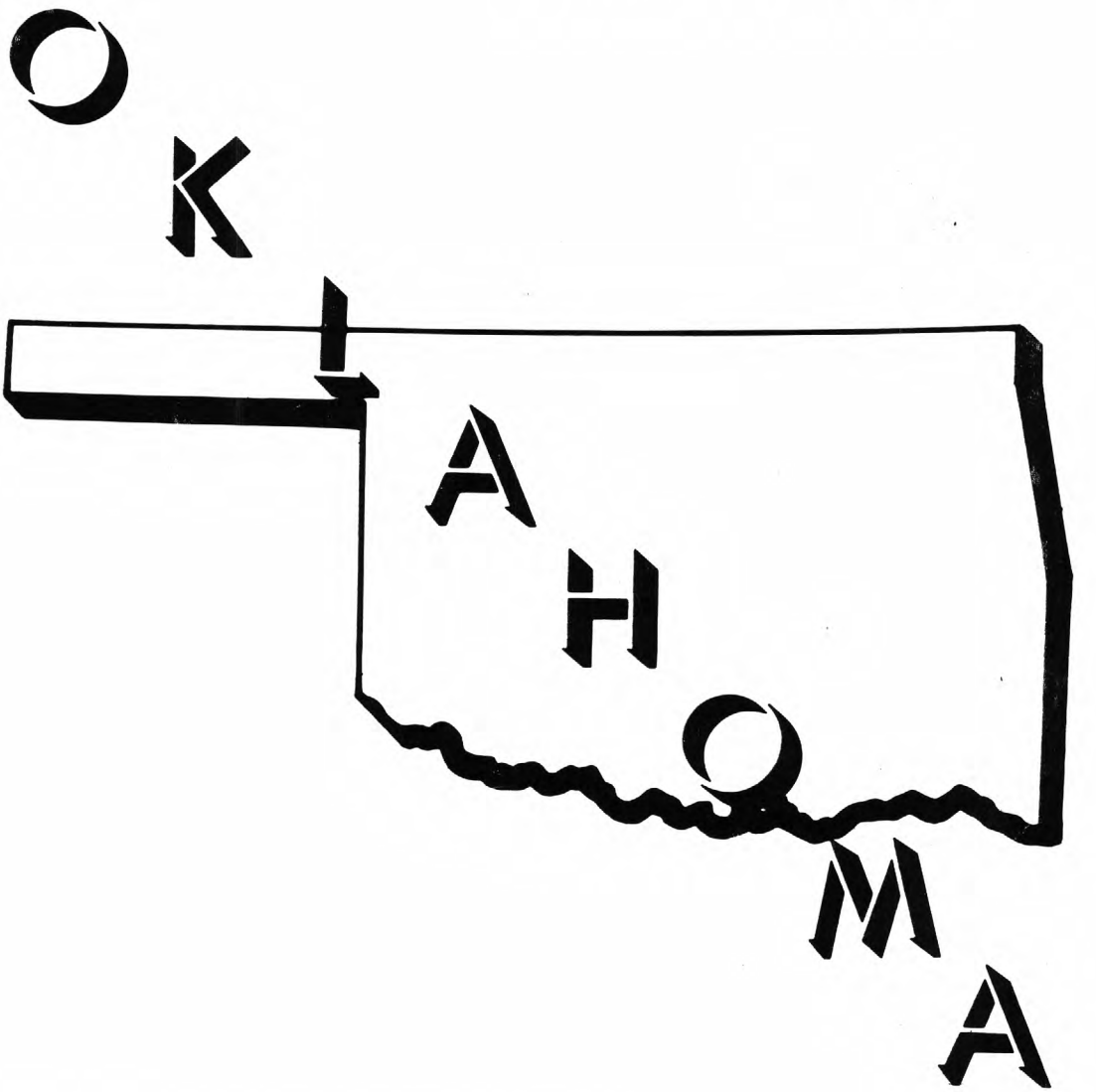
GROUND-WATER LEVELS
1961-1962



GROUND WATER

1964

State of Oklahoma

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This report contains water-level records for the 2-year period 1961-62 and is the second of a series presenting water-level data for all observation wells in Oklahoma. The first report, published in 1963, contains water-level records for the 5-year period, 1956-60. Data contained in this series of reports will: (1) provide an index to available groundwater supplies; (2) be useful in planning and studying water-resources development; and (3) serve as a framework to which other types of hydrologic data may be related.

Oklahoma Water Resources Board

GROUND-WATER LEVELS IN OBSERVATION WELLS IN OKLAHOMA, 1961-62

By

P. R. Wood

U.S. Geological Survey

and

M. D. Moeller

Oklahoma Water Resources Board

The United States Geological Survey

in cooperation with

The Oklahoma Water Resources Board

1964

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GROUND-WATER LEVELS IN OBSERVATION WELLS IN OKLAHOMA, 1961-62

By P. R. Wood and M. D. Moeller

Introduction

The investigation of the ground-water resources of Oklahoma by the U. S. Geological Survey in cooperation with the Oklahoma Water Resources Board includes a continuing program to collect records of water levels in selected observation wells on a systematic basis. These water-level records: (1) provide an index to available ground-water supplies; (2) facilitate the prediction of trends in water levels that will indicate likely changes in storage; (3) aid in the prediction of the base flow of streams; (4) provide information for use in basic research; (5) provide long-term continuous records of fluctuations of water levels in representative wells; and (6) serve as a framework to which other types of hydrologic data may be related.

Prior to 1956, measurements of water levels in observation wells in Oklahoma were included in water-supply papers published annually by the U. S. Geological Survey (table 1). Beginning with the 1956 calendar year, however, Geological Survey water-level reports will contain only records of a selected network of observation wells, and will be published at 5-year intervals. The first of this series, for the 1956-59 period, was published in 1962.

Table 1.--U.S. Geological Survey Water-Supply Papers in which water-level measurements of observation wells in Oklahoma have been published

Year	Water-Supply Paper	Year	Water-Supply Paper
1935	777	1946	1074
1936	817	1947	1099
1937	840	1948	1129
1938	845	1949	1159
1939	886	1950	1168
1940	909	1951	1194
1941	939	1952	1224
1942	947	1953	1268
1943	989	1954	1324
1944	1019	1955	1407
1945	1026	1956-59	1549

This report has been prepared primarily to present water-level records of wells not included in the Federal network. However, for the sake of completeness it includes water-level records of Federal wells that either have been or will be published in Water-Supply Papers since 1955. This report, which contains water-level records for the 2-year period (1961-62), is the second of a series presenting water-level records for all permanent observation wells in Oklahoma. The first report, published in 1963, contains water-level records for the 5-year period (1956-60).

Scope of water-level program

The systematic collection of data on ground-water levels in Oklahoma was started in Payne County in 1934; the Panhandle in 1937; Cleveland County, in 1939; the North Canadian River Valley (Canadian, Blaine, Major, Woodward, and Harper Counties) in 1940; Oklahoma and McClain Counties in 1943; Caddo County in 1945; Grady, Ellis, and Custer Counties in 1946; Comanche, Jackson, Kiowa, Roger Mills, and Washita Counties in 1947; Kay and Seminole Counties in 1948; McCurtain and Tillman Counties in 1949; Choctaw, Garfield, Greer, Harmon, and Kingfisher Counties in 1950; Beckham County in 1952; Bryan County in 1953; Coal and Pontotoc Counties in 1955; and the valleys of the Arkansas and Verdigris Rivers (LeFlore, Sequoyah, Haskell, Muskogee, Wagoner, and Rogers Counties), in 1958. Locations of the observation wells measured during 1961-62 are shown on figure 1.

The data in this report were compiled and prepared for publication under the cooperative agreement for ground-water investigations in Oklahoma between the Oklahoma Water Resources Board and the U. S. Geological Survey. The work was done under the general supervision of Frank Raab, Executive Director, Oklahoma Water Resources Board, and O. M. Hackett, Chief, Ground Water Branch, U. S. Geological Survey, and under the direct supervision of A. R. Leonard, District Geologist of the U. S. Geological Survey, in charge of ground-water investigations in Oklahoma.

Well-numbering system

The well-numbering system used in Oklahoma is based on the Bureau of Land Management system of land subdivision. In the location system the first digit of a well number indicates the township, the second the range, and the third the section in which the well is situated. The first lowercase letter denotes the quarter section (160-acre tract), the second the quarter-quarter section (40-acre tract), and the third the quarter-quarter-quarter section (10-acre tract). Within each 10-acre tract the wells are numbered serially as indicated by the final digit of the number. Thus, in Beaver County, the number 1N-26E-5ddc1 indicates that the well is in the SW¼SE¼SE¼ Sec. 5, T. 1 N., R. 26 E (fig.2).

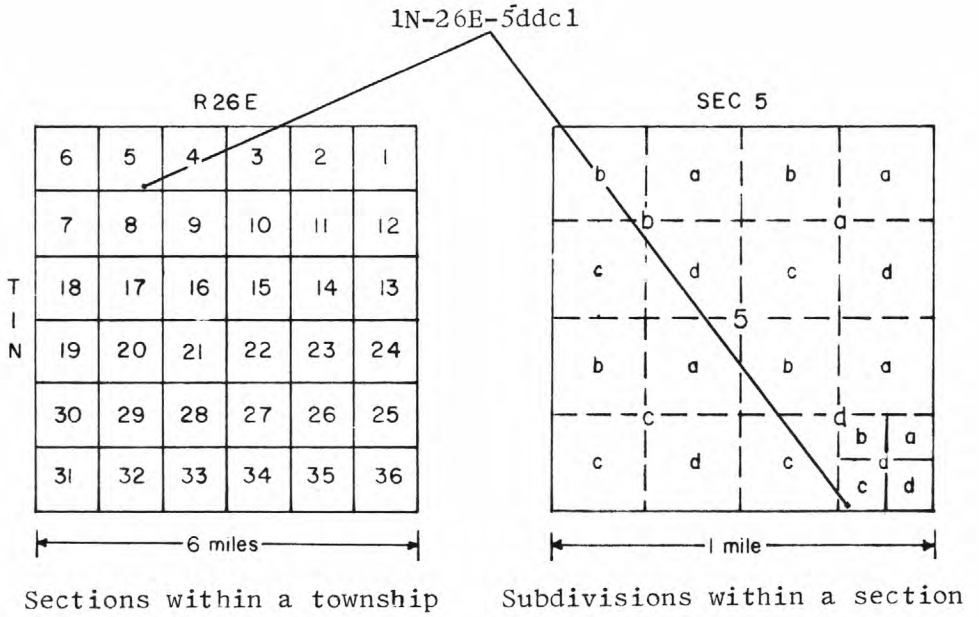


Figure 2.--Well-numbering system used in Oklahoma

In some areas, locations of observation wells are known only to the quarter section (160-acre tract) or quarter-quarter section (40-acre tract) as indicated by the well number.

Precipitation and temperature

Precipitation in Oklahoma, which is mostly in the form of rain, is heaviest in the spring and summer. In many local areas, especially during late spring and early summer, torrential rains resulting from severe late-afternoon thunderstorms are common. These storms may be accompanied by hail, tornadoes, or strong winds.

In order to better summarize Oklahoma's climatological data, the U. S. Weather Bureau has established nine divisions in the State as outlined on figure 3.

The average precipitation, the average temperature, and the departure from the long-term average in each of the nine divisions of the State for the 1961 and 1962 calendar years are summarized in table 2.

Graphs of the precipitation recorded at specific sites (fig. 1) in areas where ground-water levels were observed during the period covered by this report are placed with hydrographs showing water-level fluctuations in observation wells (figs. 4-17) to illustrate the influence of precipitation on ground-water levels in different parts of the State.

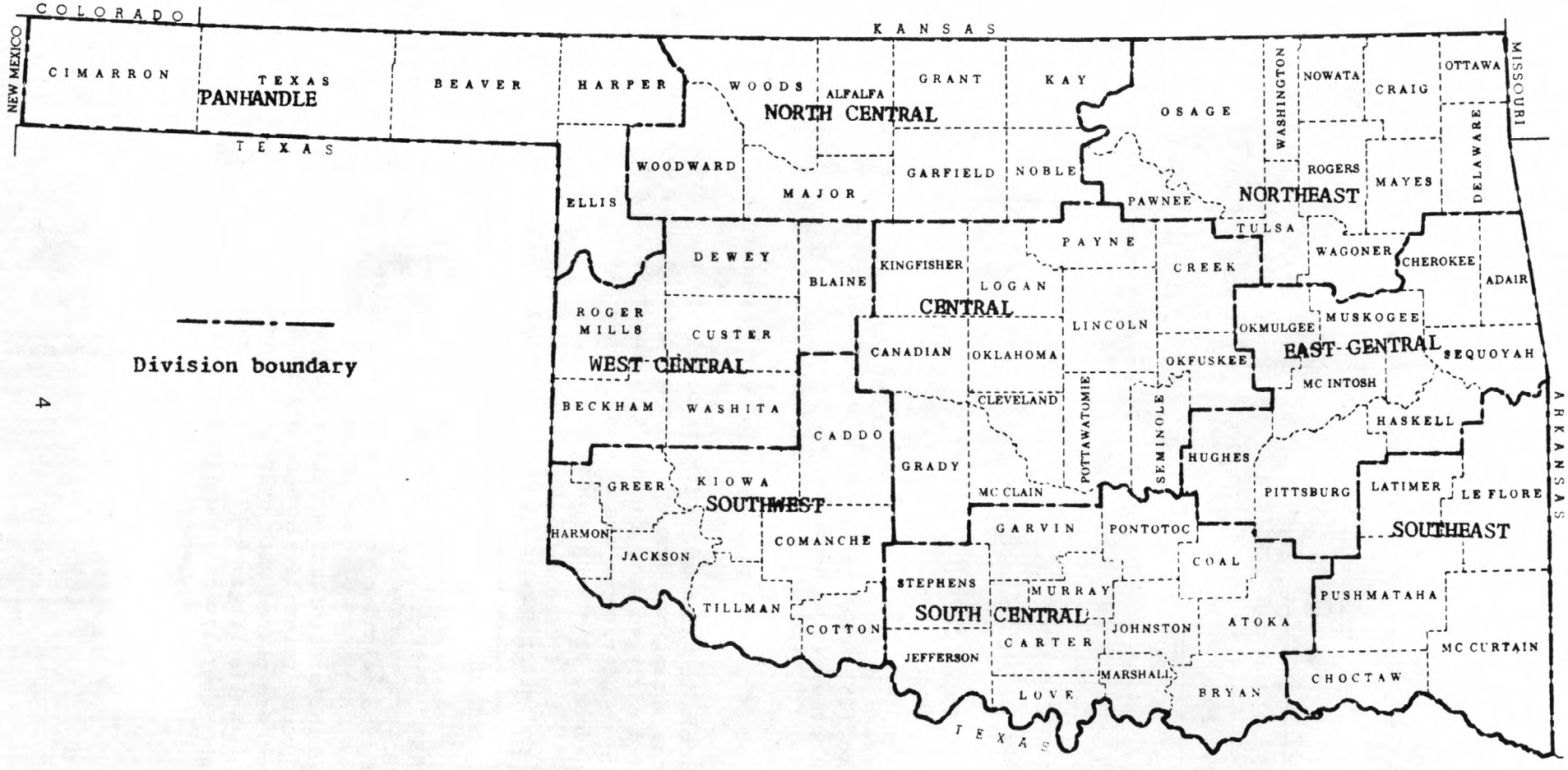


Figure 3.--Map of Oklahoma showing divisions used by the U.S. Weather Bureau

Table 2.--Average precipitation and average temperature in different parts of Oklahoma during 1961-62

(Data from U.S. Weather Bureau annual summaries)

Division [a]	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average annual	Departure from average [b]
							Average monthly precipitation, in inches							
						1961								
Panhandle	0.08	0.65	2.85	0.62	2.33	3.01	3.92	2.65	1.29	1.87	1.56	0.33	21.16	2.55
North central	.05	1.12	2.93	1.49	5.92	3.64	4.06	4.13	4.92	3.29	2.84	1.11	35.50	8.45
Northeast	.66	1.93	3.17	1.85	8.50	5.31	8.37	6.01	8.44	2.41	3.92	1.76	62.33	13.24
West central	.16	1.04	2.68	.71	2.20	6.25	2.01	3.99	4.31	2.79	3.33	.57	30.04	5.42
Central	.14	1.66	3.25	.92	3.93	4.89	6.45	2.71	7.92	2.18	3.50	1.41	38.96	5.82
East central	.96	2.19	4.55	1.27	7.31	2.81	9.07	2.34	6.26	2.88	4.19	2.51	46.34	4.47
Southwest	.23	1.65	3.22	.44	2.26	5.62	2.90	1.95	5.43	1.78	3.09	.91	29.48	2.72
South central	.40	1.72	4.31	.72	4.40	4.11	3.45	1.98	6.00	3.49	4.31	2.08	36.97	-0.08
Southeast	.87	3.47	4.92	1.56	6.92	3.91	7.08	4.16	5.33	2.86	6.55	3.83	51.46	5.00
						1962								
Panhandle	.59	.25	.67	1.44	1.17	7.70	3.67	2.13	3.04	0.56	0.66	.46	22.34	3.36
North central	1.00	.22	.69	1.94	1.21	6.53	3.49	1.61	3.97	1.32	1.01	1.19	24.18	-3.67
Northeast	1.39	1.12	2.17	2.91	1.43	5.82	3.27	2.65	9.35	3.76	1.61	.80	36.28	-3.06
West central	.57	.12	.20	2.73	1.15	8.80	3.38	1.79	4.60	2.58	1.28	1.13	28.33	3.04
Central	.69	.85	1.34	2.66	2.76	7.68	3.08	1.04	5.98	2.76	1.62	1.10	31.56	-2.25
East central	1.80	1.55	2.42	3.32	1.81	4.54	4.58	1.81	5.93	4.47	2.21	1.88	36.32	-6.27
Southwest	.23	.42	.53	2.99	2.97	8.79	2.78	0.66	5.06	2.94	1.18	1.29	29.84	2.62
South central	.67	.84	2.25	3.17	2.68	8.98	2.63	1.20	6.49	4.45	3.61	1.63	38.60	1.37
Southeast	3.42	3.16	3.70	4.75	1.91	6.23	3.18	2.39	7.35	7.62	3.09	1.57	48.37	1.21
							Average monthly temperature (°F)							
						1961								
Panhandle	35.0	39.5	45.8	54.1	65.2	73.9	78.1	77.0	67.1	58.4	41.3	34.5	55.8	-1.7
North central	35.5	41.6	50.4	57.8	67.0	75.4	80.4	78.6	69.8	62.3	45.1	34.7	58.2	-2.1
Northeast	34.7	43.8	51.9	57.4	65.7	73.6	78.3	77.0	70.3	62.6	47.5	36.5	58.3	-2.0
West central	36.4	42.5	51.2	58.8	68.4	74.4	79.7	78.4	70.2	62.3	45.3	36.1	58.6	-2.1
Central	36.2	44.3	53.2	59.4	68.0	74.5	79.1	78.3	71.0	63.3	47.8	37.5	59.4	-2.1
East central	36.5	46.2	54.5	58.7	67.6	74.2	78.9	77.6	72.0	63.5	49.4	39.5	59.9	-1.9
Southwest	37.6	44.9	53.7	61.6	70.8	75.7	81.0	80.1	72.6	64.0	47.9	39.3	60.8	-1.8
South central	39.4	47.7	56.6	61.8	70.0	75.1	80.4	79.9	74.0	65.0	50.6	42.1	61.9	-1.4
Southeast	38.7	47.9	56.1	59.8	68.6	74.1	78.0	77.1	72.4	63.4	50.0	41.8	60.7	-2.4
						1962								
Panhandle	30.4	41.7	44.4	56.5	71.6	72.2	79.3	80.0	69.9	61.3	47.3	40.2	57.9	.5
North central	30.6	43.5	47.2	58.3	75.6	75.5	82.2	82.5	72.0	64.4	48.7	40.0	60.0	- .1
Northeast	31.1	44.1	46.5	57.5	74.7	75.0	81.3	80.6	70.8	64.8	49.4	39.7	59.6	- .5
West central	32.8	45.4	48.8	58.6	74.6	74.5	81.5	81.6	72.0	64.2	49.3	41.4	60.4	- .1
Central	32.9	46.3	48.7	58.7	74.8	75.5	81.8	82.3	72.1	65.4	49.8	41.4	60.8	- .5
East central	34.0	47.3	48.1	59.2	74.8	76.1	82.1	81.8	72.2	66.2	51.1	42.3	61.3	- .4
Southwest	34.8	48.5	51.5	60.5	75.6	76.2	83.2	84.0	73.5	66.3	51.8	43.4	62.4	- .1
South central	36.5	50.6	51.6	60.7	75.2	76.7	82.5	83.5	74.5	68.2	52.4	44.6	63.1	- .1
Southeast	36.3	50.2	49.5	59.8	73.6	75.7	81.5	81.9	73.0	66.6	51.7	43.6	62.0	-1.0

[a] Counties included in the different divisions are outlined on figure 3.

[b] Departure from long-term average based on the period 1931-60.

Ground water

Ground water in Oklahoma is controlled largely by climate and geology. Its ultimate source is precipitation that falls on the land surface. However, not all the precipitation that falls reaches the State's ground-water reservoirs, some returns to the atmosphere by evaporation from exposed water and soil surfaces and by transpiration from leaves and stems of plants, and some runs off the surface directly. A part of the water that becomes surface runoff reaches the ground-water body by downward or lateral percolation from streams. The water supplied from these sources seeps down to the zone of saturation and then percolates laterally through openings in the water-bearing materials from points of higher altitude in the intake, or recharge, areas to points of low altitude in the discharge areas. Eventually, some of the ground water is lost by evapotranspiration in swampy areas; some seeps into streams, helping to maintain their base flow; and the rest, in excess of the storage requirement, leaves the State by underflow through water-bearing materials where physical conditions permit.

Water in the State's ground-water reservoirs occurs under both water-table and artesian conditions. When ground water is not confined by an overlying impermeable stratum and its surface is free to move up or down at atmospheric pressure, water-table conditions prevail. Water is obtained from such a reservoir by dewatering the water-bearing materials in the vicinity of the pumped well, and water-level fluctuations in nearby observation wells reflect actual changes in ground-water storage. When ground water is confined by materials of sufficiently low permeability to hold water under pressure, artesian conditions prevail. When confined water is encountered by a well, the water level in the well casing rises some distance above the base of the confining layer and water-level fluctuations in observation wells reflect changes in the hydrostatic pressure of the confined-water body. When a well tapping confined water is pumped, water-bearing materials adjacent to the well are not dewatered because the whole confined-water body serves as a conduit through which water moves under pressure due to a difference in head between intake, or recharge, areas and the discharging well.

Changes in ground-water levels

The ground-water surface in Oklahoma is not stationary but fluctuates up and down much like the water level in a lake or reservoir. However, over a long period of time a condition of approximate equilibrium exists between the amount of water that is added annually to ground-water storage and the amount that is discharged annually by natural means. In general, the ground-water surface rises when recharge (derived chiefly from precipitation) exceeds discharge and, conversely, the ground-water surface declines when discharge (by natural or artificial means) exceeds recharge. Thus, changes in the water levels in wells indicate to what extent the ground-water reservoirs are being depleted or replenished.

Ground-water levels in Oklahoma reflect the effects of: (1) drought; (2) recharge, resulting chiefly from precipitation; (3) pumping for municipal, industrial, or agricultural purposes; (4) depletion resulting from evaporation and transpiration; (5) changes in stage of a nearby stream; (6) normal changes in atmospheric pressure or the severe changes associated with tornadoes; and (7) earthquakes. For an explanation of the detailed fluctuations caused by these influences the reader is referred to Hart (1961) or to one of the many Water-Supply Papers published by the Geological Survey.

Water-level measurements made in areas where ground water is pumped extensively for municipal, industrial, or agricultural purposes provide an index of the extent of ground-water development. As pumpage from wells increases, the water levels in the area will decline until they become readjusted to the increased use. If ground-water development becomes so great that pumping exceeds recharge, the water levels will continue to decline. Thus, the ground-water levels are a check on the relation between the available water supply and its development.

Fluctuations of water levels in three wells tapping the Ogallala Formation in the Oklahoma Panhandle are illustrated in figure 4. A casual inspection of the graphs will show that, in this area, water-level fluctuations do not correlate with monthly or seasonal precipitation. Marine (1963, p. 4-10), however, has shown that ground-water levels in the Panhandle correlate best with graphs of the 5-year moving average of precipitation. According to him, the 5-year moving average of precipitation increased abruptly in 1941 when the drought of 1933-40 was ended. Water levels in shallow wells and in deep wells, tapping highly permeable deposits, began to rise in 1941; but changes in water levels in wells tapping less permeable deposits occurred from 1 to as much as 7 years after the abrupt increase in the 5-year moving average of precipitation. The lag in time between recharge (rise in ground-water levels) and precipitation is determined by (a) the depth to the ground-water surface, (b) the vertical permeability of the intervening deposits, and (c) the topographic position of the well.

Fluctuations of water levels in three wells in north-central Oklahoma are shown in figures 5 and 6. The hydrographs of wells 21N-9W-20dd1 (fig. 5) and 23N-19W-3aaa1 (fig. 6) show that water levels in wells tapping terrace deposits (unconsolidated alluvial materials at one or more levels above the flood plains of major streams) have risen as a result of the above-average precipitation that has occurred since 1957. The hydrograph of well 21N-22W-23bb1 (fig. 6) shows that water levels in a relatively undeveloped part of the Ogallala Formation in southwestern Woodward County fluctuate in response to precipitation, but that changes in water levels occur from 2 to 3 months after changes in rainfall. The time lag is determined principally by the moisture content of the soil, and the vertical permeability of the deposits in the interval between land surface and the zone of saturation.

Water-level fluctuations (fig. 7) in a well tapping terrace deposits in Beckham County, north of Erick, are closely related to local precipitation.

Figure 4.--Hydrographs of three wells in the Oklahoma Panhandle and monthly precipitation at Goodwell

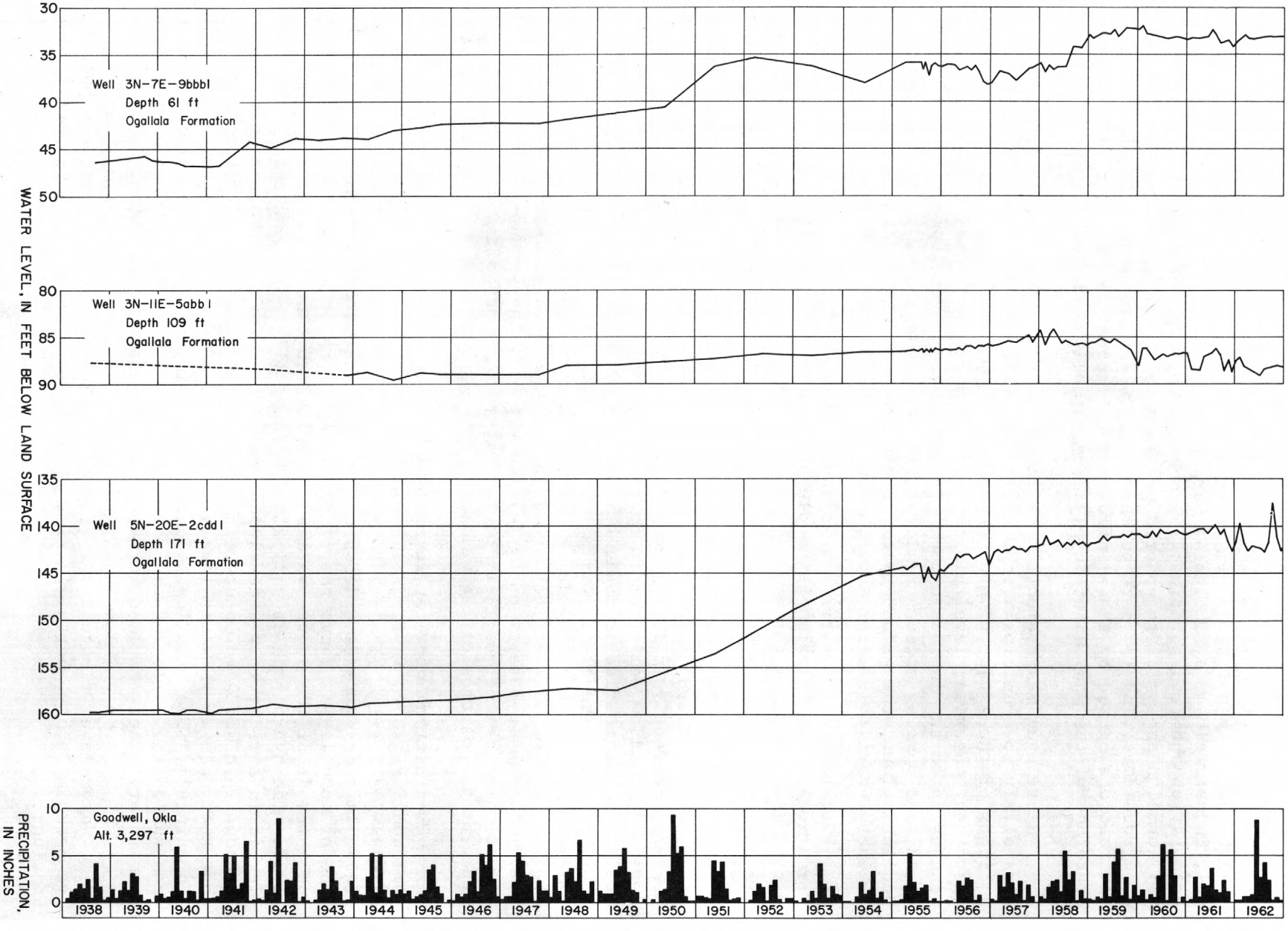


Figure 5.--Hydrograph of a well in Major County and monthly precipitation at Enid

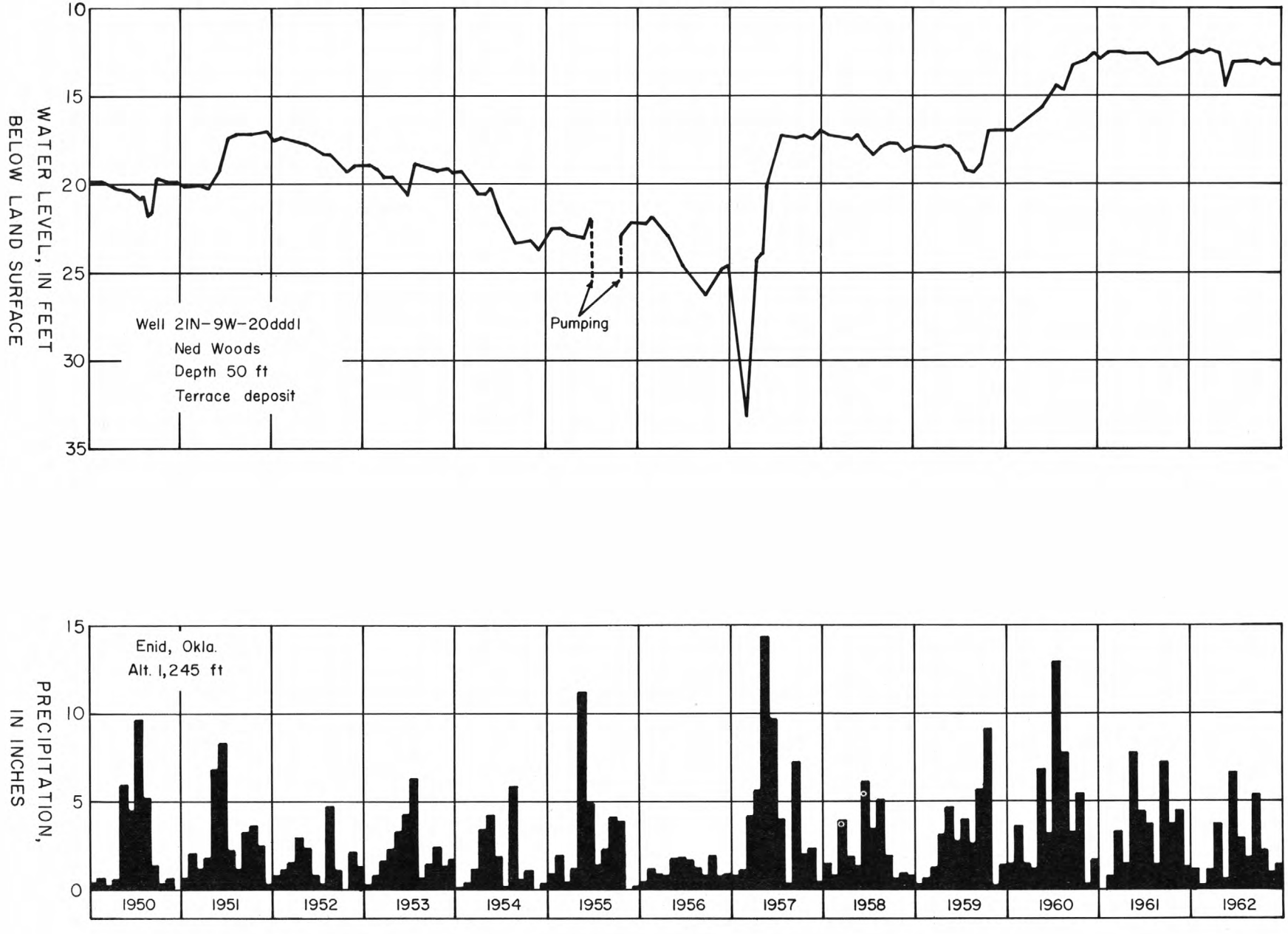
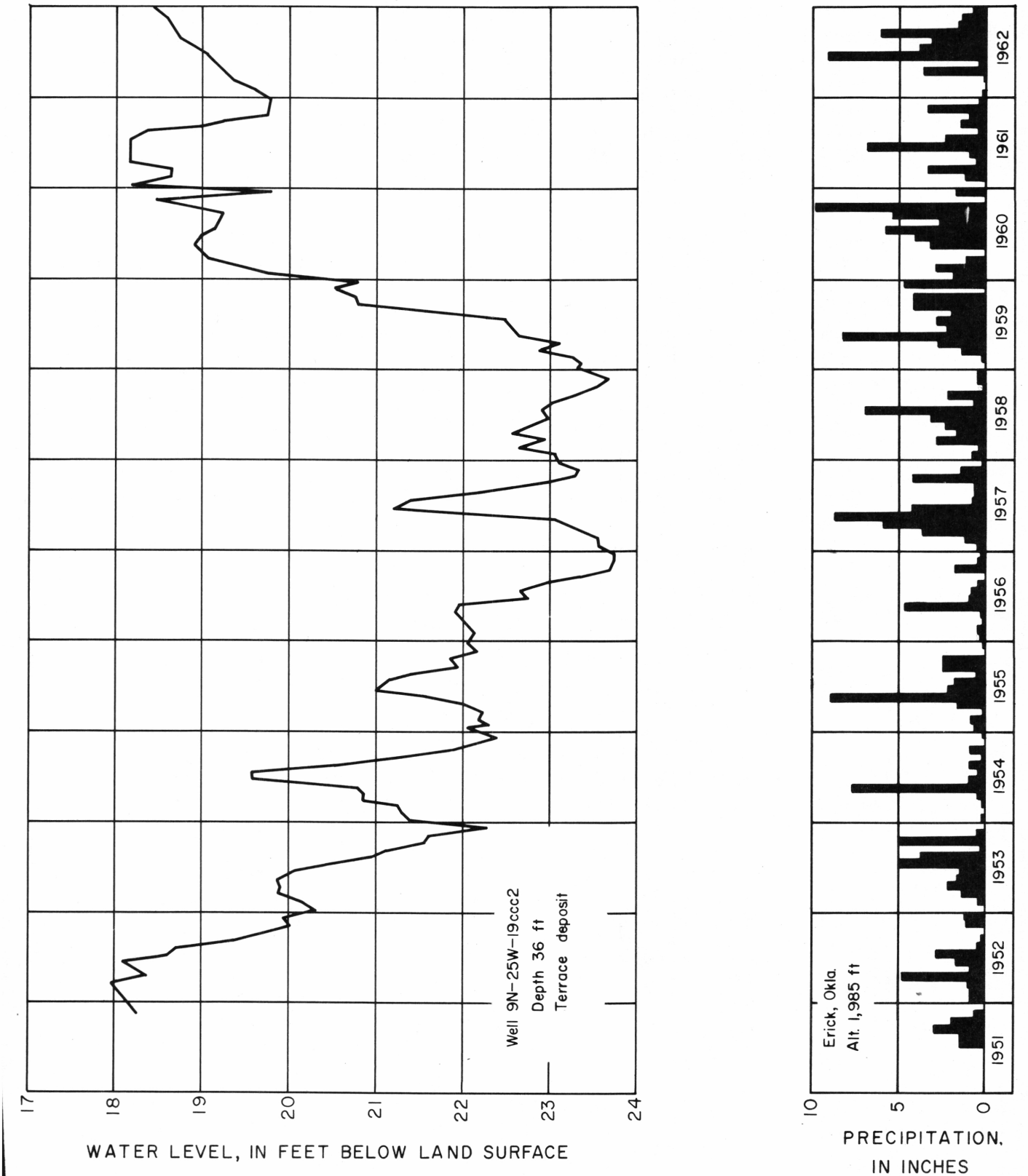


Figure 6.--Hydrographs of two wells in Woodward County and monthly precipitation at Woodward

Figure 7.--Hydrograph of a well in Beckham County and monthly precipitation at Erick



Fluctuations of water levels in the Rush Springs Sandstone, an important source of water supply in Caddo, southwestern Grady, and eastern Washita Counties, are shown in figure 8. The hydrograph of well 9N-13W-28dd1 (fig. 8) illustrates water-level changes in a well near the edge of a large irrigation area in northwestern Caddo and eastern Washita Counties. The hydrograph shows that, during the 3-year dry period (1952-54), water levels declined at a rate of about 0.8 foot per year. During the next 2 years (1955-56) the rate of water-level decline slackened to about 0.5 foot per year as a result of an increase in rains that fell during the late spring and summer of 1955. In 1957 the water level rose sharply, probably in response to above-average precipitation that occurred during the spring and early summer months.

The water-level decline for 1958 and the early part of 1959 is reflected by a decrease in rainfall for the same period. The rising water-level trend that began in June 1959 and continued through 1961 indicates that water, derived chiefly from precipitation, was being added to the ground-water reservoir at rates greater than it was being discharged. Hence, the net result was an increase in ground-water storage. In 1962, the water level declined slightly.

The hydrograph of well 4N-8W-33bb1 (fig. 8) shows water-level changes in an observation well located in an undeveloped part of the Rush Springs Sandstone in southwestern Grady County, about 40 miles southeast of the Caddo County well (fig. 8). Water-level trends in the two wells are very similar and differ mostly in the magnitude of the major fluctuations. Because the Grady County well declined less and recovered to higher levels, it probably reflects water-level changes due solely to natural causes; whereas fluctuations in the Caddo County well are influenced by pumping for irrigation.

Fluctuations of water levels in heavily developed irrigation areas in southwestern Oklahoma are shown in figures 9 and 10. Water level changes shown on these figures reflect large withdrawals of ground water for irrigation purposes during the summer of each year. The graphs also show that, in spite of the accelerated declines resulting from pumping during the summer, the ground-water reservoirs have not been over-developed, because water levels in the ground-water reservoirs return to, or near to, the original level when precipitation is adequate.

Fluctuations of water levels in central Oklahoma are shown in figures 11, 13, and 14. Figures 10 and 11 illustrate the type of fluctuation observed in deep areally extensive, artesian aquifers.

Figure 8.--Hydrographs of wells in Caddo and Grady Counties and monthly precipitation at Carnegie and Marlow

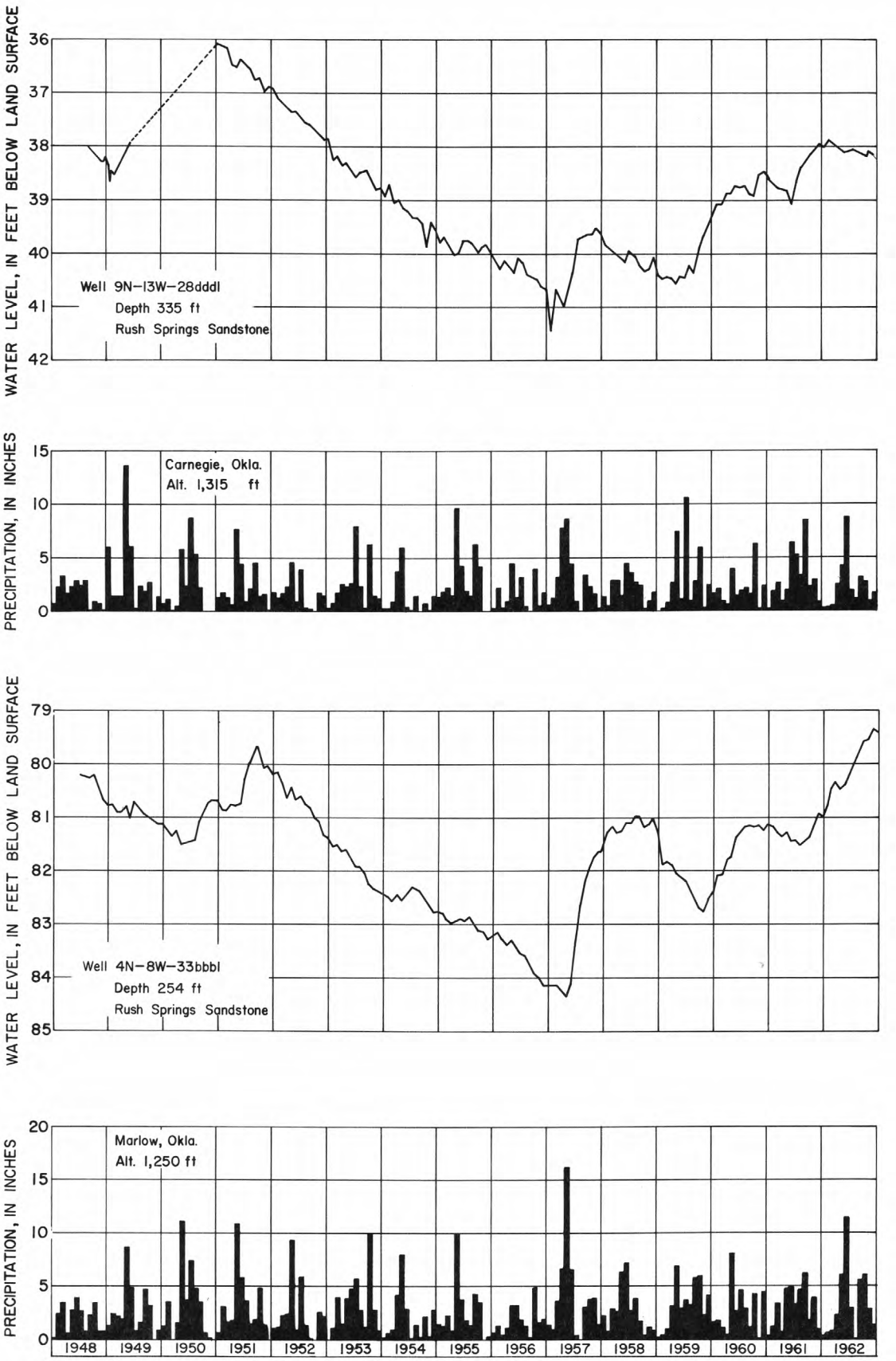


Figure 9.--Hydrographs of wells in Jackson and Greer Counties and monthly precipitation at Hollis

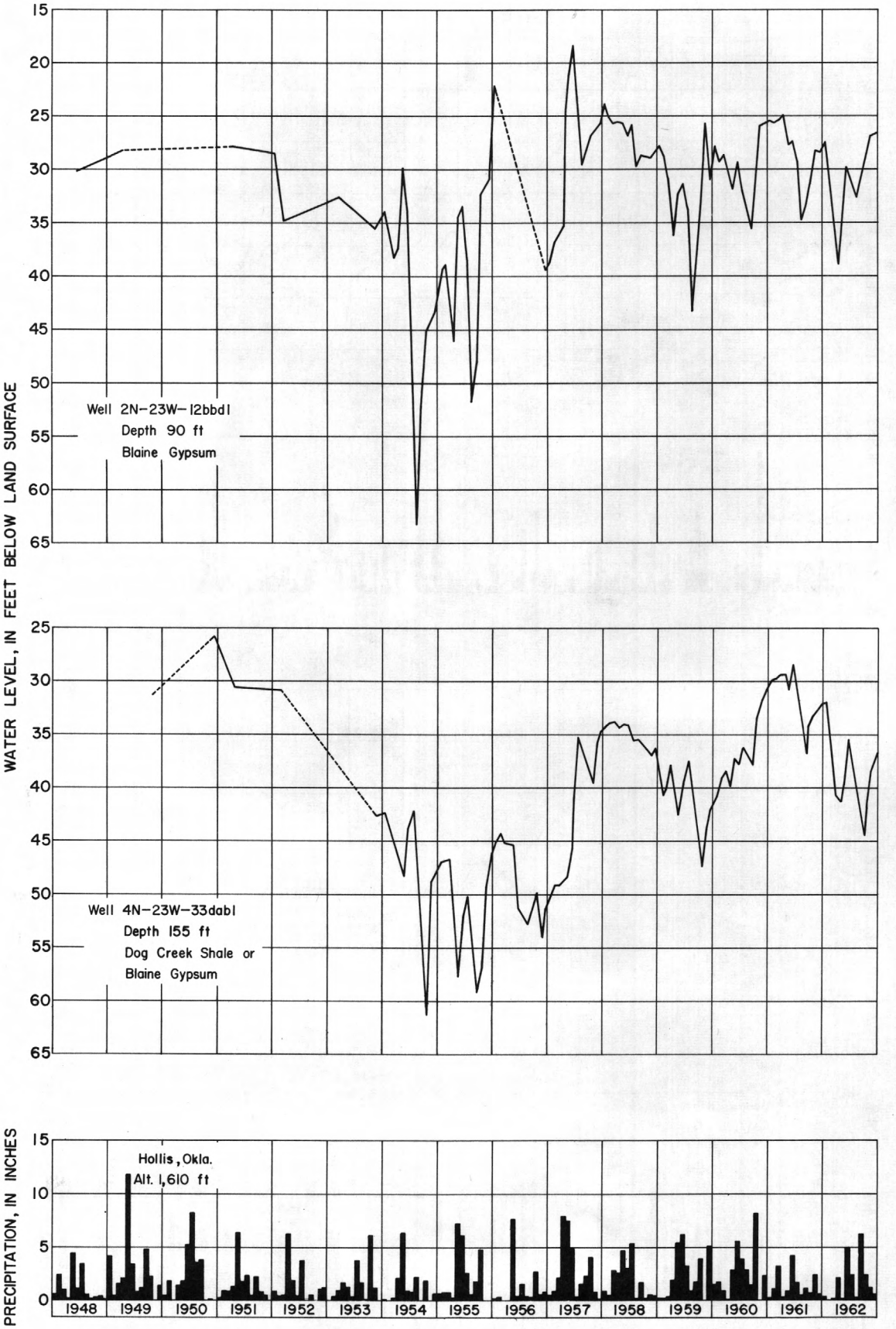


Figure 10.--Hydrograph of a well in Tillman County and monthly precipitation at Frederick

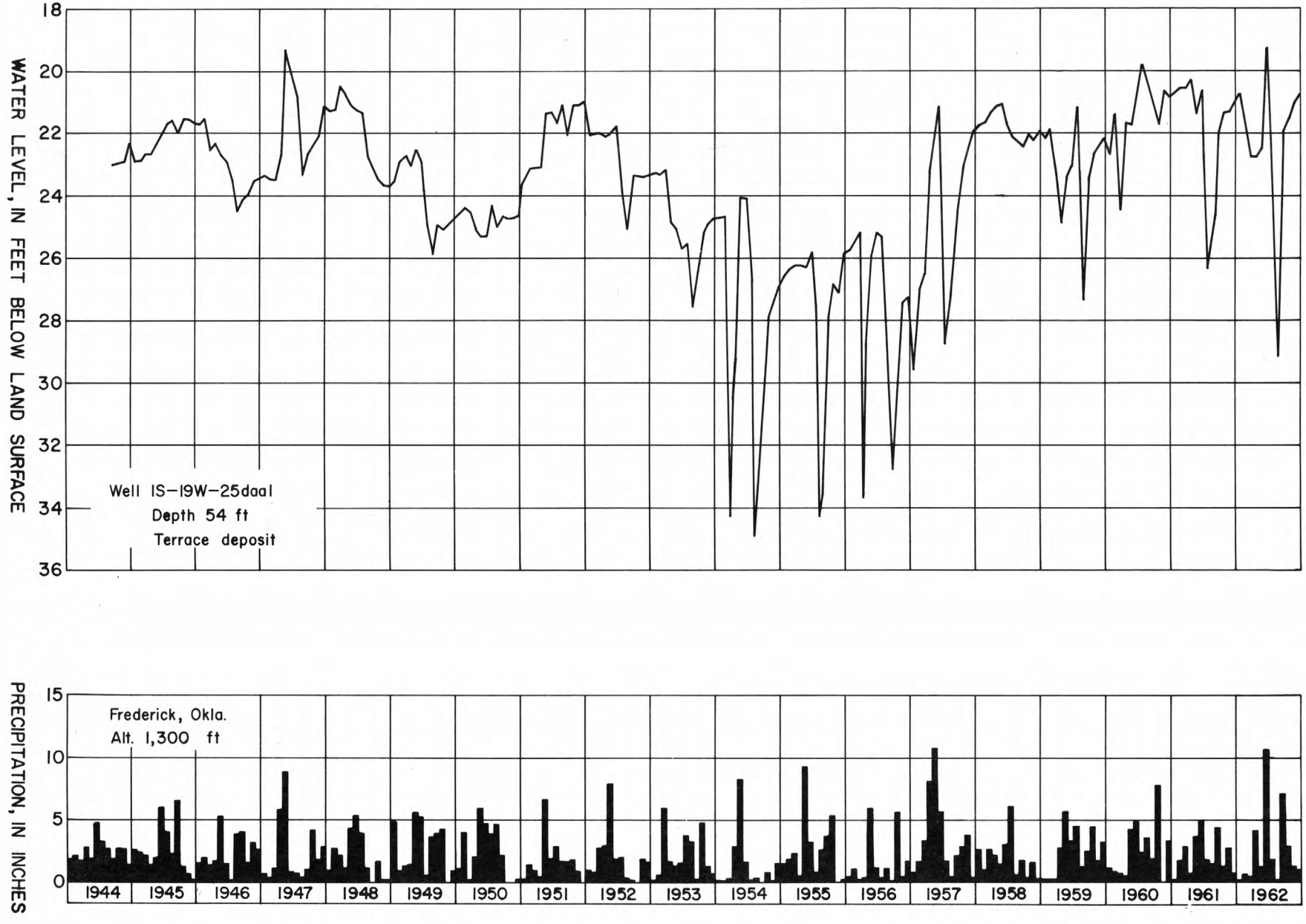


Figure 11.--Hydrograph of a well in Cleveland County and monthly precipitation at Norman

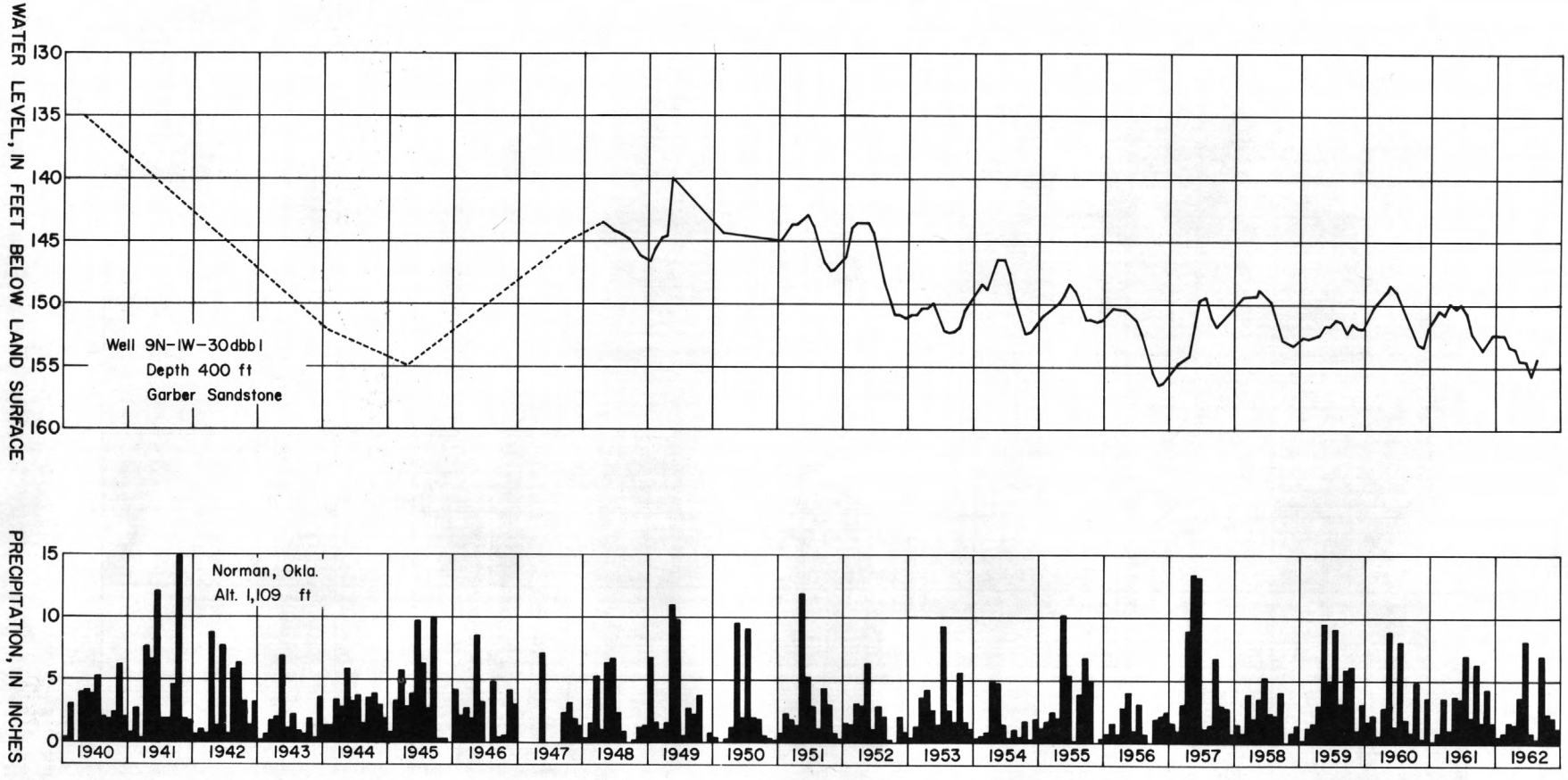


Figure 12.--Hydrograph of a well in Oklahoma County and monthly precipitation at Oklahoma City

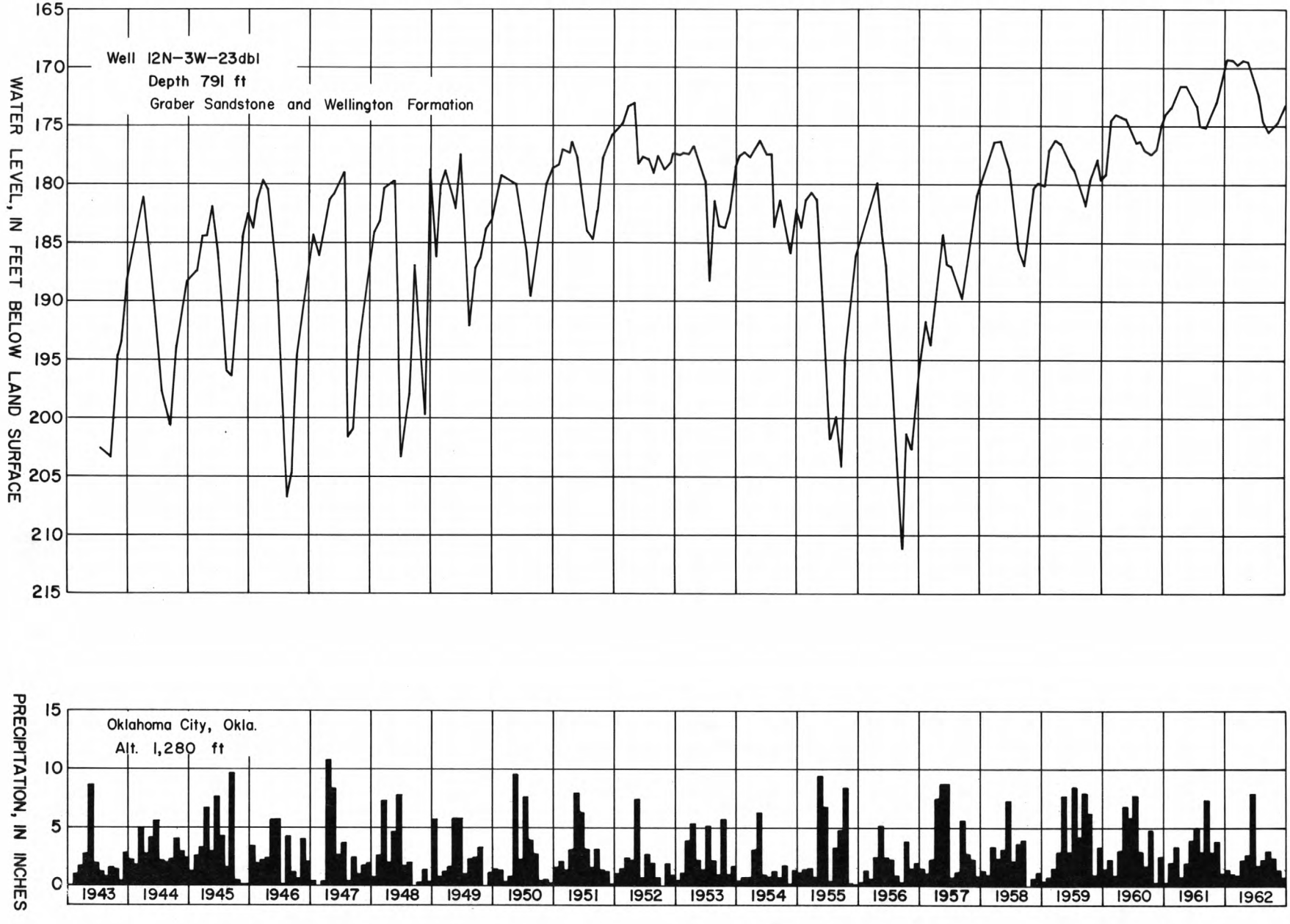
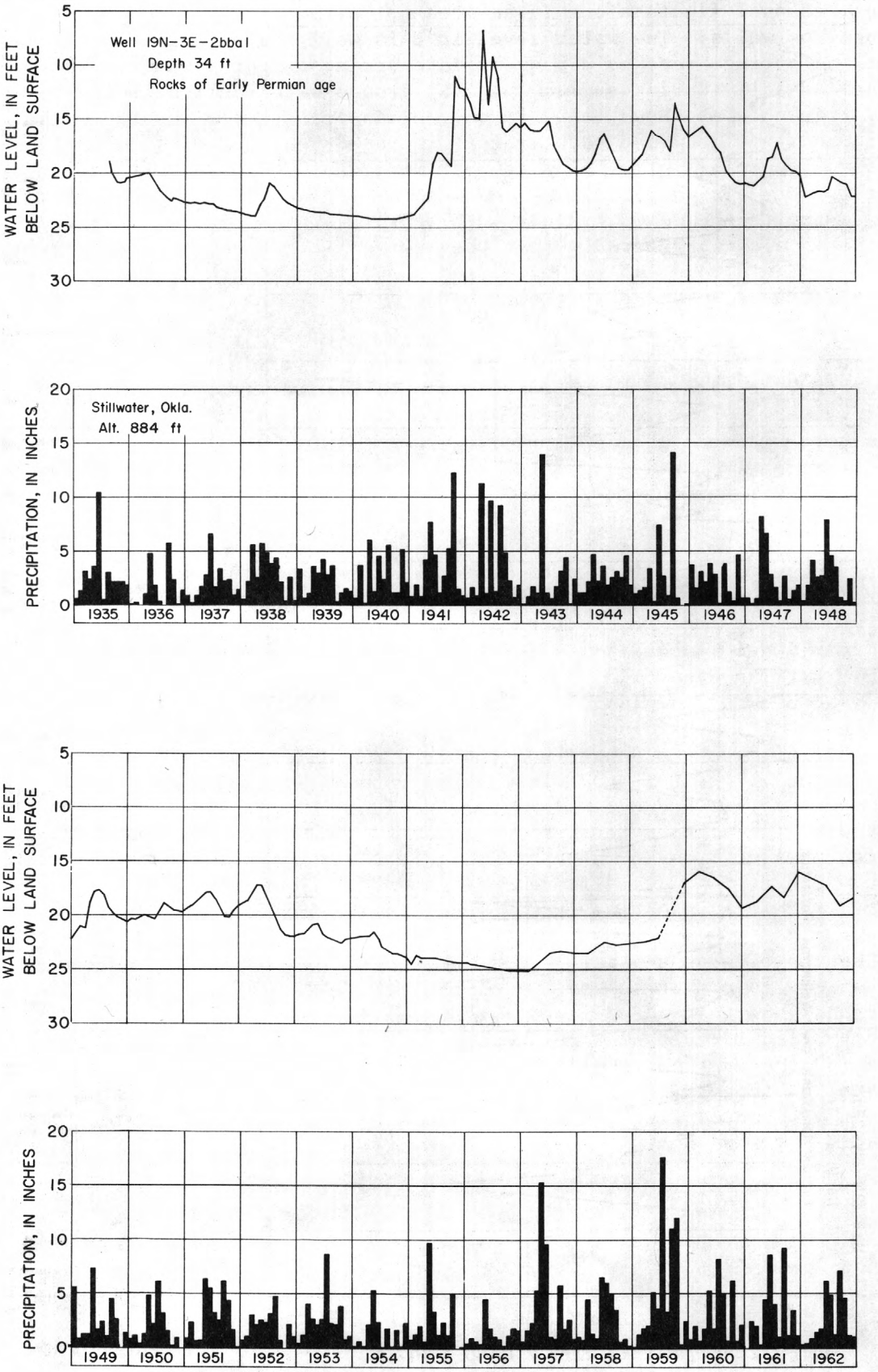


Figure 13.--Hydrograph of a well in Payne County and monthly precipitation at Stillwater



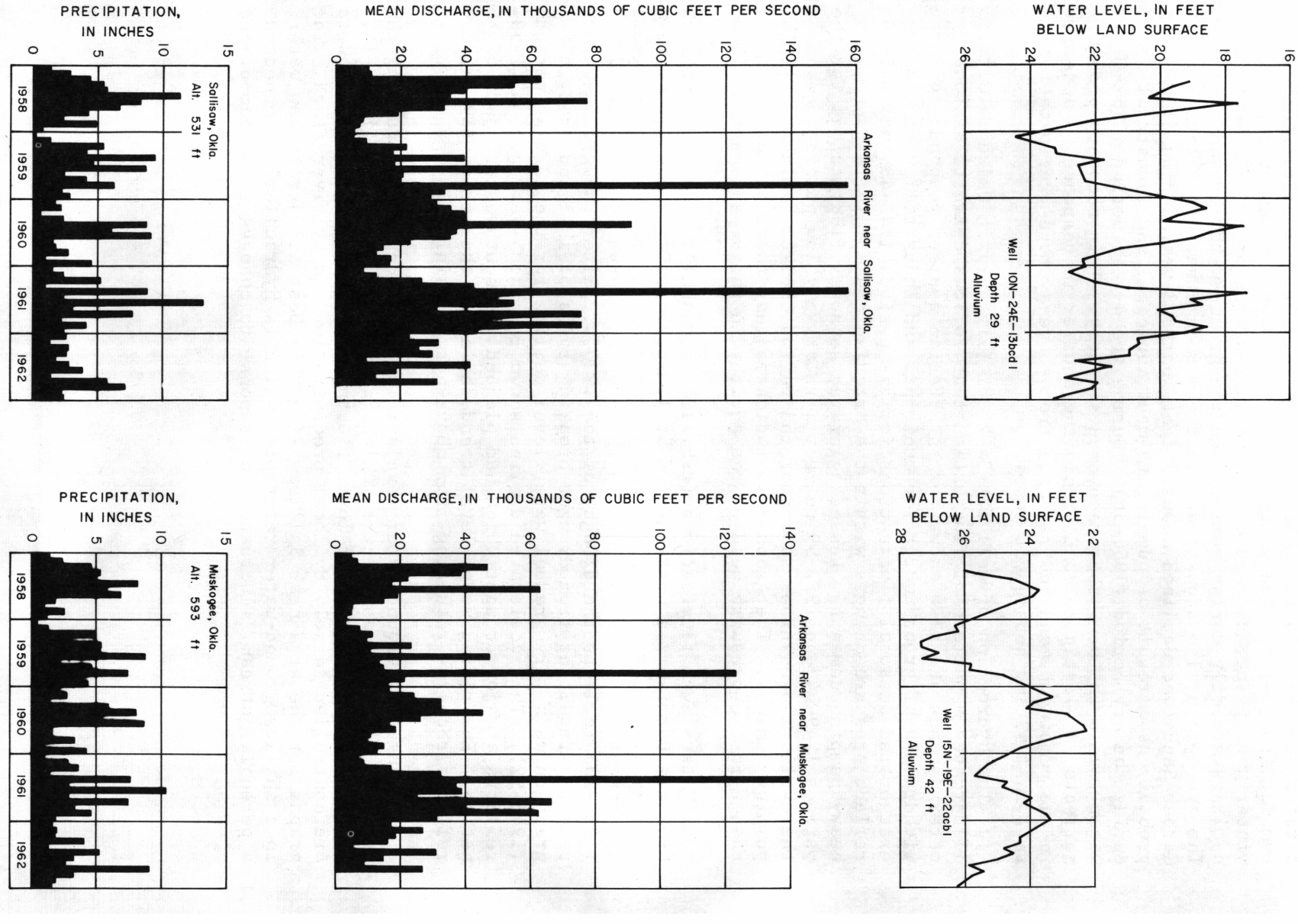
The hydrograph of well 9N-1W-30bd1 (fig. 12), near Norman illustrates seasonal fluctuations in an area not directly affected by pumping from wells. The water level in this well rises during the winter and spring, reaches a peak in late spring or early summer, and declines steadily during summer when the ground-water demand is greatest. The hydrograph also shows that, in the Norman area, water levels in the Garber Sandstone declined about 9 feet in the 8-year period (1949-56), probably as a result of pumping to meet municipal and industrial demands during the dry period (1950-56). During the 4-year period (1957-60) water levels in the Garber recovered slightly. This recovery probably reflects an elastic rebound within the aquifer in response to a decrease in the pumping demand and recharge from above-average precipitation that fell in 1957 and subsequent years.

The hydrograph of well 12N-3W-23db1 (fig. 12) in Oklahoma City, illustrates a pattern of fluctuation that follows definite seasonal water demands and also shows how an artesian aquifer responds to large withdrawals of ground water for municipal and industrial use. The exaggerated seasonal fluctuations for the periods 1943-48 and 1955-56 reflect pressure changes within the artesian aquifer in response to heavy pumping demands. Less exaggerated seasonal fluctuations for the periods 1949-54 and 1957-59 reflect a relatively low pumping demand, and the cyclic fluctuations shown for the period 1960-62 reflect negligible pumping demands. The graph also indicates that there has been little change in the pressure head of the aquifer in the 9-year period (1944-62).

Water-level fluctuations (fig. 13) in a shallow well tapping rocks of Early Permian age northeast of Stillwater, in Payne County, correlate closely with local rainfall. The hydrograph also reflects the effects of drought. The declining trend shown by the curve for the period (1935-50) reflects the drought of the 1930's. After the ground-water recovery resulting from drought-breaking rains of 1941 and 1942, the graph shows a very gradual water-level decline for the 10-year period (1943-52). The accelerated decline shown for the 5-year period (1952-56) reflects a major drought which had plagued the southwestern part of the nation. The rising water-level trend shown for the period (1957-62) reflects recharge resulting from above-normal rainfall.

Changes of ground-water levels in alluvial deposits bordering the Arkansas River in east-central Oklahoma are illustrated in figure 14. The graphs show that water-level fluctuations in the alluvial deposits are controlled largely by local precipitation and by river stage. The graphs for the area near Sallisaw (fig. 14) best illustrate how water in a shallow ground-water reservoir, which is hydraulically connected to a perennial stream, fluctuates in response to changes in stream discharge.

Figure 14.--Hydrographs of two wells in the Arkansas River valley, graphs showing mean monthly discharge of the Arkansas River near Muskogee and Sallisaw, and monthly precipitation at Muskogee and Sallisaw



Water-level fluctuations in a deep well tapping a thick limestone sequence in the Arbuckle Mountain region are shown on figure 15. Water-level changes recorded for well 1N-6E-4cad1 (fig. 15) correlate closely with the mean-monthly discharge of Byrds Mill Spring (fig. 15), which indicates that the spring serves as an important natural spillway for water stored in the limestone. The hydrograph (fig. 15) shows that water levels do not fluctuate in response to local precipitation. However, local rain, and the resulting storm runoff, are the principal sources of recharge, and the effects of such recharge is rapid when water levels are high. Under such conditions, the fractures and solution openings that form the ground-water reservoir are nearly full and the addition of more water results in rapid rise in the water level. Conversely, when water levels are low, the moisture content of the soil zone has been depleted, and many of the rock openings have been drained. Hence, recharge resulting from precipitation and runoff may not be reflected until some future time when the soil-moisture requirement has been satisfied and the rock openings intersected by the observation well have started to fill.

Water-level fluctuations in extreme southern and southeastern Oklahoma are shown on figures 16 and 17. Figure 17 shows the general water-level trend in a deep well near Durant. The graph indicates that water levels in the deep aquifer have recovered about 22 feet in the 9-year period of record (1954-62). This recovery probably reflects a natural increase of pressure within the aquifer after the city of Durant changed from ground water to surface water as a source of water supply.

Water-level trends in an important artesian aquifer (Paluxy Sand) in McCurtain County are shown on figure 17. The hydrograph indicates that water levels have lowered about 8 feet during the period of record (1951-62). Because in artesian aquifers water-level changes reflect changes in pressure, the steady decline suggests that ground-water discharge has been fairly constant. According to Davis (1960, p. 79), the Artesian aquifer in this part of the county is relatively undeveloped and is utilized only by small towns and local lumber mills. He (p.31) reports that at least three wells, which tap the aquifer, have been flowing to waste since 1908. Hence, it seems reasonable to believe that the decline has been caused by local pumpage and water flowing to waste from old unused artesian wells.

Figure 15.--Graphs showing water-level fluctuations in a well, mean-monthly discharge of Byrds Mill Spring, and monthly precipitation at Pontotoc

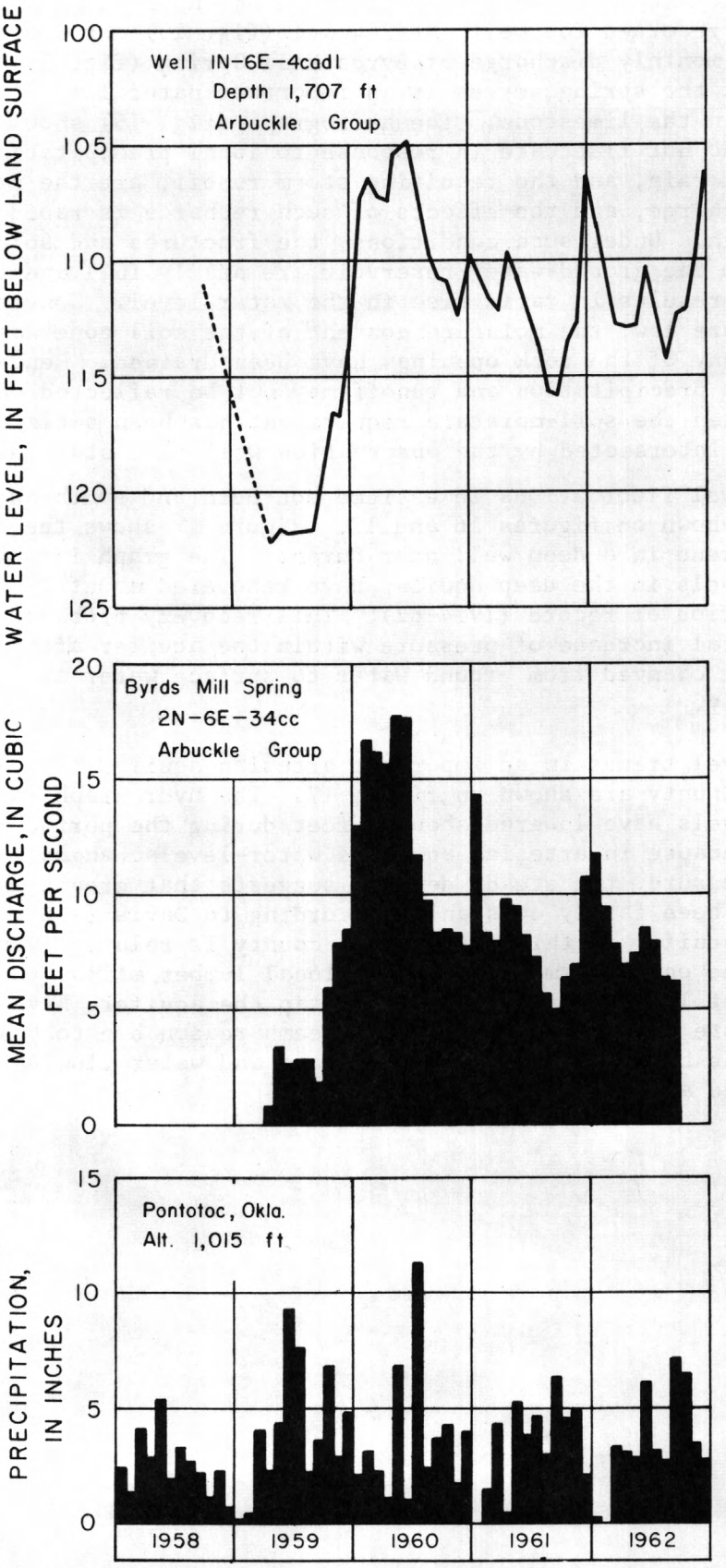


Figure 16.--Hydrograph of a well in Bryan County and monthly precipitation at Durant

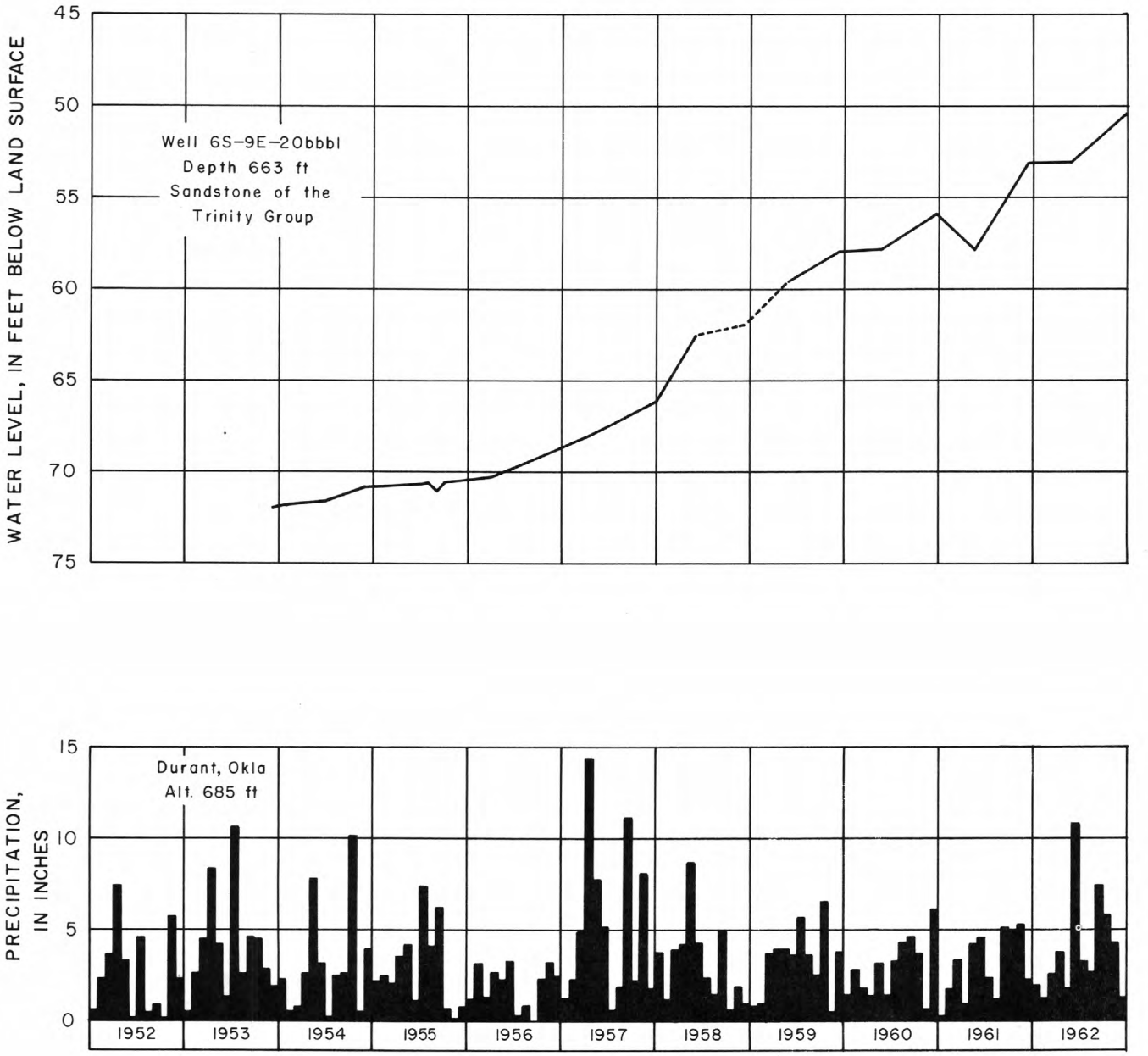
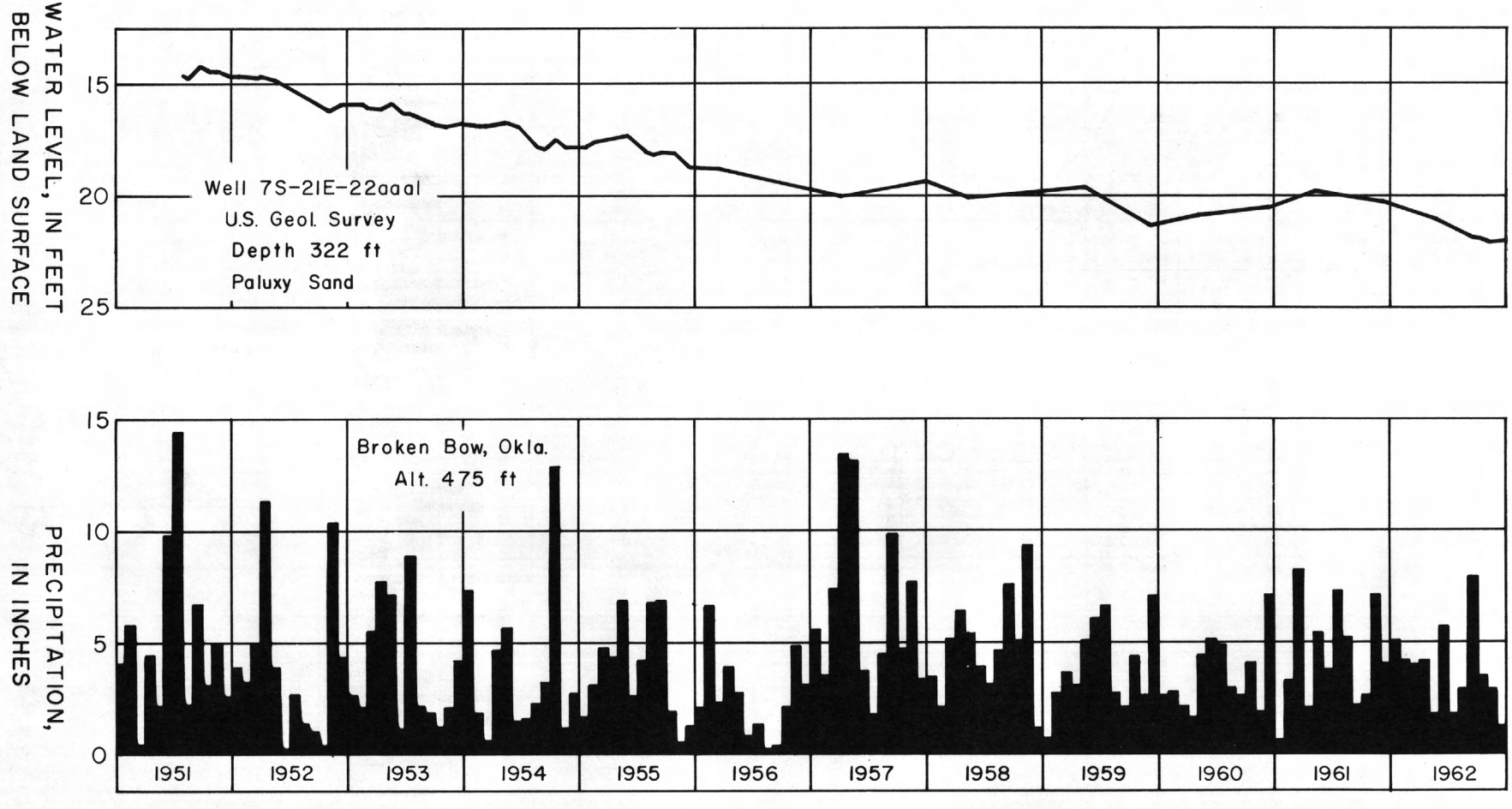


Figure 17.--Hydrograph of a well in McCurtain County and monthly precipitation at Broken Bow



Summary

Ground-water levels in most parts of Oklahoma remained high during 1961 and 1962. In most areas water levels continued the upward trend which began after the drought-breaking rains of 1957. (See figs. 4 through 17). The high water levels reflect the above-normal precipitation that has occurred in the State during the past few years (1957-62). In many areas water levels reflect seasonal trends due primarily to the seasonal requirements of man and nature. During the summer man uses great amounts of water to meet municipal, industrial, and agricultural requirements; and nature during this same period, uses large quantities of water to satisfy the demands of trees, brush, and other types of vegetation, and to offset losses resulting from evaporation and transpiration. Water levels recover during late autumn, winter, and early spring when the requirements of man and nature are at a minimum; and when precipitation is adequate, as in 1961 and 1962 (table 2) water levels continue to rise until the large seasonal demands of man and nature cause a reversal in the trend and levels start to decline.

References cited

Davis, L. V., 1960, Geology and ground-water resources of southern McCurtain County, Oklahoma: Oklahoma Geol. Survey Bull. 86, 80 p.

Hart, D. L., Jr., 1961, Fluctuations of water levels in wells, in Oklahoma Geology Notes: Oklahoma Geol. Survey, vol. 21, no. 2 p. 41-47.

Marine, I. W., 1962, Correlation of water-level fluctuations with climatic cycles in the Oklahoma Panhandle: U.S. Geol. Survey Water-Supply Paper 1669-K, 10 p.

Records of water levels

Records of ground-water levels for the 2-year period 1961-62 are given in table 3. Previously unpublished water levels, recorded before 1961, for some of the wells listed in the above table are shown in table 4.

Measurements of depth to water in observation wells are given in table 3, with reference to land-surface datum, a precise datum plane that corresponds approximately to the land surface near each well. The measurements are made from a fixed measuring point at the top of the well and a short distance above or below land-surface datum. The measurements then are adjusted so that the depths to water are reported in feet below the land-surface datum.

Information for each well in table 3 is given in accordance with the following example for well 1N-26E-5ddc1 in Beaver County (p. 27): well number (1N-26E-5ddc1) as described on page 2; location within the section (SW¼SE¼SE¼); owner (R. A. Phillips); depth (102 feet); lsd (2,539 feet); aquifer or water-bearing formation (Ogallala Formation); highest water level during period of record and date (88.03 feet below land surface, May 4, 1960); lowest water level during period of record (95.64 feet below land surface, Oct. 13, 1939); period of record during which measurements have been made (1939, 1957-62).

For wells equipped with automatic water-level recorders water levels are reported in table 3 for the 5, 10, 15, 20, 25, and end of the month (eom). The water level in the table is the lowest water level for that day. For some wells no water level is given for some days or periods because the water-level recorders were not operating.

Footnotes were used in table 4 to indicate the following: a, well being pumped when visited for measurement; c, nearby well pumping when observation well was measured; e, estimated depth to water; f, observation well dry when measured; h, tape measurement included with other water levels obtained by automatic water-level recorders; eom, end of month; lsd, land-surface datum, in feet above mean sea level.

Table 3.--Descriptions of observation wells and water levels

for the 2-year period 1961-62

BEAVER COUNTY

1961		1962	

1N-20E-16cdd1. SE¼SE¼SW¼. Ogallala Formation. Highest, 101.16, Jan. 13, 1958; lowest, 103.84, June 9, 1958. Records: 1956-62.

May	22 103.64	May	2 103.73

1N-23E-14dad1. SE¼NE¼SE¼. Owner, R. D. Hall. Depth, 169 ft. Lsd, 2,797. Ogallala Formation. Highest, 158.56, May 30, 1957; lowest, 162.73, May 2, 1962. Records: 1947-62.

May	22 161.13	May	2 162.73

1N-24E-23ccc1. SW¼SW¼SW¼. Owner, State of Oklahoma. Depth, 154 ft. Lsd, 2,739. Ogallala Formation. Highest, 133.20, Aug. 10, 1956; lowest, 137.28, Aug. 30, 1939. Records: 1939; 1956-62.

May	22 133.64	May	2 134.32

1N-26E-5ddc1. SW¼SE¼SE¼. Owner, R. A. Phillips. Depth, 102 ft. Lsd, 2,539. Ogallala Formation. Highest, 88.03, May 4, 1960; lowest, 95.64, Oct. 13, 1939. Records: 1939; 1957-62.

May	22 88.16	May	2 91.72

1N-27E-34bba1. NW¼NW¼NE¼. Ogallala Formation. Highest, 117.17, April 15, 1958; lowest, 166.12, Aug. 6, 1956. Records: 1956-61.

May	22 144.63		

1N-28E-22dad1. SE¼NE¼SE¼. Ogallala Formation. Highest, 52.28, Sept. 24, 1957; lowest, 55.71, Nov. 28, 1956. Records: 1956-60.

No measurements in 1961 or 1962.

2N-21E-22dcd1. SE¼SW¼SE¼. Ogallala Formation. Highest, 182.53, May 2, 1960; lowest, dry at 192, May 2, 1962; Records: 1956-62.

May	22 182.73	May	2 f192

1961						1962					

2N-23E-13dad1. SE¼NE¼SE¼. Owner, U.S. Geol. Survey. Depth, 14 ft. Lsd, 2,582. Alluvium. Highest, 6.79, June 10, 1956; lowest, 9.11, May 18, 1948. Records: 1946-62.

May	2	7.94	May	2	7.77

2N-24E-7ccd1. SE¼SW¼SW¼. Owner, James W. Parker. Depth, 94 ft. Ogallala Formation. Highest, 75.29, May 19, 1952; lowest, 77.20, Oct. 5, 1956. Records: 1946-62.

Jan.	4	76.71	July	17	76.28	Mar.	19	75.63	Aug.	13	75.74
Feb.	16	75.44	Aug.	17	75.57	Apr.	25	75.56	Sept.	17	75.88
Apr.	5	75.33	Sept.	28	75.72	May	2	75.62	Dec.	17	75.54
June	7	76.04	Dec.	26	75.86	July	9	75.66			

2N-26E-24dcc1. SW¼SW¼SE¼. Depth, 71 ft. Ogallala Formation. Highest, 43.23, May 31, 1952; lowest, 48.54, Jan. 17, 1958. Records: 1951-62.

May	22	46.98	May	2	47.92

3N-23E-6dcd1. SE¼SW¼SE¼. Depth, 86 ft. Terrace deposit. Highest, 77.24, Feb. 27, 1957; lowest, dry at 81, May 2, 1962; Records: 1956-62.

No measurements in 1961			May	2	81.00f

3N-26E-10aab1. NW¼NE¼NE¼. Owner, George H. Butten. Depth, 44 ft. Lsd, 2,369. Ogallala Formation. Highest, 19.80, May 19, 1952; lowest 29.59, Jan. 30, 1940. Records: 1938-42; 44-47; 49; 54-55; 58-62.

May	22	20.55	May	4	21.49

3N-26E-12bba1. NE¼NW¼NW¼. Owner, Federal Land Bank. Depth, 47 ft. Lsd, 2,355. Laverne Formation. Highest, 35.65, May 19, 1952; lowest, 40.30, Jan. 28, 1941. Records: 1938-54; 56-62.

May	22	37.08	May	4	38.05

4N-24E-7dbb1. NW¼NW¼SE¼. Owner, Southwestern Public Service Co. Depth, 34 ft. Alluvium. Highest, 2.98, Jan. 24, 1949; lowest, 17.70, Oct. 26, 1956. Records: 1939-62.

Feb.	27	15.86	May	31	14.90	No measurements in 1962					
Mar.	27	15.63	June	30	15.11						
Apr.	30	14.53									

1961				1962			

4N-24E-24ccc1. SW¼SW¼SW¼. Owner, Frances M. Hancock. Depth, 34 ft. Lsd, 2,378. Highest, 21.01, Oct. 28, 1941; lowest, 24.38, June 10, 1958. Records: 1938-46; 48-62.

May	22	22.34		May	4	22.49	

4N-24E-30bbc1. SW¼NW¼NW¼. Owner, Mrs. Ellen F. Williams. Depth, 73 ft. Lsd, 2,493. Rocks of Permian age. Highest, 38.30, Dec. 17, 1958; lowest, 64.54, Sept. 11, 1956. Records: 1938-51; 1955-62.

No measurements in 1961 or 1962

4N-28E-6ada1. NE¼SE¼NE¼. Owner, H. H. Holtkamp. Depth, 70 ft. Terrace deposit. Highest, 54.76, Apr. 7, 1958; lowest, 58.52, June 15, 1940. Records: 1940; 1956-62.

No measurements in 1961				May	3	58.05	

4N-28E-26dda1. NE¼SE¼SE¼. Owner, Clarence Lamaster. Depth, 38 ft. Alluvium. Highest, 3.58, Sept. 25, 1957; lowest, 9.19, July 23, 1956. Records: 1956-62.

May	12	6.48		May	3	6.42	

5N-20E-2cdd1. SE¼SE¼SW¼. Owner, J. C. Peters. Depth, 171 ft. Lsd, 2,773. Ogallala Formation. Highest, 139.83, Aug. 17, 1961; lowest, 168.04, Apr. 3, 1939. Records: 1938-62.

Jan.	4	140.92	Aug.	17	139.83	Jan.	24	141.54	Aug.	13	142.78
Feb.	13	140.67	Sept.	28	140.83	Feb.	19	139.70	Sept.	17	141.74
Apr.	3	140.20	Oct.	16	140.33	Mar.	14	141.87	Oct.	8	137.50
May	15	140.18	Nov.	27	141.63	Apr.	25	142.53	Nov.	16	141.04
June	7	140.72	Dec.	26	142.56	May	4	142.06	Dec.	17	142.83
July	17	140.36				July	9	142.33			

5N-20E-30ddd1. SE¼SE¼SE¼. Depth, 133 ft. Ogallala Formation. Highest, 104.85, May 2, 1960; lowest, 112.32, May 20, 1951. Records: 1951-53; 1955-62.

May	10	105.36		Measurement discontinued.			

5N-21E-12ddd1. SE¼SE¼SE¼. Owner, A. J. Isaac. Depth, 208 ft. Lsd, 2,705. Ogallala Formation. Highest, 181.53, Nov. 24, 1958; lowest, 192.41, Nov. 26, 1938. Records: 1938-62.

Jan.	4	183.70	Aug.	17	182.61	Jan.	24	183.08	Aug.	13	181.98
Feb.	13	183.68	Sept.	28	182.59	Feb.	19	183.55	Sept.	17	182.36
Apr.	3	183.53	Oct.	16	182.68	Mar.	14	183.59	Oct.	8	182.98
May	15	182.99	Nov.	27	182.76	Apr.	25	183.39	Nov.	16	183.03
June	7	182.73	Dec.	26	182.82	May	4	183.33	Dec.	17	182.66
July	17	182.84				July	9	181.64			

1961		1962	

5N-22E-20aac1. SW¼NE¼NE¼. Owner, Minnie B. Dorman. Depth, 186 ft. Lsd, 2,678. Ogallala Formation. Highest, 160.93, June 8, 1955; lowest, 169.44, Nov. 20, 1938. Records: 1938-62.

May	12	160.76	May	4	161.13

5N-24E-8ccc1. SW¼SW¼SW¼. Owner, Gilbert Hodges. Depth, 72 ft. Lsd, 2,530. Rocks of Quaternary age. Highest, 43.41, May 27, 1953; lowest, 52.79, Jan. 27, 1941. Records: 1938-62.

May	12	45.79	May	3	45.52

5N-24E-30ccb1. NW¼SW¼SW¼. Owner, Arthur Williams. Depth, 16 ft. Lsd, 2,474. Rocks of Quaternary age. Highest, 4.05, Apr. 22, 1952; lowest, 9.48, Sept. 23, 1939. Records: 1938-62.

May	12	7.08	May	3	5.37

5N-25E-4bac1. SW¼NE¼NW¼. Owner, Tom A. Judy. Depth, 200 ft. Ogallala Formation. Highest, 52.09, June 6, 1957; lowest, 55.29, Nov. 26, 1956. Records: 1950; 1956-62.

May	12	54.10	May	4	54.24

5N-27E-9add1. SE¼SE¼NE¼. Owner, Alice Schampel. Depth, 100 ft. Ogallala Formation. Highest, 54.51, Feb. 5, 1957; lowest, 62.13, Apr. 4, 1940. Records: 1940; 1956-62.

May	12	59.19	May	3	60.21

6N-21E-15cdd1. SE¼SE¼SW¼. Owner, Isabelle Bay. Depth, 208 ft. Lsd, 2,740. Ogallala Formation. Highest, 187.33, May 2, 1960; lowest, 201.67, June 21, 1940. Records: 1940; 1956-62.

May	12	188.29	May	4	188.54

6N-23E-24aad1. SE¼NE¼NE¼. Owner, Robert F. LeCrone. Depth, 197 ft. Lsd, 2,545. Ogallala Formation. Highest, 58.91, May 19, 1950; lowest, 77.08, Nov. 26, 1938. Records: 1938-62.

May	12	69.54	May	4	69.36

6N-24E-20dcb1. NW¼SW¼SE¼. Owner, Harry McAdams. Depth, 36 ft. Lsd, 2,449. Rocks of Quaternary age. Highest, 12.57, May 19, 1950; lowest, 30.62, Jan. 27, 1941. Records: 1938-62.

May	12	25.70	May	4	24.31

8N-23W-15bbb1. NW¼NW¼NW¼. Depth, 52 ft. Rocks of Permian age. Highest, 24.27, June 26, 1962; lowest, 42.25, Apr. 3, 1957. Records: 1952-62.

1961						1962			
Jan.	17	32.40	Nov.	14	28.73	Jan.	31	29.22	May 25	32.99
Feb.	14	31.08	Dec.	5	28.72	Mar.	7	31.13	June 26	24.27
						Mar.	29	31.83	Aug. 29	25.60
						Apr.	26	32.40		

8N-24W-2ddd1. SE¼SE¼SE¼. Owner, Mrs. C. E. Waters. Depth, 29 ft. Terrace deposit. Highest, 11.39, Sept. 26, 1962; lowest, dry at 29, Apr. 3, 1957. Records: 1952-62.

1961						1962			
Jan.	17	17,83	Aug.	1	14.69	Jan.	31	16.20	Sept. 26	11.39
Feb.	14	17.96	Sept.	6	15.85	Mar.	7	16.40	Nov. 14	12.18
Mar.	14	18.04	Sept.	26	16.14	Mar.	29	16.67		
Apr.	19	16.94	Oct.	25	16.65	Apr.	26	16.78		
May	17	17.10	Nov.	14	16.00	May	24	16.69		
June	21	13.71	Dec.	5	15.80	June	26	12.22		
July	12	14.13				Aug.	29	12.57		

9N-23W-9bcb1. NW¼SW¼NW¼. Owner, U.S. Geol. Survey. Depth, 24 ft. Alluvium. Highest, 11.49, Aug. 1, 1961; lowest, dry at 24, July to Dec., 1954. Records: 1953-62.

1961						1962			
Jan.	17	13.23	Aug.	1	11.49	Jan.	31	13.44	June 26	14.16
Mar.	14	12.95	Sept.	6	14.07	Mar.	7	13.59	Aug. 29	14.68
Apr.	19	12.08	Sept.	26	13.98	Mar.	29	13.45	Sept. 26	13.96
May	17	12.28	Oct.	25	14.08	Apr.	26	13.36	Oct. 17	13.55
June	21	11.96	Nov.	14	13.77	May	24	13.54	Nov. 14	13.23
July	12	12.09	Dec.	5	13.58					

9N-25W-19ccc1. SW¼SW¼SW¼. Depth, 36 ft. Terrace deposit. Highest, 17.96, May 7, 1952: lowest, 23.72, Nov. 28, 1956. Records: 1951-62.

1961						1962			
Jan.	17	18.17	July	12	18.14	Feb.	1	19.60	Aug. 29	18.71
Feb.	14	18.62	Aug.	1	18.36	Mar.	8	19.33	Nov. 14	18.58
Mar.	14	18.62	Sept.	7	18.95	Mar.	29	19.34		
Apr.	19	18.15	Sept.	27	19.23	Apr.	26	19.23		
May	17	18.14	Oct.	25	19.73	May	24	19.17		
June	21	18.14	Dec.	6	19.77	June	26	19.05		

1961						1962			

9N-25W-31bcb1. NW¼SW¼NW¼. Depth, 35 ft. Terrace deposit. Highest, 8.26, Sept. 26, 1962; lowest, 21.00, Sept. 19, 1956. Records: 1951-62.

Jan.	17	11.80	Aug.	1	10.47	Feb.	1	14.50	Sept.	26	8.26
Mar.	14	11.18	Sept.	7	14.82	Mar.	8	14.54	Nov.	14	11.14
Apr.	19	11.46	Sept.	27	14.23	Apr.	26	14.65			
May	17	8.22	Oct.	25	14.59	May	24	13.70			
June	21	9.14	Nov.	15	14.23	June	26	9.59			
July	12	11.65	Dec.	6	14.32	Aug.	29	11.74			

9N-25W-34bbb1. NW¼NW¼NW¼. Owner, J. H. Hester. Depth, 79 ft. Terrace deposit. Highest, 39.07, Oct. 17, 1962; lowest, 51.77, Feb. 26, 1958. Records: 1951-62.

Jan.	17	44.39	Aug.	1	42.93	Feb.	1	43.26	Sept.	26	41.32
Feb.	14	44.38	Sept.	7	42.95	Mar.	8	41.78	Oct.	17	39.07
Mar.	14	43.99	Sept.	27	42.94	Mar.	29	41.80	Nov.	14	40.10
Apr.	19	43.19	Oct.	25	43.13	Apr.	26	41.46			
May	17	42.98	Nov.	15	42.71	May	24	41.39			
June	21	42.63	Dec.	6	43.32	June	26	41.37			
July	12	42.47				Aug.	29	41.34			

9N-26W-8bc1. SW¼NW¼. Depth, 63 ft. Terrace deposit. Highest, 55.70, Apr. 9, 1952; lowest, dry at 63, Sept. 27, 1961. Records: 1951-62.

Jan.	17	58.70	Aug.	1	58.37	Feb.	1	58.50	Aug.	29	57.27
Mar.	14	59.02	Sept.	27	f	Mar.	8	58.50	Sept.	26	56.52
Apr.	19	60.92	Oct.	25	58.23	Mar.	29	59.75	Oct.	17	57.11
May	17	58.74	Dec.	6	58.28	Apr.	26	58.71	Nov.	14	57.42
June	21	60.83				May	24	57.13			
July	12	59.45				June	26	56.89			

9N-26W-33bb1. NW¼NW¼. Owner, Edith Woolsey. Depth, 33 ft. Terrace deposit. Highest, 8.05, Sept. 13, 1962; lowest, 17.16, Feb. 27, 1957. Records: 1951-62.

Jan.	17	10.11	Aug.	1	8.28	Feb.	1	11.10	Aug.	29	8.79
Mar.	14	10.10	Sept.	7	9.46	Mar.	8	11.14	Sept.	26	8.05
Apr.	19	9.38	Sept.	27	10.05	Mar.	29	11.32	Oct.	17	14.10
May	17	9.55	Oct.	25	10.68	Apr.	26	11.27	Nov.	14	14.27
June	21	8.08	Nov.	15	10.64	May	24	10.35			
July	12	8.23	Dec.	6	10.85	June	26	8.26			

9N-26W-36cdc1. SE¼SW¼SE¼. Depth, 27 ft. Terrace deposit. Highest, 1.75, Apr. 19, 1960; lowest. 13.28, Sept. 19, 1956. Records: 1951-62.

Jan.	17	3.95	July	12	5.09	Feb.	1	7.30	June	26	3.62
Mar.	14	4.54	Sept.	27	7.79	Mar.	8	7.20	Well destroyed.		
Apr.	19	4.25	Oct.	25	8.14	Mar.	29	7.13			
May	17	5.79	Dec.	6	7.62	Apr.	26	7.24			
June	21	4.40				May	24	6.66			

1961			1962		

12N-22W-26bcd1. SE¼SW¼NW¼. Owner, U.S. Geol. Survey. Depth, 10 ft. Alluvium. Highest, +0.80, Dec. 13, 1960; lowest, 1.78, Jan. 19, 1961. Records: 1958-61.

Jan	19	1.78	May 2	1.64	Well destroyed.
Feb.	22	1.20			

12N-22W-26bcd2. SE¼SW¼NW¼. Owner, U.S. Geol. Survey. Depth, 16 ft. Alluvium. Highest, 2.90, Aug. 7, 1958; lowest, 10.42, Mar. 3, 1959. Records: 1958-62.

Jan.	19	6.04	May 2	7.06	Well destroyed.
Feb.	22	6.58			

1961				1962			
Mar. 29	9.16	Sept. 21	10.64	Mar. 15	9.39	Oct. 1	11.35
June 26	8.80	Dec. 27	9.17	June 18	9.00		

16N-12W-26baa1. NE¼NE¼NW¼. Owner, U.S. Geol. Survey. Depth, 21 ft. Alluvium.
Highest, 8.80, Mar. 21, 1960; lowest, 13.85, Nov. 3, 1957. Records: 1956-62.

Mar. 29	3.73	Sept. 21	5.32	Mar. 15	3.56	Oct. 1	6.19
June 26	3.28	Dec. 27	3.56	June 18	3.62		

16N-12W-27aba1. NE¼NW¼NE¼. Owner, U.S. Geol. Survey. Depth, 17 ft. Alluvium.
Highest, 2.84, Mar. 21, 1960; lowest, 7.90, Feb. 21, 1957. Records: 1956-62.

Mar. 29	8.25	Sept. 21	9.65	Mar. 15	8.22	Oct. 1	10.03
June 26	7.57	Dec. 27	8.35	June 18	8.05		

16N-12W-27aba2. NE¼NW¼NE¼. Owner, U.S. Geol. Survey. Depth, 17 ft. Alluvium.
Highest, 7.28, Mar. 21, 1960; lowest, 11.78, Feb. 21, 1957. Records: 1956-62.

Mar. 29	5.29	Sept. 21	6.29	Mar. 15	5.47	Oct. 1	6.65
June 26	5.05	Dec. 27	5.78	June 18	4.23		

16N-12W-27abb1. NW¼NW¼NE¼. Owner, U.S. Geol. Survey. Depth, 17 ft. Alluvium.
Highest, 2.62, Sept. 13, 1958; lowest, 8.57, Dec. 28, 1956. Records: 1956-62.

Mar. 29	4.36	Sept. 21	6.19	Mar. 15	5.28	Oct. 1	6.34
June 26	5.56	Dec. 27	6.18	June 18	3.44		

16N-12W-27abb2. NW¼NW¼NE¼. Owner, U.S. Geol. Survey. Depth, 16 ft. Alluvium.
Highest, 3.19, Mar. 11, 1957; lowest, 7.77, Sept. 22, 1956. Records: 1956-62.

Mar. 29	5.53	Sept. 21	8.15	Mar. 15	7.27	Oct. 1	8.43
June 26	7.32	Dec. 27	7.75	June 18	5.70		

16N-12W-27abb3. NW¼NW¼NE¼. Owner, U.S. Geol. Survey. Depth, 18 ft. Alluvium.
Highest, 5.07, Sept. 13, 1958; lowest, 9.89, Sept. 22, 1956. Records: 1956-62.

Mar. 29	3.12	Sept. 21	4.68	Mar. 15	3.92	Oct. 1	5.00
June 26	4.00	Dec. 27	4.39	June 18	2.75		

16N-12W-27baa1. NE¼NE¼NW¼. Owner, U.S. Geol. Survey. Depth, 18 ft. Alluvium.
Highest, 2.14, Sept. 13, 1958; lowest, 6.29, Feb. 21, 1957. Records: 1956-62.

Mar. 29	12.20	Sept. 21	12.98	Mar. 15	12.20	Oct. 1	13.35
June 26	10.64	Dec. 27	12.36	June 18	12.08		

16N-12W-27bab1. NW¼NE¼NW¼. Owner, U.S. Geol. Survey. Depth, 21 ft. Alluvium.
Highest, 10.64, June 26, 1961; lowest, 16.25, Mar. 4, 1957. Records: 1956-62.

1961			1962		

6S-9E-20bbb1. NW¼NW¼NW¼. Owner, city of Durant. Depth, 663 ft. Trinity Sand. Highest, 53.03, May 28, 1962; lowest, 72.00, Dec. 1, 1953. Records: 1953-62.

May	8	57.93	Dec.	4	53.19	May	28	53.03

9N-12W-3aaa1. NE¼NE¼NE¼. Owner, Caddo Electric Cooperative. Lsd, 1,522. Rush Springs Sandstone. Well equipped with water-level recorder. Highest, 65.95, July 10, 1962; lowest, 72.20, Sept. 5, 1961. Records: 1957-62.

Day	1961 Jan.	1961 July	Day	1962 Jan.	1962 June
5	67.53	.....	5	.....	65.98
10	67.51	.....	10	.....	66.03
15	67.49	.....	15	.....	65.95
20	67.51	.....	20	66.52	.....
25	67.71	.....	25	66.27	.....
eom	67.39	.....	eom	66.45	.....
	Feb.	Aug.		Feb.	Aug.
5	67.45	.....	5	66.35	.....
10	67.39	.....	10	66.44	67.27
15	67.50	.....	15	.....	67.46
20	.....	.....	20	.....	67.46
25	.....	70.95	25	66.41	67.71
eom	.....	71.19	eom	66.52	67.92
	Mar.	Sept.		Mar.	Sept.
5	.....	72.20	5	66.47	66.63
10	.....	71.84	10	66.08	66.62
15	67.22	.....	15	66.37	66.48
20	67.38	.....	20	66.00	66.61
25	67.27	.....	25	66.36	66.44
eom	67.34	.....	eom	66.24	.....
	Apr.	Oct.		Apr.	Oct.
5	67.43	.....	5	66.17	.....
10	67.34	70.84h	10	66.13	66.48
15	67.55	70.81	15	66.35	66.35
20	67.23	70.81	20	66.01	.....
25	67.39	71.08	25	66.18	.....
eom	67.13	70.71	eom	66.35	.....
	May	Nov.		May	Nov.
5	67.12	72.17	5	66.19	66.23
10	67.33	71.67	10	66.15	66.06
15	67.36	71.69	15	66.23	66.12
20	67.32	71.77	20	66.23	66.24
25	67.19	71.66	25	66.26	66.39
eom	67.27	.....	eom	66.16	66.26
	June	Dec.		June	Dec.
5	67.23	.....	5	66.14	66.29
10	.....	.....	10	66.17	66.31
15	.....	.....	15	66.03	66.04
20	.....	.....	20	66.18	66.14
25	.....	.....	25	66.17	66.28
eom	.....	.....	eom	66.13	65.98

1961						1962					

5N-12W-26acd1. SE¼SW¼NE¼. Owner, Hal Reddy. Depth, 20 ft. Rush Springs Sandstone. Highest, 9.58, May 28, 1954; lowest, 12.72, Oct. 14. 1960. Records: 1954-62.

Jan.	17	11.63	Aug.	9	11.67	Jan.	16	10.58	Oct.	10	11.55
Mar.	13	11.47	Sept.	11	11.97	Feb.	21	10.67	Nov.	4	11.51
Apr.	10	11.19	Oct.	11	10.94	June	27	9.74	Dec.	3	11.24
May	12	11.28	Nov.	7	10.76	July	27	10.47			
June	14	11.34	Dec.	7	10.54	Sept.	2	11.58			

9N-13W-22ddc1. SW¼SE¼SE¼. Owner, C. A. McLemore. Depth, 28 ft. Rush Springs Sandstone. Highest, 4.39, June 5, 1957; lowest, 11.79, Sept. 15, 1956. Records: 1951-62.

Jan.	17	6.92	July	14	7.00	Jan.	16	6.79	July	27	7.77
Mar.	13	6.84	Aug.	9	7.08	Feb.	21	6.94	Sept.	2	8.43
Apr.	10	6.63	Nov.	7	6.66	May	4	7.47	Oct.	7	7.56
May	12	7.68	Dec.	7	6.40	May	30	7.87	Nov.	4	7.89
June	14	7.90				June	30	7.14	Dec.	3	7.86

9N-13W-28ddd1. SE¼SE¼SE¼. Owner, U.S. Geol. Survey. Depth, 335 ft. Lsd, 1,484. Rush Springs Sandstone. Highest, 34.71, Aug. 13, 1949; lowest, 41.43, Jan. 12, 1957. Records: 1948-62.

Jan.	17	38.61	Aug.	9	38.39	Jan.	16	38.02	Sept.	2	38.16
Mar.	13	38.78	Sept.	11	38.27	Feb.	21	37.89	Oct.	7	38.19
Apr.	10	38.80	Oct.	11	38.14	May	4	38.07	Nov.	4	39.10
May	12	38.84	Nov.	7	38.09	May	30	38.11	Dec.	3	38.16
June	14	39.08	Dec.	7	37.95	June	30	38.10			
July	14	38.63				July	27	38.07			

10N-12W-23bb2. NW¼NW¼. Owner, Smith Grape Nursery. Depth, 288 ft. Rush Springs Sandstone. Highest, 60.35, Dec. 16, 1955; lowest, 69.91, Jan. 9, 1959. Records: 1955-62.

Jan.	17	65.10	Aug.	9	65.70	Jan.	16	65.12	Sept.	2	67.13
Mar.	13	64.61	Sept.	11	66.59	Feb.	21	64.32	Oct.	7	67.31
Apr.	10	64.27	Oct.	11	66.23	May	4	64.91	Nov.	4	66.89
May	12	65.12	Dec.	7	65.46	May	30	65.28	Dec.	3	66.58
June	14	65.37				June	26	64.92			

10N-13W-22da1. NE¼SE¼. Depth, 36 ft. Lsd, 1,505. Rush Springs Sandstone. Highest, 33.50, Sept. 2, 1962; lowest, 32.86, Dec. 3, 1962. Records: 1962.

May	4	33.01	Sept.	2	33.50
May	30	33.02	Oct.	3	33.22
June	30	33.06	Nov.	4	32.99
July	27	33.07	Dec.	3	32.86

1961				1962			

12N-5W-5da1. NE¼SE¼. Owner, U.S. Geol. Survey. Depth, 17 ft. Lsd, 1,266. Highest, 1,47, Apr. 30, 1957; lowest 9.97, Sept. 22, 1956. Records: 1956-62.

Mar. 29	4.79	Dec. 27	4.36	Mar. 15	4.80	Oct. 1	4.44
June 26	4.67			June 18	2.37		

12N-5W-5da2. NE¼SE¼. Owner, U.S. Geol. Survey. Depth, 25 ft. Lsd, 1,263. Alluvium. Highest, 1.67, June 18, 1962; lowest, 10.89, Feb. 20, 1957. Records: 1956-62.

Mar. 29	5.46	Sept. 21	3.63	Mar. 15	4.60	Oct. 1	5.44
June 26	5.88	Dec. 27	5.56	June 18	1.67		

12N-5W-5da3. NE¼SE¼. Owner, U.S. Geol. Survey. Depth, 25 ft. Lsd, 1,264. Alluvium. Highest, 3.93, Apr. 30, 1957; lowest, 11.71, Sept. 22, 1956. Records: 1956-62.

Mar. 29	6.80	Sept. 21	4.37	Mar. 15	7.13	Oct. 1	8.00
June 26	6.23	Dec. 27	6.77	June 18	4.36		

12N-5W-5da4. NE¼SE¼. Owner, U.S. Geol. Survey. Depth, 22 ft. Lsd, 1,265. Alluvium. Highest, 5.47, Apr. 30, 1957; lowest, 12.90, Sept. 22, 1956. Records: 1956-62.

Mar. 29	8.05	Sept. 21	6.00	Mar. 15	7.44	Oct. 1	9.32
June 26	8.15	Dec. 27	8.28	June 18	5.72		

12N-5W-5da5. NE¼SE¼. Owner, U.S. Geol. Survey. Depth, 26 ft. Lsd, 1,264. Alluvium. Highest, 5.07, Apr. 30, 1957; lowest, 12.38, Sept. 22, 1956. Records: 1956-62.

Mar. 29	8.72	Sept. 21	4.88	Mar. 15	7.60	Oct. 1	7.47
June 26	7.45	Dec. 27	7.18	June 18	5.23		

12N-5W-5dd1. SE¼SE¼. Owner, U.S. Geol. Survey. Depth, 19 ft. Lsd, 1,264. Alluvium. Highest, 5.23, June 18, 1962; lowest, 12.94, Sept. 22, 1956. Records: 1956-62.

Mar. 29	7.10	Sept. 21	5.64	Mar. 15	5.55	Oct. 1	8.47
June 26	7.28	Dec. 27	8.44	June 18	5.23		

12N-5W-5dd2. SE¼SE¼. Owner, U.S. Geol. Survey. Depth, 18 ft. Lsd, 1,264. Highest, 5.37, June 18, 1962; lowest, 12.12, Sept. 22, 1956. Records: 1956-62.

Mar. 29	7.18	Sept. 21	5.54	Mar. 15	7.63	Oct. 1	8.61
June 26	7.40	Dec. 27	7.76	June 18	5.37		

1961				1962			

12N-5W-5dd3. SE¼SE¼. Owner, U.S. Geol. Survey. Depth, 17 ft. Lsd, 1,263. Alluvium. Highest, 4.25, Apr. 30, 1957; lowest, 11.07, Sept. 22, 1956. Records: 1956-62.

Mar. 29	6.09	Sept. 21	4.47	Mar. 15	6.53	Oct. 1	7.50
June 26	6.25	Dec. 27	6.80	June 18	4.27		

12N-5W-5dd4. SE¼SE¼. Owner, U.S. Geol. Survey. Depth, 19 ft. Lsd, 1,264. Alluvium. Highest, 4.43, Sept. 21, 1961; lowest, 11.93, Sept. 22, 1956. Records: 1956-62.

Mar. 29	6.07	Sept. 21	4.43	Mar. 15	7.22	Oct. 1	8.26
June 26	5.52	Dec. 27	7.00	June 18	5.05		

12N-5W-5dd5. SE¼SE¼. Owner, U.S. Geol. Survey. Depth, 18 ft. Lsd, 1,263 Alluvium. Highest, 2.23, Sept. 21, 1961; lowest, 11.57, Sept. 22, 1956. Records: 1956-62.

Mar. 29	5.94	Sept. 21	2.23	Mar. 15	6.30
June 26	4.40	Dec. 27	6.02		

12N-5W-8aaa1. NE¼NE¼NE¼. Owner, U.S. Geol. Survey. Depth, 18 ft. Lsd, 1,266. Highest, +2e, June 18, 1962; lowest, 5.78, Sept. 22, 1956. Records: 1956-62.

June 26	0.57			Mar. 15	0.50	Oct. 1	1.48
Sept. 21	+1e			June 18	+2e		

12N-5W-8ddd1. SE¼SE¼SE¼. Owner, U.S. Geol. Survey. Depth, 12 ft. Lsd, 1,266. Alluvium. Highest, 1.29, Sept. 21, 1961; lowest, dry at 12, Nov. 28, 1954.

Mar. 29	3.98	Sept. 21	1.29	Mar. 15	2.93	Oct. 1	4.05
May 29	5.61	Dec. 27	4.40	June 18	1.88		
June 26	5.55						

12N-6W-3add1. SE¼SE¼NE¼. Owner, Ryba Jocob. Depth, 34 ft. Lsd, 1,296. Rocks of Permian age. Highest, 15.89, June 9, 1960; lowest, 24.85, Nov. 5, 1941. Records: 1941-55; 1957-62.

May 29	17.90	June 18	16.42

12N-6W-12cbb1. NW¼NW¼SW¼. Owner, U.S. Geol. Survey. Depth, 25 ft. Lsd, 1,275. Alluvium. Highest, 5.16, May 31, 1951; lowest 13.85, Oct. 26, 1954. Records: 1942-55; 1957-62.

May 29	7.63	June 18	6.18

1961						1962			

12N-11W-1acc1. SW¼SW¼NE¼. Owner, U.S. Geol. Survey. Depth, 15 ft. Alluvium. Highest, 7.28, Dec. 22, 1960; lowest, 11.50, Nov. 1, 1956. Records: 1955-61.

Jan.	18	7.39	May	18	8.45
Mar.	15	7.59	June	22	8.52
Apr.	20	7.70	July	13	8.66

Measurement discontinued.

13N-8W-22bba1. NE¼NW¼NW¼. Owner, U.S. Geol. Survey. Depth, 8 ft. Lad, 1,334. Alluvium. Highest, 1.92, Nov. 13, 1955; lowest, 8.10, Oct. 21, 1954. Records: 1942-55; 1957-62.

May	29	5.44	June	18	3.34

13N-9W-8aaa1. NE¼NE¼NE¼. Owner, U.S. Geol. Survey. Depth, 19 ft. Lsd, 1,385. Alluvium. Highest, 4.68, June 23, 1942; lowest, 15.83, Oct. 27, 1953. Records: 1942-55; 1957-62.

May	29	12.52	June	18	11.10

14N-9W-36ccc1. SW¼SW¼SW¼. Owner, U.S. Geol. Survey. Depth, 10 ft. Lsd, 1,364. Alluvium. Highest, 4.21, May 23, 1949; lowest, 14.36, Oct. 27, 1954. Records: 1942-47; 1949-55; 1957-62.

May	29	7.76	June	18	5.55

14N-10W-14ccc1. SW¼SW¼SW¼. Owner, U.S. Geol. Survey. Depth, 15 ft. Lsd, 1,401. Alluvium. Highest, 0.01, June 10, 1960; lowest, 9.54, Oct. 27, 1954. Records: 1942-55; 1957-61.

May	20	1.65			

Measurement discontinued

14N-10W-16bba1. NE¼NW¼NW¼. Owner, U.S. Geol. Survey. Depth, 12 ft. Lsd, 1,414. Alluvium. Highest, 2.59, June 18, 1962; lowest, 8.50, Feb. 21, 1957. Records: 1956-62.

Mar.	29	3.40	Sept.	21	4.40	Mar.	15	4.16	Oct.	1	5.63
June	26	3.45	Dec.	27	4.43	June	18	2.59			

14N-10W-16bba2. NE¼NW¼NW¼. Owner, U.S. Geol. Survey. Depth, 12 ft. Lsd, 1,415. Alluvium. Highest, 3.27, June 18, 1962; lowest, 9.58, Feb. 21, 1957. Records: 1956-62.

Mar.	29	4.22	Sept.	21	5.58	Mar.	15	5.15	Oct.	1	6.54
June	26	5.95	Dec.	27	5.52	June	18	3.27			

1961				1962			

14N-10W-16bba3. NE¼NW¼NW¼. Owner, U.S. Geol. Survey. Depth, 17 ft. Lsd, 1,415. Alluvium. Highest, 3.24, June 18, 1962; lowest, 9.50, Feb. 21, 1957. Records: 1956-62.

Mar. 29	4.25	Sept. 21	5.38	Mar. 15	4.96	Oct. 1	6.30
June 26	4.88			June 18	3.24		

14N-10W-16bba4. NE¼NW¼NW¼. Owner, U.S. Geol. Survey. Depth, 17 ft. Lsd, 1,414. Alluvium. Highest, 0.54, June 18, 1962; lowest 6.50, Feb. 21, 1957. Records: 1956-62.

Mar. 29	1.15	Sept. 21	1.85	Mar. 15	1.86	Oct. 2	3.18
June 26	1.46	Dec. 27	2.10	June 18	0.54		

14N-10W-16bba5. NE¼NW¼NW¼. Owner, U.S. Geol. Survey. Depth, 42 ft. Lsd, 1,419. Alluvium. Highest, 7.10, Mar. 21, 1960; lowest, 13.76, Feb. 21, 1957. Records: 1956-62.

Mar. 29	8.60	Sept. 21	7.22	Mar. 15	8.10	Oct. 1	9.30
June 26	8.46	Dec. 27	7.69	June 18	7.80		

14N-10W-16baa1. NE¼NE¼NW¼. Owner, U.S. Geol. Survey. Depth, 41 ft. Lsd, 1,415. Alluvium. Highest, 3.41, Mar. 21, 1960; lowest, 10.17, Mar. 5, 1957. Records: 1956-62.

Mar. 29	4.78	Sept. 21	3.77	Mar. 15	5.15	Oct. 1	5.30
June 26	5.10	Dec. 27	3.70	June 18	4.04		

14N-10W-17aaa1. NE¼NE¼NE¼. Owner, U.S. Geol. Survey. Depth, 12 ft. Lsd, 1,413. Alluvium. Highest, 0.44, July 9, 1951; lowest, 9.13, Dec. 15, 1939. Records: 1939-62.

Mar. 29	2.45	Sept. 21	2.65	Mar. 15	3.01	Oct. 1	4.53
May 29	3.52	Dec. 27	3.05	June 18	1.97		

14N-10W-17abb1. NW¼NW¼NE¼. Owner, U.S. Geol. Survey. Depth, 21 ft. Lsd, 1,413. Alluvium. Highest, 0.75, Sept. 22, 1956; lowest, 4.13, Apr. 30, 1957. Records: 1956-62.

Mar. 29	3.39	Sept. 21	3.16	Mar. 15	2.38	Oct. 1	3.05
June 26	3.30	Dec. 27	2.12	June 18	2.29		

14N-10W-17aab1. NW¼NE¼NE¼. Owner, U.S. Geol. Survey. Depth, 17 ft. Lsd, 1,411. Alluvium. Highest, +0.29, Mar. 21, 1960; lowest, 5.10, Feb. 21, 1957. Records: 1956-62.

Mar. 29	0.99	Sept. 21	0.00	Mar. 15	1.28	Oct. 1	3.15
June 26	0.00	Dec. 27	.90	June 18	1.18		

14N-10W-25bbb1. NW¼NW¼NW¼. Owner, U.S. Geol. Survey. Depth, 25 ft. Lsd, 1,406. Alluvium. Highest, 11.46, June 23, 1942; lowest, 22.10, May 12, 1959. Records: 1942-55; 1957-62.

May	29	14.89		June	18	13.67	

6S-14E-18ab1. NW¼SE¼. Owner, city of Boswell. Depth, 370 ft. Washita Group. Well equipped with water-level recorder. Highest, 22.60, May 5, 1962; lowest, 26.06, Feb. 5, 1961. Records: 1961-62.

Day	1961 Jan.	1961 July	Day	1962 Jan.	1962 July
5	.....	.....	5	.....	22.77
10	.....	.....	10	25.26	22.99
15	.....	.....	15	24.77	23.35
20	.....	.....	20	24.61	23.47
25	.....	24.43	25	24.25	23.64
eom	.....	25.41	eom	24.26	23.75
	Feb.	Aug.		Feb.	Aug.
5	26.06	25.37	5	24.26	23.82
10	25.91	25.52	10	24.14	24.00
15	25.92	25.61	15	23.99	24.19
20	25.81	25.65	20	24.08	24.31
25	25.69	25.63	25	24.00	.....
eom	25.74	.....	eom	24.36	.....
	Mar.	Sept.		Mar.	Sept.
5	.....	.....	5	24.17	.....
10	25.54	.....	10	23.71	25.60
15	25.62	.....	15	23.09	25.40
20	25.40	.....	20	23.63	25.48
25	25.44	.....	25	24.15	25.37
eom	25.40	.....	eom	24.04	25.31
	Apr.	Oct.		Apr.	Oct.
5	25.33	.....	5	23.81	25.32
10	25.10h	.....	10	23.34	24.51
15	25.20	26.11	15	23.55	24.45
20	24.97	25.87	20	23.26	24.30
25	25.06	26.16	25	23.24	24.62
eom	24.98	25.88	eom	22.68	24.25
	May	Nov.		May	Nov.
5	24.92	26.27	5	22.60	24.12
10	25.13	25.76	10	22.63	23.96
15	24.91	26.05	15	22.95	23.98
20	24.87	26.03	20	23.08	24.06
25	24.72	25.85	25	23.28	24.36
eom	24.86	25.57	eom	23.59	24.06
	June	Dec.		June	Dec.
5	24.85	.....	5	23.45	23.90
10	.....	25.40	10	23.29	23.62
15	.....	25.12	15	22.85	23.20
20	.....	25.00	20	22.82	23.39
25	.....	24.64	25	22.89	23.57
eom	.....	24.79	eom	22.86	23.33

1961			1962	

6S-17E-21bd1. SE¼NW¼. Owner, city of Hugo. Depth, 494 ft. Trinity Group. Well equipped with water-level recorder. Highest, 153.07, Apr. 25, 1961; lowest, 165.03, Aug. 15, 1961. Records: 1960-62.

Day	Jan.	July	Day	Jan.
5	155.69	162.50	5	158.54
10	155.44	163.47	10	158.47
15	155.17	160.28	15	.....
20	155.40	160.17	20	.....
25	155.56	161.04	25	.....
eom	156.44	162.23	eom	.....
	Feb.	Aug.		Feb.
5	156.43	163.00	5	158.46
10	156.52	164.38	10	158.25
15	156.32	165.03	15	157.93
20	156.08	162.22	20	157 29
25	155.96	160.66	25	156.50
eom	155.79	162.70	eom	156.16
	Mar.	Sept.		Mar.
5	155.69	161.39	5	156.47
10	155.66	162.37	10	156.60
15	155.47	161.39	15	156.67
20	155.28	159.39	20	156.10
25	155.93	159.63	25	156.40
eom	155.31	.....	eom	156.17
	Apr.	Oct.		Apr.
5	154.58	.....	5	155.55
10	154.33	.....	10	155.60
15	153.90	158.19	15	155.46
20	153.99	158.21	20	156.34
25	155.07	157.21	25	156.36
eom	155.94	157.16	eom	156.19
	May	Nov.		May
5	155.91	157.61	5	156.78
10	155.55	157.48	10	157.24
15	156.15	156.82	15	157.79
20	156.94	156.51	20	159.99
25	156.93	156.14	25	161.40
eom	157.15	156.18	eom	160.66
	June	Dec.		June
5	158.60	.....	5	158.84
10	158.80	.....	10	158.91
15	158.81	158.34	15	159.05
20	158.46	158.90	20	159.17
25	159.36	158.93	Measurement discontinued	
eom	160.14	158.64		

1961		1962			

1N-1E-22ccc1. SW¼SW¼SW¼. Owner, Mrs. Decker. Depth, 149 ft. Ogallala Formation. Highest, 121.89, June 18, 1958; lowest, 126.42, May 28, 1957. Records: 1956-61.

June	5	123.42	No measurements in 1962		

1N-3E-23aaa1. NE¼NE¼NE¼. Owner, Eva J. Young. Depth, 114 ft. Lsd, 4,323. Ogallala Formation. Highest, 88.58, June 5, 1961; lowest, 95.83, Nov. 4, 1938. Records: 1938; 1956-62.

June	5	88.58	May	15	89.03

1N-5E-34ccb1. NW¼SW¼SW¼. Owner, L. J. Stafford. Depth, 245 ft. Terrace deposit.Highest 72.32, May 25, 1950; lowest 98.38, Nov. 13, 1956. Records: 1950; 1953; 1956-58; 1961.

June	5	90.81	No measurements in 1962		

2N-5E-6ada1. NE¼SE¼NE¼. Owner, Charles Ricks. Depth, 222 ft. Dakota Sandstone. Highest, 100.40, May 15, 1962; lowest, 103.50, Mar. 31, 1953: Records: 1953; 1956-62.

June	5	101.66	May	15	100.40

3N-5E-11bbc1. SW¼NW¼NW¼. Owner, O. A. Showalter. Depth, 154 ft. Lsd, 4,156. Ogallala Formation. Highest, 145.95, Apr. 23, 1943; lowest, 148.28, May 20, 1960. Records: 1938-62.

June	5	147.76	May	15	151.11	Oct. 5	150.18
			July	31	150.81	Nov. 19	150.09
			Aug.	17	150.66	Dec. 13	150.24
			Sept.	11	150.28		

3N-5E-14aba1. NE¼NW¼NE¼. Owner, Atchison, Topeka, and Santa Fe Railroad. Depth, 153 ft. Lsd, 4,144, Ogallala Formation. Highest, 133.06, May 22, 1952; lowest, 139.10, June 8, 1954. Records: 1938-44; 1946-52; 1954-62.

Jan.	3	136.20	Aug.	4	135.86	Jan.	5	135.61	
Feb.	17	136.17	Sept.	26	135.93	Feb.	12	135.74	
Apr.	7	136.13	Oct.	9	136.12	Mar.	5	135.67	
June	5	136.12	Nov.	22	135.78	May	15	137.19	
July	11	136.23	Dec.	7	135.69				

1961						1962					

3N-7E-9bbb1. NW¼NW¼NW¼. Owner, E. J. Behrendt. Depth, 61 ft. Lsd, 3,954. Ogallala Formation. Highest, 31.97, Feb. 15, 1960; lowest, 46.96, Jan. 23, 1941. Records: 1938-62.

Jan.	3	33.38	Aug.	4	32.81	Jan.	5	33.53	Aug.	17	33.07
Feb.	17	33.18	Sept.	26	33.76	Feb.	12	33.33	Sept.	11	33.03
Apr.	7	33.25	Oct.	9	33.53	Mar.	5	32.89	Oct.	5	33.08
June	5	33.03	Nov.	22	33.48	Apr.	25	33.32	Nov.	19	33.01
July	11	32.38	Dec.	7	34.08	May	15	33.44	Dec.	13	33.01
						July	31	33.18			

3N-9E-13cbb1. NW¼NW¼SW¼. Owner, Roy Hanes. Ogallala Formation. Highest, 177.28, May 19, 1960; lowest, 178.00, July 13, 1956. Records: 1956-62.

June	5	177.36	May	15	177.46

4N-5E-15aad1. SE¼NE¼NE¼. Owner, Roy and Bethal Bohn. Depth, 126 ft. Ogallala Formation. Highest, 98.82, Nov. 7, 1956; lowest, 130.74, May 20, 1959. Records: 1956-62.

No measurements in 1961			May	15	102.57

4N-8E-26ccc1. SW¼SW¼SW¼. Owner, B. J. Wiggins. Depth, 213 ft. Lsd, 3,879. Ogallala Formation. Highest, 134.37, Apr. 5, 1955; lowest, 138.45, June 12, 1956. Records: 1938-62.

Jan.	3	135.44	Aug.	4	134.78	Jan.	5	135.23	Aug.	17	134.95
Feb.	17	134.95	Sept.	26	135.43	Feb.	12	135.14	Sept.	11	134.88
Apr.	7	135.03	Oct.	9	135.61	Mar.	5	136.03	Oct.	5	134.88
June	5	135.12	Nov.	22	135.74	Apr.	25	134.63	Nov.	19	134.72
July	11	134.96	Dec.	7	135.77	May	15	134.62	Dec.	13	134.72
						July	31	134.81			

5N-5E-9aac1. SW¼NE¼NE¼. Owner, U.S. Geol. Survey. Depth, 10 ft. Alluvium. Highest, 4.11, Apr. 26, 1947; lowest, 6.28, July 13, 1956. Records: 1946-62.

June	5	5.14	May	15	6.76

5N-9E-5aaa1. NE¼NE¼NE¼. Owner, J. N. Vanleer. Depth, 227 ft. Lsd, 3,747. Ogallala Formation. Highest, 178.97, May 15, 1962; lowest, 184.90, Aug. 18, 1938. Records: 1938; 1956-62.

June	5	179.13	May	15	178.97

6N-5E-21bab1. NW¼NE¼NW¼. Owner, A. S. Parker. Depth, 74 ft. Morrison Formation. Highest, 27.59, May 11, 1945; lowest, 37.46, Nov. 7, 1956. Records: 1938-62.

June	5	37.04	May	15	37.34

1961						1962					

6N-1W-6da1. NE¼SE¼. Owner, U.S. Geol. Survey. Depth, 23 ft. Lsd, 1,034. Alluvium. Highest, 1.77, Jan. 25, 1960; lowest, 12.17, Sept. 26, 1956. Records: 1947-62.

Jan.	26	6.22	Aug.	28	6.94	Jan.	22	6.08	Aug.	21	8.55
Feb.	25	5.51	Sept.	25	6.62	Feb.	23	6.03	Sept.	21	7.38
Mar.	25	5.63	Oct.	25	6.88	Mar.	23	5.89	Oct.	22	8.23
Apr.	26	5.73	Nov.	20	5.52	Apr.	23	6.35	Nov.	21	7.65
May	26	5.86	Dec.	21	5.65	May	21	6.59	Dec.	20	7.04
June	26	5.23				June	22	5.75			
July	25	4.71				July	23	7.65			

8N-2W-9bba1. NE¼NW¼NW¼. Owner, U.S. Navy. Depth, 545 ft. Garber Sandstone. Highest, 166.04, Mar. 25, 1952; lowest, 188.62, July 25, 1957. Records: 1951-52; 1955-62.

Jan.	26	174.30	July	25	174.14	Jan.	22	174.79	July	23	184.61
Feb.	25	173.36	Aug.	28	175.79	Feb.	23	175.06	Aug.	21	187.99
Mar.	25	173.12	Sept.	25	175.91	Mar.	23	175.68	Sept.	21	182.68
Apr.	26	172.60	Oct.	25	175.53	Apr.	23	175.82	Oct.	22	183.82
May	26	172.82	Nov.	20	175.19	May	21	177.29	Nov.	21	184.53
June	26	172.96	Dec.	21	174.70	June	22	177.79	Dec.	20	183.47

8N-2W-27acd1. SE¼SW¼NE¼. Owner, town of Noble. Depth, 461 ft. Garber Sandstone. Highest, 165.43, July 7, 1943; lowest, 221.74, Dec. 23, 1948. Records: 1943-62.

Jan	26	183.17	Aug.	28	187.00	Jan.	22	184.31	Aug.	21	192.57
Feb.	27	183.24	Sept.	25	186.29	Feb.	23	183.47	Sept.	21	189.94
Apr.	26	183.87	Oct.	25	184.95	Mar.	23	184.57	Oct.	22	188.78
June	26	184.10	Nov.	20	184.30	Apr.	23	181.30	Nov.	21	187.38
July	25	185.68	Dec.	21	183.99	May	21	185.43	Dec.	20	187.32
						June	22	184.25			

9N-3W-29aaa1. NE¼NE¼NE¼. Owner, U.S. Geol. Survey. Depth, 12 ft. Alluvium. Highest, 0.57, June 23, 1958; lowest 11.60, Jan. 24, 1957. Records: 1946.62.

Jan.	26	5.49	July	25	5.77	Jan.	22	4.75	July	23	6.19
Feb.	25	5.34	Aug.	28	7.13	Feb.	23	4.89	Aug.	21	7.19
Mar.	25	5.41	Sept.	25	6.09	Mar.	23	5.01	Sept.	21	7.73
Apr.	25	5.70	Oct.	25	5.00	Apr.	23	5.79	Oct.	22	8.20
May	26	6.27	Nov.	20	5.62	May	21	6.28	Nov.	21	8.43
June	26	6.56	Dec.	21	4.71	June	22	4.88	Dec.	20	8.39

9N-1W-30dbb1. NW¼NW¼SE¼. Owner, F. W. Goldsby. Original depth 400 ft. Casing collapsed 214 ft below lsd, Aug.-Sept. 1962. Lsd, 1,174. Garber Sandstone. Well equipped with water level recorder. Highest, 132.94, 1942; lowest, 156.42, 1956. Records: 1944-62.

Day	1961 Jan.	1961 July	Day	1962 Jan.	1962 July
5	151.25	150.14	5	152.37	.....
10	151.20	150.35	10	152.57	.....
15	151.21	150.38	15	152.31	.....
20	151.28	150.54	20	152.23	.....
25	151.18	150.50h	25	.....	.....
eom	150.82	150.68	eom	.....	.....
	Feb.	Aug.		Feb.	Aug.
5	150.71	150.92	5	.....	.....
10	150.47	151.37	10	.....	.....
15	150.41	151.78	15	.....	.....
20	150.35	152.21	20	.....	.....
25	150.38	152.50	25	.....	.....
eom	150.55	152.66	eom	.....	.....
	Mar.	Sept.		Mar.	Sept.
5	150.50	152.88	5	.....	.....
10	150.75	152.96	10	.....	.....
15	150.67	153.06	15	153.11	.....
20	150.72	152.88	20	.....	.....
25	150.60	153.16	25	153.27	40.72
eom	150.30	153.21	eom	153.34	40.60
	Apr.	Oct.		Apr.	Oct.
5	150.19	153.24	5	153.32	40.40
10	150.01	153.23	10	153.24	40.47
15	150.05	153.37	15	153.46	40.33
20	149.84	.....	20	153.30	40.27
25	149.82	153.52	25	153.39	40.69
eom	149.88	153.33	eom	153.42	40.30
	May	Nov.		May	Nov.
5	150.00	153.40	5	153.47	40.37
10	150.21	152.98	10	153.59	40.19
15	150.25	152.75	15	153.89	40.26
20	150.22	152.77	20	154.10	40.43
25	150.03	152.58	25	154.43	40.70
eom	150.10	152.47	eom	154.73	40.61
	June	Dec.		June	Dec.
5	150.12	152.39	5	154.77	40.80
10	150.12	152.29	10	154.71	40.57
15	150.18	152.36	15	154.58	40.27
20	149.99	152.38	20	154.48	40.50
25	150.06	152.36	25	.....	40.76
eom	150.11	152.56	eom	.....	.....

1961

1962

1N-10E-9b1. NW¼. Owner, H. Cradduck. Depth, 8 ft. Boggy Formation. Highest, 0.33, Dec. 5, 1961; lowest, 7.17, Mar. 23, 1956. Records: 1955-62.

May	9	0.78
Dec.	5	.33

Measurement discontinued.

No measurements in 1962

1N-10E-9d1. SE¼. Owner, Buster Carter. Depth, 15 ft. Boggy Formation. Highest, +0.08, Dec. 5, 1961; lowest, 13.32, Sept. 15, 1955. Records: 1955; 1957-62.

May	9	1.17		May	29	0.71	Nov. 6 1.41
Dec.	5	+0.08		Oct.	9	2.26	Dec. 4 0.10

CUSTER COUNTY

12N-14W-31bbb1. NW¼NW¼NW¼. Owner, Casper Amen. Depth, 145 ft. Rush Springs Sandstone. Highest, 118.71, Dec. 3, 1962; lowest, 126.35, Aug. 11, 1956. Records: 1951-62.

Jan.	17	121.78	Aug.	9	121.08	Jan.	16	120.70	Oct.	3	118.84
Mar.	13	121.38	Sept.	11	120.90	Feb.	21	119.36	Nov.	4	118.90
Apr.	10	121.18	Oct.	11	120.98	May	30	119.41	Dec.	3	118.71
May	12	120.83	Nov.	7	121.30	June	30	119.45			
June	14	120.00	Dec.	7	120.56	July	26	119.44			
July	14	121.00				Sept.	11	119.12			

12N-17W-13acc1. SW¼SW¼NE¼. Owner, U.S. Geol. Survey. Depth, 19 ft. Alluvium. Highest, 8.64, Oct. 21, 1959; lowest, 14.72, Apr. 19, 1955. Records: 1954-61.

Jan.	18	12.07	May	18	12.60
Mar.	15	12.21	June	22	12.10
Apr.	20	12.28	July	13	12.59

No measurements in 1962.

1961 1962

16N-24W-10adc1. SW¼SE¼NE¼. Owner, U.S. Geol. Survey. Depth, 24 ft. Alluvium. Highest, 9.48, June 9, 1954; lowest, 16.70, Oct. 13, 1953. Records: 1953-58; 1960-61.

Aug. 2 12.94
Measurement discontinued.

18N-24W-22bbb1. NW¼NW¼NW¼. Owner, Patricia E. Robertson. Depth, 47 ft. Ogallala Formation. Highest, 36.88, Oct. 29, 1949; lowest, 40.73, June 16, 1958. Records: 1946-55; 1957-58; 1961-62.

Aug.	2	39.70	Feb.	1	39.23	May 24	39.37
Sept.	27	39.42	Mar.	8	39.20	June 26	39.49
Oct.	25	39.47	Mar.	29	39.41	Aug. 29	39.31
Nov.	15	39.13	Apr.	26	39.26	Sept. 20	39.37
Dec.	6	39.30	Measurement discontinued.				

19N-25W-10ccc1. SW¼SW¼SW¼. Owner, J. Q. Tefertiller. Depth, 42 ft. Ogallala Formation. Highest, 22.16, Aug. 29, 1962; lowest, 29.96, June 10, 1955. Records: 1946-55; 1957-58; 1960-62.

Aug.	2	24.17	Nov.	15	23.80	Feb.	1	23.82	May	24	23.94
Sept.	27	23.95	Dec.	6	23.84	Mar.	8	23.78	June	26	23.23
Oct.	25	24.06				Mar.	29	23.86	Aug.	29	22.16
						Apr.	26	23.88	Sept.	20	22.20

21N-25W-16baa1. NE¼NE¼NW¼. Owner, U.S. Geol. Survey. Depth, 13 ft. Alluvium. Highest, 5.99, July 14, 1951; lowest, 9.72, June 16, 1958. Records: 1951-55; 1957-58; 1960-61.

Aug. 2 9.07
Measurement discontinued.

1961 1962

21N-8W-6dcc1. SE¼SW¼SW¼. Owner, R. Munkres. Depth, 11 ft. Lsd, 1,208. Alluvium. Highest, 2.17, Feb. 26, 1962; lowest, 9.09, Aug. 30, 1956. Records: 1950-62.

Jan.	19	3.50	Aug.	4	5.43	Feb.	26	2.17	Nov.	16	5.32
Feb.	17	3.06	Sept.	1	4.64	Mar	26	3.38			
Apr.	21	3.36	Sept.	29	4.10	May	28	5.02			
May	19	4.50	Oct.	27	3.58	June	29	4.78			
June	23	4.68	Nov.	17	2.17	Oct.	2	4.94			
July	17	4.89	Dec.	13	2.60	Oct.	19	5.18			

21N-8W-31adc1. SW¼SE¼NE¼. Owner, Paul Gregory. Depth, 27 ft. Lsd, 1,246. Terrace deposit. Highest, 7.05, Apr. 24, 1958; lowest, 18.21, Oct. 28, 1954. Records: 1950-62.

Jan.	19	11.04	Aug.	4	10.96	Jan.	29	10.26	Oct.	2	12.93
Feb.	17	10.82	Sept.	1	12.63	Feb.	26	9.97	Oct.	19	13.00
Mar.	17	11.00	Sept.	29	12.65	Mar.	26	10.11	Nov.	16	12.89
Apr.	21	10.25	Oct.	27	12.06	Apr.	30	9.76			
June	19	9.85	Nov.	17	11.09	May	28	10.39			
July	17	10.98	Dec.	13	10.77	June	29	11.06			
July	23	10.44				Aug.	24	12.69			

23N-7W-18aaa1. NE¼NE¼NE¼. Owner, city of Enid. Depth, 72 ft. Terrace deposit. Highest, 55.62, Oct. 29, 1951; lowest, 63.39, Oct. 31, 1957. Records: 1950-61.

Jan.	18	58.33	May	18	57.75
Feb.	16	58.30	June	22	57.41
Mar.	16	58.26	July	13	57.35
Apr.	20	58.07	Aug.	3	57.30

Measurement discontinued.

23N-7W-26aab1. NW¼NE¼NE¼. Owner, city of Enid. Depth, 50 ft. Terrace deposit. Highest, 27.94, Nov. 15, 1962; lowest, 35,46, Nov. 20, 1957. Records: 1950-62.

Jan.	18	30.65	Aug.	3	30.08	Jan.	29	29.25	Oct.	1	28.02
Feb.	16	30.59	Sept.	1	30.00	Feb.	26	29.09	Nov.	15	27.94
Mar.	15	30.56	Sept.	29	29.93	Mar.	26	28.82			
Apr.	20	30.48	Oct.	26	29.86	Apr.	30	28.65			
May	18	30.44	Nov.	16	29.78	May	28	28.50			
June	22	30.33	Dec.	7	29.65	June	29	28.35			
July	13	30.22				Aug.	23	28.13			

1961				1962			

4N-7W-29acc1. SW¼SW¼NE¼. Owner, W. W. Mobley. Depth, 21 ft. Rush Springs Sandstone. Highest, 4.70, May 22, 1957; lowest, 18.90, Aug. 21, 1947. Records: 1946-62.

Jan. 26	12.42	July 25	12.47	Jan. 22	10.05	July 20	8.67
Feb. 25	12.21	Aug. 28	12.38	Feb. 23	9.76	Aug. 21	11.38
Mar. 25	12.22	Sept. 25	11.70	Mar. 23	10.00	Sept. 21	9.77
Apr. 26	11.55	Oct. 25	11.60	Apr. 23	10.24	Oct. 22	11.67
May 26	11.63	Nov. 20	11.10	May 21	11.13	Nov. 21	11.04
June 26	12.08	Dec. 21	10.14	June 22	7.47	Dec. 20	10.49

4N-8W-33bbb1. NW¼NW¼NW¼. Owner, U.S. Geol. Survey. Depth, 254 ft. Rush Springs Sandstone. Well equipped with water-level recorder. Highest, 79.28, Dec. 15, 1962; lowest, 84.72, 1957. Records: 1948-62.

Day	1961 Jan.	1961 July	Day	1962 Jan.	1962 July
5	81.12	81.41	5	80.90	80.12
10	81.17	81.46	10	81.07	80.09
15	81.16	81.44	15	80.84	80.14
20	81.29	81.44	20	80.70	80.01
25	81.29	81.54	25	.....	80.01
eom	81.16	81.51	eom	.....	79.95
	Feb.	Aug.		Feb.	Aug.
5	81.29	81.55	5	.....	79.82
10	81.20	81.52	10	.....	79.84
15	81.26	81.53	15	.....	79.85
20	81.24	81.54	20	.....	79.77
25	81.20	81.45	25	.....	79.80
eom	81.28	81.43	eom	.....	79.72
	Mar.	Sept.		Mar.	Sept.
5	81.30	81.54	5	.....	79.72
10	81.22	81.44	10	.....	79.74
15	81.18	81.60	15	.....	79.68
20	81.26	81.30	20	.....	79.69
25	81.25	81.38	25	.....	79.61
eom	81.35	81.38	eom	.....	79.56
	Apr.	Oct.		Apr.	Oct.
5	81.43	81.31	5	.....	79.48
10	81.33	81.26	10	.....	79.50
15	81.49	81.12	15	.....	79.62
20	81.32	81.21	20	.....	79.52
25	81.41	81.39	25	.....	79.68
eom	81.28	81.14	eom	.....	79.52
	May	Nov.		May	Nov.
5	81.52	81.34	5	.....	79.47
10	81.27	80.96	10	80.35h	79.36
15	81.37	81.21	15	80.43	79.44
20	81.32	81.09	20	80.39	79.34
25	81.45	81.03	25	80.40	79.44
eom	.....	80.92	eom	80.38	79.33
	June	Dec.		June	Dec.
5	.....	81.01	5	80.43	70.45
10	.....	81.06	10	80.39	79.50
15	.....	80.97	15	80.27	79.28
20	.....	80.96	20	80.30	79.35
25	.....	80.77	25	80.23	79.45
eom	81.43	80.97	eom	80.19	79.38

1961						1962			
Jan.	15	26.02	Aug.	1	26.48	Jan.	31	27.07	Oct.	3	28.75
Feb.	13	25.86	Sept.	6	26.93	May	7	27.21	Oct.	16	30.52
Mar.	14	25.66	Sept.	26	27.16	Mar.	28	27.09	Nov.	13	30.00
Apr.	19	24.95	Oct.	24	27.34	Apr.	25	27.38			
May	17	25.10	Nov.	14	27.34	May	23	27.57			
June	21	25.33	Dec.	5	27.18	June	27	28.04			
July	12	25.75				Aug.	28	29.22			

3N-23W-3aaa1. NE¼NE¼NE¼. Owner, Claude Robertson. Depth, 94 ft. Dog Creek Shale or Blaine Gypsum. Highest, 24.95, Apr. 19, 1961; lowest, 30.68, Jan. 15, 1960. Records: 1960-62.

Jan.	15	26.02	Aug.	1	26.48	Jan.	31	27.07	Oct.	3	28.75
Feb.	13	25.86	Sept.	6	26.93	May	7	27.21	Oct.	16	30.52
Mar.	14	25.66	Sept.	26	27.16	Mar.	28	27.09	Nov.	13	30.00
Apr.	19	24.95	Oct.	24	27.34	Apr.	25	27.38			
May	17	25.10	Nov.	14	27.34	May	23	27.57			
June	21	25.33	Dec.	5	27.18	June	27	28.04			
July	12	25.75				Aug.	28	29.22			

3N-23W-16daa1. NE¼NE¼SE¼. Owner, Ivan Owen. Depth, 105 ft. Lsd, 1,457. Dog Creek Shale or Blaine Gypsum. Highest, 17.53, June 25, 1957; lowest, 66.47, Apr. 20, 1955. Records: 1950-62.

Jan.	16	24.63	Aug.	1	34.54	Jan.	31	32.30	Oct.	16	37.55
Feb.	13	24.37	Sept.	6	41.06	Mar.	7	33.58	Nov.	13	32.40
Mar.	14	24.05	Sept.	26	36.43	Mar.	28	44.58			
Apr.	19	23.07	Oct.	24	37.25	Apr.	25	44.17			
May	17	25.64	Nov.	14	35.20	May	23	40.68			
June	21	24.31	Dec.	5	33.72	June	27	36.41			
July	12	30.28				Oct.	3	37.95			

4N-23W-33dab1. NW¼NE¼SE¼. Owner, Earl Thomas. Depth, 155 ft. Lsd, 1,550. Dog Creek Shale or Blaine Gypsum. Highest, 25.43, Nov. 15, 1950; lowest, 61.27, Sept. 22, 1954. Records: 1949-62.

Jan.	16	29.90	July	12	34.94	Jan.	31	31.93	Oct.	3	44.40
Feb.	13	29.60	Sept.	6	36.76	Mar.	7	31.98	Oct.	16	41.58
Mar.	14	29.40	Sept.	26	34.19	Mar.	28	40.61	Nov.	13	38.30
Apr.	19	29.20	Oct.	24	33.10	Apr.	25	41.25			
May	17	30.71	Nov.	14	32.65	May	23	39.66			
June	21	28.29	Dec.	5	32.01	June	27	35.36			

5N-23W-22aaa1. NE¼NE¼NE¼. Owner, Sid Burcham. Depth, 135 ft. Lsd, 1,754. Dog Creek Shale or Blaine Gypsum. Highest, 89.23, Nov. 15, 1950; lowest, 107.36, Oct. 29, 1957. Records: 1949-62.

Apr.	19	91.19	Sept.	26	93.92	Mar.	7	93.75	Oct.	17	93.42
May	17	96.78	Oct.	24	93.23	Apr.	25	97.60	Nov.	13	93.19
June	21	92.71	Nov.	21	92.63	May	23	98.15			
July	12	93.68	Dec.	5	92.61	June	27	94.75			
Aug.	1	93.85				Oct.	3	94.04			

5N-23W-27aca1. NE¼SW¼NE¼. Owner, W. B. Mathews. Depth, 109 ft. Lsd, 1,725. Dog Creek Shale or Blaine Gypsum. Highest, 64.82, July 29, 1953; lowest, 73.53, Jan. 22, 1957. Records: 1953; 1956-62.

Feb.	14	64.05	Sept.	6	72.17	Apr.	25	72.26	Oct.	17	65.59
May	17	71.45	Sept.	26	65.80	June	27	66.28	Nov.	13	65.29
June	21	65.05	Oct.	24	65.41	Oct.	3	65.69			

1961

1962

1N-24W-34dcc1. SW¼SW¼SE¼. Owner, Merrit and Washburn. Depth, 94 ft. Lsd, 1,443. Dog Creek Shale or Blaine Gypsum. Highest, 10.60, June 25, 1957; lowest, 18.10, Aug. 28, 1956. Records: 1953-62.

Jan.	17	14.80	Aug.	1	14.39	Jan.	31	14.42	Oct.	3	14.57
Feb.	14	16.30	Sept.	6	14.94	Mar.	7	14.35	Oct.	16	14.48
Mar.	14	16.31	Sept.	25	13.78	Mar.	28	17.18	Nov.	13	14.22
Apr.	19	12.15	Oct.	24	14.78	Apr.	25	15.99			
May	17	12.57	Nov.	21	14.49	May	23	15.65			
June	21	12.93	Dec.	5	14.43	June	27	14.04			
July	12	14.18				Aug.	28	16.13			

1N-25W-13dcc1. SW¼SW¼SE¼. Owner, E. H. Mefford. Depth, 120 ft. Dog Creek Shale or Blaine Gypsum. Highest, 17.30, June 5, 1957; lowest, 45.71, Aug. 16, 1960. Records: 1952; 1954-62.

Jan.	17	19.49	Sept.	6	23.99	Jan.	31	22.51	Aug.	28	38.69
Feb.	14	19.86	Sept.	26	21.18	Mar.	7	24.88	Oct.	3	25.35
Apr.	19	20.23	Oct.	24	24.50	Mar.	28	26.95	Oct.	16	26.50
May	17	20.91	Nov.	21	21.19	Apr.	25	28.64	Nov.	13	25.09
June	21	19.60	Dec.	5	22.41	May	23	29.00			
July	12	20.74				June	27	23.60			

1N-25W-35ddb1. NW¼SE¼SE¼. Owner, Fred Cope. Depth, 72 ft. Lsd, 1,485. Dog Creek Shale or Blaine Gypsum. Highest, 9.55, June 25, 1957; lowest, 32.32, Aug. 28, 1956. Records: 1951-62.

Jan.	17	12.36	Sept.	6	21.14	Jan.	31	15.73	Oct.	16	18.37
Feb.	14	12.23	Sept.	26	17.73	Mar.	7	16.00	Nov.	13	17.58
Mar.	14	12.13	Oct.	24	17.33	Apr.	25	22.86			
Apr.	19	12.40	Nov.	21	16.57	May	23	19.91			
May	17	13.08	Dec.	5	16.36	June	27	15.60			
June	21	12.68				Oct.	3	17.92			

1N-26W-5aab1. NW¼NE¼NE¼. Owner, Ortho H. Morris. Depth, 125 ft. Dog Creek Shale or Blaine Gypsum. Highest, 68.45, June 25, 1957; lowest, 91.37, Sept. 23, 1954. Records: 1953-62.

Jan.	17	70.25	Apr.	19	71.73
Feb.	14	71.43	May	17	70.22
Mar.	14	71.75	June	21	73.86

Measurement discontinued.

1961						1962					

2N-24W-30dcc1. SW¼SW¼SE¼. Owner, Bob Moran. Depth, 1,950 ft. Dog Creek Shale or Blaine Gypsum. Highest, 50.82, Apr. 19, 1961; lowest, 117.43, Sept. 18, 1956. Records: 1953-62.

Jan.	17	57.95	Sept.	6	71.63	Jan.	31	70.72			
Feb.	14	56.99	Sept.	26	71.00	Mar.	7	76.96			
Mar.	14	53.05	Oct.	24	72.68	Mar.	28	61.00			
Apr.	19	50.82	Nov.	21	77.35	Oct.	16	97.20			
June	21	57.92	Dec.	5	73.10	Nov.	13	96.04			

2N-25W-8daa1. NE¼NE¼SE¼. Owner, Shellie Moore. Depth, 120 ft. Dog Creek Shale or Blaine Gypsum. Highest, 28.00e, Apr. 16, 1953; lowest, 72.74, Sept. 18, 1956. Records: 1953-62.

Jan.	17	29.89	Aug.	1	32.80	Jan.	31	37.57	Oct.	16	45.95
Feb.	14	29.28	Sept.	26	44.28	Mar.	7	39.27	Nov.	13	41.40
Mar.	14	28.91	Oct.	24	42.76	Oct.	4	49.45			
Apr.	19	30.19	Nov.	21	39.49						
June	21	32.76	Dec.	5	38.33						
July	12	30.38									

2N-25W-21dac1. SW¼NE¼SE¼. Owner, Oscar Bryant. Depth, 112 ft. Lsd, 1,567. Dog Creek Shale or Blaine Gypsum. Highest, 20.27, Nov. 16, 1950; lowest, 50.07, Aug. 28, 1956. Records: 1950; 1952-62.

Jan.	17	28.77	June	21	28.30	Jan.	31	31.16	Oct.	4	34.61
Feb.	14	28.49	Sept.	26	31.53	Mar.	7	32.26	Oct.	16	34.10
Mar.	14	28.28	Oct.	24	31.67	Mar.	28	40.25			
Apr.	19	27.90	Nov.	21	31.53	Apr.	25	39.22			
May	17	29.01	Dec.	5	31.61	May	23	35.36			

2N-25W-23abb1. NW¼NW¼NE¼. Owner, H. L. Wilder. Depth, 130 ft. Lsd, 1,556. Dog Creek Shale or Blaine Gypsum. Highest, 18.27, Aug. 12, 1952; lowest, 69.95, Aug. 28, 1956. Records: 1952; 1954-62.

Feb.	14	20.40	Aug.	1	25.43	Jan.	31	26.67	Aug.	28	63.91
Mar.	14	20.26	Sept.	6	31.22	Mar.	7	25.33	Oct.	4	55.67
Apr.	19	22.96	Oct.	24	27.60	Mar.	28	31.71	Oct.	16	40.91
May	17	26.44	Nov.	21	28.55	Apr.	25	42.52	Nov.	13	35.91
June	21	21.35	Dec.	5	27.65	May	23	42.25			
July	12	21.13				June	27	34.00			

2N-25W-29bbb1. NW¼NW¼NW¼. Owner, R. Y. Darnell. Depth, 129 ft. Dog Creek Shale or Blaine Gypsum. Highest, 26.12, June 25, 1957; lowest, 40.45, May 24, 1955. Records: 1953-62.

No measurments in 1961 or 1962.

1961						1962			

2N-26W-5bcc1. SW¼SW¼NW¼. Owner, Ward Bros. Depth, 149 ft. Dog Creek Shale or Blaine Gypsum. Highest, 20.24, Nov. 16, 1950; lowest, 53.82, Mar. 28, 1962. Records: 1950-62.

Jan.	17	34.50	June	21	35.09	Mar.	7	39.36	June 27 44.66
Feb.	14	32.56	July	12	42.34	Mar.	28	53.82	
Mar.	14	31.76	Oct.	24	44.21				
Apr.	19	43.98	Nov.	14	41.14				
May	17	43.40	Dec.	5	39.05				

2N-26W-15aa1. NE¼NE¼. Owner, A. L. Prock. Depth, 130 ft. Lsd, 1,672. Dog Creek Shale or Blaine Gypsum. Highest, 61.45, Oct. 25, 1960; lowest, 84.05, Apr. 4, 1957. Records: 1954-62.

Jan.	17	68.50	July	12	68.65	Jan.	31	76.27	Aug. 28 80.29
Feb.	14	69.47	Sept.	6	73.59	Mar.	7	76.57	Oct. 7 78.08
Mar.	14	69.77	Sept.	26	74.05	Mar.	28	76.87	Oct. 16 79.25
Apr.	19	69.09	Oct.	24	74.65	Apr.	25	68.55	Nov. 13 59.25
May	17	69.81	Nov.	14	75.14	May	23	79.61	
June	21	70.19	Dec.	5	75.51	June	27	76.69	

2N-26W-27bcb1. NW¼SW¼NW¼. Owner, Herschel Vaughan. Depth, 150 ft. Lsd, 1,450. Dog Creek Shale or Blaine Gypsum. Highest, 34.49, Nov. 15, 1960; lowest, 62.78, Aug. 25, 1954. Records: 1954-62.

Jan.	17	34.64	July	12	41.48	Jan.	31	42.24	Oct. 4 48.36
Feb.	14	34.65	Sept.	6	48.12	Mar.	7	42.94	Oct. 16 47.68
Mar.	14	35.09	Sept.	26	45.02	May	23	50.71	Nov. 13 46.49
Apr.	19	35.40	Nov.	14	47.68	June	27	45.21	
May	17	38.08	Dec.	5	44.82				
June	21	37.20							

2N-26W-31abc1. N¼ENW¼NE¼. Owner, T. C. Gilbert. Depth, 150 ft. Dog Creek Shale or Blaine Gypsum. Highest, 27.90, June 23, 1955; lowest, 47.00, Sept. 18, 1956. Records: 1950; 1952-62.

Jan.	17	30.35	July	12	30.60	Jan.	31	31.58	Oct. 4 32.45
Feb.	14	30.33	Sept.	6	33.36	Mar.	7	31.64	Oct. 16 32.26
Mar.	14	30.34	Sept.	26	32.45	Mar.	28	32.34	Nov. 13 27.40
Apr.	19	31.16	Oct.	24	34.98	May	23	32.91	
May	17	30.96	Nov.	21	33.62	June	27	31.23	
June	21	30.59	Dec.	5	32.23	Aug.	28	43.13	

1961						1962			

2N-27W-1ccb1. NW¼SW¼SW¼. Owner, Ted*Clay Whorton. Depth, 150 ft. Lsd, 1,661. Dog Creek Shale or Blaine Gypsum. Highest, 34.13, May 1952; Lowest, 71.44, Oct. 30, 1956. Records: 1952; 1954-62.

Jan.	17	47.79	Sept.	6	68.64	Jan.	31	51.30	Oct.	4	68.30
Feb.	14	46.82	Sept.	26	59.88	May	23	65.17	Nov.	13	60.97
Mar.	14	45.94	Oct.	24	58.41	June	27	60.57			
May	17	49.10	Nov.	14	56.42						
June	21	47.71	Dec.	5	53.94						
July	12	54.58									

3N-24W-5dad1. SE¼NE¼SE¼. Floyd Roberts. Depth, 155 ft. Dog Creek Shale or Blaine Gypsum. Highest, 64.27, June 21, 1961; lowest, 89.63, Feb. 26, 1957. Records: 1953-62.

Jan.	17	66.37	Sept.	26	69.64	No measurement in 1962.					
Feb.	14	65.90	Oct.	24	84.61						
Mar.	14	65.14	Nov.	21	72.24						
June	21	64.27	Dec.	5	72.63						
Sept.	6	71.75									

3N-24W-29aaa1. NE¼NE¼NE¼. Owner, Ballard Hill. Depth, 169 ft. Dog Creek Shale or Blaine Gypsum. Highest, 15.47, May 28, 1957; lowest, 79.59, Sept. 18, 1956. Records: 1954-62.

Jan.	17	52.05	Aug.	1	53.14	Jan.	31	59.53	Oct.	3	70.83
Feb.	14	52.50	Sept.	6	59.32	Mar.	7	60.34	Oct.	16	70.72
Mar.	14	47.40	Sept.	26	59.86	Mar.	28	61.42	Nov.	13	68.27
Apr.	19	16.33	Oct.	24	59.87	Apr.	25	63.80			
May	17	18.00	Nov.	14	59.55	May	23	64.65			
June	21	43.53	Dec.	5	59.45	June	27	64.84			
July	12	46.15				Aug.	28	69.59			

3N-25W-32bbb1. NW¼NW¼NW¼. Owner, Wilcy Moore. Depth, 160 ft. Lsd, 1,623. Dog Creek Shale or Blaine Gypsum. Highest, 29.69, Jan. 17, 1961; lowest, 62.70, Sept. 22, 1959. Records: 1953-62.

Jan.	17	29.69	Sept.	6	42.38	Jan.	31	32.47	Oct.	4	54.02
Feb.	14	28.92	Sept.	26	38.42	Mar.	7	33.10	Oct.	16	50.50
Mar.	14	30.25	Oct.	24	39.02	Mar.	28	38.33	Nov.	13	45.20
June	21	29.46	Nov.	14	35.98	May	23	49.63			
July	12	33.14	Dec.	5	34.61	June	27	40.67			

1961						1962					

3N-26W-12cdd1. SE¼SE¼SW¼. Owner, Chester Caswell. Depth, 140 ft. Dog Creek Shale or Blaine Gypsum. Highest, 42.87, Feb. 14, 1961; lowest, 87.06, Apr. 25, 1962. Records: 1954-62.

Jan.	17	42.97	Aug.	1	58.02c	Jan.	31	65.98	Oct.	4	81.70
Feb.	14	42.87	Sept.	6	71.66	Mar.	7	72.52c	Oct.	17	73.40
Mar.	14	43.00	Sept.	26	57.16	Mar.	28	64.27	Nov.	13	66.95
Apr.	19	47.58	Oct.	24	57.40	Apr.	25	87.06			
May	17	47.08	Nov.	14	53.49	May	23	65.73			
June	21	43.94	Dec.	5	57.28	June	27	61.04			
July	12	43.73									

3N-26W-35bab1. NW¼NE¼NW¼. Owner, Charles Merida. D pth, 125 ft. Dog Creek Shale or Blaine Gypsum. Highest, 39.17, Mar. 14, 1961; lowest, 90.24, Sept. 18, 1956. Records: 1953-62.

Jan.	17	40.40	July	12	42.87	Jan.	31	45.01	Aug.	28	74.75
Feb.	14	39.63	Sept.	6	62.93	Mar.	7	45.66	Oct.	4	72.87
Mar.	14	39.17	Sept.	26	55.73	Mar.	28	55.79	Oct.	17	68.18
Apr.	19	40.72	Oct.	24	53.12	Apr.	25	66.38	Nov.	13	60.16
May	17	45.22	Nov.	14	50.58	May	23	61.59			
June	21	41.27	Dec.	5	48.16	June	27.	54.90			

1S-24W-2abb1. NW¼NW¼NE¼. Lsd, 1,452. Dog Creek Shale or Blaine Gypsum. Highest, 26.73, June 27, 1962; lowest, 39.30, Jan. 26, 1960. Records: 1957-62

No measurement in 1961.

1962					
May	23	32.88	Oct.	3	31.41
June	27	26.73	Oct.	17	30.25
Aug.	28	32.40	Nov.	13	30.90

1S-25W-13ccc1. SW¼SW¼SW¼. Owner, Winfred Black. Depth, 130 ft. Dog Creek Shale or Blaine Gypsum. Highest, 69.12, Nov. 19, 1957; lowest, 81.45, Aug. 28, 1956. Records: 1953-62.

1961						1962					
Jan.	17	71.08	July	12	70.67	Jan.	31	72.26	Oct.	3	72.55
Feb.	14	71.06	Sept.	6	73.13	May	23	74.87	Oct.	17	73.48
Mar.	14	71.06	Sept.	26	72.38	June	27	74.14	Nov.	13	73.14
Apr.	19	70.89	Oct.	24	72.33	Aug.	28	74.08			
May	17	70.92	Nov.	21	71.04						
June	21	70.42	Dec.	5	72.24						

1N-23W-10bbb1. NW¼NW¼NW¼. Owner, John G. Alexander. Depth, 100 ft. Lsd, 1,431. Dog Creek Shale or Blaine Gypsum. Highest, 13.52, Oct. 25, 1955; lowest, 31.49, Jan. 6, 1955. Records: 1953-62.

1961						1962					
Apr.	19	18.00	Sept.	26	21.94	Jan.	31	20.23	June	27	21.58
May	17	18.80	Oct.	24	20.70	Mar.	7	22.88	Aug.	28	20.23
June	21	19.77	Nov.	21	21.37	Mar.	28	23.26	Oct.	3	18.95
Aug.	1	20.80	Dec.	5	20.77	Apr.	25	23.72	Oct.	17	19.18
Sept.	6	19.52				May	23	24.03	Nov.	13	20.10

2N-22W-8dda1. NE¼SE¼SE¼. Owner, Pearl Forgey. Depth, 75 ft. Blaine Gypsum. Highest, 28.96, June 24, 1957; lowest, 48.15, Sept. 17, 1956. Records: 1953-62.

1961						1962					
Jan.	16	30.29	Sept.	6	37.60	Jan.	31	31.82	June	27	33.29
Feb	13	30.20	Sept.	26	35.97	Mar.	7	31.53	Oct.	3	37.07
Mar.	13	30.09	Oct.	23	43.65	Mar.	28	33.01	Oct.	17	36.15
Apr.	19	29.66	Nov.	21	33.19	May	23	35.64	Nov.	13	34.13
May	16	30.54	Dec.	5	32.80						
June	20	29.41									

2N-23W-10dbb1. NW¼NW¼SE¼. Owner, J. D. Ballard. Depth, 135 ft. Blaine Gypsum. Highest, 8.66, June 25, 1957; lowest, 24.10, Feb. 5, 1952. Records: 1952-62.

1961						1962					
Jan.	17	12.68	July	12	20.60	Jan.	31	17.19	June	27	17.48
Feb.	14	14.86	Sept.	6	19.30	Mar.	7	17.07	Oct.	3	16.65
Mar.	14	15.07	Sept.	26	18.53	Mar.	28	17.80	Oct.	17	16.59
Apr.	19	14.50	Oct.	24	18.02	May	23	18.65	Nov.	13	16.48
May	17	15.91	Nov.	21	17.25						
June	21	15.87	Dec.	5	17.19						

1961 1962

2N-23W-12bbd1. SE¼NW¼NW¼. Owner, Ivan Owen. Depth, 90 ft. Blaine Gypsum. Highest, 18.39, June 25, 1957; lowest, 63.21, Aug. 24, 1954. Records: 1948-62.

Jan.	16	25.40	Aug.	1	34.75	Jan.	31	27.46	Aug.	28	32.53
Feb.	13	25.55	Sept.	6	36.71	Apr.	25	38.81	Oct.	3	28.80
Mar.	14	25.42	Sept.	26	33.20	May	23	33.73	Nov.	13	26.80
Apr.	19	24.98	Oct.	24	31.32	June	27	29.77			
May	17	27.72	Nov.	21	28.20						
June	21	27.35	Dec.	5	28.47						
July	12	29.29									

2N-23W-21aaa1. NE¼NE¼NE¼. Owner, Johnnie Kenmore. Lsd, 1,424. Dog Creek Shale or Blaine Gypsum. Highest, 11.65, June 25, 1957; lowest, 29.81, Dec. 28, 1956. Records: 1956-62.

Jan.	17	17.57	Aug.	1	22.75	Jan.	31	21.82	June	27	22.77
Feb.	14	18.05	Sept.	6	25.37	Mar.	7	22.09	Aug.	28	26.67
Mar.	14	18.30	Sept.	26	24.26	Mar.	28	22.34	Oct.	3	22.45
Apr.	19	18.25	Oct.	24	23.20	Apr.	25	25.08	Oct.	17	21.93
May	17	19.98	Nov.	21	21.31	May	23	25.11	Nov.	13	21.88
June	21	19.75	Dec.	5	21.47						
July	12	23.27									

3N-22W-32cbb1. NW¼NW¼SW¼. Owner, Wilbur Leonard. Depth, 122 ft. Lsd, 1,437. Blaine Gypsum. Highest, 31.12, Apr. 16, 1949; lowest, 56.24, Sept. 17, 1956. Records: 1949; 1954-62.

Jan.	16	41.34	July	31	41.80	Jan.	31	40.52	Aug.	28	45.31
Feb.	13	38.90	Sept.	6	44.66	Mar.	7	40.45	Oct.	3	42.43
Mar.	13	38.74	Sept.	26	43.39	Mar.	28	42.29	Oct.	17	41.40
Apr.	19	38.15	Oct.	23	34.23	May	23	42.70	Nov.	13	40.66
May	16	39.99	Nov.	21	41.45	June	27	41.40			
June	20	39.35	Dec.	5	41.25						
July	11	41.43									

3N-23W-19bbb1. NW¼NW¼NW¼. Owner, I. V. Owen. Depth, 170 ft. Lsd, 1,531. Dog Creek Shale or Blaine Gypsum. Highest, 74.80, June 25, 1957; lowest, 95.63, Sept. 18, 1956. Records: 1953-62.

Jan.	16	76.22	June	21	77.10	Jan.	31	82.93	Oct.	3	86.99
Feb.	13	75.70	July	12	78.98	Mar.	28	88.98	Oct.	17	86.11
Mar.	14	75.41	Sept.	26	83.88	May	23	87.50	Nov.	13	83.98
Apr.	19	74.82	Oct.	24	85.18	June	27	84.89			
May	17	76.98	Nov.	21	82.25						

1961						1962					

3N-23W-27aad1. SE¼NE¼NE¼. Owner, Buddy Bryant. Depth, 127 ft. Lsd, 1,460. Dog Creek Shale or Blaine Gypsum. Highest, 21.67, Jan. 27, 1959; lowest, 67.79, Sept. 22, 1954. Records: 1948-62.

Jan.	16	34.38	Sept.	6	48.54	Jan.	31	40.14	Aug.	28	59.44
Mar.	14	33.97	Sept.	26	45.51	Mar.	7	39.91	Oct.	3	46.17
May	17	36.31	Nov.	14	42.02	Apr.	25	54.53	Oct.	17	42.97
June	21	35.23	Dec.	5	41.62	June	27	43.36			
July	12	36.95									

3N-23W30daa1. NE¼NE¼SE¼. Owner, Cecil Leonard. Depth, 41 ft. Lsd, 1,454. Dog Creek Shale or Blaine Gypsum. Highest, 19.42, Feb. 5, 1954; lowest, 35.80, Apr. 21, 1955. Records: 1952; 1954-62.

Jan.	16	20.62	Sept.	6	27.20	Jan.	31	21.19	June	27	25.94
Feb.	13	20.52	Sept.	26	25.91	Mar.	7	20.38	Aug.	28	34.30
Mar.	14	20.29	Oct.	24	25.53	Mar.	28	25.25	Oct.	3	24.96
Apr.	19	19.54	Nov.	21	25.02	Apr.	25	32.04	Oct.	17	25.13
May	17	20.68	Dec.	5	23.17	May	23	27.20	Nov.	13	24.75
June	21	20.68									

3N-23W-35bdb1. NW¼SE¼NW¼. Owner, Barney O. Yates. Depth, 120 ft. Dog Creek Shale or Blaine Gypsum. Highest, 19.19, June 25, 1957; lowest, 43.16, May 23, 1955. Records: 1948-61.

Feb.	13	35.10	No measurements in 1962	

	1961					1962				

26N-2E-26bdd1. SE¼SE¼NW¼. Owner, city of Ponca City. Depth, 38 ft. Alluvium. Highest, 2.30, July 1951; lowest, 29.13, Feb. 24, 1955. Records: 1948-62.

Jan.	5	11.60c	July	6	7.22c	Jan.	4	6.30c	July	5	10.50c
	12	11.66c		13	7.16c		11	5.80c		12	10.98c
	19	11.86c		20	5.62c		18	5.00c		19	11.35c
	26	12.15c		27	6.10c		25	4.90c		26	11.50c
Feb.	2	12.38c	Aug.	3	6.58c	Feb.	1	5.30c	Aug.	2	12.40c
	10	12.54c		10	7.06c		8	5.30c		9	12.90c
	16	12.64c		17	6.66c		15	5.50c		16	12.20c
	23	12.18c		24	7.32c		22	5.50c		23	12.80c
				31	7.78c					30	13.20c
Mar.	2	12.65c	Sept.	7	8.11c	Mar.	1	5.80c	Sept.	6	13.52c
	9	12.84c		14	4.02		8	6.00c		13	14.20c
	16	12.52c		21	4.70c		15	6.20c		20	14.41c
	24	13.09c		28	4.80c		22	6.30c		27	14.80c
	30	12.30c		30	4.80c		29	6.40c			
Apr.	6	12.40c	Oct.	5	3.20c	Apr.	5	6.80c	Oct.	4	14.30
	13	11.91c		12	3.80c		12	7.20c		11	13.40
	20	12.02c		19	4.40c		19	6.70c		18	12.70
	27	12.10c		26	4.50c		26	6.80c		25	12.40c
May	4	10.30	Nov.	2	2.30c	May	3	6.90c	Nov.	1	12.50c
	11	1.44		9	3.32c		10	7.15c		18	13.20c
	18	3.79c		16	2.80c		17	7.90c		15	13.30c
	25	4.39c		23	3.40c		24	8.70c		22	13.35
				30	3.90c		31	9.30c		29	13.45c
June	1	4.80c	Dec.	7	4.10c	June	7	9.60c	Dec.	6	14.58c
	8	4.97c		14	4.30c		14	9.65c		13	15.88c
	15	5.24c		21	5.20c		21	9.70c		20	16.98c
	22	5.85c		28	5.50c		28	9.95c		27	17.20c
	29	6.45c									

18N-7W-21dcd1. SE¼SW¼SE¼. Owner, H. B. Stinson. Depth, 63 ft. Lsd, 1,081. Terrace deposit. Highest, 16.73, Apr. 30, 1962; lowest, 33.25, Oct. 28, 1954. Records: 1950-62.

1961						1962			
Jan.	19	22.09	July	17	22.48	Feb.	26	19.81	Aug.	24	20.61
Feb.	17	21.90	Aug.	4	22.75	Mar.	26	19.96	Oct.	2	21.74
Mar.	17	22.04	Sept.	1	21.92	Apr.	30	16.73	Oct.	19	21.68
Apr.	21	22.20	Sept.	29	22.04	May	28	20.53	Nov.	16	21.63
May	19	22.42	Oct.	27	21.33	June	29	20.82			
June	23	22.53	Nov.	17	20.88						

19N-8W-3aab1. NW¼NE¼NE¼. Owner, John Haldik. Depth, 48 ft. Lsd, 1,227. Terrace deposit. Highest, 1.62, Jan. 29, 1962; lowest, 23.32, Sept. 21, 1956. Records: 1950-62.

Jan.	19	3.80	July	17	4.30	Jan.	29	1.62	June	29	2.99
Feb.	17	3.36	Aug.	4	5.03	Feb.	26	2.22	Aug.	24	2.93
Mar.	17	3.55	Sept.	1	5.37	Mar.	26	2.30	Oct.	2	5.36
Apr.	21	2.76	Sept.	29	4.73	Apr.	30	2.25	Oct.	19	5.55
May	19	3.57	Oct.	27	3.66	May	28	3.11	Nov.	16	5.75
June	23	3.95	Nov.	17	2.16						

19N-9W-24aad1. SE¼NE¼NE¼. Owner, U.S. Geol. Survey. Depth, 16 ft. Lsd, 1,162. Terrace deposit. Highest, +0.06, May 28, 1962; lowest, 11.78, Apr. 8, 1957. Records: 1950-62.

Jan.	19	0.60	July	17	0.96	May	28	+0.06	Oct.	2	1.69
Feb.	17	.40	Aug.	4	1.55	June	29	.10	Oct.	19	1.75
Mar.	17	.54	Sept.	1	1.47	Aug.	24	1.23	Nov.	16	1.90
Apr.	21	.59	Sept.	29	2.25						
May	19	.74	Dec.	13	2.15						
June	23	.57									

10N-24E-13bcd1. SE¼SW¼NW¼. Owner, G. W. Jones. Depth, 24 ft. Lsd, 447. Alluvium. Well equipped with water-level recorder. Highest, 14.30, June 5, 1960; lowest, 21.45, Feb. 15, 1959. Records: 1958-62.

Day	1961 Jan.	1961 July	Day	1962 Jan.	1962 July
5	19.46	16.53	5	16.56	18.78
10	19.63	16.95	10	15.78h	18.97
15	19.81	17.16	15	.....	19.11
20	19.93	16.71	20	.....	19.11
25	19.91	16.13	25	.....	19.17
eom	19.82	15.68	eom	20.65h	.....
	Feb.	Aug.		Feb.	Aug.
5	20.01	15.92	5	17.38	.....
10	20.07	16.44	10	17.15	19.25
15	19.97	16.98	15	17.27	19.31
20	19.94	16.89	20	17.46	19.46
25	19.66	16.90	25	17.57	19.65
eom	19.48	17.04	eom	17.62	19.95
	Mar.	Sept.		Mar.	Sept.
5	19.21	17.28	5	17.71	20.04
10	19.15	17.18	10	17.86	20.10
15	19.11	17.16	15	18.17	20.09
20	19.29	16.53	20	18.43	19.90
25	19.39	15.84	25	18.40	19.31
eom	18.97	16.60	eom	17.92	18.92
	Apr.	Oct.		Apr.	Oct.
5	18.50	16.57	5	17.73	18.92
10	18.12	16.77	10	18.06	18.47
15	18.00	17.05	15	18.15	18.64
20	17.83	16.68	20	18.16	18.80
25	17.86	16.05	25	18.26	18.92
eom	17.97	16.52	eom	17.93	19.04
	May	Nov.		May	Nov.
5	18.00	16.89	5	18.12	19.04
10	17.46	16.33	10	18.43	19.24
15	16.34	16.09	15	18.74	19.40
20	15.27	16.10	20	19.05	19.59h
25	14.70	15.83	25	19.32	19.81
eom	14.30	15.54	eom	19.61	19.91
	June	Dec.		June	Dec.
5	14.26	15.62	5	19.74	19.97
10	14.54	16.07	10	19.33	20.03
15	14.81	16.05	15	18.54	20.10
20	15.02	16.06	20	17.94	20.25
25	15.48	15.90	25	18.14	20.39
eom	16.06	16.27	eom	18.45	20.46

1961						1962			
Jan.	19	3.94	Aug.	4	5.39	Jan.	29	4.06	June	29	6.76
Feb.	17	3.57	Sept.	1	5.76	Feb.	26	4.65	Aug.	24	7.13
Mar.	17	4.33	Sept.	29	5.68	Mar.	26	4.95	Oct.	2	8.24
Apr.	21	4.10	Oct.	27	5.26	Apr.	30	5.53	Oct.	19	8.49
May	19	4.65	Nov.	17	3.92	May	28	6.72	Nov.	16	9.02
June	23	4.58	Dec.	13	4.35						
July	17	4.95									

20N-9W-5ccc1. SW¼SW¼SW¼. Owner, Victor I. Cooper. Depth, 53 ft. Lsd, 1,175.
Terrace deposit. Highest, 2.43, Oct. 20, 1960; lowest, 15.05, Nov. 1, 1956.
Records: 1950-62.

20N-9W-26baa1. NE¼NE¼NW¼. Owner, L. M. Sturgeon. Depth, 51 ft. Lsd, 1,214.
Terrace deposit. Highest, 1.29, July 25, 1960; lowest, 25.83, Nov. 29, 1954.
Records: 1950-62.

Jan.	19	7.07	Aug.	4	4.05	Jan.	29	3.90	June	29	3.18
Feb.	17	7.98	Sept.	1	1.65	Feb.	26	4.47	Aug.	24	4.21
Mar.	17	8.63	Sept.	29	3.11	Mar.	26	4.97	Oct.	2	5.00
Apr.	21	2.06	Oct.	27	2.90	Apr.	30	5.25	Oct.	19	5.30
May	19	1.86	Nov.	17	1.75	May	28	5.62	Nov.	16	5.78
June	25	1.65	Dec.	13	2.72						
July	17	3.13									

21N-9W-20ddd1. SE¼SE¼SE¼. Owner, Ned Woods. Depth, 50 ft. Lsd, 1,235.
Terrace deposit. Highest, 12.41, Apr. 30, 1962; lowest, 33.07, Mar. 1, 1957.
Records: 1950-62.

Jan	19	12.86	July	17	12.65	Jan.	29	12.41	June	29	13.00
Feb.	17	12.53	Sept.	1	13.21	Feb.	26	12.45	Aug.	24	12.95
Mar.	17	12.56	Sept.	29	13.13	Mar.	26	12.42	Oct.	2	13.12
Apr.	21	12.61	Oct.	27	12.99	Apr.	30	12.41	Oct.	19	12.89
May	19	12.58	Nov.	17	12.78	May	28	14.40	Nov.	16	13.11
June	23	12.55	Dec.	13	12.49						

21N-10W-21ddd1. SE¼SE¼SE¼. Owner, W. H. Winfree. Depth, 40 ft. Lsd, 1,214.
Terrace deposit. Highest, 16.69, Apr. 30, 1962; lowest, 23.51, Feb. 23, 1956.
Records: 1950-62.

Jan.	19	18.27	Aug.	4	17.74	Jan.	29	16.73	June	29	17.17
Feb.	17	18.11	Sept.	1	18.80	Feb.	26	16.74	Aug.	24	17.75
Mar.	17	18.17	Sept.	29	17.92	Mar.	26	16.77	Oct.	2	17.99
Apr.	21	18.03	Oct.	27	17.77	Apr.	30	16.69	Oct.	19	17.97
May	19	17.66	Nov.	17	17.52	May	28	16.79	Nov.	16	18.12
June	23	17.49	Dec.	13	17.00						
July	17	17.49									

1961						1962					

22N-11W-32baa1. NE¼NE¼NW¼. Owner, city of Fairview. Depth, 36 ft. Lsd, 1,265. Terrace deposit. Highest, 18.04, Jan. 28, 1960; lowest, 25.96, Apr. 26, 1956. Records: 1950-62.

Jan.	18	20.44	Aug.	3	20.31	Jan.	29	20.05	June	29	20.11
Feb.	16	21.73	Aug.	31	19.75	Feb.	26	20.00	Aug.	23	19.87
Mar.	16	22.74	Sept.	28	20.38	Mar.	26	20.32	Oct.	1	19.77
Apr.	20	22.60	Oct.	26	20.90	Apr.	30	20.19	Oct.	19	19.79
May	18	22.86	Nov.	16	20.66	May	28	20.07	Nov.	15	19.74
June	22	21.83	Dec.	7	20.36						
July	13	20.70									

6S-21E-27aaa1. NE¼NE¼NE¼. Owner, Marvin McDougal. Depth, 120 ft. Paluxy Sand. Well equipped with water-level recorder in Sept. 1962. Highest, 69.78, May 18, 1960; lowest, 74.38, Apr. 6, 1957. Records: 1954-62.

1961				1962			
May 8	70.40	Dec. 4	71.15	May 28	69.85	Nov. 5	70.70
				Sept. 11	70.50	10	70.76
				15	70.52	15	70.84
				20	70.69	20	70.86
				25	70.58	25	71.07
				eom	70.54	eom	70.92
				Oct. 5	70.57	Dec. 5	70.86
				10	70.75	10	70.96
				15	70.80	15	70.78
				20	70.74	20	70.78
				25	71.09	25	71.02
				eom	70.72	eom	71.02

6S-25E-27dd1. SE¼SE¼. Owner, Mr. Brantly. Depth, 26 ft. Lsd, 443. Trinity Sand. Highest, 9.35, Dec. 5, 1962; lowest, 12.44, Sept. 11, 1962. Records: 1962.

				Sept. 11	12.44	Dec. 5	9.35

7S-21E-22aaa1. NE¼NE¼NE¼. Owner, U.S. Geol. Survey. Depth, 322 ft. Lsd, 435. Paluxy Sand. Highest, 13.94, Oct. 3, 1951; lowest, 22.09, Nov. 8, 1962.

May 8	19.76	Dec. 4	20.26	May 28	21.15	Nov. 8	22.09
				Sept. 11	21.91	Dec. 4	22.08
				Oct. 11	21.98		

7S-22E-25cda1. NE¼SE¼SW¼. Owner, Odel J. Parish. Depth, 41 ft. Lsd, 455. Woodbine Formation. Highest, 2.14, Apr. 5, 1957; lowest, 13.91, Dec. 29, 1953. Records: 1950-62.

May 8	4.28	Dec. 4	7.14	May 28	6.28	Nov. 8	9.65
				Sept. 11	9.54	Dec. 4	8.85
				Oct. 11	9.88		

7S-23E-28dcd1. SE¼SW¼SE¼. Owner, Lone Star Grocery Co. Depth, 19 ft. Lsd, 481. Woodbine Formation. Highest, 0.00, April 24, 1952; lowest, 11.84, Sept. 26, 1954. Records: 1950-62.

May 8	0.14	Dec. 4	0.00	May 28	2.13	Nov. 18	0.19
				Sept. 11	1.51	Dec. 4	.06
				Oct. 11	1.45		

1961				1962			

7S-23E-29aad1. SE¼NE¼NE¼. Owner, Margaret H. Hubanks. Depth, 15 ft. Lsd, 472. Woodbine Formation. Highest, 1.00, Apr. 24, 1952; lowest, 10.95, Nov. 30, 1953. Records: 1950-62.

May	8	2.40	Dec.	4	2.79	May	28	6.32
						Measurement discontinued.		

7S-23E-32bab1. NW¼NE¼NW¼. Owner, Maud Jackson. Depth, 19 ft. Lsd, 450. Woodbine Formation. Highest, 0.92, Apr. 5, 1957; lowest, 15.09, Sept. 26, 1954. Records: 1950-62.

May	8	2.07	Dec.	4	3.75	May	28	5.49	Nov.	8	4.31
						Sept.	11	5.71	Dec.	4	2.22
						Oct.	11	5.86			

7S-25E-34ddd1. SE¼SE¼SE¼. Owner, Mr. Lynch. Depth, 16 ft. Lsd, 417. Woodbine Formation. Highest, 7.30, Dec. 5, 1962; lowest, 10.65, Nov. 7, 1962. Records: 1962.

						Sept.	11	9.30	Dec.	5	7.30
						Nov.	7	10.65			

8S-23E-12cdd1. SE¼SE¼SW¼. Owner, Oren C. Hicks. Depth, 28 ft. Lsd, 450. Woodbine Formation. Highest, +0.02, Dec. 5, 1961; lowest, 14.59, July 27, 1952. Records: 1950-62.

May	8	0.03	Dec.	5	+0.02	May	28	1.19
						Measurement discontinued.		

8S-23E-14ada1. NE¼SE¼NE¼. Owner, John Derryberry, Jr. Depth, 41 ft. Lsd, 420. Woodbine Formation. Highest, +0.27, Dec. 31, 1957; lowest, 12.96, Dec. 29, 1953. Records: 1950-62.

May	8	3.14	Dec.	5	2.37	May	28	4.49	Nov	8	5.15
						Sept.	11	7.62	Dec.	5	2.55
						Oct.	10	7.70			

8S-24E-29bbc1. SW¼NW¼NW¼. Owner, H. L. Latimer. Depth, 19 ft. Lsd, 351. Alluvium. Highest, 1.29, Feb. 23, 1952; lowest, 13.28, Sept. 25, 1954. Records: 1950-62.

May	8	3.80	Dec.	5	4.95	May	29	5.73	Nov	8	5.63
						Sept.	11	3.34	Dec.	5	4.11
						Oct.	10	6.35			

1961				1962			

9S-25E-21ddd1. SE¼SE¼SE¼. Owner, U.S. Geol. Survey. Depth, 16 ft. Lsd, 347. Alluvium. Highest, 5.05, May 8, 1962; lowest, 11.47, Nov. 25, 1954. Records: 1950-62.

May	8	5.71	Dec.	5	8.79	May 29	5.50
						Well destroyed.	

9S-25E-33aaa1. NE¼NE¼NE¼. Owner, U.S. Geol. Survey. Depth, 22 ft. Lsd, 338. Alluvium. Highest, 14.40, Dec. 1951; lowest, 20.01, June 30, 1955. Records: 1950-62.

May	8	18.70	Dec.	5	18.28	May	29	18.04	Nov.	8	18.22
						Sept.	11	18.29	Dec.	5	18.16
						Oct.	10	18.24			

9S-25E-33ddd1. SE¼SE¼SE¼. Owner, U.S. Geol. Survey. Depth, 18 ft. Lsd, 338. Alluvium. Highest, 6.14, Apr. 24, 1952; lowest, 16.58, Aug. 29, 1955. Records: 1950-1962.

May	8	11.80	Dec.	5	12.96	May	29	10.58	Nov.	8	12.53
						Sept.	11	10.99	Dec.	5	11.53
						Oct.	10	13.23			

12N-20E-13dcc1. SW¼SW¼SE¼. Owner, U.S. Geol. Survey. Depth, 42 ft. Lsd, 486. Alluvium. Highest, 17.01, July 30, 1959; lowest, 25.05, Aug. 29, 1962. Records: 1958-62.

1961						1962					
Jan.	4	21.69	Aug.	1	20.60	Jan.	25	21.37	Aug.	7	23.10
Feb.	7	21.79	Aug.	29	22.00	Feb.	20	21.49	Aug.	29	25.05
Mar.	7	21.70	Sept.	26	22.32	Mar.	20	21.46	Sept.	28	23.32
May	4	22.14	Oct.	24	21.68	Apr.	20	21.00	Oct.	24	23.80
May	31	21.61	Nov.	13	21.64	May	15	21.90	Nov.	20	23.60
June	29	21.18	Dec.	13	21.49	June	11	21.95	Dec.	20	23.60

15N-19E-22acb1. NW¼SW¼NE¼. Owner, Mrs. Dill. Depth, 42 ft. Lsd, 517. Alluvium. Well equipped with water-level recorder. Highest, 19.27, Aug. 20, 1960; lowest, 23.52, Dec. 20, 1962. Records: 1958-62.

Day	1961 Jan.	1961 July	Day	1962 Jan.	1962 July
5	21.95	.....	5	20.66	21.86
10	22.05	.....	10	20.86	22.06
15	22.13	.....	15	20.80	22.06
20	22.24	.....	20	20.80	22.17
25	22.27	.....	25	20.76	22.26
eom	22.31	.....	eom	20.91	22.31
	Feb.	Aug.		Feb.	Aug.
5	22.46	21.10	5	....	22.34
10	22.49	21.25	10	.....	22.40
15	22.58	21.21	15	.....	.....
20	22.53	21.22	20	21.12	.....
25	22.52	21.22	25	21.22	.....
eom	22.61	21.25	eom	21.30	23.19
	Mar.	Sept.		Mar.	Sept.
5	22.61	21.42	5	.....	22.94
10	22.57	21.46	10	.....	22.90
15	22.63	21.60	15	.....	22.82
20	22.67	21.51	20	21.37	22.77
25	22.77	21.72	25	21.50	22.69
eom	22.77	21.46	eom	21.55	22.69
	Apr.	Oct.		Apr.	Oct.
5	22.80	21.26	5	21.56	22.76
10	22.82	21.15	10	21.66	22.88
15	22.88	21.12	15	21.75	22.97
20	22.89	21.09	20	21.71	23.00
25	22.96	21.20	25	21.50	23.09
eom	22.98	21.14	eom	21.55	23.08
	May	Nov.		May	Nov.
5	22.94	21.12	5	21.59	23.13
10	22.51	20.93	10	21.66	23.09
15	22.27	20.92	15	21.79	23.12
20	22.15	21.00	20	21.84	23.19
25	22.09	20.79	25	21.98	23.32
eom	22.00	20.76	eom	22.13	23.33
	June	Dec.		June	Dec.
5	22.02	20.80	5	22.10	23.39
10	22.02	20.81	10	21.91	23.44
15	22.10	20.75	15	21.63	23.42
20	22.03	20.68	20	21.58	23.52
25	22.09	20.56	25	21.60	.....
eom	22.12h	20.69	eom	21.78	.....

11N-2W-11bcb1. NW¼SW¼NW¼. Owner, U.S. Air Force. Depth, 703 ft. Garber Sandstone and Wellington Formation. Highest, 149.92, May 5, 1947; lowest, 281.06, Mar. 28, 1957. Records: 1944-62.

1961						1962					
Jan.	24	240.75	July	19	257.26	Jan.	22	236.29	July	23	274.49
Feb.	20	228.77	Aug.	18	258.92	Feb.	23	247.27	Aug.	21	276.74
Mar.	21	231.35	Sept.	15	258.12	Mar.	23	238.48	Sept.	21	267.74
Apr.	17	241.97	Oct.	13	246.39	Apr.	23	257.40	Oct.	22	259.25
May	23	248.90	Nov.	20	246.00	May	21	261.06	Nov.	21	252.86
June	30	255.82				June	22	265.38	Dec.	20	245.65

12N-3W-23db1. NW¼SE¼. Owner, Sunray DX Oil Co. Depth, 791 ft. Garber Sandstone and Wellington Formation. Highest, 169.26, Jan. 22, 1962; lowest, 211.48, Sept. 21, 1956. Records: 1943-62.

1961						1962					
Jan.	24	173.70	July	19	173.26	Jan.	22	169.26	July	23	172.20
Feb.	20	173.45	Aug.	18	175.04	Feb.	23	169.33	Aug.	21	174.50
Mar.	21	172.50	Sept.	15	175.20	Mar.	23	169.70	Sept.	21	174.99
Apr.	17	171.48	Oct.	13	174.01	Apr.	23	169.34	Oct.	22	174.57
May	23	171.49	Nov.	20	172.77	May	21	169.47	Nov.	21	174.05
June	30	172.76	Dec.	21	171.20	June	22	170.94	Dec.	20	173.70

12N-3W-26bdb1. NW¼SE¼NW¼. Owner, Skelly Oil Co. Depth, 827 ft. Garber Sandstone and Wellington Formation. Well equipped with water-level recorder in May 1962. Highest, 192.60, Jan. 22, 1952; lowest, 242.40, Oct. 26, 1956. Records: 1943-62.

1961						1962					
Jan.	24	200.52	July	19	201.16	Jan.	22	197.10	Nov.	5	197.68
Feb.	20	200.28	Aug.	18	204.17	Feb.	23	195.78		10	197.48
Mar.	21	198.55	Sept.	15	203.67	Mar.	23	196.68		15	197.26
Apr.	17	197.87	Oct.	13	202.62	Apr.	23	196.25		20	197.13
May	23	198.61	Nov.	20	200.80	May	21	197.07		25	196.82
June	30	200.01	Dec.	21	198.74		25	197.02		eom	196.30
							eom	197.77			
						June	5	198.21	Dec.	5	197.73
							10	198.63		20	195.10h
							15	198.73			
							20	199.46			
						Aug.	eom	200.06			
						Oct.	25	198.88			
							31	197.50			

13N-3W-29bbd1. SE¼NW¼NW¼. Owner, Josaline Production Co. Depth, 750 ft. Garber Sandstone and Wellington Formation. Well equipped with water-level recorder. Highest, 157.01, Apr. 22, 1962; lowest, 179.94, Sept. 10, 1957. Records: 1957-62.

Day	1961 Jan.	1961 July	1962 Day	1962 Jan.
5	162.14	162.14	5	159.20
10	161.94	163.44	10	159.45
15	161.75	163.38	15	159.08
20	161.62	163.36	20	158.87
25	161.53	163.11	25	158.60
eom	161.23	163.02	eom	158.66
	Feb.	Aug.		Feb.
5	161.02	163.26	5	158.60
10	160.75	163.46	10	158.45
15	160.68	163.41	15	158.29
20	160.67	163.46	20	158.28
25	160.56	163.24	25	158.13
eom	160.56	163.24	eom	158.25
	Mar.	Sept.		Mar.
5	160.21	163.81	5	158.11
10	160.21	163.93	10	157.63
15	159.97	163.70	15	157.77
20	159.91	163.41	20	157.50
25	159.90	163.36	25	.....
eom	159.79	162.95	eom	.....
	Apr.	Oct.		Apr.
5	.....	162.79	5	.....
10	.....	162.33	10	.....
15	.....	162.39	15	.....
20	.....	162.00	20	.....
25	.....	161.97	25	157.22
eom	.....	161.61	eom	157.17
			Well destroyed	
	May	Nov.		
5	159.57	161.48		
10	159.80	160.97		
15	160.10	160.80		
20	.....	160.74		
25	.....	160.53		
eom	.....	160.39		
	June	Dec.		
5	.....	160.21		
10	.....	160.01		
15	.....	159.74		
20	.....	.....		
25	161.10	159.23		
eom	161.64	159.52		

1961				1962			

18N-3E-12cdc1. SW¼SE¼SW¼. Owner, John Wolf. Depth, 39 ft. Rocks of early Permian age. Highest, 14.16, Mar. 26, 1960; lowest, 23.58, Mar. 1, 1957. Records: 1951-62.

Mar. 29	17.72	Sept. 30	19.12	Mar. 29	18.95	Oct. 1	18.10
July 4	19.00	Dec. 28	19.09	June 29	18.50	Dec. 24	18.85

19N-1E-23cdc1. SW¼SE¼SW¼. Owner, Erma T. Pool. Depth, 47 ft. Rocks of early Permian age. Highest, 18.10, Dec. 24, 1962; lowest, 27.91, Jan. 28, 1941. Records: 1934-62.

Mar. 29	23.32	Sept. 30	21.83	Mar. 28	20.70	Oct. 1	20.37
July 4	22.45	Dec. 28	21.50	June 29	20.50	Dec. 24	18.10

19N- E-23ddd1. SE¼SE¼SE¼. Owner, School land. Depth, 70 ft. Rocks of early Permian age. Highest, 18.90, Mar. 31, 1958; lowest, 35.85, Mar. 1, 1957. Records: 1954-62.

Mar. 29	26.74	Sept. 30	24.08	Mar. 28	25.65	Oct. 1	27.44
July 4	23.10	Dec. 28	22.34	June 29	26.50	Dec. 24	25.96

19N-3E-2bba1. NE¼NW¼NW¼. Owner, W. O. Snyder. Depth, 34 ft. Rocks of early Permian age. Highest, 6.72, Apr. 27, 1942; lowest, 25.08, Oct. 26, 1956. Records: 1934-62.

Mar. 29	18.64	Sept. 30	18.30	Mar. 29	16.45	Oct. 1	19.00
July 4	17.20	Dec. 28	15.90	June 29	17.13	Dec. 24	18.30

19N-3E-20bbb1. NW¼NW¼NW¼. Owner, Charles Focht. Depth, 30 ft. Rocks of early Permian age. Highest, 2.17, Apr. 27, 1942; lowest, 26.52, Mar. 1, 1957. Records: 1934-62.

Mar. 29	4.10	Sept. 30	2.85	Mar. 29	8.25	Oct. 1	9.87
July 4	8.70	Dec. 28	3.50	June 29	7.95	Dec. 24	8.45

19N3E-35aab1. NW¼NE¼NE¼. Owner, Lovell Bros. Depth, 49 ft. Rocks of early Permian age. Highest, 21.93, June 29, 1962; lowest, 39.73, May 24, 1939. Records: 1934-62.

Mar. 29	27.08	Sept. 30	24.35	Mar. 29	23.28	Oct. 1	26.58
July 4	23.20	Dec. 28	23.05	June 29	21.93	Dec. 24	27.43

1961				1962			

19N-4E-15cbb1. NW¼NW¼SW¼. Owner, Mrs. Vern G. Phelps. Depth, 21 ft. Rocks of early Permian age. Highest, 1.39, Mar. 21, 1958; lowest, 7.92, Oct. 26, 1956. Records: 1934-62.

Mar. 29	3.36	Sept. 30	3.85	Mar. 29	2.16	Oct. 1	4.16
July 4	3.38	Dec. 28	2.39	June 29	2.90	Dec. 24	3.85

20N-2E-21ccd1. SE¼SW¼SW¼. Owner, Simon A. Laughlin. Depth, 41 ft. Rocks of early Permian age. Highest, 10.95, Apr. 29, 1952; lowest, 36.29, Apr. 5, 1937. Records: 1934-62.

Mar. 29	19.44	Sept. 30	17.60	Mar. 29	15.70	Oct. 1	19.20
July 4	15.68	Dec. 28	14.10	June 29	16.35	Dec. 24	17.70

20N-3E-23bab1. NW¼NE¼NW¼. Owner, V. D. Hesser. Depth, 27 ft. Rocks of early Permian age. Highest, 1.20, May 27, 1943; lowest, 14.41, Mar. 1, 1957. Records: 1934-62.

Mar. 29	7.18	Sept. 30	5.23	Mar. 29	2.88	Oct. 1	7.13
July 4	5.10	Dec. 28	2.63	June 29	4.23	Dec. 24	5.83

1961			1962		
Day	Jan.	July	Day	Jan.	July
5	52.46	60.39	5	51.52	57.23
10	51.82	60.09	10	51.88	57.65
15	.....	61.62	10	52.02	58.26
20	.....	61.08	20	52.42	58.57
25	.....	62.87	25	52.64	59.09
eom	.....	63.64	eom	53.39	59.62
	Feb.	Aug.		Feb.	Aug.
5	.....	64.17	5	54.02	60.12
10	.....	64.95	10	54.46	60.74
15	54.40	65.55	15	55.12	61.43
20	54.72	66.13	20	55.63	62.09
25	55.19	66.80	25	56.25	63.81
eom	55.62	.....	eom	57.84	63.53
	Mar.	Sept.		Mar.	Sept.
5	55.80	.....	5	57.52	64.06
10	56.30	.....	10	57.82	.....
15	56.78	67.91	15	58.70	.....
20	57.14	68.23	20	59.18	58.63
25	57.58	68.83	25	59.92	58.58
eom	56.63	69.35	eom	60.60	58.86
	Apr.	Oct.		Apr.	Oct.
5	54.40	69.28	5	61.02	59.23
10	53.47	69.33	10	61.23	59.84
15	53.17	65.93	15	61.88	58.57
20	52.91	64.99	20	62.22	58.24
25	51.86	64.95	25	62.65	58.65
eom	52.14	64.83	eom	61.34	56.26
	May	Nov.		May	Nov.
5	52.44	65.26	5	60.98	54.90
10	51.96	65.30	10	60.97	54.66
15	53.42	65.70	15	61.36	54.76
20	53.86	66.09	20	61.75	54.99
25	54.35	62.70	25	62.10	55.61
eom	55.02	60.64	eom	62.60	51.64
	June	Dec.		June	Dec.
5	56.65	60.06	5	60.90	49.61
10	57.26	58.32	10	59.12	48.50
15	57.97	55.97	15	57.08	48.10
20	58.54	53.58	20	56.65h	48.14
25	59.30	51.98	25	56.64	47.32
eom	59.86	51.62	eom	56.96	46.65

1N-5E-27dc1. SW¼SE¼. Owner, Norris estate. Depth, 2,500+ ft. Arbuckle Group. Well equipped with water-level recorder. Highest, 41.15, May 31, 1960; lowest, 87.86, Sept. 5, 1959. Records: 1959-62.

1N-6E-4cad1. SE¼NE¼SW¼. Owner, J. Brent. Depth, 1,707 ft. Arbuckle Group. Well equipped with water-level recorder. Highest, 105.92, Feb. 20, 1960; lowest, 122.39, May 5, 1959. Records: 1959-62.

Day	1961 Jan.	1961 July	Day	1962 Jan.	1962 July
5	110.09	112.54	5	106.26	110.53
10	109.70	112.83	10	106.71	110.78
15	.....	112.93	15	106.96	111.11
20	.....	112.99	20	107.34	111.38
25	.....	113.33	25	107.71	111.74
eom	.....	113.73	eom	108.36	112.15
	Feb.	Aug.		Feb.	Aug.
5	.....	114.01	5	108.92	112.40
10	.....	114.36	10	109.25	112.80
15	111.14	114.68	15	109.67	113.18
20	111.25	114.97	20	110.03	113.58
25	111.38	115.28	25	110.49	114.00
eom	111.60	115.54	eom	110.84	114.29
	Mar.	Sept.		Mar.	Sept.
5	111.68	115.89	5	111.19	114.68
10	111.90	116.14	10	111.36	114.46
15	112.06	115.92	15	111.85	113.92
20	112.06	115.92	20	112.06	112.43
25	112.43	115.91	25	112.44	112.24
eom	112.14	115.93	eom	112.75	112.25
	Apr.	Oct.		Apr.	Oct.
5	110.90	.....	5	112.89	112.35
10	110.18	.....	10	113.05	112.55
15	109.76	.....	15	113.26	112.05
20	109.48	.....	20	113.30	112.91
25	109.50	.....	25	113.38	113.05
eom	109.55	113.42h	eom	112.93	112.02
	May	Nov.		May	Nov.
5	109.61	113.72	5	112.60	111.13
10	109.85	113.75	10	112.35	110.76
15	110.00	113.96	15	112.40	110.68
20	110.27	114.13	20	112.46	110.81
25	110.46	112.93	25	112.59	111.13
eom	110.80	112.68	eom	112.78	109.74
	June	Dec.		June	Dec.
5	110.97	111.99	5	112.56	108.62
10	111.21	111.42	10	111.78	107.81
15	111.50	110.21	15	110.75	107.45
20	111.65	107.74	20	110.35	107.39
25	112.03	106.64	25	110.24	106.75
eom	112.29	106.25	eom	110.38	106.10

1961			1962		

4N-5E-25db1. NW¼SE¼. Owner, Floyd Poultry Farm. Depth, 110 ft. Boggy Formation. Highest, 105.72, May 17, 1960; lowest, 110.07, Sept. 25, 1955. Records: 1955-62.

Dec	5	106.99	May	29	107.51

12N-22W-7da1. NE¼SE¼. Owner, Clarence Fowler. Depth, 308 ft. Rocks of Permian age. Well equipped with water-level recorder. Highest, 5.32, Dec. 15, 1962; lowest, 10.72, May 5, 1959. Records: 1959-62.

Day	1961 Jan.	1961 July	Day	1962 Jan.	1962 July
5	....	5.81	5	....	....
10	....	5.86	10	6.01	....
15	....	....	15	5.83	....
20	....	5.73	20	5.85	....
25	....	5.81	25	5.73	5.77h
eom	....	5.81	eom	5.85	5.78
	Feb.	Aug.		Feb.	Aug.
5	6.37	5.86	5	5.86	5.61
10	6.29	5.84	10	5.78	5.71
15	6.31	5.83	15	5.80	5.75
20	6.29	5.89	20	5.82	5.75
25	6.23	5.81	25	5.82	5.78
eom	6.29	....	eom	5.85	5.78
	Mar.	Sept.		Mar.	Sept.
5	6.18	....	5	5.87	5.81
10	....	....	10	5.65	5.73
15	6.19	....	15	....	5.70
20	6.17	....	20	....	5.62
25	6.11	....	25	5.82	5.53
eom	6.08	....	eom	5.85	5.52
	Apr.	Oct.		Apr.	Oct.
5	6.15	....	5	5.87	5.45
10	6.08	....	10	5.83	5.47
15	6.15	....	15	5.94	5.49
20	6.04	5.77	20	5.87	5.45
25	6.10	5.92	25	....	5.52
eom	6.10	5.78	eom	....	5.47
	May	Nov.		May	Nov.
5	5.93	5.86	5	....	5.45
10	6.07	5.68	10	....	5.40
15	6.08	5.71	15	....	5.41
20	6.06	5.71	20	....	5.40
25	6.09	5.66	25	....	5.48
eom	6.10	5.73	eom	6.01h	5.42
	June	Dec.		June	Dec.
5	5.91	5.74	5	....	5.41
10	5.80	5.72	10	....	5.41
15	5.91	5.77	15	....	5.32
20	5.80	....	20	....	5.36
25	5.83	....	25	....	5.44
eom	5.83	....	eom	....	5.38

	1961			1962	
Day	Jan.	July	Day	Jan.	July
5	35.12	.....	5	35.88	.....
10	.....	.....	10	36.29	.....
15	.....	.....	15	35.97	.....
20	.....	34.92	20	36.02	.....
25	.....	34.08	25	35.85	37.78h
eom	.....	34.00	eom	36.13	37.72
	Feb.	Aug.		Feb.	Aug.
5	.....	34.03	5	.....	37.54
10	.....	.....	10	36.28	37.58
15	.....	.....	15	36.34	37.61
20	.....	.....	20	36.41	37.55
25	.....	.....	25	36.46	37.63
eom	35.33	34.67	eom	36.69	37.50
	Mar.	Sept.		Mar.	Sept.
5	.....	34.86	5	36.70	37.60
10	.....	34.80	10	36.37	37.58
15	.....	35.06	15	.....	37.50
20	.....	34.66	20	36.65	37.56
25	.....	35.05	25	36.85	37.49
eom	35.43	35.00	eom	36.87	37.41
	Apr.	Oct.		Apr.	Oct.
5	35.55	34.98	5	36.88	37.32
10	35.42	34.94	10	36.88	37.39
15	.....	35.28	15	37.11	37.28
20	.....	35.20	20	36.97	37.41
25	.....	.....	25	.....	37.61
eom	.....	.....	eom	.....	37.45
	May	Nov.		May	Nov.
5	35.13	35.54	5	.....	37.38
10	35.20	35.15	10	37.24	37.31
15	35.19	35.36	15	37.35	37.37
20	35.12	35.47	20	37.43	37.35
25	35.23	35.41	25	37.40	37.58
eom	35.04	35.54	eom	37.59	37.49
	June	Dec.		June	Dec.
5	35.06	35.65	5	37.64	37.58
10	34.96	35.73	10	37.75	37.59
15	35.07	35.79	15	37.70	37.42
20	34.86	35.83	20	37.85	37.56
25	.....	35.81	25	37.85	37.71
eom	.....	.....	eom	37.85	37.60

13N-22W-34dac1. SW¼NW¼SW¼. Owner, H. C. Reed. Depth, 76 ft. Quartermaster Formation. Well equipped with water-level recorder. Highest, 34, July 1961; lowest 46.88, May 30, 1959. Records: 1959-62.

15N-24W-11da1. NE¼SE¼. Owner, J. W. Millhouse. Depth 53 ft. Rocks of Permian age. Highest, 21.20, 1949; lowest, 26.80, June 16, 1958. Records: 1949; 1951-55; 1957-58; 1960-62.

Aug.	2	24.43	Nov.	15	24.10	Mar.	8	24.35	Sept.	26	23.99
Oct.	25	24.25	Dec.	6	24.46	Mar.	29	24.62	Nov.	14	23.82
						May	24	24.70			

1961	1962

9N-6E-17bbc1. SW¼NW¼NW¼. Owner, Kerr-McGee Oil Industries, Inc., formerly Skelly Gas Corp. Depth, 496 ft. Vamoosa Formation. Highest, 78.05, May 27, 1960; lowest, 115,88, Sept. 28, 1948. Records: 1948-60.

No measurements in 1961 or 1962--obstruction 81 ft below lsd.

10N-26E-22add1. SE¼SE¼NE¼. Owner, U.S. Geol. Survey. Depth, 34 ft. Lsd, 424. Alluvium. Highest, 12.82, Feb. 28, 1958; lowest, 17.66, June 29, 1961. Records: 1958-62.

1961						1962			
Jan.	4	16.60	Aug.	1	16.38	Jan.	26	15.78	Aug. 31	17.08
Feb.	7	16.90	Aug.	29	16.20	Feb.	22	15.80	Sept. 27	17.23
Mar.	7	17.20	Sept.	26	16.25	Mar.	20	15.95	Oct. 23	17.37
Apr.	1	17.42	Oct.	24	16.22	May	15	16.54	Nov. 20	17.31
May	3	17.59	Nov.	14	16.24	June	12	16.68	Dec. 19	17.51
May	31	17.22	Dec.	12	16.30	July	11	16.79		
June	29	17.66				Aug.	7	16.93		

	1961			1962	
1N-12E-35bdd. SE¼SE¼NW¼. Owner, Otto Harlund. Depth, 386 ft. Ogallala Formation. Well equipped with water-level recorder. Highest, 188.80, May 20, 1957; lowest, 189.99, Feb. 25, 1958. Records: 1956-62.					
Day	Jan.	July	Day	Jan.	July
5	189.17	189.10	5	.....	189.19
10	189.25	.....	10	.....	189.18
15	189.23	189.06	15	189.36	189.28
20	189.28	189.03	20	.....	189.21h
25	189.14h	189.17	25	.....	189.24
eom	189.20	189.08	eom	.....	189.20
	Feb.	Aug.		Feb.	Aug.
5	189.34	189.15	5	.....	189.10
10	189.21	189.15	10	.....	189.15
15	189.28	189.10	15	189.33	189.16
20	189.22h	189.23	20	.....	189.20
25	189.22	189.02	25	.....	189.34
eom	189.29	188.99	eom	189.37h	189.26
	Mar.	Sept.		Mar.	Sept.
5	189.15	189.19	5	189.43	189.33
10	189.21	.....	10	189.97	189.32
15	189.12	189.33	15	189.24	189.22
20	189.28	189.94	20	189.14	.....
25	189.05	189.39	25	189.61	189.22
eom	189.21	189.21	eom	189.27	189.27
	Apr.	Oct.		Apr.	Oct.
5	189.32	189.10	5	189.20	189.04
10	189.09	189.21	10	189.24	189.28
15	189.45	189.37	15	189.29	189.34
20	189.16	189.20	20	188.97	189.22
25	189.29	189.49	25	189.09	189.35
eom	189.10	189.31	eom	189.42	189.14
	May	Nov.		May	Nov.
5	189.13	189.57	5	189.27	189.10
10	189.18	189.01	10	189.14	189.01
15	189.33	189.10	15	189.22	189.11
20	189.19	189.27	20	189.20	189.01
25	189.29	189.23	25	189.15	189.28
eom	189.03	189.09	eom	189.32	189.16
	June	Dec.		June	Dec.
5	189.07	189.34	5	189.23	189.32
15	189.06	189.35	10	189.28	189.21
15	189.29	189.33	15	189.08	189.06
20	189.13	189.30	20	189.25	189.24
25	189.15	189.47	25	189.23	189.31
eom	189.18	189.36	eom	189.18	189.11

1961				1962			

1S-16E-5bab1. NW¼NE¼NW¼. Depth, 203 ft. Ogallala Formation. Highest, 187.21, Apr. 25, 1958; lowest, dry at 203, May 16, 1962. Records: 1957-62.

May 10 195.04 — May 16 f

1N-10E-28bcb1. NW¼SW¼NW¼. Owner, Roy Wonley. Ogallala Formation. Highest, 199.31, May 28, 1957; lowest, 205.90, Sept. 29, 1958. Records: 1956-62.

May 26 202.52
Measurement discontinued.

1N-13E-26dbb1. NW¼NW¼SE¼. Ogallala Formation. Highest, 146.22, July 26, 1956; lowest, 146.88, May 17, 1962. Records: 1956-62.

May 26 146.68 — May 17 146.88

1N-18E-28ccb1. NW¼SW¼SW¼. Ogallala Formation. Highest, 100.15, May 19, 1959; lowest, 162.27, Sept. 25, 1958. Records: 1956-62.

May 10 101.82
Measurement discontinued

2N-10E-12bcb1. NW¼SW¼NW¼. Owner, E. E. Ricktt. Depth, 162 ft. Ogallala Formation. Highest, 147.22, Sept. 29, 1958; lowest, 151.80, Nov. 4, 1937. Records: 1937; 1956-62.

May 26 147.50 — May 17 146.80

2N-12E-15aaa1. NE¼NE¼NE¼. Owner, Morris Freeman. Depth, 96 ft. Ogallala Formation. Highest, 10.88, Sept. 26, 1958; lowest, 13.40, Aug. 2, 1956. Records: 1953; 1956-58; 1961-62.

May 9 12.48 — May 17 11.70

2N-16E-5cbb1. NW¼NW¼SW¼. Owner, A. R. Erhart. Depth, 425 ft. Ogallala Formation. Highest, 153.00, Feb. 2, 1957; lowest, 162.76, Nov. 9, 1956. Records: 1956-62.

May 26 158.03

2N-17E-15abb1. NW¼NW¼NE¼. Owner, U.S. Geol. Survey. Depth, 10 ft. Alluvium. Highest, 2.83, July 20, 1950; lowest, 7.96, Oct. 26, 1953. Records: 1946-62.

Jan. 3	5.54	Aug. 4	4.33	Jan. 5	4.93	Aug. 17	4.03
Feb. 15	5.49	Sept. 26	5.60	Feb. 13	5.06	Sept. 10	4.26
Apr. 7	5.21	Oct. 10	5.87	Mar. 5	5.22	Oct. 5	4.18
May 9	5.30	Nov. 6	5.98	Apr. 24	4.92	Nov. 19	5.14
June 6	5.18	Dec. 8	6.03	May 16	5.09	Dec. 21	5.01
July 11	3.82			July 20	4.22		

1961				1962			

3N-11E-5abb1. NW¼NW¼NE¼. Owner, C. F. Webb. Depth, 109 ft. Lsd, 3,533. Ogallala Formation. Highest, 84.16, Apr. 25, 1958; lowest, 89.40, Oct. 30, 1944. Records: 1938; 1942-62.

Jan. 3	87.67	Aug. 4	86.21	Jan. 5	87.54	Aug. 17	88.24
Feb. 17	88.48	Sept. 26	86.76	Feb. 12	87.14	Sept. 11	88.13
Apr. 7	88.56	Oct. 9	88.57	Mar. 5	88.03	Oct. 5	88.04
May 20	87.01	Nov. 22	87.36	Apr. 25	88.26	Nov. 19	87.98
July 11	86.67	Dec. 7	88.63	July 31	89.02	Dec. 13	88.08

3N-13E-25bbb1. NW¼NW¼NW¼. Owner, Robbins Ranch. Depth, 57 ft. Rocks of Triassic age. Highest, 41.16, Nov. 5, 1956; lowest, 43.10, Apr. 29, 1947. Records: 1937-62.

May 26	42.27	May 17	42.48

3N-15E-12dc1. SW¼SE¼. Owner, U.S. Geol. Survey. Depth, 18 ft. Alluvium. Highest, 7.85, Apr. 27, 1947; lowest, 10.80, June 12, 1958. Records: 1946-62.

May 10	9.32		

3N-15E-18ccc1. SW¼SW¼SW¼. Owner, W. N. Ballinger. Depth, 30 ft. Alluvium. Highest, 4.50, Oct. 26, 1946; lowest, 9.39, July 26, 1938. Records: 1937-62.

May 26	6.69	May 16	6.81

3N-17E-6bab1. NW¼NE¼NW¼. Owner, August Lorenz. Lsd, 2,931. Ogallala Formation. Highest, 86.61, Sept. 25, 1958; lowest, 97.96, May 10, 1961.

May 10	97.96	May 16	87.04

3N-19E-26cd1. SE¼SW¼. Owner, O. Jolliff. Depth, 120 ft. Lsd, 2,766. Ogallala Formation. Highest, 101.60, June 14, 1954; lowest, 105.40, May 16, 1946. Records: 1937-57; 1960-62.

May 10	102.90	May 16	102.97

4N-12E-24dda1. NE¼SE¼SE¼. Owner, Donald Nicholas. Depth, 177 ft. Ogallala Formation. Highest, 150.20, May 18, 1960; lowest, 152.99, Nov. 13, 1956. Records: 1952-62.

May 25	150.26	May 16	150.32

4N-14E-12cbc1. SW¼NW¼SW¼. Ogallala Formation. Highest, 181.00, July 24, 1956; lowest, 187.02, May 16, 1962. Records: 1956-62.

May 26	182.67	May 16	187.02

1961		1962	

4N-17E-34bbb1. NW¼NW¼NW¼. Owner, George Hoferber. Depth, 142 ft. Lsd, 2,935. Ogallala Formation. Highest, 110.68, May 10, 1960; lowest, 119.70, Nov. 23, 1940. Records: 1937-59; 1960; 1962.

			May	16	110.95

4N-19E-21cbb1. NW¼NW¼SW¼. Owner, R. M. Van Hyning. Depth, 280 ft. Lsd, 2,820. Ogallala Formation. Highest, 91.71, May 17, 1962; lowest, 104.06, Sept. 20, 1938. Records: 1937-62.

May	10	92.22	May	17	91.71

5N-11E-2ddd1. SE¼SE¼SE¼. Owner, J. W. Chatwall. Depth, 200 ft. Ogallala Formation. Highest, 175.92, Jan. 24, 1958; lowest, 186.89, Nov. 13, 1956. Records: 1937-62.

May	26	182.18	May	16	181.90

5N-13E-4cbb1. NW¼NW¼SW¼. Owner, H. L. Jullian. Depth, 297 ft. Ogallala Formation. Highest, 218.87, June 11, 1958; lowest, 235.84, May 26, 1960. Records: 1956-62.

No measurements in 1961 or 1962.

5N-15E-23ddd1. SE¼SE¼SE¼. Ogallala Formation. Highest, 133.45, July 24, 1956; lowest, 137.70, May 10, 1960. Records: 1956-62.

May	10	135.61	May	16	136.80

5N-17E-27bbc1. SW¼NW¼NW¼. Owner, Lester Wiggins. Depth, 360 ft. Rocks of Tertiary age. Highest, 122.23, June 17, 1958; lowest, 131.02, Mar. 13, 1953. Records: 1949; 1953-62.

May	26	123.16	May	16	129.91

6N-15E-27cdd1. SE¼SE¼SW¼. Owner, A. M. Fankhauser. Depth, 167 ft. Lsd, 3,175. Ogallala Formation. Highest, 141.05, May 10, 1960; lowest, 148.47, Oct. 21, 1942. Records: 1937-42; 1946-50; 1952-62.

May	26	146.97	May	16	141.38

6N-16E-22aba1. NE¼NW¼NE¼. Owner, C. A. Rahm. Depth, 145 ft. Lsd, 3,118. Ogallala Formation. Highest, 99.40, Sept. 30, 1957; lowest, 122.87, Sept. 24, 1940. Records: 1937-49; 1952-55; 1957-62.

May	26	101.63	May	16	101.09

1961		1962	

6N-17E-22cbc1. SW¼NW¼SW¼. Owner. Mrs. Guard. Depth, 124 ft. Ogallala Formation. Highest, 95.13, May 16, 1962; lowest, 110.77, Dec. 14, 1937. Records: 1937; 1956-62.

May	22	96.30	May	16	95.13

6N-19E-22dab1. NW¼NE¼SE¼. Ogallala Formation. Highest, 84.37, Jan. 14, 1958; lowest, 86.53, June 6, 1958. Records: 1956-62.

May	10	86.12	May	17	85.27

1961			1962		

6N-18E-25cc1. SW¼SW¼. Owner, H. W. Cain. Depth, 99 ft. Ogallala Formation Well equipped with water-level recorder. Highest, 78.91, Dec. 31, 1962; lowest, 82.50, Sept. 6, 1956. Records: 1956-62.

Day	Jan.	July	Day	Jan.	July
5	80.53	80.61	5	79.60h	70.00
10	80.53	.....	10	79.77	79.03
15	80.53	80.54	15	79.54	79.57
20	80.60	80.50	20	79.45	79.65
25	80.55h	.....	25	79.32	79.72
eom	80.60	.....	eom	79.45	79.59
	Feb.	Aug.		Feb.	Aug.
5	80.75	80.61	5	79.46	79.41
10	80.66	80.60	10	.....	79.55
15	80.68	.....	15	79.27	79.70
20	80.50h	.....	20	79.33	79.68
25	80.56	.....	25	79.33	79.77
eom	80.51	.....	eom	79.37	79.69
	Mar.	Sept.		Mar.	Sept.
5	80.38	.....	5	79.38	79.77
10	80.47	.....	10	79.03	79.68
15	80.38	80.37	15	79.26	79.63
20	80.57	80.05	20	79.03	.....
25	80.34	80.32	25	79.27	79.68
eom	80.37	.....	eom	79.24	79.58
	Apr.	Oct.		Apr.	Oct.
5	80.46	.....	5	79.13	79.49
10	80.33	.....	10	79.06	79.42
15	80.54	80.17	15	79.16	79.44
20	80.36	.....	20	79.00	79.34
25	80.53	.....	25	79.09	79.39
eom	80.42	.....	eom	79.21	79.30
	May	Nov.		May	Nov.
5	80.33	.....	5	79.09	79.16
10	80.48	79.75	10	79.14	79.07
15	80.55	79.89	15	79.25	79.02
20	80.48	79.80	20	79.29	79.08
25	80.56	79.73	25	79.16	79.16
eom	80.40	79.74	eom	79.34	79.05
	June	Dec.		June	Dec.
5	.....	79.72	5	79.24	79.06
10	80.38	79.68	10	79.25	78.98
15	80.62	79.68	15	79.11	.....
20	80.59	79.67	20	79.28	.....
25	80.61	79.56	25	79.33	78.95
eom	80.68	79.67	eom	78.92	78.91

1N-17W-31dcd1. SE¼SW¼SE¼. Owner, M. H. Swartz. Depth, 43 ft. Lsd, 1,370. Terrace deposit. Highest, 18.07, Sept. 30, 1957; lowest, 34.50, Dec. 9, 1952. Records: 1952-62.

1961						1962			
Jan.	16	28.38	July	31	28.61	Jan.	30	28.37	May	22	28.59
Feb.	13	28.34	Sept.	5	28.72	Mar.	6	28.35	June	28	28.27
Mar.	13	28.27	Sept.	25	28.69	Mar.	27	28.33	Aug.	27	28.72
Apr.	18	28.22	Oct.	23	28.60	Apr.	24	28.30	Sept.	24	28.66
May	16	28.33	Nov.	13	28.49						
June	20	28.31	Dec.	4	28.38						

1N-18W-1cba1. NE¼NW¼SW¼. Owner, James Riggs. Depth, 34 ft. Alluvium. Highest, 5.90, June 20, 1961; lowest, 12.50, Jan. 22, 1957. Records: 1953-62.

Jan.	16	8.77	July	11	7.19	Jan.	30	10.11	June	28	6.01
Feb.	13	9.03	July	31	8.09	Mar.	6	10.19	Aug.	27	9.95
Mar.	13	8.95	Sept.	25	9.15	Mar.	27	10.30	Sept.	24	10.31
Apr.	18	8.63	Oct.	23	9.59	Apr.	24	9.42	Oct.	16	10.56
May	16	9.12	Nov.	13	9.79	May	22	10.57	Nov.	12	10.69
June	20	5.90	Dec.	4	9.80						

1N-18W-29ddd1. SE¼SE¼SE¼. Owner, G. W. Trimue. Depth, 42 ft. Lsd, 1,747. Terrace deposit. Highest, 18.38, June 2, 1947; lowest, 34.90, Aug. 16, 1954. Records: 1944-62.

Jan.	16	20.07	July	31	20.69	Jan.	30	20.07	June	28	20.63
Feb.	13	19.97	Sept.	5	20.77	Mar.	6	20.08	Aug.	27	21.27
Mar.	13	19.90	Sept.	25	20.46	Mar.	27	20.20	Sept.	24	21.15
Apr.	18	19.79	Oct.	23	20.52	Apr.	24	20.62	Oct.	16	21.01
May	16	19.78	Nov.	13	20.41	May	22	21.05	Nov.	12	19.91
June	20	20.03	Dec.	4	20.20						

1N-19W-25bc1. SW¼NW¼. Owner, Mollie Cody. Depth, 54 ft. Terrace deposit. Highest, 16.00, July 22, 1958; lowest, 23.29, Apr. 5, 1957. Records: 1952-62.

Jan.	16	19.08	July	31	18.69	Jan.	30	19.61	June	28	16.68
Feb.	13	19.03	Sept.	5	19.25	Mar.	6	19.61	Aug.	27	18.18
Mar.	13	18.85	Sept.	25	19.27	Mar.	27	19.65	Sept.	24	18.55
Apr.	18	18.42	Oct.	23	19.37	Apr.	24	19.86	Nov.	12	18.90
May	16	18.53	Nov.	13	19.57	May	22	19.81			
June	20	18.17	Dec.	4	19.52						
July	11	18.22									

1S-19W-2bbb1. NW¼NW¼NW¼. Owner, Leon Stansell. Depth, 41 ft. Lsd, 1,273. Terrace deposit. Highest, 23.11, June 4, 1953; lowest, 29.54, Sept. 17, 1956. Records: 1952-59; 1962.

May	22	26.78	Sept.	24	27.69
June	28	25.95	Oct.	16	27.28
Aug.	27	29.06a	Nov.	12	27.00

1961						1962			

1S-19W-10baa1. NE¼NE¼NW¼. Owner, I. W. Kinney. Depth, 45 ft. Lsd, 1,265. Terrace deposit. Highest, 21.11, Oct. 19, 1949; lowest, 31.11, Aug. 25, 1954. Records: 1949-50; 1952-62.

Jan.	16	23.14	July	11	22.50	Jan.	30	23.36	June	28	23.21
Feb.	13	23.02	Sept.	5	26.90	Mar.	6	23.39	Sept.	24	25.70
Mar.	13	22.96	Sept.	25	24.94	Mar.	27	23.39	Oct.	16	24.90
Apr.	18	23.96	Oct.	23	24.03	Apr.	24	23.63	Nov.	12	24.28
May	16	22.84	Nov.	13	23.84	May	22	23.49			
June	20	22.73	Dec.	4	23.59						

1S-19W-25daa1. SE¼NE¼NE¼. Owner, Southwestern Cotton Substation. Depth, 54 ft. Terrace deposit. Highest, 18.38, June 2, 1947; lowest, 34.90, Aug. 16, 1954. Records: 1944-62.

Jan.	16	20.61	July	31	26.38c	Jan.	30	20.76	June	28	19.22
Feb.	13	20.56	Sept.	5	24.61	Mar.	6	22.06	Aug.	27	29.17c
Mar.	13	20.54	Sept.	25	22.03	Mar.	27	22.79	Sept.	24	21.95
Apr.	18	20.26	Oct.	23	21.34	Apr.	24	22.79	Oct.	16	21.56
May	16	21.39	Nov.	13	21.30	May	22	22.47	Nov.	12	21.02
June	20	20.61	Dec.	4	21.00						
July	11	22.74									

2S-19W-14dbc1. SW¼NW¼SE¼. Owner, Walter Ray. Depth, 60 ft. Lsd, 1,274. Terrace deposit. Highest, 30.81, Mar. 6, 1962; lowest, 37.25, Aug. 22, 1955. Records: 1953-62.

Jan.	16	32.29	Nov.	13	32.18	Mar.	6	30.81	Oct.	16	32.43
Apr.	18	32.04	Dec.	4	32.00	May	22	31.84	Nov.	12	32.21
July	11	31.91				Sept.	24	32.58			

3S-19W-2ab1. NW¼NE¼. Owner, Banker. Depth, 60 ft. Terrace deposit. Highest 26.58, Sept. 25, 1961; lowest, 35.09, Aug. 26, 1954. Records: 1952-62.

Jan.	16	26.99	Aug.	31	26.75	Jan.	30	27.02	June	28	27.10
Feb.	13	27.00	Sept.	5	26.85	Mar.	6	27.04	Aug.	27	27.00
Mar.	13	26.98	Sept.	25	26.58	Mar.	27	27.09	Sept.	24	26.94
Apr.	18	26.92	Oct.	23	26.88	Apr.	24	27.18	Oct.	16	26.89
May	16	26.96	Nov.	13	27.00	May	22	27.24	Nov.	12	26.70

3S-19W-22baa1. NE¼NE¼NW¼. Owner, Harold Grand. Depth, 48 ft. Lsd, 1,221. Terrace deposit. Highest, 24.96, Nov. 12, 1962; lowest, 36.09, May 6, 1957. Records: 1953-62.

Jan	16	34.35	Feb.	13	34.32	May	22	26.53	Sept.	24	27.98
						June	28	26.60	Oct.	16	25.14
						Aug.	27	26.60	Nov.	12	24.96

16N-18E-22aaa2. NE¼NE¼NE¼. Owner, U.S. Geol. Survey. Depth, 32 ft. Lsd, 524. Alluvium. Well equipped with water-level recorder. Highest, 14.53, May 15, 1960; lowest, 19.29, Feb. 15, 1961. Records: 1960-62.

Day	1961 Jan.	1961 July	Day	1962 Jan.	1962 July
5	19.11	16.85	5	.....	.....
10	19.15	17.01	10	16.81	18.01
15	19.14	17.12	15	16.54	18.07
20	19.18	16.96	20	16.68	18.26
25	19.25	15.99	25	16.62	18.35
eom	19.27	16.09	eom	16.61	18.44
	Feb.	Aug.		Feb.	Aug.
5	19.27	16.25	5	16.43	18.41
10	19.27	16.46	10	16.49	18.56
15	19.29	16.92	15	16.58	18.66
20	19.22	17.10	20	16.72	18.79
25	19.21	17.13	25	16.72	19.06
eom	19.22	17.27	eom	16.92	19.13
	Mar.	Sept.		Mar.	Sept.
5	19.22	17.44	5	16.76	19.21
10	19.20	17.55	10	16.58	19.06
15	19.07	17.61	15	16.86	19.00
20	19.10	17.67	20	16.85	18.87
25	19.13	17.03	25	16.73	18.78
eom	19.15	17.25	eom	16.72	18.71
	Apr.	Oct.		Apr.	Oct.
5	19.07	16.99	5	16.93	18.70
10	18.92	16.77	10	16.65	18.74
15	18.93	16.95	15	16.90	18.77
20	18.98	16.93	20	16.93	18.86
25	18.99	17.03	25	16.89	19.05
eom	19.03	17.06	eom	16.57	18.95
	May	Nov.		May	Nov.
5	19.02	17.05	5	16.82	18.95
10	18.99	16.98	10	16.82	18.98
15	18.85	16.88	15	16.92	19.00
20	18.21	16.96	20	.....	19.01
25	17.50	16.82	25	.....	19.12
eom	17.15	16.88	eom	.....	19.12
	June	Dec.		June	Dec.
5	16.99	16.78	5	.....	19.07
10	16.75	16.74	10	.....	19.14
15	16.78	.....	15	.....	19.08
20	16.71	.....	20	.....	19.06
25	16.70	.....	25	.....	19.16
eom	16.76	.....	eom	.....	19.18

9N-14W-5daa1. NE¼NE¼SE¼. Owner, D. M. Holland. Depth, 162 ft. Rush Springs Sandstone. Highest, 123.08, May 20, 1950; lowest, 125.16, May 27, 1950. Records: 1949-62.

1961						1962					
Jan.	17	124.40	Aug.	9	124.19	Jan.	16	124.61	Sept.	11	123.88
Mar.	13	124.22	Sept.	11	124.10	Feb.	21	124.00	Oct.	3	124.01
Apr.	10	124.13	Oct.	11	124.29	May	30	124.11	Nov.	4	124.20
May	12	123.94	Nov.	7	124.55	June	30	124.11	Dec.	3	124.17
June	14	124.30	Dec.	7	124.28	July	26	124.26			
July	14	124.18									

10N-14W-35ddd1. SE¼SE¼SE¼. Owner, W. A. Bennett. Depth, 91 ft. Rush Springs Sandstone. Highest, 71.59, Jan. 4, 1953; lowest, 76.41, Nov. 29, 1952. Records: 1951-62.

1961						1962					
Jan.	17	74.99	Aug.	9	74.73	Jan.	16	74.68	July	26	74.29
Mar.	13	74.93	Sept.	11	74.68	Feb.	21	74.48	Sept.	11	74.25
Apr.	10	74.79	Oct.	11	74.76	May	4	74.34	Oct.	3	7.416
May	12	74.72	Nov.	7	74.67	May	30	74.39	Nov.	4	74.10
June	14	74.87	Dec.	7	74.54	June	30	73.35	Dec.	3	74.48

	1961			1962	

10N-19W-7ddd1. SE¼SE¼SE¼. Owner, U.S. Geol. Survey. Depth, 226 ft. Lsd, 1,955. Elk City Member, Quartermaster Formation. Well equipped with water-level recorder. Highest, 4.36, Nov. 10, 1961; lowest, 7.04, Sept. 10, 1961. Records: 1961-62.

Day	Jan.	July	Day	Jan.	July
5	....	5.68	5	5.20	5.24
10	....	5.94	10	5.69	5.48
15	....	5.64	15	5.38	5.74
20	....	....	20	5.40	5.90
25	....	6.06	25	5.24	5.88
eom	....	6.22	eom	5.43	5.79
	Feb.	Aug.		Feb.	Aug.
5	....	6.51	5	5.68	5.38
10	....	6.73	10	5.61	5.68
15	....	6.67	15	5.63	5.92h
20	....	6.76	20	5.74	6.17
25	....	6.61	25	5.77	6.51
eom	....	6.71	eom	6.03	6.68
	Mar.	Sept.		Mar.	Sept.
5	....	7.02	5	6.07	6.90
10	....	7.04	10	5.62	6.76
15	....	6.32	15	6.00	6.66
20	....	5.98	20	5.76	5.93
25	....	5.36	25	6.11	5.58
eom	....	5.18	eom	6.09	5.76
	Apr.	Oct.		Apr.	Oct.
5	....	5.29	5	6.03	5.75
10	....	5.41	10	6.03	5.74
15	....	5.67	15	6.22	5.86
20	....	5.63	20	5.92	5.89
25	....	6.07	25	6.09	5.93
eom	....	5.88	eom	6.26	5.91
	May	Nov.		May	Nov.
5	....	4.86	5	6.08	5.90
10	....	4.36	10	6.07	5.80
15	....	4.64	15	6.20	5.90
20	....	4.39	20	6.21	5.11
25	....	4.41	25	6.18	5.40
eom	....	4.59	eom	6.18	5.33
	June	Dec.		June	Dec.
5	....	4.76	5	6.02	5.32
10	....	4.78	10	5.02	5.30
15	....	....	15	4.62	5.19
20	5.22	4.98	20	4.82	5.42
25	5.38	4.90	25	5.03	5.61
eom	5.58	5.31	eom	5.05	5.44

1961			1962		
Day	Jan.	July	Day	Jan.	July
5	.....	.....	5	35.43	35.23
10	.....	.....	10	35.46	35.22
15	.....	.....	15	35.40	35.24
20	.....	.....	20	35.35	35.25
25	.....	36.59	25	35.32	35.25
eom	.....	36.53	eom	35.32	35.24
	Feb.	Aug.		Feb.	Aug.
5	.....	36.55	5	35.38	35.21
10	.....	35.80	10	35.33	35.24
15	.....	35.78	15	35.35	35.24
20	.....	35.75	20	35.33	35.18
25	.....	35.73	25	35.33	35.19
eom	.....	35.70	eom	35.38	35.19
	Mar.	Sept.		Mar.	Sept.
5	.....	35.73	5	35.37	35.18
10	.....	35.69	10	35.31	35.19
15	.....	35.75	15	35.32	35.15
20	.....	35.69	20	35.33	35.17
25	.....	35.74	25	35.34	35.13
eom	.....	35.71	eom	35.32	35.13
	Apr.	Oct.		Apr.	Oct.
5	.....	35.66	5	35.30	35.01
10	.....	35.65	10	35.32	.....
15	.....	35.65	15	35.35	.....
20	.....	35.63	20	35.28	.....
25	.....	35.69	25	35.29	.....
eom	.....	35.62	eom	35.34	.....
	May	Nov.		May	Nov.
5	.....	35.68	5	35.30	.....
10	.....	35.55	10	35.30	35.10
15	.....	35.60	15	35.32	35.09
20	.....	35.55	20	35.38	35.03
25	.....	35.51	25	35.37	35.07
eom	.....	35.48	eom	35.35	35.02
	June	Dec.		June	Dec.
5	.....	35.54	5	35.48	35.06
10	.....	35.51	10	35.31	35.07
15	.....	35.46	15	35.26	35.02
20	.....	35.44	20	35.25	35.04
25	.....	35.38	25	35.27	35.05
eom	.....	35.44	eom	35.23	35.01

10N-19W-10bbb1. NW¼NW¼NW¼. Owner, U.S. Geol. Survey. Depth, 162 ft. Lsd, 1,921. Elk City Member, Quartermaster Formation. Well equipped with water-level recorder. Highest, 35.01, Dec. 31, 1962; lowest, 38.92, June 16, 1961 Records: 1961-62.

	1961			1962	

10W-19W-11aaa1. NE¼NE¼NE¼. Owner, U.S. Geol. Survey. Depth, 220 ft. Lsd, 1,895. Elk City Member, Quartermaster Formation. Well equipped with water-level recorder. Highest, 17.27, Nov. 20, 1961; lowest, 20.00, Sept. 5, 1961. Records: 1961-62.

Day	Jan.	July	Day	Jan.	July
5	.....	17.45	5	17.67	17.76
10	.....	17.56	10	18.09	18.05
15	.....	17.54	15	.....	18.13
20	.....	.....	20	.....	18.20
25	.....	17.58	25	.....	18.14
eom	.....	17.50	eom	.....	18.10
	Feb.	Aug.		Feb.	Aug.
5	.....	17.64	5	.....	17.93
10	.....	17.68	10	.....	18.07
15	.....	17.65	15	17.85	18.34
20	.....	17.64	20	17.75	18.23
25	.....	17.66	25	19.92	18.39
eom	.....	17.60	eom	18.19	18.37
	Mar.	Sept.		Mar.	Sept.
5	.....	17.80	5	18.20	18.44
10	.....	17.70	10	17.66	18.39
15	.....	17.86	15	18.06	18.22
20	.....	17.53	20	17.90	18.24
25	.....	17.90	25	.....	18.03
eom	.....	17.76	eom	.....	17.93
	Apr.	Oct.		Apr.	Oct.
5	.....	17.71	5	.....	17.77
10	.....	17.64	10	.....	.....
15	.....	17.83	15	18.37	.....
20	.....	17.62	20	18.02	.....
25	.....	18.01	25	18.14	.....
eom	.....	17.70	eom	18.37	.....
	May	Nov.		May	Nov.
5	.....	18.00	5	18.19	.....
10	.....	17.40	10	18.20	17.75
15	.....	17.51	15	18.33	17.80
20	.....	17.55	20	18.26	17.61
25	.....	17.40	25	18.31	18.01
eom	.....	17.21	eom	18.33	17.89
	June	Dec.		June	Dec.
5	.....	17.50	5	18.29	18.07
10	.....	17.58	10	19.92	17.90
15	.....	17.50	15	19.91	17.90
20	17.60	17.56	20	17.89	18.03
25	17.59	17.33	25	17.84	18.20
eom	17.50	17.74	eom	17.77	17.91

10N-19W-14ddd1. SE¼SE¼SE¼. Owner, U.S. Geol. Survey. Depth, 182 ft. Lsd, 1,880. Elk City Member, Quartermaster Formation. Well equipped with water-level recorder. Highest, 34.13, Mar. 10, 1962; lowest, 36.03, Aug. 10, 1961. Records: 1961-62.

Day	1961 Jan.	1961 July	Day	1962 Jan.	1962 July
5	.....	34.40	5	34.34	34.59
10	.....	34.30	10	34.45	34.72
15	.....	34.37	15	.....	34.59
20	.....	34.47	20	.....	34.77
25	.....	34.33	25	.....	34.70
eom	.....	34.36	eom	.....	34.73
	Feb.	Aug.		Feb.	Aug.
5	.....	34.42	5	.....	34.59
10	.....	34.53	10	.....	34.79
15	.....	34.47	15	34.20	34.85
20	.....	34.45	20	34.15	34.99
25	.....	34.45	25	34.23	35.04
eom	.....	34.33	eom	34.30	34.89
	Mar.	Sept.		Mar.	Sept.
5	.....	34.41	5	34.35	34.89
10	.....	34.35	10	34.13	34.80
15	.....	34.50	15	34.30	34.79
20	.....	34.30	20	34.29	34.75
25	.....	34.43	25	34.41	34.75
eom	.....	34.45	eom	34.37	34.61
	Apr.	Oct.		Apr.	Oct.
5	.....	34.51	5	34.33	34.50
10	.....	34.35	10	34.35	.....
15	.....	34.50	15	34.40	.....
20	.....	34.39	20	34.34	.....
25	.....	34.62	25	34.31	.....
eom	.....	34.39	eom	34.42	.....
	May	Nov.		May	Nov.
5	.....	34.57	5	34.33	.....
10	.....	34.27	10	34.52	.....
15	.....	34.35	15	34.55	.....
20	.....	34.37	20	34.46	.....
25	.....	34.42	25	34.51	.....
eom	.....	34.28	eom	34.54	.....
	June	Dec.		June	Dec.
5	.....	34.37	5	34.63	.....
10	.....	34.36	10	34.51	.....
15	.....	34.36	15	34.45	.....
20	34.39	34.35	20	34.49	34.46
25	34.43	34.21	25	34.56	34.58
eom	34.41	34.29	eom	34.52	34.45

1961						1962					

20N-17W-5cdc1. SW¼SE¼SW¼. Owner, U.S. Geol. Survey. Depth, 13 ft. Lsd, 1,727. Alluvium. Highest, 3.15, May 22, 1957; lowest, dry at 13, Oct. 9, 1956. Records: 1951-62.

Jan.	20	5.07	Aug.	3	6.36	Jan.	4	5.11	June	25	4.39
Feb.	15	4.63	Aug.	30	5.75	Feb.	2	4.72	July	24	6.09
Mar.	15	5.08	Sept.	28	6.40	Mar.	1	5.15	Aug.	22	6.86
Apr.	13	4.34	Oct.	26	6.57	Mar.	30	5.21	Sept.	19	6.74
May	10	4.14	Nov.	16	5.60	Apr.	26	6.22	Oct.	18	6.24
June	8	4.30	Dec.	7	5.37	May	24	6.12	Nov.	14	6.02
July	6	6.08									

20N-17W-10bbb1. NW¼NW¼NW¼. Owner, U.S. Geol. Survey. Depth, 57 ft. Lsd, 1,723. Terrace deposit. Highest, 7.38, June 8, 1961; lowest, 12.80, May 7, 1957. Records: 1957-62.

Jan.	20	8.58	Aug.	3	8.62	Jan.	4	8.51	May	24	8.70
Feb.	15	8.52	Aug.	30	8.56	Feb.	22	8.42	June	25	7.91
Mar.	15	8.38	Sept.	28	9.00	Mar.	11	8.37	Aug.	22	9.28
Apr.	13	7.71	Oct.	26	9.15	Mar.	30	8.33	Sept.	19	9.67
May	10	7.40	Nov.	16	8.56	Apr.	26	8.22	Nov.	14	8.80
June	8	7.38	Dec.	7	8.67						
July	6	8.10									

20N-20W-36bbb1. NW¼NW¼NW¼. Owner, School land. Depth, 42 ft. Lsd, 2,061. Rush Springs Sandstone. Highest, 33.05, July 21, 1960; lowest, 38.97, June 6, 1957. Records: 1955-62.

Jan.	16	33.30	Aug.	3	33.38	Jan.	4	33.55	June	26	33.22
Feb.	16	33.32	Aug.	31	33.35	Feb.	1	33.50	Aug.	23	33.31
Mar.	16	33.49	Sept.	27	33.75	Mar.	1	33.67	Sept.	20	33.70
Apr.	13	33.24	Oct.	25	33.54	Mar.	29	33.58	Oct.	17	33.70
May	11	33.24	Nov.	15	33.33	Apr.	26	33.54	Nov.	14	33.77
June	9	32.20	Dec.	6	33.65	May	24	33.63			
July	7	33.25									

20N-22W-36add1. SE¼SE¼NE¼. Owner, U.S. Geol. Survey. Depth, 402 ft. Lsd, 2,374. Ogallala Formation. Highest, 95.02, Sept. 27, 1961; lowest, 96.17, Dec. 14, 1962. Records: 1957-62.

Jan.	16	95.78	Aug.	3	95.93	Jan.	4	95.85	July	25	96.04
Feb.	16	95.80	Aug.	31	95.82	Feb.	1	95.94	Aug.	23	95.98
Mar.	16	95.84	Sept.	27	95.02	Mar.	1	95.91	Sept.	20	96.04
Apr.	13	95.63	Oct.	25	96.00	Mar.	29	95.99	Act.	1	95.93
May	11	95.80	Nov.	15	95.75	Apr.	26	95.87	Nov.	14	95.93
June	9	95.84	Dec.	6	95.97	May	24	95.90	Dec.	14	96.17
July	7	95.92				June	26	96.00			

1961						1962					

21N-18W-14aaa1. NE¼NE¼NE¼. Depth, 24 ft. Lsd, 1,773. Terrace deposit. Highest, 18.29, June 15, 1960; lowest, 22.29, Aug. 21, 1957. Records: 1957-62.

Feb.	15	20.44	Aug.	3	20.52	Jan.	4	20.61	May	24	20.76
Mar.	15	20.43	Aug.	30	20.48	Feb.	2	20.72	June	25	19.99
Apr.	13	20.15	Sept.	28	20.60	Mar.	1	20.71	Aug.	22	20.18
May	10	20.01	Oct.	26	20.69	Mar.	30	30.71	Sept.	19	20.44
June	8	20.00	Nov.	16	20.68	Apr.	26	20.70	Nov.	14	20.42
July	6	20.10	Dec.	7	20.66						

21N-18W-27bcb1. NW¼SW¼NW¼. Owner, Gene Ellington. Depth, 53 ft. Lsd, 1,805. Terrace deposit. Highest, 38.87, Nov. 14, 1962; lowest, 44.98, Oct. 25, 1957. Records: 1955-62.

No measurements in 1961.

May	25	39.49	Oct.	18	38.95
June	26	39.54	Nov.	14	38.87
July	25	39.72			

21N-18W-31bba1. NE¼NW¼NW¼. Owner, U.S. Geol. Survey, Depth, 16 ft. Lsd, 1,834. Alluvium. Highest, 2.95, June 25, 1957; lowest, 11.82, Feb. 27, 1957. Records: 1952-62.

Jan.	20	6.62	Aug.	3	7.27	Jan.	3	7.07	July	25	7.48
Feb.	16	6.40	Aug.	31	7.49	Feb.	2	6.93	Aug.	23	8.05
Mar.	16	6.43	Sept.	28	7,80	Mar.	2	6.96	Sept.	20	4.74
Apr.	13	5.13	Oct.	26	7.81	Mar.	30	7.03	Oct.	18	6.40
May	11	5.68	Nov.	16	7.47	Apr.	27	7.02	Nov.	14	6.99
June	9	6.26	Dec.	7	7.25	May	25	7.37	Dec.	14	7.05
July	7	6.72				June	26	6.28			

21N-19W-12bbd1. SE¼NW¼NW¼. Owner, Joel Price. Depth, 32 ft. Lsd, 1,796. Terrace deposit. Highest, 7.17, June 9, 1961; lowest, 15.46, Nov. 14, 1956. Records: 1956-62.

Jan.	20	7.39	Aug.	3	8.13	Jan.	3	8.46	June	26	8.14
Feb.	16	8.18	Aug.	31	8.53	Feb.	2	8.43	July	25	9.66
Mar.	16	8.20	Sept.	28	9.14	Mar.	2	8.31	Aug.	23	9.84
Apr.	13	7.57	Oct.	26	9.43	Mar.	30	8.59	Sept.	20	9.49
May	11	7.87	Nov.	16	9.28	Apr.	27	8.85	Oct.	18	8.70
June	9	7.17	Dec.	7	8.93	May	25	9.54	Nov.	14	8.68
July	7	7.66									

1961						1962					

21N-19W-24baa1. NE¼NE¼NW¼. Owner, A. W. Crawford. Depth, 65 ft. Lsd, 1,816. Terrace deposit. Highest, 31.31, Dec. 13, 1960; lowest, dry at 65 , May 8, 1956. Records: 1955-62.

Jan.	20	31.29	Aug.	3	31.80	Jan.	3	31.68	June	26	32.08
Feb.	16	31.26	Aug.	31	31.78	Feb.	2	31.70	July	25	32.17
Mar.	16	31.38	Sept.	28	31.71	Mar.	2	31.75	Aug.	23	32.24
Apr.	13	31.38	Oct.	26	31.79	Mar.	30	31.83	Sept.	20	32.78
May	11	31.60	Nov.	16	31.76	Apr.	27	31.82	Oct.	18	32.46
June	9	31.67	Dec.	7	31.70	May	25	31.98	Nov.	14	31.92
July	7	31.79									

21N-21W-12cbb1. NW¼NW¼SW¼. Depth, 32 ft. Lsd, 2,109. Ogallala Formation. Highest, 13.94, June 25, 1957; lowest, 19.60, Oct. 31, 1956. Records: 1956-62.

Jan.	16	15.59	June	9	15.11	Jan.	4	15.82	Sept.	19	18.91
Feb.	16	15.41	July	7	15.53	Feb.	1	15.68	Oct.	18	17.00
Mar.	16	15.34	Aug.	3	15.85	May	24	18.13	Nov.	14	16.80
Apr.	13	14.03	Aug.	31	16.25	June	25	17.01	Dec.	14	16.58
May	11	14.90	Nov.	15	16.09	July	25	17.68			

21N-22W-23bbb1. NW¼NW¼NW¼. Owner, U.S. Geol. Survey. Depth, 322 ft. Lsd, 2,335. Ogallala Formation. Well equipped with water-level recorder. Highest, 27.32, July 5, 1961; lowest, 29.78, Apr. 20, 1957. Records: 1957-62.

1961			1962		
Day	Jan.	July	Day	Jan.	July
5	.....	27.32	5	27.67	27.61
10	27.48	27.39	10	27.77	27.63
15	27.49h	27.35	15	27.65	27.64
20	27.57	27.37	20	27.62	27.64
25	27.60	27.41	25	27.53	27.80
eom	27.52	27.38	eom	27.62	27.72
	Feb.	Aug.		Feb.	Aug.
5	27.59	27.41	5	27.74	27.65
10	27.54	27.41	10	27.67	27.63
15	27.59	27.42	15	27.70	27.66
20	27.52	27.47	20	27.69	27.66
25	27.53	27.41	25	27.68	27.70
eom	27.57	27.41	eom	27.79	27.67
	Mar.	Sept.		Mar.	Sept.
5	27.55	27.48	5	27.82	27.70
10	27.51	27.47	10	27.61	27.71
15	27.57	27.57	15	27.76	27.67
20	27.62	27.41	20	27.76	27.73
25	27.57	27.61	25	27.84	27.70
eom	27.61	27.58	eom	27.83	27.70
	Apr.	Oct.		Apr.	Oct.
5	27.68	27.52	5	27.81	27.61
10	27.59	27.54	10	27.84	27.62
15	27.69	27.61	15	27.92	27.70
20	27.55	27.53	20	27.77	27.61
25	27.61	27.67h	25	27.83	27.66
eom	27.51	.....	eom	27.94	27.57
	May	Nov.		May	Nov.
5	27.52	.....	5	27.87	27.53
10	27.54	.....	10	27.86	27.47
15	27.59	27.56	15	27.91	27.48
20	27.55	27.47	20	27.88	27.49
25	27.58	27.49	25	27.86	27.58
eom	27.48	27.43	eom	27.94	27.54
	June	Dec.		June	Dec.
5	27.49	27.53	5	27.96	27.59
10	27.48	27.56	10	27.99	27.55
15	27.54	27.57	15	27.86	27.54
20	27.44	27.56	20	27.85	27.60
25	27.39	27.51	25	27.80h	27.66
eom	27.37	27.69	eom	27.65	27.56

1961						1962					

22N-18W-33ccc1. SW¼SW¼SW¼. Owner. U.S. Geol. Survey. Depth, 62 ft. Lsd, 1,840. Terrace deposit. Highest, 23.07, Oct. 30, 1958; lowest, 25.78, May 6, 1957. Records: 1957-62.

Feb.	15	23.99	Aug.	3	24.32	Jan.	3	24.29	June	25	24.65
Mar.	15	23.97	Aug.	30	24.35	Feb.	2	24.22	Aug.	22	25.04
Apr.	13	23.98	Sept.	28	24.42	Mar.	1	24.34	Sept.	19	25.15
May	10	24.00	Oct.	26	24.45	Mar.	30	24.35	Oct.	18	24.98
June	8	24.05	Nov.	16	24.39	Apr.	26	24.33	Nov.	5	24.83
July	6	24.23	Dec.	7	24.33	May	24	24.51			

22N-20W-15bba1. NE¼NW¼NW¼. Owner, J. L. Smalling. Depth, 43 ft. Lsd, 2,050. Rush Springs Sandstone. Highest, 17.10, Dec. 13, 1960; lowest, 24.94, May 15, 1956. Records: 1955-62.

No measurements made in 1961.

May	24	17.68	Sept.	20	18.49
June	25	17.93	Oct.	18	17.98
July	25	18.24	Nov.	15	17.78
Aug.	22	18.65			

22N-20W-25bbb1. NW¼NW¼NW¼. Owner, U.S. Geol. Survey. Depth, 9 ft. Lsd, 1,904. Alluvium. Highest, 1.65, July 1, 1957; lowest, 7.65, Oct. 23, 1956. Records: 1952-62.

Jan.	20	4.09	Aug.	3	4.52	Jan.	3	4.08	June	25	3.67
Feb.	16	3.82	Aug.	31	4.76	Feb.	2	3.85	July	25	4.72
Mar.	15	3.59	Sept.	29	4.97	Mar.	2	3.80	Aug.	22	5.10
Apr.	13	2.68	Oct.	25	4.86	Mar.	30	3.78	Sept.	20	4.85
May	11	2.90	Nov.	16	4.46	Apr.	27	3.63	Oct.	18	4.67
June	8	3.17	Dec.	7	4.24	May	24	4.36	Nov.	15	4.52
July	7	3.85									

22N-22W-19ccc1. SW¼SW¼SW¼. Depth, 76 ft. Lsd, 2,136. Ogallala Formation. Highest, 26.35, May 18, 1960; lowest, 29.71, Oct. 17, 1956. Records: 1955-62.

Jan.	16	27.22	Aug.	2	27.13	Jan.	3	27.22	June	25	27.20
Feb.	15	27.19	Aug.	30	27.13	Feb.	1	27.26	Aug.	22	27.43
Mar.	15	27.13	Sept.	27	27.27	Mar.	1	27.24	Sept.	19	27.57
Apr.	13	27.07	Oct.	25	26.40	Mar.	29	27.26	Oct.	18	27.58
May	10	26.90	Nov.	15	27.25	Apr.	26	27.24	Nov.	14	27.30
June	8	26.75	Dec.	6	27.32	May	24	27.32			
July	6	26.80									

1961						1962					

23N-19W-3aaa1. NE¼NE¼NE¼. Owner, Wayne Trissell. Depth, 97 ft. Lsd, 2,006. Terrace deposit. Highest, 37.65, Apr. 26, 1962; lowest, 42.38, Apr. 29, 1957. Records: 1955-62.

Jan.	18	38.53	Aug.	2	38.06	Jan.	3	37.77	June	25	37.75
Feb.	15	38.47	Aug.	30	38.77	Feb.	1	37.78	July	24	37.72
Mar.	15	38.30	Sept.	27	38.84	Mar.	1	37.84	Aug.	22	37.68
Apr.	13	38.14	Oct.	25	37.95	Mar.	29	37.73	Sept.	19	37.77
May	10	38.22	Nov.	15	37.97	Apr.	26	37.65	Oct.	18	37.92e
June	9	38.15	Dec.	6	37.79	May	24	37.69	Nov.	15	37.89e
July	6	38.10									

23N-19W-20bab1. NW¼NE¼NW¼. Owner, Walter Richard. Depth, 39 ft. Lsd, 1,921. Terrace deposit. Highest, 19.27, June 8, 1961; lowest, 28.35, Aug. 28, 1956. Records: 1955-62.

Jan.	18	19.81	Aug.	2	20.02	Jan.	3	19.77	June	25	19.59
Feb.	15	19.73	Aug.	30	20.17	Feb.	1	19.70	July	24	20.11
Mar.	15	19.59	Sept.	27	20.35	Mar.	1	19.58	Aug.	22	20.37
Apr.	13	19.41	Oct.	25	20.47	Mar.	29	19.94	Sept.	19	20.63
May	10	19.27	Nov.	16	20.12	Apr.	26	19.37	Oct.	18	20.25
June	8	19.27	Dec.	6	19.96	May	24	19.78	Nov.	15	20.07
July	6	19.84									

23N-19W-33ddb1. NW¼SE¼SE¼. Owner, Emma Barton. Depth, 30 ft. Lsd, 1,861. Terrace deposit. Well equipped with water-level recorder. Highest, 1.39, Mar. 31, 1960; lowest, 6.00, Nov. 17, 1955. Records: 1955; 1957-62.

Day	Jan.	July	Day	Jan.	July
	1961			1962	
5	3.40	.....	5	3.63	3.50
10	3.41	3.61	10	3.60	3.80
15	3.50	3.33	15	3.52	4.06
20	3.40	3.60	20	3.51	4.26
25	3.41	3.73	25	3.52	4.30
eom	3.43	4.08	eom	3.25	4.37
	Feb.	Aug.		Feb.	Aug.
5	3.40	4.14	5	3.38	4.08
10	3.36	4.32	10	3.36	4.46
15	3.15	4.31	15	.....	4.68
20	3.16	4.07	20	.....	4.98
25	3.05	4.20	25	.....	5.08
eom	3.10	4.48	eom	.....	5.22
	Mar.	Sept.		Mar.	Sept.
5	3.12	4.56	5	3.43	5.16
10	3.19	4.59	10	3.42	5.18
15	3.21	4.59	15	3.46	5.30
20	2.75	4.65	20	3.47	4.22
25	2.83	4.68	25	3.50	4.14
eom	2.75	4.75	eom	3.51	4.07
	Apr.	Oct.		Apr.	Oct.
5	2.56	4.81	5	3.53	4.04
10	2.39	4.77	10	3.42	4.02
15	2.62	4.50	15	3.46	4.08h
20	2.78	4.54	20	3.53	4.07
25	2.95	4.58h	25	3.71	4.10
eom	2.96	.....	eom	3.64	4.10
	May	Nov.		May	Nov.
5	2.48	.....		3.86	4.12
10	2.80	.....	10	4.10	4.12
15	3.11	4.06	15	4.31	3.16h
20	3.17	3.94	20	4.48	3.11
25	3.32	3.89	25	4.63	3.11
eom	.....	3.88	eom	4.72	3.04
	June	Dec.		June	Dec.
5	.....	3.85	5	3.79	.....
10	3.30h	3.77	10	3.79	.....
15	.....	3.77	15	3.47	.....
20	.....	3.68	20	3.58	.....
25	.....	3.64	25	3.46h	.....
eom	.....	3.64	eom	3.24	.....

1961						1962					
Jan.	17	27.59	July	6	27.56	Jan.	4	27.41	May	25	32.33
Feb.	15	27.62	Oct.	26	27.50	Feb.	2	27.41	June	25	30.90
Apr.	15	27.57	Nov.	16	27.45	Mar.	2	27.46	July	24	29.35
May	10	27.60	Dec.	7	27.41	Mar.	29	27.49	Sept.	19	32.01
June	8	27.45				Apr.	27	27.50	Oct.	18	28.22

23N-20W-5bba1. NE¼NW¼NW¼. Owner, Oscar Foglesong. Depth, 40 ft. Lsd, 2,016. Terrace deposit. Highest, 27.02, June 15, 1960; lowest, 31.18, Oct. 9, 1956. Records: 1955-62.

23N-20W-19cbb1. NW¼NW¼SW¼. Owner, William and Grace Erts. Depth, 26 ft. Lsd, 1,875. Alluvium. Highest, 1.02, July 1, 1957; lowest, 6.94, Oct. 9, 1956. Records: 1945-62.

Jan.	17	4.15	Aug.	2	4.27	Jan.	3	4.06	July	24	4.50
Feb.	15	3.95	Aug.	31	4.40	Feb.	1	3.87	Aug.	22	4.88
Mar.	15	3.78	Sept.	27	4.71	Mar.	1	3.80	Sept.	19	5.08
Apr.	14	2.99	Oct.	25	4.78	Mar.	29	3.74	Oct.	18	4.63
May	10	2.77	Nov.	16	4.40	Apr.	27	3.53	Nov.	15	4.95
June	8	3.11	Dec.	6	4.25	May	24	4.16	Dec.	14	4.47
July	6	3.88				June	25	3.69			

23N-21W-27bab1. NW¼NE¼NW¼. Depth, 61 ft. Lsd, 1,952. Whitehorse Group. Highest, 16,20, Apr. 20, 1960; lowest, 27.91, Mar. 28, 1957. Records: 1955-62.

Jan.	17	20.22	Aug.	2	19.15	Jan.	4	19.54	June	26	19.31
Feb.	15	20.31	Aug.	30	18.80	Feb.	1	19.73	July	25	20.26
Mar.	15	20.45	Sept.	27	20.15	Mar.	1	19.98	Aug.	22	19.62
Apr.	14	19.96	Oct.	25	20.62	Mar.	30	20.46	Oct.	18	20.54
May	10	19.59	Nov.	15	19.70	Apr.	27	19.72	Nov.	15	20.93
June	8	19.14	Dec.	6	19.63	May	25	19.85			
						Measurement discontinued					

23N-21W-30ddd1. SE¼SE¼SE¼. Depth, 38 ft. Lsd, 2,095. Rush Springs Sandstone. Highest, 6.98, Aug. 14, 1958; lowest, 18.03, Oct. 31, 1956. Records: 1955-62.

Jan.	16	11.51	Aug.	2	11.88	Jan.	3	12.28	Mar.	29	12.19
Feb.	15	11.58	Aug.	30	11.94	Feb.	1	12.26	Apr.	26	12.25
Mar.	15	11.42	Sept.	27	12.47	Mar.	1	12.17	May	24	12.97
Apr.	13	10.87	Oct.	25	12.80	Measurement discontinued					
May	10	10.43	Nov.	15	12.47						
June	8	10.67	Dec.	6	12.44						
July	6	11.25									

1961						1962			
Jan.	16	14.80	Aug.	2	14.05	Jan.	3	16.58	May 24	14.67
Feb.	15	14.87	Aug.	30	13.52	Feb.	1	16.50	June 25	13.95
Mar.	15	14.83	Sept.	27	13.50	Mar.	1	14.53	July 25	14.09
Apr.	13	14.84	Oct.	25	13.93	Mar.	29	14.62	Aug. 22	14.23
May	10	14.15	Nov.	15	16.10	Apr.	26	14.66	Sept. 19	14.78
June	8	14.79	Dec.	6	17.69	Measurement discontinued				
July	6	13.77								

24N-20W-14ddd1. SE¼SE¼SE¼. Owner, U.S. Geol. Survey. Depth, 63 ft. Lsd, 2,132. Terrace deposit. Highest, 50.59, Oct. 18, 1962; lowest, 59.25, Apr. 29, 1957. Records: 1957-62.

No measurements in 1961.

1962			
Jan.	3	52.17	June 25 50.84
Feb.	2	51.48	July 24 51.30
Mar.	2	51.27	Aug. 22 50.70
Mar.	29	51.14	Sept. 19 50.70
Apr.	27	51.03	Oct. 18 50.59
May	25	50.92	Nov. 15 50.67

24N-20W-30bbb1. NW¼NW¼NW¼. Owner, U.S. Geol. Survey. Depth, 42 ft. Lsd, 2,018. Terrace deposit. Highest, 27.55, Nov. 16, 1960; lowest, 34.05, Apr. 29, 1957. Records: 1957-62.

1961						1962			
Jan.	17	28.73	Aug.	2	28.75	Jan.	4	28.45	May 25	28.69
Feb.	15	28.76	Aug.	31	28.63	Feb.	2	28.55	June 25	28.75
Mar.	15	28.72	Sept.	27	28.68	Mar.	2	28.58	July 24	28.75
Apr.	14	28.74	Oct.	26	28.70	Mar.	29	28.61	Sept. 19	28.80
May	10	28.89	Nov.	16	28.58	Apr.	27	28.55		
June	8	28.76	Dec.	7	28.61	Measurement discontinued				
July	6	28.83								

24N-20W-33dcc1. SW¼SW¼SE¼. Owner, U.S. Geol. Survey. Depth, 52 ft. Lsd, 2,037. Terrace deposit. Highest 46.09, Apr. 27, 1962; lowest, 48.23, May 27, 1957. Records: 1957-62.

1961						1962			
Jan;	17	46.37	Aug.	2	46.23	Jan.	4	47.20	June 25	46.23
Feb.	15	46.30	Aug.	31	46.19	Feb.	2	46.16	Aug. 22	46.23
Mar.	15	46.27	Sept.	27	46.23	Mar.	2	46.16	Sept. 19	46.31
Apr.	14	46.24	Oct.	26	46.30	Mar.	29	46.16	Oct. 18	46.32
May	10	46.26	Nov.	16	46.29	Apr.	27	46.09	Nov. 15	46.35
June	8	46.23	Dec.	7	46.19	May	25	46.18		
July	6	46.26								

1961						1962			

24N-21W-34ddc1. SW¼SE¼SE¼. Owner, U.S. Geol. Survey. Depth, 42 ft. Lsd, 1,981. Terrace deposit. Highest, 16.89, Jan. 17, 1961; lowest, 25.97, Mar. 6, 1957. Records: 1957-62.

Jan.	17	16.89				May	25	17.78	Sept. 19	17.92
						June	25	17.94	Oct. 18	17.90
						July	24	17.91	Nov. 15	19.90
						Aug.	22	17.86		

24N-22W-6abb1. NW¼NW¼NE¼. Owner, U.S. Geol. Survey. Depth, 13 ft. Lsd, 1,979, Alluvium. Highest, 0.57, July 1, 1957; lowest, 6.98, Oct. 25, 1957. Records: 1951-62.

Jan.	16	5.08	Aug.	2	5.19	Jan.	4	5.19	June	26	4.59
Feb.	16	4.94	Aug.	31	5.15	Feb.	2	5.03	July	25	5.57
Mar.	15	5.06	Sept.	27	5.64	Mar.	1	5.01	Aug.	22	5.96
Apr.	14	4.46	Oct.	26	5.82	Mar.	30	5.02	Sept.	19	6.11
May	10	4.65	Nov.	16	5.55	Apr.	27	5.02	Oct.	18	5.63
June	8	4.95	Dec.	7	5.37	May	25	5.60	Nov.	15	5.60
July	7	5.39									

24N-22W-10ccc1. SW¼SW¼SW¼. Owner, U.S. Geol. Survey. Depth, 17 ft. Lsd, 1,976. Alluvium. Highest, 8.93, July 1, 1957; lowest, dry at 17, Jan. 27, 1960. Records: 1951-62.

Jan.	16	13.52	Aug.	2	14.43	Jan.	4	14.74	June	26	14.29
Feb.	16	13.19	Aug.	31	14.69	Feb.	2	14.60	July	25	14.57
Mar.	15	13.17	Sept.	27	15.15	Mar.	1	14.14	Aug.	22	15.24
Apr.	14	13.39	Oct.	26	15.55	Mar.	30	14.03	Sept.	19	14.83
May	10	12.94	Nov.	16	15.56	Apr.	27	14.10	Oct.	18	14.19
June	8	12.80	Dec.	7	15.56	May	25	14.79	Nov.	15	14.28
July	7	13.56									

Table 4.--Supplemental water-level records

(Records of ground-water levels not included in previous water-level reports)

10N-24E-13bcd1. SE¼SW¼NW¼. Owner, G. W. Jones. Depth, 24 ft. Lsd, 447. Alluvium. Well equipped with water-level recorder. Highest, 14.30, June 5, 1960; lowest, 21.45, Feb. 15, 1959. Records: 1958-62.

Day	1958 Jan	1958 July	Day	1959 Jan.	1959 July
5	.....	16.90	5	20.90	19.58
10	.....	16.66	10	21.00	19.69
15	.....	16.07	15	21.10	19.78
20	.....	15.18	20	21.18	19.66
25	.....	14.67	25	21.33	18.94
eom	.....	14.62	eom	21.44	.....
	Feb.	Aug.		Feb.	Aug.
5	.....	14.82	5	21.44	.....
10	.....	15.13	10	21.41	.....
15	.....	15.20	15	21.45	.....
20	.....	15.50	20	21.41	.....
25	.....	15.57	25	21.31	.....
eom	.....	15.88	eom	.....	.....
	Mar.	Sept.		Mar.	Sept.
5	.....	16.31	5	21.27	18.75
10	.....	16.74	10	21.19	18.98
15	.....	17.11	15	20.76	19.14
20	.....	17.30	20	20.63	19.33
25	.....	17.28	25	20.45	19.49
eom	.....	17.33	eom	20.21	19.33
	Apr.	Oct.		Apr.	Oct.
5	16.96	17.48	5	20.27	18.66
10	16.50	17.85	10	20.38	15.45
15	16.46	18.19	15	20.45	13.09
20	16.63	18.47	20	20.37	12.17
25	16.58	18.77	25	20.15	11.92
eom	16.67	19.06	eom	20.18	.....
	May	Nov.		May	Nov.
5	16.82	19.39	5	20.35	.....
10	16.48	19.64	10	20.53	
15	16.16	19.84	15	20.13	.....
20	16.27	19.95	20	19.53	.....
25	16.61	19.96	25	19.20	.....
eom	.....	19.96	eom	18.72	.....
	June	Dec.		June	Dec.
5	.....	20.06	5	18.47	15.42
10	.....	20.20	10	18.54	15.71
15	.....	20.34	15	18.77	16.08
20	.....	20.46	20	19.02	16.29
25	.....	20.58	25	19.33	15.93
eom	.....	20.74	eom	19.53	15.87

10N-24E-13bcd1.--Continued

Day	Jan.	July
5	15.95	15.84
10	16.18	16.21
15	16.24	16.43
20	16.00	16.60
25	15.97	16.73
eom	.....	15.92
	Feb.	Aug.
5	16.54	15.71
10	16.35	16.05
15	16.15	16.41
20	16.30	16.69
25	16.52	16.91
eom	.....	16.95
	Mar.	Sept.
5	.....	16.67
10	17.12	16.91
15	17.12	17.24
20	16.92	17.58
25	15.62	17.91
eom	16.43	18.25
	Apr.	Oct.
5	16.56	18.51
10	16.70	18.73
15	16.89	18.98
20	16.63	19.23
25	16.48	19.16
eom	16.88	18.97
	May	Nov.
5	16.90	18.82
10	16.59	18.53
15	15.88	18.65
20	15.70	18.88
25	15.01	19.07
eom	14.40	19.38
	June	Dec.
5	14.30	19.55
10	14.40	19.72
15	14.47	19.56
20	14.64	19.24
25	14.97	19.14
eom	15.41	19.28

12N-20E-13dcc1. SW¼SW¼SE¼. Owner, U.S. Geol. Survey. Depth, 42 ft. Lsd, 486. Alluvium. Highest, 17.01, July 30, 1959; lowest, 25.05, Aug. 29, 1962. Records: 1958-62.

1958			1959			1960		
July	15	24.20	Jan.	29	22.95	Jan.	5	22.69
Aug.	14	23.29	Mar.	3	23.09	Feb.	4	22.54
Sept.	5	23.08	Mar.	31	22.98	Mar.	11	22.60
Oct.	1	22.93	Apr.	29	22.98	Mar.	30	22.57
Oct.	30	22.83	May	27	22.83	Apr.	28	22.54
Nov.	5	25.79	June	25	22.77	May	25	22.35
Dec.	1	22.78	July	30	17.01	June	16	22.30
			Aug.	13	22.86	July	18	22.17
			Sept.	2	23.49	Aug.	16	21.88
			Sept.	10	23.46	Sept.	13	21.72
			Sept.	29	23.36	Oct.	3	21.68
			Oct.	13	23.06	Nov.	2	21.71
			Oct.	21	22.97	Dec.	1	21.79
			Dec.	2	22.78			

15N-19E-22acb1. NW¼SW¼NE¼. Owner, Mrs. Dill. Depth, 42 ft. Lsd, 517. Alluvium. Well equipped with water-level recorder. Highest, 19.27, Aug. 20, 1960; lowest, 23.52, Dec. 20, 1962. Records: 1958-62.

Day	1958 Jan.	1958 July		1959 Jan.	1959 July
5	.....	21.47	5	23.26	24.70
10	.....	21.42	10	23.29	24.74
15	.....	21.16	15	23.38	24.76
20	.....	21.10	20	23.44	24.58
25	.....	21.13	25	23.45	23.86
eom	.....	21.02	eom	23.60	23.59
	Feb.	Aug.		Feb.	Aug.
5	.....	21.08	5	23.70	23.35
10	.....	20.96	10	23.78	23.34
15	.....	20.95	15	23.84	23.32
20	.....	20.97	20	23.94	23.43
25	.....	21.04	25	23.99	23.54
eom	.....	21.15	eom	24.08	.....
	Mar.	Sept.		Mar.	Sept.
5	.....	21.20	5	24.08	23.78
10	.....	21.26	10	24.12	23.94
15	.....	21.37	15	24.23	23.96
20	.....	21.41	20	24.20	24.11
25	.....	21.54	25	24.28	24.07
eom	.....	21.68h	eom	24.24	.....
	Apr.	Oct.		Apr.	Oct.
5	23.31	21.71	5	24.36	.....
10	23.42	21.88	10	24.45	.....
15	23.41	21.91	15	24.47	.....
20	23.34	21.93	20	24.44	.....
25	23.17	22.11	25	24.40	.....
eom	22.95	22.18	eom	24.50	22.09
	May	Nov.		May	Nov.
5	22.34	22.25	5	24.67	22.03
10	.....	22.34	10	24.59	21.75
15	21.94	22.40	15	24.44	21.69
20	21.87	22.51	20	24.39	21.62
25	21.84	22.63	25	24.48	21.64
eom	.....	22.66	eom	24.58	21.67
	June	Dec.		June	Dec.
5	.....	22.79	5	24.28	21.74
10	22.07	22.84	10	24.26	21.68
15	22.16	22.92	15	24.38	21.75
20	22.22	23.00	20	24.49	21.60
25	.....	23.04	25	24.57	21.52
eom	.....	23.13	eom	.....	21.43

15N-19E-22acb1.Continued

Day	Jan.	July
5	21.36	19.98
10	21.31	19.96
15	21.24	20.13
20	21.15	20.26
25	20.93	19.90
eom	20.91	19.76
	Feb.	Aug.
5	21.06	19.60
10	21.14	19.64
15	21.07	19.71
20	21.06	19.27
25	21.13	19.45
eom	21.19	19.54
	Mar.	Sept.
5	21.23	19.65
10	21.24	19.80
15	21.12	19.95
20	21.27	20.09
25	21.18	20.22
eom	21.15	20.34
	Apr.	Oct.
5	21.36	.....
10	21.41	20.59
15	21.34	20.73
20	21.28	20.82
25	21.35	20.86
eom	21.38	20.96
	May	Nov.
5	21.12	21.14
10	20.75	21.23
15	20.60	21.22
20	20.39	21.35
25	20.27	21.40
eom	20.15	21.57
	June	Dec.
5	20.09	21.62
10	19.90	21.61
15	19.79	21.71
20	19.84	21.97
25	19.85	21.75
eom	19.88	21.87

12N-22W-7da1. NE¼SE¼. Owner, Clarence Fowler. Depth, 308 ft. Rocks of Permian age. Well equipped with water-level recorder. Highest, 5.32, Dec. 15, 1962; lowest, 10.72, May 5, 1959. Records: 1959-62.

Day	1959 Jan.	July	Day	1960 Jan.	July
5	.....	10.26	5	9.49	7.45
10	.....	10.33	10	9.48	7.32
15	.....	10.31	15	9.47	.....
20	.....	10.31	20	9.30	.....
25	.....	10.33	25	9.41	.....
eom	.....	.....	eom	9.00	.....
	Feb.	Aug.		Feb.	Aug.
5	.....	.....	5	9.05	.....
10	.....	.....	10	9.13	.....
15	.....	10.19	15	8.96	.....
20	.....	10.18	20	8.91	.....
25	.....	10.27h	25	8.82	.....
eom	.....	.....	eom	8.86	.....
	Mar.	Sept.		Mar.	Sept.
5	.....	.....	5	8.75	.....
10	.....	.....	10	8.64	.....
15	.....	.....	15	8.53	.....
20	.....	.....	20	....	.....
25	.....	10.10h	25	....	.....
eom	.....	.....	eom	....	.....
	Apr.	Oct.		Apr.	Oct.
5	.....	.....	5	....	.....
10	.....	.....	10	....	.....
15	.....	.....	15	....	.....
20	.....	.....	20	....	.....
25	.....	.....	25	....	.....
eom	.....	.....	eom	....	6.61
	May	Nov.		May	Nov.
5	10.72	.....	5	7.86	.....
10	10.58	.....	10	7.96	.....
15	10.71	.....	15	7.80	.....
20	10.61	.....	20	7.76	.....
25	10.63	9.83	25	7.70	.....
eom	10.21	9.97	eom	7.73	.....
	June	Dec.		June	Dec.
5	10.22	9.98	5	7.66	.....
10	10.16	.....	10	7.48	.....
15	10.26	9.87	15	7.37	.....
20	10.34	9.73	20	7.43	.....
25	10.26	9.65	25	7.44	.....
eom	10.25	9.51	eom	7.40	.....

13N-22W-34dac1. SW¼NW¼SW¼. Owner, H. C. Reed. Depth, 76 ft. Quartermaster Formation. Well equipped with water-level recorder. Highest, 34, July 1961; lowest, 45.88, May 30, 1959. Records: 1959-62.

Day	1959 Jan.	1959 July	Day	1960 Jan.	1960 July
5	.....	46.16	5	.....	34.44
10	.....	46.15	10	.....	34.25
15	.....	45.85	15	.....	.....
20	.....	45.74	20	.....	35.20
25	.....	45.62	25	.....	35.10
eom	.....	46.59	eom	.....	35.17
	Feb.	Aug.		Feb.	Aug.
5	.....	46.29	5	.....	35.08
10	.....	46.22	10	.....	35.23
15	.....	46.13	15	.....	35.10
20	.....	46.05	15	.....	35.10
25	.....	46.00	20	.....	35.06
eom	.....	.....	eom	.....	35.18
	Mar.	Sept.		Mar.	Sept.
5	.....	.....	5	.....	35.16
10	.....	.....	10	.....	35.33
15	.....	.....	15	.....	35.26
20	.....	43.66h	20	.....	35.28
25	.....	.....	25	.....	.....
eom	.....	.....	eom	.....	.....
	Apr.	Oct.		Apr.	Oct.
5	.....	.....	5	.....	35.48
10	.....	.....	10	.....	45.46
15	.....	.....	15	.....	35.68
20	.....	43.66	20	.....	.....
25	.....	.....	25	.....	.....
eom	.....	43.86	eom	.....	35.53
	May	Nov.		May	Nov.
5	.....	43.99	5	.....	35.68
10	.....	43.43	10	.....	35.69
15	.....	43.50	15	.....	35.40
20	.....	43.28	20	.....	35.47
25	46.84	43.15	25	.....	35.56
eom	46.88	43.14	eom	.....	35.54
	June	Dec.		June	Dec.
5	.....	.....	5	.....	.....
10	.....	.....	10	34.75h	.....
15	.....	.....	15	34.49	.....
20	.....	.....	20	34.50	.....
25	.....	.....	25	34.52	.....
eom	46.34	.....	eom	34.34	.....

10N-26E-22add1. SE¼SE¼NE¼. Owner, U.S. Geol. Survey. Depth, 34 ft. Lsd, 424. Alluvium. Highest, 12.82, Feb. 28, 1958; lowest, 17.66, June 29, 1961. Records: 1958-62.

1958			1959			1960		
Jan.	14	15.40	Jan.	29	16.23	Jan.	5	15.10
Feb.	28	12.82	Mar.	3	16.69	Feb.	2	15.01
Mar.	12	13.78	Mar.	30	16.95	Mar.	10	15.21
Mar.	24	16.76	Apr.	29	17.06	Mar.	29	15.25
Apr.	4	16.63	May	25	17.13	Apr.	26	15.33
Apr.	24	16.46	June	25	17.14	May	24	15.39
Aug.	1	15.90	July	28	17.14	June	16	15.16
Sept.	5	14.77	Sept.	2	17.09	July	20	15.15
Oct.	2	15.00	Oct.	19	15.99	Aug.	16	15.00
Oct.	30	15.55				Sept.	13	15.23
Dec.	2	15.55				Oct.	5	15.53
						Nov.	2	15.90
						Dec.	1	16.25

1960

16N-18E-22aaa2. NE¼NE¼NE¼. Owner, U.S. Geol. Survey. Depth, 32 ft. Lsd, 524. Alluvium. Well equipped with water-level recorder. Highest, 14.53, May 15, 1960; lowest, 19.29, Feb. 15, 1961. Records: 1960-62.

Day	Jan.	July
5	.....	15.48
10	.....	15.86
15	.....	16.11
20	.....	16.38
25	.....	16.55
eom	.....	16.48
	Feb.	**Aug.**
5	.....	16.50
10	.....	16.65
15	.....	16.84
20	.....	16.99
25	.....	17.13
eom	.....	17.35
	Mar.	**Sept.**
5	.....	17.51
10	.....	17.67
15	.....	17.77
20	.....	17.90
25	.....	18.01
eom	.....	18.11
	Apr.	**Oct.**
5	.....	18.19
10	.....	18.30
15	.....	18.40
20	.....	.....
25	.....	.....
eom	.....	.....
	May	**Nov.**
5	.....	18.73
10	.....	18.81
15	14.53	18.81
20	14.55	18.77
25	14.55	18.83
eom	14.60	18.95
	June	**Dec.**
5	14.60	18.87
10	14.62	18.90
15	14.65	18.92
20	14.77	18.97
25	14.93	19.03
eom	15.13	19.04

EXPLANATION

Two or more observation wells, digit indicates number of wells

Observation well

Observation well, hydrograph shown in text

Observation well equipped with recorder

Spring, record shown in text

Stream-gaging station, record shown in text

Precipitation station, record shown in text

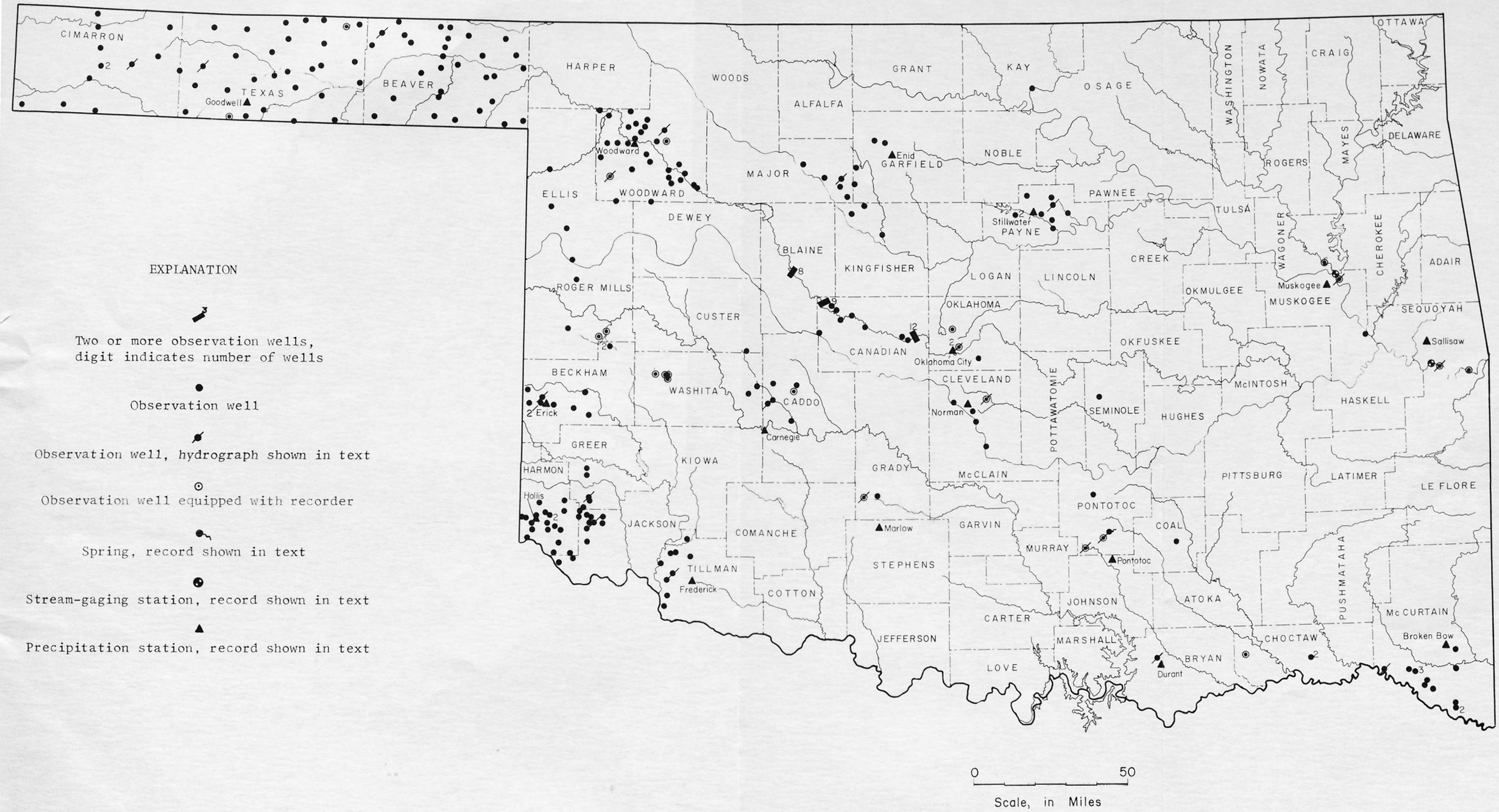


FIGURE 1.--MAP SHOWING LOCATION OF OBSERVATION WELLS IN OKLAHOMA, 1961-62

22n-18W-33ccc1. $SW\frac{1}{4}SW\frac{1}{4}SW\frac{1}{4}$. Owner. U.S. Geol. Survey. Depth, 62 ft. Lsd, 1,840. Terrace deposit. Highest, 23.07, Oct. 30, 1958; lowest, 25.78, May 6, 1957. Records: 1957-62.

1957		1958		1959		1960	
Apr. 25	25.57	Jan. 28	24.03	Jan. 7	24.01	Jan. 27	24.56
May 6	25.78	Feb. 20	24.03	28	24.03	Mar. 23	24.21
13	25.75	Mar. 25	24.00	Feb. 26	24.04	Apr. 20	24.02
22	25.35	Apr. 22	23.95	Mar. 26	24.04	May 19	23.90
28	25.22	May 20	24.00	Apr. 22	24.10	June 15	23.82
June 7	25.03	June 17	24.22	May 20	24.12	July 20	23.95
12	24.95	July 14	24.09	June 25	24.30	Aug. 17	24.13
19	24.94	Aug. 14	24.00	July 22	24.42	Oct. 14	24.25
25	24.80	Sept. 17	24.01	Aug. 26	24.65	Nov. 16	24.21
July 2	23.64	Oct. 30	24.07	Sept. 29	24.83	Dec. 13	23.87
15	24.50	Nov. 19	24.06	Oct. 21	24.78		
Aug. 6	24.41			Nov. 23	24.65		
21	24.39			Dec. 15	24.61		
Sept. 6	24.50						
18	24.43						
Oct. 15	24.30						
25	24.27						
Nov. 14	24.18						
25	24.16						
Dec. 21	24.15						

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