 1947	19.73	Aug. 14, 1946	+.05	+1.56
4-24-14cb	20.73	June 10, 1949	23.07	Dec. 21, 1949	....	2.34
4-24-14cc	19.44	July 18, 1949	20.80	Oct. 7, 1949	....	1.26
4-24-14da	16.66	July 18, 1949	17.42	Nov. 19, 1949	....	.57
4-24-15cb	14.88	July 18, 1949	15.93	Dec. 21, 1949	....	.75
4-24-15cc	10.82	July 31, 1947	14.20	Aug. 14, 1946	+.37	.50
4-24-19cb	12.25	July 18, 1949	14.02	Nov. 18, 1949	....	1.64
4-24-19cc	11.77	June 10, 1949	15.12	Aug. 5, 1949	+.38	+.75
4-24-20cbb	3.29	June 10, 1949	6.94	Oct. 7, 1949	....	6.45
4-24-20cbc	4.54	June 10, 1949	6.44	Aug. 6, 1949	....	1.45
4-24-22bb	7.15	June 10, 1949	10.33	Aug. 6, 1949	....	2.73
4-24-23aa	14.79	June 10, 1949	17.00	Oct. 7, 1949	....	1.90
4-24-23bc	16.22	June 10, 1949	18.57	Aug. 5, 1949	....	1.57
4-24-29cd	20.13	June 6, 1949	23.57	Aug. 14, 1946	+.67	+.26
4-25-27adc	6.90	June 6, 1949	10.42	Dec. 20, 1949	2.57	2.57
4-25-27add	3.40	June 6, 1949	7.94	Dec. 20, 1949	1.50	1.53
4-25-27daa1	4.02	June 6, 1949	8.50	Aug. 5, 1949	1.11	1.11
4-25-32cd	3.06	Apr. 7, 1949	6.58	Oct. 6, 1947	+.42	+.37
4-25-34ad	11.39	Aug. 1, 1949	17.76	Oct. 1, 1948 Jan. 31, 1946	+.24	+1.14

Garden County

17-44-22cc	20.83	Oct. 25, 1935	27.30	July 26, 1940	.46	5.87
18-46-27cc	1.97	Apr. 25, 1935	5.95	July 26, 1940	.28	.30
20-44-5db	4.30	Oct. 21, 1934	8.04	Jan. 13, 1938 Dec. 15, 1939	+.20	1.66
20-44-9ca	3.16	Mar. 4, 1934	7.18	Nov. 5, 1937 Nov. 23, 1937	+.30	1.66
20-45-17ba	3.30	Mar. 26, 1948 June 17, 1949	7.49	Aug. 19, 1937	.00	+1.54
21-44-29ab	1.76	June 17, 1949	5.86	Apr. 2, 1938	+.20	+2.38
21-44-35ca	.44	Feb. 12, 1934	4.84	Aug. 20, 1937	+.20	1.20
21-45-3bd	1.90	June 17, 1949	7.87	Nov. 30, 1938	+.40	.95
21-45-10cd	1.60	Mar. 25, 1948	6.66	July 29, 1934	+.30	+.98
21-45-27cb	2.60	June 22, 1947	6.64	Oct. 9, 1937	+.30	+1.82

Gosper County

5-22-3da	151.02	Jan. 19, 1949	151.86	Oct. 16, 1948	+.34	+.05
6-21-29cc	122.17	Nov. 23, 1949	123.72	Oct. 16, 1948	+.131	+1.48
6-22-15cd	126.09	Nov. 23, 1949	127.14	Oct. 16, 1948	+.75	+.91
7-21-6bc	106.12	Nov. 23, 1949	117.80	Sept. 26, 1935	+2.08	+11.47
7-21-20bb	195.77	Nov. 23, 1949	198.97	Nov. 25, 1947	+1.65	+3.20
7-21-24dc	168.90	Nov. 23, 1949	172.11	May 28, 1948	+2.33	+3.21
7-21-33aa	176.56	Nov. 23, 1949	181.68	Dec. 17, 1947	+1.29	+5.12
7-22-8bb	240.72	Nov. 22, 1949	251.65	Nov. 25, 1947	+3.93	+10.93
8-21-3dc	11.10	July 14, 1947	14.50	Sept. 10, 1947	+.67	+1.05
8-21-11aa	3.09	Aug. 7, 1943	6.55	Jan. 14, 1949	+.10	1.62
8-21-30dd	128.64	Nov. 22, 1949	132.11	Jan. 12, 1948	+2.16	+3.47
8-22-8bc	114.58	Sept. 30, 1949	129.30	Aug. 12, 1947	+3.49	+13.50
8-22-8cd	128.56	Sept. 30, 1949	223.37	Aug. 31, 1940	....	+94.81
8-22-17dd	157.40	Nov. 22, 1949	169.72	Nov. 25, 1947	+5.00	+12.32
8-22-26ba	164.73	Sept. 30, 1949	167.98	Oct. 16, 1948	....	+3.56
8-23-12cb	52.15	Nov. 22, 1949	58.67	Oct. 17, 1948	+6.52	+6.52

Length of record, in years, highest and lowest recorded water levels, in feet, net change in water level in 1949, and net change in water level during period of record in 973 wells in Nebraska--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
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Grant County

24-36-30bb	3.59	June 8, 1935	6.62	July 22, 1940	+0.70	0.75
24-40-36bb	12.32	June 8, 1935	14.26	Oct. 19, 1948	+3.39	1.07

Greeley County

17-10-10cb	13.78	Mar. 24, 1936	17.17	Oct. 31, 1942	....	+1.10
17-11-31ba	34.46	June 30, 1949	35.53	Sept. 2, 1949	....	+4.47
17-12-6dc	12.41	Apr. 28, 1949	13.43	Nov. 29, 1949	....	.98
17-12-9bb	17.98	Apr. 28, 1949	27.00	Sept. 30, 1948	....	+4.78
17-12-26aa	22.81	June 30, 1949	25.99	Sept. 30, 1948	....	+7.70
19-9-12db	37.27	Apr. 28, 1948	38.75	Aug. 4, 1949	....	.74
		Apr. 28, 1949				
20-9-20cc	1.30	Nov. 20, 1935	3.35	Aug. 3, 1949	....	.47
20-9-20db	7.50	Mar. 29, 1937	9.37	Nov. 27, 1939	....	1.67
20-9-30ca	67.28	June 8, 1949	68.49	Sept. 28, 1948	....	+3.31
20-9-34aa	32.28	Apr. 28, 1949	33.50	Nov. 1, 1949	....	+1.13

Hall County

9-9-8cb	71.90	Apr. 28, 1949	72.59	Oct. 22, 1948	+3.39	.07
9-9-12ba	67.05	Apr. 28, 1949	68.15	Oct. 22, 1948	+8.33	+4.43
9-9-27bc	66.55	Apr. 28, 1949	67.15	Oct. 22, 1948	+0.02	.48
9-10-4dc	3.62	Apr. 20, 1949	6.87	Sept. 7, 1946	+7.74	.41
		Apr. 28, 1949				
9-10-23ab	78.55	June 22, 1948	79.12	Oct. 22, 1948	+3.35	.22
9-10-29db	68.75	Oct. 20, 1949	70.03	Nov. 14, 1947	1.25	1.28
9-11-8bc	4.05	Apr. 11, 1949	7.82	Sept. 5, 1946	+4.44	1.12
9-11-14cb	6.54	Mar. 12, 1949	8.87	Aug. 9, 1946	+4.48	.70
9-11-21bb	7.17	Apr. 20, 1949	9.52	Sept. 7, 1946	.45	.06
9-12-1dc						
9-12-9ba	18.50	July 5, 1949	23.35	Sept. 6-12, 1946	+1.49	.69
10-9-3cb	1.95	May 29, 1938	6.70	Dec. 24, 1940	.91	.85
10-9-4cb	2.00	Apr. 4, 1949	6.55	Dec. 24, 1940	.71	.81
10-9-10bb	6.35	Apr. 11, 1949	9.38	Sept. 11, 1947	+3.36	.70
10-9-28cc	12.93	July 8, 1949	15.32	Sept. 3, 1946	+7.70	+4.49
10-10-8cc	19.52	June 20, 1932	24.08	Sept. 5, 1946	+6.62	.12
10-10-13dd	2.65	Mar. 15, 1948	4.62	Sept. 2, 1948	+0.05	+3.36
10-11-15dc	15.20	July 5, 1949	21.12	Sept. 5, 1946	+1.47	.30
10-11-30bc	15.67	June 23, 1931	23.92	Aug. 18, 1944	+1.07	2.49
		June 30, 1941				
10-12-21cc	27.12	July 5, 1949	29.35	Sept. 6, 1949	+1.10	1.13
11-9-4cc	10.08	Oct. 1, 1945	16.70	July 27, 1940	2.00	+6.62
11-9-4cd	9.66	Oct. 3, 1949	19.05	Feb. 5, 1941	+2.17	+3.64
11-9-8da	13.58	Oct. 1, 1945	23.25	Aug. 28, 1941	....	+1.50
11-9-9aa1	17.25	Oct. 1, 1945	25.50	July 27, 1940	.84	.64
11-9-9bd	15.08	Oct. 1, 1945	24.25	July 27, 1940	+9.99	+0.02
				Apr. 18, 1941		
11-9-9cc	17.66	Oct. 1, 1945	26.15	Feb. 5, 1941	1.76	+1.08
		Nov. 16, 1948		Aug. 28, 1941		
11-9-9da	24.83	Nov. 15, 1948	33.65	Nov. 2, 1940	2.42	+9.95
11-9-9dd	24.93	Nov. 15, 1948	33.70	Dec. 24, 1940	1.23	+2.34
11-9-12dc	4.52	Apr. 19, 1949	8.40	Feb. 13, 1937	....	.45
11-9-15bb1	22.00	Nov. 15, 1948	31.40	July 19, 1941	4.00	+1.20
11-9-15bb2	25.25	Nov. 15, 1948	35.40	July 19, 1941	3.25	+2.20
11-9-15db	5.92	Oct. 1, 1945	18.66	May 21, 1943	5.25	3.03
11-9-15dd	5.83	July 14, 1947	11.00	Dec. 24, 1940	....	1.21
11-9-16ad	28.42	Nov. 15, 1948	41.95	Aug. 28, 1941	1.74	+3.74
11-9-16bc	23.75	June 10, 1946	36.62	Nov. 2, 1940	1.67	+1.28
11-9-16bd	31.66	Dec. 18, 1944	45.30	July 27, 1940	2.25	+1.82
11-9-16ca	31.25	Dec. 9, 1946	42.45	Nov. 2, 1940	2.00	+3.42
11-9-16cb	16.83	Oct. 1, 1945	35.65	Feb. 5, 1941	2.40	+2.88
11-9-16db	29.08	Nov. 15, 1948	37.34	Nov. 2, 1940	1.84	+2.48

Length of record, in years, highest and lowest recorded water levels, in feet, net change in water level in 1949, and net change in water level during period of record in 973 wells in Nebraska--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
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Hall County--Continued

11-9-17ba	11.83	Oct. 1, 1945	21.25	Feb. 5, 1941	1.83	+1.62
11-9-17bd	15.25	Oct. 1, 1945	26.35	Feb. 5, 1941	2.58	+2.12
11-9-17cd	17.42	Oct. 1, 1945	33.75	Nov. 2, 1940	11.91	.66
11-9-21bb	24.25	Aug. 5, 1948	33.15	Feb. 5, 1941	1.16	+.47
11-9-21bd	27.25	Oct. 1, 1945	36.27	May 29, 1944	1.61	1.65
11-9-22cb	6.95	May 12, 1936	10.50	Sept. 26, 1949	1.08	2.78
11-9-26aa	2.56	July 10, 1944	8.75	Dec. 6, 1942	1.25	1.05
11-9-27bc	6.00	July 10, 1947	10.70	Feb. 26, 1944	+1.02	+1.01
11-9-28ba	6.15	Mar. 31, 1936	15.60	Feb. 26, 1944	...	8.28
		May 2, 1936				
11-9-29bb	19.16	July 14, 1947	26.00	Dec. 24, 1940	1.92	1.57
11-9-32cc	1.90	May 29, 1938	6.05	Oct. 17, 1936	.66	.71
11-9-34aa	2.54	July 10, 1944	7.30	Dec. 24, 1940	1.16	1.06
11-9-34cb	2.50	July 10, 1944	7.15	Dec. 24, 1940	1.08	1.30
11-9-35dc	2.08	July 14, 1947	6.10	Dec. 24, 1940	.58	.60
		Apr. 4, 1949				
11-10-1cc	5.08	July 14, 1947	12.00	Dec. 24, 1940	.26	+1.08
				Mar. 26, 1941		
11-10-11dc	5.00	July 14, 1947	12.40	Dec. 24, 1940	.18	+1.60
11-10-13ab	8.00	July 14, 1947	15.75	Mar. 26, 1941	1.02	+.80
11-10-14dd	8.53	July 5, 1949	11.68	Aug. 6, 1946	+1.26	+.78
11-10-16bb	8.02	July 5, 1949	11.07	Mar. 8, 1946	+1.36	+2.57
11-10-24cb	12.66	July 14, 1947	19.95	Dec. 24, 1940	+.53	+.45
11-10-26dd	5.35	Apr. 12, 1949	17.70	Dec. 28, 1935	...	+.54
11-10-27dc	14.92	July 5, 1949	17.72	June 7, 1946	+1.54	+2.49
11-11-25cc	12.18	June 25, 1949	17.10	Oct. 4, 1946	+1.09	+1.89
11-11-32cb	29.04	May 20, 1931	36.80	Sept. 3, 1948	+.75	5.90
11-11-36cb	19.90	July 5, 1949	26.07	Sept. 4, 1946	+1.00	1.93
11-12-34dc	25.59	July 5, 1949	27.58	Sept. 3, 1948	+.35	.45
12-9-27cb	5.08	Mar. 11, 1946	9.05	Dec. 24, 1940	...	+1.09
12-9-32aa1	7.58	July 14, 1947	12.80	Dec. 24, 1940	.42	+.63
12-9-32aa2	9.72	July 5, 1949	13.35	Sept. 4, 1946	+.99	+.63
12-9-32cc	7.08	July 14, 1947	12.80	Dec. 24, 1940	...	+.75
12-11-24cd	3.54	July 5, 1949	12.26	Oct. 4, 1946	+2.30	+4.00

Hamilton County

9-8-9dc	52.93	Aug. 14, 1937	38.40	Dec. 31, 1946	+1.55	1.94
11-5-5ba	84.00	May 26, 1948	86.45	Oct. 26, 1948	+.58	2.07
11-5-26cc	82.53	Apr. 27, 1949	83.00	Oct. 15, 1948	+.15	+.03
11-6-13cb	89.06	Jan. 24, 1935	93.99	Jan. 21, 1941	...	2.87
11-8-28bc	29.42	July 8, 1949	32.33	Sept. 3, 1946	+.74	.52
12-7-21da	7.64	June 14, 1949	10.07	Nov. 1, 1949	...	2.43
13-5-3dd	16.30	June 14, 1949	17.48	Sept. 1, 1949	...	1.13
13-5-19aa	23.91	Mar. 7, 1949	27.28	Aug. 5, 1946	.90	.43
13-6-27cc	6.85	June 30, 1935	11.41	Nov. 14, 1940	+.32	+.26

Harlan County

1-17-1da	1.95	Oct. 25, 1946	8.00	Oct. 7, 1948	+.61	+.22
1-17-11aa	9.40	June 22, 1949	13.45	Nov. 18, 1948	+1.00	+1.18
1-17-12cb	3.51	June 22, 1949	7.33	Nov. 18, 1948	+.06	+.31
1-17-12dd	12.71	Oct. 26, 1946	18.92	Dec. 22, 1948	+1.76	+.19
1-17-13bb	11.01	July 22, 1949	13.84	Dec. 22, 1948	+.15	+.14
2-18-33cd	5.68	Aug. 1, 1947	14.52	Sept. 27, 1934	.66	+3.20
2-19-5cb	19.99	June 11, 1949	24.19	Apr. 13, 1946	+.58	+.16
2-19-17da	18.60	Aug. 1, 1947	22.22	Dec. 10, 1946	+.73	+.40
2-19-26bb	34.75	Aug. 6, 1949	34.98	Dec. 10, 1948	+.22	+.22
2-19-28dd	6.59	June 11, 1949	10.74	Nov. 17, 1946	+.22	+1.17
2-19-34bc	19.53	June 11, 1949	23.70	Aug. 13, 1946	+.18	.54
3-20-7ab	29.10	June 11, 1949	32.00	Aug. 13, 1946	+.60	+1.10
3-20-16bb	3.89	June 11, 1949	9.44	Aug. 13, 1946	+.45	.01
3-20-18ca	13.40	June 9, 1947	16.56	Aug. 13, 1946	+.37	+1.18
3-20-22dd	24.13	June 11, 1949	26.29	Aug. 13, 1946	+.49	+1.14
3-20-25cc	10.22	Aug. 1, 1947	16.16	Aug. 13, 1946	+.46	+.28

Length of record, in years, highest and lowest recorded water levels, in feet, net change in water level in 1949, and net change in water level during period of record in 373 wells in Nebraska--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Hayes County</u>						
5-33-30cb	17.86	June 9, 1949	20.00	Aug. 15, 1946	+0.10	+0.04
5-33-31dc	6.64	Apr. 9, 1937	14.82	Oct. 8, 1947	.12	6.53
5-34-28bc	57.03	June 9, 1949	60.25	Aug. 4, 1948	.00	+0.08
5-34-30ba	9.63	Feb. 8, 1949	11.53	Oct. 5, 1948	+0.02	+0.15
5-34-35ac	28.02	June 9, 1949	30.94	Aug. 4, 1949	.50	+0.21
5-35-17da	6.83	Feb. 8, 1949	9.33	Oct. 6, 1948	.04	+0.56
<u>Hitchcock County</u>						
2-33-2aa	9.51	Apr. 4, 1949	12.05	Oct. 6, 1948	+0.55	.59
		June 8, 1949				
2-33-3bd	10.08	Dec. 19, 1949	10.79	Oct. 6, 1949	....	+0.71
2-33-3dd	8.64	June 7, 1949	9.55	Oct. 6, 1949	....	.33
2-33-4ad	12.54	Dec. 19, 1949	13.28	Oct. 6, 1949	....	+0.64
2-33-4da	7.41	Dec. 19, 1949	8.05	Oct. 5, 1949	....	+0.64
2-33-6cb	7.69	Apr. 4, 1949	11.32	Oct. 6, 1948	+0.31	+0.80
2-33-8aaa1	.80	Apr. 28, 1949	6.60	Oct. 6, 1949	....	1.13
2-33-8aaa2	1.95	Mar. 11, 1949	9.20	Oct. 6, 1949	....	1.98
2-33-8aad	5.57	Feb. 8, 1949	12.15	Oct. 4, 1949	....	2.33
2-33-8ada	13.60	Dec. 17, 1949	15.17	Oct. 6, 1949	....	+1.57
2-33-8dad	50.13	July 5, 1949	50.90	Oct. 5, 1949	....	.07
2-33-8dda	46.02	Nov. 15, 1949	46.20	Aug. 3, 1949	....	+0.10
2-33-8ddd	55.15	Sept. 2, 1949	55.95	Oct. 6, 1949	....	+0.01
2-33-9ac	27.17	Mar. 11, 1949	27.78	Sept. 2, 1949	....	.02
2-33-9ad	28.35	July 5, 1949	29.49	Apr. 28, 1949	....	+0.19
2-33-9bca1	3.94	June 7, 1949	8.90	Aug. 3, 1949	.25	.05
2-33-9bca2	15.50	Feb. 8, 1949	17.39	Aug. 3, 1949	....	.87
2-33-9bcd	18.92	Mar. 11, 1949	20.11	Dec. 17, 1949	....	.16
2-33-9bdb	13.21	Feb. 8, 1949	15.22	Sept. 28, 1948	+0.33	.18
2-33-9bbc	19.30	June 7, 1949	22.28	Nov. 15, 1949	....	2.19
2-33-9cbc	27.79	Sept. 2, 1949	28.23	Dec. 18, 1949	....	.42
2-33-10ab	6.44	Apr. 6, 1949	8.72	Oct. 4, 1948	+0.49	+0.75
2-34-7cd	17.87	Aug. 3, 1949	18.40	Oct. 6, 1949	....	.17
2-34-8add	29.96	Dec. 19, 1949	30.25	Oct. 5, 1949	....	+0.29
2-34-8cbc	13.37	Aug. 3, 1949	14.12	Oct. 5, 1949	....	.48
2-34-8cdd	5.28	Dec. 19, 1949	5.95	Aug. 3, 1949	....	+0.67
				Sept. 7, 1949		
2-34-8da	18.24	June 6, 1949	20.85	June 9, 1948	.43	+0.57
2-34-8dbc	11.18	Aug. 3, 1949	11.73	Sept. 7, 1949	....	.10
2-34-11dc	10.06	June 8, 1949	11.95	Oct. 6, 1948	+0.62	+0.25
2-34-12da	13.75	June 7, 1949	15.70	Sept. 28, 1948	+0.38	.00
2-34-16cc	13.43	Aug. 3, 1949	13.90	Oct. 5, 1949	....	.26
2-34-16db	14.16	Aug. 3, 1949	14.47	Oct. 5, 1949	....	.06
2-34-17bbb	13.49	Dec. 19, 1949	14.55	Aug. 3, 1949	....	+1.06
2-34-17bc	8.52	Sept. 7, 1949	9.60	Oct. 5, 1949	....	.39
2-34-18abb	17.77	Dec. 19, 1949	18.27	Sept. 2, 1949	....	+0.13
2-34-18acb	20.50	Dec. 19, 1949	21.22	Aug. 3, 1949	....	+0.72
2-34-18acc	8.30	Sept. 2, 1949	8.65	Oct. 5, 1949	....	+0.30
2-34-18bbb	23.82	Dec. 19, 1949	25.11	Sept. 2, 1949	....	+1.12
2-34-18bcc	12.87	Dec. 19, 1949	14.15	Sept. 2, 1949	....	+0.74
2-34-19aad	10.41	Dec. 19, 1949	10.98	Oct. 5, 1949	....	+0.43
2-34-19abc	2.74	Dec. 19, 1949	3.73	Aug. 3, 1949	....	+0.99
2-34-19acb1	5.17	Dec. 19, 1949	6.06	Sept. 2, 1949	....	+0.88
2-34-19acb2	3.72	Dec. 19, 1949	4.29	Oct. 5, 1949	....	+0.04
2-34-19bbb	7.99	Dec. 19, 1949	9.05	Aug. 3, 1949	....	+1.06
2-34-20abc	26.75	Aug. 3, 1949	27.32	Oct. 5, 1949	....	.22
2-34-20bbc	7.23	Dec. 19, 1949	7.96	Sept. 2, 1949	....	+0.73
2-34-20bdd	8.62	Dec. 19, 1949	9.37	Sept. 2, 1949	....	+0.41
2-35-12dcc	21.95	Oct. 5, 1949	23.99	Sept. 2, 1949	....	.01
2-35-12ddd	25.30	Dec. 19, 1949	26.55	Sept. 2, 1949	....	+0.48
2-35-13bbc	19.17	Aug. 3, 1949	20.10	Oct. 5, 1949	....	.42
2-35-13bdd	13.55	Aug. 16, 1946	15.74	June 6, 1947	+0.52	+0.55
2-35-13bdc	13.36	Dec. 19, 1949	13.88	Oct. 5, 1949	....	+0.20

Length of record, in years, highest and lowest recorded water levels, in feet, net change in water level in 1949, and net change in water level during period of record in 1973 wells in Nebraska--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Hitchcock County--Continued</u>						
2-35-13ccc	11.13	Dec. 19, 1949	11.49	Oct. 5, 1949	....	+0.01
2-35-13cd	3.42	June 20, 1949	6.30	Sept. 28, 1948	+53	+27
2-35-13dcc	7.90	Dec. 19, 1949	8.56	Sept. 2, 1949	....	+08
				Oct. 5, 1949		
2-35-31bc	19.77	June 6, 1949	21.73	Sept. 24, 1934	+66	+1.56
2-35-23aa	12.25	June 20, 1949	14.30	Oct. 2, 1948	+53	+22
2-35-23ab	26.93	June 20, 1949	29.05	Oct. 5, 1949	+51	+24
2-35-24aa	3.67	June 9, 1949	8.77	Oct. 8, 1947	+47	+68
2-35-24abc	4.49	Dec. 18, 1949	5.52	Sept. 2, 1949	....	+29
2-35-24ada	2.89	Dec. 19, 1949	3.66	Oct. 5, 1949	....	+71
2-35-24add	3.40	Aug. 3, 1949	8.58	Oct. 5, 1949	....	4.63
2-35-24bc	17.48	Aug. 3, 1949	18.15	Oct. 5, 1949	....	.50
3-31-14bc	11.82	Oct. 8, 1947	15.88	Aug. 15, 1946	.50	+89
3-31-17cd	6.15	June 8, 1949	8.78	Aug. 15, 1946	.02	+1.24
3-31-20da	6.58	July 28, 1947	8.52	Dec. 6, 1948	+25	.08
3-31-29bb	12.79	June 7, 1948	13.50	Dec. 3, 1947	....	.45
3-32-11bb	12.65	Feb. 8, 1949	14.15	Oct. 6, 1948	.10	.30
3-32-12cc	21.20	Oct. 24, 1946	22.15	Aug. 4, 1948	....	+09
3-32-26dd	27.40	July 28, 1947	29.92	Aug. 1, 1949	+50	+12
3-32-31aa	5.32	Apr. 4, 1949	7.35	Oct. 6, 1948	+03	+44
3-33-35dc	9.58	June 10, 1949	12.04	Oct. 6, 1948	+93	+24
4-32-30dc	17.15	Apr. 6, 1949	18.95	Oct. 6, 1948	+06	.15
4-32-33db	33.75	June 9, 1949	37.80	Oct. 6, 1949	....	+33
4-35-8bb	54.43	June 9, 1949	56.05	Oct. 6, 1948	+40	+02
4-33-23ad	11.70	June 9, 1949	13.86	Oct. 6, 1948	+01	+1.15

Holt County

27-9-27dd	.30	Apr. 11, 1949	8.96	Oct. 30, 1940	....	+5.53
27-9-34da	4.00	June 4, 1935	9.88	Sept. 29, 1948	+72	.11
29-11-9bb	6.75	Aug. 31, 1949	8.08	Oct. 13, 1948	....	+90
29-11-21bb	16.87	Dec. 15, 1947	25.47	Feb. 16, 1948	+3.64	+2.90
		Jan. 14, 1948				
29-12-10cb	24.95	Oct. 6, 1949	27.63	Feb. 16, 1948	+2.66	+2.25
29-13-13dd	38.92	Aug. 31, 1949	43.07	Nov. 22, 1948	+97	+51
30-13-27cc	27.82	Oct. 6, 1949	30.80	Oct. 3, 1948	+2.79	+2.23
31-14-35cb	26.46	July 25, 1949	29.21	June 15, 1948	+1.43

Hooker County

24-35-23dd	.19	June 8, 1945	20.87	May 13, 1949	+38	8.76
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Howard County

13-9-26dd	4.24	June 1, 1949	9.68	Sept. 4, 1946	+2.32
				Oct. 31, 1946		
13-9-27ca	16.18	July 1, 1949	22.09	Oct. 26, 1940	+2.83
13-10-4ad	6.13	May 22, 1949	11.81	Sept. 29, 1949	....	3.66
13-10-7cd	.05	May 23, 1949	3.22	Sept. 28, 1949	....	3.12
				Nov. 8, 1949		
13-11-20dd	41.29	July 8, 1949	42.60	Sept. 28, 1949	....	1.08
13-11-28da	7.67	July 8, 1949	9.70	Aug. 5, 1949	....	1.78
13-11-29cb	4.14	July 8, 1949	5.29	Sept. 25, 1949	....	1.04
13-11-36aa	6.15	July 8, 1949	8.36	Dec. 6, 1949	....	1.70
13-12-27aa	3.76	July 8, 1949	5.27	Dec. 6, 1949	....	1.53
13-12-29ba	24.56	July 8, 1949	30.43	Oct. 28, 1940	+68	+2.96
13-12-32cb	3.88	July 8, 1949	6.77	Sept. 23, 1949	....	2.84
14-10-4ca	27.21	Nov. 9, 1949	29.27	May 21, 1948	+58	+1.56
14-10-8dd	5.24	Aug. 10, 1949	6.45	Dec. 6, 1949	....	1.21
14-10-14bb	4.92	May 2, 1949	8.15	Oct. 15, 1940	.43	+1.09
14-10-28dd	4.06	May 22, 1949	5.47	Dec. 6, 1949	....	1.43
14-10-30ba	13.40	Aug. 10, 1949	16.66	Sept. 29, 1949	....	.01
14-11-36dc	34.59	Dec. 6, 1949	36.56	Aug. 10, 1949	....	+1.43

Length of record, in years, highest and lowest recorded water levels, in feet, net change in water level in 1949, and net change in water level during period of record in 973 wells in Nebraska--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Howard County--Continued</u>						
15-9-9aa	31.00	Oct. 6-7, 1949	32.91	Feb. 20, 1949	+1.55	+1.16
15-9-12cb	8.27	June 30, 1949	11.06	Oct. 1, 1948	+1.18	+.38
15-10-12ca	64.63	June 30, 1949	66.98	Aug. 3, 1949	+1.08	+.64
15-10-19ab	8.48	June 29, 1948	11.53	Sept. 2, 1949	....	+.61
15-10-34cb	16.66	June 30, 1949	19.60	June 29, 1948	+2.05	+2.35
16-11-7cc	16.31	Nov. 29, 1949	19.59	Sept. 30, 1948	....	+2.28
16-11-32ab	16.75	June 30, 1949	18.56	Aug. 3, 1949	....	+.82

Kearney County

5-13-4bc	120.37	Jan. 14, 1949	121.19	Sept. 14, 1948	+1.30	+.26
5-13-18cd	106.17	July 27, 1949	106.86	Sept. 14, 1948	....	+.26
5-13-33cc	138.65	Nov. 21, 1949	140.60	July 27, 1949	+.86	+.27
5-14-16cb	140.86	Oct. 11, 1948	142.18	Aug. 11, 1947	+1.32	+.48
5-14-33bb	158.22	Nov. 25, 1949	158.53	Sept. 14, 1948	+1.18	+.25
5-15-3ba	103.24	Nov. 8, 1949	108.15	Aug. 8, 1947	+1.03	+4.23
5-15-9cb	111.56	Sept. 28, 1949	112.42	Dec. 29, 1947	+1.36	+.78
5-16-6ac	119.40	Nov. 24, 1949	121.80	Jan. 1, 1948	+1.10	+2.40
5-16-30da	136.31	June 10, 1949	137.65	Aug. 3, 1948	....	+.19
6-13-16db	86.58	Nov. 21, 1949	89.42	Aug. 13, 1947	+.74	+2.84
6-14-9bc	87.22	Nov. 25, 1949	89.54	Oct. 25, 1948	+.73	+2.32
6-14-21db	103.65	Nov. 25, 1949	104.49	Sept. 13, 1948	+.43	+.80
6-14-25ba	89.24	Nov. 25, 1949	93.56	Dec. 31, 1947	+.42	+4.32
6-15-1cb	69.51	Nov. 24, 1949	71.36	June 29, 1948	+1.08	+1.85
6-15-11ab	71.35	Nov. 24, 1949	75.78	Dec. 2, 1948	+1.01	+4.43
6-15-14bb	81.36	Nov. 24, 1949	83.88	Aug. 3, 1948	+1.04	+2.19
6-15-22ac	95.15	Nov. 24, 1949	97.55	Dec. 31, 1947	+1.36	+2.40
6-15-32ab	90.40	Nov. 24, 1949	91.92	Sept. 11, 1948	+1.24	+1.52
6-16-14ad	80.20	Nov. 25, 1949	82.65	Apr. 12, 1949	+1.74	+2.32
6-16-20bb1	82.33	Nov. 24, 1949	100.50	Oct. 29, 1938	+1.71	+17.60
6-16-25cb	96.29	Nov. 25, 1949	99.89	Nov. 17, 1947	+1.90	+3.60
7-13-20aa	54.80	Nov. 25, 1949	56.67	Nov. 17, 1947	+1.07	+1.87
7-14-12cd	51.94	Sept. 28, 1949	53.32	Apr. 19, 1949	+.62	+.55
7-14-18bc	74.72	Nov. 24, 1949	75.75	June 10, 1949	+.36	+.22
7-14-30db	69.10	Nov. 24, 1949	71.70	Dec. 30, 1947	+1.18	+1.80
7-15-11ad	33.30	Nov. 24, 1949	35.07	Nov. 24, 1947	+.97	+1.62
7-16-8dc	16.63	Nov. 24, 1949	18.93	Aug. 7, 1947	+.77	+2.30
7-16-11dd	25.77	Nov. 24, 1949	27.61	Aug. 7, 1947	+.95	+1.84
7-16-23da	64.77	Nov. 24, 1949	67.85	Dec. 30, 1947	+1.43	+3.08
7-16-25aa	46.70	Nov. 24, 1949	48.80	Sept. 20, 1948	+1.80	+2.10
8-13-12cb	4.17	Apr. 20, 1949	7.12	Aug. 9, 1946	+.52	+.86
8-13-16bc	3.18	Apr. 20, 1949	6.77	Sept. 7, 1946	+1.16	+1.16
8-14-13db	6.59	Nov. 15, 1946	10.98	Oct. 27, 1940	+.55	+.53
8-14-19cc	2.38	Nov. 15, 1946	6.18	Sept. 7, 1946	+.63	.70
8-14-23ba	2.63	Nov. 15, 1946	5.75	Sept. 11, 1947	.10	+.48
8-15-21dc	3.20	Nov. 15, 1946	7.25	Sept. 11, 1947	+.46	.18
8-16-23dd	2.20	Oct. 10, 1946	5.70	Sept. 8, 1948	+.55	+.09
8-16-28aa	4.36	Oct. 10, 1946	7.60	Sept. 7, 1946	+.57	+.88

Keith County

13-35-6dd	5.90	May 8, 1942	10.98	Dec. 13, 1949	1.81	3.26
13-36-3cb	4.61	May 8, 1942	10.25	Sept. 27, 1940	+.74	+.22
13-36-6bc	2.03	May 8, 1942	6.32	Aug. 2, 1943	.28	+1.19
13-36-8cc	1.52	June 13, 1949	5.79	Apr. 17, 1946	+.40	+.43
13-36-9ad	+.02	Mar. 16, 1946	3.74	Apr. 17-22, 1946	+.23	.84
13-37-3ab	10.55	May 8, 1942	15.80	Nov. 6, 1947	+.95	.14
13-37-5ad	8.04	May 8, 1942	13.85	Aug. 2, 1943	.24	+.52
13-38-3ba	9.27	May 8, 1942	15.79	Aug. 2, 1943	+.38	+.86
13-38-6ca	9.94	May 8, 1942	14.90	Oct. 9, 1948	+.25	.87
13-39-19cd	39.96	Oct. 27, 1935	43.37	Oct. 25, 1941	....	1.35
13-39-34dd	166.07	Oct. 6, 1949	167.47	Nov. 19, 1942	....	+1.28
13-40-22bb	2.64	May 8, 1942	9.24	Oct. 6, 1943	+.01	.74
16-38-7aa	7.63	May 4, 1942	10.50	Aug. 31, 1948	+.10	2.50
				Aug. 31, 1949		

Length of record, in years, highest and lowest recorded water levels, in feet, net change in water level in 1949, and net change in water level during period of record in 973 wells in Nebraska--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Lincoln County</u>						
11-26-16bb	7.75	July 7, 1949	21.62	Apr. 6, 1939 Oct. 2, 1939	+0.65	+12.10
12-26-35db	7.32	July 13, 1947	11.45	Sept. 8, 1948	+.49	.15
12-27-14aa	2.98	July 2, 1935	7.07	Aug. 30, 1941	.25	1.32
12-27-16aa	2.18	July 2, 1947	5.77	Nov. 3, 1949	.48	2.31
12-27-20dd	13.17	July 13, 1947	18.68	Oct. 1, 1940	+.22	+3.16
12-27-27ad	1.74	Sept. 11, 1942	7.36	Nov. 1, 1939	+.05	+.52
12-27-28dd	11.79	July 7, 1949	12.74	Sept. 9, 1948	+.16	+.16
12-27-36ad	2.87	Nov. 3, 1949	9.02	Sept. 2, 1939	+2.46	+4.25
12-28-9bc	4.70	Apr. 19, 1949	10.65	Nov. 1, 1939	+.14	+3.88
12-28-14dd	27.42	Jan. 8, 1948	37.43	Oct. 1, 1940	+.21	+9.27
12-28-15ba	11.05	June 13, 1947	16.85	Oct. 1, 1940	+.19	+3.44
13-27-32bd	1.40	May 1, 1942	5.13	Aug. 4, 1939	+.33	1.09
13-28-16dd	2.70	Apr. 19, 1949	6.18	Sept. 8, 1948	+.51	+.72
13-28-21da	.62	June 12, 1947	6.48	Aug. 29, 1940	+.44	.32
13-28-25bc	3.48	Apr. 19, 1949	6.40	Sept. 8, 1949	+.21	1.39
13-28-28cc	1.53	Apr. 19, 1949	3.52	Sept. 8, 1949	....	.19
13-28-29cc	3.28	Apr. 7, 1939	6.39	Sept. 9, 1947	.26	1.89
13-28-31cc	3.39	Oct. 30, 1946	10.84	Aug. 3, 1939	+.14	+5.46
13-29-6ba	2.14	May 8, 1942	5.13	July 26, 1940	.33	.69
13-29-20bb	5.15	Sept. 11, 1942	12.19	Oct. 2, 1936	+.66	+5.45
13-29-20cc	22.00	July 7, 1949	22.85	Sept. 8, 1949	....	.20
13-29-25bb	3.05	Apr. 7, 1939	6.86	Nov. 22, 1944	.01	1.09
13-29-35bb	15.00	Sept. 8, 1949	17.85	May 14, 1947	+.54	+.04
13-30-3ad	2.10	May 8, 1942	6.57	Sept. 9, 1947	.04	.70
13-30-4cd	4.97	Oct. 9, 1946	7.90	Nov. 3, 1949	.45	+.70
13-30-9cb	.90	June 13, 1947	3.24	Aug. 2, 1946	.12	.02
13-30-13dd	9.05	July 7, 1949	15.89	Aug. 2, 1937	+.47	+4.54
13-30-21bb	10.50	July 7, 1949	19.92	Sept. 17, 1936	.05	+5.59
13-30-21cd	38.35	Nov. 3, 1949	41.20	Jan. 20, 1947	+.25	+2.85
14-30-9ca	2.55	June 13, 1947	6.05	Sept. 12, 1946	.07	.33
14-30-16db	.10	Feb. 25, 1947	2.69	Sept. 9, 1947	.50	.70
14-30-21cd	2.58	Apr. 19, 1949	4.12	July 7, 1948	.06	.06
14-30-28dc	5.12	July 7, 1949	7.53	July 7, 1948	+.30	.90
14-30-33cd	5.90	June 23, 1947	8.26	Nov. 3, 1949	.06	1.96
14-33-27aa	8.16	Sept. 10, 1942	11.26	Feb. 21, 1949	.0	1.22
14-33-27da	1.58	June 27, 1949	5.71	Feb. 4, 1948	.18	1.99
				Feb. 7, 1948		

Madison County

22-1-33cb	+ .30	Sept. 14, 1949	4.25	Aug. 18, 1936	....	+1.34
23-2-5aa	2.93	June 4, 1935	4.86	July 16, 1936	+.22	+.98
24-2-32dc	2.89	June 4, 1935	6.55	Aug. 10, 1935	+.33	+1.26

Merrick County

11-8-3dd	.55	Mar. 17, 1948	3.32	Sept. 5, 1947	+.19	+.21
12-7-7aa	4.34	July 10, 1947	7.32	Sept. 4, 1946	+.42	.38
12-8-7dc	8.55	July 5, 1949	13.79	Sept. 4, 1946	+1.02	+1.69
12-8-28dc	+ .11	Apr. 13, 1949	3.42	Jan. 5, 1949	+.70	.47
13-6-2bc	4.36	Apr. 12, 1949	6.91	Nov. 11, 1947	+.62	.87
13-6-7bb	4.09	July 10, 1947	6.60	Jan. 5, 1948	+.44	.58
				Nov. 2, 1948		
13-6-19cb	3.10	July 10, 1947	5.75	Jan. 5, 1948	+.57	.94
				Nov. 2, 1948		
13-6-28bb	5.12	Jan. 6, 1947	7.49	Sept. 4, 1946	+.27	.86
13-7-4bc	2.95	Mar. 9, 1949	7.46	May 7, 1946	+.30	+2.14
13-7-29cb	.40	Mar. 9, 1949	4.07	Aug. 6, 1946	+.37	.24

Length of record, in years, highest and lowest recorded water levels, in feet, net change in water level in 1949, and net change in water level during period of record in 973 wells in Nebraska--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Merrick County--Continued</u>						
14-4-18bb	1.97	Mar. 7, 1949	5.72	Sept. 3, 1946	+0.58	.49
14-5-9cc2	4.56	July 8, 1947	7.14	Nov. 11, 1947	+.62	.97
14-6-15bb	1.82	Mar. 8, 1949	5.64	Sept. 4, 1946	+.28	.65
14-7-21cb	4.16	Apr. 13, 1949	9.74	Dec. 20, 1934	+.51	+2.80
14-7-26cc	9.58	July 5, 1949	13.00	May 7, 1946	+.91	+2.63
15-4-15dd	5.05	July 8, 1947	8.90	Nov. 11, 1947	+.35	.35
15-4-31cc	2.13	Apr. 15, 1949	5.22	Nov. 11, 1947	+.63	.20
15-5-8dd	11.15	July 8, 1947	14.63	Nov. 2, 1948	+2.49	+1.88
15-5-27dd	1.92	July 8, 1947	4.70	Jan. 13, 1948	+.69	.22
15-8-33bc	10.69	July 1, 1949	16.54	Aug. 8, 1949	+2.20	+1.11
15-8-34bb	4.02	June 1, 1949	8.90	Oct. 1, 1948	+1.76	+.66
16-3-7dd	.79	Apr. 15, 1949	4.97	Nov. 11, 1947	+.88	+.93
16-3-27cc	4.05	Mar. 7, 1949	9.84	Nov. 1, 1934	+.30	+2.50

Morrill County

18-52-11dd	23.51	Dec. 16, 1949	24.11	July 12, 1949	....	+0.05
19-49-23cc	9.60	Oct. 18, 1937	11.86	Apr. 5, 1940	.45	+1.10
19-50-30cd	23.61	May 18, 1949	24.18	July 12, 1949	....	.27
19-52-26dd2	18.53	July 6, 1949	23.50	Oct. 17, 1949	....	4.51
20-49-30ac	15.22	Nov. 21, 1949	21.22	June 11, 1946	+1.45	+4.59
20-50-17bb	10.90	Oct. 27, 1947	15.93	May 9, 1946	+.10	+4.11
20-50-28bb	11.99	Jan. 18, 1947	14.74	Mar. 12, 1947	+1.08	+1.67
20-50-32aa	2.00	May 14, 1942	5.80	June 10, 1948	+.38	+.26
21-50-33bc	17.76	Aug. 31, 1948	47.85	June 11, 1946	4.43	+16.33
22-50-14bc	+0.06	May 9, 1949	2.33	Aug. 13, 1946	+.61	+.26
22-50-28bc	80.39	Nov. 21, 1949	82.46	Aug. 29, 1934	+.91	+2.07
23-51-29bb	100.95	Sept. 1, 1948	101.33	June 12, 1946	+.15	+.40

Nance County

15-7-6bb	64.33	Apr. 26, 1949	66.00	Sept. 30, 1948	+.51	+.41
16-4-31bc	3.08	Apr. 1949	6.76	Jan. 13, 1948	+.80	+1.27
16-6-14ad	25.24	July 1, 1949	30.84	Oct. 26, 1940	....	+.78
16-7-34cb	27.02	July 1, 1949	29.02	Sept. 30, 1948	....	+1.10
16-7-36aa	20.98	July 1, 1949	22.52	Sept. 30, 1948	....	+.29
17-4-23da	14.63	July 6, 1949	18.74	Sept. 28, 1948	....	+.87
17-4-24db	.88	Mar. 21, 1936	6.46	Dec. 5, 1949	....	.24
17-4-25cd	9.28	Apr. 26, 1949	12.08	Sept. 28, 1948	....	.38
17-4-32dd	4.11	June 6, 1949	6.42	Sept. 28, 1948	....	.21
17-4-36aa	2.57	July 6, 1949	5.15	Sept. 28, 1948	....	.74
17-5-35dd	3.58	July 6, 1949	6.72	Sept. 28, 1948	....	+.41
17-6-19bd	38.69	Sept. 23, 1949	39.80	Sept. 29, 1948	....	+.72
17-6-34ad	42.60	July 5, 1949	45.15	Oct. 31, 1942	....	+.09
17-7-1ad	37.38	July 1, 1949	41.56	Nov. 1, 1949	....	.50
18-4-19ab	8.19	June 6, 1949	12.21	Sept. 26, 1948	....	+.04

Nuckolls County

1-5-31cb	18.29	June 20, 1949	20.43	Nov. 2, 1948	+1.18	+.79
1-5-31cc	.42	Sept. 22, 1949	6.07	Oct. 2, 1947	+1.68	+1.66
1-6-30dd	32.98	Dec. 19, 1949	33.52	Oct. 27, 1946	+.25	+.49
		Dec. 20, 1949				
1-6-31cc	9.44	Apr. 16, 1948	13.53	Dec. 21, 1948	+.54	3.30
1-6-33cb	3.48	June 20, 1949	6.31	Sept. 23, 1948	+1.20	+.28
1-6-33cb	7.99	June 20, 1949	12.93	Nov. 2, 1948	+1.07	+.14
1-6-35cb	7.44	July 28, 1949	14.69	Dec. 20, 1948	+4.19	+2.67
1-6-35cc	8.85	Apr. 28, 1949	14.00	Nov. 2, 1948	+2.97	+.75
1-7-19cb	3.62	June 20, 1949	11.65	Oct. 25, 1948	+3.40	+.46
1-7-19dd	2.27	June 20, 1949	7.80	Sept. 24, 1948	+1.17	+1.72
1-7-27cb	18.72	June 20, 1949	20.59	Oct. 31, 1947	+1.22	+1.39
1-7-31da	4.53	June 20, 1949	11.55	Oct. 25, 1948	+1.91	+1.16
1-7-32bb	.51	Mar. 24, 1948	4.95	Sept. 24, 1948	+1.09	+1.72

Length of record, in years, highest and lowest recorded water levels, in feet, net change in water level in 1949, and net change in water level during period of record in 973 wells in Nebraska--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
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Nuckolls County--Continued

1-7-33ad	0.73	June 20, 1949	6.70	Oct. 25, 1948	+1.13	+1.06
1-7-33dd	4.84	June 20, 1949	9.73	Oct. 25, 1948	+1.33	+1.14
1-7-34bb	1.97	June 20, 1949	7.73	Sept. 23, 1948	+1.04	.56
				Oct. 25, 1948		
1-7-35da	6.46	July 29, 1949	9.10	Feb. 4, 1949	+ .99	+ .56
1-7-36da	9.69	Aug. 17, 1949	12.43	Dec. 21, 1948	+1.43	1.00
1-8-7bb	.34	June 20, 1949	6.96	Oct. 13, 1947	+ .91	+6.43
1-8-7dd	.55	June 20, 1949	6.35	Sept. 24, 1948	+ .96	.37
1-8-14cb	12.85	June 20, 1949	16.90	Oct. 25, 1948	+1.17	+1.15
1-8-17aa	1.20	June 20, 1949	6.60	Oct. 25, 1948	+1.81	+3.13
1-8-17da	2.95	June 20, 1949	7.73	Oct. 25, 1948	+1.16	+1.54
1-8-18cc	8.13	June 20, 1949	13.63	Oct. 25, 1948	+1.06	+ .37
1-8-21cb	8.28	June 20, 1949	13.06	Oct. 25, 1948	+1.14	.09
1-8-21dc	24.52	Aug. 2, 1947	28.92	Sept. 24, 1948	+1.32	.13
1-8-22ab	.52	June 20, 1949	5.64	Sept. 24, 1948	+ .11	1.56
1-8-22ad	3.88	June 20, 1949	10.05	Oct. 13, 1947	+ .41	+1.77
1-8-22dd	3.01	June 20, 1949	8.60	Oct. 25, 1948	+1.33	+1.32
1-8-25aa	1.75	June 20, 1949	7.06	Oct. 25, 1948	+1.76	+1.79
1-8-25ad	4.53	June 20, 1949	10.50	Oct. 13, 1947	+2.06	+3.29
1-8-36aa	7.46	June 20, 1949	12.17	Oct. 13, 1947	+ .37	+1.51

Phelps County

5-18-2cc	157.81	June 1, 1949	159.81	Sept. 8, 1948	+ .21	+1.20
5-18-4ab	147.83	Nov. 24, 1949	154.62	Aug. 1, 1940	+1.93	+4.83
5-18-6ab	158.33	May 31, 1949	159.54	July 20, 1948	....	+1.24
5-18-15cb	157.50	June 1, 1949	159.05	June 1, 1948	....	+1.06
5-19-4bc	205.24	Nov. 24, 1949	208.25	Jan. 21, 1948	+ .61	+3.01
5-19-22da	202.38	Dec. 10, 1949	204.64	Sept. 13, 1949	+ .62	+ .72
5-20-16dc	37.64	June 2, 1949	39.95	July 22, 1948	+1.08	+2.03
5-20-32cc	104.89	Nov. 24, 1949	105.84	Nov. 8, 1948	+ .95	+ .68
6-17-15ad	84.35	Nov. 24, 1949	90.08	Aug. 6, 1947	+2.03	+5.73
6-18-12bc	84.64	May 31, 1949	89.92	Aug. 5, 1947	....	+5.28
6-18-13da	112.20	Nov. 24, 1949	116.75	May 20, 1948	+2.54	+4.55
6-19-2aa	107.10	Nov. 24, 1949	123.70	Mar. 9, 1945	+2.53	+16.60
6-19-18ba	153.58	Nov. 24, 1949	156.26	Dec. 30, 1948	+2.68	+2.68
6-19-21dc	148.93	Nov. 24, 1949	151.35	May 5, 1948	+1.92	+2.42
6-20-10aa	165.34	Nov. 23, 1949	188.01	May 17, 1948	+1.53	+2.67
6-20-28ad	193.38	Nov. 24, 1949	194.78	July 23, 1948	+1.02	+1.40
7-17-11cb	26.70	Nov. 24, 1949	28.78	Aug. 7, 1947	+ .79	+2.08
7-17-30bb	50.75	Jan. 14, 1949	54.17	Aug. 5, 1947	....	+3.40
7-18-3cc	76.02	Nov. 24, 1949	80.85	May 15, 1948	+1.78	+4.83
7-18-27ab	59.53	May 26, 1949	64.15	Aug. 5, 1947	....	+4.62
7-18-35ab	68.88	Nov. 24, 1949	72.74	May 12, 1948	+2.11	+3.86
7-19-6aa	56.34	Nov. 23, 1949	63.28	May 10, 1948	+3.45	+6.94
7-19-12cc	45.02	Nov. 24, 1949	54.07	July 24, 1947	+3.63	+9.05
7-19-16ac	71.11	Nov. 24, 1949	81.40	July 25, 1947	+4.38	+10.29
7-19-23ad	52.36	Nov. 24, 1949	70.60	Mar. 9, 1945	+2.43	+18.24
7-19-26dd	38.88	Aug. 5, 1947	49.89	Apr. 19, 1945	+1.15	+6.22
7-20-14cc	161.92	Nov. 24, 1949	168.63	May 18, 1948	+3.19	+6.71
7-20-28dc	157.05	Nov. 24, 1949	172.72	Nov. 15, 1934	+2.64	+12.93
7-20-31cd	219.26	Nov. 28, 1949	227.40	Aug. 20, 1947	+1.99	+7.70
8-17-19db	10.00	July 15, 1947	15.91	Oct. 27, 1940	+1.15	+2.82
8-17-21bc	4.79	July 8, 1949	6.95	Sept. 8, 1948	+ .46	+ .32
8-17-24bc	7.60	July 8, 1949	12.23	Oct. 27, 1940	+ .39	+ .16
8-18-9db	.94	Feb. 23, 1932	6.05	Nov. 3, 1934	....	+ .15
8-18-16cc	6.02	July 15, 1947	9.26	Aug. 9, 1946	+ .74	+ .77
8-18-21dd	10.01	Sept. 26, 1949	11.80	Dec. 30, 1948	+ .92	+ .38
8-18-24bb	7.85	July 15, 1947	10.05	Sept. 7, 1946	+ .63	+ .40
		July 8, 1949				
8-18-33dd	72.28	Nov. 24, 1949	76.48	May 8, 1948	+ .87	+4.20
8-18-34bb	19.30	Nov. 24, 1949	20.22	June 15, 1948	+ .88	+ .87

Length of record, in years, highest and lowest recorded water levels, in feet, net change in water level in 1949, and net change in water level during period of record in 973 wells in Nebraska--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>Phelps County--Continued</u>						
8-19-7dc	4.24	July 15, 1947	6.28	Aug. 9, 1946	....	+0.68
8-19-14dc	10.12	July 8, 1949	13.22	Sept. 8, 1946	+1.05	+1.55
8-19-15cd	6.12	Apr. 6, 1949	7.04	Mar. 18, 1947	.43	+3.39
8-19-18aa	1.24	Mar. 12, 1949	2.54	Sept. 9, 1949	....	.52
8-19-29cce	62.69	Nov. 23, 1949	64.43	May 10, 1948	+1.20	+1.74
8-19-33cc	48.32	Nov. 24, 1949	51.70	May 10, 1948	+2.06	+3.38
8-19-36bb	32.22	Nov. 24, 1949	39.48	Mar. 9, 1945	+1.01	+7.26
8-20-8cd	4.18	July 8, 1949	8.90	Aug. 9, 1946	+1.12	+3.02
8-20-9cd	2.10	June 4, 1942	7.42	Sept. 30, 1940	+5.53	+2.59
8-20-12dc	1.24	Jan. 14, 1949	3.00	Sept. 8, 1948	+2.27	.20
8-20-18dd	104.68	Nov. 23, 1949	107.23	Dec. 30, 1948	+2.55	+1.24
8-20-23dc	64.29	Nov. 23, 1949	71.26	June 5, 1948	+2.77	+4.31
8-20-26dc	33.97	June 23, 1948	64.88	May 25, 1948	+2.32	+12.06

Platte County

A17-1-14cc	7.44	July 8, 1947	14.10	Aug. 25, 1936	+5.52	+2.30
A17-1-14dd	2.90	July 30, 1945	8.68	Aug. 26, 1936	+6.65	+1.90
A17-1-17dd	5.20	July 30, 1945	10.58	Aug. 3, 1937	+7.79	.40
A17-1-25aa	4.00	July 30, 1946	11.00	Apr. 30, 1940	+9.99	+9.90
A17-1-29da	7.82	July 8, 1947	12.00	Oct. 16, 1943	+8.83	+0.05
A17-1-36bc	3.87	Apr. 25, 1949	6.77	Nov. 11, 1947	+6.63	+8.85
A18-1-28cd	60.80	Mar. 27, 1940	71.23	July 30, 1937	.10	+6.60
		Apr. 24, 1940				
16-2-2da	1.86	Apr. 15, 1949	6.19	Nov. 11, 1947	+9.97	+1.14
16-2-9cc	.39	Apr. 15, 1949	4.80	Sept. 4, 1946	+4.42	+4.47
16-2-12ab	6.24	Apr. 15, 1949	11.79	Nov. 21, 1939	+8.85	+1.89
17-1-2cc	6.80	Apr. 13, 1942	13.29	Oct. 18, 1936	+5.17	+2.19
17-1-5ad	.94	May 7, 1949	7.40	Dec. 3, 1935	+5.51	+4.29
17-1-7ac	4.50	July 23, 1945	9.34	Dec. 21, 1936	+5.54	+1.76
17-1-14cc	9.06	July 7, 1947	11.50	Sept. 10, 1940	+0.09	+6.61
17-1-34dc	6.29	July 7, 1947	9.40	Sept. 4, 1946	+6.61	1.15
17-2-2cd	4.58	July 8, 1947	8.80	Oct. 23, 1936	+1.76	+1.48
17-2-4bc	7.24	June 11, 1945	12.30	Aug. 31, 1942	+5.55	+2.24
17-2-6bd	12.53	June 6, 1949	14.53	Aug. 8, 1949	....	.28
17-3-2da	5.51	June 6, 1949	9.95	Sept. 28, 1948	....	.54
17-3-8cb	.40	July 6, 1949	3.20	Sept. 28, 1948	....	+9.95
17-3-23ad	13.55	July 6, 1949	14.80	Jan. 29, 1947	....	+1.11
				Sept. 28, 1948		

Polk County

13-4-34cc	5.73	Apr. 27, 1949	12.61	Aug. 2, 1940	+1.85	+4.94
14-4-4da	4.75	June 12, 1949	6.59	Sept. 1, 1949	....	.30
14-4-19ab	2.32	Mar. 7, 1949	6.02	Sept. 3, 1947	+6.68	.52
15-2-4dc	3.36	Apr. 19, 1949	7.80	Nov. 10, 1947	+0.06	1.15
15-2-7bb	5.28	Apr. 19, 1949	8.43	Nov. 10, 1947	+1.14	.69
15-3-3dc	3.37	Apr. 20, 1949	6.42	Nov. 10, 1947	+1.18	.42
15-3-20cc	4.20	Dec. 9, 1946	7.63	Nov. 10, 1947	+7.75	.84
15-3-23dc	4.88	Mar. 7, 1949	10.72	Nov. 1, 1948	+8.87	.01
15-4-35dc	18.45	July 7, 1947	21.00	Sept. 3, 1946	+7.70	+3.34
		July 12, 1949				
16-1-14bb	3.72	July 7, 1947	6.38	Sept. 3, 1946	+5.55	+5.59
16-1-36cb	19.32	July 7, 1947	21.71	June 3, 1946	+3.37	.35
16-2-23dc	5.92	July 7, 1947	8.24	Nov. 10, 1947	+1.18	....

Length of record, in years, highest and lowest recorded water levels, in feet, net change in water level in 1949, and net change in water level during period of record in 973 wells in Nebraska--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
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Red Willow County

2-29-4aa	8.52	June 11, 1949	11.52	Oct. 6, 1948	+0.23	0.14
2-29-5ab	16.35	Dec. 7, 1946	19.92	Oct. 6, 1948	+0.08	1.01
2-30-1aa	8.17	Oct. 24, 1946	11.60	Aug. 4, 1949	+5.50	+2.23
2-30-12ad	27.76	Oct. 6, 1948	30.81	June 12, 1946	.22	+1.04
3-26-5bb	43.17	June 11, 1949	47.77	July 31, 1947	+6.66	+7.77
3-26-5cc	15.57	June 11, 1949	17.35	Oct. 7, 1948	+5.54	.07
3-26-9cb	15.35	Dec. 3, 1947	17.02	Aug. 14, 1946	+6.65	+5.56
3-26-11bb	7.85	June 6, 1949	9.43	Oct. 4, 1948	+5.56	.09
3-27-7dc	6.95	June 11, 1949	10.15	Dec. 6, 1947	+2.27	.05
3-27-8ac	9.21	Oct. 21, 1946	13.49	Oct. 21, 1937	+7.72	+2.32
3-27-11cd	16.39	Jan. 30, 1946	17.90	Oct. 4, 1947	+2.22	.49
3-27-17cd	8.31	Oct. 25, 1946	10.85	Oct. 6, 1947	+4.49	.58
3-28-17da	9.46	July 7, 1949	12.28	Oct. 6, 1947	+5.53	+1.11
3-28-20bb	8.79	Apr. 7, 1949	11.62	Oct. 6, 1947	+5.57	+3.36
3-28-21cd	8.40	June 6, 1949	9.73	Oct. 6, 1947	+6.63	+2.02
3-28-24ac	8.67	Apr. 7, 1949	14.12	Oct. 3, 1949	.12	+1.36
3-29-32db	4.60	June 11, 1949	7.85	Oct. 6, 1948	+6.60	+4.46
3-29-35da	17.92	July 31, 1947	20.39	June 9, 1947	+5.04	+1.24
3-30-19bb	5.72	June 9, 1949	8.49	Aug. 15, 1946	+8.84	+1.13
3-30-26cb	7.45	Feb. 7, 1949	10.35	Oct. 4, 1948	+1.49	.54
3-30-29aa	1.92	Apr. 7, 1949	5.06	Oct. 9, 1947	+4.42	+2.25
3-30-34bb	12.34	Oct. 24, 1946	15.12	Aug. 4, 1949	+2.29	.43
4-26-34db	19.65	July 31, 1947	21.28	Oct. 7, 1948	+6.64	+3.33

Rock County

30-17-8db	1.59	June 14, 1949	5.12	Nov. 22, 1935	1.24	+8.86
30-19-10aa	.37	June 6, 1949	4.23	July 19, 1940	1.10	+1.16

Saunders County

A13-9-24cc	.48	July 31, 1948	7.92	Aug. 30, 1934	.56	+2.25
A17-5-23bb	.71	Mar. 23, 1948	3.35	Sept. 3, 1947	+5.57	.84

Scotts Bluff County

23-56-6aa	29.24	Oct. 26, 1949	34.63	July 1, 1949	+7.79	+7.79
23-57-5bb	21.27	Oct. 26, 1949	24.08	June 30, 1949	.80	.80

Seward County

A11-2-23cc	76.96	Oct. 17, 1949	77.86	Oct. 14, 1948	+4.90	+4.47
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Sheridan County

24-41-34da	5.52	June 8, 1935	9.37	Oct. 21, 1941	+5.58	1.47
24-42-27ba	12.19	Apr. 4, 1946	13.27	Jan. 21, 1947	.04	.86
24-43-15da	5.26	June 8, 1949	8.08	Nov. 4, 1940	+6.66	+1.55
24-44-14da	3.94	May 11, 1949	6.18	Apr. 15, 1946	+1.02	.61
24-44-18bb	3.80	May 11, 1949	5.50	Aug. 15, 1946	+4.46	.43
24-45-8dd	.96	May 14, 1946	3.29	Aug. 15, 1946	+9.97	+1.12
24-46-10cb	2.26	Apr. 4, 1946	7.55	Aug. 15, 1946	+8.83	2.77
25-45-32ad	31.50	July 15, 1949	33.84	Sept. 16, 1946	+1.56	+1.38

Sherman County

13-13-4dc	120.64	Dec. 6, 1949	121.70	Nov. 8, 1949	....	+4.46
13-13-13cc	53.55	Nov. 8, 1949	58.84	Sept. 1, 1949	....	+1.77
13-13-23ad	37.93	Sept. 23, 1949	38.37	Dec. 6, 1949	....	.42
14-14-3cc	6.37	June 26, 1949	8.03	Nov. 8, 1949	....	1.66
14-14-5bc	8.87	Aug. 5, 1949	11.42	Mar. 29, 1948	1.62	+2.09
14-14-8db	6.01	July 7, 1949	8.76	Oct. 1, 1948	+7.74	1.51
14-14-23cb	10.88	June 26, 1949	12.65	Nov. 8, 1949	....	1.77

Length of record, in years, highest and lowest recorded water levels, in feet, net change in water level in 1949, and net change in water level during period of record in 973 wells in Nebraska--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
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Sherman County--Continued

15-14-19cb	4.88	Sept. 23, 1949	6.52	Oct. 1, 1948	+1.15	+0.11
15-15-3dc	14.11	Sept. 23, 1949	14.82	Nov. 30, 194963
15-15-14db	16.49	June 23, 1949	17.73	Nov. 30, 1949	....	+1.24
15-15-24cc	12.56	Sept. 23, 1949	13.55	Nov. 30, 1949	....	2.99
16-15-8dd	3.88	Nov. 30, 1949	4.30	Sept. 23, 1949	....	+4.42
16-15-9dc	12.59	Sept. 22, 1949	13.53	Aug. 24, 1949	....	+0.03
16-15-36cc	8.38	Nov. 30, 1949	12.21	Sept. 23, 1949	....	+1.37
16-16-12bc	32.37	Aug. 26, 1949	35.78	Nov. 7, 1949	....	2.85
16-16-12dc	26.20	Aug. 23, 1949	28.91	Dec. 1, 1949	2.71

Sioux County

24-57-35cb	4.84	Aug. 31, 1949	8.83	July 1, 1949	.76	.76
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Thomas County

23-28-9da	9.79	June 8, 1935	10.98	July 23, 1940	+0.06	.12
24-30-20ab	2.33	Mar. 27, 1936	3.12	Apr. 26, 1946	+0.02	.16

Valley County

17-16-25aa	9.17	Aug. 26, 1949	9.58	Sept. 27, 1949	....	.17
17-16-25cb	2.67	Nov. 30, 1949	3.19	Sept. 27, 1949	....	+5.52
17-16-26dc	2.70	Apr. 1, 1949	6.83	Dec. 26, 1946	.70	+2.26
17-16-34aa	8.14	Aug. 24, 1949	11.18	Nov. 30, 1949	....	4.04
18-13-2ac	9.60	Sept. 30, 1948	11.24	Sept. 2, 1949	....	.02
18-13-23dd	8.70	Aug. 3, 1949	23.37	Oct. 12, 1938	....	+11.19
18-15-12bb	28.26	Apr. 29, 1949	32.00	Oct. 1, 1949	....	+2.28
18-16-30cc	4.18	Aug. 31, 1949	4.79	Dec. 1, 1949	....	.61
19-13-28bb	12.29	Apr. 29, 1949	14.58	Sept. 30, 1948	....	.44
19-13-33cc	32.88	Aug. 3, 1949	34.27	June 2, 1949	....	+1.08
19-14-6dc	27.21	Sept. 20, 1949	37.90	Aug. 10, 1934	....	+9.97
19-14-13da	20.33	Sept. 30, 1948	22.74	Nov. 20, 1949	....	1.24
19-14-15db	4.43	June 30, 1948	6.42	Nov. 29, 1949	....	1.99
19-14-36bb	28.51	June 30, 1949	30.90	Nov. 2, 1949	....	.53
20-15-34aa	56.73	Apr. 29, 1949	58.00	Nov. 2, 1949	....	.84
				Nov. 29, 1949		

Webster County

1-9-6cd	48.03	Apr. 14, 1948	50.65	Oct. 8, 1948	+1.65	.97
1-9-8bc	6.78	Dec. 27, 1949	6.85	Oct. 27, 1949	....	+0.07
1-9-9ad	1.18	June 20, 1949	3.97	Oct. 25, 1948	+0.06	.25
1-9-9cb	1.84	June 20, 1949	6.78	Oct. 25, 1948	+0.70	+4.47
1-9-9cc	3.17	June 20, 1949	8.54	Feb. 4, 1949	+0.63	.24
1-9-11bc	7.13	Oct. 27, 1949	7.36	Dec. 30, 1949	....	.23
1-9-11cb	.57	June 20, 1949	6.12	Sept. 24, 1948	+0.98	.23
1-9-13ad	3.74	June 20, 1949	10.22	Nov. 10, 1949	+0.73	+0.04
1-9-14bb	4.63	May 27, 1949	8.55	Oct. 25, 1948	+0.40	+0.98
1-9-14bc	7.29	June 20, 1949	12.60	Dec. 5, 1949	1.21	.05
1-9-16bc	6.20	June 20, 1949	17.70	Aug. 18, 1948	+0.05	+4.48
1-10-1dcl	9.51	Oct. 29, 1941	10.92	Sept. 25, 1939	+0.87	+0.90
1-10-3ad	6.47	June 21, 1949	10.08	Oct. 8, 1948	+0.84	+0.75
1-10-4ab	3.81	June 21, 1949	9.46	Jan. 17, 1949	+1.75	+1.68
1-10-4db	5.34	June 21, 1949	9.75	Nov. 17, 1948	+0.47	+0.57
1-10-9ad	14.63	June 21, 1949	17.89	Nov. 17, 1948	+1.24	.19
1-10-10dd	6.70	June 21, 1949	10.68	Nov. 17, 1948	+0.91	+1.24
1-10-12ad	7.33	July 21, 1949	9.36	Nov. 17, 1948	+0.63	+0.69
1-10-12da	2.34	June 21, 1949	9.14	Jan. 17, 1949	+0.83	+0.43
1-10-12dc	3.20	June 21, 1949	7.88	Nov. 17, 1948	+0.43	+0.93
1-11-1da	3.44	June 11, 1949	10.02	Dec. 21, 1948	+1.48	+0.51
1-11-5bc	+1.12	June 21, 1949	7.63	Dec. 21, 1948	+1.43	+0.35
1-11-5cc	3.04	June 21, 1949	7.50	Nov. 17, 1948	+0.27	+0.59

Length of record, in years, highest and lowest recorded water levels, in feet, net change in water level in 1949, and net change in water level during period of record in 973 wells in Nebraska--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)
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Webster County--Continued

1-11-6cc	3.19	June 21, 1949	7.08	Dec. 21, 1948	+1.02	+0.71
1-11-8bc	6.04	June 21, 1949	11.92	Nov. 18, 1948	+52	+73
1-11-9bc	3.00	May 19, 1949	9.33	Nov. 17, 1948	+1.60	+3.19
1-11-11ab	2.76	June 14, 1949	9.49	Feb. 11, 1949	+86	+82
1-11-11bb	6.20	June 21, 1949	10.20	Jan. 17, 1949	+1.20	+96
1-11-12bc	5.62	June 21, 1949	8.27	Jan. 17, 1949	+1.14	+1.09
1-11-16aa	14.80	Dec. 27, 1949	21.25	Aug. 12, 1946	+3.94	+5.57
1-12-2bb	.94	June 21, 1949	7.12	Oct. 8, 1948	+1.53	+26
1-12-4bb	1.58	May 19, 1949	9.58	Oct. 8, 1948	+1.35	.05
1-12-8aa	.90	May 20, 1949	6.10	Oct. 8, 1948	+40	.41
1-12-9aa	1.84	May 20, 1949	7.39	Nov. 17, 1948	+1.10	+1.44
2-10-36db	26.50	Apr. 7, 1949	28.07	Feb. 12, 1946	+64	.63
2-12-34cd	16.87	Dec. 24, 1949	19.62	Oct. 2, 1936	+94	+2.64

York County

9-2-15bc	23.05	Oct. 17, 1949	26.09	Oct. 6, 1934	....	+3.04
11-1-35bb	104.94	Oct. 17, 1949	105.40	Oct. 14, 1948	+46	+41
11-3-36ab	67.67	Oct. 17, 1949	68.00	June 23, 1948	+28	+35
11-4-25bc	66.00	Apr. 27, 1949	66.43	Oct. 17, 1949	.11	.21
11-4-31ba	72.02	Apr. 27, 1949	72.65	Oct. 14, 1948	+60	+35
11-4-33bb	68.36	Apr. 27, 1949	69.29	Oct. 14, 1948	+74	+50

PUMPAGE

The following tables give the total pumpage for the public supplies of Lincoln and Grand Island. The public supply for the city of Lincoln is pumped from nine wells installed on the flood plain of the Platte River about three miles north of Ashland. The first pumping from the Lincoln well field, near Ashland, began in August 1932 and by the end of 1949 a total of approximately 55,648.2 million gallons of water had been withdrawn from the ground-water reservoir. The public supply at Grand Island is obtained by pumping from a group of wells drilled into the Pleistocene sands and gravels of the Platte Valley and situated, for the most part, within the city.

Monthly pumpage, in millions of gallons, for public supply of Lincoln, Nebr., from well field north of Ashland, 1932-49

	1932	1933	1934	1935	1936	1937
Jan.	.....	204.2	136.6	181.1	186.2	203.8
Feb.	.....	187.0	164.2	167.2	193.0	190.7
Mar.	.....	205.0	188.5	199.2	204.4	200.6
Apr.	.....	210.0	194.8	193.6	188.8	158.5
May	.....	213.8	236.0	188.7	234.8	262.9
June	.....	263.6	249.9	192.0	296.4	254.5
July	.....	212.6	308.9	236.9	334.5	322.5
Aug.	98.5	197.2	278.1	255.8	319.8	317.7
Sept.	186.1	169.4	206.5	181.3	228.2	297.6
Oct.	204.9	132.6	176.9	154.0	236.4	204.8
Nov.	201.8	106.4	196.6	90.1	209.2	217.1
Dec.	203.2	133.9	171.7	182.9	201.2	188.8
	894.5	2,235.7	2,508.7	2,228.8	2,832.9	2,819.5

Monthly pumpage, in millions of gallons, for public supply of Lincoln, Nebr., from well field north of Ashland, 1932-49--Continued

	1938	1939	1940	1941	1942	1943
Jan.	203.7	196.1	195.8	193.4	198.5	248.2
Feb.	192.2	185.6	182.8	181.2	178.4	227.6
Mar.	211.1	212.9	193.9	195.1	199.3	253.5
Apr.	189.5	223.7	177.1	173.8	213.8	246.9
May	216.4	284.6	246.5	289.2	243.4	290.0
June	245.8	267.4	290.7	286.3	292.4	324.6
July	304.9	325.0	374.3	387.4	372.5	379.8
Aug.	298.9	300.6	290.7	377.8	399.8	377.1
Sept.	201.6	324.3	314.1	277.0	269.3	334.0
Oct.	207.2	232.7	264.4	201.2	234.1	304.8
Nov.	116.3	222.8	170.8	197.7	200.5	237.4
Dec.	141.1	203.4	201.5	205.3	241.8	263.9
	2,533.7	2,979.1	2,902.3	2,960.4	3,043.8	3,487.8

Monthly pumpage, in millions of gallons, for public supply of Lincoln, Nebr., from well field north of Ashland, 1932-49

	1944	1945	1946	1947	1948	1949
Jan.	281.4	310.1	286.9	329.1	333.3	362.0
Feb.	246.1	283.9	259.6	299.0	309.6	325.7
Mar.	274.0	317.7	288.3	333.8	334.8	355.8
Apr.	274.3	313.3	330.7	325.5	213.7	361.1
May	297.2	319.6	327.2	335.0	356.7	381.3
June	353.1	312.1	353.0	326.7	349.4	374.2
July	381.0	365.6	374.2	375.4	407.2	412.9
Aug.	361.0	361.0	340.0	399.5	409.3	416.3
Sept.	343.3	334.7	341.8	380.2	392.1	398.0
Oct.	327.1	324.0	341.3	364.7	392.8	344.2
Nov.	291.4	311.5	312.8	313.8	361.1	355.5
Dec.	307.5	291.9	312.5	325.8	363.0	351.4
	3,737.4	3,845.4	3,868.3	4,108.5	4,223.0	4,438.4

Average daily pumpage, in millions of gallons, for public supply of Lincoln, Nebr., from Ashland well field, 1932-49

	1932	1937	1942	1946	1949
1932	5.84	7.72	8.34	10.60	
1933	6.12	6.94	9.53	11.25	
1934	6.87	8.16	10.20	11.54	
1935	6.10	7.95	10.54	12.16	
1936	7.76	8.11			

a Pumping from Ashland well field began in August 1932.

Monthly pumpage, in millions of gallons, for public supply of Grand Island, Nebr., 1936-49

	1936	1937	1938	1939	1940	1941	1942
Jan.	133.8	93.0	98.9	107.4	125.7	100.6	126.0
Feb.	95.6	83.3	88.2	89.7	99.8	82.5	88.4
Mar.	111.8	96.7	112.5	108.5	100.9	108.1	132.5
Apr.	154.3	131.3	140.7	154.8	144.8	111.1	128.9
May	172.8	165.1	162.2	195.6	190.6	159.7	137.2
June	215.1	173.6	181.9	209.8	229.2	134.9	251.9
July	291.2	236.3	242.4	248.2	245.6	254.5	225.1
Aug.	241.0	239.3	189.8	251.1	240.6	251.3	250.4
Sept.	194.6	194.7	199.0	241.5	198.8	174.3	202.3
Oct.	153.6	163.0	191.4	192.2	172.8	148.4	198.4
Nov.	104.2	139.3	135.7	144.1	132.6	134.7	168.9
Dec.	104.4	101.6	112.2	131.6	118.4	131.1	161.3
	2,972.4	1,817.2	1,854.9	2,074.5	1,999.8	1,791.4	2,071.3

Monthly pumpage, in millions of gallons, for public supply of
Grand Island, Nebr., 1936-49--Continued

	1943	1944	1945	1946	1947	1948	1949
Jan.	156.6	189.7	228.1	210.3	218.3	216.5	240.3
Feb.	151.6	178.3	209.3	196.5	195.5	190.3	224.0
Mar.	177.0	209.6	269.3	218.7	230.6	209.6	238.6
Apr.	212.3	196.1	205.9	258.0	251.9	252.7	238.9
May	223.6	224.9	213.4	247.7	298.2	273.8	246.3
June	244.3	228.7	225.0	304.4	238.5	278.2	261.4
July	301.3	275.2	289.5	342.4	322.5	345.8	385.2
Aug.	299.6	320.6	286.3	354.8	399.6	311.7	360.2
Sept.	250.1	234.8	271.8	250.6	314.2	317.0	280.8
Oct.	235.2	228.8	231.7	245.7	244.8	268.4	253.2
Nov.	188.9	227.0	215.6	211.5	206.5	216.4	222.9
Dec.	189.4	223.6	214.2	217.6	213.0	222.6	226.5
	2,629.9	2,737.3	2,860.1	3,058.2	3,133.6	3,103.0	3,178.3

Average daily pumpage, in millions of gallons, for public supply
of Grand Island, Nebr., 1918-48

1918	a1.64	1926	a2.29	1934	5.72	1942	5.67
1919	a1.53	1927	a2.12	1935	5.34	1943	7.20
1920	a1.44	1928	a2.51	1936	5.41	1944	7.50
1921	a1.59	1929	3.65	1937	5.00	1945	7.84
1922	a1.76	1930	3.52	1938	5.08	1946	8.38
1923	a1.83	1931	4.16	1939	5.68	1947	8.58
1924	a2.04	1932	4.11	1940	5.47	1948	8.48
1925	a2.15	1933	4.90	1941	4.90	1949	8.71

a Does not include water pumped for condenser use at municipal electric plant.

WELL-NUMBERING SYSTEM

The following well-numbering system has been adopted in the Missouri Basin and is now being used in Nebraska. The State has been divided into two principal divisions. The numbers of those 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 counter-clockwise direction beginning with a in the northeast quadrant. The last numeral indicates the 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

Adams County

5-9-9dc. D. McClarry. Highest observed stage in period of record, 35.65 on May 26. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 22	36.94	May 26	35.65	Sept. 29	37.52
Apr. 11	36.77	July 27	37.21	Nov. 12	37.37

5-10-1bb. Sims. Highest observed stage in period of record, 93.23 on May 26. Records available: 1948-49.

Jan. 22	94.35	May 26	93.23	Nov. 21	94.38
Apr. 11	93.87	Sept. 29	94.45		

5-11-2bb. Neilson. Highest observed stage in period of record, 85.68 on Nov. 21. Records available: 1947-49.

Jan. 21	86.15	June 3	85.69	Nov. 21	85.68
Apr. 25	85.82	Sept. 29	85.72		

5-11-10bc. University of Nebraska. Highest observed stage in period of record, 8.83 on June 3. Records available: 1937-38, 1940-41, 1946-49.

Jan. 21	9.32	June 3	8.83	Sept. 29	9.78
Apr. 25	8.93	July 27	9.53	Nov. 21	9.60

5-11-25ac. Slater. Measuring point raised 0.5 foot. Highest observed stage in period of record, 90.77 on Apr. 25. Records available: 1948-49. Apr. 25, 90.77.

6-9-4cb. Larson. Highest observed stage in period of record, 102.84 on Nov. 21. Records available: 1947-49.

Jan. 22	103.24	May 26	103.13	Sept. 29	102.98
Apr. 11	103.19	July 27	102.98	Nov. 21	102.84

6-10-8ac. Hageman. Highest observed stage in period of record, 90.07 on Sept. 29. Records available: 1947-49.

Apr. 25	90.37	July 27	90.49	Nov. 21	90.10
June 3	90.25	Sept. 29	90.07		

6-10-23bb. University of Nebraska. Highest observed stage in period of record, 2.05 on May 26. Records available: 1937-40, 1942, 1946-49.

Jan. 21	8.74	May 26	2.05	Sept. 29	6.50
Apr. 26	5.49	July 27	5.19	Nov. 21	6.95

6-10-31bd. Magnuson. Highest observed stage in period of record, 90.99 on June 3. Records available: 1948-49. Apr. 25, 91.09; June 3, 90.99; Sept. 29, 91.02; Nov. 21, 91.05.

6-11-30bc. Miss Helen Marble. Drilled irrigation well, diameter 18 inches, reported depth 192 feet. Measuring point, hole in turbine base, 0.5 foot above land-surface datum, 1,987.00 feet above sea level. Highest observed stage in period of record, 83.47 on Nov. 21, 1949; lowest, 84.12 on Oct. 20, 1948. Records available: 1948-49. Oct. 20, 1948, 84.12; Apr. 25, 1949, 83.92; Nov. 21, 83.47.

6-12-12db. Christensen. Highest observed stage in period of record, 99.84 on Sept. 29. Records available: 1948-49. Apr. 25, 100.08; Sept. 29, 99.84; Nov. 21, 100.03.

7-9-12dc. Halloran. Highest observed stage in period of record, 111.06 on Nov. 12. Records available: 1948-49.

Jan. 21	111.18	May 26	111.09	Nov. 12	111.06
Apr. 17	111.12	Sept. 29	111.12		

7-10-23ab. Fricke. Stevens Type A 60-day automatic water-stage recorder installed in January. Records available: 1934-48, 1948-49.

Lowest daily water-level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	.....	102.45	102.37	102.20	.....	102.13
2	.....	102.39	102.39	102.23	.....	102.13
3	.....	102.40	102.38	102.29	.....	102.14
4	.....	102.40	102.35	102.19	.....	102.10
5	.....	102.40	102.36	102.17	.....	102.07
6	.....	102.40	102.35	102.18	.....	102.07
7	102.41	102.38	102.25	102.22	.....	102.07
8	102.60	102.45	102.27	102.23	.....	102.07
9	102.60	102.45	102.32	102.25	.....	102.08
10	102.50	102.42	102.32	102.22	.....	102.05
11	102.45	102.37	102.26	102.23	.....	102.02
12	102.42	102.44	102.28	102.22	.....	102.04
13	102.45	102.41	102.31	102.22	.....	102.05
14	102.45	102.35	102.28	102.12	.....	102.04
15	102.58	102.37	102.22	102.19	.....	102.03
16	102.58	102.47	102.23	102.12	.....	101.98
17	102.47	102.35	102.26	102.08	.....	102.09
18	102.52	102.40	102.26	102.09	.....	102.09
19	102.52	102.40	102.23	102.03	.....	101.97
20	102.41	102.40	102.19	102.08	.....	102.00
21	102.45	102.37	102.27	.....	102.23	102.01
22	102.42	102.37	102.28	.....	102.23	101.92
23	102.47	102.37	102.18	.....	102.19	101.94
24	102.47	102.40	102.22	.....	102.18	101.94
25	102.43	102.39	102.24	.....	102.13	101.95
26	102.39	102.38	102.18	.....	102.15	101.93
27	102.47	102.41	102.25	.....	102.14	101.94
28	102.50	102.39	102.24	.....	102.12	101.93
29	102.44		102.21	.....	102.12	101.92
30	102.35		102.11	.....	102.12	101.95
31	102.42		102.29		102.10	

Lowest daily water-level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	101.95	102.59	102.63	102.26	102.26	102.16
2	101.95	102.62	102.67	102.29	102.28	102.14
3	101.95	102.60	102.63	102.30	102.25	102.16
4	101.95	102.54	102.63	102.30	102.28	102.17
5	101.94	102.65	102.60	102.21	102.28	102.10
6	101.96	102.65	102.65	102.18	102.23	102.12
7	101.99	102.68	102.65	102.22	102.20	102.21
8	102.02	102.57	102.66	102.29	102.20	102.27
9	102.03	102.56	102.62	102.25	102.21	102.11
10	101.98	102.68	102.59	102.25	102.22	102.12
11	102.00	102.65	102.63	102.25	102.30	102.13
12	102.15	102.60	102.60	102.23	102.28	102.22
13	102.18	102.68	102.66	102.25	102.25	102.22
14	102.23	102.60	102.61	102.25	102.26	102.17
15	102.22	102.60	102.60	102.20	102.28	102.15
16	102.23	102.60	102.59	102.23	102.28	102.10
17	102.22	102.65	102.50	102.23	102.32	102.17
18	102.26	102.60	102.49	102.27	102.36	102.17
19	102.30	102.60	102.45	102.25	102.30	102.11
20	102.35	102.55	102.46	102.23	102.30	102.15
21	102.34	102.60	102.45	102.26	102.17	102.11
22	102.29	102.62	102.38	102.26	102.12	102.13
23	102.33	102.62	102.38	102.23	102.14	102.12
24	102.31	102.58	102.35	102.23	102.19	101.98
25	102.32	102.58	102.30	102.23	102.10	102.12
26	102.36	102.57	102.35	102.25	102.10	102.08
27	102.55	102.57	102.32	102.25	102.13	102.12
28	102.48	102.65	102.33	102.25	102.15	102.10
29	102.55	102.62	102.39	102.26	102.22	102.10
30	102.55	102.60	102.26	102.28	102.13	102.06
31	102.56	102.60		102.24		102.08

7-10-26da. R. Dougherty. Highest observed stage in period of record, 113.46 on Nov. 21. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 22	113.94	July 27	113.59	Nov. 21	113.46
May 26	113.76	Sept. 29	113.48		

7-11-3cb. V. Katzberg. Highest observed stage in period of record, 111.59 on Sept. 29. Records available: 1947-49. Jan. 21, 111.96; Apr. 12, 111.88; June 6, 111.75; Sept. 29, 111.59.

7-11-22ad. V. Anderson. Highest observed stage in period of record, 118.18 on Nov. 21. Records available: 1947-49.

Jan. 21	118.55	June 6	118.40	Nov. 21	118.18
Apr. 25	118.29	Sept. 29	118.30		

7-12-15ca. R. Karr. Highest observed stage in period of record, 96.99 on Nov. 21. Records available: 1947-49.

Jan. 21	97.53	June 6	97.20	Sept. 28	97.03
Apr. 12	97.23	July 28	97.18	Nov. 21	96.99

7-12-24cc. Groff. Highest observed stage in period of record, 98.17 on Nov. 21. Records available: 1947-49.

Jan. 21	98.80	June 6	98.53	Nov. 21	98.17
Apr. 19	98.66	Sept. 28	98.35		

8-9-5cc. Hargeroad. Highest observed stage in period of record, 91.29 on Sept. 29. Records available: 1947-49. Jan. 21, 91.94; Apr. 18, 91.81; June 3, 91.76; Sept. 29, 91.29.

8-9-14aa. C. Anderson. Altitude of measuring point corrected to 1,908.97 feet above sea level. Highest observed stage in period of record, 108.17 on June 3. Records available: 1947-49. Apr. 19, 108.21; June 3, 108.17. Measurements discontinued.

8-10-26da. Staltz. Highest observed stage in period of record, 97.32 on Nov. 21; lowest, 97.43 on June 3. Records available: 1948-49.

Jan. 21	97.42	June 3	97.43	Nov. 21	97.32
Apr. 14	97.38	Sept. 29	97.33		

8-10-29ab. Junkers. Altitude of measuring point 1,986.50 feet above sea level. Highest observed stage in period of record, 118.88 on Apr. 12. Records available: 1947-49. Apr. 12, 118.88. Measurements discontinued.

8-10-32da. Kieefe. Highest observed stage in period of record, 103.99 on Apr. 12. Records available: 1948-49.

Jan. 21	104.30	June 6	104.17	Nov. 21	104.20
Apr. 12	103.99	Sept. 29	104.00		

8-11-13aa. Kent. Highest observed stage in period of record, 91.25 on Sept. 29. Records available: 1947-49.

Jan. 21	91.79	June 6	91.61	Nov. 21	91.32
Apr. 12	91.44	Sept. 29	91.25		

8-12-1cd. Brickel. Highest observed stage in period of record, 82.93 on Nov. 21. Records available: 1947-49. Jan. 20, 83.94; Apr. 12, 83.59; Nov. 21, 82.93.

8-12-8ab. Woodman. Records available: 1946-49.

Jan. 7	8.64	Apr. 20	7.24	Sept. 9	7.36
Mar. 12	7.82	July 8	6.15	Nov. 4	7.50

8-12-22db. Long. Highest observed stage in period of record, 81.90 on Nov. 21. Records available: 1947-49.

Apr. 12	83.19	July 28	82.54	Nov. 21	81.90
June 6	82.78	Sept. 28	82.20		

8-9-14ac. C. Anderson. Stevens F 8-day automatic water-stage recorder installed Sept. 16. Altitude of measuring point corrected to 1,907.91 feet above sea level. Highest observed stage in period of record, 109.96 on July 5; lowest, 113.35 on Aug. 6. Records available: 1947-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	110.23	110.61	110.42	110.75	.....	110.11
2	110.25	110.70	110.45	110.50	.....	110.40
3	110.45	110.52	110.39	110.55	.....	110.53
4	110.55	110.55	110.32	110.55	.....	110.44
5	110.72	110.47	110.53	110.35	.....	110.25
6	110.85	110.57	110.73	110.40	.....	110.14
7	110.55	110.36	110.52	110.46	.....	110.19
8	111.01	110.77	110.56	110.46	.....	110.17
9	111.33	110.86	110.64	110.52	.....	110.25
10	111.24	110.66	110.64	110.58	.....	110.24
11	110.97	110.42	110.40	110.51	.....	110.14
12	110.05	110.82	110.55	110.24	.....	110.02
13	110.48	110.68	110.65	110.27	.....	110.15
14	110.51	110.55	110.80	110.70	.....	110.23
15	110.86	110.60	110.80	110.74	.....	110.25
16	111.19	110.64	110.45	110.49	.....	110.15
17	111.10	110.60	110.50	110.50	.....	110.27
18	110.85	110.67	110.62	110.58	.....	110.34
19	110.99	110.82	110.48	110.45	.....	110.30
20	110.72	110.83	110.20	.....	110.21	110.14
21	110.69	110.51	110.50	.....	110.29	110.27
22	110.67	110.53	110.63	.....	110.43	110.15
23	110.82	110.42	110.45	.....	110.49	.....
24	110.96	110.70	110.65	.....	110.57	.....
25	110.92	110.70	110.78	.....	110.29	.....
26	110.61	110.49	110.55	.....	110.26	.....
27	110.50	110.69	110.47	.....	110.22	.....
28	110.97	110.66	110.70	.....	110.20	110.26
29	111.00		110.75	.....	110.19	.....
30	110.50		110.45	.....	110.20	.....
31	110.60		110.75		110.17	

Lowest daily water level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.
1	.....	113.30	111.90	.....	111.08
2	110.15	113.13	112.43	.....	111.30
3	109.99	113.15	112.02	.....	111.28
4	.....	113.00	113.20	.....	.....
5	109.96	113.10	113.28	.....	.....
6	.....	113.35	113.31	.....	.....
7	.....	112.82	113.12	.....	.....
8	110.82	113.30	113.05	.....	.....
9	110.72	112.60	112.90	.....	.....
10	110.64	112.75	112.58	.....	.....
11	110.47	112.78	112.53	.....	.....
12	110.40	112.55	112.83	.....	.....
13	110.40	112.40	112.85	.....	.....
14	110.50	112.40	112.55	.....	.....
15	110.05	112.30	.....	.....	.....
16	110.10	112.29	112.08	.....	.....
17	110.12	112.25	112.32	.....	.....
18	110.36	112.30	112.41	.....	.....
19	110.24	112.22	112.39	.....	.....
20	110.15	112.92	112.17	.....	.....
21	110.24	112.13	112.27	111.37	110.89
22	110.54	112.20	112.13	111.43	110.55
23	110.36	112.19	112.13	111.58	110.45
24	112.00	112.67	.....	111.53	110.48
25	112.00	112.12	.....	111.29	110.70
26	112.32	113.05	.....	111.29	110.43

a Nearby irrigation well pumping July 24, 1949.

8-9-14ac--Continued.

Lowest daily water level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.
27	112.46	113.13	.....	111.11	110.49
28	113.10	112.12	.....	111.19	110.42
29	113.25	112.12	.....	111.19	.....
30	113.10	111.88	.....	111.38	.....
31	113.15	111.90	.....	111.34	

Antelope County

24-6-2aa. University of Nebraska. Records available: 1935-42, 1944-49. Sept. 14, 4.89; Nov. 18, 5.16.

27-7-10bb. Beberniss. Highest observed stage in period of record, 54.33 on Oct. 18. Records available: 1940-42, 1944-48. No measurements made in 1949.

Arthur County

No measurement made in 1949.

Banner County

17-55-6dd. Anderson. Records available: 1935-40, 1942. No measurement made in 1949.

19-54-15bb. Rodgers. Drilled irrigation well, diameter 18 inches, depth 50 feet. Measuring point, top of casing, 0.4 foot above land-surface datum. Highest observed stage in period of record, 22.40 on July 13; lowest, 24.04 on Sept. 15. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 16	22.72	Aug. 19	22.78	Oct. 13	23.19	Dec. 16	23.30
July 13	22.40	Sept. 15	24.04	Nov. 17	23.27		

19-55-29ac. Grant. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 133.20. Measuring point raised to 1.4 feet above land-surface datum. Records available: 1934-42, 1949.

June 21	30.24	Aug. 19	30.36	Oct. 13	30.65	Dec. 16	31.48
July 13	30.21	Sept. 15	30.54	Nov. 17	31.05		

Blaine County

22-24-33ca. US 57. University of Nebraska. Highest observed stage in period of record, 1.16 on May 31. Records available: 1935-49.

Apr. 4	1.17	June 28	3.13	Sept. 7	3.85	Nov. 15	3.40
May 17	2.44	July 28	4.21	19	4.03	30	3.52
31	1.16	Aug. 9	4.64	Oct. 5	4.21	Dec. 14	3.47
June 13	1.96	23	4.34	18	3.82	28	3.46

23-22-22cb. University of Nebraska. Altitude of measuring point, 2,498.6 feet above sea level. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 117.10. Highest observed stage in period of record, 16.08 on Sept. 16. Records available: 1937-42, 1949. Sept. 16, 16.08; Nov. 16, 16.16.

23-22-22cc. University of Nebraska. Records available: 1935-42, 1946-49. Sept. 16, 3.18; Nov. 16, 2.68.

24-25-7aa. University of Nebraska. Records available: 1937-42. No measurements made in 1949.

24-25-7ca. Cox & Sons. Records available: 1934-42. No measurements made in 1949.

Boone County

18-5-12cc. Smith. Highest observed stage in period of record, 12.37 on Sept. 12. Records available: 1948-49. Sept. 12, 12.37; Nov. 4, 12.91; Dec. 5, 12.99.

18-7-4ca. University of Nebraska. To convert water levels from feet above assumed datum, as published in reports previous to 1948, to feet below land-surface datum, subtract from 114.90. Highest observed stage in period of record, 12.65 on June 8. Records available: 1937-42, 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 28	12.79	July 5	13.03	Sept. 20	13.66	Nov. 30	14.02
June 8	12.65	Aug. 4	13.83	Nov. 1	13.89		

18-7-5ad. University of Nebraska. To convert water levels from feet above assumed datum, as published in reports prior to 1948, to feet below land-surface datum, subtract from 106.04. Highest observed stage in period of record, 4.35 on Apr. 28. Records available: 1935-42, 1948-49.

Apr. 28	4.35	July 5	4.87	Sept. 20	5.13	Nov. 30	5.04
June 8	4.43	Aug. 4	5.49	Nov. 1	4.96		

18-7-14bb. Kleffner. Highest observed stage in period of record, 56.93 on Apr. 28. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 28	56.93	Sept. 20	58.31	Nov. 30	58.07
July 5	57.56	Nov. 1	58.07		

19-5-1ac. Choat. Highest observed stage in period of record, 64.54 on June 6; lowest, 65.71 on Aug. 9. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 27	64.89	July 6	65.57	Sept. 22	65.21	Dec. 5	65.03
June 6	64.54	Aug. 9	65.71	Nov. 4	65.14		

19-5-6aa. Olson. Highest observed stage in period of record, 41.12 on June 8. Records available: 1948-49.

Apr. 27	41.36	July 6	41.53	Sept. 22	42.51	Dec. 5	42.34
June 8	41.12	Aug. 9	42.59	Nov. 4	42.43		

19-5-7cd. Maricle. Highest observed stage in period of record, 44.26 on June 8. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 27	44.64	July 6	44.69	Nov. 4	45.49
June 8	44.26	Sept. 22	45.67	Dec. 5	45.42

19-5-16db. Choat. Highest observed stage in period of record, 22.74 on June 8. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 27	23.17	July 6	23.56	Sept. 22	24.44	Dec. 5	24.39
June 8	22.74	Aug. 9	24.69	Nov. 4	24.35		

19-5-27dc. Gasper. Highest observed stage in period of record, 12.29 on June 8; lowest, 15.01 on Aug. 9. Records available: 1948-49.

Apr. 27	13.04	July 6	13.18	Sept. 22	13.80	Dec. 5	13.91
June 8	12.29	Aug. 9	15.01	Nov. 4	13.87		

19-5-28cd. Bryan. Highest observed stage in period of record, 32.51 on June 8. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 27	33.17	July 6	33.02	Nov. 4	33.74
June 8	32.51	Sept. 22	33.69	Dec. 5	33.76

19-7-30aa. Green. Highest observed stage in period of record, 23.48 on Apr. 28; lowest, 25.48 on Nov. 1. Records available: 1948-49.

Apr. 28	23.48	Sept. 20	24.40	Nov. 30	24.78
July 5	23.57	Nov. 1	25.48		

19-7-31cc. Brown. Highest observed stage in period of record, 36.19 on July 5; lowest, 38.22 on Aug. 4. Records available: 1948-49.

Apr. 28	36.22	Aug. 4	38.22	Nov. 1	36.88
July 5	36.19	Sept. 20	36.91	30	36.95

19-8-9bb. Curring. Highest observed stage in period of record, 69.13 on July 5. Records available: 1948-49. July 5, 69.13; Sept. 20, 69.79; Nov. 1, 69.78; Nov. 30, 69.65.

19-8-14db. West. Highest observed stage in period of record, 25.29 on Apr. 28. Records available: 1948-49.

Apr. 28	25.29	Sept. 20	25.86	Nov. 30	26.20
July 5	25.33	Nov. 1	26.07		

19-8-16cc. Dresch. Highest observed stage in period of record, 43.75 on Apr. 28; lowest, 46.11 on Aug. 4. Records available: 1948-49.

Apr. 28	43.75	Aug. 4	46.11	Nov. 1	44.70
July 5	43.90	Sept. 20	44.87	30	45.02

20-6-6dc. Stock well. Highest observed stage in period of record, 67.07 on July 6; lowest, 69.54 on June 8. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 27	67.14	July 6	67.07	Sept. 22	67.70	Dec. 5	68.07
June 8	69.54	Aug. 3	67.31	Nov. 4	67.97		

20-6-23bb. Redler. Highest observed stage in period of record, 29.62 on June 8. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 27	29.86	July 6	30.14	Nov. 4	31.69
June 8	29.62	Sept. 22	31.64	Dec. 5	31.65

20-6-35ba. Thompson. Highest observed stage in period of record, 44.69 on July 6; lowest, 52.04 on Sept. 22. Records available: 1948-49.

Apr. 27	48.95	July 6	44.69	Nov. 4	50.51
June 8	48.68	Sept. 22	52.04	Dec. 5	50.39

21-7-26ca. University of Nebraska. To convert water levels from feet above assumed datum, as published in reports prior to 1948, to feet below land-surface datum, subtract from 120.81. Highest observed stage in period of record, 14.89 on Apr. 27. Records available: 1937-42, 1948-49. Apr. 27, 14.89; Nov. 4, 14.97; Dec. 5, 16.92.

Box Butte County

24-47-1db. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49. May 11, 11.24; July 12, 11.51; Sept. 13, 11.69; Nov. 23, 11.60.

24-48-4bb. Geological Survey, U. S. Dept. of Interior. Lowest observed stage in period of record, 15.12 on Nov. 25. Records available: 1946-49. May 11, 14.18; July 14, 14.23; Sept. 15, 14.84; Nov. 25, 15.12.

24-48-10bb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 9.82 on July 14. Records available: 1946-49.

Lowest daily water level, from recorder charts

Day	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	.....	10.25	10.70	10.97	11.06	11.14
2	.....	10.03	.....	10.26	10.72	10.98	11.06	11.15
3	.....	10.02	.....	10.27	10.73	10.98	11.06	11.15
4	.....	.....	.....	10.28	10.75	10.98	11.06	11.16
5	.....	10.00	.....	10.30	10.76	10.98	11.07	11.16
6	.....	9.99	.....	10.31	10.77	10.99	11.07	11.16
7	.....	9.99	.....	10.32	10.78	10.99	11.08	11.16
8	.....	9.98	.....	10.33	10.79	11.00	11.08	11.16
9	.....	9.97	.....	10.35	10.81	11.00	11.08	11.17
10	.....	.....	.....	10.36	10.83	11.00	11.09	11.17
11	.....	.....	.....	10.38	10.84	11.00	11.09	11.17
12	10.37	.....	9.83	10.39	10.85	11.01	11.09	11.17
13	10.38	.....	9.83	10.41	10.85	11.01	11.10	11.18
14	10.38	9.90	9.82	10.42	10.86	11.01	11.10	11.18
15	10.38	.....	9.84	10.44	10.90	11.01	11.10	11.18
16	10.37	.....	9.84	10.45	10.90	11.02	11.12	11.19
17	10.36	.....	9.85	10.47	10.91	11.02	11.13	11.19
18	10.36	.....	9.87	10.49	10.92	11.02	11.14	11.19
19	10.36	.....	9.89	10.51	10.92	11.03	11.15	11.20
20	10.35	.....	9.92	10.53	10.93	11.03	11.16	11.20
21	10.34	.....	9.95	10.54	10.93	11.03	11.17	11.20
22	10.30	.....	9.98	10.56	10.94	11.03	11.18	11.21
23	10.26	.....	10.01	10.57	10.94	11.04	11.12	11.21
24	10.22	.....	10.03	10.58	10.95	11.04	11.12	11.22
25	10.19	.....	10.07	10.61	10.95	11.04	11.13	11.22
26	10.16	.....	10.10	10.62	10.95	11.04	11.13	11.22
27	10.14	.....	10.15	10.63	10.96	11.04	11.13	11.23
28	10.12	.....	10.18	10.64	10.97	11.05	11.13	11.23
29	10.10	.....	10.22	10.66	10.97	11.05	11.14	11.23
30	10.09	.....	10.23	10.68	10.97	11.05	11.14	11.23
31	10.06	.....	10.24	10.69	.....	11.05	.....	11.23

24-48-11dd. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 0.91 on May 11. Records available: 1946-49. May 11, 0.91, influent seepage; July 14, 3.81; Sept. 13, 5.47; Nov. 23, 5.77.

24-48-31ba. Odell. Records available: 1946-49.

Lowest daily water level, from recorder charts

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 4	38.56	July 11	38.54	Sept. 15	38.54	Nov. 24	38.38
5	38.54	12	38.49	16	38.64	25	38.38
6	38.57	13	38.51	17	38.65	26	38.36
7	38.55	14	38.37	18	38.67	27	38.38
8	38.51	15	38.34	19	38.62	28	38.45
9	38.47	16	38.29	20	38.66	29	38.47
10	38.54	17	38.32	21	38.64	30	38.48
11	38.58	18	38.40	22	38.65	Dec. 1	38.48

24-50-10aa. Nolan. Records available: 1938-42, 1944, 1946-49. May 10, 49.23; July 12, 49.02; Sept. 14, 48.94; Nov. 22, 48.95.

24-52-13cb. Shepard. Highest observed stage in period of record, 74.35 on Sept. 14. Records available: 1938, 1940, 1942, 1944, 1946-49. May 10, 77.81; July 12, 77.67; Sept. 14, 74.35; Nov. 22, 77.47.

24-52-35aa. Bailey. Records available: 1938-41, 1946-49. May 10, 98.09; July 12, 98.00; Sept. 14, 97.92; Nov. 22, 97.88.

25-47-31cc. Geological Survey, U. S. Dept. of Interior. Lowest observed stage in period of record, 19.26 on Nov. 23. Records available: 1946-49. May 11, 17.99; July 13, 15.74; Sept. 15, 18.35; Nov. 23, 19.26.

25-48-4dd. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49. May 9, 63.83; July 13, 63.57; Sept. 13, 63.85; Nov. 23, 63.58.

25-48-14aa. Powell. Records available: 1946-49.

Lowest daily water level, from recorder charts

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 11	49.47	May 17	49.50	Sept. 15	49.83	Nov. 25	50.33
12	49.42	18	49.47	16	49.80	26	50.28
13	49.46	19	49.44	Nov. 22	50.26	27	50.37
14	49.41	July 13	49.47	23	50.35	28	50.37
15	49.40	Sept. 13	49.80	24	50.35	29	50.37
16	49.38	14	49.83				

a Tape measurement.

25-48-25bb2. Burnham. Lowest observed stage in period of record, 81.69 on July 13. Records available: 1946-49. May 10, 73.79; July 13, 81.69; Sept. 13, 77.28; Nov. 23, 75.01.

25-48-27db2. Pepplar. Lowest observed stage in period of record, 72.19 on Sept. 15. Records available: 1946-49. May 10, 68.98; July 12, 70.46; Sept. 15, 72.19; Nov. 23, 70.21.

25-48-30ad. Wells. Records available: 1938-42, 1944, 1946-47, 1949. May 10, 12.81; Nov. 23, 13.04.

25-49-14da. Sass. Records available: 1946-49. May 10, 32.09; July 13, 32.01; Sept. 13, 33.10.

25-50-22aa. Hollister. Highest observed stage in period of record, 131.78 on Nov. 22. Records available: 1946-49. May 10, 131.90; July 12, 131.89; Sept. 14, 131.94; Nov. 22, 131.78.

25-50-31ab. Jacobsen. Highest observed stage in period of record, 102.60 on Sept. 14. Records available: 1934-42, 1944, 1946-49. May 10, 102.67; July 12, 102.65; Sept. 14, 102.60; Nov. 22, 102.70.

25-51-14aa. Allen. Records available: 1938-42, 1944, 1946-49. May 10, 87.71; July 12, 87.98; Sept. 14, 88.32; Nov. 22, 88.67.

26-47-17dd. Lawrence. Records available: 1946-49. May 11, 52.32; July 13, 55.12; Sept. 13, 57.84; Nov. 23, 53.55.

26-47-35dd. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49. May 11, 12.36; July 13, 12.69; Sept. 13, 13.33; Nov. 23, 13.00.

26-50-12dc. Rosenberg. Records available: 1938-42, 1946-49. May 10, 100.70; July 12, 100.57; Sept. 13, 100.67; Nov. 22, 100.62.

26-51-25bc. Wilkins. Records available: 1938-42, 1944, 1946-49. May 10, 95.78; July 12, 95.68; Sept. 14, 95.61; Nov. 22, 95.56.

26-52-10bc. Dyer. Records available: 1938-40, 1942, 1946-49. May 10, 94.62; Sept. 14, 97.70; Nov. 22, 95.23.

26-52-17ab. Bauer. Highest observed stage in period of record, 73.11 on July 12. Records available: 1938-42, 1944, 1946-48. May 10, 73.27; July 12, 73.11; Sept. 14, 73.18; Nov. 22, 73.14.

27-47-12da. Krejci. Highest observed stage in period of record, 6.92 on July 12. Records available: 1934-36; 1946, 1949. May 11, 7.02; July 12, 6.92; Sept. 13, 7.18; Nov. 23, 7.30.

27-47-23ba. Shremik. Highest observed stage in period of record, 16.34 on Sept. 13. Records available: 1938-42, 1944, 1946-49. May 11, 17.00; July 13, 16.51; Sept. 13, 16.34; Nov. 23, 16.41.

27-49-21cb Wildy. Highest observed stage in period of record, 115.45 on Sept. 13. Records available: 1935-42, 1944-49. May 10, 117.99; July 11, 117.04; Sept. 13, 115.45; Nov. 22, 117.91.

27-50-20aa. Lowest observed stage in period of record, 178.73 on Sept. 14. Records available: 1938, 1940-42, 1944, 1946-49. May 10, 175.94; July 11, 175.76; Sept. 14, 178.73.

27-51-6bb. Homrighausen. Highest observed stage in period of record, 219.86 on May 10. Records available: 1946-49. May 10, 219.86; July 12, 220.12; Sept. 14, 220.66.

28-51-6dd. University of Nebraska. Records available: 1935-38, 1940-42, 1944-49. May 10, 1.94; July 12, 2.74; Sept. 14, 2.92; Nov. 22, 2.41.

28-51-8bc. Gregg. Highest observed stage in period of record, 84.47 on May 10. Records available: 1938-42, 1944-49. May 10, 84.47; July 12, 84.84; Sept. 19, 85.09; Nov. 22, 84.80.

Boyd County

No measurement made in 1949.

Brown County

29-21-6cd. Anderson. Highest observed stage in period of record, 2.19 on Apr. 20. Records available: 1944-45, 1947-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 20	2.19	July 7	4.42	Oct. 17	5.42
June 6	2.74	Aug. 30	5.18	Dec. 6	5.62

29-21-7ab. Deer. Records available: 1947-49. Aug. 30, 5.20.

29-22-4ab. Highest observed stage in period of record, 0.76 on Apr. 20. Records available: 1944, 1947-49.

Apr. 20	0.76	Aug. 30	3.35	Dec. 6	2.55
July 26	2.88	Oct. 17	2.94		

30-21-15cd. Records available: 1947-49.

Apr. 20	74.56	July 25	75.18	Dec. 5	75.20
June 6	74.46	Oct. 17	74.40		

30-21-18bc. City of Ainsworth. Highest observed stage in period of record, 55.84 on Aug. 30; lowest, 58.69 on Oct. 17. Records available: 1947-49.

Apr. 20	55.97	July 25	55.91	Oct. 17	58.69
June 6	55.91	Aug. 30	55.84	Dec. 5	56.77

30-21-19cc. City of Ainsworth. Records available: 1947-49.

Apr. 20	37.36	July 25	38.94	Oct. 17	37.30
June 6	37.17	Aug. 30	37.55	Dec. 5	38.02

30-21-26bb. Records available: 1947-49. Apr. 20, 47.30; July 25, 46.68.

30-21-30bc. Fling. Highest observed stage in period of record, 37.02 on Dec. 6. Records available: 1947-49. Apr. 20, 37.73; June 6, 37.37; Oct. 17, 37.03; Dec. 6, 37.02.

30-22-15cc. Clark. Lowest observed stage in period of record, 49.07 on Oct. 17. Records available: 1947-49.

Apr. 20	41.83	Aug. 31	43.17	Dec. 6	41.90
June 6	42.51	Oct. 17	49.07		

30-22-17cb. Clausen. Records available: 1947-49.

Apr. 20	46.40	Sept. 1	46.10	Dec. 6	45.86
June 16	46.16	Oct. 17	45.90		

30-22-19aa. Highest observed stage in period of record, 37.88 on Dec. 6; lowest, 38.73 on Apr. 20. Records available: 1947-49.

Apr. 20	38.73	July 25	38.45	Oct. 17	38.03
June 16	38.50	Aug. 31	38.27	Dec. 6	37.88

30-22-23dd. Rasck. Highest observed stage in period of record, 38.4 on June 22. Records available: 1944, 1947-49. Recorder removed July 12.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July
1	38.97	38.96	38.91	38.75	38.59	38.65	38.56
2	39.01	38.93	38.90	38.74	38.58	38.60	38.60
3	39.01	38.93	38.90	38.74	38.59	38.61	38.57
4	.....	38.93	38.88	38.73	38.60	38.58	38.60
5	.....	38.98	38.89	38.71	36.62	38.57	38.63
6	.....	38.93	38.90	38.73	38.61	38.59	38.63
7	.....	38.95	38.89	38.74	.....	38.57	38.67
8	.....	.....	38.87	38.71	.....	38.58	38.66
9	.....	.....	38.87	38.70	.....	38.57	38.68
10	.....	.....	38.86	38.69	.....	38.57	38.68
11	.....	38.97	38.85	38.66	.....	38.56	38.66
12	38.96	38.97	38.85	38.65	.....	38.61	.....
13	39.00	38.94	38.85	38.70	.....	38.57	.....
14	38.98	38.92	38.86	38.66	.....	38.58	.....
15	39.04	38.97	38.81	38.64	.....	38.54	.....
16	39.05	38.96	.....	38.63	.....	38.56	.....
17	38.96	38.92	.....	38.62	.....	38.59	.....
18	39.00	38.99	38.82	38.60	.....	38.56	.....
19	38.98	38.95	38.85	38.58	.....	38.50	.....
20	38.96	38.94	38.83	38.57	38.66	38.54	.....
21	38.97	38.94	38.82	38.61	38.66	38.51	.....
22	38.97	38.93	38.81	38.58	38.68	38.49	.....
23	38.97	38.94	38.81	38.58	38.67	38.60	.....
24	38.98	38.96	38.83	38.61	38.64	38.50	.....
25	38.96	38.92	38.82	38.61	38.64	38.50	.....
26	38.96	38.94	38.78	38.59	38.65	38.58	.....
27	38.97	38.92	38.78	38.58	38.62	38.55	.....
28	38.97	38.91	38.78	38.57	38.61	38.54	.....
29	38.97	.....	38.79	38.56	38.60	38.58	.....
30	38.93	.....	38.78	38.58	38.62	38.56	.....
31	38.94	.....	38.78	.....	38.61	.....	.....

30-22-26db. Skinner. Records available: 1937, 1939-45, 1947-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 20	25.04	July 26	27.10	Oct. 17	25.82
June 6	25.21	Aug. 30	26.08	Dec. 6	25.69

30-22-27dc. Bower. Records available: 1934-45, 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	16.43	Mar. 16	16.27	June 15	14.84	Dec. 6	16.72
Feb. 17	16.34	Apr. 20	14.85	Oct. 17	16.33		

30-23-1cc. Lowest observed stage in period of record, 66.13 on Oct. 17. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
June 16	63.27	Sept. 1	63.50	Dec. 6	63.10
July 26	63.48	Oct. 17	66.13		

30-23-13bc. Miles. Highest observed stage in period of record, 38.40 on June 16. Records available: 1941, 1944, 1947-49.

Apr. 20	38.68	Sept. 1	38.94	Dec. 6	38.42
June 16	38.40	Oct. 17	38.50		

30-23-21aa. Highest observed stage in period of record, 22.44 on Aug. 31. Records available: 1947-49.

Apr. 20	23.20	July 26	22.59	Dec. 6	22.48
June 16	22.73	Aug. 31	22.44		

31-22-23dd. Boggy. Highest observed stage in period of record, 41.58 on July 26. Records available: 1947-49.

Apr. 20	42.02	July 26	41.58	Dec. 6	42.80
June 16	42.29	Aug. 31	41.63		

Buffalo County

8-16-3cb. Sheldon. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 7	12.12	Apr. 13	11.32	Sept. 7	10.06
Mar. 10	11.77	July 6	10.99	Nov. 1	10.61

8-16-10cc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 1.70 on July 6. Records available: 1946-49.

Jan. 7	2.05	July 6	1.70	Nov. 1	2.73
Apr. 13	1.84	Sept. 6	3.18		

8-16-12cc. Garvin. Records available: 1930, 1932-49.

Jan. 7	5.64	Apr. 13	4.47	Sept. 6	5.73
Mar. 9	5.22	July 6	4.42	Nov. 1	5.25

8-17-1da. University of Nebraska. Records available: 1931-49.

Jan. 12	8.38	Apr. 13	7.50	Sept. 6	7.65
Mar. 10	7.50	July 6	6.48	Nov. 1	8.18

8-17-4bc. Richards. Records available: 1946-49.

Jan. 12	9.75	Apr. 13	7.18	Sept. 7	9.22
Mar. 10	8.38	July 6	5.85	Nov. 1	9.00

8-17-12dd. University of Nebraska. Records available: 1931-42, 1945-49.

Jan. 12	2.11	Apr. 13	2.45	Sept. 7	3.65
Mar. 10	2.01	July 6	2.31	Nov. 1	2.89

8-18-4cb. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Jan. 12	9.35	Apr. 13	9.54	Sept. 7	10.05
Mar. 10	9.01	July 6	8.22	Nov. 1	10.05

9-13-5cb. Scott. Records available: 1930-49.

Jan. 6	19.55	Apr. 12	18.79	Sept. 7	19.24
Mar. 9	19.23	July 5	17.40	Nov. 1	18.57

9-13-9cc. Smith. Highest observed stage in period of record, 10.87 on July 5. Records available: 1930-40, 1945-49.

Jan. 6	15.77	Apr. 13	13.02	Sept. 6	12.68
Mar. 9	13.32	July 5	10.87	Nov. 1	12.35

9-14-1dc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 15.56 on July 20. Records available: 1946-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	18.31	18.15	17.85	17.65	17.32	17.02	15.77	16.31	17.61	17.38	17.34	17.26
2	18.30	18.15	17.87	17.65	17.29	17.01	15.75	16.41	17.64	17.38	17.34	17.24
3	18.29	18.12	17.87	17.65	17.28	16.91	15.73	16.50	17.67	17.40	17.32	17.22
4	18.23	18.11	17.87	17.60	17.32	16.86	15.71	16.58	17.69	17.38	17.33	17.26
5	18.24	18.11	17.87	17.60	17.32	16.82	15.69	16.67	17.70	17.35	17.34	17.26
6	18.22	18.10	17.85	17.59	17.29	16.78	15.68	16.76	17.70	17.35	17.33	17.20
7	18.20	18.11	17.82	17.58	17.27	16.74	15.68	16.82	17.73	17.40	17.30	17.23
8	18.22	18.09	17.81	17.57	17.28	16.66	15.69	16.89	17.70	17.40	17.28	17.24
9	18.25	18.12	17.78	17.57	17.27	16.45	15.70	16.97	17.65	17.38	17.26	17.24
10	18.25	18.14	17.76	17.56	17.26	16.22	15.69	17.03	17.60	17.41	17.26	17.18
11	18.24	18.14	17.76	17.54	17.26	16.15	15.68	17.08	17.60	17.42	17.26	17.14
12	18.22	18.10	17.75	17.53	17.25	16.16	15.67	17.13	17.60	17.41	17.29	17.24
13	18.18	18.11	17.75	17.51	17.24	16.08	15.66	17.17	17.57	17.43	17.29	17.24
14	18.17	18.12	17.75	17.53	17.23	16.07	15.64	17.18	17.54	17.42	17.29	17.25
15	18.16	18.11	17.76	17.53	17.22	16.02	15.63	17.20	17.50	17.38	17.27	17.25

9-14-ldc--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
16	18.23	18.08	17.74	17.47	17.21	15.99	15.82	17.23	17.50	17.35	17.29	17.23
17	18.22	18.11	17.73	17.46	17.21	16.01	15.60	17.22	17.50	17.35	17.29	17.18
18	18.17	18.10	17.73	17.45	17.22	16.00	15.59	17.19	17.50	17.33	17.28	17.14
19	18.20	18.08	17.72	17.44	17.18	15.95	15.57	17.20	17.48	17.34	17.25	17.16
20	18.20	18.09	17.70	17.40	17.15	15.96	15.56	17.19	17.48	17.34	17.28	17.17
21	18.16	18.10	17.69	17.40	17.16	15.96	15.60	17.16	17.45	17.34	17.28	17.16
22	18.16	18.10	17.70	17.39	17.14	15.88	15.58	17.22	17.45	17.36	17.23	17.16
23	18.16	18.08	17.70	17.38	17.14	15.85	15.57	17.28	17.44	17.36	17.23	17.17
24	18.19	18.07	17.66	17.36	17.10	15.84	15.58	17.33	17.42	17.34	17.24	17.17
25	18.19	18.05	17.70	17.37	17.10	15.84	15.69	17.37	17.42	17.31	17.24	17.17
26	18.18	18.03	17.70	17.37	17.08	15.81	15.73	17.43	17.43	17.32	17.22	17.17
27	18.15	17.98	17.67	17.34	17.07	15.83	15.86	17.47	17.43	17.32	17.22	17.15
28	18.18	17.92	17.65	17.32	17.06	15.80	16.02	17.49	17.43	17.32	17.23	17.14
29	18.19		17.65	17.29	17.05	15.77	16.13	17.53	17.40	17.33	17.25	17.15
30	18.19		17.66	17.30	17.04	15.78	16.17	17.57	17.39	17.33	17.25	17.15
31	18.13		17.66		17.03		16.19	17.59		17.32		17.13

9-14-4cc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 17.58 on July 5. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 6	20.45	Apr. 13	19.52	Sept. 6	20.33
Mar. 9	19.80	July 5	17.58	Nov. 1	19.47

9-14-13cb. Mrs. Davis. Records available: 1930-49.

Jan. 6	19.52	Apr. 13	18.75	Sept. 6	18.31
Mar. 9	18.92	July 5	16.69	Nov. 1	18.19

9-14-19dd. US 129. Lewis. Records available: 1930-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 3	25.59	Apr. 28	25.09	July 28	23.75	Nov. 30	24.83
Mar. 1	25.49	May 28	24.75	Aug. 28	25.36	Dec. 28	24.65
28	25.26	June 28	23.83	Oct. 29	24.96		

9-14-21cc. Adair. Records available: 1930-40, 1942, 1944-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 6	19.95	Apr. 13	19.35	Sept. 6	20.09
Mar. 9	19.59	July 5	17.50		

9-14-22bb. Doty. Records available: 1946-49.

Jan. 6	17.56	Apr. 13	17.03	Sept. 6	17.06
Mar. 9	17.32	July 5	15.63	Nov. 1	16.40

9-14-34bb. Nicholson. Highest observed stage in period of record, 9.20 on July 5. Records available: 1930-49.

Jan. 6	12.20	Apr. 13	10.59	Sept. 7	12.73
Mar. 9	11.21	July 5	9.20	Nov. 1	11.18

9-15-11cb. Aldeen. Records available: 1932-42, 1944-49.

Jan. 7	26.33	Apr. 13	25.52	Sept. 7	25.30
Mar. 9	25.50	July 5	23.97	Nov. 1	25.55

9-15-16cc. Records available: 1946-49. Apr. 13, 32.47. Measurement discontinued.

9-15-34bb. Wolford. Records available: 1930-37, 1939, 1945-49.

Jan. 7	23.83	Apr. 13	20.80	Sept. 7	20.85
Mar. 9	22.50	July 5	18.80	Nov. 1	19.82

9-16-9cb. Theis. Drilled irrigation well, diameter 18 inches. Measuring point, edge of casing, 0.50 foot above land-surface datum. Highest observed stage in period of record, 30.18 on July 7; lowest, 31.63 on Sept. 19. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Nov. 16, 1948	31.60	July 7, 1949	30.18	Nov. 3, 1949	31.07
May 3, 1949	30.98	Sept. 19	31.63	Dec. 1	31.01
June 3	30.93				

9-16-13bc. Richter. Drilled irrigation well, diameter 18 inches, reported depth, 110.0 feet. Measuring point, hole in turbine base, 0.60 foot above land-surface datum. Highest observed stage in period of record, 26.71 on July 7, 1949; lowest, 28.40 on Nov. 15, 1948. Records available: 1948-49.

Nov. 15, 1948	28.40	July 7, 1949	26.71	Nov. 3, 1949	27.91
May 2, 1949	27.23	Sept. 19	28.25	Dec. 1	28.03
June 3	27.15				

9-17-31cd. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Jan. 12	11.29	Apr. 13	9.52	Sept. 7	9.98
Mar. 10	10.36	July 6	8.75	Nov. 1	10.52

9-18-27dd. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Jan. 12	8.80	Apr. 13	7.45	Sept. 7	6.82
Mar. 10	8.02	July 6	5.55	Nov. 1	7.10

9-18-31cc. Mrs. Dworak. Records available: 1946-49.

Jan. 12	11.97	Apr. 13	11.00	Sept. 7	10.54
Mar. 10	11.18	July 6	9.62	Nov. 1	11.55

10-13-24bc. Bentley. Records available: 1930-40, 1944, 1946-49.

Jan. 6	24.60	Apr. 11	24.07	Sept. 6	24.19
Mar. 9	24.35	July 5	22.75	Nov. 1	23.23

10-14-2cb. Mrs. Starks. Records available: 1934-38, 1942. No measurement made in 1949.

10-17-21cd. Buettner. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 105.07. Highest observed stage in period of record, 27.98 on July 7; lowest, 38.75 on Aug. 2. Records available: 1934-42, 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 3	28.39	July 7	27.98	Sept. 19	20.72	Dec. 1	28.80
June 3	28.48	Aug. 2	38.75	Nov. 3	28.85		

10-17-26cb. Sanquist. Drilled irrigation well, diameter 18 inches. Measuring point, hole in turbine base, 0.50 foot above land-surface datum. Highest observed stage in period of record, 23.29 on Aug. 2, 1949; lowest, 24.46 on Nov. 17, 1948. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Nov. 17, 1948	24.96	Sept. 19, 1949	24.07	Dec. 1, 1949	23.74
Aug. 2, 1949	23.29	Nov. 3	23.78		

10-18-12aa. Arrant. Drilled irrigation well, diameter 18 inches, reported depth, 126.0 feet. Measuring point, hole in turbine base, 0.50 foot above land-surface datum. Highest observed stage in period of record, 27.76 on July 7, 1949; lowest, 29.45 on Nov. 15, 1948. Records available: 1948-49.

Nov. 15, 1948	29.45	July 7, 1949	27.26	Nov. 3, 1949	28.69
May 3, 1949	28.25	Sept. 19	29.01	Dec. 1	28.75
June 3	28.51				

11-18-7ac. Wyle. Drilled irrigation well, diameter 18 inches, reported depth, 135.0 feet. Measuring point, hole in turbine base, 0.50 foot above land-surface datum. Highest observed stage in period of record, 34.32 on June 3, 1949; lowest, 35.70 on Nov. 16, 1948. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Nov. 16, 1948	35.70	June 3, 1949	34.32	Nov. 3, 1949	35.12
May 3, 1949	34.76	Sept. 19	35.55	Dec. 15	34.52

11-18-9dc. Cheney. Drilled irrigation well, diameter 18 inches, reported depth, 110.0 feet. Measuring point, hole in turbine base, 1.0 foot above land-surface datum. Highest observed stage in period of record, 33.02 on July 7, 1949; lowest, 34.61 on Nov. 15, 1948. Records available: 1948-49.

Nov. 15, 1948	34.61	July 7, 1949	33.02	Nov. 3, 1949	34.08
May 3, 1949	33.18	Sept. 19	34.36	Dec. 1	34.56
June 3	33.22				

Burt County

No measurement made in 1949.

Butler County

A14-3-8ba. University of Nebraska. Records available: 1940-42, 1946, 1948. No measurements made in 1949.

A16-1-17bc. Deltzler. Records available: 1946-49.

Jan. 3	4.12	Apr. 25	2.95	Sept. 1	4.62
Mar. 7	2.90	July 12	3.84	Nov. 5	4.35

A16-2-14cc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 3.22 on Apr. 19. Records available: 1946-49.

Jan. 3	5.47	Apr. 19	3.22	Sept. 1	5.44
Mar. 7	4.02	July 12	4.21	Nov. 5	5.62

A16-2-30bc. Foel. Highest observed stage in period of record, 20.77 on July 12. Records available: 1946-49.

Jan. 3	21.72	Apr. 19	21.18	Sept. 1	20.88
Mar. 7	21.35	July 12	20.77	Nov. 5	21.20

A16-3-1dc. Viglicky. Records available: 1946-49.

Jan. 3	12.21	Apr. 18	9.57	Sept. 1	11.80
Mar. 7	11.66	July 12	10.11	Nov. 5	11.95

A16-3-8dd. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 1.54 on Mar. 7. Records available: 1946-49.

Jan. 3	3.79	Apr. 18	2.09	Sept. 1	4.32
Mar. 7	1.54	July 12	3.72	Nov. 5	4.01

A16-3-15cd. Fortna. Records available: 1946-49.

Jan. 3	13.52	Apr. 18	12.23	Sept. 1	13.29
Mar. 7	12.59	July 12	11.85	Nov. 5	13.55

A17-4-28cd. Duda. Records available: 1946-49.

Jan. 3	21.41	Apr. 18	20.07	Sept. 1	21.27
Mar. 7	20.55	July 11	20.36	Nov. 5	21.29

Cass County

No measurement made in 1949.

Cedar County

No measurement made in 1949.

Chase County

5-36-7ba. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 14.93 on June 9. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 8	15.69	Aug. 4	16.20	Nov. 17	15.95
June 9	14.93	Oct. 6	16.00	Dec. 20	15.95

5-36-10bb. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{2}$ inches, depth 16.5 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 2.15 on Feb. 10; lowest, 6.53 on Mar. 23. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	2.15	June 9	3.33	Aug. 26	5.33	Nov. 18	4.70
Mar. 23	6.53	July 19	4.96	Oct. 6	4.92	Dec. 20	4.61
Apr. 22	4.23	Aug. 4	5.27				

5-36-11dc. Redden. Records available: 1934-40, 1941-44, 1946-48. Measurements discontinued.

5-37-2dc. Bureau of Reclamation, U. S. Dept. of Interior. Observation well, diameter $1\frac{1}{2}$ inches, depth 13.5 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 5.39 on Feb. 10; lowest, 7.46 on Aug. 26. Records available: 1949.

Feb. 10	5.39	June 9	5.73	Aug. 26	7.46	Nov. 17	6.86
Mar. 23	6.53	July 19	5.40	Oct. 6	7.05	Dec. 20	6.85
Apr. 22	6.13	Aug. 4	7.10				

5-37-3cc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{2}$ inches, depth 42.0 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 23.85 on Nov. 18, 1949; lowest, 25.60 on Dec. 9, 1948. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Dec. 9, 1948	25.60	June 9, 1949	24.88	Oct. 6, 1949	24.34
Feb. 10, 1949	25.40	July 19	24.90	Nov. 18	23.85
Mar. 23	25.48	Aug. 4	25.00	Dec. 19	24.26
Apr. 22	25.19	26	25.25		

5-37-3cd. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{2}$ inches, depth 12.0 feet. Measuring point, top of pipe, 0.5 foot above land-surface datum. Highest observed stage in period of record, 5.10 on June 9; lowest, 6.30 on Aug. 26. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 23	5.66	July 19	5.88	Aug. 26	6.30	Nov. 18	5.81
Apr. 22	5.52	Aug. 4	6.02	Oct. 4	6.00	Dec. 20	5.77
June 9	5.10						

5-37-4dad. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{2}$ inches, depth 100.5 feet. Measuring point, top of pipe, 0.5 foot above land-surface datum. Highest observed stage in period of record, 86.15 on Nov. 18; lowest, 87.26 on Apr. 22. Records available: 1949.

Feb. 10	87.17	June 9	87.08	Aug. 26	87.14	Nov. 18	86.15
Mar. 23	87.24	July 19	86.89	Oct. 6	86.87	Dec. 20	86.90
Apr. 22	87.26	Aug. 4	86.80				

5-37-9adbl. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{2}$ inches, depth 69.0 feet. Measuring point, top of pipe, 0.5 foot above land-surface datum. Highest observed stage in period of record, 63.29 on Nov. 18; lowest, 68.00 on June 9. Records available: 1949.

5-37-9adbl--Continued.

Date	Water level	Date	Water level	Date	Water level
Mar. 23	67.97	June 9	68.00	Oct. 6	63.97
Apr. 22	67.97	Aug. 26	67.87	Nov. 18	63.29

5-37-9adb2. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 89.0 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 78.95 on Nov. 18; lowest, 84.74 on Apr. 22. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	84.15	July 19	83.94	Aug. 26	84.15	Nov. 18	78.95
Apr. 22	84.74	Aug. 4	83.90	Oct. 6	79.85	Dec. 20	79.13
June 9	83.95						

5-37-9adb3. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 102.0 feet. Measuring point, top of pipe, 0.3 foot above land-surface datum. Highest observed stage in period of record, 93.57 on Dec. 20; lowest, 98.65 on Mar. 23. Records available: 1949.

Mar. 23	98.65	July 19	97.83	Aug. 26	97.68	Nov. 18	93.85
June 9	98.45	Aug. 4	98.42	Oct. 6	95.00	Dec. 20	93.57

5-37-10ba. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 14.0 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 5.37 on June 9; lowest, 7.57 on Aug. 4. Records available: 1949.

Mar. 23	6.96	July 19	7.06	Aug. 26	7.52	Nov. 18	6.99
Apr. 22	6.84	Aug. 4	7.57	Oct. 6	7.13	Dec. 20	6.90
June 9	5.37						

5-37-10bbb. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 19.0 feet. Measuring point, top of pipe, 0.2 foot above land-surface datum. Highest observed stage in period of record, 4.67 on Dec. 19, 1949; lowest, 7.34 on Dec. 9, 1948. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Dec. 9, 1948	7.34	June 9, 1949	6.01	Oct. 6, 1949	4.90
Feb. 10, 1949	7.30	July 19	6.39	Nov. 18	4.76
Mar. 23	7.26	Aug. 4	6.68	Dec. 19	4.67
Apr. 22	6.80	26	6.96		

5-37-10bbc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 22.5 feet. Measuring point, top of pipe, 0.5 foot above land-surface datum. Highest observed stage in period of record, 10.95 on Dec. 20, 1949; lowest, 14.62 on Dec. 9, 1948. Records available: 1948-49.

Dec. 9, 1948	14.62	June 9, 1949	13.60	Oct. 6, 1949	11.28
Feb. 10, 1949	14.48	July 19	13.86	Nov. 18	11.06
Mar. 23	14.59	Aug. 4	14.16	Dec. 20	10.95
Apr. 22	14.31	26	14.29		

5-37-10bc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 32.0 feet. Measuring point, top of pipe, 0.3 foot above land-surface datum. Highest observed stage in period of record, 14.99 on Dec. 20; lowest, 19.21 on Mar. 23. Records available: 1948-49.

Dec. 9, 1948	19.18	July 9, 1949	18.44	Oct. 6, 1949	15.81
Mar. 23, 1949	19.21	Aug. 4	18.59	Nov. 18	15.20
Apr. 22	18.64	26	18.78	Dec. 20	14.99
June 9	18.36				

5-38-3ad. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 18.5 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 5.92 on June 9; lowest, 7.03 on Aug. 26. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 23	6.55	July 19	6.28	Aug. 26	7.03	Nov. 18	6.79
Apr. 22	6.26	Aug. 4	6.36	Oct. 6	6.85	Dec. 20	6.55
June 9	5.92						

5-38-4aa. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 22.8 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 10.79 on June 9; lowest, 11.35 on Aug. 4. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 23	11.19	July 19	11.07	Aug. 26	11.37	Nov. 18	11.26
Apr. 22	10.96	Aug. 4	11.35	Oct. 6	11.24	Dec. 20	11.21
June 9	10.79						

5-38-4ad. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 13.2 feet. Measuring point, top of pipe, 0.5 foot above land-surface datum. Highest observed stage in period of record, 4.48 on June 9; lowest, 5.44 on Aug. 26. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 23	4.76	July 19	5.28	Aug. 26	5.44	Nov. 18	5.05
Apr. 22	4.51	Aug. 4	5.37	Oct. 6	5.15	Dec. 20	4.97
June 9	4.48						

6-37-32dc. Bureau of Reclamation, U. S. Dept. of Interior. Abandoned drilled irrigation well, diameter 18 inches, depth 100+ feet. Measuring point, edge of casing, at land-surface datum. Highest observed stage in period of record, 18.90 on Mar. 23, 1949; lowest, 19.65 on Oct. 7, 1948. Records available: 1948-49. Oct. 7, 1948, 19.65; Dec. 8, 1948, 19.34; Feb. 10, 1949, 18.95; Mar. 23, 1949, 18.90.

7-38-20dd. Banks. Highest observed stage in period of record, 68.49 on Dec. 19. Records available: 1934-40, 1942-44, 1948-49. Feb. 8, 68.93; Aug. 4, 68.95; Oct. 4, 68.79; Dec. 19, 68.49.

7-38-28cc. Hust. Highest observed stage in period of record, 75.23 on Dec. 24. Records available: 1948-49.

Lowest water level, from recorder charts

Day	Jan.	Feb.	Apr.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	75.60	75.76	.....	.....	75.52	.....	75.59	75.57	75.55	75.46
2	.....	75.69	.....	.....	75.51	.....	75.54	75.56	75.52	75.41
3	.....	75.70	.....	.....	75.56	a75.56	75.54	75.59	75.53	75.41
4	75.65	.....	.....	.....	75.54	75.56	75.58	75.58	75.53	75.46
5	75.71	.....	.....	.....	75.57	75.57	75.60	75.39	75.51	75.31
6	75.73	.....	a75.65	.....	75.58	75.57	75.60	75.50	75.42	75.37
7	75.70	.....	.....	.....	75.59	75.56	75.32	75.50	75.39	75.47
8	75.65	75.68	.....	.....	75.62	75.54	75.31	75.60	75.42	75.40
9	75.82	75.76	.....	a75.55	75.63	75.56	75.58	75.59	75.42	75.31
10	75.83	75.74	.....	.....	75.61	75.57	75.54	75.62	75.55	75.28
11	75.77	75.63	.....	.....	75.52	75.58	75.53	75.62	75.56	75.37
12	75.70	75.72	.....	.....	75.52	75.58	75.66	75.61	75.53	75.54
13	75.68	75.73	.....	.....	.....	75.57	75.66	75.65	75.52	75.56
14	75.67	75.65	.....	.....	.....	75.59	75.58	75.65	75.53	75.48
15	75.80	75.70	.....	.....	.....	75.58	75.57	75.56	75.53	75.37
16	75.85	75.75	.....	.....	.....	75.60	75.56	75.53	75.56	75.31
17	75.75	75.70	.....	.....	.....	75.58	75.62	75.53	75.52	75.41
18	75.69	75.69	.....	.....	.....	75.57	75.65	75.50	75.44	75.44
19	75.68	75.77	.....	.....	a75.45	75.59	75.64	75.55	75.43	75.36
20	75.68	75.77	.....	.....	.....	75.61	75.64	75.53	75.51	75.40
21	75.70	75.73	.....	.....	.....	75.59	75.64	75.56	75.45	75.39
22	75.68	75.73	.....	.....	.....	75.57	75.62	75.56	75.43	75.41
23	75.78	75.73	.....	75.56	.....	75.56	75.61	75.64	75.36	75.42
24	75.77	75.75	.....	75.52	.....	75.59	75.56	75.60	75.45	75.23

a Tape measurement.

7-38-28cc--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Apr.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
25	75.78	.....	.....	75.53	.....	75.59	75.35	75.56	75.35	75.40
26	75.68	.....	.....	75.56	.....	75.59	75.6*	75.54	75.36	75.38
27	75.72	.....	.....	75.62	.....	75.61	75.60	75.53	75.36	75.44
28	75.80	.....	.....	75.59	.....	75.60	75.61	75.54	75.40	75.43
29	75.80	.....	.....	75.53	.....	75.60	75.55	75.54	75.50	75.38
30	75.65	.....	.....	75.51	.....	75.63	75.54	75.59	75.38	75.37
31	75.72	.....	.....	.....	.....	75.61	.....	75.54	.....	75.40

Cherry County

26-32-28ad. Osborne. Records available: 1934-42, 1944, 1947-48. No measurement made in 1949.

31-25-20ad. University of Nebraska. Records available: 1936-49. Nov. 16, 1948, 2.82; Sept. 16, 1949, 3.43.

33-27-17cb. University of Nebraska. Records available: 1936-48. No measurement made in 1949.

34-27-31da. Nebraska Agricultural College. Records available: 1931-41, 1944-47. No measurement made in 1949.

34-27-32cb. Nebraska Agricultural College. Records available: 1934-35, 1941-43. No measurement made in 1949.

34-31-3ad. University of Nebraska. Records available: 1935-47. No measurement made in 1949.

34-36-1dc. University of Nebraska. Records available: 1935-45, 1947. No measurement made in 1949.

34-38-14bc. University of Nebraska. Records available: 1937-41, 1944-47. No measurement made in 1949.

Cheyenne County

No measurement made in 1949.

Clay County

5-6-26bd. Merrill. Highest observed stage in period of record, 76.12 on Dec. 24, 30, 31. Records available: 1948-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	76.96	76.89	76.98	76.88	76.85	76.76	76.60	76.41	76.36	76.30	76.30	76.27
2	76.94	76.88	76.98	76.90	76.85	76.75	76.60	76.41	76.35	76.28	76.30	76.27
3	76.94	76.87	76.97	76.89	76.85	76.75	76.59	76.41	76.35	76.28	76.30	76.26
4	76.94	.....	76.96	76.89	76.85	76.75	76.58	76.40	76.33	76.28	76.29	.....
5	76.94	76.95	76.96	76.88	76.85	76.75	76.58	76.40	76.34	76.28	76.30	.....
6	76.94	76.97	76.96	76.88	76.86	76.74	76.57	76.40	76.34	76.27	76.30	.....
7	76.94	77.02	76.96	76.87	76.85	76.74	76.56	76.40	76.34	76.27	76.30	.....
8	76.96	77.04	76.96	76.87	76.85	76.74	76.55	76.40	76.34	76.28	76.29	.....
9	76.97	77.05	76.96	76.85	76.85	76.74	76.54	76.40	76.34	76.28	76.28	.....
10	76.96	77.05	76.96	76.84	76.85	76.73	76.53	76.40	76.33	76.26	76.28	76.25
11	76.96	77.04	76.96	76.85	76.85	76.73	76.52	76.39	76.32	.....	76.28	76.26
12	76.96	77.04	76.95	76.82	76.84	.....	76.52	76.39	76.32	.....	76.29	76.27
13	76.95	77.04	76.95	76.84	76.84	.....	76.51	76.39	76.32	.....	76.29	76.27
14	76.95	77.04	76.95	76.84	76.84	.....	76.50	76.38	76.32	.....	76.28	76.27
15	76.96	77.02	76.95	76.84	76.83	.....	76.50	76.39	76.31	76.31	76.27	76.27
16	76.96	77.03	.....	76.83	76.83	.....	76.49	76.38	76.30	76.32	76.27	76.25
17	76.95	77.03	.....	76.94	76.82	76.70	76.48	76.39	76.31	76.32	76.27	76.24
18	76.95	77.03	.....	76.94	76.81	76.70	76.47	76.38	76.30	76.32	76.27	.....
19	76.95	77.03	76.92	76.94	76.82	76.70	76.46	76.37	76.29	76.33	76.26	.....
20	76.95	76.99	76.91	76.94	76.81	76.68	76.46	76.37	76.29	76.34	76.26	.....
21	76.94	77.00	76.90	76.93	76.81	76.67	76.46	.....	76.30	76.34	76.27	.....
22	76.94	76.99	76.90	76.93	76.80	76.66	76.46	.....	76.30	76.35	76.27	.....
23	76.95	76.99	76.89	76.93	.....	76.64	76.45	.....	76.30	76.36	76.27	.....
24	76.95	76.98	76.90	76.88	.....	76.63	76.45	.....	76.29	76.35	76.26	76.12

5-6-26bd--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
25	76.94	76.99	76.89	76.88	.....	76.65	76.44	.....	76.28	76.35	76.26	76.13
26	76.94	76.98	76.88	76.87	.....	76.64	76.44	.....	76.28	76.34	76.26	76.13
27	76.93	76.98	76.88	76.87	.....	76.63	76.43	76.37	76.28	76.33	76.26	76.13
28	.....	76.98	76.88	76.87	.....	76.63	76.43	76.37	.....	76.32	76.27	76.13
29	76.94		76.88	76.87	76.77	76.62	76.43	76.36	.....	76.30	76.27	76.13
30	76.92		76.87	76.86	76.76	76.61	76.42	76.36	.....	76.31	76.27	76.12
31	76.90		76.88		76.76		76.41	76.36		76.31		76.12

5-7-32ac. University of Nebraska. Records available: 1937-38,
1940-41, 1946. No measurement made in 1949.

Colfax County

A17-2-22dd. Geological Survey, U. S. Dept. of Interior. Records
available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 4	5.62	July 12	4.63	Nov. 5	5.05
Mar. 8	4.71	Sept. 2	5.63		

A17-3-4cc. Geological Survey, U. S. Dept. of Interior. Highest
observed stage in period of record, 4.37 on Mar. 8. Records available:
1946-49.

Jan. 4	4.95	Apr. 18	4.68	Sept. 2	5.95
Mar. 8	4.37	July 12	5.78	Nov. 5	5.75

A17-3-11dd. Bailey. Records available: 1945-49.

Jan. 3	10.12	Apr. 18	8.99	Sept. 2	8.82
Mar. 7	9.66	July 12	8.18	Nov. 5	8.99

A17-3-18dc. Folda. Records available: 1946-49.

Jan. 4	3.51	Apr. 18	2.66	Sept. 2	3.88
Mar. 8	2.19	July 12	4.02	Nov. 5	3.67

A17-3-23cc. Geological Survey, U. S. Dept. of Interior. Records
available: 1946-49.

Jan. 3	4.28	July 11	4.31	Nov. 5	4.65
Apr. 18	2.59	Sept. 2	4.59		

A17-3-29aa. Geological Survey, U. S. Dept. of Interior. Records
available: 1946-49.

Jan. 4	8.62	Apr. 18	7.84	Sept. 2	8.45
Mar. 8	7.53	July 12	8.40	Nov. 5	8.46

A17-4-4bb. Maxes. Records available: 1945-49.

Jan. 3	15.12	Apr. 18	13.91	Sept. 2	13.38
Mar. 7	14.51	July 12	12.35	Nov. 5	13.32

A20-2-2dd. University of Nebraska. Records available: 1940-42, 1946.
No measurement made in 1949.

A20-4-6dd. University of Nebraska. Records available: 1935-42, 1946.
No measurement made in 1949.

Cuming County

No measurement made in 1949.

Custer County

15-23-2bb. University of Nebraska. Records available: 1934-42.
No measurement made in 1949.

16-23-35cb. University of Nebraska. Records available: 1937-42.
No measurement made in 1949.

17-17-1aa. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter $\frac{3}{4}$ inch, depth 12.0 feet. Measuring point, top of pipe, 2.0 feet above land-surface datum. Records available: 1949. Nov. 9, 5.19; Dec. 5, 5.15.

17-25-27cc. University of Nebraska. Records available: 1937-42. No measurements made in 1949.

18-17-3bb. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter $\frac{3}{4}$ inch, depth 14.0 feet. Measuring point, top of pipe, 2.0 feet above land-surface datum. Highest observed stage in period of record, 6.47 on Dec. 1; lowest, 6.49 on Nov. 11. Records available: 1949. Oct. 6, 6.48; Nov. 11, 6.49; Dec. 1, 6.47.

18-17-9bb. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter $\frac{3}{4}$ inch, depth 28.0 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 10.99 on Oct. 6; lowest, 13.73 on Dec. 1. Records available: 1949. Oct. 6, 10.99; Nov. 11, 12.51; Dec. 1, 13.73.

18-17-36dd. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter $\frac{3}{4}$ inch, depth 10.5 feet. Measuring point, top of pipe, 2.0 feet above land-surface datum. Highest observed stage in period of record, 1.99 on Aug. 31; lowest, 2.87 on Nov. 9. Records available: 1949. Aug. 31, 1.99; Nov. 9, 2.87; Dec. 5, 2.83.

19-17-9ca. Probert. Drilled irrigation well, diameter 18 inches, reported depth 170.0 feet. Measuring point, hole in casing under disc pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 69.04 on Nov. 10; lowest, 69.38 on Sept. 26. Records available: 1949. Sept. 26, 69.38; Nov. 10, 69.04; Dec. 5, 69.14.

19-17-17bb. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter $\frac{3}{4}$ inch, depth 17.0 feet. Measuring point, top of pipe, 2.0 feet above land-surface datum. Highest observed stage in period of record, 8.53 on Nov. 9; lowest, 9.14 on Dec. 5. Records available: 1949. Oct. 6, 8.78; Nov. 9, 8.53; Dec. 5, 9.14.

19-17-19ad. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter $\frac{3}{4}$ inch, depth 11.0 feet. Measuring point, top of pipe, 2.0 feet above land-surface datum. Highest observed stage in period of record, 4.42 on Oct. 6; lowest, 4.78 on Dec. 1. Records available: 1949. Oct. 6, 4.42; Nov. 11, 4.69; Dec. 1, 4.78.

19-17-29cd. Geological Survey, U. S. Dept. of Interior. Driven and jetted observation well, diameter $\frac{3}{4}$ inch, depth 35.0 feet. Measuring point, top of pipe, 2.0 feet above land-surface datum. Highest observed stage in period of record, 10.21 on Oct. 6; lowest, 11.06 on Dec. 1. Records available: 1949. Oct. 6, 10.21; Nov. 11, 10.40; Dec. 1, 11.06.

19-17-34dd. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter $\frac{3}{4}$ inch, depth 13.5 feet. Measuring point, top of pipe, 2.0 feet above land-surface datum. Highest observed stage in period of record, 4.21 on Dec. 5; lowest, 4.34 on Nov. 9. Records available: 1949. Oct. 6, 4.28; Nov. 9, 4.34; Dec. 5, 4.21.

19-18-9aa. Owen. Records available: 1934-42, 1945, 1948-49. Sept. 10, 12.28; Oct. 6, 12.58; Nov. 10, 12.38; Dec. 2, 12.42.

19-18-10db. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter $\frac{3}{4}$ inch, depth 14.0 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 7.83 on Oct. 6; lowest, 8.26 on Dec. 1. Records available: 1949. Sept. 3, 7.97; Oct. 6, 7.83; Nov. 10, 8.09; Dec. 1, 8.26.

19-18-15ab. Geological Survey, U. S. Dept. of Interior. Driven observation well. Diameter $\frac{3}{4}$ inch, depth 7.0 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 3.28 on Sept. 5; lowest, 3.67 on Oct. 6. Records available: 1949. Sept. 5, 3.28; Oct. 6, 3.67; Nov. 10, 3.54; Dec. 1, 3.48.

19-19-1ad. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter $\frac{3}{4}$ inch, depth 20.5 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 7.55 on Nov. 10; lowest, 8.39 on Oct. 6. Records available: 1949. Oct. 6, 8.39; Nov. 10, 7.55; Dec. 2, 8.19.

19-19-2bb. Slagel. Irrigation well. Measuring point, hole in turbine base, at land-surface datum. Highest observed stage in period of record, 16.80 on Nov. 10; lowest, 17.51 on Aug. 23. Records available: 1949. Aug. 23, 17.51; Sept. 26, 16.90; Nov. 10, 16.80; Dec. 2, 16.89.

19-19-4cc. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter $3/4$ inch, depth 14.0 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 8.95 on Nov. 10; lowest, 9.83 on Sept. 6. Records available: 1949. Sept. 6, 9.83; Oct. 6, 9.60; Nov. 10, 8.95; Dec. 2, 9.76.

19-19-9bc. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter $3/4$ inch, depth 14.0 feet. Measuring point, top of pipe, 2.0 feet above land-surface datum. Highest observed stage in period of record, 8.17 on Dec. 2; lowest, 8.75 on Oct. 6. Records available: 1949. Sept. 6, 8.64; Oct. 6, 8.75; Nov. 10, 8.57; Dec. 2, 8.17.

19-19-12bc. Drilled domestic well, diameter 4 inches, depth 38 feet. Measuring point, top of casing, north side, 0.50 foot above land-surface datum. Highest observed stage in period of record, 21.30 on Sept. 7; lowest, 21.38 on Oct. 6. Records available: 1949. Sept. 7, 21.30; Oct. 6, 21.38; Nov. 11, 21.36; Dec. 1, 21.37.

19-20-1cd. Irrigation well, diameter 18 inches. Measuring point, hole in pump base, 1.0 foot above land-surface datum. Highest observed stage in period of record, 12.09 on Dec. 2; lowest, 12.88 on Sept. 7. Records available: 1949. Sept. 7, 12.88; Oct. 6, 12.29; Nov. 11, 12.15; Dec. 2, 12.09.

19-20-5bb. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter $3/4$ inch, depth 21.0 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Records available: 1949. Oct. 6, 19.29; Dec. 2, 19.58.

19-20-5cb. Jacobsen. Drilled irrigation well, diameter 18 inches, depth 112.0 feet. Measuring point, hole in top of base, 1.0 foot above land-surface datum. Highest observed stage in period of record, 15.44 on Aug. 25; lowest, 15.81 on Sept. 26. Records available: 1949. Aug. 25, 15.44; Sept. 26, 15.81; Dec. 2, 15.80.

19-20-10aa. Swick. Drilled irrigation well, diameter 18 inches, reported depth 80 feet. Measuring point, hole in pump base, at land-surface datum. Highest observed stage in period of record, 16.77 on Dec. 2; lowest, 17.04 on Aug. 23. Records available: 1949. Aug. 23, 17.04; Sept. 26, 16.89; Dec. 2, 16.77.

19-20-12db. Cleff. Drilled irrigation well, diameter 18 inches. Measuring point, hole in turbine base, 1.0 foot above land-surface datum. Highest observed stage in period of record, 21.96 on Dec. 2; lowest, 22.11 on Sept. 7 and Oct. 6. Records available: 1949. Sept. 7, 22.11; Oct. 6, 22.11; Nov. 11, 21.98; Dec. 2, 21.96.

20-19-25dd. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter $3/4$ inch, depth 41.0 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 32.61 on Oct. 6; lowest, 33.22 on Dec. 2. Records available: 1949. Oct. 6, 32.61; Nov. 10, 32.99; Dec. 2, 33.22.

20-19-31cb. Stone. Drilled irrigation well, diameter 18 inches, reported depth 110.0 feet. Measuring point, top of pump base, 1.0 foot above land-surface datum. Highest observed stage in period of record, 31.64 on Sept. 26; lowest, 32.02 on Aug. 26. Records available: 1949. Aug. 26, 32.02; Sept. 26, 31.64; Nov. 10, 31.79; Dec. 2, 31.88.

20-19-33cc. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter $3/4$ inch, depth 28.0 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 22.65 on Sept. 6; lowest, 22.87 on Dec. 2. Records available: 1949. Sept. 6, 22.65; Oct. 6, 22.72; Nov. 10, 22.84; Dec. 2, 22.87.

20-19-34ab. Johnson. Drilled irrigation well, diameter 18 inches, reported depth, 122.0 feet. Measuring point, hole in turbine base, at land-surface datum. Highest observed stage in period of record, 52.66 on Nov. 10; lowest, 54.34 on Sept. 26. Records available: 1949. Sept. 26, 54.34; Nov. 10, 52.66; Dec. 2, 52.72.

20-20-30aa. Holmes. Drilled irrigation well, diameter 18 inches, reported depth, 77.0 feet. Measuring point, hole in top of turbine base, at land-surface datum. Highest observed stage in period of record, 32.38 on Nov. 10; lowest, 33.09 on Aug. 24. Records available: 1949. Aug. 24, 33.09; Sept. 26, 32.54; Nov. 10, 32.38; Dec. 2, 32.47.

20-20-36cc. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter 3/4 inch, depth 17.0 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 3.26 on Dec. 2; lowest, 4.21 on Oct. 6. Records available: 1949. Oct. 6, 4.21; Nov. 10, 3.90; Dec. 2, 3.26.

20-21-9dd. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter 3/4 inch, depth 10.5 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum and 2,458.46 feet above sea level. Highest observed stage in period of record, 3.22 on Dec. 2; lowest, 4.60 on Sept. 10. Records available: 1949. Sept. 10, 4.60; Oct. 6, 4.29; Nov. 10, 3.59; Dec. 2, 3.22.

20-21-10bc. Turner. Drilled domestic well, diameter 6 inches, reported depth, 30.0 feet. Measuring point, top of casing east side, 1.0 foot above land-surface datum, 2,477.68 feet above sea level. Highest observed stage in period of record, 21.09 on Dec. 2; lowest, 21.34 on Oct. 6. Records available: 1949. Sept. 26, 21.15; Oct. 6, 21.34; Nov. 10, 21.18; Dec. 2, 21.09.

20-21-22bc. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter 3/4 inch, depth 17.0 feet. Measuring point, top of pipe, 2.0 feet above land-surface datum. Highest observed stage in period of record, 2.36 on Dec. 2; lowest, 3.45 on Oct. 6. Records available: 1949. Oct. 6, 3.45; Nov. 10, 2.49; Dec. 2, 2.36.

Dakota County

No measurement made in 1949.

Dawes County

31-52-3dc. US 60. Moody. Records available: 1934-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	16.90	May 1	16.85	July 30	17.87	Oct. 6	18.87
27	16.87	June 5	16.85	Aug. 30	17.92	Nov. 1	18.86
Apr. 2	16.65						

32-51-ldb. Howard. Records available: 1935-42, 1944-47. No measurement made in 1949.

34-49-11bc. University of Nebraska. Records available: 1940-42, 1945. No measurement made in 1949.

Dawson County

9-19-16ab. Kapp. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 12	9.87	Apr. 13	8.42	Sept. 7	9.08
Mar. 10	9.29	July 7	6.86	Nov. 1	8.47

9-19-25bb. Bliss. Highest observed stage in period of record, 5.12 on July 6. Records available: 1946-49.

Jan. 12	9.60	Apr. 13	7.35	Sept. 7	6.95
Mar. 10	8.81	July 6	5.12	Nov. 1	7.95

9-19-33bb. Gamble. Records available: 1946-49.

Jan. 12	8.23	Apr. 13	6.78	Sept. 7	7.64
Mar. 10	8.57	July 7	5.68	Nov. 1	7.44

9-20-3dd. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Jan. 12	12.47	Apr. 16	10.89	Sept. 7	10.10
Mar. 10	11.65	July 7	9.17	Nov. 1	10.20

9-20-5bc. Rhoadarmer. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 12	23.21	Apr. 16	21.95	Sept. 7	21.68
Mar. 10	23.07	July 7	20.80	Nov. 1	21.16

9-20-13bc. Brick. Records available: 1930-49.

Jan. 12	11.22	Apr. 16	9.90	Sept. 7	9.40
Mar. 10	10.69	July 7	7.72	Nov. 1	9.00

9-20-22cc. Priel. Records available: 1946-49.

Jan. 12	11.85	Apr. 16	10.46	Sept. 7	10.09
Mar. 10	11.06	July 7	9.14	Nov. 1	10.16

9-20-33dd. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 2.09 on July 7. Records available: 1946-49.

Jan. 12	4.13	Apr. 16	2.71	Sept. 7	4.05
Mar. 10	4.09	July 7	2.09	Nov. 1	3.40

9-21-6ad. University of Nebraska. Records available: 1930-38, 1940-49.

Jan. 12	5.80	Apr. 16	4.16	Sept. 7	5.25
Mar. 10	4.95	July 6	4.85	Nov. 1	5.58

9-21-7aa. University of Nebraska. Records available: 1930-49.

Jan. 12	7.38	Apr. 16	6.52	Sept. 7	7.07
Mar. 10	7.10	July 6	6.74	Nov. 1	7.46

9-21-7da. University of Nebraska. Records available: 1930-49.

Jan. 12	6.40	Apr. 16	6.06	Sept. 7	6.22
Mar. 10	6.42	July 6	6.17	Nov. 1	6.82

9-21-12cb. Myers. Records available: 1932, 1934-40, 1943-49. Apr. 16, 10.49; July 6, 9.95; Sept. 7, 10.49; Nov. 1, 11.02.

9-21-18aa. University of Nebraska. Records available: 1930-49.

Jan. 12	5.69	Apr. 16	4.45	Sept. 7	4.67
Mar. 10	4.94	July 6	4.22	Nov. 1	5.54

9-21-18da. University of Nebraska. Records available: 1930-49.

Jan. 12	5.86	Apr. 17	4.54	Sept. 7	5.14
Mar. 10	5.03	July 6	4.00	Nov. 1	5.64

9-21-19aa1. University of Nebraska. Records available: 1930-40, 1942-49.

Jan. 12	4.59	Apr. 17	3.47	Sept. 7	4.79
Mar. 10	3.64	July 16	2.85	Nov. 1	4.49

9-21-19aa2. University of Nebraska. Records available: 1930-49.

Jan. 12	1.65	Apr. 17	0.49	Sept. 7	1.90
Mar. 10	.55	July 6	+.20	Nov. 1	1.32

9-21-19da. University of Nebraska. Records available: 1930-49.

Jan. 12	3.51	Apr. 17	3.48	Sept. 7	4.61
Mar. 10	2.73	July 6	2.92	Nov. 1	3.52

9-21-19dd. University of Nebraska. Records available: 1930-49.

Jan. 12	5.13	Apr. 17	5.00	Sept. 7	6.61
Mar. 10	4.99	July 6	4.41	Nov. 1	5.22

9-21-24aa. University of Nebraska. Records available: 1931-43, 1945-49.

Jan. 12	4.40	July 7	2.62	Nov. 1	3.65
Mar. 10	3.35	Sept. 7	2.90		

9-21-29bc. University of Nebraska. Records available: 1930-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 12	2.76	Apr. 17	2.32	Sept. 7	3.82
Mar. 10	2.62	July 6	2.52	Nov. 1	2.95

9-21-30da. University of Nebraska. Records available: 1930-49.

Jan. 12	6.40	Apr. 17	6.26	Sept. 7	6.82
Mar. 10	6.35	July 6	6.27	Nov. 1	6.64

9-21-31aal. University of Nebraska. Records available: 1930-49.

Mar. 10	13.33	July 6	12.69	Nov. 1	13.73
Apr. 17	13.00	Sept. 7	14.50		

9-21-31da. University of Nebraska. Records available: 1930-49.

Jan. 12	9.78	Apr. 17	8.78	Sept. 7	10.82
Mar. 10	9.30	July 6	8.10	Nov. 2	9.45

9-21-31dd. Central Nebraska Public Power and Irrigation District. Records available: 1939-49.

Jan. 12	6.93	Apr. 17	7.92	Sept. 7	7.00
Mar. 10	6.39	July 6	5.17	Nov. 2	6.36

9-22-23cd. Mrs. Handley. Records available: 1945-47. Measurements discontinued.

9-22-25dc. Central Nebraska Public Power and Irrigation District. Highest observed stage in period of record, 2.17 on Apr. 18. Records available: 1939-49.

Jan. 14	3.09	Apr. 18	2.17	Nov. 3	2.92
Mar. 11	2.51	July 6	2.29		

9-22-26aa. Central Nebraska Public Power and Irrigation District. Highest observed stage in period of record, 5.69 on July 6. Records available: 1939-47, 1949.

Jan. 14	6.28	Apr. 18	5.70	Sept. 8	6.30
Mar. 11	5.86	July 6	5.69	Nov. 3	5.94

9-22-33aa. Magnuson. Abandoned domestic well, diameter 3 inches, depth 88 feet. Measuring point, top of casing, at land-surface datum. Highest observed stage in period of record, 32.83 on Nov. 22; lowest, 34.56 on May 10. Records available: 1949. May 10, 34.56; Aug. 5, 33.71; Nov. 22, 32.83.

9-23-2dc. Neil. Records available: 1945-49.

Jan. 14	16.54	Apr. 18	15.98	Sept. 8	16.50
Mar. 11	16.27	July 6	15.80	Nov. 3	16.28

9-23-3cc. Rhone. Highest observed stage in period of record, 9.89 on Mar. 11. Records available: 1947-49.

Jan. 14	12.34	Apr. 18	11.42	Sept. 7	12.64
Mar. 11	9.89	July 6	11.65	Nov. 3	11.89

9-23-12da. Central Nebraska Public Power and Irrigation District. Measurements resumed. Records available: 1939-47, 1949. July 6, 3.35; Sept. 7, 3.44; Nov. 3, 3.60.

9-23-21bb. Weissert. Abandoned drilled domestic well, diameter 3 inches, depth 253.0 feet. Measuring point, top of casing, 1.50 feet above land-surface datum. Highest observed stage in period of record, 167.93 on Nov. 22; lowest, 170.74 on May 11. Records available: 1949. May 11, 170.74; Aug. 4, 169.85; Nov. 22, 167.93.

9-23-23cd. Foss. Drilled domestic and stock well, diameter 3.5 inches, depth 200.8 feet. Measuring point, top edge of casing, 2.9 feet above land-surface datum. Records available: 1949. May 17, 138.74; Nov. 22, 136.01.

9-23-28bb. Weissert. Abandoned drilled domestic well, diameter 3 inches, depth 214.0 feet. Measuring point, top edge of casing, 0.10 foot above land-surface datum. Highest observed stage in period of record, 116.77 on Nov. 22; lowest, 136.59 on May 12. Records available: 1949. May 12, 136.59; Aug. 4, 121.25; Nov. 22, 116.77.

9-23-32cc. Holbein. Abandoned drilled domestic and stock well, diameter 4 inches, depth 248.0 feet. Highest observed stage in period of record, 176.80 on Nov. 22, 1949; lowest, 183.27 on Oct. 14. Records available: 1948-49. Oct. 14, 1948, 183.27; Apr. 27, 1949, 180.43; Aug. 4, 179.43; Nov. 22, 176.80.

9-24-1dc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 13.66 on Nov. 3. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 14	14.28	Apr. 20	13.97	Sept. 8	13.72
Mar. 11	13.95	July 6	13.86	Nov. 3	13.66

9-24-14dd. Toeber. Abandoned drilled stock well, diameter 3 inches, depth 252.0 feet. Measuring point, top edge of casing, 1.2 feet above land-surface datum. Records available: 1949. July 12, 174.48; Nov. 22, 172.70.

9-25-31db. Tell Estate. Highest observed stage in period of record, 189.73 on June 16. Plugged, measurements discontinued Aug. 4. Records available: 1934-42, 1948-49. June 16, 189.23.

10-20-21cb. Hill. Records available: 1946-49.

Jan. 12	25.22	Apr. 16	24.82	Sept. 7	24.97
Mar. 10	25.05	July 7	24.42	Nov. 1	24.50

10-20-35bb. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Jan. 12	18.29	July 7	16.60	Nov. 1	17.02
Mar. 10	17.86	Sept. 7	17.65		

10-21-6da. University of Nebraska. Records available: 1930-33, 1940-49.

Mar. 10	8.70	July 6	8.34	Nov. 1	8.29
Apr. 16	8.59	Sept. 7	8.37		

10-21-7aa. University of Nebraska. Records available: 1930-49.

Jan. 12	8.56	Apr. 16	7.25	Sept. 7	7.42
Mar. 10	8.06	July 6	7.25	Nov. 1	7.91

10-21-7da. University of Nebraska. Records available: 1930-49.

Mar. 10	8.34	July 6	6.89	Nov. 1	8.07
Apr. 16	7.50	Sept. 7	6.88		

10-21-18aa. University of Nebraska. Records available: 1930-37, 1940-49.

Jan. 12	8.54	Apr. 16	7.23	Sept. 7	6.52
Mar. 10	7.89	July 6	6.48	Nov. 1	7.52

10-21-18dd. University of Nebraska. Records available: 1930-49.

Mar. 10	13.05	July 6	12.12	Nov. 1	12.42
Apr. 16	12.65	Sept. 7	11.82		

10-21-19aa. University of Nebraska. Records available: 1930-49.

Jan. 12	15.89	Apr. 16	15.18	Sept. 7	14.12
Mar. 10	15.56	July 6	14.40	Nov. 1	14.67

10-21-19da. University of Nebraska. Records available: 1930-49.

Jan. 12	15.80	Apr. 16	14.94	Sept. 7	14.00
Mar. 10	15.44	July 6	13.87	Nov. 1	14.47

10-21-23ab. Delap. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 12	12.52	Apr. 16	11.42	Sept. 7	11.65
Mar. 10	11.87	July 7	10.87	Nov. 1	11.94

10-21-30aa. University of Nebraska. Records available: 1930-49.

Jan. 12	8.35	Apr. 16	7.92	Sept. 7	6.20
Mar. 10	7.62	July 6	6.35	Nov. 1	6.96

10-21-30da. University of Nebraska. Records available: 1930-49.

Jan. 12	9.10	Apr. 16	6.60	Sept. 7	6.52
Mar. 10	8.15	July 6	6.05		

10-21-31da. University of Nebraska. Records available: 1930-49.

Mar. 10	6.98	July 6	5.51	Nov. 1	6.65
Apr. 16	6.42	Sept. 7	5.99		

10-22-11ab. Brunner. Records available: 1946-49.

Jan. 13	7.50	Apr. 16	6.65	Sept. 8	5.97
Mar. 10	7.08	July 6	6.70	Nov. 2	6.69

10-22-29aa. University of Nebraska. Records available: 1931-43, 1945-49.

Jan. 13	5.17	Apr. 16	3.81	Sept. 7	4.00
Mar. 10	4.82	July 6	2.95	Nov. 2	4.28

10-23-5bb. Ogorsolka. Records available: 1945-49.

Jan. 13	6.92	Apr. 16	4.40	Sept. 7	7.10
Mar. 10	5.85	July 6	6.33	Nov. 2	7.70

10-23-29bb. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Jan. 14	6.86	Apr. 18	5.87	Sept. 8	7.14
Mar. 11	6.20	July 6	5.18	Nov. 3	7.25

10-23-30bc. Heller. Records available: 1945-49.

Jan. 14	10.98	July 6	8.93	Nov. 3	10.57
Mar. 11	10.43	Sept. 8	10.12		

10-24-7bb. McDowell. Records available: 1946-49.

Mar. 11	12.11	July 6	11.85	Nov. 3	12.26
Apr. 20	11.77	Sept. 8	12.25		

10-24-15cc. Kauffman. Highest observed stage in period of record, 3.63 on Apr. 20. Records available: 1945-49.

Jan. 14	5.00	Apr. 20	3.63	Sept. 8	4.10
Mar. 11	4.35	July 6	3.77	Nov. 3	4.28

10-24-17bb. Central Nebraska Public Power and Irrigation District. Records available: 1938-49.

Jan. 14	5.23	Apr. 20	3.84	Sept. 8	3.50
Mar. 11	4.85	July 6	4.15	Nov. 3	4.32

11-19-4dd. Vermas. Highest observed stage in period of record, 46.94 on July 7. Records available: 1948-49.

May 3	46.95	July 7	46.94	Nov. 3	47.38
June 3	47.19	Sept. 19	47.95	Dec. 1	47.35

11-21-31dd. University of Nebraska. Records available: 1930-36, 1940-49. Mar. 10, 26.23; Apr. 16, 26.20; Sept. 7, 24.22; Nov. 1, 25.18.

11-22-28aa. Velte. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 13	27.09	Apr. 16	26.55	Sept. 7	28.80
Mar. 10	26.78	July 6	26.37	Nov. 2	27.45

11-23-21bc. Robertson. Lowest observed stage in period of record, 15.50 on Mar. 10. Records available: 1945-49.

Jan. 13	14.59	Apr. 16	14.85	Sept. 8	13.00
Mar. 10	15.50	July 6	13.76	Nov. 2	14.45

11-23-23cc. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Jan. 13	3.74	Apr. 16	2.16	Sept. 7	3.34
Mar. 10	2.72	July 6	3.38	Nov. 2	3.75

11-24-16bb. Ballmer. Records available: 1945-49.

Jan. 13	7.15	Apr. 16	5.59	Sept. 7	6.72
Mar. 10	6.78	July 6	5.52	Nov. 2	6.95

11-24-20ca. Owings. Records available: 1932, 1934-42, 1944-49.

Jan. 13	13.61	Apr. 16	11.48	Sept. 7	11.12
Mar. 10	12.53	July 6	11.19	Nov. 2	12.43

11-24-24cb. Powell. Records available: 1946-49.

Jan. 12	10.67	Apr. 16	8.80	Sept. 7	8.34
Mar. 10	10.13	July 6	9.02	Nov. 2	9.72

11-25-8ad. Central Nebraska Public Power and Irrigation District. Highest observed stage in period of record, 0.99 on Mar. 10. Records available: 1938-49.

Jan. 13	2.05	Apr. 19	1.21	Sept. 8	2.48
Mar. 10	.99	July 6	2.07	Nov. 3	3.27

11-25-16bb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 3.17 on Apr. 19. Records available: 1947-49.

Jan. 12	4.82	Apr. 19	3.17	Sept. 8	5.72
Mar. 10	3.74	July 6	4.20	Nov. 3	5.21

11-25-19cc. Central Nebraska Public Power and Irrigation District. Highest observed stage in period of record, 5.25 on July 7. Records available: 1938-49.

Jan. 14	7.05	Apr. 19	8.32	Sept. 8	5.94
Mar. 11	6.65	July 7	5.25	Nov. 3	7.15

11-25-21cc. Clark. Records available: 1930-42, 1944-49.

Mar. 11	9.18	July 7	6.37	Nov. 3	9.04
Apr. 19	7.82	Sept. 8	7.59		

11-25-34bc. Clark. Highest observed stage in period of record, 11.79 on July 6. Records available: 1945-49.

Jan. 14	12.11	Apr. 20	12.13	Sept. 8	11.80
Mar. 11	12.28	July 6	11.79	Nov. 3	12.04

12-20-36cc. Thomas. Measuring point lowered to 0.70 foot above land-surface datum. Highest observed stage in period of record, 33.57 on June 3; lowest, 36.32 on Sept. 19. Records available: 1948-49.

May 3	35.06	July 7	34.81	Nov. 3	35.84
June 3	33.57	Sept. 19	36.32	Dec. 1	35.84

12-24-30ab. Geiken. Highest observed stage in period of record, 42.28 on July 6. Records available: 1946-49.

Mar. 10	42.85	July 6	42.28	Nov. 2	44.62
Apr. 16	42.70	Sept. 8	42.82		

12-25-34cc. Block. Records available: 1932, 1934-40, 1942, 1944-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 13	28.06	Apr. 16	28.05	Sept. 8	28.50
Mar. 10	28.05	July 6	27.52	Nov. 2	27.60

Deuel County

No measurement made in 1949.

Dixon County

No measurement made in 1949.

Dodge County

A17-5-2bb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 2.23 on Mar. 8. Records available: 1946-49.

Jan. 3	2.90	Apr. 26	3.31	Sept. 2	4.75
Mar. 8	2.23	July 11	3.56	Nov. 5	3.59

A17-6-6aa. University of Nebraska. Records available: 1937-42, 1944-49.

Jan. 3	1.42	Apr. 26	1.28	Sept. 1	2.78
Mar. 8	.84	July 12	1.90	Nov. 5	2.29

A17-6-8bc. Highest observed stage in period of record, 1.78 on Mar. 8. Records available: 1946-49.

Jan. 3	3.20	Apr. 26	2.86	Sept. 1	4.77
Mar. 8	1.78	July 12	3.23	Nov. 5	4.17

A17-8-4aa. City of Fremont. Records available: 1940-49.

Jan. 4	5.58	Apr. 26	4.64	Sept. 1	6.19
Mar. 8	4.50	July 12	4.46	Nov. 5	5.85

A17-8-4dd. City of Fremont. Records available: 1940-49.

Jan. 4	8.91	July 12	7.25	Nov. 5	8.72
Apr. 26	5.36	Sept. 1	8.20		

A17-8-9da. City of Fremont. Records available: 1940-49. Measurements discontinued.

A17-8-16ad. City of Fremont. Records available: 1940-49.

Jan. 4	10.22	Apr. 26	9.06	Sept. 1	9.34
Mar. 8	9.87	July 11	8.84	Nov. 5	9.85

A17-8-22cb. City of Fremont. Records available: 1940, 1942-49. Jan. 4, 4.20; Mar. 8, flooded; Apr. 26, 2.22; July 12, 2.60. Destroyed, Sept. 1.

A17-8-28ad. City of Fremont. Records available: 1940-49.

Jan. 4	3.34	Apr. 26	1.84	Sept. 1	4.00
Mar. 8	(a)	July 12	2.55	Nov. 5	3.69

a Flooded.

A17-9-24dc. Wieser. Records available: 1934-42, 1944, 1946, 1948. Measurements discontinued.

A18-5-23bb. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Mar. 8	7.51	July 11	7.57	Nov. 5	7.67
Apr. 26	7.31	Sept. 1	8.12		

A18-6-25cc. Records available: 1947-49.

Jan. 4	9.00	Apr. 26	7.47	Sept. 1	8.28
Mar. 8	8.43	July 12	7.94	Nov. 5	8.39

Al8-7-36cb. Geological Survey, U. S. Dept. of Interior. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 4	1.35	Apr. 26	1.74	Sept. 1	4.55
Mar. 8	.86	July 12	3.00	Nov. 5	3.00

Al8-8-28da. City of Fremont. Records available: 1940-49.

Jan. 4	63.82	Apr. 26	64.53	Sept. 1	64.81
Mar. 8	63.95	July 12	64.75	Nov. 5	64.92

Al8-8-28dd. City of Fremont. Records available: 1940-49.

Jan. 4	25.77	Apr. 26	25.76	Sept. 1	25.98
Mar. 8	25.78	July 12	25.75	Nov. 5	25.72

Al8-8-33aa. City of Fremont. Records available: 1940-41, 1946-49.

Jan. 4	5.72	July 12	5.83	Nov. 5	5.79
Mar. 8	5.73	Sept. 1	5.85		

Al8-9-18db. University of Nebraska. Records available: 1937-44, 1946-48. No measurement made in 1949.

Douglas County

No measurement made in 1949.

Dundy County

1-37-7ab. Lingo. Highest observed stage in period of record, 60.27 on Dec. 17. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	60.84	June 6	60.52	Aug. 2	60.92	Nov. 15	60.36
Apr. 5	60.61	July 8	60.40	Oct. 4	60.60	Dec. 17	60.27

1-37-16dd. Jones. Highest observed stage in period of record, 37.91 on Nov. 15. Records available: 1946-49.

Feb. 8	38.85	June 6	38.54	Oct. 4	37.92	Dec. 18	37.97
Apr. 5	38.63	Aug. 3	38.40	Nov. 15	37.91		

1-37-19ba. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 7.12 on Apr. 5. Records available: 1946-49.

Feb. 8	11.28	June 6	9.11	Sept. 12	12.56	Nov. 16	13.16
Apr. 5	7.12	Aug. 2	12.22	Oct. 4	13.38	Dec. 18	13.20

1-37-31cd. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period, 3.21 on Apr. 5. Records available: 1946-49.

Feb. 8	4.85	June 6	4.39	Sept. 12	5.31	Nov. 16	5.20
Apr. 5	3.21	Aug. 2	5.77	Oct. 4	5.45	Dec. 18	5.11

1-38-20bc. Morris. Highest observed stage in period of record, 14.75 on Aug. 2. Records available: 1935-36, 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 5	14.83	Oct. 4	15.02	Dec. 18	14.99
Aug. 2	14.75	Nov. 16	15.04		

1-38-21cb. University of Nebraska. Highest observed stage in period of record, 4.15 on Apr. 5. Records available: 1937-43, 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	5.35	July 8	4.48	Sept. 13	5.50	Nov. 16	5.25
Apr. 5	4.15	Aug. 2	5.44	Oct. 4	5.45	Dec. 18	4.93
June 6	5.20						

1-38-26ca. Jones. Highest observed stage in period of record, 11.55 on June 6. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	12.79	June 6	11.55	Aug. 2	12.72	Nov. 16	13.16
Apr. 5	11.72	July 8	11.76	Oct. 4	13.17	Dec. 18	12.90

1-38-28da. Highest observed stage in period of record, 18.86 on June 6. Records available: 1948-49.

Feb. 8	19.75	June 6	18.86	Oct. 4	19.45	Dec. 18	19.53
Apr. 5	19.32	Aug. 2	19.24	Nov. 16	19.28		

1-38-29ad. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 7.52 on Feb. 8. Records available: 1946-49.

Feb. 8	7.52	July 8	8.14	Sept. 13	8.22	Nov. 16	8.17
Apr. 5	7.74	Aug. 2	8.67	Oct. 4	8.37	Dec. 18	7.95
June 6	7.71						

1-39-21ac. Krutsinger. Highest observed stage in period of record, 4.27 on Apr. 5. Records available: 1935-43, 1946-49.

Feb. 8	4.40	June 6	4.85	Oct. 4	5.63	Dec. 18	5.40
Apr. 5	4.27	Aug. 2	5.90	Nov. 16	5.40		

1-39-22cc. Dundy County. Highest observed stage in period of record, 10.50 on Apr. 5; lowest, 13.37 on July 8. Records available: 1946-49.

Apr. 5	10.50	July 8	13.37	Sept. 13	12.20	Nov. 16	12.02
June 6	10.80	Aug. 2	12.60	Oct. 4	12.38	Dec. 18	11.82

1-39-26aa. Pringle. Highest observed stage in period of record, 24.77 on Apr. 5. Records available: 1946-49.

Feb. 8	25.07	July 8	24.87	Sept. 13	25.39	Nov. 16	25.04
Apr. 5	24.77	Aug. 2	25.30	Oct. 4	25.50	Dec. 18	24.86
June 6	24.84						

1-39-30bb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 8.23 on June 6. Records available: 1946-49.

Feb. 8	11.55	July 8	11.41	Sept. 13	12.30	Nov. 16	12.28
Apr. 5	10.98	Aug. 2	12.46	Oct. 4	12.58	Dec. 18	12.15
June 6	8.23						

1-40-20cb. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Feb. 8	2.87	July 5	3.53	Sept. 13	3.84	Nov. 16	3.67
Apr. 5	1.80	Aug. 2	4.02	Oct. 4	4.19	Dec. 18	3.48

1-40-24cd. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 7.70 on June 6. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
June 6	7.70	Oct. 4	8.27	Dec. 18	7.95
Aug. 2	8.59	Nov. 16	8.10		

1-40-27ab. Minton. Highest observed stage in period of record, 18.40 on June 6. Records available: 1946-49.

Feb. 8	19.10	June 6	18.40	Nov. 7	19.15
Apr. 5	18.67	Oct. 4	19.33	Dec. 18	19.11

1-40-29bb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 10.72 on June 24, 25, 26, 27. Records available: 1946-49.

Lowest daily water level, from recorder charts

Day	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	11.43	11.40	11.16	11.09	10.77	11.27	11.56	11.47	11.45	11.51
2	.....	11.43	11.39	11.16	11.09	10.78	11.28	11.56	11.49	11.45	11.51
3	.....	11.44	11.38	11.16	11.10	10.79	11.30	11.53	11.50	11.45	11.51
4	.....	11.44	11.37	11.15	11.10	10.79	11.31	11.43	11.50	11.45	11.52
5	.....	11.43	11.35	11.14	11.10	10.82	11.32	11.38	11.52	11.45	11.52
6	.....	11.43	11.32	11.13	11.10	10.83	11.34	11.37	11.51	11.45	11.51
7	.....	11.43	11.29	11.12	11.10	10.88	11.36	11.37	11.51	11.45	11.51
8	11.60	11.43	11.27	11.12	11.02	10.94	11.38	11.37	11.51	11.45	11.51
9	11.60	11.43	11.26	11.12	10.99	10.94	11.40	11.37	11.51	11.45	11.51
10	11.53	11.43	11.18	11.11	10.96	10.94	11.41	11.36	11.52	11.45	11.50
11	11.55	11.43	11.18	11.12	10.93	10.94	11.42	11.36	11.52	11.45	11.51
12	11.53	11.42	11.17	11.11	10.91	10.94	11.44	11.36	11.51	11.45	11.52
13	11.52	11.42	11.15	11.11	10.89	10.95	11.46	11.36	11.50	11.46	11.53
14	11.51	11.43	11.15	11.11	10.88	10.96	11.47	11.35	11.50	11.46	11.53
15	11.50	11.43	11.15	11.11	10.88	10.96	11.49	11.34	11.49	11.47	11.53
16	11.48	11.43	11.15	11.10	10.87	10.96	11.50	11.34	11.49	11.48	11.52
17	11.47	11.43	11.15	11.11	10.85	10.97	11.52	11.36	11.48	11.49	11.51
18	11.47	11.43	11.15	11.12	10.85	11.00	11.52	11.36	11.46	11.49	11.53
19	11.46	11.43	11.14	11.12	10.85	11.00	11.52	11.35	11.45	11.49	11.53
20	11.45	11.43	11.14	11.11	10.81	11.02	11.52	11.36	11.45	11.49	11.53
21	11.45	11.43	11.14	11.11	10.78	11.04	11.52	11.36	11.45	11.50	11.53
22	11.44	11.43	11.14	11.10	10.76	11.06	11.52	11.38	11.45	11.49	11.53
23	11.43	11.43	11.13	11.10	10.74	11.07	11.53	11.39	11.45	11.49	11.53
24	11.43	11.43	11.13	11.10	10.72	11.09	11.53	11.41	11.45	11.49	11.53
25	11.43	11.41	11.13	11.09	10.72	11.12	11.53	11.43	11.45	11.49	11.52
26	11.43	11.41	11.13	11.08	10.72	11.13	11.54	11.44	11.45	11.50	11.52
27	11.43	11.41	11.13	11.07	10.72	11.15	11.54	11.44	11.45	11.49	11.53
28	11.43	11.41	11.13	11.06	10.73	11.18	11.55	11.45	11.45	11.50	11.52
29		11.40	11.13	11.05	10.74	11.21	11.56	11.46	11.45	11.50	11.53
30		11.40	11.15	11.07	10.74	11.23	11.57	11.46	11.45	11.51	11.53
31		11.40		11.08		11.25	11.57		11.45		11.53

1-41-20dd. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 1.75 on Apr. 5. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	2.18	June 6	2.70	Sept. 13	3.09	Nov. 16	2.84
Apr. 5	1.75	Aug. 2	4.10	Oct. 4	3.30	Dec. 18	2.56

1-41-27ca. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 2.86 on Feb. 8. Records available: 1946-49.

Feb. 8	2.86	July 5	3.98	Sept. 13	4.38	Nov. 16	4.25
Apr. 5	3.40	Aug. 2	5.00	Oct. 4	4.51	Dec. 18	3.39
June 6	3.99						

1-42-10cd. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Feb. 8	4.27	June 6	3.92	Sept. 13	3.84	Nov. 16	3.77
Apr. 5	4.07	Aug. 2	3.91	Oct. 4	3.84	Dec. 18	3.74

1-42-13bb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 3.21 on Apr. 5. Records available: 1946-49.

Feb. 8	3.35	June 6	3.57	Sept. 13	4.35	Nov. 16	4.20
Apr. 5	3.21	Aug. 2	5.15	Oct. 4	4.62	Dec. 18	4.15

1-42-36aa. Geological Survey, U. S. Dept. of Interior. Lowest observed stage in period of record, 11.62 on Feb. 8. Records available: 1946-49.

Feb. 8	11.62	June 6	10.41	Sept. 13	10.57	Nov. 16	10.60
Apr. 5	10.18	Aug. 2	12.20	Oct. 4	10.72	Dec. 18	11.25

2-36-24ca. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	15.18	July 6	14.30	Sept. 12	14.87	Nov. 17	14.85
Apr. 6	14.79	Aug. 3	14.59	Oct. 5	14.95	Dec. 19	14.47
June 6	14.41						

2-36-29ac. Howard. Lowest observed stage in period of record, 23.00 on Sept. 12. Records available: 1946-49.

Feb. 8	22.19	July 6	21.44	Sept. 12	23.00	Nov. 17	21.90
Apr. 6	21.33	Aug. 3	22.72	Oct. 5	22.15	Dec. 19	21.70
June 9	21.34						

2-36-31bc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 20.90 on Dec. 19. Records available: 1946-49.

Feb. 8	22.00	July 6	20.92	Sept. 12	21.20	Nov. 17	20.73
Apr. 6	21.46	Aug. 3	21.17	Oct. 5	21.32	Dec. 19	20.90
June 9	20.95						

2-36-32da. Records available: 1948-49.

Feb. 8	8.40	June 6	7.82	Oct. 5	8.19	Dec. 19	8.40
Apr. 6	8.50	Aug. 3	7.80	Nov. 17	8.32		

Franklin County

1-13-1bc. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 9.40 on June 22. Records available: 1948-49.

Jan. 18	a14.83	May 20	a11.50	Oct. 20	12.80	Dec. 3	13.07
Mar. 16	a13.76	June 22	a 9.40	Nov. 10	12.64	24	13.13
Apr. 16	a13.15	July 21	a10.74				

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-13-1cc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 2.28 on June 22. Records available: 1946-49.

Jan. 18	a7.88	May 20	a3.43	Oct. 20	a6.25	Dec. 3	6.60
Mar. 16	a6.56	June 22	a2.28	Nov. 10	6.42	24	6.63
Apr. 16	a5.72	July 21	a4.68				

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-13-2bc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 5.94 on June 22. Records available: 1946-49.

Jan. 17	a9.02	May 19	a7.30	Oct. 20	a8.64	Dec. 3	8.70
Mar. 15	a6.00	June 22	a5.94	Nov. 10	8.65	24	8.58
Apr. 16	a8.20	July 21	a7.55				

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-13-4cb. Ziegler. Highest observed stage in period of record, 7.42 on June 22. Records available: 1946-49.

Jan. 18	a12.76	May 23	a10.48	Oct. 20	a11.40	Dec. 2	11.85
Mar. 16	a11.88	June 22	a 7.42	Nov. 8	11.72	23	11.97

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-13-7bb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 2.12 on May 23. Records available: 1946-49.

Jan. 18	a5.92	May 23	a2.12	Oct. 20	5.89	Dec. 2	6.02
Mar. 15	a4.79	June 22	a2.25	Nov. 8	5.85	23	5.81
Apr. 19	a4.70	July 21	a4.60				

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-13-12ad. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 5.00 on Mar. 16. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 18	a6.46	July 21	a5.60	Nov. 8	6.51	Dec. 23	6.24
Mar. 16	a5.00	Oct. 20	6.57	Dec. 2	6.40		

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-14-1aa. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 1.60 on Dec. 3. Records available: 1948-49.

Jan. 17	a4.24	July 21	a1.97	Oct. 20	a2.65	Dec. 3	1.60
Mar. 15	a3.08			Nov. 10	3.08	23	3.08
Apr. 18	a1.86						

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-14-2ac. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 1.78 on June 22. Records available: 1948-49.

Jan. 18	a6.63	May 23	a3.28	Oct. 20	a5.24	Dec. 2	5.58
Mar. 16	a5.78	June 22	a1.78	Nov. 10	5.50	23	5.65
Apr. 19	a5.30	July 21	a4.05				

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-14-2cd. Sindt. Highest observed stage in period of record, 1.78 on June 22. Records available: 1946-49.

Apr. 19	a10.14	June 22	a3.70	Oct. 20	a7.43	Dec. 2	6.70
May 23	a 7.91	July 21	a5.30	Nov. 10	a7.45		

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-14-4cc. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 3.34 on May 23. Records available: 1948-49.

Jan. 18	a6.53	May 23	a3.34	Oct. 20	a6.07	Dec. 2	5.73
Mar. 16	a5.10	June 22	a3.38	Nov. 10	6.05	23	5.97
Apr. 18	a5.00	July 21	a5.50				

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-14-5ad. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 1.40 on June 21. Records available: 1948-49.

Jan. 17	a5.31	May 19	a1.43	Oct. 20	a4.53	Dec. 3	4.67
Mar. 15	a3.68	June 21	a1.40	Nov. 10	a4.69	23	4.65
Apr. 18	a3.14	July 21	a4.04				

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-14-6bc. Blank. Records available: 1946-49. Oct. 8, 8.76; Nov. 10, 8.88; Dec. 3, 8.98.

1-14-7bb1. University of Nebraska. Records available: 1940-42, 1946-49.

Jan. 18	a3.68	May 23	a .07	July 21	a2.61	Nov. 10	3.55
Mar. 16	a2.24	June 22	a .29	Oct. 20	a3.52	Dec. 23	3.30
Apr. 19	a2.19						

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-14-7bb2. Blank. Records available: 1946-49.

Jan. 18	a6.67	May 23	a3.48	Oct. 20	a6.08	Dec. 2	6.25
Mar. 16	a5.55	June 22	a3.37	Nov. 10	6.03	23	6.01
Apr. 19	a5.13	July 21	a5.01				

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-15-3ac. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 14.82 on July 22. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 19	a18.68	May 23	a15.74	Oct. 20	a17.45	Dec. 1	17.48
Mar. 16	a17.70	June 22	a14.83	Nov. 8	17.42	23	17.39
Apr. 19	a17.43	July 22	a14.82				

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-15-3db. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 4.01 on June 22. Records available: 1948-49.

Jan. 18	a7.87	May 23	a4.59	Oct. 20	a7.73	Dec. 1	7.73
Mar. 16	a6.90	June 22	a4.01	Nov. 10	7.78	23	7.70
Apr. 19	a6.78	July 22	a5.72				

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-15-5ca. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Jan. 18	a7.38	May 23	a1.74	Oct. 21	a5.94	Dec. 1	5.16
Mar. 16	a6.65	June 22	a1.55	Nov. 8	5.95	23	6.12
Apr. 19	a6.15	July 22	a3.04				

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-15-6bc. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 7.11 on June 22. Records available: 1948-49.

Jan. 18	a8.73	May 23	a7.36	Oct. 21	a9.02	Dec. 1	8.70
Mar. 16	a8.15	June 22	a7.11	Nov. 8	8.92	23	8.73
Apr. 19	a8.11	July 22	a8.33				

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-15-7bb. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 5.53 on June 22. Records available: 1948-49.

Jan. 19	a10.73	May 23	a7.68	Oct. 20	a10.11	Dec. 2	10.02
Mar. 16	9.45	June 22	a5.53	Nov. 8	a10.05	23	10.07
Apr. 19	a 9.34	July 22	a7.14				

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-15-7cb. Gardner. Highest observed stage in period of record, 21.65 on Apr. 19. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 19	a22.72	Apr. 19	a21.65	Dec. 23	22.02
Mar. 16	a21.73	Nov. 10	22.02		

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-15-8bd. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 7.45 on June 22. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 18	a11.00	May 23	a7.98	Oct. 21	a10.92	Dec. 1	10.93
Mar. 16	a10.80	June 22	a7.45	Nov. 8	11.94	23	10.88
Apr. 19	a 9.96	July 22	a9.90				

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-15-8cb. Townsend. Highest observed stage in period of record, 6.78 on May 23. Records available: 1946-49.

Jan. 19	a11.01	May 23	a 6.78	Oct. 21	a10.96	Dec. 2	10.87
Mar. 16	a 8.97	June 22	a 7.81	Nov. 8	10.88	23	10.80
Apr. 19	a 9.75	July 22	a10.08				

1-16-7dd. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 10.50 on July 22; lowest, 13.31 on Jan. 19. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 19	a13.31	May 23	a12.37	Oct. 20	a11.70	Dec. 1	12.09
Mar. 16	a12.49	June 22	a11.11	Nov. 8	11.87	23	12.25
Apr. 19	a12.83	July 22	a10.50				

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-16-8bb. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 3.41 on June 22. Records available: 1948-49.

Jan. 19	a8.03	May 23	a4.66	Oct. 20	a7.60	Dec. 1	7.61
Mar. 16	a6.96	June 22	a3.41	Nov. 8	7.60	23	7.61
Apr. 19	a6.45	July 22	a5.78				

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-16-9bc. Post. Records available: 1946-49.

Jan. 18	a14.02	May 23	a12.75	Oct. 21	a13.60	Dec. 1	13.75
Mar. 16	a13.19	June 22	a11.55	Nov. 8	13.69	23	13.71
Apr. 19	a13.16	July 22	a12.15				

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-16-9dd. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 6.90 on June 22. Records available: 1948-49.

Jan. 18	a10.73	May 23	a8.18	Oct. 21	a10.01	Dec. 1	10.04
Mar. 16	a 9.78	June 22	a6.90	Nov. 8	10.00	23	9.99
Apr. 18	a 9.24	July 22	a8.55				

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-16-10bd. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Jan. 18	a5.52	May 23	a2.32	Oct. 21	a4.20	Dec. 1	4.16
Mar. 16	a4.73	June 22	a1.93	Nov. 8	4.15	23	4.07
Apr. 19	a4.21	July 22	a3.05				

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-16-14ab. Howel. Records available: 1946-49.

Jan. 19	a41.03	May 23	a39.10	Oct. 21	a40.38	Dec. 3	40.33
Mar. 16	a40.07	June 22	a38.11	Nov. 8	40.32	23	40.33
Apr. 19	a39.96	July 22	a38.80				

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-16-16ad. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 9.05 on June 22. Records available: 1948-49.

Jan. 19	a12.93	May 23	a10.80	Oct. 21	a12.55	Dec. 3	12.24
Mar. 16	a11.73	June 22	a 9.05	Nov. 8	12.35	23	12.07
Apr. 19	a11.41	July 22	a10.30				

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-13-3lad. Highest observed stage in period of record, 51.07 on Mar. 15. Measurements made by Bureau of Reclamation, U. S. Dept. of Interior. Records available: 1947-49. Mar. 15, 51.07; Apr. 18, 52.85; May 19, destroyed, measurements discontinued.

2-13-32dd. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 2.32 on June 21. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	a8.95	May 19	a2.62	Oct. 20	a7.43	Dec. 3	7.16
Mar. 15	a6.27	June 21	a2.32	Nov. 10	7.32	24	7.01
Apr. 18	a5.63	July 21	a5.46				

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-14-33cc. Cyr. Highest observed stage in period of record, 4.54 on Apr. 7. Records available: 1948-49.

Jan. 17	a9.75	Apr. 18	a7.79	July 21	a6.43	Dec. 3	8.37
Mar. 15	a8.62	May 19	a6.52	Oct. 20	a8.47	24	8.27
Apr. 7	4.54	June 21	a4.38	Nov. 10	8.42		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-14-33dd. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter $1\frac{1}{4}$ inches, depth 13.5 feet. Measuring point, top of pipe, 1 foot above land-surface datum. Records available: 1949. Dec. 24, 7.06.

2-14-34ad. Highest observed stage in period of record, 48.23 on Oct. 20. Records available: 1948-49.

Jan. 17	a50.35	May 19	a50.44	Oct. 20	a48.23	Dec. 3	50.16
Mar. 15	a50.42	June 21	a50.55	Nov. 10	50.23	23	50.13
Apr. 18	a50.57	July 21	a49.86				

a By Bureau of Reclamation, U. S. Dept. of Interior.

3-14-36dd. University of Nebraska. Records available: 1934-42. No measurements made in 1949.

4-14-10da. Gilgen Bros. Records available: 1935-40, 1942, 1947-49. Apr. 27, 167.59; July 20, 167.94.

Frontier County

No measurement made in 1949.

Furnas County

1-25-6ba. Shoemaker. Records available: 1934-40, 1942. Measurements discontinued.

2-25-27cc. Mrs. Hunt. Records available: 1935-42. Measurements discontinued.

2-25-28dc. Loar. Records available: 1935-40, 1942. Measurements discontinued.

3-21-2cc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 6.79 on June 10. Records available: 1946-49.

Feb. 10	9.07	June 10	6.79	Oct. 7	9.62	Dec. 21	9.10
Apr. 7	8.07	Aug. 5	9.04	Nov. 19	9.27		

3-22-2ba. Geological Survey, U. S. Dept. of Interior. Lowest observed stage in period of record, 8.84 on Nov. 19. Records available: 1946-49.

Feb. 7	8.10	July 8	7.27	Sept. 9	6.88	Nov. 19	8.84
Apr. 7	7.84	Aug. 1	6.60	Oct. 6	8.67	Dec. 17	8.83
June 6	6.85						

3-23-34cc. Lambert. Records available: 1934-41, 1943. Measurements discontinued.

3-25-4bb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 3.62 on June 20, 21, 22. Records available: 1946-49.

3-25-4bb--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.00	5.98	4.48	4.47	4.48	3.92	4.09	5.02	5.12	5.42	5.29	5.64
2	6.00	5.98	4.49	4.43	4.51	3.94	4.12	5.04	5.13	5.42	5.28	5.64
3	6.00	5.98	4.49	4.36	4.54	3.97	4.16	5.06	5.14	5.42	5.28	5.64
4	6.00	5.98	4.49	4.28	4.56	3.98	4.19	5.08	5.15	5.42	5.27	5.64
5	6.00	5.98	4.49	4.19	4.59	4.00	4.23	5.11	5.16	5.40	5.26	5.64
6	6.00	5.98	4.50	4.12	4.60	4.00	4.26	5.13	5.17	5.40	5.26	5.64
7	5.99	5.98	4.50	4.10	4.60	3.68	4.30	5.15	4.17	5.40	5.26	5.64
8	5.98	5.98	4.51	4.10	4.58	3.67	4.33	5.17	5.18	5.39	5.25	5.64
9	5.98	5.99	4.51	4.11	4.35	3.66	4.36	5.19	5.18	5.38	5.25	5.64
10	5.98	6.00	4.52	4.12	4.14	3.65	4.39	5.20	5.19	5.37	5.25	5.63
11	5.98	6.00	4.52	4.12	4.04	3.65	4.42	5.23	5.20	5.37	5.25	5.63
12	5.98	5.99	4.53	4.13	4.02	3.65	4.45	5.25	5.20	5.37	5.25	5.63
13	5.98	5.99	4.53	4.13	4.02	3.65	4.48	5.27	5.21	5.37	5.25	5.63
14	5.98	6.00	4.54	4.14	4.03	3.64	4.51	5.28	5.22	5.37	5.25	5.63
15	5.98	6.00	4.55	4.14	4.04	3.64	4.54	5.30	5.22	5.36	5.25	5.62
16	5.98	6.00	4.55	4.15	4.05	3.64	4.57	5.32	5.23	5.35	5.65	5.62
17	5.98	6.00	4.55	4.16	4.01	3.63	4.61	5.32	5.24	5.35	5.65	5.62
18	5.98	5.96	4.57	4.18	3.97	3.63	4.64	5.26	5.25	5.35	5.65	5.63
19	5.98	5.88	4.57	4.20	3.97	3.63	4.68	5.18	5.26	5.35	5.65	5.61
20	5.98	5.82	4.57	4.21	3.95	3.62	4.71	5.13	5.27	5.35	5.65	5.60
21	5.98	5.76	4.57	4.22	3.92	3.62	4.74	5.09	5.28	5.34	5.65	5.60
22	5.98	5.65	4.57	4.24	3.80	3.62	4.77	5.07	5.29	5.34	5.65	5.59
23	5.98	4.48	4.57	4.25	3.78	3.80	4.79	5.07	5.30	5.33	5.65	5.59
24	5.98	4.48	4.58	4.26	3.77	3.85	4.82	5.07	5.32	5.33	5.65	5.58
25	5.98	4.48	4.59	4.30	3.75	3.89	4.91	5.07	5.33	5.32	5.65	5.57
26	5.98	4.48	4.59	4.34	3.75	3.92	4.93	5.07	5.34	5.31	5.65	5.57
27	5.98	4.48	4.59	4.37	3.78	3.94	4.94	5.08	5.35	5.30	5.65	5.56
28	5.98	4.48	4.57	4.40	3.80	3.98	4.97	5.08	5.37	5.30	5.64	5.56
29	5.98		4.55	4.44	3.85	4.02	4.99	5.09	5.38	5.30	5.64	5.56
30	5.98		4.55	4.46	3.86	4.05	5.01	5.10	5.40	5.30	5.64	5.55
31	5.98		4.51		3.90		5.03	5.11		5.29		5.54

4-21-32cc. Rhynolds. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	14.39	June 10	12.35	Oct. 7	15.10	Dec. 21	14.10
Apr. 7	13.76	Aug. 5	14.37	Nov. 19	14.35		

4-22-19ac. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 30.0 feet. Measuring point, top of pipe, 0.50 foot above land-surface datum. Highest observed stage in period of record, 21.61 on Nov. 19; lowest, 22.05 on June 10. Records available: 1949.

June 10	a22.05	Aug. 5	21.75	Oct. 7	21.65	Dec. 21	21.72
July 18	a21.84	Sept. 9	a21.66	Nov. 19	21.61		

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-22-19ca. Bureau of Reclamation, U. S. Dept. of Interior. Highest observation well, diameter $1\frac{1}{4}$ inches, depth 14.0 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 2.00 on June 10; lowest, 6.69 on Dec. 21. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level
June 10	a1.00	Aug. 5	5.45	Nov. 19	5.75
July 18	4.37	Sept. 9	a5.55	Dec. 21	5.69

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-22-25cc. Hays. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	11.97	June 11	9.32	Oct. 7	12.52	Dec. 21	12.35
Apr. 7	11.15	Aug. 5	11.45	Nov. 19	12.34		

4-22-29aa. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 25.50 feet. Measuring point, top of pipe, 0.50 foot above land-surface datum. Highest observed stage in period of record, 13.10 on Dec. 21; lowest, 13.32 on Aug. 5. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level
July 18	13.30	Sept. 9	13.22	Dec. 21	13.10
Aug. 5	13.32	Nov. 19	13.15		

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-22-29ad. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	15.69	June 11	15.02	Aug. 5	14.80	Nov. 19	15.67
Apr. 7	15.90	July 18	14.82	Sept. 9	15.09	Dec. 21	15.20

4-22-29da. Bureau of Reclamation, U. S. Dept. of Interior. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 24.50 feet. Measuring point, top of pipe, 1.50 feet above land-surface datum. Highest observed stage in period of record, 14.55 on June 11; lowest, 15.94 on Oct. 7. Records available: 1949.

June 11	14.55	Aug. 5	15.26	Oct. 7	15.94	Dec. 21	15.77
July 18	14.95	Sept. 9	15.80	Nov. 19	15.82		

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-22-32dd. Mrs. Coker. Records available: 1946-49.

Feb. 7	11.89	June 6	8.15	Oct. 3	11.06	Dec. 17	10.08
Apr. 7	8.84	Aug. 1	11.42	Nov. 15	10.35		

4-22-33aa. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 19.0 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Measurement on June 10 by Bureau of Reclamation, U. S. Dept. of Interior. Records available: 1949. June 10, 12.85; Dec. 21, 14.31.

4-22-34bb. Payne. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 10	14.45	July 18	13.60	Nov. 19	14.65
June 10	12.76	Oct. 7	15.40	Dec. 21	14.39

4-23-15da. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 42.0 feet. Measuring point, top of pipe, 0.80 foot above land-surface datum. Highest observed stage in period of record, 39.22 on July 18; lowest, 39.58 on June 10. Records available: 1949.

June 10	39.58	Oct. 7	39.42	Dec. 21	39.49
July 18	39.22	Nov. 19	39.49		

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-23-17bd. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 41.60 feet. Measuring point, top of pipe, 0.50 foot above land-surface datum. Highest observed stage in period of record, 28.29 on Dec. 21; lowest, 28.55 on June 10. Records available: 1949.

June 10	28.55	Sept. 9	28.36	Nov. 19	28.31
July 18	28.50	Oct. 7	28.35	Dec. 21	28.29

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-23-20ab. Larson. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	27.62	June 10	26.32	Sept. 9	27.28	Nov. 19	27.58
Apr. 4	27.22	July 18	26.43	Oct. 7	27.52	Dec. 21	27.52

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-23-20bb. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 32.0 feet. Measuring point, top of pipe, 1.00 foot above land-surface datum. Highest observed stage in period of record, 17.35 on July 18; lowest, 19.16 on Dec. 21. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level
June 10	a17.63	Aug. 5	17.74	Nov. 19	19.05
July 18	a17.35	Sept. 9	a18.04	Dec. 21	19.16

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-23-22dc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 22.0 feet. Measuring point, top of pipe, 1.00 foot above land-surface datum. Highest observed stage in period of record, 14.25 on June 10; lowest, 15.85 on July 18. Records available: 1949.

June 10	14.25	Aug. 5	15.44	Nov. 19	15.33
July 18	a15.85	Oct. 7	15.59	Dec. 21	15.18

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-23-23bd. Moore. Highest observed stage in period of record, 28.42 on June 10. Records available: 1936-44, 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	29.40	June 10	28.42	Oct. 7	29.63	Dec. 21	29.43
Apr. 7	28.90	Aug. 5	29.08	Nov. 19	29.50		

4-23-27dd. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Feb. 7	11.16	June 6	8.55	Oct. 7	11.00	Dec. 17	10.97
Apr. 4	9.92	Aug. 1	9.62	Nov. 19	11.00		

4-23-30cc. Bremling Bros. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
June 6	52.59	Oct. 3	53.55	Dec. 17	53.25
Aug. 1	54.07	Nov. 15	53.40		

4-23-36aa. Watson. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 7	20.51	June 6	17.43	Oct. 3	19.96	Dec. 17	20.10
Apr. 7	20.07	Aug. 1	18.57	Nov. 15	20.17		

4-24-13bb. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 32.0 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 20.10 on Oct. 7; lowest, 20.85 on Sept. 9. Records available: 1949.

June 10	a20.33	Aug. 5	20.15	Oct. 7	20.10	Dec. 21	20.13
July 18	a20.19	Sept. 9	a20.85	Nov. 19	20.13		

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-24-13cd. Thomas. Records available: 1946-49.

Feb. 10	17.79	June 10	16.62	Aug. 5	16.45	Nov. 19	17.43
Apr. 4	17.15	July 18	16.26	Oct. 7	16.90	Dec. 21	17.50

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-24-14cb. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 32 feet. Measuring point, top of pipe, 0.80 foot above land-surface datum. Highest observed stage in period of record, 20.73 on June 10; lowest, 23.07 on Dec. 21. Records available: 1949.

June 10	20.73	Aug. 6	22.34	Sept. 9	22.50	Dec. 21	23.07
July 18	a21.28	Oct. 7	22.77	Nov. 19	23.02		

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-24-14cc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 22.0 feet. Measuring point, top of pipe, 1.00 foot above land-surface datum. Highest observed stage in period of record, 19.44 on July 18; lowest, 20.80 on Oct. 7. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 10	19.50	Aug. 5	19.90	Oct. 7	20.80	Dec. 21	20.76
July 18	a19.44	Sept. 9	20.50	Nov. 19	20.68		

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-24-14da. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 32.0 feet. Measuring point, top of pipe, 1.50 feet above land-surface datum. Highest observed stage in period of record, 16.66 on July 18; lowest, 17.42 on Nov. 19. Records available: 1949.

June 10	16.80	Aug. 6	16.89	Oct. 7	17.02	Dec. 21	17.37
July 18	a16.66	Sept. 9	a16.77	Nov. 19	17.42		

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-25-15cb. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 22.00 feet. Measuring point, top of pipe, 1.00 foot above land-surface datum. Highest observed stage in period of record, 14.88 on July 18; lowest, 15.93 on Dec. 21. Records available: 1949.

June 10	15.18	Aug. 5	15.00	Oct. 7	15.46	Dec. 21	15.93
July 18	a14.88	Sept. 9	a15.03	Nov. 19	15.78		

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-24-15cc. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Feb. 10	13.50	June 10	11.44	Aug. 5	12.35	Nov. 18	13.35
Apr. 4	12.52	July 18	a11.86	Oct. 7	13.16	Dec. 21	13.33
21	12.35						

4-24-19cb. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 22.0 feet. Measuring point, top of pipe, 0.30 foot above land-surface datum. Highest observed stage in period of record, 12.25 on July 18; lowest, 14.02 on Nov. 18. Records available: 1949.

June 10	a12.32	Aug. 5	13.10	Oct. 7	13.52	Dec. 20	13.96
July 18	a12.25	Sept. 9	13.09	Nov. 18	14.02		

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-24-19cc. Purington. Highest observed stage in period of record, 11.77 on June 10; lowest, 15.12 on Aug. 5. Records available: 1946-49.

Feb. 10	13.80	June 10	11.77	Aug. 5	15.12	Nov. 18	14.22
Apr. 4	13.04	July 18	a12.67	Oct. 7	13.90	Dec. 20	19.02

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-24-20cbb. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 11.60 feet. Measuring point, top of pipe, 0.50 foot above land-surface datum. Highest observed stage in period of record, 3.29 on June 10; lowest, 6.94 on Oct. 7. Records available: 1949.

June 10	a3.29	Aug. 6	6.16	Oct. 7	6.94	Dec. 20	6.74
July 18	a5.82	Sept. 9	6.55	Nov. 18	6.83		

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-24-20cbc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 12.0 feet. Measuring point, top of pipe, 0.50 foot above land-surface datum. Highest observed stage in period of record, 4.54 on June 10; lowest, 6.44 on Aug. 6. Records available: 1949.

4-24-20cbc--Continued.

Date	Water level	Date	Water level	Date	Water level
June 10	a4.54	Aug. 6	6.44	Nov. 18	6.15
July 18	a6.01	Oct. 7	6.42	Dec. 20	5.99

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-24-22bb. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 12.00 feet. Measuring point, top of pipe, 0.50 foot above land-surface datum. Highest observed stage in period of record, 7.15 on June 10; lowest, 10.33 on Aug. 6. Records available: 1949.

June 10	a7.15	Aug. 6	10.33	Nov. 18	10.02
July 18	a8.97	Oct. 7	10.22	Dec. 21	9.88

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-24-22dd. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49. Apr. 7, 6.49. Destroyed, measurements discontinued.

4-24-23aa. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 22.00 feet. Measuring point, top of pipe, 1.00 foot above land-surface datum. Highest observed stage in period of record, 14.79 on June 10; lowest, 17.00 on Oct. 7. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 10	14.79	Aug. 5	16.95	Oct. 7	17.00	Dec. 21	16.69
July 18	a15.62	Sept. 9	16.42	Nov. 18	16.75		

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-24-23bc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 22.00 feet. Measuring point, top of pipe, 0.50 foot above land-surface datum. Highest observed stage in period of record, 16.22 on June 10; lowest, 18.57 on Aug. 5. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level
June 10	16.22	Aug. 5	18.57	Nov. 1	17.93
July 18	a17.80	Oct. 7	18.47	Dec. 21	17.79

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-24-29cd. Andrews Estate. Highest observed stage in period of record, 20.13 on June 6. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 7	20.97	June 6	20.13	Oct. 7	21.03	Dec. 17	20.68
Apr. 7	20.60	Aug. 1	21.26	Nov. 15	20.80		

4-25-27adc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 16.50 feet. Measuring point, top of pipe, 1.00 foot above land-surface datum. Highest observed stage in period of record, 6.90 on June 6; lowest, 10.42 on Dec. 20. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Dec. 7, 1948	a7.85	June 6, 1949	a6.90	Oct. 7, 1949	9.90
Jan. 7, 1949	a9.85	July 18	a7.33	Nov. 18	10.25
Feb. 3	a9.71	Sept. 9	a9.30	Dec. 20	10.42
Apr. 7	a7.72				

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-25-27add. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 12.00 feet. Measuring point, top of pipe, 0.50 foot above land-surface datum. Highest observed stage in period of record, 3.40 on June 6; lowest, 7.94 on Dec. 20. Records available: 1948-49.

4-25-27add--Continued.

Date	Water level	Date	Water level	Date	Water level
Dec. 7, 1948	a6.44	June 6, 1949	a3.40	Oct. 7, 1949	7.65
Jan. 7, 1949	a6.49	July 18	a4.50	Nov. 18	7.80
Feb. 3	a6.47	Aug. 6	6.51	Dec. 20	7.94
Apr. 7	a4.39	Sept. 9	a7.28		

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-25-27daal. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 11.00 feet. Measuring point, top of pipe, 0.50 foot above land-surface datum. Highest observed stage in period of record, 4.02 on June 6; lowest, 8.50 on Aug. 5. Records available: 1948-49.

Dec. 7, 1948	a6.63	June 6, 1949	a4.02	Oct. 7, 1949	7.67
Jan. 7, 1949	a6.63	July 18	a5.38	Nov. 18	7.65
Feb. 3	a6.61	Aug. 6	8.50	Dec. 20	7.74
Apr. 7	a4.89	Sept. 9	a7.48		

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-25-32cd. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 3.06 on Apr. 7. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 7	5.37	June 6	4.00	Sept. 9	5.10	Nov. 15	5.40
Apr. 7	3.06	Aug. 1	5.60	Oct. 7	5.60	Dec. 17	5.20

4-25-34ad. Sayer. Highest observed stage in period of record, 11.39 on Aug. 1. Records available: 1946-49.

Feb. 7	16.54	June 6	14.13	Oct. 7	17.05	Dec. 17	16.62
Apr. 7	14.65	Aug. 1	11.39	Nov. 15	16.78		

Gage County

No measurement made in 1949.

Garden County

17-44-22cc. Morris. Records available: 1935-42, 1944-46, 1948-49.

Date	Water level	Date	Water level	Date	Water level
May 9	26.54	July 11	26.04	Nov. 21	26.85
June 20	26.16	Sept. 12	26.63		

18-46-27cc. University of Nebraska. Records available: 1935-42, 1944, 1946-49.

May 9	4.04	July 11	4.42	Nov. 21	4.42
June 20	4.16	Sept. 12	3.91		

(Measurements in following wells supplied by Fish & Wildlife Service.)

20-44-5db. Crescent Lake Migratory Bird Refuge. Records available: 1934-49. Mar. 17, 6.00; June 20, 5.50; Sept. 26, 5.90; Dec. 21, 6.10.

20-44-9ca. Crescent Lake Migratory Bird Refuge. Records available: 1933-39, 1942-49. Mar. 17, 5.00; June 20, 4.60; Sept. 26, 5.00; Dec. 21, 5.10.

20-45-13ab. Crescent Lake Migratory Bird Refuge. Highest observed stage in period of record, 1.80 on June 17. Records available: 1934-49. Mar. 17, 2.10; June 17, 1.80; Sept. 26, 3.70; Dec. 21, 3.10.

20-45-17ba. Crescent Lake Migratory Bird Refuge. Highest observed stage in period of record, 3.30 on June 17. Records available: 1934-43, 1945-49. Mar. 17, 3.90; June 17, 3.30; Sept. 26, 5.50; Dec. 21, 4.50.

21-44-29ab. Crescent Lake Migratory Bird Refuge. Highest observed stage in period of record, 1.76 on June 17. Records available: 1934-49. Mar. 11, 2.46; June 17, 1.76; Sept. 26, 2.76; Dec. 20, 2.96.

21-44-35ca. US 59. Crescent Lake Migratory Bird Refuge. Records available: 1933-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	2.50	May 5	2.40	July 29	3.80	Oct. 14	3.50
16	2.50	13	2.10	Aug. 5	3.90	21	3.50
21	2.20	19	2.20	12	3.90	26	3.40
Mar. 3	.60	25	2.20	19	3.80	Nov. 4	3.30
10	1.80	June 5	2.50	26	4.20	10	3.30
17	1.80	10	2.50	Sept. 2	3.80	17	3.30
23	1.80	17	2.50	9	3.80	24	3.20
30	1.40	July 1	3.10	16	3.70	Dec. 2	3.10
Apr. 8	1.70	8	3.40	23	3.80	9	3.10
14	1.70	14	3.50	30	3.90	23	3.00
21	2.00	21	3.70	Oct. 7	3.80	30	2.90
29	2.40						

21-45-3bd. Crescent Lake Migratory Bird Refuge. Highest observed stage in period of record, 1.90 on June 17. Records available: 1933-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	3.70	May 5	2.80	July 21	2.80	Oct. 28	3.40
17	3.60	14	2.60	29	2.90	Nov. 4	3.40
23	3.50	19	2.60	Aug. 8	3.10	10	3.40
Mar. 3	3.90	25	2.60	12	3.20	17	3.40
11	2.90	June 3	2.80	19	3.30	24	3.40
17	2.90	9	2.80	26	3.40	Dec. 2	3.40
23	2.90	17	1.90	Sept. 30	3.50	9	3.40
Apr. 8	2.60	July 1	2.40	Oct. 7	3.50	16	3.30
14	2.50	8	2.50	14	3.30	23	3.50
21	2.60	14	2.50	21	3.30	30	3.40
28	2.80						

21-45-10cd. Crescent Lake Migratory Bird Refuge. Records available: 1933-49. Mar. 11, 2.00; June 17, 1.70; Sept. 26, 4.00; Dec. 20, 2.80.

21-45-27cb. Crescent Lake Migratory Bird Refuge. Records available: Mar. 17, 3.30; June 17, 2.70; Sept. 26, 3.40; Dec. 21, 3.10. Records available: 1933-49.

Gosper County

5-22-3da. Phillips. Highest observed stage in period of record, 151.02 on Jan. 19. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 19	151.02	June 16	151.12	Sept. 30	151.05
Apr. 26	151.48	Aug. 3	151.42	Nov. 23	151.05

5-22-12ab. Berntson. Records available: 1934-42. Dry, measurements discontinued.

6-21-29cc. Forrester. Highest observed stage in period of record, 122.17 on Nov. 23. Records available: 1948-49. Apr. 26, 123.22; June 16, 122.94; Nov. 23, 122.17.

6-22-15cd. Highest observed stage in period of record, 126.09 on Nov. 23. Records available: 1948-49.

Apr. 26	126.70	Aug. 2	126.44	Nov. 23	126.09
June 14	126.54	Sept. 30	126.13		

7-21-6bc. Larson Estate. Highest observed stage in period of record, 106.12 on Nov. 23. Records available: 1934-39, 1948-49.

Jan. 18	107.80	June 14	107.05	Sept. 30	106.42
Apr. 25	107.09	Aug. 2	106.88	Nov. 23	106.12

7-21-20bb. Highest observed stage in period of record, 195.77 on Nov. 23. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 18	197.00	June 14	196.67	Sept. 30	196.13
Apr. 25	196.59	Aug. 2	196.73	Nov. 23	195.77

7-21-24dc. Highest observed stage in period of record, 168.90 on Nov. 23. Records available: 1948-49.

Jan. 18	170.74	June 14	169.64	Sept. 30	169.14
Apr. 25	170.00	Aug. 2	169.44	Nov. 23	168.90

7-21-33aa. Highest observed stage in period of record, 176.56 on Nov. 23. Records available: 1947-49. Apr. 26, 178.06; Sept. 30, 176.84; Nov. 23, 176.56.

7-22-8bb. Highest observed stage in period of record, 240.72 on Nov. 22. Records available: 1947-49.

Apr. 26	243.26	Aug. 2	242.37	Nov. 22	240.72
June 14	242.53	Sept. 30	241.30		

8-21-3dc. Jeffrey Bros. Records available: 1946-49.

Jan. 14	13.72	Apr. 18	13.40	Sept. 9	12.60
Mar. 12	13.01	July 8	12.34	Nov. 3	13.08

8-21-11aa. Central Nebraska Public Power and Irrigation District. Lowest observed stage in period of record, 6.55 on Jan. 14. Records available: 1938-49.

Jan. 14	6.55	Apr. 18	5.50	Sept. 9	6.15
Mar. 12	5.35	July 8	4.62	Nov. 3	6.08

8-21-30dd. Nyslop. Altitude of measuring point 2,490.96 feet above sea level. Highest observed stage in period of record, 128.64 on Nov. 22. Records available: 1948-49.

Jan. 18	130.04	June 14	129.77	Sept. 30	128.95
Apr. 27	130.10	Aug. 2	129.53	Nov. 22	128.64

8-22-8bc. Central Nebraska Public Power and Irrigation District. Abandoned drilled well, diameter 12 inches, reported depth 256 feet. Measuring point, top of casing, 1.0 foot above land-surface datum. Highest observed stage in period of record, 114.58 on Sept. 30, 1949; lowest, 129.30 on Aug. 12, 1947. Records available: 1947-49.

Aug. 12, 1947	129.30	Nov. 12, 1948	119.17	Aug. 2, 1949	116.63
Nov. 25	126.30	Dec. 20	119.29	Sept. 30	114.58
Apr. 28, 1948	125.50	Apr. 27, 1949	119.46	Nov. 22	115.80
Oct. 22	119.93	June 14	118.26		

8-22-8cd. Central Nebraska Public Power and Irrigation District. Highest observed stage in period of record, 128.56 on Sept. 30. Records available: 1940-49.

July 3, 1948	135.88	Nov. 12, 1948	132.54	June 14, 1949	131.20
Aug. 4	135.95	Dec. 20	132.38	Aug. 2	130.04
Sept. 13	133.96	Apr. 27, 1949	131.82	Sept. 30	128.56
Oct. 16	133.02				

8-22-17dd. Highest observed stage in period of record, 157.40 on Nov. 22. Records available: 1947-49.

Jan. 18	161.34	June 14	159.58	Sept. 30	157.85
Apr. 27	160.49	Aug. 2	159.09	Nov. 22	157.40

8-22-26ba. Highest observed stage in period of record, 164.73 on Sept. 30. Records available: 1948-49. Apr. 27, 166.70; June 14, 165.73; Aug. 2, 165.64; Sept. 30, 164.73.

8-23-12cb. Tilson. Highest observed stage in period of record, 52.15 on Nov. 22. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 18	56.81	June 14	54.78	Sept. 30	52.81
Apr. 27	55.86	Aug. 2	54.15	Nov. 22	52.15

Grant County

24-36-30bb. University of Nebraska. Published erroneously in previous reports as 24-37-25ac. Records available: 1935-42, 1946-49.

May 13	4.87	July 15	5.41	Nov. 25	5.36
June 8	4.26	Sept. 16	5.55		

24-40-36bb. University of Nebraska. Records available: 1935-42, 1944-49.

May 13	13.52	July 14	13.42	Nov. 25	13.87
June 8	13.48	Sept. 16	13.85		

Greeley County

17-10-10cb. University of Nebraska. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 114.90. Records available: 1935-42, 1949. Apr. 28, 14.27.

17-11-31ba. Yuma. Highest observed stage in period of record, 34.46 on June 30; lowest, 35.53 on Sept. 2. Records available: 1948-49.

Apr. 28	34.62	June 30	34.46	Nov. 2	35.02
June 2	34.52	Sept. 2	35.53	29	34.93

17-12-6dc. Fuss. Highest observed stage in period of record, 12.41 on Apr. 28; lowest, 13.43 on Nov. 29. Records available: 1948-49.

Apr. 28	12.41	June 30	12.47	Sept. 2	12.84
June 2	12.72	Aug. 3	13.27	Nov. 2	13.29

17-12-9bb. Williams. Highest observed stage in period of record, 17.98 on Apr. 28. Records available: 1948-49.

Apr. 28	17.98	June 30	18.23	Nov. 29	22.22
June 2	18.89	Nov. 2	19.58		

17-12-26aa. Jess. Highest observed stage in period of record, 22.81 on June 30. Records available: 1948-49.

Apr. 28	23.03	June 30	22.81	Nov. 2	23.07
June 2	22.89	Sept. 2	24.62	29	22.95

19-9-12db. Irrigation well. Highest observed stage in period of record, 37.27 on Apr. 28; lowest, 38.75 on Aug. 4. Records available: 1948-49.

Apr. 28	37.27	Aug. 4	38.75	Nov. 1	38.57
July 5	37.50	Sept. 20	38.24	30	38.01

20-9-20cc. University of Nebraska. Lowest observed stage in period of record, 3.35 on Aug. 3. Records available: 1934-42, 1948-49.

Sept. 29, 1948	2.78	July 5, 1949	2.22	Nov. 1, 1949	2.43
Apr. 28, 1949	1.93	Aug. 3	3.35	30	2.32
June 8	1.79	Sept. 20	2.81		

20-9-20db. Published in reports prior to 1948 as 423. University of Nebraska. Listed incorrectly as destroyed in 1942. Records available: 1937-41, 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 28	7.56	July 5	7.79	Sept. 22	8.97	Nov. 30	9.17
June 8	8.07	Aug. 4	9.04	Nov. 1	9.10		

20-9-30ca. Gilray. Highest observed stage in period of record, 67.28 on June 8. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 28	67.86	July 5	67.43	Nov. 1	67.66
June 8	67.28	Sept. 20	67.83	30	67.69

20-9-34aa. Haggerty. Highest observed stage in period of record, 32.28 on Apr. 28. Records available: 1948-49.

Apr. 28	32.28	Aug. 4	33.26	Nov. 1	33.50
July 5	32.41	Sept. 22	32.80	30	32.72

Hall County

(Measurements in wells owned by the city of Grand Island were supplied through the courtesy of the Grand Island Water Department.)

9-9-8cb. Lautenschlager. Highest observed stage in period of record, 71.90 on Apr. 28. Records available: 1948-49. Apr. 28, 71.90; Oct. 20, 72.20.

9-9-12ba. Stulken. Highest observed stage in period of record, 67.05 on Apr. 28. Records available: 1948-49. Apr. 28, 67.05; Oct. 20, 67.32.

9-9-27bc. Alber. Highest observed stage in period of record, 66.55 on Apr. 28. Records available: 1948-49. Apr. 28, 66.55; Oct. 20, 67.13.

9-10-4dc. Hilsbeck. Highest observed stage in period of record, 3.62 on Apr. 20. Records available: 1946-49.

Jan. 7	6.28	Apr. 20	3.62	Sept. 8	6.05
Mar. 12	4.25	July 8	5.19	Nov. 4	5.85

9-10-23ab. Thaden. Highest observed stage in period of record, 78.55 on Apr. 28. Records available: 1948-49. Apr. 28, 78.55; Oct. 20, 78.77.

9-10-29db. Rainforth. Highest observed stage in period of record, 68.75 on Oct. 20. Records available: 1947-49. Apr. 28, 69.61; Oct. 20, 68.75.

9-11-8bc. Gosda. Highest observed stage in period of record, 4.05 on Apr. 11. Records available: 1945-49.

Jan. 6	6.65	Apr. 11	4.05	Sept. 6	7.40
Mar. 9	5.00	July 5	5.60	Nov. 1	6.91

9-11-14cb. Cox. Highest observed stage in period of record, 6.54 on Mar. 12. Records available: 1946-49.

Jan. 7	7.52	Apr. 21	7.13	Sept. 8	7.70
Mar. 12	6.54	July 8	7.17	Nov. 4	7.82

9-11-21bb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 7.17 on Apr. 20. Records available: 1946-49.

Jan. 7	8.29	Apr. 20	7.17	Sept. 9	8.60
Mar. 12	7.33	July 8	7.74	Nov. 4	8.30

9-12-1dc. Kipp. Records available: 1930-49.

Jan. 6	6.82	Apr. 11	3.72	Sept. 6	6.69
Mar. 9	5.25	July 5	5.12	Nov. 1	6.58

9-12-9ba. Ohlman. Highest observed stage in period of record, 18.50 on July 15. Records available: 1930-49.

Jan. 6	22.15	Apr. 12	20.80	Sept. 6	20.80
Mar. 9	21.40	July 5	18.50	Nov. 1	20.70

10-9-3cb. City of Grand Island. Records available: 1935-49. Apr. 4, 2.50; Sept. 26, 6.25; Nov. 28, 6.25.

10-9-4cb. City of Grand Island. Highest observed stage in period of record, 2.00 on Apr. 4. Records available: 1935-49. Apr. 4, 2.00; Sept. 26, 6.00; Nov. 28, 6.16.

10-9-8cc. City of Grand Island. Records available: 1935-47. Measurements discontinued.

10-9-10bb. Herman. Highest observed stage in period of record, 6.35 on Apr. 11. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 7	8.30	Apr. 11	6.35	Sept. 6	8.69
Mar. 9	7.01	July 8	7.15	Nov. 1	8.70

10-9-28cc. Highest observed stage in period of record, 12.93 on July 8. Records available: 1946-49.

Jan. 7	13.82	Apr. 20	13.21	Sept. 8	14.05
Mar. 12	13.55	July 8	12.93	Nov. 1	14.00

10-10-8cc. Dahlstrom. Records available: 1931-49.

Jan. 6	22.23	Apr. 11	20.82	Sept. 6	22.35
Mar. 9	21.05	July 5	20.09	Nov. 1	21.60

10-10-13dd. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Jan. 7	3.29	Apr. 11	3.28	Sept. 9	4.21
Mar. 12	2.83	July 8	3.46	Nov. 4	3.80

10-11-15dc. Bouton. Highest observed stage in period of record, 15.20 on July 5. Records available: 1930-49.

Jan. 6	18.65	Apr. 11	17.78	Sept. 6	18.02
Mar. 9	18.15	July 5	15.20	Nov. 1	17.25

10-11-30bc. Weldon. Records available: 1930-49.

Jan. 6	19.63	Apr. 11	19.40	Nov. 1	18.49
Mar. 9	19.51	July 5	17.50		

10-12-21cc. Knight. Highest observed stage in period of record, 27.12 on July 5; lowest, 29.35 on Sept. 6. Records available: 1947-49.

Jan. 6	28.27	Apr. 12	27.85	Sept. 6	29.35
Mar. 9	28.10	July 5	27.12	Nov. 1	28.17

11-9-3bc. City of Grand Island. Records available: 1935-36, 1938-48. Measurements discontinued.

11-9-4cc. City of Grand Island. Records available: 1935-40, 1942-49. Oct. 3, 12.58.

11-9-4cd. City of Grand Island. Highest observed stage in period of record, 9.66 on Oct. 3. Records available: 1935-36, 1938-49. Oct. 3, 9.66.

11-9-8da. City of Grand Island. Records available: 1935-49. Oct. 3, 16.00.

11-9-8db. City of Grand Island. Records available: 1935-46, 1948. Measurements discontinued.

11-9-9aa. City of Grand Island. Records available: 1935-49. Oct. 3, 20.34.

11-9-9bd. City of Grand Island. Records available: 1935-49. Oct. 3, 16.83.

11-9-9cc. City of Grand Island. Records available: 1935-49. Oct. 3, 27.25.

11-9-12dc. City of Grand Island. Highest observed stage in period of record, 4.52 on Apr. 19. Records available: 1935-49. Apr. 4, 4.83; Apr. 19, 4.52; Sept. 26, 7.66; Nov. 28, 7.50.

11-9-15bb1. City of Grand Island. Records available: 1935-49. Oct. 3, 26.00.

11-9-15bb2. City of Grand Island. Records available: 1935-49. Oct. 3, 28.50.

11-9-15cc. City of Grand Island. Records available: 1935-47. Measurements discontinued.

11-9-15db. City of Grand Island. Records available: 1935-40, 1942-49. Oct. 3, 12.08.

11-9-15dd. City of Grand Island. Records available: 1935-49. Apr. 4, 7.16; Sept. 26, 8.92; Nov. 28, 9.16.

11-9-16ad. City of Grand Island. Records available: 1935-49. Oct. 3, 30.16.

11-9-16bc. City of Grand Island. Records available: 1935-49. Oct. 3, 28.42.

11-9-16bd. City of Grand Island. Records available: 1936-42, 1944-49. Oct. 3, 36.08.

11-9-16ca. City of Grand Island. Records available: 1935-49. Oct. 3, 35.83.

11-9-16cb. City of Grand Island. Records available: 1935-49. Oct. 3, 30.32.

11-9-16db. City of Grand Island. Records available: 1935-49. Oct. 3, 30.92.

11-9-17ba. City of Grand Island. Records available: 1935-49. Oct. 3, 14.83.

11-9-17bd. City of Grand Island. Records available: 1935-49. Oct. 3, 19.08.

11-9-17cd. City of Grand Island. Records available: 1935-36, 1938-49. Oct. 3, 31.16.

11-9-21bb. City of Grand Island. Records available: 1935-49. Oct. 3, 28.58.

11-9-21bd. City of Grand Island. Records available: 1935-49. Oct. 3, 30.25.

11-9-22cb. City of Grand Island. Lowest observed stage in period of record, 10.50 on Sept. 26. Records available: 1935-49. Apr. 4, 9.75; Sept. 26, 10.50; Nov. 28, 10.33.

11-9-26aa. City of Grand Island. Records available: 1935-49. Apr. 4, 3.75; Sept. 26, 6.25; Nov. 28, 6.50.

11-9-27bc. City of Grand Island. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	10.45	Apr. 11	8.21	Sept. 6	8.99	Nov. 4	9.56
Mar. 9	7.65	July 8	6.78	26	10.20	28	a 9.52
Apr. 4	a8.52						

a By Grand Island Water Department.

11-9-28ba. City of Grand Island. Records available: 1935-49. Apr. 4, 13.32; Sept. 26, 14.66; Nov. 28, 15.08.

11-9-29bb. City of Grand Island. Records available: 1935-49. Apr. 4, 20.92; Sept. 26, 21.08; Nov. 28, 21.17.

11-9-32cc. City of Grand Island. Records available: 1935-49. Apr. 4, 2.00; Sept. 26, 5.25; Nov. 28, 5.16.

11-9-34aa. City of Grand Island. Records available: 1935-49. Apr. 4, 3.58; Sept. 26, 6.00; Nov. 28, 6.16.

11-9-34cb. City of Grand Island. Records available: 1935-49.
Apr. 4, 3.66; Apr. 19, 3.40; Sept. 26, 6.00; Nov. 28, 6.50.

11-9-35dc. City of Grand Island. Records available: 1935-49.
Apr. 4, 2.08; Sept. 26, 5.38; Nov. 28, 5.00.

11-10-1cc. City of Grand Island. Records available: 1935-49.
Apr. 4, 6.16; Sept. 26, 6.66; Nov. 28, 6.92.

11-10-11dc. City of Grand Island. Records available: 1935-49.
Apr. 4, 6.32; Sept. 26, 6.34; Nov. 28, 6.50.

11-10-13ab. City of Grand Island. Records available: 1935-49.
Apr. 4, 9.08; Apr. 11, 9.06; Sept. 26, 9.34; Nov. 28, 10.35.

11-10-14dd. Thomas. Highest observed stage in period of record,
8.53 on July 5. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 6	10.99	Apr. 11	10.32	Sept. 6	9.02
Mar. 9	10.75	July 5	8.53	Nov. 1	9.29

11-10-16bb. Geological Survey, U. S. Dept. of Interior. Highest
observed stage in period of record, 8.02 on July 5. Records available:
1946-49.

Jan. 6	10.10	Apr. 11	9.57	Sept. 6	8.38
Mar. 9	9.83	July 5	8.02	Nov. 1	8.50

11-10-24cb. City of Grand Island. Records available: 1935-49.
Apr. 4, 13.75; Sept. 26, 13.16; Nov. 28, 14.35.

11-10-26dd. City of Grand Island. Highest observed stage in period
of record, 5.35 on Apr. 12. Records available: 1935-39, 1942-49.
Apr. 4, 5.50; Apr. 12, 5.35; Sept. 26, 8.16; Nov. 28, 8.16.

11-10-27dc. Geological Survey, U. S. Dept. of Interior. Highest
observed stage in period of record, 14.92 on July 5. Records available:
1946-49.

Jan. 5	17.55	Apr. 11	16.54	Sept. 6	15.15
Mar. 9	16.83	July 5	14.92	Nov. 1	15.64

11-11-25cc. Geological Survey, U. S. Dept. of Interior. Lowest
observed stage in period of record, 12.18 on June 25. Records available:
1946-49.

Lowest daily water level, from recorder charts

Day	Jan.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	a16.01	.....	15.49	15.16	14.68	12.36	13.87	14.96	14.61	14.74	14.83
2	a16.02	.....	15.49	15.14	14.68	12.39	13.95	14.90	14.52	14.75	14.81
3	a16.04	.....	15.48	15.13	14.70	12.41	13.99	14.88	14.63	14.75	14.83
4	a16.06	.....	15.47	15.14	14.68	12.44	14.10	14.85	14.63	14.77	14.85
5	a16.08	.....	15.46	15.15	14.67	12.48	14.22	14.85	14.60	14.77	14.82
6	16.10	.....	15.45	15.15	14.62	12.50	14.28	14.86	14.61	14.76	14.81
7	16.13	.....	15.44	15.12	14.52	12.52	14.37	14.86	14.65	14.74	14.85
8	16.15	.....	15.43	15.12	12.98	12.56	14.29	14.83	14.66	14.72	14.86
9	16.15	15.50	15.42	15.12	13.00	12.56	14.25	14.80	14.65	14.73	14.87
10	16.11	15.50	15.41	15.11	13.60	12.59	14.45	14.75	14.67	14.73	14.79
11	16.10	15.50	15.40	15.05	13.60	12.61	14.56	14.71	14.69	14.77	14.80
12	16.10	15.49	15.40	15.02	13.50	12.62	14.66	14.70	14.70	14.77	14.87
13	16.10	15.49	15.40	15.00	13.50	12.65	14.68	14.68	14.71	14.78	14.88
14	16.10	15.51	15.39	14.99	13.10	12.68	14.73	14.67	14.71	14.78	14.88
15	16.10	15.51	15.41	14.97	13.00	12.69	14.70	14.65	14.68	14.79	14.85
16	16.10	15.52	15.41	14.95	12.90	12.70	14.60	14.62	14.68	14.79	14.82
17	16.10	15.51	15.40	14.95	12.80	12.71	14.58	14.63	14.68	14.80	14.84
18	16.10	15.51	15.39	14.95	12.63	12.73	14.55	14.63	14.69	14.77	14.87
19	16.10	15.52	15.35	14.92	12.68	12.75	14.54	14.62	14.70	14.78	14.85
20	16.10	15.52	15.30	14.90	12.52	12.76	14.52	14.63	14.70	14.81	14.87
21	16.10	15.51	15.29	14.91	12.40	12.82	14.51	14.62	14.72	14.79	14.86
22	16.10	15.50	15.28	14.90	12.30	13.00	14.50	14.62	14.74	14.78	14.88
23	16.10	15.51	15.25	14.85	12.26	13.20	14.48	14.62	14.74	14.77	14.90
24	16.10	15.50	15.22	14.80	12.20	13.32	14.50	14.60	14.74	14.79	14.90

a Interpolated.

11-11-25cc--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
25	16.10	15.48	15.20	14.78	12.18	13.45	14.75	14.61	14.73	14.77	14.90
26	15.49	15.20	14.75	12.20	13.45	14.89	14.61	14.72	14.79	14.90
27	15.48	15.20	14.72	12.22	13.52	14.90	14.62	14.72	14.77	14.90
28	15.48	15.17	14.70	12.28	13.65	14.89	14.62	14.73	14.81	14.91
29	15.49	15.15	14.70	12.32	13.65	14.93	14.61	14.72	14.82	14.90
30	15.49	15.15	14.69	12.36	13.68	14.93	14.60	14.75	14.81	14.91
31	15.47	14.69	13.82	14.97	14.75					

a Interpolated.

11-11-32cb. Hughes. Records available: 1930-41, 1943-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 6	35.64	Apr. 11	35.34	Sept. 6	35.79
Mar. 9	35.60	July 5	34.70	Nov. 1	35.30

11-11-36cb. Batle. Highest observed stage in period of record, 19.90 on July 5. Records available: 1930-40, 1943-49.

Jan. 6	22.70	Apr. 11	22.25	Sept. 6	22.55
Mar. 9	22.54	July 5	19.90	Nov. 1	21.85

11-12-34dc. Stutzman. Highest observed stage in period of record, 25.59 on July 5. Records available: 1946-49.

Jan. 6	26.29	July 5	25.59	Nov. 1	26.15
Apr. 11	26.10	Sept. 6	26.40		

12-9-27cb. City of Grand Island. Records available: 1935-49.
Apr. 4, 6.92; Sept. 26, 5.58; Nov. 28, 5.66.12-9-32aa1. City of Grand Island. Records available: 1935-49.
Apr. 4, 8.25; Sept. 26, 9.16; Nov. 28, 9.67.

12-9-32aa2. Hall County Farm. Records available: 1946-49.

Jan. 5	12.29	Apr. 11	11.89	Nov. 1	11.67
Mar. 9	12.00	July 5	9.72		

12-9-32cc. City of Grand Island. Records available: 1935-49.
Apr. 4, 7.75; Sept. 26, 8.75; Nov. 28, 9.00.

12-11-24cd. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 3.54 on July 5. Records available: 1946-49.

Jan. 6	10.18	Apr. 11	6.44	Sept. 6	6.74
Mar. 9	9.71	July 5	3.54	Nov. 1	7.29

Hamilton County

9-6-34bb. Records available: 1934-42, 1946-48. No measurement made in 1949.

9-8-9dc. Phillips. Records available: 1934-42, 1944, 1946, 1948-49.
Apr. 27, 57.17; Oct. 20, 56.40.

11-5-5ba. Anderson & Madsen. Records available: 1948-49. Apr. 27, 85.90; Oct. 17, 86.07.

11-5-26cc. Klute. Highest observed stage in period of record, 82.53 on Apr. 27. Records available: 1948-49. Apr. 27, 82.52; Oct. 17, 82.85.

11-6-13cb. Swedberg. Records available: 1934-42, 1944, 1946-49.
Apr. 27, 93.05; Oct. 19, 93.41.

11-8-28bc. Rathje. Highest observed stage in period of record, 29.42 on July 8. Records available: 1946-49.

Jan. 7	30.49	Apr. 20	29.80	Nov. 1	30.28
Mar. 12	29.87	July 8	29.42		

12-7-21da. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter $1\frac{1}{4}$ inches, depth 15.0 feet. Measuring point, top of pipe, 1.5 feet above land-surface datum, 1,777.75 feet above sea level. Highest observed stage in period of record, 7.64 on June 14; lowest, 10.07 on Nov. 1. Records available: 1949. June 14, 7.64; July 11, 8.37; Sept. 1, 9.55; Nov. 1, 10.07.

13-5-3dd. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter $1\frac{1}{4}$ inches, depth 24.6 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum, 1,674.07 feet above sea level. Highest observed stage in period of record, 16.30 on June 14; lowest, 17.48 on Sept. 1. Records available: 1949. June 14, 16.30; July 11, 17.32; Sept. 1, 17.48; Nov. 7, 17.43.

13-5-19aa. Clayton. Highest observed stage in period of record, 23.91 on Mar. 7. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 3	24.75	Apr. 20	24.15	Sept. 1	25.68
Mar. 7	23.91	July 12	25.00	Nov. 7	25.82

13-6-27cc. Lock. Records available: 1935-40, 1942, 1944, 1946-49.

Jan. 3	9.42	Apr. 20	7.75	Sept. 1	9.85
Mar. 7	7.72	July 11	8.95	Nov. 7	9.70

Harlan County

1-17-1da. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 18	a6.62	May 23	a3.20	Oct. 21	a6.60	Dec. 1	6.33
Mar. 16	a5.36	June 22	a2.79	Nov. 8	6.42	Dec. 23	6.32

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-17-11aa. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 9.40 on June 22. Records available: 1948-49.

Jan. 18	a13.14	Apr. 19	a12.50	June 22	a 9.40	Oct. 21	a11.25
Mar. 16	a12.70	May 23	a11.88	July 22	a10.50	Dec. 23	12.27

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-17-12cb. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 3.51 on June 22. Records available: 1948-49.

Jan. 18	a6.88	May 23	a5.52	Oct. 21	a6.83	Dec. 1	7.07
Mar. 16	a6.04	June 22	a3.51	Nov. 10	7.00	23	7.02
Apr. 19	a5.98	July 22	a4.79				

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-17-12dd. Mrs. Godeken. Records available: 1946-49.

Jan. 19	a17.76	May 23	a16.31	Oct. 21	a17.02	Dec. 1	16.92
Mar. 16	a17.03	June 22	a14.80	Nov. 8	a17.01	23	17.16
Apr. 19	a16.74						

a By Bureau of Reclamation, U. S. Dept. of Interior.

1-17-13bb. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 11.01 on July 22. Records available: 1948-49.

Jan. 18	a13.67	May 23	a12.65	Oct. 21	a13.21	Dec. 1	13.68
Mar. 16	a13.06	June 22	a11.50	Nov. 8	13.47	23	13.69
Apr. 19	a12.83	July 22	a11.01				

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-18-33cd. Feese. Records available: 1934-42, 1944, 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	11.75	June 11	9.00	Oct. 8	10.80	Dec. 21	11.22
Apr. 7	10.80	Aug. 6	9.38	Nov. 19	11.02		

2-19-5cb. Short. Highest observed stage in period of record, 19.99 on June 11. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 10	20.96	June 11	19.99	Nov. 19	21.04
Apr. 7	20.32	Oct. 8	21.40		

2-19-17da. Korte. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	21.68	June 11	19.37	Oct. 8	21.72	Dec. 21	21.49
Apr. 7	20.12	Aug. 6	20.68	Nov. 19	21.63		

2-19-26bb. Highest observed stage in period of record, 34.75 on Aug. 6. Records available: 1948-49.

Feb. 10	34.92	June 11	34.79	Oct. 8	34.78	Dec. 21	34.76
Apr. 7	34.85	Aug. 6	34.75	Nov. 19	34.79		

2-19-28dd. University of Nebraska. Highest observed stage in period of record, 6.59 on June 11. Records available: 1940-41, 1946-49.

Feb. 10	8.35	June 11	6.59	Oct. 8	9.50	Dec. 21	9.03
Apr. 7	7.66	Aug. 6	8.92	Nov. 19	9.15		

2-19-34bc. Fishbeck. Highest observed stage in period of record, 19.53 on June 11. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 10	20.53	June 11	19.53	Nov. 19	21.34
Apr. 7	20.20	Oct. 8	21.80	Dec. 21	21.20

3-17-21da. Remke. Records available: 1935-42, 1948. No measurements made in 1949.

3-17-27bb. University of Nebraska. Records available: 1935-40, 1942, 1948. No measurements made in 1949.

3-20-7ab. Struve. Highest observed stage in period of record, 29.10 on June 11. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	29.70	June 11	29.10	Oct. 8	29.80	Dec. 21	29.45
Apr. 7	29.30	Aug. 6	29.95	Nov. 19	29.55		

3-20-16bb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 3.89 on June 11. Records available: 1946-49.

Feb. 10	7.50	June 11	3.89	Oct. 8	8.10	Dec. 21	7.40
Apr. 7	5.82	Aug. 6	7.40	Nov. 19	7.57		

3-20-18ca. Fish Implement Co. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 10	14.70	June 11	13.59	Nov. 19	14.77
Apr. 7	14.22	Oct. 8	14.77		

3-20-22dd. Murdock. Highest observed stage in period of record, 24.13 on June 11. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	24.87	June 11	24.13	Oct. 8	25.50	Dec. 21	24.81
Apr. 7	24.52	Aug. 6	25.06	Nov. 19	24.95		

3-20-25cc. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 10	14.32	June 11	11.56	Oct. 8	15.02	Dec. 21	14.97
Apr. 7	13.20	Aug. 5	13.23	Nov. 19	15.07		

Hayes County

5-32-25bc. Joy. Records available: 1934-43. Measurements discontinued.

5-33-30cb. Scott. Highest observed stage in period of record, 17.86 on June 9. Records available: 1946-49.

Apr. 6	18.83	July 19	a19.32	Oct. 6	19.40	Dec. 20	19.13
June 9	17.86	Aug. 26	a19.72	Nov. 17	19.14		

a By Bureau of Reclamation, U. S. Dept. of Interior.

5-33-31dc. University of Nebraska. Records available: 1937-44, 1946-49.

Feb. 8	12.92	July 19	a12.08	Aug. 26	13.92	Nov. 17	12.85
Apr. 6	12.14	Aug. 4	13.08	Oct. 6	13.30	Dec. 20	13.17
June 9	11.54						

a By Bureau of Reclamation, U. S. Dept. of Interior.

5-34-28bc. Schreiber. Highest observed stage in period of record, 57.03 on June 9. Records available: 1946-49.

Feb. 8	57.39	June 9	57.03	Sept. 2	a58.24	Nov. 17	57.68
Apr. 6	57.20	July 19	a57.32	Oct. 6	57.90	Dec. 20	57.61

a By Bureau of Reclamation, U. S. Dept. of Interior.

5-34-30ba. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 9.63 on Feb. 8. Records available: 1946-49.

Feb. 8	9.63	July 19	a10.93	Aug. 26	a11.38	Nov. 17	10.98
Apr. 6	10.45	Aug. 4	11.25	Oct. 6	11.16	Dec. 20	10.65
June 9	10.05						

a By Bureau of Reclamation, U. S. Dept. of Interior.

5-34-35ac. Lady. Highest observed stage in period of record, 28.02 on June 9; lowest, 30.94 on Aug. 4. Records available: 1948-49.

Feb. 8	29.34	June 9	28.02	Sept. 2	a29.95	Dec. 20	29.79
Apr. 6	28.57	Aug. 4	30.94	Oct. 6	29.90		

a By Bureau of Reclamation, U. S. Dept. of Interior.

5-35-17da. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 6.83 on Feb. 8. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 8	6.83	June 9	7.70	Nov. 17	8.69
Apr. 6	7.96	Aug. 4	9.20	Dec. 20	8.62

7-34-4ac. Laird & Ward Estate. Records available: 1934-41. Measurements discontinued.

Hitchcock County

2-33-2aa. Wertz. Highest observed stage in period of record, 9.51 on Apr. 4 and June 8. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	10.04	June 8	9.51	Sept. 12	a10.78	Nov. 17	10.40
Apr. 4	9.51	July 5	a10.56	Oct. 6	10.52	Dec. 19	10.35

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-33-3bd. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 44 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum, 2,682.78 feet above sea level. Highest observed stage in period of record, 10.08 on Dec. 19; lowest, 10.79 on Oct. 6. Records available: 1949. Oct. 6, 10.79; Nov. 17, 10.44; Dec. 19, 10.08.

2-33-3dd. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 40.4 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum, 2,680.70 feet above sea level. Highest observed stage in period of record, 8.64 on June 7; lowest, 9.55 on Oct. 6. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	a8.89	June 7	a8.64	Sept. 2	a9.50	Nov. 15	9.28
Mar. 11	a8.74	July 5	a8.89	Oct. 6	9.55	Dec. 18	9.22
Apr. 28	a8.73	Aug. 3	a9.54				

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-33-4ad. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 35 feet. Measuring point, top of pipe, 0.8 foot above land-surface datum, 2,393.83 feet above sea level. Highest observed stage in period of record, 12.54 on Dec. 19; lowest, 13.28 on Oct. 6. Records available: 1949. Sept. 7, 13.18, by Bureau of Reclamation, U. S. Dept. of Interior; Oct. 6, 13.28; Nov. 17, 12.87; Dec. 19, 12.54.

2-33-4da. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 35.7 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum, 2,685.93 feet above sea level. Highest observed stage in period of record, 7.41 on Dec. 19; lowest, 8.05 on Oct. 5. Records available: 1949. Oct. 5, 8.05; Nov. 16, 7.63; Dec. 19, 7.41.

2-33-6cb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 7.69 on Apr. 4. Records available: 1946-49.

Feb. 8	8.65	June 20	a8.74	Sept. 7	a10.14	Nov. 17	9.97
Apr. 4	7.69	July 5	9.32	Oct. 4	10.35	Dec. 19	9.65
June 6	8.94	Aug. 3	10.12				

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-33-8aaal. Bureau of Reclamation; U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 31.6 feet. Measuring point, top of pipe, 0.70 foot above land-surface datum, 2,692.73 feet above sea level. Highest observed stage in period of record, 0.80 on Apr. 28; lowest, 6.60 on Oct. 6. Records available: 1949.

Mar. 11	a0.94	July 5	a1.47	Sept. 2	a3.44	Nov. 15	2.97
Apr. 28	a.80	Aug. 3	a2.57	Oct. 6	6.60	Dec. 18	2.07
June 7	a1.14						

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-33-8aaa2. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 29.7 feet. Measuring point, top of pipe, 0.5 foot above land-surface datum, 2,695.00 feet above sea level. Highest observed stage in period of record, 1.95 on Mar. 11; lowest, 9.20 on Oct. 6. Records available: 1949.

Feb. 8	a2.79	June 7	a2.85	Sept. 2	a6.12	Nov. 15	5.75
Mar. 11	a1.95	July 5	a3.64	Oct. 6	9.20	Dec. 18	4.77
Apr. 28	a3.25	Aug. 3	a4.90				

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-33-8aad. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 30.0 feet. Measuring point, top of pipe, 0.5 foot above land-surface datum, 2,697.91 feet above sea level. Highest observed stage in period of record, 5.57 on Feb. 8; lowest, 12.15 on Oct. 4. Records available: 1949.

2-33-8aad--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. '8	a5.57	June 7	a5.65	Sept. 2	a8.76	Nov. 15	8.95
Mar. '11	a5.98	July 5	a5.81	Oct. 4	12.15	Dec. 18	7.90
Apr. '28	a5.98	Aug. 3	a7.59				

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-33-8ada. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 39.4 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum, 2,704.35 feet above sea level. Highest observed stage in period of record, 13.60 on Dec. 17; lowest, 15.17 on Oct. 6. Records available: 1949. Oct. 6, 15.17; Nov. 15, 14.90; Dec. 17, 13.60.

2-33-8dad. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 64.0 feet. Measuring point, top of pipe, 1.20 feet above land-surface datum, 2,752.92 feet above sea level. Highest observed stage in period of record, 50.13 on July 5; lowest, 50.90 on Oct. 5. Records available: 1949.

Feb. 8	a50.75	June 7	a50.25	Sept. 2	a50.90	Nov. 15	50.60
Mar. 11	a50.46	July 5	a50.13	Oct. 5	50.34	Dec. 18	50.82
Apr. 28	a50.32	Aug. 3	a50.20				

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-33-8dda. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 56.7 feet. Measuring point, top of pipe, 3.0 feet above land-surface datum, 2,762.11 feet above sea level. Highest observed stage in period of record, 46.02 on Nov. 15; lowest, 46.20 on Aug. 3. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level
Aug. 3	a46.20	Oct. 5	46.05	Dec. 18	46.10
Sept. 2	a46.03	Nov. 15	46.02		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-33-8ddd. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 56.7 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum, 2,775.41 feet above sea level. Highest observed stage in period of record, 55.15 on Sept. 2; lowest, 55.95 on Oct. 6. Records available: 1949.

Aug. 3	a55.30	Oct. 6	55.35	Dec. 17	55.29
Sept. 2	a55.15	Nov. 15	55.18		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-33-9ac. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 35.1 feet. Measuring point, top of pipe, 0.6 foot above land-surface datum, 2,715.07 feet above sea level. Highest observed stage in period of record, 27.17 on Mar. 11; lowest, 27.78 on Sept. 2. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	a27.50	June 7	a27.34	Sept. 2	a27.78	Nov. 15	27.56
Mar. 11	a27.17	July 5	a27.30	Oct. 5	27.67	Dec. 18	27.52
Apr. 28	a27.28	Aug. 3	a27.62				

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-33-9ad. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 39.6 feet. Measuring point, top of pipe, 0.5 foot above land-surface datum, 2,711.52 feet above sea level. Highest observed stage in period of record, 28.35 on July 5; lowest, 29.49 on Apr. 28. Records available: 1949.

Feb. 8	a28.86	June 7	a28.38	Sept. 2	a28.76	Nov. 15	28.73
Mar. 11	a28.68	July 5	a28.35	Oct. 5	28.79	Dec. 17	28.67
Apr. 28	a29.49	Aug. 3	a28.52				

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-33-9bca1. McConnell. Drilled irrigation well, diameter 24 inches, reported depth 29.0 feet. Measuring point, edge of casing, 0.5 foot above land-surface datum. Highest observed stage in period of record, 3.94 on June 7, 1949; lowest, 8.90 on Aug. 3, 1949. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
June 30, 1948	a5.05	Feb. 8, 1949	a3.99	Aug. 3, 1949	a8.90
Aug. 31	a5.05	Mar. 11	a4.07	Sept. 2	a4.68
Sept. 28	a6.25	Apr. 28	a4.22	Oct. 6	5.36
Oct. 27	a5.25	June 7	a3.94	Dec. 17	5.10
Dec. 3	a4.85	July 5	a4.50		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-33-9bca2. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter 1½ inches, depth 31.9 feet. Measuring point, top of pipe, 0.5 foot above land-surface datum, 2,704.95 feet above sea level. Highest observed stage in period of record, 15.50 on Feb. 8; lowest, 17.39 on Aug. 3. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	a15.50	June 7	a15.59	Sept. 2	a16.08	Nov. 15	16.35
Mar. 23	a15.70	July 5	a16.03	Oct. 6	16.35	Dec. 18	16.37
Apr. 28	a15.69	Aug. 3	a17.39				

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-33-9bcd. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter 1½ inches, depth 41.2 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum, 2,710.88 feet above sea level. Highest observed stage in period of record, 18.92 on Mar. 11; lowest, 20.11 on Dec. 17. Records available: 1949.

Feb. 8	a19.95	June 7	a19.17	Sept. 2	a19.34	Nov. 15	20.05
Mar. 11	a18.92	July 5	a19.34	Oct. 6	19.73	Dec. 17	20.11
Apr. 28	a19.19	Aug. 3	a19.28				

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-33-9bdb. McConnell. Drilled well, diameter 18 inches, reported depth 32.0 feet, used to supply swimming pool. Measuring point, hole in turbine base, 1.0 foot above land-surface datum. Highest observed stage in period of record, 13.21 on Feb. 8, 1949; lowest, 15.22 on Sept. 28, 1948. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level
June 30, 1948	a13.72	Mar. 11, 1949	a13.45	Sept. 2, 1949	13.72
Sept. 28	a15.22	Apr. 28	a13.50	Oct. 6	14.05
Oct. 27	a14.55	June 7	a13.33	Nov. 15	14.00
Dec. 3	a14.23	July 5	a13.84	Dec. 17	13.90
Feb. 8, 1949	a13.21	Aug. 3	a15.05		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-33-9cbb. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter 1½ inches, reported depth 31.5 feet. Measuring point, top of pipe, 0.6 foot above land-surface datum, 2,714.27 feet above sea level. Highest observed stage in period of record, 19.30 on June 7; lowest, 22.28 on Nov. 15. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	a20.00	June 7	a19.30	Sept. 2	a20.04	Nov. 15	22.28
Mar. 11	a19.72	July 5	a19.34	Oct. 6	21.25	Dec. 18	22.19
Apr. 28	a19.48	Aug. 3	a19.54				

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-33-3cbc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 35.6 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum, 2,727.11 feet above sea level. Highest observed stage in period of record, 27.79 on Sept. 2; lowest, 28.23 on Dec. 18. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level
Aug. 3	a27.81	Oct. 6	27.95	Dec. 18	28.23
Sept. 2	a27.79	Nov. 15	28.17		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-33-10ab. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 6.44 on Apr. 6. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 7	a6.80	July 5	a7.36	Sept. 2	a7.91	Nov. 15	7.40
Apr. 6	a6.44	Aug. 3	a7.97	Oct. 6	7.75	Dec. 17	7.26
June 8	a6.69						

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-34-7cd. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 34.0 feet. Measuring point, top of pipe, 0.5 foot above land-surface datum, 2,782.75 feet above sea level. Highest observed stage in period of record, 17.87 on Aug. 3; lowest, 18.40 on Oct. 6. Records available: 1949. Aug. 3, 17.87; by Bureau of Reclamation, U. S. Dept. of Interior; Oct. 6, 18.40; Nov. 17, 18.21; Dec. 19, 18.04.

2-34-8add. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 49.0 feet. Measuring point, top of pipe, 0.5 foot above land-surface datum, 2,779.09 feet above sea level. Highest observed stage in period of record, 29.96 on Dec. 19; lowest, 30.25 on Oct. 5. Records available: 1949. Oct. 5, 30.25; Nov. 17, 30.03; Dec. 19, 29.96.

2-34-8cbc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 42.10 feet. Measuring point, top of pipe, 0.8 foot above land-surface datum, 2,773.16 feet above sea level. Highest observed stage in period of record, 13.37 on Aug. 3; lowest, 14.12 on Oct. 5. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level
Aug. 3	a13.37	Oct. 5	14.12	Dec. 19	13.85
Sept. 7	a14.06	Nov. 17	14.02		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-34-8cdd. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 39.1 feet. Measuring point, top of pipe, 0.5 foot above land-surface datum, 2,760.22 feet above sea level. Highest observed stage in period of record, 5.28 on Dec. 19; lowest, 5.95 on Aug. 3 and Sept. 7. Records available: 1949.

Aug. 3	a5.95	Oct. 6	5.92	Dec. 19	5.28
Sept. 7	a5.95	Nov. 16	5.47		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-34-8da. Pollman. Highest observed stage in period of record, 18.24 on June 6. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	19.15	June 6	18.24	Aug. 3	19.76	Nov. 17	19.71
Apr. 4	18.40	July 5	a18.58	Oct. 5	19.60	Dec. 19	19.37

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-34-8dbc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 38.4 feet. Measuring point, top of pipe, 0.5 foot above land-surface datum, 2,765.46 feet above sea level. Highest observed stage in period of record, 11.18 on Aug. 3; lowest, 11.73 on Sept. 7. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level
Aug. 3	11.18	Oct. 5	11.70	Dec. 19	11.28
Sept. 7	11.73	Nov. 17	11.45		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-34-11dc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 10.06 on June 8. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	10.45	June 8	10.06	Sept. 2	11.02	Nov. 15	10.73
Mar. 11	10.48	July 5	10.33	Oct. 6	11.05	Dec. 17	10.57
Apr. 28	10.20	Aug. 3	10.90				

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-34-12da. L. Hall. Drilled irrigation well, diameter 24 inches, reported depth 38 feet. Measuring point, edge of casing, 1.0 foot above land-surface datum. Highest observed stage in period of record, 13.75 on June 7, 1949; lowest, 15.70 on Sept. 28, 1948. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 30, 1948	15.10	Feb. 8, 1949	14.80	Aug. 3, 1949	15.32		
Aug. 31	14.85	Mar. 11	14.42	Sept. 2	15.38		
Sept. 28	15.70	Apr. 28	14.06	Oct. 6	15.01		
Oct. 27	15.36	June 7	13.75	Nov. 15	15.18		
Dec. 3	15.48	July 5	14.16	Dec. 17	15.10		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-34-16cc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 36.2 feet. Measuring point, top of pipe, 1.8 feet above land-surface datum, 2,767.76 feet above sea level. Highest observed stage in period of record, 13.43 on Aug. 3; lowest, 13.90 on Oct. 5. Records available: 1949.

Aug. 3	13.43	Oct. 5	13.90	Dec. 17	13.69
Sept. 2	13.71	Nov. 15	13.84		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-34-16db. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 39.2 feet. Measuring point, top of pipe, 0.5 foot above land-surface datum, 2,762.56 feet above sea level. Highest observed stage in period of record, 14.16 on Aug. 3; lowest, 14.47 on Oct. 5. Records available: 1949.

Aug. 3	14.16	Oct. 5	14.47	Dec. 18	14.22
Sept. 2	14.44	Nov. 15	14.35		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-34-17bbb. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 46 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum, 2,773.70 feet above sea level. Highest observed stage in period of record, 13.49 on Dec. 19; lowest, 14.55 on Aug. 3. Records available: 1949.

Aug. 3	14.55	Oct. 5	13.94	Dec. 19	13.49
Sept. 7	14.06	Nov. 15	13.85		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-34-17bc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 42.7 feet. Measuring point, top of pipe, 0.4 foot above land-surface datum, 2,769.84 feet above sea level. Highest observed stage in period of record, 8.52 on Sept. 7; lowest, 9.60 on Oct. 5. Records available: 1949.

2-34-17bc--Continued.

Date	Water level	Date	Water level	Date	Water level
Aug. 3	a8.61	Oct. 5	9.60	Dec. 19	9.20
Sept. 7	a8.52	Nov. 15	9.40		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-34-18abb. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 44 feet. Measuring point, top of pipe, 0.5 foot above land-surface datum, 2,781.84 feet above sea level. Highest observed stage in period of record, 17.77 on Dec. 19; lowest, 18.27 on Sept. 2. Records available: 1949.

Aug. 3	a17.90	Oct. 5	18.17	Dec. 19	17.77
Sept. 2	a18.27	Nov. 17	17.94		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-34-18acb. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 51.9 feet. Measuring point, top of pipe, 0.5 foot above land-surface datum, 2,765.66 feet above sea level. Highest observed stage in period of record, 20.50 on Dec. 19; lowest, 21.22 on Aug. 3. Records available: 1949.

Aug. 3	a21.22	Oct. 5	20.87	Dec. 19	20.50
Sept. 2	a21.03	Nov. 17	20.62		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-34-18acc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 40 feet. Measuring point, top of pipe, 0.6 foot above land-surface datum, 2,774.78 feet above sea level. Highest observed stage in period of record, 8.30 on Sept. 2; lowest, 8.65 on Oct. 5. Records available: 1949.

Aug. 3	a8.61	Oct. 5	8.65	Dec. 19	8.31
Sept. 2	a8.30	Nov. 17	8.42		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-34-18bbb. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 51 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum, 2,793.06 feet above sea level. Highest observed stage in period of record, 23.82 on Dec. 19; lowest, 25.11 on Sept. 2. Records available: 1949.

Aug. 3	a24.94	Oct. 5	24.44	Dec. 19	23.82
Sept. 2	a25.11	Nov. 17	24.09		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-34-18bcc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 45.8 feet. Measuring point, top of pipe, 0.5 foot above land-surface datum, 2,784.37 feet above sea level. Highest observed stage in period of record, 12.87 on Dec. 19; lowest, 14.15 on Sept. 2. Records available: 1949.

Aug. 3	a13.61	Oct. 5	13.35	Dec. 19	12.87
Sept. 2	a14.15	Nov. 17	13.04		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-34-19aad. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 32.2 feet. Measuring point, top of pipe, 1.5 feet above land-surface datum, 2,775.00 feet above sea level. Highest observed stage in period of record, 10.41 on Dec. 19; lowest, 10.98 on Oct. 5. Records available: 1949.

Aug. 3	a10.88	Oct. 5	10.98	Dec. 19	10.41
Sept. 2	a10.84	Nov. 17	10.57		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-34-19abc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 24.5 feet. Measuring point, top of pipe, 1.5 feet above land-surface datum, 2,771.52 feet above sea level. Highest observed stage in period of record, 2.74 on Dec. 19; lowest, 3.73 on Aug. 3. Records available: 1949.

2-34-19abc--Continued.

Date	Water level	Date	Water level	Date	Water level
Aug. 3	a3.73	Oct. 5	3.55	Dec. 19	2.74
Sept. 2	a3.68	Nov. 17	2.92		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-34-19acb1. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 25.6 feet. Measuring point, top of pipe, at land-surface datum, 2,773.01 feet above sea level. Highest observed stage in period of record, 5.17 on Dec. 19; lowest, 6.06 on Sept. 2. Records available: 1949.

Aug. 3	a6.05	Oct. 5	5.94	Dec. 19	5.17
Sept. 2	a6.06	Nov. 17	5.37		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-34-19acb2. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 29.3 feet. Measuring point, top of pipe, 1.5 feet above land-surface datum, 2,773.84 feet above sea level. Highest observed stage in period of record, 3.72 on Dec. 19; lowest, 4.29 on Oct. 5. Records available: 1949.

Aug. 3	a3.76	Oct. 5	4.29	Dec. 19	3.72
Sept. 2	a4.25	Nov. 17	3.99		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-34-19bbb. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 33.6 feet. Measuring point, top of pipe, 0.4 foot above land-surface datum, 2,780.37 feet above sea level. Highest observed stage in period of record, 7.99 on Dec. 19; lowest, 9.05 on Aug. 3. Records available: 1949.

Aug. 3	a9.05	Oct. 5	8.87	Dec. 19	7.99
Sept. 2	a8.38	Nov. 17	8.22		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-34-20abc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 46.0 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum, 2,784.49 feet above sea level. Highest observed stage in period of record, 26.75 on Aug. 3; lowest, 27.32 on Oct. 5. Records available: 1949.

Aug. 3	a26.75	Oct. 5	27.32	Dec. 19	26.97
Sept. 2	a27.15	Nov. 17	27.16		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-34-20bbc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 28.9 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum, 2,770.28 feet above sea level. Highest observed stage in period of record, 7.23 on Dec. 19; lowest, 7.96 on Sept. 2. Sept. 2, 7.96, by Bureau of Reclamation, U. S. Dept. of Interior; Oct. 5, 7.91; Nov. 17, 7.38; Dec. 19, 7.23. Records available: 1949.

2-34-20bbd. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 30.7 feet. Measuring point, top of pipe, 0.6 foot above land-surface datum, 2,769.80 feet above sea level. Highest observed stage in period of record, 8.62 on Dec. 19; lowest, 9.37 on Sept. 2. Records available: 1949.

Aug. 3	a9.03	Oct. 5	9.34	Dec. 19	8.62
Sept. 2	a9.37	Nov. 17	8.82		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-35-12dcc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 38.7 feet. Measuring point, top of pipe, 0.5 foot above land-surface datum, 2,798.31 feet above sea level. Highest observed stage in period of record, 21.95 on Oct. 5; lowest, 23.99 on Sept. 2. Records available: 1949.

2-35-12dec--Continued.

Date	Water level	Date	Water level	Date	Water level
Aug. 3	a23.44	Oct. 5	21.95	Dec. 19	23.45
Sept. 2	a23.99	Nov. 17	23.67		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-35-12ddd. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 52.2 feet. Measuring point, top of pipe, 0.5 foot above land-surface datum, 2,794.56 feet above sea level. Highest observed stage in period of record, 25.30 on Dec. 19; lowest, 26.55 on Sept. 2. Records available: 1949.

Aug. 3	a25.78	Oct. 5	25.92	Dec. 19	25.30
Sept. 2	a26.55	Nov. 17	25.52		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-35-13bbc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 44 feet. Measuring point, top of pipe, 1.2 feet above land-surface datum, 2,799.95 feet above sea level. Highest observed stage in period of record, 19.17 on Aug. 3; lowest, 20.10 on Oct. 5. Records available: 1949.

Aug. 3	a19.17	Oct. 5	20.10	Dec. 19	19.59
Sept. 2	a19.99	Nov. 17	19.81		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-35-13bbd. Geological Survey, U. S. Dept. of Interior. Published in previous reports as 2-35-13bb. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	15.25	Apr. 28	a14.52	July 5	a13.96	Nov. 17	14.55
Mar. 11	a14.60	June 6	14.19	Aug. 3	14.14	Dec. 19	15.03
Apr. 4	14.40	20	a14.01	Oct. 5	14.74		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-35-13bdc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, reported depth 40.1 feet. Measuring point, top of pipe, 0.5 foot above land-surface datum, 2,790.81 feet above sea level. Highest observed stage in period of record, 13.36 on Dec. 19; lowest, 13.88 on Oct. 5. Records available: 1949. Sept. 2, 13.56; by Bureau of Reclamation, U. S. Dept. of Interior; Oct. 5, 13.88; Nov. 17, 13.65; Dec. 19, 13.36.

2-35-13ccc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 40.7 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum, 1,793.81 feet above sea level. Highest observed stage in period of record, 11.13 on Dec. 9; lowest, 11.49 on Oct. 5. Records available: 1949. Aug. 3, 11.14; by Bureau of Reclamation, U. S. Dept. of Interior; Oct. 5, 11.49; Nov. 17, 11.32; Dec. 19, 11.13.

2-35-13cd. Stratton Gun Club. Abandoned drilled stock well, diameter 3 inches. Measuring point, edge of casing, at land-surface datum. Highest observed stage in period of record, 3.42 on June 20, 1949; lowest, 6.30 on Sept. 28, 1948. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
July 22, 1948	a5.39	Feb. 8, 1949	a6.06	Aug. 3, 1949	a5.49
Aug. 31	a5.95	Mar. 11	a4.63	Sept. 2	a6.09
Sept. 28	a6.30	Apr. 28	a4.00	Oct. 5	5.80
Oct. 27	a5.98	June 20	a3.42	Nov. 17	5.30
Dec. 3	a5.65	July 5	a4.51	Dec. 19	5.12

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-35-13dcc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 40.1 feet. Measuring point, top of pipe, 0.5 foot above land-surface datum, 2,785.01 feet above sea level. Highest observed stage in period of record, 7.90 on Dec. 19; lowest, 8.56 on Sept. 2 and Oct. 5. Records available: 1949.

Aug. 3	a7.98	Oct. 5	8.56	Dec. 19	7.90
Sept. 2	a8.56	Nov. 17	8.10		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-35-21bc. Eloomfield. Highest observed stage in period of record, 19.77 on June 6. Records available: 1934-41, 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	20.80	June 6	19.77	Sept. 13	20.08	Nov. 17	20.22
Apr. 4	20.40	Aug. 3	19.79	Oct. 5	20.18	Dec. 19	20.17

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-35-23aa. W. Hall. Abandoned drilled stock well, diameter 4 inches, depth 27 feet. Measuring point, edge of casing, at land-surface datum. Highest observed stage in period of record, 12.25 on June 20, 1949; lowest, 14.30 on Oct. 2, 1948. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
July 22, 1948	a13.64	Apr. 28, 1949	a12.69	Sept. 2, 1949	a12.70
Sept. 28	a13.50	June 20	a12.25	Oct. 5	13.95
Oct. 27	a14.30	July 5	a12.47	Nov. 17	13.64
Dec. 3	a13.95	Aug. 3	a13.34	Dec. 19	13.42

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-35-23cb. W. G. Hall. Abandoned drilled stock well, diameter 3 inches, depth 41 feet. Measuring point, edge of casing, at land-surface datum. Highest observed stage in period of record, 26.93 on June 20, 1949; lowest, 29.05 on Oct. 5, 1949. Records available: 1948-49.

July 22, 1948	a28.13	Mar. 11, 1949	27.85	Sept. 2, 1949	a27.38
Aug. 31	a28.45	Apr. 28	27.69	Oct. 5	29.05
Sept. 28	a28.65	June 20	26.93	Nov. 17	28.00
Oct. 27	a28.58	July 5	27.15	Dec. 19	27.89
Dec. 3	a28.40	Aug. 3	27.69		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-35-24aa. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 3.67 on June 9. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	5.12	July 5	a5.37	Sept. 2	a6.40	Nov. 16	5.59
Apr. 6	4.21	Aug. 2	6.39	Oct. 5	6.25	Dec. 19	5.40
June 9	3.67						

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-35-24abc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 34.8 feet. Measuring point, top of pipe, 0.6 foot above land-surface datum, 2,782.48 feet above sea level. Highest observed stage in period of record, 4.49 on Dec. 18; lowest, 5.52 on Sept. 2. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level
Aug. 3	a4.78	Oct. 5	5.20	Dec. 18	
Sept. 2	a5.52	Nov. 17	4.67		4.49

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-35-24ada. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 27.5 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum, 2,776.81 feet above sea level. Highest observed stage in period of record, 2.89 on Dec. 19; lowest, 3.66 on Oct. 5. Records available: 1949.

Aug. 3	a3.60	Oct. 5	3.66	Dec. 19	2.89
Sept. 2	a3.61	Nov. 18	3.12		

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-35-24add. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 30.2 feet. Measuring point, top of pipe, 1.20 feet above land-surface datum, 2,782.71 feet above sea level. Highest observed stage in period of record, 3.40 on Aug. 3; lowest, 8.58 on Oct. 5. Records available: 1949. Aug. 3, 3.40; Oct. 5, 8.58; Nov. 17, 8.31; Dec. 19, 8.03.

2-35-24bc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter 1½ inches, depth 44.4 feet. Measuring point, top of pipe, 1.2 feet above land-surface datum, 2,891.40 feet above sea level. Highest observed stage in period of record, 17.48 on Aug. 3; lowest, 18.15 on Oct. 5. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level
Aug. 3	a17.48	Oct. 5	18.15	Dec. 19	17.98
Sept. 2	a17.91	Nov. 17	18.08		

a By Bureau of Reclamation, U. S. Dept. of Interior.

3-31-14bc. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	14.08	July 5	a14.70	Sept. 12	a14.55	Nov. 18	14.60
Apr. 4	14.90	Aug. 4	14.84	Oct. 6	14.77	Dec. 17	14.62
June 8	14.00						

a By Bureau of Reclamation, U. S. Dept. of Interior.

3-31-17cd. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 6.15 on June 8. Records available: 1946-49.

Feb. 7	7.00	July 5	a7.86	Sept. 12	a8.20	Nov. 15	7.65
Apr. 4	6.92	Aug. 1	8.69	Oct. 3	8.33	Dec. 17	7.54
June 8	6.15						

a By Bureau of Reclamation, U. S. Dept. of Interior.

3-31-20da. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Feb. 7	8.42	July 5	7.46	Sept. 12	8.18	Nov. 15	8.25
Apr. 4	8.15	Aug. 1	7.92	Oct. 3	8.45	Dec. 17	8.27
June 8	7.33						

3-31-29bb. Records available: 1947-49. Aug. 1, 14.12; Oct. 3, 13.77.

3-32-11bb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 12.65 on Feb. 8. Records available: 1946-49.

Feb. 8	12.65	June 9	12.83	Oct. 6	14.01	Dec. 20	13.50
Apr. 6	12.95	Aug. 4	13.60	Nov. 17	13.55		

3-32-12cc. Mrs. Morthole. Records available: 1946-49. Feb. 9, 21.22; Apr. 6, 21.39; Aug. 26, 21.80.

3-32-26dd. Meintz. Lowest observed stage in period of record, 29.92 on Aug. 1. Records available: 1946-49.

Feb. 7	28.61	July 5	a27.95	Sept. 12	a28.72	Nov. 15	28.55
June 8	28.08	Aug. 1	29.92	Oct. 3	28.88	Dec. 17	28.42

a By Bureau of Reclamation, U. S. Dept. of Interior.

3-32-31aa. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 5.32 on Apr. 4. Records available: 1946-49.

Feb. 8	5.94	July 19	a5.80	Sept. 12	a6.50	Nov. 17	6.43
Apr. 4	5.32	Aug. 3	6.48	Oct. 6	6.67	Dec. 19	6.30
June 8	5.42						

a By Bureau of Reclamation, U. S. Dept. of Interior.

3-33-35dc. Lawrence. Highest observed stage in period of record, 9.38 on June 10. Records available: 1935-43, 1946-49.

Feb. 8	10.57	June 10	9.38	Oct. 6	10.96	Dec. 20	10.39
Apr. 4	9.95	Aug. 3	10.57	Nov. 17	10.64		

4-32-30dc. Highest observed stage in period of record, 17.15 on Apr. 6. Records available: 1948-49.

Feb. 8	17.36	June 9	17.58	Aug. 4	18.35	Oct. 6	18.20
Apr. 6	17.15	July 19	a18.03	Sept. 2	a18.67	Dec. 20	18.02

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-32-33db. Bower. Highest observed stage in period of record, 33.75 on June 9; lowest, 37.80 on Oct. 6. Records available: 1946, 1949.

Date	Water level	Date	Water level	Date	Water level
Apr. 6	34.18	Sept. 2	35.52	Nov. 17	34.30
June 9	33.75	Oct. 6	37.80	Dec. 20	34.21

4-33-8bb. Handel. Highest observed stage in period of record, 54.43 on June 9. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	54.85	June 9	54.43	Oct. 6	55.64	Dec. 20	55.02
Apr. 6	54.51	July 19	54.65	Nov. 17	55.27		

4-33-23ad. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 11.70 on June 9. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 9	11.82	July 19	13.00	Sept. 2	13.47	Nov. 17	12.72
Apr. 6	11.73	Aug. 4	13.57	Oct. 6	13.35	Dec. 20	12.67
June 9	11.70						

a By Bureau of Reclamation, U. S. Dept. of Interior.

Holt County

26-12-24aa. University of Nebraska. Records available: 1937-42. No measurement made in 1949.

27-9-27dd. University of Nebraska. Highest observed stage in period of record, 0.30 on Apr. 11. Records available: 1937-49. Apr. 11, 0.30; Apr. 19, 0.54; June 7, 1.40; June 23, 1.67.

27-9-34da. US 56. University of Nebraska. Records available: 1935-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 21	5.96	May 23	8.33	Aug. 1	9.57	Nov. 7	8.57
Apr. 26	7.31	June 10	8.06	Sept. 26	8.46	Dec. 22	8.38
May 10	8.79	23	9.16	Oct. 26	8.46	Dec. 5	8.33

27-14-28bc. Petersen. Records available: 1935-42. No measurement made in 1949.

28-14-29aa. University of Nebraska. Records available: 1935-42. No measurement made in 1949.

29-11-9bb. Highest observed stage in period of record, 6.75 on Aug. 31. Records available: 1947-49. Aug. 31, 6.75, by Bureau of Reclamation, U. S. Dept. of Interior.

29-11-21bb. Murphy. Measurements made by Bureau of Reclamation, U. S. Dept. of Interior. Records available: 1947-49. June 6, 23.49; July 25, 23.04; Aug. 31, 22.82; Oct. 6, 21.55.

29-12-10cb. School district. Highest observed stage in period of record, 24.95 on Oct. 6. Measurements made by Bureau of Reclamation, U. S. Dept. of Interior. Records available: 1947-49. June 6, 25.47; July 26, 25.40; Aug. 31, 25.48; Oct. 6, 24.95.

29-13-13dd. Highest observed stage in period of record, 38.92 on Aug. 31. Measurements made by Bureau of Reclamation, U. S. Dept. of Interior. Records available: 1947-49. June 6, 39.42; July 25, 40.18; Aug. 31, 38.92; Oct. 6, 39.22.

30-13-27cc. Highest observed stage in period of record, 27.82 on Oct. 6. Measurements made by Bureau of Reclamation, U. S. Dept. of Interior. Records available: 1947-49. July 25, 27.87; Aug. 31, 28.52; Oct. 6, 27.82.

30-14-23dd. Records available: 1947-48. No measurement made in 1949.

31-14-35cb. Highest observed stage in period of record, 26.46 on July 25. Measurements made by Bureau of Reclamation, U. S. Dept. of Interior. Records available: 1947-49. July 25, 26.46; Aug. 31, 26.56; Oct. 6, 26.54.

Hooker County

35-46-34dd. University of Nebraska. Lowest observed stage in period of record, 20.87 on May 13. Records available: 1935-42, 1944-49.

Date	Water level	Date	Water level	Date	Water level
May 13	20.87	July 15	19.21	Nov. 23	20.46
June 8	19.70	Sept. 16	20.02		

Howard County

13-9-26dd. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 4.24 on June 1. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 11	6.83	July 1	4.26	Sept. 6	6.22	Nov. 9	6.58
May 3	4.43	5	4.74	30	6.32	Dec. 6	6.67
June 1	4.24	Aug. 10	6.59	Nov. 1	6.55		

13-9-27ca. Placks Estate. Highest observed stage in period of record, 16.18 on July 1. Records available: 1934-42, 1944, 1948-49.

May 4	17.26	July 1	16.18	Sept. 30	16.57	Dec. 6	16.62
31	16.87	Aug. 10	16.39	Nov. 9	16.57		

13-10-4ad. Abandoned driven domestic well. Measuring point, top of pipe, 2.50 feet above land-surface datum. Highest observed stage in period of record, 6.13 on May 22; lowest, 11.81 on Sept. 29. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level
May 22	6.13	Aug. 5	11.63	Nov. 9	10.59
July 8	9.14	Sept. 29	11.81	Dec. 6	9.79

13-10-7cd. Abandoned stock well, diameter $1\frac{1}{4}$ inches. Measuring point, top of pipe, 0.50 foot above land-surface datum. Highest observed stage in period of record, 0.05 on May 23; lowest, 3.22 on Sept. 28 and Nov. 8. Records available: 1949.

May 23	0.05	Aug. 5	3.00	Nov. 8	3.22
July 8	1.90	Sept. 28	3.22	Dec. 6	3.17

13-11-20dd. Drilled stock well, diameter 6 inches. Measuring point, top of casing, 1.0 foot above land-surface datum. Highest observed stage in period of record, 41.29 on July 8; lowest, 42.60 on Sept. 28. Records available: 1949.

May 27	41.41	Sept. 28	42.60	Dec. 6	42.48
July 8	41.29	Nov. 9	42.45		

13-11-28da. Hadenfelt. Drilled irrigation well, diameter 18 inches, reported depth 50.0 feet. Measuring point, hole in turbine base, at land-surface datum. Highest observed stage in period of record, 7.67 on July 8; lowest, 9.70 on Aug. 5. Records available: 1949.

May 26	7.88	Aug. 5	9.70	Nov. 8	9.51
July 8	7.67	Sept. 28	9.38	Dec. 6	9.66

13-11-29cb. Geological Survey, U. S. Dept. of Interior. Drilled and driven observation well, diameter $1\frac{1}{4}$ inches, depth 11 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 4.14 on July 8; lowest, 5.29 on Sept. 23. Records available: 1949.

July 8	4.14	Sept. 23	5.29	Dec. 6	5.18
Aug. 5	5.14	Nov. 8	5.17		

13-11-36aa. Rief. Drilled irrigation well, diameter 18 inches, reported depth 80 feet. Measuring point, hole under pump base, at land-surface datum. Highest observed stage in period of record, 8.15 on July 8; lowest, 8.36 on Dec. 6. Records available: 1949.

13-11-36aa--Continued.

Date	Water level	Date	Water level	Date	Water level
May 27	6.63	Sept. 28	8.28	Dec. 6	8.36
July 8	6.15	Nov. 8	8.32		

13-12-27aa. Geological Survey, U. S. Dept. of Interior. Drilled and driven observation well, diameter $1\frac{1}{4}$ inches, depth 10.7 feet. Measuring point, top of pipe, 1.3 feet above land-surface datum. Highest observed stage in period of record, 3.76 on July 8; lowest, 5.27 on Dec. 6. Records available: 1949.

July 8	3.76	Sept. 23	4.65	Dec. 6	5.27
Aug. 5	4.11	Nov. 8	5.12		

13-12-29ba. Mrs. Young. Highest observed stage in period of record, 24.36 on July 8. Records available: 1934-42, 1948-49.

May 3	24.95	Aug. 5	25.08	Nov. 8	26.42
July 8	24.36	Sept. 23	25.77		

13-12-32cb. Geological Survey, U. S. Dept. of Interior. Drilled and driven observation well, diameter $1\frac{1}{4}$ inches, depth 20.9 feet. Measuring point, top of pipe, 3.0 feet above land-surface datum. Highest observed stage in period of record, 3.88 on July 8; lowest, 6.77 on Sept. 23. Records available: 1949.

July 8	3.88	Sept. 23	6.77	Dec. 6	6.72
Aug. 5	5.99	Nov. 8	6.72		

14-10-4ca. Svoboda. Highest observed stage in period of record, 27.21 on Nov. 9. Records available: 1948-49.

May 2	27.79	Aug. 10	27.33	Nov. 9	27.21
June 1	27.58	Sept. 29	28.00	Dec. 6	27.71

14-10-8dd. Geological Survey, U. S. Dept. of Interior. Drilled and driven observation well, diameter $1\frac{1}{4}$ inches, depth 18.8 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 5.24 on Aug. 10; lowest, 6.45 on Dec. 6. Records available: 1949. Aug. 10, 5.24; Sept. 28, 5.44; Nov. 9, 5.97; Dec. 6, 6.45.

14-10-14bb. University of Nebraska. Highest observed stage in period of record, 4.92 on May 2. Records available: 1934-42, 1944, 1948-49.

May 2	4.92	Aug. 5	6.23	Nov. 9	6.68
31	5.21	Sept. 29	6.58	Dec. 6	6.70

14-10-28dd. School district. Domestic well, diameter $1\frac{1}{4}$ inches. Measuring point, top of pipe, 3.0 feet above land-surface datum. Highest observed stage in period of record, 4.06 on May 22; lowest, 5.47 on Dec. 6. Records available: 1949.

May 22	4.06	Sept. 29	5.42	Dec. 6	5.47
Aug. 5	5.40	Nov. 9	5.44		

14-10-30ba. Domestic well. Measuring point, top of casing, 0.5 foot above land-surface datum. Highest observed stage in period of record, 13.40 on Aug. 10; lowest, 16.66 on Sept. 29. Records available: 1949. May 24, 13.80; Aug. 10, 13.40; Sept. 29, 16.66; Nov. 9, 13.81.

14-11-36dc. Stock well. Measuring point, top of casing, 2.0 feet above land-surface datum. Highest observed stage in period of record, 34.59 on Dec. 6; lowest, 36.56 on Aug. 10. Records available: 1949. May 24, 36.02; Aug. 10, 36.56; Dec. 6, 34.59.

15-9-9aa. Edwards. Highest observed stage in period of record, 31.00 on Oct. 6 and 7; lowest, 32.91 on Feb. 20. Records available: 1948-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	32.74	32.86	32.86	32.36	31.90	31.60	31.28	31.10	31.07	31.01	31.08	31.18
2	32.68	32.86	32.85	32.33	31.92	31.61	31.28	31.11	31.04	31.03	31.12	31.17
3	32.71	32.81	32.84	32.32	31.89	31.63	31.28	31.10	31.03	31.02	31.12	31.18
4	32.70	32.83	32.80	32.31	31.89	31.62	31.29	31.09	31.06	31.06	31.14	31.20
5	32.74	32.81	32.79	32.28	31.91	.....	31.29	31.09	31.07	31.03	31.14	31.12
6	32.78	32.83	32.83	32.25	31.91	31.54	31.31	31.09	31.05	31.00	31.12	31.18
7	32.75	32.82	32.82	32.24	31.90	31.53	31.31	31.08	31.05	31.00	31.08	31.23
8	32.80	32.85	32.74	32.24	31.86	31.51	31.32	31.06	31.08	31.09	31.02	31.20
9	32.85	32.88	32.76	32.22	31.85	31.50	31.33	31.07	31.08	31.09	31.02	31.11
10	32.85	32.88	32.77	32.22	31.84	31.48	31.33	31.06	31.07	31.06	31.03	31.11
11	32.84	32.83	32.78	32.21	31.84	31.47	31.32	31.07	31.01	31.07	31.03	31.24
12	32.80	32.86	32.74	32.17	31.83	31.43	31.28	31.07	31.03	31.08	31.10	31.66
13	32.77	32.89	32.76	32.12	31.80	31.43	31.25	31.07	31.10	31.12	31.10	.....
14	32.78	32.87	32.77	32.14	31.80	31.42	31.22	31.07	.....	31.14	31.11	.....
15	32.78	32.83	32.77	32.16	31.78	31.42	31.20	31.07	.....	31.10	31.11	.....
16	32.85	32.89	32.70	32.10	31.72	31.39	31.16	31.07	.....	31.06	31.15	.....
17	32.84	32.86	32.69	32.12	31.74	31.36	31.12	31.07	.....	31.07	31.15	.....
18	32.80	32.89	32.69	32.10	31.75	31.38	31.15	31.06	.....	31.05	31.15	.....
19	32.85	32.89	32.67	32.08	31.76	31.36	31.15	31.07	31.08	31.07	31.11	31.27
20	32.83	32.91	32.63	32.08	31.75	31.32	31.11	31.09	31.06	31.07	31.16	31.30
21	32.82	32.89	32.59	32.04	31.69	31.35	31.16	31.08	31.06	31.09	31.17	31.29
22	32.82	32.86	.....	32.04	31.72	31.32	31.13	31.06	31.06	31.09	.....	31.32
23	32.83	32.85	.....	32.04	31.73	31.28	31.11	31.06	31.07	31.15	.....	31.35
24	32.86	32.88	.....	32.02	31.73	31.29	31.09	31.06	31.05	31.15	.....	31.43
25	32.86	32.89	.....	32.00	31.69	31.28	31.09	31.06	31.02	31.12	.....	31.31
26	32.84	32.87	.....	31.99	31.68	31.28	31.08	31.05	31.05	.....	.....	31.29
27	32.79	32.88	.....	32.01	31.66	31.28	31.12	31.07	31.06	.....	.....	31.28
28	32.86	32.89	.....	31.99	31.65	31.28	31.14	31.07	31.05	.....	31.11	31.29
29	.....	.....	.....	31.95	31.63	31.26	.....	31.05	31.05	.....	31.17	31.28
30	.....	.....	.....	31.91	31.64	31.25	.....	31.08	31.02	.....	31.17	31.26
31	32.83	.....	.....	.....	31.64	.....	.....	31.07	.....	31.08	.....	31.24

a Interpolated.

15-9-12cb. Baker. Drilled irrigation well, diameter 4 feet, depth 35 feet. Measuring point, edge of concrete curb, at land-surface datum. Highest observed stage in period of record, 8.27 on June 30, 1949; lowest, 11.06 on Oct. 1, 1948. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
May 21, 1948	10.26	June 2, 1949	8.51	Sept. 27, 1949	9.71
Oct. 1	11.06	30	8.27	Nov. 7	9.72
Apr. 26, 1949	8.91	Aug. 3	9.21	Dec. 5	9.88

15-10-12ca. Hanson. Highest observed stage in period of record, 64.63 on June 30; lowest, 66.98 on Aug. 3. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 26	65.28	June 30	64.63	Sept. 27	66.27	Dec. 5	65.51
May 31	64.88	Aug. 3	66.98	Nov. 10	65.70		

15-10-19ab. Ward. Lowest observed stage in period of record, 11.53 on Sept. 2. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
May 2	9.96	Sept. 2	11.53	Dec. 6	11.24
June 30	9.88	Nov. 9	11.24		

15-10-34cb. Mrs. Anderson. Highest observed stage in period of records 16.66 on June 30. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 19	17.97	June 30	16.66	Nov. 9	17.31
May 31	17.74	Sept. 27	17.35	Dec. 6	17.45

16-11-7cc. Lind. Highest observed stage in period of record, 16.31 on Nov. 29. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
May 2	18.02	June 30	18.01	Nov. 2	19.24
31	18.08	Sept. 2	19.36	29	16.31

16-11-27dc. Mrs. Augustyn. Records available: 1934-43, 1948. No measurements made in 1949.

16-11-32ab. Gerdes. Highest observed stage in period of record, 16.75 on June 30; lowest, 18.56 on Aug. 3. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 2	17.12	June 30	16.75	Sept. 2	17.74	Nov. 29	17.63
31	17.09	Aug. 3	18.56	Nov. 2	17.56		120.62

Jefferson County

No measurement made in 1949.

Johnson County

No measurement made in 1949.

Kearney County

5-13-4bc. Larson. Highest observed stage in period of record, 120.37 on Jan. 14. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 14	120.37	June 10	120.57	Sept. 28	120.97
Apr. 18	120.77	July 27	120.58	Nov. 21	120.92

5-13-18cd. Christensen. Highest observed stage in period of record, 106.17 on July 27. Records available: 1948-49. Apr. 18, 106.60; June 13, 106.27; July 27, 106.17; Sept. 28, 106.24.

5-13-33cc. Raun. Highest observed stage in period of record, 138.65 Nov. 21; lowest, 140.60 on July 27. Records available: 1947-49.

Jan. 14	138.98	June 13	138.86	Sept. 28	139.14
Apr. 18	139.34	July 27	140.60	Nov. 21	138.65

5-14-16cb. Peterson. Records available: 1947-49.

Jan. 17	142.04	June 13	141.62	Sept. 28	142.02
Apr. 18	141.98	July 27	141.59	Nov. 25	141.70

5-14-33bb. Mrs. Nielson. Highest observed stage in period of record, 158.22 on Nov. 25. Records available: 1948-49.

Jan. 17	158.39	June 13	158.44	Sept. 28	158.37
Apr. 18	158.52	July 27	158.38	Nov. 25	158.22

5-15-3ba. Thomsen. Stevens Type A-35 60-day automatic water-stage recorder installed Sept. 15. Highest observed stage in period of record, 103.24 on Nov. 8. Records available: 1947-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	104.58	.....	104.59	.....	104.39	104.24
2	104.38	.....	104.56	104.59	104.51	104.52
3	104.56	104.53	104.53	104.64	104.45	104.65
4	104.73	104.53	104.43	104.64	104.45	104.60
5	104.89	104.50	104.53	104.50	104.60	104.47
6	104.91	104.59	104.75	104.48	104.60	104.33
7	104.86	104.45	104.70	104.52	104.60	104.34
8	104.93	104.74	104.58	104.52	104.36	104.33
9	a105.08	104.85	104.69	104.58	104.42	104.40
10	a105.09	104.89	104.70	104.64	104.42	104.40

a Interpolated.

5-15-3ba--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
11	a105.06	104.54	104.68	104.64	104.42	104.33
12	104.78	104.65	104.60	104.39	104.42	104.18
13	104.51	104.65	104.67	104.33	104.32	104.29
14	104.52	104.65	104.81	104.70	104.35	104.33
15	104.80	104.51	.....	104.74	104.34	104.30
16	105.03	104.66	.....	104.59	104.28	104.25
17	.....	104.66	.....	104.53	104.25	104.38
18	.....	104.70	.....	104.62	a104.45	104.59
19	.....	104.82	.....	104.53	a104.25	104.50
20	.....	104.88	104.30	104.43	104.45	104.28
21	.....	104.70	104.52	104.39	104.00	104.41
22	.....	104.63	104.52	104.51	.....	104.33
23	.....	104.51	104.48	104.57	.....	104.12
24	.....	104.70	104.53	104.46	.....	104.12
25	.....	104.72	104.53	104.37	.....	104.24
26	.....	104.58	104.53	104.58	104.35	104.30
27	.....	104.77	104.51	104.61	104.32	104.42
28	.....	104.77	104.55	104.55	104.30	104.45
29	.....	.....	.....	104.38	104.32	104.32
30	.....	.....	.....	104.16	104.29	104.41
31	.....	.....	.....	.....	.....	.....

a Interpolated.

Lowest daily water level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	104.48	104.37	104.47	104.12	104.03	104.17
2	104.43	104.39	104.26	104.10	104.16	104.09
3	104.30	104.36	104.11	104.18	104.12	104.29
4	104.24	.....	104.30	104.20	104.20	104.37
5	104.23	.....	.....	104.07	104.22	103.73
6	104.23	104.52	.....	103.90	104.08	103.91
7	104.28	104.52	.....	103.90	103.90	104.11
8	104.40	104.42	.....	104.36	103.24	103.97
9	104.51	104.43	.....	104.36	103.30	103.59
10	104.47	104.50	.....	104.20	103.33	103.53
11	104.32	104.52	.....	104.30	.....	104.18
12	104.26	104.52	104.54	104.30	.....	104.24
13	104.25	104.44	104.57	104.35	.....	104.30
14	104.32	104.44	104.38	104.40	.....	104.29
15	104.31	104.45	104.28	104.25	104.08	103.97
16	104.26	104.48	104.02	104.00	104.19	103.66
17	104.11	104.53	104.22	104.04	104.20	103.84
18	104.34	104.42	104.35	103.95	104.15	103.85
19	104.34	104.48	104.36	104.11	103.92	103.89
20	104.17	104.54	104.15	104.10	104.23	103.95
21	104.44	104.47	104.33	104.18	104.30	103.92
22	104.46	104.41	104.25	104.19	104.00	.....
23	104.37	104.40	104.18	104.35	104.86	.....
24	104.27	104.50	104.18	104.35	103.99	.....
25	104.26	104.58	104.00	104.12	104.05	.....
26	104.32	104.62	104.22	104.12	103.86	.....
27	104.49	104.43	104.22	103.98	103.86	.....
28	104.53	104.43	104.30	104.05	104.07	.....
29	104.66	104.43	104.20	104.05	104.19	.....
30	104.61	104.43	104.05	104.11	104.19	.....
31	104.55	104.48	.....	104.08	.....	.....

5-15-9cb. Olson. Highest observed stage in period of record, 111.56 on Sept. 28. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 16	111.75	July 27	111.75	Nov. 24	111.64
June 13	111.91	Sept. 28	111.56		

5-16-6ac. Falk. Highest observed stage in period of record, 119.40 on Nov. 24. Records available: 1948-49. Apr. 15, 120.33; June 10, 120.02; Sept. 27, 119.70; Nov. 24, 119.40.

5-16-30da. Caswell. Highest observed stage in period of record, 136.31 on June 10. Records available: 1947-49. Jan. 20, 136.51; June 10, 136.51.

6-13-16db. Youngson. Highest observed stage in period of record, 86.58 on Nov. 21. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 17	87.11	June 10	86.94	Nov. 21	86.58
Apr. 18	87.10	Sept. 28	86.89		

6-14-9bc. Altitude of measuring-point 2,149.74 feet above sea level. Lowest observed stage in period of record, 87.22 on Nov. 25. Records available: 1948-49.

Jan. 17	87.68	June 10	87.37	Nov. 25	87.22
Apr. 15	87.56	Sept. 28	87.84		

6-14-21db. Larson. Highest observed stage in period of record, 103.65 on Nov. 25. Records available: 1947-49.

Jan. 17	104.12	June 13	103.69	Nov. 25	103.65
Apr. 18	104.02	Sept. 28	103.97		

6-14-25ba. Highest observed stage in period of record, 89.24 on Nov. 25. Records available: 1947-49.

Apr. 18	90.66	July 27	89.35	Nov. 25	89.24
June 10	89.50	Sept. 28	89.48		

6-15-1cb. Youngson. Highest observed stage in period of record, 69.51 on Nov. 24. Records available: 1948-49. Jan. 17, 70.50; Apr. 12, 70.28; June 10, 70.32; Nov. 24, 69.51.

6-15-11ab. Bang. Highest observed stage in period of record, 71.35 on Nov. 24. Records available: 1948-49.

Jan. 17	72.29	June 10	72.15	Sept. 28	71.47
Apr. 12	72.04	July 28	73.14	Nov. 24	71.35

6-15-14bb. Stadler. Highest observed stage in period of record, 81.36 on Nov. 24. Records available: 1947-49. Jan. 20, 82.15; Apr. 18, 81.83; Sept. 27, 81.80; Nov. 24, 81.36.

6-15-22ac. Worth. Highest observed stage in period of record, 95.15 on Nov. 24. Records available: 1947-49.

Jan. 20	96.11	June 10	95.76	Nov. 24	95.15
Apr. 19	95.87	Sept. 27	95.44		

6-15-32ab. Stadler. Altitude of measuring point, 2,200.48 feet above sea level. Highest observed stage in period of record, 90.40 on Nov. 24. Records available: 1948-49.

Jan. 18	91.19	June 10	90.98	Nov. 24	90.40
Apr. 15	91.25	Sept. 27	90.65		

6-16-14ad. Johnson. Altitude of measuring point 2,218.62 feet above sea level. Highest observed stage in period of record, 80.20 on Nov. 25; lowest, 82.65 on Apr. 12. Records available: 1948-49. Apr. 12, 82.65; May 26, 81.69; Sept. 27, 80.67; Nov. 25, 80.20.

6-16-20bb1. Carlson. Highest observed stage in period of record, 82.33 on Nov. 24. Records available: 1934-42, 1946-49.

Apr. 9	84.35	Aug. 1	83.95	Nov. 24	82.33
May 26	84.34	Sept. 27	83.22		

6-16-25cb. Lorenzen. Highest observed stage in period of record, 96.29 on Nov. 25. Records available: 1947-49.

Jan. 18	97.31	June 10	97.11	Nov. 25	96.29
Apr. 15	97.45	Sept. 27	96.59		

7-13-20aa. Gleason. Highest observed stage in period of record, 54.80 on Nov. 25. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 19	55.87	June 10	55.28	Sept. 28	55.10
Apr. 18	55.60	July 28	55.08	Nov. 25	54.80

7-14-12cd. Shearer. Altitude of measuring point 2,110.05 feet above sea level. Highest observed stage in period of record, 51.94 on Sept. 28; lowest, 53.32 on Apr. 19. Records available: 1948-49.

Jan. 19	53.13	June 10	53.10	Sept. 28	51.94
Apr. 19	53.32	July 28	52.36	Nov. 24	52.00

7-14-18bc. Newbold. Altitude of measuring point 2,129.13 feet above sea level. Highest observed stage in period of record, 33.76 on Nov. 24. Records available: 1948-49.

Jan. 19	34.65	June 10	34.57	Nov. 24	33.76
Apr. 13	34.57	Sept. 28	34.10		

7-14-20ba. Burchall. Altitude of measuring point 2,156.26 feet above sea level. Highest observed stage in period of record, 74.72 on Nov. 24; lowest, 75.75 on June 10. Records available: 1948-49.

Jan. 19	75.56	June 10	75.75	Nov. 24	74.72
Apr. 13	75.69	Sept. 28	74.84		

7-14-30db. Oman. Highest observed stage in period of record, 69.10 on Nov. 24. Records available: 1947-49.

Jan. 19	70.42	June 10	70.34	Nov. 24	69.10
Apr. 13	70.40	Sept. 28	69.27		

7-15-1lad. Hokser. Highest observed stage in period of record, 33.30 on Nov. 24. Records available: 1947-49. Apr. 12, 34.20; June 13, 33.97; Sept. 28, 33.50; Nov. 24, 33.30.

7-16-8dc. Kring Estate. Highest observed stage in period of record, 16.63 on Nov. 24. Records available: 1947-49.

Jan. 20	17.52	May 26	17.20	Nov. 24	16.63
Apr. 12	17.30	Sept. 27	16.76		

7-16-1lidd. Black. Highest observed stage in period of record, 25.77 on Nov. 24. Records available: 1947-49.

Jan. 20	26.79	May 26	26.50	Sept. 28	25.87
Apr. 9	26.69	July 28	25.98	Nov. 24	25.77

7-16-23da. Keene. Highest observed stage in period of record, 64.77 on Nov. 24. Records available: 1947-49.

Jan. 20	66.07	May 26	65.70	Nov. 24	64.77
Apr. 9	65.72	Sept. 28	65.23		

7-16-25aa. Schneider. Altitude of measuring point 2,183.43 feet above sea level. Highest observed stage in period of record, 46.70 on Nov. 24. Records available: 1948-49.

Apr. 9	47.69	July 29	47.33	Nov. 24	46.70
May 26	47.68	Sept. 28	47.03		

8-13-12cb. Hall. Highest observed stage in period of record, 4.17 on Apr. 20. Records available: 1946-49.

Jan. 7	6.37	Apr. 20	4.17	Sept. 9	6.06
Mar. 12	5.37	July 8	4.68	Nov. 4	6.02

8-13-16bc. Howard. Highest observed stage in period of record, 3.18 on Apr. 20. Records available: 1946-49.

Jan. 7	5.50	Apr. 20	3.18	Sept. 9	5.13
Mar. 12	4.52	July 8	3.50	Nov. 4	4.99

8-14-13db. Yensen. Records available: 1930-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 7	8.45	Apr. 20	6.60	Nov. 4	8.40
Mar. 12	7.52	Sept. 8	8.73		

8-14-19cc. Nielson. Records available: 1946-49.

Jan. 7	5.25	Apr. 20	3.56	Sept. 9	5.22
Mar. 12	4.42	July 8	3.55	Nov. 4	5.10

8-14-23ba. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Jan. 7	4.65	Apr. 20	3.23	Sept. 9	5.25
Mar. 12	3.83	July 8	3.79	Nov. 4	5.12

8-15-21dc. Raffety. Records available: 1946-49.

Jan. 7	6.15	Apr. 20	4.08	Sept. 8	6.50
Mar. 12	5.23	July 8	4.65	Nov. 4	6.36

8-16-23dd. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Jan. 7	5.00	Apr. 18	2.42	Sept. 8	4.75
Mar. 12	4.19	July 8	3.50	Nov. 4	4.85

8-16-28aa. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Jan. 7	6.98	Apr. 16	4.53	Sept. 9	6.70
Mar. 12	6.20	July 8	4.95	Nov. 4	6.72

Keith County

13-35-6dd. Central Nebraska Public Power and Irrigation District. Altitude of measuring point 3,064.88 feet above sea level. Lowest observed stage in period of record, 10.98 on Dec. 13. Records available: 1940-46, 1948-49. July 20, 9.34; Aug. 12, 10.02; Oct. 6, 10.56; Dec. 13, 10.98.

13-36-3cb. Central Nebraska Public Power and Irrigation District. Altitude of measuring point 3,110.11 feet above sea level. Records available: 1938-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 9	9.53	May 5	8.98	July 7	7.33	Oct. 6	9.15
Mar. 4	8.97	June 8	9.33	Aug. 12	8.91	Dec. 13	9.08
Apr. 12	9.04						

13-36-6bc. Central Nebraska Public Power and Irrigation District. Records available: 1936-49.

Feb. 9	2.96	May 5	4.23	July 7	2.69	Oct. 6	5.27
Mar. 4	3.74	June 8	3.57	Aug. 12	5.32	Dec. 13	4.39
Apr. 12	3.32						

13-36-8cc. Geological Survey, U. S. Dept. of Interior. Measurements supplied through courtesy of Platte Valley Public Power and Irrigation District. Highest observed stage in period of record, 1.52 on June 13. Records available: 1946-49.

Lowest daily water level, from recorder charts

Day	Feb.	Mar.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	2.85	2.64	3.75	4.33	4.03	3.43	....
2	2.95	2.69	3.67	4.30	4.00	3.37	....
3	2.44	3.12	2.97	2.77	3.73	4.30	3.98	3.47	....
4	2.47	3.17	2.82	2.84	3.78	4.31	3.95	3.46	....
5	2.55	3.17	2.83	....	3.81	4.31	3.93	3.47	....
6	2.60	3.17	2.68	2.81	3.88	....	3.92	3.46	....
7	2.63	3.06	2.48	2.86	3.94	....	3.93	3.43	....
8	2.71	2.17	2.52	2.88	3.98	4.20	3.97	3.43	....
9	3.12	2.73	2.21	2.55	2.94	4.03	4.20	3.98	3.42	....

13-36-8cc--Continued.

Lowest daily water level, from recorder charts

Day	Feb.	Mar.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
10	3.12	2.76	2.29	2.58	3.00	4.04	4.18	3.92	3.42	....
11	3.05	2.77	2.53	2.59	3.05	4.07	4.18	3.86	3.42	....
12	3.04	2.78	2.63	....	2.95	4.11	4.19	3.82	3.42	3.35
13	3.02	2.80	2.71	1.52	3.02	4.12	4.19	3.82	3.40	....
14	2.98	2.84	2.45	1.66	3.08	4.15	4.19	3.83	3.40	....
15	2.98	2.84	2.29	1.77	3.13	4.16	4.19	3.82	3.40	....
16	3.01	....	2.29	1.90	3.19	....	4.18	3.84	3.41	....
17	2.99	2.84	2.40	2.05	3.27	4.18	4.20	3.80	3.41	....
18	2.87	2.88	2.55	1.98	3.30	4.18	4.20	3.82	3.40	....
19	2.81	2.88	2.62	1.97	3.32	4.20	....	3.78	3.38	....
20	2.80	2.90	2.66	2.03	3.33	4.22	4.21	3.63	3.38	....
21	2.78	2.91	2.55	2.07	3.38	4.23	4.24	3.60	3.39	....
22	2.66	2.92	2.24	2.14	3.41	4.27	4.25	3.58	3.36	....
23	2.40	2.93	2.30	2.16	3.47	4.29	4.26	3.56	3.35	....
24	2.32	2.94	2.25	2.16	3.54	4.32	4.26	....	3.33	....
25	2.29	....	2.42	2.27	3.60	4.34	4.26	3.54	3.34	....
26	2.28	....	2.53	2.34	3.63	4.36	4.26	3.54	3.34	....
27	2.32	....	2.65	2.37	3.68	4.38	4.23	3.50	3.34	....
28	2.37	....	2.73	2.42	3.74	4.38	4.23	3.50	3.36	....
29	....	....	2.76	2.50	3.74	4.38	4.22	3.50	....	....
30	....	....	2.82	2.58	3.73	4.36	4.19	3.48	....	....
31	....	....	2.84	....	3.75	4.35	....	....	....	....

13-36-9ad. Geological Survey, U. S. Dept. of Interior. Measurements supplied through courtesy of Platte Valley Public Power and Irrigation District. Records available: 1946-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1.84	....	....	....	1.15	1.50	2.53	2.83	2.55	2.02	....
2	1.84	....	....	....	1.26	1.54	2.55	2.83	2.46	2.02	....
327	1.17	1.19	1.62	2.59	2.83	2.40	2.00	....
433	1.12	.72	1.68	2.64	2.82	2.38	1.98	....
535	1.10	.84	....	2.68	2.80	2.34	1.97	....
641	.98	.24	1.35	2.75	....	2.36	1.95	....
739	.12	....	1.42	2.80	....	2.41	1.93	....
841	.22	....	1.41	2.82	2.64	2.45	1.93	....
945	.49	.42	1.49	2.84	2.63	2.45	1.91	....
1041	.64	.66	1.58	2.84	2.60	2.42	1.89	....
1180	.87	1.60	2.86	2.59	2.24	1.88	....
1293	.87	1.34	2.88	2.59	2.30	1.77	1.60
1396	(a)	1.48	2.88	2.58	2.36	1.77	....
1407	.14	1.44	2.90	2.57	2.37	1.77	....
1526	.30	1.57	2.90	2.57	2.37	1.78	....
1613	.60	1.65	....	2.58	2.39	1.77	....
1752	.18	.79	1.73	2.87	2.60	2.40	1.75
1856	.43	.52	1.82	2.87	2.61	2.40	1.74
1959	.51	.72	1.87	2.84	2.61	2.39	1.74
2063	.52	.91	1.88	2.85	2.64	2.31	....
2165	.12	1.02	1.95	2.87	2.64	2.20	1.78
2228	.71	.23	1.08	2.00	2.90	2.64	2.16	1.75
2310	.71	.43	1.10	2.09	2.92	2.64	2.15	1.71
2404	.58	.30	1.11	2.18	2.94	2.64	2.13	1.68
2500	....	.49	1.20	2.25	2.94	2.66	2.10	1.68
2607	....	.73	1.28	2.27	2.94	2.67	2.09	1.65
2710	....	.86	1.29	2.34	2.94	2.67	2.07	1.65
2810	....	.95	1.31	2.40	2.93	2.67	2.06	1.65
2994	1.42	2.40	2.90	2.67	2.05	....
30	1.05	1.48	2.42	2.86	b2.66	2.05	....
31	1.05	....	2.48	2.83	2.04	....	....

a Above land-surface datum.

b Following rise caused by influent seepage.

13-37-3ab. Altitude of measuring point 3,146.47 feet above sea level.
Records available: 1935-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 4	13.40	May 5	13.79	July 7	12.14	Oct. 6	14.60
Apr. 12	13.96	June 8	13.96	Aug. 12	13.58	Dec. 13	13.94

13-37-5ad. Central Nebraska Public Power and Irrigation District.
Records available: 1936-49.

Mar. 4	10.75	May 5	11.55	July 7	10.29	Oct. 6	12.53
Apr. 12	11.47	June 8	11.76	Aug. 12	12.59	Dec. 13	12.34

13-38-3ba. Central Nebraska Public Power and Irrigation District.
Records available: 1936-49.

Feb. 9	13.00	May 5	13.02	July 7	12.04	Oct. 6	14.16
Mar. 5	12.62	June 8	12.68	Aug. 12	13.84	Dec. 13	13.57
Apr. 12	12.59						

13-38-6ca. Central Nebraska Public Power and Irrigation District.
Records available: 1936-49.

Jan. 21	13.59	Apr. 12	12.53	July 7	11.69	Oct. 6	14.80
Feb. 9	13.20	May 5	12.99	Aug. 12	14.52	Dec. 14	14.16
Mar. 5	12.68	June 8	12.79				

13-39-19cd. McGinley. Published incorrectly in previous reports as 13-40-19cd. Altitude of measuring point 3,314.61 feet above sea level.
Records available: 1935-41, 1944, 1949.

Feb. 9	43.15	May 5	42.79	July 5	42.74	Oct. 6	42.68
Mar. 4	42.70	June 8	41.93	Aug. 12	42.99	Dec. 13	42.97
Apr. 12	42.69						

13-39-34dd. Peters Estate. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, add 67.62. Highest observed stage in period of record, 166.07 on Oct. 6. Records available: 1935-42, 1949. Apr. 12, 166.69; Oct. 6, 166.07.

13-40-22bb. Central Nebraska Public Power and Irrigation District. Driven observation well, diameter 2 inches, depth 12 feet. Measuring point, top of pipe, 0.9 foot above land-surface datum, 3,293.04 feet above sea level. Highest observed stage in period of record, 2.64 on May 8, 1942; lowest, 9.24 on Oct. 6, 1943. Measurements through 1947 supplied through courtesy of Central Nebraska Public Power and Irrigation District.
Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 31, 1939	6.28	Jan. 2, 1941	8.56	Mar. 19, 1943	6.82
Feb. 28	6.40	Feb. 4	8.44	May 13	7.68
Apr. 4	5.44	Mar. 3	8.18	June 11	6.88
May 2	5.94	Apr. 10	8.44	July 9	7.56
June 1	7.55	May 5	8.29	Aug. 2	8.33
30	8.02	June 6	8.38	Sept. 15	8.97
Aug. 1	8.50	July 1	8.44	Oct. 6	9.24
31	8.74	Aug. 4	8.76	Nov. 5	8.74
Sept. 30	8.87	Sept. 2	8.87	Dec. 9	8.36
Oct. 30	8.71	Oct. 1	8.60	Jan. 15, 1944	8.40
Dec. 1	8.63	Nov. 4	8.21	June 8	7.19
Jan. 7, 1940	8.49	Dec. 1	7.77	July 10	7.75
Feb. 2	8.40	Feb. 2, 1942	7.33	Aug. 11	8.06
29	8.03	26	7.18	Sept. 16	8.60
Apr. 1	7.95	Apr. 7	6.63	Oct. 9	8.62
30	8.34	May 8	2.64	Jan. 10, 1945	7.59
May 24	8.48	Aug. 12	7.96	Feb. 13	7.40
June 27	8.67	Sept. 9	8.35	Mar. 8	7.48
July 25	8.92	Oct. 8	7.95	Apr. 10	7.74
Aug. 29	9.07	Nov. 13	7.45	Aug. 2	8.22
Oct. 1	9.07	Dec. 15	7.31	Oct. 16	7.85
31	8.86	Jan. 27, 1943	6.90	Dec. 3	7.47

13-40-22bb--Continued.

Date	Water level	Date	Water level	Date	Water level
Jan. 31, 1946	7.11	Dec. 3, 1947	7.20	Apr. 12	6.34
Apr. 15	6.67	July 8, 1948	7.28	May 5	6.94
May 8	7.58	Aug. 5	7.62	June 8	6.59
June 4	7.85	Sept. 13	8.39	July 7	5.54
July 18	8.21	Oct. 9	8.41	Aug. 12	7.77
Aug. 6	8.42	Nov. 8	7.74	Oct. 7	7.52
Nov. 22	7.70	29	7.03	Dec. 14	7.02
June 26, 1947	6.30	Mar. 5, 1949	6.14		

16-38-7aa. US 58. Central Nebraska Public Power and Irrigation District. Measurements supplied through courtesy of Central Nebraska Public Power and Irrigation District. Lowest observed stage in period of record, 10.50 on Aug. 31. Records available: 1936-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 1	10.40	June 2	9.70	Sept. 30	10.40	Nov. 30	10.30
28	10.40	July 29	10.20	Oct. 31	10.40	Dec. 31	10.30
Apr. 30	10.00	Aug. 31	10.50				

16-38-30ab. University of Nebraska. Records available: 1935-42, 1944. No measurement made in 1949.

Keya Paha County

No measurement made in 1949.

Kimball County

No measurement made in 1949.

Knox County

No measurement made in 1949.

Lancaster County

No measurement made in 1949.

Lincoln County

9-29-4cb. Roethemeyer. Records available: 1934-42, 1944. Measurements discontinued.

10-32-17cc. Fristo. Records available: 1934-42, 1944. Measurements discontinued.

11-26-16bb. Central Nebraska Public Power and Irrigation District. Highest observed stage in period of record, 7.75 on July 7. Records available: 1938-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 13	9.79	Apr. 19	8.72	Sept. 8	7.96
Mar. 11	9.66	July 7	7.75	Nov. 3	8.70

12-26-35db. McWha. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 13	10.47	Apr. 19	8.70	Sept. 8	10.40
Mar. 11	9.76	July 6	8.55	Nov. 3	10.52

12-27-14aa. University of Nebraska. Records available: 1935-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 13	5.51	Apr. 19	4.41	Sept. 7	6.24
Mar. 11	5.04	July 6	4.40	Nov. 3	6.47

12-27-16aa. Central Nebraska Public Power and Irrigation District. Lowest observed stage in period of record, 5.77 on Nov. 3. Records available: 1938-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 13	4.42	Apr. 19	3.73	Sept. 8	5.57
Mar. 11	4.03	July 6	3.20	Nov. 3	5.77

12-27-20dd. Central Nebraska Public Power and Irrigation District. Records available: 1938-49.

Jan. 13	14.04	Apr. 19	13.64	Sept. 8	13.85
Mar. 11	13.90	July 7	13.52	Nov. 3	14.06

12-27-27ad. Central Nebraska Public Power and Irrigation District. Records available: 1938-49.

Mar. 11	3.95	July 7	3.92	Nov. 3	4.33
Apr. 19	3.41	Sept. 8	4.37		

12-27-28dd. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 11.79 on July 7. Records available: 1947-49.

Jan. 13	11.85	Apr. 19	11.92	Sept. 8	12.16
Mar. 11	12.28	July 7	11.79	Nov. 4	12.34

12-27-36ad. Central Nebraska Public Power and Irrigation District. Highest observed stage in period of record, 2.87 on Nov. 3. Records available: 1938-49.

Mar. 11	4.92	July 7	4.52	Nov. 3	2.87
Apr. 19	4.85	Sept. 8	4.65		

12-28-9bc. Central Nebraska Public Power and Irrigation District. Highest observed stage in period of record, 4.70 on Apr. 19. Records available: 1938-49.

Jan. 13	4.82	Apr. 19	4.70	Sept. 8	5.20
Mar. 11	4.77	July 7	4.98	Nov. 3	4.91

12-28-14dd. Central Nebraska Public Power and Irrigation District. Records available: 1938-49.

Jan. 13	27.60	Apr. 19	27.60	Sept. 8	27.82
Mar. 11	27.62	July 7	27.69	Nov. 3	27.55

12-28-15ba. Central Nebraska Public Power and Irrigation District. Records available: 1938-49.

Jan. 13	12.10	Apr. 19	11.90	Sept. 8	12.15
Mar. 11	12.05	July 6	11.91	Nov. 3	12.09

13-27-32bd. Central Nebraska Public Power and Irrigation District. Records available: 1938-49.

Jan. 13	3.59	Apr. 19	2.45	Sept. 8	4.57
Mar. 11	2.50	July 6	3.22	Nov. 3	3.92

13-28-16dd. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 2.70 on Apr. 19. Records available: 1947-49. Apr. 19, 2.70; July 6, 4.11; Sept. 8, 6.01; Nov. 3, 5.44.

13-28-21da. Central Nebraska Public Power and Irrigation District. Records available: 1938-49.

Jan. 13	4.62	Apr. 19	1.69	Sept. 8	5.35
Mar. 11	2.52	July 7	3.64	Nov. 3	4.80

13-28-25bc. Roberts. Highest observed stage in period of record, 3.48 on Apr. 19; lowest, 6.40 on Sept. 8. Records available: 1946-49.

Jan. 13	5.44	Apr. 19	3.48	Sept. 8	6.40
Mar. 11	4.11	July 6	4.80	Nov. 3	5.87

13-28-28cc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 1.53 on Apr. 19; lowest, 3.92 on Sept. 8. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 13	2.87	Apr. 19	1.53	Sept. 8	3.52
Mar. 11	2.05	July 6	1.86		

13-28-29cc. Langford. Records available: 1938-49.

Mar. 11	5.09	July 7	4.55	Nov. 3	6.16
Apr. 19	5.42	Sept. 8	6.03		

13-28-31cc. Central Nebraska Public Power and Irrigation District. Records available: 1938-49.

Mar. 11	4.92	July 7	5.12	Nov. 3	4.54
Apr. 19	4.53	Sept. 8	4.49		

13-29-5dd. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter $1\frac{1}{4}$ inches, depth 10.0 feet. Measuring point, top of pipe, at land-surface datum. Records available: 1949. Sept. 8, 6.66; Nov. 3, 6.71.

13-29-6ba. Central Nebraska Public Power and Irrigation District. Records available: 1938-49.

Jan. 13	3.50	Apr. 19	2.65	Sept. 8	4.50
Mar. 11	2.74	July 7	3.55	Nov. 3	4.09

13-29-20bb. Central Nebraska Public Power and Irrigation District. Records available: 1936-43, 1945-49. Jan. 13, 6.98; Sept. 8, 6.40; Nov. 3, 6.45.

13-29-20cc. Drilled irrigation well, diameter 18 inches, reported depth 121 feet. Measuring point, hole in turbine base, 1.00 foot above land-surface datum. Highest observed stage in period of record, 22.00 on July 7; lowest, 22.85 on Sept. 8. Records available: 1949. Apr. 19, 22.50; July 7, 22.00; Sept. 8, 22.85; Nov. 3, 22.70.

13-29-25bb. Central Nebraska Public Power and Irrigation District. Records available: 1938-49.

Mar. 11	4.35	July 7	4.46	Nov. 3	5.29
Apr. 19	3.82	Sept. 8	5.19		

13-29-35bb. Highest observed stage in period of record, 15.00 on Sept. 8. Records available: 1946-49.

Jan. 13	17.00	Apr. 19	17.05	Sept. 8	15.00
Mar. 11	17.19	July 7	15.37	Nov. 3	15.35

13-30-3ad. Central Nebraska Public Power and Irrigation District. Records available: 1938-49.

Jan. 13	4.73	Apr. 19	3.40	Sept. 8	5.52
Mar. 11	4.26	July 7	3.63	Nov. 3	4.99

13-30-4cd. Geological Survey, U. S. Dept. of Interior. Lowest observed stage in period of record, 7.90 on Nov. 3. Records available: 1946-49.

Jan. 13	7.29	Apr. 19	6.65	Sept. 8	7.56
Mar. 11	7.02	July 7	5.65	Nov. 3	7.90

13-30-9cb. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Jan. 13	2.33	Apr. 19	1.08	Sept. 8	2.98
Mar. 11	2.00	July 7	1.49	Nov. 3	2.72

13-30-13dd. Central Nebraska Public Power and Irrigation District. Highest observed stage in period of record, 9.05 on July 7. Records available: 1936-49.

Jan. 13	10.30	Apr. 19	9.83	Sept. 8	11.14
Mar. 11	9.70	July 7	9.05	Nov. 3	10.56

13-30-21bb. University of Nebraska. Highest observed stage in period, of record, 10.50 on July 7. Records available: 1934-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 13	11.41	Apr. 19	10.61	Sept. 8	12.00
Mar. 11	11.22	July 7	10.50	Nov. 3	11.55

13-30-21cd. University of Nebraska. Highest observed stage in period of record, 38.35 on Nov. 3. Records available: 1947-49.

Mar. 11	38.78	July 7	38.74	Nov. 3	38.35
Apr. 19	38.88	Sept. 8	38.54		

14-30-9ca. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49. Apr. 19, 2.83; July 7, 3.32; Sept. 8, 5.33; Nov. 3, 4.97.

14-30-16db. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Mar. 11	0.24	July 7	0.56	Nov. 3	1.20
Apr. 19	.82	Sept. 8	1.59		

14-30-21cd. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 2.58 on Apr. 19. Records available: 1946-49.

Mar. 11	2.76	July 7	3.50	Nov. 3	3.86
Apr. 19	2.58	Sept. 8	4.10		

14-30-28dc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 5.12 on July 7. Records available: 1946-49.

Jan. 13	6.44	Apr. 19	5.15	Sept. 8	5.98
Mar. 11	5.83	July 7	5.12	Nov. 3	6.20

14-30-33cd. Geological Survey, U. S. Dept. of Interior. Lowest observed stage in period of record, 8.26 on Nov. 3. Records available: 1946-49.

Jan. 3	8.13	Apr. 19	6.69	Sept. 8	8.17
Mar. 11	7.79	July 7	7.29	Nov. 3	8.26

14-32-21bb. Great Western Sugar Co. Records available: 1934-36, 1940-41. Measurements discontinued.

14-33-17da. University of Nebraska. Records available: 1936-46. No measurements made in 1949.

14-33-27aa. Central Nebraska Public Power and Irrigation District. Measurements supplied through courtesy of Platte Valley Public Power and Irrigation District. Lowest observed stage in period of record, 11.26 on Feb. 21. Records available: 1938-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	10.90	May 9	9.90	July 18	8.55	Sept. 20	8.99
21	11.26	16	9.70	26	8.70	Oct. 5	9.25
Mar. 3	10.50	23	9.50	Aug. 7	8.87	17	9.45
8	10.43	June 6	9.23	17	8.94	26	9.60
17	10.40	13	9.20	29	8.92	Nov. 14	10.00
Apr. 25	9.65	20	8.90	Sept. 6	8.83	21	9.80
May 3	9.85	July 6	8.35	12	8.85	Dec. 12	10.50

14-33-27da. Geological Survey, U. S. Dept. of Interior. Measurements supplied through courtesy of Platte Valley Public Power and Irrigation District. Highest observed stage in period of record, 1.58 on June 27. Records available: 1943-49.

Lowest daily water level, from recorder charts

Day	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	....	....	4.73	4.39	2.20	4.57	5.01	4.85	5.08	....
2	....	....	....	4.75	4.43	2.37	4.60	5.01	4.86	5.10	....
3	....	4.60	....	4.79	4.46	2.58	....	5.02	4.87	....	....
4	....	4.60	....	4.80	4.48	2.80	....	5.03	4.89	....	....
5	....	4.61	....	4.83	4.49	....	....	5.02	4.91	....	....
6	....	4.63	....	4.85	4.51	2.60	....	5.01	4.92	....	....
7	....	4.65	....	4.86	4.51	2.89	4.76	4.94	4.94	....	....
8	5.69	4.69	....	4.86	4.52	3.08	....	4.90	4.95	....	....
9	5.69	4.73	....	4.80	4.52	3.24	....	4.88	4.96	....	....
10	5.69	4.76	....	4.71	4.53	3.36	....	4.85	4.95	....	....
11	5.67	4.79	....	4.63	4.53	3.45	4.80	4.83	4.92	....	....
12	5.65	4.83	....	4.60	4.52	3.54	4.82	4.82	4.88	....	5.59
13	5.65	4.86	....	4.59	4.48	3.62	4.84	4.80	4.86	....	5.60
14	5.60	4.90	....	4.59	4.35	....	4.87	4.80	....	5.31	5.61
15	5.58	....	....	4.45	3.89	....	4.89	4.79	....	5.32	5.62
16	5.56	....	....	4.36	3.34	....	4.91	4.78	....	5.33	5.62
17	5.56	4.96	....	4.33	2.98	....	4.91	4.77	4.81	5.34	5.63
18	5.53	5.00	....	....	2.79	3.94	4.91	4.77	4.81	5.35	5.64
19	5.48	5.02	....	....	2.62	....	4.90	4.77	4.80	5.36	5.65
20	5.45	5.03	....	....	2.46	....	4.89	....	4.80	5.38	....
21	5.43	5.06	....	....	2.26	....	4.89	4.76	4.82	5.39	....
22	5.35	5.07	....	....	2.01	....	4.90	4.77	4.84	5.39	....
23	5.18	5.08	....	4.27	1.83	....	4.90	4.77	4.87	5.40	....
24	5.07	5.10	....	4.25	1.69	....	4.91	4.77	4.89	5.41	....
25	4.96	....	4.58	4.23	1.75	....	....	4.77	....	5.42	....
26	4.83	....	4.61	4.23	1.77	4.34	....	4.79	4.95	5.43	....
27	4.73	....	4.64	4.26	1.58	4.38	....	4.81	4.97	5.44	....
28	4.65	....	4.67	4.28	1.74	4.43	....	4.83	4.99	5.45	....
29	....	....	4.69	4.31	1.88	4.47	4.98	4.84	5.02	....	....
30	....	....	4.71	....	2.05	4.50	4.99	4.85	5.04	....	....
31	....	....	....	4.36	....	4.53	5.00	....	5.06	....	....

14-33-32cd. University of Nebraska. Records available: 1936-41. No measurement made in 1949.

15-31-13dd. University of Nebraska. Records available: 1934-42. No measurement made in 1949.

16-31-4ab. University of Nebraska. Records available: 1935-42. No measurement made in 1949.

Logan County

No measurement made in 1949.

Loup County

No measurement made in 1949.

Madison County

21-4-34cb. Engelsgard. Records available: 1940-42. No measurements made in 1949.

22-1-33cb. Christian. Records available: 1935-49. Sept. 14, +0.30.

23-2-5aa. Bredehoft. Records available: 1934-37, 1940-42, 1944-49. Sept. 14, 3.52; Nov. 18, 3.74.

24-2-32dc. Prauner. Records available: 1934-42, 1944-49. Feb. 10, 1948, 4.75; Oct. 18, 1948, 4.83; Sept. 14, 1949, 4.15; Nov. 18, 1949, 4.50.

McPherson County

No measurement made in 1949.

Merrick County

11-8-3dd. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	1.89	July 5	1.80	Nov. 1	2.10
Apr. 12	1.37	Sept. 6	1.82		

11-8-18ab. City of Grand Island. Records available: 1935-48. No measurement made in 1949.

11-8-19dc. City of Grand Island. Records available: 1935-45. No measurement made in 1949.

12-7-7aa. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Jan. 5	6.82	Apr. 13	4.72	Sept. 2	6.44
Mar. 9	6.19	July 5	5.13	Nov. 1	6.74

12-8-7dc. Highest observed stage in period of record, 8.55 on July 5. Records available: 1946-49.

Jan. 5	10.60	Apr. 13	9.79	Sept. 6	10.05
Mar. 9	9.97	July 5	8.55	Nov. 1	9.50

12-8-28dc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, +0.11 on Apr. 13; lowest, 3.42 on Jan. 5. Records available: 1946-49.

Jan. 5	3.42	Apr. 13	+0.11	Sept. 6	1.75
Mar. 9	1.34	July 5	1.80	Nov. 1	2.42

13-6-2bc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 4.36 on Apr. 12. Records available: 1946-49.

Jan. 5	6.52	Apr. 12	4.36	Sept. 2	6.30
Mar. 8	5.25	July 12	5.05	Nov. 7	6.23

13-6-7bb. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Jan. 5	6.42	Apr. 12	4.16	Sept. 6	6.00
Mar. 9	5.53	July 5	4.50	Nov. 1	6.16

13-6-19cb. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Jan. 5	5.39	Apr. 12	3.34	Sept. 6	4.73
Mar. 9	4.59	July 5	3.52	Nov. 1	5.18

13-6-28bb. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Jan. 5	6.40	July 5	5.35	Nov. 1	6.85
Apr. 12	5.31	Sept. 2	7.14		

13-7-4bc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 2.95 on Mar. 9. Records available: 1946-49.

Jan. 5	5.52	Apr. 13	3.67	Sept. 6	4.62
Mar. 9	2.95	July 5	4.25	Nov. 1	5.05

13-7-29cb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 0.40 on Mar. 9. Records available: 1946-49.

Jan. 5	2.09	Apr. 13	0.68	Sept. 6	2.52
Mar. 9	.40	July 5	2.67	Nov. 1	2.72

14-4-18bb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 1.97 on Mar. 7. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 3	2.97	Apr. 12	2.62	Sept. 1	4.73
Mar. 7	1.97	July 12	3.75	Nov. 7	4.47

14-5-9cc2. Records available: 1947-49.

Jan. 7	6.69	Apr. 12	4.84	Sept. 2	6.62
Mar. 8	5.93	July 12	5.05	Nov. 7	6.47

14-6-15bb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 1.82 on Mar. 8. Records available: 1946-49.

Jan. 5	3.40	Apr. 12	2.24	Sept. 2	4.96
Mar. 8	1.82	July 12	3.40	Nov. 7	4.58

14-7-21cb. Trudy. Highest observed stage in period of record, 4.16 on Apr. 13. Records available: 1934-42, 1945-49.

Jan. 5	6.84	Apr. 13	4.16	Sept. 6	7.10
Mar. 9	4.85	July 5	5.00	Nov. 1	6.94

14-7-26cc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 9.58 on July 5. Records available: 1946-49.

Jan. 5	11.45	Apr. 13	10.51	Sept. 6	10.19
Mar. 9	11.09	July 5	9.58	Nov. 1	10.32

15-4-15dd. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Jan. 4	8.24	Apr. 15	5.61	Sept. 2	7.84
Mar. 8	7.89	July 12	6.19	Nov. 7	8.30

15-4-31cc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 2.13 on Apr. 15. Records available: 1946-49.

Jan. 3	5.12	Apr. 15	2.13	Sept. 2	4.03
Mar. 8	2.45	July 12	3.29	Nov. 7	4.06

15-5-8dd. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Jan. 5	13.01	Apr. 12	12.40	Sept. 2	11.99
Mar. 7	12.65	July 12	11.35	Nov. 7	12.14

15-5-27dd. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Jan. 5	4.19	Apr. 12	2.09	Sept. 2	3.27
Mar. 8	3.20	July 12	2.63	Nov. 7	3.68

15-8-33bc. Dinsdale Bros. Highest observed stage in period of record, 10.69 on July 1; lowest, 16.54 on Aug. 8. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 2	10.92	July 1	10.69	Sept. 21	11.93	Dec. 2	11.49
June 1	10.77	Aug. 8	16.54	Nov. 4	11.78		

15-8-34bb. Anderson. Highest observed stage in period of record, 4.02 on June 1. Records available: 1948-49.

May 2	4.25	July 1	4.75	Sept. 21	6.43	Dec. 2	7.14
June 1	4.02	Aug. 8	7.34	Nov. 4	6.96		

16-3-7dd. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 0.79 on Apr. 15. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 4	3.86	Apr. 15	0.79	Sept. 2	4.85
Mar. 8	3.49	July 12	3.58	Nov. 7	4.01

16-3-27cc. Pearson. Highest observed stage in period of record, 4.05 on Mar. 7. Records available: 1934-42, 1944-49.

Jan. 5	6.19	Apr. 19	4.43	Sept. 2	7.48
Mar. 7	4.05	July 12	5.54	Nov. 7	7.15

Morrill County

18-52-11dd. Barden. Drilled irrigation well, diameter 18 inches. Measuring point, hole in turbine base, 0.5 foot above land-surface datum. Highest observed stage in period of record, 23.51 on Dec. 16; lowest, 24.11 on July 12. Records available: 1949.

May 18	23.66	Sept. 15	23.76	Nov. 17	23.56
July 12	24.11	Oct. 12	23.68	Dec. 16	23.61

19-49-23cc. Guthrie Fstate. Drilled irrigation well, diameter 24 inches, reported depth 60 feet. Measuring point, top of casing, south side, 0.4 foot above land-surface datum. Highest observed stage in period of record, 9.60 on Oct. 18, 1937; lowest, 11.86 on Apr. 5, 1940. Records available: 1936-42, 1944, 1948-49.

Jan. 21, 1936	11.57	Dec. 5, 1939	11.47	May 9, 1949	11.49
Mar. 31	11.79	Apr. 5, 1940	11.86	July 11	11.00
June 8	10.79	Nov. 7	11.56	13	10.76
Aug. 7	10.89	Oct. 23, 1941	11.34	Aug. 19	9.91
Sept. 10	10.68	Nov. 16, 1942	11.37	Sept. 12	10.92
Nov. 30	11.41	Nov. 16, 1944	11.36	15	11.01
Apr. 6, 1937	11.66	Mar. 28, 1948	11.57	Oct. 12	10.82
Oct. 18	9.60	July 2	11.43	Nov. 17	11.29
June 27, 1938	10.89	Oct. 22	11.02	21	11.30
Oct. 26	11.16	Mar. 9, 1949	11.49	Dec. 16	11.47
June 13, 1939	11.47				

19-50-30cd. Reuter. Drilled irrigation well, diameter 24 inches, depth 81 feet. Measuring point, top of casing, south side, at land-surface datum. Highest observed stage in period of record, 23.61 on May 18; lowest, 24.18 on July 12. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 18	23.61	Aug. 15	23.91	Oct. 13	23.99	Dec. 16	23.88
July 12	24.18	Sept. 13	24.03	Nov. 17	23.81		

19-52-26dd2. Schneider. Drilled irrigation well, diameter 18 inches, depth 83 feet. Measuring point, hole in turbine base, 0.7 foot above land-surface datum. Highest observed stage in period of record, 18.53 on July 6; lowest, 23.50 on Oct. 17. Records available: 1949. May 18, 18.99; July 6, 18.53; Aug. 9, 19.36; Oct. 17, 23.50.

20-49-30ac. Stewart. Highest observed stage in period of record, 15.22 on Nov. 21. Records available: 1946-49. May 9, 19.78; July 11, 18.63; Sept. 12, 15.88; Nov. 21, 15.22.

20-50-17bb. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49. May 8, 15.23; July 11, 13.52; Sept. 12, 11.45; Nov. 21, 11.78.

20-50-28bb. Smith. Records available: 1934-42, 1944-49.

May 9	13.66	July 12	13.45	Sept. 15	13.61	Nov. 21	13.56
June 21	13.16	Aug. 19	13.53	Oct. 13	13.44	Dec. 16	12.38
July 11	13.42	Sept. 12	13.53	Nov. 17	14.11		

20-50-32aa. State of Nebraska, Department of Roads and Irrigation.
Records available: 1930-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	4.72	Apr. 15	4.85	July 5	5.67	Oct. 5	4.68
10	4.64	19	4.92	10	5.33	10	4.42
15	4.56	25	5.06	15	5.21	15	4.44
21	4.62	30	4.94	21	5.38	18	4.48
25	4.60	May 2	4.85	25	5.28	20	4.44
Feb. 5	4.64	5	4.91	27	5.71	25	4.52
10	4.71	8	4.80	Aug. 1	5.27	30	4.57
15	4.59	9	4.60	5	5.32	Nov. 6	4.59
20	4.35	15	4.80	11	5.22	10	4.61
25	4.22	20	4.80	16	4.96	15	4.72
Mar. 1	4.41	25	4.88	20	4.73	21	4.74
5	4.38	30	5.29	25	4.82	29	4.63
10	4.37	June 5	5.18	30	4.89	30	4.63
15	4.47	6	5.05	Sept. 1	4.93	Dec. 5	4.79
20	4.51	7	4.80	5	4.72	12	4.82
24	4.57	11	4.62	10	4.78	16	4.80
25	4.54	14	4.53	15	4.98	20	4.71
30	4.58	20	4.72	20	4.93	25	4.54
Apr. 10	4.74	25	4.74	26	4.69	30	4.44
14	4.70	30	5.36	30	4.70		

21-50-33bc. Winters. Records available: 1946-49. May 9, 37.32; July 11, 35.77; Sept. 12, 29.14; Nov. 21, 30.85.

22-50-14bc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, +0.06 on May 9. Records available: 1946-49. May 9, +0.06; July 11, 0.79; Sept. 12, 0.88; Nov. 21, 0.40.

22-50-28bc. Jensen. Highest observed stage in period of record, 80.39 on Nov. 21. Records available: 1934-42, 1944, 1946-49. May 9, 80.95; July 11, 80.84; Sept. 12, 80.87; Nov. 21, 80.39.

23-51-29bb. Green. Records available: 1946-49. July 12, 100.88; Sept. 14, 100.84.

Nance County

15-7-6bb. Highest observed stage in period of record, 64.33 on Apr. 26. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 26	64.33	July 1	65.78	Sept. 21	65.54	Dec. 2	65.49
June 1	65.72	Aug. 8	65.61	Nov. 7	65.61		

16-4-31bc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 3.08 on Apr. 22. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 4	6.41	July 12	4.46	Nov. 7	5.49
Apr. 22	3.08	Sept. 2	5.24		

16-6-14ac. Aldrich. Highest observed stage in period of record, 25.24 on July 1. Records available: 1936-37, 1939-42, 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 26	25.68	July 1	25.24	Sept. 21	26.02	Dec. 5	26.14
June 1	25.64	Aug. 8	25.99	Nov. 7	25.93		

16-7-34cb. Brooks. Highest observed stage in period of record, 27.02 on July 1. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 26	27.32	July 1	27.09	Nov. 7	27.85
June 1	27.12	Sept. 21	28.93	Dec. 5	27.55

16-7-36aa. Russell. Highest observed stage in period of record, 20.98 on July 1. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 26	21.26	July 1	20.98	Sept. 21	21.68	Dec. 5	21.87
June 1	21.09	Aug. 8	21.42	Nov. 7	21.83		

17-4-23da. Loup River Public Power District. Highest observed stage in period of record, 14.63 on July 6. Records available: 1948-49. Apr. 26, 15.86; June 6, 15.54; July 6, 14.43. Measurements discontinued.

17-4-24db. Greek Estate. Lowest observed stage in period of record, 6.46 on Dec. 5. Records available: 1934-42, 1948-49. Nov. 7, 6.35; Dec. 5, 6.46.

17-4-25cd. Loup River Public Power District. Highest observed stage in period of record, 9.28 on Apr. 26. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 26	9.28	July 6	10.22	Sept. 21	11.39	Dec. 2	11.65
June 6	10.32	Aug. 8	11.39	Nov. 4	11.66		

17-4-32dd. Loup River Public Power District. Highest observed stage in period of record, 4.11 on June 6. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 26	4.82	July 6	5.19	Sept. 21	5.66	Dec. 2	6.01
June 6	4.11	Aug. 8	6.20	Nov. 4	5.93		

17-4-36aa. Loup River Public Power District. Highest observed stage in period of record, 2.57 on July 6. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 26	2.93	July 6	2.57	Sept. 21	4.35	Dec. 2	4.85
June 6	2.73	Aug. 8	4.47	Nov. 4	4.63		

17-5-35dd. Loup River Public Power District. Highest observed stage in period of record, 3.58 on July 6. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 26	4.38	July 6	3.58	Sept. 21	4.65	Dec. 5	5.59
June 1	4.87	Aug. 8	5.91	Nov. 7	5.42		

17-6-19bd. Highest observed stage in period of record, 38.69 on Sept. 23, 1949; lowest, 39.80 on Sept. 29, 1948. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Sept. 29, 1948	39.80	July 5, 1949	38.89	Sept. 23, 1949	38.69
Apr. 26, 1949	39.36	Aug. 9	39.79	Nov. 30	39.08

17-6-34ad. Christiansen. Highest observed stage in period of record, 42.60 on July 5. Records available: 1935-42, 1948-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 26	43.16	Aug. 9	42.61	Nov. 1	42.61
July 5	42.60	Sept. 22	42.67	30	42.90

17-7-lad. Mrs. Anderson. Drilled domestic well, diameter 4 inches, depth 58 feet. Measuring point, edge of casing, 2.0 feet above land-surface datum. Highest observed stage in period of record, 37.38 on July 1; lowest, 41.56 on Nov. 1. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
May 20, 1948	38.10	Aug. 9, 1949	38.20	Nov. 1, 1949	41.56
July 1, 1949	37.38	Sept. 23	38.56	30	38.60

18-4-19ab. Peterson. Highest observed stage in period of record, 8.19 on June 6. Records available: 1948-49.

18-4-19ab--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 26	9.12	July 6	9.94	Sept. 22	11.03	Dec. 5	11.29
June 6	8.19	Aug. 8	11.86	Nov. 4	11.28		

Nemaha County

No measurement made in 1949.

Nuckolls County

(Measurements made by Bureau of Reclamation, U. S. Dept. of Interior, except those made in November and December, 1949.)

1-5-31cb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 18.29 on June 20. Records available: 1947-49.

Feb. 7	20.12	May 27	18.75	Aug. 17	19.10	Nov. 12	18.62
Mar. 25	19.85	June 20	18.29	Sept. 22	19.00	Dec. 28	18.99
Apr. 28	19.57	July 29	18.89	Oct. 10	18.54		

1-5-31cc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 0.42 on Sept. 22. Records available: 1946-49.

Feb. 7	3.37	May 27	0.85	Aug. 17	2.00	Nov. 12	1.53
Mar. 25	1.14	June 20	.72	Sept. 22	.42	Dec. 5	1.94
Apr. 28	1.75	July 28	1.73	Oct. 27	.95	28	2.29

1-6-30dd. Day. Highest observed stage in period of record, 32.98 on Dec. 19 and 20. Records available: 1946-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	33.25	.....	33.26	33.26	33.26	33.21	33.13	33.09	33.04	33.01	.....	.....
2	33.22	.....	33.25	33.26	33.26	33.21	33.13	33.09	33.03	33.01	.....	.....
3	33.22	.....	33.25	33.27	33.26	33.22	33.13	33.09	33.03	33.01	.....	.....
4	33.23	33.22	33.23	33.26	33.26	.....	33.12	33.08	33.03	33.01	.....	.....
5	33.23	33.22	33.23	33.26	33.27	.....	33.12	33.08	33.04	32.99	.....	.....
6	33.23	33.22	33.24	33.25	33.28	33.23	33.12	33.08	33.03	32.99	.....	.....
7	33.23	33.22	33.25	33.25	33.28	33.23	33.13	33.08	33.04	32.99	.....	.....
8	33.23	33.23	33.25	33.28	33.27	33.23	33.12	33.08	33.04	33.00	.....	.....
9	33.24	33.24	33.23	33.28	33.28	33.23	33.12	33.07	33.04	32.99	.....	.....
10	33.24	33.25	33.24	33.27	33.28	33.23	33.12	33.07	33.03	33.00	.....	.....
11	33.24	33.24	33.24	33.27	33.27	33.23	33.12	33.07	33.03	33.00	.....	.....
12	33.24	33.21	33.24	33.26	33.27	33.22	33.12	33.06	33.04	33.00	33.01	.....
13	33.23	33.22	33.24	33.24	33.26	33.21	33.13	33.06	33.04	.....	33.00	.....
14	33.22	33.21	33.24	33.25	33.25	33.21	33.13	33.06	33.04	.....	33.00	.....
15	33.22	33.19	33.24	33.26	33.25	33.21	33.13	33.06	33.03	.....	33.00	.....
16	33.24	33.20	33.25	33.27	33.24	33.20	33.13	33.06	33.02	.....	33.00	33.00
17	33.24	33.20	33.25	33.26	33.24	33.19	33.12	33.06	33.02	.....	33.00	32.99
18	33.22	33.20	33.24	33.27	33.25	33.19	33.12	33.06	33.02	.....	33.00	32.99
19	33.23	33.21	33.25	33.27	33.25	33.18	33.12	33.06	33.03	.....	.....	32.98
20	33.24	33.22	33.24	33.27	33.25	33.18	33.12	33.06	33.02	.....	.....	32.98
21	.....	33.22	33.24	33.26	33.24	33.17	33.12	33.06	33.03	.....	.....	32.99
22	.....	33.21	33.23	33.26	33.25	33.17	33.12	33.06	33.03	.....	.....	33.00
23	.....	33.21	33.24	33.27	33.24	33.16	33.12	33.05	33.03	.....	.....	33.00
24	33.25	33.21	33.24	33.26	33.24	33.15	33.11	33.05	33.03	.....	.....	33.00
25	33.24	33.21	33.24	33.26	33.24	33.15	33.11	33.05	33.02	.....	.....	33.00
26	33.23	33.26	33.24	33.26	33.23	33.15	33.11	33.04	33.02	.....	.....	33.00
27	33.24	33.25	33.23	33.27	33.22	33.14	33.10	33.04	33.02	.....	.....	33.00
28	33.24	33.26	33.24	33.27	33.22	33.15	33.10	33.04	33.03	.....	.....	33.01
29	33.22		33.25	33.26	33.22	33.14	33.10	33.04	33.03	.....	.....	33.02
30	33.22		33.24	33.25	33.22	33.13	33.10	33.04	33.01	.....	.....	33.01
31	.....		33.25		33.21		33.10	33.04		.....	.....	33.01

1-6-31cc. Geological Survey, U. S. Dept. of Interior. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 4	13.35	May 27	11.20	Aug. 8	11.42	Nov. 12	12.52
Mar. 31	12.27	June 20	10.55	Sept. 9	11.99	Dec. 5	12.78
Apr. 28	11.76	July 29	10.74	Oct. 27	12.28	29	12.99

1-6-33cb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 3.48 on June 20. Records available: 1947-49.

Feb. 4	5.94	May 27	4.26	Aug. 17	4.87	Nov. 12	4.46
Mar. 27	5.27	June 20	3.48	Sept. 22	4.25	Dec. 5	4.54
Apr. 28	5.46	July 29	4.97	Oct. 27	4.19	29	4.74

1-6-33cc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period, 7.99 on June 20. Records available: 1947-49.

Feb. 7	12.72	May 27	11.37	Aug. 17	10.43	Nov. 12	10.70
Mar. 25	12.09	June 20	7.99	Sept. 22	11.04	Dec. 5	10.94
Apr. 28	9.96	July 28	9.60	Oct. 27	10.47	29	11.76

1-6-35cb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 7.44 on July 28. Records available: 1947-49.

Apr. 28	13.71	July 28	7.44	Oct. 27	9.47	Dec. 5	10.16
May 27	13.38	Aug. 17	8.23	Nov. 12	9.75	29	10.50
June 20	13.77	Sept. 22	8.81				

1-6-35cc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 8.85 on Apr. 28. Records available: 1946-49.

Feb. 7	12.95	May 27	10.97	Aug. 17	11.70	Nov. 12	10.27
Mar. 25	10.52	June 20	8.97	Sept. 22	10.30	Dec. 5	10.52
Apr. 28	8.85	July 29	11.23	Oct. 27	9.83	29	10.81

1-7-19cb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 3.62 on June 20. Records available: 1946-49.

Feb. 4	11.46	May 27	7.15	Aug. 8	6.95	Nov. 10	7.74
Mar. 31	9.99	June 20	3.62	Sept. 22	7.92	Dec. 1	7.96
Apr. 28	9.35	July 28	6.04	Oct. 27	7.50	30	8.20

1-7-19dd. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 2.27 on June 20. Records available: 1947-49.

Feb. 4	6.04	May 27	2.89	Aug. 17	6.35	Nov. 12	5.05
Mar. 31	3.71	June 20	2.27	Sept. 22	5.60	30	5.12
Apr. 28	4.00	July 28	5.72	Oct. 27	4.85	Dec. 30	5.05

1-7-27cb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 18.72 on June 20. Records available: 1947-49.

Feb. 4	20.36	May 29	19.43	Aug. 17	19.90	Nov. 10	19.44
Mar. 31	20.08	June 20	18.72	Sept. 22	20.50	30	19.33
Apr. 28	20.19	July 28	19.75	Oct. 27	19.46	Dec. 29	19.20

1-7-31da. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 4.53 on June 20. Records available: 1947-49.

Feb. 4	11.28	May 27	9.69	Aug. 17	7.97	Nov. 10	8.81
Mar. 25	9.84	June 20	4.53	Sept. 22	8.89	30	7.44
Apr. 28	8.13	July 29	7.01	Oct. 27	8.44	Dec. 30	9.48

1-7-32bb. Geological Survey, U. S. Dept. of Interior. Records available: 1947-49.

Feb. 4	3.90	May 27	2.19	Aug. 17	2.80	Nov. 10	2.90
Mar. 25	2.30	June 20	1.20	Sept. 22	3.16	30	3.01
Apr. 28	1.00	July 29	2.67	Oct. 27	2.77	Dec. 30	2.87

1-7-33ad. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 0.73 on June 20. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 4	6.19	June 20	0.73	Sept. 22	5.49	Nov. 30	5.11
Mar. 25	5.66	July 29	4.32	Oct. 27	5.16	Dec. 30	5.16
May 27	5.00	Aug. 17	5.00	Nov. 10	5.11		

1-7-33dd. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 4.84 on June 20. Records available: 1947-49.

Feb. 4	9.46	May 27	8.60	Aug. 17	8.25	Nov. 10	7.75
Mar. 25	8.82	June 20	4.84	Sept. 22	6.30	30	7.98
Apr. 28	5.95	July 29	7.52	Oct. 27	7.44	Dec. 30	8.25

1-7-34bb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 1.97 on June 20. Records available: 1946-49.

Feb. 4	7.09	May 27	5.24	Aug. 17	6.49	Nov. 10	6.25
Mar. 25	5.63	June 20	1.97	Sept. 22	6.40	30	6.19
Apr. 28	3.54	July 29	5.71	Oct. 27	6.16	Dec. 30	5.95

1-7-35da. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 6.46 on July 29; lowest, 9.10 on Feb. 4. Records available: 1946-49.

Feb. 4	9.10	May 27	8.36	Aug. 17	6.73	Nov. 12	7.60
Mar. 25	8.50	June 20	6.84	Sept. 22	7.23	Dec. 5	7.74
Apr. 28	7.77	July 29	6.46	Oct. 27	7.44	28	8.01

1-7-36da. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 9.69 on Aug. 17. Records available: 1947-49.

Feb. 4	12.29	May 27	11.78	Aug. 17	9.69	Nov. 12	10.97
Mar. 25	11.81	June 20	10.85	Sept. 22	10.42	Dec. 5	11.00
Apr. 28	11.40	July 29	10.50	Oct. 27	10.88		

1-8-7ac. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{2}$ inches, depth 10.00 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Records available: 1949. Nov. 15, 4.94, by Bureau of Reclamation, U. S. Dept. of Interior; Dec. 30, 5.04.

1-8-7ad. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{2}$ inches, depth 16.00 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Records available: 1949. Nov. 16, 10.68, by Bureau of Reclamation, U. S. Dept. of Interior; Dec. 30, 10.54.

1-8-7bb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 0.34 on June 20. Records available: 1947-49.

Feb. 4	1.22	May 29	0.47	Aug. 17	0.44	Nov. 10	0.96
Mar. 31	.70	June 20	.34	Sept. 22	.49	Dec. 3	.58
Apr. 28	.59	July 29	.39	Oct. 27	.56	30	.53

1-8-7ca. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{2}$ inches, depth 10.00 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Records available: 1949. Nov. 15, 5.10, by Bureau of Reclamation, U. S. Dept. of Interior; Dec. 30, 4.82.

1-8-7dd. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 0.55 on June 20. Records available: 1946-49.

1-8-7dd--Continued.

Date	Water level	Date	Water level	Date	Water level
Jan. 14, 1948	5.28	Oct. 25, 1948	6.20	July 28, 1949	4.87
Feb. 18	3.86	Dec. 20	5.30	Aug. 17	5.58
Mar. 22	1.28	Feb. 4, 1949	5.20	Sept. 22	5.05
Apr. 15	3.27	Mar. 31	.85	Oct. 27	3.90
May 19	4.48	Apr. 28	2.79	Nov. 10	4.13
July 22	4.09	May 27	1.47	Dec. 3	4.30
Aug. 18	5.48	June 20	.55	30	4.34
Sept. 24	6.35				

1-8-8db. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 22.00 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Records available: 1949. Dec. 2, 16.13, by Bureau of Reclamation, U. S. Dept. of Interior; Dec. 30, 15.98.

1-8-8dc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 10.00 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Records available: 1949. Nov. 17, 4.10, by Bureau of Reclamation, U. S. Dept. of Interior; Dec. 30, 4.10.

1-8-9cc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 32.00 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Records available: 1949. Nov. 29, 27.18, by Bureau of Reclamation, U. S. Dept. of Interior; Dec. 30, 26.46.

1-8-14cb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 12.85 on June 20. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 4	15.67	May 29	13.42	Aug. 17	13.98	Nov. 10	14.35
Mar. 31	14.31	June 20	12.85	Sept. 22	14.22	Dec. 3	14.57
Apr. 28	14.32	July 28	13.22	Oct. 27	14.17	30	14.67

1-8-14dd. Keiffer. Abandoned domestic well, diameter 6 inches, depth 28.00 feet. Measuring point, top of casing, 4.0 feet below land-surface datum. Records available: 1949. June 30, 15.04; Nov. 10, 15.95; Dec. 30, 16.04.

1-8-16bc. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 10.00 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Records available: 1949. Nov. 30, 5.40, by Bureau of Reclamation, U. S. Dept. of Interior; Dec. 30, 5.30.

1-8-17aa. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 1.20 on June 20. Records available: 1947-49.

Feb. 4	5.02	June 20	1.20	Sept. 22	4.64	Dec. 3	3.57
Apr. 28	2.52	July 28	3.84	Oct. 27	3.58	30	3.40
May 29	1.88	Aug. 17	5.03	Nov. 10	3.52		

1-8-17ca. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 9.00 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Records available: 1949. Nov. 30, 6.04, by Bureau of Reclamation, U. S. Dept. of Interior; Dec. 30, 6.11.

1-8-17da. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 2.95 on June 20. Records available: 1947-49.

Feb. 4	6.93	June 20	2.95	Sept. 22	6.61	Dec. 3	5.93
Apr. 28	4.26	July 28	5.88	Oct. 27	5.97	30	5.97
May 27	3.59	Aug. 17	6.61	Nov. 10	5.92		

1-8-18aa. Bureau of Reclamation, U. S. Dept. of Interior. Jetted observation well, diameter $1\frac{1}{4}$ inches, depth 12.00 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Records available: 1949. Nov. 16, 7.38, by Bureau of Reclamation; Dec. 30, 7.39.

1-8-18cc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 8.13 on June 20. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 4	13.38	May 27	10.94	Aug. 17	12.20	Nov. 12	12.41
Mar. 31	12.00	June 20	8.13	Sept. 22	12.66	Dec. 5	12.48
Apr. 28	11.68	July 28	11.04	Oct. 27	12.39	30	12.50

1-8-21cb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 8.28 on June 20. Records available: 1947-49.

Feb. 4	12.34	May 27	9.90	Aug. 17	11.84	Nov. 10	11.73
Mar. 31	10.87	June 20	8.28	Sept. 22	12.15	Dec. 5	11.77
Apr. 28	11.09	July 28	10.67	Oct. 27	11.70	31	12.50

1-8-21dc. Teachworth. Records available: 1946-49.

Mar. 31	27.77	May 27	26.70	Oct. 27	26.87	Dec. 5	26.91
Apr. 28	27.40	June 20	25.40	Nov. 10	26.94	31	27.37

1-8-22ab. Smith. Highest observed stage in period of record, 0.52 on June 20. Records available: 1946-49.

Feb. 4	4.05	May 27	2.03	Aug. 17	4.97	Nov. 10	4.54
Mar. 31	3.10	June 20	.52	Sept. 22	4.77	30	4.49
Apr. 28	3.60	July 28	4.46	Oct. 27	4.51	Dec. 30	4.22

1-8-22ad. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 3.88 on June 20. Records available: 1947-49.

Feb. 4	8.38	May 27	5.25	Aug. 17	9.15	Nov. 10	8.44
Mar. 31	5.74	June 20	3.88	Sept. 22	9.00	30	8.43
Apr. 28	6.76	July 28	8.33	Oct. 27	8.43	Dec. 31	8.28

1-8-22dd. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 3.01 on June 20. Records available: 1947-49.

Feb. 4	8.05	May 27	3.55	Aug. 17	6.88	Nov. 10	6.65
Mar. 31	5.24	June 20	3.01	Sept. 22	7.16	30	6.90
Apr. 28	5.80	July 28	6.10	Oct. 27	6.38	Dec. 31	7.09

1-8-23ab. Bureau of Reclamation, U. S. Dept. of Interior. Driven observation well, diameter $1\frac{1}{4}$ inches, depth 10.00 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum, 1,600.32 feet above sea level. Records available: 1949. June 30, 3.70; Dec. 30, 7.61.

1-8-23db. Bureau of Reclamation, U. S. Dept. of Interior. Driven observation well, diameter $1\frac{1}{4}$ inches, depth 13.00 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Records available: 1949. June 30, 4.80; Dec. 30, 10.80.

1-8-25aa. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 1.75 on June 20. Records available: 1947-49.

Feb. 4	6.51	May 27	1.90	Aug. 17	5.35	Nov. 10	4.75
Mar. 31	4.45	June 20	1.75	Sept. 22	5.35	30	4.80
Apr. 28	3.54	July 28	4.66	Oct. 27	5.78	Dec. 30	4.85

1-8-25ad. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 4.53 on June 20. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 4	9.09	May 27	5.05	Aug. 17	9.13	Nov. 10	7.92
Mar. 31	5.07	June 20	4.53	Sept. 22	8.87	30	8.07
Apr. 28	5.89	July 28	8.33	Oct. 27	7.53	Dec. 30	7.21

1-8-36aa. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 7.46 on June 20. Records available: 1947-49.

Feb. 4	10.74	May 27	8.45	Aug. 17	11.25	Nov. 10	11.07
Mar. 25	9.52	June 20	7.46	Sept. 23	11.14	30	11.00
Apr. 28	10.24	July 28	10.61	Oct. 28	10.93	Dec. 31	10.66

2-5-8dd. Mrs. Dillon. Records available: 1934-41, 1946. Measurements discontinued.

4-7-26aa. Statz. Records available: 1935-41, 1946. Measurements discontinued.

Otoe County

No measurement made in 1949.

Pawnee County

No measurement made in 1949.

Perkins County

No measurement made in 1949.

Phelps County

5-18-2cc. Brown. Highest observed stage in period of record, 157.81 on June 1. Records available: 1947-49. Apr. 6, 158.12; June 1, 157.81; Sept. 27, 158.71; Nov. 24, 157.97.

5-18-4ab. Western Public Service Co. To convert water levels from feet above assumed datum, as published in reports prior to 1948, to feet below land-surface datum, subtract from 252.41. Highest observed stage in period of record, 147.83 on Nov. 24. Records available: 1934-41, 1948-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 17	149.78	June 1	149.45	Sept. 27	149.04
Apr. 8	149.34	Aug. 1	148.74	Nov. 24	147.83

5-18-6ab. Christian Childrens Home. Highest observed stage in period of record, 158.33 on May 31. Records available: 1947-49. Jan. 17, 159.49; Apr. 8, 158.54; May 31, 158.33. Measurements discontinued.

5-18-15cb. Rodgers. Highest observed stage in period of record, 157.50 on June 1. Records available: 1948-49. Apr. 8, 158.03; June 1, 157.50; Aug. 1, 157.99. Measurements discontinued.

5-19-4bc. Highest observed stage in period of record, 205.24 on Nov. 24. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 5	205.84	July 29	206.09	Nov. 24	205.24
June 1	205.57	Sept. 26	205.72		

5-19-22da. Warp. Stevens Type A-35 60-day automatic water-stage recorder installed Sept. 16. Highest observed stage in period of record, 202.38 on Dec. 10; lowest, 204.64 on Sept. 13. Records available: 1947-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	203.20	.....	203.42	203.68	.....	203.24
2	202.95	203.13	203.42	203.47	.....	203.50
3	203.22	203.20	203.39	203.55	.....	203.70
4	203.34	203.21	203.25	203.55	.....	203.62
5	.....	203.19	203.38	203.37	.....	203.51
6	.....	203.30	203.63	.....	.....	203.31
7	203.45	203.55	203.48	.....	.....	203.30
8	203.75	203.58	203.41	.....	.....	203.30
9	.....	203.79	203.54	.....	.....	203.40
10	.....	203.79	203.57	.....	.....	203.40
11	.....	203.28	203.51	.....	.....	203.31
12	.....	203.68	203.48	.....	.....	203.16
13	.....	203.81	203.54	.....	.....	203.29
14	203.15	203.55	203.72	.....	.....	203.38
15	203.60	.....	203.72	.....	.....	203.42
16	.....	.....	203.34	.....	.....	203.22
17	.....	203.65	203.37	.....	.....	203.41
18	.....	203.63	203.47	.....	.....	204.63
19	.....	203.81	203.32	.....	.....	204.54
20	203.30	203.87	203.03	.....	.....	203.34
21	.....	203.61	203.32	.....	.....	203.49
22	.....	203.57	203.44	.....	.....	203.38
23	.....	203.38	203.25	.....	.....	203.13
24	.....	203.61	203.56	.....	.....	203.12
25	.....	203.64	203.66	.....	203.44	203.28
26	.....	203.47	203.42	.....	203.37	203.35
27	.....	203.68	203.39	.....	203.31	203.66
28	.....	203.66	203.64	.....	203.29	203.59
29	.....	.....	203.73	.....	203.29	203.50
30	.....	.....	203.43	.....	203.26	203.51
31	.....	.....	203.68	.....	203.22	.....

Lowest daily water level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	203.59	203.44	203.48	203.25	203.34	203.06
2	203.52	203.37	203.25	203.06	203.15	202.98
3	203.36	203.41	203.13	203.14	203.32	202.98
4	203.26	203.39	203.38	203.14	203.26	203.34
5	203.25	203.25	204.50	203.28	203.36	202.69
6	203.28	203.29	203.47	203.29	203.39	202.69
7	203.31	203.26	204.52	203.11	203.23	203.15
8	203.48	203.15	204.50	203.12	203.00	203.14
9	203.60	203.17	203.42	203.50	202.78	202.69
10	203.55	203.19	203.19	203.55	202.84	202.38
11	203.32	203.29	203.17	203.31	202.88	202.40
12	203.24	203.29	204.62	203.42	203.30	203.37
13	203.20	203.27	204.64	203.48	203.45	203.53
14	203.36	203.30	203.44	203.58	203.43	203.27
15	203.33	203.34	203.30	203.60	203.35	202.87
16	203.28	203.42	203.21	203.41	203.31	202.57
17	203.10	203.34	203.19	203.08	203.45	202.76
18	203.33	203.23	203.00	203.12	203.37	203.01
19	203.33	203.32	203.25	202.99	203.15	202.90
20	203.19	203.44	203.40	203.21	203.46	202.97
21	203.52	203.52	203.44	203.21	203.55	202.92
22	203.55	203.42	203.27	203.35	203.15	203.14
23	203.43	203.32	203.40	203.36	203.16	203.14
24	203.33	203.24	203.32	203.56	203.19	202.71
25	203.23	203.34	203.35	203.55	202.77	202.88
26	203.23	203.36	203.23	203.28	202.71	203.14
27	.....	203.34	203.02	203.27	202.79	203.19
28	203.36	203.46	203.28	203.08	202.81	203.21
29	203.43	203.40	203.28	203.18	203.28	203.13
30	203.64	203.48	203.38	203.10	203.06	202.99
31	203.60	203.47	.....	203.37	.....	203.14

5-19-35db. Gray. Records available: 1947-48. Measurements discontinued.

5-20-16dc. Highest observed stage in period of record, 37.64 on June 2. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 8	37.71	July 28	37.87	Nov. 23	37.92
June 2	37.64	Sept. 27	38.24		

5-20-32cc. Highest observed stage in period of record, 104.89 on Nov. 24. Records available: 1948-49. Apr. 9, 105.36; July 28, 105.28; Sept. 26, 105.16; Nov. 24, 104.89.

6-17-15ad. Rumste. Highest observed stage in period of record, 84.35 on Nov. 24. Records available: 1947-49.

Jan. 14	85.74	May 31	85.56	Sept. 26	84.87
Apr. 8	85.39	Aug. 1	85.46	Nov. 24	84.35

6-18-12bc. Welks. Highest observed stage in period of record, 84.64 on May 31. Records available: 1947-49. Jan. 14, 85.18; Apr. 7, 85.25; May 31, 84.64. Measurements discontinued.

6-18-13da. Brown. Highest observed stage in period of record, 112.20 on Nov. 24. Records available: 1948-49.

Jan. 14	113.57	June 1	113.83	Nov. 24	112.20
Apr. 7	114.33	Sept. 27	112.90		

6-19-2aa. Central Nebraska Public Power and Irrigation District. Highest observed stage in period of record, 107.10 on Nov. 24. Records available: 1945-49.

Apr. 1	109.86	July 28	108.92	Nov. 24	107.10
May 27	109.54	Sept. 26	108.27		

6-19-18ba. Nelson. Highest observed stage in period of record, 153.58 on Nov. 24. Records available: 1948-49.

Apr. 5	155.43	July 29	155.05	Nov. 24	153.58
May 27	155.15	Sept. 26	154.33		

6-19-21dc. Highest observed stage in period of record, 148.93 on Nov. 24. Records available: 1948-49.

Apr. 5	150.20	July 28	149.71	Nov. 24	148.93
May 27	149.94	Sept. 26	149.31		

6-20-10aa. Highest observed stage in period of record, 185.34 on Nov. 23. Records available: 1948-49.

Apr. 5	186.47	July 29	186.38	Nov. 23	185.34
May 31	186.27	Sept. 26	186.00		

6-20-28ad. Johnson Estate. Highest observed stage in period of record, 193.38 on Nov. 24. Records available: 1948-49.

Jan. 17	194.33	May 31	193.72	Sept. 26	193.94
Apr. 5	193.96	July 29	194.09	Nov. 24	193.38

7-17-11cb. Just. Highest observed stage in period of record, 26.70 on Nov. 24. Records available: 1947-49. Apr. 7, 27.25; May 26, 27.09; July 29, 28.16; Nov. 24, 26.70.

7-17-30bb. Soderholm. Highest observed stage in period of record, 50.75 on Jan. 14. Records available: 1947-49. Jan. 14, 50.75; Apr. 7, 51.15; May 26, 51.00; July 29, 50.77. Measurements discontinued.

7-18-3cc. Central Nebraska Public Power and Irrigation District. Highest observed stage in period of record, 76.02 on Nov. 24. Records available: 1948-49.

Apr. 5	78.02	July 29	77.05	Nov. 24	76.02
May 26	78.19	Sept. 26	76.10		

7-18-27ab. Getty. Highest observed stage in period of record, 59.53 on May 26. Records available: 1947-49. Apr. 7, 59.77; May 26, 59.53. Measurements discontinued.

7-18-35ab. Anderson. Highest observed stage in period of record, 68.88 on Nov. 24. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 14	70.32	May 26	70.51	Sept. 27	69.49
Apr. 7	70.79	July 29	71.18	Nov. 24	68.88

7-19-6aa. Central Nebraska Public Power and Irrigation District. Highest observed stage in period of record, 56.34 on Nov. 23. Records available: 1948-49.

Apr. 1	58.98	July 28	58.10	Nov. 23	56.34
June 1	58.55	Sept. 26	56.99		

7-19-12cc. Central Nebraska Public Power and Irrigation District. Highest observed stage in period of record, 45.02 on Nov. 24. Records available: 1947-49.

Apr. 1	48.50	July 28	47.52	Nov. 24	45.02
May 27	48.91	Sept. 26	46.86		

7-19-16ac. Cole. Highest observed stage in period of record, 71.11 on Nov. 24. Records available: 1947-49.

Apr. 7	74.21	July 28	73.17	Nov. 24	71.11
June 1	73.47	Sept. 26	72.50		

7-19-23ad. Central Nebraska Public Power and Irrigation District. Highest observed stage in period of record, 52.36 on Nov. 24. Records available: 1945-49.

Apr. 1	56.99	July 28	54.28	Nov. 24	52.36
May 27	57.20	Sept. 26	52.73		

7-19-26id. Central Nebraska Public Power and Irrigation District. Records available: 1945-49.

Apr. 1	46.98	July 28	40.23	Nov. 26	43.19
May 27	47.78	Sept. 26	41.04		

7-20-14cc. Highest observed stage in period of record, 161.92 on Nov. 24. Records available: 1948-49. Apr. 5, 165.06; June 1, 164.90; July 29, 164.12; Nov. 24, 161.92.

7-20-28dc. Dahlgren. Highest observed stage in period of record, 157.05 on Nov. 24. Records available: 1934-36, 1948-49.

Apr. 5	158.67	July 29	158.43	Nov. 24	157.05
June 1	158.27	Sept. 26	157.85		

7-20-31cd. Peterson. Highest observed stage in period of record, 219.26 on Nov. 28. Records available: 1947-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	.....	.....	221.16	221.16	220.40	220.38
2	.....	220.97	221.03	221.09	220.56	220.62
3	.....	.....	221.10	221.11	220.56	220.86
4	220.60	.....	220.89	221.13	220.61	220.86
5	.....	.....	220.68	221.04	220.88	220.83
6	.....	.....	221.20	220.80	221.04	220.87
7	221.25	.....	221.20	220.85	221.01	220.60
8	221.02	.....	220.92	220.85	220.72	220.56
9	.....	.....	221.10	220.95	220.81	220.60
10	.....	.....	221.38	221.11	220.90	220.62
11	.....	.....	221.38	221.11	220.78	220.60
12	.....	.....	221.19	220.84	220.76	220.39
13	.....	.....	221.37	220.48	220.65	220.39
14	221.05	.....	221.45	220.95	220.56	220.47

7-20-31cd--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
15	a220.96	.....	221.15	221.03	220.55	220.57
16	a221.40	221.34	220.99	220.96	220.48	220.41
17	a221.53	.....	221.00	220.82	220.35	220.56
18	221.23	.....	221.09	220.95	220.57	220.80
19	221.56	.....	221.03	220.88	220.67	220.80
20	a221.40	.....	220.74	220.80	220.67	220.60
21	221.27	.....	220.70	220.62	220.40	220.78
22	.....	.....	220.84	220.79	220.54	220.63
23	.....	220.93	220.77	220.87	220.78	220.36
24	221.58	221.16	220.52	220.76	220.94	220.29
25	221.58	221.20	220.50	220.64	220.78	220.37
26	221.49	221.13	220.67	220.88	220.67	220.43
27	.....	221.24	220.74	220.94	220.60	220.72
28	.....	221.27	220.98	220.95	220.60	220.70
29	.....	.....	221.10	220.79	220.48	220.65
30	.....	.....	221.06	220.42	220.48	220.64
31	.....	.....	221.13	.....	220.45	.....

a Interpolated.

Lowest daily water level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.
1	220.56	220.81	220.59	220.20	.....
2	220.75	220.94	220.39	220.24	.....
3	220.64	221.10	220.18	220.24	.....
4	220.52	221.15	220.30	220.32	.....
5	220.49	221.15	220.40	220.23	.....
6	220.56	221.19	220.36	219.92	.....
7	220.58	221.21	220.50	219.86	.....
8	220.73	221.25	220.53	.....	.....
9	220.88	221.13	220.53	.....	.....
10	220.89	221.04	220.30	220.02	.....
11	220.80	220.98	220.00	220.22	.....
12	220.68	220.00	220.37	.....	.....
13	220.66	221.12	.....	220.47	.....
14	220.70	.....	.....	220.60	.....
15	220.63	.....	220.16	220.60	.....
16	220.60	.....	220.10	220.18	.....
17	220.45	220.69	220.12	220.08	.....
18	220.72	220.60	220.31	.....	.....
19	220.77	220.62	220.42	.....	.....
20	220.67	220.68	220.44	.....	.....
21	220.65	220.68	220.44	.....	.....
22	220.88	220.55	.....	.....	.....
23	220.92	220.49	.....	.....	219.46
24	220.92	220.60	.....	.....	219.46
25	220.69	.....	.....	.....	219.49
26	220.53	220.52	220.44	.....	219.36
27	220.44	220.57	220.44	.....	219.28
28	.....	220.67	220.49	.....	219.26
29	220.88	220.56	220.49	.....	219.66
30	220.88	220.59	220.31	.....	219.70
31	220.84	220.56	.....	.....	.....

8-17-19db. Bamford. Records available: 1930-37, 1939-43, 1945-49.

Date	Water level	Date	Water level	Date	Water level
Mar. 12	11.69	July 8	10.20	Nov. 4	11.60
Apr. 16	11.58	Sept. 8	11.19	.....	.....

8-17-21bc. Highest observed stage in period of record, 4.79 on July 8. Records available: 1947-49.

Jan. 14	6.16	Apr. 18	4.92	Sept. 9	6.29
Mar. 12	5.64	July 8	4.79	Nov. 4	6.20

8-17-24bc. Skiles. Highest observed stage in period of record, 7.60 on July 8. Records available: 1930-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 14	9.09	Apr. 18	7.70	Sept. 9	9.85
Mar. 12	8.45	July 8	7.60	Nov. 4	9.30

8-18-9db. University of Nebraska. Records available: 1931-40, 1942-43, 1945-47, 1949. Apr. 18, 3.15.

8-18-16cc. Nelson. Records available: 1946-49.

Jan. 14	7.78	Apr. 18	6.91	Sept. 9	7.50
Mar. 12	7.48	July 8	6.28	Nov. 4	7.32

8-18-21dd. Central Nebraska Public Power and Irrigation District. Highest observed stage in period of record, 10.01 on Sept. 26. Records available: 1948-49.

Apr. 6	11.70	July 29	10.36	Nov. 24	10.88
May 26	11.19	Sept. 26	10.01		

8-18-24bb. Skiles. Highest observed stage in period of record, 7.85 on July 8. Records available: 1946-49.

Jan. 14	9.44	Apr. 18	8.52	Sept. 9	9.09
Mar. 12	9.19	July 8	7.85	Nov. 4	9.17

8-18-33dd. Central Nebraska Public Power and Irrigation District. Highest observed stage in period of record, 72.28 on Nov. 24. Records available: 1948-49.

Apr. 5	73.10	July 29	72.86	Nov. 24	72.28
May 26	73.12	Sept. 26	72.48		

8-18-34bb. Central Nebraska Public Power and Irrigation District. Highest observed stage in period of record, 19.30 on Nov. 24. Records available: 1948-49.

Apr. 5	20.06	July 29	19.67	Nov. 24	19.30
May 26	19.97	Sept. 26	19.44		

8-19-7dc. Mrs. Labart. Records available: 1946-49. Mar. 12, 4.53; Apr. 18, 4.50. Measurements discontinued.

8-19-14dc. Crawford. Highest observed stage in period of record, 10.12 on July 8. Records available: 1946-49.

Jan. 14	11.48	Apr. 18	10.50	Sept. 9	11.40
Mar. 12	10.90	July 8	10.12	Nov. 4	11.22

8-19-15cd. Highest observed stage in period of record, 6.12 on Apr. 6. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 14	6.70	Apr. 6	6.12	July 8	6.48	Nov. 4	6.65
Mar. 12	6.32	18	6.37	Sept. 9	7.02		

8-19-18aa. Central Nebraska Public Power and Irrigation District. Driven observation well, diameter 2 inches, depth 8.6 feet. Measuring point, top of casing, 2.0 feet above land-surface datum. Highest observed stage in period of record, 1.24 on Mar. 12; lowest, 2.54 on Sept. 9. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level
Jan. 14	1.86	Apr. 18	1.51	Sept. 9	2.54
Mar. 12	1.24	July 8	2.06	Nov. 4	2.38

8-19-29cc. Central Nebraska Public Power and Irrigation District. Highest observed stage in period of record, 62.69 on Nov. 23. Records available: 1948-49.

Apr. 1	63.79	July 28	63.39	Nov. 23	62.69
June 1	63.66	Sept. 26	63.06		

8-19-33cc. Central Nebraska Public Power and Irrigation District. Highest observed stage in period of record, 48.32 on Nov. 24. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 1	50.13	July 28	49.30	Nov. 24	48.32
June 1	49.72	Sept. 26	48.79		

8-19-36bb. Central Nebraska Public Power and Irrigation District. Highest observed stage in period of record, 32.22 on Nov. 24. Records available: 1945-49.

Apr. 1	33.45	July 28	33.02	Nov. 24	32.22
June 1	33.28	Sept. 26	32.67		

8-20-8cd. Mrs. Matson. Highest observed stage in period of record, 4.18 on July 8. Records available: 1946-49.

Jan. 14	6.45	Apr. 18	5.24	Sept. 9	4.19
Mar. 12	5.95	July 8	4.18	Nov. 3	5.20

8-20-9cd. Jones. Records available: 1938-49.

Jan. 14	3.10	Apr. 18	2.65	Sept. 9	2.85
Mar. 12	2.90	July 8	2.35	Nov. 4	2.98

8-20-12dc. Central Nebraska Public Power and Irrigation District. Highest observed stage in period of record, 1.24 on Jan. 14. Records available: 1948-49.

Jan. 14	1.24	Apr. 16	1.35	Sept. 9	1.57
Mar. 12	1.20	July 8	1.63	Nov. 4	1.55

8-20-18dd. High Estate. Highest observed stage in period of record, 104.68 on Nov. 23. Records available: 1948-49. Apr. 6, 106.54; July 28, 104.84; Sept. 26, 104.87; Nov. 23, 104.68.

8-20-23dc. Central Nebraska Public Power and Irrigation District. Highest observed stage in period of record, 64.29 on Nov. 23. Records available: 1948-49.

Apr. 6	66.45	July 28	65.59	Nov. 23	64.29
June 1	66.10	Sept. 26	65.19		

8-20-26dc. Central Nebraska Public Power and Irrigation District. Records available: 1948-49.

Apr. 6	51.47	July 28	54.42	Nov. 23	52.82
June 1	57.17	Sept. 26	50.64		

Pierce County

No measurement made in 1949.

Platte County

A17-1-14cc. Loup River Public Power District. Records available: 1935-40, 1942-49.

Jan. 4	9.52	Apr. 25	8.47	Sept. 2	9.00
Mar. 8	8.28	July 12	8.40	Nov. 4	9.10

A17-1-14dd. Loup River Public Power District. Records available: 1935-40, 1942-49.

Jan. 4	4.84	Apr. 25	3.40	Sept. 2	5.06
Mar. 8	3.45	July 12	4.18	Nov. 4	4.70

A17-1-17dd. Loup River Public Power District. Records available: 1935-40, 1942-49.

Jan. 4	9.34	Apr. 25	7.20	Sept. 2	8.89
Mar. 8	8.99	July 12	7.75	Nov. 4	8.80

A17-1-25aa. Loup River Public Power District. Records available: 1935-40, 1942-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 4	8.25	Apr. 26	6.74	Sept. 2	7.48
Mar. 8	7.80	July 12	6.43	Nov. 4	7.30

A17-1-29da. Loup River Public Power District. Records available: 1935-40, 1942-44, 1946-49.

Jan. 4	11.20	Apr. 25	9.38	Sept. 2	10.74
Mar. 7	9.57	July 12	9.79	Nov. 4	10.75

A17-1-36bc. Loup River Public Power District. Highest observed stage in period of record, 3.87 on Apr. 25. Records available: 1946-49.

Jan. 4	5.95	Apr. 25	3.87	Sept. 2	5.87
Mar. 8	5.29	July 12	4.99	Nov. 4	5.87

A18-1-28cd. US 150. Loup River Public Power District. Records available: 1935-40, 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	69.70	Apr. 29	69.49	July 30	70.50	Oct. 31	70.50
Feb. 26	69.70	May 28	69.40	Aug. 29	69.50	Dec. 28	69.70
Mar. 31	69.80	June 30	70.50	Sept. 30	69.50		

A20-1-18cb. University of Nebraska. Records available: 1935-42, 1946. No measurement made in 1949.

16-2-2da. Loup River Public Power District. Highest observed stage in period of record, 1.86 on Apr. 15. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 4	5.05	Apr. 15	1.86	Sept. 2	5.50
Mar. 8	3.86	July 12	3.67	Nov. 7	5.05

16-2-9cc. Nyffeler. Highest observed stage in period of record, 0.39 on Apr. 15. Records available: 1946-49.

Jan. 5	2.55	Apr. 15	0.39	Sept. 2	3.62
Mar. 8	.95	July 12	2.85	Nov. 7	3.43

16-2-12ab. Ernst. Highest observed stage in period of record, 6.24 on Apr. 15. Records available: 1934-42, 1944-49. Apr. 15, 6.24; July 12, 7.60; Sept. 2, 9.95; Nov. 7, 9.27.

17-1-2cc. Loup River Public Power District. Records available: 1935-40; 1942-49.

Apr. 25	9.70	Sept. 2	10.65	Nov. 7	10.43
July 12	8.93	Nov. 4	10.45	Dec. 2	10.51

17-1-5ad. Loup River Public Power District. Highest observed stage in period of record, 0.94 on Mar. 7. Records available: 1935-40, 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	1.69	Apr. 25	1.35	Sept. 2	2.58	Nov. 7	2.20
Mar. 7	.94	July 12	1.63	Nov. 4	2.24	Dec. 2	2.31

17-1-7ac. Loup River Public Power District. Records available: 1935-40, 1942-49.

Jan. 4	7.83	July 12	5.72	Nov. 4	7.16	Dec. 2	7.34
Apr. 25	6.09	Sept. 2	6.85	7	7.14		

17-1-14cc. Loup River Public Power District. Records available: 1935-40, 1942-49.

Jan. 4	10.67	Apr. 25	9.77	Sept. 2	11.00	Nov. 7	10.72
Mar. 8	9.45	July 12	10.39	Nov. 4	10.71	Dec. 2	10.79

17-1-34dc. Ernst. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	8.72	July 12	7.58	Nov. 7	8.68
Mar. 7	7.82	Sept. 2	8.79		

17-2-2cd. Schacher. Records available: 1934-42, 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	8.01	Apr. 18	4.87	Sept. 2	6.84	Nov. 7	6.36
Mar. 7	6.73	July 12	4.62	Nov. 4	6.81	Dec. 2	6.51

17-2-4bc. Loup River Public Power District. Records available: 1935-40, 1942-49.

Jan. 4	10.88	Apr. 25	8.96	Sept. 2	11.16	Nov. 7	10.91
Mar. 8	8.09	July 12	9.22	Nov. 4	10.93	Dec. 2	10.96

17-2-6bd. Loup River Public Power District. Driven observation well, diameter $1\frac{1}{4}$ inches, depth 23.0 feet. Measuring point, top of pipe, 2.4 feet above land-surface datum. Highest observed stage in period of record, 12.53 on June 6, 1949; lowest, 14.53 on Aug. 8, 1949. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
May 18, 1948	13.70	June 6, 1949	12.53	Sept. 21, 1949	13.94
Sept. 28	14.32	July 6	12.93	Nov. 7	13.87
Apr. 27, 1949	13.07	Aug. 8	14.53	Dec. 2	13.98

17-2-17bb. Observation well, diameter 2 inches, depth 9.60 feet. Measuring point, top of pipe, 2.0 feet above land-surface datum. Highest observed stage in period of record, 3.16 on Nov. 7, 1949; lowest, 3.62 on Sept. 28, 1948. Records available: 1948-49. May 18, 1948, 3.40; Sept. 28, 1948, 3.62; Nov. 7, 1949, 3.18; Dec. 2, 1949, 3.37.

17-3-2da. Loup River Public Power District. Driven observation well, diameter $1\frac{1}{4}$ inches, depth 18.0 feet. Measuring point, top of pipe, 2.5 feet above land-surface datum. Highest observed stage in period of record, 5.51 on June 6, 1949; lowest, 9.95 on Sept. 28, 1948. Records available: 1948-49.

May 19, 1948	8.45	June 6, 1949	5.51	Sept. 21, 1949	8.48
Sept. 28	9.95	July 6	6.39	Nov. 7	8.66
Apr. 7, 1949	6.61	Aug. 9	8.96	Dec. 2	8.79

17-3-8cb. Loup River Public Power District. Driven observation well, diameter $1\frac{1}{4}$ inches, depth 14.5 feet. Measuring point, top of pipe, 2.0 feet above land-surface datum. Highest observed stage in period of record, 0.40 on July 6, 1949; lowest, 3.20 on Sept. 28, 1948. Records available: 1948-49.

May 18, 1948	2.70	June 6, 1949	0.81	Sept. 21, 1949	1.48
Sept. 28	3.20	July 6	.40	Nov. 7	1.27
Apr. 26, 1949	1.04	Aug. 9	2.98	Dec. 2	1.75

17-3-23ad. Drilled irrigation well, diameter 24 inches, depth 48.20 feet. Measuring point, top of casing, 0.60 foot above land-surface datum. Highest observed stage in period of record, 13.55 on July 6, 1949; lowest, 14.80 on Jan. 29, 1947 and Sept. 28, 1948. Records available: 1948-49.

Jan. 29, 1947	14.80	June 6, 1949	14.00	Sept. 21, 1949	14.11
Oct. 30	14.19	July 6	13.55	Nov. 7	14.42
Sept. 28, 1948	14.80	Aug. 9	13.71	Dec. 2	14.69
Apr. 27, 1949	14.43				

Polk County

13-4-34cc. University of Nebraska. Highest observed stage in period of record, 5.73 on Apr. 27. Records available: 1940-41, 1944, 1946-49. Apr. 27, 5.73; Oct. 17, 7.67.

14-4-4da. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter 1½ inches, depth 12.0 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum, 1,608.02 feet above sea level. Highest observed stage in period of record, 4.75 on June 12; lowest, 6.59 on Sept. 1. Records available: 1949. June 12, 4.75; July 11, 4.97; Sept. 1, 6.59; Nov. 7, 5.05.

14-4-19ab. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 2.32 on Mar. 7. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 3	5.45	Apr. 20	3.26	Sept. 1	4.57
Mar. 7	2.32	July 11	4.82	Nov. 7	4.65

15-2-4dc. Highest observed stage in period of record, 3.36 on Apr. 19. Records available: 1946-49.

Jan. 3	6.75	July 12	5.88	Nov. 7	7.40
Apr. 19	3.36	Sept. 1	7.40		

15-2-7bb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 5.28 on Apr. 19. Records available: 1946-49.

Jan. 3	6.85	Apr. 19	5.28	Sept. 1	7.46
Mar. 7	5.45	July 12	7.08	Nov. 7	7.53

15-3-3dc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 3.37 on Apr. 20. Records available: 1947-49.

Jan. 3	5.73	Apr. 20	3.37	Sept. 1	5.45
Mar. 7	4.95	July 11	4.34	Nov. 7	5.86

15-3-20cc. Norris. Records available: 1946-49.

Jan. 3	6.25	July 11	4.88	Nov. 7	6.53
Apr. 20	4.31	Sept. 1	6.06		

15-3-23dc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 4.88 on Mar. 7. Records available: 1947-49.

Jan. 3	10.48	July 11	8.77	Nov. 7	9.85
Mar. 7	4.88	Sept. 1	9.78		

15-4-35dc. Carlson. Highest observed stage in period of record, 18.45 on July 12. Records available: 1946-49.

Jan. 3	19.98	July 12	18.45	Nov. 7	19.65
Apr. 20	18.64	Sept. 1	19.40		

16-1-14bb. Czafla. Records available: 1946-49.

Jan. 3	5.82	July 12	5.02	Nov. 7	5.45
Apr. 19	5.26	Sept. 1	5.27		

16-1-36cd. Bugham. Records available: 1946-49.

Jan. 3	21.18	Apr. 19	19.81	Sept. 1	20.28
Mar. 7	20.71	July 12	19.55	Nov. 5	20.48

16-2-23dc. Nitsch. Records available: 1946-49.

Jan. 3	7.91	July 12	6.96	Nov. 7	7.96
Apr. 19	5.97	Sept. 1	8.20		

Red Willow County

2-29-4aa. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 8.52 on June 11. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 9	10.59	July 7	9.17	Sept. 12	10.73	Nov. 14	10.74
Apr. 6	9.42	Aug. 4	10.42	Oct. 7	11.20	Dec. 20	10.62
June 11	8.52						

2-29-5ab. Wilcox. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 9	18.89	June 11	17.70	Oct. 6	19.42
Apr. 7	18.42	Aug. 4	19.88	Nov. 18	19.13

2-30-1aa. Geological Survey, U. S. Dept. of Interior. Lowest observed stage in period of record, 11.60 on Aug. 4. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 9	9.86	July 7	a9.51	Sept. 12	a9.06	Nov. 18	10.00
Apr. 7	9.13	Aug. 4	11.60	Oct. 7	10.70	Dec. 20	9.80
June 11	8.90						

a By Bureau of Reclamation, U. S. Dept. of Interior.

2-30-12ad. Schmidt. Records available: 1946-49.

Feb. 9	29.60	July 7	a29.10	Sept. 12	a29.71	Nov. 18	29.25
Apr. 7	29.89	Aug. 4	30.15	Oct. 7	29.32	Dec. 20	29.34
June 11	29.31						

a By Bureau of Reclamation, U. S. Dept. of Interior.

3-26-5bb. Carr. Highest observed stage in period of record, 43.17 on June 11. Records available: 1946-49.

Feb. 9	43.77	June 11	43.17	Oct. 7	44.44	Dec. 20	43.53
Apr. 4	43.49	Sept. 9	a45.74	Nov. 15	43.75		

a By Bureau of Reclamation, U. S. Dept. of Interior.

3-26-5cc. Highest observed stage in period of record, 15.57 on June 11. Records available: 1946-49.

Feb. 9	16.59	June 11	15.57	Oct. 7	16.80	Dec. 20	16.42
Apr. 4	15.75	Aug. 4	16.22	Nov. 18	16.60		

3-26-9cb. Pucha. Records available: 1946-49.

Feb. 7	16.72	June 6	15.60	Oct. 7	16.10	Dec. 17	16.17
Apr. 7	16.12	Aug. 1	15.55	Nov. 15	16.19		

3-26-1lbb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 7.85 on June 6. Records available: 1946-49.

Feb. 7	8.81	June 6	7.85	Sept. 9	a8.86	Nov. 15	8.82
Apr. 7	8.21	Aug. 1	8.35	Oct. 7	9.04	Dec. 17	8.71

a By Bureau of Reclamation, U. S. Dept. of Interior.

3-27-7dc. Helm. Highest observed stage in period of record, 6.95 on June 11. Records available: 1946-49.

Feb. 8	9.27	June 11	6.95	Sept. 9	a9.10	Nov. 15	9.44
Apr. 4	8.40	Aug. 4	8.32	Oct. 7	9.48	Dec. 20	9.25

a By Bureau of Reclamation, U. S. Dept. of Interior.

3-27-8ac. Duckworth. Records available: 1934-44, 1946-49.

Feb. 8	11.53	June 11	10.12	Oct. 7	11.34	Dec. 20	11.02
Apr. 4	11.09	Aug. 4	10.94	Nov. 18	11.27		

3-27-11cd. Tiller. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
June 6	16.70	Oct. 7	17.52	Dec. 17	16.88
Aug. 1	17.49	Nov. 15	17.14		

3-27-17cb. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 7	10.81	June 6	9.90	Oct. 7	10.27	Dec. 17	9.68
Apr. 7	8.51	Aug. 1	9.89	Nov. 15	9.87		

3-28-17da. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 9.46 on July 7. Records available: 1946-49.

Feb. 7	10.72	July 7	9.46	Sept. 7	11.15	Nov. 15	10.97
Apr. 7	9.60	Aug. 1	10.54	Oct. 7	11.52	Dec. 17	10.68
June 6	9.59						

a By Bureau of Reclamation, U. S. Dept. of Interior.

3-28-20bb. Tridle. Highest observed stage in period of record, 8.79 on Apr. 7. Records available: 1946-49.

Feb. 7	9.85	July 7	8.99	Sept. 7	10.30	Nov. 15	10.34
Apr. 7	8.79	Aug. 1	9.65	Oct. 3	10.56	Dec. 17	10.06
June 6	9.19						

a By Bureau of Reclamation, U. S. Dept. of Interior.

3-28-21cd. Vogue. Highest observed stage in period of record, 8.40 on June 6. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 7	8.47	Aug. 1	8.83	Nov. 15	8.82
June 6	8.40	Oct. 3	9.04	Dec. 17	8.54

3-28-24ac. Highest observed stage in period of record, 8.67 on Apr. 7; lowest, 14.12 on Oct. 3. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 7	11.87	June 6	11.78	Oct. 3	14.12	Dec. 17	12.24
Apr. 7	8.67	Aug. 1	13.52	Nov. 15	12.66		

3-29-32db. University of Nebraska. Highest observed stage in period of record, 4.60 on June 11. Records available: 1940-44, 1946-49.

Feb. 9	5.96	June 11	4.60	Oct. 6	7.02	Dec. 20	5.98
Apr. 7	4.95	Aug. 4	6.83	Nov. 18	6.32		

3-29-35da. Hickman. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 7	18.84	Aug. 4	17.99	Nov. 18	18.42
June 11	18.20	Oct. 7	18.15	Dec. 20	18.29

3-30-19bb. Mrs. Cain. Highest observed stage in period of record, 5.72 on June 9. Records available: 1946-49.

June 9	5.72	Aug. 4	7.59	Nov. 15	6.95
July 7	6.88	Oct. 6	7.12	Dec. 17	6.77

3-30-26cb. Brown. Highest observed stage in period of record, 7.45 on Feb. 7. Records available: 1946-49.

Feb. 7	7.45	June 6	8.15	Nov. 15	8.65
Apr. 4	7.78	Oct. 3	9.30	Dec. 17	8.57

3-30-29aa. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 1.92 on Apr. 7. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 9	3.55	July 7	a3.63	Sept. 12	a4.35	Nov. 18	3.97
Apr. 7	1.92	Aug. 4	4.68	Oct. 7	4.56	Dec. 20	3.75
June 11	2.35						

a By Bureau of Reclamation, U. S. Dept. of Interior.

3-30-34bb. Hauxwell. Lowest observed stage in period of record, 15.12 on Aug. 4. Records available: 1946-49.

Feb. 9	13.46	July 7	a13.30	Sept. 12	a14.27	Nov. 18	13.85
Apr. 7	12.86	Aug. 4	15.12	Oct. 7	14.30	Dec. 20	13.73
June 11	12.53						

a By Bureau of Reclamation, U. S. Dept. of Interior.

4-26-34db. Selover. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 9	20.82	June 11	19.77	Nov. 18	20.60
Apr. 4	20.12	Oct. 7	20.79	Dec. 20	20.55

Richardson County

No measurement made in 1949.

Rock County

30-17-8db. University of Nebraska. Highest observed stage in period of record, 1.59 on June 14. Measurements made by Bureau of Reclamation, U. S. Dept. of Interior, Ainsworth. Records available: 1934-49.

June 14	1.59	Aug. 31	5.99	Oct. 6	4.04
June 25	3.88	Sept. 14	3.67		

30-19-10aa. University of Nebraska. Highest observed stage in period of record, 0.37 on June 6. Measurements made by Bureau of Reclamation, U. S. Dept. of Interior, Ainsworth. Records available: 1940, 1944-49.

June 6	0.37	Aug. 31	3.37	Oct. 6	3.07
July 25	3.08	Sept. 14	2.92		

Saline County

No measurement made in 1949.

Sarpy County

No measurement made in 1949.

Saunders County

A13-9-11dd. City of Lincoln. Records available: 1934-42, 1944, 1946. Measurements discontinued.

A13-9-12dc. City of Lincoln. Records available: 1936-42, 1944, 1946. Measurements discontinued.

A13-9-24cc. US 62. City of Lincoln. Records available: 1933-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 1	5.05	Apr. 28	3.67	Aug. 5	5.43	Oct. 21	5.35
28	1.17	May 30	3.05	29	5.52	Nov. 28	5.49
Apr. 1	1.45	July 1	2.82	Oct. 1	5.05		

A13-9-24dc. City of Lincoln. Records available: 1934-42, 1944, 1946. Measurements discontinued.

A14-5-35cd. Union Pacific Railroad. Records available: 1935-42, 1944, 1946. Measurements discontinued.

A17-5-23bb. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49. Destroyed, measurements discontinued after Nov. 5.

Date	Water level	Date	Water level	Date	Water level
Jan. 3	2.07	July 11	1.94	Nov. 5	1.97
Apr. 26	1.17	Sept. 1	5.10		

Scotts Bluff County

23-56-6aa. Gompert. Drilled irrigation well, diameter 18 inches. Measuring point, hole in turbine base, 0.7 foot above land-surface datum. Highest observed stage in period of record, 29.24 on Oct. 26; lowest, 34.63 on July 1. Records available: 1948-49.

Nov. 23, 1948	30.91	July 1, 1949	34.63	Oct. 26, 1949	29.24
Mar. 23, 1949	33.05	28	33.54	Nov. 28	29.88
Apr. 27	33.95	Aug. 31	31.77	Dec. 21	30.12
June 15	34.55	Sept. 30	29.44		

23-57-5bb. Oleson. Abandoned drilled domestic well, diameter 4 inches, depth 142 feet. Measuring point, top of casing, 1.1 feet above land-surface datum. Highest observed stage in period of record, 21.27 on Oct. 26; lowest, 24.08 on June 30. Records available: 1948-49.

Dec. 14, 1948	21.28	June 30, 1949	24.08	Oct. 26, 1949	21.27
Mar. 23, 1949	23.63	July 28	23.87	Nov. 28	22.05
Apr. 27	23.47	Aug. 31	23.03	Dec. 21	22.08
June 10	23.78	Sept. 30	21.28		

Seward County

All-2-23cc. Rolfmeier. Highest observed stage in period of record, 76.96 on Oct. 17. Records available: 1948-49. Apr. 26, 77.46; Oct. 17, 76.96.

All-3-22aa. Kilpatrick Estate. Records available: 1934-42, 1946. Measurements discontinued.

Sheridan County

24-41-34da. University of Nebraska. Records available: 1935-42, 1944-49.

May 13	7.66	July 15	7.98	Nov. 25	8.19
June 8	7.52	Sept. 16	8.34		

24-42-27ba. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49. May 13, 12.94; June 8, 12.52; July 15, 12.84; Nov. 25, 13.05.

24-43-15da. University of Nebraska. Highest observed stage in period of record, 5.26 on June 8. Records available: 1940-42, 1944-49.

May 13	5.78	July 15	6.32	Nov. 25	6.35
June 8	5.26	Sept. 16	6.53		

24-44-14da. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 3.94 on May 11. Records available: 1949. May 11, 3.94; July 15, 4.62; Sept. 16, 5.24; Nov. 25, 4.66.

24-44-18bb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 3.80 on May 11. Records available: 1946-49. May 11, 3.80; July 15, 4.11; Sept. 16, 4.77; Nov. 25, 4.73.

24-45-8dd. Geological Survey, U. S. Dept. of Interior. Records available: 1935-42, 1946-49. May 11, 1.13; July 14, 0.97; Sept. 13, 2.15; Nov. 23, 1.94.

24-46-10cb. Geological Survey, U. S. Dept. of Interior. Records available: 1946-49. May 11, 5.92; July 14, 5.67; Sept. 13, 6.14; Nov. 23, 6.03.

25-41-28ad. Ballinger. Records available: 1946-47. Measurements discontinued.

25-45-32ad. Herrian. Highest observed stage in period of record, 31.50 on July 15 and 16. Records available: 1946-49.

Lowest daily water level, from recorder charts

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 11	32.33	July 13	31.52	Sept. 13	32.13	Nov. 23	32.19
12	32.33	14	31.51	14	32.13	24	32.19
13	32.33	15	31.50	15	32.13	25	32.19
14	32.29	16	31.50	16	32.17	26	32.19
15	32.25	17	31.54	17	32.20	27	32.18
16	32.25	18	31.59	18	32.22	28	32.18
17	32.23	19	31.59	19	32.22	29	32.19
18	32.17	20	31.62	20	32.23	30	32.20

26-41-24cd. Records available: 1946-47. Measurements discontinued.

27-41-29ba. Bixby. Records available: 1946-47. Measurements discontinued.

27-46-34bb. Mesursmith. Records available: 1946-47. Measurements discontinued.

28-42-15bc. Records available: 1946-47. Measurements discontinued.

28-46-4ac. Nickels. Records available: 1946-47. Measurements discontinued.

28-46-32ad. Records available: 1946-47. Measurements discontinued.

31-44-10dd. University of Nebraska. Records available: 1935-42, 1944-47. No measurement made in 1949.

31-46-5dd. Johnson. Records available: 1934-38, 1940-41, 1945, 1947. Measurements discontinued.

31-46-8ad. University of Nebraska. Records available: 1937-42, 1945-47. No measurement made in 1949.

33-42-36da. Barto. Records available: 1940-41, 1945, 1947. Measurements discontinued.

Sherman County

13-13-4dc. Thomas. Drilled stock well, diameter 4 inches, reported depth 190 feet. Measuring point, hole in top of platform, at land-surface datum. Highest observed stage in period of record, 120.64 on Dec. 6; lowest, 121.70 on Nov. 8. Records available: 1949. June 22, 121.10; Sept. 23, 120.92; Nov. 8, 121.70; Dec. 6, 120.64.

13-13-13cc. Siefert. Dug stock well, diameter 4 feet, reported depth 78 feet. Measuring point, hole in platform, south side, at land-surface datum. Highest observed stage in period of record, 53.55 on Nov. 8; lowest, 58.84 on Sept. 1. Records available: 1949. Sept. 1, 58.84; Sept. 23, 54.93; Nov. 8, 53.55; Dec. 6, 57.07.

13-13-23ad. McDonald. Abandoned dug and drilled stock well, diameter 4 feet, depth 44 feet. Measuring point, top of plank, east side, at land-surface datum. Highest observed stage in period of record, 37.93 on Sept. 23; lowest, 38.37 on Dec. 6. Records available: 1949. June 23, 37.95; Sept. 23, 37.93; Dec. 6, 38.37.

14-14-3cc. Couton. Dug and drilled stock well. Measuring point, top of casing, 0.5 foot above land-surface datum. Highest observed stage in period of record, 6.37 on June 26; lowest, 8.03 on Nov. 8. Records available: 1949. June 26, 6.37; Sept. 23, 6.63; Nov. 8, 8.03.

14-14-5bc. Macejeski. Highest observed stage in period of record, 8.87 on Aug. 5. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 29	10.95	Aug. 5	8.87	Nov. 8	10.89
June 2	11.15	Sept. 23	9.89	Dec. 5	11.33

14-14-8db. Zimmerman. Highest observed stage in period of record, 6.01 on July 7. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 29	6.46	July 7	6.01	Nov. 8	7.95
June 3	6.43	Sept. 23	7.95	Dec. 6	8.02

14-14-23cb. Heil. Drilled irrigation well, diameter 18 inches, reported depth 85 feet. Measuring point, hole in pump base, 1.0 foot above land-surface datum. Highest observed stage in period of record, 10.88 on June 26; lowest, 12.65 on Nov. 8. Records available: 1949. June 26, 10.88; Sept. 23, 12.46; Nov. 8, 12.65.

14-14-35cb. School district. Domestic well. Measuring point, top of casing, 1.0 foot above land-surface datum. Records available: 1949. June 24, 30.14; Dec. 6, 30.35.

15-14-19cb. Heil. Highest observed stage in period of record, 4.88 on Sept. 23. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 29	5.01	July 7	5.65	Nov. 7	5.28	Nov. 30	5.37
June 3	5.24	Sept. 23	4.88	Nov. 8	5.29		

15-15-3dc. Larsen. Irrigation well. Measuring point, top of pump base, 1.0 foot above land-surface datum. Highest observed stage in period of record, 14.11 on Sept. 23; lowest, 14.82 on Nov. 30. Records available: 1949. June 26, 14.19; Sept. 23, 14.11; Nov. 30, 14.82.

15-15-14db. Chelowski. Drilled irrigation well, diameter 18 inches, reported depth 183 feet. Measuring point, top of pump platform, 1.0 foot above land-surface datum. Highest observed stage in period of record, 16.49 on June 23; lowest, 17.73 on Nov. 30. Records available: 1949. June 23, 16.49; Sept. 23, 16.75; Nov. 30, 17.73.

15-15-24cc. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter 3/4 inch, depth 20.1 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 12.56 on Sept. 23; lowest, 13.55 on Nov. 30. Records available: 1949. Sept. 23, 12.56; Nov. 7, 13.22; Nov. 8, 13.25; Nov. 30, 13.55.

16-15-5dd. Drilled stock well, diameter 5 inches, depth 86 feet. Measuring point, top of casing, 1.0 foot above land-surface datum. Records available: 1949. Oct. 11, 42.94; Nov. 30, 42.76.

16-15-8dd. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter 3/4 inch, depth 21 feet. Measuring point, top of pipe, 2.0 feet above land-surface datum. Highest observed stage in period of record, 3.88 on Nov. 30; lowest, 4.30 on Sept. 23. Records available: 1949. Sept. 23, 4.30; Nov. 7, 4.08; Nov. 30, 3.88.

16-15-9dc. Geological Survey, U. S. Dept. of Interior. Jetted observation well, diameter 1/2 inch, depth 17 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 12.59 on Sept. 22; lowest, 13.53 on Aug. 24. Records available: 1949. Aug. 24, 13.53; Sept. 22, 12.59; Nov. 7, 13.35; Nov. 30, 13.50.

16-15-16cd. Geological Survey, U. S. Dept. of Interior. Jetted observation well, diameter 3/4 inch, depth 14 feet. Measuring point, top of pipe, 2.3 feet above land-surface datum. Records available: 1949. Nov. 30, 6.24.

16-15-19ab. Fowler. Drilled irrigation well, diameter 18 inches, reported depth 124 feet. Measuring point, hole in turbine base, at land-surface datum. Records available: 1949. Nov. 20, 22.21.

16-15-20cc. Geological Survey, U. S. Dept. of Interior. Jetted observation well, diameter 3/4 inch, depth 37.9 feet. Measuring point, top of pipe, 2.5 feet above land-surface datum. Records available: 1949. Dec. 1, 9.52.

16-15-21aa. Geological Survey, U. S. Dept. of Interior. Jetted observation well, diameter $\frac{3}{4}$ inch, depth 17.5 feet. Measuring point, top of pipe, 2.2 feet above land-surface datum. Records available: 1949. Nov. 16, 5.09.

16-15-26ca. School district. Drilled domestic well, diameter 4 inches. Measuring point, inspection hole, east side of pump base, 1.4 feet above land-surface datum. Records available: 1949. Oct. 11, 48.93; Nov. 30, 49.82.

16-15-28bb. Geological Survey, U. S. Dept. of Interior. Jetted observation well, diameter $\frac{3}{4}$ inch, depth 35.2 feet. Measuring point, top of pipe, 2.8 feet above land-surface datum. Records available: 1949. Dec. 1, 21.10.

16-15-36cc. Geological Survey, U. S. Dept. of Interior. Jetted observation well, diameter $\frac{1}{2}$ inch, depth 40 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 8.38 on Nov. 30; lowest, 12.21 on Sept. 23. Records available: 1949. Aug. 22, 9.75; Aug. 24, 9.87; Sept. 23, 12.21; Nov. 30, 8.38.

16-16-12bc. Chotkoski. Drilled irrigation well, diameter 18 inches, reported depth 124 feet. Measuring point, hole in turbine base, 2.0 feet above land-surface datum. Highest observed stage in period of record, 32.37 on Aug. 26; lowest, 35.78 on Nov. 7. Records available: 1949. Aug. 29, 32.37; Sept. 27, 33.68; Nov. 7, 35.78; Nov. 30, 35.22.

16-16-12dc. Geological Survey, U. S. Dept. of Interior. Jetted observation well, diameter $\frac{3}{8}$ inch, depth 37 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 26.20 on Aug. 23; lowest, 28.91 on Dec. 1. Records available: 1949. Aug. 23, 26.20; Aug. 24, 26.22; Sept. 27, 26.29; Dec. 1, 28.91.

16-16-13aa. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter $\frac{3}{4}$ inch, depth 20.2 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 13.18 on Sept. 27; lowest, 13.69 on Dec. 1. Records available: 1949. Sept. 27, 13.18; Nov. 7, 13.56; Dec. 1, 13.69.

Sioux County

24-57-35cb. Lenhart. Drilled irrigation well, diameter 24 inches, depth 87 feet. Measuring point, hole in turbine base, at land-surface datum. Highest observed stage in period of record, 4.84 on Aug. 31; lowest, 8.83 on July 1. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Nov. 16, 1948	7.09	Aug. 31, 1949	4.84	Nov. 28, 1949	7.33
July 1, 1949	8.83	Sept. 30	5.53	Dec. 21	7.85
28	6.12	Oct. 26	6.36		

Stanton County

No measurement made in 1949.

Thayer County

No measurement made in 1949.

Thomas County

23-28-9da. University of Nebraska. Records available: 1935-40, 1942, 1945-49.

May 11	10.19	July 15	10.49	Nov. 24	10.62
June 8	10.06	Sept. 16	10.69		

24-30-20ab. University of Nebraska. Records available: 1935-42, 1944-49. July 15, 2.91; Sept. 16, 2.84; Nov. 23, 2.76.

Thurston County

No measurement made in 1949.

Valley County

17-16-17ac. Geological Survey, U. S. Dept. of Interior. Jetted observation well, diameter $\frac{3}{8}$ inch, depth 20.3 feet. Measuring point, top of pipe, 2.0 feet above land-surface datum. Records available: 1949. Sept. 26, 3.48; Dec. 5, 4.46.

17-16-25aa. Geological Survey, U. S. Dept. of Interior. Jetted observation well, diameter $\frac{3}{8}$ inch, depth 25 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 9.17 on Aug. 26; lowest, 9.58 on Sept. 27. Records available: 1949. Aug. 26, 9.17; Sept. 27, 9.58; Nov. 7, 9.44; Nov. 30, 9.34.

17-16-25cb. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter $\frac{3}{4}$ inch, depth 10.5 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 2.67 on Nov. 30; lowest, 3.19 on Sept. 27. Records available: 1949. Sept. 27, 3.19; Nov. 7, 2.80; Nov. 30, 2.67.

17-16-26dc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 2.70 on Apr. 1. Records available: 1943-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	4.57	....	3.04	2.70	4.76	5.17	4.93	....	5.85	5.80	5.25	5.11
2	4.57	....	3.03	2.86	4.82	5.14	5.00	5.84	5.88	5.81	5.26	5.12
3	4.57	....	2.99	2.95	4.86	5.11	5.18	5.87	5.89	5.83	5.27	5.11
4	4.57	....	3.02	2.95	4.91	5.16	5.28	5.90	5.83	5.84	5.27	5.12
5	....	....	3.32	3.03	4.95	5.18	5.36	5.93	5.76	5.82	5.27	a5.13
6	....	....	3.41	3.22	4.75	5.19	5.42	5.97	....	5.80	5.27	5.13
7	....	....	3.41	3.43	4.37	5.15	5.48	5.00	5.41	5.78	5.26	5.13
8	4.42	....	3.48	3.65	4.38	4.06	5.48	6.03	5.36	5.70	5.24	5.14
9	4.50	....	3.62	3.65	3.93	3.78	4.88	6.06	5.34	5.67	5.23	5.17
10	4.58	....	3.69	3.18	4.19	3.58	4.85	6.08	5.29	5.42	5.21	5.13
11	4.59	....	3.72	3.50	4.37	3.88	4.91	6.10	5.24	5.51	5.20	5.13
12	4.56	....	3.77	3.73	4.51	4.04	5.13	6.12	5.22	5.16	5.29	a5.01
13	4.48	....	3.80	3.91	4.63	4.20	5.22	6.14	5.16	5.13	5.28	a5.05
14	4.43	....	3.71	3.91	4.72	4.36	5.30	6.15	5.19	5.13	5.24	5.08
15	4.38	....	3.76	3.11	4.78	4.51	5.38	6.16	5.23	5.13	5.24	5.09
16	4.36	....	....	3.37	4.80	4.66	5.45	5.94	5.28	5.12	5.24	5.14
17	4.38	....	....	3.73	4.78	4.80	5.53	5.93	5.35	5.14	5.24	5.11
18	4.40	....	....	3.97	4.85	4.89	5.56	5.91	5.43	5.17	5.25	5.08
19	4.43	4.76	....	4.10	4.93	4.97	5.60	5.86	5.50	5.17	5.26	5.06
20	4.43	4.78	....	4.14	4.97	5.03	5.54	5.69	5.54	5.18	5.25	5.03
21	4.41	4.77	....	4.19	4.87	5.10	5.48	5.64	5.60	5.19	5.27	5.10
22	4.38	....	3.57	4.27	4.26	5.19	5.56	5.64	5.63	5.19	5.18	5.17
23	4.36	....	3.60	4.35	4.34	5.26	5.66	5.67	5.66	5.21	5.17	5.23
24	....	....	3.70	4.48	4.47	5.32	5.69	5.75	5.67	5.21	5.14	5.28
25	....	....	3.85	4.50	4.60	5.37	5.73	5.82	5.69	5.22	5.12	5.32
26	....	....	3.87	4.57	4.74	5.43	....	5.86	5.72	5.23	5.11	5.36
27	....	....	2.97	4.63	4.85	5.44	....	5.81	5.70	5.23	5.10	5.39
28	....	3.04	3.14	4.68	4.95	4.82	....	5.81	5.72	5.24	5.10	5.40
29	....	....	3.20	4.73	5.02	4.78	....	5.80	5.73	5.24	5.10	5.36
30	....	....	3.12	4.75	5.09	4.82	....	5.82	5.75	5.26	5.11	5.32
31	....	....	....	....	5.15	....	....	5.83	....	5.26	....	5.27

a Interpolated.

17-16-34aa. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter $\frac{3}{4}$ inch, depth 16.0 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 8.14 on Aug. 24; lowest, 11.18 on Nov. 30. Records available: 1949. Aug. 24, 8.14; Sept. 27, 9.71; Nov. 7, 10.94; Nov. 30, 11.18.

18-13-2ac. Rutar. Lowest observed stage in period of record, 11.24 on Sept. 2. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 29	10.33	June 30	10.27	Nov. 2	10.15
June 2	10.17	Sept. 2	11.24	29	10.28

18-13-23dd. Hutchins. Highest observed stage in period of record, 8.70 on Aug. 3. Records available: 1934-42, 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 29	10.88	June 30	11.06	Sept. 2	9.77	Nov. 29	11.89
June 2	11.39	Aug. 3	8.70	Nov. 2	11.51		

18-15-12bb. Kokes. Highest observed stage in period of record, 28.26 on Apr. 29. Records available: 1948-49. Apr. 29, 28.26; June 2, 28.56.

18-16-30cc. Geological Survey, U. S. Dept. of Interior. Driven observation well, diameter 3/4 inch, depth 14.0 feet. Measuring point, top of pipe, 2.0 feet above land-surface datum. Highest observed stage in period of record, 4.18 on Aug. 31; lowest, 4.79 on Dec. 1. Records available: 1949. Aug. 31, 4.18; Nov. 8, 4.69; Dec. 1, 4.79.

19-13-28bb. Peterson. Highest observed stage in period of record, 12.29 on Apr. 29. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 29	12.29	June 30	12.71	Nov. 2	13.53
June 2	12.55	Sept. 30	13.62	29	13.89

19-13-33cc. Fish. Highest observed stage in period of record, 32.88 on Aug. 3; lowest, 34.27 on June 2. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 29	10.88	June 30	11.06	Sept. 2	9.77	Nov. 29	11.89
June 2	11.39	Aug. 3	8.70	Nov. 2	11.51		

19-14-6dc. Versal. To convert water levels from feet above assumed datum, as published in previous reports, to feet below land-surface datum, subtract from 135.85. Highest observed stage in period of record, 27.21 on Sept. 20, 1949. Records available: 1934-42, 1948-49.

Date	Water level	Date	Water level	Date	Water level
Mar. 27, 1948	29.23	June 2, 1949	29.55	Sept. 20, 1949	27.21
June 30	28.77	30	29.37	Nov. 2	27.38
Sept. 30	27.82	Aug. 3	28.62	29	27.93
Apr. 29, 1949	29.29				

19-14-13da. Sack. Lowest observed stage in period of record, 22.74 on Nov. 29. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 29	22.39	June 30	21.92	Sept. 20	21.60	Nov. 29	22.74
June 2	21.88	Aug. 3	20.71	Nov. 2	22.43		

19-14-15db. Kerchal. Lowest observed stage in period of record, 6.42 on Nov. 29. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 29	4.96	June 30	5.43	Nov. 2	6.41
June 2	5.57	Sept. 26	6.04	29	6.42

19-14-36bb. Penas. Highest observed stage in period of record, 28.51 on June 30; lowest, 30.90 on Nov. 2. Records available: 1948-49.

19-14-36bb--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 29	29.24	June 30	28.51	Sept. 20	29.88	Nov. 29	29.93
June 2	29.44	Aug. 3	29.69	Nov. 2	30.90		

20-15-34aa. Michalski. Highest observed stage in period of record, 56.73 on Apr. 29; lowest, 58.00 on Nov. 2 and 29. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 29	56.73	June 30	56.85	Nov. 2	58.00
June 2	56.99	Sept. 2	57.37	29	58.00

Washington County

No measurement made in 1949.

Wayne County

No measurement made in 1949.

Webster County

(Measurements made by Bureau of Reclamation, U. S. Dept. of Interior, except those made in November and December.)

1-9-6cd. Records available: 1948-49. Aug. 6, 49.70; Nov. 10, 48.64; Dec. 27, 49.00.

1-9-8bc. Bureau of Reclamation, U. S. Dept. of Interior. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 12.6 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 6.78 on Dec. 27; lowest, 6.85 on Oct. 27. Records available: 1949. Oct. 27, 6.85; Nov. 10, 6.84; Dec. 27, 6.78.

1-9-9ad. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 1.18 on June 20. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 4	3.15	May 27	2.24	Aug. 17	3.60	Nov. 10	3.24
Mar. 25	1.59	June 20	1.18	Sept. 23	3.64	Dec. 3	3.15
Apr. 28	2.48	July 29	3.29	Oct. 28	3.35	30	3.05

1-9-9cb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 1.84 on June 20. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 4	6.62	June 20	1.84	Sept. 27	5.96	Dec. 5	5.83
Apr. 28	4.92	July 28	5.06	Oct. 27	5.58	30	5.90
May 27	4.22	Aug. 17	5.55	Nov. 10	5.72		

1-9-9cc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 3.17 on June 20; lowest, 8.54 on Feb. 4. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 4	8.54	May 27	6.16	Aug. 17	6.28	Nov. 10	6.85
Mar. 31	7.15	June 20	3.17	Sept. 22	6.81	Dec. 5	7.08
Apr. 28	6.93	July 28	5.85	Oct. 27	6.76	30	7.80

1-9-11bc. Bureau of Reclamation, U. S. Dept. of Interior. Driven observation well, diameter $1\frac{1}{4}$ inches, depth 14.5 feet. Measuring point, top of pipe, 1.0 foot above land-surface datum. Highest observed stage in period of record, 7.13 on Oct. 27; lowest, 7.36 on Dec. 30. Records available: 1949. Oct. 27, 7.13; Nov. 10, 7.25; Dec. 30, 7.36.

1-9-11cb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 0.57 on June 20. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 4	5.08	May 27	2.12	Aug. 17	4.33	Nov. 10	4.02
Mar. 31	2.25	June 20	.57	Sept. 22	4.37	Dec. 3	4.12
Apr. 28	2.83	July 28	3.87	Oct. 27	3.93	30	4.12

1-9-13ad. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 3.74 on June 20; lowest, 10.22 on Nov. 10. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 4	8.64	May 27	5.70	Aug. 17	8.28	Nov. 10	10.22
Mar. 31	6.62	June 20	3.74	Sept. 22	8.43	Dec. 5	8.23
Apr. 28	7.19	July 28	7.46	Oct. 27	9.21	30	8.14

1-9-14bb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 4.63 on May 27. Records available: 1947-49.

Feb. 4	7.57	July 28	6.17	Oct. 27	7.58	Dec. 3	7.61
Apr. 27	5.90	Aug. 17	7.85	Nov. 10	7.62	30	7.49
May 27	4.63	Sept. 22	7.87				

1-9-14bc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 7.29 on June 20; lowest, 12.60 on Dec. 5. Records available: 1947-49.

Feb. 4	10.67	May 27	9.40	Aug. 17	11.93	Nov. 10	11.65
Mar. 31	10.22	June 20	7.29	Sept. 22	11.79	Dec. 5	12.60
Apr. 28	10.49	July 28	10.98	Oct. 27	11.73		

1-9-16bc. G. Ohmstede. Highest observed stage in period of record, 6.20 on June 20. Records available: 1946-49.

Mar. 31	11.77	May 27	9.70	Nov. 10	9.92	Dec. 30	10.38
Apr. 28	11.20	June 20	6.20	Dec. 5	10.54		

1-10-1dcl. Records available: 1939-41, 1946-49. Aug. 6, 9.68, by Geological Survey, U. S. Dept. of Interior; Nov. 10, 10.05; Dec. 27, 9.76.

1-10-3ad. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 6.47 on June 21. Records available: 1946-49.

Jan. 17	9.42	May 19	7.66	Oct. 20	8.31	Dec. 6	8.59
Mar. 15	8.72	June 21	6.47	Nov. 10	8.45	27	8.67
Apr. 18	8.26	July 21	7.83				

1-10-4ab. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 3.81 on June 21; lowest, 9.46 on Jan. 17. Records available: 1948-49.

Jan. 17	9.46	May 19	6.99	Oct. 20	7.14	Dec. 6	7.52
Mar. 15	8.72	June 21	3.81	Nov. 10	7.35	27	7.68
Apr. 18	8.09	July 21	4.83				

1-10-4db. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 5.34 on June 21. Records available: 1948-49.

Jan. 17	9.40	May 19	7.26	Oct. 20	8.90	Dec. 6	9.06
Mar. 15	8.43	June 21	5.34	Nov. 10	9.05	27	9.03
Apr. 18	8.09	July 21	7.65				

1-10-9ad. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 14.63 on June 21. Records available: 1946-49.

Jan. 17	17.63	May 19	15.85	Oct. 20	16.35	Dec. 6	16.56
Mar. 15	16.48	June 21	14.63	Nov. 10	16.46	30	16.53
Apr. 18	16.34	July 21	15.20				

1-10-10dd. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 6.70 on June 21. Records available: 1948-49.

Jan. 17	10.12	May 20	7.88	Oct. 20	9.96	Dec. 6	9.56
Mar. 15	8.44	June 21	6.70	Nov. 10	9.52	30	9.44
Apr. 18	8.48	July 21	8.60				

1-10-12ad. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 7.33 on July 21. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	8.22	May 19	8.06	Oct. 20	8.67	Dec. 6	8.67
Mar. 15	8.41	June 21	7.49	Nov. 10	8.68	27	8.67
Apr. 18	8.38	July 21	7.33				

1-10-12da. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 2.34 on June 21; lowest, 9.14 on Jan. 17. Records available: 1948-49.

Jan. 17	9.14	May 19	5.21	Oct. 20	7.58	Dec. 6	7.54
Mar. 15	5.37	June 21	2.34	Nov. 10	7.52	27	7.57
Apr. 18	6.09	July 21	6.30				

1-10-12dc. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 3.20 on June 21. Records available: 1948-49.

Jan. 17	7.10	May 20	4.30	Oct. 20	6.98	Dec. 6	7.00
Mar. 15	5.22	June 21	3.20	Nov. 10	7.09	30	6.95
Apr. 18	5.63	July 21	6.50				

1-11-1da. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 3.44 on June 11. Records available: 1946-49.

Jan. 17	9.98	Apr. 18	8.68	June 21	4.05	Nov. 10	8.00
Mar. 15	9.06	May 19	6.49	July 21	6.02	Dec. 6	8.30
Apr. 7	8.64	June 11	3.44	Oct. 20	7.59	27	8.54

1-11-5bc. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, +0.12 on June 21. Records available: 1946-49.

Jan. 17	7.61	May 19	0.47	Oct. 20	5.77	Dec. 6	6.10
Mar. 15	5.73	June 21	+12	Nov. 10	5.98	24	6.20
Apr. 18	5.21	July 21	3.13				

1-11-5cc. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 3.04 on June 21. Records available: 1948-49.

Jan. 17	7.03	May 19	4.81	Oct. 20	6.87	Dec. 6	6.88
Mar. 15	6.10	June 21	3.04	Nov. 10	6.95	24	6.91
Apr. 18	5.98	July 21	5.94				

1-11-6cc. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 3.19 on June 21. Records available: 1948-49.

Jan. 19	6.89	May 20	3.95	Oct. 20	5.89	Dec. 6	5.94
Mar. 15	4.88	June 21	3.19	Nov. 10	5.90	27	6.06
Apr. 18	4.69	July 21	4.76				

1-11-8bc. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 6.04 on June 21. Records available: 1948-49.

Jan. 17	11.58	May 20	9.33	Oct. 20	11.00	Dec. 6	11.15
Mar. 15	10.10	June 21	6.04	Nov. 10	11.12	27	11.19
Apr. 18	10.38	July 21	9.35				

1-11-9bc. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 3.00 on May 19. Records available: 1948-49.

Jan. 17	8.14	May 19	3.00	Oct. 20	6.98	Dec. 6	6.28
Mar. 15	6.24	June 21	4.04	Nov. 10	6.55	24	6.14
Apr. 18	5.14	July 21	5.93				

1-11-11ab. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 2.76 on June 14; lowest, 9.49 on Feb. 11. Records available: 1946-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	8.90	....	9.00	8.60	8.50	....	4.66	6.52	6.11	....	7.09	7.76
2	8.88	....	8.98	8.59	8.50	....	4.77	6.56	6.09	....	7.11	7.76
3	8.87	....	8.91	8.59	8.51	....	4.86	6.60	6.08	....	7.15	7.78
4	8.84	....	8.79	8.56	8.53	....	4.97	6.64	6.07	....	7.17	7.80
5	8.81	....	8.65	8.54	8.53	....	5.07	6.68	6.10	....	7.20	7.80
6	8.78	....	8.59	8.53	8.15	....	5.16	6.65	6.15	....	7.22	7.78
7	8.77	....	8.59	8.54	8.03	....	5.26	6.64	6.15	....	7.23	7.82
8	8.76	....	8.58	8.54	7.53	....	5.34	6.61	6.13	7.47	7.28	7.84
9	8.74	....	8.59	8.55	7.04	....	5.43	6.58	6.13	7.42	....	7.84
10	8.70	....	8.60	8.52	7.03	....	5.51	6.55	6.17	6.73	7.44	7.79
11	8.68	9.49	8.61	8.55	7.08	3.34	5.57	6.53	6.17	6.58	7.45	7.82
12	8.67	9.47	8.63	8.53	7.14	3.52	5.63	6.50	6.17	6.52	7.48	7.87
13	8.66	9.48	8.63	8.52	7.22	3.23	5.68	6.48	6.14	6.52	7.51	7.89
14	8.64	9.45	8.65	8.52	7.27	2.76	5.75	6.45	6.10	6.59	7.53	7.90
15	8.64	9.45	8.68	8.52	7.30	3.12	5.81	6.43	6.08	6.62	7.55	7.92
16	8.61	9.43	8.69	8.48	7.31	3.42	5.86	6.40	6.07	6.63	7.57	7.89
17	8.58	9.43	8.70	8.48	7.33	3.65	5.92	6.38	6.08	6.65	7.59	7.90
18	8.57	9.44	8.70	8.48	7.35	3.70	6.00	6.36	6.06	6.68	7.59	7.92
19	8.55	9.44	8.71	8.47	7.35	3.43	6.08	6.34	6.04	6.71	7.60	7.92
20	8.52	9.46	8.70	8.46	7.24	3.67	6.15	6.32	6.03	6.74	7.63	7.94
21	8.51	9.45	8.70	8.46	5.90	3.91	6.23	6.30	6.02	6.78	7.65	7.94
22	8.48	9.45	8.73	8.47	5.82	4.04	6.29	6.28	6.01	6.82	7.65	7.96
23	8.47	9.44	8.70	8.46	5.88	4.12	6.30	6.27	5.98	6.86	7.65	7.97
24	8.44	9.48	8.70	8.46	5.95	4.13	6.23	6.25	5.97	6.91	7.67	7.97
25	8.42	9.29	8.72	8.47	6.02	3.87	6.29	6.23	5.96	6.94	7.68	7.97
26	8.40	9.13	8.71	8.48	6.08	4.09	6.34	6.20	5.95	6.96	7.68	7.98
27	8.40	9.13	8.68	8.48	6.18	4.29	6.38	6.18	5.94	6.98	7.69	8.00
28	....	9.08	8.66	8.48	....	4.32	6.45	6.16	5.92	6.99	7.71	8.00
29	....	....	8.63	8.47	....	4.36	6.46	6.14	....	7.02	7.73	8.01
30	....	....	8.62	8.48	....	4.52	6.47	6.13	....	7.04	7.74	8.01
31	....	....	....	....	....	....	6.48	6.12	....	7.07	....	8.02

1-11-11bb. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 6.20 on June 21; lowest, 10.20 on Jan. 17. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	10.20	May 19	8.18	Oct. 20	8.15	Dec. 6	8.71
Mar. 15	8.95	June 21	6.20	Nov. 10	8.42	24	8.88
Apr. 18	9.05	July 21	7.15				

1-11-12bc. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 5.62 on June 21; lowest, 8.27 on Jan. 17. Records available: 1948-49.

Jan. 17	8.27	May 19	6.74	Oct. 20	6.35	Dec. 6	6.95
Mar. 15	7.19	June 21	5.62	Nov. 10	6.77	24	7.09
Apr. 18	7.25	July 21	5.85				

1-11-16aa. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 14.80 on Dec. 17. Records available: 1946-49.

Jan. 17	18.43	May 20	16.94	Oct. 20	15.70	Dec. 6	15.14
Mar. 15	16.45	June 21	16.33	Nov. 10	15.42	27	14.80
Apr. 18	17.36	July 21	16.23				

1-12-2bb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 0.94 on June 21. Records available: 1946-49.

Jan. 17	6.47	May 19	0.98	Oct. 20	5.10	Dec. 3	5.20
Mar. 15	4.98	June 21	.94	Nov. 10	5.14	24	5.19
Apr. 18	4.20	July 21	3.60				

1-12-4bb. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 1.58 on May 19. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	8.05	May 19	1.58	Oct. 20	8.13	Dec. 3	7.08
Mar. 15	7.16	June 21	1.80	Nov. 10	7.55	24	6.73
Apr. 18	5.98	July 21	4.90				

1-12-8aa. Geological Survey, U. S. Dept. of Interior. Highest observed stage in period of record, 0.90 on May 20. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	4.70	May 20	0.90	Oct. 20	4.76	Dec. 2	4.58
Mar. 16	2.60	June 21	1.80	Nov. 10	4.70	24	4.47
Apr. 18	2.73	July 21	4.16				

1-12-9aa. Bureau of Reclamation, U. S. Dept. of Interior. Highest observed stage in period of record, 1.84 on May 20. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 18	6.86	May 20	1.84	Oct. 20	5.80	Dec. 2	5.78
Mar. 15	4.30	June 21	2.06	Nov. 10	5.85	24	5.95
Apr. 18	4.37	July 21	4.64				

2-9-24bd. H. Pederson. Records available: 1934-42, 1946. Measurements discontinued.

2-10-36db. Somerholder. Highest observed stage in period of record, 26.50 on Apr. 7. Records available: 1934-40, 1942, 1946-49. Apr. 7, 26.50; Oct. 8, 26.69; Nov. 10, 26.61.

2-12-34cd. B. McNenny. Highest observed stage in period of record, 16.87 on Dec. 24. Records available: 1939-42, 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	17.97	May 19	17.60	Oct. 20	16.94	Dec. 3	16.95
Mar. 15	17.30	June 21	17.28	Nov. 10	18.05	24	16.87
Apr. 18	17.30	July 21	17.26				

3-10-34cb. R. Adams. Records available: 1934-42, 1946. Measurements discontinued.

Wheeler County

No measurement made in 1949.

York County

9-2-15bc. (Well 225 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 125.82. Measuring point lowered 0.5 foot on Apr. 27, 1949. Highest observed stage in period of record, 23.05 on Oct. 17. Records available: 1934-41, 1944, 1949. Apr. 27, 23.55; Oct. 17, 23.05.

11-1-35bb. Schlechte. Highest observed stage in period of record, 104.94 on Oct. 17. Records available: 1948-49. Apr. 26, 105.08; Oct. 17, 104.94.

11-3-32db. Moore. Records available: 1934-42, 1944, 1946. Measurements discontinued.

11-3-36ab. Mother Jewel Home. Highest observed stage in period of record, 67.67 on Oct. 17. Records available: 1948-49. Apr. 22, 67.83; Oct. 17, 67.67.

11-4-25bc. Tracy. Highest observed stage in period of record, 66.00 on Apr. 27; lowest, 66.43 on Oct. 17. Records available: 1948-49. Apr. 27, 66.00; Oct. 17, 66.43.

11-4-31ba. Fenster. Highest observed stage in period of record, 72.02 on Apr. 27. Records available: 1948-49. Apr. 27, 72.02; Oct. 17, 72.05.

11-4-33bb. Leuthje. Highest observed stage in period of record, 68.36 on Apr. 27. Records available: 1948-49. Apr. 27, 68.36; Oct. 17, 68.55.

NORTH DAKOTA

By J. E. Powell and G. A. LaRocque, Jr.

PROGRAM OF WORK

Ground-water investigations and the measurement of water levels in observation wells in North Dakota were continued in 1949 in cooperation with the State Geological Survey, the State Water Conservation Commission, and the Missouri Basin investigational program. At the end of 1949, water-level measurements were being made in 397 observation wells, 9 of which were equipped with automatic water-stage recorders. Water levels in 29 wells were being measured weekly by local observers. Water-level measurements were discontinued in seven wells. 4,431 periodic water-level measurements are included in this report, and in addition, 2,091 water-level determinations were obtained from wells equipped with automatic water-stage recorders. Water-level determinations obtained under the Missouri Basin program are reported here for the first time and include measurements obtained from 1945 through 1949, inclusive. (See figs. 8 and 9.)

Under the cooperative program, field work in connection with the investigation of the ground-water conditions in the vicinities of Niche and Lakota was completed during 1949, and field work was done in connection with studies of the ground-water conditions in the vicinities of Richardton, Streeter, Devils Lake, Rolla, Mylo, St. John, and Bowbells. A report on the ground-water conditions in the Fargo-Moorhead area was published and reports on the ground-water investigations near Wyndmere, Kindred, and Portland were completed.

PRECIPITATION

Precipitation for North Dakota in 1949, as reported by the United States Weather Bureau, was 16.24 inches, or 0.85 inch below average. Departures from average precipitation ranged from 6.75 inches below average to 5.77 inches above average. The maximum positive departures from the average occurred in the northeastern part of the State, and the greatest

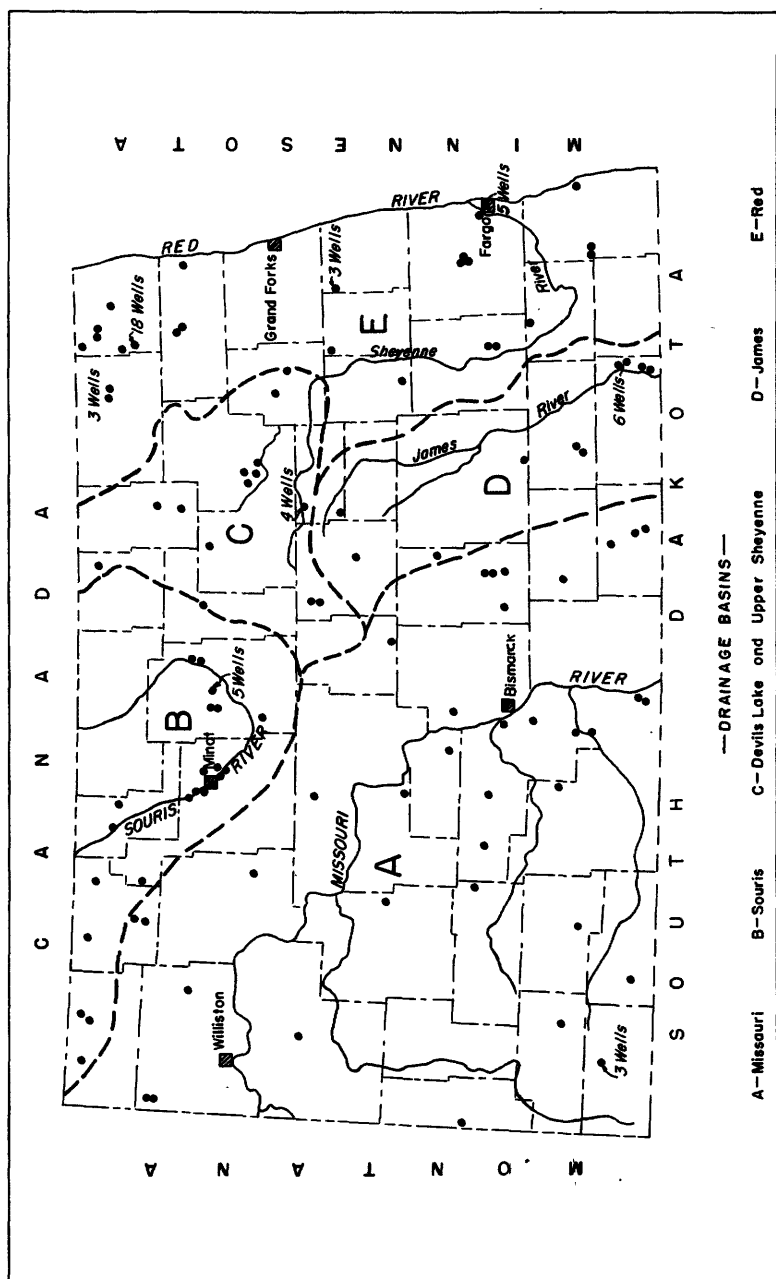


Figure 8.--Map of North Dakota showing drainage basins and distribution of observation wells being maintained under the Federal-State cooperative program at the end of 1949.

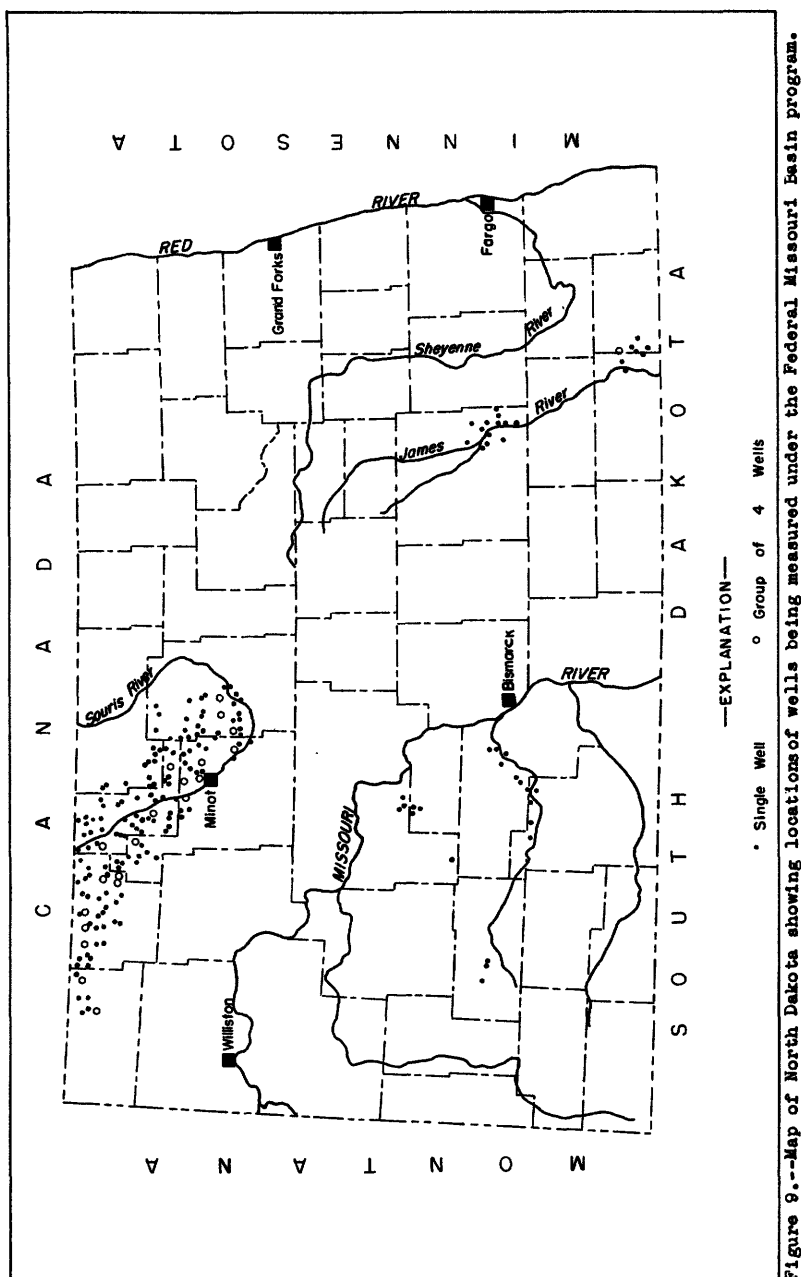


Figure 9.--Map of North Dakota showing locations of wells being measured under the Federal Missouri Basin program.

negative departures occurred in the southwestern part of the State. In general, precipitation was above average in the east and mid-central portions of the State and below average in the remaining portions. Average precipitation for the State was above average during the months of January, May, July, October, and December. The greatest monthly departures were -1.07 inches in August and +1.52 inches in October.

As in previous years, the ground-water levels were low during the winter, the lowest stage occurring in February. Ground-water levels declined moderately from December to March and rose rapidly during April and May due to recharge from melting snow in conjunction with the thawing of the ground surface. The highest ground-water levels occurred in May, after which they declined gradually until November. A small rise in November was followed by an insignificant drop in December. At the end of 1949, the average ground-water level was 0.52 foot higher than at the end of 1948.

FLUCTUATIONS OF WATER LEVELS

The average monthly water levels for the State from 1937 through 1949 are shown in the following table. These averages are based on measurements in selected observation wells, and were computed from the records from nine wells--in which water levels were measured weekly--distributed throughout the State. Four of these wells are in the Red River drainage basin, one in the Souris River drainage basin, and three in the Missouri River drainage basin. Figure 10 is a graphical presentation of these data.

Average monthly water levels, in feet above assumed datum planes, in observation wells in North Dakota, 1937-1949.

Year	Jan.	Feb.	Mar.	Apr.	May	June
1937	.....	.....	.....	.....	.....	.....
1938	99.97	99.93	100.12	100.41	100.68	100.35
1939	99.49	99.38	99.38	99.95	99.98	100.07
1940	99.24	99.14	99.13	99.16	99.43	99.52
1941	98.84	98.74	98.83	99.76	99.97	100.43
1942	100.68	100.41	100.43	101.40	101.45	101.67
1943	100.51	100.44	100.40	101.30	102.09	102.73
1944	100.40	100.24	100.02	100.22	100.52	101.15
1945	101.04	100.96	101.06	101.49	101.74	101.71
1946	100.01	100.24	100.18	101.13	101.55	100.97
1947	100.48	100.49	100.33	101.35	101.74	102.25
1948	101.30	101.01	101.10	102.29	104.63	103.74
1949	101.12	100.84	100.96	103.00	103.88	103.36

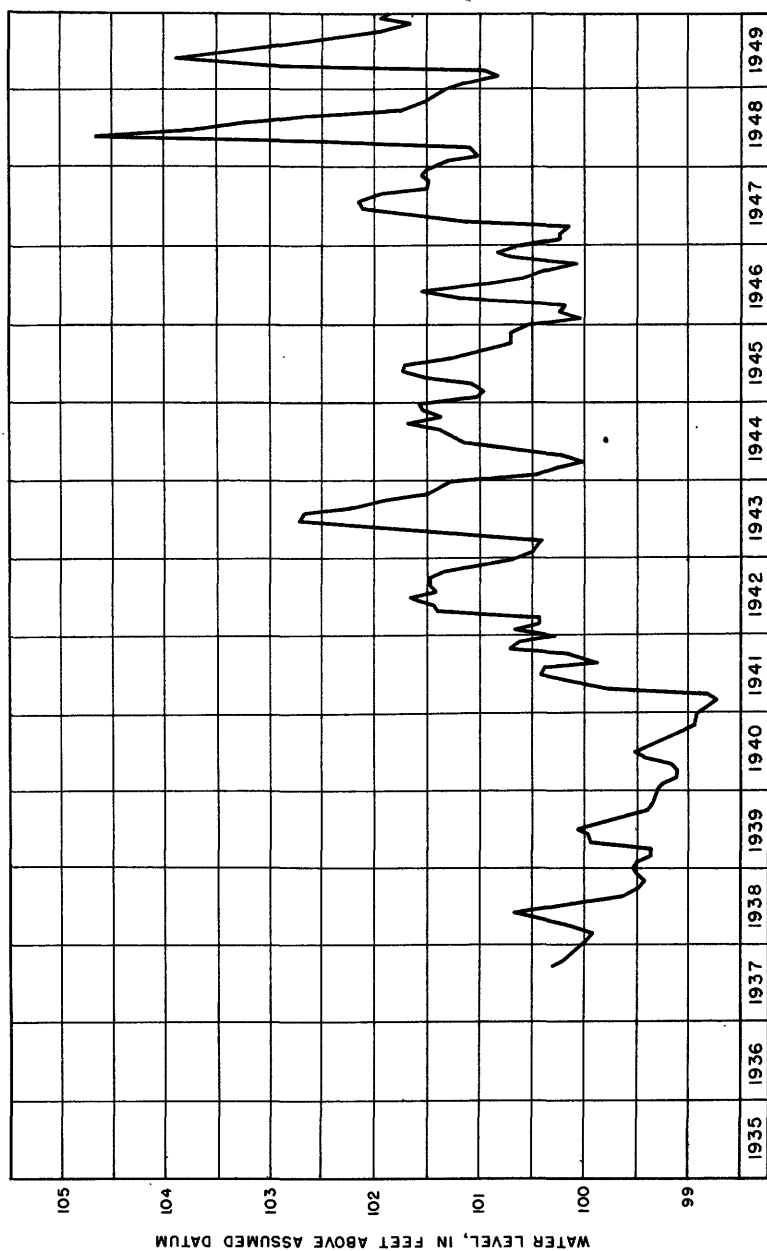


Figure 10.--Graph showing average monthly water level in 8 to 42 selected observation wells in North Dakota, 1937-49.

Average monthly water levels, in feet above assumed datum planes, in observation wells in North Dakota, 1937-1949--Continued

Year	July	Aug.	Sept.	Oct.	Nov.	Dec.
1937	.....	.....	100.31	100.39	100.13	100.05
1938	99.99	99.61	99.59	99.44	99.51	99.54
1939	99.89	99.62	99.41	99.37	99.34	99.31
1940	99.34	99.24	99.07	98.96	98.95	98.92
1941	100.39	99.89	100.16	100.73	100.64	100.26
1942	101.42	101.48	101.48	101.35	100.98	100.73
1943	102.68	102.19	101.91	101.50	100.37	101.26
1944	101.28	101.37	101.67	101.36	101.55	101.59
1945	101.27	100.95	100.71	100.71	100.70	100.54
1946	100.60	100.36	100.07	100.70	100.84	100.67
1947	102.37	101.93	101.49	101.48	101.57	101.61
1948	103.27	102.65	101.73	101.52	101.47	101.32
1949	102.89	102.45	101.97	101.65	101.96	101.84

The following table shows the general fluctuations and net changes in the ground-water levels during 1949 in several regions of the State according to drainage basins. This table indicates a net rise in water levels for the year in all regions except the James River basin where precipitation for the year was less than average.

Average high and low water levels, in feet below land-surface datum, and average fluctuations and average net changes in water level, in feet, in selected observation wells in five drainage basins in North Dakota in 1949

Basin	Number of wells	High	Low	Fluctuation	Net Change
Red River	7	5.02	9.60	4.58	0.65
Devils Lake and Upper Sheyenne River	3	7.31	10.29	2.98	.57
James River	5	8.73	11.08	2.35	.77
Souris River	5	6.26	8.72	2.49	+.34
Missouri River	7	38.12	41.22	3.10	1.10

WELL-NUMBERING SYSTEM

The well numbers in this report conform to the system adopted for reports in all the Missouri Basin States. See Water-Supply Paper 1098.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Adams County

130.97.14ccl. Mrs. Halverson. Records available: 1940-49. June 30, 49.98; July 13, 50.00.

Barnes County

138.57.5cbl. H. H. Wilkins. Records available: 1939-47, 1949. Sept. 7, 31.64.

138.57.5cb2. H. H. Wilkins. Records available: 1939-47. Measurements discontinued.

Benson County

156.69.36cal. H. Biltingsrud. Records available: 1940-49. Sept. 12, 13.28.

Botineau County

159.81.19dc. Alfred Nelson. Dug domestic well, diameter 48 inches, depth 12.8 feet. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Oct. 10, 1945	9.75	July 9, 1947	9.06	Nov. 19, 1948	9.62
May 9, 1946	9.32	Oct. 31	10.05	May 3, 1949	7.20
July 30	9.78	May 7, 1948	7.73	July 18	7.59
Nov. 15	10.69	Aug. 13	7.67	Sept. 15	8.98

159.81.27ab. Carl Kjonaas. Dug domestic and stock well, diameter 48 inches, depth 12.9 feet. Records available: 1945-49.

Oct. 10, 1945	10.00	July 9, 1947	0.12	Mar. 3, 1949	b +1.80
May 9, 1946	4.25	Nov. 12	6.61	July 18	b +1.80
July 30	7.04	Aug. 13, 1948	.96	Sept. 15	3.59
Nov. 16	8.90	Nov. 19	5.73		

b Surrounded by ponded water.

159.81.34cd. Owner unknown. Unused dug well, diameter 36 inches. Records available: 1945-49.

Oct. 10, 1945	13.15	July 9, 1947	13.11	Nov. 19, 1948	11.29
May 9, 1946	12.67	Nov. 12	14.05	May 3, 1949	4.06
July 30	13.05	May 7, 1948	10.42	July 18	8.87
Nov. 16	13.65	Aug. 18	11.55	Sept. 15	10.15

159.82.1aa. H. L. Diamond. Dug domestic and stock well, diameter 48 inches, depth 15.5 feet. Records available: 1945-49.

Oct. 9, 1945	8.72	July 9, 1947	3.60	May 3, 1949	b +1.56
May 9, 1946	4.72	Oct. 31	6.54	July 18	2.12
July 30	5.41	Aug. 13, 1948	2.29	Sept. 15	4.10
Nov. 16	7.01	Nov. 19	6.05		

b Surrounded by ponded water.

159.82.13ab. John H. Olliges. Dug domestic and stock well, diameter 18 inches, depth 14 feet. Records available: 1945-49.

Oct. 10, 1945	11.00	Apr. 1, 1947	10.11	Aug. 13, 1948	5.56
May 7, 1946	10.38	Sept. 7	7.67	Nov. 19	10.36
July 30	11.30	Oct. 31	10.81	May 3, 1949	6.93
Nov. 16	11.85	May 7, 1948	3.27	Sept. 15	4.90

159.83.9aa. Martinson Estate. Dug domestic and stock well, diameter 48 inches, depth 61.1 feet. Records available: 1945-49.

Oct. 7, 1945	5.95	July 11, 1947	3.88	Nov. 19, 1948	4.37
May 9, 1946	4.53	Oct. 31	5.80	May 3, 1949	1.06
July 30	5.55	May 7, 1948	c 1.06	July 18	2.51
Nov. 20	6.69	Aug. 13	2.60	Sept. 16	5.61

c Ponded water nearby.

159.83.11cc. H. Helming. Dug domestic well, diameter 20 inches, depth 15 feet. Records available: 1945-49.

Oct. 7, 1945	8.15	July 11, 1947	4.14	Nov. 19, 1948	4.71
May 9, 1946	4.87	Oct. 31	5.86	May 3, 1949	2.55
July 30	5.63	May 7, 1948	c 2.28	July 18	3.94
Nov. 20	7.30	Aug. 13	2.67	Sept. 16	c 5.65
Mar. 26, 1947	7.60				

c Ponded water nearby.

159.83.17cd. Donald Zeitz. Dug domestic and stock well, diameter 48 inches, depth 11.0 feet. Records available: 1945-49.

Oct. 7, 1945	8.05	July 11, 1947	6.51	Nov. 19, 1948	6.09
May 9, 1946	6.55	Oct. 31	7.86	May 3, 1949	3.44
July 30	6.82	May 7, 1948	c 3.73	July 18	5.25
Nov. 20	7.12	Aug. 13	4.67	Sept. 16	5.74

c Ponded water nearby.

160.82.34dd. Dug stock well, diameter 18 inches. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Oct. 9, 1945	8.20	July 9, 1947	6.73	Nov. 19, 1948	7.59
May 7, 1946	7.77	Oct. 31	9.36	May 3, 1949	4.29
July 30	d 9.20	May 7, 1948	4.70	July 18	6.18
Nov. 15	8.99	Aug. 13	5.90	Sept. 15	7.65
Apr. 1, 1947	7.80				

d Pumping recently.

161.93.32dd. H. A. Milleton. Dug stock well, diameter 48 inches, depth 12.5 feet. Records available: 1945-49.

Oct. 2, 1945	5.40	July 2, 1947	b 3.00	Nov. 18, 1948	a +1.57
May 8, 1946	1.35	Oct. 28	7.40	May 10, 1949	(b)
July 30	6.00	May 6, 1948	(b)	July 11	(b)
Mar. 26, 1947	b +3.00	Aug. 17	1.21	Sept. 16	7.55

a Top of ice.

b Surrounded by ponded water

162.83.8cc. Roy Brackelsburg. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 8, T. 162 N., R. 83 W. Dug stock well, diameter 48 inches, depth 15 feet. Records available: 1945-49.

Oct. 3, 1945	4.50	Oct. 28, 1947	4.02	May 10, 1949	1.82
May 8	3.26	May 6, 1948	0.76	July 11	3.01
July 31	4.35	Aug. 17	2.76	Sept. 16	3.66
July 2, 1947	2.22	Nov. 18	3.36		

162.83.21aa. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 21, T. 162 N., R. 83 W. Dug stock well. Records available: 1945-49.

Oct. 3, 1945	2.62	July 2, 1947	1.32	Nov. 18, 1948	1.48
May 8, 1946	2.14	Oct. 28	2.77	May 10, 1949	c 1.38
July 31	3.25	May 6, 1948	b .48	July 11	c 1.54
Nov. 20	a 3.08	Aug. 17	c 1.35	Sept. 16	2.20

a Top of ice.

b Surrounded by ponded water.

c Ponded water nearby.

Bowman County

131.102.11ba1. City of Bowman. Records available: 1940-42, 1944-46, 1948. No measurement made in 1949.

131.102.11ca1. City of Bowman. Records available: 1940-42, 1944-49. June 30, 19.33; Aug. 11, 18.55; Oct. 10, 19.34.

131.102.11ca2. City of Bowman. Records available: 1940-42, 1944-46, 1948. No measurement made in 1949.

Burke County

159.91.4ddl. U. S. Fish and Wildlife Service. Records available: 1940-46, 1949. Sept. 10, 76.75.

160.91.21cd1. U. S. Fish and Wildlife Service. Records available: 1940-47, 1949. Sept. 10, 59.05.

161.89.1bc. Bowbells Golf Club. Bored domestic well, diameter 10 inches. Records available: 1945-49.

Sept. 23, 1945	7.55	Aug. 8, 1946	7.65	Aug. 18, 1948	6.57
June 3, 1946	6.95	Sept. 30	8.99	Nov. 17	7.87
18	7.12	Oct. 22	8.82	May 11, 1949	7.06
July 1	7.09	July 11, 1947	4.35	July 21	5.85
8	7.36	Nov. 4	6.12	Sept. 20	7.98
22	7.23	May 8, 1948	2.54		

161.89.5dd2. L. P. Christianson. Unused drilled well, diameter 5 inches, depth 80 feet. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Sept. 24, 1945	24.35	Aug. 12, 1946	24.26	May 8, 1948	25.02
Apr. 10, 1946	24.35	Oct. 22	24.07	Aug. 18	23.04
July 12	24.14	July 7, 1947	23.36	May 11, 1949	26.69
Aug. 1	24.24	Nov. 4	24.50		

161.89.14cd1. J. P. Neve. Dug domestic well, depth 12 feet. Records available: 1945-49.

Sept. 24, 1945	16.00	Nov. 4, 1947	12.26	May 11, 1949	4.11
July 15, 1946	11.54	May 8, 1948	5.48	July 21	6.43
Oct. 23	11.22	Aug. 18	6.21	Sept. 20	10.05
July 7, 1947	4.56	Nov. 17	9.47		

161.89.18cc1. Owner unknown. Dug stock well, diameter 48 inches. Records available: 1945-49.

Sept. 14, 1945	15.10	July 7, 1947	5.64	Nov. 17, 1948	8.56
July 12, 1946	9.74	Nov. 4	6.88	May 11, 1949	7.46
Aug. 12	10.99	May 8, 1948	5.16	July 21	6.82
Oct. 23	14.82	Aug. 18	6.74	Sept. 20	10.02

161.89.20aa. T. Jacobson. Unused drilled well, diameter 5 inches, depth 96.0 feet. Records available: 1945-49.

Sept. 14, 1945	25.58	Apr. 22, 1947	25.12	Nov. 17, 1948	24.61
Apr. 10, 1946	25.06	July 7	24.72	May 11, 1949	24.50
July 12	25.28	Nov. 4	24.78	July 21	24.48
Aug. 12	25.35	May 8, 1948	24.38	Sept. 20	24.70
Oct. 22	25.26	Aug. 18	24.60		

161.89.24bb. Olson Bros. Unused drilled well, diameter 6 inches, depth 180 feet. Records available: 1945-49.

July 15, 1946	61.02	Nov. 4, 1947	55.24	May 11, 1949	57.09
Aug. 1	62.01	May 8, 1948	54.72	July 21	56.19
Oct. 23	58.79	Aug. 18	51.33	Sept. 20	59.85
July 7, 1947	54.67	Nov. 17	51.47		

162.88.31cc. R. F. Dodge. Dug domestic and stock well, diameter 48 inches, depth 10 feet. Records available: 1945-49.

Sept. 18, 1945	3.45	Aug. 2, 1946	1.54	May 8, 1948	(b)
June 3, 1946	.69	8	3.70	Aug. 18	0.86
18	3.04	Sept. 30	4.72	Nov. 15	.99
July 1	1.72	Oct. 23	3.90	May 10, 1949	b .64
8	1.90	July 11, 1947	(b)	July 19	b .32
22	1.55	Nov. 4	c .43	Sept. 20	2.65

b Surrounded by ponded water.

c Ponded water nearby.

162.89.1bb. Raymond Swenson. Dug domestic and stock well, diameter 48 inches, depth 15.5 feet. Records available: 1945-49.

Sept. 18, 1945	10.72	July 7, 1947	4.50	Nov. 17, 1948	9.42
July 23, 1946	10.82	Nov. 4	9.60	May 11, 1949	3.73
Aug. 8	d 11.61	May 10, 1948	4.26	July 21	6.33
Oct. 22	15.56	Aug. 18	5.56	Sept. 20	9.32

d Pumping recently.

161.89.27dd. Owner unknown. Unused drilled well, diameter 5 inches, depth 220 feet. Records available: 1946-49.

July 13, 1946	82.38	Nov. 4, 1947	78.36	May 11, 1949	77.27
Aug. 1	81.88	May 8, 1948	78.41	July 21	76.94
Oct. 23	81.63	Aug. 18	77.77	Sept. 20	76.73
July 7, 1947	78.63	Nov. 17	73.02		

161.90.18dc. Owner unknown. Unused dug well, diameter 48 inches, depth 14.7 feet. Records available: 1945-48. Measurements discontinued Nov. 17, 1948.

Date	Water level	Date	Water level	Date	Water level
Sept. 15, 1945	11.82	Oct. 18, 1946	12.13	Nov. 4, 1947	9.14
Apr. 10, 1946	11.35	Apr. 22, 1947	11.66	May 10, 1948	8.53
July 9	11.32	July 9	9.91	Aug. 18	8.85
Aug. 7	11.48				

161.90.34dd. T. H. Thompson. Unused dug well, diameter 36 inches, depth 22 feet. Records available: 1945-49.

Sept. 15, 1945	13.65	July 7, 1947	10.61	Nov. 17, 1948	11.55
Apr. 10, 1946	13.44	Nov. 4	11.00	May 11, 1949	10.99
Oct. 23	13.65	May 10, 1948	10.04	July 21	9.19
Apr. 22, 1947	15.05	Aug. 18	10.64	Sept. 20	11.09

161.92.12ddl. Maud Beard. Bored domestic well, diameter 18 inches, depth 54.4 feet. Records available: 1945-49.

Sept. 15, 1945	19.83	Apr. 22, 1947	29.29	Nov. 17, 1948	16.04
Apr. 10, 1946	22.77	July 9	20.66	May 11, 1949	25.27
June 7	20.55	Nov. 5	17.42	July 21	14.26
Aug. 7	21.38	May 11, 1948	8.70	Sept. 21	12.05
Oct. 18	29.33	Aug. 20	10.94		

161.92.12dd#. Maud Beard. Bored stock well, diameter 30 inches, depth 61.5 feet. Records available: 1945-49.

Sept. 15, 1945	28.20	Apr. 22, 1947	27.79	Nov. 17, 1948	31.64
Apr. 10, 1946	29.27	July 9	32.52	May 11, 1949	32.52
June 7	39.88	May 11, 1948	27.94	July 21	27.42
Aug. 7	38.68	Aug. 20	18.45	Sept. 21	22.67
Oct. 18	31.93				

163.91.20ab. Oliver Salmon. Unused drilled well, diameter 6 inches. Records available: 1945-49.

Sept. 16, 1945	13.30	July 8, 1947	13.76	Nov. 17, 1948	10.87
June 25, 1946	13.97	Nov. 5	11.93	May 12, 1949	10.95
Aug. 12	13.85	May 11, 1948	9.86	July 21	10.49
Oct. 15	14.07	Aug. 20	11.03	Sept. 21	11.67
Apr. 24, 1947	15.53				

163.91.25ad. N. Baerke. Dug stock well, diameter 48 inches, depth 30 feet. Records available: 1945-49.

Sept. 16, 1945	12.32	July 8, 1947	16.85	Aug. 20, 1948	17.24
June 26, 1946	24.90	Nov. 5	22.49	Sept. 21, 1949	21.15
Aug. 9	25.23	May 11, 1948			

162.89.4cd. Owner unknown. Unused dug well, diameter 48 inches, depth 7.0 feet. Records available: 1945-49.

Sept. 18, 1945	4.85	Aug. 8, 1946	3.51	May 10, 1948	b +4
June 3, 1946	2.31	Sept. 30	(f)	Aug. 18	2.04
18	2.65	Oct. 22	4.29	Nov. 15	3.64
July 1	3.29	Apr. 18, 1947	(b)	May 11, 1949	b .0
8	3.52	July 7	(b)	July 21	2.87
22	3.49	Nov. 4	(b)	Sept. 20	4.35
Aug. 2	3.46				

b Surrounded by ponded water.

f Dry.

162.89.5ddl. Mrs. P. M. Peterson. Records available: 1937-49.

May 10, 1948	69.84	May 11, 1949	70.41	Sept. 10	70.28
Aug. 16	69.99	July 21	69.90	20	70.56
Nov. 15	70.52				

142.89.17aa. Frank Shultz. Dug domestic well, diameter 48 inches, depth 10.5 feet. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Sept. 17, 1945	5.92	Aug. 2, 1946	4.81	May 10, 1948	b 1.03
June 6, 1946	4.16	Sept. 30	7.55	Aug. 18	3.50
18	4.32	Oct. 22	6.13	Nov. 15	3.52
July 1	4.60	Apr. 18, 1947	b 1.23	May 11, 1949	2.90
8	4.93	July 7	b 1.38	July 21	2.95
22	4.77	Nov. 4	3.85	Sept. 20	5.67

b Surrounded by ponded water.

162.89.22cc. Frank Dyer. Unused drilled well, diameter 5 inches. Records available: 1945-49.

Sept. 18, 1945	54.78	July 7, 1947	54.09	Nov. 17, 1948	54.03
July 30, 1946	54.63	Nov. 4	54.18	May 11, 1949	54.06
Oct. 22	54.51	May 10, 1948	54.17	July 21	53.38
Apr. 18, 1947	54.53	Aug. 18	54.09	Sept. 20	54.05

162.90.6bal. Owner unknown. Dug domestic well, diameter 36 inches. Records available: 1945-48. Measurements discontinued. See well 6ba2, 5 feet south.

Sept. 15, 1945	10.75	July 22, 1946	7.44	Apr. 24, 1947	4.99
June 3, 1946	5.78	Aug. 2	7.79	July 8	2.65
18	6.06	8	8.11	Nov. 5	5.52
July 1	6.80	Sept. 30	9.74	May 10, 1948	c .82
8	7.57	Oct. 17	9.11	Aug. 18	.0

c Ponded water nearby.

162.90.6ba2. Owner unknown. Dug domestic well, diameter 18 inches, depth 35.3 feet. Records available: 1948-49. See well 6bal for period 1945-48.

Aug. 18, 1948	4.78	May 11, 1949	4.10	Sept. 20, 1949	8.21
Nov. 17	7.36	July 21	5.71		

162.90.27dc. Alfred Jensen. Dug domestic well, diameter 30 inches, depth 20 feet. Records available: 1945-49.

Sept. 19, 1945	10.05	July 7, 1947	3.15	Nov. 16, 1948	8.55
Apr. 10, 1946	9.54	Nov. 4	7.04	May 11, 1949	3.68
July 2	8.56	May 10, 1948	2.82	July 21	6.23
Aug. 7	9.42	Aug. 18	4.33	Sept. 21	8.80

162.91.3ddl. Carl Kallbert. Unused dug well, diameter 36 inches, depth 18.5 feet. Records available: 1945-49.

Sept. 15, 1945	12.93	July 8, 1947	4.73	Nov. 17, 1948	12.88
June 13, 1946	12.75	Nov. 4	16.77	May 11, 1949	7.26
Aug. 12	12.99	May 11, 1948	10.55	July 21	16.04
Oct. 17	12.84	Aug. 20	15.24	Sept. 21	14.22
Apr. 24, 1947	3.53				

162.91.20cc. J. Frilisch. Unused bored well, diameter 14 inches. Records available: 1945-49.

Sept. 21, 1945	11.05	Apr. 22, 1947	11.34	Nov. 16, 1948	9.53
Apr. 10, 1946	10.80	July 9	8.86	May 11, 1949	7.78
June 7	10.20	Nov. 5	9.57	July 21	8.32
Aug. 7	10.53	May 11, 1948	5.77	Sept. 21	9.24
Oct. 18	11.40	Aug. 20	8.14		

162.91.30aa. Frank Ronnie. Unused bored well, diameter 8 inches. Records available: 1945-49.

Sept. 21, 1945	12.15	July 9, 1947	10.22	Nov. 16, 1948	10.18
June 7, 1946	12.41	Nov. 5	10.26	May 11, 1949	11.04
Aug. 7	12.63	May 11, 1948	10.16	July 21	10.25
Oct. 18	10.54	Aug. 20	9.07	Sept. 21	12.15
Apr. 22, 1947	13.82				

162.92.24cc. M. E. Glaspey. Dug domestic well, diameter 48 inches, depth 14 feet. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Sept. 15, 1945	9.47	Apr. 22, 1947	6.80	Aug. 20, 1948	5.30
Apr. 10, 1946	7.51	July 9	5.63	May 11, 1949	4.65
June 5	7.51	Nov. 5	6.73	July 21	5.97
Aug. 7	8.08	May 11, 1948	2.26	Sept. 21	8.05
Oct. 18	9.62				

162.92.27ab. Owner unknown. Unused bored well, diameter 14 inches. Records available: 1945-49.

Sept. 21, 1945	10.95	Apr. 22, 1947	10.99	Nov. 16, 1948	9.21
Apr. 10, 1946	10.40	July 9	8.60	May 11, 1949	8.48
June 5	10.21	Nov. 5	9.15	July 21	9.03
Aug. 7	10.33	Aug. 20, 1948	8.30	Sept. 21	10.42
Oct. 18	11.01				

162.93.6aa. Owner unknown. Bored stock well, diameter 12 inches. Records available: 1945-49.

Sept. 11, 1945	8.85	Aug. 2, 1946	8.82	May 11, 1948	2.79
Apr. 10, 1946	8.91	8	10.24	Aug. 20	7.82
May 28	9.50	Oct. 16	8.74	Nov. 15	9.52
June 3	9.61	Apr. 25, 1947	6.48	May 5, 1949	4.64
July 1	8.82	July 8	2.90	July 22	7.03
8	8.97	Nov. 5	7.51	Sept. 21	9.37
22	7.85				

162.93.10cc. Owner unknown. Unused bored well, diameter 18 inches, depth 39.2 feet. Records available: 1945-49.

Sept. 21, 1945	18.85	July 9, 1947	18.43	Nov. 16, 1948	12.36
Apr. 10, 1946	18.89	Nov. 5	18.62	May 12, 1949	17.05
May 28	18.20	May 11, 1948	14.73	July 23	16.86
Aug. 8	18.89	Aug. 20	16.56	Sept. 22	17.24
Apr. 25, 1947	18.80				

162.93.22dc. Owner unknown. Unused bored well, diameter 16 inches, depth 36.6 feet. Records available: 1945-49.

Sept. 21, 1945	9.80	Apr. 25, 1947	9.79	Nov. 16, 1948	8.94
Apr. 10, 1946	9.41	July 8	9.11	May 12, 1949	7.97
May 28	9.09	Nov. 5	9.52	July 23	8.50
Aug. 8	9.93	May 11, 1948	4.80	Sept. 22	9.72
Oct. 18	10.05	Aug. 20,	7.63		

c Ponded water nearby.

162.94.2ba1. Anton Boen. Dug domestic well, diameter 24 inches, depth 20 feet. Records available: 1945-49.

Sept. 11, 1945	14.07	Oct. 1, 1946	15.27	Aug. 19, 1948	8.66
Apr. 10, 1946	10.31	16	11.96	Nov. 15	8.88
June 3	9.29	Apr. 25, 1947	11.64	May 5, 1947	7.84
July 1	12.81	July 8	10.62	July 22	8.53
8	12.18	Nov. 6	10.73	Sept. 21	9.49
Aug. 8	17.22	May 11, 1948	9.85		

162.94.2ba2. Anton Boen. Bored domestic well, diameter 18 inches, depth 65 feet. Records available: 1945-49.

Sept. 11, 1945	28.92	Oct. 1, 1946	12.53	Aug. 19, 1948	8.57
Apr. 10, 1946	12.56	16	12.13	Nov. 15	9.29
June 3	11.00	July 8, 1947	10.89	May 5, 1949	8.17
July 1	12.32	Nov. 6	10.50	July 22	8.77
8	12.04	May 11, 1948	10.02	Sept. 21	9.78
Aug. 3	12.40				

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163.88.2dd2. W. B. Haselton. Dug stock well, diameter 36 inches, depth 35 feet. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Sept. 24, 1945	11.80	July 7, 1947	3.86	May 11, 1949	3.63
July 26, 1946	11.14	May 8, 1948	3.44	July 19	6.78
Aug. 8	12.87	Nov. 18	5.34	Sept. 19	10.50
Oct. 23	20.61				

c Ponded water nearby.

163.88.19dc2. G. T. Swenson. Dug domestic well, diameter 4 inches, depth 14 feet. Records available: 1945-49.

Sept. 18, 1945	8.66	Oct. 22, 1946	11.63	May 8, 1948	3.16
July 23, 1946	8.23	July 7, 1947	3.09	May 11, 1949	4.39
Aug. 8	8.76	Nov. 4	8.95	Sept. 20	11.30

163.89.8dd. Owner unknown. Unused drilled well, diameter 5 inches. Records available: 1945-49.

Sept. 17, 1945	47.23	July 7, 1947	48.44	Nov. 17, 1948	45.70
July 18, 1946	49.32	Nov. 4	49.79	May 11, 1949	c 46.10
Aug. 8	48.25	May 10, 1948	45.70	July 21	46.37
Oct. 22	47.88	Aug. 18,	45.65	Sept. 20	47.52
Apr. 18, 1947	46.77				

c Ponded water nearby.

163.89.10dc. J. L. Gverdett. Dug domestic and stock well, diameter 48 inches, depth 12.5 feet. Records available: 1945-49.

Sept. 17, 1945	6.88	July 7, 1947	5.32	Nov. 17, 1948	6.21
July 18, 1946	6.55	Nov. 4	6.19	May 11, 1949	5.40
Aug. 8	6.87	May 10, 1948	7.78	July 21	7.16
Oct. 22	6.59	Aug. 18	7.83	Sept. 20	6.40
Apr. 8, 1947	5.18				

163.90.22cc1. Owner unknown. Bored domestic and stock well. Records available: 1945-49.

Sept. 21, 1945	32.95	Oct. 22, 1946	32.76	Nov. 16, 1948	29.45
June 27, 1946	32.20	July 11, 1947	29.04	May 11, 1949	28.61
Aug. 12	32.73	Nov. 4	30.88	Sept. 20	29.51

163.90.35dc. Owner unknown. Dug domestic and stock well, diameter 48 inches. Records available: 1945-49.

Sept. 16, 1945	18.25	Aug. 9, 1946	18.48	May 10, 1948	12.74
June 6, 1946	18.41	Sept. 30	18.65	Aug. 18	13.14
18	18.44	Oct. 22	18.67	Nov. 15	14.11
July 1	18.45	Apr. 18, 1947	18.94	May 11, 1949	13.67
8	18.42	July 8	15.46	July 21	13.30
22	18.47	Nov. 5	15.82	Sept. 20	14.15
Aug. 2	18.49				

163.91.6ba. M. Valentine. Dug domestic well, diameter 40 inches. Records available: 1945-49.

Sept. 12, 1945	11.22	July 8, 1947	5.28	Nov. 16, 1948	9.38
June 21, 1946	9.30	Nov. 5	9.12	May 12, 1949	5.36
Aug. 9	10.10	May 11, 1948	c 2.34	July 21	7.45
Oct. 17	10.39	Aug. 20	4.71	Sept. 21	10.35
Apr. 24, 1947	9.21				

c Ponded water nearby.

163.91.35cd. T. Fashal. Drilled domestic and stock well, diameter 5 inches, depth 100 feet. Records available: 1945-49.

163.91.35cd--Continued.

Date	Water level	Date	Water level	Date	Water level
Sept. 15, 1945	12.65	Aug. 2, 1946	11.01	Nov. 5, 1947	10.01
June 3, 1946	11.16	12	11.03	May 11, 1948	9.33
18	11.07	Oct. 1	11.16	Aug. 20	8.86
July 1	11.01	17	9.94	July 21, 1949	8.80
8	11.01	Apr. 24, 1947	11.04	Sept. 21	9.15
22	10.99	July 8	10.60		

163.92.5ba. Owner unknown. Unused bored well, diameter 24 inches. Records available: 1945-49.

Sept. 12, 1945	24.35	July 8, 1947	20.95	Aug. 20, 1948	19.58
June 18, 1946	24.30	Nov. 5	20.97	May 11, 1949	19.26
Aug. 9	24.22	May 11, 1948	18.84		

163.92.9ccl. Samuel Nickey. Unused bored well, diameter 18 inches, depth 35 feet. Records available: 1945-49.

Sept. 13, 1945	15.90	July 8, 1947	15.80	Nov. 17, 1948	12.40
June 18, 1946	17.89	Nov. 5	14.80	May 11, 1949	13.55
Aug. 12	12.67	May 11, 1948	13.67	July 21	12.88
Oct. 17	17.80	Aug. 20	14.10	Sept. 21	13.25

163.92.12ccl. E. Engstrom. Dug domestic well, diameter 24 inches, depth 16 feet. Records available: 1945-49.

Sept. 13, 1945	10.55	July 8, 1947	7.25	Nov. 17, 1948	10.67
June 21, 1946	9.25	Nov. 5	9.50	May 11, 1949	7.93
Aug. 12	9.51	May 11, 1948	7.17	July 21	8.60
Oct. 17	11.76	Aug. 20	8.10	Sept. 21	11.50
Apr. 24, 1947	11.48				

163.92.32dd. Owner unknown. Dug stock well, diameter 36 inches. Records available: 1945-49.

Sept. 12, 1945	12.00	Aug. 12, 1946	10.11	Aug. 20, 1948	7.95
June 3, 1946	10.10	Oct. 1	10.18	Nov. 15	8.44
20	9.85	16	10.17	May 11, 1949	8.48
July 1	10.59	July 8, 1947	7.61	July 21	9.21
8	9.79	Nov. 6	9.29	Sept. 21	9.48
22	9.80	May 11, 1948	6.46		

163.92.35dd. F. C. Falck. Bored domestic and stock well, diameter 18 inches, depth 35 feet. Records available: 1945-49.

Sept. 12, 1945	15.05	Aug. 12, 1946	13.41	May 11, 1948	8.27
June 3, 1946	12.42	Oct. 1	13.60	Aug. 20	9.53
July 1	14.22	17	14.01	Nov. 15	14.06
8	13.38	Apr. 24, 1947	13.49	July 21, 1949	11.52
22	13.68	July 8	8.77	Sept. 21	13.88
Aug. 2	13.41	Nov. 5	12.18		

163.93.8cb. W. M. Tyndall. Bored stock well, diameter 18 inches, depth 40 feet. Records available: 1945-49.

May 15, 1946	23.55	May 11, 1948	11.77	May 12, 1949	12.82
Oct. 16	22.51	Aug. 20	14.13	July 23	14.66
July 8, 1947	21.11	Nov. 17	16.84	Sept. 21	16.69
Nov. 5	20.59				

a Ponded water nearby.

163.93.13bd. A. Curtis. Bored stock well, diameter 18 inches, depth 30 feet. Records available: 1945-49.

Sept. 13, 1945	14.15	July 8, 1947	13.23	Nov. 17, 1948	12.55
May 27, 1946	13.30	Nov. 5	14.00	May 12, 1949	12.82
Aug. 9	13.13	May 11, 1948	10.67	July 23	12.93
Oct. 17	14.41	Aug. 20	12.01	Sept. 21	12.89

c Ponded water nearby.

163.93.34cc2. Owner unknown. Records available: 1946-49. From recorder charts.

Date	Water level	Date	Water level	Date	Water level
May 20, 1947	14.93	Nov. 16, 1948	12.36	July 23, 1949	11.09
May 11, 1948	7.83	May 12, 1949	9.88	Sept. 22	12.04
Aug. 20	11.09				

163.94.6bb. Owner unknown. Unused drilled well, diameter 5 inches, depth 73.0 feet. Records available: 1945-49.

Sept. 10, 1945	71.10	July 8, 1947	72.78	Nov. 16, 1948	70.78
Apr. 9, 1946	71.00	Nov. 6	70.95	May 12, 1949	70.91
May 16	71.30	May 11, 1948	70.76	July 22	70.92
Apr. 25, 1947	71.11	Aug. 19	71.00	Sept. 22	71.10

163.94.10cdl. A. B. Peterson. Bored domestic and stock well, diameter 18 inches, depth 46 feet. Records available: 1945-49.

Sept. 10, 1945	24.25	Apr. 25, 1947	23.89	Nov. 16, 1948	19.22
Apr. 9, 1946	25.68	July 8	22.02	May 12, 1949	17.93
May 21	24.00	Nov. 6	20.98	July 22	18.63
Aug. 8	d 28.91	May 11, 1948	d 23.47	Sept. 21	19.25
Oct. 16	25.31	Aug. 19	21.04		

d Pumping recently.

163.94.31dc. A. F. Shetfstad. Bored stock well, diameter 24 inches, depth 25 feet. Records available: 1945-49.

Sept. 11, 1945	12.90	Oct. 16, 1946	12.02	Aug. 19, 1948	11.16
Apr. 10, 1946	11.73	Apr. 25, 1947	11.49	Nov. 15	11.30
June 6	11.75	July 8	11.71	May 5, 1949	10.79
Aug. 8	11.80	Nov. 6	11.55	July 22	11.06
Oct. 1	11.98	May 11, 1948	10.85	Sept. 22	11.27

164.89.32bc. Great Northern Railway. Drilled stock well, diameter 8 inches, depth 186 feet. Records available: 1945-49.

Sept. 17, 1945	56.55	July 7, 1947	56.17	Aug. 18, 1948	55.54
July 18, 1946	56.50	Nov. 4	60.63	Nov. 17	55.74
Oct. 22	56.51	May 10, 1948	55.71	Sept. 20, 1949	55.39
Apr. 8, 1947	56.38				

164.91.35dd. M. Lanthorn. Dug domestic and stock well, diameter 48 inches, depth 30 feet. Records available: 1945-49.

Sept. 16, 1945	21.40	Apr. 24, 1947	19.38	Aug. 20, 1948	5.25
June 25, 1946	21.10	July 8	g 3.52	Nov. 16	11.51
Aug. 9	22.03	Nov. 5	8.35	May 12, 1949	5.61
Oct. 17	18.61	May 11, 1948	c 3.18	Sept. 21	22.22

c Ponded water nearby.

g Surface water draining into well.

164.93.35dc. O. J. M. Olsen. Dug domestic and stock well, diameter 36 inches, depth 27 feet. Records available: 1945-49.

Sept. 12, 1945	22.17	July 8, 1947	19.85	Nov. 16, 1948	19.69
Apr. 9, 1946	22.68	Nov. 5	20.67	May 12, 1949	19.49
May 24	20.90	May 11, 1948	16.94	July 23	20.06
Aug. 9	21.52	Aug. 20	19.01	Sept. 21	20.44
Apr. 24, 1947	22.00				

Burleigh County

141.80.35cc1. Celia De Long. Records available: 1940-46, 1948-49.
June 7, 14.18; Sept. 10, 15.58; Nov. 25, 14.82.

Cass County

137.50.29dad4. Village of Kindred. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	9.14	Mar. 27	8.96	July 5	7.27	Sept. 12	8.59
10	9.09	Apr. 4	8.41	12	7.16	19	8.65
17	9.18	11	8.18	18	7.16	26	8.66
24	9.04	18	8.17	25	7.16	Oct. 3	8.79
30	8.97	25	8.15	Aug. 1	7.37	10	8.75
Feb. 7	8.99	May 2	8.13	8	7.68	17	8.72
14	9.01	9	8.01	15	8.00	24	8.72
28	9.01	17	7.87	22	8.07	Nov. 7	8.72
Mar. 5	8.69	23	7.88	29	8.20	14	8.71
11	8.48	31	7.87	Sept. 5	8.32	21	8.71
18	8.36						

137.50.29dda5. Village of Kindred. Records available: 1948-49.

Jan. 3	8.66	Mar. 27	8.17	June 20	7.22	Sept. 5	8.46
10	8.67	Apr. 4	8.12	27	7.21	12	8.55
17	8.69	11	8.11	July 5	7.19	19	8.57
24	8.74	18	8.10	12	7.16	26	8.60
30	8.73	25	8.06	18	7.05	Oct. 3	8.69
Feb. 7	8.74	May 2	8.03	25	7.05	10	8.69
14	8.75	9	7.76	Aug. 1	7.22	17	8.70
21	8.75	17	8.08	8	7.38	24	8.69
28	8.83	23	8.01	15	7.49	Nov. 7	8.64
Mar. 5	8.88	31	7.70	22	7.68	14	8.61
11	8.88	June 6	7.59	29	7.89	21	8.59
18	8.89	13	7.37				

137.50.29ddc1. Village of Kindred. Records available: 1948-49.

Jan. 3	8.09	Mar. 27	7.30	June 20	6.51	Sept. 5	7.60
10	8.08	Apr. 4	7.30	27	6.50	12	7.82
17	8.01	11	7.29	July 5	6.50	19	7.91
24	7.86	18	7.22	12	6.45	26	7.91
30	8.03	25	7.17	18	6.44	Oct. 3	7.86
Feb. 7	8.03	May 2	7.14	25	6.43	10	7.90
14	8.04	9	7.09	Aug. 1	6.72	17	7.99
21	8.04	17	7.00	8	7.05	24	7.97
28	8.07	23	6.99	15	7.25	Nov. 7	7.96
Mar. 5	8.06	31	6.99	22	7.40	14	7.93
11	8.08	June 6	6.97	29	7.46	21	7.91
18	8.09	13	6.74				

139.48.6ccdl. The Pierce Co., 1019 First Avenue North, Fargo.
Records available: 1940-49.Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	37.04	36.39	35.77	36.58	35.60	35.48	36.54	.....	.....	39.65	38.86	.....
2	36.98	36.39	35.73	36.58	35.58	35.46	35.53	.....	37.98	39.68	38.82	37.64
3	36.94	36.38	35.71	.....	35.54	35.46	35.53	.....	38.06	39.72	38.81	37.64
4	36.93	36.36	35.69	.....	35.52	35.48	35.52	.....	38.17	39.76	38.76	37.63
5	36.86	36.31	35.65	.....	35.52	35.48	35.52	35.45	38.27	39.78	38.67	37.63
6	36.77	36.29	35.66	.....	35.53	35.50	35.49	35.47	38.34	39.78	38.64	37.62
7	36.72	36.25	35.66	.....	35.54	35.52	35.47	35.48	38.42	39.84	38.59	37.57
8	36.65	36.21	35.65	.....	35.54	35.52	35.54	35.48	38.49	39.88	38.52	37.56
9	36.66	36.20	35.67	.....	35.54	35.52	35.44	35.48	38.56	39.92	38.47	37.56
10	36.69	36.22	35.67	.....	35.54	35.52	35.46	35.49	38.59	39.92	38.41	37.51
11	36.72	36.22	35.67	.....	35.54	35.51	35.46	35.53	38.64	39.86	38.38	37.44
12	36.71	36.16	35.66	.....	35.53	35.50	35.45	35.68	38.68	39.85	38.36	37.36
13	36.64	36.00	35.66	.....	35.53	35.50	35.43	35.67	38.77	39.86	38.34	37.37
14	36.57	36.00	35.67	.....	35.52	35.48	35.43	35.77	38.94	39.86	38.31	37.37
15	36.56	35.94	35.67	35.57	35.52	35.48	35.43	35.87	38.89	39.82	38.28	37.37
16	36.52	.....	35.67	35.57	35.52	35.48	35.30	35.97	38.93	39.76	38.25	37.33
17	36.52	.....	35.65	35.56	35.51	35.47	35.30	36.01	38.98	39.70	38.23	37.26

a Tape measurement.

139.48.6ccdl--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
18	36.49	.....	35.63	35.56	35.49	35.17	35.28	36.13	39.14	39.67	38.22	37.23
19	36.48	35.90	35.65	35.56	35.50	35.49	35.30	36.35	39.20	39.62	38.11	37.23
20	36.48	35.91	35.98	35.56	35.50	35.49	35.31	36.49	39.24	39.55	38.10	37.21
21	36.47	35.91	35.93	35.54	35.50	35.48	35.31	36.52	39.29	39.49	38.08	37.19
22	36.46	35.89	35.90	35.53	35.48	35.48	35.31	36.63	39.33	39.32	38.08	37.17
23	36.40	35.85	35.90	35.55	35.49	35.46	.....	36.83	39.39	39.29	38.02	37.16
24	36.37	35.80	35.90	35.56	35.51	35.44	.....	36.96	.....	39.29	37.99	37.17
25	36.36	35.80	35.87	35.56	35.51	35.39	.....	37.10	.....	39.25	37.94	37.09
26	36.35	35.80	35.85	35.56	35.52	35.40	.....	37.27	.....	39.18	.....	37.07
27	36.31	35.78	36.52	35.57	35.53	35.39	.....	37.40	.....	39.14	.....	37.05
28	36.27	35.77	36.50	35.57	35.53	35.11	.....	37.47	.....	39.07	.....	37.03
29	36.23	.....	36.54	35.56	35.52	35.41	.....	37.49	.....	39.01	.....	37.03
30	36.48	.....	36.56	35.60	35.51	35.40	.....	.....	.....	38.94	.....	37.03
31	36.42	.....	36.57	.....	35.51	.....	.....	.....	.....	58.92	.....	37.00

a Tape measurement.

139.48.7acbl. City of Fargo. In Island Park. Records available: 1940-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	41.69	42.74	42.69	42.76	42.69	42.74	42.77	42.81	.....	43.30	43.17	43.18
2	41.63	42.74	42.67	42.74	42.66	42.72	42.77	42.85	43.17	43.08	43.24	43.18
3	41.67	42.69	42.67	42.63	42.67	42.77	42.74	42.86	43.18	.....	43.23	43.15
4	41.67	42.69	42.69	42.62	42.70	42.76	42.76	42.86	43.21	.....	43.25	43.17
5	41.54	42.77	42.69	42.60	42.70	42.75	42.76	42.85	43.24	.....	43.25	43.17
6	41.51	42.76	42.65	42.59	42.73	42.79	42.78	42.87	43.25	.....	43.23	43.15
7	41.51	42.76	42.64	42.61	42.73	42.80	42.72	42.87	43.25	43.30	43.21	43.18
8	42.77	42.78	42.68	42.65	42.71	42.79	42.72	43.00	43.25	43.34	43.18	43.21
9	42.86	42.79	42.68	42.65	42.74	42.80	42.77	.....	43.25	43.34	43.16	43.20
10	42.87	42.83	42.68	42.68	42.74	42.79	42.75	.....	43.21	43.29	43.14	43.14
11	42.88	42.79	42.68	42.68	42.74	42.76	42.70	.....	43.18	43.23	43.17	43.15
12	42.81	42.78	42.65	42.63	42.73	42.74	42.64	43.01	43.21	43.23	43.17	43.15
13	42.73	42.82	42.70	42.67	42.75	42.76	42.66	43.01	43.21	43.30	43.16	43.15
14	42.75	42.81	42.72	42.71	42.78	42.75	42.70	43.03	43.22	43.32	43.15	43.15
15	42.59	42.72	42.72	42.73	42.77	42.76	42.72	43.04	43.22	43.30	43.15	43.14
16	42.63	42.79	42.69	42.71	42.76	42.76	42.71	43.04	43.20	43.29	43.17	43.14
17	42.64	42.79	42.69	42.73	42.75	42.73	42.70	43.06	43.21	43.30	43.22	43.14
18	42.61	42.82	42.62	42.74	42.73	42.74	42.74	43.06	43.22	43.30	43.22	43.18
19	42.65	42.61	42.60	42.74	42.76	42.74	42.77	43.10	43.26	43.27	43.17	43.18
20	42.65	42.68	42.66	42.71	42.76	42.71	42.77	.....	43.26	43.26	43.20	43.17
21	42.63	42.69	42.64	42.70	42.70	42.71	42.74	.....	43.28	.....	43.22	43.17
22	42.78	42.66	42.65	42.70	42.70	42.71	42.80	.....	43.29	43.20	43.19	43.16
23	42.78	42.65	42.65	42.76	42.75	42.69	42.79	.....	43.32	43.25	43.19	43.18
24	42.78	42.67	42.64	42.76	42.76	42.69	42.78	.....	43.32	43.26	43.18	43.18
25	.....	42.69	42.59	42.73	42.76	42.71	42.79	.....	43.21	43.48	43.16	43.16
26	.....	42.72	42.73	42.75	42.77	42.71	42.80	.....	43.27	43.22	43.17	43.16
27	.....	42.72	42.71	42.79	42.78	42.72	42.80	.....	43.31	43.19	43.17	43.16
28	.....	42.72	42.73	42.76	42.77	42.73	42.78	.....	43.34	43.20	43.17	43.17
29	42.78	.....	42.78	42.73	42.75	42.70	42.83	.....	43.35	43.18	43.16	43.19
30	42.70	.....	42.78	42.70	42.76	.....	42.83	.....	43.33	43.23	43.16	43.19
31	42.67	.....	42.77	.....	42.76	.....	42.83	.....	43.23	.....	43.21	.....

a Tape measurement.

139.49.1cccl. City of Fargo. Records available: 1937-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	56.50	53.32	52.36	51.65	51.95	52.68	54.9.46	53.34	89.06	85.30	61.43	.....
2	56.40	53.72	53.35	53.78	53.55	52.05	.....	53.34	89.10	85.29	.....	.....
3	56.91	53.26	52.65	51.87	52.45	52.15	.....	54.01	89.13	85.28	.....	59.34
4	56.30	53.66	52.85	51.70	51.95	51.88	.....	54.11	.....	85.27	.....	60.16
5	55.80	53.67	52.74	54.31	51.44	51.88	.....	52.67	.....	85.27	.....	59.07
6	57.14	52.61	52.42	53.35	52.15	51.49	.....	.....	.....	85.26	.....	59.90
7	56.32	53.57	53.20	52.24	54.52	51.50	.....	.....	.....	85.20	.....	59.82

a Tape measurement.

139.49.1ccl--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
8	54.85	53.07	52.60	51.95	53.17	51.35	53.12	.....	.....	82.95	.....	.....
9	54.70	53.52	52.40	53.25	52.40	51.08	52.35	.....	88.16	79.25	.....	.....
10	55.11	53.13	53.63	52.00	54.30	51.98	52.58	.....	88.26	76.65	.....	56.50
11	54.67	.....	52.82	54.02	53.64	51.98	52.82	.....	88.24	74.95	59.76	.....
12	55.15	52.75	52.40	52.70	52.40	51.11	52.82	66.20	89.85	73.65	.....	.....
13	54.55	52.71	52.25	51.90	53.84	50.73	53.56	74.55	83.70	72.95	.....	.....
14	54.27	53.38	53.45	51.54	53.74	50.61	54.06	74.54	.....	70.99	.....	.....
15	54.03	52.78	52.70	.....	53.44	50.85	53.82	74.58	.....	70.16	.....	.....
16	.....	52.93	53.27	.....	52.87	50.85	53.31	.....	86.95	70.00	.....	.....
17	.....	52.65	52.72	52.11	52.44	50.76	53.31	.....	91.24	69.30	.....	56.70
18	.....	52.93	52.39	52.02	52.44	50.76	53.31	.....	92.12	68.60	.....	56.08
19	.....	52.65	52.90	52.13	52.21	50.62	54.02	76.12	52.12	67.60	59.86	67.12
20	.....	52.50	51.85	52.03	52.71	50.51	54.04	78.83	92.25	66.47	59.11	56.10
21	.....	53.22	51.35	52.83	51.33	50.61	54.06	87.74	.....	66.55	58.76	.....
22	53.50	52.67	52.63	52.15	51.35	50.75	53.80	88.32	.....	64.82	59.47	.....
23	53.40	52.38	51.80	53.40	52.12	50.36	.....	88.90	80.92	64.60	58.44	.....
24	54.08	53.36	52.62	52.70	51.83	50.36	.....	88.92	83.78	65.25	59.04	55.52
25	53.50	52.70	51.75	55.15	51.34	49.84	.....	79.36	84.60	63.80	58.44	.....
26	.....	52.43	54.67	53.95	51.95	49.84	.....	89.33	82.30	63.28	55.12	.....
27	.....	52.20	53.10	52.95	51.83	49.82	.....	89.80	80.57	64.16	.....	.....
28	.....	52.90	52.24	54.43	51.34	49.73	.....	88.82	80.57	63.70	.....	.....
29	53.50	.....	51.95	53.70	50.33	49.96	54.61	88.94	80.56	62.51	.....	.....
30	53.31	.....	53.15	52.10	50.33	49.37	54.52	89.02	80.57	63.00	.....	.....
31	53.87	.....	51.85	.....	49.55	.....	54.11	89.03	.....	62.61	.....	.....

a Tape measurement.

139.49.6ad1. Union stockyards. Records available: 1938-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	71.41	75.12	71.60	.....	65.67	66.56	68.48	69.89	71.49	72.83	71.33
2	.....	71.40	73.15	72.00	.....	65.67	66.56	68.62	70.00	71.50	72.84	71.32
3	.....	71.41	75.22	72.10	.....	66.07	66.60	68.78	70.01	71.54	72.85	71.55
4	.....	.....	73.26	71.88	.....	66.08	66.60	68.85	70.01	71.62	72.88	71.14
5	.....	71.60	72.60	71.63	.....	66.07	66.60	68.75	69.99	71.68	72.88	71.09
6	.....	71.61	72.62	71.50	67.75	66.04	66.67	68.81	70.01	71.74	72.87	71.07
7	71.46	71.60	72.63	71.35	67.69	66.07	67.90	68.81	70.01	71.79	72.83	70.95
8	71.48	71.64	72.65	71.33	67.69	66.11	68.90	68.85	70.09	71.84	72.81	70.95
9	71.48	71.70	72.68	71.30	67.68	66.16	68.98	68.90	70.15	71.87	72.80	70.95
10	71.49	71.76	72.70	69.98	67.67	66.16	68.98	69.12	70.17	71.87	72.78	71.04
11	71.55	71.81	72.72	69.98	67.67	66.10	69.05	69.20	70.16	71.89	72.76	70.97
12	71.58	71.49	72.72	70.67	.....	66.10	69.15	69.29	70.18	71.96	72.76	70.93
13	71.60	71.50	72.60	70.53	67.71	.....	69.17	69.35	70.13	72.04	72.75	70.91
14	71.60	71.71	72.61	70.45	67.71	.....	.....	69.38	70.30	72.12	72.71	70.89
15	71.67	71.71	72.60	70.38	67.68	.....	69.43	69.45	70.35	72.15	72.63	.....
16	71.67	71.75	72.59	69.58	67.65	.....	69.47	69.47	70.42	72.16	72.56	.....
17	71.62	71.77	72.58	69.30	67.62	66.36	69.48	69.53	70.45	72.21	72.50	70.71
18	71.59	71.84	72.59	69.02	67.60	66.39	69.52	69.62	70.48	72.26	72.50	70.70
19	71.54	72.65	.....	68.88	67.58	66.39	69.80	69.66	70.55	72.24	72.45	70.69
20	71.53	72.73	.....	68.77	67.60	66.36	.....	69.67	80.62	72.41	.....	70.68
21	71.52	72.78	.....	.....	66.60	66.40	.....	69.67	70.71	72.46	.....	70.68
22	71.64	72.84	.....	69.41	66.27	66.46	68.23	69.69	70.82	72.51	.....	70.67
23	71.63	72.84	.....	.....	66.23	66.51	68.27	69.70	71.00	72.55	.....	70.66
24	71.68	72.92	.....	.....	66.19	66.56	68.29	69.75	71.04	72.51	.....	70.66
25	71.54	73.00	.....	.....	66.17	66.58	68.34	69.78	71.08	72.66	.....	.....
26	71.53	73.02	72.45	.....	66.16	66.58	68.41	69.83	71.13	72.71	71.68	.....
27	71.49	73.04	72.32	.....	66.16	66.59	68.49	69.84	71.20	72.77	71.60	.....
28	71.49	73.09	72.00	.....	66.15	66.44	68.55	69.84	71.27	72.78	71.55	.....
29	71.61	.....	71.78	67.90	66.12	66.71	68.52	69.83	71.40	72.81	71.38	.....
30	71.61	.....	71.62	.....	65.92	66.79	68.54	69.84	71.49	72.82	71.36	.....
31	71.54	.....	71.60	.....	65.61	.....	68.55	69.85	.....	72.83	.....	68.98

a Tape measurement.

140.52.14dd1. Mrs. Arthur D. South. Records available: 1937-49.
May 14, 13.05.

140.52.14dd3. Mrs. Arthur D. South. Records available: 1937-49.
May 14, 14.21.

140.52.14dd4. Mrs. Arthur D. South. Records available: 1937-49.
May 14, 16.45.

Cavalier County

161.60.14cd1. City of Langdon. Records available: 1937-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	18.44	Apr. 9	18.56	July 16	21.35	Oct. 8	18.60
8	18.50	16	17.42	23	17.46	15	18.64
15	18.58	23	16.70	30	17.60	22	18.56
22	18.65	30	16.58	Aug. 6	17.69	29	18.56
29	18.59	May 7	16.53	13	17.82	Nov. 5	18.56
Feb. 5	18.65	14	16.47	20	18.00	12	18.46
12	18.76	21	16.40	27	18.11	19	18.44
19	18.83	28	16.44	Sept. 3	18.15	26	18.38
26	18.89	June 4	16.62	10	18.21	Dec. 3	18.48
Mar. 5	18.96	11	16.65	17	18.21	10	18.52
12	19.01	18	16.68	24	18.31	12	18.52
19	19.09	27	16.64	28	18.44	24	18.51
26	19.13	July 2	20.50	Oct. 1	18.48	31	18.61
Apr. 2	19.24	9	20.89				

161.60.14dal. City of Langdon. Records available: 1937-49.

Jan. 1	8.67	Apr. 9	9.21	July 16	14.05	Oct. 8	9.48
8	8.71	16	7.97	23	7.86	15	8.94
15	8.72	23	6.78	30	7.68	22	8.08
22	8.74	30	6.27	Aug. 6	7.73	29	7.32
29	8.80	May 7	5.96	13	7.99	Nov. 5	7.22
Feb. 5	9.16	14	5.72	20	8.11	12	7.21
12	9.18	21	5.54	27	8.34	19	7.16
19	9.44	28	5.62	Sept. 3	8.39	26	7.18
26	9.53	June 4	6.38	10	8.59	Dec. 3	7.21
Mar. 5	9.68	11	6.38	17	8.59	10	7.14
12	9.78	18	6.36	24	8.78	12	7.15
19	10.08	25	6.42	28	9.02	24	7.72
26	10.13	July 2	6.72	Oct. 1	9.32	31	8.02
Apr. 2	10.18	9	9.00				

161.60.14dcl. City of Langdon. Records available: 1937-49.

Jan. 1	20.55	Apr. 9	19.55	July 16	16.67	Oct. 8	21.73
8	20.58	16	18.63	23	20.85	15	20.82
15	20.62	23	18.93	30	20.35	22	19.78
22	20.64	30	19.05	Aug. 6	20.45	29	19.71
29	20.67	May 7	19.20	13	20.95	Nov. 5	19.67
Feb. 5	20.75	14	19.22	20	21.30	12	19.74
12	20.83	21	19.23	27	21.53	19	19.79
19	20.89	28	19.40	Sept. 3	21.69	26	19.84
26	20.95	June 4	19.60	10	21.80	Dec. 3	19.75
Mar. 5	20.95	11	19.57	17	21.80	10	20.05
12	21.00	18	19.52	24	21.70	12	20.25
19	21.03	25	19.59	28	21.65	24	20.45
26	20.95	July 2	16.30	Oct. 1	21.69	31	20.55
Apr. 2	20.75	9	16.45				

Dickey County

129.59.7bal. D. C. Botts. Records available: 1946-49. Sept. 7, 8.56.

129.59.11bb. F. Turner. Driven domestic well, diameter 6 to $1\frac{1}{4}$ inches, depth 28 feet. Records available: 1946-47, 1949. Aug. 28, 1946, 5.49; May 7, 1947, 2.55; Oct. 4, 1949, 6.96.

129.60.24cc1. V. S. Doyen. Records available: 1940-42, 1946. Measurements discontinued.

130.59.3bcl. M. J. Reinhart. Records available: 1941-49.

Date	Water level	Date	Water level	Date	Water level
May 24, 1948	5.22	Apr. 27, 1949	7.33	Sept. 7, 1949	8.32
Aug. 5	6.46	June 9	7.66	Oct. 3	8.02
Oct. 12	8.09	0			

130.59.9bcl. H. G. Martin, administrator. Records available: 1940-49. Sept. 3, 1948, 7.96; June 9, 1949, 8.08; Sept. 7, 1949, 9.53; Oct. 3, 1949, 9.63.

130.59.32aa. A. Peterson. Driven domestic well, diameter $1\frac{1}{4}$ inches, depth 10 feet. Records available: 1946-49.

Aug. 28, 1946	6.40	Oct. 14, 1947	6.30	Aug. 5, 1948	5.62
May 8, 1947	2.15	May 24, 1948	5.05	Oct. 3, 1949	7.56

131.59.16dd. State of North Dakota. Unused bored well, diameter 18 inches. Records available: 1940, 1947, 1949.

Sept. 4, 1940	25.75	Oct. 14, 1947	21.40	Sept. 7, 1949	22.36
May 8, 1947	21.62	June 9, 1949	22.67	Oct. 3	22.38

131.59.21cc1. Sletvold. Unused bored well. Records available: 1947. Measurements discontinued. May 7, 10.41; Oct. 14, 10.73.

131.59.21cc2. Sletvold. Driven domestic well, diameter $1\frac{1}{2}$ inches, depth 18.6 feet. Records available: 1948-49. May 24, 1948, 11.52; Oct. 3, 1949, 13.88.

131.59.27cd. School. Driven domestic well, diameter $1\frac{1}{4}$ inches. Records available: 1946-49.

Aug. 29, 1946	10.09	May 24, 1948	9.56	Apr. 27, 1947	10.78
May 7, 1947	9.13	Aug. 5	10.21	July 7	10.49
Oct. 14	9.47	Oct. 13	10.82	Oct. 4	11.26

131.59.28bal. City of Oakes. Records available: 1940-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	8.57	Apr. 11	8.33	July 5	8.52	Oct. 3	9.12
10	8.62	14	8.36	11	8.60	10	9.04
17	8.66	18	8.50	18	8.64	17	9.10
25	8.65	25	8.46	25	8.70	24	9.07
31	8.66	May 2	8.17	Aug. 1	8.46	31	8.98
Feb. 7	8.63	9	8.12	8	8.82	Nov. 7	9.02
14	8.66	16	8.13	15	8.85	14	9.01
22	8.70	23	8.20	22	8.95	21	9.03
28	8.72	30	8.28	30	8.95	28	8.95
Mar. 7	8.60	June 6	8.30	Sept. 5	9.05	Dec. 5	9.00
14	8.62	13	8.40	12	9.03	14	9.05
21	8.50	20	8.40	19	9.12	19	9.02
28	8.46	27	8.39	26	9.14	27	9.05

131.59.29aal. Fred Sletvold. Records available: 1943-49. Sept. 7, 12.45.

131.59.33cc1. Lynus Sitts, Jr. Records available: 1940, 1948-49.

131.59.33ccl--Continued.

Date	Water level	Date	Water level	Date	Water level
Sept. 7, 1940	10.28	Oct. 13, 1948	8.43	July 7, 1949	8.42
May 24, 1948	7.39	Apr. 27, 1949	8.30	Sept. 9	9.14
Aug. 5	8.35	June 9	8.13	Oct. 3	8.89

131.60.25bal. E. Johnson. Unused dug well, diameter 35 inches, depth 29.2 feet. Records available: 1946-49.

Aug. 29, 1946	19.04	May 24, 1948	18.86	Apr. 27, 1949	20.74
May 8, 1947	19.28	Aug. 5	19.07	July 7	20.74
Oct. 14	19.30	Oct. 13	19.46	Oct. 3	20.67

131.60.25ba2. E. Johnson. Bored domestic well, diameter 24 inches, depth 26.6 feet. Records available: 1946-49. Oct. 13, 1949, 20.06; Apr. 27, 1949, 20.73; July 7, 20.85; Oct. 3, 21.34.

131.64.56al. State of North Dakota. Records available: 1939-44, 1946. No measurement made in 1949.

Divide County

162.97.6dal. Adolf Carlson. Records available: 1946-47, 1949.

Lowest daily water level, from recorder charts

Day	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	14.57	15.17	14.34	14.57
2	.....	14.62	15.18	14.85	15.56
3	.....	14.65	15.20	14.79	15.56
4	.....	14.67	15.21	14.77	15.57
5	.....	14.72	15.21	14.75	15.58
6	.....	14.76	15.20	14.73	15.57
7	.....	14.79	15.21	14.71	15.59
8	.....	14.82	15.23	14.68	15.61
9	.....	14.86	15.25	14.65	15.61
10	.....	14.88	15.21	14.63	.....
11	13.69	14.91	15.20	14.64	.....
12	13.75	14.92	15.20	14.65	.....
13	13.80	14.94	15.21	14.64	.....
14	13.86	13.96	15.25	14.64	.....
15	13.87	14.96	15.22	14.63	.....
16	13.89	14.95	15.21	14.64	.....
17	13.91	14.95	15.24	14.64	.....
18	13.95	14.98	15.24	14.63	.....
19	14.01	15.00	15.24	14.62	.....
20	14.05	15.01	15.23	14.61	.....
21	14.09	15.03	15.20	14.62	.....
22	14.16	15.05	15.20	14.61	.....
23	14.21	15.07	15.20	14.61	.....
24	14.24	15.08	15.18	14.60	.....
25	14.29	15.10	15.15	14.60	.....
26	14.33	15.12	15.14	14.60	.....
27	14.38	15.14	15.10	14.59	.....
28	14.44	15.15	15.07	14.57	.....
29	14.47	15.16	15.02	14.57	.....
30	14.84	15.16	14.98	14.57	.....
31	14.55		14.90		.....

162.97-12ad. Edwin Skar. Bored domestic well, diameter 18 inches, depth 30 feet. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Sept. 8, 1945	24.20	July 11, 1947	19.02	Nov. 16, 1948	16.87
Apr. 8, 1946	23.01	Nov. 6	20.46	May 5, 1949	10.67
July 18	23.50	May 12, 1948	7.01	July 22	13.69
Aug. 30	23.41	Aug. 19	13.59	Sept. 22	15.81
Oct. 15	23.65				

162.97.12da. Edwin Skar. Bored stock well, diameter 18 inches.
Records available: 1943-49.

Date	Water level	Date	Water level	Date	Water level
Sept. 8, 1945	6.60	July 11, 1947	3.78	Nov. 16, 1948	6.06
July 8, 1946	2.44	Nov. 6	5.45	May 5, 1949	c 2.72
Aug. 30	6.82	May 12, 1948	c 2.02	July 20	4.25
Oct. 15	6.60	Aug. 19	6.62	Sept. 22	6.77

c Ponded water nearby.

162.97.18aa. Owner unknown. Bored stock well, diameter 18 inches.
Records available: 1945-49

Sept. 9, 1945	26.05	Apr. 28, 1947	24.79	Nov. 15, 1948	25.15
Apr. 8, 1946	24.75	July 11	24.86	May 5, 1949	23.60
July 18	24.59	Nov. 6	24.81	July 22	23.46
Aug. 30	24.60	May 12, 1948	24.57	Sept. 22	23.93
Oct. 15	24.70	Aug. 19	24.67		

162.97.21bb. O. Bakken. Unused bored well, diameter 18 inches. Records available: 1945-49.

Sept. 8, 1945	16.85	July 11, 1947	16.15	Nov. 15, 1948	16.01
Apr. 8, 1946	16.62	Nov. 6	16.54	May 5, 1949	16.02
July 18	16.58	May 12, 1948	15.39	July 22	16.00
Aug. 30	16.52	Aug. 19	15.56	Sept. 22	17.37
Oct. 15	17.01				

163.95.8bb. Owner unknown. Dug stock well. Records available: 1945-49.

Sept. 9, 1945	16.05	Apr. 25, 1947	14.26	Nov. 16, 1948	12.24
Apr. 9, 1946	14.26	July 8	13.54	May 5, 1949	11.73
July 19	14.05	Nov. 6	13.47	July 22	11.46
Aug. 29	14.19	May 12, 1948	11.62	Sept. 22	11.90
Oct. 15	14.10	Aug. 19	13.36		

163.95.17ba1. Orrin Lien. Unused bored well, diameter 24 inches.
Records available: 1945-49.

Sept. 9, 1945	19.40	Apr. 25, 1947	18.56	Nov. 16, 1948	17.44
Apr. 9, 1946	19.24	July 8	17.36	May 5, 1949	17.24
July 19	18.74	Nov. 6	17.82	July 22	16.48
Aug. 29	20.20	May 12, 1948	16.25	Sept. 22	16.75
Oct. 15	18.56	Aug. 19	16.77		

163.96.29dc. L. J. Brady. Dug domestic and stock well. Records available: 1945-49.

Sept. 8, 1945	26.05	Oct. 16, 1946	21.30	Nov. 15, 1948	13.92
Apr. 8, 1946	19.72	July 9, 1947	18.62	May 5, 1949	c 14.16
July 19	21.30	Nov. 6	d 20.51	July 22	12.55
Aug. 29	23.73	Aug. 19, 1948	18.06	Sept. 22	13.96

c Ponded water nearby.

d Pumping recently.

163.97.21bc. William Mitchell. Bored stock well, diameter 18 inches.
Records available: 1945-49.

Sept. 8, 1945	13.60	Apr. 28, 1947	c 7.93	Nov. 15, 1948	8.56
Apr. 8, 1946	c 11.14	July 9	5.71	May 5, 1949	c 2.50
July 19	9.28	Nov. 6	8.29	July 22	5.67
Aug. 29	10.52	May 12, 1948	c 4.72	Sept. 22	9.29
Oct. 15	10.72	Aug. 19	5.62		

c Ponded water nearby.

163.95.20cc. Owner unknown. Dug stock well. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Sept. 9, 1945	6.65	Oct. 15, 1946	5.11	Aug. 19, 1948	d 10.60
Apr. 9, 1946	4.24	Apr. 25, 1947	4.36	Nov. 16	4.52
July 19	d 9.23	July 8	d 4.60	May 5, 1949	4.25
Aug. 29	5.93	Nov. 6	4.48	July 22	d 12.71
Oct. 10	5.13	May 12, 1948	3.83	Sept. 22	5.63

d Pumping recently.

163.95.32bc. Owner unknown. Drilled domestic and stock well. Records available: 1945-49.

Sept. 11, 1945	26.00	Oct. 15, 1946	26.10	Aug. 19, 1948	24.23
Apr. 9, 1946	26.04	Apr. 25, 1947	25.95	Nov. 16	24.78
July 19	25.85	July 8	25.63	May 5, 1949	d 24.64
Aug. 29	26.05	Nov. 6	25.49	July 22	24.03
Oct. 10	26.15	May 12, 1948	24.71	Sept. 22	24.18

a Pumping recently.

163.96.5cc. Carl Gudvangen. Bored domestic and stock well, diameter 18 inches, depth 50 feet. Records available: 1945-49.

Sept. 11, 1945	28.05	July 9, 1947	27.85	Nov. 16, 1948	26.86
July 19, 1946	28.38	Nov. 6	27.77	May 5, 1949	26.79
Aug. 29	28.26	May 12, 1948	24.08	July 22	26.79
Oct. 15	28.04	Aug. 19	24.81	Sept. 22	27.14
Apr. 28, 1947	27.67				

163.97.22cd1. J. M. Johnson. Records available: 1938-49.

May 12, 1948	cd 2.33	May 5, 1949	5.58	Sept. 11	8.90
Aug. 19	d 9.97	July 22	7.30	22	9.08
Nov. 16	9.46				

c Ponded water nearby.

d Pumping recently.

163.97.33dd. Tom Granrud. Bored stock well, diameter 18 inches. Records available: 1945-49.

Sept. 8, 1945	18.35	July 9, 1947	8.30	Nov. 15, 1948	10.51
July 19, 1946	16.80	Nov. 6	10.14	May 5, 1949	9.72
Aug. 29	10.45	May 12, 1948	6.49	July 22	13.44
Oct. 16	12.90	Aug. 18	7.29	Sept. 22	10.96
Apr. 28, 1947	12.74				

163.100.34aal. A. U. Anderson. Records available: 1940-46, 1949. Sept. 10, 13.58.

164.95.34dd. Owner unknown. Unused drilled well, diameter 6 inches. Records available: 1945-49.

Sept. 10, 1945	57.47	July 8, 1947	57.74	Nov. 16, 1948	57.06
Apr. 9, 1946	57.25	Nov. 6	57.17	May 5, 1949	56.87
Aug. 29	57.52	May 12, 1948	57.09	July 22	57.10
Oct. 15	57.47	Aug. 19	57.20	Sept. 22	57.05
Apr. 25, 1947	57.24				

Dunn County

141.92.28da. Owner unknown. Unused dug well, depth 62.5 feet. Records available: 1946-49.

Apr. 29, 1946	44.71	July 16, 1947	44.81	Oct. 18, 1948	44.46
July 9	44.76	Oct. 2	44.49	Apr. 21, 1949	44.22
Oct. 5	44.93	May 6, 1948	44.52	July 16	43.80
May 13, 1947	44.93	July 29	44.46	Dec. 8	44.32

145.92.25ad1. S. F. Lesmeister. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	8.73	Apr. 1	8.66	June 24	7.83	Sept. 16	8.68
14	8.66	8	8.39	July 1	8.04	23	8.89
21	8.73	15	8.23	8	8.93	30	8.67
28	8.86	22	7.97	15	8.42	Oct. 7	8.62
Feb. 4	8.72	29	7.33	22	8.93	14	8.13
11	8.75	May 6	7.57	29	7.92	21	8.75
18	8.89	13	7.23	Aug. 5	8.08	28	8.62
25	8.92	20	7.10	12	8.24	Nov. 4	8.52
Mar. 4	8.86	27	7.70	19	8.02	11	8.33
11	8.88	June 3	7.52	26	7.96	18	8.49
18	8.77	10	7.96	Sept. 2	8.17	25	8.63
25	8.72	17	7.68	9	8.53		

Eddy County

148.64.23dc. R. Topp. Dug domestic well, diameter 24 inches, depth 10.35 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Aug. 21, 1946	8.14	Oct. 10, 1947	7.47	Oct. 5, 1949	8.84
May 8, 1947	7.35	May 22, 1948	6.95		

148.65.21aa. H. Johnson. Bored domestic well, diameter 24 inches, depth 28 feet. Records available: 1946-49.

Aug. 21, 1946	16.10	May 22, 1948	15.83	Apr. 28, 1949	8.91
May 5, 1947	18.31	Aug. 8	17.11	July 30	d 20.94
Oct. 10	17.76	Oct. 13	d 22.06	Oct. 5	17.22

d Pumping recently.

148.65-35ba. A. L. Price. Unused dug well, diameter 24 inches, depth 28 feet. Records available: 1946-49.

Aug. 21, 1946	10.17	May 22, 1948	9.72	Apr. 28, 1949	7.57
May 8, 1947	10.80	Aug. 8	10.87	June 30	7.39
Oct. 10	11.64	Oct. 13	17.38	Oct. 5	10.04

148.66.1aa. S. Mygaard. Dug domestic and stock well, diameter 36 inches, depth 11.3 feet. Records available: 1946-49.

Aug. 20, 1946	8.40	May 22, 1948	7.53	Apr. 28, 1949	6.39
May 8, 1947	7.94	Aug. 8	7.05	June 30	7.00
Oct. 10	8.33	Oct. 13	8.27	Oct. 4	8.48

148.66.4cb. James Pfeiffer. Dug domestic well, diameter 36 inches, depth 25.2 feet. Records available: 1946-49.

Aug. 21, 1946	11.74	May 22, 1948	11.06	Apr. 28, 1949	8.16
May 8, 1947	11.02	Aug. 8	7.79	June 30	8.26
Oct. 10	12.01	Oct. 13	11.30	Oct. 4	13.20

148.66.10dd. F. Duda. Drilled domestic and stock well, diameter 6 inches, depth 116 feet. Records available: 1945-49.

Sept. 5, 1946	30.60	May 22, 1948	25.17	June 30, 1949	27.38
May 8, 1947	25.41	Oct. 13	28.39	Oct. 4	28.75
Oct. 10	26.03	Apr. 28, 1949	d 31.92		

d Pumping recently.

148.67.28dal. Pfau Estate. Records available: 1940-49. Sept. 13, flow 15 gallons per minute.

149.63.32ab. S. Erman. Dug stock well, diameter 30 inches, depth 43 feet. Records available: 1946-49.

149.63.32ab--Continued.

Date	Water level	Date	Water level	Date	Water level
Aug. 20, 1946	16.93	May 22, 1948	16.86	Apr. 28, 1949	15.61
May 8, 1947	17.22	Aug. 8	16.36	June 30	16.87
Oct. 10	17.45	Oct. 13	18.10	Oct. 5	17.55

149.64.28cc. R. Rosenberg. Unused dug well, diameter 30 inches, depth 40 feet. Records available: 1946-49.

Aug. 20, 1946	13.61	May 22, 1948	13.43	Apr. 28, 1949	3.75
May 8, 1947	18.70	Aug. 8	5.11	June 30	5.31
Oct. 10	15.09	Oct. 13	9.35	Oct. 5	10.94

149.64.31cb. E. Boyle. Unused dug well, diameter 30 inches, depth 10.1 feet. Records available: 1946-49.

Aug. 20, 1946	6.58	May 22, 1948	4.66	Apr. 28, 1949	3.81
May 8, 1949	5.15	Aug. 8	4.69	June 30	5.18
Oct. 10	5.80	Oct. 13	6.33	Oct. 5	6.79

149.65.10dd. H. Pierson. Dug domestic and stock well, diameter 30 inches, depth 7.80 feet. Records available: 1946, 1949. Apr. 28, 1949 3.76; June 30, 5.22; Oct. 5, 6.60.

149.65.35cb. J. Overdick. Dug domestic and stock well, diameter 36 inches, depth 10 feet. Records available: 1946, 1949. Apr. 28, 1949 3.37; June 30 4.88; Oct. 5, 7.39; pumping recently.

150.65.35cc. O. Anderson. Dug domestic well, diameter 30 inches, depth 11.9 feet. Records available: 1946-49.

Aug. 20, 1946	6.95	May 22, 1948	6.13	Apr. 28, 1949	5.52
May 8, 1947	7.14	Aug. 8	6.25	June 30	5.73
Oct. 10	7.05	Oct. 13	6.26	Oct. 5	7.05

150.66.9bal. Elmer Moe. Records available: 1936, 1938-46, 1948-49. Sept. 13, 19.20.

150.66.9bd1. Gilbert Olson. Records available: 1936, 1938-49. Sept. 13, 14.90.

150.66.9cbl. U. S. S. Stockyards. Records available: 1936-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 9	8.30	June 3	6.55	Aug. 9	7.30	Oct. 26	7.70
15	8.35	9	6.60	15	6.33	Nov. 3	7.02
21	8.35	15	6.65	21	7.35	9	7.05
27	8.35	21	6.70	27	7.37	15	7.80
Apr. 3	7.45	27	3.73	Sept. 5	7.37	21	7.80
26	6.10	July 3	6.80	12	7.38	28	7.80
May 2	6.30	9	6.90	19	7.38	Dec. 4	7.80
8	6.20	15	7.00	26	7.46	10	7.77
14	6.30	21	7.05	Oct. 4	7.52	16	7.78
21	6.50	28	6.10	11	7.55	22	7.80
28	6.55	Aug. 3	7.20	18	7.60	28	7.90

150.66.9cd1. L. S. Rude. Records available: 1936, 1938-49. Sept. 13, 8.30.

Foster County

147.64.10ad. W. Graham. Dug domestic and stock well, diameter 36 inches, depth 17.1 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Aug. 21, 1946	0.30	May 22, 1948	2.37	July 30, 1949	7.35
May 8, 1947	.20	Aug. 8	8.86	Oct. 5	11.97
Oct. 10, 1947	.37	Apr. 27, 1949	9.98		

c Ponded water nearby.

Golden Valley County

139.106.2ddl. Mrs. Tangen. Records available: 1940-42, 1946-47, 1949. Sept. 8, 70.90.

Grant County

134.85.10aal. R. O. Ozburn. Records available: 1940-44, 1946-48. Measurements discontinued.

136.85.8aa. Owner unknown. Unused dug well, depth 37.9 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
May 24, 1946	25.34	July 17, 1947	25.02	Oct. 19, 1948	25.63
July 11	25.20	Oct. 1	25.27	Apr. 22, 1949	23.40
Sept. 10	25.90	May 6, 1948	24.04	July 15	24.66
May 19, 1947	23.73	July 28	25.02	Dec. 9	25.16

136.86.12db. Owner unknown. Unused bored well, diameter 30 inches, depth 34.7 feet. Records available: 1946-49.

May 13, 1946	31.15	Oct. 1, 1947	28.70	Apr. 22, 1949	30.27
Aug. 14	31.44	July 28, 1948	29.91	July 15	30.02
May 19, 1947	29.79	Oct. 19	31.04	Dec. 9	31.62
July 17	28.12				

136.86.20ac. C. E. Johnson. Bored stock well, diameter 24 inches, depth 32 feet. Records available: 1946-49.

May 13, 1946	29.50	Oct. 1, 1947	29.47	Apr. 22, 1949	28.80
July 11	29.52	May 6, 1948	29.37	July 15	28.86
May 19, 1947	29.26	July 29	29.46	Dec. 9	29.60
July 19	29.23	Oct. 19	29.59		

136.87.20dd. Albert Steigmyer. Dug stock well, diameter 48 inches, depth 17.2 feet. Records available: 1946-49.

May 15, 1946	14.20	Oct. 1, 1947	14.30	Apr. 22, 1949	14.58
July 11	14.12	May 6, 1948	14.56	July 15	14.10
May 20, 1947	14.37	July 29	15.19	Dec. 9	15.45
July 18	14.34	Oct. 19	16.04		

136.88.18ca. John Renner. Dug stock well, diameter 48 inches, depth 30.2 feet. Records available: 1946-49.

May 21, 1946	28.10	May 6, 1948	27.49	Apr. 21, 1949	27.36
May 20, 1947	27.53	July 29	28.08	July 15	27.94
July 18	27.71	Oct. 19	28.45	Dec. 9	28.64
Oct. 1	27.66				

Griggs County

144.59.20bcl. Griffith Loan & Investment Co. Records available: 1940-49. Sept. 7, 19.34.

Hettinger County

133.93.5bdl. L. F. Everhart. Records available: 1938-42, 1946-49. Sept. 9, 50.17.

Kidder County

138.73.9ccl. U. S. 7. Herman Peterson. Records available: 1937-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 6	5.67	May 2	7.37	June 7	8.97	July 5	6.77
19	7.67	31	8.27	21	6.87		

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139.71.3cc1. Jake Schaurer. Records available: 1940-49. Sept. 8, 11.50.

139.71.10bcl. Village of Tappen. Records available: 1940-49. June 7, 11.90; Sept. 8, 7.92.

139.71.27cc1. Phillip Mittelsider. Records available: 1940-49. Sept. 8, 0.01.

139.72.10cal. Chas. Woessner. Records available: 1940-49. June 7, 11.40; Sept. 8, 15.67.

142.70.23abl. Mrs. Fagereng. Records available: 1940-49. Sept. 8, 18.70.

LaMoure County

133.64.3bcl. Town of Edgeley. Records available: 1940-49. June 7, 26.98; Sept. 8, 25.95.

134.64.24dcl. Mrs. Fidela Davis. Records available: 1939-49. Sept. 8, +0.34.

Logan County

135.72.21bcl. Pete Draeger. Records available: 1940-43, 1946, 1949. June 7, 8.33.

McHenry County

152.79.6bcl. Minneapolis, St. Paul & Sault Ste. Marie Railway Co. Records available: 1940-48. No measurements made in 1949.

153.80.11aa. Owner unknown. Dug domestic and stock well, diameter 48 inches, depth 32.6 feet. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Oct. 21, 1945	14.30	July 7, 1947	20.00	Nov. 18, 1948	14.21
Mar. 24, 1946	13.54	Nov. 19	16.09	May 2, 1949	c 9.78
Aug. 7	13.79	May 21, 1948	7.20	July 13	11.03
Nov. 14	15.49	Aug. 11	9.68	Sept. 26	16.82
May 19, 1947	14.11				

c Ponded water nearby.

154.78.5bbl. R. R. Senger. Drilled domestic and stock well, diameter 5 inches, depth 96 feet. Records available: 1945-49.

Oct. 27, 1945	28.15	May 19, 1947	18.07	May 3, 1949	c 15.73
Aug. 6, 1946	26.63	May 21, 1948	14.84	July 14	d 26.10
Nov. 17	22.77	Nov. 8	22.12	Sept. 27	d 28.00

c Ponded water nearby.

d Pumping recently.

154.79.18ad. P. A. Johnson. Unused dug well, diameter 48 inches, depth 37.4 feet. Records available: 1945-49.

Oct. 21, 1945	20.85	July 7, 1947	18.42	Nov. 8, 1949	14.14
Mar. 24, 1946	23.85	Nov. 19	18.14	May 2, 1949	c 11.58
Aug. 6	20.23	May 21, 1949	13.30	July 13	10.28
Nov. 14	19.38	Aug. 11	13.69	Sept. 27	13.55

c Ponded water nearby.

154.79.26bc. Emil Julson. Dug domestic and stock well, diameter 48 inches, depth 34 feet. Records available: 1945-49.

Oct. 20, 1945	32.10	July 7, 1947	30.74	Aug. 11, 1948	30.66
Aug. 6, 1946	30.73	Nov. 19	30.87	Nov. 8	30.44
May 19, 1947	30.78	May 21, 1948	30.73	Sept. 27, 1949	29.58

154.79.30dd. Lars Wold. Unused bored well, diameter 18 inches, depth 60 feet. Records available: 1943-49.

Date	Water level	Date	Water level	Date	Water level
Oct. 21, 1945	33.85	July 7, 1947	d 32.89	Nov. 8, 1948	31.06
Mar. 24, 1946	33.65	Nov. 19	33.12	May 2, 1949	29.70
Aug. 6	33.31	May 21, 1948	31.42	July 13	28.50
Nov. 14	33.56	Aug. 11	32.02	Sept. 27	28.58
May 19, 1949	33.64				

d Pumping recently.

154.80.14dc1. Albert Jensen. Dug domestic and stock well, diameter 36 inches, depth 45 feet. Records available: 1945-49.

Oct. 22, 1945	40.70	July 7, 1947	22.72	Nov. 8, 1949	26.66
Mar. 24, 1946	36.15	Nov. 19	30.91	May 2, 1949	c 16.78
Aug. 6	34.37	May 21, 1949	22.20	July 13	13.59
Nov. 14	29.96	Aug. 11	22.88	Sept. 27	13.79
May 19, 1947	25.03				

c Ponded water nearby.

154.80.14dc2. Albert Jensen. Bored stock well, diameter 6 inches, depth 12.8 feet. Records available: 1945-49.

Oct. 22, 1945	8.75	Nov. 19, 1947	8.57	May 2, 1949	c 3.18
Mar. 24, 1946	3.65	May 21, 1948	3.99	July 13	5.65
Aug. 6	8.49	Aug. 11	4.55	Sept. 27	8.38
July 7, 1947	5.71	Nov. 8, 1948	6.96		

c Ponded water nearby.

154.80.17bc1. W. E. Morey. Unused bored well, diameter 14 inches, depth 45.3 feet. Records available: 1945-49. Measurements discontinued.

Oct. 22, 1945	9.00	May 19, 1947	11.81	May 21, 1948	7.21
Oct. 6, 1946	9.16	July 7	8.62	Aug. 11	8.03
Nov. 14	9.40	Nov. 19	10.73		

154.80.21cb. Mons Hystad. Bored stock well, diameter 12 inches, depth 34.7 feet. Records available: 1945-49.

Oct. 22, 1945	13.75	July 7, 1948	14.68	Nov. 8, 1948	8.42
Mar. 24, 1946	14.34	Nov. 19	15.19	May 2, 1949	c 1.62
Aug. 6	12.07	May 21, 1948	11.43	July 13	5.44
Nov. 14	12.58	Aug. 11	12.00	Sept. 26	7.65
May 19, 1947	14.57				

c Ponded water nearby.

154.80.22dd. Owner unknown. Unused bored well, diameter 12 inches, depth 82.5 feet. Records available: 1945-49.

Oct. 22, 1945	39.95	July 7, 1947	40.31	Nov. 8, 1948	37.34
Mar. 24, 1946	40.70	Nov. 19	40.11	May 2, 1949	c 36.13
Aug. 2	40.29	May 21, 1948	40.16	July 13	35.41
Nov. 14	40.24	Aug. 11	40.25	Sept. 26	35.28
May 19, 1947	40.18				

c Ponded water nearby.

154.80.34dd. Andrena Whitt. Stock bored well, diameter 24 inches, depth 34 feet. Records available: 1945-49.

Oct. 27, 1945	12.10	July 7, 1947	13.66	Nov. 8, 1948	10.79
Mar. 24, 1946	13.31	Nov. 19	13.06	May 2, 1949	10.37
Aug. 6	14.80	May 21, 1948	11.77	July 13	9.76
Nov. 14	14.35	Aug. 11	11.95	Sept. 26	10.85
May 19, 1947	14.66				

155.78.31cb. R. R. Senger. Dug domestic and stock well, diameter 12 inches, depth 35 feet. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Oct. 27, 1945	23.40	July 7, 1947	25.97	Nov. 9, 1948	20.91
Aug. 2, 1946	21.65	Nov. 19	22.28	May 3, 1949	20.84
Nov. 17	21.99	May 13, 1949	20.65	July 14	20.07
May 19, 1947	21.89	Aug. 11	19.88	Sept. 13	21.70

155.79.2dc2. Owner unknown. Dug stock well, diameter 48 inches, depth 26.0 feet. Records available: 1945-49.

Oct. 20, 1945	13.30	July 7, 1947	9.41	Nov. 9, 1948	8.60
Mar. 2, 1946	10.72	Nov. 19	11.52	May 3, 1949	5.57
Nov. 17	12.26	May 13, 1948	9.12	July 14	6.68
May 19, 1947	11.31	Aug. 11	7.83	Sept. 13	8.88

155.79.8aal. Cities Service. Records available: 1940-42, 1945-49. Sept. 12, 7.55.

155.79.14bc. C. J. McCabe. Bored domestic and stock well, diameter 12 inches, depth 18.2 feet. Records available: 1945-49.

Oct. 20, 1945	9.55	July 7, 1947	6.24	Nov. 9, 1948	7.44
Mar. 25, 1946	8.54	Nov. 19	8.58	May 3, 1949	c 2.92
Aug. 2	8.80	May 13, 1948	4.87	July 14	d 5.80
Nov. 17	9.02	Aug. 11	5.77	Sept. 13	10.02
May 19, 1947	6.91				

c Ponded water nearby.

d Pumping recently.

155.79.19bb. Owner unknown. Unused bored well, diameter 12 inches, depth 30.7 feet. Records available: 1945-49.

Oct. 20, 1945	5.85	July 7, 1947	5.73	Nov. 9, 1948	4.89
Mar. 25, 1946	6.76	Nov. 19	7.17	May 3, 1949	c 2.41
Aug. 6	6.05	May 13, 1948	5.86	July 14	3.53
Nov. 17	7.06	Aug. 11	4.04	Sept. 13	5.24
May 19, 1947	7.53				

c Ponded water nearby.

155.79.25da. Claire Brown. Bored domestic and stock well, diameter 12 inches, depth 39.4 feet. Records available: 1945-49.

Oct. 27, 1945	8.40	Nov. 19, 1947	8.48	May 3, 1949	3.67
Aug. 2, 1946	8.82	May 13, 1948	6.18	July 14	5.92
May 19, 1947	7.81	Aug. 11	6.36	Sept. 13	8.30
July 7	6.64	Nov. 9	9.06		

155.80.18bb. N. Fimreile. Bored domestic and stock well, diameter 12 inches, depth 39 feet. Records available: 1945, 1947-49.

Oct. 23, 1945	25.70	May 13, 1948	18.36	May 3, 1949	c 14.66
May 16, 1947	22.72	Aug. 11	19.33	July 14	17.51
July 7	22.67	Nov. 9	20.49	Sept. 13	16.79

c Ponded water nearby.

155.80.20dal. W. H. Wagner. Dug domestic well, diameter 72 inches, depth 10 feet. Records available: 1945-49.

Oct. 22, 1945	6.75	July 11, 1947	5.67	Nov. 9, 1948	7.39
Mar. 25, 1946	5.40	Nov. 19	7.73	May 3, 1949	2.52
Aug. 6	7.05	May 13, 1948	4.53	July 14	5.11
May 16, 1947	4.87	Aug. 11	5.29	Sept. 13	7.12

156.76.11bd1. Village of Towner. Records available: 1940-49.
Sept. 12, 12.92.

156.78.36bc1. Denbigh Forest Experimental Station well 1. U. S. Forest Service. Records available: 1939-41, 1943-49. Sept. 12, 5.37.

156.78.36bc2. Denbigh Forest Experimental Station well 2. U. S. Forest Service. Records available: 1939-41, 1943-49. Sept. 12, 2.98.

156.78.36bc3. Denbigh Forest Experimental Station well 3. U. S. Forest Service. Records available: 1939-41, 1945-48. No measurements made in 1949.

156.78.36bc4. Denbigh Forest Experimental Station well 4. U. S. Forest Service. Records available: 1939-41, 1944-48. No measurements made in 1949.

156.78.36ddl. Denbigh Forest Experimental Station well 5. U. S. Forest Service. Records available: 1939-41, 1944-48. No measurement made in 1949.

156.79.10aa2. U. S. Geological Survey. Unused drilled well, diameter 4 inches, depth 121 feet. Records available: 1947, 1949. July 16, 1947, 7.8; May 3, +1.35; surrounded by ponded water; Sept. 13, 0.79.

156.79.23cc. Ralph Govell. Dug domestic well, diameter 12 inches, depth 10.3 feet. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Oct. 23, 1945	7.10	July 9, 1947	5.82	May 3, 1949	c 2.05
Mar. 25, 1946	6.95	May 13, 1948	4.31	July 14	4.82
Aug. 2	6.76	Aug. 11	4.80	Sept. 13	6.95
Nov. 18	8.44	Nov. 9	6.03		

c Ponded water nearby.

156.79.33dcl. Harold H. Sullwold. Records available: 1940-49.
Sept. 12, 7.87.

156.80.1bc. R. C. Peterson. Unused dug well, diameter 24 inches, depth 12 feet. Records available: 1945-49.

Oct. 24, 1945	8.30	July 9, 1947	7.57	May 3, 1949	c 5.38
Aug. 2, 1946	9.25	May 13, 1948	5.34	July 14	7.16
Nov. 18	5.35	Aug. 12	6.04	Sept. 14	8.62
May 23, 1947	8.14	Nov. 9	10.02		

c Ponded water nearby.

d Pumping recently.

156.80.14aa. J. A. Lund. Dug stock well, diameter 36 inches, depth 9.2 feet. Records available: 1945-49.

Oct. 24, 1945	7.30	Nov. 20, 1947	7.42	May 3, 1949	3.68
Aug. 2, 1946	6.92	May 13, 1948	c 3.98	July 14	d 5.03
May 23, 1947	5.20	Aug. 12	5.15	Sept. 14	c 6.90
July 9	5.73				

c Ponded water nearby.

d Pumping recently.

156.80.16cd. Owner unknown. Unused bored well, diameter 18 inches, depth 23.7 feet. Records available: 1945-49.

Oct. 25, 1945	19.27	July 9, 1947	13.23	Nov. 9, 1948	20.08
Aug. 2, 1946	d 17.95	Nov. 20	20.63	May 3, 1949	18.10
Nov. 18	20.28	May 13, 1948	11.65	July 14	21.05
May 23, 1947	20.11	Aug. 12	12.36	Sept. 14	19.45

d Pumping recently.

157.75.31dcl. U. S. Forest Service. Records available: 1940-49.
Sept. 12, 3.00.

157.79.28ddl. B. Phillips. Dug domestic well, diameter 36 inches, depth 12.5 feet. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Oct. 24, 1945	7.83	May 23, 1947	7.83	May 3, 1949	c 4.64
Aug. 1, 1946	7.81	July 9	7.11	Sept. 13	7.57
Nov. 18	8.58	Nov. 9, 1948	8.01		

c Ponded water nearby.

157.80.6aa. Owner unknown. Dug stock well, diameter 24 inches, depth 9.3 feet. Records available: 1945-49.

Oct. 26, 1945	5.20	May 22, 1947	4.36	Nov. 12, 1948	5.92
Mar. 25, 1946	4.25	July 9	4.49	May 3, 1949	c 1.08
Aug. 1	5.78	Nov. 13	6.15	July 16	2.96
Sept. 17	6.29	May 7, 1948	3.67	Sept. 14	4.70
Nov. 16	6.04	Aug. 12	4.79		

c Ponded water nearby.

157.80.14aa. Drilled stock well, diameter 5 inches, depth 100 feet. Records available: 1945-49.

Oct. 25, 1945	18.15	May 23, 1947	17.56	Nov. 12, 1948	16.88
Mar. 25, 1946	17.27	July 9	18.02	May 3, 1949	16.46
Aug. 1	19.75	Nov. 18	17.44	July 16	15.52
Sept. 18	19.30	May 7, 1948	13.78	Sept. 14	16.68
Nov. 18	18.24	Aug. 12	15.20		

157.80.30aa. Town of Deering. Dug domestic well, diameter 48 inches, depth 18.9 feet. Records available: 1945-49.

Oct. 19, 1945	5.90	Nov. 16, 1946	7.54	May 7, 1948	3.13
Mar. 25, 1946	4.34	May 22, 1947	5.11	Aug. 12	5.44
Aug. 1	6.42	July 9	4.13	Sept. 13, 1949	6.12
Sept. 18	6.97	Nov. 18	d 6.41		

d Pumping recently.

158.78.3cdl. Walter Arneson. Records available: 1940-49. Sept. 12, 11.55.

158.80.19aa. R. L. Clapper. Dug stock well, diameter 48 inches, depth 13.9 feet. Records available: 1945-49.

Oct. 26, 1945	7.35	May 22, 1947	6.12	Nov. 12, 1948	7.63
Mar. 25, 1946	6.60	July 9	6.19	May 3, 1949	c 4.20
Aug. 1	7.38	Nov. 12	8.03	July 16	5.10
Sept. 20	8.12	May 7, 1948	5.85	Sept. 14	7.07
Nov. 16	7.78	Aug. 12	6.66		

c Ponded water nearby.

159.79.30ad. W. F. Zimmerman. Bored domestic and stock well, diameter 16 inches, depth 62 feet. Records available: 1949. May 3, 12.88; Aug. 16, 11.70; Sept. 14, 11.88.

159.80.35da. J. E. Newman. Bored domestic well, diameter 18 inches, depth 90 feet. Records available: 1945-49.

Oct. 26, 1945	19.05	July 9, 1947	18.27	May 3, 1949	15.52
Mar. 25, 1946	17.80	May 7, 1948	16.90	July 18	14.78
Aug. 1	18.90	Aug. 13	17.51	Sept. 14	18.20
Sept. 25	18.98				

McIntosh County

130.69.7cdl. Freida Forrest. Records available: 1938-49. June 7, 3.62; Sept. 8, 9.86.

130.69.7cd2. Freida Forrest. Records available: 1938-49. Sept. 8, 8.38.

132.70.28dal. Dan Nigisch. Records available: 1940-49. June 7, 14.88; Sept. 8, 16.88.

132.71.15aal. U. S. 1. Records available: 1940-46, 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	24.32	Apr. 4	24.26	July 6	24.18	Oct. 3	24.18
10	24.34	11	24.24	13	24.26	10	24.09
17	24.37	19	24.24	18	24.34	17	24.08
24	24.60	25	24.25	25	24.00	25	24.08
31	24.70	May 2	24.25	Aug. 1	24.01	31	24.06
Feb. 6	24.49	9	24.38	8	24.28	Nov. 7	24.06
13	25.50	16	24.48	15	24.28	13	24.04
20	24.49	22	24.26	22	24.06	20	24.10
27	24.02	31	24.24	29	24.12	27	24.04
Mar. 1	24.53	June 6	24.02	Sept. 5	24.14	Dec. 5	24.01
7	24.50	13	24.01	12	24.09	12	24.02
15	24.50	20	23.95	19	24.08	19	24.03
21	24.52	27	24.12	26	24.25	26	24.06
28	24.52						

132.71.24adl. Federal Land Bank. Records available: 1940-49. June 7, 7.59.

McKenzie County

150.100.12cc1. Chas. E. Fleck. Records available: 1938-49.

Jan. 1	113.72	May 14	113.81	Aug. 20	114.76	Oct. 29	113.88
Feb. 26	113.95	21	113.92	27	114.85	Nov. 5	113.75
Mar. 5	114.05	28	113.67	Sept. 3	113.75	12	113.80
12	113.95	June 4	113.89	10	113.58	19	113.75
19	113.70	11	113.69	17	113.79	26	113.85
Apr. 2	113.83	18	113.95	24	113.57	Dec. 3	113.93
9	114.06	July 2	113.77	Oct. 1	113.65	10	113.69
16	113.83	9	114.71	8	113.94	17	113.73
23	113.93	16	114.53	15	113.50	24	113.45
30	113.87	Aug. 6	114.73	22	113.84	31	113.41
May 7	113.70	13	114.86				

McLean County

149.84.15bc1. State of North Dakota. Records available: 1937-46, 1948-49. Sept. 10, 42.14; Oct. 25, 42.61.

Mercer County

143.88.4cd1. Robert Koegh. Dug irrigation well, diameter 24 inches, depth 25.5 feet. Records available: 1946-47. Measurements discontinued. Replaced by 145.88.4cd3.

Date	Water level	Date	Water level	Date	Water level
Apr. 30, 1946	20.20	Oct. 2, 1946	20.90	July 16, 1947	16.01
July 10	21.82	May 13, 1947	18.90	Oct. 2	16.50

143.88.4cd3. Robert Koegh. Drilled stock well, depth 30 feet. Records available: 1948-49.

July 30, 1948	17.54	Apr. 21, 1949	12.80	Dec. 7, 1949	18.68
Oct. 18	18.66	July 16	16.25		

143.88.14bb. Owner unknown. Unused dug and bored well, diameter 24 inches, depth 21.1 feet. Records available: 1946-49.

Apr. 30, 1946	13.10	July 16, 1947	9.08	Oct. 18, 1948	14.32
July 9	13.25	Oct. 2	10.34	Apr. 21, 1949	11.11
Oct. 2	13.43	Apr. 30, 1948	13.91	July 16	11.75
May 13, 1947	14.43	July 30	14.12	Dec. 7	14.42

143.89.10ccl. Owner unknown. Unused drilled well, diameter 5 inches, depth 100+ feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 29, 1946	49.15	July 16, 1947	49.31	Oct. 18, 1948	49.15
July 10	49.30	Oct. 2	49.33	July 16, 1949	48.91
Oct. 2	48.85	July 30, 1948	49.10	Dec. 7	49.08
May 13, 1947	49.05				

143.89.12ba. H. D. Spear. Driven stock well, diameter 5 inches, depth 37.0 feet. Records available: 1946-49.

Apr. 30, 1946	11.73	July 16, 1947	9.59	Oct. 18, 1948	d 19.60
July 10	14.40	Oct. 2	11.65	Apr. 20, 1949	d 8.89
Oct. 2	13.75	May 6, 1948	10.18	July 16	d 10.40
May 13, 1947	9.88	July 30	10.19	Dec. 7	d 11.48

d Pumping recently.

143.89.21aa. Paul Goehring. Dug domestic well, diameter 36 inches, depth 28.5 feet. Records available: 1946-49.

Apr. 30, 1946	26.05	July 16, 1947	24.92	Oct. 18, 1948	26.58
July 10	26.50	Oct. 2	25.14	Apr. 20, 1949	23.60
Oct. 2	26.83	May 6, 1948	24.86	July 16	25.65
May 13, 1947	25.29	July 30	25.98	Dec. 7	26.67

144.85.22ad1. Maichel Bros. Records available: 1940-48. No measurements made in 1949.

144.87.14aa. Otto E. Oster. Dug domestic and stock well, diameter 36 inches. Records available: 1946-49.

May 1, 1946	15.02	July 16, 1947	d 14.94	Oct. 17, 1948	14.37
July 10	14.45	Oct. 2	14.68	Apr. 20, 1949	12.21
Oct. 2	15.77	Apr. 29, 1948	13.67	July 16	14.24
May 13, 1947	14.15	July 30	14.27	Dec. 7	15.65

d Pumping recently.

144.88.25cb. John Meyers. Bored domestic well, depth 63.3 feet. Records available: 1946-49.

May 1, 1946	28.27	July 16, 1947	27.94	Oct. 18, 1948	27.06
July 10	28.48	Oct. 2	28.25	Apr. 20, 1949	25.11
Oct. 2	28.88	Apr. 29, 1948	27.46	July 16	25.16
May 13, 1947	29.53	July 30	27.25	Dec. 7	24.66

144.88.25cc. D. Koehler. Bored domestic and stock well, diameter 18 inches, depth 23.2 feet. Records available: 1946-49.

May 1, 1946	19.45	July 16, 1947	15.98	Oct. 18, 1948	18.63
July 10	19.19	Oct. 2	17.07	Apr. 20, 1949	13.67
Oct. 2	19.84	Apr. 29, 1948	16.80	July 16	16.52
May 13, 1947	18.75	July 30	18.20	Dec. 7	18.33

Morton County

134.82.36cbl. Albrecht & Johnson. Records available: 1941-47, 1949. Sept. 10, 17.12.

136.81.6dcl. Joe Lenz, Jr. Records available: 1941-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	21.20	Feb. 14	21.09	Mar. 28	21.55	May 9	21.31
10	21.13	21	21.08	Apr. 4	21.50	16	21.36
17	21.17	28	21.05	11	21.60	23	21.30
24	21.15	Mar. 7	21.25	18	21.50	30	21.29
31	21.16	14	21.50	25	21.40	June 6	21.28
Feb. 7	21.11	21	21.40	May 2	21.35	13	21.25

136.81.6ddl--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 20	21.29	Aug. 8	21.28	Sept. 26	21.47	Nov. 14	21.62
27	21.28	15	21.29	Oct. 3	21.48	21	21.64
July 4	21.25	22	21.30	10	21.48	28	21.65
11	21.22	29	21.29	17	21.50	Dec. 5	21.67
18	21.21	Sept. 5	21.32	24	21.51	12	21.66
25	21.19	12	21.42	31	21.57	19	21.70
Aug. 1	21.25	19	21.44	Nov. 7	21.62	26	21.69

137.84.1ddl. Stark. Dug domestic and stock well, diameter 5 inches, depth 17.6 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
May 7, 1946	12.30	July 17, 1947	10.78	Apr. 22, 1949	11.09
July 8	12.44	May 10, 1948	10.64	July 15	12.35
Sept. 17	13.19	July 28	11.82	Dec. 9	13.08
May 16, 1947	11.50	Oct. 19	12.73		

d Pumping recently.

137.84.10ccl. Clemens Schmitz. Bored stock well, diameter 24 inches, depth 47.4 feet. Records available: 1946-49.

May 28, 1946	32.09	July 17, 1947	32.02	Oct. 19, 1948	32.06
July 8	31.97	Sept. 30	32.05	Apr. 22, 1949	31.91
Sept. 17	32.19	May 10, 1948	31.87	July 15	31.90
May 16, 1947	31.88	July 28	31.92	Dec. 9	32.08

138.81.4bbl. U. S. 54. U. S. Soil Conservation Service. Records available: 1937-46. No measurement made in 1949.

138.82.5da. A. Larson. Dug domestic and stock well, diameter 48 inches, depth 23 feet. Records available: 1946-49.

Sept. 7, 1946	20.55	Sept. 30, 1947	18.53	Oct. 19, 1948	19.05
May 16, 1947	16.10	May 4, 1948	15.20	Apr. 25, 1949	16.45
July 17	13.99	July 28	17.48	July 15	18.48

138.82.18bd. Jankus Estate. Dug domestic and stock well, diameter 36 inches, depth 21 feet. Records available: 1945-49.

July 3, 1946	18.88	May 4, 1948	17.72	Apr. 25, 1949	17.03
May 19, 1947	18.24	July 28	18.18	July 15	19.48
July 17	17.41	Oct. 19	19.46	Dec. 16	17.35
Sept. 30	17.68				

138.83.14abl. Owner unknown. Dug domestic and stock well, diameter 36 inches, depth 28.9 feet. Records available: 1945-49.

May 8, 1946	23.00	July 17, 1947	22.17	July 28, 1948	22.48
July 3	22.68	Sept. 30	22.60	Oct. 19	24.32
Sept. 17	23.43	May 4, 1948	20.02	Dec. 9, 1949	22.55
May 16, 1947	21.36				

139.82.34db. Owner unknown. Unused dug well, diameter 48 inches, depth 56.5 feet. Records available: 1945-49.

May 6, 1946	36.35	July 17, 1947	36.76	Oct. 19, 1948	33.40
July 5	35.71	Sept. 30	35.43	Apr. 25, 1949	35.06
Sept. 17	35.74	May 4, 1948	34.08	July 15	33.20
May 16, 1947	37.59	July 28	32.34		

139.85.15ccl. Fred Lehde. Records available: 1941-49.

139.85.15cc1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	33.49	Apr. 10	29.56	July 16	29.57	Oct. 4	31.10
10	33.47	16	30.38	23	30.16	9	31.10
15	33.52	23	30.47	30	30.38	15	31.18
23	33.60	30	30.21	Aug. 6	30.50	25	31.28
29	33.72	May 8	29.66	13	30.59	30	31.35
Feb. 7	33.77	21	29.41	21	30.69	Nov. 6	31.38
21	33.62	28	29.59	27	30.75	13	31.43
26	33.66	June 4	29.38	Sept. 3	30.82	19	31.51
Mar. 6	33.73	18	29.82	10	30.88	26	31.54
12	32.95	25	29.84	18	30.93	Dec. 3	31.66
19	33.52	July 2	30.13	24	31.01	14	31.78
26	29.59	9	30.34				

Mountrail County

152.89.6aal. Emil Molter. Records available: 1938-49. Sept. 10, 47.06.

Nelson County

152.58.17bc3. Ole Norum. Records available: 1948-49.

Jan. 1	6.30	Apr. 9	4.60	July 9	2.80	Oct. 8	5.70
8	6.35	16	4.00	16	2.60	15	5.05
15	6.40	23	2.90	23	4.30	22	4.80
22	6.40	30	1.90	30	4.30	29	4.50
29	6.45	May 7	2.70	Aug. 6	4.40	Nov. 5	4.45
Feb. 5	6.50	14	3.10	13	4.60	12	4.45
12	6.55	21	3.00	20	4.80	19	4.40
19	6.55	28	3.40	27	4.90	26	4.30
26	6.60	June 4	3.60	Sept. 3	5.20	Dec. 3	4.20
Mar. 5	6.60	11	3.40	10	5.40	10	4.25
12	6.70	18	3.20	17	5.50	17	4.55
19	6.80	25	3.40	24	5.60	24	4.70
26	6.80	July 2	2.80	Oct. 1	5.70	31	4.80
Apr. 2	6.80						

153.60.35cc3. U. S. Geological Survey, test hole. Diameter 4 inches, depth 20 feet. Records available: 1948-49. July 14, 13.12; Oct. 5, 15.73; Dec. 29, 15.67.

Oliver County

141.82.10bal. Otis Tye. Records available: 1940-46. No measurements made in 1949.

144.85.20ad. Owner unknown. Bored observation well, diameter 18 inches, depth 43.4 feet. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
July 16, 1947	14.71	Oct. 18, 1948	14.08	July 16, 1949	12.91
Apr. 29, 1948	15.55	Apr. 20, 1949	13.79	Dec. 7	14.85
July 30	14.14				

Pembina County

160.56.8dcal. Paul B. Olafson. Records available: 1946-49. May 21, 3.14; Sept. 2, 7.46.

160.56.9ccbl. Ole Soli. Records available: 1946-48. No measurements made in 1949.

160.56.9dce1. J. Anderson. Records available: 1946-49. May 21, 5.38.

160.56.16aaa1. S. J. Hanson. Records available: 1946-49. May 21, 6.02; Sept. 2, 8.69.

160.56.16aaa2. Gritherun Thorstenson. Records available: 1946-48. No measurement made in 1949.

160.56.16aab1. S. J. Hallgrimson. Records available: 1946-49. May 21, 6.40; Sept. 2, 9.75.

160.56.16aab2. Lutheran parsonage. Records available: 1946-49. May 21, 5.40; Sept. 2, 9.70.

160.56.16aab3. H. J. Hallgrimson. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	8.30	Mar. 14	7.90	May 22	4.90	July 24	7.30
9	8.30	20	8.10	30	4.50	31	7.50
16	8.30	27	7.70	June 6	4.90	Aug. 7	7.67
24	8.20	Apr. 3	8.30	12	5.70	14	8.17
31	8.10	10	4.50	19	5.75	21	8.33
Feb. 7	8.20	17	3.10	27	6.10	27	8.50
13	8.10	24	2.90	July 2	5.60	Sept. 3	8.50
20	8.10	May 1	2.90	15	6.70	11	8.90
28	7.90	8	3.90	17	7.10	17	9.10
Mar. 6	8.10	15	5.30				

160.56.16aab4. H. J. Hjaltalin. Records available: 1946-49. May 21, 5.13; Sept. 2, 9.65.

160.56.16aac1. Mountain school. Records available: 1946-49. May 21, 3.84; Sept. 2, 7.60.

160.56.16aad1. Mr. Paulson. Records available: 1946-48. No measurement made in 1949.

160.56.16adal. Oscar Byron. Records available: 1946-49. May 21, 10.37; Sept. 2, 11.90.

160.56.16ada2. Oscar Byron. Records available: 1946-49. May 21, 11.40; Sept. 2, 11.94.

160.59.16ada3. Walter Hallison. Records available: 1946-49. May 21, 10.59; Sept. 2, 16.43.

160.59.16ada4. Mr. Olafson. Records available: 1946-49. May 21, 12.44; Sept. 2, 18.89.

160.56.16adb1. H. Olafson. Records available: 1946-49. May 21, 8.33; Sept. 2, 8.04.

160.56.16acc1. H. Olafson. Records available: 1946-49. May 21, 3.98; Sept. 2, 6.35.

160.56.16bdal. H. T. Hjaltalin. Records available: 1946-49.

Jan. 2	7.50	Mar. 20	7.50	May 22	5.30	July 24	6.60
9	7.50	27	7.30	30	7.10	31	7.50
16	7.50	Apr. 3	7.50	July 6	6.10	Aug. 7	7.67
31	7.50	10	7.50	12	7.50	14	8.00
Feb. 7	7.70	17	6.30	19	6.40	21	8.00
13	7.50	24	6.10	27	6.50	27	8.17
20	7.70	May 1	4.90	July 2	7.70	Sept. 3	7.60
28	7.50	8	7.30	15	7.30	11	7.90
Mar. 6	7.70	15	8.10	17	7.10	17	8.80
14	7.50						

161.56.22bbl. E. J. Lander & Co. Records available: 1941-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	8.00	Apr. 2	8.18	July 9	7.33	Oct. 8	8.23
8	8.02	9	7.20	16	7.51	15	8.27
15	8.04	16	6.23	23	7.79	22	8.10
22	8.06	23	4.59	30	4.12	29	7.80
29	8.08	30	4.27	Aug. 6	8.23	Nov. 5	7.70
Feb. 5	8.14	May 7	4.24	13	8.38	12	7.64
12	8.12	14	4.71	20	8.45	19	7.57
19	8.24	21	4.58	27	7.62	26	7.52
26	8.17	June 4	5.06	Sept. 3	7.78	Dec. 3	7.52
Mar. 5	8.21	11	5.27	10	7.90	10	7.51
12	8.25	18	6.50	17	8.01	17	7.50
19	8.26	25	6.78	24	8.23	24	7.52
26	8.25	July 2	7.03	Oct. 1	8.25		

162.53.31ccl. Garnett A. Snell. Records available: 1941-49.

Jan. 1	9.78	Apr. 16	7.99	June 25	7.38	Oct. 29	8.83
8	9.78	23	7.62	July 2	7.78	Nov. 5	8.72
15	9.76	30	6.96	9	8.12	12	8.68
22	9.79	May 7	5.94	16	8.62	19	8.52
29	9.81	14	6.17	23	8.78	26	8.46
Feb. 5	9.82	21	6.24	30	8.94	Dec. 3	8.41
12	9.92	28	6.36	Oct. 1	10.37	10	8.35
19	10.02	June 4	6.52	8	10.42	17	8.37
26	10.08	11	6.86	15	9.89	24	8.42
Apr. 2	10.13	18	7.17	22	9.27	31	8.55
9	9.26						

162.55.3dd1. Albert C. McCurdy. Records available: 1941-49.

Jan. 2	8.28	Apr. 3	8.97	July 3	6.52	Oct. 2	8.95
9	8.27	10	7.88	10	6.84	9	9.11
16	8.22	17	6.24	17	7.09	16	8.77
23	8.45	24	5.11	24	7.33	23	8.32
30	8.53	May 1	4.84	31	7.38	30	7.84
Feb. 6	8.63	8	4.80	Aug. 7	7.47	Nov. 6	7.74
13	8.74	14	5.09	14	7.80	13	7.72
20	8.89	21	5.13	21	7.88	20	7.63
27	8.92	29	5.38	28	8.09	27	7.60
Mar. 6	8.91	June 5	5.29	Sept. 4	8.25	Dec. 4	7.61
13	9.05	11	5.70	11	8.44	11	7.55
20	9.07	19	5.97	18	8.60	18	7.60
27	9.10	26	6.22	25	8.77	25	7.80

162.55.3dd2. A. C. McCurdy. Records available: 1946-49. Sept. 2, 11.38.

163.56.9aal. Herman Tesmer. Records available: 1941-44; 1946-48. No measurement made in 1949.

Pierce County

156.72.10bal. Eric Hammel. Records available: 1940-48. Measurement discontinued.

Ramsey County

153.64.5aal. Ray Young. Records available: 1942-49. Sept. 12, 24.16.

153.64.20ccl. W. H. Summers. Records available: 1942-48. No measurement made in 1949.

153.64.25cal. Camp Grafton Military Reserve. Records available: 1943-49. Sept. 12, 53.68.

153.65.14acl. Mrs. Bonnie Roland. Records available: 1937-49.
Sept. 12, 56.00.

Ransom County

136.56.3abl. Melfird Skramstad. Records available: 1940-46, 1948-49.
Sept. 7, 15.07.

Renville County

158.81.1l1dd. Warren Fulton. Dug domestic well, diameter 36 inches,
depth 9.1 feet. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Oct. 10, 1945	6.18	July 9, 1947	3.07	Nov. 12, 1948	6.63
May 10, 1946	6.15	Nov. 12	6.97	May 3, 1949	c .04
July 22	5.56	May 7, 1948	2.21	July 16	2.51
Nov. 19	5.16	Aug. 12	3.36	Sept. 14	5.31
May 21, 1947	2.87				

c Ponded water nearby.

158.81.2lba. Owner unknown. Unused dug well, diameter 48 inches,
depth 8.2 feet. Records available: 1945-49.

Oct. 10, 1945	3.35	July 9, 1947	2.91	Nov. 12, 1948	a 3.29
May 10, 1946	2.63	Nov. 12	a 4.00	May 3, 1949	c 1.36
July 22	3.69	May 7, 1948	c 1.14	July 16	2.72
Nov. 20	a 4.05	Aug. 12	2.13	Sept. 14	3.83
May 24, 1947	3.21				

a Top of ice.

c. Ponded water nearby.

158.82.1bb. Amanda Kunkel. Dug stock well, diameter 48 inches,
depth 9.6 feet. Records available: 1945-49.

Oct. 10, 1945	5.45	July 9, 1947	4.36	Nov. 11, 1948	5.37
May 9, 1946	3.62	Oct. 31	6.34	May 4, 1949	1.44
July 23	5.30	May 5, 1948	c .90	July 16	2.64
Nov. 14	6.61	Aug. 12	2.58	Sept. 14	5.04
May 22, 1947	3.69				

c Ponded water nearby.

158.82.7cc. J. T. Phillips. Dug stock well, diameter 36 inches,
depth 12 feet. Records available: 1945-49.

Oct. 12, 1945	4.95	July 11, 1947	3.31	Nov. 11, 1948	3.80
May 10, 1946	3.25	Oct. 31	5.26	May 4, 1949	c 1.32
Nov. 20	a 4.68	May 5, 1948	c .71	July 16	2.96
May 21, 1947	3.04	Aug. 12	1.90	Sept. 15	4.47

a Top of ice.

c Ponded water nearby.

158.82.15ab. Owner unknown. Dug stock well, diameter 72 inches,
depth 8.9 feet. Records available: 1945-49.

Oct. 11, 1945	6.15	July 9, 1947	1.56	Nov. 11, 1948	4.69
May 10, 1946	3.95	Oct. 31	6.09	May 3, 1949	(b)
July 23	5.25	May 5, 1948	(b)	July 16	c 1.52
Nov. 20	a 6.71	Aug. 12	4.66	Sept. 14	6.00
May 21, 1947	c .82				

a Top of ice.

b Surrounded by ponded water.

c Ponded water nearby.

158.82.28cd. M. B. Tolley. Dug domestic well, diameter 36 inches,
depth 34.5 feet. Records available: 1945-49. Measurements discontinued.

Oct. 12, 1945	21.43	Nov. 20, 1946	19.69	Nov. 13, 1947	21.42
May 10, 1946	15.55	May 21, 1947	18.11	May 5, 1949	c 14.11
July 23	20.49	July 9	20.16	Aug. 12	d 18.67

c Ponded water nearby

d Pumping recently.

158.83.3ddl. Claude Bradley. Unused dug well, diameter 48 inches, depth 8.1 feet. Records available: 1945-48. Measurements discontinued.

Date	Water level	Date	Water level	Date	Water level
Oct. 12, 1945	4.55	May 21, 1947	3.02	May 5, 1948	c 1.64
May 10, 1946	3.25	July 11	2.99	Aug. 12	c 1.08
July 23	4.24	Oct. 31	3.86	Nov. 11	a 2.50
Nov. 20	a 5.38				

a Top of ice.

c Ponded water nearby.

158.83.20cc. Owner unknown. Unused dug well, diameter 48 inches, depth 18.4 feet. Records available: 1945-49.

Oct. 12, 1945	7.55	July 8, 1947	4.73	May 4, 1949	c 3.94
May 10, 1946	5.18	Oct. 31	7.65	July 16	5.45
July 23	6.70	Aug. 12, 1948	5.64	Sept. 15	7.39
May 19, 1947	5.11	Nov. 11	7.04		

c Ponded water nearby.

158.83.22cc. Owner unknown. Dug domestic well, diameter 24 inches, depth 16.3 feet. Records available: 1945-49.

Oct. 12, 1945	7.22	July 8, 1947	3.97	Nov. 11, 1948	6.86
May 10, 1946	5.50	Oct. 31	6.78	May 4, 1949	b +1.30
July 23	6.30	May 5, 1948	3.36	July 16	c 3.07
May 21, 1947	3.72	Aug. 12	3.87	Sept. 15	4.89

b Surrounded by ponded water.

c Ponded water nearby.

158.84.3ab. John Dufner. Bored stock well, diameter 18 inches, depth 55 feet. Records available: 1945-49.

Oct. 6, 1945	39.00	July 11, 1947	30.53	Nov. 11, 1948	26.15
May 16, 1946	30.08	Oct. 31	30.99	May 4, 1949	22.62
July 23	33.02	May 9, 1948	27.60	Sept. 26	27.78

158.84.35dd. H. J. Linnards. Unused bored well, diameter 18 inches, depth 52 feet. Records available: 1945-49.

Oct. 6, 1945	23.45	July 8, 1947	20.21	Nov. 11, 1948	18.73
May 28, 1946	20.92	Nov. 11	20.65	May 4, 1949	c 17.85
July 15	22.18	May 9, 1948	20.21	July 20	16.99
Apr. 4, 1947	20.06	Aug. 16	20.40	Sept. 26	17.56

c Ponded water nearby.

158.85.27aa. Owner unknown. Unused dug well, diameter 20 inches, depth 34.5 feet. Records available: 1945-49.

Oct. 5, 1945	12.25	July 12, 1947	11.31	Nov. 12, 1948	9.55
May 28, 1946	11.45	Nov. 11	10.24	May 4, 1949	5.22
July 29	9.15	May 9, 1948	8.38	July 20	8.68
Apr. 14, 1947	11.65	Aug. 16	9.22	Sept. 23	7.52

158.85.28bb. Owner unknown. Dug domestic well, diameter 48 inches, depth 18.4 feet. Records available: 1945-49.

Oct. 5, 1945	10.60	July 12, 1947	6.17	Nov. 12, 1948	7.07
May 28, 1946	7.43	Nov. 11	8.82	May 4, 1949	c 1.72
July 29	11.80	May 9, 1948	5.53	July 20	4.48
Apr. 14, 1947	7.13	Aug. 16	6.06	Sept. 23	7.83

c Ponded water nearby.

158.86.16dd. Whiteash School. Dug domestic well. Records available: 1945-49.

Oct. 4, 1945	11.20	July 12, 1947	7.07	Nov. 12, 1948	8.57
May 25, 1946	6.80	Nov. 7	9.30	May 4, 1949	c 5.09
July 29	9.70	May 9, 1948	5.66	July 20	5.14
Apr. 4, 1947	11.19	Aug. 10	5.74	Sept. 23	10.11

c Ponded water nearby.

158.86.24da. Owner unknown. Dug stock well, diameter 48 inches, depth 11.5 feet. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Oct. 5, 1945	9.03	Nov. 7, 1947	9.04	May 4, 1949	c 1.68
May 28, 1946	6.05	May 9, 1948	c 3.18	July 20	5.21
July 29	9.70	Aug. 16	4.75	Sept. 23	(f)
July 12, 1947	6.26	Nov. 12	5.45		

c Ponded water nearby
f Dry at 6.5 feet.

159.84.10cd. J. O. Bolander. Dug domestic and stock well, depth 12 feet. Records available: 1945-49.

Oct. 6, 1945	7.15	Oct. 31, 1947	7.15	May 3, 1949	2.95
May 14, 1946	5.90	May 7, 1948	c 3.76	July 18	4.50
July 23	6.30	Aug. 13	4.63	Sept. 16	6.48
July 11, 1947	5.52				

c Ponded water nearby.

159.84.20ab. Unused dug well, diameter 48 inches, depth 15.5 feet. Records available: 1945-49.

Oct. 6, 1945	10.40	Oct. 31, 1947	10.23	May 3, 1949	0.83
May 16, 1946	7.28	May 7, 1948	5.36	July 18	4.79
July 23	9.32	Aug. 13	6.68	Sept. 16	6.92
July 11, 1947	9.07	Nov. 19	3.82		

159.85.7bcd. Ralph Johnson. Bored domestic well, diameter 18 inches. Records available: 1945-49.

Oct. 5, 1945	16.30	July 11, 1947	3.44	Nov. 19, 1948	6.08
May 25, 1946	5.10	Nov. 11	7.68	May 3, 1949	3.90
July 29	10.93	May 7, 1948	c .86	July 18	c 3.43
Apr. 8, 1947	12.90	Aug. 13	2.08	Sept. 17	7.95

c Ponded water nearby.

159.85.8dc. Owner unknown. Unused dug well, diameter 48 inches, depth 49.6 feet. Records available: 1945-49.

Oct. 5, 1945	8.70	Nov. 11, 1947	7.86	May 3, 1949	1.33
May 25, 1946	6.02	Aug. 13, 1948	b .05	July 18	4.98
July 29	6.25	Nov. 19	5.72	Sept. 17	8.79
July 11, 1947	2.42				

b Surrounded by ponded water.

159.85.12aa. J. P. Lundberg. Dug domestic well, diameter 36+ inches, depth 14 feet. Records available: 1945-49.

Oct. 2, 1945	10.15	July 11, 1947	4.68	Nov. 19, 1948	10.08
May 14, 1946	6.94	Oct. 31	10.86	May 3, 1949	2.83
July 23	8.40	May 7, 1948	2.52	July 18	6.44
Apr. 8, 1947	12.70	Aug. 13	5.08	Sept. 17	10.62

159.85.21aal. Owner unknown. Unused bored well, diameter 20 inches, depth 33.1 feet. Records available: 1945-49.

Oct. 5, 1945	18.25	July 11, 1947	18.11	Nov. 19, 1948	13.66
May 25, 1946	18.47	Nov. 11	15.71	May 3, 1949	11.07
July 29	17.87	May 7, 1948	15.86	July 18	11.42
Apr. 8, 1947	18.51	Aug. 13	15.82	Sept. 17	13.60

159.85.30bc. O. Bue. Dug domestic and stock well, diameter 20 inches, depth 22 feet. Records available: 1945-49.

Oct. 5, 1945	14.67	July 11, 1947	9.11	Nov. 19, 1948	12.38
May 28, 1946	12.84	Nov. 7	13.12	May 3, 1949	4.62
July 29	12.86	May 7, 1948	c 2.58	July 20	9.43
Apr. 14, 1947	d 14.41	Aug. 13	5.03	Sept. 17	13.11

c Ponded water nearby.
d Pumping recently.

159.85.34cc. Conrad Skophamer. Dug domestic and stock well, diameter 48 inches, depth 30 feet. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Oct. 5, 1945	12.55	July 11, 1947	9.08	Nov. 19, 1948	10.69
May 28, 1946	11.95	Nov. 11	11.90	May 3, 1949	4.41
July 29	12.00	May 7, 1948	4.61	July 20	7.16
Apr. 14, 1947	13.04	Aug. 13	6.37	Sept. 17	10.09

159.86.31aal. R. G. Chaffin. Dug domestic and stock well, diameter 36 inches, depth 14.6 feet. Records available: 1945-49.

Oct. 4, 1945	7.15	Nov. 7, 1947	6.12	May 3, 1949	b +0.24
May 25, 1946	(b)	Aug. 16, 1948	1.66	July 20	4.03
July 29	4.22	Nov. 19	5.40	Sept. 23	6.77
July 12, 1947	b .20				

b Surrounded by ponded water.

160.84.21aa. Lee Miller. Dug stock well, diameter 48 inches, depth 10 feet. Records available: 1945-48. Measurements discontinued.

Oct. 2, 1945	6.20	July 11, 1947	3.56	May 7, 1948	c 1.91
May 14, 1946	4.98	Oct. 31	5.50	Aug. 13	2.27
July 24	5.73				

c Ponded water nearby.

160.85.9cc. Owner unknown. Dug domestic well, diameter 18 inches, depth 18 feet. Records available: 1946-49.

May 14, 1946	7.25	May 7, 1948	3.78	May 3, 1949	2.67
July 24	8.35	Aug. 13	4.23	July 18	4.93
July 11, 1947	4.08	Nov. 19	7.70	Sept. 17	7.88
Nov. 11	8.46				

160.85.31bb. C. A. Larson. Bored domestic and stock well, diameter 12 inches. Records available: 1945-49.

Oct. 5, 1945	60.20	July 11, 1947	d 37.16	Nov. 19, 1948	31.93
May 25, 1946	48.28	Nov. 11	35.75	May 3, 1949	29.27
July 29	41.08	May 7, 1948	d 33.61	July 18	26.19
Apr. 15, 1947	46.52	Aug. 13	d 35.08	Sept. 17	26.22

d Pumping recently.

160.86.11bc. Lester Seibert. Unused bored well, diameter 6 inches. Records available: 1945-49.

Oct. 5, 1945	11.85	Nov. 7, 1947	10.26	May 3, 1949	3.80
May 25	5.45	May 7, 1948	c 4.23	July 20	7.24
July 29	8.05	Aug. 16	5.23	Sept. 24	9.78
July 11, 1947	4.47	Nov. 19	9.68		

c Ponded water nearby.

160.86.22dc. C. M. Fink. Bored domestic well, diameter 18 inches, depth 30 feet. Records available: 1945-49.

Oct. 4, 1945	11.45	July 11, 1947	8.89	May 3, 1949	6.03
May 25, 1946	8.45	Nov. 7	10.52	July 20	8.70
July 29	11.12	May 7, 1948	7.62	Sept. 24	10.75
Apr. 15, 1947	9.62	Aug. 16	8.85		

161.84.6cb. Owner unknown. Dug domestic and stock well, diameter 48 inches. Records available: 1945-49.

Sept. 28, 1945	8.15	July 11, 1947	2.41	Nov. 11, 1948	6.47
May 13, 1946	4.05	Oct. 29	6.72	May 9, 1949	1.96
July 26	6.80	May 6, 1948	b .28	July 11	3.70
Mar. 26, 1947	(a)	Aug. 17	3.75	Sept. 17	c 6.92

a Frozen.

b Surrounded by ponded water.

c Ponded water nearby.

161.84.17ddl. Owner unknown. Unused dug well, diameter 72 inches. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Sept. 30, 1945	16.90	Oct. 29, 1947	8.93	May 9, 1949	c 2.18
May 13, 1946	12.65	May 6, 1948	b 2.91	July 11, 1949	c 5.14
July 25, 1946	16.00	Aug. 17, 1948	5.11	Sept. 17, 1949	c 8.65
July 2, 1947	4.53	Nov. 18, 1948	c 8.46		

b Surrounded by ponded water.

c Ponded water nearby.

161.84.24abl. J. Dighton Taylor. Records available: 1940-46. Measurements discontinued.

161.85.5bc. owner unknown. Unused dug well. Records available: 1945-43. Measurements discontinued.

Oct. 1, 1945	8.05	Oct. 25, 1946	8.12	Oct. 29, 1947	6.45
May 22, 1946	6.16	Apr. 15, 1947	8.15	Aug. 17, 1948	5.26
July 26, 1946	7.29	July 2, 1947	5.03		

161.85.20aal. Minnesota Trust Co. Records available: 1937-49.

May 29, 1946	82.75	May 6, 1948	81.91	May 9, 1949	82.14
Oct. 25, 1946	82.79	Aug. 17, 1948	82.32	July 19, 1949	82.41
Oct. 5, 1947	82.71	Nov. 18, 1948	82.47	Sept. 19, 1949	82.10

161.85.34ccl. Harry Klatt. Bored domestic well, diameter 18 inches, depth 25 feet. Records available: 1945-49.

Oct. 6, 1945	12.15	July 2, 1947	6.92	Nov. 18, 1948	8.11
May 22, 1946	13.03	Oct. 29, 1947	11.50	May 9, 1949	5.31
July 25, 1946	11.42	May 6, 1948	5.30	July 19, 1949	7.26
Oct. 25, 1946	15.09	Aug. 17, 1948	7.68	Sept. 19, 1949	13.88
Apr. 5, 1947	16.87				

161.86.15cc. Owner unknown. Unused dug well, diameter 72 inches, depth 10.7 feet. Records available: 1945-49.

Sept. 23, 1945	6.15	July 3, 1947	(b)	Nov. 18, 1948	a 0.40
July 25, 1946	5.05	Nov. 3, 1947	1.84	May 5, 1949	(b)
Oct. 25, 1946	7.70	May 6, 1948	(b)	July 19, 1949	+1.10
Apr. 9, 1947	(b)	Aug. 10, 1948	.52	Sept. 19, 1949	3.45

a Top of ice.

b Surrounded by ponded water.

161.86.28dd. N. Johnson. Dug domestic and stock well, depth 20 feet. Records available: 1945-49.

Sept. 26, 1945	12.28	July 3, 1947	3.82	Nov. 18, 1948	11.02
May 28, 1946	8.25	Nov. 7, 1947	10.07	May 9, 1949	4.48
July 25, 1946	10.75	May 6, 1948	2.78	July 19, 1949	6.98
Oct. 25, 1946	13.20	Aug. 17, 1948	6.02	Sept. 19, 1949	d 14.52
Apr. 9, 1947	12.12				

d Pumping recently.

161.86.33aa. Owner unknown. Dug stock well, diameter 48 inches, depth 16.3 feet. Records available: 1945-49.

Oct. 4, 1945	14.10	Apr. 11, 1947	(b)	Aug. 17, 1948	1.19
May 23, 1946	2.98	July 3, 1947	(b)	Nov. 18, 1948	4.38
July 25, 1946	5.63	Nov. 7, 1947	3.48	May 9, 1949	(b)
Oct. 25, 1946	12.23	May 6, 1948	(b)	Sept. 19, 1949	5.99

b Surrounded by ponded water.

161.87.17dc. Albert Brown. Bored domestic well, diameter 18 inches, depth 17 feet. Records available: 1945-49.

161.87.17dc--Continued.

Date	Water level	Date	Water level	Date	Water level
Sept. 23, 1945	8.30	July 3, 1947	1.75	Nov. 19, 1948	6.62
May 29, 1946	6.15	Nov. 3	5.93	May 9, 1949	c 4.19
July 25	7.45	May 8, 1948	c 1.07	July 19	5.18
Oct. 24	8.75	Aug. 18	3.63	Sept. 19	8.16

c Ponded water nearby.

162.84.9cd. Owner unknown. Unused domestic well, diameter 72 inches, depth 19.1 feet. Records available: 1945-49.

Sept. 29, 1945	13.55	July 2, 1947	4.06	Nov. 18, 1948	8.41
May 13, 1946	12.57	Oct. 28	10.07	May 10, 1949	c 3.50
July 26	13.21	May 6, 1949	c 1.47	July 11	5.08
Apr. 7, 1947	15.19	Aug. 17	3.56	Sept. 16	10.83

c Ponded water nearby.

162.84.10cd. Owner unknown. Dug stock well. Records available: 1945-49.

Sept. 28, 1945	7.28	July 2, 1947	3.15	Nov. 18, 1948	6.12
May 13, 1946	6.27	Oct. 28	5.88	May 10, 1949	1.33
July 26	8.63	May 6, 1948	c .37	July 11	3.89
Apr. 7	c 1.46	Aug. 17	2.48	Sept. 16	6.28

c Ponded water nearby.

162.85.8dd. Owner unknown. Dug stock well, depth 16.4 feet. Records available: 1945-49.

Oct. 1, 1945	6.35	July 2, 1947	0.43	Nov. 18, 1948	4.87
May 17, 1946	1.44	Oct. 29	5.06	May 10, 1949	b .56
July 26	5.08	May 6, 1948	b .19	July 19	1.96
Oct. 25	6.51	Aug. 17	.94	Sept. 19	5.87

b Surrounded by ponded water.

162.86.13abl. August Bahl. Unused dug domestic well, diameter 10 inches, depth 15 feet. Records available: 1945-49.

Sept. 29, 1945	10.25	July 2, 1947	1.51	Nov. 18, 1948	7.41
May 17, 1946	6.14	Oct. 29	6.68	May 10, 1949	c 2.78
July 26	8.30	May 6, 1948	c .66	July 19	5.06
Oct. 25	11.01	Aug. 17	1.38	Sept. 19	8.30

c Ponded water nearby.

162.87.2bb. W. S. Cook. Dug domestic and stock well, diameter 36 inches. Records available: 1945-49.

Sept. 30, 1945	21.35	July 3, 1947	11.12	Nov. 18, 1948	10.63
May 30, 1946	14.23	Nov. 3	11.25	May 10, 1949	12.82
July 25	13.55	May 8, 1948	9.13	July 19	14.45
Oct. 24	14.12	Aug. 18	10.32	Sept. 19	13.48

162.87.17aa. Owner unknown. Dug domestic and stock well, diameter 48 inches, depth 30.4 feet. Records available: 1945-49.

Sept. 24, 1945	19.80	July 3, 1947	6.59	Nov. 18, 1948	10.11
May 30, 1946	16.48	Nov. 3	11.49	May 10, 1949	e 7.15
July 25	13.72	May 8, 1948	c 6.40	July 19	7.49
Oct. 24	15.21	Aug. 18	6.60	Sept. 19	10.00
Apr. 17, 1947	11.87				

c Ponded water nearby.

e Shut down 10 minutes.

162.87.28aa. Owner unknown. Unused drilled well, diameter 3 inches. Records available: 1945-49.

Sept. 30, 1945	23.38	July 3, 1947	21.98	Nov. 18, 1948	22.35
May 30, 1946	23.15	Nov. 3	21.85	May 10, 1949	21.12
July 25	22.87	May 8, 1948	21.28	July 19	22.21
Oct. 24	23.00	Aug. 18	21.56	Sept. 19	22.45
Apr. 17, 1947	22.47				

162.87.29dd2. Hans Scott. Dug domestic and stock well, diameter 36 inches, depth 20 feet. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Sept. 24, 1945	10.80	July 3, 1947	3.38	Nov. 18, 1948	10.87
May 30, 1946	7.52	Nov. 3	6.91	May 10, 1949	4.56
July 25	12.05	May 8, 1948	3.76	July 19	7.69
Oct. 24	13.66	Aug. 18	6.57	Sept. 19	10.82
Apr. 17, 1947	9.47				

162.87.35ad. Owner unknown. Unused drilled well, diameter 3 inches. Records available: 1945-49.

Sept. 30, 1945	10.45	July 3, 1947	19.42	Nov. 18, 1948	20.44
May 29, 1946	16.30	Nov. 3	13.76	May 10, 1949	20.37
July 25	17.00	May 8, 1948	14.07	July 19	19.48
Oct. 24	16.53	Aug. 18	14.20	Sept. 19	20.40
Apr. 17, 1947	19.65				

163.85.5cd. George Eltz. Unused dug well, diameter 30 inches, depth 19.3 feet. Records available: 1945-49.

Sept. 29, 1945	10.75	July 2, 1947	10.55	Nov. 18, 1948	10.37
May 17, 1946	13.45	Oct. 29	13.76	May 10, 1949	4.47
July 24	13.64	May 6, 1948	c 3.77	July 19	6.23
Oct. 25	12.60	Aug. 17	5.40	Sept. 19	12.16
Apr. 7, 1947	9.86				

c Ponded water nearby.

163.85.15dd. Owner unknown. Dug domestic and stock well. Records available: 1945-49.

Sept. 29, 1945	11.30	July 2, 1947	3.27	Nov. 18, 1948	4.62
May 17, 1946	7.55	Oct. 29	9.24	May 10, 1949	2.68
July 24	9.61	May 6, 1948	c .68	July 19	3.94
Oct. 25	9.46	Aug. 17	2.97	Sept. 19	5.39
Apr. 7, 1947	(a)				

a Frozen.

c Ponded water nearby.

163.85.35bb. Owner unknown. Dug domestic and stock well, diameter 48 inches. Records available: 1945-49.

Oct. 1, 1945	8.50	Apr. 7, 1947	6.50	Aug. 17, 1948	5.71
May 17, 1946	7.46	July 2	6.29	Nov. 18	7.40
July 26	8.45	Oct. 29	8.17	July 19, 1949	6.79
Oct. 25	9.20	May 6, 1948	c 2.16	Sept. 19	7.85

c Ponded water nearby.

163.85.36aa. Owner unknown. Dug stock well. Records available: 1945-49.

Sept. 28, 1945	7.55	July 2, 1947	1.89	Nov. 18, 1948	4.32
May 13, 1946	6.45	Oct. 29	5.05	May 10, 1949	c 3.28
July 26	6.29	May 6, 1948	c 1.36	July 19	c 3.19
Mar. 26, 1947	6.30	Aug. 17	2.38	Sept. 19	5.05

c Ponded water nearby.

163.86.9aa. Owner unknown. Dug domestic well, diameter 36 inches. Records available: 1945-49.

Sept. 29, 1945	10.90	July 2, 1947	8.51	Nov. 18, 1948	8.36
May 17, 1946	10.44	Oct. 29	8.93	May 10, 1949	6.61
July 25	10.93	May 6, 1948	4.85	July 19	7.27
Oct. 25	11.00	Aug. 17	6.85	Sept. 19	8.34

163.86.33dd. Owner unknown. Dig domestic and stock well, depth 18 feet. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Sept. 29, 1945	11.65	July 2, 1947	6.72	Nov. 18, 1948	9.81
May 17, 1946	10.06	Oct. 29	10.55	May 10, 1949	5.77
July 26	11.56	May 6, 1948	2.93	July 19	8.35
Oct. 25	12.27	Aug. 17	4.25	Sept. 19	9.53

c Ponded water nearby.

163.87.5dc. Owner unknown. Dug stock well, diameter 36 inches, depth 14.5 feet. Records available: 1945-49.

Sept. 24, 1945	4.55	July 3, 1947	b +0.53	May 10, 1949	c 0.34
May 30, 1946	3.45	Nov. 3	3.57	July 19	2.63
July 25	4.79	Aug. 18, 1948	c .39	Sept. 19	4.08
Oct. 24	5.17				

b Surrounded by ponded water.

c Ponded water nearby.

163.87.9bc. Owner unknown. Dug stock well, diameter 48 inches, depth 10.2 feet. Records available: 1945-49.

Sept. 24, 1945	5.65	July 3, 1947	0.83	May 10, 1949	1.42
May 30, 1946	3.62	Nov. 3	4.25	July 19	3.44
July 25	5.10	May 8, 1948	c .55	Sept. 19	4.97
Oct. 24	5.46	Aug. 18	1.57		

c Ponded water nearby.

Richland County

133.52.32cd1. Owner unknown. Records available: 1946-49. June 6, 6.18.

133.52.33cd1. U. S. 52. John Liljemark. Records available: 1937-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	7.44	Apr. 9	7.62	July 9	2.77	Oct. 8	7.10
15	7.49	16	6.65	16	3.81	15	6.60
22	7.57	23	6.61	23	4.72	22	6.18
29	7.69	30	6.07	30	2.31	29	6.01
Feb. 5	7.74	May 7	4.49	Aug. 6	3.77	Nov. 5	6.01
12	8.03	14	5.07	13	4.81	12	5.93
19	8.11	21	5.02	20	5.50	19	5.85
26	8.15	28	4.44	27	6.18	26	5.77
Mar. 5	8.11	June 4	5.11	Sept. 3	6.48	Dec. 3	5.55
12	7.82	10	5.82	10	6.57	10	5.45
19	7.69	18	7.15	17	6.68	17	5.77
26	7.53	25	6.07	24	6.93	24	5.93
Apr. 2	6.98	July 2	6.43	Oct. 1	6.85	31	6.52

Rolette County

162.69.17al. Town of Rolla well 4. Records available: 1940-44, 1946-49. Oct. 24, 24.52.

Sargent County

130.58.19ba. J. Pfeifle. Driven domestic and stock well, diameter 1½ inches, depth 25 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Aug. 29, 1946	6.07	May 24, 1948	3.35	Apr. 27, 1949	6.42
May 7, 1947	2.51	Aug. 5	5.18	July 7	5.52
Oct. 14	4.33	Oct. 12	7.02	Oct. 3	7.64

Sheridan County

145.75.28bb1. Bank of North Dakota. Records available: 1938-47, 1949. Oct. 24, 53.90.

Sioux County

130.79.7cl. Mrs. Lookingout. Records available: 1940-47. No measurement made in 1949.

130.80.23dal. Mrs. Mulache. Records available: 1941-47. No measurement made in 1949.

133.82.25bal. Owner unknown. Records available: 1946-47. No measurement made in 1949.

Slope County

134.100.14ad1. Arthur Nesseth. Records available: 1940-48. No measurement made in 1949.

Stark County

139.91.2bal. Roland and George Funk. Records available: 1940-49. Sept. 10, 3.04.

139.96.3bbcl. City of Dickinson. Records available: 1948-49.

Lowest daily water level, from recorder charts										
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1	118.95	124.91	138.84	125.40	125.80	108.60	128.62	.....	120.09	119.91
2	120.50	124.60	139.03	125.34	130.95	107.10	128.40	.....	124.68	109.80
3	118.80	133.10	138.52	.....	130.67	106.90	128.52	.....	125.98	112.48
4	118.82	135.04	138.72	.....	130.50	106.52	127.98	115.36	118.10	113.60
5	118.85	128.40	138.45	124.79	134.16	120.40	127.81	123.70	116.48	115.83
6	118.82	126.22	138.61	124.90	132.25	124.50	127.45	126.48	110.20	117.52
7	118.96	125.10	139.70	124.92	134.18	126.18	128.51	126.70	109.68	118.73
8	119.60	125.10	.....	124.90	133.75	127.80	130.30	127.10	118.80	.....
9	120.90	125.10	138.70	124.80	131.25	129.08	130.98	129.72	127.40	.....
10	121.37	124.90	137.80	132.55	130.80	129.86	128.91	128.47	128.08	.....
11	121.47	124.76	133.08	131.60	130.98	131.51	127.73	124.98	130.20	.....
12	121.25	124.93	133.60	134.30	132.50	129.70	130.60	123.53	128.98	.....
13	121.14	133.52	133.56	135.10	131.38	129.08	131.78	124.54	119.40	.....
14	131.72	128.10	133.10	131.70	128.37	130.80	124.10	125.50	113.70	.....
15	131.73	125.40	132.40	129.40	127.67	129.35	128.78	126.94	110.55	.....
16	123.15	133.85	129.10	134.83	126.05	118.60	125.00	128.19	108.60	.....
17	121.97	135.26	128.65	136.50	118.54	113.30	117.10	128.88	.....	.....
18	122.50	135.26	128.78	136.80	116.00	111.14	124.40	129.46	.....	.....
19	122.55	135.50	128.50	134.40	113.52	109.28	127.30	128.90	.....	.....
20	133.00	136.12	127.40	135.70	111.80	108.00	117.70	127.97	.....	.....
21	133.57	135.78	127.45	136.35	110.60	107.30	113.95	119.60	.....	.....
22	135.65	135.78	127.20	136.95	109.80	122.88	110.20	126.55	105.03	.....
23	135.28	136.78	126.47	137.31	109.50	122.10	108.40	126.10	105.00	.....
24	127.85	137.10	126.35	121.60	108.82	123.20	112.40	.....	104.10	.....
25	134.00	137.40	.....	131.50	.....	124.04	113.70	129.20	103.54	.....
26	134.20	137.59	126.40	135.50	.....	122.78	121.58	129.96	105.73	.....
27	134.80	137.72	126.00	137.30	.....	124.30	124.60	130.22	105.73	.....
28	134.88	137.31	125.80	137.76	.....	126.50	117.60	125.10	117.96	.....
29	127.93	.....	125.90	137.88	.....	127.50	110.50	115.90	118.75	.....
30	125.25	.....	125.60	138.00	.....	127.32	109.10	117.60	119.85	.....
31	125.02	.....	.....	.....	109.42	.....	.....	117.68	.....	.....

a Tape measurement.

139.96.12bb. S. L. Carroll. Bored domestic and stock well, diameter 24 inches, depth 68 feet. Records available: 1946-49.

139.96.12bb--Continued.

Date	Water level	Date	Water level	Date	Water level
Sept. 21, 1946	52.80	May 5, 1948	50.37	Apr. 21, 1949	50.07
May 22, 1947	50.71	July 29	51.22	July 15	51.11
July 16	47.53	Oct. 20	50.98	Dec. 8	48.95
Oct. 2	50.94				

139.96.14ab. F. Johnson. Unused bored well, diameter 12 inches, depth 81.0 feet. Records available: 1946-49.

Sept. 21, 1946	59.10	May 5, 1948	59.43	Apr. 21, 1949	58.99
May 22, 1947	59.45	July 29	59.11	July 15	59.00
July 16	59.28	Oct. 10	59.37	Dec. 8	73.62
Oct. 2	59.04				

139.97.14da. Owner unknown. Drilled domestic well, diameter 5 inches, depth 30 feet. Records available: 1946-49.

Sept. 13, 1946	23.90	May 5, 1948	23.46	Apr. 21, 1949	19.96
May 22, 1947	22.32	July 29	23.02	July 15	22.53
July 16	11.58	Oct. 20	23.45	Dec. 8	23.19
Oct. 2	22.81				

Steele County

148.57.15aal. Mrs. Snortland. Records available: 1940-49. Sept. 3, 8.22.

Stutsman County

137.63.11aa. E. Hanson. Bored domestic and stock well, diameter 18 inches, depth 22.3 feet. Records available: 1946-49.

Sept. 4, 1946	11.79	May 23, 1948	10.95	Apr. 26, 1949	13.60
May 19, 1947	11.70	Aug. 7	11.42	July 8	13.55
Oct. 13	11.75	Oct. 12	12.62	Oct. 1	13.56

137.64.33ccl. Union Central Life Insurance Co. Records available: 1940-48. Measurements discontinued.

138.62.4dc. J. Crouch. Unused dug well, diameter 36 inches, depth 19.3 feet. Records available: 1946-49.

Sept. 4, 1946	16.50	May 23, 1948	12.76	Apr. 26, 1949	17.87
May 9, 1947	12.64	Aug. 7	14.28	July 8	17.14
Oct. 13	14.45	Oct. 12	16.17	Sept. 30	18.33

138.62.7cb. M. Ukestad. Dug stock well, diameter 30 inches, depth 37 feet. Records available: 1946-49.

Sept. 4, 1946	33.88	May 23, 1948	32.40	Apr. 26, 1949	32.92
May 9, 1947	32.99	Aug. 7	32.55	July 8	33.50
Oct. 13	32.87	Oct. 12	32.73	Oct. 1	33.64

138.63.11ba. E. Steege. Dug domestic and stock well, diameter 18 inches, depth 56.7 feet. Records available: 1946-49.

Sept. 4, 1946	51.45	May 23, 1948	50.72	Apr. 26, 1949	51.40
May 9, 1947	51.52	Aug. 7	50.45	July 8	50.52
Oct. 13	52.84	Oct. 12	51.03	Sept. 30	52.78

d Pumping recently.

138.63.26ac. H. Beckman. Bored domestic and stock well, diameter 24 inches, depth 71.6 feet. Records available: 1946-49.

Sept. 4, 1946	68.30	May 23, 1948	68.23	Apr. 26, 1949	68.02
May 9, 1947	68.29	Aug. 7	68.32	July 8	68.11
Oct. 13	68.17	Oct. 12	68.08	Sept. 30	67.99

138.64.12bb. A. Lambrecht. Bored domestic and stock well, diameter 18 inches, depth 26.5 feet. Records available: 1946-49.

Date	Water level	Estimated flow (gpm)
Sept. 4, 1946	0.54	
May 9, 1947	1.03	2-3
Oct. 13	.34	4
May 23, 1948	.91	4
Aug. 7	1.07	4
Oct. 12	.34	5
April 26, 1949	.87	4
July 8	1.30	3
Sept. 30	.66	2½

139.63.4dd. E. Attleson. Dug domestic and stock well, diameter 48 inches, depth 28.3 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Aug. 30, 1946	26.12	May 23, 1948	23.97	Apr. 26, 1949	24.98
May 9, 1947	24.99	Aug. 7	24.85	July 8	25.09
Oct. 11	25.51	Oct. 12	25.48	Oct. 1	25.82

139.63.20ca. A. Meeker. Dug domestic and stock well, diameter 36 inches, depth 25 feet. Records available: 1946-49.

Sept. 4, 1946	19.80	Oct. 13, 1947	18.24	Aug. 7, 1948	16.88
May 9, 1947	18.60	May 23, 1948	16.36	Sept. 30, 1949	18.55

139.63.20db. Elmer Mathias. Dug domestic and stock well, diameter 36 inches, depth 22.1 feet. Records available: 1948-49. Oct. 10, 1948, 15.65; Apr. 26, 1949, 16.55; July 8, 1949, 16.73; Sept. 30, 16.89.

139.63.24cb2. H. W. Anderberg. Dug stock well, diameter 60 inches, depth 5.56 feet. Records available: 1948-49. Oct. 10, 1948, 4.04, pumping recently; Apr. 26, 1949, 0.96; July 8, 1949, 2.85; Sept. 30, 1949, 3.85.

139.64.5ab. Owner unknown. Unused drilled well, diameter 2½ inches. Records available: 1946-49.

Aug. 30, 1946	6.16	Oct. 11, 1947	34.67	Aug. 7, 1948	33.46
May 9, 1947	35.32	May 23, 1948	34.00	Sept. 30, 1949	34.01

139.64.14da. J. A. Michel. Unused dug well, diameter 36 inches, depth 19.35 feet. Records available: 1946-49.

Sept. 4, 1946	7.85	May 23, 1948	5.62	Apr. 26, 1949	7.86
May 9, 1947	7.19	Aug. 7	6.67	July 8	6.91
Oct. 13	6.43	Oct. 12	7.14	Sept. 30	7.52

140.63.25cd. M. Monek. Drilled domestic and stock well, diameter 4 inches, depth 115 feet. Records available: 1946-49.

Aug. 30, 1946	90.29	May 23, 1948	91.10	Apr. 27, 1949	90.05
May 9, 1947	89.96	Aug. 7	90.16	July 8	89.98
Oct. 11	90.03	Oct. 11	89.95	Oct. 1	90.08

d Pumping recently.

140.64.9da. A. Roeszler. Dug domestic well, diameter 36 inches, depth 14.7 feet. Records available: 1946-49.

Aug. 27, 1946	11.00	Oct. 11, 1948	10.60	July 8, 1949	9.55
Oct. 11, 1947	9.96	Apr. 26, 1949	9.15	Oct. 1	10.93
May 23, 1948	8.95				

Towner County

158.66.20d1. S. L. Isaacson. Records available: 1942-44, 1947-49. Sept. 11, 20.45.

160.66.28ba1. Bank of North Dakota. Records available: 1937-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	14.15	Apr. 2	13.95	July 2	14.21	Oct. 1	14.46
8	14.15	9	13.96	9	14.25	8	15.48
15	14.11	16	13.94	16	14.32	15	15.51
22	14.09	23	14.01	23	14.30	22	15.48
29	14.07	30	14.03	30	14.27	29	15.46
Feb. 5	14.07	May 7	14.05	Aug. 6	14.25	Nov. 5	15.46
12	14.07	14	14.09	13	14.20	12	15.42
19	14.05	21	14.11	20	13.84	19	15.40
26	14.04	28	14.13	27	14.21	26	15.38
Mar. 5	14.01	June 4	14.15	Sept. 3	14.25	Dec. 3	15.36
12	14.00	11	14.17	10	14.29	10	15.34
19	13.99	18	14.17	17	14.34	17	15.27
26	13.96	25	14.18	24	15.42	24	15.32

Trail County

146.51.24cd1. A. C. Skybert. Records available: 1937-48. No measurement made in 1949.

146.51.24bc1. A. C. Peterson. Records available: 1946-48. No measurement made in 1949.

148.53.18aa1. City of Hatton. Records available: 1937-49.

June 4	5.54	July 3	7.12	July 30	5.98	Aug. 21	6.74
12	5.98	9	6.62	Aug. 6	6.45	27	7.30
19	6.98	16	8.08	14	6.82	Sept. 4	7.79
26	6.74	23	7.18				

148.53.18ab1. City of Hatton. Records available: 1938-49.

June 4	5.99	July 9	7.37	July 30	6.60	Aug. 21	5.83
12	6.19	16	7.57	Aug. 6	7.14	27	7.45
19	6.35	23	7.65	14	7.53	Sept. 4	5.59
July 3	7.57						

148.53.18ad1. City of Hatton. Records available: 1946-49. July 10, 10.04.

148.53.18ad2. City of Hatton. Records available: 1946-49. July 10, 10.55

148.53.18ad3. City of Hatton. Records available: 1938-49.

June 4	9.62	July 3	9.94	July 30	9.96	Aug. 21	10.28
12	9.54	9	9.78	Aug. 6	10.11	27	10.54
19	9.66	16	10.06	14	10.52	Sept. 9	10.56
26	9.74	23	10.20				

Walsh County

157.51.16dc2. U. S. No. 6. Henry Dipple. Records available: 1937-49. May 14, 2.10; Sept. 3, 4.81.

157.55.17cc1. C. D. Lewis. Records available: 1939-49.

Jan. 1	6.46	Feb. 12	6.39	Mar. 19	6.38	Apr. 23	2.98
8	6.45	19	6.38	26	6.17	30	2.88
15	6.43	26	6.39	Apr. 2	6.54	May 7	2.74
22	6.42	Mar. 5	6.38	9	4.08	14	3.00
29	6.42	12	6.37	16	3.06	31	3.18
Feb. 5	6.39						

155.57.17cdl. C. D. Lewis. Records available: 1937-38. 1946-49.
May 14, 5.24.

Ward County

155.83.14dcal. People's Ice Co. Records available: 1945-46. No measurement made in 1949.

155.83.23baal. City of Minot supply well 2. Records available: 1945-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	Nov.	Dec.
1	43.08	50.29	50.06	49.18	.....	51.28
2	50.28	49.79	49.83	.....	.....	50.18
3	50.04	50.48	50.58	.....	.....	51.53
4	49.33	49.81	50.84	.....	.....	45.32
5	49.30	49.73	49.86	.....	.....	45.13
6	50.17	49.86	49.93	.....	.....	45.13
7	49.46	50.73	49.84	.....	.....	45.36
8	50.22	49.82	49.73	.....	.....	45.25
9	48.96	49.83	50.43	.....	.....	45.18
10	49.93	50.66	50.40	.....	.....	51.08
11	50.13	49.84	49.68	.....	.....	49.78
12	49.23	49.70	49.66	.....	.....	50.85
13	50.10	50.62	49.95	.....	.....	50.98
14	49.45	50.00	49.74	.....	.....	51.08
15	49.01	49.76	49.58	.....	.....	51.10
16	49.28	49.74	49.58	.....	.....	49.78
17	49.13	50.50	50.26	.....	.....	50.88
18	49.91	49.97	50.21	.....	.....	50.76
19	49.88	49.90	50.21	.....	.....	50.38
20	49.35	50.51	49.61	.....	.....	50.88
21	49.18	50.75	49.52	.....	.....	51.90
22	50.03	50.04	49.35	.....	.....	51.11
23	49.16	49.94	50.35	.....	.....	51.91
24	49.00	50.78	49.55	.....	.....	50.64
25	42.73	50.00	49.50	.....	50.08	50.35
26	42.90	49.88	49.54	.....	51.28	49.56
26	50.03	49.84	49.41	.....	51.05	49.57
28	49.68	49.85	50.23	.....	51.28	50.16
29	49.74		49.40	.....	50.93	50.23
30	49.81		49.29	.....	51.74	51.18
31	50.44		49.08			49.21

156.83.14aa. Marie Selfors. Records available: 1946-47, 1949.

Lowest daily water level, from recorder charts

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	11.30	8.39	7.16	8.15	9.10	9.65	10.24	11.02
2	.....	11.25	8.39	6.99	8.24	9.01	9.74	10.69	10.78
3	.....	11.14	8.44	7.06	8.15	9.08	9.98	10.53	10.90
4	.....	11.22	8.39	7.16	8.11	9.16	9.97	10.67	11.11
5	.....	11.24	8.98	7.10	8.20	9.33	9.67	10.73	11.16
6	.....	11.28	8.01	7.05	8.22	9.37	9.54	10.72	10.79
7	.....	10.89	7.77	6.12	8.12	9.41	9.81	10.50	11.25
7	.....	10.72	7.50	7.24	8.07	9.42	10.16	10.45	11.38
9	.....	10.71	7.45	7.41	8.30	9.37	10.10	10.21	.....
10	.....	10.38	7.25	7.37	8.37	9.10	9.51	10.26	10.70
11	14.55	10.91	6.87	7.27	8.44	9.19	9.79	10.36	10.85
12	14.49	10.06	7.11	7.33	8.46	9.41	9.79	10.64	10.99
13	14.54	9.98	7.14	7.33	8.42	9.55	9.81	10.61	11.34
14	14.68	9.92	7.01	7.33	8.58	9.58	10.40	10.59	11.43
15	14.54	9.70	6.97	7.33	8.72	9.43	10.09	10.66	.....
16	14.05	9.51	6.90	7.20	8.65	9.20	10.18	10.79	.....
17	14.19	9.24	6.98	7.20	8.71	9.23	10.39	11.01	.....
18	14.04	9.42	7.23	7.40	8.71	9.35	10.32	10.73	.....
19	13.65	9.50	6.98	7.56	8.78	9.69	10.48	10.51	.....
20	13.35	9.22	6.90	7.49	8.83	9.52	10.51	10.76	.....

156.83.14aa--Continued.

Lowest daily water level, from recorder charts

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	13.21	9.06	6.94	7.49	8.77	9.70	10.28	11.10	.....
22	13.12	8.99	6.80	7.73	8.77	9.76	10.09	10.70	.....
23	13.23	9.14	6.74	7.61	8.72	9.83	10.56	10.84	.....
24	13.88	9.00	6.65	7.67	8.70	9.69	10.62	10.62	.....
25	12.77	8.91	6.61	7.59	8.84	9.53	10.50	10.79	.....
26	12.68	8.92	6.82	7.69	8.91	9.71	10.52	10.49	.....
27	12.48	8.92	6.79	7.74	9.07	9.83	10.32	10.40	.....
28	12.15	8.67	6.95	7.96	9.10	10.03	10.39	10.37	.....
29	11.67	8.52	6.75	8.11	9.02	9.85	10.11	10.66	.....
30	11.61	8.50	7.00	8.01	9.15	9.75	10.65	10.89	.....
31		8.54		8.03	9.23		10.45		.....

124.81.8ad. E. O. Grasby. Dug domestic and stock well, diameter 48 inches, depth 38.2 feet. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Oct. 18, 1945	22.80	May 16, 1947	22.59	May 14, 1948	19.09
Mar. 23, 1946	21.73	July 7	22.95	Aug. 11	17.43
July 11	21.55	Nov. 14	22.09	May 2, 1949	15.92
Nov. 12	22.04				

154.81.11cc. A. J. Kittleson. Bored domestic and stock well, diameter 18 inches, depth 50 feet. Records available: 1945-49.

Oct. 17, 1945	26.05	July 7, 1947	34.85	May 2, 1949	c 32.52
July 11, 1946	21.64	Nov. 14	35.52	July 13	30.65
Nov. 11	37.20	May 14, 1948	35.41	Sept. 27	31.02
May 19, 1947	36.42	Aug. 11	33.22		

c Ponded water nearby.

154.81.22aal. R. O. Abrahamson. Dug domestic well, diameter 48 inches. Records available: 1945-49.

Oct. 17, 1945	19.45	July 7, 1947	18.42	Nov. 8, 1948	17.55
July 11, 1946	18.57	Nov. 14	18.58	May 2, 1949	c 14.79
Nov. 12	18.87	May 14, 1948	17.60	July 13	15.34
May 19, 1947	18.64	Aug. 11	17.62	Sept. 26	15.76

c Ponded water nearby.

154.81.27dd. A. M. Foss. Dug domestic well, diameter 48 inches, depth 29 feet. Records available: 1945-49.

Oct. 17, 1945	20.35	July 7, 1947	17.94	Nov. 8	15.73
Mar. 23, 1946	19.07	Nov. 14	18.49	May 2, 1949	15.70
July 11	15.56	May 14, 1948	17.24	July 13	13.43
May 19, 1947	19.20	Aug. 11	16.01	Sept. 26	13.68

154.82.13ad. Owner unknown. Unused dug well, diameter 48 inches, depth 29.1 feet. Records available: 1945-49.

Oct. 18, 1945	19.75	July 7, 1947	19.34	Nov. 8, 1948	19.58
July 11, 1946	20.61	Nov. 14	19.79	May 2, 1949	c 18.29
Nov. 12	19.92	May 14, 1948	19.88	July 13	19.03
May 17, 1947	19.92	Aug. 11	19.55	Sept. 26	19.57

c Ponded water nearby.

155.81.2cc. Unused bored well, diameter 18 inches, depth 22.9 feet. Records available: 1945-49.

Oct. 16, 1945	13.45	July 7, 1947	14.51	Nov. 9, 1948	13.59
Mar. 26, 1946	13.96	Nov. 19	15.29	May 3, 1949	c 12.53
July 10	14.17	May 13, 1948	14.22	July 14	12.42
Nov. 13	14.90	Aug. 11	14.11	Sept. 13	13.48
May 16, 1947	15.12				

c Ponded water nearby.

155.81.6aa. Owner unknown. Bored stock well, diameter 14 inches, depth 14.1 feet. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Oct. 16, 1945	6.45	July 7, 1947	4.05	Nov. 9, 1948	5.30
Mar. 26, 1946	3.00	Nov. 13	8.72	May 4, 1949	c 2.29
July 12	(f)	May 13, 1948	c 2.43	July 14	3.44
Nov. 13	(f)	Aug. 11	3.56	Sept. 13	7.48
May 16, 1947	(f)				

c Ponded water nearby.

f Dry.

155.81.11aa. Carl Olson. Dug stock well, diameter 20 inches, depth 10.6 feet. Records available: 1945-49.

Oct. 16, 1945	9.20	July 7, 1947	4.99	Nov. 9, 1948	6.46
July 11, 1946	8.16	Nov. 19	6.82	May 3, 1949	c 1.52
Nov. 13	6.87	May 13, 1948	4.12	July 14	4.20
May 16, 1947	5.12	Aug. 11	4.52	Sept. 13	6.40

c Ponded water nearby.

155.81.11dd1. E. J. Burgass. Unused dug well, diameter 30 inches, depth 30 feet. Records available: 1945-49.

Oct. 23, 1946	11.42	July 7, 1947	13.47	May 3, 1949	8.32
July 11	9.68	Aug. 11, 1948	6.74	July 14	7.34
Nov. 13	12.28	Nov. 9	13.51	Sept. 13	11.08
May 16, 1947	13.86				

155.82.10aa. Frank Hrdlicka. Dug domestic well, diameter 48 inches, depth 12 feet. Records available: 1945-49.

Oct. 16, 1945	4.60	July 7, 1947	0.53	Nov. 9, 1948	3.35
Mar. 26, 1946	b +1.32	Nov. 13	5.17	May 4, 1949	b +1.19
July 12	3.75	May 5, 1948	b +1.70	July 14	1.62
Nov. 13	4.58	Aug. 11	b +.50	Sept. 26	4.85
May 16, 1947	.22				

b Surrounded by ponded water.

155.82.14dd. John Balerud. Unused drilled well, diameter 4 inches, depth 120 feet. Records available: 1945-49.

Oct. 17, 1945	39.20	July 7, 1947	38.76	Nov. 9, 1948	38.26
Mar. 26, 1946	38.93	Nov. 14	39.14	May 24, 1949	38.26
July 12	38.98	May 5, 1948	38.87	July 14	38.19
May 16, 1947	39.16	Aug. 11	38.39	Sept. 26	38.19

155.82.23cd. Owner unknown. Unused dug well, diameter 36 inches, depth 8.1 feet. Records available: 1945-49.

Oct. 17, 1945	2.95	July 7, 1947	2.27	Nov. 9, 1948	3.47
Mar. 23, 1946	.10	Nov. 14	4.37	May 4, 1949	b .60
July 12	3.11	May 5, 1948	b +2.22	July 14	1.48
Nov. 7	4.33	Aug. 11	2.36	Sept. 26	3.90
May 16, 1947	2.07				

b Surrounded by ponded water.

156.81.4aa. Abel Beaton. Drilled domestic well, diameter 1½ inches, depth 185 feet. Records available: 1945-49.

Oct. 15, 1945	4.80	July 9, 1947	+0.14	Nov. 19, 1948	6.60
Mar. 26, 1946	3.21	Nov. 18	7.25	May 4, 1949	2.94
July 13	6.83	May 13, 1948	5.60	July 14	4.35
Nov. 13	7.70	Aug. 12	2.21	Sept. 13	7.76
May 23, 1947	3.94				

156.81.17cc1. E. B. Engebretson. Bored domestic well, diameter 15 inches, depth 55 feet. Records available: 1945-49.

156.81.17ccl--Continued.

Date	Water level	Date	Water level	Date	Water level
Oct. 15, 1945	12.90	July 9, 1947	5.66	Nov. 9, 1948	10.91
July 12, 1946	10.30	Nov. 18	10.03	May 4, 1949	c 2.20
Nov. 13	11.68	May 13, 1948	5.09	July 14	6.80
May 15, 1947	5.79	Aug. 12	6.59	Sept. 13	11.00

c Ponded water nearby.

156.82.4ba. Rudolph Helseth. Dug stock well, diameter 48 inches, depth 60 feet. Records available: 1945-49.

Oct. 15, 1945	26.15	July 9, 1947	11.71	Nov. 9, 1948	10.62
July 13, 1946	16.80	Nov. 13	12.17	May 4, 1949	c 5.18
Nov. 19	15.24	May 5, 1948	8.82	July 14	6.58
May 15, 1947	12.97	Aug. 12	10.08	Sept. 26	9.73

c Ponded water nearby.

156.82.10bcl. Roy Tripp. Bored domestic and stock well, diameter 24 inches, depth 35 feet. Records available: 1945-49.

Oct. 15, 1945	22.25	July 9, 1947	6.51	May 4, 1949	c 2.69
July 13, 1946	8.05	Nov. 13	13.75	July 14	6.56
Nov. 19	9.76	May 5, 1948	5.96	Sept. 26	8.38
May 15, 1947	10.13	Nov. 9	8.71		

c Ponded water nearby.

156.82.26dc. Arthur Korgel. Dug domestic and stock well, diameter 48 inches. Records available: 1945-49.

Oct. 16, 1945	5.70	July 9, 1947	d 3.73	Nov. 9, 1948	4.60
July 13, 1946	4.77	Nov. 13	d 5.26	May 4, 1949	c 1.20
Nov. 19	d 5.02	May 5, 1948	2.86	July 14	4.37
May 15, 1947	3.78	Aug. 12	3.41	Sept. 26	5.67

c Ponded water nearby.

4 Pumping recently.

156.82.28dcl. S. Laskowsky. Dug stock well, diameter 48 inches, depth 24 feet. Records available: 1945-49.

Oct. 16, 1945	11.75	July 8, 1947	8.61	Nov. 9, 1948	8.59
July 13, 1946	7.77	May 5, 1948	6.05	July 14, 1949	6.55
May 15, 1947	12.42	Aug. 12	6.73	Sept. 26	10.54

156.83.7ccl. Elmer Werner. Unused bored well, diameter 24 inches, depth 50 feet. Records available: 1945-49.

Oct. 14, 1945	12.50	July 8, 1947	12.61	May 4, 1949	c 11.57
July 15, 1946	12.95	Nov. 11	13.28	July 15	12.49
Nov. 19	13.89	Nov. 9, 1948	12.61	Sept. 26	12.18
May 15, 1947	14.49				

c Ponded water nearby.

156.83.9ccl. E. K. Livingstone. Dug stock well, diameter 48 inches, depth 12 feet. Records available: 1945-49.

Oct. 14, 1945	5.15	Nov. 11, 1947	d 5.41	May 4, 1949	b 0.00
July 15, 1946	3.27	May 5, 1948	b +.5	July 15	b .22
May 15, 1947	.00	Nov. 9	2.43	Sept. 26	4.46
July 8	.86				

b Surrounded by ponded water.

d Pumping recently.

156.83.19bcl. D. Olson. Unused bored well, diameter 30 inches, depth 32.8 feet. Records available: 1945-49.

Oct. 14, 1945	10.35	July 8, 1947	8.41	May 4, 1949	c 5.26
July 15, 1946	9.37	Nov. 11	12.53	July 15	7.62
Nov. 19	12.74	9, 1948	12.85	Sept. 26	10.69
May 15, 1947	9.31				

156.83.25cd. John Parizek. Dug stock well, diameter 48 inches, depth 11 feet. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Oct. 15, 1945	6.65	July 8, 1947	5.62	May 4, 1949	2.91
July 13, 1946	6.46	May 5, 1948	2.31	July 14	5.09
Nov. 19	7.75	Aug. 12	3.36	Sept. 26	7.32
May 15, 1947	6.41				

156.84.3bb. Owner unknown. Dug stock well, diameter 16 inches, depth 42 feet. Records available: 1945-49.

Oct. 13, 1945	25.30	July 8, 1947	22.52	May 4, 1949	c 16.06
July 15, 1946	35.80	Nov. 11	22.76	July 15	15.02
Nov. 19	19.75	May 13, 1948	15.25	Sept. 26	25.56
Apr. 2, 1947	19.29	Nov. 11	20.34		

c Ponded water nearby.

157.81.7aal. John Peck. Dug domestic well, diameter 36 inches, depth 8 feet. Records available: 1945-49.

Oct. 14, 1945	3.35	July 9, 1947	2.64	Nov. 12, 1948	3.83
July 13, 1946	3.23	Nov. 13	3.98	May 3, 1949	b +0.23
Nov. 19	4.15	Aug. 12, 1948	2.55	Sept. 14	3.33
May 22, 1947	2.48				

b Surrounded by ponded water.

157.81.29ab. Owner unknown. Dug domestic and stock well, diameter 48 inches, depth 12.4 feet. Records available: 1945-49.

Oct. 14, 1945	8.60	July 9, 1947	7.42	May 3, 1949	c 4.97
July 13, 1946	9.96	Nov. 13	10.37	July 16	7.63
Nov. 19	8.39	Aug. 12, 1948	6.64	Sept. 14	9.15
May 15, 1947	7.92	Nov. 12	9.35		

c Ponded water nearby.

157.82.22dd. Owner unknown. Unused bored well, diameter 48 inches. Records available: 1945-49.

Oct. 14, 1945	11.85	July 9, 1947	10.09	Nov. 12, 1948	12.68
July 13, 1946	9.45	Nov. 13	14.04	May 3, 1949	c 3.64
Nov. 19	13.40	May 5, 1948	c 7.10	July 15	6.48
May 15, 1947	10.88	Aug. 12	7.14	Sept. 14	11.05

c Ponded water nearby.

157.82.31ddl. Ruthville Texaco Station. Bored industrial well, diameter 18 inches, depth 19 feet. Records available: 1945-49.

Oct. 14, 1945	7.25	July 8, 1947	3.02	Nov. 11, 1948	5.15
July 15, 1946	d 8.79	Nov. 13	6.92	May 4, 1949	c 2.87
Nov. 14	6.99	May 5, 1948	4.32	July 15	4.00
Apr. 2, 1947	7.00	Aug. 12	3.53	Sept. 15	6.88

c Ponded water nearby.

d Pumping recently.

157.83.7dd2. H. A. Kluver. Dug stock well, diameter 20 inches, depth 29 feet. Records available: 1945-49.

Oct. 12, 1945	19.80	May 20, 1947	15.12	May 4, 1949	c 12.72
July 15, 1946	16.74	July 8	13.52	July 16	14.87
Sept. 11	17.96	Nov. 11	14.58	Sept. 15	11.98
Nov. 19	17.92	Nov. 11, 1948	d 19.94		

c Ponded water nearby.

d Pumping recently.

157.83.14da. G. R. New. Dug domestic and stock well, depth 12.4 feet. Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Oct. 13, 1945	7.50	July 8, 1947	2.22	Nov. 11, 1948	6.81
July 15, 1946	6.33	Nov. 13, 1947	5.68	May 4, 1949 c	2.20
Sept. 13	7.52	May 5, 1948	2.06	July 14	3.08
Nov. 19	8.16	Aug. 12	2.80	Sept. 14	6.51
May 15, 1947	2.37				

c Ponded water nearby.

157.83.33cd. Laurence Schimmelpfennig. Dug stock well, diameter 48 inches, depth 46.1 feet. Records available: 1945-49.

Oct. 13, 1945	21.95	Apr. 12, 1947	19.00	Nov. 11, 1948	9.97
Mar. 26, 1946	15.70	July 8	13.72	May 4, 1949 c	9.96
July 13	24.86	Nov. 11	23.62	July 15	13.34
Sept. 12	23.27	May 5, 1948	16.39	Sept. 14	17.93
Nov. 19	23.68	Aug. 12	15.01		

c Ponded water nearby.

157.83.36dc. Owner unknown. Dug stock well, diameter 48 inches, depth 12.8 feet. Records available: 1945-49.

Oct. 13, 1945	1.95	July 8, 1947	a 1.58	Nov. 10, 1948	2.25
July 15, 1946	7.60	Nov. 13	a 3.06	May 4, 1949	(b)
Sept. 13	3.40	May 5, 1948	(b)	July 14	b +.14
Apr. 2, 1947 b	+89	Aug. 12	.95	Sept. 14	1.91

a Top of ice.

b Surrounded by ponded water.

157.84.5cd. U. S. Fish and Wildlife Service. Records available: 1937-46. No measurements made in 1949.

157.84.18bc. O. Rastead. Dug stock well, diameter 48 inches, depth 25 feet. Records available: 1945-49.

Oct. 13, 1945	17.00	July 8, 1947	14.18	Nov. 12, 1948	13.63
July 15, 1946	15.20	Nov. 11	14.60	May 4, 1949 c	11.27
Sept. 4	16.39	May 9, 1948	13.98	July 20	10.68
Nov. 15	16.38	Aug. 16	14.39	Sept. 23	13.84
Apr. 2, 1947	15.72				

c Ponded water nearby.

157.84.20cc. Public school. Unused dug well, depth 30 feet. Records available: 1945-49.

Oct. 13, 1945	24.00	Apr. 2, 1947	17.40	Nov. 12, 1948	15.06
Mar. 26, 1946	18.02	July 8	16.11	May 9, 1949	15.78
July 15	17.13	Nov. 11	16.32	July 20	13.47
Sept. 5	17.27	May 9, 1948	16.16	Sept. 23	14.23
Nov. 15	18.05	Aug. 16	17.13		

157.84.21ca. U. S. Fish and Wildlife Service. Records available: 1937-46. No measurements made in 1949.

157.84.21ddl. U. S. Fish and Wildlife Service. Records available: 1937-46. No measurement made in 1949.

157.84.21cal. U. S. Fish and Wildlife Service. Records available: 1937-46. No measurement made in 1949.

157.84.21ddl. U. S. Fish and Wildlife Service. Records available: 1937-46. No measurement made in 1949.

157.84.22ad. A. M. Bock. Dug domestic and stock well, depth 23 feet.
Records available: 1945-49.

Date	Water level	Date	Water level	Date	Water level
Oct. 12, 1945	9.10	Apr. 2, 1947	9.06	Nov. 11, 1948	8.72
Mar. 26, 1946	9.72	July 8	6.41	May 4, 1949	c 3.27
July 15	9.11	Nov. 11	d 10.42	July 20	6.23
Sept. 10	9.28	May 9, 1948	c 2.01	Sept. 26	10.70
Nov. 19	9.88	Aug. 16	5.65		

c Ponded water nearby.

d Pumping recently.

157.84.30ad. Julia Schulz. Dug stock well, diameter 48 inches, depth 20.5 feet. Records available: 1945-49.

Oct. 13, 1945	5.35	July 8, 1947	1.96	Nov. 12, 1948	3.80
July 15, 1946	3.28	Nov. 11	4.35	May 4, 1949	b +2.70
Sept. 5	4.73	May 9, 1948	(b)	July 20	c .28
Nov. 15	5.38	Aug. 16	2.47	Sept. 23	3.75
Apr. 2, 1947	7.32				

b Surrounded by ponded water.

c Ponded water nearby.

157.85.5bb. Merrill Dahle. Dug domestic well, diameter 48 inches, depth 29 feet. Records available: 1945-49.

Oct. 5, 1945	19.60	July 12, 1947	18.08	Nov. 12, 1948	14.97
July 15, 1946	18.99	Nov. 11	18.59	July 20, 1949	10.35
Sept. 4	20.07	May 9, 1948	15.09	Sept. 23	12.22
Apr. 4, 1947	18.66	Aug. 16	14.81		

157.85.13cb. Owner unknown. Unused dug well, diameter 36 inches, depth 40.7 feet. Records available: 1945-49.

Oct. 13, 1945	11.00	July 8, 1947	5.89	Nov. 12, 1948	10.41
July 15, 1946	8.50	Nov. 11	11.77	May 4, 1949	c 6.76
Sept. 4	10.68	June 9, 1948	5.34	July 20	6.61
Nov. 15	11.91	Aug. 16	6.26	Sept. 23	10.31

c Ponded water nearby.

159.87.1dcl. C. Sorenson. Dug domestic well, diameter 36 inches, depth 24 feet. Records available: 1945-49.

Sept. 26, 1945	11.55	July 12, 1947	6.22	Nov. 19, 1948	11.19
July 17, 1946	9.85	Nov. 7	11.55	May 3, 1949	5.47
Oct. 24	12.90	May 9, 1948	c 5.03	July 20	8.78
Apr. 16, 1947	13.07	Aug. 16	5.74	Sept. 23	11.14

c Ponded water nearby.

159.87.34ccl. John E. Nelson. Bored domestic well, diameter 12 inches, depth 12.1 feet. Records available: 1945-49.

Sept. 25, 1945	9.50	Nov. 7, 1947	4.75	May 3, 1949	b +0.55
July 17, 1946	4.18	May 9, 1948	c .56	July 20	3.53
Oct. 24	(f)	Aug. 16	1.90	Sept. 23	8.55
July 12, 1947	c 1.24	Nov. 19	5.88		

b Surrounded by ponded water.

c Ponded water nearby.

f Dry.

160.87.4cd. E. J. Prehn. Dug domestic and stock well, diameter 48 inches, depth 14.8 feet. Records available: 1945-49.

Sept. 26, 1945	10.60	Nov. 7, 1947	6.20	May 3, 1949	4.97
July 16, 1946	10.65	May 10, 1948	4.53	July 20	7.85
Apr. 16, 1947	7.69	Nov. 10	9.00	Sept. 24	9.80
July 11	5.38				

160.87.13cd. Roy Cole. Dug domestic well, diameter 36 inches, depth 30 feet. Records available: 1945-49.

160.87.13cd--Continued.

Date	Water level	Date	Water level	Date	Water level
Sept. 25, 1945	8.20	July 11, 1947	3.62	Nov. 19, 1948	8.17
July 16, 1946	7.41	Nov. 7	8.06	May 3, 1949	2.93
Oct. 23	10.33	May 9, 1948	c 2.97	July 20	6.12
Apr. 16, 1947	8.26	Aug. 16	4.88	Sept. 24	10.29

c Ponded water nearby.

160.88.4dc. Levi Emmel. Unused bored well, diameter 18 inches.

Records available: 1945-49.

Sept. 26, 1945	9.13	July 11, 1947	3.89	Nov. 19, 1948	9.28
July 16, 1946	8.07	Nov. 7	8.05	May 9, 1949	c 5.79
Oct. 23	9.34	May 10, 1948	c 3.17	July 20	7.44
Apr. 17, 1947	8.11	Aug. 16	6.92	Sept. 23	9.38

c Ponded water nearby.

160.88.7dd. Owner unknown. Dug stock well, diameter 48 inches.

Records available: 1945-49.

Sept. 20, 1945	11.59	Nov. 7, 1947	10.98	May 9, 1949	c 5.99
July 16, 1946	11.32	May 10, 1948	3.61	July 20	7.16
Oct. 23	12.90	Aug. 16	8.15	Sept. 23	10.09
July 11, 1947	7.53	Nov. 15	9.48		

c Ponded water nearby.

160.88.25cc. Irenous Johnson. Bored domestic well, diameter 18 inches. Records available: 1945-49.

Sept. 25, 1945	13.85	July 12, 1947	9.62	Nov. 19, 1948	11.99
July 17, 1946	12.97	Nov. 7	12.33	May 9, 1949	8.28
Oct. 23	13.89	May 9, 1948	c 8.01	July 20	10.03
Apr. 16, 1947	13.73	Aug. 16	9.97	Sept. 23	13.59

c Ponded water nearby.

160.89.31abl. U. S. Fish and Wildlife Service. Records available: 1942-46. No measurement made in 1949.

161.88.21dd. Owner unknown. Dug stock well, diameter 35 inches.

Records available: 1945-49.

Sept. 23, 1945	5.95	July 7, 1947	0.07	Nov. 15, 1948	6.21
July 16, 1946	4.62	Nov. 3	4.40	May 9, 1949	c 1.63
Oct. 4	6.56	May 10, 1948	b .65	July 19	4.62
Oct. 23	5.60	Aug. 18	3.02	Sept. 20	5.53
Apr. 7, 1947	.74				

b Surrounded by ponded water.

c Ponded water nearby.

161.88.26cc. W. Mortenson. Bored domestic well, diameter 16 inches, depth 19 feet. Records available: 1945-49.

Sept. 20, 1945	10.80	July 7, 1947	3.95	Nov. 19, 1948	8.31
July 16, 1946	9.15	Nov. 3	7.48	May 9, 1949	5.16
Oct. 3	10.12	May 10, 1948	c 3.14	July 19	7.60
Oct. 23	10.19	Aug. 18	5.88	Sept. 20	8.58
Apr. 17, 1947	6.09				

c Ponded water nearby.

161.88.28aa. State Highway Department. Bored domestic well, diameter 18 inches. Records available: 1945-49.

Sept. 20, 1945	6.45	July 7, 1947	0.68	Nov. 15	5.84
July 16, 1946	5.43	Nov. 3	4.78	May 9, 1949	2.32
Oct. 4	7.12	May 10, 1948	c .28	July 19	5.62
Oct. 23	6.44	Aug. 18	4.14	Sept. 20	6.23
Apr. 17, 1947	.88				

c Ponded water nearby.

Wells County

147.70.23aal. Hayden Jones. Records available: 1940-49. Sept. 8, 4.02.

150.72.21cdl. City of Harvey. Records available: 1937-49. Sept. 8, 2.06.

150.72.28bal. City of Harvey. Records available: 1937-48. No measurement made in 1949.

Williams County

157.96.29ccl. Mrs. Gus B. Swanson Estate. Records available: 1938-46. No measurement made in 1949.

159.103.24adl. Hans O. Lottestad. Records available: 1939-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	24.68	Apr. 3	21.65	July 3	18.23	Oct. 2	22.03
9	24.79	10	16.34	10	18.58	9	22.23
16	24.88	17	15.59	17	18.87	16	22.53
23	24.97	24	15.84	24	19.33	23	22.64
30	25.07	May 1	14.81	31	19.76	30	22.80
Feb. 6	25.19	8	15.11	Aug. 7	19.97	Nov. 6	22.94
13	25.29	15	15.31	14	20.18	13	23.18
20	25.38	22	15.37	21	20.58	20	23.40
27	25.47	29	15.83	28	20.90	27	23.58
Mar. 6	25.58	June 7	16.34	Sept. 4	21.24	Dec. 4	23.77
13	25.68	12	16.81	11	21.26	11	23.99
20	25.84	19	17.23	18	21.64	16	24.21
27	25.93	26	17.76	25	21.90	25	24.83

159.103.24ad2. Hans O. Lottestad. Records available: 1938-49.

Jan. 2	18.53	Apr. 3	13.45	July 3	11.54	Oct. 2	15.53
9	18.62	10	7.73	10	12.73	9	15.80
16	17.73	17	9.33	17	12.96	16	15.90
23	18.76	24	9.78	24	12.17	23	16.11
30	18.92	May 1	9.98	31	13.48	30	16.30
Feb. 6	19.04	8	10.42	Aug. 7	13.75	Nov. 6	16.44
13	19.09	15	10.69	14	13.98	13	16.62
20	19.12	22	10.98	21	14.20	20	16.97
27	19.31	29	11.30	28	13.36	27	16.97
Mar. 6	19.41	June 5	11.62	Sept. 4	14.65	Dec. 4	17.21
13	19.52	12	11.90	11	14.90	11	17.39
20	19.63	19	12.09	18	15.15	16	17.59
27	19.79	26	11.37	25	15.38	25	17.71

SOUTH DAKOTA

By George A. LaRocque, Jr. and William H. Bush

PROGRAM OF WORK

In April 1935, water-level measurements were made in four wells south of Huron by the Corps of Engineers, U. S. Army. In August 1936, the Federal Geological Survey remeasured the wells and established a total of 17 additional observation wells in Beadle, Bon Homme, Kingsbury, Minnehaha, Moody, Turner, Union, and Yankton Counties. Beginning in 1937 these 21 observation wells were measured at irregular intervals under the direction of E. P. Rothrock, State Geologist. From 1939 to 1945 a total of 59 observation wells was measured in cooperation with the State Geological Survey. In 1946 as part of the Missouri River Basin development program a limited State-wide program and a more intensive program maintained in connection with proposed irrigation developments were begun.

Since 1946, the State-wide program has been limited to observation wells in the Oahe area (James River valley), Angostura area (Cheyenne River valley) and the Grand River valley. Measurements were made by the Federal Geological Survey of observation wells in the Lower James River valley. Measurement of depths to water in observation wells have been made by personnel of the Pierre office of the surface water branch of the Federal Geological Survey, under the direction of William Littlefield, engineer in charge.

In 1946 the Federal Geological Survey began a series of investigations as a part of the program for utilization of the water resources of the Missouri Basin. Priority has been given to the inventory of presently available ground-water supplies in areas for which irrigation now exists or is planned. The Federal Geological Survey is cooperating with the Bureau of Reclamation in the establishment and maintenance of wells in the Oahe area. The data collected will aid in the understanding of the complexity of ground-water movement in glaciated areas.

U. S. Weather Bureau records for South Dakota show that in 1946 and 1948 precipitation was above the long-term average and in 1947 and 1949 below the long-term average.

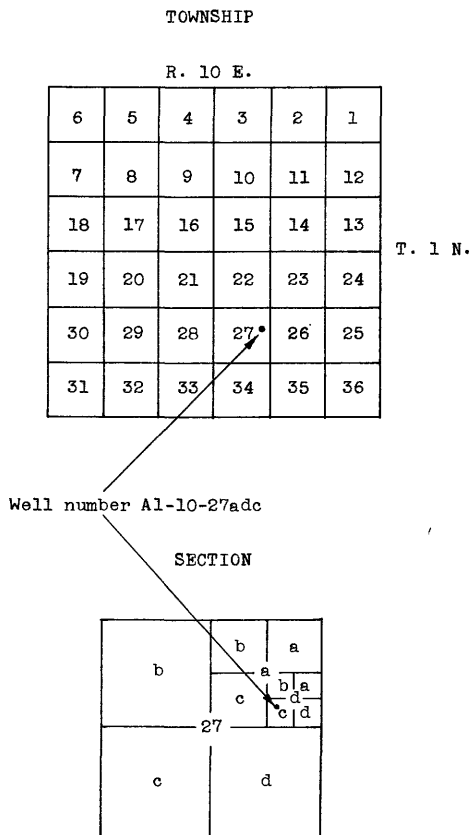
Summary of annual change, in feet, in ground-water levels in South Dakota, 1946-49

Area	Number of wells	Change from spring 1946 to spring 1947	Change from spring 1947 to spring 1948	Change from spring 1948 to spring 1949	Spring 1949	
					Maximum	Minimum
<u>James River Valley</u>						
Beadle	35	+1.04	-0.25	-0.34	-2.00	+2.06
Brown	2	+.04	-.04	-.57	-.94	+.13
Edmunds	2	+.58	+.74	-1.46	-1.46	
Faulk	8	+1.21	+.28	-.46	-.73	+1.23
Hand	14	-.77	+.90	-.21	-1.12	+1.49
Spink	12	+.19	+.78	-.66	-.93	+.73
Weighted average	73	+.53	+.23	-.42	-1.47	+1.53
Net change from spring 1946		+.53	+.76	+.34		
<u>Angostura</u>						
Custer	6	-.10	+.96	+.08	-.23	+1.06
Fall River	11	+.32	+.48	+.03	-.32	+1.28
Weighted average	17	+.18	+.65	+.05	-.29	+1.20
Net change from spring 1946		+.18	+.83	+.88		
<u>Grand River Valley</u>						
Carson	17	+.91	-.60	-.16	-.91	+.49
Perkins	5	+1.20	-1.07	+.23	-.84	+.42
Weighted average	22	+.98	-.71	-.07	-.90	+.47
Net change from fall 1946		+.98	+.27	+.20		

WELL-NUMBERING SYSTEM

Observation wells are listed alphabetically by county and numerically within each county. The number assigned to each well also gives the location with reference to the township and range subdivisions for the area. Unfortunately South Dakota is covered by three systems: (1) the area east of the Missouri River with a small portion of the south-central area; (2) Pine Ridge and Rosebud Indian Reservations of southern South Dakota; and (3) the remainder or all area north of the White River and west of the Missouri River. Accordingly the following letters are added as a prefix to the well number to designate the quadrant of township and range subdivision to use: "A" - NE, "B" - NW, "C" - SW, and "D" - SE, this is applicable to all areas except those east of the Missouri River, where for convenience the prefix letter has been omitted. Similarly "a", "b", "c", "d" in the well number designate the same respective 160-acre, 40-acre or 10-acre tract. Thus the number A-1-10-27 locates the well as follows:

SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 27, T. 1 N., R. 10 E. Inasmuch as the well number also locates the well, the land description is not included in the well descriptive headings.



Sketch showing system of well identification.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Beadle County

109-51-15cc. Bored well, diameter 24 inches, depth 54.6 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
June 11, 1946	44.85	Apr. 22, 1948	43.72	May 5, 1949	43.87
June 28, 1947	44.95	Aug. 23	44.68	July 14	44.94
Aug. 21	47.38	Nov. 8	28.55	Sept. 26	41.60

109-62-7aa2. Peter Ohm. Bored well, diameter 30 inches, depth 52.6 feet. Records available: 1946-49.

Apr. 11, 1946	20.13	June 16	18.43	Nov. 8	21.64
Aug. 9	20.07	Aug. 21	18.14	May 6, 1949	22.68
Nov. 12	20.90	Apr. 22, 1948	18.77	July 11	22.82
Apr. 17, 1947	20.06	Aug. 23	19.84	Sept. 26	23.42

109-62-12cc. C. West. Dug domestic well, diameter 24 inches, depth 60 feet. Records available: 1946-49.

June 10, 1946	24.00	Aug. 20, 1948	13.98	May 6, 1949	9.46
Aug. 8	24.06	Apr. 22	17.94	July 11	20.18
Apr. 17, 1947	15.38	Aug. 23	12.40	Sept. 26	23.30
June 16	9.80	Nov. 8	15.50		

109-62-30bc. F. Brass. Dug domestic well, diameter 36 inches, depth 38.2 feet. Records available: 1946-49.

June 10, 1946	26.61	Aug. 21	25.53	May 4, 1949	23.92
Aug. 9	26.40	Apr. 22, 1948	24.59	June 11	25.33
Apr. 24, 1947	23.25	Aug. 23	24.90	Sept. 26	25.50
June 16	25.62	Nov. 8	25.44		

109-63-6ab. Bored domestic well, diameter 18 inches, depth 40 feet. Records available: 1946-47, 1949.

June 12, 1946	a 14.78	June 5, 1947	12.55	July 12, 1949	16.18
Oct. 28	a 14.85	July 24	14.00	Sept. 26	19.80
Mar. 14, 1947	a 14.91	May 6, 1949	15.69		

a By State Geological Survey.

109-63-9aa. Dug well, diameter 24 inches. Records available: 1946-49.

June 11, 1946	20.06	Aug. 21, 1947	16.46	Nov. 10, 1948	17.84
Aug. 9	17.95	Apr. 22, 1948	14.83	May 4, 1949	19.14
Apr. 17, 1947	15.60	June 14	15.10	June 12	18.88
May 29	15.40	Aug. 23	16.27	Sept. 26	19.47
June 16	13.47				

109-63-30cb. Albert M. Schorzman. Dug domestic and stock well, diameter 24 inches, depth 60.4 feet. Records available: 1946-49.

June 10, 1946	34.11	June 16, 1947	23.52	Nov. 10, 1948	21.22
Aug. 9	42.93	Aug. 21	27.60	May 4, 1949	28.26
Nov. 12	19.31	Apr. 22, 1948	21.24	July 12	25.94
Apr. 17, 1947	19.28	Aug. 23	23.62	Sept. 26	33.78

109-63-34aa. T. Bauer. Bored domestic and stock well, diameter 24 inches. Records available: 1946-49.

June 10, 1946	16.47	June 16, 1947	13.68	Nov. 10, 1948	15.09
Aug. 9	a 18.00	Aug. 11	15.14	May 4, 1949	16.74
Nov. 12	15.85	Apr. 22, 1948	14.20	July 12	13.05
Apr. 24, 1947	14.78	Aug. 23	15.38	Sept. 26	16.41

a Pumping recently.

109-64-7bb. Dug stock well, diameter 24 inches, depth 13.3 feet.
Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
June 10, 1946	5.55	June 16, 1947	5.35	Nov. 11, 1948	5.65
Aug. 9	5.85	Aug. 21	6.41	May 4, 1949	5.35
Nov. 12	4.70	Apr. 22, 1948	4.86	July 12	6.21
Apr. 17, 1947	4.47	Aug. 27	6.01	Sept. 27	6.58

109-64-26dc. Dug stock well, diameter 20 inches, depth 17 feet.
Records available: 1947-49.

Apr. 17, 1947	1.30	Apr. 22, 1948	4.86	May 4, 1949	3.49
June 16	4.50	Aug. 27	6.01	July 12	3.85
Aug. 20	5.99	Nov. 11	5.65	Sept. 27	a 13.69

a Pumping recently.

109-64-32aa. Rock Island Bank. Dug domestic well, diameter 24 inches, depth 80 feet. Records available: 1946-49.

June 10, 1946	14.65	Aug. 21, 1947	14.93	May 4, 1949	16.14
Aug. 9	15.75	Apr. 22, 1948	12.82	July 12	16.06
Apr. 17, 1947	12.23	Aug. 27	14.98	Sept. 27	18.45
June 16	11.53	Nov. 11	24.29		

109-65-3bb. H. Sexton. Dug domestic and stock well, diameter 24 inches, depth 42.0 feet. Records available: 1946-49.

June 10, 1946	30.10	June 19, 1947	22.84	Nov. 11, 1948	24.29
Aug. 9	27.00	Aug. 21	24.00	May 4, 1949	25.39
Nov. 12	24.43	Apr. 22, 1948	23.15	July 12	25.88
Apr. 17, 1947	23.08	Aug. 25	24.00	Sept. 27	27.28

109-65-17cc. Owner unknown. Unused dug well, diameter 48 inches, depth 10.0 feet. Records available: 1946-49.

June 10, 1946	5.70	Aug. 21, 1947	7.59	May 4, 1949	5.00
Aug. 9	5.92	Aug. 25, 1948	5.44	July 12	6.43
June 19, 1947	6.71	Nov. 11	5.24	Sept. 27	6.81

109-65-26dd. Dug domestic and stock well, diameter 48 inches, depth 20.2 feet. Records available: 1946-49.

June 10, 1946	7.05	Aug. 21, 1947	6.93	May 4, 1949	6.91
Aug. 9	7.90	Apr. 22, 1948	4.94	July 12	8.10
Apr. 17, 1947	4.23	Aug. 27	5.58	Sept. 27	8.20
June 16	4.75	Nov. 11	a 8.95		

a Pumping recently.

110-61-7cc. J. C. Johnson. Bored domestic well, diameter 24 inches, depth 55 feet. Records available: 1947-49.

Apr. 17, 1947	4.05	June 14, 1948	8.55	May 4, 1949	9.61
June 16	4.17	Aug. 23	7.46	July 11	14.07
Aug. 20	4.34	Nov. 10	9.60	Sept. 27	a 37.70
Apr. 22, 1948	a 8.57				

a Pumping recently.

110-61-20aa. G. E. Montgomery. Dug domestic and stock well, diameter 24 inches, depth 38 feet. Records available: 1947-49.

July 3, 1947	15.55	June 18, 1948	22.95	May 5, 1949	23.30
Aug. 20	a 24.29	Aug. 23	a 21.65	July 12	23.42
Apr. 25, 1948	a 23.31	Nov. 8	a 24.41	Sept. 26	23.35

a Pumping recently.

110-61-35aa. Owner unknown. Bored stock well, diameter 18 inches, depth 40.2 feet. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
June 23, 1947	30.35	June 18, 1948	23.82	May 4, 1949	29.11
Aug. 20,	32.66	Aug. 23	28.31	July 11	29.44
Apr. 25, 1948	29.35	Nov. 8	28.30	Sept. 26	29.27

110-62-2ab2. Owner unknown. Dug domestic well, diameter 18 inches, depth 15 feet. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
June 16, 1947	5.80	June 14, 1948	8.11	May 6, 1949	9.93
Aug. 21	8.42	Aug. 23	8.53	July 13	11.43
Oct. 20	6.00	Nov. 10	9.14	Sept. 26	10.72
Apr. 23, 1948	7.25				

110-62-6ab2. Harold Urban. Unused bored well, diameter 18 inches, depth 56.8 feet. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 23, 1948	20.17	May 6, 1949	20.45	Sept. 24, 1949	21.33
Nov. 10	20.08	July 13	20.98		

110-62-12dd. Frank Sunderson. Dug stock well, diameter 24 inches, depth 40 feet. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 17, 1947	7.12	June 14, 1948	11.77	May 5, 1949	8.84
June 16	7.27	Aug. 23	8.68	July 11	11.86
Aug. 20	9.23	Nov. 8	9.92	Sept. 26	14.80
Apr. 22, 1948	11.43				

110-63-18cc. Owner unknown. Unused bored well, diameter 24 inches, depth 36.4 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
June 11, 1946	18.12	Aug. 21, 1947	16.78	Nov. 10, 1948	21.09
Aug. 9	18.00	Apr. 23, 1948	17.01	May 5, 1949	17.10
Nov. 12	17.04	June 16	23.22	July 12	a 23.90
Apr. 18, 1947	16.28	Aug. 23	25.70	Sept. 26	a 25.55
June 16	16.65				

a Pumping recently.

110-64-1ba. Owner unknown. Unused dug well, diameter 60 inches, depth 32.3 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 8, 1946	20.30	June 16, 1947	14.92	Nov. 11, 1948	15.31
June 12	19.22	Aug. 21	14.52	May 4, 1949	16.20
Aug. 8	18.39	Apr. 23, 1948	15.91	July 13	16.39
Nov. 13	18.23	June 18	15.49	Sept. 27	16.08
Apr. 18, 1947	17.13	Aug. 27	14.92		

110-64-5aa. M. Erion. Bored stock well, diameter 24 inches, depth 60 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 8, 1946	15.95	June 19, 1947	13.79	Nov. 11, 1948	16.31
June 11	16.25	Aug. 21	13.61	May 4, 1949	16.31
Aug. 9	16.50	Apr. 23, 1948	14.09	July 13	16.39
Nov. 13	14.52	June 27	16.50	Sept. 27	16.08
Apr. 18, 1947	12.52	Aug. 27	16.50		

110-64-17ba. A. Pierson. Dug domestic and stock well, diameter 48 inches, depth 50 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
June 11, 1946	4.90	June 19, 1947	10.87	Nov. 11, 1948	15.98
Aug. 9	17.05	Aug. 21	22.92	July 13, 1949	11.67
Nov. 13	12.30	Apr. 23, 1948	13.89	Sept. 27	10.26
Apr. 18, 1947	12.78	Aug. 27	13.70		

110-65-4dd. Robert Mehling. Bored domestic and stock well, diameter 18 inches, depth 58.6 feet. Records available: 1946-49.

110-65-4dd--Continued.

Date	Water level	Date	Water level	Date	Water level
Apr. 8, 1946	15.60	June 19, 1947	13.86	Nov. 11, 1948	16.95
June 11	16.88	Aug. 21	14.63	May 4, 1949	15.89
Aug. 8	18.05	Apr. 23, 1948	15.23	July 13	24.29
Nov. 13	15.10	June 18	15.51	Sept. 27	17.13
Apr. 18, 1947	15.14	Aug. 23, 1948	14.92		

110-65-9ba. Owner unknown. Unused dug well, diameter 18 inches, depth 37 feet. Records available: 1947-49.

Apr. 18, 1947	3.44	June 13, 1948	3.92	May 4, 1949	9.05
June 19	4.70	Aug. 23	3.87	July 13	12.17
Aug. 21	5.07	Nov. 11	5.24	Sept. 27	12.35
Apr. 23, 1948	3.23				

111-61-34cc. Owner unknown. Bored stock well, diameter 18 inches, depth 57.5 feet. Records available: 1947-49.

June 23, 1947	13.15	June 12, 1948	13.17	May 6, 1949	17.08
Aug. 20	16.50	Aug. 23	13.07	July 15	16.52
Apr. 25, 1948	12.76	Nov. 13	16.58	Sept. 27	17.20

111-62-12aa. Owner unknown. Unused dug well, diameter 24 inches, depth 18.7 feet. Records available: 1947-49.

Apr. 19, 1947	7.71	June 18, 1948	10.00	May 3, 1949	11.57
June 17	8.36	Aug. 23	10.84	July 13	12.05
Aug. 22	10.78	Nov. 13	12.00	Sept. 23	13.38
Apr. 23, 1948	9.77				

111-64-1bc. Daniel Wharton. Bored domestic and stock well, diameter 24 inches, depth 40 feet. Records available: 1946-49.

Apr. 5, 1946	19.80	Aug. 22, 1947	25.74	Nov. 10, 1948	19.06
June 12	18.35	Apr. 23, 1948	18.62	May 3, 1949	19.57
Aug. 8	20.02	June 18	19.66	July 13	19.91
Apr. 18, 1947	18.04	Aug. 27	19.05	Sept. 23	21.35
June 17	17.81				

111-64-17dd. Owner unknown. Bored stock well, diameter 18 inches, depth 21 feet. Records available: 1946-49.

Apr. 16, 1946	5.50	June 19, 1947	6.74	Nov. 12, 1948	14.94
June 11	8.35	Aug. 21	14.36	May 4, 1949	15.01
Aug. 8	15.30	Apr. 26, 1948	7.07	July 13	14.98
Nov. 12	8.10	Aug. 27	7.16	Sept. 24	14.80
Apr. 18, 1947	6.23				

111-65-23dd. Independent Order of Foresters. Unused dug well, diameter 20 inches, depth 30.6 feet. Records available: 1947-49.

Apr. 18, 1947	26.73	Apr. 23, 1948	25.30	May 4, 1949	23.84
June 19	25.24	Aug. 27	25.71	July 13	25.35
Aug. 21	26.05	Nov. 11	26.72	Sept. 24	27.10

112-61-31cc1. U. S. Bureau of Reclamation. Drilled observation well, diameter 1½ inches, depth 15 feet. Records available: 1948-49.

July 23, 1948	a 6.54	Feb. 18, 1949	a 9.84	July 15, 1949	9.66
Aug. 16	6.73	Mar. 18	a 9.14	29	9.98
Sept. 5	7.59	Apr. 18	a 8.84	Aug. 18	a 10.52
Oct. 3	8.42	May 3	8.64	29	10.52
Nov. 8	a 8.40	18	a 8.74	Sept. 23	10.84
18	a 9.14	June 14	8.76	Oct. 20	a 11.54
Dec. 22	a 9.14	16	a 8.84	Nov. 18	a 11.19
Jan. 18, 1949	a 9.54	July 1	7.18	Dec. 13	10.82

a By U. S. Bureau of Reclamation.

112-61-34cd. U. S. Bureau of Reclamation. Drilled well, diameter $1\frac{1}{4}$ inches, depth 24 feet. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
July 23, 1948	a 20.29	Feb. 18, 1949	a 13.39	July 15, 1949	11.32
Aug. 16	17.29	Mar. 18	a 12.99	29	11.22
Sept. 5	17.70	Apr. 18	a 12.29	Aug. 18	a 11.18
Oct. 3	15.29	May 3	12.19	29	10.99
Nov. 8	a 12.56	18	a 12.16	Sept. 23	10.82
18	a 14.59	June 14	11.48	Oct. 20	a 11.29
Dec. 22	a 14.09	16	a 11.76	Nov. 18	a 10.79
Jan. 18, 1949	a 13.79	July 1	11.42	Dec. 13	10.59

a By U. S. Bureau of Reclamation.

112-61-35bc. Owner unknown. Bored stock well, diameter 18 inches, depth 40 feet. Records available: 1946-49.

Apr. 16, 1946	11.60	Aug. 22, 1947	10.56	May 3, 1949	11.09
Aug. 8	12.60	Aug. 23, 1948	17.34	July 15	11.05
June 25, 1947	11.08	Nov. 13	14.62	Sept. 23	11.82

112-62-1abaal. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 30 feet. Records available: 1949.
Dec. 14, 5.41. Measurements made by U. S. Bureau of Reclamation.

112-62-1abaa2. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 46 feet. Measurements made by U. S. Bureau of Reclamation. Records available: 1949. Dec. 14, 15.44.

112-62-24bb. Owner unknown. Bored stock well, diameter 18 inches, depth 56 feet. Records available: 1946-49.

Apr. 16, 1946	44.18	Aug. 22, 1947	45.63	Nov. 13, 1948	42.96
June 12	44.54	Apr. 25, 1948	48.86	May 3, 1949	43.09
Aug. 8	43.40	June 10	44.56	July 15	43.74
Apr. 19, 1947	44.27	Aug. 23	45.70	Sept. 23	44.69
June 17	43.42				

112-62-31cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 24 feet. Records available: 1948-49.

July 23, 1948	a 18.30	Feb. 18, 1949	a 15.80	July 15, 1949	14.91
Aug. 7	18.26	Mar. 18	a 15.60	29	14.85
Sept. 5	16.05	Apr. 18	a 15.40	Aug. 18	a 14.95
Oct. 3	a 15.38	May 3	15.39	30	14.58
Nov. 8	a 15.35	18	a 15.40	Sept. 23	14.00
18	a 15.70	June 14	15.03	Oct. 20	a 14.60
Dec. 22	a 15.80	16	a 15.10	Nov. 18	14.28
Jan. 18, 1949	a 15.80	July 1	14.92	Dec. 14	14.02

a By U. S. Bureau of Reclamation.

112-62-34cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 24 feet. Records available: 1948-49.

July 23, 1948	a 9.86	Feb. 18, 1949	a 9.76	July 13, 1949	9.69
Aug. 7	8.81	Mar. 18	a 10.06	29	9.74
Sept. 5	8.40	Apr. 18	a 9.96	Aug. 18	a 10.01
Oct. 3	8.38	May 6	9.89	29	9.87
Nov. 8	a 11.43	18	a 9.96	Sept. 23	9.92
18	a 8.86	June 14	9.64	Oct. 20	a 10.86
Dec. 12	a 9.06	16	a 9.86	Nov. 18	a 10.04
Jan. 18, 1949	a 9.46	July 1	9.60	Dec. 13	9.82

a By U. S. Bureau of Reclamation.

112-53-4aa. L. Parkhurst. Bored domestic and stock well, diameter 18 inches, depth 39.4 feet. Records available: 1946-49.

112-63-4aa--Continued.

Date	Water level	Date	Water level	Date	Water level
Apr. 6, 1946	25.82	June 17, 1947	27.19	Nov. 13, 1948	27.93
June 12	28.01	Aug. 22	30.82	May 3, 1949	27.25
Aug. 8	29.96	Apr. 25, 1948	25.26	July 16	29.53
Nov. 14	26.88	June 10	26.55	Sept. 23	29.67
Apr. 18, 1947	25.85	Aug. 26	28.64		

112-63-24db. C. Dickson. Bored stock well, diameter 18 inches, depth 18 feet. Records available: 1946-49.

Apr. 6, 1946	13.35	Aug. 22, 1947	14.36	Nov. 13, 1948	12.67
June 12	13.45	Apr. 23, 1948	12.54	May 2, 1949	13.10
Aug. 8	13.60	June 18	12.91	July 16	13.30
Apr. 19, 1947	12.93	Aug. 23	13.18	Sept. 23	13.57
June 24	13.21				

112-63-31cc2. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 24 feet. Records available: 1948-49.

July 23, 1948	a 20.97	Feb. 18, 1949	a 12.27	July 13, 1949	10.09
Aug. 7	19.26	Mar. 18	a 12.07	29	10.04
Sept. 5	16.03	Apr. 18	a 11.47	Aug. 18	a 10.27
Oct. 3	14.45	May 6	11.07	29	9.92
Nov. 8	a 9.65	18	a 11.07	Sept. 23	9.94
18	a 13.27	June 14	10.35	Oct. 20	a 10.17
Dec. 22	a 12.77	16	a 10.47	Nov. 18	a 10.00
Jan. 18, 1949	a 12.57	July 1	10.11	Dec. 14	9.91

a By U. S. Bureau of Reclamation.

112-63-33dc. N. A. Nelson. Bored domestic and stock well, diameter 18 inches, depth 40 feet. Records available: 1946-49.

Apr. 6, 1946	30.45	June 24, 1947	29.25	Nov. 13, 1948	19.08
June 12	29.31	Aug. 22	30.57	May 3, 1949	19.59
Aug. 8	30.71	June 18, 1948	21.45	July 15	20.14
Nov. 14	31.30	Aug. 24	26.12	Sept. 23	20.81
Apr. 19, 1947	29.94				

112-63-34cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 23.6 feet. Records available: 1948-49.

July 23, 1948	(f)	Feb. 18, 1949	a 16.70	July 15, 1949	14.84
Aug. 7	(f)	Mar. 18	a 16.40	29	14.70
Sept. 5	a 19.56	Apr. 18	a 16.00	Aug. 18	a 11.60
Oct. 3	19.22	May 3	15.75	29	14.12
Nov. 8	a 18.04	18	a 15.70	Sept. 23	13.84
16	a 17.80	June 14	15.18	Oct. 20	a 14.40
Dec. 22	a 17.40	June 16	15.30	Nov. 18	a 13.95
Jan. 18, 1949	a 17.10	July 1	15.10	Dec. 14	13.51

a By U. S. Bureau of Reclamation.

f Dry

112-63-35dd. F. Houck. Bored domestic and stock well, diameter 18 inches, depth 74 feet. Records available: 1946-49.

Apr. 6, 1946	21.42	June 20, 1947	24.00	Aug. 23, 1948	26.00
June 12	28.05	24	25.81	Nov. 13	24.30
Aug. 8	31.07	Aug. 22	24.69	May 3, 1949	a 38.10
Nov. 14	23.30	Apr. 23, 1948	30.90	July 15	a 38.15
Apr. 19, 1947	24.18	June 18	25.53	Sept. 23	29.85

a Pumping recently.

112-64-1cc. Owner unknown. Unused bored well, diameter 18 inches, depth 25.5 feet. Records available: 1946-49.

Apr. 6, 1946	15.10	June 17, 1947	14.19	Nov. 10, 1948	13.01
June 12	14.53	Aug. 22	13.95	May 3, 1949	14.02
Aug. 8	14.20	Apr. 23, 1948	13.72	July 15	14.08
Nov. 14	14.79	Aug. 24	14.54	Sept. 24	14.35
Apr. 18, 1947	15.61				

112-64-23cc. E. McGillvrey. Bored domestic and stock well, diameter 18 inches, depth 40 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 5, 1946	19.95	June 17, 1947	20.10	Nov. 10, 1948	21.05
June 12	20.99	Aug. 22	22.74	May 3, 1949	20.63
Aug. 8	25.75	Apr. 23, 1948	20.78	July 13	23.27
Nov. 14	21.08	June 18	20.07	Sept. 23	24.28
Apr. 18, 1947	20.51	Aug. 24	20.40		

112-64-31dd. M. M. Chesley. Bored stock well, diameter 20 inches, depth 20 feet. Records available: 1946-49.

Apr. 5, 1946	9.43	June 19, 1947	a 10.94	Nov. 11, 1948	9.84
June 12	9.75	Aug. 22	10.71	May 4, 1949	9.62
Aug. 8	a 12.70	Apr. 23, 1948	9.95	July 13	9.91
Nov. 13	10.40	June 18	10.09	Sept. 24	10.34
Apr. 18, 1947	10.56	Aug. 27	9.93		

a Pumping recently.

112-64-34cc. U. S. Bureau of Reclamation. Drilled observation well, diameter 1½ inches. Records available: 1948-49.

July 23, 1948	a 5.17	Feb. 18, 1949	a 6.47	July 13	6.32
Aug. 7	5.33	Mar. 18	a 5.27	29	6.74
Sept. 5	5.66	Apr. 18	a 3.87	Aug. 18	a 7.20
Oct. 3	6.11	May 6	4.24	29	7.11
Nov. 8	a 4.27	18	a 4.37	Sept. 23	7.25
18	a 6.17	June 14	5.33	Oct. 20	a 6.02
Dec. 2	a 6.27	16	a 5.47	Nov. 18	a 6.97
Jan. 18, 1949	a 6.37	July 1	5.94	Dec. 13	6.85

a By U. S. Bureau of Reclamation.

112-65-1bb. G. Boyd. Dug domestic well, diameter 18 inches, depth 18 feet. Records available: 1946-49.

Apr. 5, 1946	9.10	June 19, 1947	7.89	Nov. 12, 1948	8.95
June 12	8.57	Aug. 22	8.80	May 3, 1949	8.89
Aug. 8	9.84	Apr. 23, 1948	9.13	July 16	9.00
Nov. 14	9.72	Aug. 27	9.07	Sept. 24	9.51
Apr. 18, 1947	9.98				

112-65-9dd. Owner unknown. Unused bored well, diameter 18 inches, depth 42 feet. Records available: 1947-49.

Apr. 18, 1947	27.99	Aug. 27, 1948	28.23	July 16, 1949	27.76
June 19	27.84	Nov. 12	26.99	Sept. 24	27.80
Aug. 22	28.57	May 4, 1949	27.33		

112-65-13bb. State of South Dakota. Unused dug well, diameter 36 inches, depth 40.8 feet. Records available: 1946-49.

Apr. 16, 1946	17.84	June 19, 1947	16.76	May 3, 1949	17.85
June 12	16.93	Aug. 22	18.05	July 16	17.46
Aug. 8	16.45	Aug. 27, 1948	17.98	Sept. 24	17.44
Apr. 18, 1947	17.87	Nov. 12	16.37		

112-65-33dc. Connecticut General Life Insurance Co. Bored domestic and stock well, diameter 12 inches, depth 59 feet. Records available: 1946-49.

Apr. 5, 1946	45.30	June 19, 1947	45.75	Nov. 11, 1948	46.08
June 11	45.20	Aug. 22	46.34	May 4, 1949	45.55
Aug. 8	45.12	Apr. 23, 1948	45.29	July 13	45.00
Nov. 13	44.45	June 18	46.36	Sept. 24	44.91
Apr. 18, 1947	45.66	Aug. 27, 1948	45.45		

113-60-31cc. U. S. Bureau of Reclamation. Drilled observation well, diameter 1½ inches, depth 21 feet. Records available: 1949. Aug. 31, 6.93; Oct. 25, 7.68; Nov. 18, 7.50; Dec. 13, 7.30. (Measurements on Oct. 25 and Nov. 18, by U. S. Bureau of Reclamation.)

113-61-2ba. Owner unknown. Dug stock well, diameter 24 inches, depth 25.5 feet. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
June 24, 1947	4.22	Aug. 26, 1948	5.53	July 13, 1949	7.21
Aug. 22	5.95	Nov. 14	6.82	Sept. 22	7.79
Apr. 26, 1948	3.69	May 2, 1949	7.15		

113-61-32cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 42 feet. Records available: 1949. Dec. 13, 34.48.

113-61-33cc1. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 32 feet. Records available: 1949. Oct. 13, 11.29; Oct. 21, 11.38; Dec. 13, 11.35. (Measurements on Oct. 13 and Oct. 21 made by U. S. Bureau of Reclamation.)

113-61-33cc2. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 52 feet. Records available: 1949. Dec. 13, 14.24.

113-61-34cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 24.5 feet. Records available: 1949. Oct. 13, 13.89; Oct. 21, 14.07; Nov. 18, 13.56; Dec. 13, 14.18. (Measurements on Oct. 21 and Nov. 18 made by U. S. Bureau of Reclamation.)

113-61-34dd. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 43 feet. Records available: 1949. Sept. 28, 29.56; Oct. 21, 28.94; Nov. 18, 28.54; Dec. 13, 28.64. (Measurements on Oct. 21 and Nov. 18 made by U. S. Bureau of Reclamation.)

113-61-36cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 37 feet. Records available: 1949. Sept. 28, 10.15; Nov. 18, 10.06; Dec. 13, 10.60. (Measurements on Sept. 28 and Nov. 18 made by Bureau of Reclamation.)

113-62-2ab. P. S. Waldner. Dug domestic and stock well, diameter 24 inches, depth 32 feet. Records available: 1947-49.

June 24, 1947	13.15	Aug. 26, 1948	8.46	July 13, 1949	1.99
Aug. 22	9.39	Nov. 14	5.52	Sept. 22	1.35
Apr. 26, 1948	1.86	May 3, 1949	1.65		

113-62-31cc2. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches. Records available: 1949. Dec. 14, 9.42.

113-62-31da1. Owner unknown. Bored stock well, diameter 24 inches, depth 60 feet. Records available: 1947-49.

Apr. 19, 1947	37.92	Apr. 26, 1948	36.96	May 6, 1949	36.83
June 17	32.70	Aug. 26	36.11	July 13	36.91
Aug. 20	36.95	Nov. 14	37.07		

113-62-31da2. Owner unknown. Bored stock well, diameter 24 inches, depth 60 feet. Records available: 1949. Sept. 22, 48.04.

113-62-32cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 34.5 feet. Records available: 1949. Oct. 20, 10.09; Nov. 16, 10.56; Dec. 14, 10.63. Measurements on Oct. 20 and Nov. 16 made by U. S. Bureau of Reclamation.

113-62-33cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 33 feet. Records available: 1949. Oct. 20, 19.32; Nov. 18, 19.74; Dec. 14, 20.09. Measurements on Oct. 20 and Nov. 18 made by Bureau of Reclamation.

113-62-34cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 47 feet. Records available: 1949. Dec. 14, 28.14.

113-62-35cc2. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 40 feet. Records available: 1949. Oct. 20, 26.89; Oct. 21, 29.95; Nov. 18, 29.42; Dec. 14, 28.79. Measurements on Oct. 21 and Nov. 18 made by U. S. Bureau of Reclamation.

113-62-36cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 36 feet. Records available: 1949. Oct. 20, 25.25; Oct. 21, 25.59; Nov. 18, 25.30. (Measurements on Oct. 21 and Nov. 18 made by U. S. Bureau of Reclamation.)

113-62-36dcd1. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 12 feet. Records available: 1949. Dec. 14, 9.07.

113-62-36dcd2. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 47 feet. Records available: 1949. Dec. 14, 16.02.

113-63-31cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 24 feet. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
July 23, 1948	a 18.15	Feb. 18, 1949	a 18.95	July 13, 1949	18.41
Aug. 7	17.80	Mar. 18	a 18.85	29	18.46
Sept. 5	17.75	Apr. 18	a 18.45	Aug. 18	a 18.68
Oct. 3	18.12	May 3	18.28	29	18.63
Nov. 8	a 18.18	18	a 18.45	Sept. 23	18.85
18	a 18.65	June 14	18.33	Oct. 20	a 19.40
Dec. 22	a 18.65	16	a 18.45	Nov. 18	a 19.02
Jan. 18, 1949	a 18.95	July 1	18.38	Dec. 14	19.14

a By U. S. Bureau of Reclamation.

113-63-32cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 34 feet. Records available: 1949. Oct. 20, 18.78; Nov. 18, 14.78; Dec. 14, 15.48. (Measurements on Oct. 20 and Nov. 18 made by U. S. Bureau of Reclamation.)

113-63-33cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches. Records available: 1949. Nov. 18, 5.37; Dec. 14, 5.76. (Measurement on Nov. 18 made by U. S. Bureau of Reclamation.)

113-63-34cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 24 feet. Records available: 1948-49.

July 23, 1946	2.44	Feb. 18, 1949	a 3.44	July 16	2.46
Aug. 7	2.24	Mar. 18	a 3.24	29	2.58
Sept. 5	2.76	Apr. 18	a 1.94	Aug. 18	a 2.87
Oct. 3	3.13	May 3	1.97	30	2.71
Nov. 8	a 3.10	18	a 1.84	Sept. 23	2.84
18	a 3.24	June 14	1.83	Nov. 18	a 5.04
Dec. 22	a 3.24	16	a 1.94	Dec. 14	3.34
Jan. 18, 1949	a 3.44	July 1	2.29		

a By U. S. Bureau of Reclamation.

113-63-35cc2. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 30 feet. Records available: 1949. Nov. 18, 7.55; Dec. 14, 7.27. (Measurement on Nov. 18 made by U. S. Bureau of Reclamation.)

113-63-36cc1. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 26 feet. Records available: 1949. Dec. 14, 6.98. (Measurement on Dec. 14 made by U. S. Bureau of Reclamation.)

113-63-36cc2. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 39 feet. Records available: 1949. Oct. 20, 5.55; Nov. 18, 8.42; Dec. 14, 8.78. (Measurements on Oct. 20 and Nov. 18 made by U. S. Bureau of Reclamation.)

113-64-1ba. G. Christiansen. Dug domestic and stock well, diameter 48 inches, depth 15 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 6, 1946	7.90	May 26, 1947	6.95	Nov. 15, 1948	9.12
June 12	8.25	June 17	6.26	May 2, 1949	8.15
Aug. 7	8.21	Aug. 22	7.18	July 13	9.17
Nov. 14	8.47	Apr. 27, 1948	6.56	Sept. 22	10.09
Apr. 19, 1947	7.17	Aug. 26, 1948	8.27		

113-64-5aal. R. A. Rawstern. Dug stock well, diameter 18 inches, depth 40 feet. Records available: 1946-49.

Apr. 9, 1946	14.06	Apr. 19, 1947	15.22	Aug. 26, 1948	21.60
June 12	14.02	June 17	12.19	Nov. 15	11.90
Aug. 6	14.43	Aug. 22	19.23	May 2, 1949	20.50
Nov. 14	13.40	Apr. 27, 1948	14.11	July 14	13.02

a Pumping recently.

113-64-5aa2. R. A. Rawstern. Unused dug well, diameter 24 inches, depth 27.1 feet. Records available: 1947-49.

Apr. 19, 1947	10.51	Apr. 27, 1948	8.67	May 2, 1949	7.07
June 17	10.45	Aug. 26	7.86	July 14	9.60
Aug. 22	10.10	Nov. 15	8.54	Sept. 22	11.05

113-64-23bcl. Postmaster, Bonilla. Unused dug well, diameter 12 inches, depth 10.4 feet. Records available: 1946-49.

Apr. 6, 1946	1.40	June 17, 1947	5.63	Nov. 13, 1948	5.58
June 12	4.97	Aug. 22	8.14	May 3, 1949	4.51
Aug. 8	6.75	Apr. 27, 1948	1.76	July 13	7.26
Nov. 14	4.24	Aug. 24	3.99	Sept. 22	9.51
Apr. 19, 1947	1.94				

113-64-3lcc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{2}$ inches, depth 24 feet. Records available: 1948-49.

July 23, 1948	a 3.77	Feb. 21, 1949	a 3.47	July 16	3.24
Aug. 7	2.57	Mar. 18	a 3.47	29	3.38
Sept. 5	2.78	Apr. 18	a 3.27	Aug. 18	a 3.64
Oct. 3	3.12	May 3	3.24	30	3.63
Nov. 8	a 2.91	18	a 3.37	Sept. 24	3.72
18	a 2.77	June 14	3.30	Oct. 20	a 4.11
Dec. 22	a 3.07	16	a 3.36	Nov. 18	a 3.97
Jan. 27, 1949	a 3.17	July 1	3.36	Dec. 14	4.19

a By U. S. Bureau of Reclamation.

113-64-32cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{2}$ inches, depth unknown. Records available: 1949. Oct. 20, 7.49; Nov. 18, 7.39; Dec. 14, 7.84. (Measurements on Oct. 20 and Nov. 18 made by Bureau of Reclamation.)

113-64-33cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{2}$ inches, depth 41 feet. Records available: 1949. Oct. 20, 9.89; Nov. 18, 10.01; Dec. 14, 10.42. (Measurements on Oct. 20 and Nov. 18 made by U. S. Bureau of Reclamation.)

113-64-34cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{2}$ inches, depth 24 feet. Records available: 1948-49.

July 24, 1948	17.54	Feb. 21, 1949	a 10.54	July 16, 1949	5.48
Aug. 7	15.36	Mar. 18	a 10.04	29	5.65
Sept. 5	13.88	Apr. 18	a 9.04	Aug. 18	a 6.12
Oct. 3	12.48	May 3	7.00	30	6.14
Nov. 8	a 11.29	18	a 5.64	Sept. 24	6.53
18	a 11.24	June 14	5.39	Oct. 20	a 7.18
Dec. 22	a 10.94	16	a 5.64	Nov. 18	a 7.49
Jan. 27, 1949	a 10.74	July 1	5.43	Dec. 14	8.06

a By U. S. Bureau of Reclamation.

113-64-35cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 33 feet. Records available: 1949. Oct. 20, 14.67; Nov. 18, 14.72; Dec. 14, 15.14. (Measurements on Oct. 20 and Nov. 18 made by U. S. Bureau of Reclamation.)

113-64-36cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 41 feet. Records available: 1949. Oct. 20, 23.42; Nov. 18, 17.50; Dec. 14, 15.20. (Measurements on Oct. 20 and Nov. 18 made by U. S. Bureau of Reclamation.)

113-65-2bb. F. Schroeder. Bored domestic and stock well, diameter 18 inches, depth 43 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 9, 1946	19.85	May 26, 1947	18.20	Nov. 15, 1948	17.39
June 12	24.12	June 17	20.20	May 2, 1949	16.60
Aug. 7	16.00	Aug. 22	a 28.92	July 14	16.56
Nov. 14	23.28	Apr. 27, 1948	19.63	Sept. 22	20.95
Apr. 19, 1947	22.35	Aug. 26	16.35		

a Pumping recently.

113-65-31cc1. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 24 feet. Records available: 1948-49.

July 23, 1948	a 20.06	Feb. 21, 1949	a 12.76	July 13, 1949	11.12
Aug. 7	18.26	Mar. 18	a 12.46	29	11.10
Sept. 5	16.52	Apr. 18	a 11.96	Aug. 18	a 11.31
Oct. 3	15.18	May 3	11.55	30	11.08
Nov. 8	a 14.12	18	a 11.66	Sept. 24	11.16
18	a 13.86	June 14	11.29	Oct. 20	a 11.76
Dec. 22	a 13.46	June 16	a 11.36	Nov. 18	a 11.86
Jan. 27, 1949	a 13.16	July 1	11.18	Dec. 14	12.14

a By U. S. Bureau of Reclamation.

113-65-32cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 39 feet. Records available: 1949. Oct. 20, 24.00; Nov. 18, 18.60; Dec. 14, 16.36. (Measurements on Oct. 20 and Nov. 18 made by U. S. Bureau of Reclamation.)

113-65-33cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 35 feet. Records available: 1949. Oct. 20, 21.86; Nov. 18, 21.78; Dec. 14, 22.31. (Measurements on Oct. 20 and Nov. 18 made by U. S. Bureau of Reclamation.)

113-65-34cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 24 feet. Records available: 1949.

July 23, 1948	a 10.17	Apr. 18, 1949	a 8.77	July 29, 1949	8.97
Aug. 7	9.34	May 3	8.81	Aug. 18	a 9.17
Sept. 5	9.29	18	a 8.97	29	9.17
Nov. 18	a 9.17	June 14	8.81	Sept. 23	9.37
Dec. 22	a 9.07	16	a 8.87	Oct. 20	a 10.09
Jan. 27, 1949	a 8.87	July 1	8.71	Nov. 18	a 10.11
Feb. 21	a 9.07	13	8.84	Dec. 13	10.02
Mar. 24	a 8.97				

a By U. S. Bureau of Reclamation.

113-65-34cd. Owner unknown. Unused dug well, diameter 24 inches, depth 12 feet. Records available: 1947-49.

Apr. 18, 1947	4.48	Apr. 27, 1948	3.56	May 3, 1949	5.05
June 19	4.80	Aug. 27	5.58	July 13	5.48
Aug. 22	5.36	Nov. 15	4.99	Sept. 24	5.72

113-65-35cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 33 feet. Records available: 1949. Oct. 20, 18.77; Nov. 18, 18.70; Dec. 14, 18.80. (Measurements on Oct. 20 and Nov. 18 made by Bureau of Reclamation.)

113-65-36cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 10 feet. Records available: 1949. Oct. 20, 7.97; Nov. 18, 7.97; Dec. 14, dry. (Measurements on Oct. 20 and Nov. 18 made by U. S. Bureau of Reclamation.)

121-64-33dd. U. S. Bureau of Reclamation. Bored observation well, diameter $1\frac{1}{4}$ inches, depth 24 feet. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
July 28, 1948	a 8.70	Apr. 1, 1949	a 9.70	Aug. 2, 1949	11.70
Aug. 26	a 9.30	May 5	a 9.40	Aug. 30	15.46
Sept. 28	a 20.80	June 2	a 6.90	Sept. 2	a 15.60
Oct. 28	a 20.90	15	7.58	19	16.65
Dec. 2	a 20.90	July 1	9.50	Oct. 3	a 15.60
Jan. 11, 1949	a 17.30	2	a 9.57	Nov. 1	a 15.60
Feb. 3	a 15.90	11	10.04	Dec. 1	a 16.30
Mar. 1	a 17.40	30	11.10	28	18.05

a By Bureau of Reclamation.

121-65-36dc. Owner unknown. Dug stock well, diameter 36 inches, depth 14.2 feet. Records available: 1946-49.

Apr. 12, 1946	4.62	June 24, 1947	5.04	Apr. 29, 1949	4.90
June 17	5.55	Aug. 25	6.74	July 11	a 9.28
Aug. 5	7.50	Apr. 29, 1948	5.16	28	8.89
Nov. 16	4.84	June 24	5.68	Sept. 30	a 6.95
Apr. 22, 1947	4.41	Nov. 20	5.41		

a Pumping recently.

122-65-33cc. C. Walter. Dug domestic and stock well, diameter 48 inches, depth 27 feet. Records available: 1946-49.

Apr. 12, 1946	9.60	Aug. 25, 1947	9.55	Apr. 29, 1949	a 13.51
June 17	10.15	Apr. 29, 1948	9.08	July 11	10.44
Aug. 5	10.35	Aug. 24	9.44	26	11.69
Apr. 22, 1947	9.74	Nov. 20	10.01	Sept. 30	10.31
June 24	9.13				

a Pumping recently.

123-64-22ad. G. Reitz. Unused dug well, diameter 60 inches, depth 15 feet. Records available: 1946-49.

Nov. 16, 1946	7.33	May 3, 1948	8.62	Feb. 23, 1949	10.16
Mar. 12, 1947	9.05	24	8.94	Mar. 16	10.39
June 24	7.40	June 26	9.30	Apr. 21	9.73
Aug. 5	7.97	July 8, 1948	8.59	29	9.61
25	8.48	29	8.73	May 31	8.92
Oct. 21	8.22	Aug. 17	8.70	June 27	9.25
Nov. 10	7.56	24	8.91	July 11	9.72
Jan. 14, 1948	10.25	Sept. 9	8.20	19	9.85
Feb. 12	10.22	Oct. 20	9.88	Sept. 1	10.68
Mar. 11	10.11	Nov. 20	9.69	22	10.88
30	8.75	24	9.59	30	10.89
Apr. 4	8.68	Dec. 23	9.93	Oct. 6	10.97
29	6.13	Jan. 25, 1949	10.18	Nov. 25	10.76

128-60-22. C. Clark. Unused dug and driven well, diameter 36 inches, depth 7.45 feet. Records available: 1946-49.

Aug. 28, 1946	6.85	May 24, 1948	6.42	Apr. 27, 1949	7.52
May 7, 1947	5.25	Aug. 5	7.18	July 7	(a)
Oct. 14	(a)	Oct. 12	9.80	Oct. 4	(a)

a Dry.

Charles Mix County

96-65-4dd. Amundsen. Unused bored well, diameter 18 inches. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Nov. 18, 1946	11.69	Dec. 4, 1947	13.03	Feb. 25, 1949	13.99
Feb. 11, 1947	11.28	Jan. 20, 1948	13.08	Mar. 22	13.83
Mar. 14	11.30	May 4	13.27	Apr. 25	14.02
Apr. 9	11.34	May 25	13.34	May 25	12.32
May 10	10.66	July 7	13.17	July 25	11.79
July 30	10.93	Aug. 25	13.63	Sept. 27	13.73
Sept. 3	12.04	Oct. 5	14.27	Nov. 4	5.90
Oct. 1	12.65	Nov. 29	14.10	30	4.45
21	11.11	Dec. 27	14.09		

Codington County

117-52-5bb. Desmond. Unused dug well, diameter 36 inches, depth 12 feet. Records available: 1946-49.

Nov. 16, 1946	4.97	Mar. 10, 1948	5.60	Dec. 22, 1948	6.07
Feb. 10, 1947	4.30	31	3.85	Jan. 24, 1949	6.42
Mar. 11	5.44	Apr. 13	4.05	Feb. 21	6.45
Apr. 10	2.25	May 4	3.84	Mar. 15	5.98
May 14	3.86	May 26	5.38	June 1	5.86
June 4	3.70	June 26	5.50	29	5.60
25	4.84	July 9, 1948	5.57	July 30	6.59
Aug. 5	6.00	Aug. 19	4.00	Aug. 31	6.73
Oct. 20	5.80	Sept. 9	3.98	Sept. 21	6.61
Nov. 20	6.19	Oct. 20	5.89	Oct. 5	6.77
Jan. 13, 1948	6.34	Nov. 2	5.69	Nov. 25	6.60
Feb. 13	6.55	28	5.68	Dec. 8	4.77

Corson County

A 19-26-2ba. Owner unknown. Unused dug well, diameter 48 inches, depth 32.2 feet. Records available: 1946-49.

Oct. 25, 1946	25.63	Oct. 16, 1947	24.21	Oct. 8, 1948	25.77
May 13, 1947	25.85	May 11, 1948	23.17	Apr. 18, 1949	24.00
July 17	24.06	Aug. 4	24.02	Dec. 9	25.15

A 19-29-10bc. Owner unknown. Dug domestic well, diameter 48 inches, depth 6.6 feet. Records available: 1946-49.

Nov. 6, 1946	5.02	Oct. 16, 1947	5.06	Aug. 8, 1948	5.48
May 12, 1947	5.35	May 11, 1948	5.01	Apr. 18, 1949	4.85
July 15	5.12	Aug. 4	5.09	Dec. 9	5.06

A 20-18-1dcl. Charles Sands. Unused dug well, diameter 36 inches, depth 34 feet. Records available: 1946-49.

Sept. 27, 1946	23.45	Oct. 16, 1947	23.18	Oct. 7, 1948	22.96
May 14, 1947	23.59	May 12, 1948	22.87	Apr. 19, 1949	23.15
July 16	23.15	Aug. 5	22.92	Dec. 8	23.32

A-20-18-4bc. R. Montgomery. Unused dug well, diameter 48 inches, depth 32.1 feet. Records available: 1946-49.

Sept. 30, 1946	28.28	May 12, 1948	27.34	Oct. 7, 1948	26.96
May 14, 1947	28.74	Aug. 5	27.29	Apr. 19, 1949	27.20
July 16	28.38	11	27.14	Dec. 8	a 27.21
Oct. 16	28.13				

a Top of ice.

A 20-18-12ab. Owner unknown. Unused dug well, diameter 36 inches, depth 25.0 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Sept. 27, 1943	19.45	Oct. 16, 1947	18.31	Oct. 7, 1948	18.74
May 14, 1947	19.17	May 12, 1948	18.60	Apr. 19, 1949	18.78
July 16	18.24	Aug. 5	18.61	Dec. 8	19.59

A20-18-14aa1. Owner unknown. Unused dug well, diameter 36 inches, depth 36 feet. Records available: 1946-49.

Sept. 27, 1946	31.43	Oct. 16, 1947	28.55	Oct. 7, 1948	29.11
May 14, 1947	29.96	May 12, 1948	29.00	Apr. 19, 1949	27.85
July 16	29.49	Aug. 5	28.86	Dec. 8	29.89

A 20-18-24bb1. H. Lyman. Unused dug well, diameter 36 inches, depth 20.7 feet. Records available: 1946-49.

Sept. 27, 1946	15.90	May 12, 1948	14.94	Apr. 19, 1949	14.46
May 14, 1947	14.72	Aug. 11	15.86	Dec. 8	16.45
July 6	14.56	Oct. 7	16.20		

A 20-19-18ba. Owner unknown. Unused drilled well, diameter 4 inches, depth 32.0 feet. Records available: 1946-49.

Sept. 27, 1946	5.75	Oct. 16, 1947	5.56	Oct. 7, 1948	6.34
May 14, 1947	5.62	May 12, 1948	5.19	Apr. 19, 1949	5.55
July 16	5.47	Aug. 5	6.12		

A 20-21-16aa. Owner unknown. Dug domestic well, diameter 36 inches, depth 24.4 feet. Records available: 1946-49.

June 21, 1946	13.63	July 16, 1947	12.27	Oct. 8, 1948	13.40
Oct. 17	13.38	May 12, 1948	13.65	Apr. 19, 1949	13.85
May 13, 1947	13.19	Aug. 5	13.38	Dec. 9	13.69

A 20-26-34dc. Mrs. Agnes V. Center. Unused dug well, diameter 43 inches, depth 16.4 feet. Records available: 1946-49.

Apr. 30, 1946	13.36	July 17, 1947	10.42	Oct. 8, 1948	11.68
Oct. 25	13.52	May 11, 1948	10.68	Apr. 18, 1949	11.35
May 13, 1947	10.89	Aug. 4	11.20	Dec. 9	11.72

A-20-28-35bd. J. Corken. Dug domestic well, diameter 24 inches, depth 19 feet. Records available: 1946-49.

Nov. 1, 1946	13.85	Feb. 3, 1948	13.50	Mar. 10, 1949	13.55
Feb. 27, 1947	12.98	26	12.58	21	13.00
Apr. 16	13.24	May 20	12.25	May 23	14.02
May 6	11.95	June 28	12.88	June 21	14.49
27	12.76	July 22	13.57	July 12	(a)
June 17	12.47	Aug. 12	13.48	Aug. 2	(a)
July 7	11.61	Sept. 1	(a)	23	(a)
Aug. 19	14.65	21	(a)	Sept. 13	(a)
Sept. 8	(a)	Oct. 19	(a)	Oct. 4	(a)
Oct. 16	(a)	Nov. 18	(a)		

a Dry.

A 20-28-11cb. Owner unknown. Unused bored well, diameter 18 inches, depth 38.5 feet. Records available: 1946-49.

Nov. 1, 1946	29.80	Oct. 16, 1947	29.47	Oct. 8, 1948	29.71
May 12, 1947	29.49	May 11, 1948	29.12	Apr. 18, 1949	28.82
July 17	29.32	Aug. 4	29.24	Dec. 9	29.83

A 21-18-34dd. Owner unknown. Unused dug well, diameter 60 inches, depth 37 feet. Records available: 1946-49.

Sept. 30, 1946	32.68	Oct. 16, 1947	32.52	Oct. 7, 1948	31.47
May 14, 1947	32.56	May 12, 1948	31.62	Apr. 19, 1949	31.22
July 16	32.46	Aug. 5	31.66	Dec. 8	31.36

A 21-23-34db. Owner unknown. Unused dug well, diameter 24 inches, depth 32.5 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Oct. 22, 1946	15.20	Oct. 16, 1947	14.88	Oct. 8, 1948	15.66
May 13, 1947	14.77	May 11, 1948	15.20	Apr. 18, 1949	15.46
July 15	14.79	Aug. 4	15.41	Dec. 9	15.62

A 21-23-36cb. John R. Shamble. Dug domestic well, diameter 24 inches, depth 18.9 feet. Records available: 1946-49.

June 19, 1946	13.60	Oct. 16, 1947	13.52	Oct. 18, 1948	14.16
Oct. 22, 1946	13.85	May 11, 1948	13.62	Apr. 18, 1949	13.74
May 13, 1947	13.14	Aug. 4	13.96	Dec. 9	13.78
July 15	13.24				

A 21-24-23ad. Leo Shooter. Unused dug well, diameter 48 inches, depth 30.0 feet. Records available: 1946-49.

Oct. 23, 1946	17.74	Oct. 16, 1947	17.11	Oct. 8, 1948	18.13
May 13, 1947	16.59	May 11, 1948	16.86	Apr. 18, 1949	16.83
July 15	16.59	Aug. 4	17.45	Dec. 9	17.98

A 21-24-24ca. Village of Bull Head. Dug domestic well, diameter 36 inches, depth 25.8 feet. Records available: 1946-49.

Apr. 30, 1946	22.71	Oct. 16, 1947	22.45	Oct. 8, 1948	23.49
Oct. 23	22.75	May 11, 1948	21.90	Apr. 18, 1949	22.17
May 13, 1947	21.79	Aug. 4	22.58	Dec. 9	25.74
July 15	22.38				

A 21-24-25aa. Owner unknown. Unused dug well, diameter 48 inches, depth 15.9 feet. Records available: 1946-49.

Apr. 30, 1946	15.25	Oct. 16, 1947	14.38	Oct. 8, 1948	15.54
Oct. 23	15.58	May 11, 1948	14.50	Apr. 18, 1949	13.61
July 15, 1947	14.24	Aug. 4	15.07	Dec. 9	15.59

Custer County

D-6-8-13aad. W. Sneider. Unused dug well, diameter 60 inches, depth 17.5 feet. Records available: 1946-49.

Apr. 23, 1946	15.75	Mar. 31, 1947	15.88	July 29, 1948	15.65
June 4	15.74	May 1	15.89	Sept. 14	15.66
Aug. 9	13.85	June 5	15.88	Dec. 8	15.83
Sept. 5	15.88	July 2	15.88	June 28, 1949	15.57
Oct. 1	15.86	Aug. 5	15.47	Aug. 10	15.68
29	15.88	Dec. 10	14.60	Sept. 26	15.80
Nov. 29	15.89	Mar. 31, 1948	14.55	Oct. 15	15.87
Jan. 6, 1947	15.89	Apr. 29	15.52	Nov. 28	15.81
31	16.27	May 27	15.52	Dec. 29	15.78
Feb. 27	15.48	July 2	16.20		

D-6-8-24ddc. E. Mohler. Dug domestic and stock well, diameter 48 inches, depth 41 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 23, 1946	37.22	Feb. 27, 1947	37.22	July 2, 1948	38.00
June 5	37.24	Mar. 31	37.24	28	37.20
Aug. 9	37.33	May 1	37.26	Sept. 14	37.10
Sept. 5	37.24	June 4	37.26	Dec. 8	37.10
Oct. 1	37.28	July 2	37.20	Aug. 10, 1949	37.23
29	37.26	Dec. 10	39.60	Sept. 26	37.24
Nov. 29	37.22	Mar. 3, 1948	37.07	Oct. 15	37.23
Jan. 6, 1947	37.25	Apr. 29	37.07	Nov. 28	37.13
31	37.20	May 27	37.10	Dec. 29	37.09

D-6-8-25dab. H. W. Mohler. Dug domestic and stock well, diameter 48 inches. Records available: 1946-49.

Apr. 23, 1946	33.22	Mar. 31, 1947	33.09	July 29, 1948	32.58
June 5	32.90	May 1	33.01	Sept. 14	33.28
Oct. 1	32.39	July 2	32.12	June 28, 1949	32.35
29	33.31	Mar. 31, 1948	32.15	Aug. 10	32.64
Nov. 29	33.04	Apr. 29	32.55	Sept. 26	32.58
Jan. 6, 1947	32.96	May 27	32.42	Oct. 10	32.67
31	32.91	July 2	33.00	Dec. 29	32.62
Feb. 27	33.09				

D-6-8-26aac. Owner unknown. Unused dug well, diameter 48 inches, depth 28.0 feet. Records available: 1946-49.

Apr. 23, 1946	36.32	Mar. 28, 1947	36.82	July 29, 1948	33.97
June 5	36.64	May 1	36.44	Sept. 14	33.82
Aug. 9	36.63	June 4	36.46	Dec. 8	33.70
Sept. 5	37.48	July 2	31.41	June 28, 1949	32.80
Oct. 1	36.80	Aug. 5	33.43	Aug. 10	32.36
29	36.48	Dec. 10	34.70	Sept. 26	31.50
Nov. 29	36.74	Mar. 31, 1948	34.20	Oct. 15	31.91
Jan. 6, 1947	36.45	Apr. 29	34.07	Nov. 28	31.89
31	36.47	May 27	34.04	Dec. 29	31.77
Feb. 27	36.55	July 2	35.70		

D-6-8-8ccb. Owner unknown. Unused dug well, diameter 60 inches, depth 39.0 feet. Records available: 1946-49.

Apr. 23, 1946	35.10	Mar. 31, 1947	35.24	July 29, 1948	35.10
June 4	35.11	May 1	35.24	Sept. 14	35.11
Aug. 8	35.15	June 5	35.26	Dec. 8	35.07
Sept. 5	35.16	July 2	35.26	June 28, 1949	35.06
Oct. 1	35.16	Aug. 5	35.27	Aug. 10	35.21
29	35.18	Dec. 10	35.19	Sept. 26	35.23
Nov. 29	35.20	Mar. 31, 1948	35.12	Oct. 15	35.21
Jan. 6, 1947	35.19	Apr. 29	35.10	Nov. 28	35.24
31	35.21	May 27	35.15	Dec. 29	35.17
Feb. 27	35.22	July 2	35.90		

D-6-9-8dcc2. Owner unknown. Unused dug well, diameter 48 inches, depth 21 feet. Records available: 1946-49.

Sept. 10, 1946	17.75	July 2, 1947	17.78	Sept. 14, 1948	16.47
Oct. 29	17.77	Aug. 5	17.07	Dec. 8	16.48
Nov. 29	17.80	Dec. 10	16.33	June 28, 1949	16.48
Jan. 6, 1947	17.79	Mar. 31, 1948	16.40	Aug. 10	16.47
31	17.84	Apr. 29	16.36	Sept. 26	16.47
Feb. 27	17.84	May 27	16.43	Oct. 15	16.49
Mar. 31	17.91	July 2	17.70	Nov. 28	16.68
May 1	17.93	29	16.40	Dec. 29	16.50
June 5	17.95				

D-6-9-18acc2. Owner unknown. Unused dug well, diameter 60 inches. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Aug. 21, 1946	8.48	July 2, 1947	5.88	Sept. 14, 1948	8.05
Oct. 1	8.31	Aug. 5	6.92	Dec. 8	7.81
29	8.21	Dec. 10	6.43	June 28, 1949	7.96
Nov. 29	8.22	Mar. 31, 1948	7.61	Aug. 10	8.19
Jan. 6, 1947	8.19	Apr. 29	7.62	Sept. 26	8.09
31	8.18	May 27	7.73	Oct. 15	8.13
Mar. 31	7.48	July 2	8.60	Nov. 28	7.96
May 1	8.25	29	7.78	Dec. 29	7.89
June 5	8.31				

D-6-9-18dcc2. L. J. Berfiend. Dug domestic and stock well, diameter 48 inches, depth 37.3 feet. Records available: 1946-49.

Apr. 23, 1946	32.50	Feb. 27, 1947	32.46	Mar. 31, 1948	31.92
June 4	32.44	Mar. 28	32.47	Apr. 29	31.93
Aug. 9	32.55	May 1	32.61	May 27	31.99
Sept. 5	32.48	June 5	32.48	Aug. 10, 1949	31.57
Oct. 1	32.45	July 2	32.46	Sept. 26	31.62
29	32.46	Aug. 5	32.32	Oct. 15	31.61
Nov. 29	32.47	Dec. 10	32.02	Nov. 28	31.59
Jan. 6, 1947	32.46	Feb. 20, 1948	32.57	Dec. 29	31.48
31	32.52				

D-6-9-19bda. Owner unknown. Dug domestic well, diameter 48 inches, depth 32 feet. Records available: 1946-49.

Aug. 21, 1946	32.79	June 5, 1947	32.45	July 29, 1948	31.68
Sept. 30	32.82	July 2	33.07	Sept. 14	31.73
Oct. 29	32.97	Aug. 5	32.79	Dec. 8	32.03
Nov. 29	33.51	Dec. 10	32.16	June 28, 1949	31.46
Jan. 6, 1947	33.54	Feb. 20, 1948	31.92	Aug. 10	31.91
31	33.57	Mar. 31	31.99	Sept. 26	31.76
Feb. 28	34.43	Apr. 29	31.80	Oct. 15	31.81
Mar. 31	34.28	May 27	31.76	Nov. 28	30.70
May 1	34.70	July 2	33.50	Dec. 29	30.84

D-6-9-20bcd. Owner unknown. Unused dug well, diameter 42 inches, depth 12 feet. Records available: 1946-49.

Sept. 10, 1946	10.27	July 2, 1947	10.10	Sept. 14, 1948	9.31
Oct. 1	10.51	Aug. 5	9.14	Dec. 8	9.36
29	10.55	Dec. 10	9.20	June 28, 1949	9.58
Nov. 29	10.64	Mar. 31, 1948	9.39	Aug. 10	9.64
Jan. 6, 1947	10.65	Apr. 29	9.40	Sept. 26	9.70
Feb. 27	10.72	May 27	9.42	Oct. 15	9.71
Mar. 28	10.81	July 2	9.80	Nov. 28	9.79
May 1	10.87	29	9.28	Dec. 29	9.82
June 5	10.80				

Davison County

103-60-19dc. Wilson. Dug well, diameter 24 inches, depth 7 feet. Records available: 1946-49.

Nov. 18, 1946	2.44	Oct. 21, 1947	1.94	Sept. 7, 1948	4.85
Feb. 14, 1947	3.31	Dec. 2	6.55	Oct. 14	5.68
Mar. 10	3.00	Jan. 5, 1948	6.64	Dec. 13	5.38
Apr. 11	.01	Mar. 4	6.32	Apr. 28, 1949	5.47
May 9	1.24	29	1.28	June 8	.69
20	.62	May 7	1.17	Aug. 2	(a)
Aug. 3	4.30	27	2.91	Sept. 2	(a)
Sept. 7	6.58	July 15	3.56	29	(a)
Oct. 14	(a)	Aug. 10	2.45		

a Dry.

104-60-30cd. Owner unknown. Bored domestic well, diameter 18 inches, depth 30 feet. Records available: 1946-47, 1949. Measurements discontinued after Sept. 29.

Date	Water level	Date	Water level	Date	Water level
Oct. 28, 1946	a 7.32	May 8, 1949	6.90	Sept. 29	7.55
June 5, 1949	a 6.11	July 14	7.21		

a By State Geological Survey.

104-60-31aa. Owner unknown. Bored well, diameter 24 inches, depth 25 feet. Records available: 1946-47, 1949.

Oct. 28, 1946	a 3.74	Oct. 9, 1947	a 5.75	June 14, 1949	4.45
Mar. 14, 1947	a 4.45	May 8, 1949	1.78	Sept. 29	5.22
June 5, 1947	a 3.24				

a By State Geological Survey.

104-61-24cc2. Owner unknown. Bored well, diameter 24 inches, depth 7.3 feet. Records available: 1949. May 8, 4.40; June 14, 5.40; Sept. 29, 7.20.

104-62-4dd. Mrs. Martin Tyffy. Bored well, diameter 8 inches, depth 60 feet. Records available: 1946-47, 1949.

Oct. 28, 1946	a 8.58	Oct. 8, 1947	a 7.99	July 14, 1949	7.21
Mar. 16, 1947	a 7.68	May 8, 1949	6.90	Sept. 29	7.55
June 6	a 7.48				

a By State Geological Survey.

Dewey County

A-14-23-24aa. Owner unknown. Unused drilled well, diameter 6 inches, depth 25 feet. Records available: 1946-49.

Oct. 31, 1946	16.97	Jan. 21, 1948	17.53	Dec. 15, 1948	17.70
Feb. 25, 1947	16.18	Feb. 26	16.99	Mar. 9, 1949	15.26
Apr. 16	15.34	Apr. 14	16.78	May 26	16.17
May 5	15.83	May 4	15.54	June 20	16.96
28	16.64	20	16.03	July 14	16.90
June 18	15.73	July 1	16.42	Aug. 3	(a)
July 8	16.31	20	15.57	24	(a)
Aug. 20	18.10	Aug. 31	17.90	Sept. 13	(a)
Sept. 9	18.58	Sept. 20	17.26	Oct. 4	(a)
30	18.70	Oct. 20	17.92	26	(a)
Oct. 28	17.45	Nov. 18	17.05	Nov. 17	(a)
Dec. 10	17.11				

a Dry.

Edmonds County

121-66-10cb. G. Price. Dug stock well, diameter 36 inches, depth 10.8 feet. Records available: 1946-49.

Apr. 12, 1946	6.15	June 24, 1947	5.76	Nov. 20, 1948	7.01
June 17	6.30	Aug. 25	6.18	Apr. 29, 1949	6.44
Aug. 5	6.55	Apr. 29, 1948	5.60	July 11	7.12
Nov. 16	6.87	Aug. 24	5.79	Sept. 30	7.40
Apr. 22, 1947	6.28				

a Pumping recently.

121-66-4aa. Owner unknown. Dug stock well, diameter 48 inches, depth 27.2 feet. Records available: 1946-49.

Apr. 12, 1946	11.13	June 24, 1947	7.09	Nov. 20, 1948	10.43
June 17	9.99	Aug. 25	8.16	Apr. 29, 1949	11.13
Aug. 5	13.10	Apr. 29, 1948	9.04	July 11	11.56
Nov. 16	9.72	Aug. 24	9.78	Sept. 30	12.74
Apr. 22, 1947	9.84				

Fall River County

D-7-7-25ccc. Owner unknown. Unused dug well, diameter 48 inches, depth 13 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
April 19, 1946	11.63	Mar. 28, 1947	11.34	July 2, 1948	11.60
June 3	11.04	Apr. 29	11.17	28	10.32
Aug. 8	11.25	June 4	11.25	Sept. 15	10.38
Sept. 4	11.31	July 1	10.54	Dec. 22	10.45
Oct. 2	11.30	Aug. 4	10.53	July 2, 1949	10.38
Nov. 1	11.27	Oct. 25	10.89	Aug. 10	10.54
29	11.28	Dec. 16	10.74	Sept. 26	10.62
Jan. 3, 1947	11.38	Mar. 31, 1948	10.73	Oct. 15	10.64
30	11.29	Apr. 29	10.76	Nov. 28	10.47
Feb. 27	11.32	May 27	10.79	Dec. 29	10.38

D-7-7-27bab. C. Fleming. Unused dug well, diameter 48 inches, depth 21.7 feet. Records available: 1946-49.

Aug. 16, 1946	18.66	July 1, 1947	18.45	July 28, 1948	18.26
Oct. 2	18.70	Aug. 4	18.78	Sept. 16	18.24
Nov. 1	18.73	Oct. 25	18.28	Dec. 22	18.00
Dec. 2	18.86	Dec. 16	18.53	July 2, 1949	17.86
Jan. 3, 1947	19.01	Feb. 16, 1948	18.32	Aug. 10	18.10
30	18.76	Mar. 31	18.26	Sept. 26	18.12
Feb. 27	18.79	Apr. 29	18.23	Oct. 15	18.08
Mar. 28	18.85	May 27	18.30	Nov. 28	18.18
Apr. 29	18.39	July 2	19.40	Dec. 29	17.92
June 4	18.81				

D-7-7-34aba. C. E. Chamberlain. Dug irrigation well, diameter 24 inches, depth 23.7 feet. Records available: 1946-49.

Apr. 22, 1946	19.55	Mar. 28, 1947	19.86	July 28, 1948	17.08
June 3	17.34	Apr. 29	20.02	Sept. 16	18.89
Aug. 8	18.59	June 4	19.60	Dec. 22	19.36
Sept. 4	20.19	July 1	15.85	July 2, 1949	17.67
Oct. 2	21.23	Aug. 4	15.46	Aug. 10	17.83
Nov. 1	20.97	Oct. 25	20.67	Sept. 26	17.91
Dec. 2	20.18	Dec. 16	20.55	Oct. 15	17.89
Jan. 3, 1947	20.29	May 27, 1948	17.80	Nov. 28	18.01
30	19.30	July 2	19.80	Dec. 29	18.27
Feb. 27	20.38				

D-7-7-35baa. A. W. Gamet. Dug stock well, diameter 36 inches, depth 31.7 feet. Records available: 1946-49.

Aug. 16, 1946	28.27	June 4, 1947	28.35	July 2, 1948	29.00
Sept. 4	28.28	July 1	28.29	28	28.09
Oct. 2	28.27	Aug. 4	28.24	Sept. 15	27.99
Nov. 1	28.28	Oct. 5	28.22	July 2, 1949	27.57
29	28.28	Dec. 16	28.13	Aug. 10	27.86
Jan. 3, 1947	28.57	Feb. 20, 1948	28.25	Sept. 26	27.82
30	28.30	Mar. 31	28.21	Oct. 5	27.91
Feb. 27	28.43	Apr. 29	28.18	Nov. 28	27.13
Mar. 28	28.33	May 27	28.16	Dec. 29	27.38
Apr. 29	28.35				

D-7-8-10cba. D. Moiser. Dug domestic well, diameter 36 inches, depth 16.1 feet. Records available: 1946-49.

Aug. 19, 1946	12.80	July 2, 1947	12.45	July 28, 1948	13.44
Sent. 30	15.16	Aug. 4	13.12	Sept. 13	13.81
Nov. 1	14.06	Oct. 25	13.05	Dec. 9	13.51
29	14.00	Dec. 16	12.84	July 2, 1949	13.62
Jan. 3, 1947	13.96	Feb. 20, 1948	13.00	Aug. 10	14.04
30	13.94	Mar. 31	12.76	Sept. 26	14.09
Feb. 27	13.91	Apr. 29	12.82	Oct. 15	14.14
Mar. 23	13.93	May 27	13.01	Nov. 28	14.16
Apr. 29	13.96	July 2	13.40	Dec. 29	14.21
June 4	14.08				

D-7-8-11cdd. W. Gamet. Dug domestic and stock well, diameter 48 inches, depth 38 feet. Records available: 1946-49.

Apr. 19, 1946	34.27	Mar. 31, 1948	29.91	June 2, 1949	30.44
June 5	29.84	Apr. 27	29.47	Aug. 10	28.38
Aug. 8	31.06	July 2	31.30	Sept. 26	28.70
Oct. 25, 1947	30.35	28	29.29	Oct. 15	28.82
Dec. 16	29.45	Sept. 13	29.70	Nov. 28	28.66
Feb. 20, 1948	29.44	Dec. 9	29.17	Dec. 29	28.71

D-7-8-14cdd. W. Gamet. Unused bored well, diameter 24 inches, depth 57.5 feet. Records available: 1946-49.

Apr. 19, 1946	48.10	Apr. 29, 1947	48.42	July 2, 1948	49.90
June 5	48.57	June 4	48.44	28	48.11
Aug. 8	48.55	July 2	48.41	Sept. 13	49.13
Sept. 5	48.55	Aug. 4	48.36	Dec. 9	48.12
Oct. 2	48.49	Oct. 25	48.17	July 2, 1949	48.01
Nov. 1	48.47	Dec. 16	48.14	Aug. 10	48.04
29	48.48	Feb. 20, 1948	48.14	Sept. 26	48.11
Jan. 3, 1947	48.46	Mar. 31	48.12	Oct. 15	48.12
30	48.46	Apr. 29	48.13	Nov. 28	48.08
Feb. 28	48.50	May 27	48.13	Dec. 29	48.08
Mar. 28	48.43				

D-7-8-17cbc. P. Fleming. Dug domestic and stock well, diameter 48 inches, depth 35 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 19, 1946	29.04	Mar. 28, 1947	25.10	July 2, 1948	26.00
June 3	25.45	Apr. 29	25.01	28	25.15
Aug. 8	25.21	June 4	25.07	Sept. 13	25.18
Sept. 5	24.89	July 1	24.02	Dec. 22	24.91
Oct. 2	25.52	Aug. 5	24.39	July 2, 1949	24.89
Nov. 10	25.05	Oct. 25	24.88	Aug. 10	24.98
24	25.07	Dec. 16	24.38	Sept. 26	25.03
Jan. 3, 1947	25.04	Mar. 31, 1948	24.90	Oct. 15	25.05
30	25.05	Apr. 29	25.08	Nov. 28	25.07
Feb. 27	25.07	May 27	25.10	Dec. 29	25.11

D-7-8-19cab. W. G. Tice. Unused dug well, diameter 25 inches, depth 16.1 feet. Records available: 1946-49.

Sept. 5, 1946	13.73	July 1, 1947	12.83	July 28, 1948	13.42
30	13.71	Aug. 4	13.15	Sept. 15	13.66
Nov. 1	13.72	Oct. 25	13.34	Dec. 9	13.49
29	13.53	Dec. 16	13.08	July 3, 1949	13.53
Jan. 3, 1947	14.15	Feb. 20, 1948	13.30	Aug. 10	13.61
30	13.67	Mar. 31	13.34	Sept. 26	13.55
Feb. 27	13.63	Apr. 29	13.41	Oct. 15	13.57
Mar. 28	13.64	May 27	13.50	Nov. 28	13.53
Apr. 29	13.71	July 2	14.15	Dec. 29	13.49
June 4	13.80				

D-7-8-20ddc. R. Gamet. Dug domestic and stock well, diameter 48 inches, depth 71.5 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 19, 1946	71.00	Apr. 29, 1947	71.69	July 2, 1948	72.00
June 3	71.27	June 4	71.43	Sept. 28	70.55
Aug. 8	71.43	July 1	71.39	Sept. 13	70.55
Sept. 4	71.32	Aug. 4	71.43	Dec. 9	70.49
Oct. 2	71.34	Oct. 25	71.54	July 2, 1949	70.47
Nov. 1	71.32	Dec. 16	71.17	Aug. 10	69.99
29	71.57	Feb. 20, 1948	71.02	Sept. 26	70.60
Jan. 3, 1947	71.29	Mar. 31	70.95	Oct. 15	70.63
30	71.39	Apr. 29	70.89	Nov. 28	70.53
Feb. 28	71.34	May 27	71.14	Dec. 29	70.50
Mar. 28	71.36				

D-7-8-21ddc. J. Eng. Dug domestic and stock well, diameter 48 inches, depth 88 feet. Records available: 1946-49.

Apr. 19, 1946	62.69	June 4, 1947	61.67	July 28, 1948	61.42
June 5	62.20	July 1	61.63	Sept. 13	61.34
Aug. 8	62.10	Aug. 4	61.29	Dec. 9	61.35
Sept. 4	62.21	Oct. 25	61.65	July 2, 1949	61.22
Oct. 2	62.00	Dec. 16	61.67	Aug. 10	60.98
Nov. 1	62.05	Feb. 20, 1948	61.56	Sept. 26	61.04
Jan. 3, 1947	62.58	Apr. 29	61.46	Oct. 15	61.11
Feb. 28	61.74	May 27	61.47	Nov. 28	61.07
Mar. 28	61.60	July 2	62.90	Dec. 29	61.04
Apr. 29	61.66				

D-7-8-29ccc. Owner unknown. Unused dug well, diameter 48 inches, depth 73.3 feet. Records available: 1946-49.

Aug. 20, 1946	72.31	June 4, 1947	72.34	July 2, 1948	73.00
Sept. 30	72.30	July 1	72.30	Sept. 28	72.24
Nov. 1	72.31	Aug. 4	72.25	Sept. 13	72.25
29	72.31	Oct. 25	72.25	July 2, 1949	72.25
Jan. 3, 1947	72.31	Dec. 16	72.27	Aug. 10	72.12
30	72.32	Feb. 20, 1948	71.74	Sept. 26	72.19
Feb. 27	72.31	Mar. 31	72.27	Oct. 15	72.21
Mar. 30	72.32	Apr. 29	72.28	Nov. 28	72.24
Apr. 29	72.34	May 27	72.33	Dec. 29	72.06

D-7-8-33bbb. A. J. Sedar. Unused dug well, diameter 48 inches. Records available: 1946-49.

June 5, 1946	23.45	Apr. 29, 1947	18.07	July 2, 1948	19.90
Aug. 8	18.57	June 4	18.05	Sept. 28	18.62
Sept. 4	18.35	July 2	18.08	Sept. 13	19.50
Oct. 2	18.33	Aug. 4	17.85	Dec. 9	17.84
Nov. 1	18.03	Oct. 25	17.94	July 2, 1949	16.64
29	18.00	Dec. 16	18.00	Aug. 10	21.31
Jan. 3, 1947	18.11	Feb. 20, 1948	18.31	Sept. 26	16.52
30	18.03	Mar. 31	18.37	Oct. 15	16.65
Feb. 27	18.03	Apr. 29	18.58	Nov. 28	16.72
Mar. 28	18.19	May 27	18.65	Dec. 29	17.01

D-8-6-1bad. Owner unknown. Unused dug well, diameter 60 inches, depth 26.3 feet. Records available: 1946-49.

Aug. 13, 1946	22.90	July 1, 1947	23.28	July 28	23.15
Sept. 4	22.23	Aug. 4	23.30	Sept. 16	23.13
Nov. 1	23.25	Oct. 25	23.27	Dec. 22	22.99
Dec. 2	23.27	Dec. 11	23.25	July 2, 1949	22.59
Jan. 3, 1947	23.18	Feb. 16, 1948	23.21	Aug. 10	22.54
30	23.30	Mar. 31	23.22	Sept. 26	22.52
Feb. 28	23.25	Apr. 29	23.18	Oct. 15	22.53
Mar. 28	23.28	May 27	23.18	Nov. 28	22.36
Apr. 29	23.28	July 2	23.50	Dec. 29	22.28
June 44	23.28				

D-8-6-9dca. Owner unknown. Unused dug well, diameter 36 inches, depth 44.6 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 22, 1946	41.20	Apr. 29, 1947	43.50	July 2, 1948	43.60
June 3	42.24	June 4	42.35	28	42.05
Aug. 7	42.19	30	42.52	Sept. 16	41.95
Sept. 4	42.20	Aug. 4	42.43	Dec. 22	42.03
Oct. 2	42.48	Oct. 25	42.98	June 28, 1949	41.82
Nov. 1	42.54	Dec. 11	42.81	Aug. 10	41.78
Dec. 2	42.56	Feb. 16, 1948	42.62	Sept. 26	43.59
Jan. 3, 1947	42.52	Mar. 31	42.14	Oct. 15	43.31
31	42.63	Apr. 29	42.25	Nov. 28	41.72
Feb. 27	42.57	May 27	42.05	Dec. 29	41.49
Mar. 31	42.56				

D-8-6-10daa. Owner unknown. Unused dug well, diameter 48 inches, depth 42.1 feet. Records available: 1946-49.

Apr. 22, 1946	39.12	Apr. 29, 1947	39.25	July 2, 1948	39.50
June 3	39.29	June 4	39.25	28	38.84
Aug. 7	39.26	30	39.25	Sept. 16	38.76
Sept. 4	39.30	Aug. 4	39.14	Dec. 22	38.70
Oct. 2	39.30	Oct. 25	39.12	June 28, 1949	38.40
Nov. 1	39.23	Dec. 11	39.06	Aug. 10	38.37
Dec. 2	39.30	Feb. 16, 1948	39.04	Sept. 26	39.81
Jan. 3, 1947	39.31	Mar. 31	39.00	Oct. 15	39.26
31	39.27	Apr. 29	39.05	Nov. 28	40.09
Feb. 28	39.27	May 27	38.95	Dec. 29	41.04
Mar. 28	39.28				

D-8-6-13aac. A. J. Kieffer. Unused dug well, diameter 24 inches, depth 11.7 feet. Records available: 1946-49.

June 3, 1946	7.84	Apr. 29, 1947	8.37	July 2, 1948	9.00
Aug. 7	8.69	June 4	8.56	28	7.77
Sept. 4	8.65	30	7.01	Sept. 16	7.77
Oct. 2	7.99	Aug. 4	7.31	Dec. 22	7.78
Nov. 1	8.49	Oct. 25	7.66	June 28, 1949	8.06
Dec. 2	8.49	Dec. 11	7.45	Aug. 10	8.30
Jan. 3, 1947	8.49	Feb. 16, 1948	7.65	Sept. 26	8.36
31	8.43	Mar. 31	7.48	Oct. 15	8.41
Feb. 28	8.44	Apr. 29	7.46	Nov. 28	8.16
Mar. 28	8.41	May 27	7.60	Dec. 29	8.04

D-8-6-13bad. A. J. Kieffer. Dug domestic well, diameter 24 inches, depth 13 feet. Records available: 1946-49.

Aug. 7, 1946	10.28	June 30, 1947	9.27	July 28, 1948	9.17
Oct. 2	10.36	Aug. 4	8.70	Sept. 16	9.31
Nov. 1	10.27	Oct. 25	9.45	Dec. 22	9.23
Dec. 2	10.28	Dec. 11	9.25	July 2, 1949	8.92
Jan. 3, 1947	10.33	Feb. 20, 1948	9.15	Aug. 10	9.61
31	10.27	Mar. 31	9.07	Sept. 26	9.86
Feb. 28	10.25	Apr. 29	9.03	Oct. 15	10.01
Mar. 28	10.27	May 27	9.00	Nov. 28	9.86
Apr. 29	10.25	July 2	9.70	Dec. 29	9.80
June 4	10.21				

D-8-6-15bcd1. W. J. Beck. Drilled domestic and stock well, diameter 8 inches, depth 160 feet. Records available: 1946-49.

Aug. 20, 1946	76.28	June 4, 1947	74.12	July 28, 1948	70.05
Sept. 30	77.61	30	73.97	Sept. 16	69.63
Nov. 1	74.21	Aug. 4	74.01	Dec. 22	70.18
Dec. 2	73.50	Oct. 25	66.53	June 28, 1949	70.11
Jan. 3, 1947	73.87	Dec. 11	66.34	Aug. 10	70.19
31	73.41	Feb. 16, 1948	67.50	Sept. 25	70.56
Feb. 28	75.18	Apr. 29	69.19	Oct. 15	70.54
Mar. 31	73.50	May 27	69.64	Nov. 28	71.11
Apr. 29	73.62	July 2	70.50	Dec. 29	71.22

D-8-6-16aba. Airport, Hot Springs. Drilled domestic well, diameter 6 inches, depth 120 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 22, 1946	39.50	Apr. 29, 1947	39.78	July 28, 1948	38.35
June 3	39.56	June 4	40.12	Sept. 16	38.99
Aug. 7	39.59	Aug. 4	39.72	Dec. 22	38.84
Sept. 4	39.62	Oct. 25	39.79	June 28, 1949	38.81
Nov. 1	39.67	Dec. 11	39.52	Aug. 10	38.59
Dec. 2	39.68	Feb. 16, 1948	39.41	Sept. 26	38.92
Jan. 6, 1947	39.96	Mar. 21	39.32	Oct. 15	38.87
Feb. 4	39.82	Apr. 29	39.25	Nov. 28	38.48
28	39.71	May 27	39.20	Dec. 29	38.27
Mar. 31	39.73	July 2	40.70		

D-8-7-5acc. E. Hagerman. Unused dug well, depth 49.3 feet. Records available: 1946-49.

Aug. 13, 1946	45.26	July 1, 1947	45.33	July 28, 1948	44.72
Sept. 30	45.23	Aug. 4	45.18	Sept. 16	43.97
Nov. 1	45.25	Oct. 25	45.08	Dec. 22	43.32
Dec. 2	45.43	Dec. 11	45.03	July 2, 1949	42.74
Jan. 6, 1947	45.34	Feb. 16, 1948	44.99	Aug. 10	42.70
30	45.35	Mar. 31	44.98	Sept. 25	42.70
Feb. 28	45.51	Apr. 29	44.94	Oct. 15	42.91
Mar. 28	45.47	May 27	44.92	Nov. 28	42.97
Apr. 29	45.61	July 2	45.50	Dec. 29	42.62
June 4	45.62				

D-8-7-6dcd. A. Mills. Dug domestic and stock well, diameter 48 inches, depth 37.3 feet. Records available: 1946-49.

Apr. 22, 1946	34.05	June 4, 1947	35.02	July 28, 1948	34.83
June 3	34.03	July 1	34.11	Sept. 16	34.41
Aug. 7	34.04	Aug. 4	33.87	Dec. 22	34.65
Sept. 4	33.92	Oct. 25	33.60	July 2, 1949	33.47
Oct. 2	34.01	Dec. 11	33.32	Aug. 10	33.46
Nov. 1	34.00	Feb. 16, 1948	34.64	Sept. 26	33.47
Dec. 2	34.08	Mar. 31	34.79	Oct. 15	33.47
Jan. 30, 1947	34.17	Apr. 29	34.73	Nov. 28	33.45
Mar. 28	34.19	May 27	34.74	Dec. 29	33.35
Apr. 30	34.89	July 2	35.60		

D-8-7-7bb2. H. Kneuple. Dug domestic and stock well, diameter 48 inches. Records available: 1946-49.

Apr. 22, 1946	6.44	Apr. 29, 1947	5.94	July 2, 1948	6.80
June 2	5.20	June 4	6.25	28	6.77
Aug. 7	7.98	July 1	2.83	Sept. 16	6.67
Sept. 4	6.89	Aug. 4	5.77	Dec. 22	6.22
Oct. 2	6.36	Oct. 25	5.85	July 2, 1949	5.98
Nov. 1	6.26	Dec. 11	5.30	Aug. 10	6.26
Dec. 2	6.50	Feb. 16, 1948	5.67	Sept. 25	6.29
Jan. 3, 1947	6.37	Mar. 31	5.22	Oct. 15	6.33
30	6.36	Apr. 29	5.27	Nov. 28	6.51
Feb. 28	6.12	May 27	5.53	Dec. 29	6.22

D-8-7-8dcc. H. Reigler. Unused dug well, diameter 36 inches, depth 21.2 feet. Records available: 1946-49.

June 5, 1946	17.51	Apr. 29, 1947	16.99	July 2, 1948	16.12
Aug. 8	17.21	June 4	17.04	28	15.87
Sept. 5	16.57	30	16.74	Sept. 16	15.45
Oct. 2	17.08	Aug. 4	15.47	Dec. 22	15.73
Nov. 1	17.16	Oct. 25	15.95	July 22, 1949	15.44
Dec. 2	17.17	Dec. 11	16.06	Aug. 10	15.51
Jan. 3, 1947	16.82	Feb. 16, 1948	16.15	Sept. 26	15.74
31	16.84	Mar. 31	16.20	Oct. 15	15.69
Feb. 28	16.92	Apr. 29	16.24	Nov. 28	15.85
Mar. 28	16.96	May 27	16.21	Dec. 29	14.89

Faulk County

117-66-4dd. Owner unknown. Dug domestic well, diameter 24 inches, depth 29 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 13, 1946	22.07	June 23, 1947	21.30	Apr. 30, 1949	20.49
June 13	21.92	Apr. 28, 1948	19.56	July 11	20.19
Aug. 5	21.63	Aug. 25	20.90	Sept. 19	23.30
Nov. 15	20.91	Nov. 19	a 24.25		

a Pumping recently.

117-66-35cd. J. Haider. Dug stock well, diameter 48 inches, depth 45 feet. Records available: 1946-49.

Apr. 15, 1946	14.25	June 20, 1947	13.96	Nov. 18, 1948	13.45
June 13	14.07	Aug. 23	14.54	Apr. 30, 1949	13.12
Aug. 6	14.20	Apr. 28, 1948	13.54	July 12	13.45
Nov. 13	13.80	Aug. 25	14.65	Sept. 19	13.97
Apr. 21, 1947	13.74				

117-68-12aa. Owner unknown. Dug stock well, diameter 48 inches, depth 38 feet. Records available: 1946-49.

Apr. 13, 1946	19.20	June 23, 1947	17.68	Nov. 19, 1948	17.67
June 13	18.19	Aug. 27	17.87	Apr. 30, 1949	19.09
Aug. 5	17.53	Apr. 29, 1948	17.38	July 12	18.43
Nov. 15	17.76	Aug. 25	17.06	Sept. 19	18.81
Apr. 22, 1947	17.82				

117-68-36aa. J. Sievers. Bored stock well, diameter 24 inches, depth 18.1 feet. Records available: 1946-49.

Apr. 13, 1946	8.77	June 23, 1947	5.59	Nov. 20, 1948	7.50
June 13	7.27	Aug. 27	7.11	Apr. 30, 1949	5.78
Aug. 6	5.60	Apr. 28, 1948	5.60	July 12	7.23
Nov. 15	7.30	Aug. 25	5.84	Sept. 19	8.38
Apr. 21, 1947	6.12				

117-68-36cc. Owner unknown. Dug stock well, diameter 48 inches, depth 40 feet. Records available: 1946-49.

Apr. 13, 1946	15.20	Apr. 21, 1947	15.51	Nov. 18, 1948	15.13
June 13	15.40	Apr. 28, 1948	16.51	July 12, 1949	14.90
Aug. 6	15.47	Aug. 25	a 16.67	Sept. 19	15.35
Nov. 13	16.93				

a Pumping recently.

118-66-21ba. V. Elliott. Dug domestic and stock well, diameter 36 inches, depth 9 feet. Records available: 1946-49.

Apr. 11, 1946	5.55	June 23, 1947	4.47	Nov. 19, 1948	6.28
June 13	5.25	Aug. 27	a 5.93	Apr. 30, 1949	5.66
Aug. 5	4.97	Apr. 29, 1948	a 4.10	July 11	a 5.95
Nov. 15	3.79	Aug. 25	4.76	Sept. 19	6.65

a Pumping recently.

118-57-7cb1. Owner unknown. Dug domestic well, diameter 24 inches, depth 19 feet. Records available: 1946-49. Measurements discontinued after July 12. See well 118-67-7cb2 for further measurements in this area.

Apr. 11, 1946	9.87	Apr. 22, 1947	9.14	Aug. 25, 1948	9.25
June 13	9.57	June 23	a 10.27	Nov. 19	10.55
Aug. 5	9.67	Aug. 27	10.19	Apr. 30, 1949	10.06
Nov. 15	9.42	Apr. 29, 1948	8.69	July 12	10.33

a Pumping recently.

118--67-7cb2. Owner unknown. Dug domestic and stock well, diameter 24 inches. Records available: 1949. Sept. 19, 10.02.

119-66-2ab. G. Chiak. Dug domestic and stock well, diameter 24 inches, depth 39 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 11, 1946	26.70	June 23, 1947	24.21	Nov. 19, 1948	23.17
June 13	27.93	Aug. 25, 1947	27.63	Apr. 29, 1949	24.29
Aug. 5	25.85	Apr. 29, 1948	24.36	July 11	24.58
Nov. 16	25.20	Aug. 24	25.70	Sept. 19	24.09
Apr. 22, 1947	23.84				

a Pumping recently.

Haakon County

A-1-25-6dd. A. Elrod. Dug stock well, diameter 24 inches, depth 30 feet. Records available: 1946-49.

Oct. 30, 1946	23.27	Dec. 9, 1947	23.48	Feb. 24, 1949	22.43
Feb. 21, 1947	23.20	Jan. 5, 1948	23.49	Mar. 22	22.61
Mar. 28	23.10	Feb. 17	23.47	May 3	22.28
Apr. 11	23.06	Mar. 16	23.31	27	22.27
May 22	23.03	May 5	23.07	June 17	22.39
June 12	23.05	July 7	22.59	July 6	22.49
July 22	23.06	Aug. 7	22.54	Sept. 9	23.03
Aug. 3	23.25	Oct. 7	22.86	29	23.12
30	23.38	Nov. 15	22.80	Oct. 21	23.10
Oct. 29	23.47	Dec. 13	22.85	Nov. 17	23.15
Nov. 3	23.02	Jan. 18, 1949	22.87	Dec. 8	23.18

A-8-24-4aa. W. B. Alleman. Unused dug well, diameter 60 inches, depth 20 feet. Records available: 1946-49.

Oct. 30, 1946	10.68	Dec. 10, 1947	11.50	Dec. 13, 1948	10.82
Feb. 25, 1947	10.55	Jan. 20, 1948	11.50	Jan. 26, 1949	10.84
Apr. 15	10.05	Feb. 27	11.50	Mar. 7	10.96
May 5	9.90	Apr. 14	10.99	May 3	8.98
29	10.07	May 5	10.40	26	9.27
June 18	9.91	July 1	10.40	June 20	9.41
July 9	10.03	20	10.47	July 14	10.02
Aug. 20	11.05	Aug. 12	9.98	Aug. 24	10.68
Sept. 10	11.36	Sept. 20	10.71	Oct. 7	11.25
30	11.52	Oct. 21	10.91	26	11.38
Oct. 28	11.47	Nov. 15	10.70		

Hand County

110-66-lad. L. Licktey. Bored domestic and stock well, diameter 18 inches, depth 38 feet. Records available: 1946-49.

Apr. 8, 1946	31.61	June 19, 1947	31.11	Nov. 11, 1948	a 31.70
June 11	31.21	Aug. 21	31.02	May 4, 1949	30.67
Aug. 8	31.47	Apr. 25, 1948	30.97	July 13	31.50
Nov. 12	31.20	Aug. 12	30.56	Sept. 27	30.76
Apr. 17, 1947	31.38				

a Pumping recently.

111-66-24da. W. Trentor. Unused bored well, diameter 24 inches, depth 13 feet. Records available: 1948-49. Nov. 11, 1948, 4.15; May 4, 1949, 2.37; July 13, 1949, 4.50; Sept. 24, 1949, 4.53.

112-66-5aa. J. Slater. Dug stock well, diameter 24 inches, depth 20 feet. Records available: 1946-49.

112-66-5aa--Continued.

Date	Water level	Date	Water level	Date	Water level
Apr. 8, 1946	9.20	June 2, 1947	a 12.57	Nov. 12, 1948	10.04
June 13	9.48	Aug. 23	11.03	May 3, 1949	8.40
Aug. 7	11.15	Apr. 23, 1948	10.25	July 13	9.55
Nov. 13	11.30	Aug. 27	a 12.70	Sept. 24	4.53

a Pumping recently.

112-66-28ad. E. H. Simons. Unused bored well, diameter 18 inches, depth 45 feet. Records available: 1946-49.

Apr. 8, 1946	22.40	June 20, 1947	16.35	Nov. 11	16.43
June 11	16.45	Aug. 22	16.18	May 3, 1949	21.91
Nov. 7	16.71	Apr. 23, 1948	16.18	July 13	22.21
Nov. 13	16.63	June 18	16.22	Sept. 24	22.54
Apr. 18, 1947	16.83	Aug. 27	16.50		

112-66-36dd. L. A. Murphy. Bored domestic and stock well, diameter 18 inches, depth 22.5 feet. Records available: 1946-49.

Apr. 5, 1946	15.20	June 20, 1947	16.35	Nov. 11, 1948	16.43
June 11	16.45	Aug. 22, 1947	16.18	May 3, 1949	13.93
Aug. 7	14.71	Apr. 23, 1948	16.18	July 13	15.83
Nov. 13	16.63	June 18	16.22	Sept. 24	17.38
Apr. 18, 1947	16.83	Aug. 27	16.50		

112-66-36dd2. U. S. Bureau of Reclamation. Drilled observation well, diameter 1½ inches, depth 24 feet. Records available: 1943-49.

July 23, 1948	a 14.85	Mar. 18, 1949	a 15.05	July 29, 1949	15.23
Sept. 5	14.03	Apr. 18	a 14.85	Aug. 18	a 15.50
Oct. 3	14.75	May 3	14.64	30	14.99
Nov. 8	a 14.73	18	a 14.85	Sept. 24	15.77
18	a 14.55	June 14	a 14.81	Oct. 20	a 16.40
Dec. 22	a 15.25	16	a 14.85	Nov. 18	a 16.06
Jan. 18, 1949	a 15.25	July 1	a 14.91	Dec. 13	16.95
Feb. 18	a 15.25	13	a 15.05		

a By Bureau of Reclamation.

112-67-7dc. D. Nelson. Bored domestic and stock well, diameter 18 inches, depth 120 feet. Records available: 1946-49.

Apr. 15, 1946	32.05	Apr. 26, 1948	a 73.43	May 2, 1949	a 49.42
Apr. 21, 1947	a 63.48	June 18	39.45	July 13	a 63.00
June 20	a 46.10	Aug. 27	a 61.00	Sept. 24	54.93
Aug. 23	a 69.23	Nov. 12	a 71.85		

a Pumping recently.

112-69-3dc. C. Loosey. Dug stock well, diameter 48 inches, depth 30 feet. Records available: 1946-49.

Aug. 23, 1946	8.18	Jan. 13, 1948	9.34	Nov. 28, 1948	19.42
Nov. 15	10.63	Feb. 12	9.16	Dec. 23	18.29
Feb. 10, 1947	7.65	Mar. 29	2.78	Feb. 21, 1949	18.48
Mar. 12	11.30	Apr. 3	3.90	May 2	4.76
Apr. 10	11.20	May 3	3.62	July 8	6.92
May 14	9.45	24	4.90	13	7.11
June 4	8.82	June 17	5.96	Aug. 5	8.18
23	7.07	July 9	6.78	Sept. 20	9.30
Aug. 23	8.28	Aug. 17	a 17.10	24	9.33
Oct. 20	8.30				

a Deepened and repaired.

113-66-13da. W. Trentor. Dug domestic and stock well, diameter 24 inches, depth 33.7 feet. Records available: 1946-49.

113-66-13da--Continued.

Date	Water level	Date	Water level	Date	Water level
Apr. 8, 1946	21.92	June 18, 1947	27.80	Nov. 18, 1948	31.75
June 12	33.35	Aug. 23	27.14	May 2, 1949	20.44
Aug. 7	30.12	Apr. 27, 1948	26.78	July 13	18.28
Nov. 14	23.33	Aug. 6	26.37	Sept. 22	22.85
Apr. 21, 1947	29.11				

113-66-31cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 24 feet. Records available: 1948-49.

July 23, 1948	a 17.72	Feb. 21, 1949	a 15.02	July 13, 1949	13.60
Aug. 7	16.73	Mar. 18	a 14.82	29	13.52
Sept. 5	16.20	Apr. 18	a 14.32	Aug. 18	a 13.52
Oct. 3	15.82	May 3	14.13	29	13.12
Nov. 8	a 15.53	18	a 14.22	Sept. 24	13.10
18	a 15.32	June 14	13.80	Oct. 20	a 13.37
Dec. 22	a 15.42	16	a 13.92	Nov. 18	a 12.97
Jan. 27, 1949	a 15.22	July 1	13.65	Dec. 13	12.72

a By U. S. Bureau of Reclamation.

113-66-32cc2. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 30 feet. Records available: 1949. Nov. 18, 11.33; Dec. 14, 10.67; (Measurement on Nov. 18 made by U. S. Bureau of Reclamation.)

113-66-33cc2. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches. Records available: 1949. Nov. 18, 8.47; Dec. 14, 8.49. (Measurement on Nov. 18 made by Bureau of Reclamation.)

113-56-34cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 24 feet. Records available: 1948-49.

July 23, 1948	a 5.75	Feb. 21, 1949	a 6.15	July 13, 1949	5.83
Aug. 7	4.14	Mar. 24	a 5.75	29	6.34
Sept. 5	4.98	Apr. 18	a 4.45	Aug. 18	a 6.86
Oct. 3	5.83	May 3	4.26	29	6.96
Nov. 8	a 5.36	18	a 4.55	Sept. 24	7.34
18	a 5.65	June 14	4.94	Oct. 20	a 7.99
Dec. 22	a 5.85	16	a 5.15	Nov. 18	a 7.69
Jan. 27, 1949	a 5.95	July 1	5.42	Dec. 14	7.59

a By U. S. Bureau of Reclamation.

113-66-35cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 31 feet. Records available: 1949. Oct. 20, 7.41; Nov. 18, 12.40; Dec. 14, 14.01 (Measurements on Oct. 20 and Nov. 18 made by U. S. Bureau of Reclamation.)

113-66-36cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 39 feet. Records available: 1949. Oct. 20, 14.42; Nov. 18, 16.14; Dec. 14, 16.29. (Measurements on Oct. 20 and Nov. 18 made by Bureau of Reclamation.)

113-67-7dd. Owner unknown. Bored stock well, diameter 18 inches, depth 40 feet. Records available: 1946-49.

Apr. 15, 1946	26.55	Apr. 21, 1947	29.11	Aug. 26, 1948	26.37
June 13	26.43	June 20	27.80	Nov. 18	31.75
Aug. 6	27.92	Aug. 23	27.14	May 2, 1949	29.38
Nov. 13	28.50	Apr. 27, 1948	26.78	Sept. 22	31.00

113-67-34cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 24 feet. Records available: 1948-49.

113-67-34cc--Continued.

Date	Water level	Date	Water level	Date	Water level
July 23, 1948	a 10.96	Feb. 21, 1949	a 8.66	July 13, 1949	7.19
Aug. 7	10.07	Mar. 18	a 7.96	29	7.16
Sept. 5	9.44	Apr. 18	a 7.66	Aug. 18	a 7.06
Oct. 3	9.76	May 3	7.51	29	6.85
Nov. 8	a 9.37	18	a 7.66	Sept. 24	6.62
18	a 9.66	June 14	7.40	Oct. 20	a 6.99
Dec. 22	a 9.46	16	a 7.46	Nov. 18	a 6.67
Jan. 27, 1949	a 9.46	July 1	7.24	Dec. 14	6.57

a By U. S. Bureau of Reclamation.

113-67-36cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 41 feet. Records available: 1949. Nov. 18, 9.72; Dec. 14, 10.06.

114-56-8aa. Benning Bros. Bored domestic well, diameter 12 inches, depth 50 feet. Records available: 1946-49.

Apr. 8, 1946	32.90	June 20, 1947	32.62	Nov. 14, 1948	32.82
June 13	33.23	Aug. 23	33.33	May 2, 1949	32.95
Aug. 6	33.17	Apr. 27, 1948	32.83	July 12	34.80
Nov. 13	33.22	Aug. 26	33.54	Sept. 22	34.02
Apr. 21, 1947	33.24				

114-67-8cc. Public school. Unused bored well, diameter 6 inches, depth 16 feet. Records available: 1946-49.

Apr. 15, 1946	5.15	June 20, 1947	4.96	Nov. 15, 1948	10.19
June 13	7.48	Aug. 23	8.72	May 2, 1949	9.36
Aug. 6	7.72	Apr. 27, 1948	4.43	July 12	10.22
Nov. 13	8.16	Aug. 26	7.00	Sept. 22	11.32
Apr. 21, 1947	5.82				

114-67-32bc. E. Bertsch. Bored stock well, diameter 18 inches, depth 35 feet. Records available: 1946-49.

Apr. 15, 1946	25.00	June 20, 1947	24.33	Nov. 15, 1948	22.99
June 13	24.98	Aug. 23	24.90	May 2, 1949	25.79
Aug. 6	24.95	Apr. 27, 1948	24.21	July 12	24.94
Nov. 13	24.90	Aug. 26	25.00	Sept. 22	25.13
Apr. 21, 1947	25.61				

115-66-2da. G. W. Comstock. Dug domestic and stock well, diameter 24 inches, depth 40 feet. Records available: 1946-49.

Apr. 15, 1946	21.25	June 20, 1947	21.25	Nov. 15, 1948	22.99
June 13	21.03	Aug. 23	21.77	Apr. 30, 1949	20.97
Nov. 13	20.47	Apr. 23, 1948	20.70	July 12	21.16
Apr. 21, 1947	21.47	Aug. 25	21.14	Sept. 19	20.42

115-66-21bb. Owner unknown. Unused bored well, diameter 20 inches, depth 30 feet. Records available: 1947-49.

Apr. 21, 1947	28.35	Apr. 27, 1948	27.36	Apr. 30, 1949	26.92
June 20	27.04	Aug. 24	28.03	July 12	27.08
Aug. 23	27.48	Nov. 18	26.77	Sept. 19	27.17

115-67-5ab. Owner unknown. Dug stock well, diameter 60 inches, depth 25.3 feet. Records available: 1946-49.

Apr. 15, 1946	15.40	June 20, 1947	15.05	Nov. 18, 1948	15.29
June 13	15.45	Aug. 23	15.11	Apr. 30, 1949	15.04
Aug. 6	15.37	Apr. 28, 1948	15.07	July 12	14.90
Nov. 13	15.31	Aug. 25	15.52	Sept. 19	15.25
Apr. 21, 1947	15.54				

115-58-15aa. Owner unknown. Bored domestic and stock well, diameter 18 inches, depth 50 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 13, 1946	26.97	June 20, 1947	26.41	Nov. 18, 1948	26.68
June 13	27.19	Aug. 23	27.13	Apr. 30, 1949	26.07
Aug. 6	27.30	Apr. 23, 1948	26.69	July 12	a 28.71
Nov. 13	27.43	Aug. 25	26.45	Sept. 19	26.38
Apr. 21, 1947	27.11				

a Pumping recently.

115-68-23bb. Owner unknown. Dug stock well, diameter 24 inches, depth 19.5 feet. Records available: 1946-49.

Apr. 21, 1947	5.34	Apr. 28, 1948	4.07	Apr. 30, 1949	5.27
June 20	4.51	Aug. 15	5.53	July 12	5.67
Aug. 23	5.53	Nov. 18	5.99	Sept. 19	6.41

116-66-13bb. G. Mullenberg. Dug domestic and stock well, diameter 18 inches, depth 40 feet. Records available: 1946-49.

Apr. 15, 1946	29.70	June 20, 1947	30.70	Nov. 17, 1948	28.59
June 13	29.54	Aug. 23	29.76	Apr. 30, 1949	28.68
Aug. 6	29.37	Apr. 28, 1948	29.87	July 11	28.70
Nov. 13	29.30	Aug. 25	29.56	Sept. 19	29.15
Apr. 21, 1947	29.48				

116-67-14bc. Mrs. W. Tierney. Dug domestic and stock well, diameter 48 inches, depth 25 feet. Records available: 1946-49.

Apr. 15, 1946	10.05	June 20, 1947	9.97	Nov. 18, 1948	10.30
June 13	10.11	Aug. 23	10.90	Apr. 30, 1949	10.43
Aug. 6	10.35	Apr. 23, 1948	10.66	July 12	10.38
Nov. 13	11.57	Aug. 25	11.05	Sept. 19	10.73
Apr. 21, 1947	10.03				

116-68-27dd. H. Haberling. Dug stock well, diameter 24 inches, depth 40 feet. Records available: 1947-49.

Apr. 21, 1947	16.18	Apr. 28, 1948	12.83	July 12, 1949	a 24.12
June 20	17.70	Aug. 25	14.82	Sept. 19	a 26.20
Aug. 23	16.61	Apr. 30, 1949	17.00		

a Pumping recently.

Jerauld County

107-64-26bb2. Owner unknown. Dug well, diameter 36 inches, depth 9.3 feet. Records available: 1949. May 7, 7.65; July 14, 8.65; Sept. 29, 9.21.

108-63-5dd. G. Orth. Bored domestic well, diameter 24 inches, depth 66 feet. Records available: 1947-49.

May 29, 1947	31.20	Aug. 23, 1948	30.28	July 11, 1949	33.05
Aug. 20	33.20	Nov. 8	31.25	Sept. 27	35.72
Apr. 22, 1948	30.61	May 7, 1949	32.48		

108-63-11bd2. Owner unknown. Bored stock well, diameter 24 inches, depth 15 feet. Records available: 1947, 1949.

Mar. 22, 1947	a 5.62	Oct. 8, 1947	8.32	July 11, 1949	7.00
May 28	a 5.15	May 7, 1949	3.58	Sept. 27	7.65
June 6	a 4.11				

a By State Geological Survey.

108-63-24cc. Skinner public school. Bored well, diameter 6 inches, depth 10.2 feet. Records available: 1946-47, 1949.

108-63-24cc--Continued.

Date	Water level	Date	Water level	Date	Water level
June 12, 1946	a 4.08	May 28, 1947	a 3.54	May 7, 1949	3.80
Oct. 29	a 3.10	June 6	a 2.52	July 11	5.08
Mar. 14, 1947	a 4.05	Oct. 8	a 5.85	Sept. 27	5.57

a By State Geological Survey.

108-63-33cd. Owner unknown. Bored well, diameter 24 inches, depth 52.5 feet. Records available: 1947-49.

May 28, 1947	24.30	Aug. 23, 1948	25.94	July 11, 1949	25.75
Aug. 20	25.34	Nov. 8	25.90	Sept. 27	27.25
Apr. 22, 1948	25.71	May 7, 1949	24.03		

108-64-3dd2. Melvin Newmeyer. Bored well, diameter 24 inches, depth 50 feet. Records available: 1946-47, 1949.

June 12, 1946	a 13.08	June 6, 1947	a 10.00	July 11, 1949	13.72
Oct. 29	a 12.22	Oct. 8	a 15.09	Sept. 29	16.94
Mar. 14, 1947	a 13.13	May 7, 1949	13.48		

a By State Geological Survey.

108-64-6cc. A. C. Crouch. Bored well, diameter 24 inches, depth 50 feet. Records available: 1946-49.

June 12, 1946	a 19.66	Oct. 8, 1947	a 20.32	July 11, 1949	21.08
Oct. 29	a 19.59	Sept. 9, 1948	12.59	Sept. 29	21.66
June 6, 1947	a 18.57	May 7, 1949	17.75		

a By State Geological Survey.

Minnehaha County

101-49-33bb. C. Donaldson. Unused dug well, diameter 30 inches, depth 12 feet. Records available: 1946-49.

Nov. 18, 1946	8.90	Jan. 6, 1948	9.44	Feb. 11, 1949	9.54
Feb. 13, 1947	9.28	Mar. 1	9.30	Mar. 3	9.37
Mar. 12	9.25	30	9.11	24	9.16
Apr. 11	9.04	May 7	9.11	May 4	8.38
May 11	8.08	June 7	9.35	19	8.57
13	7.90	July 17	8.90	June 17	8.80
Aug. 3	8.85	Aug. 12	8.59	July 7	9.24
Sept. 6	9.19	Sept. 2	9.00	Sept. 16	9.30
Oct. 16	9.28	Oct. 13	9.24	Oct. 13	9.65
22	8.32	Dec. 1	9.34	Nov. 3	9.70
Dec. 2	9.26	30	9.76		

Pennington County

A-1-8-9-bad. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 14 feet. Records available: 1949. Aug. 24, 5.42; Oct. 3, 8.19; Dec. 29, 9.11.

A-1-8-10abc. U. S. Geological Survey. Jetted observation well, diameter 3/4 inch, depth 9.0 feet. Records available: 1949. Aug. 23, 2.62; Sept. 19, 3.97; Oct. 3, 4.08; Dec. 28, 4.53.

A-1-8-10adc. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 9.0 feet. Records available: 1949. Aug. 23, 4.78; Sept. 19, 6.49; Oct. 3, 6.90; Dec. 29, 7.41.

A-1-8-10dab2. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 9.0 feet. Records available: 1949. Nov. 4, 4.65; Dec. 29, 6.04.

A-1-8-10dab3. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 12.8 feet. Records available: 1949. Nov. 4, 4.63; Dec. 29, 6.27.

A-1-8-10dab4. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 17.0 feet. Records available: 1949. Nov. 4, 10.89; Dec. 29, 9.79.

A-1-8-13cda. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 11.5 feet. Records available: 1949. Oct. 13, 6.61; Dec. 29, 7.18.

A-1-8-14ada. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 6.5 feet. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level
Aug. 15	0.92	Oct. 3	3.42	Dec. 28	4.51
Sept. 19	3.23	Nov. 30	4.48		

A-1-8-14-daa. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 10.0 feet. Records available: 1949.

Aug. 14	7.06	Oct. 3	6.53	Dec. 29	7.31
Sept. 19	6.61	Nov. 30	7.19		

A-1-8-14dda. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 12.0 feet. Records available: 1949.

Aug. 14	3.59	Oct. 3	5.96	Dec. 28	7.90
Sept. 19	5.58	Nov. 30	7.44		

A-1-8-15aba. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 4.5 feet. Records available: 1949. Nov. 4, 2.73; Dec. 29, 3.44.

A-1-8-15aba2. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 9.0 feet. Records available: 1949. Nov. 4, 2.87; Dec. 29, 3.41.

A-1-8-15aba3. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 13.5 feet. Records available: 1949. Nov. 4, 3.91; Dec. 29, 4.09.

A-1-8-15aba4. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 17.0 feet. Records available: 1949. Nov. 4, 15.49; Dec. 29, 12.53.

A-1-8-15abb. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 10.5 feet. Records available: 1949. Aug. 24, 1.75; Sept. 19, 0.51; Oct. 3, 0.48; Dec. 28, 0.60.

A-1-8-15abc1. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 4.5 feet. Records available: 1949. Nov. 4, 0.46; Dec. 29, 0.77.

A-1-8-15abc2. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 9.0 feet. Records available: 1949. Nov. 4, 0.47; Dec. 29, 0.73.

A-1-8-15abc3. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 13.5 feet. Records available: 1949. Nov. 4, 1.03; Dec. 29, 1.12.

A-1-8-15abc4. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 17.0 feet. Records available: 1949. Nov. 4, 7.43; Dec. 29, 7.07.

A-1-8-15add. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 7 feet. Records available: 1949. Oct. 3, 2.68; Nov. 30, 3.84; Dec. 28, 4.01.

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A-1-8-15bda2. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 9.0 feet. Records available: 1949. Nov. 4, 5.23; Dec. 29, 5.78.

A-1-8-15bda3. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 13.0 feet. Records available: 1949. Nov. 4, 8.05; Dec. 29, 8.15.

A-1-8-15cbc. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 12 feet. Records available: 1949. Sept. 26, 2.19; Oct. 3, 1.77; Nov. 30, 2.08; Dec. 28, 2.19.

A-1-8-16add. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 12 feet. Records available: 1949. Sept. 26, 6.83; Oct. 3, 6.79; Nov. 30, 7.64; Dec. 28, 8.07.

A-1-8-17add1. E. H. Hoff. Dug stock well, depth 18 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Nov. 11, 1946	5.71	Mar. 2, 1948	7.10	Dec. 8, 1948	7.22
Feb. 20, 1947	13.64	24	6.10	20	7.23
Mar. 10	12.51	Apr. 13	5.80	Jan. 13, 1949	8.04
May 8	5.37	May 4	6.80	Feb. 9	7.88
June 3	5.33	22	6.65	Mar. 8	3.93
July 24	5.37	June 15	6.45	29	3.90
Aug. 21	7.09	July 7	6.00	Apr. 19	4.69
Oct. 11	8.60	27	6.20	May 11	8.53
Nov. 14	8.12	Aug. 13	6.00	June 2	5.35
Dec. 10	6.96	Sept. 9	8.80	21	5.88
Jan. 6, 1948	6.70	27	6.00	July 19	8.91
Feb. 3	7.50	Oct. 20	7.70	Aug. 10	3.60

A-1-8-23aaa. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 12.0 feet. Records available: 1949.

Aug. 15	3.97	Oct. 3	2.44	Dec. 29	2.41
Sept. 19	2.41	Nov. 30	2.19		

A-1-8-23ada. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, diameter 10.0 feet. Records available: 1949.

Aug. 14	2.11	Oct. 3	2.55	Dec. 28	2.28
Sept. 19	2.42	Nov. 30	2.28		

A-1-8-23daa. U. S. Geological Survey. Driven well, diameter 3/4 inch, depth 11.0 feet. Records available: 1949.

Aug. 14	3.89	Oct. 3	5.43	Dec. 28	4.27
Sept. 19	5.51	Nov. 30	3.92		

A-1-9-19abc2. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 9.0 feet. Records available: 1949. Nov. 4, 5.96; Dec. 29, 7.59.

A-1-9-19abc3. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 13.5 feet. Records available: 1949. Nov. 4, 8.96; Dec. 29, 8.34.

A-1-9-19acd1. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 4.5 feet. Records available: 1949. Nov. 4, 0.72; Dec. 29, 1.25.

A-1-9-19adc2. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 9.0 feet. Records available: 1949. Nov. 4, 0.79; Dec. 29, 2.67.

A-1-9-19acd3. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 13.5 feet. Records available: 1949. Nov. 4, 0.54; Dec. 29, 2.56.

A-1-9-19acd4. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 18.0 feet. Records available: 1949. Nov. 4, 0.63; Dec. 29, 2.46.

A-1-9-19beb. U. S. Geological Survey. Drilled observation well, diameter 3/4 inch, depth 12.0 feet. Records available: 1949. Sept. 14, 1.47; Oct. 3, 2.31; Nov. 30, 2.38; Dec. 28, 2.47.

A-1-9-19cdal. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 4.5 feet. Records available: 1949. Nov. 4, 1.83; Dec. 29, 1.52.

A-1-9-19cda2. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 9.0 feet. Records available: 1949. Nov. 4, 1.80; Dec. 29, 1.48.

A-1-9-19cda3. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 13.5 feet. Records available: 1949. Nov. 4, 1.39; Dec. 29, 1.45.

A-1-9-19dcl. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 5.0 feet. Records available: 1949. Nov. 4, 4.73; Dec. 29, dry.

A-1-9-19dec2. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 10.0 feet. Records available: 1949. Nov. 4, 4.46; Dec. 29, 4.84.

A-1-9-19dec3. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 15.0 feet. Records available: 1949. Nov. 4, 8.62; Dec. 29, 4.99.

A-1-9-26ddd. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 13.5 feet. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level
Aug. 24	10.16	Oct. 6	10.63	Dec. 28	10.67
Sept. 19	10.21	Nov. 30	10.54		

A-1-9-28caa2. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 13.0 feet. Records available: 1949. Nov. 4, 5.78; Dec. 29, 5.03.

A-1-9-28caa3. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 15.5 feet. Records available: 1949. Nov. 4, 5.32; Dec. 29, 5.47.

A-1-9-28cad2. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 9.0 feet. Records available: 1949. Nov. 4, 5.44; Dec. 29, 6.18.

A-1-9-28cad3. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 13.0 feet. Records available: 1949. Nov. 4, 5.49; Dec. 29, 6.07.

A-1-9-28cad4. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 17.0 feet. Records available: 1949. Nov. 4, 14.71; Dec. 29, 9.48.

A-1-9-28cbb. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 9.0 feet. Records available: 1949. Oct. 3, 6.35; Nov. 30, 6.87; Dec. 28, 7.13.

A-1-9-29cda. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 13.5 feet. Records available: 1949. Oct. 13, 8.12; Dec. 28, 8.29.

A-1-9-29ddd. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 13.5 feet. Records available: 1949. Oct. 13, 9.65; Nov. 30, 7.52; Dec. 28, 8.37.

A-1-9-33bda. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 13.5 feet. Records available: 1949. Oct. 13, 8.88; Dec. 29, 9.41.

A-1-9-34bca. U. S. Geological Survey. Drilled observation well, diameter 3/4 inch, depth 12.0 feet. Records available: 1949. Sept. 14, 7.62; Oct. 3, 6.57; Nov. 30, 6.38; Dec. 28, 6.24.

A-1-9-35bbc. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 13.5 feet. Records available: 1949. Sept. 14, 3.16; Oct. 3, 3.17; Nov. 30, 3.39; Dec. 28, 3.51.

A-1-9-35bbd. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 13.5 feet. Records available: 1949. Sept. 14, 8.12; Oct. 3, 2.35; Dec. 28, 3.83.

A-1-14-5abl. A. Trole. Dug stock well, depth 16.6 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Nov. 11, 1946	5.83	Mar. 5, 1948	3.90	Feb. 15, 1949	4.53
Mar. 5, 1947	3.96	24	3.60	Mar. 9	1.54
31	3.75	Apr. 14	3.90	Apr. 1	2.96
Apr. 24	3.42	May 6	3.86	Apr. 19	3.35
May 23	3.94	19	4.60	May 31	3.82
June 2	3.80	June 7	5.15	June 22	4.17
July 7	4.50	24	3.28	July 13	5.41
Aug. 20	5.50	July 13	5.10	Aug. 3	4.00
Sept. 9	5.90	Aug. 4	5.20	24	6.62
Oct. 20	6.00	24	6.75	Sept. 12	6.86
Nov. 26	5.72	Sept. 15	6.31	Oct. 11	6.90
Dec. 18	4.60	Nov. 3	6.99	Nov. 8	7.20
Jan. 12, 1948	5.08	30	6.07	Dec. 8	7.80
Feb. 9	5.06	Dec. 30	5.97		

D-1-10-5ccc. U. S. Geological Survey. Observation well, diameter 3/4 inch, depth 16.3 feet. Records available: 1949. Oct. 5, 12.66; Nov. 30, 11.77; Dec. 28, 13.02.

D-1-10-8abcl. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 4.5 feet. Records available: 1949. Nov. 4, 3.28; Dec. 29, 1.97.

D-1-10-8abc2. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 9.0 feet. Records available: 1949. Nov. 4, 2.25; Dec. 29, 1.88.

D-1-10-8abc3. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 13.0 feet. Records available: 1949. Nov. 4, 10.32; Dec. 29, 9.93.

D-1-10-8abc4. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 17.0 feet. Records available: 1949. Nov. 4, 1.86; Dec. 29, 1.57.

D-1-10-8bcc. U. S. Geological Survey. Driven observation well, diameter 3/4 inch, depth 13.5 feet. Records available: 1949. Oct. 5, 6.71; Dec. 28, 8.11.

D-1-10-8caa1. U. S. Geological Survey. Driven observation well, diameter $3/4$ inch, depth 4.5 feet. Records available: 1949. Dec. 29, 3.31.

D-1-10-8caa2. U. S. Geological Survey. Observation well, diameter $3/4$ inch, depth 9.0 feet. Records available: 1949. Nov. 4, 3.00; Dec. 29, 2.94.

D-1-10-8caa3. U. S. Geological Survey. Driven observation well, diameter $3/4$ inch, depth 13.5 feet. Records available: 1949. Nov. 4, 3.99; Dec. 29, 2.87.

D-1-10-8caa4. U. S. Geological Survey. Driven observation well, diameter $3/4$ inch, depth 17.0 feet. Records available: 1949. Nov. 4, 12.97; Dec. 29, 9.76.

D-1-10-8caa4. U. S. Geological Survey. Driven observation well, diameter $3/4$ inch, depth 17.0 feet. Records available: 1949. Nov. 4, 12.97; Dec. 29, 9.76.

D-1-10-8cacl. U. S. Geological Survey. Driven observation well, diameter $3/4$ inch, depth 4.5 feet. Records available: 1949. Nov. 4, dry; Dec. 29, dry.

D-1-10-8caa2. U. S. Geological Survey. Driven observation well, diameter $3/4$ inch, depth 9.0 feet. Records available: 1949. Nov. 4, 4.89; Dec. 29, 4.11.

D-1-10-8cac3. U. S. Geological Survey. Driven observation well, diameter $3/4$ inch, depth 13.0 feet. Records available: 1949. Nov. 4, 4.44; Dec. 29, 4.10.

D-1-10-8cac4. U. S. Geological Survey. Driven observation well, diameter $3/4$ inch, depth 12.0 feet. Records available: 1949. Nov. 4, 9.53; Dec. 29, 9.48.

C-1-10-8cda. U. S. Geological Survey. Driven observation well, diameter $3/4$ inch, depth 13.5 feet. Records available: 1949. Sept. 5, 4.05; Oct. 6, 3.48; Dec. 28, 3.58.

D-1-10-9cdc. U. S. Geological Survey. Driven observation well, diameter $3/4$ inch, depth 7.0 feet. Records available: 1949. Sept. 26, 1.92; Oct. 6, 1.86; Nov. 30, 0.01; Dec. 28, 1.44.

D-1-10-10ccc. U. S. Geological Survey. Driven observation well, diameter $3/4$ inch, depth 8.5 feet. Records available: 1949. Sept. 28, 3.76; Oct. 6, 3.47; Nov. 28, dry; Dec. 28, dry.

A-1-8-4dad. U. S. Geological Survey. Jetted observation well, diameter $3/4$ inch, depth 18.0 feet. Records available: 1949. Aug. 23, 13.93; Sept. 19, 14.13; Oct. 3, 14.31; Dec. 28, 14.37.

Perkins County

A-21-16-15cd. Ronald Ham. Dug stock well, diameter $1\frac{1}{2}$ inches, depth 34.5 feet. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level
Oct. 15, 1946	19.80	May 14, 1948	16.73	Oct. 7, 1948	19.49
May 15, 1947	17.64	June 2	16.82	Apr. 19, 1949	17.65
July 16	17.39	Aug. 10	18.47	Dec. 8	18.95
Oct. 17	17.94				

A-21-16-19dal. Otto Weinkauff. Drilled domestic well, diameter 6 inches, depth 24.2 feet. Records available: 1946-49.

Oct. 12, 1946	10.47	Oct. 17, 1947	9.33	Aug. 11, 1948	10.10
May 15, 1947	10.20	May 13, 1948	9.77	Dec. 7, 1949	10.28
July 16	9.55	June 2	9.79		

A-21-16-21bcl. Carl Lutz. Drilled domestic well, diameter 6 inches, depth 32 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Oct. 15, 1946	28.80	May 14, 1948	28.29	Oct. 8, 1948	28.59
May 15, 1947	28.25	June 2	28.44	Apr. 9, 1949	27.92
July 16	27.59	Aug. 10	28.48	Dec. 8	27.78
Oct. 17	27.73				

A-21-16-21bc2. Carl Lutz. Dug stock well, diameter 40 inches. Records available: 1946-49.

Oct. 15, 1946	11.30	June 2, 1948	11.16	Apr. 19, 1949	10.61
May 15, 1947	10.90	Aug. 10	11.23	Dec. 8	11.33
May 14, 1948	11.05	Oct. 8	11.28		

A-21-16-24dd. U. S. Bureau of Reclamation. Bored observation well, diameter 12 inches, depth 24 feet. Records available: 1948-49.

May 28, 1948	13.5	Aug. 11, 1948	12.08	Apr. 19, 1949	13.34
June 1	11.92	Nov. 23	12.55	Dec. 8	16.68
2	11.95	24	12.93		

A-21-16-29ba. Barnett. Dug domestic well, diameter 30 inches, depth 17.0 feet. Records available: 1946-49.

Oct. 12, 1946	13.96	Oct. 17, 1947	12.40	Oct. 6, 1948	14.22
May 15, 1947	12.58	May 13, 1948	13.49	Apr. 19, 1949	13.68
July 16	11.98	Aug. 10	14.14	Dec. 8	14.18

Sanborn County

106-61-1bd2. John Nichols. Dug domestic well, diameter 24 inches, depth 15 feet. Records available: 1949. May 8, 8.26; July 14, 10.48; Sept. 28, 12.47.

108-61-4cc. Emanuel Mogck. Dug domestic well, diameter 80 feet. Records available: 1947-49.

June 4, 1947	14.80	Aug. 23, 1948	14.72	July 12, 1949	14.41
Aug. 20	14.64	Nov. 8	14.46	Sept. 27	a 18.91
Aug. 22, 1948	14.29	May 6, 1949	14.16		

a Pumping recently.

108-61-31bc. George Deering. Drilled well, diameter 3 inches, depth 150 feet. Records available: 1946-47, 1949.

June 13, 1946	a 6.16	June 5, 1947	a 9.71	July 12, 1949	9.92
Oct. 29	a 10.46	Oct. 9	a 10.57	Sept. 27	9.94
Mar. 13, 1947	a 10.08	May 7, 1949	9.99		

a By State Geological Survey.

108-62-1cc. H. H. Grant. Dug domestic well, diameter 36 inches, depth 49 feet. Records available: 1947-49.

June 4, 1947	33.80	Aug. 23, 1948	35.98	July 12, 1949	46.00
Aug. 20	a 47.77	Nov. 8	41.29	Sept. 27	46.38
Apr. 22, 1948	45.47	May 7, 1949	42.51		

a Pumping recently.

108-62-32bb. Dug well, diameter 20 inches. Records available: 1947-49.

May 22, 1947	4.50	Aug. 23, 1948	5.08	July 11, 1949	6.31
Aug. 20	6.30	Nov. 9	7.79	Sept. 27	6.12
Apr. 22, 1948	6.44	May 7, 1949	5.30		

Shannon County

B-38-47-18ac1. Drilled stock well, depth 20.4 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Oct. 26, 1946	10.75	Jan. 5, 1948	7.60	Jan. 1, 1949	11.50
Mar. 4, 1947	14.05	Feb. 3	8.80	Feb. 11	10.25
Apr. 1	12.08	Mar. 1	10.60	28	8.60
24	11.30	24	10.65	Mar. 28	10.68
May 6	11.47	Apr. 12	10.60	Apr. 18	10.40
June 4	10.75	May 3	9.60	May 10	12.45
July 3	10.10	27	10.68	June 1	10.73
23	10.54	June 18	10.60	18	10.82
Aug. 12	10.75	July 6	10.35	July 12	10.98
Sept. 5	10.99	26	10.80	Aug. 1	12.28
22	10.94	Aug. 16	10.70	22	10.95
Oct. 17	10.78	Sept. 8.	11.00	Sept. 13	10.61
Nov. 5	11.53	Oct. 19	10.20	Oct. 10	10.75
14	10.65	Nov. 11	12.00	Nov. 8	10.74
Dec. 9	10.83	Dec. 14	12.09		

Spink County

114-62-1aa. Owner unknown. Dug well, diameter 4 inches, depth 46 feet. Records available: 1947-49.

June 25, 1947	37.85	Aug. 26, 1948	37.71	July 13, 1949	37.22
Aug. 25	40.46	Nov. 14	37.30	Sept. 19	37.29
Apr. 26, 1948	38.66	May 3, 1949	37.36		

114-62-16cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 33 feet. Records available: 1949. Dec. 1, 15.40; Dec. 15, 15.42.

114-62-17cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 28 feet. Records available: 1949. Dec. 1, 19.10; Dec. 15, 18.80.

114-62-33bc. McDonald. Dug and drilled domestic and stock well, diameter 48 inches, depth 30 feet. Records available: 1946-49.

Apr. 9, 1946	23.00	June 18, 1947	22.72	Nov. 14, 1948	25.00
June 14	23.42	Aug. 25	23.63	May 3, 1949	a 28.75
Aug. 7	23.27	Apr. 25, 1948	21.71	July 13	a 24.12
Nov. 14	23.70	Aug. 26	23.46	Sept. 22	a 23.58
Apr. 23, 1947	23.60				

a Pumping recently.

114-53-13cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 29 feet. Records available: 1949. Dec. 1, 17.30; Dec. 15, 16.59. (Measurement on Dec. 1 made by Bureau of Reclamation.)

114-53-13dd. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 27 feet. Records available: 1949. Dec. 1, 16.30; Dec. 15, 15.40. (Measurement on Dec. 1 made by Bureau of Reclamation.)

114-63-15cb. Owner unknown. Unused dug well, diameter 49 inches. Records available: 1946-49.

Nov. 14, 1946	31.71	Apr. 26, 1948	21.14	May 3, 1949	21.10
Apr. 23, 1947	21.86	Aug. 25	20.71	July 13	31.08
June 18	21.30	Nov. 14	22.14	Sept. 22	31.43
Aug. 25	20.61				

114-63-15cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 38 feet. Records available: 1949. Dec. 1, 18.20; Dec. 15, 18.21. (Measurements on Dec. 1 made by Bureau of Reclamation.)

114-63-16cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 37 feet. Records available: 1949. Dec. 1, 29.10; Dec. 15, 29.27. (Measurement on Dec. 1 made by Bureau of Reclamation.)

114-63-17cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 38 feet. Records available: 1949. Dec. 1, 11.85; Dec. 15, 11.92. (Measurement on Dec. 1 made by Bureau of Reclamation.)

114-63-18cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 28 feet. Records available: 1949. Dec. 1, 10.50; Dec. 15, 10.51. (Measurement on Dec. 1 made by Bureau of Reclamation.)

114-63-35cd. W. Gatzke. Bored domestic and stock well, diameter 18 inches, depth 32 feet. Records available: 1946-49. Apr. 6, 1946

Date	Water level	Date	Water level	Date	Water level
Apr. 6, 1946	17.30	June 17, 1947	17.00	Nov. 14, 1948	a 32.43
June 12	11.72	Aug. 22	a 30.04	May 3, 1949	31.74
Aug. 7	a 30.10	Apr. 26, 1948	a 26.63	July 13	31.08
Apr. 19, 1947	a 32.02	Aug. 25	21.17	Sept. 22	31.43

a Pumping recently.

114-64-8cc. Unused dug well, diameter 18 inches, depth 37.5 feet. Records available: 1947-49.

Apr. 23, 1947	17.40	Apr. 27, 1948	16.45	May 2, 1949	15.90
June 18	16.68	Aug. 26	16.97	July 13	16.07
Aug. 26	17.21	Nov. 15	16.11	Sept. 22	16.98

114-64-13cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 32 feet. Records available: 1949. Dec. 1, 6.35; Dec. 15, 7.59. (Measurements on Dec. 1 made by Bureau of Reclamation.)

114-64-14cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 26 feet. Records available: 1949. Dec. 1, 6.95; Dec. 15, 7.05. (Measurement on Dec. 1 made by Bureau of Reclamation.)

114-64-15cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 30 feet. Records available: 1949. Dec. 1, 19.55; Dec. 15, 19.05. (Measurement on Dec. 1 made by Bureau of Reclamation.)

114-64-16cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 35 feet. Records available: 1949. Dec. 1, 17.90; Dec. 15, 17.16. (Measurement on Dec. 1 made by Bureau of Reclamation.)

114-64-18cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 28 feet. Records available: 1949. Dec. 1, 13.80; Dec. 15, 13.49. (Measurement on Dec. 1 made by Bureau of Reclamation.)

114-64-18dd. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 30 feet. Records available: 1949. Dec. 1, 7.90; Dec. 15, 7.90. (Measurement on Dec. 1 made by Bureau of Reclamation.)

114-65-8cb. H. L. Binger. Dug stock well, diameter 18 inches, depth 32 feet. Records available: 1946-49.

Apr. 9, 1946	18.85	Aug. 26, 1947	19.33	May 2, 1949	25.60
June 14	19.19	Apr. 27, 1948	19.01	July 14	19.35
Aug. 7	19.28	Aug. 25	19.13	Sept. 1	19.47
Nov. 15	19.18	Nov. 15	19.72	.22	19.70
June 18, 1947	19.01				

114-65-13cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 28 feet. Records available: 1949. Dec. 1, 8.65; Dec. 15, 9.61. (Measurement on Dec. 1 made by Bureau of Reclamation.)

114-65-14cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 28 feet. Records available: 1949. Dec. 1, 9.85; Dec. 15, 10.02. (Measurement on Dec. 1 made by Bureau of Reclamation.)

114-65-15cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 37 feet. Records available: 1949. Dec. 1, 16.10; Dec. 15, 16.15. (Measurement on Dec. 1 made by Bureau of Reclamation.)

114-65-17dd. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 28 feet. Records available: 1949. Dec. 1, 18.90; Dec. 15, 17.40. (Measurement on Dec. 1 made by Bureau of Reclamation.)

114-65-17cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 37 feet. Records available: 1949. Dec. 1, 14.60; Dec. 15, dry. (Measurement on Dec. 1 made by Bureau of Reclamation.)

114-65-18cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 18 feet. Records available: 1949. Dec. 1, 12.20; Dec. 15, 12.25. (Measurement on Dec. 1 made by Bureau of Reclamation.)

115-62-7dd. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 24 feet. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
July 26, 1948	a 23.90	June 2, 1949	a 24.40	Aug. 30, 1949	24.24
Aug. 26	a 23.90	15	21.20	Sept. 2	a 24.20
Sept. 28	a 24.10	July 1	24.30	19	24.25
Oct. 28	a 24.10	2	a 24.30	Oct. 3	24.20
Dec. 2	a 25.10	11	24.22	Nov. 1	a 24.30
Mar. 1, 1949	a 25.50	30	24.25	Dec. 1	a 24.09
Apr. 1	a 24.20	Aug. 5	a 24.20	28	23.35
May 1	24.10				

a By Bureau of Reclamation.

115-52-25aa. Owner unknown. Dug stock well, diameter 30 inches, depth 28.3 feet. Records available: 1947-49.

June 25, 1947	7.80	Nov. 17, 1948	9.64	July 13, 1949	12.14
Aug. 25	a 9.66	May 2, 1949	9.79	Sept. 13	11.60
Aug. 25, 1948	a 15.60				

a Pumping recently.

115-63-2cc. Owner unknown. Bored stock well, diameter 30 inches, depth 31 feet. Records available: 1947-49.

Apr. 23, 1947	22.33	Apr. 28, 1948	20.25	May 2, 1949	22.76
June 18	19.97	Aug. 25	22.04	July 13	22.78
Aug. 25	20.38	Nov. 17	22.66	Sept. 19	21.92

115-63-4aa. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 24 feet. Records available: 1948-49.

July 26, 1948	a 10.80	Apr. 1, 1949	a 15.20	Aug. 1, 1949	a 15.80
Aug. 26	a 10.80	May 1	a 14.50	30	15.91
Sept. 28	a 12.50	June 1	a 14.50	Sept. 1	a 15.90
Oct. 27	a 13.50	June 14	14.78	19	16.51
Dec. 6	a 14.00	July 1	15.00	Oct. 3	a 15.90
Jan. 6, 1949	a 13.60	2	a 15.16	Nov. 1	a 16.00
Feb. 2	a 13.60	13	15.28	Dec. 1	a 16.00
Mar. 1	a 15.00	30	15.69	28	16.18

a By U. S. Bureau of Reclamation.

115-53-15dd. Owner unknown. Bored domestic and stock well, diameter 18 inches, depth 25 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 10, 1946	14.90	June 18, 1947	15.95	Nov. 17, 1948	16.90
June 14	17.77	Aug. 26	16.90	May 2, 1949	16.82
Aug. 7	16.17	Apr. 23, 1948	15.37	July 13	16.53
Nov. 14	16.01	Aug. 25	15.93		

115-64-11cc. Owner unknown. Bored stock well, diameter 18 inches, depth 65 feet. Records available: 1946-49.

Apr. 10, 1946	27.42	June 18, 1947	26.60	Nov. 17, 1948	27.56
June 14	27.23	Aug. 25	a 28.11	Apr. 30, 1949	27.72
Aug. 7	25.82	Apr. 27, 1948	26.14	July 14	28.00
Nov. 14	a 28.41	Aug. 24	a 29.63	Sept. 19	27.32
Apr. 23, 1947	27.49				

a Pumping recently.

115-64-30cc. G. Otto. Unused bored well, diameter 18 inches, depth 26 feet. Records available: 1946-49.

Apr. 9, 1946	13.10	May 26, 1947	11.67	Nov. 17, 1948	11.58
June 14	12.48	June 18	12.12	Apr. 30, 1949	11.19
Aug. 7	12.05	Aug. 20	12.57	July 14	11.62
Nov. 15	12.36	Apr. 28, 1948	11.53	Sept. 19	13.27
Apr. 23, 1947	12.76	Aug. 26	12.22		

115-64-35bb. Owner unknown. Unused dug well, diameter 48 inches, depth 13 feet. Records available: 1946-49.

Apr. 9, 1946	6.25	June 18, 1947	6.06	Nov. 17, 1948	8.13
June 14	7.20	Aug. 27	7.40	Apr. 30, 1949	6.69
Aug. 7	8.66	Apr. 27, 1948	6.53	July 14	7.70
Nov. 14	7.96	Aug. 24	6.82	Sept. 19	10.02
Apr. 23, 1947	6.13				

115-65-5cd. M. J. Handcock. Dug domestic well, diameter 18 inches, depth 18 feet. Records available: 1946-49.

Apr. 15, 1946	10.30	June 18, 1947	10.38	Apr. 30, 1949	11.30
June 14	10.89	Aug. 26	9.87	July 12	12.23
Aug. 7	11.22	Apr. 28, 1948	9.63	Aug. 29	12.30
Nov. 15	11.39	Aug. 25	10.05	Sept. 18	12.17
Apr. 23, 1947	10.59	Nov. 17	10.19		

115-65-33aa. Owner unknown. Bored stock well, diameter 24 inches, depth 24 feet. Records available: 1946-49.

Apr. 9, 1946	17.43	June 18, 1947	16.92	Apr. 30, 1949	15.61
June 14	17.26	Aug. 26	16.88	July 14	15.63
Aug. 7	17.14	Apr. 28, 1948	16.70	Aug. 23	15.76
Nov. 15	17.22	Aug. 26	17.32	Sept. 19	15.95
Apr. 23, 1947	17.41	Nov. 18	15.64		

116-61-20cc. O. Malone. Dug domestic and stock well, depth 19 feet. Records available: 1947-49.

June 25, 1947	14.55	Aug. 25, 1948	14.70	July 13, 1949	13.46
Aug. 25	14.33	Nov. 17	13.71	Sept. 19	13.24
Apr. 29, 1948	14.33	May 2, 1949	13.38		

116-62-3ab. Owner unknown. Dug stock well, diameter 18 inches, depth 22 feet. Records available: 1949.

June 26	16.08	Aug. 25	14.15	July 13	a 16.51
Aug. 25	15.87	Nov. 17	15.45	Sept. 19	15.87
Apr. 29	14.51	May 2	15.72		

a Pumping recently.

116-62-22dd. Owner unknown. Dug domestic and stock well, diameter 36 inches, depth 25 feet. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
June 25, 1947	19.05	Aug. 25, 1948	18.08	July 13, 1949	18.34
Aug. 25	19.57	Nov. 17	18.14	Sept. 19	a 19.49
Apr. 29, 1948	19.13	May 2, 1949	18.30		

a Pumping recently.

116-63-36dd. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 24 feet. Records available: 1948-49

July 26, 1948	a 25.50	May 1, 1949	a 23.60	Aug. 30, 1949	23.44
Aug. 26	a 24.80	June 1	a 23.50	Sept. 1	a 23.50
Sept. 28	a 24.50	14	23.70	19	23.46
Oct. 28	a 24.30	July 1	23.60	Oct. 3	a 23.40
Dec. 2	a 23.00	2	a 23.51	Nov. 1	a 23.40
Jan. 6, 1949	a 22.80	13	23.59	Dec. 1	a 23.40
Mar. 1	a 22.80	30	a 23.53	28	23.41
Apr. 1	a 22.80	Aug. 1	a 23.50		

a By U. S. Bureau of Reclamation.

116-64-3db. L. J. Hillested. Dug domestic and stock well, diameter 18 inches, depth 22 feet. Records available: 1946-49.

Nov. 16, 1946	10.93	Feb. 12, 1948	11.80	Dec. 23, 1948	11.62
Feb. 11, 1947	11.10	Mar. 11	11.68	Jan. 25, 1949	12.23
Mar. 12	11.42	29	11.24	Feb. 23	a 13.17
Apr. 11	11.68	Apr. 14	11.02	Mar. 16	13.55
May 5	10.52	27	10.95	Apr. 21	11.61
14	10.71	May 3	10.90	May 2	11.58
23	10.48	5	10.85	31	11.95
June 24	11.10	June 16	11.41	June 29	12.24
Aug. 5	10.94	July 9	10.52	July 7	12.28
25	11.26	30	10.77	12	12.35
Oct. 21	12.24	Aug. 17	10.36	Aug. 31	12.34
Nov. 21	11.97	Sept. 9	11.00	Sept. 19	13.12
Jan. 14, 1948	11.79	Nov. 11	12.19	21	12.96

a Pumping recently.

116-64-4cd4. G. Miller. Unused dug well, diameter 24 inches, depth 30 feet. Records available: 1949. Sept. 19, 12.30.

116-54-32aa. R. P. Sharp. Dug domestic and stock well, diameter 24 inches, depth 23 feet. Records available: 1946-49.

Apr. 10, 1946	17.23	June 16, 1947	15.68	Nov. 17, 1948	15.19
June 14	16.70	Aug. 26	16.80	May 2, 1949	15.17
Aug. 6	16.04	Apr. 27, 1948	15.43	July 14	15.55
Nov. 15	16.38	Aug. 25	14.62	Sept. 19	16.51
Apr. 23, 1947	16.23				

116-65-4ba. Owner unknown. Bored stock well, diameter 18 inches, depth 15 feet. Records available: 1946-49.

Apr. 10, 1946	6.53	June 23, 1947	7.20	Apr. 30, 1949	5.15
June 14	6.47	Aug. 26	6.99	July 12	6.56
Aug. 6	6.44	Apr. 28, 1948	5.30	Sept. 1	6.80
Nov. 15	6.51	Aug. 25	5.34	19	6.98
Apr. 23, 1947	5.78	Nov. 18	6.46		

117-62-35bb. Owner unknown. Dug domestic and stock well, diameter 18 inches, depth 30 feet. Records available: 1947-49.

June 26, 1947	21.62	Aug. 25, 1948	21.14	July 13, 1949	a 21.41
Aug. 25	23.07	Nov. 19	21.20	Sept. 19	21.28
Apr. 29, 1948	21.00	May 2, 1949	21.40		

a Pumping recently.

118-65-25ac. Owner unknown. Dug domestic well, diameter 36 inches, depth 21 feet. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Apr. 13, 1946	17.30	Aug. 27, 1947	17.15	Apr. 29, 1949	16.60
June 17	17.34	Apr. 29, 1948	17.02	July 11	16.50
Apr. 22, 1947	17.30	Aug. 24	17.12	Aug. 18	16.56
June 23	17.23	Nov. 20	16.89	Sept. 19	16.54

119-53-6ab. John McCall. Dug domestic and stock well, diameter 24 inches, depth 40 feet. Records available: 1946, 1949.

Apr. 11, 1946	26.33	Nov. 15, 1946	25.50	July 11, 1949	25.94
June 17	26.30	May 24	27.62	Sept. 19	25.20
Aug. 5	26.93				

119-64-3bb. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 24 feet. Records available: 1948-49.

July 26, 1948	a 11.70	Apr. 1	a 18.20	Aug. 1, 1949	a 18.30
Aug. 26	a 12.10	May 1	a 17.90	Aug. 30	a 18.71
Sept. 23	a 12.50	June 1	a 17.50	Sept. 1	a 18.70
Oct. 28	a 13.00	15	17.06	19	17.99
Dec. 2	a 13.80	July 1	17.50	Oct. 3	a 19.20
Jan. 6, 1949	a 12.90	2	a 17.26	Nov. 1	a 19.20
Feb. 2	a 12.50	11	17.70	Dec. 1	a 19.00
Mar. 1	a 12.30	30	18.26	28	20.65

a By Bureau of Reclamation.

120-63-6bb. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 24 feet. Records available: 1948-49.

July 26, 1948	a 18.20	Apr. 1, 1949	a 20.20	Aug. 1, 1949	a 19.90
Aug. 26	a 18.70	May 1	a 20.00	30	20.00
Sept. 23	a 18.50	June 1	a 19.40	Sept. 1	a 20.00
Oct. 23	a 18.80	15	19.49	19	20.19
Dec. 2	a 19.70	July 1	19.60	Oct. 3	a 20.10
Jan. 6, 1949	a 20.10	2	a 19.60	Nov. 1	a 20.30
Feb. 2	a 20.20	11	19.62	Dec. 1	a 20.50
Mar. 1	a 20.30	30	19.82	28	20.59

a By U. S. Bureau of Reclamation.

120-63-31cc. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 24 feet. Records available: 1948-49.

July 26, 1948	18.80	Apr. 1, 1949	a 21.30	July 30, 1949	21.36
Aug. 26	a 22.00	May 1	a 21.30	Aug. 1	a 21.30
Sept. 23	a 20.10	June 1	a 21.80	Sept. 19	21.48
Oct. 23	a 20.20	15	20.42	Oct. 20	a 21.40
Dec. 2	a 20.50	July 1	21.30	Nov. 18	a 21.50
Jan. 6, 1949	a 20.80	2	a 20.28	Dec. 1	a 21.80
Feb. 2	a 20.80	11	21.36	28	21.80
Mar. 1	a 20.80				

a By U. S. Bureau of Reclamation.

120-64-16dd. U. S. Bureau of Reclamation. Drilled well, diameter $1\frac{1}{4}$ inches, depth 24 feet. Records available: 1948-49.

June 26, 1948	a 21.50	Apr. 1, 1949	a 24.00	Aug. 1, 1949	a 23.50
Aug. 26	a 22.70	May 1	a 23.60	30	23.75
Sept. 23	a 22.80	June 1	a 23.50	Sept. 1	a 23.80
Oct. 23	a 23.30	15	23.60	19	24.07
Dec. 2	a 23.50	July 1	23.50	Oct. 3	a 24.10
Jan. 6, 1949	a 24.00	2	a 23.40	Nov. 1	a 24.30
Feb. 2	a 24.00	11	23.28	Dec. 1	a 24.50
Mar. 1	a 23.30	29	23.29	28	24.38

a By U. S. Bureau of Reclamation.

120-64-35cc. Owner unknown. Unused bored well, diameter 18 inches, depth 38 feet. Records available: 1946-49.

120-64-35cc--Continued.

Date	Water level	Date	Water level	Date	Water level
Apr. 11, 1946	19.20	June 23, 1947	17.62	Apr. 29, 1949	18.28
June 17	19.01	Aug. 25	19.80	July 11	19.53
Aug. 5	18.36	Apr. 29, 1948	15.55	25	20.52
Nov. 15	17.18	Aug. 24	17.22	Sept. 19	21.35
Apr. 22, 1947	17.00	Nov. 19,	19.00		

120-65-36dd. U. S. Bureau of Reclamation. Drilled observation well, diameter $1\frac{1}{4}$ inches, depth 34 feet. Records available: 1948-49.

July 26, 1948	a 4.20	Apr. 1, 1949	a 8.10	Aug. 1, 1949	a 7.40
Aug. 26	a 5.60	May 1	a 8.30	31	a 8.98
Sept. 28	a 6.40	June 1	a 8.30	Sept. 1	a 9.0
Oct. 28	a 7.80	19	7.80	19	9.50
Dec. 2	a 7.20	July 1	8.00	Oct. 3	9.60
Jan. 6, 1949	a 7.80	2	a 7.62	Nov. 1	a 9.60
Feb. 2	a 7.70	11	7.44	Dec. 1	a 9.40
Mar. 1	a 6.70	29	7.33	28	10.21

a By U. S. Bureau of Reclamation.

Stanley County

A-5-31-28aa. Owner unknown. Unused driven well, diameter 1 inch, depth 22 feet. Records available: 1946-49.

Oct. 28, 1946	11.53	Oct. 27, 1947	8.96	July 19, 1948	9.60
Feb. 14, 1947	11.80	Nov. 18	9.94	Aug. 18	10.68
Mar. 27	10.80	Dec. 12	10.74	Oct. 7	10.73
Apr. 9	5.37	Jan. 8, 1948	10.41	Nov. 17	10.79
May 23	7.25	Feb. 17	10.22	Dec. 16	11.53
June 13	7.33	Mar. 19	9.19	Jan. 20, 1949	9.68
July 22	8.46	Apr. 19	9.29	May 6	8.20
Aug. 4	11.30	May 18	10.35	27	8.13
Oct. 2	11.15	June 6	8.76	June 28	9.26

Walworth County

121-76-2dc. M. Anderson. Dug domestic well, diameter 36 inches, depth 35 feet. Records available: 1943, 1947-49.

May 16, 1943	12.23	Aug. 12, 1948	4.23	May 6, 1949	4.92
Jan. 28, 1947	11.11	Sept. 17	6.15	23	5.08
Oct. 28	11.66	Oct. 18	6.54	June 26	5.02
May 3, 1948	4.47	Nov. 23	8.65	July 18	5.40
May 21	4.79	Jan. 19, 1949	6.27	Aug. 22	5.76
June 28	4.93	Feb. 16	5.97	Sept. 27	9.60
July 23	3.96	Mar. 21	6.69	Oct. 31	12.00

Yankton County

93-56-14aa. Mrs. J. M. Kayser. Drilled well, depth 80 feet. Records available: 1946-49.

Nov. 19, 1946	42.00	Jan. 7, 1948	46.22	Dec. 15, 1948	46.78
Mar. 11, 1947	46.04	Mar. 4	43.84	Feb. 2, 1949	46.64
Apr. 30	46.96	30	46.86	Mar. 1	42.12
May 10	46.08	May 5	46.61	22	40.72
June 11	47.52	25	46.45	May 17	44.06
July 31	45.90	June 30	46.93	June 15	46.50
Sept. 2	46.49	Aug. 10	44.38	July 26	44.76
Oct. 1	46.68	Sept. 6	46.03	Aug. 30	45.19
21	45.01	Nov. 16	46.60	Oct. 11	44.70
Dec. 3	46.06				

WISCONSIN

By F. C. Foley

PROGRAM OF WORK

Measurements of water levels in observation wells in Wisconsin were continued during 1949. The program was expanded during the year with the addition of 15 observation wells. Automatic water-stage recorders were installed on eight wells; the recorder was removed from one well. A total of 184 wells was included in the program at the end of the year. Automatic water-stage recorders were in operation on 28 of them. A total of 3,004 individual water-level measurements were made during 1949. Measurements of water levels were made on six of the wells in northern Wisconsin by the Wisconsin Conservation Department during 1949 as in past years.

Special studies were continued in cooperation with the University of Wisconsin in the Milwaukee-Waukesha, Green Bay, and Langlade County areas and geophysical investigation of possible aquifers was made in the Marshfield area.

FLUCTUATIONS OF WATER LEVELS

Precipitation in Wisconsin in 1949 averaged 27.94 inches, which is 2.52 inches below normal. Precipitation in 1949 was greater than during 1948 when the State average was 6.31 inches below normal. The northern part of the State received more precipitation in general than the southern part and the difference is reflected in the fluctuations of water levels in water-table wells.

Following are departures from normal precipitations at five weather bureau stations in northern Wisconsin: Antigo, Langlade County, +0.59 inch; Minoqua, Oneida County, +3.45 inches; Park Falls, Price County, +0.39 inch; Danbury, Burnett County, +2.98 inches; Wausau, Marathon County, -3.69 inches. In Water-Supply Paper 1128, records were analyzed for 1948 for 13 water-table wells in northern Wisconsin. In 1948 all but one of the 13 wells showed a net decline in water level and the average net decline

was 1.20 feet. In 1949, 6 of the same 13 wells showed a net rise ranging from 0.33 foot to 1.16 feet, 7 showed a net decline ranging from 0.06 foot to 1.41 feet, and the average change was a net rise of 0.07 foot. Figure 11 shows hydrographs for 1948 and 1949 of two representative water-table wells, Pr 6 and Sw 7.

Precipitation at LaCrosse, LaCrosse County, in western Wisconsin, was 10.33 inches below normal during 1949, at Sparta, Monroe County, 6.38 inches below normal, and at Viroqua, Vernon County, 7.20 inches below normal. All the stations are near the Coon Creek area in which six observation wells showed an average net decline of 0.74 foot during the year. Only one of the six wells showed a net rise and that was 0.02 foot. Declines ranged from 0.15 foot to 3.04 feet.

In the Milwaukee-Waukesha area most deep artesian wells showed a net decline during 1949. Of five recorder-equipped wells 3 showed net declines of 2.27 to 7.09 feet while two showed net rises of 2.65 feet and 19.84 feet. It is believed that the net rise of 19.84 feet in well M145 is due to limestone water entering from above the deep sandstones and that the net rise is not representative of the deep sandstone aquifers. All of the same five wells showed net declines during 1948 of from 7.16 to 21.05 feet, so the decline in water levels was considerably less in 1949 than in 1948. Seasonal fluctuations ranged from 8.07 to 53.89 feet in the five wells with the greatest fluctuation recorded in well M1 45, in the Milwaukee Journal Building, as in past years. The following table shows net changes, annual highest and lowest water levels with dates, and the total seasonal fluctuation in six wells in the Milwaukee-Waukesha area during 1949. Well Wk 14 is not included in the five wells described above. All measurements are in feet below land-surface datum.

Well No.	Location	Net change	Highest	Date	Lowest	Date	Seasonal fluctuation
M1 36	27th & Hopkins Sts. Milwaukee	-7.09	156.35	May 26	187.40	Sept. 3	31.05
M1 45	Milwaukee Journal Bldg. Milwaukee	+19.84	101.04	Apr. 12	154.93	July 29	53.89
M1 79	Forest Home Cemetery Milwaukee	-2.27	186.57	Apr. 18	227.12	Aug. 26	40.65
M1 132	White Manor Homes Milwaukee	-6.85	199.57	Apr. 18	234.54	Aug. 27	34.97
Wk 2	Elm Grove Convent Elm Grove	+2.65	74.59	Apr. 22	82.66	July 26	8.07
Wk 14	Veterans Hospital Waukesha	-1.22	281.75	Mar. 21	304.81	July 30	23.06

Figure 12 shows the hydrograph of well M1-36, a representative well in Milwaukee County.

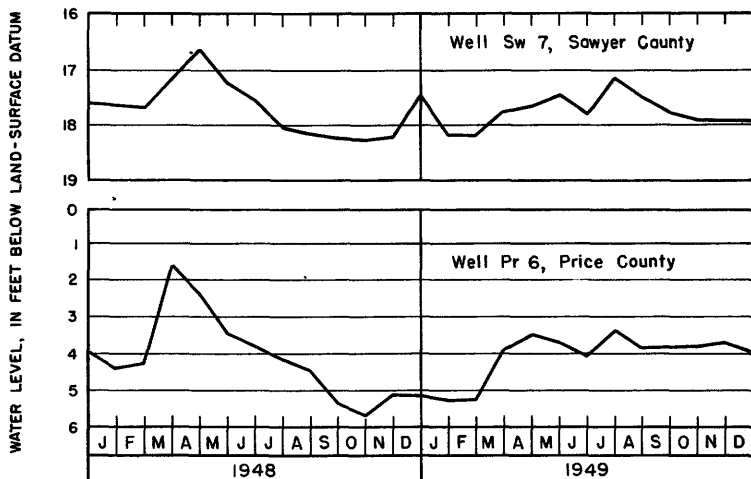


Figure 11.--Graph showing fluctuations of water levels in two water-table wells in northern Wisconsin, 1948-49.

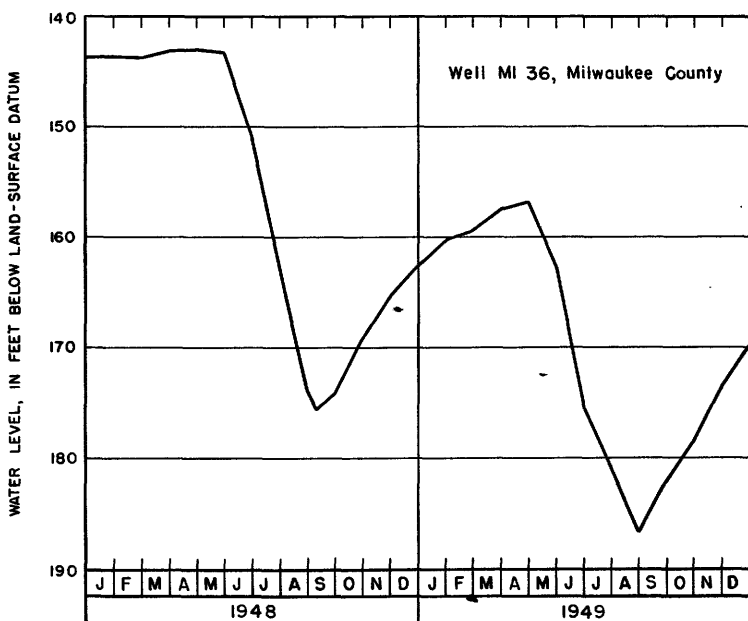


Figure 12.--Graph showing fluctuations of water level in artesian well at Milwaukee, Milwaukee County, Wis., 1948-49.

The lowest water levels during 1949 in all the wells listed in the table, except Wk 2, were lower than the corresponding lowest water levels during 1948.

Well Bn 9, at 320 North Broadway, Green Bay, showed the lowest water level during 1949, 308.98 feet below land-surface datum on August 6. This level was 8.17 feet lower than the corresponding lowest water level during 1948. The highest recorded water level in well Bn 9 occurred on March 20. The total seasonal fluctuation was 88 feet in 1949 compared to 85 feet in 1948.

Well Fl 10, on the eastern edge of the city of Fond du Lac, showed a net rise of 1.47 feet during 1949 compared to a net drop of 3.44 feet during 1948. Highest water levels occurred during March, April, and May, and the lowest level occurred on August 10. The total seasonal fluctuation was 10.05 feet during 1949 compared to 8.92 feet during 1948.

Artesian wells away from heavily pumped areas showed no significant changes in water levels during 1949. Well Ra 5, at Sturtevant, in Racine County, showed a net drop of 5.58 feet during 1949 compared to a net drop of 3.74 feet during 1948, a continuation of a downward trend. Wells Dg 9 and Dg 10, in Dodge County, showed net drops of 1.67 feet and 8.2 feet, respectively, during 1949 compared to net rises of 6.45 feet and 1.46 feet during 1948. Well Mt 5 in Peshtigo, Marinette County, showed a net rise of 0.59 foot during 1949 compared to a net drop of 1.32 feet during 1948.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

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., 6 miles south of Ashland, near power dam. Records available: 1943-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	3.15	Apr. 4	2.31	June 27	2.85	Oct. 3	3.33
10	3.09	11	2.43	July 4	1.95	10	2.95
17	3.00	18	2.39	11	2.33	17	3.04
24	3.01	25	2.55	18	2.95	24	3.05
31	3.05	May 2	2.69	25	3.13	31	2.95
Feb. 7	3.01	9	2.15	Aug. 15	3.31	Nov. 7	2.95
14	2.95	16	2.65	22	2.99	14	2.79
21	2.93	23	2.80	29	3.29	21	2.85
28	2.83	30	2.78	Sept. 5	3.34	23	2.79
Mar. 7	2.55	June 6	2.95	12	3.33	Dec. 5	2.80
14	2.65	13	3.05	19	3.35	12	2.63
21	2.55	20	2.73	26	3.33	26	2.93
28	2.35						

Brown County

Bn 9. Larsen Canning Co. 320 North Broadway, Green Bay. Records available: 1947-49.

Daily high and low water levels, from recorder charts

Day	January		February		March		April	
	High	Low	High	Low	High	Low	High	Low
1	231.20	233.96
2	232.12	235.00
3	231.68	235.21
4	240.05	228.80	233.05
5	238.58	227.72	230.20
6	227.79	230.60
7	229.37	233.10
8	231.89	233.85
9	232.11	234.17
10	232.58	234.83
11	227.45	.....	232.23	234.50
12	227.30	233.43	232.82	235.08
13	225.25	232.20	233.22	235.35
14	232.52	.....	225.40	230.82	234.38	237.27
15	231.00	233.77	227.22	232.75	235.90	237.61
16	234.05	237.07
17	228.93	232.88	233.22	236.41
18	227.98	232.80	234.82	237.19
19	225.86	231.36	236.00	237.67
20	220.00	227.45	.....	.....	228.15	232.75	236.05	238.90
21	225.98	236.63	238.47
22	222.98	226.00	235.82	238.00
23	223.58	.....	234.40	236.66
24	223.22	.....	232.87	236.05
25	224.40	229.58	231.30	241.65
26	236.22	.....	.....	.....	235.00	244.95
27	231.15	237.75	.....	.....	.....	251.08
28	232.92	241.23	.....	237.35	.....	.....
29	228.95	231.62	.....	.....
30	230.22	233.93	.....	253.58
31	230.52	233.50	.....	.....

Daily high and low water levels, from recorder charts

Day	May		June		July		August	
	High	Low	High	Low	High	Low	High	Low
1	276.05	283.72	.....	.....
2	251.65	.....	.....	277.74	283.35	296.80	303.85
3	253.55	.....	.....	.....	.....	.....	306.58
4	257.70	.....	.....	.....	.....	301.50	307.93
5	256.00	261.05	.....	.....	272.61	.....	300.45	307.84
6	270.80	279.50	300.82	308.98
7	273.40	281.59	.....	.....
8	275.67	284.50	.....	294.33
9	274.20	.....	277.95	285.68	.....	297.20
10	272.60	231.80	.....	.....	.....	301.24
11	274.20	284.10	.....	.....	297.40	300.45
12	275.30	280.64	.....	.....	295.50	301.32
13	273.30	274.40	.....	.....	297.58	302.92
14	275.83	.....	.....	.....	.....
15	269.60	275.30	.....	.....	.....	296.73
16	267.20	276.20	.....	.....	.....	301.00
17	266.77	275.93	.....	.....	298.15	303.28
18	276.42	.....	.....	.....	.....
19	267.82	272.93	.....	.....	298.50	305.63
20	266.44	276.67	.....	.....	303.12	305.64
21	270.00	280.41	290.90	.....	.....	.....
22	290.80	296.13	.....	300.85
23	287.80	295.52	295.60	301.30
24	283.17	291.00	294.35	303.25
25	281.85	.....	296.60	305.20
26	270.30	.....	.....	.....	298.40	306.35
27	269.28	277.75	.....	.....	299.70	306.38

Bn-9--Continued.

Daily high and low water levels, from recorder charts

Day	May		June		July		August	
	High	Low	High	Low	High	Low	High	Low
28	271.20	279.22	.....	.....	299.20	303.75
29	273.30	281.58	290.17	296.09	298.68	304.53
30	276.05	282.18	288.92	297.20	299.00	304.30
31	297.02	305.47

Daily high and low water levels, from recorder charts

Day	September		October		November		December	
	High	Low	High	Low	High	Low	High	Low
1	297.30	304.63	278.40	287.40	.....	.....	247.45	253.38
2	296.88	304.20	275.00	278.30	.....	.....	247.80	258.37
3	298.10	303.70	274.45	283.60	.....	.....	246.60	255.80
4	293.10	298.53	273.65	278.00	.....	.....	242.89	250.72
5	290.27	297.00	274.20	.....	.....	.....	243.25	254.23
6	288.27	295.00	277.15	286.50	.....	.....	.....	.....
7	236.87	295.82	279.20	287.30	.....	274.80	243.69	254.70
8	288.60	293.93	281.31	288.95	.....	273.75	243.92	252.70
9	285.69	294.88	279.10	285.53	264.30	.....	244.50	254.22
10	288.15	294.84	.....	286.65	264.48	268.15	243.85	.....
11	283.34	290.45	278.30	288.55	264.40	276.15	242.32	249.65
12	283.42	290.70	280.58	289.32	264.78	273.80	241.82	252.18
13	.....	.....	281.50	.....	261.80	266.50	240.40	.....
14	283.50	290.09	282.45	290.50	260.00	269.60	240.28	250.47
15	281.35	284.30	.....	283.80	.....	.....	241.05	252.88
16	279.45	286.87	277.30	.....	260.09	270.15	242.35	254.32
17	278.82	289.00	.....	284.60	262.80	268.73	242.85	251.57
18	278.72	283.48	274.62	277.00	.....	.....	240.30	247.04
19	278.10	287.30	274.86	.....	.....	.....	239.63	250.50
20	278.05	285.58	274.98	.....	253.80	259.45	238.51	247.50
21	278.70	288.78	275.78	284.90	254.30	264.10	239.75	250.47
22	279.70	.....	275.55	279.40	.....	262.48	239.50	248.39
23	279.27	291.29	273.20	277.90	.....	.....	239.90	250.60
24	282.80	290.60	271.60	280.65	.....	.....	238.55	.....
25	280.88	283.80	271.92	277.72	.....	.....	232.90	238.57
26	281.50	284.65	271.83	279.10	.....	.....	226.08	230.87
27	.....	.....	270.35	279.35	244.92	.....	.....	.....
28	278.82	287.43	.....	.....	245.20	255.85	.....	.....
29	276.47	.....	271.08	279.50	245.10	256.02	.....	.....
30	278.55	287.48	264.80	272.50	245.35	251.24	.....	.....
31	.....	.....	.....	273.80	.....	.....	.....	.....

Bn 11. City of DePere. Corner of Broadway and George Streets. Records available: 1947-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	107.17	107.38	.....	107.50	110.10	116.21
2	106.88	107.17	.....	106.50	110.00	116.58
3	107.15	.....	.....	106.92	.....	117.01
4	106.95	106.68	.....	106.96	110.54	117.25
5	106.30	106.76	.....	106.99	110.80	117.75
6	107.33	106.82	.....	106.99	111.91	118.00
7	107.00	106.77	.....	107.17	113.95	118.68
8	108.60	.....	.....	107.78	113.02	118.84
9	107.85	.....	107.70	107.77	112.54	118.78
10	108.82	.....	107.25	107.80	114.29	118.50
11	108.83	.....	107.46	106.78	114.37	118.20
12	108.60	.....	106.97	107.45	114.42	118.31
13	108.59	.....	106.88	108.30	115.70	117.38
14	108.77	106.70	107.30	108.28	115.58	117.58
15	108.70	107.45	107.39	107.97	115.51	119.60
16	108.91	107.62	107.57	108.40	116.45	124.10
17	107.74	107.44	107.68	108.50	116.74	126.00
18	108.11	107.36	107.82	108.55	116.70	127.13
19	107.85	107.08	107.96	109.09	115.71	124.10

Bn-11--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
20	108.15	106.86	107.64	109.63	114.22	127.70
21	107.47	106.47	106.84	109.80	113.79	131.79
22	107.92	106.40	106.94	110.10	114.24	129.60
23	107.66	106.37	107.44	110.15	114.32	131.90
24	107.38	106.66	107.23	110.09	114.47	.....
25	107.37	106.74	107.27	109.64	114.60	.....
26	.....	106.74	107.35	109.13	115.02	.....
27	.....	106.38	.....	109.57	115.48	.....
28	.....	.....	106.76	109.50	115.60	131.52
29	.....	.....	107.01	109.75	115.70	131.52
30	.....	.....	107.18	110.02	115.24	.....
31	107.28	.....	107.13	.....	115.39	.....

Lowest daily water level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	127.88	125.52	124.52	123.00	124.50
2	.....	127.45	125.68	124.42	123.32	124.71
3	.....	127.20	125.50	.....	123.47	124.59
4	.....	127.00	125.42	123.85	123.80	123.83
5	.....	126.82	125.40	124.06	123.92	122.99
6	128.80	126.57	125.28	124.00	123.93	122.95
7	.....	126.12	125.30	123.94	123.62	122.47
8	.....	125.23	125.30	123.90	123.48	122.42
9	128.60	124.91	125.48	123.89	123.68	122.35
10	126.18	125.03	125.68	.....	123.18	120.78
11	131.62	125.03	125.38	124.32	123.20	119.28
12	131.90	124.88	125.10	124.69	123.11	118.97
13	129.30	124.42	125.35	125.34	122.75	119.10
14	128.22	124.25	125.38	125.56	123.48	118.97
15	128.04	124.08	125.40	125.61	124.18	118.89
16	127.85	124.90	125.47	125.32	121.91	118.74
17	127.80	125.40	125.41	124.24	122.51	118.58
18	127.85	125.35	124.65	124.19	122.20	118.04
19	127.75	125.78	123.82	124.60	122.12	117.43
20	127.58	125.75	124.28	123.90	121.91	117.42
21	127.87	125.43	124.28	123.73	121.39	116.54
22	128.02	124.43	124.70	123.65	121.50	118.40
23	128.01	124.43	124.80	123.60	122.40	118.07
24	128.10	124.10	.....	123.60	122.35	117.79
25	128.10	124.40	.....	123.40	121.98	117.27
26	128.38	125.00	124.76	123.25	121.75	115.58
27	128.30	125.22	124.50	123.27	121.46	.....
28	128.65	125.65	124.67	123.32	121.21	115.52
29	128.75	125.45	124.60	123.26	121.45	115.47
30	128.58	125.23	124.50	123.28	122.92	115.28
31	128.35	125.22	.....	.....	.....	115.10

Bn 13. William Herber. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T. 24 N., R. 20 E. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 7	17.73	May 6	15.09	Sept. 23	20.32
Mar. 4	17.13	June 10	16.49	Dec. 9	20.84

Bn 14. Village of Pulaski. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T. 25 N., R. 9 E. Records available: 1947-49. Jan. 7, 38.35, pumping prior to measurement; Mar. 4, 39.11, pumping recently; Sept. 23, 39.10, pumping recently; Dec. 9, 38.92.

Bn 15. Larsen Canning Co. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 35, T. 24 N., R. 19 E. Records available: 1947-49.

Bn 15--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	8.93	May 6	6.58	July 22	8.78	Dec. 9	10.45
Mar. 4	7.10	June 10	7.32	Sept. 23	10.85		

Bn 16. Larsen Canning Co. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 35, T. 24 N., R. 19 E. Records available: 1947-49. Mar. 4, 16.64; May 6, 15.19; June 10, 16.13; Sept. 23, 20.12.

Bn 19. Green Bay Soap Co. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T. 24 N., R. 20 E. Records available: 1947-48. Measurements discontinued.

Bn 43. Harry Nick. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 2, T. 24 N., R. 20 E. Records available: 1948-49.

Jan. 6	19.41	May 5	15.71	July 21	20.19	Dec. 8	25.38
Mar. 3	17.04	June 9	16.51	Sept. 22	26.86		

Bn 51. Larsen Orchards. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 29, T. 24 N., R. 20 E. Used drilled domestic well, diameter 6 inches, depth approximately 800 feet. Equipped with turbine pump. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level
Jan. 7	115.84	June 10	115.58	Sept. 23	118.68
Mar. 4	115.07	July 22	119.37	Dec. 9	117.51

Bn 63. Joseph C. Michaels. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 15, T. 24 N., R. 20 E. Records available: 1948-49. May 5, 93.44; June 9, 96.03; July 21, 108.73; Sept. 22, 111.96.

Bn 72. Gregoire Denis. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 24 N., R. 21 E. Used drilled domestic well, diameter 8 inches, depth approximately 1,006 feet. Equipped with turbine pump. Records available: 1949. Mar. 10, 236; June 9, 236; July 21, 240; Dec. 8, 244.

Bn 75. L. Keyser. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 28, T. 22 N., R. 20 E. Used drilled domestic and stock well, diameter 6 inches, depth approximately 726 feet. Equipped with electric jack pump. Records available: 1949.

Mar. 30	97.92	Aug. 20	99.75	Dec. 7	100.17
June 8	97.52	Oct. 21	99.37		

Bn 78. Carl Jenkins. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 7, T. 25 N., R. 21 E. Used drilled domestic well, diameter 6 inches, depth approximately 198 feet. Flowing well. Records available: 1949. Sept. 22, +20.5; Dec. 8, +8.5.

Buffalo County

Bf 1. Owner unknown. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 29, T. 21 N., R. 12 W. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	31.01	Apr. 28	30.69	Aug. 11	31.28	Dec. 14	30.40
Mar. 9	30.93	June 2	31.00	Sept. 28	30.40		

Burnett County

Bt 2. Wisconsin Conservation Department. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 17, T. 39 N., R. 16 W. Measurements supplied through courtesy of Wisconsin Conservation Department. Records available: 1937-49.

Jan. 1	33.93	Apr. 2	34.06	July 1	34.22	Oct. 1	34.42
Feb. 5	34.01	May 1	34.09	Aug. 1	34.30	Nov. 1	34.40
Mar. 1	34.00	June 1	34.17	Sept. 1	34.42	Dec. 3	34.34

Calumet County

Ca 4. Harold Krueger. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 12, T. 20 N., R. 19 E. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	26.76	May 4	27.56	July 20	28.41	Dec. 7	28.31
Mar. 2	27.29	June 8	28.21	Oct. 21	28.02		

Ca 5. R. A. Huebner. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 17, T. 20 N., R. 20 E. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	101.54	May 4	124.14	July 20	103.44
Mar. 2	103.84	June 8	115.75	Sept. 21	105.50

Columbia County

Co. 13. F. Stollfus. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 29, T. 13 N., R. 11 E. Unused drilled stock well, diameter 6 inches, depth 72 feet. Equipped with lift pump. Records available: 1949. Oct. 27, 57.24; Dec. 9, 57.42.

Co. 17. Vogel & Bass. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, T. 12 N., R. 12 E. Unused drilled industrial well, diameter 6 inches, depth 93.3 feet. Records available: 1949. Sept. 30, 14.03; Dec. 9, 15.33.

Co. 22. Wisconsin State Fur and Game Farm. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 36, T. 11 N., R. 9 E. Unused drilled stock well, diameter 6 inches, depth 75.1 feet. Equipped with lift pump. Records available: 1949. Sept. 30, 52.83; Dec. 9, 53.28.

Co. 25. H. Landsverk. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 8, T. 11 N., R. 11 E. Unused drilled stock well, diameter 6 inches, depth 137.8 feet. Records available: 1949. Oct. 5, 79.39; Nov. 30, 80.14; Dec. 9, 82.28.

Co. 28. Mr. Flanders. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 5, T. 12 N., R. 9 E. Unused test well, diameter 6 inches, depth 71.0 feet. Water-stage recorder maintained on well since Nov. 10, 1949. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 10	2.28	Nov. 24	2.24	Dec. 8	2.31	Dec. 22	2.15
17	2.25	Dec. 1	2.19	15	2.14	29	2.23

Dane County

Dn 3. Gerald Hendrickson. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 32, T. 5 N., R. 8 E. Records available: 1946-49.

Jan. 11	65.01	Apr. 27	64.67	Aug. 5	64.54	Dec. 13	66.38
Mar. 8	65.09	June 1	65.11	Sept. 27	65.23		

Dn 4. J. N. Hanley. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 34, T. 9 N., R. 11 E. Records available: 1946-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	46.94	.....	46.94	44.41	44.74	45.57	46.12	46.22	46.92	47.56	47.91	48.61
2	46.99	.....	46.83	45.03	44.99	45.66	46.10	46.33	46.89	47.46	48.12	48.64
3	47.05	47.00	46.83	45.15	45.02	45.75	46.00	46.41	46.86	47.46	48.12	48.50
4	47.02	47.11	46.61	45.08	45.03	45.74	45.96	46.43	46.83	47.55	48.22	48.55
5	46.86	47.12	43.17	44.86	45.04	45.77	45.95	46.42	47.02	47.55	48.22	48.56
6	46.93	47.08	45.06	44.75	45.14	45.77	45.95	46.39	47.06	47.49	48.02	48.54
7	46.97	47.14	46.17	44.80	45.15	45.91	46.02	46.42	47.02	47.56	48.02	48.71
8	46.99	47.27	46.20	44.92	45.06	45.94	46.01	46.39	47.04	47.57	48.08	48.74
9	47.30	47.32	46.10	44.97	45.90	45.93	46.07	46.42	47.08	47.64	48.09	48.71
10	47.32	47.41	46.10	44.95	45.25	45.90	46.12	46.51	47.07	47.56	48.07	48.54

Dn 4--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	47.22	47.41	46.03	44.82	45.20	45.81	46.07	46.47	47.02	47.63	48.16	48.60
12	46.92	47.26	46.05	44.70	45.16	45.79	46.00	46.50	47.02	47.72	48.13	48.79
13	46.93	47.37	46.05	44.69	45.15	45.86	46.02	46.50	47.15	47.75	48.12	48.82
14	47.07	47.37	46.05	44.69	45.29	45.27	46.05	46.53	47.16	47.80	48.12	.....
15	46.92	47.29	46.06	44.88	45.28	46.02	46.06	46.55	47.11	47.78	48.22	.....
16	47.19	47.52	45.92	44.90	45.27	46.02	46.07	46.54	47.08	47.73	48.30	.....
17	47.15	47.53	45.91	44.71	45.28	46.04	46.03	46.49	47.09	47.79	48.33	.....
18	47.04	47.40	46.08	44.93	45.21	46.10	46.03	46.55	47.15	47.80	48.34	.....
19	47.29	47.46	46.12	44.99	45.38	46.11	46.09	46.65	47.27	47.78	48.21	.....
20	.....	47.60	46.04	44.91	45.39	46.03	46.11	46.70	47.30	47.73	48.35	.....
21	.....	47.53	45.82	44.83	45.27	46.09	.....	46.69	47.26	47.72	48.47	.....
22	.....	47.40	44.24	44.79	45.37	46.14	46.21	46.66	47.27	47.82	48.44	48.92
23	.....	47.38	45.78	44.90	45.46	46.13	46.27	46.67	47.37	47.98	48.30	49.00
24	.....	47.19	45.78	45.03	45.49	46.06	46.19	46.71	47.37	48.03	48.31	49.03
25	.....	46.63	45.20	44.93	45.48	46.09	46.17	46.74	47.37	47.91	48.41	48.80
26	.....	47.11	45.60	44.90	45.53	46.14	46.19	46.71	47.35	47.99	48.40	.....
27	46.93	46.95	44.82	45.04	45.55	46.24	46.20	46.71	47.35	47.97	48.40	48.98
28	47.13	46.97	45.41	45.05	45.60	46.16	46.23	46.76	47.46	47.90	48.32	49.02
29	.....	.....	45.58	44.92	45.58	46.13	46.30	46.78	47.47	47.87	48.40	49.07
30	.....	.....	44.49	44.84	45.58	46.08	46.31	46.77	47.52	47.98	48.55	48.98
31	.....	.....	45.13	.....	45.59	.....	46.33	46.85	.....	48.02	.....	48.93

Dn 5. State of Wisconsin. In State Capitol Building, south wing.
Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	92.45	May 2	91.79	July 25	95.27	Nov. 29	91.32
Feb. 28	92.74	June 6	95.35	Sept. 14	95.68		

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: 1946-49.

Jan. 7	13.20	May 6	9.38	July 22	12.08	Dec. 9	13.04
Mar. 4	12.07	June 10	11.08	Sept. 23	12.56		

Dg 4. City of Horicon. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 5, T. 11 N., R. 16 E. Records available: 1947-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	119.04	118.38	118.68	116.83	116.75	117.68
2	118.51	118.37	117.83	117.54	117.40	118.09
3	119.33	119.10	118.50	116.51	117.50	118.42
4	118.63	118.37	117.76	116.86	117.13	117.60
5	119.02	118.39	118.25	117.50	117.58	117.50
6	118.32	118.50	117.34	116.79	118.04	117.63
7	118.88	118.29	117.87	117.44	118.10	118.42
8	118.29	118.96	117.43	117.05	117.22	118.75
9	118.24	119.03	117.45	117.78	117.82	118.80
10	119.15	118.56	118.18	116.88	117.58	118.60
11	118.65	118.85	117.48	116.92	117.96	118.47
12	118.58	118.35	117.47	117.72	117.50	118.70
13	119.38	118.26	117.95	116.92	118.12	118.16
14	118.68	118.93	117.42	116.90	117.50	118.40
15	119.30	118.34	118.28	117.77	117.10	118.50
16	118.35	118.49	117.43	116.92	117.20	.....
17	118.21	119.14	117.47	116.68	117.80	.....
18	118.22	118.82	118.12	117.47	117.88	.....
19	119.09	118.37	117.57	117.50	117.88	.....
20	118.98	118.21	117.47	117.25	117.33	.....
21	118.58	118.64	118.18	116.94	117.82	.....
22	118.30	118.36	116.79	117.00	117.70	119.92

Dg 4--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
23	118.90	118.66	117.52	117.55	117.36	119.86
24	118.39	118.11	116.80	117.64	117.45	119.75
25	.....	118.60	116.72	116.83	118.25	118.80
26	.....	118.08	117.50	117.67	117.68	118.83
27	118.23	117.74	116.40	117.13	117.76	119.51
28	118.95	117.86	117.26	117.27	117.68	119.18
29	118.43		116.43	117.90	117.72	118.50
30	118.41		117.22	117.00	117.24	118.30
31	118.87		116.90		118.20	

Lowest daily water level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	119.00	119.98	120.78	120.32	120.50	120.23
2	118.40	119.57	120.92	120.16	120.81	120.73
3	118.80	119.45	120.90	120.58	120.60	120.18
4	118.90	119.54	120.42	120.13	120.70	119.51
5	119.62	119.57	120.60	120.10	120.43	120.11
6	119.55	119.50	120.20	120.37	120.69	120.40
7	119.82	120.03	120.53	120.35	120.10	120.69
8	120.19	119.89	120.17	120.05	120.27	120.33
9	120.77	119.98	120.06	119.80	120.80	120.79
10	120.28	120.15	120.03	120.35	120.45	120.10
11	120.40	120.38	119.80	120.03	120.90	120.42
12	120.54	120.22	119.99	120.23	120.45	119.56
13	121.02	119.97	120.60	120.81	120.50	.....
14	120.38	119.89	120.27	120.80	120.10	.....
15	120.00	120.20	119.84	120.18	119.75	119.98
16	120.58	120.69	119.93	119.86	120.25	119.93
17	119.90	120.82	119.87	120.44	120.50	119.79
18	119.82	120.72	119.66	120.89	120.08	.....
19	120.56	120.94	120.38	120.81	120.10	.....
20	119.75	120.40	119.86	120.37	120.50	.....
21	120.19	120.12	120.37	120.42	120.50	.....
22	119.58	120.81	119.93	120.41	120.00	119.78
23	119.49	120.50	120.62	120.19	120.33	120.40
24	119.27	120.61	120.02	120.65	120.14	119.82
25	119.37	120.90	119.80	120.36	120.40	119.60
26	120.00	120.02	119.87	121.12	120.68	119.87
27	119.35	121.00	119.90	120.56	120.58	119.03
28	119.44	120.50	120.39	120.30	120.05	119.79
29	119.62	120.95	120.60	120.58	119.95	119.96
30	119.50	120.44	120.45	120.59	120.58	120.50
31	119.18	120.48		120.59		119.84

Dg 9. Ashippun Fire Department. $SE\frac{1}{4}SE\frac{1}{4}$ sec. 30, T. 9 N., R. 17 E.
Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	13.16	June 8	11.73	Sept. 21	13.59
May 4	9.00	July 27	11.14	Dec. 7	14.83

Dg 10. Ashippun Fire Department. $SE\frac{1}{4}SE\frac{1}{4}$ sec. 30, T. 9 N., R. 17 E.
Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	11.00	May 4	9.95	July 27	11.00	Dec. 7	11.82
Mar. 2	10.53	June 8	10.75	Sept. 21	11.19		

Dg 11. F. C. Etscheid. $SE\frac{1}{4}SW\frac{1}{4}$ sec. 1, T. 9 N., R. 13 E. Records
available: 1946-49.

Dg 11--Continued.

Lowest daily water level, from recorder charts												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	45.41	45.51	46.71	46.00	40.38	35.90	36.14	36.36	39.88	43.23	46.83	47.65
2	45.42	45.53	46.74	45.87	40.75	36.11	36.21	36.44	39.95	43.66	47.13	47.75
3	45.48	45.40	46.75	45.59	40.75	36.18	36.18	36.51	40.04	43.95	47.13	47.73
4	45.49	45.47	46.78	45.42	40.45	36.11	36.13	36.50	40.22	44.30	47.19	47.77
5	45.38	45.48	46.97	45.19	40.14	36.13	36.14	36.57	40.72	44.44	47.23	47.82
6	45.31	45.43	47.25	45.04	39.82	36.15	.....	36.79	40.80	44.46	47.08	47.83
7	45.35	45.46	47.26	45.02	39.40	36.34	36.00	36.96	40.76	44.57	47.02	48.05
8	45.27	45.65	47.10	44.94	38.86	36.39	36.00	37.05	40.75	44.68	47.25	48.15
9	45.66	45.73	47.10	44.93	38.45	36.43	35.88	37.15	40.69	44.84	47.29	48.16
10	45.67	45.79	47.04	44.79	38.32	36.58	35.89	37.38	40.80	44.85	47.32	48.04
11	45.59	45.79	47.02	44.57	38.09	36.29	35.81	37.37	41.14	45.01	47.39	47.99
12	45.32	45.82	47.00	44.21	37.79	36.42	35.60	37.39	41.28	45.21	47.40	48.04
13	45.42	45.90	46.99	44.15	37.74	36.60	35.51	37.32	41.45	45.40	47.36	48.11
14	45.54	45.94	46.99	44.16	37.67	36.60	35.48	37.26	41.49	45.55	47.36	48.06
15	45.42	46.08	47.02	44.22	37.54	36.59	35.45	37.29	41.43	45.59	47.41	47.97
16	45.63	46.37	47.97	44.22	37.26	36.56	35.40	37.40	41.66	45.66	47.49	47.75
17	45.62	46.40	46.91	44.01	37.06	36.32	35.40	37.55	41.88	45.88	47.55	47.63
18	45.45	46.35	46.92	43.90	36.89	36.29	35.51	37.68	42.09	46.02	47.58	47.65
19	45.66	46.38	46.93	43.87	36.88	36.34	35.59	37.96	42.36	46.17	47.42	47.65
20	45.66	46.42	46.85	43.67	36.78	36.43	35.68	38.05	42.39	46.27	47.56	47.55
21	45.43	46.37	46.67	43.50	36.43	36.61	.....	38.01	42.38	46.27	47.70	47.55
22	45.54	46.31	46.70	43.16	36.08	36.68	35.91	37.98	42.35	46.22	47.70	47.64
23	45.48	46.34	46.72	43.02	36.08	36.68	35.95	38.18	42.40	46.35	47.57	47.74
24	45.56	46.53	46.60	42.99	35.92	36.68	35.98	38.26	42.39	46.43	47.56	47.74
25	.....	46.69	46.47	42.72	35.81	36.58	36.00	38.36	42.39	46.34	47.69	47.73
26	.....	46.67	46.47	42.30	35.66	36.47	36.22	38.52	42.61	46.47	47.70	47.83
27	45.36	46.51	46.29	42.24	35.51	36.44	36.33	38.80	42.87	46.47	47.66	48.04
28	45.42	46.68	46.37	42.07	35.42	36.41	36.36	39.00	42.99	46.52	47.56	48.07
29	45.52		46.54	41.61	35.36	36.31	36.41	39.12	43.02	46.48	47.48	48.19
30	45.48		46.28	41.20	35.54	36.17	36.41	39.31	43.06	46.72	47.54	48.12
31	45.31		46.00		35.73		36.40	39.61	.....			48.10

Dg 12. Baker Canning Co. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 12 N., R. 17 E. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	44.45	May 4	38.84	July 20	47.52	Nov. 30	48.13
Mar. 2	41.40	June 8	43.89	Oct. 19	47.29		

Dg 14. Chicago & Northwestern Railroad. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 21, T. 10 N., R. 15 E. Records available: 1946-49.

Jan. 5	51.50	May 4	44.89	July 28	45.97	Nov. 30	46.10
Mar. 2	52.28	June 8	48.11	Sept. 14	50.17		

Dg 15. Mayville Construction Co. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 13, T. 12 N., R. 16 E. Records available: 1946-49.

Jan. 5	22.29	May 4	21.05	July 20	21.54	Nov. 30	22.08
Mar. 2	21.70	June 8	21.38	Sept. 14	22.08		

Dg 17. F. C. Etscheid. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 1, T. 9 N., R. 13 E. Records available: 1948-49.

Jan. 17	74.61	Apr. 20	81.10	Aug. 24	70.80	Nov. 2	86.12
26	74.12	May 18	72.83	31	72.36	9	83.12
Feb. 2	74.94	June 22	69.90	Sept. 7	72.32	16	82.80
16	77.27	29	68.66	14	65.70	23	82.60
23	78.69	July 7	68.39	21	63.26	30	80.36
Mar. 9	82.72	13	64.73	28	63.03	Dec. 7	80.73
16	82.27	28	69.52	Oct. 5	70.31	14	78.64
23	82.31	Aug. 3	67.92	12	72.43	21	77.23
30	82.30	10	75.21	16	78.11	28	79.37
Apr. 13	81.08	17	70.80	26	78.11		

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: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	7.02	May 5	1.43	July 21	7.81	Dec. 7	9.30
Mar. 3	5.50	June 9	5.24	Sept. 22	7.91		

Dr 7. Fred Peterson. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 30, T. 29 N., R. 27 E. Records available: 1946-49.

Jan. 6	42.69	May 5	35.39	July 21	46.40	Dec. 7	52.40
Mar. 3	37.13	June 9	46.40	Sept. 22	46.39		

Douglas County

Ds 1. Wisconsin Conservation Department. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 23, T. 47 N., R. 10 W. Measurements supplied through courtesy of Wisconsin Conservation Department. Records available: 1937-41, 1943-49.

Jan. 1	28.76	Apr. 2	28.22	July 5	27.99	Oct. 1	28.94
Feb. 5	28.80	May 7	28.46	Aug. 6	28.82	Nov. 5	28.89
Mar. 19	28.85	June 4	28.85	Sept. 3	28.89	Dec. 3	28.88

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: 1946-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	52.61	52.57	51.65	51.47	50.64	52.23	55.84	58.11	58.23	56.14	52.37	51.77
2	52.33	52.67	51.68	51.78	50.82	52.61	55.99	58.58	58.24	55.65	52.81	52.01
3	52.55	52.54	51.62	51.92	51.12	52.84	56.30	58.57	58.04	55.44	52.68	51.52
4	52.60	52.62	51.39	52.05	51.46	53.25	56.64	58.30	57.46	55.75	52.57	51.17
5	52.69	.....	51.28	52.27	51.77	53.23	56.05	58.28	57.00	55.77	52.45	51.16
6	52.70	.....	51.18	52.15	51.85	53.30	57.37	58.72	57.10	55.60	51.98	51.05
7	52.72	.....	51.18	51.96	51.74	53.58	57.39	58.66	57.32	55.65	52.12	51.20
8	52.83	52.51	51.32	52.20	51.66	53.42	57.19	59.25	57.29	55.71	52.32	51.17
9	52.55	52.49	51.33	52.34	51.48	53.48	56.99	60.27	57.36	55.28	52.43	51.33
10	52.75	52.63	51.35	52.34	51.62	53.86	56.52	60.66	57.32	54.89	52.57	51.36
11	52.91	52.66	51.25	52.17	51.63	54.31	56.62	60.14	56.93	55.24	52.63	50.85
12	52.68	52.58	51.21	52.09	51.80	54.28	57.04	59.94	56.55	.....	52.43	51.06
13	52.71	52.30	51.09	52.20	51.96	54.03	57.21	60.11	56.61	.....	51.87	51.25
14	52.80	52.24	51.01	52.12	52.23	53.80	56.95	59.20	56.74	54.34	51.97	51.33
15	52.43	52.28	51.17	51.52	51.56	53.57	57.01	58.76	56.90	54.11	51.88	51.45
16	52.39	52.34	51.11	51.24	52.04	53.56	57.05	59.16	56.83	53.58	51.75	51.41
17	52.61	52.59	51.21	51.05	51.91	53.79	56.65	58.98	57.00	53.67	52.00	51.37
18	52.71	52.72	51.38	50.99	52.15	54.39	56.93	58.89	56.15	53.64	52.30	51.00
19	52.89	52.60	51.34	51.09	52.10	54.25	57.78	58.67	56.17	53.71	52.03	51.15
20	52.93	52.24	51.12	51.08	52.12	54.80	58.38	58.34	56.13	53.73	51.64	51.09
21	52.78	52.39	50.84	51.07	52.00	55.39	58.17	57.75	56.22	53.56	51.81	51.18
22	52.95	52.54	50.92	51.11	51.65	55.84	58.22	57.98	56.20	53.47	51.86	51.33
23	52.38	52.40	51.15	51.02	51.62	55.67	58.14	58.26	56.03	53.00	52.07	51.72
24	.....	52.33	51.05	50.76	51.81	55.31	57.56	58.72	55.80	53.03	51.75	51.70
25	.....	52.58	51.20	50.61	51.86	54.95	57.72	59.33	55.31	53.06	51.81	51.10
26	52.67	52.36	51.15	50.92	51.88	54.42	58.33	59.60	55.68	53.17	51.61	50.87
27	52.63	52.00	50.92	50.99	52.04	54.36	58.54	59.64	55.74	53.18	51.73	50.90
28	52.66	51.72	50.79	51.10	52.00	54.59	58.60	59.04	56.03	53.20	51.29	51.07
29	52.71		50.93	51.17	51.75	54.76	59.08	58.54	55.97	53.02	51.51	51.35
30	52.40		50.90	51.05	51.49	55.52	59.03	58.49	56.29	52.59	51.64	51.44
31	51.36		51.23		51.83		58.34	58.30		52.70		51.49

FL 16. Mrs. Amanda Kohn. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 23, T. 13 N., R. 18 E. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	6.93	May 4	6.97	July 20	7.73	Dec. 7	8.02
Mar. 2	5.73	June 8	7.84	Sept. 21	8.09		

FL 19. John Steffin. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 30, T. 17 N., R. 19 E. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Mar. 2	134.82	June 8	135.35	Sept. 21	136.93
May 4	134.68	July 20	135.45	Dec. 7	136.62

Grant County

Gr 1. Carl Doeringfeld. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 7, T. 6 N., R. 2 W. Records available: 1946-48. No measurements made in 1949.

Gr 2. Carl Doeringfeld. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 7, T. 6 N., R. 2 W. Records available: 1946-48. No measurements made in 1949.

Gr 3. Chester H. Graham. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 17, T. 6 N., R. 2 W. Records available: 1946-47. Measurements discontinued.

Gr 4. Henry Jones Estate. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 26, T. 6 N., R. 1 W. Records available: 1946-49.

Jan. 11	65.31	Apr. 27	66.01	Aug. 5	66.57
Mar. 8	65.64	June 1	66.10	Dec. 13	67.35

Gr 5. Clarence Gratz. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 6, T. 5 N., R. 2 W. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 11	15.39	Apr. 27	15.53	Aug. 5	16.05	Dec. 13	16.28
Mar. 8	14.75	June 1	15.93	Sept. 27	16.43		

Green County

Gn 1. Charles Segner. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 21, T. 2 N., R. 7 E. Records available: 1946-49.

Jan. 11	61.44	Apr. 27	60.43	Aug. 5	62.02	Dec. 13	63.59
Mar. 8	59.10	June 1	61.55	Sept. 27	62.81		

Gn 2. Earl Waddington. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 18, T. 3 N., R. 6 E. Records available: 1946-49.

Jan. 11	133.97	Apr. 27	134.47	Aug. 5	134.66	Dec. 13	135.04
Mar. 8	133.89	June 1	134.17	Sept. 27	134.31		

Gn 3. Owner unknown. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 23, T. 2 N., R. 7 E. Records available: 1947-49.

Jan. 11	33.60	Apr. 27	32.85	Aug. 5	33.31	Dec. 13	34.26
Mar. 8	31.89	June 1	33.35	Sept. 27	33.64		

Jackson County

Ja 1. L. Epstein. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 20, T. 20 N., R. 2 E. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 13	15.67	Apr. 29	14.37	Aug. 12	14.46
Mar. 10	15.57	June 3	14.13	Sept. 29	16.70

Jefferson County

Je 1. Owner unknown. $SW\frac{1}{4}SE\frac{1}{4}$ sec. 3, T. 6 N., R. 13 E. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 3	10.15	June 6	9.76	Sept. 19	11.03
May 2	8.66	July 25	10.21	Nov. 29	11.30

Je 7. Village of Johnson Creek. $NW\frac{1}{4}NW\frac{1}{4}$ sec. 18, T. 7 N., R. 14 E. Records available: 1946-48. Measurements discontinued.

Je 9. Chicago & Northwestern Railroad. $SE\frac{1}{4}SW\frac{1}{4}$ sec. 25, T. 7 N., R. 14 E. Records available: 1946-49.

Jan. 3	16.25	May 2	23.49	Sept. 19	34.60
Feb. 28	15.16	June 6	23.01	Dec. 6	23.43

Juneau County

Ju 1. Owner unknown. $NW\frac{1}{4}NW\frac{1}{4}$ sec. 24, T. 14 N., R. 5 E. Measurements discontinued after Aug. 12, 1949. Records available: 1948-49.

Jan. 13	11.22	Apr. 29	9.68	Aug. 12	10.06
Mar. 10	10.69	June 3	10.17		

Ju 8. Wisconsin National Guard Camp. $SW\frac{1}{4}SW\frac{1}{4}$ sec. 21, T. 17 N., R. 2 E. Unused drilled public-supply well, diameter 4 inches, depth 64 feet. Water-stage recorder maintained on well since Nov. 30, 1949. Measurements supplied through courtesy of commanding officer, Camp Williams. Records available: 1949.

Dec. 1	9.16	Dec. 15	9.52	Dec. 29	9.34
8	9.21	22	9.28		

Ju 9. W. Surriet. $SW\frac{1}{4}NW\frac{1}{4}$ sec. 17, T. 16 N., R. 3 E. Unused drilled industrial well, diameter 6 inches, depth 103 feet. Water-stage recorder maintained on well since Dec. 16, 1949. Measurements supplied through courtesy of New Lisbon Water Department. Records available: 1949.

Dec. 2	14.93	Dec. 15	14.99	Dec. 29	14.97
8	14.96	23	14.94		

Kenosha County

Ke 1. Standard Products Laboratories. $NE\frac{1}{4}SE\frac{1}{4}$ sec. 10, T. 1 N., R. 21 E. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	59.10	May 2	50.59	July 25	58.71	Dec. 5	51.81
Feb. 28	51.92	June 6	52.29	Sept. 19	53.02		

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: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 3	114.25	June 6	103.45	Sept. 19	109.15
May 2	104.86	July 25	109.60	Dec. 5	108.90

Ke 4. Sunset Ridge Memorial Park. $NW\frac{1}{4}SE\frac{1}{4}$ sec. 27, T. 2 N., R. 22 E. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	77.26	May 25	78.57	July 25	78.57	Dec. 5	78.86
Feb. 28	77.40	June 6	78.28	Sept. 19	78.91		

Ke 5. J. Bishop. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 20, T. 2 N., R. 22 E. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	4.87	May 2	3.37	July 26	4.54	Dec. 5	6.96
Feb. 28	4.24	June 6	4.34	Sept. 19	6.03		

Ke 6. Kenosha County. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 11, T. 2 N., R. 22 E. Records available: 1946-49.

Jan. 3	30.22	May 2	32.68	July 25	34.28	Dec. 5	34.42
Feb. 28	30.79	June 6	33.24	Sept. 19	35.58		

Lafayette County

Lf 1. Erickson. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 25, T. 3 N., R. 5 E. Records available: 1946-49.

Jan. 11	21.70	Apr. 27	21.45	Aug. 5	20.70	Dec. 13	22.76
Mar. 8	20.66	June 1	22.16	Sept. 27	22.22		

Lf 10. Owner unknown. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 9, T. 2 N., R. 1 E. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 11	22.23	June 1	21.76	Dec. 13	24.35
Apr. 27	21.20	Aug. 5	21.75		

Lf 11. Owner unknown. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 4, T. 2 N., R. 1 E. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 11	29.39	Apr. 27	29.36	Aug. 5	29.97	Dec. 13	31.91
Mar. 8	29.21	June 1	29.63	Sept. 27	30.59		

Lf 12. Owner unknown. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 33, T. 2 N., R. 4 E. Records available: 1947-49.

Jan. 11	33.74	Apr. 27	36.25	Aug. 5	30.97	Dec. 13	38.20
Mar. 8	25.12	June 1	36.62	Sept. 27	36.23		

Langlade County

La 2. Dahlke SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T. 31 N., R. 11 E. Records available: 1948-49.

Jan. 21	125.5	May 11	125.97	June 10	126.04	July 25	126.21
Mar. 16	125.75	21	126.08	17	126.09	Aug. 25	126.25
May 3	125.98	June 1	126.03	23	126.10	Sept. 29	126.31

La 3. James Veelak. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 4, T. 31 N., R. 12 E. Records available: 1948-49.

Mar. 16	81.88	May 11	82.01	June 10	82.16	Aug. 25	82.47
May 3	81.98	24	82.11	17	82.19		

La 9. Harvey Guenther. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 35, T. 31 N., R. 10 E. Records available: 1948-49.

Mar. 15	14.62	May 23	14.31	July 25	14.03	Sept. 29	14.51
May 3	14.10	June 1	14.36	Aug. 25	14.24	Dec. 19	14.94
11	14.15						

La 17. Prosser Bros. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, T. 31 N., R. 11 E. Records available: 1948-49. Measurements discontinued after Aug. 25, 1949.

Mar. 16	16.63	May 24	15.59	June 17	15.99	Aug. 25	15.91
May 3	14.32	June 10	16.00	23	15.99		

La 22. Gus Wierschke. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 31 N., R. 11 E. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Mar. 16	10.53	May 24	11.20	June 17	10.35
May 3	10.53	June 10	10.44	Aug. 25	10.42

La 23. Felix Zelowski. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 4, T. 30 N., R. 11 E. Records available: 1948-49.

Mar. 15	9.87	May 23	9.30	June 16	9.57
May 2	9.11	June 9	9.57	Aug. 25	9.66

La 26. U. S. Geol. Survey. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 7, T. 31 N., R. 11 E. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	10.14	Apr. 10	8.44	July 10	7.81	Oct. 2	9.44
8	11.19	16	8.57	17	8.24	10	9.44
16	10.26	24	8.76	23	8.39	17	9.51
23	10.22	May 2	8.44	25	8.47	24	9.66
29	10.29	8	8.32	31	8.42	31	9.69
Feb. 5	10.36	15	8.52	Aug. 7	9.45	Nov. 6	9.75
12	10.43	22	8.54	14	8.64	14	9.76
19	10.33	28	8.77	21	8.73	21	9.88
27	10.48	June 5	9.01	28	8.66	27	10.76
Mar. 6	10.47	12	9.04	Sept. 4	9.01	Dec. 4	10.03
12	10.51	16	9.20	12	9.15	11	10.02
19	10.59	20	9.19	19	9.23	19	10.07
26	9.08	25	9.13	28	9.37	26	10.12
Apr. 3	8.18	July 3	9.01				

La 30. Felix Zelowski. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 1, T. 31 N., R. 11 E. Records available: 1948-49.

Jan. 21	24.50	May 24	23.89	June 17	24.28	Aug. 25	24.57
Mar. 16	24.89	June 1	24.03	23	24.33	Sept. 29	24.86
May 3	23.51	10	24.17	July 25	24.30	Dec. 10	24.32
11	23.66						

La 44. J. Jacobus. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 32, T. 32 N., R. 11 E. Records available: 1948-49.

Jan. 21	23.71	May 24	23.92	June 17	23.87	Aug. 25	23.77
Mar. 16	23.93	June 1	23.86	23	23.86	Sept. 29	23.77
May 3	23.89	10	23.86	July 25	23.77	Dec. 10	23.99
11	23.88						

La 45. Star Neva School. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22, T. 32 N., R. 11 E. Records available: 1948-49.

Mar. 16	35.68	May 11	35.21	June 10	35.45	Aug. 25	35.31
May 3	35.17	24	35.32	17	35.49		

La 57. Frosser Bros. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 17, T. 31 N., R. 11 E. Records available: 1941-49. Measurements discontinued after May 16, 1949.

Jan. 3	15.50	Feb. 14	15.53	Mar. 21	15.61	Apr. 26	14.30
10	15.33	21	15.57	28	15.35	May 2	14.15
17	15.94	28	15.60	Apr. 4	14.88	3	14.17
24	15.5	Mar. 7	15.60	12	14.58	10	14.10
31	15.46	14	15.60	19	14.40	16	13.50
Feb. 7	15.48	15	15.60				

La 64. Wisconsin Conservation Department. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 20, T. 31 N., R. 11 E. Records available: 1948-49.

La 64--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	16.26	May 2	15.28	July 18	14.96	Oct. 10	15.69
10	16.29	9	15.18	25	15.02	17	15.74
17	16.32	16	15.23	Aug. 1	15.10	24	15.78
24	16.35	23	15.20	8	15.12	31	15.87
31	16.46	30	15.02	15	15.09	Nov. 7	15.87
Mar. 7	16.40	June 1	15.48	22	15.27	14	15.87
14	16.34	6	15.40	25	15.28	21	15.92
21	16.40	13	15.46	Sept. 5	15.26	28	15.92
23	15.49	20	15.50	12	15.52	Dec. 5	16.04
Apr. 4	15.38	29	15.44	19	15.55	12	16.08
11	15.28	July 4	15.30	26	15.62	19	16.12
18	15.37	11	15.22	Oct. 3	15.70	26	16.17
25	15.40						

La 68. J. Shafel. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 12, T. 31 N., R. 11 E. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Mar. 15	8.67	May 23	6.30	Aug. 25	6.39
May 3	6.33	June 10	6.61		

La 71. Fred Anstutz. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T. 31 N., R. 11 E. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 21	13.62	May 24	12.99	June 16	13.17	Aug. 25	12.53
Mar. 15	13.88	June 1	13.02	23	13.21	Sept. 29	12.71
May 3	13.25	10	13.11	July 25	12.57	Dec. 10	13.24
11	13.05						

La 74. C. Pickner. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 34, T. 32 N., R. 11 E. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 16	25.81	May 24	25.36	June 17	25.47	Aug. 25	25.03
May 3	25.32	June 10	25.43	22	25.49		

La 77. Ted Baginski. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 23, T. 31 N., R. 10 E. Records available: 1948. Measurements discontinued. Replaced by La 270.

La 78. Owner unknown. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 1, T. 33 N., R. 10 E. Unused drilled industrial well, diameter 6 inches, depth 91 feet. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level
Mar. 18	76.47	May 24	76.83	June 16	76.89
May 3	76.75	June 10	76.81	Aug. 25	77.16

La 86. A. F. Hoeft. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T. 32 N., R. 10 E. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 21	10.01	May 24	8.83	June 16	9.21	Aug. 25	9.14
Mar. 16	10.18	June 1	8.97	23	9.17	Sept. 29	9.41
May 3	9.03	10	9.20	July 25	8.83	Dec. 10	9.66
11	8.57						

La 87. Felix Zelowski. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 10, T. 32 N., R. 10 E. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
May 3	7.32	July 10	6.80	Sept. 25	6.59
24	6.73	16	6.87		

La 88. John Lucht. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 27, T. 31 N., R. 11 E. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Mar. 16	31.49	May 24	31.15	June 17	31.31
May 3	30.99	June 10	31.27	Sept. 25	31.43

La 90. Arnold Schmiede. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24, T. 32 N., R. 11 E. Records available: 1948-49. May 3, 9.86; May 24, 10.16; June 17, 10.70; Sept. 25, 16.68.

La 100. Kretz. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T. 30 N., R. 11 E. Records available: 1948-49.

Mar. 15	11.83	May 23	10.78	June 16	11.07
May 2	10.60	June 9	11.01	Aug. 25	10.91

La 107. Carlsen. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 26, T. 32 N., R. 12 E. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 21	115.06	May 25	115.90	June 17	115.98	Aug. 25	116.58
Mar. 16	115.44	June 1	115.91	23	116.03	Sept. 29	116.55
May 3	115.73	10	115.95	July 25	116.17	Dec. 10	121.08

La 108. Frank Psenicka, Jr. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 7, T. 32 N., R. 11 E. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Mar. 16	51.87	May 24	50.67	June 16	50.44
May 3	50.82	June 10	50.40	Aug. 25	50.09

La 110. Dolezel. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 26, T. 32 N., R. 10 E. Records available: 1948-49.

Mar. 15	11.87	May 24	10.98	June 16	11.25
May 3	10.81	June 10	11.36	Aug. 25	10.94

La 111. Pilecy. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 4, T. 31 N., R. 10 E. Records available: 1948-49.

Mar. 15	9.04	May 24	7.70	June 16	8.25
May 3	7.25	June 10	8.19	Aug. 25	7.66

La 118. Wisconsin Public Service Corporation. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 20, T. 31 N., R. 11 E. Measurements supplied through courtesy of Wisconsin Public Service Corporation. Records available: 1942-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	13.66	Apr. 4	12.98	June 20	12.57	Sept. 26	12.78
10	13.65	11	12.85	27	12.60	Oct. 3	12.85
17	13.63	18	12.75	July 5	11.99	17	12.80
24	13.70	25	12.68	12	12.20	26	12.94
31	13.72	May 2	12.52	25	12.27	Nov. 7	13.10
Feb. 7	13.75	10	12.48	Aug. 15	12.26	14	13.17
14	13.78	16	12.38	22	12.38	22	13.20
21	13.80	23	12.36	29	12.50	28	13.25
28	13.84	31	12.39	Sept. 6	12.59	Dec. 12	13.45
Mar. 7	13.80	June 6	12.45	13	12.65	19	13.42
14	13.80	13	12.53	19	12.70	27	13.45

La 200. Antigo Water Department. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 29, T. 31 N., R. 11 E. Records available: 1948-49.

La 200--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	6.46	6.70	6.85	5.53	5.75	5.76	6.24	5.61	6.38	6.07	5.94	6.19
2	6.36	6.70	6.85	5.70	5.54	5.93	6.32	5.55	6.37	6.03	5.94	6.24
3	6.40	6.65	6.78	5.71	5.49	5.92	5.37	5.69	6.40	6.00	5.90	6.24
4	6.46	6.71	6.69	5.68	5.25	6.00	....	5.67	6.40	6.06	5.98	6.20
5	6.44	6.77	6.72	5.59	5.60	6.00	....	5.79	6.31	6.05	6.01	6.20
6	6.36	6.76	6.72	5.66	5.61	6.12	....	5.78	6.31	5.95	6.01	6.20
7	6.36	6.51	6.56	5.84	5.67	6.12	5.27	5.76	6.30	6.00	6.00	6.20
8	6.49	6.65	6.55	5.78	5.65	6.14	5.52	5.76	6.26	5.97	6.01	6.13
9	6.49	6.75	6.69	5.89	5.58	6.12	5.54	5.95	6.26	5.86	6.01	6.28
10	6.35	6.75	6.69	5.98	5.46	6.30	5.64	5.96	6.31	5.78	5.97	6.30
11	6.43	6.66	6.63	5.83	5.52	6.30	5.64	5.91	6.30	5.78	5.97	6.30
12	6.53	6.79	6.64	5.66	5.61	6.12	5.77	6.06	6.05	5.81	5.92	6.05
13	6.53	6.76	6.66	5.84	5.62	6.28	5.77	6.04	6.05	5.86	5.89	6.05
14	6.35	6.75	6.66	5.84	5.54	6.28	5.96	6.19	6.10	5.89	5.96	6.15
15	6.38	6.61	6.65	5.88	5.55	6.05	5.96	6.10	6.10	5.89	5.96	6.20
16	6.39	6.79	6.63	5.80	5.44	5.97	6.15	6.26	6.17	5.83	6.00	6.26
17	6.38	6.86	6.74	5.80	5.50	6.19	6.15	6.21	6.16	5.83	6.00	6.26
18	6.30	6.86	6.85	5.80	5.63	6.31	6.23	6.30	6.04	5.94	6.03	6.25
19	6.42	6.78	6.91	5.79	5.59	6.31	6.21	6.31	6.03	5.94	6.03	6.25
20	6.58	6.74	6.91	5.47	5.49	5.97	6.29	6.31	6.03	5.93	6.00	6.28
21	6.58	6.87	6.89	5.77	5.65	6.01	6.11	6.29	6.02	5.98	6.00	6.28
22	6.44	6.86	6.75	5.76	5.65	6.00	6.18	6.26	6.07	5.91	6.03	6.30
23	6.50	6.61	6.28	5.79	5.61	5.92	6.16	6.27	6.07	5.91	6.03	6.30
24	6.61	6.67	6.29	5.79	5.55	5.95	....	6.25	6.06	5.87	6.06	....
25	6.61	6.81	6.29	5.44	5.71	5.91	....	6.36	6.06	5.87	....	....
26	6.46	6.80	6.27	....	5.73	5.91	....	6.36	5.99	5.99	6.10	....
27	6.51	6.70	6.19	....	5.73	5.75	....	6.44	5.99	5.99	6.11	....
28	6.64	6.73	5.65	....	5.63	6.04	5.74	6.44	6.00	6.01	6.12	....
29	6.63		5.63	5.53	5.75	....	5.77	6.33	6.00	6.01	6.12	....
30	6.41		5.65	5.75	5.80	6.13	5.80	6.33	6.07	5.92	6.19	6.40
31	6.61		6.65	5.81	5.79		5.79	6.38		5.92		6.40

La 270. U. S. Geol. Survey. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 23, T. 31 N., R. 10 E. Driven observation well, diameter 1 $\frac{1}{4}$ inches. Measuring point, top of casing, 1 foot above land-surface datum. Records available: 1949. Aug. 10, 5.29; Aug. 25, 5.61.

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: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	6.10	Feb. 21	6.38	Mar. 27	5.29	Nov. 6	5.96
17	6.04	Mar. 1	6.34	Apr. 5	5.38	13	5.37
23	6.13	8	6.18	10	5.45	22	5.66
31	6.30	13	6.32	May 22	5.34	28	5.60
Feb. 7	6.34	20	6.04	Nov. 2	5.92	Dec. 18	5.62

Marathon County

Mr L. George Chrudimsky. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T. 30 N., R. 10 E. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	36.67	Mar. 12	36.57	May 7	36.87	July 9	36.87
8	36.69	15	34.40	14	35.97	16	37.02
15	36.47	19	36.56	21	36.91	23	37.07
22	36.52	26	36.52	23	36.94	Aug. 13	37.15
29	36.47	Apr. 2	36.72	28	36.87	20	37.17
Feb. 5	36.77	9	34.40	June 4	36.95	25	37.21
12	36.52	16	34.42	11	36.57	27	37.47
19	36.39	23	31.52	18	36.87	Sept. 3	37.22
26	36.97	30	31.47	26	36.77	10	37.27
Mar. 5	37.22	May 3	36.89	July 2	36.82	17	37.28

Mr 1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 24	37.27	Oct. 22	37.50	Nov. 19	37.47	Dec. 17	37.77
Oct. 1	37.42	25	37.59	26	37.67	24	38.07
8	37.41	Nov. 5	37.77	Dec. 3	38.07	31	37.92
15	37.52	12	37.67	10	37.80		

Mr 3. George Hunt. NW $\frac{1}{4}$ sec. 26, T. 30 N., R. 10 E. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Mar. 15	6.83	May 23	4.79	June 16	6.16
May 3	3.56	June 9	5.89		

Mr 27. Conrad Kreamsreiter. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24, T. 29 N., R. 11 E. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	9.14	Mar. 30	9.56	June 6	8.44	Aug. 24	7.45
10	9.44	Apr. 5	9.34	14	8.44	Sept. 20	8.01
20	9.35	13	9.18	22	8.44	26	8.27
27	9.43	20	9.14	27	8.48	Nov. 2	8.40
Feb. 9	9.53	25	9.11	July 5	8.27	9	8.32
16	9.58	May 3	8.84	14	8.03	14	8.28
21	9.62	9	8.49	19	8.09	Dec. 2	8.45
Mar. 1	9.67	18	8.42	24	8.04	16	8.21
9	9.71	24	8.39	Aug. 8	7.17	22	8.46
21	9.66	June 1	8.41	14	7.25	25	8.48

Mr 28. U. S. Geol. Survey. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 31, T. 27 N., R. 9 E. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	22.53	Apr. 4	22.59	July 5	22.98	Sept. 27	23.21
10	22.58	11	22.56	11	22.98	Oct. 3	23.22
17	22.63	18	22.62	18	22.96	10	23.24
24	22.66	25	22.62	27	22.99	17	23.27
31	22.62	May 2	22.69	Aug. 1	23.00	24	23.28
Feb. 7	22.74	9	22.72	8	23.00	Nov. 7	23.34
14	22.80	16	22.72	15	23.02	14	23.58
21	22.82	23	22.78	22	23.05	28	23.42
28	22.85	31	22.81	29	23.06	Dec. 5	23.45
Mar. 7	22.89	June 9	22.85	Sept. 6	23.08	12	24.47
14	22.95	13	22.88	12	23.20	19	23.49
21	22.82	20	22.90	19	23.23	27	23.89
28	22.59	27	22.90				

Marinette CountyMt 1. Mr. R. S. Skidmore. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 6, T. 30 N., R. 24 E. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 6	5.12	May 5	14.22	Aug. 21	23.00
Mar. 3	12.62	June 9	17.64	Dec. 8	11.62

Mt 5. City of Peshtigo. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 19, T. 30 N., R. 23 E. Records available: 1947-49.Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	22.72	25.00	25.14	.....	26.31	.....	.....	.....	.....	22.08	24.15
2	20.39	25.36	25.77	.....	25.84	.....	.....	.....	.....	22.75	24.05
3	.....	25.67	25.70	.....	26.21	.....	.....	.....	.....	22.85	24.50
4	.....	26.02	25.67	.....	26.47	.....	.....	.....	.....	23.15	24.47

Mt-5--Continued.

Lowest daily water level, from recorder charts											
Day	Jan.	Feb.	Mar.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5	.....	25.87	25.67	24.35	.....	.....	.....	.....	22.36	23.55	23.83
6	25.00	25.74	26.04	.....	.....	22.33	.....	.....	22.30	23.40	24.06
7	25.27	25.06	24.87	24.35	26.36	23.80	.....	.....	22.50	22.45	24.45
8	25.48	25.43	25.34	23.83	25.67	24.39	.....	.....	22.83	22.97	24.23
9	25.58	25.67	25.82	23.83	25.97	24.73	.....	.....	22.69	23.52	24.25
10	24.93	25.81	25.52	.....	26.16	.....	.....	.....	21.16	23.44	24.45
11	25.10	25.81	25.67	.....	26.37	.....	.....	.....	21.85	23.85	24.35
12	25.40	25.82	26.12	.....	26.11	.....	.....	.....	22.50	24.42	24.55
13	25.54	25.90	26.28	.....	26.18	.....	.....	.....	22.46	24.44	24.48
14	25.63	25.33	25.01	.....	25.41	.....	.....	.....	22.36	24.18	24.55
15	25.65	26.05	25.10	.....	25.47	25.10	.....	.....	22.66	24.40	24.65
16	25.71	26.54	25.65	.....	25.65	25.73	.....	.....	23.15	24.58	24.95
17	24.84	26.40	25.51	25.00	25.75	.....	.....	.....	21.93	24.62	25.35
18	25.13	26.36	25.86	24.97	26.32	.....	.....	.....	22.43	24.79	24.84
19	25.49	26.38	25.86	25.04	25.33	.....	.....	.....	22.47	24.83	23.59
20	24.60	25.77	25.64	25.23	.....	.....	.....	.....	22.58	24.92	24.00
21	25.73	25.37	.....	25.34	25.30	.....	.....	.....	22.74	24.38	24.79
22	25.84	25.57	25.03	25.27	25.37	.....	.....	.....	22.72	23.80	24.90
23	24.90	25.97	25.37	25.02	25.01	.....	22.72	22.34	22.70	24.71	25.15
24	24.26	25.64	25.25	25.02	25.05	.....	.....	22.65	20.98	24.45	25.17
25	24.86	26.12	25.17	25.27	25.17	.....	.....	22.51	21.95	24.49	23.05
26	25.20	25.84	25.74	25.41	.....	.....	.....	.....	22.75	24.58	24.50
27	25.26	26.27	25.03	25.23	.....	.....	23.18	.....	22.75	24.58	24.88
28	25.30	24.95	.....	25.13	.....	.....	24.15	.....	22.82	24.27	22.87
29	25.23	.....	.....	25.05	.....	.....	.....	.....	22.85	24.22	23.75
30	25.33	.....	.....	25.87	.....	.....	.....	.....	22.85	24.52	24.20
31	24.05	.....	.....	26.17	.....	.....	.....	.....	21.25	.....	24.48

Marquette County

Mq 2. G. Thompson. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 8, T. 15 N., R. 10 E. Unused drilled industrial well, diameter 6 inches. Records available: 1949. Oct. 13, 5.24; Dec. 9, 5.83.

Mq 5. L. Wilson. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 21, T. 14 N., R. 10 E. Unused drilled stock well, diameter 6 inches, depth 60 feet. Equipped with lift pump. Records available: 1949. Oct. 12, 46.10; Dec. 9, 46.40.

Mq 9. Village of Westfield. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 12, T. 16 N., R. 8 E. Unused drilled fire well, diameter 6 inches, depth 274 feet. Records available: 1949. Oct. 17, 17.76; Nov. 30, 17.91; Dec. 9, 17.83.

Milwaukee County

Ml 7. Milwaukee County. In Brown Deer Park. Records available: 1947-49. Mar. 1, 41.39; May 3, 40.40.

Ml 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: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 4	136.75	May 3	133.17	July 26	137.49
Mar. 1	134.88	June 7	137.49	Sept. 20	153.36

Ml 36. A. O. Smith Corporation, 3533 North 27th Street, Milwaukee. Records available: 1946-49.

Lowest daily water level, from recorder charts						
Day	Jan.	Feb.	Mar.	Apr.	May	June
1	162.56	160.10	159.50	157.71	156.74	162.74
2	162.40	160.15	159.48	157.73	156.95	163.14
3	.....	159.98	159.50	157.71	157.11	163.64
4	.....	.....	159.32	157.61	157.29	164.03
5	161.94	.....	159.11	157.34	157.45	164.34

M1-36--Continued.

Lowest daily water level, from recorder charts						
Day	Jan.	Feb.	Mar.	Apr.	May	June
6	161.81	.....	159.34	157.14	157.79	165.00
7	161.86	.....	159.30	157.19	157.96	165.92
8	161.93	159.18	158.98	157.41	158.00	166.75
9	162.30	159.30	159.00	157.46	158.30	167.56
10	.....	159.52	158.98	157.46	158.29	168.23
11	.....	159.52	158.96	157.27	158.75	168.90
12	162.04	159.19	158.94	157.00	159.04	169.49
13	161.82	159.23	158.94	156.78	.....	170.27
14	161.73	159.24	158.78	156.78	.....	171.02
15	161.73	158.89	158.72	156.87	.....	171.92
16	.....	159.24	158.56	157.00	.....	172.40
17	.....	159.32	158.40	156.84	.....	172.85
18	.....	159.23	158.46	156.82	160.44	173.20
19	161.57	159.36	158.55	156.88	160.89	173.28
20	161.59	.....	158.45	156.83	161.04	173.17
21	161.38	.....	157.93	156.76	161.09	173.34
22	161.50	159.38	157.81	156.65	161.29	173.67
23	161.45	159.35	157.97	156.74	161.50	173.89
24	161.04	159.31	157.92	156.92	161.72	174.13
25	161.03	159.69	157.93	156.82	161.88	174.50
26	160.98	159.69	157.93	156.58	162.11	174.76
27	160.81	159.45	157.58	156.81	162.48	174.91
28	160.50	159.50	157.68	156.91	162.72	175.05
29	160.66		157.73	156.79	162.84	175.23
30	160.30		157.73	156.83	162.80	175.40
31	.....		157.48		162.78	

Lowest daily water level, from recorder charts						
Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	175.60	180.73	187.14	182.21	178.43	173.46
2	175.75	180.73	187.32	181.92	178.45	173.49
3	175.79	180.91	187.40	181.59	178.45	173.38
4	175.81	181.05	187.28	181.36	178.54	172.93
5	175.99	181.12	187.15	181.31	178.54	172.78
6	176.36	181.09	187.07	181.12	178.29	172.48
7	176.80	181.01	186.81	181.07	177.89	172.17
8	177.06	180.87	186.63	181.07	177.34	172.20
9	177.33	180.88	186.50	180.96	177.34	172.21
10	177.53	181.19	186.36	180.70	176.98	171.83
11	177.43	181.58	186.14	180.34	176.94	171.53
12	177.37	181.97	185.75	180.40	176.87	171.24
13	177.32	182.23	185.27	180.42	176.48	171.28
14	177.43	182.32	185.27	180.45	176.18	171.25
15	177.56	182.34	185.09	180.44	175.84	171.21
16	177.67	182.39	184.89	180.18	175.85	171.03
17	177.68	182.47	184.69	179.95	175.81	170.89
18	177.54	182.73	184.46	179.77	175.79	170.79
19	177.66	183.09	184.17	179.63	175.48	170.78
20	177.92	183.37	184.04	179.45	175.21	170.50
21	178.18	183.54	183.72	179.37	175.20	170.24
22	178.69	183.74	183.57	179.24	175.15	170.36
23	178.95	184.12	183.48	179.31	174.66	170.58
24	178.98	184.50	183.48	179.32	174.65	170.69
25	179.02	184.89	183.25	.....	174.55	170.51
26	179.23	185.27	182.90	.....	174.48	170.14
27	179.61	185.70	182.57	.....	174.04	169.88
28	180.06	186.08	182.24	.....	173.83	169.80
29	180.48	186.29	182.25	.....	173.41	169.91
30	180.78	186.54	182.19	178.55	173.44	169.87
31	180.87	186.80		178.52		169.77

M1 45. Milwaukee Journal, 333 West State Street, Milwaukee. Records available: 1946-49.

M1 45--Continued.

Daily high and low water levels, from recorder charts								
Day	January		February		March		April	
	High	Low	High	Low	High	Low	High	Low
1	114.41	114.66	105.02	105.23	112.53	113.71	102.30	102.41
2	114.45	114.60	105.08	105.31	109.98	112.53	102.26	102.36
3	114.55	114.69	109.52	105.08	108.00	109.97	102.29	102.34
4	114.16	114.60	104.39	104.53	106.61	107.98	102.00	102.29
5	114.02	114.18	104.43	104.59	106.04	106.61	101.40	102.00
6	114.10	114.24	104.28	104.60	105.93	106.03	101.28	102.02
7	114.08	114.30	104.00	104.45	105.22	105.92	101.47	108.20
8	114.29	114.45	103.15	104.00	104.83	105.21	103.40	107.90
9	112.32	114.43	102.38	103.70	104.54	104.85	102.63	103.40
10	110.38	112.31	107.70	107.09	104.33	104.54	101.87	103.01
11	108.90	110.38	107.09	108.53	104.12	104.43	101.07	101.85
12	107.82	108.88	108.53	109.83	104.01	104.30	101.04	107.42
13	107.11	107.83	109.93	110.64	103.54	104.04	102.83	103.30
14	106.95	107.31	110.47	110.68	103.28	103.62	102.82	106.65
15	107.42	109.80	110.43	111.30	103.22	103.43	102.28	102.82
16	109.80	111.57	111.30	112.02	103.00	103.28	101.89	102.29
17	111.57	112.88	112.02	112.15	102.96	103.17	101.22	101.89
18	111.75	112.52	112.13	112.50	103.04	103.28	101.20	101.32
19	110.13	111.75	112.50	112.85	103.28	103.43	101.28	101.31
20	108.45	110.13	112.85	113.44	102.74	103.39	101.09	116.27
21	107.63	108.45	113.13	113.44	102.60	102.94	103.29	111.30
22	107.38	107.68	113.04	113.39	102.65	103.03	106.48	111.22
23	106.38	107.38	113.13	113.39	103.03	103.13	106.69	110.13
24	106.18	106.38	112.78	113.13	102.96	103.40	104.24	107.99
25	106.13	106.35	113.05	113.64	102.84	103.22	103.23	107.41
26	105.74	106.18	113.47	113.66	102.40	102.92	104.53	110.50
27	104.88	105.82	113.44	113.68	102.92	104.90	106.54	110.82
28	104.79	105.40	113.51	113.68	103.78	104.90	105.30	109.31
29	105.40	105.51			103.20	103.78	105.77	109.48
30	105.16	105.53			102.69	103.21	105.21	110.40
31	104.87	105.17			102.27	102.70		

Daily high and low water levels, from recorder charts								
Day	May		June		July		August	
	High	Low	High	Low	High	Low	High	Low
1	104.72	108.50	113.46	120.94	135.17	142.07	.....	.....
2	104.32	112.32	115.53	125.02	136.02	143.74	.....	.....
3	107.28	114.98	119.92	127.26	139.93	140.60	.....	.....
4	109.70	118.11	120.66	129.04	133.80	134.93	144.43	152.40
5	112.32	121.62	117.63	125.04	132.88	142.02	.....	152.35
6	115.75	122.60	106.80	125.23	136.75	.....	145.59	152.30
7	114.03	119.74	119.10	124.24	137.80	146.50	142.75	148.98
8	108.90	116.00	118.71	122.49	140.02	146.28	141.52	149.88
9	107.90	113.30	117.60	125.72	138.63	142.30	144.57	151.76
10	108.44	111.83	120.55	127.20	138.00	.....	145.31	152.78
11	107.68	111.00	121.91	130.20	137.00	146.42	144.30	153.05
12	108.07	116.56	122.20	127.40	140.68	148.46	.....	153.41
13	111.30	118.55	121.28	131.22	.....	150.10	146.26	153.02
14	113.07	117.48	124.60	130.14	.....	150.95	143.72	149.72
15	109.48	114.95	124.81	132.30	143.71	.....	141.69	152.21
16	108.74	114.73	125.90	134.32	143.82	.....	.....	153.41
17	111.80	119.33	128.70	135.16	142.12	148.25	146.88	153.78
18	113.89	119.83	128.46	135.51	142.00	.....	146.95	.....
19	112.03	119.63	125.50	132.97	144.58	151.65	149.22	.....
20	111.37	115.60	124.58	133.58	145.52	152.27	146.55	151.93
21	111.34	116.12	127.88	136.09	.....	153.20	141.17	148.23
22	111.36	113.96	129.42	136.85	147.55	153.67	.....	147.12
23	110.08	118.63	129.82	137.66	147.02	153.81	140.95	147.60
24	113.10	118.12	131.83	137.80	.....	150.60	.....	151.21
25	112.50	117.00	131.34	138.57	.....	152.00	145.85	154.23
26	112.26	117.95	130.00	135.75	.....	152.88	148.33	.....
27	113.54	117.67	128.65	137.90	.....	153.13	.....	153.74
28	112.67	116.12	131.44	139.72	.....	154.41	.....	.....
29	110.51	114.52	134.60	141.55	148.72	154.93	.....	151.56
30	109.94	110.51	133.62	141.92	147.75	153.44	.....	152.32
31	109.84	118.08			.....	.....	145.93	151.10

M1 45--Continued.

Daily high and low water levels, from recorder charts								
Day	September		October		November		December	
	High	Low	High	Low	High	Low	High	Low
1	.....	149.72	124.62	131.93	113.08	114.53	100.45	102.00
2	.....	149.90	124.94	129.56	113.14	113.45	99.45	100.48
3	.....	150.85	125.06	132.75	112.73	113.45	98.58	98.85
4	.....	.....	127.59	136.70	112.36	112.76	97.71	98.55
5	.....	.....	129.49	135.01	110.41	112.46	97.29	97.90
6	.....	144.20	129.57	135.34	108.49	110.49	96.40	97.42
7	140.80	147.00	129.60	135.88	107.75	110.42	96.07	97.09
8	139.90	147.95	129.94	135.87	108.00	111.50	97.09	99.30
9	141.00	148.60	127.61	132.70	107.95	111.71	99.30	99.77
10	142.80	149.44	127.17	135.30	109.20	114.10	99.37	99.88
11	141.00	146.60	129.43	135.65	107.93	113.20	99.59	100.20
12	140.30	149.00	126.85	132.99	107.02	110.00	100.20	100.81
13	142.27	147.69	125.59	133.51	106.62	109.30	100.20	100.80
14	136.23	143.00	123.56	131.71	105.55	106.62	99.91	100.75
15	135.07	144.90	125.54	130.55	105.00	105.66	100.12	100.63
16	139.54	146.16	123.70	128.00	109.09	105.00	100.29	101.20
17	139.54	145.27	122.60	128.50	102.15	104.40	100.51	101.21
18	135.70	141.48	124.23	129.71	103.42	105.20	100.00	100.76
19	133.60	139.15	125.13	131.22	104.70	106.25	99.96	100.45
20	133.04	137.09	125.00	132.80	106.22	106.75	97.93	100.08
21	132.86	139.39	126.88	132.99	105.21	106.35	98.55	99.44
22	131.56	137.71	124.24	131.80	103.82	105.30	98.45	98.83
23	129.70	136.35	121.10	124.95	103.33	104.01	98.27	98.91
24	128.22	131.73	118.43	121.77	103.01	103.90	96.90	98.65
25	126.98	130.00	115.50	118.50	102.52	103.54	95.35	97.20
26	125.99	133.11	114.68	116.21	102.42	102.85	95.72	96.15
27	127.88	133.62	114.32	119.47	102.82	103.21	94.58	95.76
28	125.44	131.10	117.35	121.73	102.52	103.25	95.29	95.93
29	123.82	125.44	117.55	122.56	103.20	103.73	95.30	96.08
30	123.11	120.36	115.48	120.76	102.00	103.15	95.35	96.20
31			114.52	115.90			94.74	95.58

M1 56. National Enameling & Stamping Co., North 10th Street & West St. Paul Avenue, Milwaukee. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 4	100.31	May 3	102.27	Sept. 20	115.30
Mar. 1	103.18	June 7	107.17	Dec. 6	86.39

M1 79. Forest Home Cemetery. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, T. 6 N., R. 21 E. Records available: 1946-49.

Daily high and low water levels, from recorder charts								
Day	January		February		March		April	
	High	Low	High	Low	High	Low	High	Low
1	192.15	193.21	197.02	197.94	193.70	194.22	191.03	192.40
2	.....	192.18	197.83	198.48	193.99	194.48	189.53	191.03
3	.....	.....	198.14	198.50	194.37	194.80	188.30	189.00
4	.....	191.40	198.30	198.90	194.51	194.83	188.00	189.23
5	191.30	191.63	197.57	198.99	193.30	194.66	188.80	189.32
6	191.60	192.25	.....	197.57	192.20	193.42	188.83	189.60
7	192.23	192.86	.....	196.91	192.00	193.20	189.19	189.69
8	192.87	193.15	196.80	197.55	193.09	193.82	188.88	189.80
9	192.92	193.30	197.44	197.73	193.68	194.52	188.00	189.02
10	193.05	193.60	197.34	198.14	194.40	195.15	186.98	188.10
11	193.37	195.32	197.50	198.10	194.99	195.50	186.69	187.93
12	195.20	196.32	.....	197.53	194.08	195.49	187.62	188.60
13	196.20	197.00	.....	194.88	192.51	194.16	188.41	189.51
14	196.95	197.78	194.52	195.38	192.17	193.50	189.27	189.95
15	196.00	197.78	195.21	196.03	193.42	194.17	188.95	189.88
16	195.00	196.00	195.98	196.80	194.03	194.90	187.88	188.95
17	194.63	196.20	196.69	197.18	194.75	195.08	186.66	187.91
18	195.85	196.32	197.16	197.91	194.78	195.27	186.57	188.12
19	196.11	197.47	196.29	198.14	193.24	195.10	188.03	188.72

Ml-79--Continued.

Daily high and low water levels, from recorder charts

Day	January		February		March		April	
	High	Low	High	Low	High	Low	High	Low
20	197.32	197.64	194.73	196.36	.....	193.24	188.45	189.14
21	197.02	197.41	194.31	195.26	.....	.....	188.89	189.37
22	196.07	197.60	195.16	195.70	.....	192.70	188.13	189.15
23	195.00	196.10	195.48	195.76	192.53	193.40	.....	188.24
24	194.79	196.70	195.50	195.98	193.20	193.62	.....	.....
25	196.59	197.32	195.74	196.13	192.92	193.68	.....	.....
26	197.30	197.91	194.10	195.90	.....	192.90	.....	188.10
26	197.43	197.86	193.80	194.11	.....	.....	188.04	193.67
28	197.42	198.62	192.53	193.90	.....	.....	190.70	195.40
29	197.41	198.71	.....	.....	.....	191.93	189.20	190.70
30	196.03	197.41	.....	.....	191.73	192.11	.....	189.33
31	195.52	197.06	.....	.....	191.67	192.18	.....	.....

Daily high and low water levels, from recorder charts

Day	May		June		July		August	
	High	Low	High	Low	High	Low	High	Low
1	.....	.....	194.44	201.87	202.83	204.42	.....	.....
2	.....	.....	196.01	196.82	201.82	203.00	212.67	.....
3	.....	195.80	190.59	204.22	201.60	209.18	212.30	221.12
4	188.72	198.57	197.14	198.80	.....	202.60	213.96	221.90
5	190.90	197.85	196.86	204.32	.....	208.30	214.70	222.49
6	191.14	197.40	196.85	204.86	199.60	201.70	.....	.....
7	139.73	191.60	199.00	207.93	198.60	199.62	.....	.....
8	189.44	197.00	200.71	209.23	198.43	206.78	212.20	221.32
9	189.68	191.00	201.75	210.27	198.31	199.30	.....	.....
10	190.72	191.84	203.71	210.46	198.30	205.60	.....	.....
11	191.67	197.81	200.83	203.22	199.10	200.00	.....	.....
12	192.70	200.53	200.54	208.90	199.62	207.19	.....	.....
13	193.67	199.61	201.08	209.78	201.50	210.00	.....	.....
14	192.27	193.67	202.57	203.60	202.35	203.70	.....	.....
15	191.70	199.12	202.40	203.12	202.13	208.01	.....	.....
16	191.90	193.81	202.93	210.01	201.60	202.92	.....	.....
17	192.53	193.60	203.75	208.20	201.30	208.48	.....	.....
18	193.29	198.02	202.52	203.75	201.68	210.03	.....	.....
19	194.60	195.22	202.27	.....	203.02	212.52	.....	.....
20	194.89	195.54	.....	.....	205.66	214.30	.....	.....
21	193.30	195.28	.....	212.25	209.20	215.56	.....	.....
22	191.80	193.30	204.86	213.28	208.60	216.12	.....	.....
23	191.60	201.38	205.55	213.83	206.45	208.50	219.61	.....
24	194.52	195.32	205.34	213.72	.....	.....	217.37	225.93
25	194.34	194.90	204.18	206.35	.....	.....	218.10	226.61
26	194.62	195.26	203.87	210.93	210.30	216.23	218.81	227.12
27	194.94	203.73	203.52	209.00	209.62	.....	217.20	219.95
28	196.68	202.03	202.84	203.62	.....	.....	215.62	217.31
29	194.06	196.30	202.71	203.15	.....	.....	215.32	225.26
30	193.62	.....	203.75	210.41	.....	.....	217.51	226.43
31	.....	.....	.....	.....	.....	.....	218.79	226.91

Daily high and low water levels, from recorder charts

Day	September		October		November		December	
	High	Low	High	Low	High	Low	High	Low
1	218.60	220.68	207.58	212.22	206.79	207.63	203.40	204.55
2	217.99	225.72	206.20	207.58	206.89	207.87	202.95	203.90
3	215.73	218.82	205.77	207.41	207.30	207.98	201.40	202.95
4	213.28	215.73	207.27	208.36	206.62	207.59	200.45	201.60
5	211.68	213.28	208.00	208.91	205.40	206.80	200.10	201.50
6	211.36	219.65	208.24	208.97	204.10	205.46	200.70	201.58
7	213.28	214.27	207.96	208.99	203.62	205.00	201.06	201.90
8	213.03	213.84	207.59	212.25	204.95	205.73	201.38	202.03
9	213.46	220.37	206.65	207.69	205.08	205.70	200.88	201.83
10	212.59	214.08	206.19	212.60	205.05	205.53	199.50	200.88
11	211.30	212.59	208.84	209.38	204.24	205.75	197.70	199.37
12	210.90	212.11	209.26	210.10	202.35	204.30	197.63	198.85
13	211.89	212.82	209.78	210.47	201.40	202.50	198.50	199.51

M1 79--Continued.

Daily high and low water levels, from recorder charts

Day	September		October		November		December	
	High	Low	High	Low	High	Low	High	Low
14	212.56	213.90	209.21	210.31	201.12	202.68	199.12	199.83
15	212.42	213.17	208.52	.....	202.40	203.35	199.50	200.13
16	212.16	219.38	206.92	208.52	203.15	203.90	198.68	199.98
17	211.26	213.02	206.63	208.02	203.60	212.30	197.32	198.68
18	210.08	211.36	207.85	209.10	204.35	206.65	196.13	197.32
19	209.73	211.25	208.90	209.83	202.73	204.35	195.58	197.00
20	210.38	211.41	209.52	210.55	202.15	202.91	196.72	197.45
21	210.23	211.69	209.37	210.61	202.00	204.10	197.19	197.98
22	210.05	211.61	208.19	209.51	203.75	204.41	197.44	198.19
23	209.70	210.25	207.20	208.25	203.76	204.50	197.05	198.20
24	209.09	210.00	206.96	207.32	202.50	204.10	195.52	197.05
25	207.90	209.21	209.91	216.03	202.30	203.42	194.94	195.50
26	207.56	216.43	209.22	210.04	201.30	203.35	192.68	193.39
27	209.30	210.62	209.36	209.91	200.34	201.35	192.43	194.03
28	209.15	210.20	209.47	210.07	200.00	201.35	193.82	194.52
29	208.51	210.03	207.64	209.85	201.80	202.32	194.65	195.77
30	208.08	208.51	206.45	207.65	202.00	210.55	195.19	195.90
31			206.07	207.32			194.02	195.44

M1 88. Milwaukee Vinegar Works. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 25, T. 6 N., R. 22 E. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 4	120.50	May 3	124.03	July 27	123.44
Mar. 1	130.59	June 7	119.70	Sept. 20	130.58

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: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	224.65	May 3	221.77	July 27	229.64	Dec. 20	232.00
Mar. 1	224.33	June 7	225.86	Sept. 20	234.42		

M1 94. Milwaukee County. In Whitnall Park, in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 32, T. 6 N., R. 21 E. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	220.85	May 3	218.92	July 27	226.67	Dec. 6	228.20
Mar. 1	221.06	June 7	226.41	Sept. 20	229.89		

M1 118. A. Schaefer. 5465 North 51st Street, Milwaukee. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 4	31.58	May 3	27.67	July 26	36.13
Mar. 1	29.59	June 7	36.17	Sept. 20	32.30

M1 119. Robert Cerletty. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, T. 8 N., R. 21 E. Records available: 1946-49. Destroyed, measurements discontinued after Sept. 20, 1949.

Date	Water level	Date	Water level	Date	Water level
Jan. 4	11.86	May 3	8.35	July 26	10.42
Mar. 1	9.22	June 7	9.43	Sept. 20	10.43

M1 120. Nunn Bush Shoe Co. North 5th and West Hadley Streets, Milwaukee. Records available: 1946-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Dec.
1	88.53	88.10	87.91	87.37	87.03	90.33	93.19	94.13	91.96	.....
2	88.20	88.20	87.94	87.43	86.94	90.47	93.26	94.14	92.02	.....
3	88.10	88.08	87.95	87.37	87.17	90.77	93.18	94.35	92.03	.....
4	88.12	87.91	87.78	87.28	87.45	90.98	93.16	94.51	91.89	.....
5	87.91	87.95	87.49	87.11	87.79	91.06	93.03	94.58	91.81	.....

a Tape measurement.

Ml 120--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Dec.
6	87.73	87.82	87.64	87.03	88.18	91.08	93.13	94.64	91.91	.....
7	87.87	87.57	87.58	87.12	88.30	91.44	93.30	94.53	91.92	.....
8	88.00	87.60	87.59	87.38	88.20	91.62	93.44	94.38	91.99	.....
9	88.34	87.85	87.69	87.47	.....	91.68	93.42	94.41	92.12	.....
10	88.62	88.15	87.77	87.47	.....	91.65	93.55	94.55	92.14	.....
11	88.57	88.14	87.77	87.24	.....	91.60	93.44	94.62	92.09	.....
12	88.48	87.92	87.77	87.11	.....	91.47	93.45	94.71	92.10	.....
13	88.30	87.85	87.76	87.02	.....	91.35	93.51	94.72	92.30	.....
14	.....	87.86	87.63	87.04	.....	91.42	93.60	94.70	92.35	.....
15	.....	87.67	87.67	87.05	.....	91.77	93.67	94.61	92.36	.....
16	88.28	87.96	87.61	87.19	.....	91.95	93.74	94.66	92.33	.....
17	88.34	88.03	87.57	86.95	.....	92.14	93.72	94.66	.....	.....
18	88.36	87.98	87.59	86.83	.....	92.33	93.46	94.72	.....	.....
19	88.60	89.05	87.75	87.01	.....	92.08	93.64	94.88	.....	.....
20	88.70	88.20	87.61	86.98	.....	91.92	93.80	95.09	.....	.....
21	88.54	88.10	87.15	86.68	.....	92.05	93.86	95.21	.....	.....
22	88.64	88.03	87.14	86.65	.....	92.23	94.08	.....	.....	.....
23	88.53	87.99	87.39	.....	.....	92.26	94.28	91.69	.....	.....
24	88.27	87.84	87.34	.....	.....	92.32	94.19	91.67	.....	.....
25	88.31	88.23	87.38	87.19	90.41	92.33	94.08	91.79	.....	.....
26	88.25	88.23	87.36	87.09	90.51	92.51	94.10	91.85	.....	.....
27	88.17	87.99	86.98	87.39	90.58	92.56	94.20	91.86	.....	91.86
28	88.05	87.91	87.13	87.52	90.67	92.76	94.22	91.81	.....	.....
29	.....	.....	87.31	87.44	90.59	92.94	94.30	91.68	.....	.....
30	.....	.....	87.32	87.29	90.36	93.08	94.33	.....	.....	.....
31	88.00	.....	87.16	.....	90.25	.....	94.34	91.77	.....	.....

a Tape measurement.

Ml 121. F. M. Nimphius. 311 Marion Street, Milwaukee. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	59.42	May 3	59.52	July 27	59.70	Dec. 6	60.02
Mar. 1	59.68	June 7	59.77	Sept. 20	59.54		

Ml 124. Good Hope Cemetery. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 23, T. 6 N., R. 21 E. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	130.65	May 3	136.02	July 27	136.93	Dec. 6	130.10
Mar. 1	130.78	June 7	144.56	Sept. 20	134.60		

Ml 125. Good Hope Cemetery. South 43d Street and West Cold Spring Road. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	125.19	May 3	132.18	July 27	130.68	Dec. 6	123.25
Mar. 1	124.47	June 7	138.59	Sept. 20	128.50		

Ml 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: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 4	62.07	May 3	61.17	Sept. 20	63.39
Mar. 1	60.69	June 7	63.68	Dec. 6	63.22

a Pumping recently.

Ml 132. White Manor Water Cooperative. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 13, T. 6 N., R. 21 E. Records available: 1946-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	206.17	207.55	206.10	205.29	201.69	212.48
2	205.89	207.61	205.84	205.31	201.60	213.09
3	206.48	207.50	205.96	205.18	201.85	214.32
4	205.07	207.94	205.90	204.71	202.47	215.74
5	204.66	208.20	206.14	204.07	203.17	215.94

M1 132--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
6	204.88	208.20	206.44	203.54	203.52	216.97
7	205.28	207.93	206.37	203.46	204.62	217.60
8	205.64	207.79	205.91	203.56	.....	218.21
9	206.25	207.97	206.16	203.57	.....	218.93
10	206.36	208.37	206.57	203.57	206.16	219.63
11	206.33	208.37	206.95	203.22	206.71	220.50
12	206.15	208.05	207.34	202.66	207.55	220.45
13	206.31	208.05	207.34	202.33	208.24	220.24
14	206.75	207.99	207.14	201.74	208.80	220.04
15	206.76	207.09	206.76	200.83	208.94	219.77
16	207.23	206.81	206.52	200.62	208.79	219.74
17	207.27	206.97	206.64	200.13	208.68	219.80
18	206.97	207.13	207.04	199.78	208.83	220.17
19	207.23	207.44	207.22	199.91	209.59	220.15
20	207.32	207.59	207.17	199.98	210.08	220.20
21	207.25	207.52	206.43	200.19	210.18	220.11
22	207.57	206.83	205.84	200.54	210.20	220.60
23	207.55	206.68	205.92	200.91	210.20	221.00
24	207.28	206.56	205.91	201.05	209.97	221.77
25	207.28	206.91	206.17	200.89	209.97	221.84
26	207.21	206.91	206.16	200.24	210.29	222.96
27	206.88	206.63	205.80	200.73	210.94	221.90
28	207.43	206.36	205.65	201.11	211.56	221.90
29	207.81		205.41	201.41	211.59	221.70
30	207.81		205.27	201.75	211.99	222.05
31	207.61		204.99		212.10	

Lowest daily water level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	222.51	226.84	233.97	224.60	222.73	218.58
2	222.91	226.91	234.06	224.47	223.34	218.82
3	222.68	227.41	233.98	224.04	222.34	218.81
4	222.52	227.99	233.60	223.59	222.36	218.74
5	222.40	228.78	232.51	223.40	222.38	218.69
6	221.95	229.60	231.69	223.30	222.16	218.33
7	221.44	229.63	230.50	223.49	221.76	218.00
8	221.07	230.02	229.58	223.66	221.20	217.95
9	220.57	230.48	229.37	223.73	221.21	217.94
10	220.40	231.00	229.41	223.72	220.88	217.70
11	220.38	231.08	229.42	223.62	220.40	217.56
12	220.19	231.36	229.20	224.02	220.37	216.96
13	220.43	231.56	228.60	224.23	220.07	216.76
14	220.42	231.57	228.60	224.36	219.76	216.56
15	220.77	231.32	228.59	224.43	219.31	216.50
16	220.97	231.33	228.47	224.36	219.44	216.44
17	220.99	231.74	228.29	224.09	219.60	216.41
18	221.43	232.18	228.25	223.72	219.73	216.29
19	222.07	232.66	227.72	223.50	219.84	216.03
20	222.65	233.39	227.55	223.88	220.01	215.35
21	223.03	233.35	227.05	223.96	220.01	214.85
22	223.90	232.92	226.47	224.23	220.51	214.98
23	224.57	232.73	226.42	224.26	219.51	215.18
24	224.53	233.08	226.42	224.28	219.52	215.24
25	224.93	233.55	226.29	223.75	219.45	215.08
26	225.04	234.02	225.97	223.48	219.32	214.38
27	224.68	234.54	225.25	223.46	219.01	213.76
28	225.28	234.46	224.80	223.36	218.92	213.26
29	225.95	234.11	224.75	223.37	218.58	213.06
30	226.62	234.00	224.60	223.24	218.49	213.04
31	226.84	233.70		223.14		213.03

M1 135. Leonard Budzein. 920 West Armour Avenue, Town of Lake.
 Records available: 1946-49.

M1 135--Continued.

Date	Water level	Date	Water level	Date	Water level
Jan. 4	11.05	May 3	9.38	Sept. 20	10.58
Mar. 1	8.35	July 27	9.47	Dec. 6	10.87

M1 146. Mr. Huel. 9090 Lake Drive, Milwaukee. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	62.30	May 3	62.58	July 26	65.81	Dec. 6	68.23
Mar. 1	63.22	June 7	68.05	Sept. 20	64.35		

M1 148. Milwaukee County. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 32, T. 6 N., R. 21 E. Records available: 1946-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	32.00	32.21	31.42	30.63	30.26	30.95	31.36	31.66	32.51	32.90	32.86	33.63
2	32.05	32.23	31.14	30.64	30.57	30.97	31.52	31.80	32.54	32.70	33.08	33.79
3	32.08	31.96	31.14	30.52	30.62	31.26	31.36	31.85	32.65	32.65	33.12	33.51
4	32.08	32.02	30.87	30.55	30.62	31.33	31.38	31.94	32.53	32.68	33.20	33.58
5	31.83	32.05	30.80	30.26	30.63	31.26	31.39	31.86	32.59	32.81	33.27	33.56
6	31.81	32.03	31.00	30.24	30.67	31.15	31.36	31.84	32.61	32.50	33.00	33.41
7	31.90	32.07	30.96	30.32	30.70	31.29	31.41	31.82	32.46	32.67	32.95	33.72
8	31.96	32.18	30.58	30.52	30.57	31.35	31.44	31.90	32.56	32.70	33.04	33.80
9	32.33	32.32	30.56	30.63	30.60	31.34	31.46	31.90	32.63	32.79	33.03	33.75
10	32.55	32.43	30.48	30.56	30.83	31.20	31.56	31.95	32.59	32.61	33.11	33.51
11	32.27	32.43	30.43	30.42	30.70	31.28	31.57	32.06	32.45	32.69	33.11	33.41
12	31.88	32.17	30.46	30.28	30.63	31.29	31.45	31.45	32.41	32.55	33.09	33.75
13	31.78	32.32	30.56	30.36	30.57	31.20	31.43	31.43	32.49	32.87	33.05	33.84
14	31.92	32.31	30.55	30.41	30.83	31.16	31.43	31.43	32.60	32.84	33.15	33.81
15	31.90	32.16	30.60	30.57	30.77	31.24	31.44	31.44	32.47	32.80	33.23	33.74
16	32.10	32.40	30.46	30.74	30.83	31.30	31.49	31.49	32.39	32.71	33.33	33.59
17	32.10	32.40	30.43	30.51	30.75	31.27	31.42	31.89	32.41	32.78	33.41	33.57
18	32.04	32.10	30.59	30.62	30.70	31.45	31.49	32.03	32.52	32.85	33.47	33.77
19	32.37	32.14	30.69	30.75	30.84	31.33	31.58	32.06	32.64	32.86	33.21	33.74
20	32.35	32.31	30.58	30.64	30.84	31.17	31.60	32.25	32.77	32.73	33.42	33.53
21	31.98	32.23	30.46	30.52	30.68	31.16	31.57	32.19	32.60	32.67	33.54	33.54
22	32.12	31.03	30.53	30.37	30.83	31.26	31.89	32.31	32.56	32.93	33.50	33.86
23	32.02	32.00	30.73	30.49	30.97	31.19	31.89	32.25	32.77	33.05	33.30	34.07
24	32.09	31.79	30.60	30.67	30.99	31.16	31.73	32.42	32.66	33.16	33.30	34.18
25	32.13	31.98	30.64	30.57	30.96	31.21	31.77	32.39	32.71	32.89	33.48	33.83
26	31.97	31.95	30.62	30.48	30.96	31.43	31.67	32.40	32.62	32.95	33.39	33.71
27	31.92	31.50	30.51	30.61	31.05	31.50	31.66	32.43	32.57	32.95	33.41	23.82
28	32.14	31.42	30.65	30.69	31.10	31.37	31.71	32.36	32.72	32.81	33.34	33.88
29	32.32		30.68	30.50	31.07	31.35	31.74	32.35	32.84	32.79	33.46	34.06
30	32.26		30.64	30.43	31.03	31.32	31.79	32.30	32.81	32.87	33.59	33.91
31	31.92		30.41		31.20		31.80	32.34		32.98		33.80

M1 153. Lakeside Laboratories. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 11, T. 8 N., R. 21 E. Records available: 1948-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	33.00	32.43	31.92	30.46	29.57	30.99	33.39	34.63	35.90	35.27	34.53	34.88
2	32.87	32.47	31.76	30.42	29.90	31.65	33.56	34.73	35.73	35.13	34.60	35.03
3	32.91	32.23	31.77	30.40	30.04	32.45	33.60	34.96	35.73	35.16	34.60	34.98
4	32.88	32.12	31.52	30.30	30.13	33.50	33.71	35.13	35.41	34.57	34.97	
5	32.61	32.18	31.35	30.10	30.19	33.25	33.72	35.26	35.40	34.56	33.01	
6	32.56	32.09	31.59	29.89	30.42	33.77	33.52	35.26	35.21	34.38	35.01	
7	32.66	32.07	31.53	29.92	30.42	34.10	33.44	35.27	35.30	35.03	34.26	.....
8	32.71	32.11	31.38	30.11	30.36	34.25	33.38	35.53	35.10	35.03	34.28	.....
9	33.10	32.23	31.35	30.17	30.37	34.48	33.40	35.90	35.01	34.91	34.30	.....
10	33.19	32.49	31.34	30.16	30.56	34.69	33.58	36.08	35.01	34.77	34.18	.....
11	33.13	32.49	31.29	30.12	30.55	35.00	33.61	36.03	34.98	34.68	34.26	34.68
12	32.80	32.20	31.28	29.83	30.61	35.11	33.81	35.70	34.77	34.83	34.27	.....

M1 153--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
13	32.64	32.24	31.28	29.72	30.56	35.04	33.95	35.39	34.76	34.90	34.00	.....
14	32.72	32.27	31.24	29.76	30.80	34.67	33.82	35.38	34.79	35.06	34.08	34.87
15	32.70	32.00	31.26	29.80	30.88	34.09	33.74	35.45	34.72	35.11	34.26	34.71
16	32.76	32.23	31.10	29.95	30.85	33.84	33.88	35.47	34.69	34.95	34.32	34.59
17	32.76	32.28	30.96	29.74	30.76	33.49	33.88	35.42	34.68	34.90	34.46	34.48
18	32.65	32.10	31.05	29.90	30.58	33.45	33.85	35.64	34.60	34.89	34.48	34.51
19	32.81	32.20	31.13	29.94	30.64	33.41	34.15	35.96	34.79	34.80	34.35	34.51
20	.....	32.58	30.99	29.85	30.67	32.99	34.23	36.19	34.89	34.66	34.67	34.16
21	.....	32.28	30.62	29.76	30.49	32.97	34.20	36.54	34.81	34.60	34.89	34.19
22	.....	32.09	30.69	29.61	30.48	33.08	34.25	36.09	34.80	34.56	34.89	34.32
23	.....	32.06	30.84	29.74	30.61	33.06	34.45	35.65	34.80	34.76	34.46	34.49
24	.....	31.84	30.77	29.92	30.60	33.14	34.45	35.69	34.85	34.78	34.45	34.58
25	.....	32.12	30.72	29.89	30.57	33.03	34.42	35.90	34.88	34.66	34.55	34.49
26	32.41	32.12	30.70	29.72	30.60	33.04	34.59	36.11	34.79	34.75	34.51	34.22
27	32.30	31.80	30.40	29.92	30.58	33.07	34.60	36.39	34.56	34.77	34.36	34.14
28	32.37	31.92	30.57	29.99	30.61	33.10	34.58	36.40	34.67	34.71	34.31	34.33
29	.....	.....	30.62	29.79	30.60	33.15	34.63	36.11	34.92	34.64	34.45	34.44
30	.....	.....	30.60	29.72	30.62	33.25	34.75	36.05	35.13	34.56	34.70	34.33
31	.....	.....	30.27	.....	30.63	.....	34.78	35.94	.....	34.64	.....	34.24

M1 229. Andrew J. Albert. 5827 North 40th Street, Milwaukee. Unused drilled domestic well, diameter 6 inches, depth 76 feet. Water-stage recorder maintained on well since May 3, 1949. Records available: 1949.

Lowest daily water level, from recorder charts

Day	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	34.01	33.29	32.74	34.48	34.92	34.65	34.88
2	.....	34.59	33.77	32.70	34.48	34.92	34.70	34.89
3	30.48	34.69	33.97	.....	34.45	34.91	34.71	34.84
4	31.06	35.64	33.33	.....	34.41	34.90	34.82	34.84
5	31.41	35.54	33.46	32.72	34.48	34.76	34.80	34.89
6	31.30	35.54	33.30	33.12	34.45	34.65	34.65	34.89
7	31.59	.....	33.03	33.22	34.38	34.40	34.61	34.81
8	31.69	.....	32.85	33.77	34.32	34.49	34.71	34.90
9	31.41	.....	33.00	34.07	34.50	34.50	34.70	34.93
10	31.73	.....	32.90	34.08	34.45	34.39	34.67	34.83
11	31.62	.....	32.92	33.74	34.40	34.45	34.70	34.80
12	32.02	.....	33.30	33.41	34.21	34.61	34.70	34.96
13	31.97	.....	33.26	33.43	34.13	34.67	34.58	34.90
14	32.12	.....	32.93	33.53	34.13	34.68	34.60	34.89
15	32.03	.....	32.64	33.76	34.13	34.69	34.63	34.73
16	31.78	.....	32.93	34.31	34.06	34.65	34.78	34.59
17	31.83	.....	32.98	33.89	34.11	34.68	34.78	34.54
18	31.69	.....	33.16	33.68	34.15	34.61	34.78	34.73
19	31.69	.....	33.74	33.96	34.29	34.55	34.62	34.71
20	31.77	.....	33.52	34.20	34.34	34.48	34.80	34.48
21	31.79	.....	33.50	34.22	34.35	34.48	34.92	34.49
22	31.94	.....	33.80	34.28	34.35	34.65	34.91	34.59
23	31.87	.....	34.81	34.72	34.45	34.90	34.66	34.63
24	32.03	.....	34.19	34.61	34.57	34.88	34.66	34.65
25	31.81	.....	34.64	35.10	34.58	34.75	34.70	34.48
26	32.05	.....	34.55	35.12	34.39	34.80	34.64	34.20
27	32.10	.....	34.12	35.05	34.44	34.76	34.74	34.21
28	32.99	.....	32.84	34.86	34.56	34.61	34.69	34.17
29	33.04	32.92	32.75	34.72	34.60	34.64	34.80	34.31
30	33.38	33.35	32.94	34.78	34.79	34.70	34.86	34.31
31	34.06	.....	32.93	34.70	.....	34.73	.....	34.23

M1 230. E. Runge. 4723 West Villard Avenue. Unused drilled domestic well, diameter 6 inches, depth 83 feet. Records available: 1949.

Date	Water level	Date	Water level	Date	Water level
May 3	9.38	July 26	17.52	Dec. 6	13.39
June 7	15.40	Sept. 20	13.96		

Monroe County

Mo 2. Jos. Anderson. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 34, T. 15 N., R. 4 W. Records available: 1935-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	9.15	May 28	8.10	Aug. 27	9.43	Dec. 3	12.09
Feb. 25	9.49	June 26	8.60	Sept. 25	11.08	Dec. 14	11.53
Mar. 25	6.90	July 25	8.70	Oct. 25	11.63	Dec. 26	12.20
Apr. 25	7.40						

Mo 10. Dennis Shea. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 5, T. 15 N., R. 3 W. Records available: 1935-49.

Jan. 29	10.35	May 31	9.87	Aug. 27	11.09	Nov. 30	11.08
Feb. 28	9.98	June 28	10.07	Sept. 27	10.98	Dec. 28	10.89
Mar. 29	9.49	July 26	11.03	Nov. 4	10.94		

Mo 11. John Sullivan. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 27, T. 16 N., R. 3 W. Records available: 1935-49.

Jan. 29	6.60	May 29	6.65	Sept. 29	7.30	Nov. 29	7.26
Feb. 28	6.50	June 28	6.75	Oct. 29	7.25	Dec. 29	7.30
Mar. 29	5.45	Aug. 29	7.40				

Mo 12. Melvin Olson. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 32, T. 16 N., R. 4 W. Records available: 1935-49.

Jan. 31	27.16	May 3	27.12	Sept. 28	27.13	Nov. 26	27.15
Mar. 28	26.87	June 28	27.10	Oct. 31	27.14	Dec. 31	27.13

Mo 13. Walter Parks. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 3, T. 16 N., R. 4 W. Records available: 1935-49.

Feb. 12	10.70	Apr. 28	10.10	June 24	10.62	Aug. 28	8.50
25	10.46	May 28	10.96	July 30	10.63	Oct. 3	10.83
Mar. 24	9.75						

Oconto County

Oc 1. Oconto Utilities. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 19, T. 28 N., R. 22 E. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Mar. 3	6.66	June 9	13.48	Sept. 22	(a)
May 5	2.98	July 21	5.09	Dec. 8	(a)

a Flowing.

Oneida County

On 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. Measurements supplied through courtesy of Wisconsin Conservation Department. Records available: 1936-38, 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	1.20	Mar. 12	0.70	May 28	0.80	Aug. 6	0.53
8	1.20	19	.90	July 4	1.00	13	.61
15	1.20	26	.40	11	1.10	20	.74
24	1.20	Apr. 9	.30	18	.90	27	.75
29	1.10	16	.50	July 2	.60	Sept. 17	.57
Feb. 5	1.15	23	.60	9	.20	Nov. 1	.75
12	1.20	30	.80	16	.20	26	.74
18	1.10	May 7	.40	24	.60	Dec. 4	.88
26	.90	14	.70	30	.58	18	.86
Mar. 5	.30	21	.70				

On 22. Wisconsin Valley Improvement Co. Rainbow Snow Course, in SW $\frac{1}{4}$ sec. 18, T. 39 N., R. 8 E. Measurements supplied through courtesy of Wisconsin Valley Improvement Co. Records available: 1944-49.

Water level at noon, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	18.66	18.57	18.85	19.26	19.13	18.53	18.23	17.76	17.61	17.59	17.64	17.70
2	18.66	18.58	18.86	19.26	19.12	18.56	18.23	17.76	17.61	17.59	17.67	17.70
3	18.66	18.58	18.88	19.27	19.12	18.55	18.26	17.75	17.61	17.59	17.67	17.69
4	18.66	18.58	18.88	19.28	19.11	18.54	18.25	17.73	17.60	17.60	17.68	17.69
5	18.64	18.59	18.90	19.28	19.10	18.51	18.22	17.71	17.60	17.60	17.68	17.70
6	18.63	18.59	18.93	19.28	19.08	18.49	18.21	17.70	17.60	17.60	17.67	17.70
7	18.62	18.60	18.93	19.23	19.07	18.48	18.19	17.70	17.59	17.59	17.65	17.70
8	18.60	18.60	18.96	19.28	19.05	18.46	18.16	17.69	17.59	17.60	17.65	17.71
9	18.58	18.62	18.97	19.29	19.05	18.44	18.12	17.69	17.59	17.60	17.65	17.71
10	18.58	18.63	18.98	19.28	19.04	18.42	18.11	17.69	17.59	17.60	17.63	17.70
11	18.56	18.63	18.98	19.28	19.01	18.41	18.08	17.69	17.58	17.58	17.64	17.69
12	18.53	18.63	19.01	19.27	19.00	18.40	18.05	17.69	17.58	17.58	17.62	17.69
13	18.52	18.65	19.02	19.28	18.97	18.40	18.03	17.69	17.57	17.56	17.62	17.70
14	18.53	18.66	19.04	19.27	18.97	18.40	18.01	17.68	17.57	17.54	17.61	17.70
15	18.52	18.65	19.05	19.27	18.95	18.40	18.00	17.68	17.55	17.54	17.62	17.70
16	18.52	18.67	19.06	19.26	18.93	18.40	17.99	17.68	17.54	17.53	17.62	17.69
17	18.53	18.68	19.07	19.25	18.91	18.40	17.98	17.67	17.53	17.54	17.63	17.67
18	18.52	18.68	19.09	19.26	18.89	18.40	17.96	17.67	17.53	17.54	17.63	17.67
19	18.53	18.69	19.11	19.25	18.88	18.40	17.96	17.67	17.53	17.54	17.63	17.68
20	18.54	18.71	19.11	19.24	18.86	18.40	17.96	17.67	17.53	17.55	17.62	17.68
21	18.52	18.72	19.13	19.23	18.83	18.39	17.93	17.66	17.52	17.55	17.63	17.66
22	18.53	18.73	19.14	19.22	18.81	18.39	17.93	17.65	17.52	17.55	17.63	17.66
23	18.53	18.74	19.16	19.22	18.79	18.37	17.94	17.64	17.53	17.60	17.63	17.66
24	18.53	18.75	19.17	19.22	18.76	18.36	17.91	17.64	17.54	17.62	17.63	17.66
25	18.54	18.79	19.17	19.20	18.74	18.34	17.91	17.63	17.55	17.64	17.63	17.64
26	18.54	18.80	19.20	19.19	18.72	18.33	17.89	17.63	17.56	17.67	17.63	17.64
27	18.54	18.81	19.29	19.19	18.70	18.32	17.87	17.62	17.57	17.67	17.65	17.64
28	18.54	18.84	19.22	19.18	18.67	18.31	17.85	17.62	17.58	17.67	17.66	17.63
29	18.56		19.24	19.16	18.65	18.30	17.84	17.63	17.58	17.66	17.67	17.63
30	18.56		19.24	19.15	18.62	18.29	17.82	17.62	17.58	17.65	17.68	17.63
31	18.56		19.24		18.60		17.79	17.61		17.66		17.60

On 23. U. S. Geol. Survey. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 27, T. 37 N., R. 6 E. Incorrectly published as sec. 22, in previous reports. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	31.85	Apr. 4	32.27	July 3	32.75	Oct. 11	32.26
10	31.88	10	32.37	11	32.65	16	32.25
17	31.90	18	32.43	18	32.63	26	32.27
24	32.04	25	32.45	25	32.96	31	32.24
31	32.02	May 2	32.45	Aug. 1	32.74	Nov. 2	32.49
Feb. 7	32.11	9	32.52	8	32.70	9	32.25
14	31.15	16	32.56	22	32.55	15	32.28
21	32.17	23	32.55	29	32.15	22	32.44
28	32.22	31	32.57	Sept. 5	32.14	29	32.48
Mar. 7	32.24	June 6	32.64	11	32.16	Dec. 5	32.45
14	32.30	13	32.60	18	32.13	12	32.47
21	32.28	20	32.65	25	32.19	20	32.49
28	32.22	26	32.69	Oct. 2	32.23	30	32.47

On 24. U. S. Geol. Survey. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 9, T. 36 N., R. 9 E. Records available: 1944-49.

Jan. 6	21.95	Apr. 4	22.00	June 30	21.83	Oct. 21	21.40
10	21.92	10	21.95	July 10	21.55	21	21.44
19	22.00	21	21.88	21	21.35	Nov. 1	21.50
27	21.99	27	21.90	24	21.02	6	21.45
Feb. 1	21.86	May 3	21.88	Aug. 2	21.00	11	21.45
10	22.10	11	21.85	12	20.99	20	21.46
18	21.70	20	21.84	25	21.08	28	21.44
27	21.70	25	21.80	30	21.15	Dec. 5	21.42
Mar. 5	22.13	June 2	21.91	Sept. 18	21.22	12	21.42
13	22.16	10	21.85	30	21.30	19	21.42
20	22.20	17	21.88	Oct. 12	21.42	26	21.44
27	22.17						

Outagamie County

On 2. Kaukauna Water & Electric Co. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T. 21 N., R. 16 E. Records available: 1946-49.

Highest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	....	1.27	+0.17	+5.44	3.69	12.40	....	14.88	....	7.41	7.08
2	....	....	1.85	+3.98	+5.90	5.20	10.70	....	16.55	....	8.13	7.82
3	....	....	2.33	+5.46	+1.90	5.59	9.80	13.50	16.60	....	7.80	4.67
4	0.73	....	2.68	+5.89	.75	5.92	9.28	14.18	12.20	....	8.28	2.28
5	1.00	....	1.52	+2.72	2.10	4.77	8.90	14.65	9.40	....	8.29	1.23
6	.96	....	+1.80	+1.20	....	2.18	9.38	14.29	8.63	15.21	7.10	5.18
7	.75	....	+3.55	+4.49	....	5.83	8.75	11.85	13.90	15.99	6.19	....
8	.36	....	2.11	.03	....	6.71	8.58	11.55	14.18	13.60	9.62	....
9	+.91	....	2.72	+3.50	....	7.68	7.65	....	14.47	11.15	9.97	....
10	....	2.60	3.05	+5.08	.92	8.45	7.92	15.65	15.32	10.21	10.78	....
11	....	2.70	2.57	+5.53	.85	8.65	....	15.90	14.05	13.63	11.28	....
12	....	+1.12	.35	+2.04	1.60	7.69	9.52	15.80	13.80	13.79	10.30	....
13	....	+2.87	+1.52	+1.55	2.80	7.54	11.60	16.00	15.15	14.28	4.98	....
14	1.98	+3.40	+2.54	+7.73	.99	....	11.60	14.90	15.87	14.80	3.42	....
15	+1.13	.07	1.23	+5.52	+7.77	....	11.30	13.28	16.00	12.50	....	....
16	+2.23	1.22	2.21	+2.47	+1.05	....	11.80	15.70	15.10	10.45	....	....
17	+2.68	2.03	2.50	+4.70	3.94	....	10.17	....	14.60	8.55	9.13	....
18	+.10	1.78	1.76	+5.00	4.25	....	9.82	16.43	14.10	11.54	9.55	....
19	.42	.60	+1.54	+1.38	4.36	....	12.29	16.95	13.63	12.69	5.91	....
20	....	+2.10	+3.58	+3.38	3.48	....	12.79	15.90	15.50	13.20	3.90	....
21	....	+3.00	+4.32	+4.05	2.00	....	12.85	12.85	15.59	14.65	3.26	....
22	....	1.12	+.80	.03	1.12	....	12.98	13.00	15.00	11.85	6.77	....
23	....	2.38	.38	+3.66	.95	....	12.70	15.30	14.43	7.65	6.90	....
24	....	1.55	.74	+4.90	3.89	....	....	15.60	13.45	6.31	6.90	....
25	....	2.40	.50	+5.47	3.08	....	....	15.75	10.89	9.72	5.71	....
26	....	.90	+2.80	+2.08	2.85	....	12.62	16.25	9.85	10.05	4.00	....
27	....	....	+4.32	+4.59	3.81	....	12.78	16.15	13.92	10.01	2.00	....
28	....	....	+4.82	+2.20	1.80	11.08	12.98	11.35	14.67	10.44	.90	....
29	....	....	+1.70	+2.20	.31	11.23	13.60	15.28	....	9.75	5.08	....
30	....	....	+.68	+2.52	+.02	11.78	....	....	....	6.00	6.51	....
31	....	....	+.69	....	+.43	....	....	....	....	4.40	....	....

On 3. Vanden Huefel. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 2, T. 23 N., R. 18 E. Records available: 1947-49. Apr. 6, 27.29; June 10, 29.45; July 22, 33.18; Sept. 23, 35.94.

On 5. Kaukauna Water & Electric Co. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 4, T. 21 N., R. 19 E. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	21.32	May 4	20.80	July 20	22.89	Dec. 7	24.00
Mar. 2	21.20	June 8	21.50	Sept. 21	25.13		

Portage County

Pt 30. U. S. Geol. Survey. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 1, T. 22 N., R. 8 E. Records available: 1944-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	13.96	May 2	11.40	July 17	11.64	Oct. 2	12.34
17	13.06	8	11.39	26	11.94	9	12.51
30	13.15	12	11.10	28	11.82	11	12.52
Feb. 7	13.29	16	11.70	30	11.97	16	12.53
13	13.34	22	11.64	Aug. 7	11.94	23	12.59
21	13.39	23	11.05	11	12.00	30	12.69
28	13.30	29	11.25	14	12.00	31	12.76
Mar. 6	13.24	June 2	11.20	16	12.06	Nov. 6	12.84
14	13.19	5	11.25	21	11.80	14	12.97
15	13.23	9	11.30	26	11.88	20	12.96
20	13.17	12	11.33	28	11.94	27	13.16
28	12.66	20	11.40	Sept. 5	12.01	Dec. 4	13.07
Apr. 3	12.62	23	11.48	12	12.20	10	13.22
11	12.32	26	11.48	16	12.20	11	13.18
18	12.79	July 5	11.59	19	12.21	18	13.26
24	12.76	10	11.57	25	12.29	25	13.29
May 1	11.50	14	11.68				

Price County

Pr 6. Wisconsin Conservation Department. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T. 40 N., R. 1 W. Measurements supplied through courtesy of Wisconsin Conservation Department. Records available: 1937-38, 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	5.12	Apr. 9	3.80	July 9	2.77	Oct. 8	3.90
8	5.20	16	3.90	16	3.26	15	3.67
15	5.26	23	3.30	23	3.44	22	3.73
22	5.08	30	3.47	31	3.34	29	3.78
31	5.26	May 1	3.47	Aug. 1	3.34	31	3.80
Feb. 1	5.26	7	2.43	6	3.26	Nov. 1	3.80
5	5.37	14	3.06	13	3.40	5	3.86
12	5.47	21	3.34	20	3.58	12	3.64
19	5.54	28	3.55	27	3.76	19	3.63
28	5.23	31	3.67	31	3.83	26	3.08
Mar. 1	5.23	June 1	3.67	Sept. 1	3.83	30	3.71
5	4.97	4	3.73	10	3.74	Dec. 1	3.71
12	4.52	11	3.91	17	3.59	10	3.83
19	4.53	18	4.03	24	3.69	17	3.66
26	4.06	25	3.80	29	3.91	24	3.83
31	3.84	30	4.04	30	3.81	29	3.91
Apr. 1	3.84	July 1	2.54	Oct. 1	3.81	31	3.96

Racine County

Ra 3. City of Burlington. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 30, T. 3 N., R. 19 E. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 24	18.92	June 6	18.24	Sept. 19	17.33
May 2	17.41	July 25	17.91	Dec. 5	20.60

Ra 4. Pure Milk Association. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 34, T. 3 N., R. 20 E. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 3	49.14	July 25	49.65	Dec. 5	50.52
Feb. 28	50.33	Sept. 19	49.94		

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: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	118.49	May 2	121.99	July 25	124.28	Dec. 5	123.90
Feb. 28	121.78	June 6	122.74	Sept. 19	125.03		

Ra 6. LeRoy Radtke. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T. 4 N., R. 23 E. Location incorrectly given in previous reports. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	26.40	June 7	26.12	Sept. 20	24.42		
May 3	24.63	July 27	25.86	Dec. 6	25.14		

Ra 8. Harold Wollmer. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 10, T. 4 N., R. 21 E. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	67.81	May 3	67.65	July 27	68.42	Dec. 6	68.88
Mar. 1	67.25	June 7	69.32	Sept. 20	68.66		

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: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	57.11	May 2	56.77	July 25	57.53	Dec. 5	58.07
Feb. 28	57.05	June 6	57.27	Sept. 19	57.87		

St. Croix County

SC 2. Owner unknown. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 31, T. 28 N., R. 19 W. Records available: 1947-49.

Jan. 12	49.65	Apr. 28	49.80	Aug. 11	50.68	Dec. 14	51.48
Mar. 9	50.17	June 2	50.04	Sept. 28	50.89		

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: 1946-49.

Lowest daily water level (from recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	83.90	77.28	77.34	78.65	78.61	78.00	78.48	77.14	77.01	76.97	70.57	74.40
2	83.51	77.52	78.10	78.67	77.61	79.10	78.52	77.14	77.25	76.61	70.37	75.18
3	82.34	77.82	78.37	73.30	77.50	79.59	78.03	77.70	77.25	76.85	70.36	75.22
4	81.13	78.29	78.50	77.63	78.12	79.61	77.15	78.03	76.77	76.03	70.44	75.22
5	81.25	78.33	78.50	76.81	78.75	79.13	76.29	78.24	75.89	76.21	70.44	74.88
6	81.55	77.98	78.17	77.35	79.73	78.13	76.67	78.25	75.21	76.19	70.32	74.57
7	81.93	77.11	77.57	78.05	79.83	78.33	77.90	77.84	75.67	76.13	70.18	75.47
8	81.95	77.13	77.30	78.69	79.42	78.98	77.75	77.01	76.75	76.11	69.89	76.10
9	81.31	77.65	77.84	78.72	78.42	79.44	78.87	77.10	77.17	75.57	70.22	76.14
10	80.55	78.34	78.27	78.47	78.37	79.64	78.54	79.18	77.18	74.74	70.40	74.42
11	79.64	78.82	78.69	77.63	78.81	79.61	77.61	78.56	76.71	74.04	70.44	76.42
12	79.85	78.82	78.69	77.00	79.24	79.05	77.04	79.24	75.84	73.85	70.35	76.10
13	80.19	78.66	78.46	77.64	79.46	78.05	77.94	79.27	75.41	74.04	70.10	76.21
14	80.22	77.91	77.65	78.14	79.49	77.76	.....	78.83	76.02	74.07	69.87	76.72
15	80.18	76.99	77.41	78.67	79.04	.....	77.81	76.48	73.78	69.76	76.72	
16	79.42	78.02	77.88	78.69	78.07	.....	78.54	77.29	76.82	73.25	70.73	76.39
17	78.79	78.34	78.27	78.24	73.08	79.40	78.02	77.41	76.89	72.79	72.13	75.84
18	78.25	78.64	78.87	77.41	78.68	79.44	77.06	77.70	76.51	72.34	73.22	75.30
19	79.26	73.67	78.91	77.30	78.22	79.05	77.21	77.82	75.82	71.95	74.40	74.82
20	.....	78.34	78.52	77.87	79.43	78.10	77.74	78.53	75.34	71.69	75.50	75.59
21	79.05	77.66	77.48	78.37	79.39	77.80	78.00	78.04	75.99	71.55	75.69	75.12
22	79.16	76.89	76.96	78.98	78.75	78.29	78.27	77.02	76.55	71.48	75.70	76.04
23	78.80	76.87	77.45	70.98	78.01	78.62	78.30	76.81	76.95	71.45	75.67	76.52
24	77.70	77.22	77.67	78.75	77.82	78.90	77.82	77.31	76.96	71.44	75.35	76.56
25	77.59	78.42	78.36	77.96	78.36	78.82	76.94	77.44	76.51	71.10	74.78	76.04
26	78.00	78.56	78.49	77.42	78.75	78.46	77.01	77.42	75.68	70.89	74.31	75.31
27	78.05	73.55	78.22	78.15	79.20	77.69	77.60	77.39	75.07	70.79	73.71	74.58
28	78.84	78.00	77.83	78.66	79.47	77.16	78.00	76.85	75.73	71.14	73.25	74.72
29	78.85		77.44	79.06	79.43	77.60	78.41	76.01	76.27	71.19	73.21	74.94
30	78.54		77.66	79.06	78.90	8.05	78.44	76.07	76.86	71.07	73.67	75.33
31	77.55		78.20		77.91		78.08	76.62		70.93		75.32

Sk 6. Baraboo Iron Co. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 1, T. 11 N., R. 6 E. Measurements supplied through courtesy of Leland Shaw, water superintendent, Baraboo. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	+3.35	Feb. 11	+3.05	Mar. 18	+3.45	Apr. 24	+3.45
12	+2.90	18	+3.20	25	+3.31	30	+3.51
21	+2.90	26	+3.30	Apr. 1	+3.56	May 7	+3.09
28	+3.25	Mar. 5	+3.41	6	+3.23	14	+3.03
Feb. 3	+3.15	10	+3.38	16	+3.31	21	+3.28

Sk 6--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 25	+2.75	July 24	+3.28	Sept. 17	+3.19	Nov. 11	+3.21
June 4	+3.06	30	+3.21	24	+2.71	18	+3.25
10	+2.94	Aug. 7	+2.95	28	+2.76	25	+3.19
18	+2.99	14	+3.09	Oct. 8	+3.13	Dec. 3	+3.08
25	+2.97	21	+2.87	14	+3.15	10	+3.11
July 2	+3.31	27	+2.76	22	+3.05	14	+2.66
Jul 8	+3.21	Sept. 4	+3.19	29	+3.27	22	+3.11
16	+3.39	10	+3.07	Nov. 3	+2.91	31	+3.06

Sk 7. U. S. Government, War Assets Administration. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 19, T. 10 W., R. 7 E. Records available: 1948-49. Recorder removed May 27, 1949.

Jan. 1	87.85	Feb. 11	88.05	Mar. 22	87.84	Apr. 29	87.80
9	88.05	19	88.09	29	87.92	May 7	87.82
15	87.91	26	87.88	Apr. 1	87.88	14	87.77
22	87.79	Mar. 1	88.03	7	87.80	21	87.72
29	87.95	7	87.94	15	87.82	26	87.74
Feb. 4	87.90	15	87.81	22	87.74		

Sk 11. Wilbur S. Grant. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 15, T. 10 N., R. 6 E. Records available: 1948-49.

Jan. 13	88.65	Apr. 29	88.85	Aug. 12	88.71	Dec. 15	88.47
Mar. 10	88.76	June 3	88.98	Sept. 27	88.56		

Sk 12. Devils Lake State Park. SW $\frac{1}{4}$ sec. 13, T. 11 N., R. 6 E. Records available: 1948-49. Jan. 21, 126.67.

Sk 13. University of Wisconsin Engineers Camp. SW $\frac{1}{4}$ sec. 24, T. 11 N., R. 6 E. Records available: 1948-49. Jan. 21, 37.49; Apr. 29, 33.22.

Sk 14. Devils Lake State Park. SE $\frac{1}{4}$ sec. 24, T. 11 N., R. 6 E. Records available: 1948-49. Jan. 21, 118.14; Apr. 29, 121.38.

Sk 15. Devils Lake State Park. SW $\frac{1}{4}$ sec. 19, T. 11 N., R. 7 E. Records available: 1948-49. Jan. 21, 201.67; Apr. 29, 203.45.

Sawyer County

Sw 7. Wisconsin Conservation Department. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 28, T. 41 N., R. 9 W. Measurements supplied through courtesy of Wisconsin Conservation Department. Records available: 1937-38, 1946-49.

Jan. 29	17.19	Apr. 30	16.65	July 30	16.13	Oct. 29	16.91
Feb. 26	17.21	May 28	16.44	Aug. 27	16.51	Nov. 26	16.92
Mar. 26	16.74	June 25	16.81	Sept. 24	16.78	Dec. 31	16.95

Shawano County

Sh 1. Harry Sievert. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 30, T. 26 N., R. 18 E. Records available: 1947-49. Note: Subtract 2.0 feet from all readings prior to Jan. 1, 1949.

Jan. 7	60.18	May 6	58.11	July 22	60.03	Dec. 9	62.66
Mar. 4	59.48	June 10	59.10	Sept. 23	61.35		

Sh 2. District school. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 2, T. 26 N., R. 16 E. Records available: 1947-49.

Jan. 7	52.95	May 6	49.61	July 22	50.95	Dec. 9	53.23
Mar. 4	53.09	June 10	50.38	Sept. 23	51.69		

Sh 3. George Martin. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 2, T. 26 N., R. 16 E. Water-stage recorder maintained on well since May 12, 1949. Records available: 1947-49.

Sh 3--Continued.

Daily water level, from recorder charts

Day	Jan.	Mar.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	9.94	11.33	11.38	12.60	13.61	14.25	14.75
2	9.97	11.38	11.36	12.64	13.63	14.30	14.79
3	10.08	11.38	11.40	12.68	13.66	14.34	14.79
4	al4.82	.....	10.14	11.41	11.42	12.73	13.70	14.36	14.80
5	10.17	11.43	11.42	12.77	13.74	14.40	14.82
6	a 8.55	10.23	11.44	11.43	12.85	13.71	14.40	14.82
7	al4.82	.....	.....	10.35	11.44	11.47	12.87	13.75	14.40	14.83
8	10.42	11.43	11.49	12.90	13.79	14.40	14.85
9	10.48	11.38	11.52	12.94	13.83	14.42	14.87
10	10.51	11.45	11.59	12.97	13.78	14.42	14.89
11	10.51	11.45	11.66	13.00	13.83	14.46	14.86
12	8.82	10.53	11.43	11.73	13.02	13.87	14.48	14.87
13	8.80	10.60	11.44	11.78	13.04	13.91	14.48	14.92
14	8.97	10.66	11.46	11.84	13.08	13.95	14.48	14.94
15	9.02	10.73	11.49	11.89	13.10	13.97	14.49	14.94
16	9.05	10.83	11.53	11.92	13.12	13.98	14.53	14.93
17	9.10	10.85	11.56	11.93	13.13	14.02	14.55	14.90
18	9.10	10.93	11.56	11.98	13.16	14.03	14.56	14.90
19	9.23	10.99	11.61	12.06	13.20	14.05	14.55	14.94
20	9.30	11.00	11.63	12.12	.....	14.06	14.59	14.88
21	9.29	10.99	11.68	12.16	.....	14.06	14.63	14.87
22	9.30	11.02	11.79	12.18	.....	14.07	14.62	14.85
23	9.43	11.01	11.86	12.22	.....	14.13	14.60	14.94
24	9.54	11.04	11.87	12.27	13.39	14.17	14.63	14.98
25	9.57	11.06	11.87	12.29	13.42	14.16	14.66	14.96
26	9.63	11.13	11.87	12.34	13.44	14.20	14.66	14.95
27	9.70	11.19	11.90	12.38	13.45	14.22	14.68	14.96
28	9.77	11.22	11.87	12.43	13.50	14.23	14.68	15.00
29	9.82	11.27	11.65	12.46	13.55	14.23	14.69	15.03
30	9.86	11.29	11.56	12.49	13.58	14.25	14.71	15.05
31	9.90	.....	11.48	12.52	.....	14.28	.....	15.04

a Tape measurement.

Sh 4. John Short. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 28, T. 25 N., R. 17 E. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	7.15	May 6	4.71	July 22	6.86	Dec. 9	8.38
Mar. 4	7.89	June 10	6.24	Sept. 23	8.00		

Sh 5. Lew and Sylvester Jarosinski. NE $\frac{1}{4}$ sec. 4, T. 25 N., R. 18 E. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 7	19.64	May 6	14.86	Dec. 9	20.75
Mar. 4	19.35	Sept. 23	19.34		

Trempealeau CountyTr 1. Owner unknown. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 35, T. 19 N., R. 8 W. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	141.79	Apr. 28	140.90	Aug. 11	141.72	Dec. 14	142.17
Mar. 9	141.04	June 2	141.34	Sept. 28	142.39		

Vernon CountyVe 4. Albert Storbakken. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 14, T. 14 N., R. 5 W. Records available: 1935-49.

Ve 4--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 11	10.17	Apr. 27	9.58	Aug. 11	10.38	Dec. 14	10.26
Mar. 9	8.87	June 1	10.04	Sept. 27	10.49		

Ve 8. M. H. Willenberg. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 26, T. 14 N., R. 7 W. Records available: 1935-49.

Jan. 24	48.21	Apr. 20	49.34	Aug. 24	49.38	Nov. 23	49.48
Feb. 23	49.32	May 26	49.34	Sept. 21	49.49	Dec. 27	49.50
Mar. 24	48.50	June 20	49.35	Oct. 20	49.39		

Ve 9. F. Lenser. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 14, T. 14 N., R. 7 W. Records available: 1935-49.

Jan. 11	47.33	Apr. 27	47.90	Aug. 11	47.42	Dec. 14	47.88
Mar. 9	47.53	June 1	47.05	Sept. 27	47.60		

Ve 14. Chris Benrud. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 6, T. 14 N., R. 4 W. Records available: 1935-49.

Jan. 11	7.46	Apr. 27	7.04	Aug. 11	7.75	Dec. 14	7.55
Mar. 9	6.60	June 1	7.51	Sept. 27	7.73		

Vilas County

Vi 3. Wisconsin Conservation Department. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 9, T. 41 N., R. 10 E. Measurements supplied through courtesy of Wisconsin Conservation Department. Records available: 1948-49.

Jan. 1	8.59	Apr. 9	7.98	July 9	8.17	Oct. 8	8.39
8	8.43	16	8.14	16	8.43	15	8.30
15	8.44	23	8.17	23	8.41	22	7.18
22	8.06	30	8.53	30	8.36	29	8.20
29	7.68	May 2	8.64	Aug. 6	8.53	Nov. 4	8.00
Feb. 5	8.11	7	8.38	13	8.38	11	7.94
12	8.02	14	8.51	20	8.63	18	7.87
19	8.01	28	8.67	27	8.93	25	7.82
26	8.02	June 4	8.62	Sept. 3	8.87	Dec. 3	7.83
Mar. 5	8.15	11	8.75	10	8.78	10	7.85
12	8.26	18	8.73	17	8.73	17	7.84
19	8.28	25	8.80	24	8.55	24	7.86
26	7.78	June 2	8.78	Oct. 1	8.42	31	7.88
Apr. 2	8.10						

Vi 21. U. S. Geol. Survey. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 10, T. 40 N., R. 10 E. Records available: 1944-49.

Jan. 3	16.55	Apr. 12	16.37	July 11	16.51	Oct. 10	16.52
11	16.57	18	16.39	18	16.48	17	16.54
18	16.60	25	16.41	25	16.46	24	16.56
24	16.62	May 9	16.51	Aug. 2	16.39	31	16.57
Feb. 2	16.68	11	16.52	8	16.37	Nov. 1	16.63
9	16.70	16	16.52	16	16.38	7	16.59
14	16.72	23	16.53	22	16.37	14	16.60
21	16.75	June 1	16.57	29	16.38	22	16.59
28	16.78	6	16.60	Sept. 7	16.43	29	16.59
Mar. 7	16.83	14	16.64	12	16.43	Dec. 5	16.59
14	16.83	21	16.66	19	16.44	13	16.59
21	16.86	27	16.66	26	16.47	20	16.57
28	16.85	July 5	16.60	Oct. 4	16.50	27	16.58
Apr. 5	16.41						

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: 1946-49.

Ww 1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	27.09	May 2	26.49	July 25	27.07	Dec. 5	28.07
Feb. 28	26.56	June 6	26.78	Sept. 19	27.75		

Ww 2. G. Bergstrom. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 1 N., R. 16 E. Records available: 1946-49.

Jan. 3	65.25	May 2	65.43	July 25	66.09	Dec. 5	67.22
Feb. 28	65.49	June 6	65.65	Sept. 19	66.56		

Ww 4. United Milk Products. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 33, T. 1 N., R. 15 E. Records available: 1946-49.

Jan. 3	55.46	May 2	55.59	July 25	56.58	Dec. 5	58.79
Feb. 28	55.83	June 6	56.19	Sept. 19	57.38		

Ww 5. H. Phillips. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 36, T. 4 N., R. 16 E. Records available: 1947-49. Jan. 3, 35.00; May 2, 34.61; June 6, 34.65; July 25, 34.37.

Ww 9. Stewart Bros. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 33, T. 3 N., R. 15 E. Records available: 1947-49.

Jan. 3	76.56	May 2	76.33	July 25	76.93	Dec. 5	77.48
Feb. 28	76.72	June 6	76.33	Sept. 19	76.84		

Washburn County

Wb 1. Wisconsin Conservation Department. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 31, T. 39 N., R. 12 W. Driven observation well, diameter 1 $\frac{1}{4}$ inches, depth 17.5 feet. Measurements supplied through courtesy of Wisconsin Conservation Department. Records available: 1948-49.

Date	Water level	Date	Water level	Date	Water level
Aug. 21, 1948	5.54	Mar. 14, 1949	5.83	Aug. 7, 1949	4.77
27	5.52	21	5.65	15	5.10
Sept. 4	5.64	28	5.37	22	5.21
12	5.69	Apr. 4	5.42	29	5.25
20	5.72	11	5.36	Sept. 6	4.67
28	5.62	18	5.23	12	4.68
Oct. 6	5.28	25	5.37	19	4.68
25	5.63	May 2	5.42	28	5.16
Nov. 5	5.61	9	4.89	Oct. 3	5.26
13	5.20	16	5.17	10	5.15
19	5.22	23	5.21	17	5.17
26	5.23	30	5.46	24	5.26
Dec. 3	4.76	June 6	5.59	31	5.31
Jan. 10, 1949	5.67	13	5.37	Nov. 7	5.26
17	5.62	20	5.23	14	5.30
24	5.65	27	5.30	21	5.35
31	5.72	July 5	5.03	28	5.40
Feb. 7	5.67	12	5.10	Dec. 5	5.46
14	5.62	18	4.89	12	5.36
21	5.91	26	5.01	19	5.55
28	5.87	Aug. 1	4.81	26	5.24
Mar. 7	5.48				

Washington County

Wn 1. John Thiesen. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 11 N., R. 18 E. Records available: 1946-49.

Jan. 5	49.24	June 8	47.98	Sept. 21	49.50
Mar. 2	50.84	July 20	48.24	Nov. 30	51.10

Wn 2. City of Hartford. In Hartford, on east side of North Rural Street, between powerhouse and railroad. Records available: 1948-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	42.02	42.82	40.70	43.77	43.99	44.07	49.69	45.82	49.20	49.12	47.25	47.90
2	42.27	42.83	40.95	44.24	43.69	44.20	49.72	46.11	48.10	48.58	48.42	48.15
3	42.34	43.05	40.70	44.23	43.70	44.88	49.44	46.33	47.78	48.10	48.54	47.92
4	42.03	43.14	40.58	43.73	44.42	45.20	49.00	46.58	46.79	47.99	48.77	48.45
5	41.52	42.94	40.45	43.49	44.60	45.29	48.98	46.90	48.20	48.28	48.65	48.40
6	41.87	42.93	40.97	43.06	43.97	45.38	49.36	47.15	48.55	47.90	48.83	47.82
7	42.05	42.66	41.19	43.28	43.69	45.59	49.73	47.78	48.95	48.42	47.78	47.24
8	42.13	42.64	41.26	43.43	44.65	45.73	49.77	47.83	49.33	48.60	48.51	48.22
9	42.00	42.84	41.29	43.62	44.69	45.45	49.56	48.47	49.38	48.07	48.19	48.64
10	42.03	43.08	41.55	43.61	44.71	45.80	49.56	48.64	48.55	47.80	47.97	48.74
11	41.92	43.03	41.49	43.67	44.54	46.40	49.41	48.64	48.39	47.66	47.80	48.53
12	41.78	43.16	42.00	43.68	44.29	47.08	49.09	48.78	48.63	47.68	48.00	48.33
13	41.80	43.23	42.03	43.71	44.09	46.74	49.04	48.69	48.68	48.33	48.12	47.99
14	41.74	43.15	42.03	43.65	44.17	46.29	49.01	48.63	48.57	48.89	48.28	47.97
15	41.70	43.02	42.02	43.29	44.27	46.15	49.13	48.53	48.24	48.70	47.82	48.03
16	41.73	42.68	42.18	43.30	44.29	46.58	49.33	48.98	48.29	48.10	48.18	48.38
17	41.53	42.90	42.43	43.54	44.49	47.12	48.93	49.15	48.71	48.01	48.11	48.30
18	40.93	43.13	42.35	43.33	43.52	47.25	49.05	49.15	48.48	48.10	48.13	47.88
19	41.74	42.84	42.41	43.31	43.98	47.40	49.09	48.31	48.28	48.40	47.92	47.75
20	41.93	39.48	42.42	43.63	44.00	47.23	48.90	48.10	48.07	48.50	45.70	48.31
21	41.96	38.62	42.30	43.70	43.56	47.80	48.40	48.00	48.40	48.95	44.91	48.26
22	42.09	38.42	42.29	43.68	43.10	47.92	48.74	48.28	48.59	48.71	44.87	48.50
23	42.12	38.15	42.31	43.62	43.41	48.15	48.78	48.50	48.55	48.14	46.62	48.78
24	41.90	39.12	42.48	43.62	43.60	48.08	48.80	48.49	48.33	47.74	48.12	48.87
25	.....	39.76	42.83	43.59	43.45	48.20	48.80	49.15	48.80	47.07	48.02	47.89
26	41.72	40.40	42.91	43.89	43.48	47.15	48.50	49.48	48.53	47.08	48.11	47.60
27	41.68	40.50	42.92	43.94	43.48	47.95	47.44	49.12	48.33	48.08	47.83	48.35
28	41.92	40.63	42.75	43.93	43.54	48.78	46.54	48.93	48.50	47.40	47.38	48.28
29	41.96		42.99	43.40	43.54	48.85	45.50	48.98	48.62	48.08	47.39	48.30
30	42.27		43.21	43.57	43.70	49.42	45.80	49.24	48.94	47.70	47.05	48.41
31	42.63		43.58		43.70		46.05	49.19		47.79		48.54

Wn 3. City of West Bend. In basement of city police station. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	13.14	June 8	17.72	Sept. 21	15.95
Mar. 2	14.45	July 20	16.72	Nov. 30	14.74

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: 1946-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	79.88	78.67	77.11	75.72	75.39	78.00	80.73	81.30	81.67	80.47	78.55	78.26
2	79.87	78.74	77.05	75.65	75.61	78.47	80.83	81.29	81.30	80.48	78.44	78.18
3	79.76	78.50	76.91	75.67	75.72	78.98	81.24	81.09	81.14	80.72	78.15	77.96
4	79.71	78.44	76.58	75.67	76.10	79.80	81.99	81.07	81.06	80.65	78.35	78.00
5	79.31	78.39	76.57	75.43	76.19	79.85	82.09	80.99	81.18	80.47	78.49	78.13
6	79.41	78.27	76.23	75.43	76.48	80.42	81.80	81.08	81.35	80.13	78.42	77.98
7	79.45	78.24	76.15	75.40	76.80	80.72	81.56	81.30	81.08	79.55	78.22	78.13
8	79.44	77.09	76.29	75.65	76.94	80.67	81.25	81.80	80.95	79.87	78.43	78.26
9	79.60	77.23	76.27	75.79	77.17	80.65	81.92	81.91	80.78	79.81	78.26	78.31
10	79.61	77.41	76.34	75.81	77.11	80.94	81.04	82.02	80.73	79.66	78.07	78.02
11	79.44	77.35	76.25	75.85	76.96	81.53	80.96	81.96	80.63	79.81	77.96	77.70
12	79.20	77.11	76.30	75.71	77.01	81.64	81.34	82.14	80.51	80.06	77.83	78.00
13	79.07	77.32	76.40	75.56	77.30	81.67	81.09	81.88	80.46	80.07	77.86	78.12
14	79.21	77.27	76.45	75.30	77.38	81.04	80.96	81.65	80.48	79.95	77.95	78.12
15	79.09	77.26	76.44	75.37	77.40	80.43	80.95	81.49	80.39	79.43	78.04	78.12
16	79.20	77.34	76.23	75.52	77.26	79.94	81.05	81.39	80.11	79.56	78.13	77.51
17	79.30	77.35	76.17	75.33	77.37	79.64	80.95	81.31	80.25	79.42	78.09	77.58

Wk 2--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
18	79.27	77.10	76.30	75.55	77.16	79.67	80.95	81.61	80.30	79.29	78.07	77.61
19	79.43	77.21	76.42	75.43	77.32	79.55	81.05	81.52	80.43	79.22	77.79	77.61
20	79.37	77.52	76.18	75.35	77.46	79.65	80.95	82.08	80.57	79.65	78.13	77.57
21	79.01	77.33	76.15	75.15	76.89	79.86	80.80	82.14	80.55	79.01	78.29	77.30
22	79.33	77.34	76.17	75.14	76.89	80.59	80.83	81.70	80.27	79.03	78.00	77.84
23	79.08	77.22	76.22	75.21	76.95	80.84	81.47	81.77	80.35	79.38	77.94	78.07
24	79.26	76.94	76.03	75.63	76.92	80.83	81.48	81.78	80.36	79.34	77.93	77.84
25	79.19	77.15	75.92	75.56	76.30	80.71	82.50	81.87	80.54	78.94	78.12	77.50
26	79.01	76.98	75.70	75.40	76.67	80.72	82.66	81.99	80.44	78.95	77.93	77.29
27	78.88	76.95	75.66	75.58	76.86	80.79	82.59	82.36	80.39	78.89	77.95	77.36
28	78.52	77.17	75.82	75.66	77.28	80.90	82.23	82.41	80.38	78.53	77.93	77.43
29	78.91		75.82	75.40	77.55	80.72	82.01	82.33	80.29	78.70	77.96	77.53
30	78.89		75.77	75.41	77.82	80.66	81.77	82.46	80.46	78.86	78.17	77.45
31	78.73		75.51		78.40		81.59	81.95		78.80		77.34

Wk 3. Village of Menomonee Falls. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 10, T. 8 N., R. 20 E.
Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 3	25.57	May 3	26.65	July 26	28.60
Mar. 1	33.11	June 7	41.40	Dec. 7	27.97

a Recently pumping.

Wk 14. Veterans Administration Hospital. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 2, T. 6 N., R. 19 E. Records available: 1946-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	295.56	295.67	284.03	296.18	294.50	295.85
2	294.20	295.71	284.28	296.18	293.23	296.56
3	293.02	295.60	284.28	295.72	292.80	297.65
4	293.44	296.10	284.32	295.19	294.85	297.72
5	294.30	296.00	284.31	291.40	295.70	297.20
6	295.02	293.70	283.79	294.10	296.53	295.90
7	295.34	293.33	283.31	293.39	296.83	298.14
8	295.20	294.15	283.49	290.38	295.85	298.17
9	295.20	295.01	283.52	291.93	295.37	299.41
10	294.76	295.50	283.81	292.07	295.40	299.42
11	295.10	295.74	283.93	291.90	295.86	300.00
12	295.34	295.02	283.92	291.00	296.82	300.02
13	295.44	294.21	283.61	292.80	297.21	298.80
14	295.70	293.81	284.01	293.33	297.64	299.37
15	295.74	294.30	283.50	292.85	296.73	299.70
16	295.73	294.50	283.37	292.86	295.14	300.31
17	295.74	294.95	283.34	292.31	296.53	300.81
18	295.02	294.69	283.58	292.29	296.80	299.64
19	295.98	294.68	283.60	291.70	297.50	299.80
20	296.07	293.77	283.17	293.31	296.50	298.77
21	296.06	290.48	286.26	292.65	296.85	299.45
22	296.06	293.87	290.82	294.63	294.40	299.82
23	295.77	292.22	293.02	294.68	294.68	300.01
24	294.62	289.30	293.98	293.35	295.43	301.01
25	295.03	287.11	295.09	293.00	296.92	301.14
26	295.33	286.75	295.12	293.93	297.14	299.18
27	295.34	286.34	294.60	294.00	297.36	298.53
28	296.05	285.23	294.92	295.20	297.20	300.04
29	296.10		295.50	295.28	295.15	300.25
30	296.09		295.53	294.97	294.40	301.15
31	294.71		295.70		294.50	

Wk14--Continued.

Lowest daily water level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	301.20	301.85	302.93	301.12	298.81	298.85
2	301.50	301.87	303.34	300.60	299.91	297.90
3	299.82	302.27	300.00	299.41	300.46	297.00
4	298.00	301.51	302.01	299.43	300.73	295.30
5	297.54	301.93	298.60	300.20	300.19	297.08
6	298.58	300.78	299.22	300.20	299.20	296.90
7	299.76	299.53	300.50	300.22	298.39	298.28
8	298.95	300.04	301.41	300.30	299.99	299.52
9	299.52	301.12	301.91	300.04	299.99	299.67
10	297.25	302.08	302.16	298.42	300.44	299.90
11	298.15	302.38	299.50	298.98	299.57	297.29
12	300.23	302.73	299.91	300.10	299.23	296.22
13	301.02	301.14	300.81	300.60	297.75	297.15
14	301.34	300.18	301.63	301.23	297.28	298.65
15	301.65	300.12	302.11	300.75	298.80	298.31
16	302.10	301.05	302.11	300.23	299.88	297.78
17	302.10	302.14	301.61	298.88	299.88	297.90
18	301.23	302.26	301.21	299.33	300.35	295.62
19	302.22	303.09	299.30	300.62	300.07	295.06
20	303.38	303.19	.....	300.52	297.68	296.84
21	303.58	302.40	.....	300.91	298.40	297.10
22	304.20	300.74	.....	300.00	298.40	296.70
23	304.43	301.43	.....	298.72	299.40	297.19
24	302.72	302.21	.....	298.40	299.43	295.55
25	301.97	302.78	.....	299.96	297.80	294.65
26	303.12	303.20	.....	300.03	298.05	293.10
27	303.75	303.24	299.65	300.57	297.63	295.20
28	304.43	302.90	299.60	299.21	296.35	296.21
29	304.75	301.70	301.15	298.49	297.97	296.21
30	304.81	301.71	301.12	298.48	298.15	297.98
31	304.23	302.88	.....	298.53	.....	297.02

Wk 20. G. W. Aepler. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T. 7 N., R. 17 E. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	29.87	May 4	29.18	July 27	31.72	Dec. 7	29.84
Mar. 2	28.60	June 7	31.70	Sept. 21	30.59		

Wk 22. Mrs. Bartholomew. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 24, T. 5 N., R. 19 E. Records available: 1946-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	25.19	May 2	26.04	July 25	28.58	Nov. 29	27.02
Feb. 28	25.72	June 6	29.93	Sept. 13	26.63		

Wk 29. Mr. Roesse, Riviera Tavern. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 14, T. 7 N., R. 18 E. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	64.92	June 7	71.74	Nov. 30	68.41
May 3	72.17	July 27	72.89		

Wk 31. Fulton Farms. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 2, T. 5 N., R. 19 E. Records available: 1947-49.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	132.71	.....	132.77	132.30	132.36	132.82
2	132.70	.....	132.70	132.30	132.44	132.81
3	132.73	.....	132.70	132.32	132.44	132.87
4	132.76	.....	132.61	132.31	132.58	132.87
5	132.65	.....	132.55	132.25	132.58	132.89
6	132.61	.....	132.64	132.19	132.58	132.97
7	132.65	.....	132.63	132.24	132.59	133.01

Wk 31--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
8	132.67	132.77	132.51	132.34	132.57	133.03
9	132.87	132.82	132.51	132.38	132.64	133.03
10	132.93	132.92	132.53	132.38	132.69	133.00
11	132.92	132.92	132.51	132.35	132.65	133.03
12	132.79	132.81	132.48	132.29	132.65	133.04
13	132.72	132.84	132.48	132.23	132.60	132.94
14	132.73	132.85	132.46	132.25	132.68	132.88
15	132.73	132.80	132.48	132.30	132.68	132.88
16	132.79	132.89	132.43	132.36	132.65	132.90
17	132.90	132.91	132.42	132.30	132.64	132.91
18	132.79	132.84	132.43	132.36	132.62	132.96
19	132.87	132.88	132.48	132.42	132.65	132.97
20	132.88	132.99	132.46	132.41	132.72	132.33
21	132.77	132.99	132.38	132.38	132.64	132.92
22	132.84	132.89	132.34	132.31	132.57	132.98
23	132.81	132.89	132.41	132.36	132.70	132.95
24	132.80	132.79	132.40	132.45	132.73	132.95
25	132.87	132.92	132.39	132.44	132.71	132.86
26	132.80	132.91	132.39	132.40	132.73	132.94
27	132.75	132.78	132.27	132.48	132.75	132.99
28	132.71	132.76	132.35	132.52	132.78	132.99
29	132.81		132.37	132.46	132.77	133.02
30	132.81		132.37	132.41	132.76	133.03
31	132.72		132.23		132.85	

Lowest daily water level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	133.05	133.21	133.68	134.03	134.10	134.39
2	133.06	133.24	133.69	133.95	134.12	134.42
3	133.05	133.30	133.37	133.92	134.12	134.42
4	133.05	133.34	133.67	133.93	134.21	134.38
5	133.05	133.35	133.70	133.91	134.21	134.40
6	132.97	132.33	133.75	133.86	134.17	134.40
7	133.01	133.33	133.67	133.85	134.14	134.46
8	133.03	133.33	133.69	133.86	134.14	134.51
9	133.01	133.35	133.71	133.87	134.15	134.52
10	133.08	133.35	133.72	133.86	134.11	134.42
11	133.06	133.35	133.71	133.88	134.15	134.36
12	133.02	133.35	133.69	133.96	134.15	134.45
13	133.01	133.36	133.66	133.97	134.12	134.56
14	133.02	133.39	133.71	134.01	134.18	134.56
15	133.04	133.40	133.69	134.01	134.20	134.54
16	133.05	133.49	133.67	133.99	134.27	134.48
17	133.05	133.43	133.68	134.01	134.29	134.49
18	133.07	133.42	133.69	134.01	134.32	134.49
19	133.09	133.47	133.76	134.00	134.25	134.49
20	133.13	133.54	133.81	133.96	134.30	134.45
21	133.13	133.80	133.78	133.95	134.38	134.35
22	133.19	133.83	133.77	133.99	134.38	134.40
23	133.25	133.78	133.84	134.10	134.27	134.48
24	133.21	133.77	133.85	134.12	134.25	134.53
25	133.21	133.74	133.85	134.08	134.29	134.48
26	133.19	133.71	133.85	134.11	134.29	134.43
27	133.15	133.67	133.81	134.13	134.26	134.43
28	133.17	133.62	133.87	.....	134.26	134.47
29	133.19	133.64	133.91	.....	134.26	134.55
30	133.23	133.63	133.94	134.04	134.34	134.54
31	133.25	133.61		134.10		134.50

Wk 32. Western United Dairy Co. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 23, T. 5 N., R. 18 E.
 Records available: 1947-49.

Wk 32--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	46.85	May 2	46.62	July 25	47.20	Dec. 5	47.82
Feb. 28	46.92	June 6	46.80	Sept. 19	47.50		

Wk 34. A. N. McGeoch Co. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 19, T. 5 N., R. 18 E. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level
Feb. 28	34.71	June 6	37.75	Sept. 19	38.85
May 2	36.17	July 25	38.18	Dec. 5	38.93

Waushara County

Ws 1. University of Wisconsin Experiment Farm, Hancock. Measurements supplied through courtesy of University of Wisconsin Experiment Farm. Records available: 1947-49.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	9.65	Apr. 5	9.86	June 27	9.58	Sept. 19	9.88
12	9.70	13	9.72	July 5	9.61	Oct. 2	9.99
17	9.70	18	9.66	11	9.64	13	10.10
26	9.82	25	9.62	18	9.67	17	10.10
Feb. 4	9.89	May 2	9.59	25	9.67	26	10.17
16	10.00	9	9.49	Aug. 1	9.68	31	10.24
23	10.05	17	9.46	9	9.69	Nov. 14	10.33
Mar. 4	10.05	23	9.42	16	9.72	28	10.45
11	9.55	31	9.40	24	9.75	Dec. 5	10.54
16	9.80	June 8	9.50	29	9.80	24	10.72
23	9.85	13	9.48	Sept. 12	9.85	30	10.77
29	9.88	20	9.53				

Ws 2. Village of Plainfield. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 14, T. 2 N., R. 8 E. Unused driven fire well, diameter 4 inches, depth 27 feet. Records available: 1949. Nov. 16, 18.54; Dec. 10, 18.81.

Ws 3. Mr. Follett. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 5, T. 18 N., R. 8 E. Unused driven domestic well, diameter 2 inches, depth 70 feet. Records available: 1949. Nov. 16, 54.72; Dec. 10, 54.78.

Winnebago County

W1 1. Oak Hill Cemetery. SE $\frac{1}{4}$ sec. 20, T. 20 N., R. 17 E. Records available: 1946-49.

Jan. 7	51.60	May 4	49.63	June 10	52.42	Sept. 23	54.90
Mar. 4	48.97	6	47.96	July 22	56.35	Dec. 9	55.36

Wood County

Wd 29. Elmer Aschenbrenner. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 2, T. 23 N., R. 4 E. Records available: 1944-49.

Jan. 3	10.76	Mar. 29	5.78	July 4	6.70	Sept. 25	10.39
11	12.47	Apr. 4	5.40	11	6.62	Oct. 3	10.18
17	12.50	11	4.97	18	6.45	10	10.49
24	12.70	25	5.70	25	6.73	17	11.09
Feb. 7	12.72	May 2	5.84	Aug. 1	6.70	31	11.26
14	13.28	9	5.79	9	6.66	Nov. 7	12.40
21	12.76	30	6.33	16	6.69	14	12.47
28	12.30	June 6	6.40	29	6.89	30	11.21
Mar. 7	9.12	13	6.29	Sept. 5	7.80	Dec. 5	11.24
15	7.86	20	6.38	12	9.08	12	11.96
21	6.03	28	6.60	20	9.64	19	12.25

