U. S. DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

WATER RESOURCES DIVISION

PROGRESS REPORT ON THE GEOLOGY AND GROUND-WATER HYDROLOGY OF PART OF THE OAHE UNIT, JAMES RIVER DIVISION, SOUTH DAKOTA

by

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and

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Compiled as part of program of
Interior Department
for development of the
Missouri River Basin

February 1950
~~August 1949~~

S. D. - 15

Waring, G. W.
1949. Progress report on the geology and ground-water hydrology of part (the southeastern part) of the Oahe-James River Division, South Dakota, June 1948: * 272 p., 5 pls, 10 figs.

(Revised copy, brought up to date by W. H. Bush, received, and approved February 8, 1950, for release to open file in mimeographed form.)

*Approved: May 6, 1949 for open file.

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ABSTRACT

The Oahe Unit, in the James River basin in eastern South Dakota, extends for about 100 miles north-south and is 20 to 80 miles wide, having the river as its east border. The Oahe irrigation project is planned to supply water to 750,000 to 1,500,000 acres of the most suitable land within the area.

The studies that have been undertaken in the Oahe area by the Ground Water Division of the U. S. Geological Survey form a part of the investigations which are being carried on by several bureaus of the Department of the Interior and other government agencies for the conservation, control and utilization of the water resources of the Missouri River Basin.

The field studies on which the present report is based were made during May 1947 through November 1948 and cover about 1,890 square miles in the southern part of the Oahe area. Data were collected on the character of the surficial geologic deposits, and on the occurrence, movement, quantity, and quality of the ground-water supplies.

The report describes the several water-bearing formations and presents nine typical logs of deep artesian wells. The records of fluctuation of the water table in 168 wells in or near the Oahe area are listed. Tabulated inventory of 3,257 wells and springs includes information on the observation wells and on all other wells that were noted within the area examined.

or "in a north-south direction"

August 1949

Location and extent of the area

The Oahe Unit of the James River Division derives its name from the Oahe dam site, on the Missouri River about 6 miles above Pierre, South Dakota. From the proposed reservoir it is planned to lift water across the drainage divide between the Missouri and James Rivers. The original irrigation development plan foresaw the irrigation of 750,000 acres of the most suitable land in the central James River Valley of South Dakota. Subsequent studies indicate that a more feasible and profitable plan will be the development of an irrigation system for serving 1,500,000 acres. The ground-water investigation being made in conjunction with the studies of the feasibility of the original or revised plans must cover about 7,000 square miles. This area extends from about Woonsocket, on the south, to Aberdeen, about 100 miles to the north. The maximum width of the area to be investigated extends from the east side of R. 60 W. west to the west side of R. 73 W. This report covers about 1,890 square miles in the southern part of the Oahe Unit area. (See fig. 1).

Purpose of investigation

It is recognized that usable or excess quantities of ground water may be a potential benefit or a potential detriment in either of the proposed plans for the irrigation development of the Oahe Unit, South Dakota. In the plan for irrigating 750,000 acres, regulating reservoirs within the area are contemplated, but no reuse of return flows, ground

or surface, is contemplated. In addition to regulating reservoirs, the full reuse of return surface water and such ground water as may be intercepted is contemplated in the plan for irrigating 1,500,000 acres.

Therefore, the purpose of the investigation is to show whether any of the ground water now available under present natural conditions of recharge may be intercepted and utilized; to show whether any additional ground water will be available for utilization under the artificial conditions of recharge resulting from the application of irrigation water; and to summarize future drainage requirements.

Character of investigation

This ground-water investigation is one of several that are being made by the U. S. Geological Survey in cooperation with other agencies of the Department of the Interior, for the conservation, control, and use of water resources within the Missouri River Basin. Upon completion of this investigation the comprehensive report will cover: the fluctuations of the water table, the quality of ground water throughout the Oahe area, a complete inventory of wells, and a detailed study of geologic conditions relating to both the shallow and the deep ground-water supplies. The final report will also include contour maps of the water table and piezometric surfaces.

About 80 observation wells were established and measured. An inventory of wells and pertinent geologic examinations have been made for about 1,890 square miles of the area.

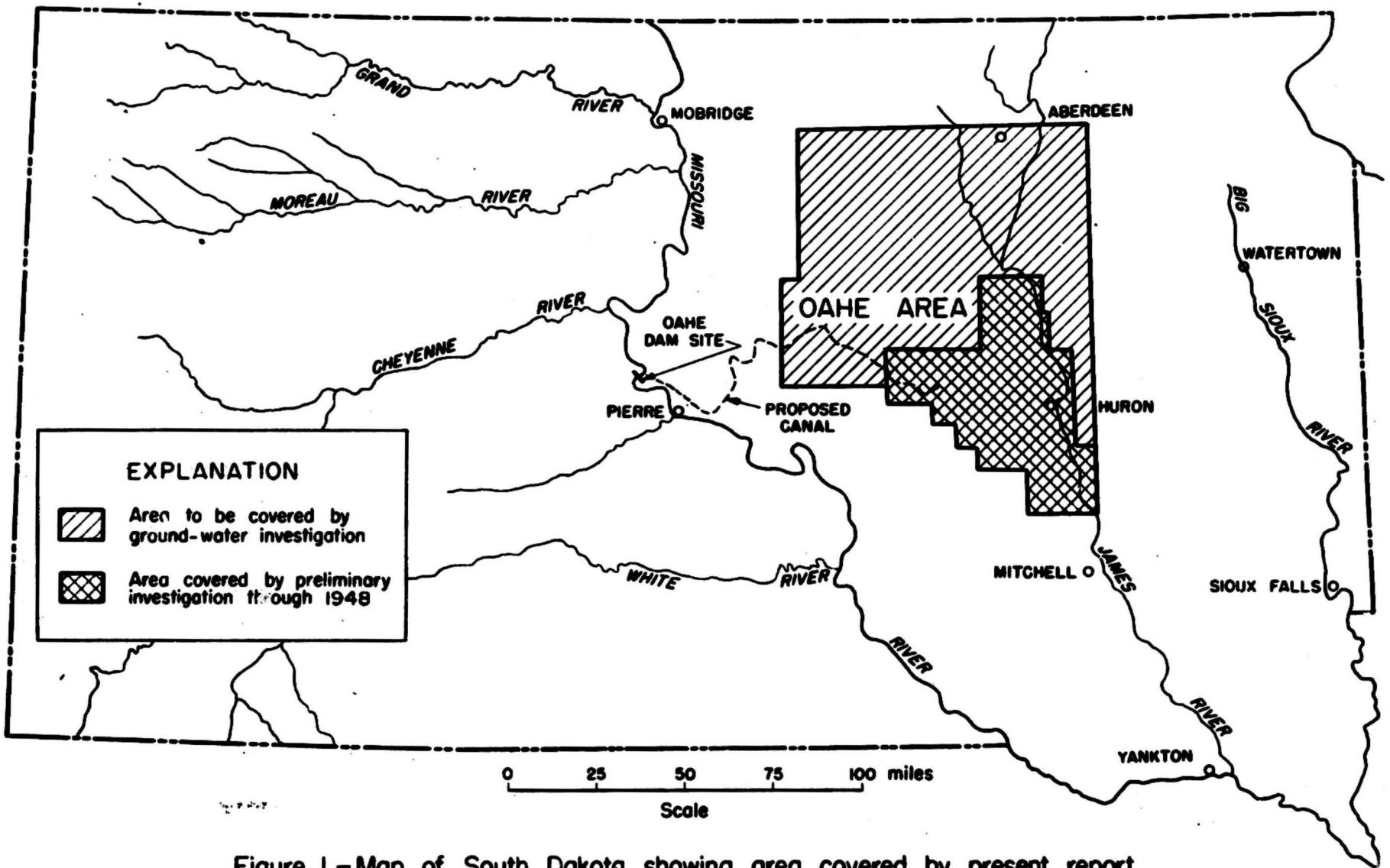

Figure 1.–Map of South Dakota showing area covered by present report

Acknowledgments

The studies were made under the general supervision of A. N. Sayre, Geologist in Charge of the Division of Ground Water of the U. S. Geological Survey. The field and office work was under the direct supervision of George H. Taylor, Regional Engineer (in charge of Missouri River Basin ground-water studies), and George A. LaRocque, Jr., District Engineer in charge of Missouri River Basin ground-water studies in North and South Dakota.

Maps and other data were obtained from the office of the U. S. Bureau of Reclamation at Huron. Information on the character of the glacial deposits and of shallow ground-water conditions was furnished by Dr. E. P. Rothrock, State Geologist of South Dakota, as were the records of observation wells south of the Cahe area. Measurements of the depth to water level in observation wells were made by P. C. Tychsen during the period April 1946 to April 1947; and since that time, measurements have been continued by J. S. Hornby and W. H. Bush. The well inventory was made for the most part ~~done~~ by J. S. Hornby and W. H. Bush. During 1948, all ~~of~~ the water samples for complete analysis and many of the samples for partial analysis were taken by E. R. Jochens of the Quality of Water Branch, Federal Geological Survey.

Measurements of the depth to water level made by M. E. Kirby during 1935 on about 90 wells in the Huron area are included in the well

inventory and the observation-well records.

Previous studies

A large portion of the James River Basin was mapped geologically on a reconnaissance scale early in the present century by J. E. Todd of the U. S. Geological Survey. The reports of Todd contain data on the artesian-water resources. A report on the geology and underground water of the State of South Dakota, by N. H. Darton gives information on the early development of artesian wells.

During the drought of 1931-34, both Federal and State agencies made ground-water investigations with special reference to the water supply for several towns and cities in the James River Valley. Results of those and other investigations have been consulted in preparing this report. Those which contain specific data on the Oahe area are as follows:

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A South Dakota guide, 1938, American Guide Series: Works Progress Admin., Federal Writers Project.

Frary, Guy G., January, 1939, Public water supplies in South Dakota, a report of water analyses recently made at the State Chemical Laboratory, Vermillion,

Searight, W. V., and Meleen, E. E., 1940, Rural water supplies in South Dakota: South Dakota State Coll. Agr. and Mech. Arts. Special Exten. Circ. 47, Brookings. (Separate reports for the following counties were available: Beadle, Jerauld, Spink, Faulk, Hand, Hyde, Brown, Edmonds, Marshall, Day, Clark, Kingsbury, Miner, Hanson, Davison, Aurora, and McPherson; each circular contains maps showing artesian and shallow wells, depth to shallow water supplies, extent of artesian area, and tabulated well data.)

Johnson, R. P., Loucks, Dean, Patty, R. L., and others, 1941, Water-land resources and problems in South Dakota: U. S. Dept. Agr., Bur Agr. Economics, in cooperation with South Dakota State Land Use Planning Comm., Washington.

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Topography and Drainage

The James River Basin in South Dakota is in the western part of the Central Lowland Province of the Interior Plains, as defined by Fenneman.[1] The topography and drainage are closely related to the character and distribution of the clay, silt, sand, and gravel deposits of the period of glaciation.

In the Oahe area the land surface is nearly level but has a gentle slope southward and eastward toward the river valley. The topography is marked in many places by numerous depressions 100 to 300 yards in diameter and less than 10 feet deep. Many of these depressions are shallow ponds during the early summer, but they usually become dry in August or September and remain dry until the thawing and rainy season of the following spring.

The eastern part of the Oahe area consists largely of nearly level lands traversed by broad, but very shallow, drainage channels. Northward from about the center of T. 114 N., R. 62 W., these nearly level lands are considered to have been the floor of glacial Lake Dakota.

1 Fenneman, N. M., Map showing physical divisions of the United States; scale 1:7,000,000: U. S. Geol. Survey, 1930.

The flat lands that extend for about 12 miles to the north and south of Huron and for several miles on either side of the river valley are underlain by glacial deposits consisting partly of sand and gravel. This area seems to have been smoothed and leveled largely by outwash water from the melting ice.

In the southeastern part of the area there are extensive flat sandy lands, which grade into rolling lands with small dunes near Forestburg. Such lands probably were smoothed over by glacial outwash water that carried much sand, and in more recent times the dunes have been formed by wind.

Minor parts of the Onhe area consist of broad low ridges and detached knolls, rising 10 to 40 feet above the land surface. These uplands, commonly stony, were formed where unusually large amounts of coarse material were deposited along the front of the melting ice sheet.

The James River is the approximate east border of the Onhe area. The stream generally flows in a flat-bottomed, steep-sided valley, ranging from 30 to 60 feet in depth and 300 yards to three-quarters of a mile in width, averaging about three-eighths of a mile. The average gradient of the stream within the State of South Dakota is about 0.26 foot per mile.

Since October 1, 1928, a stream-flow measurement station has been maintained on the James River near Scotland. The records of runoff and maximum discharge are given in the following table:

Table 1.--Discharge of the James River 5 miles northeast of Scotland, South Dakota, at county highway bridge in the SW¼ sec. 30, T. 97 N., R. 57 W.

Drainage area 21,550 square miles
(From records of U. S. Geological Survey)

Water year ending September	Runoff (acre-feet)	Date of maximum discharge	Maximum discharge (second-feet)
1929	a 316,110	Mar. 31	2,970
1930	a 113,220	May 12	856
1931	34,000	Apr. 27	289
1932	115,000	Mar. 2	2,500
1933	19,500	July 23	441
1934	10,020	Sept. 25	1,110
1935	28,020	June 29	296
1936	54,970	May 23	2,240
1937	124,500	Aug. 20	2,030
1938	105,400	Mar. 3	2,070
1939	35,190	Apr. 1	622
1940	28,300	June 24	910
1941	33,960	Mar. 10	710
1942	494,900	May 15	10,800
1943	549,200	Apr. 12-17	3,110
1944	529,900	June 13	5,270
1945	359,000	June 18	2,500
1946	158,900	Mar. 22	1,760

a 9 months; no record for Dec., Jan., and Feb.

Several glacial valleys with steep sides and wide bottoms, disproportionately large for the small streams they now contain, are tributary to the James River Valley and carry most of the runoff from the Oahe area. Turtle Creek in the north, and Cain and Sand Creeks in the south are the principal western tributaries. Other glacial valleys carry water during rainy periods and the early spring thaws. The gradients of these valleys are very low, and in some, the bottoms have become silted to the extent that a drainage divide has been formed within the valley and runoff occurs in opposite directions through the old valley.

Climate

The mean annual temperature of the Oahe area is about 45° F., with temperatures ranging from about -30° F. to 100° F. The last frost is seldom later than May 10 and the first frost rarely occurs before September 15. About 75 percent of the precipitation occurs during the growing season, May through August, and about 10 percent during the period November through February. The winter precipitation is nearly all in the form of snow, the average ~~total~~ annual snowfall being about 30 inches.

The rain and snowfall vary greatly from year to year, with occasional periods of severe drought. The records of annual precipitation at Huron and Redfield are shown on figure 2, the averages at the two stations being 20.67 and 18.68 inches, respectively. During the drought years of 1931-1934, the precipitation at Huron, as shown by these records, was from 7 inches to nearly 10 inches less than the long-term average. The deficiencies in precipitation were smaller at Redfield. A dust storm in November 1933 initiated the worst part of the drought. Melting of heavy snows during the winter of 1936-37 filled most of the small reservoirs in the following spring months.

Development and industries

The Oahe area is served by the Chicago and Northwestern Railway, which passes through Huron and Wolsey, with a branch to Hitchcock, Redfield, and Aberdeen. The Chicago, Milwaukee, St. Paul and Pacific Railroad passes through Woonsocket, Wolsey, Redfield, and Aberdeen; the Great

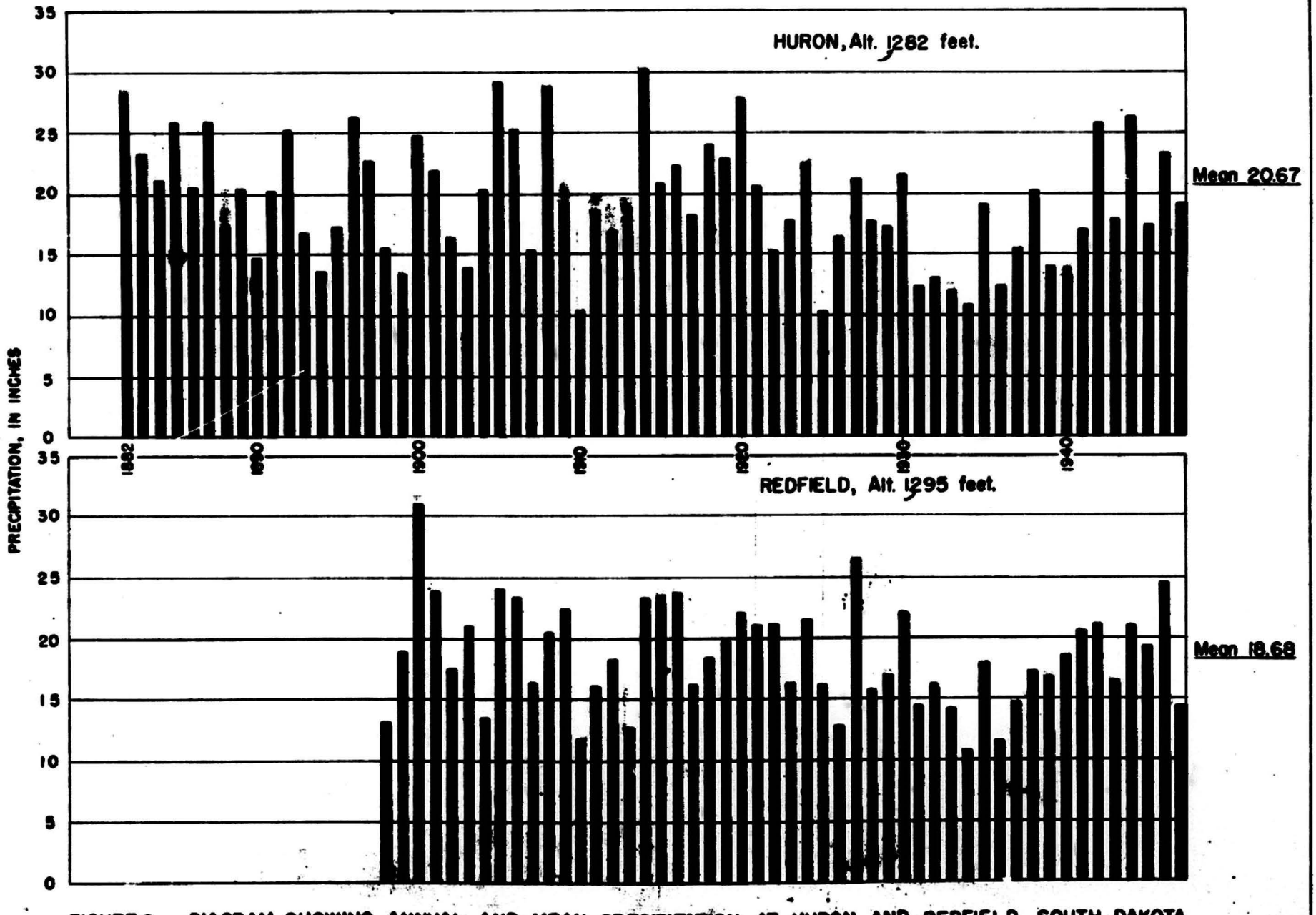

FIGURE 2 DIAGRAM SHOWING ANNUAL AND MEAN PRECIPITATION AT HURON AND REDFIELD, SOUTH DAKOTA (FROM RECORDS OF U.S. WEATHER BUREAU)

Northern Railway has branches from the northeast to Aberdeen and to Huron; and a branch of the Minneapolis and St. Louis Railway extends from the southeast, through Aberdeen.

Woonsocket, near the south border of the area, had a population of about 1,200 in 1947; Huron had nearly 12,000; and Redfield about 3,000. Smaller towns at intervals of about 10 miles along the railroads afford supply points for the surrounding farmers, and shipping points for their grain, cattle, and other produce.

The area is traversed from north to south by U. S. Highway 281 and State Highway 37. U. S. Highway 14 extends east-west through Huron; and U. S. Highway 212 passes east-west through Redfield. Most ~~all~~ portions of the area are accessible from the several graveled highways and the graded roads along most of the land-section lines.

Nearly all the public land was homesteaded in 160-acre tracts prior to about 1910. Stock-raising and the growing of wheat and corn are the principal farming activities. During the drought of 1931-34, many ~~of the~~ farms were sold or relinquished, and the area lost much of its earlier population.

In 1934 it was estimated that in Beadle and Spink counties, which include most of the area covered by this report, ~~that~~ about 57 percent and 69 percent ~~respectively~~, of the land was under cultivation, and 23 percent and 17 percent, respectively, was in pasture. Much of the pasture land consists of rolling to hilly fields that are too stony for easy cultivation; as also are some of the sandy lands, which are subject to wind erosion. Part of the remaining lands, along stream

valleys, are covered with native growths of ash, box elder, hackberry, and willow.

Numerous gravel pits supply material for road surfacing and concrete aggregate. A small brick plant at Redfield has made successful tests of local clay, but has not been active in recent years, partly because of lack of a suitable fuel supply.

Well-numbering system

The well numbers used in this report show the location of each well according to General Land Office surveys of the area. These numbers are assigned according to the following formula: Township, range, section, quarter section and quarter-quarter section. When two or more wells are located within a 40-acre tract, the wells are numbered serially according to the order in which they were visited. The quarter section and quarter-quarter sections are designated a, b, c, and d in a counter-clockwise direction, beginning in the northeast quarter. (See fig. 3.)

WATER-BEARING FORMATIONS AND THEIR CHARACTERISTICS

Materials overlying the glacial drift

Alluvial deposits

The bottom lands of the James River Valley and the contiguous lowlands near the mouths of the principal creeks are underlain by alluvial deposits of silt and fine sand, with small amounts of gravel. These deposits, generally several feet in thickness, have been derived from

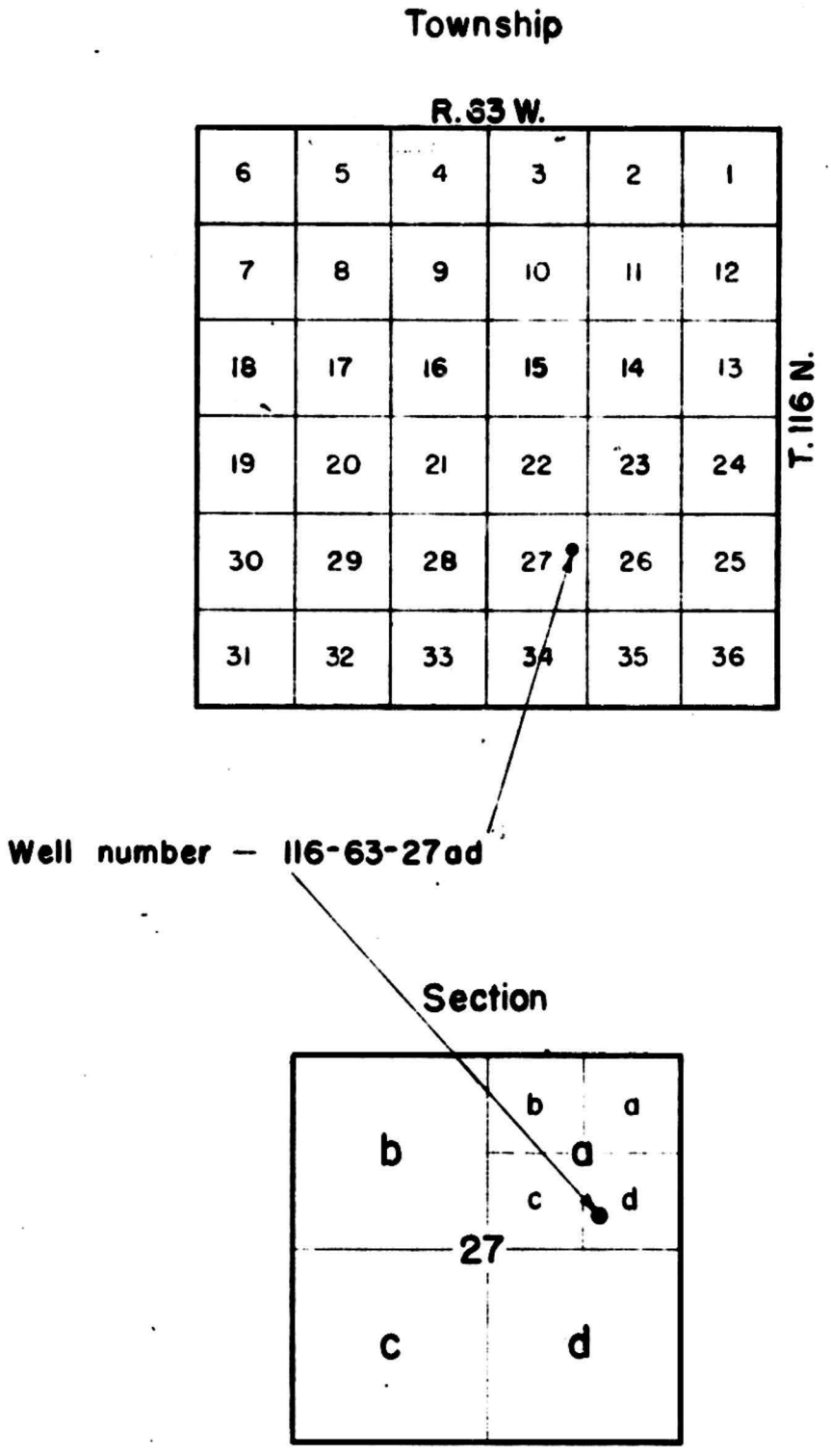

Figure 3 – Sketch showing system of well identification

the glacial drift. The sands and gravels of the alluvial deposits afford favorable conditions for the storage of ground water. Few wells have been constructed in these alluvial deposits as surface water has been readily available for livestock; also, in the bottom lands there are few homes which might use the available shallow ground-water supply.

Glacial outwash

The drainage pattern generally follows the courses of broad, shallow glacial outwash channels, within which sand and gravel occur in many places to a thickness of several feet. Ample water for farm use is withdrawn from numerous shallow wells in these deposits.

The approximate courses of some of the glacial outwash channels, and also of the present alluvial valleys, are indicated on plate 1 by the area within which the water table is generally less than 10 feet below the land surface.

A wide outwash plain, which extends north, east, and south of Woonsocket and grades eastward to sandy land, was considered by Todd[2] to have been occupied by a large, shallow lake during the recession of the glacial ice. A similar flat but less sandy area, which includes the outwash plain on which Huron is situated was also considered by Todd to have been occupied by a very shallow glacial lake.

Beds of glacial Lake Dakota

Toward the close of the Pleistocene epoch, when the ice was melting in the James River Basin, a wide area that extends from about the center

2 Todd, J. E., U. S. Geol. Survey Geol. Atlas, Huron folio (no. 113), p. 3, 1904.

of T. 114 N., R. 62 W., northward across the State line and for several miles into North Dakota, was covered by a shallow lake. This is ~~geologically~~ known as glacial Lake Dakota. Clay and silt were deposited in parts of its bed to depths of several feet, and minor depressions were thus leveled over. Much of the lake bed, therefore, now forms an unusually flat area. In some places glacial outwash channels and modern stream courses have cut into the lake deposits. The former borders of the lake are obscured by post-glacial deposits of wind-blown material, but the approximate southern limit of the lake is indicated on plate 1 (North half).

Concerning the very fine-grained deposits of the area, Rothrock[3] has said:

> The similarity of the silt to loess, which is known to be a wind-blown deposit, suggests that the silt may be wind-blown. The silts, in places, are bedded like water-laid deposits, but their general massive character suggests wind depositions rather than water. If the lake existed, as certain evidence seems to indicate, it must have been very short-lived, and the silts on the bottom must have been reworked by the action of the wind.

Within the lake-bed area are extensive flat uplands on both sides of the James River Valley south of Frankfort. The scarcity of shallow ground water beneath these lands indicates that they are immediately underlain by very fine-grained lake sediments.

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3 Rothrock, E. P., A geology of South Dakota, Part 1, The Surface: South Dakota Geol. Survey Bull. No. 13, p. 32, 1943.

Glacial drift

Till

Ground moraine. - The terms glacial drift, and till, are not used in quite the same sense by all who have studied glacial deposits. Some have used drift as an all-inclusive term, and others have used till in the same way. The following discussion is in accordance with recent definition and use of the terms by Flint[4], who considers glacial drift to include till (unsorted and unstratified material), stratified drift, and scattered rock fragments.

The glacial drift that underlies practically all the Oahe area consists chiefly of till. This is a complex mixture of clay, silt, sand, gravel, and stones, which was deposited by the melting glacial ice in a fairly uniform layer known as ground moraine. The upper few feet of till is generally weathered to pale yellow or straw color, but forms dark soil. The unweathered material is prevailingly dark gray.

Beneath the nearly flat to gently undulating uplands the till is generally 50 to 100 feet thick. Beneath the principal stream valleys it is thinner. Along lower Turtle Creek and the James River northeast of Redfield, the underlying bedrock is exposed in a few places.

Early geologic studies did not show that there was more than one layer of glacial drift in this region. However, in recent years more detailed examination has found evidence of interglacial deposits and weathering in some places. Several investigators now consider that

4 Flint, R. F., Glacial geology and the Pleistocene epoch, pp. 102 and 103, 1947. Publisher N. Y. Wiley.

there may be three and possibly four ages of drift represented in different parts of the James River basin.

The materials are generally unstratified, except for local lenses and pockets of sand and gravel. Because of the common mixture of clay with the coarser deposits, conditions generally are not favorable for the storage of important amounts of shallow ground water.

Terminal moraines and boulder deposits. - The east and west sides of the James River basin are marked by ranges of hills that constitute terminal moraines of the glacial ice sheet. Within the basin and extending nearly to the river valley in places, are lobes and branches of the principal moraines. One discontinuous morainal band extends southward from near Redfield. Another band ~~that is~~ several miles farther west, turns southeastward and passes between Huron and Woonsocket. Two others form low ranges of hills west and southwest of Woonsocket.

Because of the unsorted character of the morainal material, which contains very few lenses of sand and gravel, these hilly morainal areas do not afford favorable conditions for shallow well water. The areas covered by the principal moraines are indicated on Plate 2.

The till of the moraines has on its surface a considerable number of boulders. Smaller stones may be scattered throughout the thickness of the till, and may also be included in the drift of the ground moraine; but the large boulders seem to be chiefly on or near the land surface.

Near Redfield, boulders in the northeastern part of T. 115 N., R. 64 W., accentuate the southeast trend of a terminal moraine in the area. In a few places the distribution of the large boulders also suggests the presence of bands of coarse material that may constitute minor recessional moraines.

In general the boulders are most plentiful along the sides of the James River Valley and are commonly about halfway up the slopes. These slopes are often terraced. The boulders are especially conspicuous in the southwestern part of T. 116 N., R. 62 W., where an extensive layer is present about halfway up the bluffs and along the sides of tributary ravines. Many boulders in a wide, shallow drainage channel near the center of T. 116 N., R. 63 W., may represent the same layer of boulders. This and other groups of boulders within the borders of glacial Lake Dakota are along shallow outwash channels that have been eroded in the lake beds.

A number of large boulders are present on the south border of T. 113 N., R. 61 W., in the southeastern part of T. 112 N., R. 61 W., and near the center of T. 111 N., R. 61 W. Many large boulders on the slopes ~~which~~ that border Stony Run Lake in sec. 19, T. 110 N., R. 61 W., may originally have formed a layer on a terrace; but they are now distributed from the lake border up to an elevation of 40 feet above the water level. About 1 and 3 miles east of this lake, aggregations of boulders on the plain are associated with gravelly deposits which may be small recessional moraines.

Collections of boulders, most of which are striated, have been described by Todd[5] as a "boulder pavement", which seems to have been formed where ice overrode and wore down the bouldery surface of till that had been previously deposited. Prominent "pavements" of boulders, many of which were planed and striated, were noted by him in the valley of Foster Creek about 3 miles north of Byron Lake, and also about 6 miles farther east.

5 Todd, J. E., op. cit., p. 5.

There are, of course, many more small boulders than large ones. The total number in the area examined was too great to be easily recorded. All boulders were measured whose long axis was 4 feet or more in length. The distribution of these boulders is shown on plate 2.

Though many of the boulders have been moved from the field to the nearest roadside or fence corner, the general pattern of their original distribution has not been appreciably altered. In the southern part of the area most of the large boulders are irregularly scattered, and may be "erratics" that were carried on or within the glacial ice sheet.

The general distribution of the large boulders is believed to indicate the areas of the most stony land, as the smaller stones are most common in the same localities as the larger ones. Boulders less than about 2 feet in length, and areas of cobbles and coarse gravel, are not as common in the Oahe area as they are in some other parts of the great glaciated region. Very few piles of stones collected from the cultivated fields are present in the area examined, whereas they are common in some areas farther north and northwest, notably in the Lower Missouri-Souris area of northwestern North Dakota.

On assembling the data on boulder sizes and grouping the boulders by half-foot increments of length, it was found that the number in each group increased rapidly with decrease in size. The rate of change for boulders between 4 and 9 feet in length seemed to follow a mathematical sequence. The number of boulders greater than 9 feet in length was too small to form groups showing a regular change.

The rate of increase of the number of boulders with decrease in size-

group seemed to be factorial; for when plotted on semi-logarithmic paper the numbers lay nearly along a straight line. Partial calculations have indicated that size-groups based on the product of the three principal dimensions of the boulders would also give a similar mathematical series; perhaps because the great majority of the boulders are of approximately the same shape, being roughly oval in both transverse and longitudinal cross-sections.

In the area of about 1,170 square miles, 1,615 boulders 4 feet or longer were measured. This was an average of one boulder to 0.73 square mile. By extrapolation, it was estimated that there were also about eight boulders to the square mile, of lengths 2.0 to 3.9 feet. The observed comparative scarcity of boulders less than 2 feet long indicates that a mathematical rate of increase does not apply to those of smaller size, in the Oahe area.

About 83½ percent of the boulders were 4.0 to 5.9 feet in greatest dimension; about 14½ percent were 6.0 to 8.9 feet; and the remaining 2 percent were 9.0 feet or longer. In the NW¼NE¼ sec. 18, T. 116 N., R. 63 W., the record boulder was seen. This was a coarse-grained granite boulder 17 feet by 11 feet by 5 feet. A gneiss boulder 15 feet by 9 feet by 5 feet in dimensions was noted in the NE¼NW¼ sec. 32, T. 116 N., R. 62 W., and 15 others 10 to 13 feet in greatest dimension were recorded.

About 91½ percent of the boulders were of granitic rock, about 3½ percent were of granitic gneiss, and 2½ percent were of very hard hornblende-biotite gneiss. Only seven large boulders of greenstone, and one of diabase were noted. About 30 large boulders of limestone were seen, all

being of dense gray rock containing paleozoic fossils. Only two large boulders of sandstone were observed, both of which were from the Fort Union formation, of lower Tertiary age. Nearly all the boulders were of hard, fresh rock; but 10 large boulders of deeply weathered granite were noted.

Many of the boulders have a coating of lime carbonate one-fortieth to one-tenth of an inch thick deposited as caliche on their original under sides. A smaller number have patches of gray lichen on their original upper surfaces; and on three or four boulders an intergrowth of gray and of bright yellow-green lichen was noticed.

The proportions of rocks other than granite were less than were recorded by Todd[6] in the Aberdeen-Redfield area, where he estimated that about 5 percent of the boulders (presumably down to sizes of less than 4 feet) were of greenstone, diorite, or diabase; and 10 to 15 percent were of fine-grained sedimentary rocks.

In the area examined by the writer about 120 large boulders that were notably planed, and about one-half of them had small portions of their upper surfaces were polished, probably by flowing water laden with silt and sand in suspension. Most of those polished surfaces were on large boulders still partly embedded in the till. They were not in positions where local polishing could have been accomplished by the rubbing of buffaloes and other animals, as is locally believed.

Stratified drift

In some places the till contains extensive layers of sand and gravel that were assorted by running water during the Pleistocene epoch. Some

6 Todd, J. E., U. S. Geol. Survey Geol. Atlas, Aberdeen-Redfield folio (No. 165), p. 5, 1909.

of these stratified deposits may be near the present land surface, but they are generally at considerable depths within the till. Some of the bedded materials may underlie the surficial bands of glacial outwash, but generally they are not indicated by any topographic evidence. The deposits are found chiefly by sinking wells in search of shallow water supplies, for the sand and gravel may contain comparatively large amounts of ground water.

In a few places along the sides of deep stream valleys and lake basins, water from stratified drift issues as springs. Numerous small springs issue from bedded sand along the upper slopes of the valley of Pearl Creek near its mouth. Seepage springs from bedded gravel near the base of bluffs along the shore of Byron Lake supply some water to that lake; and a short distance farther west, springs from the same or similar stratified deposits supply Mud Lake near the southwest border of the larger Connors Lake.

Pierre shale (Upper Cretaceous)

The several bedrock formations which are present in eastern South Dakota have been described by Petsch[7] from exposures along the Missouri River Valley 50 to 100 miles south and west of the Oahe area.

The Pierre shale, of Upper Cretaceous age, probably underlies the glacial drift nearly throughout the Oahe area; within the area the local character of the Pierre, and of the formations that underlie it, is known from the records of numerous deep wells. The formation consists almost entirely of marine deposits of dark-gray to black clay shale, with calcareous and pyritic concretions, lenses, and thin beds a few thin

7 Petsch, B. C., Geology of the Missouri Valley in South Dakota: South Dakota Geol. Survey, Rept. of Invest. 53, pp. 16-48, June 1946.

layers of soft sandstone, and many layers of bentonite that are only a few inches thick. The shale weathers to black plastic clay. The bentonite forms a very slippery clay when wet, and caves into drill holes, but the amount present is generally too small to cause trouble in drilling wells through the shale.

The Pierre shale is exposed in a few places along Turtle Creek and the James River northeast of Redfield, and in excavations in the western part of the city. Thin layers of cream-colored chalk, interbedded with shale, are exposed in a road cut 1½ miles southeast of Redfield and also near the highway 4 miles farther south. These and the possibility of other chalky exposures, and records of chalky beds in shallow drilled wells, suggest that the Pierre shale may be very thin or absent from beneath parts of the Oahe area, and that the glacial drift may rest directly upon the underlying Niobrara formation.[8] The chalky beds near Redfield, however, are considered by Searight and Moxon[9] to be thin layers in the Pierre shale.

Black clay that may belong to the Pierre shale has been reported along Sand Creek in secs. 15 and 22, T. 109 N., R. 64 W., but it could not be identified by the present writer.

According to Todd[10] and Darton[11] the upper part of the Pierre

8 Rothrock, E. P., Geologic map, State of South Dakota, 1932.

9 Searight, W. V., and Moxon, A. L., Selonium in glacial and associated deposits: South Dakota State Coll. of Agr., Tech. Bull. No. 5, p. 6, 1945.

10 Todd, J. E., U. S. Geol. Survey Geol. Atlas, Huron folio (no. 113), p. 3, 1904; and Aberdeen-Redfield folio (no. 165), p. 4, 1909.

11 Darton, N. H., Geology and underground waters of South Dakota: U. S. Geol. Survey Water-Supply Paper 227, p. 57, 1909.

shale was extensively eroded prior to being covered by the glacial drift; so the thickness of the shale varies considerably from place to place. The beds also rise gently southward from Redfield, and become thinner in that direction. The formation is believed to be 400 to 500 feet thick near Redfield, though in drilled wells the upper surface of the shale can not be easily distinguished from the lower part of the glacial drift, and the base of the formation is not marked by a definite change in the character of the materials. Near Wolsey the shale is 300 to 350 feet thick, and near Huron about 150 feet thick. Near the south border of the Oahe area it is generally less than 70 feet thick.

Thin water-bearing sandy layers have been found at two or more horizons in the shale. Todd[12] records a thin water-bearing sand at a depth of about 140 feet near Hitchcock and 160 feet near Redfield, and another water-bearing sand about 200 feet deeper, which yielded water to several small flowing wells in the basin of Byron Lake and in the valley of the James River in the same area. The water was soft, but slightly brackish, and the yield was small. The present writer did not note any wells that were reported to yield water from the Pierre shale.

Niobrara formation (Upper Cretaceous)

The Niobrara formation consists chiefly of a series of chalkstone and chalky layers, but in the Oahe area some of the beds grade northward into calcareous shale. The chalky material is light gray when freshly excavated, but weathers to buff or nearly white, very fine-grained, friable material of uniform texture. Near the south border of the area the formation varies

12 Todd, J. E., U. S. Geol. Survey Geologic Atlas, Aberdeen-Redfield folio (no. 165), p. 9, 1909.

considerably in thickness. In wells near Woonsocket only 20 to 25 feet of chalk has been penetrated; the formation there probably is nearly 100 feet thick and includes calcareous shale above the chalk.

The beds lie nearly horizontal but the formation thins northward. In some wells south and southeast of Redfield the Niobrara formation seems to be present as impure limestone, at a depth of about 450 feet. It has not been definitely recognized in wells north of Redfield, but may be present as calcareous shale that is not easily distinguishable from similar beds in the basal part of the Pierre shale.

The chalky beds yield small amounts of water; but numerous wells in the southern part of the Oahe area, which are called "chalk wells" or "soft-water wells," probably yield water from sandstone a few feet below the base of the beds of the Niobrara formation. It is probable that only a few wells yield their principal supply of water from strata in the Niobrara formation.

Carlile shale (Upper Cretaceous)

The Carlile shale, 150 to 200 feet thick, underlies the Niobrara formation and consists chiefly of dark-gray to blue-gray shale, with calcareous concretions and a few thin sandstone layers. A persistent water-bearing sandstone 10 feet or more thick is at or near the top, only a few feet below the chalk of the Niobrara formation. The sandstone has been correlated by Rothrock[1] with the Codell sandstone, which is listed by

[1] Rothrock, E. P., A geology of South Dakota, Part 3, Mineral resources: South Dakota Geol. Survey Bull. 15, p. 233, 1944.

Miss Wilmarth[2] as the topmost member of the Carlile shale.

[2] Wilmarth, M. G., Lexicon of geologic names of the United States: U. S. Geol. Survey Bull. 896, pt. 1, p. 480, 1938.

The following description of this water-bearing zone is given by Todd./

/ Todd, J. E., U. S. Geol. Survey Geol. Atlas, Huron folio (no. 113) p. 5, 1904; Aberdeen-Redfield folio (no. 165), p. 10, 1909.

Wells in the upper Benton sandstone.--The third and most important pump-well horizon is the upper sandstone of the Benton formation, which throughout the quadrangle seems to lie just below the chalk. It is the source of the most desirable and most permanent wells in the whole southern half of the quadrangle, and is well-known in the northeastern quarter, but in the northwestern portion has not been found. This is probably due, not to its absence, but to its greater depth and the better supply of water from more accessible strata.

Since this horizon is an unfailing source of soft water, which usually rises within a few feet of the surface, it seems worth while to give in considerable detail the depths at which it may be struck. Beginning at the southeast corner of the quadrangle, it lies at a depth of 130 to 140 feet. Near Woonsocket it is reached between 140 and 175 feet. Farther west its depth increases as the surface rises, so that at the southwest corner it lies about 400 feet below the surface. Near the northwest part of Franklin Township (T. 107 N., R. 63 W.) it is reached at a depth of a little over 200 feet. In the Schmidt well (in sec. 14, T. 108 N., R. 64 W.), it is struck 350 feet below the surface. In sec. 21, Carlyle Township (T. 109 N., R. 63 W.), a well nearly 200 feet deep did not reach it. In the eastern part of Custer Township (T. 110 N., R. 61 W.) it lies at a depth of 230 feet. In the southeastern part of Iowa Township (T. 112 N., R. 61 W.) this horizon is about 300 feet below the surface, and in sec. 29 of the same township it has a depth of 250 feet. About Huron it is found at a depth of 200 to 210 feet.

The water from this stratum is uniformly soft, although containing considerable mineral matter. The ingredients probably are salts of soda. It is commonly said to be "soft as rain water," and in some localities is sold for washing purposes.

In the southern part of the quadrangle the water horizon is frequently spoken of as being in the chalkstone, and where the water is reached at less depth than usual it may have escaped from the sandstone into the over lying chalkstone by way of crevices or more porous strata.

The water-bearing sandstone is encountered in the Woonsocket-Huron area at depths ranging from 120 to 220 feet, and yields water under artesian head, which generally rises to between 20 and 50 feet below the land surface.

The water is generally soft but contains considerable sodium chloride (common salt) in solution. It is used extensively for domestic supply in

the southern part of the Oahe area, where it is preferred to the more highly mineralized water from deeper beds.

Greenhorn limestone (Upper Cretaceous)

The Greenhorn limestone, underlying the Carlile shale, consists of hard, thin-bedded layers of impure limestone having a thickness of 30 to 40 feet in the Oahe area. It is not an important water bearer.

Graneros shale (Upper Cretaceous)

The Graneros shale underlies the Greenhorn limestone and is 50 to 200 feet thick. It consists of dark-gray clay shale with sandy shale and thin beds of sandstone near its base. Thin beds of soft sandstone in the Graneros are the chief water-bearing beds of the formation. Water in these sandstones is found near Wolsey at a depth of about 490 feet and near Huron at 510 feet; the depth increases northward to about 750 feet near Redfield. In some localities small artesian flows are obtained from the Graneros, but the water-bearing beds are commonly so friable that mud and fine sand may be discharged with the water.

The water is generally soft but contains considerable sodium chloride in solution. It is commonly more highly mineralized than the water of the Carlile shale.

The thickness of the Carlile, Greenhorn, and Graneros taken together seems to have considerable local variation, but in general it increases to the north and west. The incomplete records of drilled wells indicate that between Forestburg and Huron the total thickness of the three formations is 350 to 400 feet. In the western part of the Oahe area the range is from about 400 to 450 feet, but near Redfield the total thickness seems to be somewhat greater.

Dakota sandstone (Upper Cretaceous)

The Dakota sandstone consists of a series of beds of gray sandstone and dark-gray shale. The sandstone beds are fine to coarse-grained, generally soft and thin-bedded in the upper part but harder and more massive in the lower part of the formation. Fossils in the shale and sandstone show that these beds were deposited during the early part of the Upper Cretaceous epoch, and are mainly of fresh-water origin.

The formation has a thickness of 125 feet to more than 300 feet in the Oahe area. The beds have a gentle regional dip to the north or northwest, so the depth to the top of the Dakota sandstone increases gradually from about 600 feet on the south border of the area, to 850 feet near Redfield. It is less, of course, beneath stream valleys than beneath the adjacent uplands.

The Dakota sandstone yields large supplies of artesian water throughout a large region. This is due to the wide extent of the formation, its high porosity, and the sealing of the water-bearing beds by the overlying Graneros shale. The Dakota is also capable of yielding great supplies of water by pumping for municipal and other uses.

The first artesian flow is generally found 20 to 50 feet below the top of the formation, or even lower if the upper beds are locally shaly. The uppermost water-bearing sandstone may be 2 to 6 feet thick; a second flow is obtained 30 to 50 feet deeper, in sandstone 2 to 20 feet thick. In some places a third and a fourth sandstone that yield flowing water have been penetrated. Water from the first flow in the Dakota sandstone is generally cooler and less mineralized

than is the water from deeper beds. The lower beds yield large quantities of water.

During the early years of development, about 1882 to 1910, the water was encountered under pressures ranging up to more than 100 pounds to the square inch. Most wells that were finished with 1¼-inch pipe yield flows of 10 to 80 gallons a minute. Some municipal and industrial wells, cased with 3 to 4½-inch pipe, yielded initial flows of several hundred gallons a minute. The original pressure rapidly declined. In areas where many wells were drilled, the uppermost water-bearing sandstone now yields only small flows under weak pressure.

The period of maximum well-drilling activity in South Dakota was between 1910 and 1917. Since that time drilling of new wells has greatly decreased,[13a] and is now generally only for a replacement well or the redrilling and cleaning of old wells. Wells of considerable initial yield are still obtained in areas that have not undergone intensive drilling, but everywhere the artesian pressure is much less than it was in earlier years.

13a Pugsley, C. W., and Cox, C. H., Artesian well flow in South Dakota; South Dakota State Planning Board, p. 3, 1936.

Sioux quartzite and granitic rocks (pre-Cambrian)

In the Oahe area the Dakota sandstone probably is underlain in many places by the Sioux quartzite. This formation consists of thin-bedded siliceous sandstone, ranging in thickness from a few feet to about 60 feet. It may be present in discontinuous areas, overlying granite. Where the quartzite is exposed along the James River Valley near Mitchell it consists of thin layers of pink, red, purple, and gray siliceous sandstone, with thin partings of red slate.

In the area examined by the writer only a few wells have been drilled into the quartzite, which is not easily distinguishable from hard layers in the lower part of the Dakota sandstone.

The quartzite does not contain important supplies of water, and no wells that yield water from it were recorded in the Oahe area. However, in the vicinity of Mitchell, and in other places where the Sioux quartzite is at or near the land surface, shallow wells yield small supplies for domestic use from the dense but thin-bedded and greatly fractured rock.

Throughout most of the area examined, the Dakota sandstone probably is directly underlain by granitic rocks, including gray granite and dark-gray mica schist. These rocks extend downward for many hundreds of feet. They have been encountered in only a few wells, but probably underlie the entire Oahe area, with a somewhat irregular upper surface, at depths ranging from about 800 to 1,200 feet.

The granitic rocks are very dense and probably are not greatly fractured. They have not been found to contain important amounts of water, and no wells in the Oahe area are reported to yield water from them. In areas where the granite is at the surface, however, supplies of water sufficient

for domestic use could be obtained, through shallow wells, from the weathered rock and from fractures in the dense, unweathered material.

WATER IN ALLUVIAL AND GLACIAL DEPOSITS ALONG STREAM VALLEYS

James River

In the vicinity of Forestburg, in the southern portion of the Oahe area, the James River valley is about three-quarters of a mile wide. The bottom lands are nearly level and ground water is obtainable at depths of less than 10 feet from the alluvium, and at depths ranging from about 40 feet to about 70 feet from sand or gravel lenses of what may be stratified glacial drift. In early years wells flowing under light artesian pressure were developed in some of the sand and gravel lenses but no such wells were noted in 1947.

Near Forestburg the river channel is entrenched about 6 to 15 feet in the bottom land. (See fig. 4 A.) For several miles about Forestburg the valley maintains a fairly uniform width of nearly half a mile, but narrows somewhat near the north border of T. 108 N., R. 61 W. Much of the bottom land in this township is flat, with steeply rising valley sides, but the river channel is comparatively narrow, and is entrenched less than 8 feet, as shown on figure 4 B.

Farther upstream the river meanders from side to side of the alluvial bottom, which ranges from a quarter of a mile to half a mile in width. The stream channel is 50 to 100 feet wide, and normally is 3 to 6 feet deep.

At the road bridge in the NW¼ sec. 23, T. 109 N., R. 61 W., the stream

Figure 4. - A. James River Valley 2 miles north of Forestburg, looking northeast showing entrenched channel and wide valley bottom.

B. James River Valley 12 miles south of Huron, looking southeast, showing character of channel and of valley side.

banks are about 12 feet high at low-water stage, but are somewhat lower at the road crossings 4 and 7 miles farther north. The water table in the alluvium is generally only 1 or 2 feet above the river level.

Moderate supplies of water are present in glacial deposits of sand and gravel beneath the stream alluvium, at depths generally less than 50 feet. Along the base of bluffs which border the valley shallow water is also present in sandy lenses of the glacial drift; however, no springs were noted at this horizon. At several places along the valley sides are terraces, at heights of about 10, 20, and 30 to 40 feet above the lowland.

At Huron the bottom lands are bordered by bluffs 30 to 40 feet high, and are about a quarter of a mile wide. (See fig. 5, A.) The water table is at a depth of less than 6 feet and is controlled by the river level, which in turn is controlled by a concrete overflow dam just below the railway bridge. Above Huron the bottom lands widen to nearly half a mile.

A few small perennial springs are reported to issue near the base of the valley sides, in the NW¼ sec. 12, the NW¼ sec. 14, the NW¼ sec. 21, and the NE¼ sec. 32, T. 111 N., R. 61 W. On the north border of this township the river is entrenched about 10 feet below the level of the bottom land, and is in a fairly straight and deep channel for 6 miles farther north. Along this portion of the valley considerable shallow ground water is present in the alluvium. Near the river channel the water table is slightly above the normal river level, and along the borders of the valley it is 2 or 3 feet above the river level. The shallow water-bearing sand is fine grained and does not yield large water supplies. Deeper water-bearing sand or gravel has not been penetrated in this part of the valley.

Figure 5. - A, James River Valley at Huron, looking east, showing low bluffs on east side of valley.

B. James River Valley near Spink Colony 9 miles south of Frankfort, looking northeast, showing wide, flat alfalfa land.

Near the mouth of Foster Creek the valley widens and the river meanders through flat cultivated lands. The water table is at a depth of nearly 10 feet. The possibilities of developing water supplies in glacial deposits underlying the alluvium have not been tested in this part of the river valley. Farther upstream the channel becomes straighter, but continues rather deeply entrenched.

Near the Spink Colony of Mennonite farmers, the river is in one of its narrowest reaches and is there entrenched about 8 feet. (See fig. 5, B.) The water table is generally at about 10 feet below land surface on the border of the valley, and slightly above the river level near its channel.

About 2 miles farther north, the valley and also the river channel widen somewhat, though the stream remains entrenched 6 to 10 feet. (See fig. 6.) Thence northward nearly to Frankfort the valley remains narrow.

On the north border of the area covered by this report the river valley is 40 to 60 feet below the level of the upland, and has a flat alluvial bottom nearly half a mile wide. Moderate amounts of water at depths of less than 10 feet are obtainable from wells in the sandy layers of the alluvium.

Small springs issue on the west border of the river channel, where the stream swings against the valley side in the SE¼ sec. 2, T. 116 N., R. 63 W. Some of the springs have been submerged by the rise in river level caused by a small dam in a recreation park a short distance downstream.

Figure 6. James River Valley 7 miles south of Frankfort, looking north; showing wide channel entrenched 6 to 10 feet.

Tributaries of James River

Several creeks, most of which are ~~mostly~~ intermittent, enter the James River from the east; ~~namely:~~ these are Dry Run, Thunder, Foster (with Byron Lake), Shue, Pearl, Marsh, and Redstone Creeks. These creeks generally occupy, for portions of their length, glacial outwash channels, which are not often deeply entrenched into the upland surface except near the ~~creek~~ junction with the James River. The flood plains or bottom lands of these creeks generally range from ? up to 500 yards in width. The present stream usually follows ~~in~~ a very sinuous course, and is rarely entrenched more than 10 feet into the alluvial or glacial outwash bottom lands. In many ~~instances~~ places, the alluvium of the bottom lands is only a few feet in thickness, but may be underlain by glacial outwash sands and gravels several feet in thickness. From the sands and gravels of the glacial outwash channels it is often possible to develop more than an ample shallow ground-water supply for domestic and stock uses. During the summer of 1947, the depth to the water table ranged from about 3 feet to about 10 feet below land surface.

The lower valley of Foster Creek opens eastward to a basin several square miles in extent. This basin, bordered by bluffs, contains Byron, Connors, and Mud or Spring Lakes. In 1897, Byron Lake was connected to Foster Creek by a diversion canal and the lake level has since been stabilized by the construction of a concrete spillway which returns water to Foster Creek through Connors Lake. Byron Lake has a flat bottom and the average depth is about 10 feet.

Along the base of bluffs which border the northern and southwestern shores of Byron Lake, small springs issue from sand near the base of the

glacial drift. Large deposits of gravel near the east end of the lake contain much water, at depths extending from about 8 feet below the land surface to the base of the gravel at about 20 feet. In the alluvial meadow and marsh lands that extend eastward from the lake, ground water may be obtained at depths generally less than 5 feet.

Mud Lake or Spring Lake, near the southwest side of Connors Lake, is only a few rods in diameter but is about 30 feet deep and is reported to always contain water. It seems to be supplied chiefly from nearby deposits of water-bearing gravel, but Todd[13] states, "The depth of the pond and the reported softness of its water have led to the belief that Mud Lake is an outlet from a stratum yielding soft artesian water, which in their region lies at a depth of 200 or 300 feet."

The tributaries that enter the James River from the west, namely, Turtle (and Twin Lakes), Cain, Sand and Firesteel Creeks, have characteristics quite similar to those heretofore mentioned, though more generally of a perennial nature. The depth to the water table ranges from about 5 feet to about 10 feet below the land surface of the flood plain.

Twin Lakes are about 7 miles south of Redfield. They are in a basin that is partly bordered by bluffs 20 to 40 feet high, and the lakes have no outlet. These water bodies are shallow, the western and deepest having a maximum depth of about 10 feet, and they were formerly connected by a narrow channel.

Todd[14] states that during the spring of 1897 Turtle Creek overflowed in the NW¼ sec. 25, T. 115 N., R. 65 W., into an old channel leading to

13 Todd, J. E., U. S. Geol. Survey Geol. Atlas, Aberdeen-Redfield folio (No. 165), p. 2, 1909.

14 Todd, J. E., U. S. Geol. Survey Geol. Atlas, Aberdeen-Redfield folio (No. 165), p. 2, 1909.

Idem.

Twin Lakes, and raised their level several feet. The overflow was due to an ice jam, and may have been repeated in later years.

During the drought of 1931-34 the lakes were nearly dry. The old diversion channel from Turtle Creek was reopened in 1936, by cutting a deep drainage ditch in the western part of sec. 19, T. 115 N., R. 64 W., and making a minor diversion in the NE¼ sec. 20. Through this channel the lakes were refilled; but an excessive amount of water entered during the wet spring of 1942, raising the water level high enough to form one large lake. In the summer of 1947 the lake level was still abnormally high, and the water surface extended, as shown on plate 1 (North half).

Large deposits of sand and gravel at the south end of the lake basin have been extensively used for road material. Other important deposits on the north border of the basin have also been developed. This gravel-filled basin probably contains large supplies of shallow ground water in addition to the lake water, and could yield large amounts for municipal or industrial use.

Minor drainage channels

The principal stream valleys, including that of the James River, were excavated by glacial outwash streams. The floods of water from the melting glacial ice also eroded many broad stream channels only 3 to 10 feet deep, in the surface of the drift. In some places these channels form a network pattern of bands of sand and gravel, which contain moderate amounts of ground water at depths generally of less than 10 feet.

Some minor channels were cut deeper through ridges of drift by the flood waters from the melting ice, and valleys were formed that are nearly as deep as those of the main creeks. About 4 miles west of Virgil, one cross-valley is nearly a quarter of a mile wide and has moderately sloping valley sides 30 to 40 feet high. (See fig. 7, A.) This valley and two shallower ones about 3 and 7 miles farther east, respectively, open southward to a stream whose discharge is regulated by a long, narrow artificial lake in the southeast corner of sec. 28, T. 109 N., R. 63 W. The cross valleys also open northward to Cain Creek and the present drainage divide in each is marked by a marshy area from which the runoff is both to the north and to the south. A deep and narrow cross-valley connects Cain Creek with Sand Creek in the northwestern part of T. 108 N., R. 62 W.

A very shallow stream course, which has been improved by ditching, extends southward through a wide, flat area near Woonsocket. It drains excess water to Long Lake and thence eastward to the James River. This channel is considered by Todd[15] to have been a former course of Sand Creek, the border of whose former valley is marked by a terrace 4 feet high along the southwest side of the lake basin. The drainage ditch is 6 to 8 feet deep in places, and has lowered the ground-water table beneath the lands adjacent to it; but water stands at less than 5 feet below the surface of much of the lowland during early summer.

A drainage system with very shallow channels extends southeastward past Hitchcock to a small intermittent lake basin known as Wall Lake. This basin seems to have two outlets, one southeastward to the James River through a very shallow channel, and the other eastward through a deeper

15 Todd, J. E., U. S. Geol. Survey Geol. Atlas, Huron folio (No. 113), p. 1, 1904.

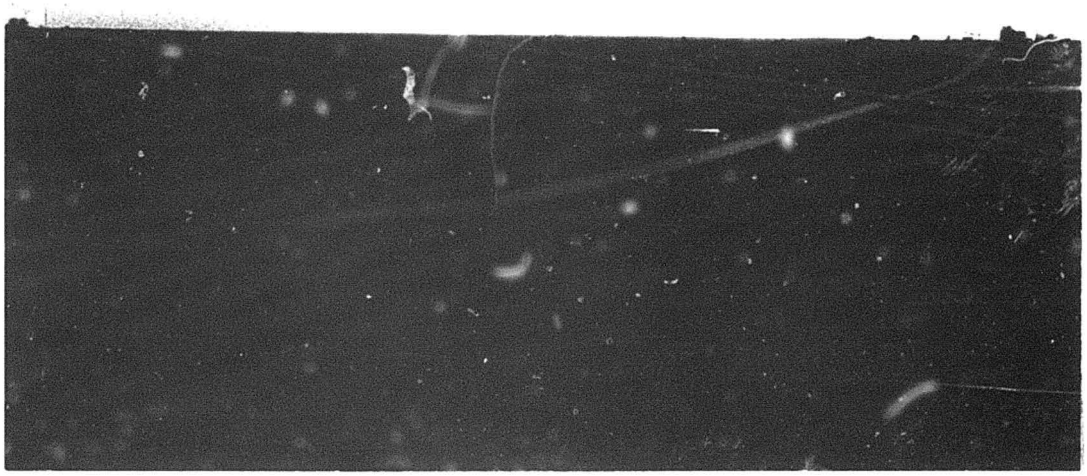

Figure 7. - A. Creek valley 4 miles west of Virgil, looking west, showing flat bottom and moderately sloping valley side.

B. Creek valley 4 miles south-southwest of Frankfort, looking northwest, showing curved bottom and moderately sloping sides.

channel, to a ravine which connects more directly with the river. Todd[16] stated that the lake usually contains very little water, but that in 1897 it filled to a depth of 10 or 12 feet. In the summer of 1947 it was a tule-grown marsh.

For several miles northward from Hitchcock a wide network of drainage channels carries the runoff southeastward or eastward from the plains to the James River. These channels follow broad, very shallow depressions in the surface of the glacial drift. The depressions are generally floored with a layer of stones and gravel. In places where the deposits are sandy and 8 feet or more in thickness, sufficient ground water is available for domestic and stock-water supplies.

The general surface of the plain for 8 or 10 miles south and west of Frankfort is unusually flat, but a network of minor drainage courses that are deeper than those near Hitchcock has been eroded into lake-bed deposits which overlie the glacial drift. Several of these channels are in valleys only 100 to 400 yards wide, with flat or rounded bottoms. A view of one of the largest valleys is shown in figure 7,B. Along these minor valleys small amounts of ground water may be found in local sandy lenses at depths generally of 10 to 20 feet. In one of the principal valleys, near the west border of T. 116 N., R. 63 W., seepage water and small springs from sandy layers make a shallow-water area extending for several miles, in whose lowest portion is a perennial pond and slough. In wet seasons small springs also issue along shallow channels farther east, near the northwest and southeast corners of sec. 2, T. 115 N., R. 63 W. The lake deposits overlying the glacial drift are too fine-grained to yield important amounts of ground

16 Todd, J. E., U. S. Geol. Survey Geol. Atlas, Redfield-Aberdeen folio (No. 165), p. 2, 1909.

water.

The plain extends for several miles east and south of Frankfort and is traversed by a network of shallow drainage channels, along which small amounts of ground water are present, generally at depths of 10 to 15 feet.

WATER IN THE GLACIAL DRIFT

~~It is estimated that over~~ more than 90 percent of the area covered by this report may be considered to be an upland area. These uplands are almost wholly ~~underlain~~ underlain by glacial drift. The topography ranges from that of a very gently sloping plain (this of glacial Lake Dakota) traversed by minor drainage channels to the more normal undulating topography with shallow depressions, terminal and recessional moraines, eskers, kames, outwash plains and some dune sand area.

The glacial drift in the area of glacial Lake Dakota is overlain by silty and clayey lake-bed deposits. These lake-bed deposits contain little if any recoverable ground water.

The glacial drift contains many ~~highly~~ discontinuous lenses of sand and gravel, some of which contain important quantities of ground water, as in the vicinity of Huron.

Most of the city of Huron is built on a sandy outwash plain that extends for about 1 mile north and 2½ miles west and south of the center of the city. Todd[17] considered that a much larger area was covered by a very

17 Todd, J. E., U. S. Geol. Survey Geol. Atlas, Huron folio (No. 113), p. 3, 1904.

shallow lake during the recession of the ice; ~~and~~ Rothrock[18] has described the plain of outwash and lake-bed deposits as extending for about 12 miles north of Huron and an equal distance south of the city. The glacial drift beneath the outwash contains moderate to large supplies of shallow water, in thick lenses of sand and gravel.

In 1934-35 the Huron City Water Department, in cooperation with the Corps of Engineers and the U. S. Geological Survey, made exploratory tests for a municipal water supply in the glacial outwash plain and tributary valley of Stony Run, 3 to 6 miles west of the city. In the NW¼ sec. 9, T. 110 N., R. 62 W., limited areas were found to be underlain by considerable thicknesses of coarse water-bearing beds and ~~also~~ similar beds occur in another locality about 2 miles farther northwest[19]. A well field was developed in the first mentioned locality, and in recent years has furnished part or all of the city water supply at times when water from the James River has not been suitable for the purpose.

The depths at which lenses of sand and gravel occur ~~is highly variable~~. ~~The known~~ range ~~is~~ from about 10 feet to about 82 feet below the land surface. ~~While~~ although the depths at which these lenses may be found is quite variable, there is much less range in the ~~depth to water~~ head of the. The depth to water in wells ranges from about 10 feet to about 40 feet below the land surface. Often ~~times~~ the altitude of the water surface in wells

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18 Rothrock, E. P., The surface of a portion of the James Basin in South Dakota: South Dakota Geol. Survey Report of Investigation No. 54, p. 20 and plates showing glacial geology, 1946.

19 Sayre, A. N., Investigation of ground-water supplies and dam sites, in James and Sheyenne River basins, North Dakota, and South Dakota, water supply and sewage disposal; War Department, Corps of Engineers, ~~Appendix IV~~, pp. 98-106, ~~1935~~ 1936.

tapping the deeper water-bearing zones may be at or above that of the water level in nearby wells tapping shallower water-bearing zones.

The ~~number of the~~ variations in the character of the stratification and type of materials in the moraines, eskers, and kames ~~is~~ are almost as numerous as these features. Of these features, which most often are above the general land surface, eskers and kames generally contain amounts of recoverable ground water in proportion to their size. Within these features, the level of the contained ground water is generally below that of the nearby normal land surface. The water-bearing zones within these eskers and kames is generally not contiguous with those of the glacial drift.

During years of plentiful rainfall some wells in the valley of the James River have yielded small artesian flows of water from stratified layers in the lower part of the glacial drift. Todd[20] recorded small flowing wells from stratified sand in the river valley at Forestburg, and also in sandy parts of the upland east of the river valley. However, in 1947 no shallow wells were noted in that area by the present writer.

TEMPERATURE OF SHALLOW GROUND WATERS

The mean annual temperature of the Oahe area is about 45°, with temperatures ranging from about -30° F. to 100° F.

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20 Todd, J. E., U. S. Geol. Survey Geol. Atlas, Huron folio (no. 113) p. 5, and Artesian Water Sheet, 1904.

Collins[20a] states:

> "Temperature of water in the ground at any place is in general about the same as the mean annual air temperature.....The annual range of temparature of the ground decreases rapidly in the first few feet.....
>
> It may be stated, then, for practical purposes that a ground-water supply obtained at any depth from 20 to 200 feet will have a uniform temperature ranging from about 3° to 6° F. above the mean annual air temperature.

Spence[20b] ascertained the temperature ranges for North Dakota where the annual temperature range is 133° to be:

80° F. ~~range~~ at 1.2 feet
42° F. ~~range~~ at 3.7 feet
25° F. ~~range~~ at 6.6 feet
18° F. ~~range~~ at 9.0 feet

Temperature measurements of the water in wells in the Oahe area during 1948 ranged from 47° F. to 57° F. in wells less than 50 feet deep and from 49° F. to 54° F. in wells 50 to 225 feet deep. Thus, the temperature ranges for wells in the Oahe area generally agree with determinations of water temperatures for other areas.

The greater than normal variation in the temperature of water in wells more than 50 feet deep may be due to recharge of the separate aquifers at different seasons of the year. It is possible that temperature differences in wells may be helpful in distinguishing between and delineating the various shallow aquifers and in the determination of the season of maximum recharge for a given aquifer.

20a Collins, W. D., Temperature of water available for industrial use in the U~~nited~~ S~~tates~~: U.S. Geol. Survey W.S.P. 520, pp. 97-98, and plate 8, ~~VIII, 1923-24.~~

20b Op. cit., p. 98

In the southern part of the Oahe area, the water supply on many farms is obtained from a water-bearing zone locally known as the "chalk rock." This chalky material is at or near the base of the Niobrara formation, and overlies a sandy layer that supplies many farms south of Huron and also

yields water for the municipal supply of Woonsocket.

In some places where water is developed from the chalk at unusually shallow depths, the water may rise from the underlying sandstone into crevices in the chalk. The sandy water-bearing layer is described in early reports of Todd[21] and of Darton[22] and, as stated previously, has been correlated by Rothrock[23] with the Codell sandstone, which is listed by Miss Wilmarth[24] as the topmost member of the Carlile shale.

In the vicinity of Huron this water-bearing sandstone is at depths of a little more than 200 feet below the land surface. In the vicinity of Woonsocket it occurs at depths ranging from about 140 to 170 feet, but westward from Woonsocket the depth increases to about 200 feet in the northwest part of T. 107 N., R. 63 W.

The water from the sandstone is under artesian pressure and generally rises to less than 40 feet below the land surface. In a few low places along the valley of Sand Creek the sandstone has yielded small artesian flows, but no wells yielding more than 1 gallon a minute were observed in 1947. However, so far as was learned, the artesian pressure in the sandstone has not declined appreciably within recent years.

Many wells in the Huron and Woonsocket areas yield water from the basal part of the Niobrara formation and the Carlile shale. Though

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21 Todd, J. E., U. S. Geol. Survey Geol. Atlas, Huron folio (no. 113) p. 5, 1904; Aberdeen-Redfield folio (no. 165), p. 10, 1909.

22 Darton, N. H., Geology and underground waters of South Dakota: U. S. Geol. Survey Water-Supply Paper 227, p. 49, 1909.

23 Rothrock, E. P., A geology of South Dakota, Part 3, Mineral resources South Dakota Geol. Survey Bull. 15, p. 233, 1944.

24 Wilmarth, M. G., Lexicon of geologic names in the United States: U. S. Geol. Survey Bull. 896, pt. 1, p. 480, 1938.

the water contains considerable sodium chloride (common salt), it is soft and is generally used for domestic purposes, in preference to hard water from glacial deposits.

A water-bearing zone in the Graneros shale was recognized by Todd[25] and by Darton.[26] This zone is present in a few places several miles northeast of Woonsocket at a depth of about 450 feet, and yields small artesian flows. In the western part of T. 109 N., R. 60 W., it is at about 475 feet. In the northeastern part of T. 108 N., R. 64 W., about 15 miles northwest of Woonsocket, the depth to the same zone is about 650 feet.

Near Huron a thin water-bearing layer in the Graneros has been found at depths between 480 and 500 feet. About 2 miles northeast of Huron, thin water-bearing layers in the Graneros have been encountered at depths of about 460, 510, 600, 640, and 690 feet, the deepest being only a few feet above the top of the Dakota sandstone.

Near Wolsey a thin water-bearing sandstone is present at about 500 feet. As the beds dip gently northward, approximately the same horizon is encountered at depths between 550 and 600 feet in the northeastern part of T. 112 N., R. 63 W., and between 600 and 650 feet near Hitchcock. In the northern areas the water is under sufficient head to produce small artesian flows. Small flows that have been encountered at depths of about 750 feet in the vicinity of Redfield probably are also from sandy layers in the Graneros shale.

25 Todd, J. E., op. cit.
26 Darton, N. H., op. cit., p. 50.

Replacement page, June 1949

Extent of formation

The extent of the Dakota sandstone as a water-bearing formation in South Dakota was described many years ago by Todd[28] and by Darton,[29] whose reports have been drawn upon for the following discussion. Though

28 Todd, J. E., U. S. Geol. Survey Geol. Atlas, Huron folio (no. 113), pp. 2, 5 and 6, 1904; and Aberdeen-Redfield folio (no. 165), pp. 3, 4, and 10-13, 1909.

29 Darton, N. H., Geology and underground waters of South Dakota: U. S. Geol. Survey Water-Supply Paper 227, pp. 41-48, and pls. 10 and 13, 1909.

many other deep wells have been drilled since their studies were made, not a great amount of additional information concerning local conditions has been recorded. During recent years only a few deep wells have been drilled, chiefly as replacements of early wells, and reliable data concerning the thickness of the water-bearing strata, the yield, and the artesian head in the newer wells are not available.

The Dakota sandstone, which underlies the Graneros shale is the principal water-bearing formation in the James River Basin. In the area that was examined, the total thickness of the layers of sandstone and shale which constitute the Dakota differs considerably from place to place, because of the uneven surface of the quartzite and granitic rocks on which the beds of the Dakota sandstone were deposited.

Between Forestburg and Woonsocket the Dakota sandstone is about 250 feet thick. Near Huron the Dakota is 300 to 350 feet thick and rests on granite, but at Wolsey only 130 feet of beds of the Dakota overlies quartzite or granite. Near Hitchcock the Dakota sandstone is about 230 feet thick; but about 5 miles northeast of that town quartzite has been struck beneath only 180 feet of the Dakota. The formation is believed to be about 250 feet thick near Frankfort. At Redfield, granite has been encountered beneath 180 to 190 feet of the Dakota.

The top of the Dakota sandstone is at a depth of about 600 feet beneath the James River Valley near Forestburg, and 30 to 60 feet deeper beneath the adjacent uplands. There are some minor undulations in the top of the formation, but in general its beds are inclined northward to a broad, gentle syncline between Virgil and Huron. In this syncline the

top of the sandstone is 800 to 850 feet below the surface of the uplands. Thence the beds rise gently northward to depths about 100 feet ~~shallower~~ less below the land surface in the vicinity of Broadland. Near this village the gentle dip swings to a more westerly direction. The top of the formation is at a depth of about 850 feet along the valley of Turtle Creek near Redfield, at depths 20 to 50 feet greater beneath the adjacent plains, and at 950 feet beneath the Redfield Hills, a few miles south of Redfield.

Water-bearing beds

Where the uppermost part of the Dakota sandstone is soft and porous, the first flow of artesian water is generally encountered 5 to 25 feet below the top of the formation, in medium-grained sandstone 2 to 6 feet thick. In places where the uppermost beds are shaly, the first flow may be in a sandy bed 50 feet or more below the top of the formation. Correlate with 20-50 ft. given on p. 29.

The second artesian zone is generally at a depth ranging from 30 to 50 feet below the first flow, in a sandstone layer 2 to 20 feet thick. In some places where the formation is unusually thick, a third flow has been found about 100 feet below the second, and in a few places a fourth flow is present near the bottom of the formation.

The first flow is present near Forestburg at about 650 feet, at 700 feet near Woonsocket, and at 800 feet near Alpena. In sec. 22 and 23, T. 109 N., R. 63 W., the depth to the first flow is about 850 feet, and a strong flow has been developed below 990 feet. Near Virgil the first flow is at about 870 feet, the second flow at 950 feet, and the third

flow at 1,020 feet.

In the vicinity of Huron the first flow is generally struck at about 750 feet, the second flow at about 800 feet, and a strong third flow at depths between 950 and 980 feet. About 1900, a large flow was developed at 902-960 feet on the Risdon farm about 2 miles northeast of Huron, as illustrated by Todd and Hall[30]. A fourth flow has been found in a few wells near Huron at depths between 1,020 and 1,050 feet.

Within a small area 4 to 6 miles southeast of Huron, moderately strong flows were obtained during 1942-45 at depths ranging from 745 to 800 feet, presumably from the first and second flows.

In some wells at and near Wolsey, the first flow was weak even in the early days of drilling, but ample supplies were obtained from depths between 900 and 950 feet. South of Wolsey, in sec. 1, T. 110 N., R. 64 W., and sec. 36, T. 111 N., R. 64 W., the first flow is at about 820 feet, and a stronger flow has been developed at 900 feet.

In a band extending for several miles northwest of Wolsey, the first and second flows are not very productive, but to the east and west of this band, moderate yields are obtained from the second flow. At Broadland the first flow is at about 800 feet, being 30 to 40 feet below the top of the Dakota sandstone.

Between Broadland and Hitchcock in secs. 23 and 24, T. 113 N., R. 63 W., flows were early developed at depths of 836, 912, 960, and 988 feet.

At Hitchcock a strong flow was early obtained at about 950 feet, but 1 to 2 miles northwest of the town, flows have been developed at depths

30 Todd, J. E., and Hall, C. M., Geology and water resources of part of the lower James River Valley, South Dakota: U. S. Geol. Survey Water-Supply Paper 90, pls. 6 and 19, 1904.

of about 880, 970, and 1,040 feet. A few miles northeast of Hitchcock the third water-bearing sand is absent, owing to the presence of a low ridge of quartzite of undetermined extent, which prevented the deposition of the lowest beds of the Dakota sandstone. However, strong flows were obtained in early years from the upper two artesian strata, at depths of about 750 and 800 feet.

Fairly strong discharge has been developed from both the second and the third flows in recent years, in T. 114 N., R. 63 W. Moderately strong discharge from the third flow has been obtained in parts of T. 114 N., R. 62 W., under considerable pressure, and the water is not as strongly mineralized as it is nearer Hitchcock. Southwest of Hitchcock only moderate flows were developed by early wells in T. 113 N., R. 63 W., but farther south, beyond Bonilla, a small area of strong flow was early found in the southern part of T. 113 N., R. 64 W.

At Tulare moderate supplies have been developed from the first flow at depths between 840 and 860 feet. East of Crandon, in the test area of the U. S. Bureau of Reclamation comprising secs. 14 and 15, T. 115 N., R. 63 W., the top of the Dakota sandstone is about 820 feet below the surface of the lower lands. Below the uplands it is 30 to 40 feet deeper. The first flow has been found a few feet below the top of the formation and stronger flows have been developed 50 to 70 feet deeper.

In the southeastern part of T. 115 N., R. 62 W., moderately strong flows of water of fairly low mineral content are obtainable from the second flow, but farther northwest Tps. 115 N. and 116 N., R. 64 W., seem to constitute an area of weak wells. Possibly this is due to the heavy drains on the first and second flows by the great number of wells that were early drilled between Redfield and Frankfort.

At Frankfort small flows were developed in the Dakota sandstone at

depths of about 800 ~~feet~~ and 865 feet; and stronger flows at 945 and 1,000 feet. The depths gradually increase westward across the nearly level plain to Redfield, where the main flows are encountered at depths of about 920, 970, and 1,000 feet, which correspond approximately to the second, third, and fourth flows at Frankfort.

The general character of the materials that underlie different parts of the Oahe area and the positions of the main water-bearing strata, are shown in the following table of the logs of nine representative wells.

Table 2.--Logs of wells in the Oahe area, South Dakota

Well 107-62-21dc. Former mill well at Woonsocket[a]

	Thickness (feet)	Depth (feet)
Yellow and blue clay	25	25
Sand	20	45
Blue clay	13	58
Hardpan	7	65
Sand	30	95
Hardpan and gravel	70	165
Shale and pyrite on top, "soapstone" below	247	412
Hard sandstone	24	436
Soapstone and shale with pyrite	201	637
Hard limestone	8	645
Shale	45	690
Hard shale	7	697
Sandstone; strong artesian flow	78	775

a/From Darton, N. H., Geology and underground waters of South Dakota: U. S. Geol. Survey Water-Supply Paper 227, pp. 134-135, 1909.

Table 2.--Logs of wells in the Oahe area, South Dakota--Continued

Well 108-64-14ad. K. Colwell (formerly E. Schmidt). a/

	Thickness (feet)	Depth (feet)
Glacial drift	100	100
Pierre shale:		
Limy shale	4	104
Shale	150	254
Niobrara formation:		
Chalk	95	349
Benton shale: /		
Sandstone; water	20	369
Gray shale	280	649
Sandstone; small artesian flow	5	654
Shale b/	146	800
Dakota sandstone:		
Shale	39	839
Sandstone; strong artesian flow	1	840

a/ From Todd, J. E., U. S. Geol. Survey Geol. Atlas, Huron folio (No. 113) p. 2, 1904; Darton, N. H., Geology and underground waters of South Dakota: U. S. Geol. Survey Water-Supply Paper 227, p. 113, 1909.

b/ Darton gives the lower part of the log as: shale 654-840, and sandstone, with main flow, 840-841.

Well 110-61-15ab. Beadle County Farm. a/

Glacial drift:		
Yellow and blue till	90	90
Shale or clay; water at bottom	40	130
Pierre shale:		
Shale	30	160
Niobrara formation:		
Shale and chalk	70	230
Benton shale:		
Gray shale	525	755
Dakota sandstone:		
Shale	85	840
Sandstone; strong artesian flow	39	879

a/ From Todd, J. E., op. cit., p, 2, 1904.

/ In the well logs, the term Benton shale refers to the Carlile or Graneros shale, or both.

Table 2.--Logs of wells in the Oahe area, South Dakota--Continued.

Well 110-62-1dd1. Huron City well No. 3 a/.

	Thickness (feet)	Depth (feet)
Glacial drift:		
Yellow and blue till	80	80
Sand and gravel; water	10	90
Pierre shale:		
Shale, with gray chalk near bottom	135	225
Niobrara formation:		
Chalk	51	276
Benton shale:		
Sandstone; soft water	7	283
Gray shale	200	483
Hard sandstone; water	17	500
Shale	238	738
Dakota sandstone:		
Hard sandstone; strong artesian flow	10	748
Sandy shale	50	798
Hard sandstone	12	810
Sandstone; artesian flow	65	875
Calcareous sandstone (?)	89	964
Sandstone; artesian flow	10	974
Shale (?)	61	1,035
Sandstone; artesian flow	15	1,050
Shale	15	1,065
White quartz sand with brown grains	25	1,090
Granite (?)	1	1,091

a/From Todd, J. E., op. cit., p. 2.

Table 2.--Logs of wells in the Oahe area, South Dakota--Continued.

Well 111-64-24bbl. Wolsey City well (a/).

	Thickness (feet)	Depth (feet)
Glacial drift:		
Yellow and blue till	65	65
Pierre shale:		
Shale, with some chalk and sandstone	335	400
Niobrara formation:		
Chalk	90	490
Benton shale:		
Sandstone; small artesian flow	10	500
Light-colored shale	300	800
Dakota sandstone:		
Pyrite and limestone	8	808
Sandstone; artesian flow	30	838
Limestone	20	858
Sandstone	20	878
"Soapstone"	15	893
Sandstone	10	903
Limestone	25	928
Sioux quartzite (?)		
Very hard, dark rock	2	930

a/From Todd, J. E., op. cit., p. 2.

Table 2.--Logs of wells in the Oahe area, South Dakota--Continued.

Well 114-62-18cd. Budlong. a/

	Thickness (feet)	Depth (feet)
Glacial drift:		
Yellow till	12	12
Sand	82	94
Pierre shale, Niobrara formation and Benton shale		
Hard white shale	6	100
Dark shale	239	339
Light shale	25	364
Dark shale	44	408
Sandstone; artesian flow 10 g.p.m. (from Benton shale)	12	420
Sandy shale	36	456
Sandstone	2	458
Dark shale with pyrite	215	673
Hard sandstone (?)	2	675
Dark shale with pyrite	90	765
Sandy shale	11	776
Dakota sandstone: b/		
Sandstone: artesian flow 75 g.p.m.	15	791
Conglomerate and soft sandstone: artesian flow 100 g.p.m.	23	814
Dark shale	10	824
Sandy shale	12	836
White shale	19	855
Conglomerate	25	880
Sandstone; no artesian flow	12	892
White shale	30	922
Fine conglomerate	13	935
Sandstone	20	955
Sioux quartzite:		
Pink quartzite	45	1,000
Granite:		
Light-gray granite	2	1,002

a/ From Todd, J. E., U. S. Geol. Survey Geol. Atlas, Aberdeen-Redfield folio (no. 165) p. 13, 1909.

b/ Slightly different measurements for the strata below the top of the Dakota sandstone are given by N. H. Darton, in Geology and underground waters of South Dakota: U. S Geol. Survey Water-Supply Paper 227, pp. 35 and 42, 1909.

Table 2.--Logs of wells in the Oahe area, South Dakota--Continued.

Well 114-63-32da. Glidden Estate. a/

	Thickness (feet)	Depth (feet)
Glacial drift:		
Yellow till	41	41
Sand and gravel	59	100
Pierre shale, Niobrara formation and Benton shale		
Gray shale	301	401
Dark shale	200	601
Cream-colored sandy shale; small artesian flow	50	651
Brown shale, dark and sandy in lower part	200	851
Dakota sandstone: b/		
Sandstone; small artesian flow	30	881
White shale	35	916
White "limestone"; artesian flow	20	936
Yellow sandy shale	34	970
White sandstone; strong artesian flow	20	990
Shale and "limestone"	45	1,035
Coarse sandstone; artesian flow 650 g.p.m.	10	1,045
White shale and "limestone"	38	1,083
Sioux quartzite:		
Pink quartzite	59	1,142
Granite	8	1,150

a/ From Todd, J. E., op. cit., p. 12.

b/ Slightly different measurements for the strata below the top of the Dakota sandstone are given by N. H. Darton, in Geology and underground waters of South Dakota: U. S. Geol. Survey Water-Supply Paper 227, pp. 35 and 42, 1909.

Table 2.--Logs of wells in the Oahe area, South Dakota--Continued.

Well 115-62-8ad. Frankfort City well. a/

	Thickness (feet)	Depth (feet)
Glacial drift:		
Yellow loam and till	22	22
Sand and gravel	20	42
Pierre shale, Niobrara formation and Benton shale:		
Blue shale	60	102
Hard shale	200	302
Impure limestone	10	312
Hard shale	288	600
Conglomerate	7	607
Hard shale	84	691
Sandy limestone	16	707
Hard shale	93	800
Conglomerate	3	803
Dakota sandstone:		
Hard sandstone; artesian flow	62	865
Soft sandstone; artesian flow	60	925
Hard shale	20	945
Sandstone; artesian flow	40	985
Hard shale	15	1,000
Sandstone; artesian flow	8	1,008

a/ From Todd, J. E. op. cit. p. 12.

Table 2.--Logs of wells in the Oahe area, South Dakota--Continued.

City well at Miller.[30a]

	Thickness (feet)	Depth (feet)
Soil, clay, gravel	220	220
Blue shale	710	930
Hard sandstone and pyrites	45	975
Shale	130	1,105
Sandstone	40	1,145

Town well at Highmore.[30b]

	Thickness (feet)	Depth (feet)
Soil, clay, and gravel	240	240
Blue shale	500	740
Hard gray shale, pyrites	75	815
Blue shale	271	1,086
Gray shale mixed with sand	224	1,310
Shale and pyrites	4	1,314
Blue shale	116	1,430
Sandstone; no flow	12	1,442
Sandy shale on bed of hard sand	95	1,537
Soft sandstone	15	1,552

30a From Darton, N. H., Geology and underground waters of South Dakota: U. S. Geol. Survey, W.S.P. 227, p. 105, 1909.

30b From Darton, N. H., op. cit. p. 111.

Table 2.--Logs of wells in the Oahe area, South Dakota--Continued.

City well at Miller.[30a]

	Thickness (feet)	Depth (feet)
Soil, clay, gravel	220	220
Blue shale	710	930
Hard sandstone and pyrites	45	975
Shale	130	1,105
Sandstone	40	1,145

Town well at Highmore.[30b]

	Thickness (feet)	Depth (feet)
Soil, clay, and gravel	240	240
Blue shale	500	740
Hard gray shale, pyrites	75	815
Blue shale	271	1,086
Gray shale mixed with sand	224	1,310
Shale and pyrites	4	1,314
Blue shale	116	1,430
Sandstone; no flow	12	1,442
Sandy shale on bed of hard sand	95	1,537
Soft sandstone	15	1,552

30a From Darton, N. H., Geology and underground waters of South Dakota: U. S. Geol. Survey, W.S.P. 227, p. 105, 1909.

30b From Darton, N. H., op. cit. p. 111.

Yield of flowing wells

In a report on the Aberdeen-Redfield area prepared in 1906, Todd[31] wrote as follows:

> The largest flows are usually from the deepest wells. The amount of flow depends on several conditions - the porosity of the rock yielding the water, the thickness of this rock, and the pressure. Most wells in these quadrangles have a diameter of 1¼ inches and the flow from them is from 10 to 80 gallons a minute; the average flow for the whole area is probably about 25 gallons. Many 3/4-inch wells furnish from 5 to 15 gallons a minute. Two-inch wells, which are usually sunk to a deeper sandstone, flow from 80 to 150 gallons a minute, with an average of about 100 gallons. Three-inch wells, which are comparatively few, yield from 200 to 300 gallons a minute.

During the investigation in 1947, it was found that very few wells more than 40 years old still produce water. Nearly all the early wells have long since become clogged by sand; or the casing has rusted through, allowing the water to escape before it reaches the land surface. Many wells drilled within the past 30 years, whose casing had become clogged or rusted through, have been cleaned out and recased with smaller pipe, and still yield small to moderate flows. In some localities where the water is strongly mineralized and the casing rusts through in 15 years or less, wells have been recased twice; and in some places a third well has been drilled, where the earlier well or wells have failed.

A view of one of the early wells drilled at Woonsocket is shown on figure 8, A. This well, which supplies "Lake Prior" in the city park, is reported to have had an original flow of more than 400 gallons a minute. In 1935 the flow through a control valve was about 40 gallons a minute[32] and in 1947 it was 30 gallons a minute. A view of one of the wells drilled

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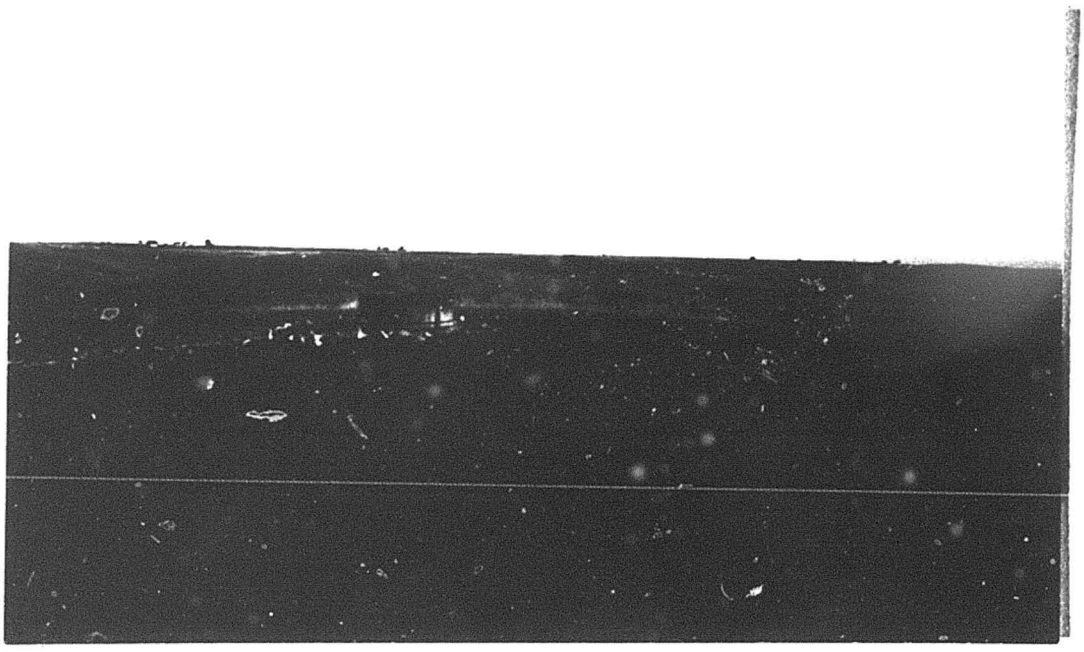
31 Todd, J. E., U. S. Geol. Survey Geol. Atlas, Aberdeen-Redfield folio (No. 165), p. 10, 1909.

32 Pugsley, C. W., and Cox, T. H., Artesian well flow in South Dakota: South Dakota State Planning Board, leaf 18, 1936.

Figure 8. A. Artesian well at Woonsocket, flowing 30 gallons a minute; supplies lake in city park.

Lake Prior ? 7.61



B. Artesian well in pasture 5 miles west of Virgil, flowing 7 gallons a minute; supplies water for cattle.

in pasture land for the use of livestock is shown on figure 8, B. This well was flowing at full capacity of 7 gallons a minute in the summer of 1947, and was reported to have had a nearly constant flow for several years.

In 1919 the South Dakota State legislature passed an act to regulate the use of artesian and phreatic (underground) water of the State[33]. A registration tax of 50 cents was to be paid "for each flowing well running on May 1, 1919, and for every one made thereafter". A flow of 25 gallons a minute was allowed free for each quarter-section, and a small graduated tax was assessed for flows of larger amount. Regulations were specified for the control of the discharge of flowing wells, and penalties were provided for the wasteful flow of such wells. This waste has considerably hastened the decline in pressure and flow of all the artesian wells in some districts.

Practically all flowing wells except those yielding less than about 1 gallon a minute are generally kept partly closed. Some constant flow is desirable, to prevent the changes in pressure that are caused when a well is alternately opened and closed, for such changes may start the entry of sand into the casing from the water-bearing bed. A minimum flow of about 1 gallon a minute is also desirable in cold weather, to prevent the freezing of water in the upper few feet of the casing.

The following tabulation by townships gives the amounts of water that were normally flowing from wells in the area examined in 1947. The yields do not show the full capacity of the wells, most of which were usually kept partly closed, but the figures show the approximate amounts of water that

33 The terms of this law are given in full in the Tenth biennial report of the South Dakota State Engineer, pp. 50-52, 1924.

were being almost constantly drawn from the artesian formation. Very few large wells were allowed to flow fully open, and only comparatively small amounts of water were wasted. However, several wells of considerable flow, whose yield was not being efficiently used in 1947, are mentioned in the remarks column of the table.

Table 3.--Flowing wells from the Dakota sandstone, in the southern part of the Oahe area, South Dakota, in the summer of 1947

Tp., N.,	R., W.	Number of wells	Aggregate flow (gallons per minute)	Remarks
(1)	(2)	(3)	(4)	(5)
Sanborn County				
106	60	6	16.7	
106	61	1	10.0	Forestburg town well, estimated flow.
106	62	1	3.0	
107	60	15	40.3	
107	61	26	105.2	Includes 2 wells of 13 gpm each.
107	62	9	72.0	Includes wells of 10 and 12 gpm; and Woonsocket well of 30 gpm.
108	60	14	74.4	Includes 2 wells estimated 25 gpm each, but reported capacities of 50 and 100 gpm.
108	61	42	142.2	Includes 1 well of 14 gpm, and 1 of part-time flow of 25 gpm.
108	62	29	85.5	Includes 1 well of 20 gpm waste flow at vacant house.
Jerauld County				
108	63	12	67.0	Includes Alpena town well, estimated flow 30 gpm direct into main, but capacity 160 gpm.
108	64	13	66.0	Includes wells of 10 and 12 gpm.
Beadle County				
109	60	2	2.5	
109	61	38	196.2	Includes 4 wells of 10 gpm; 1 of 12 gpm; and 2 of 15 gpm.
109	62	38	123.8	Includes 1 well of 13 gpm.
109	63	43	213.5	Includes 2 wells of 10 gpm; 3 of 12 gpm; and 2 of part-time flows of 15 and 20 gpm.
109	64	17	65.2	
110	60	2	2.0	

Flow reliable are fractions should they be rounded off?

Table 3.--Flowing wells from the Dakota sandstone, in the southern part of the Oahe area, South Dakota, in the summer of 1947--Continued

(1)	(2)	(3)	(4)	(5)
Beadle County--Continued				
110	61	36	224.6	Includes wells of 10, 12, 20, and 20 gpm; 2 wells of 22 and 25 gpm part-time flow; and Dakota Brewing Co. well estimated 20 gpm.
110	62	27	263.1	Includes 3 wells of 10 gpm; 1 of 12 gpm; 1 of 15 gpm; wells of 20, 25, and 30 gpm part-time flow; and State Fair grounds wells of 80 gpm.
110	63	29	191.1	Includes wells of 10 and 11 gpm; Virgil town well of 14 gpm; 1 of 15 gpm; and wells of 25 and 40 gpm part-time flow.
110	64	20	65.7	Includes 1 well of 10 gpm.
111	60	1	3.0	
111	61	32	192.2	Includes wells of 10, 12, and 15 gpm; and wells of 18 and 60 gpm part-time flow.
111	62	30	151.2	Includes 2 wells of 10 gpm; 3 of 12 gpm; and 1 of 15 gpm.
111	63	27	144.9	Includes 1 well of 10 gpm; 2 of 12 gpm; and 1 of 15 gpm.
111	64	17	98.5	Includes Wolsey town wells, of 10 gpm (estimated), and 20 gpm.
112	60	2	9.0	
112	61	30	100.2	Includes 1 well of 10 gpm; and another of 10 gpm, ~~but~~ with estimated capacity 50 gpm.
112	62	37	100.3	Includes 1 well of 11 gpm.
112	63	32	157.3	Includes wells of 11, 12, 13, 14, 15, and 24 gpm.
112	64	15	48.3	Includes 1 well of 15 gpm.
113	60	1	3.0	
113	61	15	82.9	Includes 1 well of 17 gpm.
113	62	21	100.4	Includes wells of 12 and 25 gpm.
113	63	29	89.4	Includes Hitchcock town well, estimated flow 10 gpm (pumped to tank) but capacity reported 300 gpm.
113	64	22	76.2	Includes 1 well of 12 gpm.
113	65	1	2.0	
Spink County				
114	61	7	18.7	
114	62	28	155.2	Includes wells yielding 10, 11, 17, and 30 gpm.
114	63	34	140.0	Includes 2 wells of 12 gpm each, and 1 of 15 gpm.
114	64	26	91.0	Includes 1 well of 10 gpm.

Table 3.--Flowing wells from the Dakota sandstone, in the southern part of the Oahe area, South Dakota, in the summer of 1947--Continued

(1)	(2)	(3)	(4)	(5)
Spink County--Continued				
114	65	1	2.0	
115	61	1	2.0	
115	62	29	132.3	Includes 1 well of 18 gpm, stock water in pasture; largely waste.
115	63	42	173.0	Includes 2 wells of 30 gpm each.
115	64	27	90.6	Includes Tulare town well, estimated 20 gpm.
115	65	1	2.0	
116	62	32	200.7	Includes 2 wells of 10 gpm; 1 of 11 gpm; 2 Frankfort town wells of 20 gpm each; and 1 of 45 gpm part-time flow.
116	63	50	238.6	Includes wells of 12 and 15 gpm, and 1 of 60 gpm part-time flow.
116	64	42	226.6	Includes 1 well of 30 gpm part-time flow. Also 2 city wells at Redfield, 1 at State School and Home, and 1 at Redfield Academy, total flow of the 4 being estimated at 100 gpm.
116	65	2	6.0	
117	64	3	10.0	
	Totals	1,057	4,875.5	

The total regulated flow of 4,875.5 gallons a minute from 1,057 wells is at an average rate for each well of 4.61 gallons a minute. This is considerably greater than was recorded by Wenzel and Sand[34] for flowing wells in part of the James River basin in North Dakota in 1938, where their measurements of 815 regulated wells showed a total flow of 2,202.3 gallons a minute. This was at an average rate of only 2.70 gallons a minute for each well.

The average flow from wells of comparable diameter probably has always been less in the upper part of the James River basin, in North Dakota, than

34 Wenzel, L. K., and Sand, H. H., Water supply in the Dakota sandstone in the Ellendale-Jamestown area, North Dakota, with reference to changes between 1923 and 1938: U. S. Geol. Survey Water-Supply Paper 889-E, p. 39, 1942.

in the lower part of the basin, in South Dakota. The total regulated flow within the area of about 1,170 square miles that was studied by the present writer averaged only 4.16 gallons a minute for each square mile, which seems to be a very moderate amount.

Another way of estimating the discharge was used in early studies, by considering the yield from an east-west row of townships extending across the full width of the artesian basin. Concerning the discharge in the early years of artesian water development, Meinzer[35] has commented as follows:

> It was estimated by Darton[36] that in 1896 the total discharge from flowing wells which ended in the Dakota sandstone in the area that he covered was 104,000 gallons a minute. This area included most of the area of artesian flow of the Dakota sandstone in North and South Dakota and had a north-south extent of nearly 300 miles. His estimate therefore gives a discharge of a little more than 2,000 gallons a minute for an east-west row of townships in the area. As most of the strong wells were in South Dakota, the average for the part of the area that lies in North Dakota must have been much less than 2,000 gallons a minute.

Recharge

It has long been recognized that recharge to the artesian water-bearing beds comes from far to the west, where the Dakota sandstone is exposed in the Black Hills and elsewhere, and that where the discharge from wells is greater than the natural recharge, the wells will decrease in flow.

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35 Meinzer, O. E., and Hard, H. A., The artesian water supply of the Dakota sandstone in North Dakota, with special reference to the Edgeley quadrangle: U. S. Geol. Survey Water-Supply Paper 520-E, p. 88, 1925.

36 Darton, N. H., U. S. Geol. Survey Seventeenth Ann. Rept., pt. 2, p. 609, pl. 69, 1896.

In studies of part of the artesian basin in North Dakota, Meinzer[37] estimated that in 1923 a few hundred gallons a minute but not as much as 1,000 gallons a minute, for each row of townships, was being recharged to the part of the basin that was studied; that is, for each east-west band 6 miles wide from north to south, across the full width of the flowing-well area. Wenzel and Sand[38] made a similar estimate in 1938 for the area that they studied.

Though the full width of the area of flowing wells was not covered by the studies on which the present report is based, the part that has the greatest development of artesian water was included. It is believed, therefore, that 70 to 80 percent of the total regulated flow in each row of townships from Tps. 107 N. to T. 116 N., inclusive, was measured in 1947. The measured total flow of 4,835.8 gallons a minute (excluding the few wells in Tps. 106 and 117 N.), gives an average measured discharge of about 485 gallons a minute for each of the 10 rows of townships. The total for the full ~~width~~ length of each row may be 20 to 30 percent greater.

The estimate of discharge is admittedly very approximate; but it comes within the limits of recharge estimated by Meinzer, and suggests to the present writer that the total discharge, under regulated flow, may be approaching the amount of recharge. Further decrease in discharge may, therefore, take place only very gradually.

Pressure

The artesian head was strong in many of the early wells in the Dakota sandstone, with closed

37 Meinzer, O. E., op. cit., p. 94; also in Hard, H. A., Geology and water resources of the Edgeley and LaMoure quadrangles, North Dakota: U. S. Geol. Survey Bull. 801, pp. 66, 67, 1929.

38 Wenzel, L. K., and Sand, H. H., op. cit., p. 42.

pressure of more than 100 pounds to the square inch in some of the larger ones. The pressure was generally strong enough to force the water to residences, barns, and other buildings on the farms, and to operate small machinery. Town wells were commonly connected directly to distributing mains, as the pressure was sufficient for general use and fire protection.

The drain on the artesian basin caused by the construction and use of many hundreds of wells greatly reduced the pressure, especially from the first and second flows. However, part of the decline of the pressure in many wells probably was due to the leakage of water that rose from the artesian horizon, outside the casing, and escaped into higher layers, where the pressure was less.

The decline of the flowing-well area is shown by plate 5. The local increases in the flowing-well area between 1908 and 1938 and between 1938 and 1948 may be the result of drilling into a lower zone having higher pressures, and possibly it is due in part to a more accurate delineation based on additional information. The decline in pressure between 1892 and 1948 was about 225 feet, but the total decline in pressure to 1948 was about 500 feet if the reported original pressure is a reliable value. (See fig. 9).) Meinzer[38a] has made the following statement in regard to the reliability of the data:

> The original artesian head in different parts of the area can never be ascertained with great precision. The artesian-water map of South Dakota..... which was published in 1909.....doubtless shows the approximate conditions at a considerably earlier time.....

38a Meinzer, O. E., and Hard, H. A., The artesian-water supply of the Dakota sandstone in North Dakota, with special reference to the Edgeley quadrangle: U. S. Geol. Survey Water-Supply Paper 520-E, p. 81, 1925.

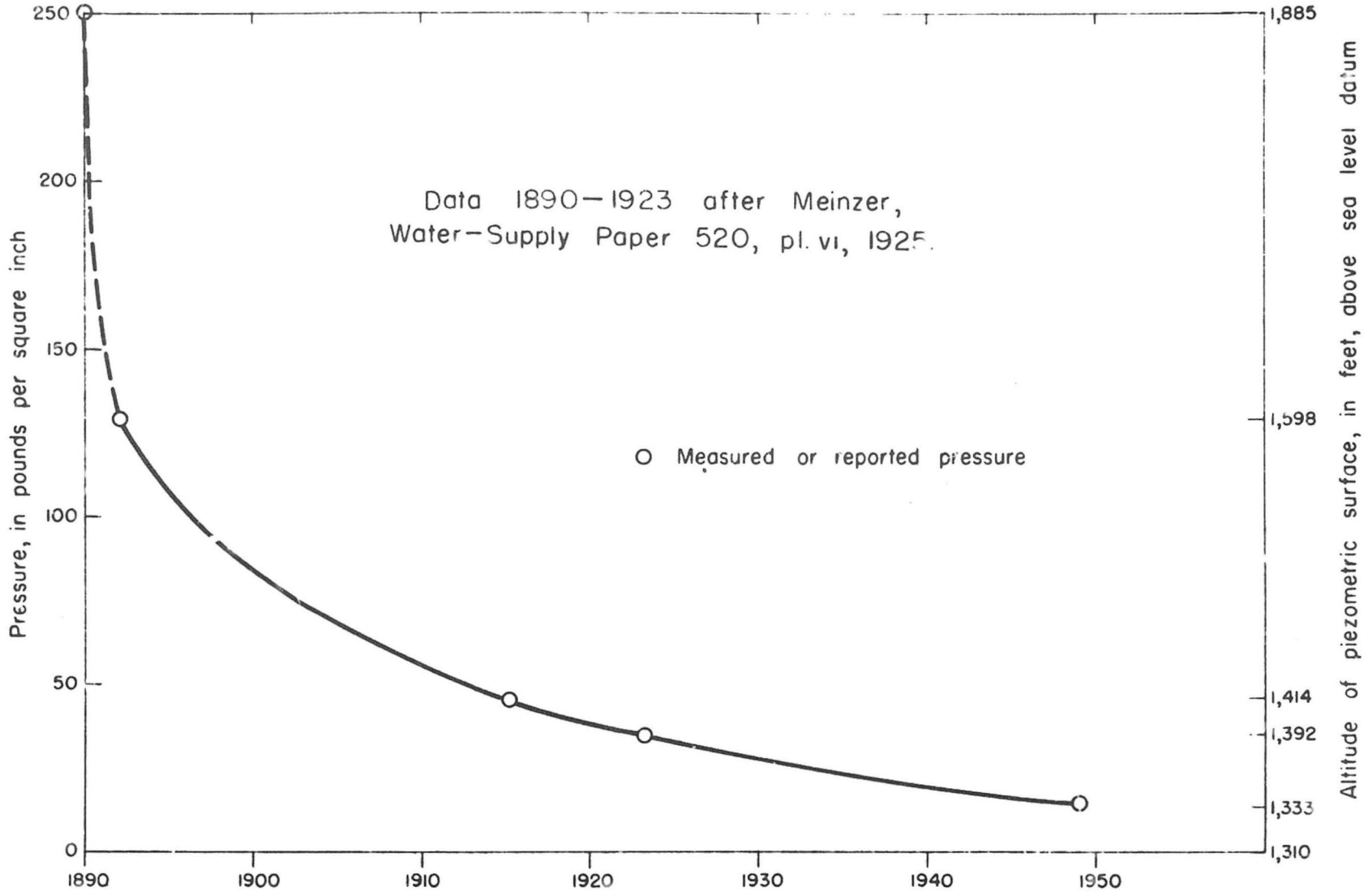

Figure 9.—Decline of artesian pressure at Woonsocket, S. Dak.

The decline in pressure in the Oahe area is approximately equivalent to the decline in North Dakota. Meinzer computed a decline of 197 feet from 1902 to 1923, and Wenzel and Sand [38b] indicated a total decline of 330 feet from 1886 to 1938 for the Ellendale-Jamestown area.

The rapid decline in pressure of the artesian wells has been the subject of much study since about 1910. A report prepared by H. M. Derr[39], State Engineer, summarized measurements of closed pressure which he made on many wells in the summer of 1915. These included 27 wells in Beadle County within the area covered by the present report. Only seven of these wells had closed pressures of 35 pounds to the square inch or greater. The closed pressure in the other 20 wells ranged from 8 to 33 pounds to the square inch.

No regularity in the areal distribution of the wells of high pressure is observable in Mr. Derr's measurements, but in general the wells were drilled to the third flow. Small areas where the wells from the third flow had fairly high pressures seem to have been present in 1915 in the central part of T. 110 N., R. 63 W., in T. 111 N., R. 64 W., near Wolsey; in the southern

38b Wenzel, L. K., and Sand, H. H., Water supply of the Dakota sandstone in the Ellendale-Jamestown area, ~~North~~ Dakota: U. S. Geol. Survey (W.S.P.) 889, pp. 31-38, 1942.

39 Derr, H. M., Artesian wells of South Dakota; South Dakota State Engineer, 6th Bienn. Rept.; ~~for~~ 1915-16, pp. 143-282, 1917.

part of T. 112 N., R. 61 W.; and in T. 113 N., Rs. 62 and 63 W., near Hitchcock.

Mr. Derr found the average closed pressure in 31 wells in Spink County to be a little less than 35 pounds to the square inch; but within the area covered by the present report, 10 of the 14 wells that he measured had closed pressures of 35 to 54 pounds to the square inch. These wells yielded from the second or third flow. The pressure in the first flow in southern Spink County, had greatly declined by 1915. Many of the wells that were measured in 1915 have ceased to flow and have been superseded by later drilled wells. Others could not be definitely identified in 1947, so that a comparison of recent pressures with those in 1915 could not be made.

Though the pressures in all the artesian water-bearing zones have in general greatly declined from those which were found by the earliest drilled wells, occasional new wells still find water under a closed pressure of 30 to 40 pounds to the square inch. The distribution of areas of comparatively high pressure in the three or four artesian zones seems to be irregular and to be subject to local conditions of porosity, compaction, and other factors, which have not been studied in detail.

The artesian pressure may be affected slightly by the escape of gas from the water, and it is also appreciably affected by changes in the barometric pressure; and these pressure changes sometimes cause noticeable, temporary changes in the flow of water from wells.

A few small areas were observed where the water level in former flowing wells was below the level of the land surface. However, in such places it could not be determined definitely whether the decline was due chiefly to decrease in the pressure in the artesian water-bearing zone, or to leakage underground through defective casing.

In 1947 no measurements were made of the closed pressure in artesian wells in the area that was examined. The casings of most of the older wells were rusted and probably were so thin that the building up of pressure during the course of a test might have burst the pipe. In wells in which the casing was already rusted through, the increased pressure probably would have enlarged the openings and allowed the escape of additional water, so that definite measurements of the closed pressure would not have been obtained anyway. However, such measurements would be feasible on wells less than about 5 years old, and especially on wells just drilled.

Temperature

The mean annual temperature of the Oahe area is about 45° F. The water from flowing artesian wells is considerably warmer, because of the higher earth temperatures at the depths from which the water rises. Wells whose casing does not allow the entry of water from shallower horizons, and which flow at a sufficient rate that the water is not appreciably cooled during its rise to the surface, yield water whose temperature probably is approximately the same as that in the artesian water-bearing layer.

During the summer of 1947 the temperature of the water was measured at nearly all wells of appreciable flow whose water was discharging either directly from the well or from an outlet only a few feet away. It was soon found that water that had traveled through surface pipe more than about 10 yards to an outlet was noticeably cooler than at the well head, on a cool day, and warmer than at the well head, on a warm day.

Temperature measurements that are believed to be reliable were made

on 285 flowing wells. Water from 33 of these wells, which were flowing 1 gallon a minute or less, ranged in temperature from 55° F. to 66° F., and averaged 59.3° F. In all these wells the water probably is appreciably cooled because it rises so slowly. As the velocity of flow through a $1\frac{1}{4}$-inch pipe discharging 1 gallon a minute is about 15.7 feet a minute, the time required for water to rise to the land surface from a depth of 800 feet in a well of that diameter is close to 50 minutes. During that time the water may be cooled several degrees as it ascends in the casing, past progressively cooler layers of the bedrock.

Water from 107 wells ranging in flow from 1.1 to 3.0 gallons a minute had temperatures of 55° to 67°, the average being 62.2°. These temperatures probably are also somewhat below the temperature of the artesian water-bearing zone. The 145 other wells ranged in flow from 3.1 to 80 gallons a minute; and the temperature of their water was from 58° to 70°, the average being 63.5°. These figures are in approximate agreement with similar measurements by Wenzel and Sand[40], who recorded temperatures of 56° to 60° in wells having an average flow of 1.8 gallons a minute, 61° to 65° in wells averaging 2.0 gallons a minute, and 66° to 69° in wells averaging 3.0 gallons a minute.

A comparison of temperatures based on the depth from which the water rises would be better than one based on the rate of flow. Though the data on depth of the water-bearing bed are not so detailed as those of flow, the following summary is believed to be reliable.

The reported depth was obtained, from owner or tenant, for 128 of the wells, the temperature of whose water was measured. Water from 46

40 Wenzel, L. K., and Sand, H. H., op. cit., p. 18.

wells, with reported depths of 700 to 846 feet, ranged from 58° to 66° in temperature, the average being 61.7°. These wells probably yield water from the first flow of the Dakota sandstone. Water from 51 wells, reported to be 850 to 950 feet deep, ranged from 58° to 69° in temperature, the average being 63.4°. These wells are situated in areas where they probably yield water from the second flow.

Water from 28 wells, with reported depths of 960 to 1,050 feet, had temperatures of 55° to 68°. As four of these wells had flows so small that the temperature of their water was cooled to below 60°, they may be properly omitted from the summary; the average temperature of water from the other 24 wells ~~being~~ was 64.8°. These wells probably yield water from the third or deeper flows. The remaining three wells, having reported depths of 1,220 feet, 1,230 feet, and 1,350 feet, yielded water having temperatures of 66°, 70°, and 58°, respectively.

In most areas of undisturbed sedimentary rocks such as are present in the Oahe area, the temperature generally increases about 1° F. for each 50 feet of increase in depth. As the mean annual temperature in this area is close to 45°, a normal temperature of about 61° would, therefore, be expected at a depth of 800 feet, 63° at 900 feet, and 65° at 1,000 feet. The observed average water temperatures of 61.7° from wells 700 to 846 feet deep, 63.4° from wells 850 to 950 feet deep, and 64.8° from wells 960 to 1,050 feet deep are, therefore, in close agreement with the temperatures that would be expected.

The two wells about 1,200 feet deep had water temperatures close to the normal, based on a temperature ~~gradient~~ rise of 1° F. ~~increase~~ for each

50 feet of increase in depth. The abnormally low temperature of water from the deepest well, which had a discharge of only 0.6 gallon a minute, may have been due both to cooling of the water during its slow rise to the surface, and to leakage of shallow ground water into the well.

Though the average temperatures are in accord with a gradient of about 1° F. for each 50 feet in depth, it is probable that the water in all the flowing wells cools a few degrees as it rises to the land surface, and that the temperature gradient is 1° F. for about each 40 feet of increase in depth. At a depth of 800 feet the temperature of the bedrock and of the artesian water may, therefore, be about 65° instead of 61°; and the deeper horizons may also be a few degrees warmer than is indicated by the temperature at the land surface of water flowing from them.

Individual variations in the temperature of water from wells of about the same depth may be due to local small variations in the temperature gradient, or to defects in the casing which allow the entry or escape of water above the main water-bearing zone.

MUNICIPAL WATER SUPPLIES

Redfield

The earliest municipal water supply for Redfield was obtained in 1886 from a well 1,030 feet deep and 6½ to 4½ inches in diameter, which was reported by Todd[41] to have had an initial flow of 1,260 gallons a minute and a closed pressure of 177 pounds to the square inch. The well was

41 Todd, J. E., U. S. Geol. Survey Geol. Atlas, Aberdeen-Redfield folio (No. 165), pp. 10, 11, 1909.

drilled to the third flow. The water was admitted from the well to the city mains, probably with some arrangement for reduction of the pressure.

By 1903 the closed pressure had declined to about 75 pounds to the square inch, and two other wells had been drilled to supplement the supply. In 1920 another well was drilled, and two others about 1930, to supplement the declining yield of the earlier wells. In 1935 the water system for the city was described by Sayre[42] as follows:

> The maximum daily water consumption is 320,000 gallons. The average daily water consumption is 145,000 gallons. There are no large industries that use water. The Chicago and Northwestern Railway uses a relatively small amount of water which it supplies from its own well.
>
> The present water supplies is drawn from two sources, and separate mains are maintained. The water used for fire-fighting purpose is pumped into fire mains from a reservoir on Turtle Creek which is formed by a low dam some distance above the highway bridge. The water used for domestic purposes is drawn from 3 wells about 1,000 feet deep, drilled into the Dakota sandstone. These wells flow into a 500,000-gallon reservoir and the water is then pumped into an elevated tank. The natural flow is about 135,000 gallons a day. When the usage exceeds this amount the wells are pumped by means of turbine pumps which deliver the water directly into the elevated tank.
>
> From time to time the city has caused to be drilled 8 artesian wells, ranging in depth from 878 feet to 1,038 feet. When the first well was drilled in 1886 the pressure was 177 pounds per square inch and the well was connected directly to the mains. The pressure at present is only about 6 pounds per square inch.

In 1947 Redfield had a population of about 3,000. The Turtle Creek reservoir, which covered about 400 acres and stored about 1,500 acre-feet, furnished a water supply for industrial uses and fire protection. In the western part of the city two wells furnished a limited domestic supply, which was collected in a concrete reservoir and pumped to an elevated tank nearby of 150,000-gallons capacity.

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42 Sayre, A. N., Investigation of ground-water supplies and dam sites; in James and Sheyenne River basins, North Dakota and South Dakota, water supply and sewage disposal, War Department, Corps of Engineers, Appendix W, p. 107, 1935. 1936.

The drilling of another well was started in October 1947, and was still in progress in the early summer of 1948. Several industrial establishments and the Chicago and Northwestern Railway obtain their ~~own~~ supplies from their own wells.

The State School and Home, north of the city limits, was early supplied with water from two wells drilled on the property in 1900 and 1907. These wells had an original closed pressure of 125 pounds to the square inch, and were connected to the distributing mains without provision for storage. By 1915, however, the pressure had decreased to 15 pounds to the square inch, and a system with collecting reservoir, pump, and elevated tank had been installed[43]. In 1942 another well was drilled, which yielded an adequate supply of water from the third flow, though the pressure was not very strong.

Frankfort

Wells drilled at Frankfort prior to 1900 for municipal supply yielded artesian flows of water under strong pressure, and were connected to the water main without provision for storage. A supplementary well that was drilled in 1911 had a closed pressure of 40 pounds to the square inch in 1915[44]. The drain on the wells has not been great, and in 1947 the supply for the population of about 400 was ~~supplied~~ furnished chiefly by two old wells in the eastern part of the town. A third well, north of the highway, supplied a small amount. No elevated storage was provided, as the pressure from the wells was still sufficient; but a concrete reservoir of 65,000-gallons capacity was used as an emergency supply for fire protection.

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43 Derr, H. M., op. cit., p. 258.
44 ~~Derr, H. M., op. cit., p. 258.~~ Idem.

Tulare

Tulare had an early municipal water supply from a well that was drilled to the second flow in the Dakota sandstone. This well was replaced by another, drilled in 1914 to a depth of about 900 feet, which yielded a moderate flow that was collected in a small concrete reservoir and pumped to an elevated tank of 60,000-gallon capacity.

In 1947 a 4-inch well in the southeastern part of the town supplied water for the population of about 400; the water was pumped to the tank in order to give sufficient pressure for all uses. The average consumption in summer was estimated to be about 30,000 gallons a day, and that in the winter was about two-thirds as much.

Crandon

In the summer of 1947 Crandon was a community of about half a dozen families, with church and school, railway station, and grain elevator. In and near the village, two small artesian wells and several shallow bored wells furnished moderate but sufficient water supplies for domestic use.

The artesian wells yielded small amounts of water from depths of about 900 feet from the first flow in the Dakota sandstone, the shallow wells yielded water from a fairly persistent sandy layer about 12 feet thick in the glacial drift, the top of the water-bearing bed being 18 or 20 feet below the land surface. In some places this sandy layer is so fine grained and loose that difficulty is experienced in casing and screening wells to ensure that a satisfactory supply of water can be obtained.

Hitchcock

A well that was drilled in the southeastern part of Hitchcock in 1885 developed an artesian flow of about 1,200 gallons a minute at a depth of 953 feet, the closed pressure being 154 pounds to the square inch[45]. Later wells yielded water under less pressure, but ample for municipal use ~~by~~ when connecting ~~them~~ to the water mains without provision for storage. A municipal well that was drilled in 1909 had a closed pressure of 40 pounds to the square inch in 1915. The reported large flow and high pressure credited by Derr,[46] to this well, probably are those of the earliest municipal well.

In 1947 the municipal water supply was furnished by a 4-inch well drilled in 1937 on the west border of the town, to a depth of 1,040 feet, the third flow at ~~of~~ ~~in depth.~~ The initial yield of this well was rated at 300 gallons a minute, and the closed pressure was about 30 pounds to the square inch. The regulated discharge of the well was collected in a small concrete reservoir and lifted by an electrically driven pump to a 50,000 gallon elevated tank near the well. The water level in the tank was controlled by automatic starting and stopping of the pump. The average summer consumption by the population of about 400 was estimated to be 20,000 to 30,000 gallons a day and the maximum daily consumption was about 40,000 gallons.

Bonilla

Near Bonilla two community or township wells were drilled to the

45 Todd, J. E., U. S. Geol. Survey, Geol. Atlas, Aberdeen-Redfield folio (No. 165), p. 11, 1909.

46 Derr, H. M., op. cit., p. 166.

Dakota sandstone prior to 1906, but these wells gradually failed to yield satisfactory supplies. In the summer of 1947 the village, with a population of about 100, obtained domestic water supplies from several shallow bored wells. These wells yielded moderate amounts of water from a sandy layer 15 feet thick, which is present at a depth of about 15 to 30 feet in the glacial drift.

During wet seasons the water table in the lower part of the village rises to less than 5 feet below the land surface, and the supply from some of the wells becomes contaminated by the very shallow ground water. Satisfactory domestic supplies, however, are generally obtained from shallow wells in the higher parts of the village.

Wolsey

Wolsey has been supplied for many years with water from town wells drilled to the Dakota sandstone. In 1947 the municipal water supply for the population of about 500 came from two wells about 900 feet deep, drilled in 1920 and 1936 in the northwestern part of the town. The regulated flow of these wells was collected in a small reservoir and pumped to an elevated tank of 60,000-gallons capacity, close to the wells. The discharge from an older well supplied a concrete swimming pool near the tank tower. A small flow from another old well farther west was reported to be discharging into the sewer system, to aid in flushing it. The railroad station and livestock corral had their own small supplies from drilled wells.

As there were no large industrial establishments in the town in 1947, the per-capita consumption was not great. The amount pumped was estimated

to be 30,000 to 40,000 gallons a day during the summer, and only about two-thirds as much during the winter.

Broadland

Broadland is situated on a plain about 30 feet above the valley of a small creek. Artesian wells of small flow furnish water supplies on farms surrounding the village, but in 1947 the community of about 150 people obtained domestic supplies from bored wells. Several wells equipped with hand pumps yielded moderate supplies of water from a layer of sand and gravel 8 feet thick, found at a depth extending from 12 to 20 feet below the land surface. Though this water-bearing layer is a few feet above the creek level, no springs were seen issuing from this horizon along the border of the creek valley.

Another layer of sand, about 10 feet thick, encountered at a depth from 50 to 60 feet, also yielded moderate but dependable water supplies and a thin sandy layer near the base of the till supplied several wells from a depth of 80 to 82 feet. It was reported that during the drought of 1931-34, the water level in the bored wells of this area did not decline seriously.

Huron

Huron is situated on flat land on the west side of the valley of the James River, and 40 to 50 feet above the level of the stream. The city depends chiefly on the river for its water supply, the development of which

has been described by Sayre[47] as follows:

> From 1883 to 1886 the water supply for the city was taken from the James River. In 1886 artesian water was discovered in the Dakota sandstone at a depth of about 1,100 feet beneath the surface, and the river supply was abandoned. The first well had an artesian pressure of 125 pounds per square inch and was connected directly to the mains. With the growth of the city and the gradual decline in pressure, and therefore in the yield of the wells, it was necessary to drill additional wells from time to time. In 1911 the direct pressure from these wells became inadequate to supply sufficient pressure in the city mains and the water from the wells was allowed to run into a collecting reservoir from which it was pumped into an elevated tank. In 1914 the well supply became inadequate and the river was again used as a city supply. The old dam at the Chicago and Northwestern Railway bridge was repaired to impound the water, and a plant for purifying the water was installed. In 1930 the water stage in the James became very low and an attempt was made to develop a shallow well supply in the river valley and on the upland within the town. These attempts failed because only fine sand was encountered in the wells. The city then had two artesian wells drilled to augment the river supply and had the dam on the river raised 26 inches. In September 1933, the James ceased to flow over the dam at Huron and did not flow over the dam again until in March 1935.
>
> In May 1934, it was recognized that the city was facing the possibility of a severe water shortage and the engineering firm of Black and Veatch was engaged to study the possibility of obtaining additional water supplies. Several wells were drilled to test the "chalk" at depths ranging from 190 to 290 feet as a possible source of supply. In general the supplies obtained were rather small and the water, although soft, was highly mineralized, as shown in the table of analyses. One of the wells, located 2 miles east of the city, was pumped as an emergency supply for the city for several weeks before it failed due to faulty construction, in November 1934. A number of test wells were drilled west of the city to determine the possibility of obtaining a supply from the outwash sands and gravels that underlie the latest till in that area and the areas between the test wells were prospected by geophysical methods. . . . .The geophysical explorations were carried on by B. C. Petsch, of the South Dakota Geological Survey, under the direction of Dr. E. P. Rothrock, State Geologist. The results of the geophysical explorations were published by the South Dakota Geological Survey as Report of Investigations No. 24, in January 1935. These investigations showed that there was an area 4 miles square that was underlain by a bed of sand and gravel ranging from 10 to 40 feet thick, and that the sand and gravel were overlain by 30 to 50 feet of glacial till. The sand and gravel varies greatly as to thickness and texture and contains lenses and beds of clay that are, in most cases, not sufficiently extensive to entirely seal off one part of the aquifer from another. The water in the aquifer was under artesian pressure so that it rose about 43 feet above the top of the aquifer.
>
> The area in which the aquifer appeared to be most permeable and of greatest average thickness was selected as the site for the city well

[47] Sayre, A. N., Investigation of ground-water supplies and dam sites in James and Sheyenne River basins, North Dakota, and South Dakota, water supply and sewage disposal, War Department, Corps of Engineers, Appendix IV, pp. 98, 99, and 101, 1935. 1936

field, and the Svec farm, an 80-acre tract 4 miles west of Huron in the W½, NW¼ sec. 9, T. 110 N., R. 62 W., was purchased by the city. Four wells were bored to a depth of about 80 feet. The wells were 42 inches in diameter and a 12-inch screen was set in the lower 30 feet. The spaces between the screen and the wall of the well were then filled with fine gravel.

Additional test holes, ~~that were~~ put down under the direction of Mr. Sayre during 1935, showed that the layers of water-bearing sand and gravel were more extensive than had earlier been proven, and that favorable conditions for developing another well field were present in secs. 29 and 30, T. 111 N., R. 61 W. However, more plentiful supplies of water have been available from the James River since 1935, and it has not been necessary to increase the shallow well water supply.

In the spring of 1935 the supply pumped from the wells averaged about 500,000 gallons a day, and it increased to nearly 1,000,000 gallons a day during June 1935. The water consumption in 1935 was estimated at about 400,000 gallons a day during the winter, and a maximum of nearly 2,000,000 gallons a day during the summer[48].

Water from the shallow wells has been pumped during recent winters, when the supply from the river has not been so readily available, but the river has furnished a sufficient supply during the summers. Figures are not at hand on the winter pumpage from the wells and summer pumpage from the river during recent years, but the amounts have been estimated to be about 10 percent greater than they were in 1935.

In the summer of 1947 the meat packing plant of Armour and Co., situated on the east side of the river, outside the city limits, had its own water-supply system taking water from the river ~~with~~ and from supplementary drilled wells. Several smaller industrial plants and the railways also

48 Sayre, A.N., op. cit., p. 98.

had their own water supplies, from the river or from wells. The municipal water supply was pumped from the river to filter beds and thence to two large elevated tanks situated in the northern and southern parts of the city, respectively. These tanks provided a total storage of 500,000 gallons. The water was chlorinated before entering the mains. The average consumption during the summer was estimated to be nearly 1,000,000 gallons a day.

The low overflow dam on the river at Huron provides a reservoir within the channel of about 500 acres, and gives storage for 2,600 acre-feet of water. The construction of another dam has been proposed about 23 miles farther upstream, in the NW¼ sec. 14, T. 113 N., R. 62 W., where a dam 15 to 18 feet high would give channel storage somewhat greater than that of the reservoir at Huron.

Virgil

In and near Virgil small amounts of water for domestic use and livestock have long been obtained from shallow bored wells, but since 1922 the municipal water supply has been obtained from a drilled well on the school grounds in the eastern part of the town. This well is reported to be 1,020 feet deep, and probably yields water from the third flow in the Dakota sandstone. In 1947 the natural artesian flow of about 14 gallons a minute or 20,000 gallons in 24 hours, was collected in a concrete reservoir and pumped to an elevated tank of 15,000-gallon capacity near the well.

The maximum consumption of the town (about 200 population) was estimated to be about 25,000 gallons a day during the summer, but the average

daily summer consumption was probably less than the capacity of the tank.

Alpena

A municipal water supply for Alpena was obtained for a number of years from a well about 800 feet deep that was drilled prior to 1903 on the school grounds in the western part of the town. The water was under considerable pressure, and was connected directly to the distributing main. The pressure and yield gradually declined, and the original well was replaced by another one drilled in 1910, about 730 feet deep and 5 inches in diameter. This well had a closed pressure of 35 pounds to the square inch in 1915[49]; but it later declined so that a collecting reservoir, pump, and elevated steel tank of 40,000-gallon capacity were installed.

In 1934 a third well was drilled, 790 feet deep, which is reported to have had an initial flow of 160 gallons a minute and a closed pressure of 38 pounds to the square inch, and it was connected directly to the water main. In 1947 the pressure in this well was still sufficient for domestic needs. The nearby storage tank on elevated tower was not in regular use; but it could be filled for emergency supply, either from the deep well or from a shallow bored well in meadow land near the south border of the town. However, this shallow water was too hard to be satisfactory for general use.

The average consumption of the town, (about 550 population), was estimated to be about 30,000 gallons a day during the summer and about two-thirds as much during the winter months.

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49 Derr, H. M., op. cit., p. 234.

Woonsocket

Prior to about 1900 the town of Woonsocket obtained a water supply from wells drilled to the Dakota sandstone. According to Darton[50] the "mill well," drilled about 1888 in the northern part of the town, had an initial large artesian flow from sandstone encountered at 697 to 775 feet and a closed pressure of 125 pounds to the square inch. Another well, 6 inches in diameter, drilled in 1890 to a depth of 725 feet, yielded a very strong flow for several years, the closed pressure in 1892 being 130 pounds to the square inch and the full flow being 1,150 gallons a minute.

According to Derr[51] the two early wells ceased flowing and were plugged prior to 1915. In that year the town supply was furnished by two other wells, one of which had been drilled in the southern part of the town in 1904 and the other in the northern part in 1910. The closed pressure on each well was 45 pounds to the square inch and the wells were connected directly to the water main. As the water from these wells was very hard, a change was made in 1922 to wells drilled about 160 feet deep to a bed of sandstone that yields soft water, in the Carlile shale. This water-bearing zone also supplies many farm wells surrounding Woonsocket.

In 1947 the town (population about 1,200) had a municipal water supply pumped from two wells in the southern part of the business district, to a nearby elevated steel tank having a capacity of 60,000 gallons. The water was distributed through mains to 142 metered outlets, nearly all residences being supplied. The average consumption in summer was estimated to be about 50,000 gallons a day.

50 Darton, N. H., Geology and underground waters of South Dakota: U. S. Geol. Survey Water-Supply Paper 227, pp. 134-135, and plate 15, 1909.

51 Derr, H. M., op. cit., p. 251.

Forestburg

A 3-inch well, drilled at Forestburg about 1915 to the second or third flow in the Dakota sandstone, has yielded a moderate flow of artesian water for domestic use and partial fire protection, though in the summer of 1947 no storage or distribution system had yet been provided for the village (population about 150). As the deep artesian water is quite hard, some families obtained domestic water from wells drilled to the Niobrara formation or Carlile shale.

In 1947 a drilled well on the south border of the village and another on the north border supplied water for the domestic use of several families. Other families, on the east border of the village, obtained water supplies from shallow bored wells in the adjacent lowland of the James River Valley.

FLUCTUATIONS OF WATER LEVELS

Period of observation

In 1939 the U. S. Geological Survey and the South Dakota State Geological Survey undertook a cooperative study of the fluctuation of the ground-water level in observation wells in eastern South Dakota. The early records include several wells in Beadle County within the Oahe area. Measurements on five of these wells during 1935-38 were published by Rothrock[52] and for the same wells during 1939, 1941, and 1944, in U. S. Geological Survey Water-Supply Papers 886, 938, and 1018, respectively.

Additional observation wells south of the Oahe area within the proposed

52 Rothrock, E. P., and Ullery, Dorothy, Ground-water investigations in eastern South Dakota: South Dakota Geol. Survey Rept. of Invest. No. 30, pp. 26-28, 1938.

area to be irrigated were added in 1946 and 1947.

Records of observation wells

The locations of 168 observation wells on which measurements were made at one or more times during the period 1935-1948 are shown on plate 3. The observation wells within the area studied in 1947-1948, and all other wells in that area on which information was obtained are shown on plate 4.

Periods of excess summer rainfall have not produced a correspondingly great rise in the shallow water table, because the glacial drift is, in general, a poorly assorted mixture of clay, silt and sand, which does not absorb water readily. Melting of the winter snows is probably the largest factor in replenishing the ground-water supply.

The measurements of depth to water that have been made in the observation wells are given below.

Table 4.--Measurements of water level in observation wells
[An asterisk (*) preceding well number indicates that all measurements of the water level in the well were made by the South Dakota State Geological Survey; an asterisk preceding a water-level measurement indicates that the measurement was made by the State Geological Survey]

Aurora County

*104-64-11cb.

Water level in feet below land-surface datum

Date	Water level	Date	Water level	Date	Water level
Oct. 29, 1946	43.68	June 6, 1947	42.80	Oct. 8, 1947	44.05
Mar. 14, 1947	42.93				

*105-63-15ab.

Water level in feet below land-surface datum

Oct. 28, 1946	39.16				

Beadle County

109-61-15cc.

Water level in feet below land-surface datum

June 11, 1946	44.85	Aug. 21, 1947	47.38	Aug. 23, 1948	44.68
June 28, 1947	44.95	Apr. 22, 1948	43.72	Nov. [illegible]	28.55

*109-62-3dd.

Water level in feet below land-surface datum

Apr. 18, 1935	29.34	Feb. 9, 1938	28.16	May 10, 1944	27.37
Aug. 18, 1936	28.51	Apr. 5, 1941	32.40	June 4, 1947	16.70
Dec. 7, 1937	27.59	June 6	28.70		

109-62-7aa.

Water level in feet below land-surface datum

*Apr. 19, 1935	35.83	*May 10, 1944	27.09	June 16, 1947	18.43
*Aug. 18, 1936	39.16	Apr. 11, 1946	20.13	Aug. 21	18.14
*Dec. 7, 1937	30.85	Aug. 9	20.07	Apr. 22, 1948	18.77
*Feb. 9, 1938	30.75	Nov. 12	20.90	Aug. 23	19.84
*Apr. 5, 1941	30.97	Apr. 17, 1947	20.06	Nov. 8	21.64
*June 6, 1941	35.10				

Table 4.--Measurements of water level in observation wells--Continued

Beadle County--Continued

109-62-9ad.

Water level in feet below land-surface datum

Date	Water level	Date	Water level	Date	Water level
*Apr. 15, 1935	25.28	*May 10, 1944	18.26	June 16, 1947	10.25
*Aug. 18, 1936	25.06	*Apr. 10, 1946	14.05	Aug. 21	13.68
*Dec. 7, 1937	25.70	Aug. 9	14.47	Apr. 22, 1948	12.17
*Feb. 9, 1938	27.09	Nov. 12	12.18	Aug. 23	13.49
*Apr. 5, 1941	25.88	Apr. 24, 1947	10.89	Nov. 8	13.70
*June 6	25.06				

109-62-12cc.

Water level in feet below land-surface datum

June 10, 1946	24.00	June 16, 1947	9.80	Aug. 23, 1948	12.40
Aug. 8	24.06	Aug. 20	13.98	Nov. 8	15.50
Apr. 17, 1947	15.38	Apr. 22, 1948	17 94		

109-62-30bc.

Water level in feet below land-surface datum

June 10, 1946	26.51	June 16, 1947	25.62	Aug. 23, 1948	24.90
Aug. 9	26.40	Aug. 21	25.53	Nov. 8	25.44
Apr. 24, 1947	23.25	Apr. 22, 1948	24.59		

109-62-36aa.

Water level in feet below land-surface datum

June 10, 1946	16.62	June 16, 1947	15.24	Apr. 22, 1948	15.61
Aug. 9	17.47	Aug. 20	15.44	Aug. 23	14.20
Nov. 12	16.00	Nov. 12	15.77	Nov. 8	14.66
Apr. 17, 1947	15.80				

*109-63-1ab.

Water level in feet below land-surface datum

Apr. 19, 1935	22.47	Apr. 5, 1941	23.26	May 10, 1944	18.43
Aug. 18, 1936	22.91	June 6	23.42	July 28, 1947	15.00
Dec. 7, 1937	23.32				

109-63-6ab.

Water level in feet below land-surface datum

June 12, 1946	14 78	Mar. 14, 1947	14.91	July 24, 1947	14.00
Oct. 28	14.85	June 5	12.55		

Table 4.--Measurements of water level in observation wells--Continued

Beadle County--Continued

109-63-9aa.

Water level in feet below land-surface datum					
Date	Water level	Date	Water level	Date	Water level
June 11, 1946	20.06	June 16, 1947	13.47	June 14, 1948	15.10
Aug. 9	17.95	Aug. 21	16.46	Aug. 23	16.27
Apr. 17, 1947	15.60	Apr. 22, 1948	14.83	Nov. 10	17.84
May 29	15.40				

109-63-30cb.

Water level in feet below land-surface datum					
June 10, 1946	34.11	Apr. 17, 1947	19.28	Apr. 22, 1948	21.24
Aug. 9	42.93	June 16	23.52	Aug. 23	23.62
Nov. 12	19.31	Aug. 21	27.60	Nov. 10	21.22

109-63-34aa.

Water level in feet below land-surface datum					
June 10, 1946	16.47	Apr. 24, 1947	14.78	Apr. 22, 1948	14.20
Aug. 9	a18.00	June 16	13.68	Aug. 23	15.38
Nov. 12	15.85	Aug. 11	15.14	Nov. 10	15.09

*109-64-5aa.

Water level in feet below land-surface datum					
Oct. 29, 1946	39.50	Mar. 14, 1947	39.25	June 6, 1947	38.70

109-64-7bb.

Water level in feet below land-surface datum					
June 10, 1946	5.55	Apr. 17, 1947	4.47	Apr. 22, 1948	4.86
Aug. 9	5.85	June 16	5.35	Aug. 27	6.01
Nov. 12	4.70	Aug. 21	6.41	Nov. 11	5.65

109-64-26dc.

Water level in feet below land-surface datum					
Apr. 17, 1947	1.30	Aug. 20, 1947	5.99	Aug. 27, 1948	6.32
June 16	4.50	Apr. 22, 1948	2.76	Nov. 11	3.54

a Well pumping.

Table 4.--Measurements of water level in observation wells- Continued

Beadle County--Continued

109-64-32aa.

Water level in feet below land-surface datum

Date	Water level	Date	Water level	Date	Water level
June 10, 1946	14.65	June 16, 1947	11.53	Aug. 27, 1948	14.98
Aug. 9	15.75	Aug. 21	14.93	Nov. 11	16.25
Apr. 17, 1947	12.23	Apr. 22, 19	12.82		

109-65-3bb.

Water level in feet below land-surface datum

June 10, 1946	30.10	Apr. 17, 1947	23.08	Apr. 22, 1948	23.15
Aug. 9	27.00	June 19	22.84	Aug. 25	24.00
Nov. 12	24.43	Aug. 21	24.00	Nov. 11	24.29

109-65-17cc.

Water level in feet below land-surface datum

June 10, 1946	5.70	June 19, 1947	6.71	Aug. 25, 1948	5.44
Aug. 9	5.92	Aug. 21	7.59	Nov. 11	5.24

109-65-26dd.

Water level in feet below land-surface datum

June 10, 1946	7.05	June 16, 1947	4.75	Aug. 27, 1948	5.58
Aug. 9	7.90	Aug. 21	6.93	Nov. 11	a8.95
Apr. 17, 1947	4.23	Apr. 22, 1948	4.94		

110-61-7cc.

Water level in feet below land-surface datum

Apr. 17, 1947	4.05	Apr. 22, 1948	a8.67	Aug. 23, 1948	7.46
June 16	4.17	June 14	8.55	Nov. 10	9.60
Aug. 20	4.34				

110-61-20aa.

Water level in feet below land-surface datum

July 3, 1947	15.55	Apr. 25, 1948	a23.31	Aug. 23, 1948	a21.65
Aug. 20	a24.29	June 18	22.95	Nov. 8	a24.41

110-61-28cd.

Water level in feet below land-surface datum

June 23, 1947	16.55	Apr. 25, 1948	15.52	Aug. 23, 1948	15.46
Aug. 20	16.28	June 18	15.64		

a Well pumping.

Table 4.--Measurements of water level in observation wells- Continued

Beadle County--Continued

*110-61-30bc.

Water level in feet below land-surface datum

Date	Water level	Date	Water level	Date	Water level
June 12, 1946	29.24	June 5, 1947	30.05	July 11, 1947	30.50
Mar. 13, 1947	18.22				

110-61-35aa.

Water level in feet below land-surface datum

June 23, 1947	30.35	Apr. 25, 1948	29.36	Aug. 23, 1948	28.31
Aug. 20	32.66	June 18	28.82	Nov. 8	28.30

110-62-2ab1.

Water level in feet below land-surface datum

Apr. 15, 1946	6.50	Feb. 10, 1947	6.15	Apr. 17, 1947	4.52
June 17	6.75	Mar.	6.29	May 14	4.32
Nov. 17	5.63	Apr. 10	5.69	June 4	4.68

110-62-2ab2.

Water level in feet below land-surface datum

June 16, 1947	5.80	Apr. 23, 1948	7.25	Aug. 23, 1948	8.53
Aug. 21	8.42	June 14	8.11	Nov. 10	9.14
Oct. 20	6.00				

110-62-6ab1.

Water level in feet below land-surface datum

Apr. 5, 1946	24.05	Apr. 17, 1947	22.21	June 14, 1948	20.22
June 13	24.00	June 16	20.78	Aug. 23	19.07
Aug. 8	26.20	Aug. 21	19.58	Nov. 10	20.08
Nov. 13	22.84				

110-62-6ab2 b/

Water level in feet below land-surface datum

Apr. 23, 1948	20.17				

110-62-12dd.

Water level in feet below land-surface datum

Apr. 17, 1947	7.12	Apr. 22, 1948	11.43	Aug. 23, 1948	8.68
June 16	7.27	June 14	11.73	Nov. 8	9.92
Aug. 20	9.23				

b Water level in 110-62-6ab2 was measured instead of water level in 110-62-6ab1 in April, 1948.

Table 4.--Measurements of water level in observation wells--Continued

Beadle County--Continued

*110-62-36cd2.

Water level in feet below land surface datum					
Date	Water level	Date	Water level	Date	Water level
Aug. 18, 1936	27.47	Feb. 9, 1938	26.48	June 6, 1941	27.04
Dec. 7, 1937	26.00	Apr. 5, 1941	27.93	4, 1947	22.00

110-63-18cc.

Water level in feet below land surface datum					
June 11, 1946	18.12	June 16, 1947	16.65	June 16, 1948	23.22
Aug. 9	18.00	Aug. 21	16.78	Aug. 23	25.70
Nov. 12	17.04	Apr. 23, 1948	17.01	Nov. 10	21.09
Apr. 18, 1947	16.28				

110-63-25ab.

Water level in feet below land surface datum					
June 11, 1946	21.44	June 16, 1947	19.26	June 16, 1948	16.99
Aug. 9	21.20	Aug. 21	26.82	Aug. 23	17.58
Nov. 12	19.84	Apr. 23, 1948	19.63	Nov. 10	17.04
Apr. 17, 1947	19.19				

110-64-1ba.

Water level in feet below land surface datum					
Apr. 8, 1946	20.30	Apr. 18, 1947	17.13	June 18, 1948	15.49
June 12	19.22	June 16	14.92	Aug. 27	14.92
Aug. 8	18.39	Aug. 21	14.52	Nov. 11	15.31
Nov. 13	18.23	Apr. 23, 1948	15.91		

110-64-5aa.

Water level in feet below land surface datum					
Apr. 8, 1946	15.95	Apr. 18, 1947	12.52	June 18, 1948	14.16
June 11	16.25	June 19	13.79	Aug. 27	16.50
Aug. 9	16.50	Aug. 21	13.61	Nov. 11	16.31
Nov. 13	14.92	Apr. 23, 1948	14.09		

110-64-17ba.

Water level in feet below land surface datum					
June 11, 1946	4.90	Apr. 18, 1947	12.78	Apr. 23, 1948	13.89
Aug. 9	17.05	June 19	10.87	Aug. 27	13.70
Nov. 13	12.30	Aug. 21	22.92	Nov. 11	15.98

Table 4.--Measurements of water level in observation wells--Continued

Beadle County--Continued

110-65-4dd.

Water level in feet below land surface datum

Date	Water level	Date	Water level	Date	Water level
Apr. 8, 1946	15.60	Apr. 18, 1947	15.14	June 18, 1948	15.51
June 11	16.88	June 19	13.86	Aug. 23	14.92
Aug. 8	18.05	Aug. 21	14.63	Nov. 11	16.95
Nov. 13	15.10	Apr. 23, 1948	15.23		

110-65-9ba.

Water level in feet below land surface datum

Apr. 18, 1947	3.44	Apr. 23, 1948	3.23	Aug. 23, 1948	3.87
June 19	4.70	June 18	3.92	Nov. 11	5.24
Aug. 21	5.07				

*111-59-31dd.

Water level in feet below land surface datum

Aug. 8, 1940	16.48	Apr. 5, 1940	17.07		

111-61-34cc.

Water level in feet below land surface datum

June 23, 1947	13.15	Apr. 25, 1948	12.76	Aug. 23, 1948	13.07
Aug. 20	16.50	June 18	13.17	Nov. 13	16.58

111-62-12aa.

Water level in feet below land surface datum

Apr. 19, 1947	7.71	Apr. 23, 1948	9.77	Aug. 23, 1948	10.84
June 17	8.36	June 18	10.00	Nov. 13	12.00
Aug. 22	10.78				

111-64-1bc.

Water level in feet below land surface datum

Apr. 5, 1946	19.80	June 17, 1947	17.81	June 18, 1948	19.66
June 12	18.35	Aug. 22	25.74	Aug. 27	19.05
Aug. 8	20.02	Apr. 23, 1948	18.62	Nov. 10	19.06
Apr. 18, 1947	18.04				

Table 4.--Measurements of water level in the observation wells--Continued.

Beadle County--Continued.

111-64-17dd.

Water level in feet below land-surface datum

Date	Water level	Date	Water level	Date	Water level
Apr. 16, 1946	5.50	Apr. 18, 1947	6.23	Apr. 26, 1948	7.07
June 11	8.35	June 19	6.74	Aug. 27	7.16
Aug. 8	a15.30	Aug. 21	a14.36	Nov. 12	a14.94
Nov. 12	8.10				

111-65-23dd.

Water level in feet below land-surface datum

Apr. 18, 1947	26.73	Aug. 21, 1947	26.05	Aug. 27, 1948	25.71
June 19	25.24	Apr. 23, 1948	25.30	Nov. 11	26.72

112-61-35bc.

Water level in feet below land-surface datum

Apr. 16, 1946	11.60	June 25, 1947	11.08	Aug. 23, 1948	17.34
Aug. 8	12.60	Aug. 22	10.56	Nov. 13	14.62

112-62-24bb.

Water level in feet below land-surface datum

Apr. 16, 1946	44.18	June 17, 1947	43.42	June 10, 1948	44.56
June 12	44.54	Aug. 22	45.63	Aug. 23	45.70
Aug. 8	43.40	Apr. 25, 1948	46.86	Nov. 13	42.96
Apr. 19, 1947	44.27				

112-63-4aa.

Water level in feet below land-surface datum

Apr. 6, 1946	25.82	Apr. 18, 1947	25.85	June 10, 1948	26.55
June 12	28.01	June 17	27.19	Aug. 26	28.64
Aug. 8	29.96	Aug. 22	30 82	Nov. 13	27.93
Nov. 14	26.88	Apr. 25, 1948	26.26		

112-63-24db.

Water level in feet below land-surface datum

Apr. 6, 1946	13.35	June 24, 1947	13.21	June 18, 1948	12.91
June 12	13.45	Aug. 22	14.36	Aug. 23	13.18
Aug. 8	13.60	Apr. 23, 1948	12.54	Nov. 13	12.67
Apr. 19, 1947	12 93				

a Well pumping.

Table 4.--Measurements of water level in the observation wells--Continued

Beadle County--Continued

112-63-33dc.

Water level, in feet below land-surface datum					
Date	Water level	Date	Water level	Date	Water level
Apr. 6, 1946	30.45	Apr. 19, 1947	29.94	June 18, 1948	21.45
June 12	29.31	June 24	29.25	Aug. 24	26.12
Aug. 8	30.71	Aug. 22	30.57	Nov. 13	19.08
Nov. 14	31.30				

112-63-35dd.

Water level, in feet below land-surface datum					
Apr. 6, 1946	21.42	Apr. 19, 1947	24.18	Apr. 23, 1948	30.90
June 12	28.05	June 20	24.00	June 18	25.53
Aug. 8	31.07	June 24	25.31	Aug. 23	26.00
Nov. 14	23.30	Aug. 22	24.69	Nov. 13	24.30

112-64-1cc.

Water level, in feet below land-surface datum					
Apr. 6, 1946	15.10	Apr. 18, 1947	15.61	Apr. 23, 1948	13.72
June 12	14.53	June 17	14.19	Aug. 24	14.54
Aug. 8	14.20	Aug. 22	13.95	Nov. 10	13.01
Nov. 14	14.79				

112-64-23cc.

Water level, in feet below land-surface datum					
Apr. 5, 1946	19.95	Apr. 18, 1947	20.51	June 18, 1948	20.07
June 12	20.99	June 17	20.10	Aug. 24	20.40
Aug. 8	25.75	Aug. 22	22.74	Nov. 10	21.05
Nov. 14	21.08	Apr. 23, 1948	20.78		

112-64-31dd2.

Water level, in feet below land-surface datum					
Apr. 5, 1946	9.43	Apr. 18, 1947	10.56	June 18, 1948	10.09
June 12	9.75	June 19	a10.94	Aug. 27	9.93
Aug. 8	a12.70	Aug. 22	10.71	Nov. 11	9.84
Nov. 13	10.40	Apr. 23, 1948	9.95		

a Well pumping.

Table 4.--Measurements of water level in the observation wells- Continued

Beadle County--Continued

112-65-1bb.

Water level in feet below land surface datum					
Date	Water level	Date	Water level	Date	Water level
Apr. 5, 1946	9.10	Apr. 18, 1947	9.98	Apr. 23, 1948	9.13
June 12	8.57	June 19	7.89	Aug. 27	9.07
Aug. 8	9.84	Aug. 22	8.80	Nov. 12	8.95
Nov. 14	9.72				

112-65-6aa.

Water level in feet below land surface datum					
Apr. 5, 1946	39.21	June 19, 1947	a48.06	Aug. 27, 1948	40.96
June 12	38.81	Aug. 22	42.76	Nov. 8	41.27
Apr. 18, 1947	39.05	Apr. 23, 1948	40.53		

112-65-9dd.

Water level in feet below land surface datum					
Apr. 18, 1947	27.99	Aug. 22, 1947	28.57	Nov. 12, 1948	26.99
June 19	27.84	Aug. 27, 1948	28.23		

112-65-13bb.

Water level in feet below land surface datum					
Apr. 16, 1946	17.84	Apr. 18, 1947	17.87	Aug. 27, 1948	17.98
June 12	16.93	June 19	16.76	Nov. 12	16.37
Aug. 8	16.45	Aug. 22	18.05		

112-65-33dc.

Water level in feet below land surface datum					
Apr. 5, 1946	45.30	Apr. 18, 1947	45.66	June 18, 1948	46.36
June 11	45.20	June 19	45.75	Aug. 27	45.45
Aug. 18	45.12	Aug. 22	46.34	Nov. 11	46.08
Nov. 13	44.45	Apr. 23, 1948	45.29		

113-61-2ba.

Water level in feet below land surface datum					
June 24, 1947	4.22	Apr. 26, 1948	3.69	Nov. 14, 1948	6.82
Aug. 22	5.95	Aug. 26	5.53		

a Well pumping.

Table 4.--Measurements of water level in the observation wells--Continued

Beadle County--Continued

113-62-2ab.

Water level in feet below land-surface datum

Date	Water level	Date	Water level	Date	Water level
June 24, 1947	13.15	Apr. 26, 1948	1.86	Nov. 14, 1948	5.52
Aug. 22	9.39	Aug. 26	8.46		

113-62-31da.

Water level in feet below land-surface datum

Apr. 19, 1947	37.92	Aug. 20, 1947	36.95	Aug. 26, 1948	36.11
June 17	32.70	Apr. 26, 1948	36.96	Nov. 14	37.07

113-64-1ba.

Water level in feet below land-surface datum

Apr. 6, 1946	7.90	Apr. 19, 1947	7.17	Apr. 27, 1948	6.56
June 12	8.25	May 26	6.95	Aug. 26	8.27
Aug. 7	8.21	June 17	6.26	Nov. 15	9.12
Nov. 14	8.47	Aug. 22	7.18		

113-64-5aa1.

Water level in feet below land-surface datum

Apr. 9, 1946	14.06	Apr. 19, 1947	15.22	Apr. 27, 1948	14.11
June 12	14.02	June 17	12.19	Aug. 26	a21.60
Aug. 6	14.43	Aug. 22	a19.23	Nov. 15	11.90
Nov. 14	13.40				

113-64-5aa2.

Water level in feet below land-surface datum

Apr. 19, 1947	10.51	Aug. 22, 1947	10.10	Aug. 26, 1948	7.86
June 17	10.45	Apr. 27, 1948	8.67	Nov. 15	8.54

113-64-23bc1.

Water level in feet below land-surface datum

Apr. 6, 1946	1.40	Apr. 19, 1947	1.94	Apr. 27, 1948	1.76
June 12	4.97	June 17	5.63	Aug. 24	3.99
Aug. 8	6.75	Aug. 22	8.14	Nov. 13	5.58
Nov. 14	4.24				

113-64-23bc2.

Water level in feet below land-surface datum

Apr. 6, 1946	7.65	Nov. 14, 1946	15.85	Aug. 22, 1947	15.58
June 12	15.98	Apr. 19, 1947	15.78	Apr. 27, 1948	12.70
Aug. 8	16.15	June 17	14.60	Measurements discontinued	

a Well pumping.

Table 4.--Measurements of water level in the observation wells--Continued

Beadle County--Continued

113-65-2bb.

Water level in feet below land surface-datum

Date	Water level	Date	Water level	Date	Water level
Apr. 9, 1946	19.85	Apr. 19, 1947	22.35	Apr. 27, 1948	19.63
June 12	24.12	May 26	18.20	Aug. 26	16.35
Aug. 7	16.00	June 17	20.20	Nov. 15	17.39
Nov. 14	23.28	Aug. 22	a28.92		

113-65-34cc.

Water level in feet below land-surface datum

Apr. 18, 1947	4.48	Aug. 22, 1947	5.36	Aug. 27, 1948	5.58
June 19	4.80	Apr. 27, 1948	3.56	Nov. 15	4.99

Brown County

121-65-36dc.

Water level in feet below land-surface datum

Apr. 12, 1946	4.63	Apr. 22, 1947	4.41	Apr. 29, 1948	5.16
June 17	5.55	June 24	5.04	June 24	5.68
Aug. 5	7.50	Aug. 25	6.74	Nov. 20	5.41
Nov. 16	4.84				

122-65-33cc.

Water level in feet below land-surface datum

Apr. 12, 1946	9.60	Apr. 22, 1947	9.74	Apr. 29, 1948	9.08
June 17	10.15	June 24	9.13	Aug. 24	9.44
Aug. 5	10.35	Aug. 25	9.55	Nov. 20	10.01

123-64-22ad.

Water level in feet below land-surface datum

Nov. 16, 1946	7.33	Aug. 25, 1947	8.48	Aug. 24, 1948	8.91
June 24, 1947	7.40	Apr. 29, 1948	6.13	Nov. 20	9.69

Table 4.--Measurements of water level in the observation wells--Continued

Davison County

103-60-19dc.

Water level in feet below land-surface datum					
Date	Water level	Date	Water level	Date	Water level
Nov. 18, 1946	2.44	Mar. 10, 1947	3.00	May 9, 1947	1.24
Feb. 14, 1947	3.31	Apr. 11	.01	Oct. 21	1.94

*103-60-23dd.

Water level in feet below land-surface datum					
Oct. 31, 1946	11.60	Oct. 8, 1947	15.10	June 5, 1947	10.60

*103-61-19dd.

Water level in feet below land-surface datum					
Oct. 30, 1946	48.45	June 6, 1947	47.47		

*103-62-22cb.

Water level in feet below land-surface datum					
Oct. 30, 1946	58.06	June 6, 1947	58.45	Oct. 8, 1947	59.36
Mar. 22, 1947	58.09				

*104-60-30cd.

Water level in feet below land-surface datum					
Oct. 28, 1946	7.32	June 5, 1947	6.11		

a Well pumping.

Table 4.--Measurements of water level in the observation wells- Continued

Davison County--Continued

*104-60-31aa.

Water level in feet below land-surface datum

Date	Water level	Date	Water level	Date	Water level
Oct. 28, 1946	3.74	June 5, 1947	3.24	Oct. 9, 1947	5.75
Mar. 14, 1947	4.45				

*104-61-24cc.

Water level in feet below land-surface datum

Oct. 28, 1946	9.99	June 5, 1947	7.37	Oct. 9, 1947	11.73
Mar. 14, 1947	8.64				

*104-62-4dd.

Water level in feet below land-surface datum

Oct. 28, 1946	8.58	June 6, 1947	7.48	Oct. 8, 1947	7.99
Mar. 14, 1947	7.68				

Edmunds County

121-66-4aa.

Water level in feet below land-surface datum

Apr. 12, 1946	11.13	Apr. 22, 1947	9.84	Apr. 29, 1948	9.04
June 17	9.99	June 24	7.09	Aug. 24	9.78
Aug. 5	13.10	Aug. 25	8.16	Nov. 20	10.43
Nov. 16	9.72				

121-66-10cb.

Water level in feet below land-surface datum

Apr. 12, 1946	6.15	Apr. 22, 1947	6.28	Apr. 29, 1948	5.60
June 17	6.30	June 24	a 5.76	Aug. 24	5.79
Aug. 5	6.55	Aug. 25	6.18	Nov. 20	7.01
Nov. 16	6.87				

121-67-9bb.

Water level in feet below land-surface datum

Apr. 12, 1946	42.95	Nov. 16, 1946	42.62	Aug. 25, 1947	41.18
June 17	38.40	Apr. 22, 1947	40.02	Apr. 29, 1948	39.63
Aug. 5	43.60	June 24	44.05	Aug. 24	40.33

a Well pumping.

Table 4.--Measurements of water level in the observation wells--Continued

Edmunds County--Continued

121-68-28aa.

Water level in feet below land-surface datum

Date	Water level	Date	Water level	Date	Water level
Apr. 12, 1946	36.45	Nov. 16, 1946	36.62	Apr. 29, 1948	33.61
June 17	36.29	June 24, 1947	36.24	Aug. 24	a36.30
Aug. 5	a37.42	Aug. 25	33.36	Measurements discontinued.	

Faulk County

117-66-4dd.

Water level in feet below land-surface datum

Apr. 13, 1946	22.07	Nov. 15, 1946	20.91	Aug. 25, 1948	20.90
June 13	21.92	June 23, 1947	21.30	Nov. 19	a24.25
Aug. 5	21.63	Apr. 28, 1948	19.56		

117-66-35cd.

Water level in feet below land-surface datum

Apr. 15, 1946	14.25	Apr. 21, 1947	13.74	Apr. 28, 1948	13.54
June 13	14.07	June 20	13.96	Aug. 25	14.65
Aug. 6	14.20	Aug. 23	14.54	Nov. 18	13.45
Nov. 13	13.80				

117-68-12aa.

Water level in feet below land-surface datum

Apr. 13, 1946	19.20	Apr. 22, 1947	17.82	Apr. 29, 1948	17.38
June 13	18.19	June 23	17.68	Aug. 25	17.06
Aug. 5	17.53	Aug. 27	17.87	Nov. 19	17.67
Nov. 15	17.76				

117-68-36aa.

Water level in feet below land-surface datum

Apr. 13, 1946	8.77	Apr. 21, 1947	6.12	Apr. 28, 1948	5.60
June 13	7.27	June 23	5.59	Aug. 25	5.84
Aug. 6	5.60	Aug. 27	7.11	Nov. 20	7.50
ov. 15	7.30				

a Well pumping.

Table 4.--Measurements of water level in the observation wells--Continued

Faulk County--Continued

117-68-36cc.

Water level, in feet below land-surface datum

Date	Water level	Date	Water level	Date	Water level
Apr. 13, 1946	15.20	Nov. 13, 1946	16.93	Aug. 25, 1948	a16.67
June 13	15.40	Apr. 21, 1947	15.51	Nov. 18	15.13
Aug. 6	15.47	28, 1948	16.51		

118-66-21ba.

Water level, in feet below land-surface datum

Apr. 11, 1946	5.55	Nov. 15, 1946	3.79	Apr. 29, 1948	a4.10
June 13	5.25	June 23, 1947	4.47	Aug. 25	4.76
Aug. 5	4.97	Aug. 27	a5.93	Nov. 19	6.28

118-67-7cb.

Water level, in feet below land-surface datum

Apr. 11, 1946	9.87	Apr. 22, 1947	9.14	Apr. 29, 1948	8.69
June 13	9.57	June 23	a10.27	Aug. 25	9.25
Aug. 5	9.67	Aug. 27	10.19	Nov. 19	10.55
Nov. 15	9.42				

119-66-2aa.

Water level, in feet below land-surface datum

Apr. 11, 1946	26.70	Apr. 22, 1947	23.84	Apr. 29, 1948	24.36
June 13	27.93	June 23	24.21	Aug. 24	25.70
Aug. 5	25.85	Aug. 25	a27.63	Nov. 19	23.17
Nov. 16	25.20				

120-68-36dc.

Water level, in feet below land-surface datum

Apr. 22, 1947	2.02	Aug. 25, 1947	3.71	Nov. 19, 1948	4.90
June 23	3.27	24, 1948	4.23		

a Well pumping.

Table 4.--Measurements of water level in the observation wells--Continued

Hand County

110-66-1ad.

Water level, in feet below land-surface datum					
Date	Water level	Date	Water level	Date	Water level
Apr. 8, 1946	31.61	Apr. 17, 1947	31.38	June 18, 1948	30.97
June 11	31.21	June 19	31.11	Aug. 12	30.56
Aug. 8	31.47	Aug. 21	31.02	Nov. 11	a31.70
Nov. 12	31.20	Apr. 25, 1948	30.97		

111-66-24ad.

Water level, in feet below land-surface datum					
Apr. 16, 1946	17.13	Apr. 18, 1947	17.29	Apr. 23, 1948	20.21
June 11	17.45	June 19	17.29	June 18	20.24
Aug. 8	18.65	Aug. 21	20.54	Measurements discontinued	
Nov. 12	19.70				

111-66-24da c/

Water level, in feet below land-surface datum					
Nov. 11, 1948	3.15				

112-66-5aa.

Water level, in feet below land-surface datum					
Apr. 8, 1946	9.20	Nov. 13, 1946	11.30	Apr. 23, 1948	10.25
June 13	9.48	June 2, 1947	12.57	Aug. 27	a12.70
Aug. 7	11.15	Aug. 23	11.03	Nov. 12	10.04

112-66-28ad.

Water level, in feet below land-surface datum					
Apr. 8, 1946	22.40	Apr. 21, 1947	23.11	June 18, 1948	21.91
June 13	22.04	June 20	21.85	Aug. 27	21.50
Aug. 7	21.98	Aug. 23	21.49	Nov. 12	21.90
Nov. 13	22.40	Apr. 23, 1948	21.78		

112-66-36dd.

Water level, in feet below land-surface datum					
Apr. 5, 1946	15.20	Apr. 18, 1947	16.83	June 18, 1948	16.22
June 11	16.45	June 20	16.35	Aug. 27	16.50
Aug. 7	16.71	Aug. 22	16.18	Nov. 11	16.43
Nov. 13	16.63	Apr. 23, 1948	16.18		

a Well pumping.
c Water level in 111-66-24da measured instead of water level in 111-66-24ad in November 1948.

Table 4.--Measurements of water level in the observation wells- Continued

Hand County--Continued

112-67-7dc.

Water level in feet below land-surface datum

Date	Water level	Date	Water level	Date	Water level
Apr. 15, 1946	32.05	Aug. 23, 1947	a69.23	Aug. 27, 1948	a61.00
21, 1947	a63.48	Apr. 26, 1948	a73.43	Nov. 12	a71.85
June 20	a46.10	June 18	39.45		

112-69-3dc.

Water level in feet below land-surface datum

Aug. 23, 1946	8.18	June 23, 1947	7.07	May 3, 1948	3.62
Nov. 15	10.63	Aug. 23	8.28	24	4.90
Feb. 10, 1947	7.65	Oct. 20	8.30	June 17	5.96
Mar. 12	11.30	Jan. 13, 1948	9.34	July 9	6.78
Apr. 10	11.20	Feb. 12	9.16	Aug. 17	d 17.10
May 14	9.45	Mar. 29	2.78	Nov. 28	19.42
June 4	8.82	Apr. 13	3.90	Dec. 23	18.29

113-66-13da.

Water level in feet below land-surface datum

Apr. 8, 1946	21.92	Apr. 19, 1947	22.22	Apr. 27, 1948	22.02
June 12	33.35	June 18	22.29	Aug. 26	24.74
Aug. 7	30.12	Aug. 22	a29.21	Nov. 15	13.85
Nov. 14	23.38				

113-67-7dd.

Water level in feet below land-surface datum

Apr. 15, 1946	26.55	Apr. 21, 1947	29.11	Apr. 27, 1948	26.78
June 13	26.43	June 20	27.80	Aug. 26	26.37
Aug. 6	27.92	Aug. 23	27.14	Nov. 18	31.75
Nov. 13	28.50				

113-68-22aa.

Water level in feet below land-surface datum

Apr. 13, 1946	20.48	Apr. 21, 1947	29.96	Apr. 27, 1948	a30.11
June 13	20.37	June 20	24.37	Aug. 26	27.69
Aug. 6	a26.90	Aug. 23	31.80	Nov. 12	a36.30
Nov. 13	22.90				

a Well pumping.
d Apparently well was dry in August and was dug deeper between August and November.

Table 4.--Measurements of water level in the observation wells--Continued

Hand County--Continued

114-66-8bb.

Water level in feet below land-surface datum

Date	Water level	Date	Water level	Date	Water level
Apr. 8, 1946	32.90	Apr. 21, 1947	33.24	Apr. 27, 1948	32.83
June 13	33.23	June 20	32.62	Aug. 26	33.54
Aug. 6	33.17	Aug. 23	33.38	Nov. 14	32.82
Nov. 13	33.22				

114-67-8cc.

Water level in feet below land surface datum

Apr. 15, 1946	5.15	Apr. 21, 1947	5.82	Apr. 27, 1948	4.43
June 13	7.48	June 20	4.96	Aug. 26	7.00
Aug. 6	7.72	Aug. 23	8.72	Nov. 15	10.19
Nov. 13	8.16				

114-67-32bc.

Water level in feet below land-surface datum

Apr. 15, 1946	25.00	Apr. 21, 1947	25.61	Apr. 27, 1948	24.21
June 13	24.98	June 20	24.33	Aug. 26	25.00
Aug. 6	24.95	Aug. 23	24.90	Nov. 15	22.99
Nov. 13	24.90				

115-66-2da.

Water level in feet below land-surface datum

Apr. 15, 1946	21.25	Apr. 21, 1947	21.47	Apr. 28, 1948	20.70
June 13	21.03	June 20	21.25	Aug. 25	21.14
Nov. 13	20.47	Aug. 23	21.77	Nov. 17	21.09

115-66-21bb.

Water level in feet below land-surface datum

Apr. 21, 1947	28.35	Aug. 23, 1947	27.48	Aug. 24, 1948	28.03
June 20	27.04	Apr. 27, 1948	27.36	Nov. 18	26.77

115-67-5ab.

Water level in feet below land-surface datum

Apr. 15, 1946	15.40	Apr. 21, 1947	15.54	Apr. 28, 1948	15.07
June 13	15.45	June 20	15.05	Aug. 25	15.52
Aug. 6	15.37	Aug. 23	15.11	Nov. 18	15.29
Nov. 13	15.31				

Table 4.--Measurements of water level in the observation wells--Continued

Hand County--Continued

115-68-15aa.

Water level in feet below land-surface datum

Date	Water level	Date	Water level	Date	Water level
Apr. 13, 1946	26.97	Apr. 21, 1947	27.11	Apr. 28, 1948	26.69
June 13	27.19	June 20	26.41	Aug. 25	26.49
Aug. 6	27.30	Aug. 23	27.13	Nov. 18	26.60
Nov. 13	27.43				

115-68-23bb.

Water level in feet below land-surface datum

Apr. 21, 1947	5.34	Aug. 23, 1947	5.53	Aug. 15, 1948	5.53
June 20	4.51	Apr. 28, 1948	4.07	Nov. 18	5.99

116-66-13bb.

Water level in feet below land-surface datum

Apr. 15, 1946	29.70	Apr. 21, 1947	29.48	Apr. 28, 1948	29.87
June 13	29.54	June 20	30.70	Aug. 25	29.56
Aug. 6	29.37	Aug. 23	29.76	Nov. 17	28.59
Nov. 13	29.30				

116-67-14bc.

Water level in feet below land-surface datum

Apr. 15, 1946	10.05	Apr. 21, 1947	10.03	Apr. 28, 1948	10.66
June 13	10.11	June 20	9.97	Aug. 25	11.05
Aug. 6	10.35	Aug. 23	10.90	Nov. 18	10.30
Nov. 13	11.57				

116-68-27dd.

Water level in feet below land-surface datum

Apr. 21, 1947	16.18	Aug. 23, 1947	16.61	Aug. 25, 1948	14.82
June 20	17.70	Apr. 28, 1948	12.83		

Jerauld County

*106-64-2cb.

Water level in feet below land-surface datum

Mar. 13, 1947	4.42	June 6, 1947	5.19		

*107-63-13cd.

Water level in feet below land-surface datum

Mar. 14, 1947	29.88	June 6, 1947	27.45	Oct. 8, 1947	26.01

Table 4.--Measurements of water level in the observation wells--Continued

Jerauld County--Continued

*107-63-16aa.

Water level in feet below land-surface datum

Date	Water level	Date	Water level	Date	Water level
Oct. 29, 1946	43.31	Mar. 22, 1947	42.45	June 6, 1947	42.11

*107-64-18da.

Water level in feet below land-surface datum

June 12, 1946	6.44	Mar. 13, 1947	5.00	Oct. 8, 1947	6.85
Oct. 29	6.75	June 6	3.80		

*107-64-26bb.

Water level in feet below land-surface datum

June 12, 1946	8.70	June 6, 1947	6.67	Oct. 8, 1947	8.87
Oct. 29	7.31				

108-63-5dd.

Water level in feet below land-surface datum

May 29, 1947	31.20	Apr. 22, 1948	30.61	Nov. 8, 1948	31.25
Aug. 20	33.20	Aug. 23	30.28		

*108-63-11bd2.

Water level in feet below land-surface datum

Mar. 22, 1947	5.62	June 6, 1947	4.11	Oct. 8, 1947	8.32
May 28	5.15				

*108-63-11bd4.

Water level in feet below land-surface datum

June 12, 1946	4.08	Mar. 14, 1947	11.70	June 6, 1947	11.30
Oct. 29	3.10				

108-63-33cd.

Water level in feet below land-surface datum

Date	Water level	Date	Water level	Date	Water level
May 28, 1947	24.30	Apr. 22, 1948	25.71	Nov. 8, 1948	25.90
Aug. 20	25.34	Aug. 23	25.94		

Table 4.--Measurements of water level in the observation wells- Continued

Jerauld County--Continued

*108-64-3dd2.

Water level in feet below land-surface datum					
June 12, 1946	13.08	Mar. 14, 1947	13.13	Oct. 8, 1947	15.09
Oct. 29	12.22	June 6	10.00		

*108-64-6cc.

Water level in feet below land-surface datum					
June 12, 1946	19.66	June 6, 1947	18.57	Oct. 8, 1947	20.32
Oct. 29	19.59				

Sanborn County

*105-60-3bd.

Water level in feet below land-surface datum					
Oct. 28, 1946	57.95	Mar. 3, 1947	57.20	June 5, 1947	57.00

*106-61-1bd.

Water level in feet below land-surface datum					
June 12, 1946	6.53	June 6, 1947	4.99	Oct. 9, 1947	8.73
Oct. 29	8.53				

*106-62-23da.

Water level in feet below land-surface datum					
Oct. 30, 1946	12.13	June 6, 1947	9.69	Oct. 8, 1947	12.73
Mar. 14, 1947	11.62				

*107-62-28da.

Water level in feet below land-surface datum					
June 13, 1946	13.35	Mar. 14, 1947	6.84	June 6, 1947	8.44
Oct. 29	9.81				

108-61-4cc.

Water level in feet below land-surface datum					
June 4, 1947	14.80	Apr. 22, 1948	14.29	Nov. 8, 1948	14.46
Aug. 20	14.64	Aug. 23	14.72		

Table 4.--Measurements of water level in the observation wells- Continued.

Sanborn County--Continued.

*108-61-31bc.

Water level in feet below land surface datum					
Date	Water level	Date	Water level	Date	Water level
June 13, 1946	5.66	Mar. 13, 1947	10.08	Oct. 9, 1947	10.57
Oct. 29	10.46	June 5	9.71		

108-61-33dd.

Water level in feet below land surface datum					
June 5, 1947	15.50	Apr. 22, 1948	15.40	Measurements discon-	
Aug. 20	15.44	Aug. 23	15.76	tinued.	

108-62-1cc.

Water level in feet below land surface datum					
June 4, 1947	33.80	Apr. 22, 1948	45.47	Nov. 8, 1948	41.29
Aug. 20	a47.77	Aug. 23	35.98		

*108-62-6cd2.

Water level in feet below land surface datum					
June 12, 1946	6.88	Mar. 14, 1947	6.2[illegible]	Oct. 8, 1947	9.76
Oct. 29	5.57	June 6	4.85		

108-62-32bb.

Water level in feet below land surface datum					
May 22, 1947	4.50	Apr. 22, 1948	6.44	Nov. 9, 1948	7.79
Aug. 20	6.30	Aug. 23	5.08		

Spink County

114-62-1aa.

Water level in feet below land surface datum					
June 25, 1947	37.85	Apr. 26, 1948	38.66	Nov. 14, 1948	37.30
Aug. 25	40.46	Aug. 26	37.71		

114-62-3aa.

Water level in feet below land surface datum					
June 24, 1947	21.95	Apr. 26, 1948	20.77	Measurements discon-	
Aug. 25	21.11			tinued.	

Table 4.--Measurements of water level in the observation wells--Continued

Spink County--Continued

114-62-33bc.

Water level in feet below land-surface datum					
Date	Water level	Date	Water level	Date	Water level
Apr. 9, 1946	23.00	Apr. 23, 1947	23.60	Apr. 26, 1948	21.71
June 14	23.42	June 18	22.72	Aug. 26	23.46
Aug. 7	23.27	Aug. 25	23.63	Nov. 14	25.00
Nov. 14	23.70				

114-63-15bc.

Water level in feet below land-surface datum					
Nov. 14, 1946	31.70	Aug. 25, 1947	20.61	Aug. 25, 1948	20.71
Apr. 23, 1947	21.86	Apr. 26, 1948	21.14	Nov. 14	22.14
June 18	21.30				

114-63-35cd.

Water level in feet below land-surface datum					
Apr. 6, 1946	17.30	Apr. 19, 1947	32.02	Apr. 26, 1948	a26.63
June 12	11.72	June 17	17.00	Aug. 25	21.17
Aug. 7	a30.10	Aug. 22	a30.04	Nov. 14	32.43

114-64-8cc.

Water level in feet below land-surface datum					
Apr. 23, 1947	17.40	Aug. 26, 1947	17.21	Aug. 26, 1948	16.97
June 18	16.68	Apr. 27, 1948	16.45	Nov. 15	16.11

114-64-11bc.

Water level in feet below land-surface datum					
Apr. 13, 1946	1.70	Apr. 23, 1947	2.48	Apr. 27, 1948	1.26
June 14	4.21	June 18	2.92	Aug. 24	1.22
Aug. 7	5.65	Aug. 25	5.57	Measurements discontinued.	
Nov. 14	5.56				

a Well pumping.

Table 4.--Measurements of water level in the observation wells--Continued

Spink County--Continued

114-65-8cb.

Water level, in feet below land-surface datum					
Date	Water level	Date	Water level	Date	Water level
Apr. 9, 1946	18.85	Nov. 15, 1946	19.18	Apr. 27, 1948	19.01
June 14	19.19	June 18, 1947	19.01	Aug. 25	19.13
Aug. 7	19.28	Aug. 26	19.33	Nov. 15	19.72

115-62-25aa.

Water level, in feet below land-surface datum					
June 25, 1947	7.80	Aug. 25, 1948	a15.60	Nov. 17, 1948	9.64
Aug. 25	a9.66				

115-63-2cc.

Water level, in feet below land-surface datum					
Apr. 23, 1947	22.33	Aug. 25, 1947	20.38	Aug. 25, 1948	22.04
June 18	19.97	Apr. 28, 1948	20.25	Nov. 17	22.66

115-63-15dd.

Water level, in feet below land-surface datum					
Apr. 10, 1946	14.90	Nov. 14, 1946	16.01	Apr. 28, 1948	15.37
June 14	17.77	June 18, 1947	15.95	Aug. 25	15.98
Aug. 7	16.17	Aug. 26	16.90	Nov. 17	16.90

115-64-11cc.

Water level, in feet below land-surface datum					
Apr. 10, 1946	27.42	Apr. 23, 1947	27.49	Apr. 27, 1948	26.14
June 14	27.23	June 18	26.60	Aug. 24	a29.63
Aug. 7	25.82	Aug. 25	a28.11	Nov. 17	27.56
Nov. 14	a28.41				

115-64-30cc1.

Water level, in feet below land-surface datum					
Apr. 9, 1946	13.10	Apr. 23, 1947	12.76	Apr. 28, 1948	11.53
June 14	12.48	May 26	11.67	Aug. 26	12.22
Aug. 7	12.05	June 18	12.12	Nov. 17	11.58
Nov. 15	12.36	Aug. 20	12.37		

a Well pumping.

Table 4.--Measurements of water level in the observation wells--Continued/

Spink County--Continued/

115-64-35bb.

Water level in feet below land-surface datum

Date	Water level	Date	Water level	Date	Water level
Apr. 9, 1946	6.25	Apr. 23, 1947	6.13	Apr. 27, 1948	6.53
June 14	7.20	June 18	6.06	Aug. 24	6.82
Aug. 7	8.66	Aug. 27	7.40	Nov. 17	8.13
Nov. 14	7.96				

115-65-5cd.

Water level in feet below land-surface datum

Apr. 15, 1946	10.30	Apr. 23, 1947	10.59	Apr. 28, 1948	9.63
June 14	10.89	June 18	10.38	Aug. 25	10.05
Aug. 7	11.22	Aug. 26	9.87	Nov. 17	10.19
Nov. 15	11.39				

115-65-33aa.

Water level in feet below land-surface datum

Apr. 9, 1946	17.43	Apr. 23, 1947	17.41	Apr. 28, 1948	16.70
June 14	17.26	June 18	16.92	Aug. 26	17.32
Aug. 7	17.14	Aug. 26	16.88	Nov. 18	15.64
Nov. 15	17.22				

116-61-20cc.

Water level in feet below land-surface datum

June 25, 1947	14.55	Apr. 29, 1948	14.33	Nov. 17, 1948	13.71
Aug. 25	14.33	Aug. 25	14.70		

116-62-3ab.

Water level in feet below land-surface datum

June 26, 1947	16.08	Apr. 29, 1948	14.51	Nov. 17, 1948	15.45
Aug. 25	15.87	Aug. 25	14.15		

116-62-22dd.

Water level in feet below land-surface datum

June 25, 1947	19.05	Apr. 29, 1948	19.13	Nov. 17, 1948	18.14
Aug. 25	19.57	Aug. 25	18.08		

Table 4.--Measurements of water level in the observation wells--Continued/

Spink County--Continued/

116-64-3db.

Water level, in feet below land-surface datum

Date	Water level	Date	Water level	Date	Water level
Nov. 16, 1946	10.93	Aug. 25, 1947	11.26	May 3, 1948	10.90
Feb. 11, 1947	11.10	Oct. 21	12.24	5	10.85
Mar. 12	11.42	Nov. 21	11.97	June 16	11.41
Apr. 11	11.68	Jan. 14, 1948	11.79	July 9	10.52
May 5	10.52	Feb. 12	11.80	30	10.77
14	10.71	Mar. 11	11.68	Aug. 17	10.36
23	10.48	29	11.24	Sept. 9	11.00
June 24	11.10	Apr. 14	11.02	Nov. 11	12.19
Aug. 5	10.94	27	10.95	Dec. 23	11.62

116-64-4cd1.

Water level, in feet below land-surface datum

Apr. 22, 1947	13.66	Aug. 26, 1947	19.66	Measurements discon-	
June 18	19.41	Apr. 27, 1948	7.89	tinued.	

116-64-4cd2 e/

Water level, in feet below land-surface datum

Aug. 24, 1948	18.71	Nov. 17, 1948	17.47		

116-64-32aa.

Water level, in feet below land-surface datum

Apr. 10, 1946	17.23	Apr. 23, 1947	16.33	Apr. 27, 1948	15.43
June 14	16.70	June 16	15.68	Aug. 25	14.62
Aug. 6	16.04	Aug. 26	16.80	Nov. 17	15.19
Nov. 15	16.38			-	

116-65-4ba.

Water level, in feet below land-surface datum

Apr. 10, 1946	6.53	Apr. 23, 1947	5.78	Apr. 28, 1948	5.30
June 14	6.47	June 23	7.20	Aug. 25	5.54
Aug. 6	6.44	Aug. 26	6.99	Nov. 18	6.46
Nov. 15	6.51				

e 116-64-4cd2 has been substituted for 116-64-4cd1.

Table 4.--Measurements of water level in the observation wells--Continued

Spink County--Continued

117-62-35bb.

Date	Water level	Date	Water level	Date	Water level
	Water level in feet below land-surface datum				
June 26, 1947	21.62	Apr. 29, 1948	21.90	Nov. 19, 1948	21.20
Aug. 25	23.07	Aug. 25	21.14		

118-65-25ab.

	Water level in feet below land-surface datum				
Apr. 13, 1946	17.30	June 23, 1947	17.23	Aug. 24, 1948	17.12
June 17	17.34	Aug. 27	17.15	Nov. 20	16.89
Apr. 22, 1947	17.30	Apr. 29, 1948	17.02		

120-64-35cc.

	Water level in feet below land-surface datum				
Apr. 11, 1946	19.20	Apr. 22, 1947	17.00	Apr. 29, 1948	15.55
June 17	19.01	June 23	17.62	Aug. 24	17.22
Aug. 5	18.36	Aug. 25	19.80	Nov. 19	19.00
Nov. 15	17.18				

A complete chemical analyses were made of the water from 79 wells and a partial analyses were made of the water in from additional 622 wells. (See tables 5 and 6.) Of the complete analyses, 24 are of water from wells tapping the Dako[illegible] sandstone, 3 are of water from wells tapping either the chalky layers of the Niobrara formation or the Carlile or Graneros shales, and 52 are of water withdrawn from aquifers in the glacial drift. The locations of the wells from which samples for complete chemical analysis were obtained are shown in figure 10.

A study of the ~~complete and partial~~ chemical analyses of water in aquifers in the glacial drift strongly indicates that these aquifers can be distinguished from each other on the basis of the chemical composition and the value of certain related physical measurements. It is expected that the full utilization and application of this and other available tools and methods will make possible the preparation of contour maps of the water table or piezometric surface for each of the more extensive aquifers.

Sufficient analytical data are on hand to prepare a more story on water quality in the area. This may be under consideration in view of the abbreviated discussion above

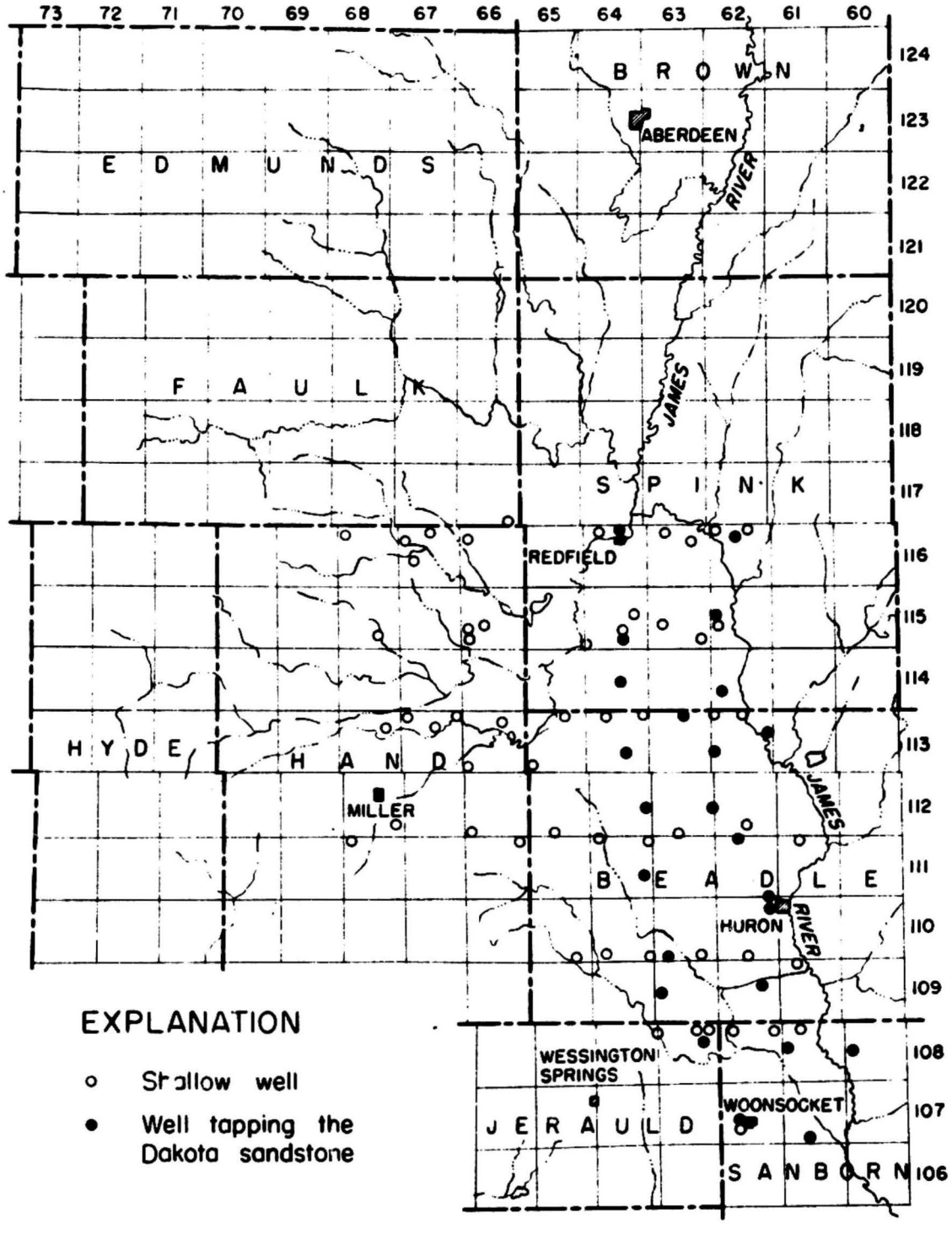

Figure 10.—Map of the Oahe area showing location of wells from which water samples were collected in 1947-48 for complete analysis

Table 5.--Complete chemical analyses of representative ground waters in the Oahe area, S. Dak.

Location of well/spring	Date of collection	Depth of well (feet)	Temperature (°F)	pH	Specific conductance (K x 10^{-5} at 25°C)	Silica (SiO_2)	Total Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Boron (B)	Dissolved solids	Hardness as $CaCO_3$		Percent sodium
																			Total	Non-carbonate	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
107-61-28cd	9- 8-47	750		7.2	2,610	8.0	3.3	158	45	422	19	137	1,230	86	2.4	0.2		2,040	579	467	60
107-62-21dc	9- 8-47	775		7.1	2,240	12	.95	212	58	316	22	142	1,200	74	2.8	.2		1,970	762	646	47
28ab	9- 8-47	163		7.8	1,900	11	.03	1.3	1.2	466	13	680	338	86	.6	8.0		1,260	8	0	97
108-60-20ba1	9- 8-47	500		8.2	2,840	9.0	.92	1.4	.5	694	16	871	556	162	3.6	.5		1,870	6	0	98
108-61- 4cc	6- 4-47	80		7.4	2,180	23	.08	146	61	291	16	658	616	60	.6	3.8	0.67	1,540	616	76	50
18bd	9- 8-47	800		7.4	2,940	10	2.9	28	8.2	653	16	213	1,170	98	2.8	6.2		2,100	104	0	92
108-62- 1cc	6- 4-47	48		7.4	4,080	20	.20	554	347	78	23	386	2,250	78	1.2	295	.59	3,840	2,810	2,490	6
8ba2	6- 3-47	38		8.1	2,760	25	4.9	278	135	247	14	545	1,220	54	.1	15	.93	2,260	1,250	803	30
108-63- 2dd	6- 3-47	150		7.8	4,590	10	12	20	8.7	1,030	8.8	815	18	1,170	.3	10	5.2	2,690	86	0	96
3cd	6- 3-47	50		8.5	1,640	29	.34	146	42	180	16	510	298	52	.0	181	.62	1,200	536	118	41
7bb	6- 3-47	66		8.1	2,990	26	2.6	340	233	155	16	582	1,400	119	.1	76	.57	2,650	1,810	1,330	16
11bc1	9- 8-47	790		7.3	2,380	11	2.1	172	52	383	27	125	1,220	90	2.4	6.2		2,030	643	540	55
109-61- 4bc1	6- 2-47	14		8.2	2,410	26	.33	318	125	94	8.3	433	680	83	.1	416	.33	1,970	1,310	955	13
109-62-14da	9-10-47	760		7.4	2,590	12	.65	50	15	593	27	154	1,150	128	2.4	.2		2,050	186	60	85
109-63-19aa1	9- 9-47	860		7.0	2,000	14	.60	177	53	362	24	126	1,180	94	2.8	6.9		1,980	660	556	53
110-62- 1bd	9- 9-47	1,000		7.8	2,460	15	1.2	269	65	285	26	155	1,210	136	3.6	2.0		2,090	938	811	39
1db1	9- 9-47	1,000		7.2	2,320	15	5.1	170	44	400	26	163	1,130	132	2.5	5.0		2,010	605	472	58
33cd	6- 2-47	70		8.1	5,620	6.0	4.03	372	59	1,170	11	452	2,030	259	.2	1,080	.41	5,470	1,170	799	68
110-63-32da	9- 9-47	1,020		7.1	2,730	12	2.1	246	34	385	26	141	1,230	153	2.4	8.0		2,170	754	639	52

Table 5.--Complete chemical analyses of representative ground waters in the Oahe area, S. Dak.—Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
110-63-35cd	6- 3-47	30		8.1	4,330	30	1.44	320	233	506	.18	506	1,620	370	.5	315	1.2	3,660	1,760	1,345	88
110-64-32aa	6- 3-47	38		7.1	1,860	14	.05	163	67	159	28	600	464	42	.0	38	.82	1,270	682	190	32
36dc	6- 3-47	75		7.4	2,440	20	.05	186	179	79	12	296	511	122	.6	545	.41	1,800	1,200	957	12
110-65-35cd1	6- 3-47	27		8.2	914	14	.05	116	38	34	10	336	207	24	.4	7.6	.33	644	446	170	14
111-61- 5aa	6- 2-47	45		8.1	2,630	26	.41	126	64	525	20	601	1,160	26	.1	10	1.3	2,250	578	85	65
111-63- 4ab	9-10-47	800		7.5	2,540	7.0	1.3	184	51	368	26	157	1,150	117	3.2	3.0		1,990	668	540	53
111-64- 1aa	6- 2-47	30		7.7	3,690	7.0	.08	304	277	262	39	556	1,700	118	.6	155	.68	3,140	1,900	1,440	23
24bb1	9- 9-47	930		7.0	2,050	9.0	.26	130	35	479	21	174	1,120	155	3.2	2.5		2,040	468	326	68
111-66- 1ab	9- 8-48	18	52	8.0	1,020	34	14	94	47	72	1.2	435	204	15	.2	13	.12	702	428	71	27
111-68- 6aa1	9- 8-48	19	52	7.5	806	31	3.2	110	40	18	8.4	416	128	13	1.2	.1	0	584	439	98	8
112-62-34be	6- 2-47	16		8.6	2,140	25	.33	174	156	125	10	318	715	92	.5	275	.30	1,730	1,080	819	20
112-63-24da	9-10-47	750		7.8	2,400	36	.08	308	78	217	28	145	1,250	121	2.8	.2		2,110	1,090	972	30
33dc	6- 2-47	40		7.0	2,920	11	.08	524	150	58	20	620	1,430	56	.4	.2	.46	2,560	1,920	1,410	6
112-64-24cc	9- 9-47	800		7.2	2,690	14	.05	228	21	417	27	160	1,210	139	2.8	.5		2,140	654	522	57
31dd2	6- 2-47	28		7.4	1,420	24	.02	95	55	150	7.4	486	297	58	.4	11	.55	950	463	64	41
112-65-33dc	6- 2-47	59		7.1	1,650	24	.08	186	70	112	12	666	402	30	.4	3.0	.49	1,170	752	206	24
112-66-31da1	9- 8-48	17	54	7.2	6,560	37	.70	487	505	557	4.4	530	1,870	434	.6	1,660	.38	5,820	3,290	2,860	27
112-68-26cc	9- 8-48	100+	50	7.8	7,040	47		298	543	1,100	14	644	4,320	160	.7	21	.17	6,830	2,980	2,450	44
113-62- 3bb	6- 2-47	31		8.5	748	27	.39	90	29	37	6.5	388	86	16	.1	1.8	.32	475	344	26	18
113-62- 8bb	6- 2-47	31		8.5	816	28	1.4	87	48	43	6.2	413	152	12	.2	2.5	.36	590	414	75	18
13ac	9-10-47	800	63	7.2	3,010	8.0	.02	33	11	650	20	192	1,120	160	3.2	10		2,110	128	0	90
19cc	9-10-47	800		7.0	2,780	10	.05	148	37	457	26	124	1,230	108	2.0	11		2,090	521	420	64
113-63- 4ba1	5-27-47	1,150		8.3	2,490	9.0	2.8	316	82	201	20	148	1,280	89	1.2	8.2	.57	2,080	1,130	1,010	28
113-64- 1ba	5-27-47	13		8.2	850	19	.86	88	49	43	8.5	366	131	24	.1	68	.21	610	421	121	18
5aa1	5-27-47	40		8.1	3,220	31	4.7	164	113	507	19	478	1,290	186	.1	5.0	1.0	2,560	874	482	55
113-64-26ba	9- 9-47	900		7.2	2,710	11	.05	244	30	385	23	156	1,230	128	3.2	2.0		2,130	732	604	52

Table 5.--Complete chemical analyses of representative ground waters in the Oahe area, S. Dak.—Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
113-65- 2bb	5-27-47	43		8.4	2,720	28	4.6	288	125	232	14	438	1,180	114	0.1	8.2	0.61	2,210	1,230	871	29
31cd	9- 9-48	50	50	7.9	2,100	33	2.2	181	61	264	.8	521	660	80	.3	9.5	.50	1,540	702	275	44
113-66- 3dc	9- 8-48	51	49	7.8	6,530	28	1.0	420	645	519		452	3,010	431	1.8	883	.78	6,160	3,700	3,330	23
31dd	9- 8-48	42	48	8.0	7,930	26	.36	279	615	1,190	19	716	4,230	625	4.0	41	.56	7,390	3,220	2,630	44
113-67- 1bc1	9- 8-48	23	49	7.8	4,760	29	1.0	398	265	525	24	568	1,980	410	1.5	187	.62	4,100	2,080	1,610	35
6cb	9- 8-48	45	53	7.9	1,010	65	.62	146	42	32	10	456	170	36	.1	5.1	.12	707	537	163	11
9aa	9- 8-48	35	49	7.8	1,810	73	.20	183	90	80	8.0	608	180	114	.0	198	.32	1,230	826	327	17
113-68-10cc	9- 8-48		52	7.6	5,010	29	.08	574	260	339	.4	426	1,420	509	.2	800	.61	4,140	2,500	2,151	23
114-62-29cb	9-10-47	850		7.3	3,060	13	.49	30	10	663	20	232	1,050	203	2.8	8.4		2,110	116	0	91
114-64-22bb	9-11-47	975		7.2	3,140	10	.91	66	18	638	22	162	1,190	189	2.8	10		2,230	238	106	84
115-62-18cb	9-10-47	850		7.5	2,930	10	1.7	28	9	631	20	283	930	205	3.2	8.0		1,980	107	0	91
19dc	5-26-47	30		7.1	2,670	26	.05	396	144	34	17	437	979	180	.6	53	.47	2,050	1,580	1,220	4
115-63-20cd	5-26-47	21		7.4	1,020	18	.12	111	44	57	15	540	129	16	.4	.5	.58	652	458	15	21
36bb	5-26-47	40		7.2	1,300	28	.05	137	39	91	15	452	187	108	.6	.8	.60	852	502	131	28
115-64-14dc	5-26-47	44		7.0	1,570	23	.05	236	73	14	11	492	430	26	.4	56	.34	1,110	889	486	3
27cd	5-26-47	32		7.4	5,020	17	.05	500	403	179	49	504	1,690	164	.8	1,180	.11	4,430	2,900	2,490	12
27dd	9-11-47	850		7.3	2,070	12	.06	114	32	506	28	144	1,180	139	2.4	5.0		2,090	416	298	71
30cc2	5-26-47	30		7.1	2,070	21	.05	263	128	12	14	395	512	78	.6	320	.27	1,540	1,180	856	2
115-65-30da	9- 9-48	43	49	7.2	1,950	28	3.8	273	118	72	8.0	455	796	61	.3	9.1	.01	1,590	1,170	797	12
115-66-21dd	9- 9-48	29	49	7.9	699	29	1.4	65	32	47	6.4	354	114	6.3	.0	1.5	.20	480	294	4	25
30dc	9- 9-48	44	50	8.0	1,560	21	2.1	182	101	82	4.0	264	736	57	.2	7.6	.41	1,320	869	653	17
115-68-28aa	9- 9-48	46	48	7.7	2,630	71	4.9	226	63	373	12	656	776	186	.2	7.0	.74	2,040	823	285	49
116-62- 3ab	9-11-48	22	48	7.4	1,280	30	.20	150	56	48	1.6	408	134	107	.3	104	.00	850	604	269	16
8aa	9-11-47	1,000		7.9	2,980	9	.15	30	9.6	649	22	246	1,010	203	2.4	9.0		2,070	114	0	91
116-63- 5ad2	9-11-48	25	50	7.0	4,670	29	2.0	479	165	433	11	529	1,700	376	.4	222	.48	3,680	1,870	1,436	33
10aa	9-11-47	851		7.7	3,030	7	2.8	12	4.0	716	14	387	939	225	3.6	.2		2,110	46	0	96

Table 5.--Complete chemical analyses of representative ground waters in the Oahe area, S. Dak.— Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
116-64- 5ca2	9-11-48	32	50	7.6	4,160	32	0.12	510	180	329	12	549	1,600	232	0.7	386	.34	3,560	2,010	1,560	26
10bb	9-11-47	920		8.1	2,590	10	.27	47	15	663	19	230	1,120	193	3.2	6.2		2,190	178	0	78
116-66- 7bb	9- 9-48	21	55	8.0	1,720	25	23	213	115	86	6.8	852	640	55	.6	.6	.00	1,500	1,000	465	22
116-67- 4ba	9- 9-48	34	48	8.0	1,840	26	1.8	187	135	106	10	316	848	116	.3	.6	.06	1,600	1,020	761	22
7bc	9- 9-48	13	52	7.6	1,540	29	.36	144	70	123	0	425	426	83	.2	1.9	.00	1,090	647	299	29
20ba	9- 9-48	54	49	7.9	2,620	2.6	.10	161	98	368	32	372	1,010	187	.1	21	.21	2,090	805	500	49
116-68- 6aa	9- 9-48	72	49	7.4	4,160	25	11	438	121	573	1.2	792	1,850	124	.3	11	.69	3,540	1,590	941	44
117-66-35cd	9- 9-48	23	49	7.8	1,050	70	.04	147	47	27	7.6	400	218	26	.0	31	.10	762	560	232	9

In future reports, put commas in figures of 1,000 or more

Table 6.--Partial chemical analyses of ground waters

Well number	Date collected (1948)	Depth (feet)	Temperature (°F.)	pH	Specific conductance (micromhos at 25°C)	Sulphate (SO_4) (ppm.)	Chloride (Cl) (ppm.)	Bicarbonate (HCO_3) (ppm.)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Beadle County					
109-64- 6cc	8-27	21	51	7.6	755	22	11	388
17cc	10-10	850	65	7.7	2620	1360	92	174
19cc	9-7	39	50	7.5	3110	968	205	544
32aa1	9-7	31	51	7.4	1030	255	7.5	404
32aa2	9-7	30	49	7.3	3820	2080	120	444
109-65- 3bb	8-25	61		7.2	2140	550	75	638
3dd	8-25	34	52	7.2	2970	990	152	630
5bc	8-25	13	53	7.3	3000	1380	58	403
7dc	8-25	17	50	7.4	4730	1680	380	318
12ca	8-26	11		7.7	1300	356	35	372
13ab	8-26	31	52	7.6	1200	343	31	352
14aa	8-26	12	53	7.5	1310	216	40	517
17cc	8-25	7	65	7.3	1550	515	35	352
17cd1	8-25	10	56	7.6	2080	715	68	361
18bc	8-25	Sp	60	7.4	3110	803	282	504
18da	8-25	20	51	7.5	6270	3000	340	372
21cd2	8-26	13	53	7.4	2690	957	130	410
22aa	9- 1		63	7.4	2760	1230	126	176
24cd	8-27	17	53	7.3	1380	422	46	356
24dc	8-27	16	51	7.4	1440	18	26	896
25ba1	8-27	30	54	7.5	1560	444	62	387
25ba2	8-27	20	52	7.6	3020	1140	126	509
26ba	8-27	Sp	52	7.3	1860	673	58	473
26dd	8-27	27	56	7.6	1500	62	62	400
30bd	8-25	55	52	7.2	1640	524	22	474
31cd	8-25	50	53	7.5	1760	396	115	425
33bd	9- 1		53	8.3	2660	781	270	224
35aa1	9- 1	32	51	7.5	4120	1450	198	553
35aa2	9- 1	18	52	7.6	1900	660	60	412
110-61- 7cc	7-13	55		7.2	3010	1530	112	540
9cc	8- 2	50		7.2	6610	3020	240	428
11bb	8- 2	50		7.2	1510	528	12	500

Table 6.--Partial chemical analyses of ground waters--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Beadle County--Continued					
110-61-11dd	8- 2	40		7.8	1860	312	152	528
12bb1	8- 2	60	54	7.6	2050	539	222	372
14ab1	8- 2	40		7.3	1560	515	48	424
18dc	8- 2	34		7.5	3340	1720	48	408
20aa	8- 2	38		7.3	6000	3880	155	408
23cb	8- 2	35		7.4	1020	88	65	364
34aa	8- 2	35		7.2	2490	275	105	496
34dd	8- 2	40		7.1	6230	2170	348	316
35aa	8- 2	40		7.3	3270	1450	98	484
110-62- 3ba1	7-12	42		7.8	6580	4140	530	494
3cd	7-10			7.4	3590	1830	218	650
6ab	7-12	57		7.5	5450	3900	318	460
7cd	7-10	66		7.5	3260	1130	248	620
8da	7-10	46		8.0	3190	1350	85	576
9aa	7-10	63		7.8	1840	383	68	817
11aa	7-10	28		8.0	1530	282	55	300
11ad	7-10	15		7.8	1920	1060	20	392
11cc	7-10	30		7.8	2180	715	68	678
11da	7-10	30		7.8	2450	1230	70	444
12dd	7-13	40		7.0	7900	2320	840	564
13ad	7- 8	50		7.4	2700	1110	122	447
14ba	7-10	45		7.2	4270	1950	438	605
17aa	7-10	50		7.5	3440	1800	162	604
17ba	7-10	37		7.4	2190	1180	72	523
23bb	7-10	35		7.7	1920	497	70	699
26dd	7-10	34		7.3	2680	671	238	557
27cb	7-10	63		7.7	2530	671	102	906
30ba	7-10	24		7.5	2750	781	392	225
32dd	7- 8	63		7.2	4790	2270	302	528
34dc	7- 8	85		7.5	2450	2160	60	535
36cd1	7- 8	60		7.6	1760	488	40	632
36cd2	7- 8	38		7.6	4580	2280	362	502
110-63- 2ab	7-12	54		8.0	2510	1360	62	472
2dd	7-10	56		7.6	2040	913	50	545
3cd	7-12	62		7.5	2680	418	430	418
4dc	7-12			7.4	3190	1280	250	282
5ad	7-12	65		8.0	3290	1110	285	308
5dc	7-12	58		7.2	3630	1340	282	420
6ad	7-12	60		7.6	2510	803	165	444
7ab	7-12	56		7.3	3470	3420	242	444

Table 6.--Partial chemical analyses of ground waters--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Beadle County--Continued					
110-63- 8bal	7-12	59		7.6	2660	1040	55	532
8ba2	7-12	71		7.6	3330	1070	150	522
9ba	7-12	70		7.5	4580	2160	325	448
9da	7-12	64		7.6	3010	1010	258	430
11dd	7-10	65		7.8	3590	3090	265	482
12ab	7-10	37		7.6	2260	803	68	575
12bb	7-10	80		7.7	2090	1000	38	511
13ad	7-10	50		8.0	3070	913	390	448
14da	7-10	38		7.9	2850	1140	188	414
18ab	7-12			8.0	2140	803	68	424
18cc	7-12	36		7.7	1220	385	35	392
19bb	7-12	15		7.3	3590	1600	115	568
23ba	7-10	83		7.8	3040	1420	118	506
23cd	7-10	32		8.0	2630	1320	168	454
24cc	7-10	61		7.4	4720	2680	242	496
31ad2	7- 8	22		7.2	4450	2730	395	522
32db	7- 8	31		7.3	3160	1880	120	486
33cb	7- 8	15		7.6	1040	268	25	412
33dd	7- 8	30		7.5	1800	678	65	521
34cd	7- 8	37		7.7	2000	607	155	467
110-64- 1ab	7-12			7.6	2450	1040	88	566
2ba	7-12			7.4	1550	400	62	514
2dd	7-12	38		7.5	1980	603	75	544
4cb	7-12			7.8	2040	715	52	606
5aa1	7-12			7.3	1780	634	58	460
5aa2	7-12			7.2	4330	1240	218	572
11aa	7-12	40		7.4	2590	891	122	604
13dd	7-12	36.1		7.2	1630	581	55	408
16dc	7-12			7.2	1610	471	50	556
24ad	7-12	30.5		7.4	1950	774	48	434
26dc	7-12			7.3	5180	1940	318	668
27ba	7-12	28		7.3	1950	735	65	536
29aa	7-12			7.3	1580	488	32	610
35ab	7-12	20		7.3	1070	330	1.5	358
110-65- 1ad	8-23	19	51	7.2	3120	1320	122	956
1bb	8-23		51	7.5	1360	290	24	520
1cd	8-23	25	51	7.2	4270	1790	165	572
4cc	8-24	65	50	7.4	1480	370	22	516
4dd	8-23	58	51	7.4	7090	3280	287	492
8aa1	8-24	65	50	7.4	2090	836	50	508

Table 6.--Partial chemical analyses of ground waters--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Beadle County--Continued					
110-65- 8dd	8-19	43	52	7.6	3630	1110	225	468
9ba	8-23	38	50	7.3	1370	268	20	552
10cb	8-24	43	51	7.6	2210	792	45	564
13cb	8-23	61	52	8.2	1300	136	56	548
16bc	8-19	48	52	7.4	3510	1240	186	504
16dc	9-20		63	7.2	2930	990	305	208
17aa	8-19	35	51	7.3	3030	1110	128	496
17cb	8-19		51	7.3	910	114	4	468
20bc	8-19	40	52	7.2	855	22	7	576
24be2	8-23	44	52	7.4	2760	858	65	560
27dc	8-20	52	51	7.6	1370	532	12	328
28bb	8 19	36	51	7.5	714	31	5	332
34aa	8-20	82	51	7.3	1430	422	25	440
34bc	8-20	24	50	7.6	491	40	0	244
35cd2	8-20	10	50	7.5	674	88	11	344
36aa	8-20	23	50	7.5	1460	282	25	440
111-61- 9bb2	8-19	11	62	7.5	1320	392	20	340
9dc	8-19	80	57	7.3	4220	2360	145	258
22cc	8-19	40	51	7.9	3160	2.2	740	704
25aa	8-19		57	8.0	2570	8.8	582	490
26aa	8-19	60	50	7.2	1910	651	78	420
27cc	8-19	70	50	7.4	2400	737	105	452
27dd	8-19	80	49	7.1	1160	282	15	356
28aa	8-19	40	54	7.4	4510	781	190	508
28cc	8-19	15	54	7.2	1480	264	30	712
30aa	8-20	50	57	7.4	5980	3520	225	476
30bc3	8-20	47	49	7.1	3600	1610	215	352
33da	8-19	30	59	7.3	3960	1900	170	452
34ad	8-19	80	51	7.6	3320	31	845	590
34cc	8-19	57.5	50	7.3	1520	308	20	352
34cd	8-19	40	55	7.7	662	62	5	380
111-62- 6cc	8-20	52	49	7.6	2600	946	80	632
7cd	8-20	45	50	7.5	2940	957	95	648
8dd	8-20	43.4	49	7.5	4220	1600	260	688
11ad	8-21	22	54	7.3	7310	3900	285	532
16bb	8-20	40	55	7.8	2170	671	90	580
17bc	8-20	49	49	7.6	2330	704	70	696
18dc	8-19	35	49	7.4	2820	1020	110	620
19da	8-19	50	49	7.5	2320	583	105	568
21ad	8-20	26	51	7.2	8540	3330	675	388

Table 6.--Partial chemical analyses of ground waters--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Beadle County--Continued						
111-62-21cd	8-20	40	50	7.5	4220	1480	280	552
23dd	8-20	75	51	7.3	5250	473	315	452
26dc	8-20	40	50	7.4	3600	1060	195	392
28ad	8-20	40	49	7.3	3480	1780	218	472
28bb3	8-20	65	49	7.7	2600	682	90	808
28dc	8-20	47.2	49	7.5	1860	1440	58	728
31ad	8-19	40	50	7.5	1460	418	20	472
31bc	8-23	39.3		7.4	6340	3830	158	368
33ad	8-20	60	50	7.5	3320	1030	180	804
34ab	8-20	45	50	7.5	4210	1310	380	304
35cd	8-19	30	61	7.2	3520	693	305	336
111-63- 1cb	8-20	42	50	7.8	2560	374	175	1020
3bc	8-23	45	50	7.6	3600	1190	294	61[illegible]
4cb	8-23	54	48	7.0	3140	1670	79	492
7cc1	8-23	69	50	7.2	4670	1910	280	556
7cc2	8-23	66		7.5	1560	532	12	400
9bc	8-23	62.5	49	7.3	5110	2730	191	532
14ba1	8-23	50	50	7.3	2190	385	154	420
15cc	8-19	74	50	7.4	2350	1040	70	508
18bc1	8-23	60	49	7.2	4150	1750	215	520
18bc2	8-23	37	49	7.2	4820	1120	292	608
19dc	8-19	50	55	7.3	1560	493	10	492
21ab2	8-19	25	57	7.2	2650	1170	55	556
21cb	8-19	38	49	7.4	2280	583	95	632
23dc	8-19	42.7	49	7.4	2930	1160	75	404
26ab	8-19	65	49	7.2	2820	1000	105	516
28bb	8-19	41.4	56	7.4	2690	1240	62	432
28cb	8-19	59	50	7.6	3080	1240	112	488
29bb	8-19	68	49	7.4	1770	590	72	456
30aa	8-19	55	56	7.4	1450	409	32	436
32cc1	7-12	80		7.7	5960	3050	300	422
32cc2	7-12	75		8.0	2680	682	348	338
33cd	7-12			8.0	2870	968	198	380
35dd	7-12	58		7.7	2320	1160	60	494
111-64- 1bc	8-20	40	50	7.3	1210	277	15	480
3ad	8-20	60	49	7.1	4110	1850	140	584
9da	8-20	35	49	7.6	1830	585	58	380
11cc	8-20	50	57	7.3	1650	475	55	492
12cc	8-20	32	50	7.4	2350	957	38	412
12dd	8-23	82	50	7.6	1860	669	22	404

Table 6.--Partial chemical analyses of ground waters--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Beadle County--Continued					
111-64-13bc	8-20	30	49	7.2	3280	1200	105	576
14bb	8-20	60	49	7.4	5770	2330	285	516
15dc	8-20	40	49	7.4	1440	414	45	420
23da	8-20	48	59	7.3	1570	383	35	484
26aa	8-20	44	50	7.2	5390	2330	440	514
26cb	8-20		49	7.7	1730	167	35	408
26da	8-20		49	7.5	2670	1000	110	452
28aa	8-20	40	49	7.3	1220	198	30	504
35bb	8-20	42	54	7.4	3190	1380	40	396
35da	8-20	40	50	7.3	2040	726	80	468
111-65- 2ca2	9- 4	34.9	50	7.4	2360	770	60	614
2ca3	9- 4	30	49	7.4	1160	167	15	582
3bd	9- 4	8.2	59	7.4	2160	572	65	788
4bb1	8-24	45.2	51	7.0	3660	1650	210	420
5cc1	8-23	21.7	50	7.1	3830	1610	160	578
5cc2	8-23	42	48	6.9	5770	3090	135	608
6ca	9-21	34	49	7.4	1410	304	85	488
6da1	9-21	42	49	7.2	5410	2360	190	656
7bc	8-23		50	7.2	2850	1200	115	440
8da	8-24	48.6	50	7.1	2440	825	50	662
15bb	10-10		75	7.6	2750	1100	165	200
17aa	8-24	72	51	7.3	1190	167	25	568
17bc	8-23	34.6	50	7.1	2670	1030	70	654
18ab	8-24	30	51	7.2	2210	869	58	578
18ad1	8-24	30.2	51	7.2	2380	913	55	632
18ca	8-23	45	49	7.7	799	101	10	432
18da	8-23	33	49	7.2	4790	1850	325	484
19cb	8-23	4		7.7	785	31	20	474
20bb	8-23	30.9	49	7.1	3390	1720	120	450
20dd	8-24	28	48	7.1	4980	2450	220	484
23bb	9- 4	20	50	7.3	1430	361	48	444
24bc	9- 4		50	7.8	1960	334	138	592
25aa	9- 4	49.6	49	7.4	1790	502	38	544
25ba2	9- 4	52	49	7.5	2080	649	78	524
26cc2	9- 4	41.2	50	7.6	2650	660	110	408
26cd3	9- 4	15	55	7.8	865	150	10	352
26dc1	9- 4	15.8	54	7.6	1340	246	45	438
26dc2	9- 4	17	50	7.5	823	150	12	340
27ba2	9- 4	33	49	7.2	4480	1510	402	462
28dd2	8-24	18.8	54	7.3	6210	1190	435	1160

Table 6.--Partial chemical analyses of ground waters--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Beadle County--Continued						
111-65-29bb	8-24	40.4	49	7.4	3020	495	150	320
30cc	8-23		49	7.9	958	229	30	308
31cc1	8-23	30	50	7.8	708	123	5	296
31cc2	8-23	60.5	50	7.7	1780	585	55	408
32cb	8-23	53	41	7.8	1330	246	48	472
112-61-17dc	8- 5	33	49	7.2	3240	1750	130	404
29cd	8- 5	780	52	7.8	3600	33	832	816
32cb	8- 5	80	50	7.4	3520	1310	195	480
112-62- 5dd	8- 5	70	51	7.8	6350	3980	188	480
13dd	8- 5	60	50	7.1	3270	1540	40	724
14ad	8- 5	45	49	7.1	3480	1730	80	524
14da	8- 5		49	7.1	5310	2930	178	684
22bc2	8- 4		54	7.2	4360	2290	98	344
23cd	8- 4	26	55	7.2	1490	517	45	436
24bb	8- 5	55.9	49	7.1	6750	4060	265	928
25bc2	8- 4	36	50	7.0	3500	1450	55	456
27bc	8- 4	12.8	56	7.6	850	242	25	292
27cc1	8- 4	10	55	7.5	1780	649	20	380
27cc2	8- 4	15.8	63	7.5	5350	1960	220	436
28bb	8- 4		54	7.7	2680	616	120	500
29da1	8- 3	24	54	7.4	1500	231	32	340
112-63- 4aa	8- 4	39.4	49	7.3	3030	1230	148	528
4bb	8- 4	70	50	7.2	3480	1460	178	528
5cb	8- 4	90	50	7.5	2420	858	135	488
6cd	8- 4	40	56	7.4	3680	1670	125	572
6da	8- 4	53.4	51	7.3	2800	891	165	600
7aa	8- 4	48	49	7.5	3210	1080	205	532
15cc	8- 4		50	7.4	2770	1030	148	476
22ad	8- 4	8.7	62	7.5	1220	53	35	240
22cc	8- 4	74	52	7.4	1840	638	48	536
22da	8- 4	11.6	57	7.5	1196	444	25	272
24ac	8- 4	16	52	7.7	2060	374	128	248
24bc	8- 4		55	7.5	1120	136	60	500
24bd	8- 4	50	57	7.5	1170	260	52	212
24ca1	8- 4	17	57	7.5	1720	444	62	264
24ca2	8- 4		51	7.4	3140	748	180	548
24ca3	8- 4	60	53	7.6	1100	158	58	280
24cd	8- 4	62	49	7.5	1580	330	75	560
24db	8- 4	18	53	7.5	2450	407	102	292
25bb	8- 4	70	53	7.4	3000	1080	158	452

Table 6.--Partial chemical analyses of ground waters--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Beadle County--Continued						
112-63-35dd	8- 4	74	57	7.6	4240	1680	360	464
112-64- 1ad	8- 4	70	48	7.4	3910	1110	435	544
3cd	8- 3	30	48	7.2	3860	1550	142	620
14aa	8- 3	15	59	7.7	722	123	22	308
14bb1	8- 3	25	53	7.0	5060	2100	270	772
14dc	8- 3	53	55	7.2	1790	524	22	572
15ad	8- 3	30	49	7.1	3380	1360	75	592
15db	8- 3	60	49	7.4	1710	532	30	516
22cd	8- 3	45	54	7.2	2130	836	58	512
22dc	8- 3	40	59	7.5	2840	1030	78	484
23ad	8- 3	54	52	7.3	3900	1760	88	588
23cc	8- 3	25.2	54	7.5	1870	541	55	516
24bc	8- 3	43	54	7.3	2080	671	40	580
26aa	8- 3		53	7.4	1930	638	28	504
26bc1	8- 3		54	6.9	2040	660	120	436
26bc2	8- 3	25	52	7.4	2080	385	108	472
26da	8- 3	50	59	7.2	1920	524	25	696
34ab	8- 3	35	50	7.1	3450	1220	215	568
35ab	8- 3	50	52	7.3	2060	682	35	604
35cc	8- 3	65	56	7.3	1280	299	22	512
35dc	8- 3	44	64	7.5	2510	242	118	504
36ad	8- 4	50	54	7.2	7200	4020	422	568
112-65- 1aa	10- 3	9	56	7.8	735	172	5	288
1bb1	9- 7	17.9		7.2	2360	561	215	434
2bc	9- 7	27.5	50	7.3	1200	321	25	370
3cd1	9- 7	22	55	7.2	1210	123	30	564
4aa	9- 7	40	49	7.2	997	119	10	520
4dd2	9- 7	30	52	7.3	2780	979	45	490
5ad	9- 7	45	50	7.2	1940	488	45	610
5dd	9- 7	50	50	7.2	1660	427	30	600
15cb	10-10	960	73	7.4	2490	913	188	244
16dd	9- 7	44.4	50	7.2	1940	770	40	298
17cc	9- 7	40	50	7.5	3750	1140	130	676
18dc2	9- 7	45	50	7.2	2830	924	120	650
19dd	9- 7	39.8	49	7.1	4730	1980	215	643
20bc	9- 7	80	50	7.6	3710	1120	195	586
21cd	9-10	42.4	50	7.4	1740	414	45	598
24bc	9-10	72	49	7.3	2100	726	50	559
25ab	9-10	42	50	7.2	3140	902	250	489
26da	9-10	60	51	7.2	1780	532	50	518

Table 6.--Partial chemical analyses of ground waters--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Beadle County--Continued						
112-65-27bb1	9-10	46.1	50	7.2	1680	414	55	572
28ad	9-10	46	50	7.4	2300	803	70	556
28bc	9-10		49	7.2	2610	1040	70	572
29cb2	9- 7	32	50	7.1	6390	2320	538	786
30ad	9- 7	60	50	7.2	3030	1080	140	600
31cc	9-20	26	53	7.5	2170	924	135	306
32bc	9- 7	40.2	50	7.4	3920	1450	145	757
33bb	9-10	35.6	49	7.2	2880	1200	85	516
35aa	9-10	27.1	51	7.4	1150	216	20	519
113-62- 2ab	8-21	32	50	7.4	941	238	20	344
2bb	8-21	25	49	7.4	1070	480	18	306
4cb	8-21	32.9	49	7.4	1270	387	20	406
5dc	8-21	29.1	58	7.5	988	180	15	440
6bb	8-21	30.8	49	7.5	848	62	6.0	420
8cb	8-21	28	48	7.3	2270	583	215	518
9ab	8-21	34	50	7.3	1080	229	40	468
9ba	8-21	32	48	7.5	1040	172	15	432
9bc	8-21	28	48	7.4	994	189	15	496
14ca	8-21	33	48	7.3	1340	321	35	442
17aa	8-21	32	48	7.6	1730	418	80	512
20ad	8-21	35	59	7.1	2040	737	90	420
22ad	8-21	28	47	7.2	2150	594	85	548
23bb	8-21	38.9	49	7.3	1920	546	85	526
31da	8- 5	79.6	53	7.0	3860	2270	10	512
113-63- 1cb	8-21	29.9	49	7.4	1560	405	65	490
6ad2	8- 5	42.1	54	7.4	3080	1310	135	320
6bc1	8- 5	35	52	7.2	5590	3180	170	464
6bc2	8- 5	23.8	54	7.4	2590	1410	58	412
11ab	8-21	46.4	49	7.2	4510	2110	165	404
11bb	8-21	40	49	7.3	5670	3040	240	420
17cd	8- 5	48.2	50	7.4	2440	440	370	468
18cd	8- 5	43	50	7.3	3280	1350	105	488
19dc	8- 5	50	51	7.8	1920	682	70	484
20bb	8- 5	44	49	7.3	1870	781	75	452
20cd	8- 5	50	49	7.3	1710	616	48	476
26da1	8- 5	55	54	7.8	3670	1220	195	644
27da	8- 5	15.5	49	7.2	3080	1410	25	584
29da1	8- 5		48	7.5	3380	1560	115	460
29da2	8- 5	37	49	7.5	1630	550	50	464
30cd	8- 5	42.2	49	7.3	2460	792	192	516

Table 6.--Partial chemical analyses of ground waters--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Beadle County--Continued						
113-63-32aa1	8- 5	39.6	49	7.4	1750	561	90	476
32aa2	8- 5	38.3	49	7.4	1760	506	98	480
34bd	8- 5	65	49	7.1	2440	1160	25	600
113-64- 1ad	8- 5	40	54	7.1	2720	297	220	564
2bb	8- 5		50	7.3	2190	902	60	492
4cd	8- 5	40	48	7.3	3050	1090	275	568
5cc	8- 5	40	49	7.6	1100	88	40	452
6dc	8- 5	64	50	7.4	1600	572	42	408
8bb	8- 5	32	48	7.5	1090	275	48	392
9aa	8- 5	30	48	7.4	1870	440	105	632
9dd	8- 5	40	49	7.5	8470	4270	475	544
10aa	8- 5	60	50	7.3	3240	1530	45	448
12aa	8- 5	29.6	56	7.3	12000	5350	952	460
12bb	8- 5	36.7	51	7.5	3060	1340	98	520
13aa	8- 5	50	55	7.2	3810	1800	140	504
14bc	8- 5	60	53	7.1	2720	1130	78	488
14cd	8- 5	60	48	7.2	2930	1250	90	444
15ad	8- 5	48	49	7.5	1370	418	40	436
15bc1	8- 5	40	49	7.5	1280	374	45	440
15cb	8- 5	37.4	49	7.3	2360	781	135	556
15da	8- 5	36.8	52	7.1	3240	1690	90	412
19cc	8- 5	30.6	55	7.2	1990	704	80	560
23bc1	8- 5	41	53	7.4	6350	3220	478	392
23bd	8- 5	45.7	49	7.5	1620	572	55	524
23cc	8- 5	40	50	7.4	4480	1400	475	568
23db	8- 5	40	49	7.4	3430	1350	160	552
24cb	8- 5	80	55	7.7	1770	308	85	408
25ab1	8- 5		50	7.5	1770	528	70	512
25bb1	8- 5	48.7	50	7.2	4120	1190	238	576
25bb2	8- 5	56	49	7.7	6350	3260	272	436
26ab	8- 5	50	50	7.6	2990	1110	190	576
35aa	8- 5	65	51	7.5	4420	1840	142	676
113-65- 2bb	9-30	42	48	7.3	2490	1160	115	446
2dd	9-30		49	7.4	2030	418	115	420
3cc	9-30	7.5	51	7.6	795	84	12	398
4cb1	10- 1	27	30	7.2	412	18	0	258
4cb2	10- 1	16	53	7.6	521	31	0	304
6dc	9-30	42	49	7.4	2790	1190	112	536
9bc1	10- 1	21	49	7.5	932	334	25	362
9bc2	10- 1	23.4	50	7.5	1240	277	38	408

Table 6.--Partial chemical analyses of ground waters--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Beadle County--Continued						
113-65-10bb	9-30	18.8	50	7.6	2120	275	78	664
10cd	10- 9		70	7.4	2470	1160	150	178
11aa	9-30	11.4	50	7.0	857	22	5	450
13dd	10- 1	16	54	7.7	541	13	5	338
16ad	10- 5	19.9	52	7.7	2810	1250	78	552
16dd2	10- 1	35	50	7.3	4220	1520	415	256
18cb	10- 1	16.1	53	7.4	2220	594	120	502
19cb	10- 9	990	70	7.5	2510	913	178	240
21cb	10- 9	59	49	7.3	1320	321	22	520
21cd2	10- 5		51	7.0	3260	1230	122	724
23bb	10- 5	13		7.5	3200	1210	82	472
26cb	10- 9	13	53	7.4	1070	172	18	430
27cc	10- 9	60	48.5	7.3	2660	803	95	550
29ab	10- 9	68	49	7.6	2990	495	150	580
31ad	10- 9	76	48	7.5	2400	891	80	488
32ab1	10- 6	80	49	7.4	2580	781	115	628
33ab1	10- 9	46	50	7.7	3630	1520	190	598
33ab2	10- 9	55	50	7.6	3220	1160	148	634
34bb	10- 1	64	49	7.7	2620	781	130	616
		Hand County						
110-66- 1aa	8-13	37	50	7.5	1080	304	20	380
1bb	8-16	64	51	7.4	1400	444	7.5	512
3dd	8-17	12	55	7.3	1240	365	10	404
4ba1	8-18	Sp	60	7.4	1170	260	9	452
4ba2	8-18	Sp	53	7.4	1270	299	16	488
4dd	8-17	44	50	7.5	1990	818	25	444
6cb	8-17			7.5	3760	1520	134	556
7cb1	8-18	71	50	7.6	3220	1200	96	612
7cc3	8-18	50	50	7.5	1940	563	42	572
8cd	8-19	30	54	7.2	1560	444	15	428
11ba	8-16	Sp	55	7.4	997	255	5	400
11ca	8-16	34	49	7.4	9340	3490	430	344
12aa	8-13	60	51	7.6	1040	277	10	380
13bc1	8-16	14	53	7.5	1330	418	15	456
13bc2	9-20			7.6	2600	1040	152	198
13dd	8-13	16.7	52	7.3	2110	627	65	352
14da	8-16			7.3	1030	242	15	396
15dc	8-16	Sp	65	7.9	1160	422	7.5	348
17ca	8-17	90	50	7.5	1910	805	38	228

Table 6.--Partial chemical analyses of ground waters--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Hand County--Continued						
110-66-17cc	8-13	Sp	55	7.5	769	167	10	344
18bd	8-18	77	50	7.5	2000	713	44	492
18db	8-13	80	51	7.9	1280	224	10	604
19bc	8-19	67	49	7.5	2670	1070	57	548
19da	8-17	20	51	7.4	1400	317	124	384
20da	8-16	Sp	50	7.6	768	136	11	268
20dc	8-17	34	51	7.0	3470	1720	118	612
20dd	8-17	52	51	7.3	4220	2380	44	456
22dd1	8-16	16	50	7.7	2180	1010	32	372
23cc	8-16		54	7.7	1100	273	22	376
28db	8-16	60	49	7.3	2670	1180	20	372
30ad	8-18	79	50	7.3	4390	2110	152	260
30bc	8-19	37	49	7.2	5890	3540	129	656
31da	8-18	19	54	7.7	1860	634	28	444
32cb	8-19	33	49	7.3	2000	810	39	352
33cc	8-16	60	50	7.4	2230	781	225	152
111-66- 2dd2	9-10	26.1	50	7.6	2910	792	220	440
5bc1	9-10	20	49	7.2	3080	1070	60	384
5bc2	9-10	15.5	51	7.1	5660	1960	234	570
5da	9-10	20	50	7.6	2220	1100	28	280
6aa	9-10	20	53	7.2	2780	1380	35	304
7da	9-10	100	51	7.6	2420	814	55	644
9da	9-20		74	7.3	2840	1100	208	182
10aa1	9-10	20	50	7.2	5660	2750	130	788
10aa2	9-10	33.9	50	7.6	5200	2410	162	608
11ab	9-10	40	50	7.4	1160	260	7.5	500
11bb	9-10	28	49	7.6	1250	185	38	516
13bc	9-10	33.3	49	7.1	1[illegible]0	656	42	455
13da	9-10	19.1	49	7.8	4790	2480	45	490
15dd	9-10	24.7	50	7.4	5750	2430	152	516
16cc	8- 4	12	62	7.4	1580	649	10	464
18aa	8- 5	68	52	7.0	2420	979	32	632
19dd	8- 5	81.7	52	7.2	3020	1260	20	832
21cc	8- 5	44.7	68	7.3	3080	1600	52	560
22bd	9-10	17.6	49	7.4	1890	695	48	290
22dd	9-10		49	7.2	3920	1160	212	346
23cd1	8- 4	75	51	7.2	1560	1230	8	444
23cd2	8- 4	28	49	7.2	3860	1010	165	504
24ad	8-23	23.9	50	7.5	2490	759	80	436
24da	8-23	3.3	50	7.3	3400	1570	45	528
24cc	9-10	35	52	7.2	1730	515	35	480

Table 6.--Partial chemical analyses of ground waters--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Hand County--Continued					
111-66-25bb1	9-10	42	50	7.1	2080	693	38	531
25bb2	9-10	42	49	7.0	2360	935	82	484
25cb	9-10	45.1	50	7.1	1670	458	22	516
26ba	8- 4	40.7	53	7.4	1390	583	35	300
27dd	9-10	55	51	7.2	4310	1570	155	493
28aa	8- 4	23	55	7.5	2460	1210	32	384
28dd2	8- 5	50	49	7.3	1360	341	20	480
29ab	8- 5	61	50	7.2	2350	858	18	704
30dd	8- 5	100	53	7.3	5750	2350	155	500
33aa	8- 4	29	53	7.6	2330	561	302	404
33cd	9-10		49	7.6	1240	295	5.0	516
34cd	9-10	22	52	7.4	1290	422	10	352
36dd1	8-23	42.6	50	7.3	2450	957	95	444
36dd2	8-23	39.3	50	7.3	1250	356	30	400
111-67- 5ab	9-14	98+	51	7.4	2580	1020	28	586
11bb	9-14		50	7.6	2070	561	10	724
11cc	9-14		50	7.5	2390	748	12	726
12cb2	9-14	31	50	7.2	677	22	10	430
19dd2	9-15	31	48	7.2	1230	220	65	446
20cb	9-14	32.4	50	7.2	1020	13	5	628
20cc2	9-14	14	50	7.2	7210	3410	708	664
20dd	9-15	120	50	7.6	2580	495	162	702
22cb	9-20	1400		7.2	3090	814	330	224
28da1	9-13		51	7.4	6780	3340	252	528
34cd1	9-13	53	51	7.4	4740	2500	148	586
111-68- 1aa	9-16	19	54	7.2	601	13	5	342
2bd	9-16	160	50	7.5	4490	1670	232	620
7aa2	9-18	98	50	7.4	4320	1140	250	708
7ba	9-18	68	50	7.3	3600	759	368	988
22da	9-16	48	52	7.3	1170	1030	7.5	640
27ad	9-20	1510		7.8	3170	649	380	442
30ba1	9-17	100?	50	7.4	3640	847	345	710
33dd	9-17	70	52	7.5	6650	3140	520	450
111-69-24ad	9-18	52	49	7.6	1880	66	115	934
112-66- 2bb	8-10	31	49	7.3	6640	3340	275	748
2dc	8- 9	55	54	7.6	2000	726	60	460
3bc	8-10	22	53	7.8	931	255	20	312
4ad	8-10	18	53	8.0	969	202	20	352
4bc2	8-10	42	52	7.4	1160	233	7.5	528
4dc	8-11	28	51	7.2	3110	1350	85	607

Table 6.--Partial chemical analyses of ground waters--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Hand County--Continued						
112-66- 8aa	8-11	50	51	7.2	3270	1260	68	822
9aa	8-11	54	51	7.7	2730	1080	100	552
9cd	8-11	25	78	8.0	2780	979	185	278
11cd	9-21	17	53	7.6	775	31	7.5	380
13cc	8- 9	23	50	7.6	1050	176	18	464
15cd	8-12	36	51	7.8	1680	383	78	484
17bb	8-11	25	50	7.2	2520	880	174	464
17da	8-12	28	51	7.4	1340	378	10	511
21dc	8-12	25	51	7.4	7480	4150	310	620
22cc	8-12	36	51	7.6	4120	1120	246	532
23ad2	8- 9	30	52	7.8	1280	299	20	432
23bc	9-21	22	51	7.5	2020	957	25	298
24cb	8- 9	35	50	7.4	1700	400	42	628
25ad	8- 9	40	52	7.2	2290	110	90	752
25cc	8- 9	32.3	53	7.3	3800	1680	158	580
26cd2	8-12	43	50	7.2	6950	2400	610	1010
26cd3	8-12	28	50	7.2	1920	475	70	504
27bc	8-12	32	52	7.4	1080	233	15	476
27cc	8-11	33	52	7.5	7040	3300	462	484
27dd	8-11	54	52	7.6	4800	2680	341	697
28ad1	8-12	42		7 6	3440	1450	130	564
31da1	8-11	18	52	7.2	2400	1010	32	410
31da2	8-11	17	54	7.4	6600	1870	425	520
33cd	8-11	80	64	7.7	3560	792	608	270
34dd2	8-10	37	53	7.4	2400	627	58	528
36cd	8-10	21	51	7.4	2150	429	68	668
112-67- 1bc	9-21	30	54	7.5	6430	1450	548	774
5ab	9-23	68		7.3	3380	1090	148	760
6bc	9-23	113	50	7.5	3100	935	82	704
12aa	9-24	140	50	7.6	3060	902	178	694
13ad	9-24		51	7.4	2050	572	65	560
15bc	10-21		63	7.9	3170	858	325	340
17bb	9-22	52	52	7.7	3790	1660	148	588
18cb	9-24	140	51	7.3	1850	374	75	634
21ba	9-23	125	51	7.5	2470	847	105	552
112-68- 3dc3	9-25	10	54	7.9	5240	2870	205	32
4bd	9-25	31	51	7.2	5410	1600	475	1020
8dd1	9-25	41	50	7.3	1420	370	12	594
10dc	10-21			7.2	2560	1080	90	170

Table 6.--Partial chemical analyses of ground waters--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
			Hand County--Continued					
112-68-11dc	9-27	40	50	7.4	6630	3120	290	772
11dc2	9-27	160	51	7.7	3120	1080	100	636
11dd	9-27	105	51	7.6	2310	737	75	582
12ce	9-27	150	50	7.8	5580	2980	190	544
13bb	9-27	100	51	7.5	3890	1470	130	614
15cd	9-27	34	52	7.6	788	66	7.5	364
15dc	9-27	23	52	7.5	1170	224	10	462
16aa	9-29	96	51	7.8	2100	517	78	634
16dd	9-28	29	60	7.5	1010	185	10	426
18bc	9-28	100	50	7.5	6290	3190	315	552
20da2	9-25	15	55	7.6	2040	517	85	594
21aa	9-27	18	56	7.4	2640	319	220	1000
21cd2	9-27	13	61	7.3	1270	339	10	512
22bb2	9-27	13.4	52	7.2	925	136	10	462
29cd	9-28	10	49.5	7.5	1010	163	10	418
2[illegible]dc	9-28	25.3	53	7.4	1110	264	22	370
31ad	9-28	21	51	7.4	1190	299	20	384
31da	9-28	23	53	7.2	1620	414	40	534
33dc	9-29	12	59	7.4	1480	304	50	506
34bb	9-28	180	50	7.6	3410	1330	160	440
113-66- 3bc	10-11	37.5	49	7.5	2040	572	65	598
3bd	10-11	55	49	7.4	4740	2280	250	670
4cd1	10-11	20	53	7.5	2200	220	132	230
4cd2	10 11	8.9	55	7.6	1240	97	82	334
10ac	10-11	61	48	7.5	2490	704	152	470
10da	10-17	25	48	7.5	2860	792	250	606
14ad	10-17	22	49	7.6	1070	229	28	432
14ad	10-17	28	50	7.6	2370	803	85	550
14bc	10-17	42	49	7.7	2230	594	145	398
15dd	10-17	42	50	7.4	3430	1410	142	536
19cd	10-12	51	49	7.2	3520	1600	225	498
20bc	10-12	10	52.5	7.3	972	233	28	326
20cc	10-12	22	49.5	7.6	5010	1550	482	644
22bb	10-17	974		7.9	2720	737	240	322
24bc	10-17		50	7.6	852	180	18	336
27da1	10-17	81	53	7.8	2960	770	290	560
29cb	10-12	19.9	54	7.5	942	185	7.5	430
31bc	10-12	26	49	7.6	645	92	10	310
32cc	10-12	25	49	7.1	1840	519	95	470
33dd	10-17	33	49	7.6	1710	493	75	334

Table 6.--Partial chemical analyses of ground waters--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Hand County--Continued						
113-67- 1ad	10-18	27	48	7.1	3040	1190	192	390
7dd	10-18	47	48	7.7	1240	207	60	496
8cd	10-18	62	48	7.4	4870	2100	330	548
17cd	10-16	40	49	7.6	1310	290	30	444
19aa	10-16	67	48	7.3	3490	990	312	616
23cd	10-18	37	49	7.6	5160	1840	465	624
25db2	10-16	42	48.5	7.8	9110	4080	670	814
29cb1	10-16	72	49	7.8	1340	110	108	532
29cb2	10-16	12	54	7.6	1260	427	10	338
32cc1	10-15	71	49	7.4	2910	1160	60	5[illegible]
32dd	10-16	38	50.5	7.4	1070	238	12	380
113-68- 2aa	10-19	33	48	7.5	1500	317	85	446
6da	10-20	87	49	7.6	3150	363	510	588
8ad	10-20	17.5	53.5	7.4	1970	484	175	448
10cc	10-19	16.5	52	7.2	5010	1560	530	396
15cc	10-21			7.7	2620	1030	120	230
22aa	10-19	49	52	7.0	2530	517	168	672
22dd	10-19	70	48	7.4	4440	2380	140	476
23bb	10-19	52	50	7.5	2750	803	175	616
		Jerauld County						
107-64- 5aa	9-11	19.5	51	6.8	2510	429	100	464
108-64- 5bc	9- 9	33	50	7.4	1650	559	48	448
6ad	9- 9	35	50	7.4	1330	220	65	368
6dc	9 9	32	50	7.6	1670	620	35	412
8dd	9- 9	15	54	7.6	1350	436	19	348
9bc	9- 9	42	50	7.5	1110	304	15	408
9dc	9- 9	17	51	7.4	1380	334	28	504
17dc2	9-10	20	51	7.4	1590	405	52	602
18ca	9-11	32	51	7.6	1010	158	32	320
18dd1	9-11	13	57	7.8	1180	202	15	384
18dd2	9-11	12	57	7.6	3380	737	160	486
20ab	9-10	22	51	7.4	3100	1420	55	520
20bb	9-10	22	51	7.2	966	246	20	280
21cc1	10-10	850	59	7.6	2530	1160	80	170
21cc2	10-10	860	59	7.8	453	18	7.5	222
28db	9-11	20	53	7.4	5780	3240	105	422
29ad	9-11	10	59	7.6	2560	2000	35	402
30bd	9-11	20	51	7.4	3520	1500	82	390
31aa2	9-10	35	50	7.3	3590	1400	88	426
32ab1	9-11	25	53	7.4	3020	1100	72	410

The hydrologic field work planned by the U. S. Geological Survey for the Oahe area and other parts of the James River basin includes an inventory of all existing wells and any other wells for which some record is available. During 1947 and 1948 about 1,890 square miles in the south half of the Oahe area were covered by such an inventory. The information has been assembled in table 7.

A total of 3,242 wells and 15 springs are listed in the table. Of this number, 1,365 wells yield, or have yielded, water from alluvial or glacial deposits, 306 wells derive water from the Niobrara formation, Carlile shale or Graneros shale, and 1,485 wells yield water from the Dakota sandstone. The 15 springs issue from alluvial or glacial deposits. The locations of wells and springs inventoried are shown on plate 4.

Table 7.--Record of wells

Well number[1]	Owner or tenant	Type of well[2]	Depth of well (feet)[3]	Diameter of well (inches)	Type of casing[4]	Character of water-bearing material[5]	Method of lift[6]	Use of water[7]	Measuring point: Description[8]	Measuring point: Height above mean sea level (feet)	Depth to water level below measuring point (feet)[9]	Date of measurement	Temperature (°F.)	Chemical analysis[10]
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)		(14)
						Aurora County								
104-64-11cb	-	Dr	150	4	-	Kcg	N	O	Tca	1.0	44.68	10-29-46	-	
105-63-15ab	H. Green	Dr	180	4	-	Kcg	CY,H	S,O	Tca	1.0	40.16	10-28-46	-	
						Beadle County								
109-60- 6bb	-	B	27	18	-	Qgt	CY,W	D,S	L	-	22.	10-25-47	-	
6cc	-	Dr	160	-	P	Kcg	CY,E	D,S	-	-	-	-	-	
30bb	-	Dr	700	-	P	Kd	F2.0	D,S	-	-	-	10-25-47	-	
31bb1	-	Dr	700	3/4	P	Kd	FO.5	D,S	-	-	-	10-25-47	-	
31bb2	-	Dr	123	3	P	Kcg	CY,H	N	-	-	-	-	-	
31cc	-	Dr	175	-	P	Kcg	N	N	-	-	-	-	-	

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
109-61- 1ad	-	Dr	160	3	P	Kcg	CY,W	D,S	-	-	-	-	-
3ba	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	7-28-47	-
3da	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	7-28-47	-
4ab1	-	Dr	140	-	P	Kcg	CY,W	D	-	-	-	-	-
4ab2	-	Du	40	-	-	Qgt	CY,H	S	L	-	18.	7-28-47	-
4bc1	M. E. Baum, Jr.	Du	13.6	36	W	Qco	CY,H	D,S	Bp	0.2	8.89	7-15-47	C
4bc2	P. Baum	B	40	18	T	Qgt	CY,H	D,S	Tca	1.7	20.16	7-15-47	-
5ac	E. Timm	Du	80	30	W	Qgt	CY,H	D,S	Bp	.8	29.37	7-15-47	-
5bb	L. Cranston	Dr	800	1¼	P	Kd	F15.0	D,S	-	-	-	7-15-47	-
6ba	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	7-15-47	-
6cc	P. King	Dr	830	1	P	Kd	F1.2	D,S	-	-	-	7-14-47	-
6da	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	7-15-47	-
7bb	L. P. Hill	Dr	900	1	P	Kd	F3.0	D,S	-	-	-	7-14-47	-
8bb	E. Moeller	Dr	820	1¼	P	Kd	F4.0	D,S	-	-	-	7-14-47	-
8cb	H. V. VanWinkle	Dr	1000	1¼	P	Kd	F2.0	D,S	-	-	-	7-15-47	-
8dc	-	Dr	-	1	P	Kd	F3.0	D,S	-	-	-	7-14-47	-
9cc	F. Baum	Dr	750	3/4	P	Kd	F6.0	D,S	-	-	-	7-14-47	-
9da	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	7-28-47	-
10ac	-	Du	-	-	-	Qgt	CY,G	D,S	L	-	15.	7-28-47	-
10ad	-	Dr	165	-	P	Kcg	CY,W	D,S	-	-	-	-	-
11bb	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	7-28-47	-
11cc	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	7-28-47	-
12bc	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	7-28-47	-
13bc	-	Dr	-	-	P	Kd	F10.0	D,S	-	-	-	1-28-45	-
14ad	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	7-15-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Beadle County--Continued								
109-61-14bb	-	Dr	-	-	P	Kd	F5.0	D,S	-	-	-	7-15-47	-
15cc	-	B	54.6	24	T	Qgt	CY,G	O,S	Tca	1.4	46.20	6-11-46	-
17ba1	A. Mattcke	Dr	-	3/4	P	Kd	F5.0	D,S	-	-	-	7-14-47	-
17ba2	do.	B	11.6	18	T	Qgt	N	N	Tca	1.8	6.45	7-14-47	-
17db	A. Otz	Dr	750	-	P	Kd	F5.0	K,S	-	-	-	7-28-47	-
18dc	H. Costain	Dr	-	3/4	P	Kd	F5.0	D,S	-	-	-	7-14-47	-
19cb	R. Eden	B	43	18	T	Qgt	CY,W	D,S	Bp	.2	21.90	7-14-47	-
20bc	J. Cronin	Dr	750	1 1/4	P	Kd	F10.0	D,S	-	-	-	7-14-47	-
21cd	E. J. Nelson	Dr	750	1	P	Kd	F4.0	D,S	-	-	-	7-14-47	-
22ba	-	Du	-	24	W	Qgt	CY,W	S	Bp	1.9	15.42	7-14-47	-
22cc	-	Dr	170	3	P	Kcg	CY,W	S	-	-	-	-	-
22dd	E. Arbieter	Dr	960	1 1/4	P	Kd	F15.0	D,S	-	-	-	7-14-47	-
23ad	-	Dr	-	-	P	Kd	FO.01	N	-	-	-	7-15-47	-
24cb	-	Dr	162	-	P	Kcg	CY,W	D,S	-	-	-	-	-
24da	-	Dr	800	1	P	Kd	F1.5	D,S	-	-	-	10-25-47	-
25aa	-	Dr	900	-	P	Kd	F5.0	D,S	-	-	-	10-25-47	-
26ad1	T. Searing	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	7-15-47	64
26ad2	do.	Dr	130	-	P	Kcg	N	N	-	-	-	-	-
27ab	E. Arbieter	Dr	-	1	P	Kd	F5.0	D,S	-	-	-	7-14-47	-
27bb	J. A. Lyon	Dr	970	1	P	Kd	F6.0	D,S	-	-	-	7-14-47	-
28ba	L. Cronin	Dr	742	3/4	P	Kd	F2.0	D,S	-	-	-	7-14-47	-
29ab	F. Baum	B	35	18	T	Qgt	CY,G	D,S	Tca	1.0	17.15	7-14-47	-
29dd	C. Teuske	Dr	980	1 1/4	P	Kd	F12.0	D,S	-	-	-	7-14-47	-
30bb	E. Scotter	Dr	780	3/4	P	Kd	F7.0	D,S	-	-	-	7-14-47	-
30cd	A. Wessel	B	45.8	18	T	Qgt	CY,G	D,S	Tca	1.5	15.50	7-14-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
109-61-30dd	Public School	Dr	-	-	P	Kcg	CY,H	D	-	-	-	-	-
31ab	R. Bussell	Dr	980	1½	P	Kd	F10.0	D,S	-	-	-	7-14-47	64
31bc	C. E. Daugherty	B	35	18	T	Qgt	CY,W	D,S	Bp	0.4	17.44	7-14-47	-
32aa	-	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	7-25-47	-
33ab	-	Du	-	-	-	Qgt	CY,H	D,S	L	-	25.	7-28-47	-
33da	G. Jerky	Dr	900	1¼	-	Kd	F8.0	D,S	-	-	-	7-14-47	-
34bb	D. Farrey	Dr	1000	1	P	Kd	F10.0	D,S	-	-	-	7-14-47	-
35ba1	Hanson	Dr	-	-	-	Kd	F0.5	D	-	-	-	7-15-47	-
35ba2	do.	Dr	-	-	P	Kd	F6.0	D,S	-	-	-	7-15-47	64
109-62- 1ac1	W. Bush	Dr	900	3/4	P	Kd	F2.7	D,S	-	-	-	7-25-47	-
1ac2	do.	B	40	30	W	Qgt	CY,H	N	L	-	16.	7-25-47	-
1dd	L. T. Hill	Du	-	24	-	Qgt	CY,G	D,S	L	-	15.	6- 4-47	-
2dc	Gladys Pyle	Dr	-	3/4	P	Kd	F1.7	D,S	-	-	-	7-25-47	-
3ba	J. A. Miller	Du	27.8	18	T	Qgt	N	N	Tca	1.5	14.45	6- 4-47	-
3dc	O. W. Peterson	Dr	887	1¼	P	Kd	F2.2	D,S	-	-	-	7-25-47	-
3dd	J. Lucklum	B	45	18	T	Qgt	CY,H	S,O	Tca	1.3	18.	6- 5-47	-
4aa	H. Mencke	Dr	-	1¼	P	Kd	F0.6	D,S	-	-	-	7-28-47	-
4ba	L. McIlvaine	Dr	805	1¼	P	Kd	F1.4	D,S	-	-	-	7-28-47	-
5aa	B. H. Davies	B	70	-	D	Qgt	CY,H	N	L	-	35.	6- 4-47	-
6ba	-	B	-	18	-	Qgt	CY,H	N	Tco	1.0	23.	6- 5-47	-
7aa	Mrs. Ella Johnson	B	74	30	P	Qgt	N	O	Tca	1.0	21.73	6-11-46	-
7dc	Baltzer	Dr	-	3/4	P	Kd	F1.8	D,S	-	-	-	7-28-47	-
8aa	-	Dr	-	3/4	P	Kd	F3.2	D,S	-	-	-	7-25-47	-
8bc	G. Goranson	Dr	900	1¼	P	Kd	F5.5	D,S	-	-	-	7-28-47	-
9ad	Mrs. Hildur Erickson	B	75	18	T	Qgt	N	O	Tca	1.3	15.05	6-10-46	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
109-62- 9bc	J. L. Griggs	Dr	800	3/4	P	Kd	F1.5	D,S	-	-	-	7-25-47	61
9cd	-	Dr	-	1¼	P	Kd	F1.2	S	-	-	-	7-16-47	-
10ad	-	B	75	2	P	Qgt	CY,W	D,S	L	-	30.	6- 5-47	-
10cd	G. Link	Dr	1050	1¼	P	Kd	F2.0	-	-	-	-	7-28-47	-
10dc	J. Svec	Dr	790	1¼	P	Kd	F1.2	-	-	-	-	7-28-47	-
11ba	-	Dr	-	1¼	P	Kd	F5.5	-	-	-	-	7-25-47	65
11da	-	B	35	24	T	Qgt	CY,W	D,S	Bp	1.6	14.90	6- 5-47	-
12ab	-	Dr	-	1¼	P	Kd	F4.2	D,S	-	-	-	7-28-47	-
12cc	-	B	60	24	T	Qgt	CY,W	D,S,O	Tca	.7	24.7	6-10-46	-
12da	-	Du	8.3	24	T	Qgt	N	N	Tca	.5	5.60	6- 4-47	-
13aa1	Anna Rother	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	6- 4-47	-
13aa2	do.	Du	37.0	24	T	Qgt	N	N,O	Tca	.3	8.40	6- 4-47	-
13cc	R. Cranston	Dr	740	3/4	P	Kd	F1.3	D,S	-	-	-	7-28-47	-
14bb	-	Dr	-	1¼	P	Kd	F1.5	D,S	-	-	-	7-28-47	-
14da	R. Schumacker	Dr	760	1¼	P	Kd	F5.4	D,S	-	-	-	7-28-47	64C
15da	J. Beck	Dr	-	1	P	Kd	F4.0	D,S	-	-	-	7-28-47	66
17dd	Mrs. Wm. DeBoer	Dr	800	3/4	P	Kd	F1.5	D,S	-	-	-	7-25-47	-
18ac	O. Fuerst	Dr	-	1¼	P	Kd	F4.6	D,S	-	-	-	7-28-47	63
18bc1	A. Wagner	Dr	-	1½	P	Kd	F3.8	N	-	-	-	-	-
18bc2	do.	B	69	18	W	Qgt	N	N	Tco	1.6	10.	6-10-47	-
19cd	A. Ochsner	Dr	-	1	P	Kd	F1.6	D,S	-	-	-	7-29-47	58
20cd	-	Dr	-	3/4	P	Kd	FO.2	D,S	-	-	-	7-29-47	-
21dc	E. Wagner	Dr	-	3/4	P	Kd	F3.0	D,S	-	-	-	7-29-47	64
22da	R. Kirchenman	Dr	780	1	P	Kd	F5.2	D,S	-	-	-	7-28-47	-
23dd	R. Vagan	B	61.8	24	T	Qgt	CY,W	D,S	Bp	1.0	33.50	6- 5-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
109-62-24ad	A. H. McDowall	B	41.6	18	T	Qgt	CY,W	D,S	Bp	1.3	26.40	6- 4-47	-
24da	O. Schnieder	Du	36.8	24	C	Qgt	CY,W	D,S	Bp	1.0	28.10	6- 4-47	-
25bb	-	Du	56.8	24	W	Qgt	N	N	Tca	1.1	29.00	6- 5-47	-
25da	P. Broer	B	57	14	T	Qgt	CY,G	D,S	Tca	.0	26.35	6- 4-47	-
26ad	W. Eden	Du	45	24	W	Qgt	CY,W	D,S	L	-	25.	7-29-47	-
26bb	F. Eden	Dr	-	1½	P	Kd	F9.0	D,S	-	-	-	7-28-47	62
26dd	A. Tromm	Dr	810	1¼	P	Kd	F3.5	D,S	-	-	-	7-29-47	62
27bc	R. DeJoan	Dr	740	3/4	P	Kd	F2.7	D,S	-	-	-	7-29-47	60
28ad	B. Fast	Du	11.9	24	T	Qgt	N	O	Tca	.7	5.65	8-21-47	-
28bb	E. Baruth	Dr	916	1¼	P	Kd	F8.5	D,S	-	-	-	7-29-47	65
30bc	F. Brass	Du	38.2	36	W	Qgt	CY,W	D,S,O	Bp	1.5	28.01	6-10-46	-
30dd1	A. Golz	Dr	800	1	P	Kd	F3.0	D,S	-	-	-	7-29-47	-
30dd2	do.	Dr	-	1¼	P	Kd	F3.7	D,S	-	-	-	7-29-47	65
31bc	W. Wagner	Dr	980	3/4	P	Kd	F13.0	D,S	-	-	-	7-29-47	66
31cb	H. Dunze	Dr	833	1½	P	Kd	F3.3	D,S	-	-	-	7-29-47	-
31cd	H. Jurgens	Dr	-	1¼	P	Kd	F1.0	D,S	-	-	-	7-29-47	-
32bb	C. Ultecht	B	80	3½	P	Qgt	CY,W	S	L	-	35.	6- 5-47	-
32dc	-	Dr	300	3	P	Kcg	CY,G	D,S	-	-	-	-	-
33cb	-	Dr	820	1	P	Kd	F3.3	D,S	-	-	-	7-29-47	63
34ba	D. J. Fast	Dr	785	1¼	P	Kd	F1.8	D,S	-	-	-	7-29-47	62
35ab	R. Kuudt	B	40	24	C	Qgt	CY,W	D,S	Bp	1.0	14.50	6- 5-47	-
35ba	R. Klukas	Dr	800	1¼	P	Kd	F1.2	D,S	-	-	-	7-29-47	59
36aa	-	Du	42.3	18	W	Qgt	CY,H	O	Bp	.8	17.42	6-10-46	-
109-63- 1aa	C. F. Christensen	Dr	-	1¼	P	Kd	F3.0	S	-	-	-	7-28-47	62
1ab	N. Christensen	B	74	18	T	Qgt	N	O	Tco	1.0	16.00	7-28-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Beadle County--Continued								
109-63- 1bb	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	7-23-47	-
1cc	-	Dr	817	1½	P	Kd	F10.0	S	-	-	-	6-25-47	66
2bc	O. Schroeder	Dr	850	1	P	Kd	F2.0	D,S	-	-	-	6- 9-47	-
2cd	-	Dr	816	1	P	Kd	F3.0	D,S	-	-	-	6- 9-47	-
2dc	Schroeder Bros.	Dr	850	1½	P	Kd	F3.0	D,S	-	-	-	6- 9-47	-
3cd	-	Dr	-	-	-	Kd	F5.0	D,S	-	-	-	7-23-47	-
4ab	J. Davis	B	65	18	T	Qgt	CY,W	D,S	L	-	35.	6- 9-47	-
4cb	-	Dr	-	2	P	Kd	F4.0	D,S	-	-	-	7-23-47	-
5ab	-	Dr	960	1	P	Kd	F3.0	D,S	-	-	-	6- 9-47	-
5bc	-	Dr	842	-	-	Kd	F4.0	D,S	-	-	-	7-24-47	65
6ab	-	B	40	18	T	Qgt	CY,W	D,S,O	Tca	1.0	15.78	6- 6-46	-
6bb	-	Dr	-	1	P	Kd	F2.0	D,S	-	-	-	6- 9-47	-
6da	-	Dr	850	-	-	Kd	F0.3	S	-	-	-	7-24-47	-
8ba	-	Dr	-	-	-	Kd	F4.0	D,S	-	-	-	7-23-47	-
9aa	-	Du	50	24	-	Qgt	CY,W	O	Bp	.8	20.86	6-11-47	-
9ba	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	7-23-47	-
11cd	-	Dr	-	-	-	Kd	F1.2	D,S	-	-	-	7-23-47	-
12aa	-	Dr	-	1	P	Kd	F1.2	D,S	-	-	-	6-25-47	-
12cb	N. Ochsner	Dr	835	1½	P	Kd	F5.0	D,S	-	-	-	6-25-47	-
13ad	-	Dr	-	1	P	Kd	F4.0	D,S	-	-	-	6- 6-47	-
13cc	-	Dr	-	3/4	P	Kd	F2.0	D,S	-	-	-	6- 6-47	-
14cd	R. Neuharth	Dr	800	1½	P	Kd	F8.0	D,S	-	-	-	6- 6-47	-
14dd	-	Dr	-	1	P	Kd	F5.0	D,S	-	-	-	6- 6-47	-
15dd	-	Dr	855	1	P	Kd	F4.0	D,S	-	-	-	6- 6-47	-
16dd	-	Du	-	24	W	Qgt	CY,W	D,S	L	-	18.	6- 6-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
109-63-17da	-	Dr	-	1½	P	Kd	F3.0	D,S	-	-	-	6- 6-47	-
18aa	J. R. Clouser	Dr	910	3/4	P	Kd	F3.0	D,S	-	-	-	6-25-47	-
19aa1	M. Garbe	-	860	1½	P	Kd	F3.0	D,S	-	-	-	6- 6-47	C
19aa2	do.	Du	6.4	24	P	Qgt	N	N	Tca	0.0	2.20	6- 6-47	-
19dd	-	B	60	18	P	Qgt	CY,H	D,S	L	-	35.	6- 6-47	-
20aa	-	Dr	-	2	P	Kd	F2.0	D,S	-	-	-	6- 6-47	-
20bc	A. Langcor	Dr	800	2	P	Kd	F9.0	D,S	-	-	-	6- 6-47	-
20dc	-	Dr	-	1½	P	Kd	FO.7	D,S	-	-	-	7-24-47	-
21ba	A. Ruppel	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	7-23-47	-
21dd	-	Dr	812	-	P	Kd	F12.0	D,S	-	-	-	7-24-47	-
22ba	F. M. Meyer	Dr	850	1¼	P	Kd	F5.0	D,S	-	-	-	6- 6-47	-
22da	-	Dr	-	-	P	Kd	F5.0	D,S	-	-	-	6-25-47	-
23bb	-	Dr	-	1¼	P	Kd	F6.0	D,S	-	-	-	6- 6-47	-
23dd1	R. Neuharth	Dr	997	1½	P	Kd	F20.0	D,S	-	-	-	6-25-47	-
23dd2	do.	Du	30	24	W	Qgt	CY,H	N	Bp	1.6	16.70	6-25-47	-
24ab	E. Schaffer	Dr	800	1	P	Kd	F2.0	D,S	-	-	-	6- 6-47	-
24da	H. Mees	Dr	-	1½	P	Kd	F1.7	D,S	-	-	-	7-29-47	61
25cc	A. Groeuhuff	B	80	24	W	Qgt	CY,G	D,S	L	-	38.	6-25-47	-
26dd	-	Dr	-	3	P	Kcg	CY,W	D,S	-	-	-	6-25-47	-
27aa	R. Neuharth	Dr	-	-	-	Kd	F2.5	D,S	-	-	-	6-25-4	-
27cd1	A. Syring	Dr	890	3/4	P	Kd	F12.0	D,S	-	-	-	6-25-47	-
27cd2	do.	B	25.9	18	T	Qgt	CY,H	N	Bp	2.2	11.05	6-25-47	-
28cd	-	Dr	-	1	P	Kd	F4.0	D,S	-	-	-	6- 9-47	-
28dd	-	Du	-	24	T	Qgt	CY,W	S	L	-	15.	6- 9-47	-
29bc	R. Bittner	Dr	850	1½	P	Kd	F10.0	D,S	-	-	-	6- 6-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
109-63-29dd	T. Meyer	Dr	800	2½	P	Kd	F12.0	D,S	-	-	-	6- 6-47	-
30ad	F. Busse	B	75	24	W	Qgt	CY,W	D,S	Tco	1.0	9.80	6- 6-47	-
30cb	A. Scherzmann	Du	60.4	18	W	Qgt	CY,W	D,S,O	Bp	2.3	36.41	6- 6-47	-
31aal	C. Jager	Dr	1000	2	P	Kd	F15.0	D,S	-	-	-	6- 6-47	-
31aa2	do.	Du	65	30	W	Qgt	CY,W	D,S	Tca	2.2	46.80	6- 6-47	-
31ba	Ruppel	Dr	860	3/4	P	Kd	F3.0	D,S	-	-	-	6- 6-47	-
31dd	M. Schaffer	B	65	15	P	Qgt	CY,W	D,S	L	-	40.	6- 6-47	-
32ad	-	Du	39.7	24	W	Qgt	CY,H	N	Tca	.8	9.15	6- 6-47	-
32cd	A. Huether	B	71.2	24	T	Qgt	CY,W	N	Bp	2.7	34.20	6- 6-47	-
33ad	-	B	25	-	-	Qgt	CY,W	D,S	Bp	.8	11.27	7-24-47	-
33cd	E. Brass	B	35.2	24	T	Qgt	CY,W	D,S	Bp	1.3	26.20	6- 6-47	-
33dd	-	Du	19.0	30	W	Qgt	CY,H	N	Bp	.6	17.95	7-24-47	-
34aa	T. Bauer	B	60	24	D	Qgt	CY,W	D,S,O	Bp	1.0	17.47	6-10-46	-
35ad	-	Du	44.7	-	-	Qgt	N	N	Tca	.0	19.39	6-25-47	-
35cb1	T. Thompson	B	38	24	T	Qgt	CY,W	D,S	Bp	1.3	19.85	6-25-47	-
35cb2	do.	Dr	806/	-	P	Kd	N	N	-	-	-	-	-
109-64- 1ba	-	Dr	830	-	-	Kd	F1.5	D,S	-	-	-	10-20-47	-
2aa	-	Dr	-	-	-	Kd	F2.5	D,S	-	-	-	10-20-47	-
2dc	-	Dr	108	-	P	Kcg	N	N	-	-	-	-	-
3cd	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	10-18-47	-
4aa	-	Dr	900	-	-	Kd	F2.0	D,S	-	-	-	10-18-47	-
5aa	-	B	60	18	-	Qgt	N	O	Tca	1.0	40.50	10-29-46	-
5db	C. Eggleston	Dr	-	6	P	Kd	F3.0	N	Tca	2.5	-	9- 7-48	68
6aa	F. L. Curtis	Dr	800	1¼	P	Kd	F15.0	D,S	Tca	3.2	-	9- 1-48	69

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
109-64- 6cc	-	B	21.1	18	T	Qgt	CY,H	N	Tca	0.8	13.42	8-27-48	51P
6dd	F. L. Curtis	B	49.4	24	W	Qgt	CY,N	N	Bp	1.5	22.74	9- 1-48	-
7bb	-	Du	13.3	24	T	Qgt	N	O	Tca	1.2	6.75	6-10-46	-
8aa	C. Eggleston	Dr	-	1	P	Kd	F5.0	S	Tca	2.0	-	9- 7-48	68
8bd	-	Dr	900	1	P	Kd	F14.0	D,S	Tca	2.8	-	9- 1-48	67
9bb	do.	Dr	750	1	P	Kd	F4.0	D	Tca	1.5	-	9- 7-48	63
9bd	-	Dr	-	2	P	Kd	F25.0	S	Tca	.2	-	9- 7-48	70
10bb	-	Du	21.0	-	N	Qgt	N	N	Tca	.0	12.80	10-18-47	-
11ad	-	B	30	18	T	Qgt	CY,G	D,S	L	-	25.	10-20-47	-
11cb	-	Du	50	48	C	Qgt	CY,W	D,S,O	Bp	1.0	16.72	6-11-46	-
12bb	-	Dr	850	2	P	Kd	F2.0	D,S	-	-	-	10-20-47	64
13bc	-	Dr	-	-	-	Kd	F2.5	D,S	-	-	-	10-18-47	-
14ba	-	Dr	835	-	-	Kd	F2.5	D,S	-	-	-	10-18-47	-
14bb	-	Dr	827/	-	-	Kd	N	N	-	-	-	-	-
14cd1	-	Dr	-	-	-	Kd	F5.0	D,S	-	-	-	10-20-47	-
14cd2	-	B	60	-	-	Qgt	CY,H	S	L	-	30.	10-20-47	-
15ad	-	Dr	-	-	-	Kd	F5.0	D,S	-	-	-	10-20-47	-
17cc	B. Olson	Dr	845	1¼	P	Kd	F8.0	D,S	Tca	1.8	-	9- 7-48	64P
17dc1	J. Seeman	Dr	-	2	P	Kd	F35.0	D,S	Tca	2.0	-	9- 7-48	64
17dc2	do.	Dr	-	-	-	Kd	F0.01	N	-	-	-	9- 7-48	-
18dd	D. Chapman	Dr	820	1	P	Kd	F2.0	D,S	Tca	3.0	-	9- 7-48	64
19cc	J. Gross	B	39.1	18	W	Qgt	CY,W	D,S	Tco	2.2	20.74	9- 7-48	50P
20dd	-	Dr	-	1	P	Kd	F3.0	D,S	Tca	1.5	-	-	62
21cc	O. M. Pedersen	Dr	800/	1	P	Kd	F2.0	D,S	Tca	3.6	-	9- 7-48	64
21dd	-	Dr	-	-	-	Kd	F4.0	D,S	-	-	-	10-20-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
109-64-22ad	-	Dr	-	3/4	P	Kd	F4.2	S	-	-	-	10-20-47	64
22bb	-	Dr	830	1½	P	Kd	F8.0	D,S	-	-	-	10-20-47	-
22cc	-	Dr	850	3/4	P	Kd	F6.0	D,S	-	-	-	10-20-47	64
24bb	-	B	64.0	12	T	Qgt	CY,H	N	Tca	1.3	33.30	10-18-47	-
24dc	-	Dr	850	1	P	Kd	F8.0	D,S	-	-	-	10-20-47	65
25cd	-	Dr	-	-	-	Kd	F4.0	D,S	-	-	-	10-20-47	-
25da	-	B	80	18	W	Qgt	CY,W	D,S	L	-	30.	7-24-47	-
26cb1	-	Dr	-	3	P	Keg	CY,W	D,S	Tca	2.0	30.	10-20-47	53
26cb2	-	Dr	-	-	P	Kd	FO.01	N	-	-	-	10-20-47	-
26dc	-	Du	17.0	20	W	Qal	CY,W	S,O	Bp	2.2	3.50	4-17-47	-
27ad	-	Dr	-	1	P	Kd	F2.0	D,S	-	-	-	10-20-47	64
27cc	-	B	-	-	-	Qgt	CY,W	D,S	L	-	25.	10-20-47	-
28cd	O. Peterson	Dr	-	3/4	P	Kd	F6.0	D,S	Tca	3.5	-	9- 7-48	65
29dd	R. Craft	Dr	850	2	P	Kd	F2.0	D,S	Tca	2.5	-	9- 7-48	63
30cb	-	Dr	-	1	P	Kd	F3.0	S	Tca	1.5	-	9- 7-48	63
31da	H. Olson	Dr	-	1¼	P	Kd	F2.5	D,S	Tca	1.1	-	9- 7-48	62
32aa1	R. Ramsell	Du	31.0	20	P	Qgt	CY,H	D,O	Tca	1.2	21.44	9- 7-48	51P
32aa2	do.	Dr	30	2	P	Qco	CY,W	S	L	-	20.	9- 7-48	49P
33bc	-	Dr	-	1	P	Kd	F3.0	D,S	Tca	1.2	-	9- 7-48	63
34bb	-	B	-	-	-	Qgt	CY,W	S	L	-	30.	10-20-47	-
34da1	-	Dr	180	3	P	Keg	CY,W	D,S	-	-	-	-	-
34da2	-	Dr	-	-	-	Kd	FO.01	N	-	-	-	10-20-47	-
35bb	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	10-20-47	-
35cc	-	Dr	850/	-	P	Kd	N	N	-	-	-	-	-
36db	-	B	25	20	P	Qgt	CY,W	D,S	L	-	15.	-	-
109-65- 2bc	-	Dr	898	2½	P	Kd	F8.0	D,S	Tca	2.0	-	8-26-48	72

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Beadle County--Continued								
109-65- 2dd	J. Wullweber	Dr	800	1	P	Kd	FO.2	S	Tca	1.5	-	8-26-48	63
3bb	H. Sextant	B	62.1	18	T	Qgt	CY,E	D,S,O	Tca	2.0	26.00	8-25-48	50P
3dd	E. O. Quiram	B	34.1	24	P	Qco	CY,H	D,S	Tco	1.2	16.41	8-25-48	52P
4dd	R. Hollingsworth	Dr	-	1	P	Kd	F	D,S	Tca	2.8	-	8-25-48	61
5bc	F. LaBranch	B	13.8	20	W	Qgt	CY,H	S	Tca	1.0	6.54	8-25-48	53P
7dc	E. W. Tucker	B	17.2	12	T	Qgt	CY,W	D,S	Tca	2.0	12.25	8-25-48	50P
9aa	-	Dr	-	2	P	Kd	F4.5	D,S	Tca	2.5	-	8-25-48	69
10db	R. Vogelman	Dr	-	1¼	P	Kd	F4.0	D,S	Tca	3.7	-	8-26-48	69
11bb	-	Du	19.3	24	W	Qco	-	-	-	-	Dry	8-26-48	-
11ca	McNair Estate	Dr	-	1¼	P	Kd	F5.0	D,S	Tca	3.2	-	8-26-48	68
12bc	O. King	Dr	-	2	P	Kd	F14.0	D,S	Tca	3.0	-	8-26-48	70
12ca	E. Quiram	Du	11.7	-	-	Qgt	CY,W	D,S	Tca	1.5	8.19	8-26-48	P
13ab	-	B	31.1	18	W	Qgt	CY,W	D,S	Tca	1.0	25.88	8-26-48	52P
14aa	L. Hein	Du	12.0	36	T	Qgt	CY,W	D,S	Tca	2.5	7.58	8-26-48	53P
17cc	E. Oestrich	Du	7.0	48	W	Qco	CY,H	S,O	Tca	1.5	4.84	8-25-48	65P
17cd	do.	Du	10.0	36	W	Qco	CY,W	D,S	Tca	1.0	5.94	8-25-48	56P
18bc	O. Palmer	Spring	-	48	W	Qgt	CY,W F5.0	D,S	-	-	-	8-25-48	60P
18da	L. Orr	B	20.1	20	W	Qgt	CY,W	D,S	Tca	1.2	6.81	8-25-48	51P
20ba	D. Barnes	B	29.4	18	W	Qco	CY,N	N	Tca	.5	5.71	8-25-48	-
21cd1	G. M. Moorman	Dr	980	1¼	P	Kd	F4.0	D,S	Tca	2.2	-	8-26-48	60
21cd2	do.	Du	13.1	24	T	Q	CY,W	S	Tco	1.5	7.71	8-26-48	53P
22aa	E. Kruger	Dr	-	1½	P	Kd	F5.0	D,S	Tca	1.6	-	9- 1-48	67P
22cb	G. M. Moorman	Dr	980	1	P	Kd	F2.0	S	Tca	3.0	-	8-26-48	65
23dd	O. Myran	Dr	800	1¼	P	Kd	F4.0	D,S	Tca	3.0	-	8-27-48	68

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Beadle County--Continued								
109-65-24cd	G. Evensen	Du	17.8	72	C	Qal	CY,W	D,S	Tco	1.4	-	8-27-48	53P
24dc	do.	Du	16.0	30	W	Qal	CY,H	N	Tco	.8	6.44	8-27-48	51P
25bal	P. P. Myran	B	31	-	W	Qal	CY,H	D	L	-	28.	8-27-48	54P
25ba2	do.	Du	20.4	60	W	Qal	CY,W	S	Tco	1.5	12.21	8-27-48	52P
26ba	-	Spring	-	-	C	Qgt	CY,W	D,S	-	-	-	8-27-48	52P
26cc	M. Myran	Dr	800	2	P	Kd	F2.0	D,S	Tca	2.0	-	8-27-48	68
26dd	T. Peterson	Du	20.2	48	W	Qco	CY,W	D,S,O	Tco	1.4	6.98	8-27-48	56P
30bd	W. Gruenwald	B	55.4	18	P	Qgt	CY,W	D,S	Tca	2.5	28.61	8-25-48	52P
31cd	-	Dr	-	3	P	Qgt	CY,W	S	-	-	-	8-25-48	53P
33bd	-	Dr	-	3	P	Qco	CY,W	N	L	-	10.	9- 1-48	52P
34aa	C. Cook	Dr	1300	1½	P	Kd	F16.0	D,S	Tca	2.6	-	8-27-48	71
34da	R. Conklin	Dr	-	1	P	Kd	F8.0	D,S	Tca	2.8	-	9- 1-48	71
35aal	P. Peterson	B	32.8	24	P	Qgt	CY,H	S	Tca	1.9	20.04	9- 1-48	51P
35aa2	do.	B	18.9	24	W	Qco	CY,W	D,S	Tco	1.1	7.56	9- 1-48	52P
110-60- 7cc	-	Dr	200	-	P	Kcg	CY,G	D,S	-	-	-	-	-
19bc	-	Dr	-	-	-	Kd	F1.5	D,S	-	-	-	10-24-47	-
30bc	-	Dr	-	-	-	Kd	F0.5	D,S	-	-	-	10-25-47	-
110-61- 1ba	-	Dr	-	-	-	Kd	F2.0	D,S	-	-	-	-	-
1cc	-	Dr	250	3	P	Kcg	CY,W	D,S	-	-	-	-	-
2bb	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	10-24-47	-
2dc	-	Dr	-	-	-	Kd	F1.0	D,S	-	-	-	10-24-47	-
3cc1	-	Dr	-	-	-	Kd	F4.0	D,S	-	-	-	10-24-47	-
3cc2	-	Dr	-	3	P	Kcg	CY,H	N	-	-	-	-	-
3db	-	Dr	-	1¼	P	Kd	F3.0	D,S	-	-	-	10-24-47	-
4aa	-	Dr	850	1	P	Kd	F2.0	D,S	-	-	-	10-24-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
110-61- 4bb	-	Dr	210	-	-	Kcg	CY,H	D,S	-	-	-	-	-
4cc	-	Dr	-	-	-	Kcg	CY,W	S	-	-	-	-	-
5aa	-	Dr	206	2½	P	Kcg	CY,H	D,S	-	-	-	-	-
5ab	-	Dr	210	-	-	Kcg	CY,E	D,S	-	-	-	-	-
5bc	Dakota Brewing Co.	Dr	900	-	P	Kd	CY,E	In	-	-	-	-	-
6ad	-	Dr	772	-	P	Kd	N	N	-	-	-	-	-
6bd1	City of Huron	Dr	1138	-	P	Kd	N	N	-	-	-	-	-
6bd2	-	Dr	900	-	P	Kd	N	N	-	-	-	-	-
6cb	-	Dr	772	-	P	Kd	N	N	-	-	-	-	-
7cc	J. C. Johnston	B	55	24	C	Qgt	CY,G	D,O	Bp	0.7	4.75	4-17-47	55P
9ab	-	Dr	200	3	P	Kcg	CY,W	D,S	-	-	-	-	-
9bb1	-	Du	10.0	-	-	Qgt	N	N	-	-	8.	7-28-47	-
9bb2	-	Du	11.0	-	-	Qgt	CY,H	S	Tco	1.0	8.00	7-28-47	-
9cc	-	B	50	-	-	Qgt	CY,W	D,S	L	-	25.	6-23-47	P
9dc1	-	Dr	750	-	-	Kd	F5.0	D,S	-	-	-	10-24-47	-
9dc2	-	B	80	-	-	Qgt	CY,H	N	L	-	30.	10-24-47	-
10dc	-	Dr	-	1¼	P	Kd	F4.0	D,S	-	-	-	10-24-47	-
11ab	-	Dr	-	-	-	Kd	F1.5	D,S	-	-	-	10-24-47	-
11bb	-	B	50	18	T	Qgt	CY,W	D,S	L	-	25.	10-24-47	P
11cc	-	Dr	350	3	P	Kcg	CY,W	D,S	L	-	50.	10-24-47	-
11dd	-	B	40	-	-	Qgt	CY,W	D,S	L	-	25.	10-24-47	P
12bb1	-	B	60	-	-	Qgt	CY,G	D,S	L	-	30.	10-24-47	54P
12bb2	-	Dr	250	3	P	Kcg	CY,W	N	-	-	-	-	-
13aa	-	Dr	850	-	-	Kd	F1.5	D,S	-	-	-	10-24-47	-
13dd	-	Dr	150	3	P	Kcg	CY,W	D,S	-	-	-	-	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
110-61-14ab1	-	B	40	-	-	Qgt	CY,W	D,S	L	-	16.	10-24-47	P
14ab2	-	Dr	230	-	P	Kcg	N	N	-	-	-	-	-
14dc	-	Dr	-	-	-	Kd	F5.0	D,S	-	-	-	10-25-47	-
15ab	County Farm	Dr	879	2	P	Kd,X	F10.0	D,S	-	-	-	10-24-47	-
16aa	S. Osgood	Dr	150	3	P	Kcg	CY,G	D,S	-	-	-	-	-
16da	-	Dr	140	-	-	Kcg	CY,W	D,S	-	-	-	-	-
17aa	-	Dr	-	-	-	Kd	CY,W	D,S	-	-	-	6-23-47	-
18aa	Huron Cemetary	Dr	-	1¼	P	Kd	F1.6	I	-	-	-	6-26-47	-
18ab	W. Kaening	Dr	740	1	P	Kd	F1.5	D,S	-	-	-	6-26-47	-
18cb	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	8-18-47	-
18dc	Lowery Bros.	B	33.6	18	T	Qgt	CY,E	D,S	L	-	16.	6-26-47	P
19ab	R. G. Mentzel	Dr	810	1¼	P	Kd	F12.0	D,S	-	-	-	6-26-47	-
20aa	G. E. Montgomery	B	38	24	T	Qgt	CY,W	D,S,O	Bp	1.5	17.05	7- 3-47	P
21aa	-	Dr	235	1½	P	Kcg	CY,G	D,S	-	-	-	-	-
21dc	McCoy Est.	Dr	745	-	P	Kd	F22.0	D,S	-	-	-	7-28-47	-
22bc	-	Dr	800	-	-	Kd	F2.0	D,S	-	-	-	10-25-47	-
22cc	G. A. Hurd	Dr	785	-	P	Kd	F25.0	D,S	-	-	-	10-25-47	-
22dd1	-	Dr	750	-	P	Kd	F20.0	D,S	-	-	-	10-25-47	-
22dd2	-	Dr	190	-	P	Keg	N	N	-	-	-	-	-
23cb	-	B	35	18	T	Qgt	CY,W	D,S	L	-	25.	10-25-47	P
23dc	-	Dr	150	-	-	Kcg	CY,W	D,S	-	-	-	-	-
24cc	-	Dr	150	3	P	Kcg	CY,W	D,S	-	-	-	-	-
25cc	-	Dr	165	-	P	Kcg	N	N	-	-	-	-	-
25cd	-	Dr	-	-	-	Kd	F0.5	S	-	-	-	10-25-47	-
26ba	-	Dr	-	4	P	Kcg	CY,W	S	-	-	-	-	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
110-61-26da	-	Dr	-	-	-	Kcg	CY,G	D,S	-	-	-	-	-
27ba1	-	Dr	746	-	-	Kd	F20.0	D,S	-	-	-	10-25-47	-
27ba2	-	B	30	18	T	Qgt	CY,H	N	L	-	25.	10-25-47	-
28cd	-	Dr	160	3	P	Kcg	CY,H	O	Tca	2.0	18.55	6-23-47	-
28db	-	Dr	728	-	-	Kd	F2.0	S	-	-	-	7-28-47	-
29ab1	McKenzie	Dr	886	1½	P	Kd	F8.5	D,S	-	-	-	7-11-47	63
29ab2	J. A. Schneller	Dr	-	-	-	Kd	F5.0	S	-	-	-	7-11-47	-
29da	-	Dr	-	-	-	Kd	FO.01	N	-	-	-	7-11-47	-
30bb	J. Schroeder	Dr	730	1	P	Kd	F5.5	D,S		-	-	6-26-47	-
30bc	-	Dr	160	3	P	Kcg	CY,W	D,S,O	Tca	1.5	32.00	7-11-47	-
30dd	A. Timm	Dr	912	1	P	Kd	F8.0	D,S	-	-	-	6-26-47	-
31bb	-	Dr	-	1	P	Kd	F5.0	D,S	-	-	-	6-26-47	-
31cb	T. A. Rodgers	Dr	827	1	P	Kd	F4.0	D,S	-	-	-	6-26-47	-
32bd	R. D. Timm	Dr	800	3/4	P	Kd	F2.5	D,S	-	-	-	7-26-47	-
33ab	-	Dr	-	-	-	Kd	F2.5	D,S	-	-	-	7-28-47	-
34aa	-	B	35	-	-	Qgt	CY,W	D,S	Bp	1.3	23.90	7-28-47	P
34cb1	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	7-28-47	-
34cb2	-	Dr	125	-	P	Kcg	N	N	-	-	-	-	-
34dd	F. Bateman	B	40	-	-	Qgt	CY,W	D,S	L	-	25.	7-28-47	P
35aa	-	B	40.2	18	T	Qgt	CY,W	S,O	Bp	1.5	31.85	6-23-47	P
35cb	-	Dr	-	-	-	Kd	F2.0	D,S	-	-	-	7-28-47	-
35da	-	B	30.6	18	T	Qgt	N	N	Tca	.1	29.40	10-25-47	-
36aa1	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	10-25-47	-
36aa2	-	Dr	-	3	P	Kcg	CY,H	N	-	-	-	-	-
36ba	-	Dr	750	-	-	Kd	F4.0	D,S	-	-	-	10-25-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
110-62- 1bb	-	Dr	170	4	P	Qgt	N	N	L	-	8.	7-28-47	-
1bd	-	Dr	1000	4	P	Kd	F80.0	P	-	-	-	9- 8-47	67C
1db1	County Courthouse	Dr	1000	-	-	Kd	E	P	-	-	-	8-16-47	C
1db2	do.	Dr	230	2	P	Kcg	E	P	-	-	-	-	-
1dd1	City of Huron	Dr	1091	-	P	Kd,X	N	N	-	-	-	-	-
1dd2	-	-	534	-	-	Kcg	N	N	-	-	-	-	-
2ab	H. Rause	B	19.6	18	T	Qgt	CY,H	S,O	Bp	1.5	8.00	6-15-46	-
2ca	A. Bruins	Du	30	30	P	Qgt	CY,H	D,S	Tca	1.1	7.80	6-30-47	-
3ba1	W. Brewer	B	42	24	T	Qgt	CY,H	N	L	-	12.	6-30-47	P
3ba2	do.	Dr	800	1	P	Kd	F5.0	D,S	-	-	-	6-30-47	-
3cd	C. C. Bruyger	B	-	18	T	Qgt	CY,H	N	L	-	12.	6-27-47	P
4bd	-	Du	20	-	-	Qgt	CY,H	S	L	-	12,	7-16-47	-
5aa	L. Salaman	Dr	-	1½	P	Kd	F4.0	D,S	-	-	-	6-30-47	-
5bb	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	7-25-47	-
6ab	H. Urban	B	56.8	18	T	Qgt	CY,W	S,O	Tcu	1.4	25.45	4- 5-46	P
7cd	H. Busch	B	66	24	T	Qgt	CY,W	D,S	L	-	20.	6-27-47	P
8ab	G. Stahl	B	54.3	18	T	Qgt	CY,W	D,S	Bp	2.2	20.39	6-26-47	-
8cc	E. Pesky	B	52	18	T	Qgt	CY,G	D,S	Tca	1.3	32.48	6-26-47	-
8da	R. C. Henry	Du	45.8	18	C	Qgt	N	N	Tco	1.1	16.40	6-26-47	P
9aa	D. E. McDaniels	B	63.0	18	T	Qgt	CY,E	D,S	Tca	1.0	15.00	6-26-47	-
9bb1	City of Huron	B	60	18	T	Qgt	N	N	Tca	1.5	16.00	6-25-47	-
9bb2	do.	B	60	12	P	Qgt	T,E	P	L	-	6.	6-25-47	-
9bb3	do.	B	82	12	P	Qgt	T,E	P	L	-	10.	6-25-47	-
9bc1	do.	B	60	12	P	Qgt	N	N	L	-	10.	6-25-47	-
9bc2	do.	B	74	12	P	Qgt	T,E	P	L	-	15.	6-25-47	-

See footnote at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
110-62- 9bc3	City of Huron	B	83	12	-	Qgt	T,E	P	L	-	10.	7-25-47	-
10bb	O. A. Johnson	Dr	900	1	P	Kd	F12.0	D,S	-	-	-	6-30-47	-
11aa	R. M. Fox	B	16	12	W	Qgt	CY,H	D,S	Tca	.8	9.82	6-30-47	P
11ab1	-	Du	-	18	T	Qgt	N	N	Tco	1.1	5.49	6-30-47	-
11ab2	-	B	-	18	C	Qgt	N	N	Tco	2.3	6.80	6-30-47	-
11ad	H. Baum	Du	28.4	30	W	Qgt	CY,H	D,S	Tca	1.0	3.30	6-30-47	P
11bb	R. H. Stratman	Dr	870	1	P	Kd	F10.0	D,S	-	-	-	6-30-47	-
11ca	-	Dr	826	-	-	Kd	-	N	-	-	-	-	-
11cc	J. Decker	B	30	24	W	Qgt	CY,H	D,S	Bp	.4	13.96	6-27-47	P
11cd1	-	B	15	24	W	Qgt	N	N	L	-	12.	9-17-47	-
11cd2	-	Du	-	24	W	-	CY,G	N	Tco	.9	8.45	6- 1-48	-
11da	-	Du	15	20	P	Qgt	CY,H	S	Bp	.6	6.50	7-23-47	P
12dd	F. Sunderson	Du	40	24	T	Qgt	CY,G	O	Tco	1.5	8.62	4-17-47	P
13aa	H. J. Lemke	Dr	1005	1¼	P	Kd	F25.0	D,S	-	-	-	6-27-47	-
13ab	A. Taylor	Dr	-	1	P	Kd	F2.0	D,S	-	-	-	6-27-47	-
13ad	-	-	50	-	-	-	-	-	-	-	-	-	P
13cb	J. Anderson	Dr	820	1½	P	Kd	F7.5	D,S	-	-	-	6-30-47	-
13da1	F. J. Halbur	Dr	840	1	P	Kd	F3.0	D,S	-	-	-	6-30-47	-
13da2	do.	B	44.2	18	T	Qgt	CY,H	N	Tca	.7	4.64	6-30-47	-
14aa	H. Lather	B	40	18	T	Qgt	CY,W	D,S	L	-	15.	6-27-47	P
14ba	J. Gleason	B	45	18	G	Qgt	CY,W	D,S	Bp	1.4	17.83	6-27-47	-
14bc	-	B	26.7	18	T	Qgt	CY,W	N	Bp	.5	17.09	6-24-47	-
15ad1	-	B	18.4	15	T	Qgt	N	N	Tca	1.3	12.00	7-17-47	-
15ad2	-	B	30	12	T	Qgt	N	N	Tca	2.0	12.20	7-17-47	-
15bb	-	B	20	18	W	Qgt	CY,H	D,S	Bp	1.2	8.15	7-23-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Beadle County--Continued								
110-62-17aa	C. Brown	B	50	18	T	Qgt	CY,W	S	Tca	0.8	19.	6-26-47	P
17ba	W. Friese	B	37.0	15	T	Qgt	CY,W	D,S	Bp	1.2	22.10	6-26-47	P
18da	-	Du	20	-	-	Qco	CY,W	S	L	-	8.	7-25-47	-
19ab	W. F. Meyer	Dr	-	-	-	Kd	F2.0	D,S	-	-	-	7-24-47	-
19dd	J. Nibelo	B	80	15	T	Qgt	N	N	Tca	1.0	19.	7-23-47	-
20aa	L. Meyer	Du	33	24	W	Qgt	CY,W	D,S	L	-	20.	6-27-47	-
20ab	W. F. Meyer	Dr	750	3/4	P	Kd	FO.6	D,S	-	-	-	6-27-47	-
20ba	W. Timm, Sr.	B	80	24	T	Qgt	CY,W	S	Bp	.9	31.70	6-27-47	-
20cd	-	B	16	18	W	Qgt	N	N	Tca	2.0	14.70	7-25-47	-
21bb	-	Dr	798	1	P	Kd	F.01	N	-	-	-	6-27-47	-
22aa	-	Dr	-	2	P	Kd	F1.5	S	-	-	-	7-23-47	60
22bb	-	Dr	-	1	P	Kd	F20.0	D,S	-	-	-	6-27-47	-
23aa	F. G. Halbur	Dr	835	1	P	Kd	F3.0	D,S	-	-	-	6-30-47	-
23bb	D. DeWolfe	B	35	18	T	Qgt	CY,W	D,S	Bp	1.0	19.07	6-27-47	P
24ad	A. Beck	Dr	-	1	P	Kd	F3.0	D,S	-	-	-	6-30-47	-
24da	E. Howard	Dr	1000	1¼	P	Kd	F10.0	D,S	-	-	-	6-30-47	-
25da	Mrs. Alice Schroeder	Dr	707	1½	P	Kd	F15.0	D,S	-	-	-	6-30-47	-
26ad	-	Dr	-	1	P	Kd	F4.0	D,S	-	-	-	6-30-47	-
26dd	C. Coulter	B	34	24	T	Qgt	CY,W	D,S	L	-	18.	6-30-47	P
27bb1	R. Winter	Dr	940	1½	P	Kd	F30.0	D,S	-	-	-	6-27-47	-
27bb2	do.	B	108	6	P	Qgt	CY,H	N	Tca	1.0	21.40	6-27-47	-
27cb	E. F. Bischoff	B	62.7	15	T	Qgt	CY,W	D,S	Tca	1.6	17.10	7- 1-47	P
29aa	R. H. Meyer	B	64	18	T	Qgt	CY,W	D,S	Tca	.7	26.03	7- 1-47	-
29da	H. Knutz	Dr	-	1	P	Kd	F2.0	D,S	-	-	-	7- 1-47	-
30aa	W. Malloy	B	70	18	T	Qgt	N	N	Tca	1.0	23.	6- 4-47	-
30ba	R. H. Carpenter	B	-	24	T	Qgt	CY,H	D,S	Tca	1.0	27.10	6- 4-47	P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
110-62-31aa	J. Seeman	Dr	-	3/4	P	Kd	F3.0	D,S	-	-	-	6-27-47	-
32aa	P. Meyers	Dr	-	1	P	Kd	F2.0	D,S	-	-	-	-	-
32dd	-	B	63.2	18	W	Qgt	CY,W	S	Tco	0.3	26.00	6- 4-47	P
33bb	M. Walters	Dr	900	1¼	P	Kd	F10.0	D,S	-	-	-	7- 1-47	-
33cd	R. M. Miller	Du	70	18	T	Qgt	CY,W	D,S	Tco	1.5	17.80	6- 4-47	C
34dc	W. Knutz, Jr.	B	85	24	T	Qgt	CY,G	D,S	Bp	.8	23.60	6- 4-47	P
35ba1	-	Dr	-	-	-	Kd	F2.5	D,S	-	-	-	6-30-47	-
35ba2	-	B	59.15	18	T	Qgt	CY,H	N	Bp	1.0	9.15	6-30-47	-
36cd1	J. Holbursh	B	60	24	C	Qgt	CY,W	S	Bp	2.0	28.10	6- 4-47	P
36cd2	do.	B	38	24	T	Qgt	CY,W	D,S	Bp	1.4	23.40	6- 4-47	P
110-63- 1aa1	-	Dr	-	2	P	Kd	F3.3	D,S	-	-	-	8-13-47	64
1aa2	-	B	60	15	W	Qgt	N	N	Tca	1.0	15.	7-20-47	-
1cd	A. Fuehren	Dr	-	1	P	Kd	F4.0	D,S	-	-	-	7- 9-47	-
1dd	-	B	-	18	T	Qgt	N	N	Tca	.3	18.30	7-20-47	-
2ab	-	B	54	18	W	Qgt	CY,W	D,S	Bp	1.3	26.90	6-11-47	P
2dd	F. Jacobs	B	55.7	18	T	Qgt	CY,W	D,S	Bp	1.5	31.50	7- 9-47	P
3cd	F. W. Friese	Du	62	-	-	Qgt	CY,W	D,S	L	-	40.	7- 9-47	P
4dc	-	B	-	18	T	Qgt	CY,W	D,S	Tco	1.1	28.71	7- 9-47	P
5ad	Orville Public Sch.	B	65	18	T	Qgt	CY,W	D,S	Bp	1.0	32.16	7- 9-47	P
5dc	K. Peterson	B	58	24	T	Qgt	CY,W	D,S	L	-	28.	7-10-47	P
6ad	H. Andreson	Du	60	36	C	Qgt	CY,W	D,S	Bp	.5	31.75	7-10-47	P
7ab	Liebnow	B	56	18	T	Qgt	CY,W	D,S	Bp	.8	28.72	7-10-47	P
7cc	H. W. Friese	B	-	6	T	Qgt	CY,W	S	Bp	.7	23.10	7-11-47	P
8ab	-	Du	25	-	-	Qgt	CY,W	S	L	-	15.	7-23-47	-
8ba1	C. W. Scheel	B	59	18	T	Qgt	CY,W	D,S	Bp	1.4	37.50	7-10-47	P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Beadle County--Continued								
110-63- 8ba2	C. W. Scheel	B	71	18	T	Qgt	CY,W	D,S	L	-	32.	7-10-47	P
9ba	M. School	B	70	18	W	Qgt	CY,W	D,S	Bp	1.7	31.70	7- 9-47	P
9da	H. Lou	B	-	24	T	Qgt	CY,W	D,S	Bp	1.6	70.60	2-11-47	P
10da	E. Smith	Dr	815	1	P	Kd	F10.0	D,S	-	-	-	7-10-47	63
11ba	H. C. Johnson	Dr	800	3/4	P	Kd	F1.5	D,S	-	-	-	7- 9-47	-
11dd	G. Jones	B	65	18	T	Qgt	CY,W	D,S	Tco	1.1	39.55	7- 9-47	P
12ab	Dr. C. S. Betts	B	37.2	24	W	Qgt	CY,H	D,S	Tco	1.7	24.85	6- 4-47	P
12bb	R. L. Brock	B	80	24	T	Qgt	CY,W	D,S	L	-	40.	7- 9-47	P
12dd	Dr. C. S. Betts	B	46.5	36	W	Qgt	N	N	Tco	.6	12.25	6- 4-47	-
13ad	J. Fuehren	B	50	-	T	Qgt	CY,W	D,S	Bp	1.5	25.45	6- 4-47	P
14ba	-	Dr	-	2	P	Kd	F5.0	D,S	-	-	-	7-21-47	65
14da	-	B	-	18	T	Qgt	CY,H	D,S	Bp	3.4	34.62	7- 9-47	P
15cc	W. J. Gorham	Dr	-	1	P	Kd	F6.0	D,S	-	-	-	6-11-47	-
16ba	L. Scheel	Dr	800	1	P	Kd	F4.0	D,S	-	-	-	7-10-47	-
17bc	L. R. Dohl	Dr	850	1¼	P	Kd	F1.0	D,S	-	-	-	7-10-47	-
18ab	-	B	-	-	-	Qgt	CY,W	S	L	-	15.	7-18-47	P
18bb	-	Dr	918	-	-	Kd	N	N	-	-	-	-	-
18cc	-	Du	36.4	24	T	Qgt	CY,W	O	Bp	1.3	19.42	6-11-46	P
19bb	E. Hahre	Du	15	24	T	Qal	CY,W	S	Bp	2.5	8.50	6-11-47	P
19cd	-	Du	10	24	W	Qco	CY,H	N	Bp	.6	6.70	7-24-47	-
20aa	Agnes E. Miller	Dr	830	1¼	P	Kd	F3.0	D,S	-	-	-	7-10-47	-
20cd	-	Dr	928	2	P	Kd	F25.0	D,S	-	-	-	6-11-47	-
21bd	G. Ernster	Dr	-	1	P	Kd	F5.0	D,S	-	-	-	7-10-47	-
21dc	O. Wieland	Dr	-	1	P	Kd	F4.0	D,S	-	-	-	6-11-47	-
22cc	-	Dr	840	-	P	Kd	N	N	-	-	-	-	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
110-63-22cd	C. Reilly	Dr	910	1¼	P	Kd	F15.0	D,S	-	-	-	7-10-47	-
23ba	R. W. Groothius	B	83	18	W	Qgt	CY,H	D,S	L	-	30.	7- 9-47	P
23cd	-	B	-	18	W	Qgt	CY,W	D,S	Bp	1.5	31.10	7- 9-47	P
24aa	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	7-24-47	-
24bb	E. V. Hurd	Dr	880	1	P	Kd	F8.0	D,S	-	-	-	7- 9-47	-
24cc	J. Hurd	B	61	18	T	Qgt	CY,H	D	Tca	.5	18.50	7- 9-47	P
24dd	T. J. Meyer	Du	50.0	36	N	Qgt	N	N	L	-	4.	6- 4-47	-
25ab	T. Veuables	Du	72	30	T	Qgt	CY,W	D,S,O	Tca	.9	22.34	6-11-46	-
25ba	P. K. Drost	Dr	-	1	P	Kd	F2.0	D,S	-	-	-	7- 9-47	-
25cb	G. Mencke	Dr	963	2	P	Kd	F11.0	D,S	-	-	-	7- 9-47	-
26cb	R. Ortbahn	Dr	-	1¼	P	Kd	F2.5	D,S	-	-	-	7- 9-47	-
29ac	A. Bolte	Dr	800	1¼	P	Kd	F3.0	D,S	-	-	-	6-11-47	-
29dd	R. Ortbahn	Dr	-	3/4	P	Kd	F4.0	D,S	-	-	-	6-11-47	-
30bc	J. Sprecker	Dr	842	1¼	P	Kd	F40.0	D,S	-	-	-	6-11-47	-
30cc	E. LeGrand	Dr	-	3/4	P	Kd	F3.0	D,S	-	-	-	6-11-47	-
30dc		Dr	-	-	-	Kd	F2.C	D,S	-	-	-	7-29-47	-
31ad1	C. Chamber	Dr	-	1	P	Qgt	FO.3	D,S	-	-	-	6-11-47	-
31ad2	" do.	Du	22.5	48	C	Qgt	CY,H	N	Bp	.5	12.50	6-11-47	P
31bb	R. Chapman	Dr	-	1	P	Kd	F4.0	D,S	-	-	-	6-11-47	-
32da	Town of Virgil	Dr	1020	2	P	Kd	F14.0	P	-	-	-	8- 9-47	C
32db	-	Du	30.6	12	T	Qgt	CY,H	N	Bp	.6	12.50	6-11-47	P
33aa	-	Dr	-	-	-	Kd	F2.0	D,S	-	-	-	7-10-47	-
33cb	-	Du	15	-	-	Qgt	CY,W	S	L	-	5.	7-23-47	P
33dd	L. Mettler	B	30	24	T	Qgt	CY,W	D,S	Bp	1.3	19.17	7-10-47	P
34cd	W. O. Schroeder	Du	36.8	48	C	Qgt	CY,W	S	Bp	1.6	16.92	7-10-47	P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
110-63-35cd	E. Bauder	Du	30	18	T	Qgt	CY,W	D,S	Bp	1.8	15.30	6- 3-47	C
35dd	-	Dr	-	-	-	Kd	FO.5	N	-	-	-	7-23-47	P
36cc	G. Krutzfeldt	Dr	780	1	P	Kd	F5.0	D,S	-	-	-	7- 9-47	-
110-64- 1ab	-	B	-	14	W	Qgt	CY,W	D,S	Tco	.5	18.50	7-14-47	P
1ba	-	Du	32.3	60	C	Qgt	CY,W	O	Bp	.3	20.60	4- 8-46	-
1cc	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	10-17-47	-
2ba	-	B	-	18	T	Qgt	CY,W	D,S	L	-	22.	10-17-47	P
2dd	-	B	-	30	-	Qgt	CY,W	D,S	L	-	18.	10-17-47	P
3cd1	-	Dr	-	-	-	Kd	F7.0	S	-	-	-	10-17-47	66
3cd2	-	B	20	20	T	Qgt	CY,H	D	Bp	1.0	12.70	10-17-48	-
4ba	A. Stogeman	Dr	850	1¼	P	Kd	F5.0	D,S	-	-	-	6-30-48	-
4cb	F. Eichstadt	B	-	18	T	-	CY,W	S	Tco	.6	9.80	6-30-48	P
5aa1	M. Erion	B	60	24	W	Qgt	CY,W	S,O	Tco	1.5	17.45	4- 8-46	P
5aa2	-	-	-	-	-	-	-	-	-	-	-	-	P
6cc	Paddelford	Du	20	36	W	-	CY,W	D,S	Tco	1.5	7.94	7- 7-48	-
7aa	R. Mettler	Dr	870	1¼	P	Kd	F15.0	D,S	-	-	-	7- 7-48	65
8ad	-	Du	-	48	C	-	-	-	-	-	-	-	-
8bb	R. DuBois	B	45	18	T	-	CY,H	D,S	L	-	25.	7- 7-48	-
8da	O. Sprecher	Du	33	48	C,P	-	CY,W	D,S	L	-	14.	6-30-48	-
9dd1	-	Dr	-	-	-	Kd	F2.0	D,S	-	-	-	10-17-47	-
9dd2	-	Dr	-	3	P	Kd	FO.5	N	-	-	-	10-17-47	-
10ab	-	Dr	-	-	-	Kd	F2.5	D,S	-	-	-	10-17-47	65
11aa	-	B	40	-	-	Qgt	CY,W	D,S	L	-	20.	10-17-47	P
11ba	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	10-17-47	-
11dc	-	Dr	-	-	-	Kd	F1.5	D,S	-	-	-	10-17-47	-

See footnotes at end of table...

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
110-64-13bc	-	B	26.4	18	W	Qgt	CY,H	D	Bp	1.8	16.20	10-18-47	-
13dd	E. Kahre	Du	36.1	24	T	Qgt	CY,W	D,S	Bp	1.6	17.70	6-11-47	P
14aa	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	10-17-47	-
14bb	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	10-17-47	-
14dc	-	Dr	860	1¼	P	Kd	F3.0	D,S	-	-	-	10-18-47	66
15ad	-	B	15	20	T	Qal	CY,W	S	Tco	1.8	5.30	10-17-47	-
15dc	-	Dr	-	-	-	Kd	F2.0	D,S	-	-	-	10-17-47	-
16bb	-	B	-	18	T	-	CY,W	S	Tco	1.9	28.99	6-30-48	-
16dc	-	-	-	-	-	-	-	-	-	-	-	-	P
17ba	-	Du	50	48	C	Qgt	CY,W	D,S,O	Bp	1.9	6.80	6-11-46	-
17cb	-	B	-	18	T	-	CY,W	N	Tco	1.0	16.53	7- 7-48	-
18aa	J. Andresen	Dr	825	1¼	P	Kd	F6.0	D,S	-	-	-	7- 7-48	74
19cd	F. Hein	G	50	15	T	-	CY,W	D,S	Tco	1.7	26.95	7- 7-48	-
20ad	F. Hanson	B	60	18	T	-	CY,W	D,S	L	-	30.	7- 7-48	-
21ab	-	B	59.8	18	T	-	CY,H	N	Tca	2.2	25.08	7- 7-48	-
21dd	-	B	60	10	T	Qgt	CY,W	D,S	Tca	.2	26.20	10-18-47	-
22aa	-	Dr	-	-	-	Kd	F2.0	D,S	-	-	-	10-17-47	-
22bb	-	B	-	18	T	-	CY,N	N	Bp	1.3	29.03	7- 7-48	-
23cd	-	Dr	850	-	-	Kd	F1.5	D,S	-	-	-	10-18-47	64
24ad	H. J. Landrigan	B	30.5	15	P	Qco	CY,W	D,S	Bp	1.7	10.10	6-11-47	P
24dd	-	Dr	860	-	-	Kd	F4.0	D,S	-	-	-	10-18-47	-
25dd	P. Horn	Dr	850	1	P	Kd	F10.0	D,S	-	-	-	6-11-47	-
26aa	-	Dr	850	-	-	Kd	F2.0	D,S	-	-	-	10-18-47	-
26cd	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	10-18-47	67
26dc	-	B	-	-	-	Qgt	CY,W	D,S	L	-	18.	10-18-47	P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
110-64-27ba	-	B	28.0	24	T	Qgt	CY,G	D,S	Bp	1.8	19.90	10-18-47	P
28dd	-	B	34.2	18	T	Qgt	CY,H	N	Tca	1.6	24.05	10-18-47	-
29aa	-	-	-	-	-	-	-	-	-	-	-	-	P
29bb	B. F. McBride	Dr	835	3/4	P	Kd	F5.0	D,S	-	-	-	7- 7-48	-
30aa	-	B	19.6	18	T	-	N	N	Tca	1.5	11.84	7- 7-48	-
31cd	E. Oestreich	Dr	16	1½	P	Q	CY,W	D,S	L	-	14.	7- 7-48	-
32aa	L. D. Shoemacker	B	38.9	15	T	-	CY,W	D,S	Tca	1.1	19.17	7- 7-48	C
32dc	A. Opperman	Dr	850	1¼	P	Kd	F12.0	D,S	-	-	-	7- 7-48	67
34bb	-	Dr	-	1½	-	Kd	F6.7	S	-	-	-	10-18-47	67
34cc	-	Dr	900	-	-	Kd	F3.0	D,S	-	-	-	10-18-47	-
35ab	-	B	20	-	-	Qgt	CY,W	D,S	L	-	12.	10-18-47	P
35dd	-	Dr	850	-	-	Kd	F1.0	D,S	-	-	-	10-20-47	62
36dc	-	B	75	18	T	Qgt	CY,W	D,S	L	-	15.	6- 3-47	C
110-65- 1ad	W. Boldt	B	19.7	18	T	Qgt	CY,W	D,S	Bp	1.0	7.75	8-23-48	51P
1bb	-	B	-	18	T	Qgt	CY,W	S	-	-	5.	8-23-48	51P
1cd	W. Boldt	B	25.0	24	W	Qgt	CY,W	D,S	Tca	1.3	18.20	8-23-48	51P
2cc	E. Wiand	Dr	-	1¼	P	Kd	F3.0	D,S	Tca	1.0	-	8-23-48	72
2da	-	Dr	-	1	P	Kd	F10.0	D,S	Tca	3.0	-	8-23-48	76
4ab	-	Dr	-	1¼	P	Kd	F4.0	D,S	Tca	3.0	-	8-24-48	74
4cc	-	B	65	-	-	Qco	-	D,S	L	-	10.	8-24-48	50P
4dd	R. Mehling	B	58.6	18	T	Qgt	CY,W	D,S,O	Bp	1.3	16.22	8-23-48	50P
7aa	Eggleston Bros.	Dr	-	1	P	Kd	F5.0	D,S	Tca	3.0	-	8-19-48	69
7dc	-	B	30.0	18	W	Qgt	N	N	Tco	1.0	23.08	8-20-48	-
8aa1	K. Fisher	B	65.1	18	T	Qco	CY,G	D	Tca	.8	11.80	-	50P
8aa2	do.	Dr	-	1¼	P	Kd	F2.0	D,S	Tca	4.5	-	8-24-48	72
8dd	W. Schroeder	B	43.1	24	W	Qco	CY,W	D,S	Tco	2.0	18.01	8-19-48	52P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
110-65- 9ba	-	B	37.4	24	T	Qco	CY,W	D,S,O	Tca	0.6	4.77	8-23-48	50P
10cb	F. Diekhoff	D	43.7	24	T	Qgt	CY,G	D,S	Tca	2.0	13.30	8-24-48	51P
12cd	A. Boldt	Dr	-	1¼	P	Kd	F3.0	D,S	Tca	2.0	-	8-23-48	69
13cb	W. Radcliff	B	61.1	-	-	Qgt	CY,W	D,S	Dp	.5	5.20	8-23-48	52P
13dd	W. Goodall	Dr	-	1½	P	Kd	F6.0	D,S	Tca	315	-	8-23-48	72
15dc	W. Davis	Dr	-	1	P	Kd	F5.0	D,S	Tca	3.0	-	8-24-48	76
16bc	G. M. Fisher	B	48.4	18	W	Qco	CY,W	D,S	Tca	.5	22.31	8-19-48	52P
16dc	Public School	Dr	900	1¼	P	Kd	F22.0	P	Tca	1.8	-	8-24-48	62P
17aa	G. Diekhoff	B	35.3	-	-	Qco	CY,W	D,S	Tco	1.0	13.49	8-19-48	51P
17cb	H. Kraust	B	-	-	-	Qco	CY,W	D,S	L	-	20.	-	51P
19aa	-	Dr	-	2	P	Kd	F1.0	N	Tca	2.5	-	8-19-48	61
20bc	-	B	40.2	18	T	Qco	CY,H	N	Tco	1.0	33.69	8-19-48	52P
21ab	A. Peterson	Dr	1200	2	P	Kd	F10.0	D,S	Tca	1.5	-	8-24-48	70
22cd	-	Dr	900	1½	P	Kd	F3.0	D,S	Tca	2.5	-	8-23-48	70
24bc1	Floyd	Dr	850	1½	P	Kd	F35.0	S	Tca	1.0	-	8-23-48	72
24bc2	do.	B	44	-	-	Qco	CY,H	P	L	-	12.	8-23-48	52P
25dc1	M. C. Eggleston	Dr	860	2½	P	Kd	F5.0	S	Tca	2.5	-	8-20-48	77
25dc2	do.	Dr	860	1½	P	Kd	F4.5	D	Tca	3.0	-	8-20-48	71
26aa	D. Schiltz	Dr	830	1¼	P	Kd	F15.0	D,S	Tca	2.5	-	8-23-48	72
26cd	-	Dr	860	2	P	Kd	F3.0	D,S	Tca	3.5	-	8-20-48	73
27dc	F. Wiand	B	52.4	18	W	Qgt	CY,W	D,S	Tca	1.0	38.18	8-20-48	51P
28bb	L. Ransom	B	36.1	24	T	Qco	CY,W	D,S	Tco	2.0	19.91	8-19-48	51P
29ad	C. Hanson	Dr	-	2	P	Kd	F5.0	D,S	Tca	1.5	-	8-20-48	70
30bb	-	Dr	-	1	P	Kd	F1.0	S	Tca	2.5	-	8-24-48	62
30dd	M. Coil	Dr	-	2	P	Kd	F2.0	D,S	Tca	1.5	-	8-20-48	66

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
						Beadle County--Continued							
110-65-31ab	F. Coil	Dr	-	1¼	P	Kd	F1.5	D,S	Tca	2.0	-	8-20-48	66
32ba	H. Hill	Dr	-	3/4	P	Kd	F1.0	D,S	Tca	2.0	-	8-20-48	67
32cc	L. Sammons	Dr	-	2	P	Kd	F5.0	D,S	Tca	1.8	-	8-20-48	72
33ab	-	B	17.7	18	W	Qco	CY,N	N	Tco	2.0	9.24	8-20-48	-
34aa	F. Herman	B	82	-	-	Qgt	CY,W	D,S	L	-	65.	8-20-48	51P
34bc	-	B	24.2	-	-	Qco	CY,W	D,S	Tco	1.0	6.90	8-20-48	50P
35cd1	M. E. Palmer	B	26.5	24	P	Q	CY,H	D	Tca	1.1	16.75	8-20-48	C
35cd2	do.	D	9	-	-	Qco	CY,W	S	L	-	3.	8-20-48	50P
36aa	J. Eggleston	Du	23.1	24	W	-	CY,H	D,S	Tca	1.5	10.69	8-20-48	51P
111-59-31dd	P. J. Murphy	B	60	24	-	Qgt	CY,H	D,S,O	Tca	1.0	17.48	8-18-48	-
111-60-10bb	H. Johannsen	Dr	110	3	P	Kb	CY,W	D,S	-	-	-	-	-
30cb	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	10-23-47	-
111-61- 2da	-	Dr	-	-	-	Kd	F1.5	D,S	-	-	-	8-29-47	-
3ab	G. Day	Dr	930	1	P	Kd	F4.0	D,S	-	-	-	7-11-47	-
3bb	L. Newland	Dr	-	1¼	P	Kd	F3.0	D,S	-	-	-	7-11-47	62
4aa	P. Katz	Dr	1050	3/4	P	Kd	F2.0	D,S	-	-	-	7-11-47	-
5aa	-	Du	44.5	36	C	Qgt	CY,W	D,S	Dp	1.0	33.20	6- 2-47	C
5bc1	E. J. Albee	Dr	832	3/4	P	Kd	F15.0	D,S	-	-	-	7-11-47	-
5bc2	-	Dr	678	-	P	Kcg	N	N	-	-	-	-	-
5dd	-	Dr	-	2	P	Kd	F.01	N	-	-	-	8-15-47	-
7bb	G. Newbarth	B	28	18	W	Qgt	N	O	Tcu	1.1	3.81	4- 6-46	-
7dd	R. Burnett	Dr	700	1½	P	Kd	F18.0	D,S	-	-	-	7-11-47	-
8cc	do.	Dr	760	1¼	P	Kd	F5.0	S	-	-	-	7-11-47	-
9aa	Public School	Dr	200	3	P	Kcg	CY,H	D	Dp	.2	34.90	7-11-47	-
9bb	-	-	-	-	-	-	-	-	-	-	-	-	P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
				Beadle County--Continued									
111-61- 9bc1	V. Justus	Dr	810	3/4	P	Kd	F4.0	D,S	-	-	-	7-11-47	-
9bc2	do.	Du	38	24	W	Qgt	CY,H	N	Tca	1.7	18.97	7-11-47	-
9dc	-	-	-	-	-	-	-	-	-	-	-	-	P
10bc	H. Clagg	Dr	-	3/4	P	Kd	FO.2	D,S	-	-	-	7-11-47	-
10cc	E. Baseman	Dr	800	3/4	P	Kd	F1.5	D,S	-	-	-	-	-
12da	-	Dr	-	-	-	Kd	F4.0	D,S	-	-	-	10-22-47	-
13ad	-	Dr	-	2	P	Kcg	N	N	-	-	-	-	-
13ba	-	Dr	200	3	P	Kcg	CY,W	D,S	-	-	-	-	-
14cc	-	Dr	750	-	-	Kd	F1.5	D,S	-	-	-	10-27-47	-
15ab	-	Dr	-	3/4	-	Kd	F3.0	D,S	-	-	-	7-11-47	-
15dd	R. V. Ramsell	Dr	750	-	P	Kd	F2.0	D,S	-	-	-	10-27-47	-
16cd1	A. Keehn	Dr	640	1¼	P	Kd	F6.0	D,S	-	-	-	7-11-47	-
16cd2	do.	Dr	683	1	P	Kd	F.01	N	-	-	-	7-11-47	-
17cb	D. Hay	Dr	-	-	-	Kd	F2.0	D,S	-	-	-	7-12-47	-
17dc	C. F. Newland	Dr	820	1	P	Kd	F4.0	D,S	-	-	-	7-11-47	-
18aa	R. Stearteay	Dr	780	1¼	P	Kd	F12.0	D,S	-	-	-	7-11-47	-
18bc	V. J. Lips	Dr	840	1¼	P	Kd	F10.0	D,S	-	-	-	7-11-47	-
19ad	L. Arteman	Dr	790	1¼	P	Kd	F5.0	D,S	-	-	-	7-12-47	-
19bc	L. I. Bradmire	Dr	800	1	P	Kd	F2.0	D,S	-	-	-	7-11-47	-
19cc	Heckenpiable	Dr	-	1	P	Kd	F6.0	D,S	-	-	-	7-11-47	-
19da	-	Dr	836	-	P	Kd	N	N	-	-	-	-	-
22cc	-	B	40	-	-	Qgt	CY,G	D,S	L	-	25.	10-27-47	51P
23cb	-	Dr	750	3/4	P	Kd	F1.5	D,S	-	-	-	10-27-47	-
24cd	-	Dr	165	3	P	Kcg	CY,W	D,S	-	-	-	10-23-47	-
24dc	-	Dr	770	1¼	P	Kd	F1.5	D,S	-	-	-	10-23-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
111-61-25aa	-	Dr	-	-	-	Qgt	CY,H	D,S	Bp	0.0	24.00	10-23-47	57P
25cb	-	Dr	1000	2	P	Kd	F60.0	D,S	L	-	25.	10-27-47	-
26aa	-	B	60	18	-	Qgt	CY,W	D,S	L	-	25.	10-27-47	50P
26bc	G. Vernheist	Dr	750	-	-	Kd	F2.0	D,S	-	-	-	10-27-47	-
26cb	-	Dr	750	-	-	Kd	F1.0	D,S	-	-	-	10-27-47	60
27ad	-	B	35	-	-	Qgt	CY,H	P	L	-	25.	10-27-47	-
27cc	-	B	70	-	-	Qgt	CY,G	D,S	L	-	30.	10-27-47	50P
27dd	-	B	80	-	-	Qgt	CY,G	D,S	L	-	30.	10-27-47	49P
28aa	-	B	40	-	-	Qgt	CY,G	D,S	L	-	25.	10-27-47	54P
28cc	-	Du	15	-	-	Qgt	CY,H	D,S	L	-	15.	7-28-47	54P
29cb	-	Dr	400	-	-	Kcg	N	N	-	-	-	-	-
30aa	H. A. Kline	B	50	-	-	Qgt	CY,H	D,S	L	-	30.	8-14-47	57P
30bc1	B. Phillips	Dr	-	1	P	Kd	F4.0	D	-	-	-	7-17-47	-
30bc2	S. Biggerstaff	Dr	266	3	P	Kcg	CY,H	D	-	-	-	-	-
30bc3	do.	B	47	24	W	Qgt	CY,G	S	Bp	1.0	19.07	7-14-47	49P
31ad1	-	Dr	-	1	P	Kd	F3.0	D,S	-	-	-	7-22-47	-
31ad2	-	Dr	-	-	-	Kd	F.01	N	-	-	-	7-11-47	-
31ba	H. Newell	B	70	18	T	Qgt	CY,W	D,S	Bp	.9	27.60	7-14-47	-
31cc	-	Dr	735	-	P	Qgt	N	N	-	-	-	-	-
31dc	G. R. Munion	B	42	15	T	Qgt	CY,H	N	Tca	1.0	12.00	9-18-47	-
31dd	-	B	40	-	-	Qgt	CY,H	S	L	-	15.	9-18-47	-
32bb	-	Dr	960	-	-	Kd	N	N	-	-	-	-	-
32dc	-	Dr	240	-	-	Kcg	CY,E	D,S	-	-	-	-	-
33bc	-	Dr	-	-	-	Kd	F2.5	D,S	-	-	-	7-28-47	62
33da	-	B	30	-	-	Qgt	CY,W	D,S	L	-	22.	10-27-47	59P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
111-61-34ad	-	B	80	4	F	Qct	CY,W	D,S	L	-	28.	10-27-47	51P
34cc	-	B	57.5	18	T	Qgt	CY,H	O	Dp	1.2	14.35	6-23-47	50P
34cd	-	B	40	-	-	Qgt	CY,H	D,S	L	-	22.	10-23-47	55P
34dc	-	Dr	200	-	-	Kcg	CY,G	D,S	-	-	-	-	-
35cc	-	Dr	-	-	-	Kd	F2.0	D,S	-	-	-	10-23-47	-
35dc	W. H. Allen	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	10-23-47	-
111-62- 1aa	S. Rhoads	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	7-12-47	-
1bc	O. V. Olsen	Dr	790	3/4	P	Kd	F0.7	S	-	-	-	7-12-47	60
1cc	J. D. Lemon	Dr	780	1	P	Kd	F3.0	D,S	-	-	-	-	-
2bc	-	Dr	-	1¼	P	Kd	F0.8	N	-	-	-	7-15-47	59
2cc	-	Dr	-	2	P	Kd	P,H	S	Tca	2.0	10.	8-14-47	-
3ad	-	Du	7.0	60	C	Qgt	CY,W	N	Tca	.0	5.00	8-14-47	-
3dd	G. Gosch	Dr	-	1½	P	Kd	F2.0	D,S	-	-	-	7-15-47	-
4ab	H. Smith	Dr	800	1¼	P	Kd	F10.0	D,S	-	-	-	7-15-47	C
5bc	E. Hiles	Du	40	36	W	Qgt	CY,W	S	L	-	25.	7-15-47	-
6cc	I. E. Benson	Du	52	24	T	Qgt	CY,W	D,S	Dp	1.4	27.95	7-15-47	49P
7ad	E. Hiles	Dr	1100	3/4	P	Kd	F15.0	D,S	-	-	-	7-15-47	-
7bb	-	B	46.6	24	T	Qgt	CY,H	D,S	Tca	1.5	15.24	7-15-47	-
7bc	B. H. Smalley	B	50	18	T	Qgt	N	N	Tca	1.5	15.50	7-14-47	-
7cd	N. Poulisse	B	45	18	T	Qgt	CY,W	D,S	Bp	1.1	14.76	7-14-47	50P
7da	B. Mason	B	68	24	P	Qco	N	N	Tca	1.0	10.65	8-19-47	-
8cb	D. Kenison	Dr	970	1	P	Kd	F10.0	D,S	-	-	-	7-15-47	-
8dd	A. Matson	B	43.4	24	T	Qgt	CY,W	D,S	Bp	1.7	17.40	7-16-47	49P
10ad	-	Dr	-	2	P	Kd	F1.5	S	-	-	-	8-14-47	60
10dd	G. Coutts	Dr	940	½	P	Kd	F0.7	D,S	-	-	-	7-17-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
111-62-11ad	G. W. Smith	B	22	24	T	Qgt	CY,W	S	Bp	0.8	12.91	7-12-47	54P
11da	E. Trams	Dr	820	2	P	Kd	F12.0	D,S	-	-	-	7-12-47	-
12aa	-	Du	18.7	24	T	Qgt	N	O	Tca	.7	8.41	4-19-47	-
13bb	-	Dr	788	-	P	Kd	N	N	-	-	-	-	-
13cb	A. Deerscheid	Dr	295	3	B	Kcg	CY,G	D,S	-	-	-	-	-
13dd	W. R. Main	Dr	870	3/4	P	Kd	F6.0	D,S	-	-	-	7-12-47	-
14ad	-	Dr	-	1¼	P	Kd	F6.0	D,S	-	-	-	7-12-47	-
14dd	H. Kutzler	Dr	289	3	P	Kcg	CY,W	D,S	-	-	-	-	-
15ad	-	Dr	760	-	P	Kd	N	N	-	-	-	-	-
15dd	H. Bender	Dr	815	1	P	Kd	F2.0	D,S	-	-	-	-	-
16bb	-	B	40	18	W	Qgt	CY,W	S	Bp	2.8	14.70	7-16-47	55P
17bc	W. Doulittle	B	49	18	T	Qgt	CY,W	D,S	Bp	.9	16.15	7-16-47	49P
18cd	-	B	20	10	T	Qgt	N	N	L	-	18.	8-19-47	-
18dc	E. Husted	Du	35	30	W	Qgt	CY,W	D,S	Bp	.4	17.92	7-15-47	49P
19da	H. Mulder	B	50	18	T	Qgt	CY,W	D,S	Bp	.7	16.60	7-16-47	49P
21ad	J. Schultz	Du	26	30	W	Qgt	CY,H	S	Bp	1.1	11.29	7-16-47	51P
21cd	H. Schultz	Du	40	36	C	Qgt	CY,W	D,S	Bp	.4	18.17	7-16-47	50P
22ad	C. Schilling	Dr	800	1¼	P	Kd	F7.0	D,S	-	-	-	7-17-47	-
23aa	A. K. Gardener	Dr	775	1	P	Kd	F4.0	D,S	-	-	-	7-12-47	-
23dd	A. M. Swain	B	75	18	G	Qgt	CY,W	D,S	Bp	.8	18.22	7-12-47	51P
24ad	-	Dr	-	1	P	Kd	F2.0	D,S	-	-	-	7-17-47	-
24bb	L. Miller	Dr	810	1¼	P	Kd	F12.0	D,S	-	-	-	7-12-47	-
25ad1	Huron Golf Club	Dr	-	-	-	Kd	F6.0	I	-	-	-	7-17-47	-
25ad2	J. Crauford	Dr	800	1¼	P	Kd	F6.0	D,S	-	-	-	7-17-47	-
25bc	E. A. Korty	Dr	780	1¼	P	Kd	F3.0	D,S	-	-	-	7-17-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
111-62-25da	W. D. Conrad	Dr	786	1½	P	Kd	F5.0	D,S	-	-	-	7-17-47	-
26ea	O. L. Youngs	Dr	800	1	P	Kd	F6.0	D,S	-	-	-	7-17-47	-
26ad	W. Harrington	B	35	18	T	Qgt	CY,H	D	Bp	1.2	13.37	7-17-47	-
26dc	E. A. Anderson	B	40	18	T	Qgt	CY,G	D,S	L	-	16.	7-17-47	50P
27ad	H. E. Beck	Dr	750	3/4	P	Kd	F1.5	D,S	-	-	-	7-17-47	-
27cd1	F. Wormstadt	Dr	840	1	P	Kd	F2.5	D,S	-	-	-	8-13-47	-
27cd2	do.	B	30	18	T	Qgt	CY,W	N	Tca	.2	6.80	8-13-47	-
28ad	W. Ranft	B	40	18	T	Qgt	CY,W	D,S	Bp	2.1	14.56	7-16-47	49P
28bb1	-	B	66	14	T	Qgt	N	N	Tca	2.1	14.	8-13-47	-
28bb2	-	B	68	18	T	Qgt	N	N	Tca	2.5	20.50	8-13-47	-
28bb3	Sumers Bros.	B	65	24	T	Qgt	CY,H	D,S	Bp	1.3	28.81	7-16-47	49P
28dc	-	B	47.2	18	T	Qgt	CY,N	N	Hc	1.6	4.92	7-16-47	49P
28dd	-	B	-	18	T	Qgt	N	N	L	-	15.	8-13-47	-
29dc	E. Morgan	B	45	24	W	Qgt	CY,W	D,S	Bp	.7	21.00	7-16-47	-
30bb	H. C. Nelson	Dr	260	3	P	Kcg	CY,W	D,S	-	-	-	-	-
30da	-	B	-	18	T	Qgt	N	N	Tca	2.0	17.	7-16-47	-
31ad	M. G. Johnson	B	40	18	W	Qgt	CY,W	D,S	Bp	1.2	18.70	7-16-47	50P
31bc	A. Simentel	B	39.3	30	C	Qgt	CY,W	D,S	Bp	2.0	13.93	7-16-47	P
31dd	-	B	-	-	-	Qgt	CY,W	D,S	L	-	18.	8-13-47	-
32bb	-	Du	37.5	60	-	Qgt	C,G	S	Bp	.0	8.40	8-13-47	-
32bc	-	B	-	24	T	Qgt	N	N	Tca	.3	15.15	8-12-47	-
32ca1	J. Schultz	Dr	-	1¼	P	Kd	F3.0	D,S	-	-	-	7-16-47	-
32ca2	do.	B	33.6	18	T	Qgt	CY,H	N	Tca	1.3	8.03	7-16-47	-
32dd	W. L. Swartz	Dr	-	1	P	Kd	F2.5	D,S	-	-	-	7-16-47	61
33ad	A. J. Amundson	B	60	18	T	Qgt	CY,W	D,S	Bp	2.3	20.92	7-16-47	50P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
111-62-33cc	F. Root	B	50	18	T	Qgt	CY,H	D,S	Tca	1.0	16.	7-16-47	-
33dd	D. C. Boyd	Dr	980	1½	P	Kd	F12.0	D,S	-	-	-	7-14-47	65
34ab	R. Bales	B	45	18	T	Qgt	CY,W	D,S	Bp	2.2	20.	7-16-47	50P
35bc	E. Kotas	Dr	835	1¼	P	Kd	F3.0	D,S	-	-	-	7-16-47	-
35cd	M. R. Smith	B	30	24	C	Qgt	CY,E	S	Bp	1.6	10.46	7-16-47	61P
35da	-	Dr	-	3/4	P	Kd	F3.0	D,S	-	-	-	7-17-47	-
111-63- 1bc	Mrs. L. Randall	Dr	910	1	P	Kd	F3.4	D,S	-	-	-	7-22-47	-
1cb	C. Houck	B	42.0	24	T	Qgt	CY,W	D,S	Bp	2.0	14.71	7-18-47	50P
2ab	A. J. Schauffacher	Dr	800	1¼	P	Kd	F5.0	D,S	-	-	-	7-18-47	-
3bc	H. J. Heckenliddle	B	45	18	T	Qgt	CY,G	D	Tca	1.5	13.50	7-18-47	50P
3cb	do.	Dr	840	1	P	Kd	F3.0	S	-	-	-	-	-
3dc	L. W. Glazier	B	-	24	T	Qgt	N	N	Tca	2.0	27.	7-18-47	-
4cb	W. Michaelis	B	54.0	18	T	Qgt	CY,W	D,S	Bp	1.7	32.33	7-18-47	48P
5bc	-	B	-	15	T	Qgt	N	N	Tca	1.0	26.30	8-19-47	-
6bb	D. B. Schamp	Dr	-	1	P	Kd	F1.5	D,S	-	-	-	7-18-47	-
7ba	-	Dr	-	1¼	P	Kd	F12.0	D,S	-	-	-	7-18-47	-
7cc1	O. Haeder	Dr	69	24	W	Qgt	CY,W	D,S	Bp	1.7	15.44	7-21-47	50P
7cc2	do.	-	66	-	-	-	-	-	-	-	-	-	P
7dc	D. Wagner	Dr	800	1	P	Kd	F3.8	D,S	-	-	-	7-21-47	-
8cc	P. Haeder	Dr	950	2	P	Kd	F7.4	D,S	-	-	-	7-21-47	-
9bc	-	B	62.5	18	T	Qgt	CY,W	D,S	Tca	.6	33.37	7-21-47	49P
9dd	H. Anderson	Dr	760	3/4	P	Kd	F2.0	D,S	-	-	-	7-18-47	-
11dd	L. Sacket	Dr	816	3/4	P	Kd	F3.5	S	-	-	-	7-21-47	63
12cc	Mrs. D. Daugherty	Dr	814	1¼	P	Kd	F4.3	D,S	-	-	-	7-21-47	-
13ad	-	B	22.5	24	T	Qgt	N	N	Tca	.5	13.40	8-19-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
111-63-13bb	L. Sacket	Dr	800	1½	P	Kd	F15.0	D,S	-	-	-	7-21-47	-
14ba1	H. Dettmer	B	50	24	T	Qgt	CY,W	D,S	Bp	1.1	17.40	7-21-47	50P
14ba2	do.	B	51	5	P	Qgt	CY,W	S	Tco	.8	13.	8-19-47	-
15ab	A. Wagner	B	75	18	T	Qgt	N	N	Tca	1.1	22.60	8-19-47	-
15bc	I. Wagner	Dr	-	1¼	P	Kd	F6.0	D,S	-	-	-	7-18-47	-
15cc	G. Wagner	B	74	18	T	Qgt	CY,W	D,S	Bp	1.1	33.17	7-18-47	50P,
15dc	R. Dunnick	B	-	18	T	Qgt	CY,H	N	Tca	.8	26.70	7-18-47	-
16cd	-	B	71.7	24	T	Qgt	CY,H	N	Bp	.6	31.54	7-18-47	-
17dc	H. Langbehm	Dr	880	3/4	P	Kd	F2.0	D,S	-	-	-	7-19-47	-
18bc1	E. Langbehm	B	60	18	T	Qgt	CY,W	S	L	-	18.	7-21-47	49P
18bc2	do.	Du	37	-	-	Qgt	CY,G	D,S	Bp	1.0	18.94	7-21-47	49P
18da	-	Du	-	36	W	Qgt	N	N	L	-	15.	8-19-47	-
19dc	P. Busch	B	50	24	T	Qgt	CY,H	D,S	Bp	.3	29.48	7-21-47	55P
20ab	C. Allison	Dr	900	1¼	P	Kd	F3.0	D,S	-	-	-	7-18-47	-
21ab1	A. M. Urquhart	Dr	780	3/4	P	Kd	F0.2	D,S	-	-	-	7-18-47	-
21ab2	-	B	125	24	W	Qgt	CY,G	S	L	-	30.	7-18-47	57P
21cb	Mrs. L. Anderson	B	38	30	C	Qgt	CY,W	D,S	Bp	.5	14.64	7-18-47	49P
22ab1	C. A. McFarling	B	60	24	P	Qgt	N	N	Tca	1.0	21.80	7-21-47	-
22ab2	do.	Dr	600	1¼	P	Kd	F6.0	D,S	-	-	-	7-18-47	-
22dd	M. Bartel	Dr	-	1¼	P	Kd	F10.0	D,S	-	-	-	7-18-47	-
23cd	J. Doolittle	Dr	822	1¼	P	Kd	F8.3	D,S	-	-	-	7-21-47	63
23dc	R. W. Peterson	B	42.7	18	T	Qgt	CY,W	D,S	Tca	.7	26.30	7-21-47	49P
24cd1	G. Flowers	B	30	18	T	Qgt	N	N	Tca	1.3	21.17	7-21-47	-
24cd2	do.	Dr	812	1¼	P	Kd	F4.5	D,S	-	-	-	7-21-47	-
25bb	H. Krutzfeldt	Dr	-	3/4	P	Kd	F1.0	D,S	-	-	-	7-21-47	60

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
111-63-25da	-	Dr	-	1	P	Kd	F3.0	D,S	-	-	-	7-21-47	-
26ab	C. Lockwood	Du	65	24	W	Qgt	CY,G	D,S	Bp	1.1	24.77	7-21-47	49P
26cc	J. I. Ischetter	Dr	815	1¼	P	Kd	F5.0	D,S	-	-	-	7-18-47	-
27aa	O. McFarling	B	40	18	T	Qgt	N	N	Tca	1.5	15.50	7-18-47	-
28bb	C. McGillvery	B	41.4	18	W	Qgt	CY,W	D,S	Bp	.9	12.45	7-18-47	56P
28cb	G. Schlueter	B	59	18	T	Qgt	CY,W	D,S	Bp	2.0	27.81	7-18-47	50P
29bb	R. McBride	Du	68	24	T	Qgt	CY,W	D,S	Bp	.9	31.08	7-21-47	49P
29cb	F. Braun	Dr	1000	1¼	P	Kd	F3.1	D,S	-	-	-	7-21-47	-
30aa	F. Harden	B	55	24	T	Qgt	CY,W	D,S	Bp	1.2	29.36	7-21-47	56P
31ba	C. Quincey	Dr	-	1¼	P	Kd	F5.2	D,S	-	-	-	7-21-47	-
31cc	-	Dr	918	-	-	Kd	N	N	-	-	-	-	-
32cc1	J. J. Salisbury	B	80	24	T	Qgt	CY,H	S	Bp	1.0	22.90	6-11-47	P
32cc2	do.	B	75	24	W	Qgt	CY,W	D,S	Tca	.8	27.10	6-11-47	P
33bb	F. Langbehm	Dr	600	1¼	P	Kd	F12.0	D,S	-	-	-	7-18-47	-
33cd	E. Dunnick	B	-	24	T	Qgt	CY,W	D,S	Bp	1.2	20.20	6-11-47	P
33dd	-	B	-	6	P	Qgt	N	N	Tca	.8	10.	8-19-47	-
34aa1	E. Hall	Dr	-	1½	P	Qgt	F8.0	D,S	-	-	-	7-18-47	-
34aa2	do.	B	-	18	W	Qgt	N	N	Tca	1.5	19.55	8-19-47	-
34dc	-	B	74	24	W	Qgt	CY,H	O	Tca	.8	12.71	6-17-46	-
35ad	Leaver	Dr	1000	1¼	P	Kd	F6.7	D,S	-	-	-	7-21-47	66
35dd	-	B	58	24	T	Qgt	CY,W	D,S	Bp	1.1	25.25	6-11-47	-
36bb	-	Dr	-	2	P	Kd	F.01	N	-	-	-	8-13-47	-
36ca	-	B	-	18	T	Qgt	CY,W	N	Tca	2.3	22.00	8-19-47	-
111-64- 1aa	-	Du	30	18	T	Qgt	CY,W	D,S	L	-	20.	6- 2-47	C
1bc	D. Wharton	B	40	24	W	Qgt	CY,W	D,S,O	Bp	.4	20.20	4- 5-46	50P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
111-64- 1cc	-	Dr	860	-	P	Kd	F4.0	D,S	-	-	-	8-20-47	-
2db	C. Osmanson	Dr	1230	8	P	Kd	F5.0	N	-	-	-	8-20-47	70
3ad	-	B	60	18	-	Qgt	CY,W	D,S	L	-	35.	9-15-47	49P
4ab	-	Dr	1070	2	P	Kd	F4.0	D,S	-	-	-	10-16-47	-
5aal	H. Larson	B	62.0	-	-	Q	CY,N	N	Hp	1.1	50.10	7- 8-48	-
5aa2	do.	Dr	700	1¼	P	Kd	F6.0	D,S	-	-	-	7- 8-48	-
5bc1	E. Sibbers	B	25	18	T	Q	CY,E	D,S	Tca	.5	13.85	7- 8-48	-
5bc2	do.	Du	23.3	30	W	Q	CY,W	S	Tca	1.9	7.92	7- 8-48	-
6bb	C. Larson	Dr	1135	1½	P	Kd	F10.0	D,S	-	-	-	7- 8-48	68
7bb	F. L. Larson	Dr	800	1¼	P	Kd	F3.5	D,S	-	-	-	7- 8-48	
7dd	R. Langbehn	Dr	-	1¼	P	Kd	F4.0	D,S	-	-	-	7- 9-48	-
8aal	O. Eichstadt	B	40	18	T	Q	CY,W	D,S	L	-	34.	7- 8-48	-
8aa2	do.	B	56.4	18	T	Q	CY,N	N	Tca	2.0	38.60	7- 8-48	-
8dd1	-	Dr	-	1½	P	Kd	F15.0	D,S	-	-	-	7- 8-48	-
8dd2	-	B	43.4	24	T	Q	CY,W	S	Tca	2.6	18.34	7- 8-48	-
9da	-	B	35	-	-	Qgt	CY,W	D,S	L	-	25.	10-16-47	49P
11cc	-	B	50	18	-	Qgt	CY,W	D,S	Bp	.4	34.45	9-15-47	57P
11dd	C. Osmanson	B	55.0	24	T	Qgt	CY,W	D,S,O	Bp	1.5	30.	5-29-47	-
12cc	A. Balvin	B	32	15	T	Qgt	CY,W	D,S	Tco	.5	18.5	5-29-47	50P
12dd	J. Koester	B	82	14	T	Qgt	CY,W	D,S	Tco	.6	19.6	5-27-47	50P
13ad	-	Dr	812	-	-	Kd	F1.5	D,S	-	-	-	8-20-47	65
13bc	R. Kohlmeyer	Du	30	48	W	Qgt	CY,W	S,O	Bp	1.2	17.04	4-18-47	49P
14bb	-	B	60	18	-	Qgt	CY,W	D,S	L	-	30.	9-15-47	49P
15dc	-	B	40	-	-	Qgt	CY,W	D,S	L	-	23.	10-17-47	49P
16aal	-	B	20	-	-	Qal	N	N	L	-	9.	10-16-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Beadle County--Continued								
111-64-16aa2	-	B	25.3	20	W	Qgt	CY,W	S	Bp	3.3	14.20	10-16-47	-
17bc	-	B	16.7	15	T	Q	N	N	Bp	.3	Dry	7- 9-48	-
17dd	-	B	20.8	18	W	Qgt	CY,W	S,O	Tco	2.3	1.80	4-16-46	-
18cd	-	Dr	-	1¼	P	Kd	F10.0	S	-	-	-	7- 9-48	-
18da	A. Langbehn	B	50	24	C	Q	CY,W	D,S	Tco	.3	24.94	7- 9-48	-
18dc1	W. Struck	B	50	12	T	Q	CY,H	D	L	-	40.	7- 9-48	-
18dc2	do.	Du	73	30	W	Q	CY,W	S	L	-	15.	7- 9-48	-
19ab	M. Eichstadt	B	40	24	W	Q	CY,W	D,S	-	-	30.	-	-
20ab	-	B	27.1	18	T	Q	CY,H	D,S	Tca	.7	12.66	7- 9-48	-
20ba	-	Du	23.7	30	W	Q	CY,W	S	Tca	2.7	10.14	7- 9-48	-
20cd	-	B	27.7	24	W	Q	CY,N	N	Bp	.2	20.84	7- 9-48	-
21aa	-	Dr	-	-	-	Kd	F4.0	S	-	-	-	10-17-47	64
22aa	-	Dr	-	-	-	Kd	F2.0	D,S	-	-	-	10-16-47	-
22cd1	-	Dr	700	1¼	P	Kd	F8.0	D,S	-	-	-	10-17-47	62
22cd2	-	B	20	18	-	Qal	CY,H	N	L	-	8.	10-17-47	-
23da	T. Riedel	Du	48	18	W	Qgt	CY,W	D,S	Tca	2.0	20.	8-20-47	59P
24bb1	Town of Wolsey	Dr	930	-	-	Kd,X	F28.0	P	-	-	-	8-18-47	C
24bb2	do.	Dr	890	-	-	Kd	F	P	-	-	-	8-18-47	-
24bb3	do.	Dr	900	-	-	Kd	F8.0	P	-	-	-	8-18-47	64
24bb4	C. M. St. P. & P. RR.	Dr	-	-	-	Kd	F5.0	In,D	-	-	-	8-18-47	-
26aa	-	Du	44	48	C	Qgt	CY,G	D,S	Bp	.6	19.50	8-20-47	50P
26cb	-	B	-	-	-	Qgt	CY,W	D,S	L	-	24.	10-17-47	49P
26da	-	B	-	-	-	Qgt	CY,W	D,S	Bp	1.0	18.20	8-20-47	49P
27cd	-	Dr	800	-	-	Kd	F5.0	D,S	-	-	-	10-17-47	-
27dc	-	Dr	-	-	-	Kd	F4.0	D,S	-	-	-	10-17-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Beadle County--Continued								
111-64-28aa	-	B	40	-	-	Qgt	CY,G	D,S	L	-	21.	10-17-47	49P
28cd	-	Dr	890	1¼	P	Kd	F12.0	D,S	-	-	-	7-10-48	-
28dd	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	10-17-47	-
29ba	W. C. Meyer	B	32	18	T	Q	CY,H	D	Tco	1.7	23.75	7- 9-48	-
29cb	F. Walbert	B	36	18	T	Q	CY,W	D,S	Tco	1.0	22.20	7- 9-48	-
29dd	O. W. Risetter	B	30	24	T	Q	CY,W	D,S	L	-	14.	7- 9-48	-
30aa	P. Holst	Dr	840	1¼	P	Kd	F10.0	D,S	-	-	-	7- 9-48	-
30ad	A. Kuehl	B	52	30	W	Q	CY,H	S	Tco	1.1	19.67	7-10-48	-
30dc	H. F. Eichstadt	Dr	950	2	P	Kd	F20.0	D,S	-	-	-	7- 9-48	-
32aa	Mrs. Boesel	B	35	18	T	Q	CY,G	D,S	-	-	20.	7-10-48	-
32bb	C. Wahlert	Dr	845	1¼	-	Kd	F5.0	D,S	-	-	-	7- 9-48	-
32dd	R. Heindman	B	32	18	T	Q	CY,W	D,S	-	-	16.	7-10-48	-
33da	-	Dr	-	-	-	Kd	F4.0	D,S	-	-	-	10-17-47	-
34ab	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	10-17-47	-
35ad	C. Pierson	B	44	24	T	Qgt	CY,H	N	Bp	1.5	19.78	8-20-47	-
35bb	-	B	-	18	T	Qgt	CY,W	D,S	Tco	1.8	20.20	10-17-47	54P
35da	-	B	40	18	-	Qgt	CY,W	D,S	L	-	22.	8-20-47	50P
36bb	-	Dr	-	-	-	Kd	F8.0	D,S	-	-	-	8-20-47	-
111-65- 1aa	-	Dr	1200	1½	P	Kd	F4.0	D,S	-	-	-	7-24-48	-
2ab	S. Mosher	Dr	1140	1¼	P	Kd	F2.0	D,S	-	-	-	-	-
2cal	Mrs. F. Williams	B	52.4	24	W	Qgt	N	N	Tco	1.0	24.99	7-24-48	-
2ca2	do.	B	34.9	-	-	Qgt	CY,W	S	Bco	.5	23.21	7-24-48	50P
2ca3	do.	B	30	-	-	Qgt	CY,H	D	-	-	25.	7-24-48	49P
3bd	-	Du	8.2	48	W	Qco	CY,W	S	Tco	.0	3.75	7-30-48	59P
4bb1	C. Syring	B	45.2	-	-	Qgt	CY,H	N	Tca	.6	11.54	7-24-48	51P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Beadle County--Continued								
111-65- 4bb2	C. Syring	Dr	966	1¼	P	Kd	F26.0	D,S	-	-	-	7-24-48	-
5bc	J. Bonebreak	Dr	-	1½	P	Kd	F10.0	D,S	-	-	-	7-24-48	-
5cc1	A. Palt	Du	21.7	48	W	Qgt	CY,H	D	Tca	0.0	17.89	7-24-48	50P
5cc2	do.	B	42	24	T	Qgt	CY,H	S	L	-	18.	7-24-48	48P
6aa	T. DeHaven	Dr	-	1¼	P	Kd	F5.0	D,S	-	-	-	7-24-48	-
6bb	City of Wessington	Du	27.0	120	C	Qco	N	N	Tcu	.5	19.35	7-23-48	-
6ca	W. Timmerman	B	34.3	24	T	Qgt	CY,W	S	Tco	.5	27.60	7-21-48	49P
6da1	do.	B	42.1	24	T	Qgt	CY,G	S	Tco	1.0	15.05	7-21-48	49P
6da2	do.	B	40	24	T	Qgt	CY,G	D,S	L	-	15.	7-21-48	-
7bc	E. Scott	B	-	18	W	Qgt	CY,W	D,S	L	-	25.	7-16-48	50P
8bb	-	Dr	-	1¼	P	Kd	F5.0	D,S	-	-	-	7-24-48	-
8ca	-	B	29.0	14	W	Qgt	CY,N	N	Tco	1.0	18.86	9-20-48	-
8cc	-	B	-	-	-	Qgt	-	-	-	-	-	-	-
8da	A. Peterson	B	48.6	24	W	Qgt	CY,W	S	Bp	3.0	34.15	7-26-48	50P
13cc	S. Nettinga	Dr	927	2	P	Kd	F4.0	D,S	-	-	-	7-26-48	-
14ac	C. H. Fenner	Spring	-	-	-	Qgt	F10.0	S	-	-	-	7-26-48	-
14cc1	do.	Dr	912	-	-	Kd	F5.0	D,S	-	-	-	7-26-48	-
14cc2	do.	Du	8.2	-	P	Qgt	N	N	Tca	.8	7.60	7-26-48	-
14dd	R. L. Nettinga	Dr	800	3/4	P	Kd	F0.5	D,S	-	-	-	7-26-48	-
15bb	L. Kaufman	Dr	-	2	-	Kd	F10.0	D,S	-	-	-	7-26-48	75P
17aa	C. A. Peterson	Dr	72	-	P	Qgt	CY,W	D,S	L	-	35.	7-26-48	51P
17bc	N. Runge	B	34.6	24	W	Qgt	CY,W	D,S	Tco	.8	17.35	7-26-48	50P
17dd	L. Saboe	Dr	-	-	P	Kd	F10.0	D,S	-	-	-	7-26-48	-
18ab1	J. Hoffman	B	30.2	24	T	Qco	CY,H	D	Tca	1.6	10.10	7-26-48	51P
18ab2	do.	B	30.0	24	T	Qco	CY,W	S	Tca	.8	9.95	7-26-48	51P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
111-65-18ca	D. Mitchell	B	45	18	W	Qco	CY,W	D,S	L	-	30.	7-27-48	49P
18da	A. L. Stiner	B	33.0	24	W	Qco	CY,G	D,S	Tca	1.7	18.24	7-26-48	49P
19cb	MacMartensen	-	-	-	-	Q	CY,W	D,S	L	-	22.	7-26-48	P
20bb	L. Phillips	B	30.9	24	T	Qgt	CY,H	D,S	Tca	2.8	17.97	7-26-48	49P
20dd	C. M. Rogers	B	28.0	36	W	Q	CY,G	S	Tca	.6	16.24	7-26-48	48P
21bb	W. Weitz	B	16.8	24	P	Qco	N	N	Tca	2.5	9.79	7-26-48	-
21cc1	C. M. Rogers	Dr	950	-	P	Kd	F.05	D,S	-	-	-	7-26-48	-
21cc2	do.	B	28	6	P	Qgt	-	S	L	-	26.	7-26-48	-
22aa	M. Quiram	Dr	900	-	P	Kd	F2.0	D,S	-	-	-	7-26-48	-
23bb	-	B	20	8	T	Qgt	CY,W	S,O	-	-	15.	7-26-48	50P
23dd	N. Nettinga	B	30.3	24	T	Qgt	N	O	Tca	.0	25.36	7-27-48	-
24bc	-	Dr	-	4	P	Q	CY,W	N	L	-	5.	7-27-48	50P
24da	R. Eichstadt	Dr	1154	-	P	Kd	F25.0	D,S	-	-	-	7-27-48	-
25aa	-	B	49.6	24	T	Qgt	CY,W	S	Tca	1.4	26.99	7-26-48	49P
25ba1	A. Quiram	B	44.5	-	-	Qgt	CY,H	D,S	Tca	.6	19.65	7-27-48	-
25ba2	do.	B	52	-	-	Qgt	CY,G	D,S	L	-	26.	7-27-48	49P
26bb	do.	Dr	925	1¼	P	Kd	F2.0	D,S	-	-	-	7-26-48	-
26cc1	E. Liebnow	Dr	920	1½	P	Kd	F20.0	S	-	-	-	7-26-48	-
26cc2	do.	B	41.2	24	T	Qgt	CY,W	D	Bp	1.4	23.60	7-26-48	50P
26dc1	A. Quiram	B	15.8	24	T	Qco	CY,W	S	Tca	1.0	7.80	7-27-48	54P
26dc2	do.	B	17	24	T	Qco	CY,G	S	Tca	1.7	7.30	7-27-48	50P
26dc3	do.	B	15.0	24	T	Qco	CY,H	D	Tca	1.5	7.30	7-27-48	55P
27ba1	W. Liebnow	Dr	900	-	P	Kd	F3.0	S	-	-	-	7-27-48	-
27ba2	do.	B	33.0	24	T	Qco	CY,W	D	Tca	.8	19.95	7-27-48	49P
28ab	-	B	38.6	24	T	Qgt	CY,H	N	Tca	.0	17.77	7-26-48	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
111-65-28cb	-	B	43.1	16	T	Qco	N	N	Tca	0.0	16.68	7-27-48	-
28dd1	-	Dr	900	1¼	P	Kd	F3.0	S	-	-	-	7-27-48	-
28dd2	-	B	18.8	24	T	Qgt	CY,H	D	Tca	4.4	14.96	7-27-48	54P
29bb	C. Willard	B	40.4	-	-	Qgt	CY,W	D,S	Bp	2.0	21.69	7-26-48	49P
30bd	J. T. Rogers	Du	26.0	24	W	Q	CY,W	S	Tca	1.5	9.73	7-28-48	-
30cc	R. Fisher	B	-	24	T	Qco	Cy	-	-	-	12.	7-28-48	49P
31bb	J. T. Rogers	Dr	-	1½	P	Kd	F3.0	D,S	-	-	-	7-28-48	-
31cc1	A. Runge	B	30	-	-	Qco	CY,W	D	-	-	18.	-	50P
31cc2	do.	B	60.5	-	-	Qco	CY,W	S	Tcu	1.5	18.99	7-28-48	50P
31da	T. Syring	B	36.5	24	T	Qco	N	N	Tca	1.1	15.31	7-28-48	-
32cb	do.	B	53	-	-	Q	CY,W	D,S	L	-	10.	7-28-48	P
33bb1	-	Du	24	48	C	Q	N	O	Tco	1.2	22.	6-11-46	-
33bb2	M. Cristoverson	Dr	-	1¼	P	Kd	F7.0	D,S	-	-	-	7-27-48	-
33cc	-	Dr	1100	1½	P	Kd	F5.0	S	-	-	-	7-27-48	-
34aa1	S. S. Meyer	Dr	940	-	-	Kd	F5.0	D,S	-	-	-	7-26-48	-
34aa2	do.	B	23.0	24	T	Qgt	N	C	Tca	.0	14.79	7-26-48	-
112-60- 6bc	-	Dr	-	2	P	Kd	F3.0	D,S	-	-	-	10-21-47	-
6cc	L. Hohn	Dr	-	-	-	Kd	F6.0	D,S	-	-	-	10-21-47	-
19bc	-	Dr	200	3	P	Kcg	CY,W	S	-	-	-	-	-
30cc	-	Dr	210	-	-	Kcg	CY,G	D,S	-	-	-	-	-
112-61- 2ab	-	Dr	-	2	P	Kd	F2.0	D,S	-	-	-	8-28-47	-
2cc	-	Dr	749	-	-	Kd	F3.0	D,S	-	-	-	8-28-47	-
3aa	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	8-28-47	-
7cc	P. Kleinsasser	Dr	704	1¼	P	Kd	F3.4	D,S	-	-	-	8- 6-47	-
8aa	-	Dr	764	-	P	Kd	N	N	-	-	-	-	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
112-61- 9bc	M. Wollman	Dr	800	1¼	P	Kd	F6.2	D,S	-	-	-	8- 6-47	62
11aa	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	10-21-47	-
11da	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	10-21-47	-
12ad	-	Dr	-	1	P	Kd	F4.0	D,S	-	-	-	0-21-47	-
12cb	-	B	65.5	18	W	Qgt	N	N	Tco	2.0	14.40	10-21-47	-
13bc	-	Dr	-	3/4	P	Kd	F2.5	S	-	-	-	10-21-47	64
13dc	-	Dr	850	1	P	Kd	F2.0	D,S	-	-	-	10-22-47	-
14aa	-	Dr	205	3	P	Kcg	CY,W	D,S	Tca	1.5	45.	10-21-47	-
14cd	-	Dr	-	-	-	Kd	F5.0	D,S	-	-	-	8-29-47	60
17dc	F. Hay	B	33	24	W	Qgt	CY,H	D,S	Bp	1.1	21.70	8- 6-47	49P
18bb	J. S. Geigler	Dr	800	1¼	P	Kd	F2.3	D,S	-	-	-	8- 6-47	62
19bc	-	B	42.0	18	W	Qgt	N	N	Tca	1.0	38.50	5-27-47	-
20bb	-	Dr	-	1¼	P	Kd	F4.0	D,S	-	-	-	8- 6-47	-
20cd	P. Wipf	Dr	860	1¼	P	Kd	F1.0	D,S	-	-	-	8- 6-47	60
20dc	F. C. Dooley	Dr	-	1¼	P	Kd	F2.5	D,S	-	-	-	8- 6-47	63
22ba	G. Walters	Dr	-	1¼	P	Kd	F2.0	D,S	-	-	-	8- 6-47	60
22dc	Mennonite Colony	Dr	777	2½	P	Kd	F50.0	D,S	-	-	-	8- 5-47	-
24ac	-	Dr	-	1	P	Kd	F4.0	D,S	-	-	-	10-22-47	-
25da	-	Dr	-	-	-	Kd	F2.0	D,S	-	-	-	10-21-47	-
26dd	-	Dr	802	-	-	Kd	F3.0	D,S	-	-	-	10-21-47	-
27ab	Mennonite Colony	Dr	-	1¼	P	Kd	F5.0	S	-	-	-	8- 5-47	-
29bb	-	Dr	-	3/4	P	Kd	F2.8	N	-	-	-	8- 6-47	61
29cc	-	Dr	778	-	P	Kd	N	N	-	-	-	-	-
29cd	-	Dr	780	2	P	Kd	CY,W	D,S	Tca	2.0	30.	8- 5-47	52P
29da	-	Dr	200	-	P	Kcg	N	N	-	-	-	-	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
112-61-29dc	-	Dr	-	1¼	P	Kd	F0.8	D,S	-	-	-	8- 5-47	58
30bc	-	Dr	-	3/4	P	Kd	F1.5	S	-	-	-	8-25-47	-
30dd	R. Ziegler	Dr	800	1¼	P	Kd	F10.0	D,S	-	-	-	8- 5-47	-
31cc1	USBR test hole	B	24	1¼	P	Qgt	N	D	Tca	1.5	10.36	11- 8-48	-
31cc2	G. G. Shoemaker	Dr	1040	1	P	Kd	F2.1	D,S	-	-	-	8- 5-47	65
31da	-	B	32.4	24	W	Qgt	N	N	Tca	1.2	23.45	8-29-47	-
32cb	D. Henion	B	80	18	T	Qgt	CY,W	D,S	Bp	1.3	33.78	8- 5-47	50P
33bc1	O. W. Howard	Dr	-	1¼	P	Kd	F1.3	D,S	-	-	-	8- 5-47	-
33bc2	do.	Dr	-	2	P	Kd	N	N	-	-	-	8- 5-47	-
33cc	L. S. Slepikas	Dr	940	-	-	Kd	F2.7	D,S	-	-	-	8- 5-47	58
34cb	-	Dr	-	1¼	P	Kd	F1.1	D,S	-	-	-	8- 5-47	-
34cd	USBR test hole	B	24	1¼	P	Qgt	N	O	Tca	2.5	14.77	10- 8-48	-
35bc	-	B	40	18	-	Qgt	CY,W	S,O	Bp	.0	11.60	4-16-46	-
35da1	-	Dr	-	-	-	Kd	F5.0	S	-	-	-	8-27-47	-
35da2	-	Dr	200	-	P	Kcg	N	N	-	-	-	-	-
112-62- 2cb	-	Dr	774	-	P	Kd	N	N	-	-	-	-	-
2da	E. McGauhery	Dr	740	1¼	P	Kd	F2.6	D,S	-	-	-	8- 4-47	-
3ad	-	Dr	-	-	-	Kd	F1.5	D,S	-	-	-	8-28-47	-
3bc	E. P. Kleinsasser	Dr	-	3/4	P	Kd	F2.0	D,S	-	-	-	7-31-47	63
3da	P. S. Tschetter	Dr	800	1¼	P	Kd	F6.0	D,S	-	-	-	8- 4-47	-
4bc	F. Scheidegger	Dr	-	1	P	Kd	F3.0	D,S	-	-	-	7-31-47	61
4dc	V. Seeman	Dr	-	1	P	Kd	F1.0	D,S	-	-	-	7-31-47	59
5cd	-	B	-	18	T	Qgt	N	N	Tca	.3	14.25	8-27-47	-
5dd	T. J. Terney	B	70	18	W	Qgt	CY,W	D,S	L	-	40.	7-31-47	51P
6bc	R. Gross	Dr	-	1¼	P	Kd	F2.4	D,S	-	-	-	7-31-47	62

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
112-62- 7bb	H. L. Pownell	Dr	820	1½	P	Kd	F1.7	D,S	-	-	-	7-31-47	-
7cd	C. Pownell	Dr	-	1¼	P	Kd	F1.7	D,S	-	-	-	7-31-47	63
8ba	R. C. Lytle	Dr	765	3/4	P	Kd	F3.5	D,S	-	-	-	7-31-47	60
8cb	J. Walter	Dr	-	1	P	Kd	F0.7	D,S	-	-	-	7-31-47	59
9bb	K. Bauman	Dr	860	1¼	P	Kd	F0.8	D,S	-	-	-	7-31-47	60
9dd	-	Dr	-	1¼	P	Kd	F2.3	D,S	-	-	-	7-30-47	64
10ad	-	Dr	774	-	P	Kd	N	N	-	-	-	-	-
10db	A. Carlson	Dr	-	3/4	P	Kd	F1.1	D,S	-	-	-	7-30-47	61
10dc	-	Dr	-	-	-	Kd	F0.01	N	-	-	-	8-27-47	-
11ad	L. S. Tschetter	Du	44	24	W	Qgt	CY,G	D	L	-	25.	8- 4-47	-
12dc	-	Dr	-	1¼	P	Kd	F3.6	D,S	-	-	-	8- 4-47	64
12dd	J. Tschetter	Dr	790	1¼	P	Kd	F5.8	D,S	-	-	-	8- 4-47	60
13dd	C. Ziegler	B	60	24	W	Qgt	CY,W	D,S	L	-	35.	8- 4-47	50P
14ad	M. Gross	B	45	24	T	Qgt	CY,W	D,S	L	-	30.	8- 4-47	49P
14da	-	B	-	24	T	Qgt	CY,G	D,S	L	-	30.	8- 4-47	49P
15bb	C. Kleinsasser	Dr	-	3/4	P	Kd	F0.5	D,S	-	-	-	7-30-47	60
15dd	F. Anderson	Dr	804	1	P	Kd	F3.7	D,S	-	-	-	8- 4-47	61
19bc	G. Ferber	Dr	797	1½	P	Kd	F2.1	D,S	-	-	-	7-31-47	61
19cb1	-	Du	-	36	N	Qgt	N	N	L	-	15.	8-25-47	-
19cb2	-	Dr	22-	-	P	Kcg	N	N	-	-	-	-	-
19dd	H. Morris	Dr	-	3/4	P	Kd	F1.7	D,S	-	-	-	8- 4-47	61
20bb	-	Dr	800	3/4	P	Kd	F1.7	D,S	-	-	-	8- 4-47	60
21cb1	-	Dr	-	1½	P	Kd	F0.01	N	-	-	-	8-27-47	-
21cb2	-	Dr	-	2	P	Kd	F0.01	N	-	-	-	8-27-47	-
22bc1	C. Dickinson	Dr	800	1¼	P	Kd	F7.6	S	-	-	-	7-30-47	63

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Beadle County--Continued								
112-62-22bc2	C. Dickinson	B	-	12	T	Qgt	CY,H	D	L	-	22.	7-30-47	54P
22dc	-	B	31.6	24	T	Qgt	CY,W	N	Bp	0.7	23.20	7-30-47	-
23cd	C. H. Coyer	B	26.	18	T	Qgt	CY,H	D,S	Bp	.3	15.11	7-30-47	55P
24ad	-	Dr	150	3	P	Kcg	N	N	Tca	2.0	38.60	5-27-47	-
24bb	E. Bischoff	Du	55.9	18	W	Qgt	CY,W	N,O	Bp	.6	44.78	4-16-46	49P
24cd	G. B. Anderson	Dr	810	1	P	Kd	F2.7	D,S	-	-	-	7-31-47	59
25bc1	V. Larson	Dr	-	-	-	Kd	FO.01	N	-	-	-	8-27-47	-
25bc2	do.	Du	36	30	W	Qgt	CY,H	D,S	L	-	17.	7-31-47	50P
25cc	A. Schnathorst	Dr	-	1¼	P	Kd	F1.5	D,S	-	-	-	7-31-47	58
25dd	-	Dr	-	3/4	P	Kd	FO.2	S	-	-	-	8-21-47	-
26aa1	E. Bischoff	Dr	800	3/4	P	Kd	F1.6	D,S	-	-	-	7-31-47	-
26aa2	do.	Du	33.9	24	W	Kd	N	N	Tca	1.9	13.77	7-31-47	-
26cd	G. DeLong	Dr	800	1	P	Kd	FO.8	D,S	-	-	-	7-30-47	60
26dd	D. J. Tchetler	Dr	970	3/4	-	Kd	FO.8	D,S	-	-	-	7-31-47	62
27ad	R. H. Olsen	Dr	-	1¼	P	Kd	F3.0	D,S	-	-	-	7-30-47	62
27bc	-	B	12.8	12	T	Qgt	CY,W	S	Bp	1.5	10.64	8- 4-47	56P
27cc1	W. Wilson	Du	10	36	W	Qgt	CY,W	S	Bp	.7	7.17	7-30-47	55P
27cc2	do.	Du	15.8	36	W	Qgt	CY,H	D,S	Tca	.3	6.80	7-30-47	63P
28bb	-	B	-	24	T	Qgt	CY,W	D,S	L	-	15.	8- 4-47	54P
28cc	J. Higgins	Dr	-	1½	P	Kd	F2.8	D,S	-	-	-	8- 4-47	62
29bb	C. Gorham	Dr	-	1¼	P	Kd	F4.4	D,S	-	-	-	8- 4-47	62
29da1	C. Poullisse	B	24	18	T	Qgt	CY,G	S	Bp	.6	13.71	8- 4-47	54P
29da2	do.	B	27	18	T	Qgt	CY,H	D,S	L	-	15.	8- 4-47	-
30aa	-	Dr	-	3/4	P	Kd	F3.2	D,S	-	-	-	8- 4-47	64
30bb	E. Mager	Du	31	24	P	Qgt	CY,H	D,S	Bp	.3	5.71	8- 4-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
112-62-31bb	M. Hiles	Dr	-	1¼	P	Kd	F5.8	D,S	-	-	-	8- 4-47	62
31cc	U. S. B. R.	B	24	1¼	P	Qgt	N	O	Tca	2.1	17.55	11- 8-48	-
31dc	-	Dr	-	-	-	Kd	F11.0	S	-	-	-	8-21-47	63
32aa	-	Dr	-	1¼	P	Kd	F2.5	N	-	-	-	8- 4-47	63
32dc	-	Du	-	6	-	Qgt	N	N	L	-	4.	8-21-47	-
33cd	M. Torrell	B	80	18	P	Qgt	N	N	Tca	1.0	13.	8-20-47	-
33dd	-	Dr	-	1¼	P	Kd	F1.0	N	-	-	-	7-30-47	58
34bc	G. Urban	Du	16	24	T	Qgt	CY,W	D,S	Bp	1.4	8.30	6- 2-47	C
34cc	U. S. B. R.	B	24	1¼	P	Qgt	N	D	Tca	1.8	13.17	10- 8-48	-
35bb	F. Owen	Du	14	48	W	Qco	CY,G	D,S	Bp	.5	8.58	7-30-47	-
35cc	-	Du	-	48	W	Qgt	N	N	Tca	1.4	7.22	7-30-47	-
35dd	-	Dr	-	1¼	P	Kd	F3.0	D,S	-	-	-	7-30-47	60
112-63- 1ad	O. Tollifson	Dr	-	3/4	P	Kd	F3.3	D,S	-	-	-	7-24-47	64
1bb	H. Pownell	Dr	880	1½	P	Kd	F6.2	D,S	-	-	-	7-24-47	-
2bb1	K. Huizenga	Dr	867	3/4	P	Kd	F2.2	D,S	-	-	-	7-24-47	64
2bb2	do.	Dr	788	-	P	Kd	N	N	-	-	-	-	-
2cd1	W. B. Nash	Dr	810	1¼	P	Kd	F2.0	D,S	-	-	-	7-22-47	-
2cd2	-	Dr	880	-	-	Kd	N	N	-	-	-	-	-
3ba	-	Dr	-	2	P	Kd	F.01	N	-	-	-	8-25-47	-
3dd	H. F. Pegler	Dr	816	3/4	P	Kd	F1.0	D,S	-	-	-	7-22-47	-
4aa	L. Parkhurst	B	39.4	18	T	Qgt	CY,H	D,S,O	Tca	.5	26.32	4- 6-46	49P
4bb	A. Riel	B	70	18	T	Qgt	CY,W	D,S	Bp	1.5	30.94	7-24-47	50P
5cb	H. Hickle	B	90	18	T	Qgt	CY,W	D,S	Bp	1.8	41.15	7-22-47	50P
6bb	R. D. Fuller	Dr	800	3/4	P	Kd	FO.4	D,S	-	-	-	7-22-47	60

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
112-63- 6cd	E. Mommer	B	40	18	T	Qgt	CY,H	D,S	Tca	1.4	25.06	7-22-47	56P
6da	-	B	53.4	18	T	Qgt	CY,W	S	Bp	.6	36.40	8-25-47	51P
7aa	W. Parkinson	Du	48	24	C	Qgt	CY,W	D,S	Bp	.8	28.70	7-22-47	49P
8ac	R. Levi	Dr	900	1½	P	Kd	F13.0	D,S	-	-	-	7-22-47	65
8dd	-	Dr	807	-	P	Kd	N	N	-	-	-	-	-
9aa	Todnem	Dr	-	3/4	P	Kd	F1.1	D,S	-	-	-	7-22-47	61
9cc	K. Rathien	Dr	810	1	P	Kd	F0.4	D,S	-	-	-	7-24-47	59
11bb	S. Boomsma	Dr	-	1¼	P	Kd	F1.5	D,S	-	-	-	7-22-47	63
11cd	F. Corcoran	Dr	960	3/4	P	Kd	F4.3	D,S	-	-	-	7-25-47	-
12bb1	-	Dr	-	1¼	P	Kd	F3.1	D,S	-	-	-	7-22-47	-
12bb2	-	Dr	-	1¼	P	Kd	F9.4	N	-	-	-	7-22-47	-
12cc	D. Bies	Dr	812	1½	P	Kd	F24.0	D,S	-	-	-	7-25-47	63
12dd	-	Dr	-	2	P	Kd	F3.0	D,S	-	-	-	7-25-47	65
13ca	-	Dr	825	-	P	Kd	N	N	-	-	-	-	-
13dc	-	Dr	-	-	-	Kd	F1.0	D,S	-	-	-	8-22-47	-
14aa	H. S. McFarland	Dr	600	1¼	P	Kcg	F2.2	D,S	-	-	-	7-25-47	60
14bb	E. Pegler	Dr	550	1¼	P	Kcg	F3.0	D,S	-	-	-	7-25-47	-
14cd	A. Better	Dr	-	1½	P	Kd	F1.0	D,S	-	-	-	7-25-47	58
15cc	-	B	-	18	T	Kd	CY,W	D,S	L	-	18.	7-25-47	50P
17ba	-	B	34.3	24	T	Qgt	N	N	Tca	.6	32.30	8-22-47	-
18bc	Mrs. M. Beyer	B	48	18	T	Qgt	CY,G	D,S	Bp	1.9	25.17	7-22-47	-
18dd1	L. W. Meier	Dr	850	1¼	P	Kd	F1.2	D,S	-	-	-	7-24-47	64
18dd2	do.	Du	27.1	24	T	Qgt	CY,H	N	Tca	.8	11.90	7-24-47	-
19aa	-	B	30.5	24	T	Qgt	N	N	Tca	1.5	25.60	8-22-47	-
19cb	-	Dr	-	2	P	Qgt	F11.0	N	-	-	-	7-22-47	64

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
112-63-22ad	L. Bies	Du	8.7	48	W	Qgt	CY,H	D	Bp	0.4	7.54	7-25-47	62P
22cc	A. Hook	B	74	18	T	Qgt	CY,W	D,S	L	-	30.	7-24-47	52P
22da	L. Bies	Du	11.6	48	W	Qgt	CY,W	S	L	1.2	10.03	7-25-47	57P
23ad	Mrs. L. Whitaker	Dr	630	3/4	P	Kd	F1.3	S	-	-	-	7-24-47	-
23cd	G. Brock	Dr	-	1¼	P	Kd	F2.2	D,S	-	-	-	7-24-47	59
24ac	-	-	16	-	-	Q	-	-	-	-	-	7-24-47	52P
24bc	-	B	-	12	P	Qgt	CY,H	D	L	-	13.	8-21-47	55P
24bd	Public School	B	50	18	T	Qgt	CY,H	D	Bp	1.1	14.30	8-21-47	57P
24cal	-	-	17	-	-	Q	-	-	-	-	-	-	57
24ca2	-	-	-	-	-	-	-	-	-	-	-	-	51
24ca3	C. Betters	B	60	18	T	Qgt	CY,H	D	Tca	.5	12.5	8-21-47	53P
24cd	-	-	62	-	-	Q	-	-	-	-	-	-	49P
24da	K. Abramson	Dr	750	1¼	P	Kd	F3.0	D,S	-	-	-	7-25-47	C
24db	C. Dickson	B	18.0	18	T	Qgt	CY,H	D,S,O	Tca	.5	13.85	4- 6-46	53P
25bb	R. Urban	B	70	18	T	Qgt	CY,W	D,S	Bp	1.1	14.00	8-21-47	53P
26aa	A. Miedema	Dr	770	1¼	P	Kd	F2.3	D,S	-	-	-	7-24-47	60
26ba	R. Cummings	Dr	800	-	-	Kd	F14.0	D,S	-	-	-	7-24-47	63
28aa	R. J. Brock	Dr	790	1¼	P	Kd	F3.0	D,S	-	-	-	7-24-47	63
29bc	R. Haeder	Dr	-	1¼	P	Kd	F0.6	D,S	-	-	-	7-24-47	-
30aa	O. Boe	Dr	-	1¼	P	Kd	F5.4	D,S	-	-	-	7-24-47	-
30cc	Olie's Service Sta.	Dr	806	1¼	P	Kd	F15.0	D,S	-	-	-	7-22-47	-
31cc1	-	Dr	821	-	P	Kd	N	N	-	-	-	-	-
31cc2	U. S. B. R.	B	24	1¼	P	Qgt	N	O	Tca	1.4	11.38	11- 8-48	-
31cd	C. R. Alley	Dr	-	1¼	P	Kd	F12.0	D,S	-	-	-	7-22-47	64
32ab	-	B	66.0	24	W	Qgt	N	N	Tca	1.8	19.80	8-22-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
112-63-32cc	-	Dr	-	3/4	P	Kd	F3.3	S	-	-	-	7-22-47	-
32dd	-	Dr	-	1¼	P	Kd	F4.5	D,S	-	-	-	7-22-47	-
33ad	-	Dr	-	1	P	Kd	F.01	S	-	-	-	8-22-47	-
33dc	N. A. Nelson	B	40	18	W	Qgt	CY,H	D,S,O	Tcu	0.5	30.95	4- 6-46	C
34aa	A. R. Huston	B	14.4	16	T	Qgt	N	N	Tca	.5	14.30	8-21-47	-
34cc	U. S. B. R.	B	24	1¼	P	Qgt	N	O	Tca	1.6	19.64	11- 8-48	-
35aa	-	Dr	825	-	P	Kd	N	N	-	-	-	-	-
35ab	E. Bies	Dr	825	3/4	P	Kd	F1.6	D,S	-	-	-	7-24-47	-
35dd	F. Houck	B	74	18	T	Qgt	CY,W	D,S,O	Tca	.5	21.92	4- 9-46	57P
112-64- 1ad	-	B	70	24	W	Qgt	-	L	-	-	30.	8-25-47	48P
1cc	-	B	25.5	18	T	Qgt	N	O	Tca	1.5	16.60	4- 6-46	-
2aa	-	Dr	-	-	-	Kd	F1.5	D,S	-	-	-	8-21-47	-
2bb	-	Dr	-	-	-	Kd	F2.5	D,S	-	-	-	6- 2-47	-
3cd	-	B	30	-	-	Qgt	CY,W	D,S	L	-	5.	10-16-47	48P
4ab	-	Dr	-	-	-	Kd	F2.0	D,S	-	-	-	9-15-47	-
4bb	-	Dr	875	-	-	Kd	F.01	N	-	-	-	9-15-47	-
4dd	-	B	-	-	-	Qgt	CY,H	D	L	-	-	10-16-47	-
5cd	S. J. Schnetzer	Dr	900	1½	P	Kd	F10.0	S	-	-	-	7-10-48	-
7ad	H. Licht	B	48	18	W	Qgt	CY,W	D,S	-	-	25.	7-10-48	-
7dc	-	B	35.1	24	W	Qgt	CY,W	D,S	Tco	1.2	14.80	7-10-48	-
7dd	-	Du	9.7	3	W	Qgt	CY,W	N	Bp	2.6	5.49	7-10-48	-
8da	O. B. Cheuey	B	50	18	W	Qgt	CY,G	D,S	L	-	30.	7-10-48	-
9bc	G. Phillips	Dr	860	1¼	P	Kd	F30.0	D,S	-	-	-	7-10-48	-
10dc	-	Du	23.0	36	W	Qgt	CY,G	D,S	Bp	.0	13.60	10-16-47	-
11aa	-	Dr	-	-	-	Kd	F4.0	D,S	-	-	-	8-21-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
112-64-11bb	-	Dr	-	2	P	Kd	F.01	N	-	-	-	8-21-47	-
12dc	-	Dr	876	1	P	Kd	FO.5	D,S	-	-	-	8-21-47	-
13dc	-	Dr	-	-	-	Kd	FO.6	D,S	-	-	-	8-21-47	-
14aa	-	Du	15	24	C	Qgt	CY,W	S	L	-	12.	8-21-47	59P
14bb1	-	Du	25	-	-	Qgt	CY,W	D,S	L	-	15.	8-21-47	53P
14bb2	-	Dr	875	-	P	Kd	N	N	-	-	-	-	-
14dc	-	B	53	18	T	Qgt	CY,W	D,S	L	-	35.	8-21-47	55P
15ad	-	Du	30	-	-	Qgt	CY,W	D,S	L	-	20.	8-21-47	49P
15db	-	B	60	18	-	Q	CY,G	D,S	L	-	30.	10-16-47	49P
17ad	-	Dr	-	-	-	Kd	F4.0	D,S	-	-	-	7-10-48	-
17cc	-	Dr	-	2	P	Kd	F	D,S	-	-	-	7-16-48	-
19ad1	J. Rawstern	Du	35	36	W	Qgt	CY,W	D,S	Bp	1.5	15.16	7-16-48	-
19ad2	do.	Du	20.9	30	T	Qgt	N	N	Tca	1.5	15.13	7-16-48	-
21aa	-	Dr	-	-	-	Kd	F2.0	D,S	-	-	-	10-16-47	-
21dd	-	Dr	900	1¼	P	Kd	F5.0	D,S	-	-	-	10-16-47	-
22bc	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	10-16-47	-
22cd	-	B	45	-	-	Qgt	CY,W	D,S	L	-	30.	10-16-47	54P
22dc	-	B	40	-	-	Qgt	CY,W	D,S	L	-	25.	10-16-47	54P
23ad	R. Jungeman	B	54	18	T	Qgt	CY,W	D,S	Bp	1.8	19.55	8-22-47	52P
23cc	E. McGillrrey	B	25.2	18	T	Qgt	CY,W	D,S,O	Tca	2.0	21.95	4- 5-46	54P
23da	-	B	28.2	18	T	Qgt	CY,H	N	Bp	1.3	18.60	8-21-47	-
24bc	-	Du	43.0	24	W	Qgt	CY,G	D,S	Bp	.4	25.95	8-21-47	54P
24cc	H. Kahre	Dr	800	-	-	Kd	F2.5	D,S	-	-	-	8-21-47	C
25aa	-	Dr	-	-	-	Kd	F2.0	D,S	-	-	-	8-21-47	-
25cc	-	Dr	-	3/4	P	Kd	F5.0	D,S	-	-	-	8-21-47	64

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
112-64-26aa	-	B	-	-	-	Qgt	CY,W	D,S	L	-	15.	8-21-47	53P
26ba	-	B	25	-	-	Qgt	CY,W	D,S	L	-	15.	8-21-47	54P
26bc2	-	-	-	-	-	-	-	-	-	-	-	-	54P
26da	-	B	50	18	T	Qgt	CY,W	D,S	L	-	30.	8-22-47	59P
27aa	Public School	B	-	-	-	Qgt	CY,H	D	Bp	1.2	15.90	8-21-47	-
27bd	-	Dr	860	2	P	Kd	F15.0	D,S	-	-	-	10-16-47	-
27dc	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	10-16-47	-
29dd	C. N. Pierson	Dr	901	1	P	Kd	F10.0	D,S	-	-	-	7-16-48	-
30bb	E. Seeman	B	42	18	T	Qgt	CY,W	D,S	Tco	1.4	29.48	7-16-48	-
30bc	-	Du	45.8	30	W	Qgt	N	N	L	-	40.	7-16-48	-
30dd	Public School	B	23.4	18	T	Qgt	CY,H	N	Tco	1.3	11.48	7-16-48	-
31ba	P. Harden	B	36.4	18	T	Qgt	CY,W	D,S	Tco	2.1	23.29	7-16-48	-
31cc	U. S. B. R.	B	24	1¼	P	Qgt	N	O	Tca	1.5	6.24	11- 8-48	-
31dd1	F. V. Chesley	Du	42	12	T	Qgt	CY,H	D,S	L	-	15.	6- 2-47	-
31dd2	M. M. Chesley	Du	28	24	T	Qgt	CY,W	S,O	Tco	2.2	11.63	4- 5-46	C
32ba	-	B	33.7	24	T	Qgt	CY,N	N	Bp	2.5	13.33	7-16-48	-
34ab	-	B	35	-	-	Qgt	CY,W	D,S	L	-	25.	10-16-47	50P
34cc	U. S. B. R.	B	24	1¼	P	Qgt	N	O	Tca	2.0	6.60	11- 8-48	-
35ab	-	B	50	-	-	Qgt	CY,W	D,S	L	-	30.	8-22-47	52P
35cc	-	B	65	6	P	Qgt	CY,H	D	Tca	.0	21.	8-22-47	56P
35dc	-	B	44	-	-	Qgt	CY,W	D,S	L	-	30.	8-22-47	64P
36ad	-	B	50	18	T	Qgt	CY,W	D,S	Bp	1.1	22.90	8-22-47	54P
36bc	-	Dr	-	-	-	Kd	F0.7	D,S	-	-	-	8-22-47	-
112-65- 1aa	-	B	9.3	12	P	Qco	CY,H	N	Tca	4.5	7.39	10- 3-48	56P
1bb1	G. E. Boyd	Du	17.9	24	T	Qgt	CY,H	D,O	Tca	1.5	9.49	7-19-38	P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
112-65- 1bb2	G. E. Boyd	B	57.8	24	W	Qgt	CY,W	S	Tca	2.0	16.22	7-19-48	-
1bd	V. Horn	B	34.5	18	T	Qgt	CY,T	D,S	Tca	.9	28.47	7-23-48	-
1cc	do.	B	18	-	-	Qco	N	N	-	-	Dry	7-23-48	-
2bc	O. Fieber	B	27.5	24	W	Qgt	CY,W	D,S	Tca	.0	18.50	7-19-48	50P
3bb	H. Heitland	B	30.1	24	T	Qgt	CY,N	N	Bp	1.9	3.64	7-19-48	-
3cd1	do.	Du	22.0	-	-	Qgt	CY,H	D	Bp	.8	8.49	7-19-48	55P
3cd2	do.	Dr	-	1¼	P	Kd	F12.0	S	-	-	-	7-19-48	-
4aa	E. Datel	B	40	-	-	Qgt	CY,W	D,S	L	-	10.	7-19-48	49P
4dd1	K. Marshall	B	28.5	-	-	Qgt	CY,N	N	L	-	23.6	7-19-48	-
4dd2	do.	B	30	24	T	Q	CY,W	D,S	-	-	-	7-19-48	52P
5ad	Mrs. A. Zroneck	B	45	-	-	Qgt	CY,G	D,S	L	-	10.	7-19-48	50P
5dd	-	-	50	-	-	Q	-	-	-	-	-	-	50P
6aa	J. McGuirr	B	63.0	18	T	Qgt	CY,W	S,O	Tca	.9	42.17	11- 8-48	-
6cc	D. Reed	Dr	900	2	P	Kd	F4.0	D	-	-	-	7-20-48	-
7dd	-	B	40.4	-	-	Qgt	CY,W	N	Tco	1.3	20.04	7-23-48	-
8aa	G. Smith	B	50	18	T	Qgt	CY,W	D,S	L	-	7.	7-20-48	-
9dd	-	Du	42	18	T	Qgt	N	O	Tca	.8	27.79	11-12-48	-
10cb	W. Zrouek	B	54.5	-	-	Qgt	CY,W	D,S	Tca	.7	30.40	7-22-48	-
11bc	W. Seely	Dr	950	2	P	Kd	F4.6	D,S	-	-	-	7-19-48	-
11cb	R. Wilson	Dr	960	1½	P	Kd	F20.0	N	-	-	-	7-23-48	-
12cc	L. Galbreath	Dr	1200	1½	P	Kd	F5.0	D,S	-	-	-	7-23-48	-
13bb	R. Wilson	Du	42.5	60	C	Qgt	CY,W	O	Bp	1.0	17.20	7-23-48	-
14bb	do.	Dr	-	2	P	Kd	F4.0	D,S	-	-	-	7-22-48	-
15cb1	M. McKelrey	B	53.5	-	-	Qgt	CY,H	N	Tca	.0	17.78	7-22-48	-
15cb2	do.	Dr	960	-	P	Kd	F15.0	D,S	-		-	7-22-48	73P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
112-65-16dd	Public School	B	44.4	-	-	Qgt	CY,H	N	Tca	0.5	26.85	7-22-48	50P
17cc	J. McGuirr	B	50	24	W	Qgt	CY,G	D,S	Tco	1.1	18.65	7-20-48	50P
17cd	C. E. McNeil	Dr	1100	2	P	Kd	F3.0	D,S	-	-	-	7-20-48	-
18bc	L. McGuirr	B	45	-	-	Q	CY,W	D,S,O	L	-	35.	7-20-48	-
18dc1	L. Matthews	B	34.3	24	T	Qgt	N	N	Tca	.0	22.60	7-20-48	-
18dc2	do.	B	45.0	24	W	Qgt	CY,W	D,S	Bp	1.6	23.10	7-20-48	50P
19ad	F. Rex	B	43.0	-	-	Qgt	CY,W	N	Tco	1.3	17.65	7-22-48	-
19bc1	E. H. Pyle	Dr	1350	3/4	-	Kd	F1.0	D,S	-	-	-	7-20-48	-
19bc2	do.	B	17.0	18	T	Qgt	N	N	Tca	.5	16.92	7-20-48	-
19dd	L. Galbreath	B	39.7	18	T	Qgt	CY,W	D,S	Tco	1.0	21.34	7-22-48	49P
20bc	H. Thieman	B	80	-	-	Q	CY,W	D,S	L	-	40.	7-21-48	50P
20cc	do.	B	42.6	-	-	Qgt	CY,N	N	Tca	1.6	22.81	7-22-48	-
21cd	A. Ruddy	B	42.4	-	-	Qgt	CY,W	D,S	L	-	29.90	7-22-48	50P
22bb	-	Dr	900	2	P	Kd	F12.0	D,S	-	-	-	7-22-48	-
24bc	G. Kohlmeyer	B	72	18	T	Qgt	CY,W	D,S	L	-	44.	7-21-48	49P
25ab	V. Koch	B	42	24	T	Qgt	CY,W	D,S	Bp	1.2	23.89	7-21-48	50P
26ad	E. Lehr	B	-	-	-	Qgt	CY,W	D,S	L	-	33.	7-21-48	-
26da	M. Schiebe	Du	60	36	W	Qgt	CY,G	D,S	Bp	1.0	33.91	7-21-48	51P
27aa1	R. White	B	57.8	-	T	Qgt	CY,H	N	Tco	1.4	30.81	7-21-48	-
27aa2	do.	B	57.5	-	-	Qgt	N	N	Tco	.0	21.88	7-21-48	-
27aa3	do.	Dr	900	2	P	Kd	F2.0	D,S	-	-	-	7-21-48	-
27bb	E. Fritzsche	B	46.1	-	-	Qgt	CY,W	S	L	.0	27.39	7-21-48	50P
28ad	do.	B	46.0	24	T	Qgt	CY,W	D	L	-	30.17	7-21-48	50P
28bc	W. Gonske	B	-	24	T	Qgt	CY,W	D,S	L	-	25.	7-22-48	49P
29cb1	G. H. Muller	B	42.6	-	-	Qgt	CY,W	N	L	-	21.89	7-16-48	-

See footnotes at end of table.

Table 7.--Record of Wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Beadle County--Continued								
112-65-29cb2	G. H. Muller	B	32	-	-	Qgt	CY,W	S	L	-	22.	7-23-48	50P
29dd	H. Fisher	B	36.0	-	-	Qgt	CY,W	D,S	Tca	2.6	23.43	7-22-48	-
30ad	F. Holtz	B	60	-	-	Qgt	CY,W	D,S	Bp	1.1	22.85	7-22-48	50P
31cc	L. Jones	B	-	-	C	Qgt	CY,H	D	Tco	.5	18.98	9-20-48	53P
32bc	H. Haigh	B	40.2	24	W	Qgt	CY,W	D,S	Tca	.5	18.03	7-16-48	50P
32dc	S. Mosier	Dr	-	1	P	Kd	F0.5	D,S	-	-	-	7-22-48	-
33bb	E. Fritsche	B	35.6	24	T	Qgt	CY,W	D,S	Tco	1.0	20.91	-	43P
33dc	C. Franklin	B	58.7	-	-	Qgt	CY,W	D,S,O	Tca	2.0	45.00	7-23-48	C
35aa	E. Hall	B	27.1	-	-	Qgt	CY,W	D,S	Bp	1.6	20,60	7-21-48	-
35cd	-	Dr	1025	1¼	P	Kd	F10.0	D,S	-	-	-	7-16-48	51P
113-60-31cd	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	-	-
113-61- 2ba	-	Du	25.5	24	W	Qgt	CY,H	S,O	Bp	1.5	5.72	6-24-47	-
6cc	-	Dr	-	2	P	Kd	F2.5	D,S	-	-	-	9- 1-47	64
13dd	-	Dr	-	1	P	Kd	F3.0	D,S	-	-	-	10-21-47	-
15cc	-	Dr	760	-	P	Kd	N	N	-	-	-	-	-
15dd	-	Dr	800	2	P	Kd	F8.0	S	-	-	-	10-21-47	-
16cd	-	Dr	-	1	P	Kd	F.01	N	-	-	-	10-21-47	-
20bb1	-	Dr	-	-	-	Kd	F4.0	D,S	-	-	-	10-21-47	-
20bb2	-	Dr	200	-	P	Kcg	CY,W	D,S	-	-	-	-	-
22bb	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	10-21-47	-
22dd	-	Dr	850	-	-	Kd	F5.0	D,S	-	-	-	10-21-47	-
23cb	-	Dr	850	-	-	Kd	F6.0	D,S	-	-	-	10-21-47	-
24ad	-	Dr	-	-	-	Kd	F2.0	D,S	-	-	-	10-21-47	-
25bb	-	Dr	-	-	-	Kd	F2.0	D,S	-	-	-	10-21-47	-
25cb	-	Dr	-	3/4	P	Kd	F5.0	D,S	-	-	-	10-21-47	60

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
113-61-29bb	-	Dr	200	-	-	Kcg	CY,W	D,S	-	-	-	-	-
30ca	Mennonite Colony	Dr	-	-	-	Kd	F4.0	D,S	-	-	-	9- 1-47	-
30da	-	Dr	760	-	P	Kd	N	N	-	-	-	-	-
31cc	John Greenan	Dr	-	1¼	P	Kd	F8.0	D,S	-	-	-	8- 8-47	63
31dc	J. M. Tschetter	Dr	900	1¼	P	Kd	F9.4	D,S	-	-	-	8- 8-47	63
33da	-	Dr	-	2½	P	Kd	F17.0	S	-	-	-	-	60
34bc	-	Dr	810	-	-	Kd	F4.0	D,S	-	-	-	8-29-47	-
113-62- 1ad	-	Dr	-	1½	P	Kd	F2.5	S	-	-	-	-	64
2ab	P. S. Waldner	Du	32	24	P	Qgt	CY,H	D,S,O	Bp	2.0	15.15	6-24-47	50P
2bb	-	Du	25	-	-	Qgt	CY,W	D,S	L	-	12.	6- 2-47	49P
3ab	-	Dr	-	-	-	Kd	F6.0	D,S	-	-	-	5-27-47	-
3bb	O. A. Olson	Du	24.0	24	W	Qgt	CY,W	D,S	Bp	.5	18.35	5-27-47	C
4bc	C. Freeburg	Dr	850	1	P	Kd	F2.7	D,S	-	-	-	8-11-47	63
4cb	M. Montimer	B	32.9	24	T	Qgt	CY,W	D,S	Bp	.6	31.31	8-11-47	49P
5ba	R. Stewart	Dr	-	1¼	P	Kd	F2.7	D,S	-	-	-	8-11-47	63
5dc	L. Dye	Du	29.1	48	W	Qgt	CY,W	D,S	Bp	2.1	25.77	8-11-47	58P
6bb	W. H. Kustermeyer	Du	30.8	30	W	Qgt	CY,W	D,S	Tca	.8	28.32	8-11-47	49P,C
6cd	-	Dr	-	-	-	Kd	F1.8	S	-	-	-	8-11-47	-
7cd	-	Du	-	-	-	Qgt	CY,H	N	L	-	18.	9- 2-47	-
8bb	-	Dr	777	-	-	Kd	F3.0	D,S	-	-	-	8-11-47	-
8cb	J. Kingdon	Du	28	24	P	Qgt	CY,H	D,S	Bp	.3	22.85	8-11-47	48P
9ab	C. DeLong	Du	34	24	C	Qgt	CY,H	D,S	Bp	1.3	24.47	8-11-47	50P
9ba	R. High	Du	32	30	C	Qgt	CY,W	D,S	Bp	1.7	26.91	8-11-47	48P
9bc	H. A. High	Du	28	24	C	Qgt	CY,H	D,S	Bp	1.2	23.08	8-11-47	48P
10ad	-	Dr	-	-	-	Kd	F2.0	D,S	-	-	-	9- 2-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
113-62-12ad	T. J. Tschetter	Dr	800	1½	P	Kd	F5.0	D,S	-	-	-	9- 1-47	-
13ac	-	Dr	800	1½	P	Kd	F25.0	S	-	-	-	9- 1-47	63C
13bd	-	Dr	-	2	P	Kd	F3.0	D,S	-	-	-	9- 1-47	-
14ca	C. Lovett	B	33	15	T	Qgt	CY,W	D,S	L	-	23.	8- 8-47	48P
15bb	L. Stymiest	B	50	3	P	Qgt	CY,W	D,S	L	-	25.	8-11-47	-
17aa	F. Osman	Du	32	36	W	Qgt	CY,W	D,S	Bp	1.4	26.50	8-11-47	48P
17cc	D. Mortimer	Dr	160	4	P	Keg	CY,W	D,S	L	-	18.	8-11-47	-
18bb	D. S. Sweeter	Dr	830	1¼	P	Kd	F2.5	D,S	-	-	-	8-11-47	60
19aa	-	Du	20.8	24	W	Qgt	N	N	Tco	.2	15.18	8-11-47	-
19cc	I. Anderson	Dr	800	1¼	P	Kd	F3.2	D,S	-	-	-	8-11-47	62C
20ad	T. Blakely	B	35	14	P	Qgt	CY,H	D,S	Bp	3.2	25.72	8-11-47	59P
21bb	G. Wieting	Dr	820	1½	P	Kd	F4.2	D,S	-	-	-	8-11-47	-
22ad	J. Mortimer	B	28	4	P	Qgt	CY,W	D,S	L	-	15.	8- 8-47	47P
22ba	-	Du	32.8	30	W	Qgt	N	N	Tco	.5	30.85	9- 2-47	-
23bb	V. Mortimer	B	38.9	15	T	Qgt	CY,W	D,S	Bp	.7	26.14	8- 8-47	49P
24dd	-	Dr	765	-	P	Kd	N	N	-	-	-	-	-
26bb	-	Du	29.7	30	W	Qgt	CY,G	S	Tca	.3	18.63	8- 8-47	-
30bb	-	Dr	775	-	P	Kd	N	N	-	-	-	-	-
30cc	W. Walter	Dr	-	3/4	P	Kd	F2.0	D,S	-	-	-	4-11-47	-
31cb	-	Dr	815	-	P	Kd	N	N	-	-	-	-	-
31da	E. Oestrich	B	79.6	24	W	Qgt	CY,H	O	Tcu	.8	38.72	4-19-47	53P
32ab1	I. McDonald	Dr	-	2	P	Kd	F4.1	D,S	-	-	-	8-11-47	60
32ab2	do.	Du	8.24	24	T	Qgt	N	N	Tco	1.0	7.44	8-11-47	-
32dc1	F. Tschetter	Dr	920	1¼	P	Kd	F4.3	D,S	-	-	-	8-11-47	64
32dc2	do.	B	-	18	T	Qgt	CY,G	D,S,O	Bp	1.6	35.05	4- 6-46	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
113-62-33ab	K. Tschetter	Dr	-	1½	P	Kd	F3.0	D,S	-	-	-	8-11-47	65
34ab	A. Tschetter	Dr	880	1½	P	Kd	F5.6	D,S	-	-	-	8- 8-47	64
34ac	D. P. Tschetter	Dr	-	3/4	P	Kd	F3.0	D,S	-	-	-	8-11-47	63
35bb	-	Dr	750	1¼	P	Kd	F2.8	D,S	-	-	-	8- 8-47	-
35da	P. W. Gross	Dr	780	1¼	P	Kd	F12.0	D,S	-	-	-	8- 8-47	-
113-63- 1cb	E. Sangstad	Du	29.9	24	W	Qgt	CY,W	D,S	Tca	1.2	26.05	8-13-47	49P
2cb	-	B	39.4	14	W	Qgt	N	N	Tca	1.0	33.04	8-14-47	-
3bb	F. M. Gross	Dr	-	3/4	P	Kd	F1.0	D,S	-	-	-	8-14-47	-
3cb	G. Gross	Dr	950	1¼	P	Kd	F1.8	D,S	-	-	-	8-14-47	62
4ab1	Town of Hitchcock	Dr	1150	2	P	Kd	T,E	P	-	-	-	-	C
4ab2	-	Dr	953	3	P	Kd	N	N	-	-	-	-	-
5ba	H. L. DuBois	Dr	-	2	P	Kd	F2.0	D,S	-	-	-	-	61
6ad1	-	Dr	-	3/4	P	Kd	F1.0	S	-	-	-	-	60
6ad2	-	B	42.1	18	T	Qgt	CY,H	N	Tca	1.2	7.03	8-13-47	54P
6bc1	R. Swanson	B	35	24	W	Qgt	CY,G	D,S	L	-	14.	8-13-47	52P
6bc2	S. VanVorhees	Du	23.8	24	T	Qgt	CY,W	D,S	Bp	.7	9.38	8-13-47	54P
6cb	-	Dr	908	-	P	Kd	N	N	-	-	-	-	-
7cc	-	Dr	929	-	P	Kd	N	N	-	-	-	-	-
7dc	-	Dr	-	1	P	Kd	F5.0	S	-	-	-	8-13-47	70
8ad1	S. Tucker	Dr	-	1¼	P	Kd	F2.1	S	-	-	-	8-13-47	-
8ad2	do.	B	40	24	T	Qgt	CY,W	D	L	-	25.	8-13-47	-
8ba	L. P. Person	Dr	900	1½	P	Kd	F5.4	D,S	-	-	-	8-13-47	62
9ba	H. R. VanBuskirk	Dr	1220	1½	P	Kd	F0.6	D,S	-	-	-	8-14-47	66
10bb	C. LeGrand	Dr	854	1¼	P	Kd	F0.3	-	-	-	-	-	60
11ab	-	B	46.4	18	W	Qgt	CY,W	D,S	Tca	1.8	28.10	8-13-47	49P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
113-63-11bb	G. W. Gross	Du	40	24	W	Qgt	CY,W	D,S	L	-	25.	8-14-47	49P
12cb	-	Dr	858	3/4	P	Kd	F3.7	S	-	-	-	8-13-47	-
12dd	-	Du	-	-	-	Qgt	N	N	L	-	15.	9- 2-47	-
13bb	P. Herzberg	Dr	895	1¼	P	Kd	F4.0	D,S	-	-	-	8-13-47	62
13cb	W. F. Charlet	Dr	190	2½	P	Kcg	CY,W	D,S	L	-	25.	8-13-47	-
14dd	H. Mortimer	Dr	-	1¼	P	Kd	F1.1	D,S	-	-	-	8-13-47	59
15ab	-	Dr	180	4	P	Keg	N	N	Tca	1.0	35.80	8-14-47	-
15cc	A. LeGrand	Dr	-	3/4	P	Kd	F1.0	D,S	-	-	-	8-12-47	57
16bc	E. J. Chaplin	Dr	155	3	P	Keg	CY,W	S	L	-	25.	8-12-47	-
17ad	do.	Dr	-	1¼	P	Kd	F3.0	D,S	-	-	-	8-12-47	-
17cd	J. Kingdon	B	48.2	18	T	Qgt	CY,W	D,S	Tca	1.5	30.68	8-12-47	50P
18bb	C. W. Fuller	Dr	933	½	P	Kd	F3.3	D,S	-	-	-	8-13-47	66
18cd	L. H. Palmer	B	43	24	T	Qgt	CY,W	D,S	Bp	.7	22.26	8-14-47	50P
18dd	-	B	38.3	18	P	Qgt	N	N	Tca	.9	15.93	8-14-47	-
19cc	-	B	37.5	18	T	Qgt	CY,H	N	Tca	1.8	26.90	8-25-47	-
19dc	-	B	50	18	T	Qgt	CY,W	-	L	-	30.	8-14-47	51P
20aa	E. J. Chaplin	Dr	-	1	P	Kd	F2.0	D,S	-	-	-	8-12-47	63
20bb	M. E. VanBusket	B	44	24	T	Qgt	CY,G	D,S	-	-	25.	8-12-47	49P
20cd	O. Tollefson	B	50	24	T	Qgt	CY,G	D,S	L	-	25.	8-12-47	49P
21aa	Bussell	Dr	-	1¼	P	Kd	F1.0	D,S	-	-	-	8-11-47	60
22cb	F. Dennis	Dr	1047	3/4	P	Kd	F5.0	D,S	-	-	-	8-12-47	65
22da	-	Du	-	-	-	Qgt	N	N	L	-	15.	9- 5-47	-
23ab1	W. Puffer	Dr	-	1¼	P	Kd	F5.0	D,S	-	-	-	8-13-47	62
23ab2	do.	Dr	988	3/4	P	Kd	F.01	D	-	-	-	8-13-47	58
23bc	E. Motumaugh	Dr	800	1	P	Kd	F2.3	D,S	-	-	-	8-12-47	61

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
113-63-23cc	-	Dr	912	-	P	Kd	N	N	-	-	-	-	-
23dc	E. Tschetter	Dr	-	1¼	P	Kd	F3.2	D,S	-	-	-	8-12-47	63
24bb	D. H. Puffer	Dr	1000	1¼	P	Kd	F2.6	D,S	-	-	-	8-13-47	62
26da1	-	-	55	-	-	Q	-	-	-	-	-	-	54P
26da2	H. McDaniel	Dr		1¼	P	Kd	F3.2	D,S	-	-	-	8-13-47	60
27da	W. Puffer	Du	15.5	24	P	Qgt	CY,H	D,S	Bp	0.9	3.22	8-14-47	49P
28ad	H. Fountain	Dr	-	1¼	P	Kd	F2.0	D,S	-	-	-	8-14-47	61
29da1	C. Tollefson	B	-	12	T	Qgt	CY,W	D,S	L	-	25.	8-14-47	48P
29da2	do.	B	37.0	18	T	Qgt	CY,W	S	Bp	1.8	13.83	8-14-47	49P
30aa	-	B	33.0	24	W	Qgt	CY,H	N	Bp	.0	26.55	8-25-47	-
30cd	M. Christopherson	Du	42.2	24	W	Qgt	CY,W	D,S	Tca	2.5	25.91	8-14-47	49P
31cb	M. I. Justus	Dr	1000	3/4	P	Kd	F2.0	D,S	-	-	-	8-14-47	-
32aa1	H. Eldeen	B	39.6	18	T	Qgt	CY,H	D	Tca	1.4	18.50	8-14-47	49P
32aa2	do.	B	38.3	18	W	Qgt	CY,W	S	Tca	2.2	6.70	8-14-47	49P
34aa	-	Dr	-	1	P	Kd	F.01	N	-	-	-	8-25-47	-
34bb	M. LeGrand	B	65	18	W	Qgt	CY,W	D,S	L	-	30.	8-14-47	-
34bd	-	-	65	-	-	Q	-	-	-	-	-	-	49P
35ba	M. McDaniels	Dr	-	3/4	P	Kd	F2.0	D,S	-	-	-	8-13-47	59
35cc	-	Dr	-	3/4	P	Kd	F3.8	D,S	-	-	-	8-13-47	-
113-64- 1ad	-	B	40	18	T	Qgt	CY,W	D,S	L	-	15.	8-18-48	54P
1ba	F. Jockhecke, Sr.	Du	13	48	W	Qgt	CY,W	D,S,O	Bp	1.0	8.90	4- 6-46	C
2bb	-	Du	-	24	T	Qgt	CY,W	N,O	L	-	24.	8-18-47	50P
2cd	D. Jockhecke	Dr	-	1½	P	Kd	F4.0	S	-	-	-	8-18-47	68
4cd	-	Du	40	24	W	Qgt	CY,W	D,S	Tcu	.0	18.63	8-18-47	48P
5aa1	R. A. Rawstern	Du	39.8	18	P	Qgt	CY,W	S,O	Bp	1.0	15.06	4- 9-46	C

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
113-64- 5aa2	R. A. Rawstern	Du	27	24	T	Qgt	N	O	Tco	0.7	11.21	4-19-47	-
5cc	R. Hamilton	B	40	18	T	Qgt	CY,W	D,S	Tca	1.9	19.05	8-18-47	49P
6dc	W. R. Hamilton	B	64	18	T	Qgt	CY,W	D,S	L	-	22.	8-18-47	50P
8aa	-	Dr	913	-	P	Kd	N	N	-	-	-	-	-
8bb	M. Christianson	B	32	24	T	Qgt	CY,G	D,S	Tca	1.7	17.83	8-18-47	48P
8cb	O. Hurst	Dr	-	1¼	P	Kd	F3.0	D,S	-	-	-	8-18-47	68
8dd	-	B	50	18	P	Qgt	N	N	Tca	.0	18.30	9-15-47	-
9aa	W. Swaney	Du	30	24	T	Qgt	CY,W	D,S	L	-	18.	8-18-47	48P
9dd	F. Hamilton	B	53.4	18	T	Qgt	CY,W	D,S	Bp	1.6	24.58	8-18-47	49P
10aa	L. Ernster	B	60	18	W	Qgt	CY,W	D,S	L	-	22.	8-18-47	50P
11ab	F. Jockhecke, Jr.	Dr	-	3/4	P	Kd	F1.5	D,S	-	-	-	8-18-47	-
12aa	D. Vorhees	Du	29.6	24	W	Qgt	CY,G	D,S	Tca	1.6	6.04	8-18-47	56P
12bb1	J. Olsen	Dr	-	1¼	P	Kd	F3.5	S	-	-	-	8-18-47	-
12bb2	do.	B	36.7	18	T	Qgt	CY,W	D,S	Bp	1.8	20.17	8-18-47	51P
13aa	J. Fuller	B	50	24	T	Qgt	CY,W	D,S	L	-	22.	8-19-47	55P
14bc	L. Swaney	B	60	24	W	Qgt	CY,W	D,S	Bp	.7	26.17	8-19-47	53P
14cd	C. Poe	Dr	60	30	C	Qgt	CY,W	D,S	L	-	24.	8-19-47	48P
15ad	C. Dilley	Du	48	30	W	Qgt	CY,W	D,S	L	-	20.	8-19-47	49P
15bc1	B. Kenison	Du	40	24	W	Qgt	CY,W	D,S	L	-	24.	8-19-47	49P
15bc2	-	Dr	1066	-	P	Kd	N	N	-	-	-	-	-
15cb	M. Kenison	Du	37.4	24	W	Qgt	CY,W	D,S	Bp	1.3	21.18	8-19-47	49P
15da	J. Schamp	Du	38.6	30	W	Qgt	CY,H	S	Bp	.3	14.07	8-19-47	52P
17dd	I. Miller	Dr	-	1	P	Kd	F1.0	D,S	-	-	-	8-18-47	60
18cd	W. Traver	Dr	-	1¼	P	Kd	F1.5	D,S	-	-	-	8-18-47	63
18dc	R. E. Binger	Dr	-	1	P	Kd	F2.0	D,S	-	-	-	8-18-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
113-64-19aa	B. Schnabel	Dr	-	1¼	P	Kd	F3.0	D,S	-	-	-	8-18-47	62
19cc	Dague	Du	3066	24	W	Qgt	CY,W	D,S	Bp	1.6	12.53	8-18-47	55P
20ad	W. Rearick	Dr	900	1	P	Kd	F2.0	D,S	-	-	-	8-18-47	62
20cd	W. Morse	Dr	900	1¼	P	Kd	F	D,S	-	-	-	8-15-47	62
23bc1	-	B	41	10	T	Qgt	CY,H	O	Bp	1.7	9.35	4- 6-46	53P
23bc2	Bonilla Post Office	B	10.4	12	T	Qgt	CY,H	O	Tca	1.4	2.80	4- 6-46	-
23bd	-	B	45.7	24	W	Qgt	CY,W	S	Bp	1.1	19.03	9- 5-47	49P
23cc	J. Bales	B	40	18	T	Qgt	CY,G	D,S	L	-	25.	8-19-47	50P
23db	-	B	40	-	-	Qgt	CY,W	S	L	-	25.	9- 5-47	49P
24aa	Mrs. Burton Fuller	Dr	-	3/4	P	Kd	F3.0	D,S	-	-	-	8-19-47	-
24cb	L. Marshall	B	80	18	T	Qgt	CY,W	D,S	Tca	.8	39.38	8-19-47	55P
25ab1	E. E. French	B	-	18	T	Qgt	CY,W	D,S	Bp	1.5	31.18	8-19-47	50P
25ab2	do.	B	45.4	18	T	Qgt	CY,W	N	Bp	.6	22.86	8-19-47	-
25bb1	T. Tollefson	B	48.7	24	T	Qgt	CY,W	S	Bp	1.3	24.00	8-19-47	50P
25bb2	do.	B	56	24	T	Qgt	CY,W	D,S	Bp	1.1	25.19	8-19-47	49P
26ab	S. Miller	B	50	24	W	Qgt	CY,W	D,S	Bp	.7	34.47	8-19-47	50P
26ba	F. Burton	Dr	900	3/4	P	Kd	F5.0	D,S	-	-	-	8-19-47	69C
26da	A. Peterson	Du	55	24	W	Qgt	CY,W	D,S	Bp	.7	23.88	8-19-47	-
27bb	H. J. Williams	Dr	934	1¼	P	Kd	F12.0	D,S	-	-	-	8-19-47	-
28cc	-	Dr	880	2	P	Kd	F9.0	S	-	-	-	9-15-47	66
29ad	A. Hamilton	Dr	1118	4½	P	Kd	F6.0	S	-	-	-	8-15-47	-
30aa	-	Dr	-	1¼	P	Kd	F0.2	D,S	-	-	-	8-15-47	60
30cc	G. F. Atkins	Dr	980	1½	P	Kd	F3.5	D,S	-	-	-	8-18-47	68
30dd	L. Bonin	Dr	-	¾	P	Kd	F0.5	D,S	-	-	-	8-15-47	-
31bc	W. Hamilton	Dr	-	1¼	P	Kd	F4.0	D,S	-	-	-	8-15-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
113-64-31dd	L. Boyd	Dr	984	3/4	P	Kd	F2.0	S	-	-	-	8-15-47	-
32ca	-	Dr	-	-	-	Kd	F.01	N	-	-	-	10-16-47	-
33ad	J. C. Borah	Dr	942	1¼	P	Qgt	F4.0	S	-	-	-	8-19-47	-
33cb	J. Phillips	Dr	-	1¼	P	Kd	F3.0	D,S	-	-	-	8-15-47	65
33dd	-	Du	8.8	48	C	Qgt	CY,H	N	Bp	0.4	5.82	8-15-47	-
35aa	L. Martin	Du	65	24	W	Qgt	CY,W	S	Dp	.4	17.38	8-19-47	51P
113-65- 1aa	-	Dr	950	-	P	Kd	F4.0	S	-	-	-	9-30-48	68
1cd	C. Zybell	Dr	1000	1¼	P	Kd	F1.5	D,S	Tca	2.0	-	9-30-48	66
2aa	J. Lawyer	Dr	1000	1	P	Kd	F1½	D,S	Tco	1.0	-	9-30-48	66
2bb	Beckler Est.	B	42.4	24	T	Qgt	CY,W	D,S,O	Tca	.5	-	9-30-48	48PC
2dd	-	Dr	18	3	P	Qco	CY,W	S	-	-	-	-	49P
3cc	-	Du	7.5	48	W	Qco	CY,W	S	Tco	1.0	7.21	9-30-48	51P
4cb1	-	B	27.3	24	W	Qgt	CY,H	D	Tca	1.0	23.87	10- 1-48	50P
4cb2	-	B	16.6	24	T	Qco	CY,H	S	Tca	.5	12.00	10- 1-48	53P
5dc	H. Versted	Dr	900	-	P	Kd	F1.0	D,S	Tca	2.5	-	10- 1-48	66
6ad	L. Cavenee	B	30.8	24	W	Qgt	N	N	Tca	.0	14.80	9-30-48	-
6cc	-	B	-	2	W	Qgt	CY,W	D,S	-	-	-	-	49C
6dc	L. Cavenee	B	42.2	18	T	Qgt	CY,W	D,S	Tca	1.0	25.08	9-30-48	49P
7cc	Gaudig	B	13.8	18	T	Qco	CY,N	N	Tca	1.0	11.31	10- 9-48	-
8ba	T. J. Gravitt	Dr	1000	3	P	Kd	F2.5	D,S	Tca	6.0	-	9-30-48	66
8da	C. Larson	Dr	1000	-	P	Kd	F1.5	D,S	Tca	3.0	-	10- 1-48	65
9bc1	B. Ganske	B	266	18	T	Qgt,X	CY,H	D	Tca	.0	11.78	10- 1-48	50P
9bc2	do.	B	23.4	18	W	Qco,X	CY,H	S	Tcu	1.5	12.72	10- 1-48	49P
9bc3	do.	Dr	900	3	P	Kd	F1.0	S	Tca	3.0	-	10- 1-48	62
10bb	W. Dague	B	18.8	24	T	Qco	CY,W	D,S	Tca	.5	10.22	9-30-48	50P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
113-65-10cd	J. Haigh	Dr	960	1	P	Kd	F8.0	S	Tca	2.0	-	10- 5-48	70P
11aa	-	B	11.4	24	W	Qco	CY,H	N	Tco	1.0	9.30	9-30-48	50P
11ba1	W. McNeal	Dr	-	1½	P	Kd	F1.5	D,S	Tca	2.5	-	9-30-48	68
11ba2	do.	Dr	-	-	-	Kd	F10.0	S	Tca	3.0	-	9-30-48	70
11dd	-	Dr	-	3/4	P	Kd	F1.5	D,S	Tca	2.5	-	10- 1-48	65
12aa	-	Dr	-	1	P	Kd	F1.0	D,S	Tca	2.0	-	9-30-48	62
12da	-	B	22.0	12	T	Qgt	N	N	Tca	.0	20.90	9-15-47	-
13dd	-	B	16.1	24	W	Qco	CY,H	S	Tca	1.5	8.66	10- 1-48	54P
14ad1	-	B	45.1	24	W	Qgt	CY,T	D,S	Tca	1.0	22.84	10- 1-48	-
14ad2	-	B	42.0	24	W	Qgt	CY,G	N	Tca	.0	20.80	10- 1-48	-
14cc	-	Dr	-	3	P	Kd	F0.5	D,S	Tca	10.0	-	10- 1-48	61
15ad	-	B	41.5	24	T	Qal	CY,N	N	Tca	1.6	33.28	10- 9-48	-
15ba	J. Haigh	B	35	1¼	P	Qgt	CY,H	D	Tca	.0	16.	10- 5-48	-
16ad	-	B	19.9	24	W	Qco	CY,W	S	Tca	1.5	18.10	10- 5-48	52P
16dd1	C. Daugherty	Dr	-	2	P	Kd	F0.5	D,S	Tca	1.0	-	10- 1-48	57
16dd2	do.	B	35.0	24	T	Qco	CY,H	D	Tcu	.5	12.35	10- 1-48	50P
18ad	-	Dr	-	2	P	Kd	F0.2	D,S	-	3.0	-	10- 1-48	58
18cb	-	B	16.1	24	W	Qgt	CY,W	D,S	Tca	1.0	-	10- 1-48	53P
19cb	-	Dr	1250	1¼	P	Kd	F40.0	D,S	Tca	3.0	-	10- 9-48	74
19cd	E. Brown	Dr	995	1	P	Kd	F7.0	D,S	Tca	4.0	-	10- 9-48	70P
21cb	H. Fritzsche	B	59.0	24	T	Qgt	CY,W	D,S	Tcu	1.0	35.77	10- 5-48	49P
21cd1	-	B	24.1	24	T	Qco	CY,N	N	Tca	.5	14.55	10- 5-48	-
21cd2	-	Dr	-	3	P	-	CY,G	D,S	-	-	-	10- 5-48	51P
23bb	-	B	8.0	12	P	-	T,G	S	Tca	1.5	7.15	10- 1-48	52P
23cc	-	Dr	10	3	P	Qco	T,N	N	L	-	6.	10- 5-48	-

See footnotes at end of table.

Table 7--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Beadle County--Continued										
113-65-23da	-	Dn	13	1¼	P	Qco	T,G	S	L	-	6.	10- 5-48	-
24ac	-	-	30.3	36	W	Qgt	N	N	Tca	1.0	15.65	10- 5-48	-
24cd1	H. D. Clark	Dr	987	3	P	Kd	F6.0	D,S	Tca	1.5	-	10- 5-48	71
24cd2	do.	Dr	980	1¼	P	Kd	FO.2	S	Tca	2.0	-	10- 5-48	54
24da	-	B	19.5	18	P	[illegible]t	N	N	Tca	.0	10.6	9-15-47	-
26cb	L. Paulsen	Dn	10	1¼	P	Qco	CY,W	S	L	-	6.	10- 5-48	51½P
27aa	-	Dn	-	1¼	P	-	-	S	L	-	7.	10- 5-48	51½P
27cc	R. Gamble	Dr	60	3	P	Qco	CY,W	D,S	L	-	20.	10- 9-48	48½P
29ab	-	B	68.4	18	W	Qgt	CY,W	S	Tca	1.6	33.29	10- 9-48	49P
29bc	T. Ferholtz	Dr	1000	3	P	Kd	F4.0	D,S	Tca	2.0	-	10- 9-48	71
30ad	H. Miner	Dr	-	3/4	P	Kd	F1.0	D,S	Tca	3.0	-	10- 9-48	62
30dc	H. Martens	Dr	1025	1¼	P	Kd	F8.0	D,S	Tca	2.0	-	10- 6-48	72
31ad	C. Bothwell	Dr	76	2	P	Qgt	CY,W	D,S	L	-	37.	10- 6-48	48P
31cd	-	B	49.9	18	-	-	-	-	Tca	-	31.64	9- 9-48	50C
32ab1	L. McKelvy	Dr	80.0	4	P	-	CY,W	D,S	Bp	1.0	26.20	10- 6-48	49P
32ab2	do.	Dr	80	4	P	CY,W	D,S	L	-	-	30.	10- 6-48	49
32ab3	do.	B	34.1	24	T	-	N	N	Tco	.0	8.51	10- 6-48	-
32ab4	do.	B	64.1	18	T	-	N	N	Tca	.0	20.61	10- 6-48	-
33ab1	C. White	B	46.4	36	B	Qgt	CY,H	N	Tco	2.0	16.47	10- 9-48	50P
33ab2	do.	B	55	24	T	Qgt	CY,W	D,S	L	-	17.	10- 9-48	50P
34bb	H. Miller	B	64.4	-	-	Qgt	CY,W	D,S	Bp	.5	22.33	10- 1-48	49P
34ed	do.	Du	14.5	48	C	Qgt	CY,W	O	Tco	1.1	6.52	7-23-48	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Brown County								
121-65-36dc	-	Du	14.2	36	W	Qco	CY,W	S,0	Bp	2.4	7.03	4-12-46	-
122-65-33cc	C. Walter	Du	27.0	48	W	Qgt	CY,W	D,S,0	Bp	1.8	11.40	4-12-46	-
123-64-22ad	G. Reitz	Du	15.0	60	W	Qgt	CY,H	0	Bp	.6	7.93	11-16-46	-
					Davison County								
103-60-19dc	-	B	50	24	-	Qgt	N	0	Tca	.2	2.64	11-18-46	-
23dd	-	B	25	3	P	Qgt	CY,H	S,0	Tca	2.0	11.60	10-31-46	-
103-61-19dd	-	Dr	150	3	P	Kcg	CY,H	S,0	Tca	1.5	49.95	10-30-46	-
103-62-22cb	-	Dr	150	3	P	Kcg	CY,H	D,S,0	Tca	2.0	60.06	10-30-46	-
103-63-13cd	-	Dr	170	3	P	-	-	D,S,0	Tca	2.0	31.88	-	-
104-60-30cd	-	B	30	18	-	Qgt	CY,H	D,0	Tcu	.0	7.32	10-28-46	-
31aa	-	B	25	24	-	Qgt	CY,H	D,0	Tcu	.0	3.74	10-28-46	-
104-61-24cc	-	B	30	12	-	Qgt	CY,H	D,0	Tcu	.0	9.99	10-28-46	-
104-62- 4dd	Mrs. Martin Typpy	B	60	8	-	Qgt	CY,W	N,0	Tca	.5	9.08	10-28-46	-
					Edmunds County								
121-66- 4aa	-	Du	27.2	48	W	Qgt	CY,H	S,0	Tco	1.4	12.53	4-12-46	-
10cb	G. Price	Du	10.8	36	W	Qgt	CY,H	S,0	Bp	.7	6.85	4-12-46	-
22cc	S. Anderson	Du	32	36	W	Qgt	CY,W	D,S,0	Bp	1.1	29.00	4-12-46	-
121-67- 9bb	Peterson	Dr	96	6	P	Qgt	CY,W	D,S,0	Bp	.0	42.95	4-12-46	-
121-68-28aa	Richardson	Dr	100	4	P	Qgt	CY,W	S,0	Bp	1.5	37.95	4-12-46	-
					Faulk County								
117-66- 4dd	-	Du	27.6	24	W	Qgt	CY,W	D,0	Bp	1.5	23.57	4-13-46	-
35cd	J. Haider	Du	45	48	C	Qgt	CY,W	S,0	Bp	1.8	16.05	4-15-46	C

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Faulk County--Continued								
117-68-12aa	-	Du	37.8	48	W	Qgt	CY,H	O	Bp	2.4	21.60	4-13-46	-
36aa	J. Sievers	B	18.1	24	P	Qgt	CY,W	S,O	Bp	1.3	10.07	4-13-46	-
36cc	-	Du	40	48	W	Qgt	CY,W	S,O	Bp	1.8	17.00	4-13-46	-
118-66-21ba	V. Elliott	Du	?.0	36	W	Qco	CY,W	D,S,O	Tcu	1.7	7.25	4-11-46	-
118-67- 7cb	-	Du	19.1	24	W	Qco	CY,W	D,O	Bp	.2	10.07	4-11-46	-
119-66- 2ab	G. Chiak	Du	38.6	24	W	Qgt	CY,W	D,S,O	Bp	1.4	28.10	4-11-46	-
119-67- 6bb	-	Du	15.2	60	W	Qgt	N	O	Tcu	.8	7.70	4-11-46	-
36dc	R. Fischer	Du	12	30	T	Qco	N	O	Tca	1.8	3.82	4-22-47	-
					Hand County								
110-66- 1ad	L. Lickty	B	37.7	18	T	Qco	CY,W	D,S,O	Bp	.7	31.26	8-12-48	50P
1bb	J. Verbeck	B	64.0	18	W	Qgt	CY,W	D,S	Tco	1.2	53.41	8-16-48	51P
3db	T. A. Tucker	Sp	-	-	N	Qgt	F.01	S	-	-	-	8-17-48	-
3dd	do.	Du	12.0	48	W	Qco	CY,W	S	Tco	1.0	5.29	8-17-48	55P
4ab	-	Sp	-	-	N	Qgt	F.01	S	-	-	-	8-18-48	-
4ba1	C. Rowen	Sp	-	36	W	Qgt	F3.0	S	-	-	-	8-18-48	60P
4ba2	do.	Sp	-	48	C	Qgt	CY,H F3.0	D	-	-	-	8-18-48	53P
4cc	-	Sp	-	-	-	-	F3.0	-	-	-	-	8-18-48	-
4dd	G. Horsely	B	44	-	-	Qgt	CY,W	D,S	L	-	30.	8-17-48	50P
5ba	-	B	26.0	18	T	Qco	CY,W	S	Tca	.0	4.39	8-18-48	-
5bb	N. Palmer	Dr	-	4	P	-	CY,W	D,S	-	-	-	8-13-48	-
5dc	C. Rowen	Sp	-	-	-	-	F2.0	S	-	-	-	8-16-48	-
6cb	-	B	70	18	W	Qgt	CY,W	D,S	L	-	45.	8-19-48	P
7cb	Letsche	B	71.0	18	W	-	CY,G	D,S	Tca	2.5	41.83	8-18-48	50P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Hand County--Continued								
110-66- 7cc1	Letsche	B	62.0	18	W	-	CY,W	S	Tco	1.0	37.10	8-18-48	50
7cc2	do.	B	65	18	W	-	N	-	Tco	3.0	9.85	8-18-48	-
7cc3	do.	Dr	-	3	P	-	CY,W	S	-	-	-	8-18-48	50P
7dc	-	Sp	-	-	-	-	-	S	-	-	-	8-18-48	-
8cd	-	B	30.3	24	T	-	CY,W	S	Tco	2.0	9.94	8-19-48	54P
10cd	Allen	B	-	-	-	-	CY,W	D,S	-	-	-	-	52
11ba	V. Gegolin	Sp	-	-	T	Qgt	FO.1	D,S	Tca	1.5	-	8-16-48	55P
11ca	do.	B	34.0	24	T	-	CY,H	N	Tca	1.0	7.96	-	49P,U
12aa	W. J. Duxbury	B	60	24	T	Qgt	CY,W	D,S	L	-	30.	8-13-48	51P
13bc1	C. B. McNeil	Du	14.4	24	T	Qco	CY,H	D	Tca	2.5	11.67	8-16-48	53P
13bc2	do.	Dr	997	4	S	Kd	F6.0	S	Tca	3.0	-	8-16-48	70P
13dd	A. M. Nelson	Du	16.7	48	W	Qco	CY,H	D,S	Tco	2.0	12.64	8-13-48	52P
14da	W. E. McNeil	B	30	-	-	Qco	T,G	D,S	L	-	10.	8-16-48	51P
15dc	A. C. Allen	Sp	-	120	C	Qgt	FO.5	D,S	-	-	-	8-16-48	65P
17aa	-	B	19.2	18	W	Qco	N	N	Tca	1.2	5.71	8-17-48	-
17ca	W. Herman	B	90	-	-	Q	CY,H	D,S	L	-	45.	8-17-48	50P
17cc	W. Moon	Sp	-	48	C	Qgt	F1.0	D,S	-	-	-	8-13-48	54P
18bd1	J. Halen	B	77.0	18	W	Q	CY,W	D,S	Tca	2.0	21.30	8-18-48	50P
18bd2	do.	B	41.6	18	W	Q	CY,N	N	Tca	2.0	8.50	8-18-48	-
18db	A. Chercus	Dr	80	4	P	Q	CY,W	D,S	L	-	50.	8-13-48	51P
19bc	E. Bannerman	B	67.5	18	W	Q	CY,W	D,S	Bp	2.0	26.75	8-19-48	49P
19da	D. A. Hazzard	B	20.0	18	T	Q	CY,W	D,S	Tca	2.0	16.15	8-17-48	51P
20da	McInnis	Sp	-	-	-	Q	CY,T F2.0	D,S	-	-	-	8-17-48	P
20dc	C. Richart	B	34	-	-	Q	CY,W	D,S	L	-	6.	8-17-48	51P
20dd	McInnis	B	52.0	24	T	Q	CY,H	S	Tca	.5	9.40	8-17-48	51P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Hand County--Continued										
110-66-21ba	R. Ross	B	79.5	20	W	Q	CY,N	N	Tco	1.5	41.22	8-13-48	-
21ca	A. Ross	B	18	-	-	Q	CY,W	-	L	-	5.	8-17-48	-
22dd1	A. Allen	B	15.9	18	T	Qgt	CY,W	D,S	Tca	.0	15.45	8-16-48	50P
22dd2	do.	B	44.0	24	T	Q	T,G	S	Tca	2.5	12.17	8-16-48	-
23cc	-	B	39.0	18	T	Q	CY,W	D,S	Tca	.0	12.25	8-16-48	50P
23da	-	Sp	-	-	-	-	-	S	-	-	-	8-13-48	-
23db	-	Sp	-	-	-	-	-	S	-	-	-	8-13-48	-
24ba	J. C. Duxbory	Dr	1060	4	P	Kd	CY,W	D,S	L	-	120.	8-13-48	-
24ca	Duxbory	Dr	1020	1¼	P	Kd	CY,W	D,S	L	-	60.	8-13-48	-
28cc	O. C. Johnson	Dr	130	5	P	Q	CY,W	D,S	L	-	100.	8-13-48	-
28db	McGillhay	B	65	18	T	Q	CY,W	D,S	-	-	5.44	8-16-48	49P
30ad	-	B	79.2	18	W	Q	CY,W	S	Tco	.0	70.09	8-18-48	50P
30bc	-	B	37.2	-	-	Q	CY,W	D,S	Tco	.5	18.56	8-19-48	49P
31da	H. J. Mosher	Du	14	-	-	Q	CY,W	D,S	Bp	2.2	9.88	8-18-48	54P
32cb	A. Johnson	B	33.2	-	-	Q	CY,W	D,S	Bp	2.5	21.71	8-19-48	49P
33ab	E. W. Noyes	Dr	100	3	P	-	CY,W	D,S	L	-	95.	8-13-48	-
33cc	Mrs. C. Fisher	Dr	-	5	P	Q	CY,W	D,S	-	-	-	8-16-48	50P
35aa	J. Gilbertson	Dr	1100	4	P	Kd	CY,W	D,S	L	-	90.	8-13-48	-
36ac1	A. Johnson	B	39.3	24	W	Q	T,G	D,S	Tca	2.5	9.69	8-13-48	-
36ac2	do.	B	-	6	T	Q	CY,N	S	Tca	1.5	11.45	8-13-48	-
36db	do.	Du	27.3	18	W	Q	CY,G	S	Tca	.0	7.49	8-13-48	-
111-66- 1ab	Cemetary	B	18	18	T	Qco	CY,H	I	Tca	.9	14.60	7-29-48	52C
1ad	-	B	19.6	24	T	Qco	CY,N	N	Tco	1.5	8.77	9-20-48	-
2cd	-	B	21.5	18	W	Qco	CY,H	N	Tco	1.3	11.79	7-30-48	-
2dd1	T. Fisher	B	24	24	T	Q	Cy	D,S	L	-	17.	7-29-48	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Hand County--Continued										
111-66- 2dd2	T. Fisher	B	26.1	24	T	Q	CY,H	I	Tco	2.5	16.98	7-29-48	50P
3cc	U. G. Harris	Dr	1168	2½	P	Kd	F16.0	D,S	-	-	-	7-30-48	-
5ba	-	Du	25.1	30	C	Q	N	N	Tco	.0	14.17	7-30-48	-
5bc1	D. Major	Du	20.0	48	W	Q	CY,W	D	Tco	.0	11.38	7-30-48	49P
5bc2	A. Major	Du	15.5	48	W	Q	CY,H	S	Tca	-	8.56	7-30-48	-
5da	-	B	20	18	T	Q	CY,W	S	L	-	4.0	7-30-48	50P
6aa	G. Major	Du	20	30	W	Q	CY,H	D,S	L	-	8.	7-30-48	53P
7da	W. Hart	B	190	24	W	-	CY,W	S	Tco	1.3	74.80	7-30-48	51P
8ad	A. M. Rowen	Dr	1155	3	P	Kd	CY,W	D,S	L	-	80.	7-30-48	-
8cd	-	Dr	-	6	P	-	CY,W	N	-	-	-	8- 5-48	-
9da	-	Dr	1140	2½	P	Kd	F8.0	D,S	Tca	1.5	-	8- 4-48	74P
10aa1	A. C. Prentice	Du	20	4	W	Q	CY,H	S	Tco	.3	9.20	7-30-48	50P
10aa2	do.	B	33.9	24	T	Q	CY,W	S	Tca	-	13.91	7-30-48	50P
11ab	A. VanAspern	B	40	18	P	Q	CY,W	D,S	L	-	20.	7-30-48	50P
11bb	R. Clark	B	28	24	W	Q	CY,W	D,S	L	-	18.	7-30-48	49P
12ad	-	Dr	-	2	P	Kd	F10.0	N	-	-	-	7-30-48	-
12cb	-	B	46.3	24	P	Q	CY,W	N	Tca	1.8	24.87	7-29-48	-
13bc	F. Lannon	B	33.3	24	-	Q	CY,W	D,S	Tco	1.1	18.19	7-29-48	49P
13da	do.	B	19.1	24	W	Q	CY,W	S	Tca	1.3	9.43	7-29-47	49P
14cc	V. Hodges	Dr	-	1½	-	Kd	F	-	-	-	-	7-29-48	-
15dd	L. Laugben	B	24.7	24	T	Qgt	CY,W	D,S	Tco	.8	15.59	7-29-48	50P
16cc	-	Du	12.0	60	W	Q	CY,W	S	Tco	3.0	5.30	8- 4-48	62P
18aa	W. Hart	B	68.6	24	W	Q	CY,W	D,S	Tco	1.1	63.20	8- 5-48	52P
19bd	-	Dr	-	6	P	-	CY,W	S	-	-	-	8- 5-48	-
19dd	V. Porter	B	81	18	W	Q	CY,W	D,S	Tca	4.5	58.10	8- 5-48	52P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Hand County--Continued								
111-66-21cc	A. VanAspern	Du	44.7	-	-	Q	CY,W	S	Tca	2.9	44.50	8- 5-48	68P
21cd	do.	B	17.0	N	-	Q	N	N	L	.0	5.30	8- 5-48	-
22bd	V. Hedge	B	17.6	24	T	Q	CY,W	D,S	Tca	1.2	9.50	7-29-48	49P
22dd	-	B	-	24	W	Q	CY,W	D,S	-	-	8.	7-29-48	-
23cd1	J. F. Peterson	B	75.0	24	T	Q	CY,W	D,S	Tca	1.0	64.45	8-44-48	51P
23cd2	do.	B	28.2	24	T	Q	CY,H	S	Tca	.6	11.85	8- 4-48	49P
23cd3	do.	B	27.0	24	T	Q	N	N	Tca	.0	20.48	8- 4-48	-
24ad	C. W. Whittenburger	Du	23.9	48	W	Q	CY,H	D,S,O	Bp	.6	17.60	7-28-48	50P
24cc	C. Halen	B	40	-	-	Q	CY,H	D,S	-	-	32.	7-30-48	-
24da	-	Du	13.3	36	W	Q	-	O	Tca	1.0	3.95	7-28-48	50P
25bb1	Crossman	Du	42	-	-	Q	CY,W	S	-	-	32.	7-28-48	50P
25bb2	do.	B	42	24	T	Q	CY,G	D	-	-	32.	7-28-48	49P
25cb	L. Lickty	B	45.1	15	T	Q	CY,W	D,S	Tco	1.3	23.06	7-30-48	50P
26aa	-	B	45.3	18	T	Q	N	N	Tca	1.5	35.01	7-30-48	-
26ba1	O. Lickty	B	40.7	24	T	Q	CY,W	D,S	Tcu	2.0	29.29	8- 4-48	53P
26ba2	-	B	36.3	24	T	Q	CY,H	S	Tco	1.5	29.39	8- 4-48	-
26bc	-	Du	15.0	48	-	Q	N	N	Tco	.0	10.13	7-29-48	-
26da	Peterson	B	32.7	18	T	Q	CY,H	N	Tco	1.3	25.91	7-30-48	-
27ad	-	Dr	-	2	P	Kd	F3.0	D,S	-	-	-	7-29-48	-
27dd	E. Phillips	B	55	18	T	Q	CY,W	D,S	-	-	18.	7-29-48	51P
28aa	D. King	Du	23.0	24	T	Q	-	D,S	Tca	1.5	7.82	8- 4-48	55P,
28dd1	J. Cable	B	64	24	W	Q	CY,W	S	-	-	52.	8- 5-48	-
28dd2	do.	B	50	18	W	Q	CY,H	S	Tco	1.2	19.40	8- 5-48	49P
29ab	A. VanAspern	B	61.5	24	W	Q	CY,W	D,S	Tco	.5	48.00	8- 5-48	50P
29bd	-	B	52.0	24	T	Q	CY	-	-	-	Dry	-	-
29db	A. VanAspern	Sp	-	-	-	Q	Fl.O	S	-	-	-	8- 5-48	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Hand County--Continued										
111-66-30dd	F. Delvaux	B	110	24	-	-	CY,W	D,S	Tco	2.0	73.	8- 5-48	52P
32ac	R. E. Schultz	B	58	18	T	Q	CY,W	D,S	L	-	45.	7-30-48	-
33aa1	E. Martens	B	29.0	24	T	Q	CY,W	D,S	Tca	.0	24.89	8- 4-48	53P
33aa2	do.	B	51.4	20	W	Q	N	N	Tco	1.1	21.65	8- 4-48	-
33cd	-	B	-	24	W	Q	CY,W	S	L	-	10.	7-30-48	49P
34bc	McNary Estate	Dr	1200	-	-	Kd	CY,W	D,S	L	-	30.	8- 4-48	-
34cd	R. Moller	B	22	-	-	Q	CY,W	D,S	L	-	10.	7-30-48	52P
35bc	-	B	20.1	24	T	Q	N	N	-	-	5.40	8- 4-48	-
35cc	-	Dr	1000	1½	P	Kd	F6.0	D,S	-	-	-	7-30-48	-
35da	L. Wedge	Dr	-	2½	P	Kd	F1.0	D,S	Tca	1.8	-	7-30-48	-
36dd1	-	B	42.6	18	T	Q	CY,H	D	Tca	.2	26.93	7-29-48	50P
36dd2	-	B	39.3	18	W	Q	CY,W	S	Tca	2.0	-	7-30-48	50P
111-67- 2bb	-	Dr	-	2	P	Kd	CY,W	D,S	-	-	-	9-14-48	66
4bb	-	Dr	-	4	P	Kd	CY,W	D,S	-	-	-	9-14-48	67
5ab	H. Skinner	B	125	18	W	-	CY,W	D,S	Tca	1.0	72.80	9-14-48	51P
6da	J. Roberts	Dr	300	4	P	Kcg	CY,W	D,S	-	-	-	9-14-48	52
7dd	S. Miller	B	110	-	-	Q	CY,W	D,S	Tca	1.5	100/	9-14-48	51
9aa	W. Miller	Dr	-	-	-	Kd	CY,W	D,S	L	-	200.	9-13-48	53
10aa	H. Vandenburg	Dr	1300	1¼	P	Kd	CY,W	D,S	L	-	200.	9-13-48	62
11bb1	L. O. Rawstern	B	185	18	W	-	CY,W	D,S	Tca	1.5	72.85	9-14-48	50P
11bb2	do.	Du	9.6	36	W	Q	N	N	-	-	9.2	9-14-48	-
11cc	A. C. Vanneberg	B	100	-	-	Q	CY,H	D,S	-	-	79.15	9-14-48	50P
12cb1	-	Dr	1350	3	P	Kd	CY,W	D,S	-	-	-	9-14-48	58
12cb2	-	B	31.0	24	T	Q	CY,H	N	Tco	1.5	6.91	9-14-48	50P
12dc	-	Dr	-	4	P	-	CY,N	N	-	-	-	9-14-48	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Hand County--Continued										
111-67-13dd	C. A. Bradford	Dr	190	2	P	-	CY,W	D,S	L	-	140.	9-14-48	51
14aa	-	Du	12.6	48	W	Q	N	N	Tca	3.8	7.53	-	-
14cd	J. Kennedy	Dr	223	-	-	Q	CY,W	D,S	L	-	190.	9-15-48	51
15cb	M. Skinner	Dr	1600	2	P	Kd	CY,W	D,S	L	-	200.	9-13-48	60
15cd1	-	Dr	1350	3	P	Kd	CY,W	D,S	-	-	-	9-14-48	58
15cd2	-	B	14.8	18	W	Q	N	N	Tca	1.0	8.49	9-14-48	-
17bc1	C. Phillips	Dr	1300	3	P	Kd	P F.01	D	-	-	-	9-14-48	-
17bc2	do.	Dr	150	2	P	Q	CY,W	D,S	-	-	-	9-14-48	-
18ad	-	Dr	132	2	P	-	CY,W	D,S	-	-	120.	9-14-48	51
18cc	J. V. Anderson	Dr	1335	3	P	Kd	CY,W	D,S	L	-	165.	9-15-48	54
19dd1	E. Getcher	Dr	1300	2	P	Kd	CY,W	D,S	L	-	-	9-15-48	-
19dd2	do.	B	31.8	18	W	Q	CY,H	N	Tca	.0	6.88	9-15-48	48P
19dd3	do.	B	21.9	18	W	Q	CY,N	N	Tco	1.5	7.22	9-15-48	-
20cb	-	Du	32.4	18	W	Q	CY,H	N	Tco	1.0	9.85	9-14-48	50P
20cc1	B. Welch	Dr	1280	4	P	Kd	CY,W	D,S	-	-	-	-	57
20cc2	do.	Du	14	-	-	Q	CY,H	N	L	-	12.	9-14-48	50P
21cc	-	B	120	-	-	-	CY,N	N	Tco	1.5	64.65	9-15-48	-
20dd	H. Welch	B	120	24	W	-	CY,W	D,S	Bp	3.0	63.20	9-15-48	50P
22cb	-	Dr	1350	3	P	Kd	CY,W	D,S	-	-	250.	9-13-48	60P
25bb	-	Dr	1600	4	P	Kd	CY,W	D,S	L	-	200.	9-13-48	55
28bb	-	Du	24.8	24	W	Q	N	N	Tca	3.0	7.21	9-15-48	-
28da1	O. Weaver	B	120	14	W	Q	CY,W	D,S	Tca	2.0	40.13	9-13-48	50P
28da2	do.	Dr	120	2	P	Q	CY,H	D,S	L	-	100.	9-13-48	52
28dd	do.	Dr	120	2	P	Q	CY,N	N	L	-	100.	9-13-48	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Hand County--Continued										
111-67-29dd	A. B. Callahan	Dr	180	2	P	Q	CY,W	D,S	L	-	50.	9-15-48	50
30bd	D. Nelson	Dr	223	1¼	P	Q	CY,W FO.51	S	Tca	3.5	-	9-15-48	52P
31ab	-	Dr	165	2	P	Q	CY,W	N	L	-	5.	9-15-48	-
32dd1	A. B. Callahan	Dr	165	2	P	Q	CY,G	D,S	L	-	15.	9-15-48	50
33aa	A. Evans	B	138	24	T	Q,X	CY,W	D,S	L	-	120.	9-13-48	51P
33cc	-	Dr	165	2	P	Q	CY,W	N	L	-	-	9-15-48	-
34cd1	H. Rimeer	B	52.9	18	W	Q	CY,W	S	Tco	1.5	15.59	9-13-48	51P
34cd2	do.	Dr	1500	3	P	Kd	CY,W	D,S	L	-	120.	9-13-48	-
111-68- 1aa	-	B	19.0	18	T	Q	CY,H	D	Tca	1.0	9.96	9-16-48	54P
1cb	R. Feinmark	Dr	1400	3	P	Kd	CY,W	D,S	L	-	170.	9-16-48	58
2bd	A. Jones	B	160	18	W	Q	CY,W	D,S	Tca	1.0	79.60	9-16-48	50P
6aa1	G. Esserhausen	B	19	-	-	Q	CY,H	-	-	-	-	-	62C
6aa2	do.	Du	14.2	48	W	-	N	N	Tca	1.5	9.99	9-18-48	-
7aa1	-	B	34.6	18	-	Q	CY,H	N	Tcu	.0	7.30	9-18-48	-
7aa2	-	B	98.1	24	-	Q	CY,W	S	Tco	1.0	18.30	9-18-48	50P
7ba	-	B	68.7	18	W	Q	N	N	Tca	1.5	30.50	9-18-48	50P
9ba	N. Jacobson	Dr	1385	3	P	Kd	CY,W	D,S	L	-	200.	9-17-48	-
9cb1	Mrs. A. Pugh	Dr	400	3	P	Kcg	CY,W	D,S	L	-	175.	9-17-48	-
9cb2	do.	B	26.8	24	W	Q	N	N	Tca	3.5	9.98	9-17-48	-
10cb	R. Jacobson	Dr	1300	4	P	Kd	CY,W	D,S	L	-	190.	9-17-48	-
11aa	-	Dr	-	4	P	-	CY,W	D,S	L	-	180.	9-16-48	-
11bb	A. Gortmaker	Dr	1400	3	P	Kd	CY,W	D,S	-	-	10.	9-16-48	-
14cd	-	B	38.2	18	W	Q	CY,N	-	-	-	7.43	9-16-48	-
15ad	-	Dr	1510	2	P	Kd	CY,G	D,S	-	-	-	9-17-48	-
17aa	-	B	100/	18	-	Q	N	N	-	-	80.21	9-18-48	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Hand County--Continued										
111-68-17bb	G. Almond	B	120	24	W	Q	CY,W	D,S	L	-	60.	9-18-48	50
18ba	-	B	100	18	W	Q	N	N	L	0.0	5.99	9-17-48	-
18da	-	Du	13.2	48	W	Q	N	N	Tca	1.0	8.35	9-18-48	-
20bb	H. Ufen	Dr	180	2	P	-	CY,W	D,S	L	-	10.	9-16-48	-
21ac	C. Yearous	Dr	1380	3	P	Kd	CY,W	S	L	-	200.	9-17-48	-
21ad	do.	Dr	1378	3	P	Kd	CY,G	-	-	-	-	9-16-48	63
22ad	-	B	28.5	24	W	Q	CY,N	N	Tca	3.0	5.35	9-17-48	-
22da	do.	B	48.7	18	W	Q	CY,W	D,S	Tco	1.5	5.82	9-16-48	52P
23cc	G. Ufen, Jr.	Dr	180	2	P	-	CY,W	D,S	-	-	-	9-17-48	51P
23dc	-	Dr	1380	4	P	Kd	CY,W	D,S	L	-	180.	9-16-48	58
27ad	S. Hines	Dr	1500	4	P	Kd	CY,W	D,S	L	-	160.	9-17-48	P
28ba	W. C. Foust	Dr	1350	4	P	Kd	CY,W	D,S	-	-	-	9-17-48	-
30ad	G. F. Ufen	Dr	200	3	P	-	CY,W	D,S	L	-	40.	9-17-48	-
30ba1	E. Gross	B	100	24	W	Q	CY,H	D,S	Tca	1.0	19.15	9-17-48	50, P,U
30ba2	do.	Dr	-	2	P	-	CY,W	S	-	-	-	9-17-48	50
31ca	-	Dr	200	3	P	-	CY,W	S	-	-	-	9-17-48	-
32dd	-	B	93	18	W	Q	CY,W	D,S	Tcu	1.0	70.20	9-17-48	-
33cc	H. Eschenbaum	Dr	-	3	P	-	CY,W	D,S	-	-	-	9-17-48	-
33dd	-	B	70.0	18	W	Q	CY,W	S	-	-	35.83	-	52P
111-69-24ad	-	B	52.7	18	W	Q	CY,W	D,S	Tca	.5	5.25	9-18-48	49P
112-66- 1cb1	H. Thompson	Dr	983	2	P	Kd	F30.0	D,S	Tca	3.0	-	8- 9-48	-
1cb2	do.	B	50.2	-	-	Q	N	N	Tcu	1.1	29.79	8- 9-48	-
2ad	F. Thompson	Dr	1000	3/4	P	Kd	F3.0	D,S	Tca	2.5	-	8- 9-48	-
2bb	-	B	31.0	24	T	Q	CY,H	N	Tco	1.0	17.20	8-10-48	49P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Hand County--Continued										
112-66- 2dc	F. Dessonville	B	55.6	24	T	Q	CY,W	D,S	Tca	2.5	22.65	8- 9-48	54P
3bc	N. E. Bonebright	B	22.5	24	W	Q	CY,W	D,S	Tco	2.0	16.97	8-10-48	53P
3dd	-	B	15.2	18	W	Q	CY,W	S	Tco	.0	6.40	8-10-48	51
4ad	N. E. Bonebright	B	18.0	24	T	Q	CY,W	S	Tco	1.0	16.09	8-10-48	53P
4bc1	E. Stephens	B	16	-	-	Q	CY,H	S	L	-	8.	8-10-48	-
4bc2	do.	B	42.8	18	P	Q	CY,H	D,S	Tco	.0	27.32	8-10-48	52P
4bc3	do.	B	20	-	-	Q	CY,W	S	L.	-	8.	8-10-48	49
4dc	-	B	28.0	18	T	Q	CY,N	N	Tco	.5	24.26	8-11-48	-
5aa	J. Slater	Du	18.0	24	W	Q	CY,W	D,S,O	Tca	1.8	10.09	8-10-48	52
5bd	O. C. Wright	Dr	-	-	P	Kd	F1.0	S	Tca	2.5	-	8-11-48	-
6bb	-	Dr	-	-	P	Kd	F2.0	D	Tca	1.5	-	8-12-48	68
7cc	-	Dr	1030	1½	P	Kd	F8.0	S	Tca	2.5	-	8-12-48	68
7da	-	Dr	1030	1½	P	Kd	F8.0	D,S	Tca	1.0	-	8-11-48	68
8aa	B. Paulsen	B	48.7	12	T	Q	CY,W	D,S	Tco	.0	32.00	8-11-48	51P
8ba	O. C. Wright	B	51.0	24	W	Q	CY,W	S	Tca	1.5	35.47	8-11-48	-
9aa	C. Vaughn	B	39.1	12	T	Q	CY,W	N	Tco	.5	24.66	8-11-48	-
9cd1	do.	Dr	1025	1¼	P	Kd	F16.0	D,S	-	-	-	8-11-48	77P
9cd2	do.	B	31.7	24	T	Q	CY,N	N	Tca	1.5	18.41	8-11-48	-
11ba	F. Dessouville	Dr	980	1¼	P	Kd	F12.0	S	Tca	2.5	-	8- 9-48	-
11cd	-	B	17.4	18	W	Q	-	S	Tco	2.0	10.74	9-21-48	53P
12aa	K. Black	Dr	900	1¼	P	Kd	F8.0	D,S	Tca	3.0	-	8- 9-48	-
12cc	T. McGuirr	Du	25.2	24	T	Qco	N	N	Tca	2.0	7.47	8- 9-48	-
12cd1	-do.	Dr	1100	2	P	Kd	F15.0	D,S	Tca	2.5	-	8- 9-48	-
12cd2	-	Dr	32.2	4	P	Qgt	N	N	Tca	.9	12.99	8- 9-48	-
13cc	K. Sargent	Du	23.2	20	P	Q	T,G	-	Tca	1.2	14.36	8- 9-48	50P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Hand County--Continued										
112-66-13da1	W. McGuirr	Dr	920	1	P	Kd	F8.0	D,S	Tca	3.4	-	8- 9-48	-
13da2	do.	B	39.6	24	T	Q	N	D	Tco	2.3	7.39	8- 9-48	-
14ad	T. DeHaven	Du	8.5	20	P	Q	N	N	Tca	1.1	5.02	8- 9-48	-
15cd	Gruber Bros.	Dr	36.0	24	W	Q	CY,W	D,S	Tca	.0	21.50	8-12-48	51P
16ad	-	B	32.0	24	W	Q	CY,N	N	Tco	1.2	14.70	8-12-48	-
17bb	R. Cook	Du	25	36	W	Q	CY,W	D,S	L	-	5.	8-11-48	50P
17da	W. F. Schmul	B	28.0	18	W	Q	CY,W	D,S	Tca	1.5	15.55	8-12-48	51P
18aa	A. A. Syring	Dr	-	2	P	Kd	F15.0	D,S	Tca	1.2	-	8-11-48	74
19da	-	Dr	1100	3/4	P	Kd	F	S	Tca	2.2	-	8-11-48	-
20ad	G. Barkhus	Dr	1107	1	P	Kd	F8.0	D,S	Tca	2.5	-	8-12-48	78
20ba	G. Gilland	Dr	1100	1¼	P	Kd	F1.0	D,S	Tca	3.0	-	8-11-48	-
20cb1	-	B	20.0	12	P	Q	N	N	-	-	9.86	8-11-48	-
20cb2	Town of Vayland	Dr	1100	3/4	P	Kd	F1.0	S	Tca	3.5	-	8-11-48	68
20cb3	do.	Dr	1135	-	P	Kd	F25.0	D,S	Tca	3.0	-	8-11-48	68
21dc	-	B	20.7	18	W	Q	CY,W	S	Tca	1.2	11.79	8-12-48	51P
22cc	G. Lickty	B	26.3	24	T	Q	CY,W	D,S	Tco	2.0	9.93	8-12-48	51P
23ad1	-	Dr	-	-	-	-	CY,H	D,S	L	-	25.	8- 9-48	-
23ad2	-	Du	29.4	28	P	Q	N	N	Tca	1.8	26.31	8- 9-48	51P
23bc	E. Langbein	B	22.8	24	W	Q	CY,W	D,S	Tca	.5	13.71	9-21-48	51P
24cb	G. Phillips	B	34.8	24	T	Q	CY,H	D,S	Tca	1.0	26.31	8- 9-48	50P
25ac	M. R. Wells	B	20.5	18	W	Q	CY,N	N	Hc	.0	12.49	8- 9-48	-
25ad	do.	B	25.2	24	T	Q	CY,G	D,S	Tca	1.0	16.69	8- 9-48	52P
25cc	F. Lischke	B	32.3	-	-	Q	CY,W	S	Tca	.6	29.93	8- 9-48	53P
26cd1	L. H. Hill	B	34.0	18	T	Q	N	N	Tco	1.0	9.88	8-12-48	-
26cd2	do.	B	43.1	24	T	Q	CY,H	S	Tca	2.0	5.10	8-12-48	50P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Hand County--Continued										
112-66-26cd3	L. H. Hill	B	28.0	24	T	Q	CY,W	D,S	L	0.0	7.88	8-12-48	55P
27bc	-	B	32.0	24	T	Q	CY,W	N	Tca	1.5	14.34	8-12-48	52P
27cc	C. V. Robbins	B	33.7	24	T	Q	CY,W	D,S	Tca	.0	27.39	8-11-48	52P
27dd	G. Partridge	B	54	12	T	Q	CY,W	D,S	L	-	35.	8-11-48	52P
28ad1	E. H. Simmons	B	42	-	-	Q	CY,W	D,S	L	-	22.	8-12-48	53P
28ad2	do.	B	32.4	24	T	Q	CY,N	O	Tco	3.0	22.22	8-12-48	-
28dd	F. Seevers	Dr	-	-	P	Kd	F3.0	D,S	Tca	1.5	-	8-12-48	73
29aa	-	Dr	-	2	P	Kd	F3.0	D,S	Tca	1.5	-	8-12-48	75
30bc	-	Dr	-	4	P	-	CY,H	S	L	-	10.	8-11-48	53
30dd	-	Dr	-	4	P	-	-	D,S	L	-	10.	8-11-48	-
31ac	-	Sp	-	-	-	-	F	N	-	-	-	8-11-48	-
31bd	-	Sp	-	-	-	-	F	N	-	-	-	8-11-48	-
31da1	-	Du	18	96	C	G Qco	CY,W	D,S	L	-	9.	8-11-48	52P, C
31da2	-	Du	17.0	12	P	Q	CY,H	S	Tca	1.0	6.46	8-11-48	54P
33ba	C. McGuirr	Dr	900	-	-	Kd	F3.0	D,S	Tca	7.0	-	8-12-48	72
33cd	A. H. Williams	Dr	1080	1	P	Kd	F2.0	D,S	Tca	3.5	-	8-11-48	64P
34dd1	D. Runge	B	-	18	W	Q	CY,W	D,S	L	-	24.	8-10-48	52
34dd2	do.	B	37.0	-	-	Q	CY,H	S	Tca	2.0	14.60	8-10-48	53P
36cd	E. Muller	Du	21.0	36	W	Q	CY	D,S	Tco	1.5	18.99	8-10-48	51P
36dd	L. A. Murphy	B	22.5	18	T	Qgt	CY,H	D,S,O	Tca	.6	15.80	4- 5-46	-
112-67- 1bc1	A. Hiatt	B	21.1	-	N	Q	CY,H	S	Tco	.0	18.95	9-21-48	-
1bc2	do.	B	30.4	18	W	Q	CY,W	S	Tco	2.0	11.40	9-21-48	54P
2bb	A. Grimm	Dr	1137	1¼	P	Kd	F10.0	D,S	Tca	4.0	-	9-21-48	73
4bb	E. McCue	Dr	1200	1¼	P	Kd	F3.0	D,S	Tca	2.5	-	9-23-48	66
4cc	-	Dr	-	2	P	Kd	F2.0	D,S	Tca	5.0	-	9-23-48	70

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Hand County--Continued										
112-67- 5ab	-	B	68.2	24	P	Q	CY,W	S	Tco	2.5	24.05	9-23-48	50P
5bc	C. Syneder	Dr	1100	2	P	Kd	F4.0	D,S	Tca	5.5	-	9-23-48	63
5dc	A. Meyers	Dr	1150	2	P	Kd	F5.0	D,S	Tca	2.5	-	9-23-48	69
6bc	M. Porter	B	113	24	P	Q	CY,W	D,S	Tca	.0	46.50	9-23-48	50P
6cc	-	Dr	-	2	P	-	F2.0	D,S	Tca	2.0	-	9-23-48	68
7aa	W. H. Browns	Dr	115	2	P	Q	CY,W	D	L	-	110.	9-24-48	-
7dc	D. Nelson	B	112	24	P	Q	CY,W	D,S,O	Tca	1.0	74.61	9-24-48	51
8dd	-	Dr	-	2	P	-	F4.0	D,S	Tca	2.5	-	9-22-48	65
9cb	-	Dr	-	2	P	Kd	F10.0	D,S	Tca	3.0	-	9-22-48	62
9dd	A. Freemark	Dr	1100	2	P	Kd	F2.0	D,S	-	10.0	-	9-22-48	69
11ca	J. VanZee	Dr	1150	2	P	Kd	F2.0	D,S	Tca	2.0	-	9-21-48	65
12aa	W. H. Browns	B	140	24	W	-	CY,W	S	Tcu	.5	100/	9-24-48	50P
12ab	-	Dr	1000	2	P	Kd	F1.0	D,S	Tca	1.0	-	9-23-48	69P
12cd	R. E. Renshaw	Dr	1175	3	P	Kd	F6.0	D,S	Tca	2.5	-	9-21-48	72
12dd	C. Gussler	Dr	-	2	P	Kd	F5.0	D,S	Tca	1.5	-	9-22-48	70
13ad	G. Magness	Dr	117	2	P	Q	CY,W	D,S	L	-	100.	9-22-48	51P
14bc	-	B	53.4	18	W	Q	CY,W	S	Tca	1.5	25.93	9-21-48	51P
14cb	-	Du	23.4	-	N	Q	N	N	Tco	.0	22.85	9-22-48	-
15bc	-	Dr	-	2	P	Kd	F1.5	S	Tca	2.0	-	9-23-48	64P
17bb	H. W. Cotton	B	120	24	T	Q	CY,W	D,S	Tca	.5	53.61	9-23-48	52P
18cb	Brumwhile Est.	Dr	140	2.5	P	-	CY,W	D,S	-	-	-	9-24-48	51P
19dc	-	B	100	-	-	-	N	N	Tca	.5	74.51	9-24-48	-
20bb	C. E. Hull	B	-	18	W	-	N	N	Tca	1.0	100/	9-24-48	-
20cb	dc.	Dr	1300	3	P	Kd	CY,W	D,S	L	-	25.	9-24-48	-
21ab	-	Dr	70	2	P	Q	CY,N	N	Bp	-	55.21	9-23-48	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Hand County--Continued										
112-67-21ba	V. Monroe	Dr	125	2	P	-	CY,W	D,S	-	-	-	-	51P
21dc	-	B	96.2	18	-	Q	-	-	L	-	50.90	9- 8-48	-
22cd	-	B	120	18	W	-	CY,W	D,S	L	-	90.	9-22-46	50
23aa	-	B	31.8	18	W	Q	N	N	Tca	1.0	17.81	9-22-48	-
23cc	-	Dr	-	2	P	Kd	FO.2	D	Tca	3.0	-	9-22-48	54
24ad	-	Dr	-	3	P	Kd	F.01	N	Tca	1.5	-	9-21-48	-
25dd	E. G. Porter	Dr	-	2	P	-	-	-	-	-	-	8-11-48	-
26cc	-	Dr	1250	3	P	Kd	CY,W	D,S	-	-	5.	9-22-48	-
26dc	-	Dr	1250	3	P	Kd	CY,W	S	L	-	5.	9-22-48	-
27ab	W. Baker	Dr	1250	3	P	Kd	F.01	N	Tca	1.0	-	9-22-48	-
27ba	do.	Dr	120	2	P	Q	CY,W	D,S	-	-	-	9-22-48	-
28ab	-	Dr	-	-	-	K	CY,W	D,S	-	-	-	9-22-48	60
30bd	E. A. Jones	Dr	1500	2	P	Kd	CY,W	D,S	-	-	-	9-24-48	51
30da	F. McGinnis	Dr	1300	3	P	Kd	CY,W	D,S	-	-	60.	9-23-48	-
31cb	-	B	-	24	W	Q	CY,N	N	Tca	.5	100/	9-24-48	-
32ad	G. Ford, Jr.	Dr	-	3	P	-	CY,W	D,S	-	-	-	9-24-48	54
33bb	J. C. Jones	Dr	-	3	P	Kd	CY,W	D,S	-	-	-	9-22-48	64
34bb	M. Bahr	Dr	-	3	P	-	CY,W	D,S	-	-	100.	9-22-48	-
112-68- 2ad	A. Cahan	Dr	1700	3	P	Kd	F10.0	D,S	Tca	1.5	-	9-25-48	75
2bb	A. Callahan	B	25.6	36	W	Q	CY,W	D,S	Tca	1.0	24.42	9-25-48	-
2cc	do.	Dr	100	3	P	Q	CY,W	D,S	-	-	-	9-25-48	51
3ad	Golf Course	B	8.6	24	W	Q	N	N	Tca	3.2	5.51	10-20-48	-
3dc1	Danforth & Co.	Dr	1100	1¼	P	Kd	F1.5	D,S	-	2.5	-	10-21-48	62
3dc2	-	Dr	-	-	P	Kd	F3.5	In	Tca	2.0	-	9-29-48	71
3dc3	H. D. Bell	Du	10.8	100	G	Q	VC,E	In,D	Tca	.0	10.12	9-25-48	54P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Hand County--Continued										
112-68- 4bd	-	B	31.9	36	W	Q	CY,W	D,S	Tco	1.5	10.38	9-25-48	51P
4cd	-	B	100	12	T	-	CY,N	S	Tca	.0	52.29	9-25-48	-
4da	F. Hatch	Dr	1400	3	P	Kd	F.10	S	Tca	1.5	-	9-25-48	-
5aa	-	Dr	-	3	P	Kd	F2.0	S	Tca	1.5	-	9-25-48	67
6aa	W. Jones	Dr	1150	3	P	Kd	F8.0	D,S	Tca	2.0	-	9-25-48	67
7aa	-	Dr	100	3	P	-	CY,N	N	Tca	1.5	49.00	9-25-48	-
7dd	A. Hibbison	Dr	1285	3/4	P	Kd	F.25	D,S	Tca	1.5	-	9-25-48	59
8dd1	C. Nedred	B	41.0	24	W	Q	CY,G	S	Tca	.0	-	9-25-48	50P
8dd2	do.	Dr	-	1½	P	Kd	F.01	S	Tca	1.5	-	9-25-48	-
9ad	-	Dr	-	3	P	Kd	F1.0	D,S	Tca	2.5	-	9-29-48	64
9dd1	J. Verdugt	Dr	130	2½	P	-	CY,G	D,S	-	-	-	9-29-48	52
9dd2	do.	B	85.1	14	W	Q	N	N	Tco	1.0	6.58	9-29-48	-
10cc	-	B	14.8	24	W	Q	N	N	-	2.0	9.35	9-29-48	-
10cd	C. N. N. W. RR.	Dr	1350	-	P	Kd	E	In	L	-	160.	9-29-48	-
11dc1	C. R. Dean	B	42.0	18	W	Q	CY,E	S	Tco	2.0	10.80	9-27-48	50P
11dc2	do.	B	160	18	W	-	CY,E	D,S	Tca	2.0	77.90	9-27-48	51P
11dd	G. A. Oehler	B	105	18	W	-	CY,W	D,S	Bp	1.0	78.21	9-27-48	51P
12cb	B. Collins	Dr	1150	3	P	Kd	F1.0	D	Tca	1.0	-	9-27-48	-
12cc	F. Bingham	B	150	18	W	-	CY,W	D,S	Tco	1.5	74.83	9-27-48	50P
13bb	A. Schweppy	B	100	24	P	-	CY,W	D,S	Tco	.5	73.99	9-27-48	51P
14aa1	do.	B	100	-	-	-	CY,G	S	Tco	.0	58.37	9-27-48	-
14aa2	do.	Dr	-	3	P	Kd	F.25	D	Tca	1.5	-	9-27-48	-
15bb	A. R. McNeil	Dr	140	2½	P	-	-	D,S	L	-	40.	9-29-48	51
15cd	C. P. Palmer	B	34.1	18	W	Q	CY,W	S	Tca	1.5	9.99	9-27-48	52P
15dc	do.	B	23.6	24	W	Q	CY,H	D,S	Tca	1.5	10.40	9-27-48	52P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Hand County--Continued								
112-68-15dd	F. Sivertsen	B	165	18	W	-	CY,E	D,S	L	-	145.	9-29-48	51
16aa1	-	B	100	24	W	-	CY,W	D,S	Tco	2.0	69.37	9-29-48	51P
16aa2	W. Beaner	B	-	18	W	-	CY,W	D,S	L	1.0	100/	9-29-48	51
16dd	H. Gohring	B	28.8	18	W	Q	CY,H	S	Tco	1.0	6.88	9-27-48	60P
18bc	-	B	100	14	P	-	CY,H	N	Tco	1.0	28.40	9-28-48	50P
19cc	C. M. Carroll	Dr	1400	3	P	Kd	CY,W	D,S	L	-	30.	9-28-48	-
20bb	do.	Dr	1100	2	P	Kd	F.25	D,S	Tca	2.0	-	9-25-48	56
20da1	Haberling	Dr	-	1	P	Kd	FO.5	S	Tca	1.5	-	9-25-48	59
20da2	A. Haberling	Du	15.6	72	W	Q	CY,G	D	Tco	1.0	7.25	9-25-48	55P
21aa	H. Gohring	B	17.9	36	-	Q	CY,W	D,S	Tca	1.5	7.98	9-27-48	56P
21cd1	H. Fulton	Dr	200	4	P	-	CY,G	D,S	L	-	130.	9-27-48	-
21cd2	do.	Du	13.4	52	P	Q	CY,H	S	Tco	3.0	7.97	9-27-48	61P
22bb1	A. Schafer	Du	10.1	48	W	Q	N	-	Tca	3.5	8.98	9-27-48	-
22bb2	do.	B	13.4	6	P	Q	P,H	D	Tca	1.0	9.98	9-27-48	52P
22cd	L. Dean	Dr	240	2	P	-	CY,W	D,S	-	-	-	9-29-48	53
22db1	-	Dr	180	3	P	-	CY,W	D,S	L	-	-	9-29-48	50
22db2	-	B	84.2	18	W	Q	CY,N	N	Tco	1.5	42.35	9-29-48	-
26cc	-	B	100	18	W	-	CY	-	-	-	67.20	9- 8-48	50C
27aa	T. Arbogast	B	-	24	P	-	CY,W	D,S	L	-	100.	9-29-48	50
28ad	P. Robinson	B	180	-	-	-	CY,W	S	Tco	1.0	100/	9-29-48	51
28bb	H. Fulton	B	-	2	P	-	CY,W	S	-	-	-	9-27-48	67
29cd	-	Du	10.0	24	T	Q	CY,H	D,S	Tca	1.0	9.01	9-28-48	50P
29dc	-	B	23.5	24	W	Q	CY,W	S	Tca	.5	9.59	9-28-48	53P
31ad	B. Hoogestradt	Du	21.6	36	W	Q	CY,W	D,S	Tca	.5	6.79	9-28-48	51P
31da	M. Hargens	Du	23.5	36	W	Q	CY,W	D,S	Tco	.5	8.39	9-28-48	53P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Hand County--Continued										
112-68-33dc1	L. Olson	Du	12.0	72	W	Q	CY,W	S	Tco	2.0	7.59	9-29-48	59P
33dc2	do.	B	12.5	24	W	Q	N	N	L	-	8.	9-29-48	-
33dc3	do.	Du	12	36	W	Q	N	N	L	-	8.	9-29-48	-
34bb1	F. Gurdes	B	180	24	-	-	CY,W	D,S	L	-	100.	9-28-48	50P
34bb2	do.	B	9.3	6	T	Q	N	N	Tca	.0	8.01	9-28-48	-
34da	-	B	180	18	T	-	CY,W	D,S	L	-	130.	9-27-48	50
35cb	-	B	180	24	W	-	CY,W	S	L	-	100/	9-27-48	51
112-69- 3dc	C. Loosey	Du	50	48	-	Qgt	N	O	Tca	.0	10.63	11-15-46	-
113-66- 1aa	C. Caranee	Dr	1280	1¼	P	Kd	F6.0	D,S	Tca	2.2	-	10-11-48	70
1db	-	B	59.5	24	W	Q	N	N	Tco	1.0	27.10	10-13-48	-
3bc	Harring Bros.	B	37.5	18	W	Q	CY,H	D,S	Tca	1.3	14.82	10-11-48	49P
3bd	do.	B	55	24	T	Q	CY,W	D,S	L	-	20.	10-11-48	49P
3dc	Mrs. Crows	B	51.4	18	-	Q	-	D,S	Tca	-	25.70	9- 8-48	49C
4cd1	Mrs. E.-Westenhaver	B	20	30	W	Q	CY,H	D	L	-	8.	10-11-48	53P
4cd2	do.	B	8.9	36	P	Q	CY,W	S	Tco	.5	6.89	10-11-48	55P
5cc	H. Lacy	Dr	1100	2	P	Kd	F5.0	D,S	-	1.5	-	10-11-48	-
7ad	Mrs. G. Conkey	Dr	1148	2	P	Kd	F3.0	D,S	Tca	3.5	-	10-11-48	70
8cb	J. E. Jones	Dr	999	3	P	Kd	F7.0	D,S	-	6.5	-	10-11-48	-
9aa	L. Jones	B	31.3	12	W	Q	CY,W	D,S	Tca	-	9.48	10-11-48	-
9dd	-	B	27.7	24	W	Q	N	N	Tca	2.1	13.93	10-14-48	-
10ac	-	B	61.4	-	-	Q	CY,H	D,S	Tcu	.5	23.25	10-11-48	48P
10da	P. Ohlinger	B	25.0	16	T	Q	CY,W	D,S	Tca	1.1	11.80	10-14-48	48P
11ad	R. O. Wright	Dr	-	5	P	Kd	F5.0	D,S	Tca	4.5	-	10-11-48	70
12bb	E. Kludt	Dr	1000	2	P	Kd	F32.0	D,S	Tca	3.5	-	10-11-48	70
12dd	B. Gaudig	Dr	1000	3	P	Kd	F4.0	D,S	Tca	1.5	-	10- 9-48	69

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Hand County--Continued										
113-66-13cd	M. E. Christian	Dr	-	1¼	P	Kd	F5.0	D,S	Tca	5.0	-	10-13-48	70
13da	-	B	32.8	24	W	-	CY,W	D,S,O	Tco	1.4	17.39	10-14-48	49
13dd	L. Spicer	Dr	-	1	P	Kd	F1.0	S	Tca	3.0	-	10-13-48	69
14ad	-	B	22.0	24	T	Q	CY,W	D,S	Tca	2.2	13.20	10-13-48	49P
14bc	H. F. Johnston	B	42.2	18	W	Q	CY,W	D,S	Tca	1.0	23.40	10-14-48	49P
14dc	J. Kulik	B	28.1	24	T	Q	CY,W	D,S	Tca	1.6	14.71	10-14-48	50
15dd	J. Bingham	B	42	24	-	Q	CY,W	D,S	L	-	34.	10-13-48	50P
16aa	-	B	25.5	18	T	Q	CY,N	N	Tca	.0	11.35	10-14-48	-
17bb	S. Conkey	Dr	1043	1¼	P	Kd	F5.0	D,S	Tca	2.5	-	10-11-48	70
17cb	H. E. Tarr	Dr	-	4	P	Kd	F12.0	D,S	Tca	5.0	-	10-11-48	75
18ab	R. Jenner	Dr	-	3	P	Kd	F1.5	D,S	Tca	5.0	-	10-11-48	60
19cd	-	B	51.4	24	W	Q	CY,W	N	Tca	1.6	12.32	10-12-48	49P
20bc	O. G. Bolin	B	10.0	18	P	Q	CY,H	S	Tca	.2	5.75	10-12-48	52P
20cc1	L. Noe	B	22.6	18	P	Q	CY,W	D,S	Tca	1.2	12.68	10-12-48	49P
20cc2	-	Dr	-	1¼	P	Kd	FO.5	S	Tca	4.0	-	10-21-48	55
21bb	-	Dr	-	2	P	Kd	F12.0	S	Tca	4.0	-	10-10-48	72
22bb	W. F. Pautsch	Dr	974	1¼	P	Kd	F15.0	D,S	-	15.0	-	10-13-48	71P
22da	-	Dr	-	1¼	P	Kd	FO.05	D	Tca	2.5	-	10-13-48	54
23ad	Mrs. Carstens	B	40.9	36	C	Q	CY,W	D,S	Tca	1.0	24.70	10-13-48	49
24bc	J. Sargent, Sr.	B	20.9	-	-	Q	CY,W	D,S	Dp	1.0	10.91	10-13-48	51P
25da	J. McGuirr	Dr	900	1¼	P	Kd	F2.0	D,S	Tca	4.5	-	10-13-49	63
27da1	O. Myers	B	81.2	18	T	Q	CY,W	D,S	Tco	.0	30.56	10-13-48	53P
27da2	do.	B	73.8	18	W	Q	CY,W	N	Tca	1.0	14.85	10-13-48	-
29cb	-	B	19.9	18	W	Q	CY,W	S	Tca	1.9	14.62	10-12-48	54P
31bc	Hannan Est.	B	26	36	T	Q	CY,W	D,S	L	-	14.	10-12-48	49P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Hand County--Continued										
113-66-31dd	C. Conerton	B	41.9	18	-	-	-	D,S	-	-	22.77	9- 8-48	48C
32cc	W. Gaudig	B	25.4	24	W	Q	CY,H	N	Tca	1.2	1.63	10-12-48	49P
32dc1	H. Snodgrass	Dr	900	-	-	Kcg	FO.25	S	Tca	2.4	-	10-12-48	55
32dc2	do.	Dr	1400	3	P	Kd	F4.0	D,S	-	5.0	-	10-12-48	70
33ad	F. Lockner	Dr	1000	2	P	Kd	F20.0	D,S	-	5.0	-	10-13-48	75
33cc	J. Slater	B	25	-	-	Q	CY,W	D,S	L	-	10.	10-12-48	53
33dd	-	B	33.3	18	T	Q	CY,W	S	Tca	.5	15.47	10-13-48	49P
34dd	J. Lakner	Dr	970	1¼	P	Kd	F15.0	D,S	-	4.0	-	10-13-48	73
35aa	-	Du	6.7	36	W	Q	N	N	Tca	.0	-	10-11-48	-
35bc	-	Dr	1050	2	P	Kd	F6.0	D,S	-	7.0	-	10-13-48	67
36dd1	-	Dr	980	2½	P	Kd	F25.0	D,S	-	15.0	-	10-13-48	72
113-67- 1ad	W. Swaney	B	27.9	18	W	Q	CY,G	D,S	Tca	1.1	13.55	10-18-48	48P
1bc1	L. Gleason	B	23.3	18	W	Q	CY,W	S	-	-	14.33	9- 8-48	50C
1bc2	do.	B	-	24	T	Q	CY,H	D	-	-	-	10-14-48	-
1bc3	-	B	17.4	-	-	Q	N	N	Tco	1.0	13.51	10-14-48	-
1cc1	E. Jenner	Dr	1165	2	P	Kd	F1.5	D,S	-	10.0	-	10-14-48	63
1cc2	do.	B	32.4	24	W	Q	CY,N	N	Tca	2.0	8.44	10-14-48	-
2cd	B. Simons	Dr	1028	1	P	Kd	F2.0	D,S	Tca	6.0	-	10-14-48	68
3cc	B. A. Goyke	Dr	-	3/4	P	Kd	F1.0	D,S	-	6.5	-	10-14-48	-
4aa	-	Dr	-	1¼	P	Kd	F2.0	N	Tca	2.0	-	10-14-48	-
5ab	E. Carl	Dr	1000	1	P	Kd	FO.5	D,S	-	-	-	10-14-48	58
5cc	-	Dr	-	1	P	Kd	F3.0	D,S	Tca	2.5	-	10-14-48	65
6ad	K. Bertsch	Dr	1100	3/4	P	Kd	F3.0	D,S	Tca	3.5	-	10-14-48	65
6cb	-	B	44.6	18	-	-	-	-	Tca	-	-	9- 8-48	53C
7dd	O. Johnson	B	47.3	-	-	Q	CY,W	D,S,O	Bp	.8	32.35	10-14-48	48P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
				Hand County--Continued									
113-67- 8cd	-	B	62.8	24	W	Q	CY,W	-	Tco	1.3	23.34	10-14-48	48P
9aa	D. R. Drake	B	34.8	18	-	Q	CY	-	Tca	-	13.28	9- 8-48	49C
9cc1	L. Resel	B	16.3	24	C	Q	CY,H	N	Tca	-	9.71	10-14-48	55
9cc2	do.	B	1194	2	P	Kd	F1.0	D,S	-	5.0	-	10-14-48	-
10aa	-	Dr	-	3/4	P	Kd	F1.5	D,S	-	5.0	-	10-14-48	63
12bb	Mrs. Stewart	Dr	-	1	P	K	F3.0	D,S	-	7.0	-	10-18-48	56
13dd	J. J. Grogan	Dr	1200	1¼	P	Kd	F10.0	D,S	-	1.8	-	10-14-48	73
14dd	S. Benham	Dr	-	2	P	Kd	F1.0	D,S	-	3.5	-	10-14-48	-
15cd	E. Horn	Dr	1100	2½	P	Kd	F1.0	D,S	-	4.5	-	10-16-48	-
15da	R. Beaner	Dr	1100	-	-	Kd	F1.0	D,S	Tca	3.5	-	10-16-48	57
16dc	-	Dr	-	2	P	-	CY,W	S	-	-	-	10-16-48	-
17bc	G. F. Wagner	Dr	-	1	P	Kd	F4.0	D,S	-	-	-	10-15-48	70
18ab	H. W. Harris	Dr	-	1¼	P	Kd	F1.0	D,S	-	-	-	10-15-48	60
18dd	-	Dr	-	2	P	Kd	FO.1	D,S	-	-	-	10-15-48	-
19aa	O. Johnson	B	62.0	18	W	Q	CY,W	D,S	Tco	5.6	35.19	10-16-48	48P
20bb	D. W. Styles	Dr	1000	3	P	Kd	F2.0	D,S	Tca	2.0	-	10-16-48	55
21dd	T. Kelly	Dr	996	3/4	P	Kd	F1.0	D,S	Tca	2.5	-	10-16-48	56
22ac	-	B	22.5	24	W	Qal	CY,N	N	Tca	.0	10.02	10-16-48	-
23ba	J. Erfman	Dr	1260	1¼	P	Kd	F25.0	D,S	-	6.0	-	10-18-48	68
23cd	P. Grogan	B	37.5	24	W	Q	CY,W	D,S	Tco	.0	20.98	10-18-48	49P
24bb	L. Grogan	Dr	-	3	P	Kd	F1.0	D,S	-	6.0	-	10-16-48	60
25db1	W. W. Cotton	Dr	-	3/4	P	Kd	F2.0	D,S	Tca	4.5	-	10-14-48	70
25db2	do.	B	42.6	24	W	Q	CY,H	N	Tco	1.6	8.79	10-15-48	49P
27dc	-	Dr	-	-	P	Kd	F3.0	S	Tca	3.0	-	10-16-48	-
29cb1	G. Melber, Sr.	B	72.0	24	W	Q	CY,W	D,S	Tco	2.5	49.69	10-16-48	49P

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Hand County--Continued										
113-67-29cb2	G. Melber, Sr.	B	12.2	24	W	Q	CY,W	D	Tco	1.6	8.32	10-16-48	54P
30ad	J. A. Vitters	Dr	1119	1½	P	Kd	F1.0	D,S	Tca	2.5	-	10-16-48	59
31aa	C. Ross	Dr	-	-	P	Kd	F1.0	D,S	-	4.5	-	10-15-48	57
31ba	-	Dr	-	2½	P	Kd	F2.0	D,S	-	6.0	-	10-16-48	-
31cc	C. Lanz	Dr	1200	1¼	P	Kd	F2.0	D,S	-	4.5	-	10-16-48	66
32cc1	do.	Dr	71.8	-	P	Q	CY,G	D,S	Tco	.7	33.98	10-15-48	49P
32cc2	do.	Dr	1111	3	P	Kd	F4.0	S	Tca	1.5	-	10-15-48	68
32dd	A. Olson	B	38.2	-	-	Q	-	-	Tca	-	18.25	-	50P
34bb	Olson	Dr	1050	1¼	P	Kd	F3.0	D,S	Tca	3.0	-	10-16-48	66
34dc	A. Jenner	Dr	-	1½	P	Kd	F2.0	D,S	-	-	-	10-15-48	-
35bc	-	Dr	-	1	P	Kd	F2.0	D,S	Tca	4.0	-	10-15-48	60
113-68- 1bc	-	B	19.8	24	W	Q	N	N	Tca	1.6	14.49	10-19-48	-
1cc	W. C. Brown	Dr	1064	3	P	Kd	F9.0	D,S	-	4.5	-	10-19-48	74
2aa	A. Shaw	B	33.1	24	W	Q	CY,W	D,S	Tca	1.0	14.82	10-19-48	48P
2cb	A. Mullins	Dr	1200	1	P	Kd	F7.0	D,S	-	6.0	-	10-18-48	68
3ad	-	Dr	-	-	P	Kd	F5.0	D,S	-	5.0	-	10-18-48	69
4bc	J. Bushfield	Dr	1200	1¼	P	Kd	F2.5	D,S	-	5.0	-	10-20-48	62
5bb	-	Dr	-	3	P	Kd	F6.0	S	Tca	7.0	-	10-20-48	74
6cb	-	B	41.7	24	T	Q	CY,N	-	Tco	3.5	10.75	10-20-48	C
6da	Mrs. H. Schweitzer	B	87.7	24	W	Q	CY,W	D,S	Tco	.8	30.99	10-20-48	49P
7ad	Mrs. G. Rudeman	Dr	-	1¼	P	Kd	F0.1	-	Tca	4.5	-	10-20-48	-
7cb	F. Tews	Dr	1300	2	P	Kd	F60.0	D,S	-	4.5	-	10-20-48	75
8ad	A. Callahan	B	17.5	18	W	Q	CY,W	N	Tco	.0	7.45	10-20-48	54P
8bb	-	Du	16.0	72	C	Q	N	N	Tco	1.2	9.10	10-20-48	-
8dd	A. Callahan	Dr	-	1½	P	Kd	F5.0	D,S	Tca	3.2	-	10-20-48	73

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Hand County--Continued								
113-68-10cc	Bertsch	B	16.5	24	T	Q	CY,W	D,S	Tca	1.4	9.45	10-19-48	52PC
11da	F. Peterson	Dr	1400	1	P	Kd	F3.0	D,S	-	5.0	-	10-19-48	69
12ab	A. Bertsch	Dr	-	2½	P	Kd	F5.0	D,S	-	6.0	-	10-18-48	75
12cc	J. Bertsch	Dr	-	3/4	P	Kd	F1.0	D,S	Tca	3.0	-	10-19-48	58
12dc	J. Egan	Dr	1400	1½	P	Kd	F2.0	D,S	Tca	1.7	-	10-19-48	64
13bc	H. Rourda	Dr	-	1¼	P	Kd	F0.8	D,S	Tca	-	-	10-19-48	59
14bc	G. C. Whittington	Dr	-	1¼	P	Kd	F6.0	D,S	-	-	-	10-18-48	71
15cc	J. J. Bertsch, Jr.	Dr	1255	1¼	P	Kd	F20.0	D,S	Tca	4.5	-	10-18-48	75P
17cc	M. Myers	Dr	-	1¼	P	Kd	F3.5	D,S	-	4.0	-	10-20-48	67
18ad	-	Dr	-	3	P	Kd	F3.5	D,S	Tca	3.2	-	10-20-48	66
20ad	-	Dr	1165	-	-	Kd	F	-	-	-	-	10-19-48	-
21bb	M. Davis	Dr	1150	1½	P	Kd	F3.5	D,S	-	6.0	-	10-19-48	72
22aa	R. Wagner	B	49.7	12	P	Qgt	CY,W	D,S,O	Tco	.8	-	10-18-48	52P
22dd	T. D. Hanson	-	70	-	-	Q	-	-	-	-	-	-	40P
23bb	-	B	52.9	18	W	Q	CY,W	S	Bp	.6	46.54	10-19-48	50P
24cc	-	Dr	1107	1	P	Kd	F5.0	D,S	-	-	-	10-19-48	75
25aa	C. Dristy	Dr	-	2½	P	Kd	F3.0	D,S	-	5.0	-	10-18-48	66
25cb	Mrs. E. Jamison	Dr	1120	1¼	P	Kd	F1.5	D,S	-	5.0	-	10-19-48	60
26dd	-	Dr	-	1¼	P	Kd	F0.5	D,S	-	5.0	-	10-20-48	59
28aa	W. Hanson	Dr	-	3	P	Kd	F4.0	D,S	-	10.0	-	10-19-48	65
29cc	A. B. Callahan	Dr	1140	5	P	Kd	F60.0	D,S	Tca	6.0	-	10-20-48	74
29dd	Danforth & Wood	Dr	-	2½	P	Kd	F30.0	D,S	Tca	7.5	-	10-20-48	74
31cb	-	Dr	1300	2	P	Kd	F10.0	D,S	-	5.0	-	10-20-48	61
33dc	F. Hicks	Dr	-	3/4	P	Kd	F1.0	D,S	Tca	1.9	-	10-20-48	65
34cc	J. Moncor	Dr	1100	1¼	P	Kd	F3.0	D,S	Tca	3.0	-	10-20-48	65

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Hand County--Continued										
113-68-35dc	C. H. Biddle	Dr	1118	1	S	Kd	F5.0	D,S	Tca	2.2	-	10-20-48	74
114-66- 8bb	Benning Bros.	B	60	18	T	Qgt	CY,H	D,O	Tco	1.6	34.50	4- 8-46	-
19dd	F. Wheelhouse	B	61.3	24	W	Qgt	CY,W	D,S,O	Bp	1.2	27.00	4- 8-46	-
25bb	A. Roebel	B	50	18	T	Qgt	CY,W	D,S,O	Bp	.8	23.75	4- 8-46	-
114-67- 8cc	Public School	B	16	6	P	Qgt	CY,H	O	Tca	.2	5.35	4-15-46	-
32bc	E. Bertsch	B	35	18	W	Qgt	CY,G	S,O	Bp	1.0	26.00	4-15-46	-
115-66- 2da	G. W. Comstock	Du	40	24	W	Qgt	CY,W	D,S,O	Bp	1.6	22.85	4-15-46	-
21bb	-	B	29.5	18	T	Qgt	CY,H	O	Bp	.7	29.05	4-21-47	-
21dd	Anderson	B	23.9	18	-	Q	-	-	Tca	-	19.60	9- 9-48	49C
30dc	Joyce	B	44.1	18	-	Q	-	-	-	-	25.18	-	50C
115-67- 5ab	-	Du	25.3	60	C	Qco	CY,H	S,O	Bp	.5	15.90	4-15-46	-
29cb	-	Du	40.4	24	W	Qgt	CY,W	D,S,O	Bp	.0	4.85	4-15-46	-
115-68-11bc	L. Mulloney	B	180	3	P	Kcg	CY,W	D,S,O	L	-	35.	4-13-46	-
15aa	-	B	50.3	18	W	Qgt	CY,W	S,O	Bp	1.4	28.37	4-13-46	-
23bb	-	Du	19.5	24	W	Qgt	CY,W	O	Tcu	1.3	6.64	4-21-47	-
28aa	Hargens	B	45.6	18	-	Q	-	-	Tca	-	30.83	9- 9-48	48C
116-66- 7bb	-	B	20.8	18	-	Q	-	-	Tca	-	3.51	9- 9-48	55C
13bb	G. Mullenberg	Du	48	18	-	Qgt	CY,W	D,S,O	Bp	1.3	31.00	4-15-46	-
116-67- 4ba	-	B	34.3	18	-	Q	-	-	Tca	-	15.45	-	48C
7bc	-	Du	12.5	24	-	Q	-	-	Tca	-	7.16	9- 9-48	52C
14bc	Mrs. W. Tierney	Du	24.2	48	W	Qgt	CY,W	D,S,O	Tco	1.1	11.15	4-15-46	-
20ba	Waters	B	54.0	18	-	Q	-	-	Tca	-	32.41	9- 9-47	49C
116-68- 6aa	Lapke	-	72.2	18	-	Q	-	-	Tca	-	52.26	-	49C
23bb	F. Schilling	B	60	6	P	Qgt	CY,W	D,S,O	Bp	.4	37.63	4-13-46	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Hand County--Continued								
116-68-27dd	H. Haberling	Du	40	42	C	Qgt	CY,W	S,O	Bp	1.5	17.68	4-21-47	-
					Jerauld County								
106-64- 2cb	-	B	30	18	-	Qgt	N	O	Tcu	1.0	5.42	3-13-47	-
107-63- 1ab	-	Dr	160	3	P	Kcg	CY,W	D,S	-	-	-	-	-
1ad	-	Dr	-	-	P	Kcg	CY,W	D,S	-	-	-	-	-
1cc	-	Dr	-	-	-	-	CY,W	D,S	-	-	-	-	-
1dd	-	Dr	-	3	P	Kcg	CY,W	D,S	-	-	-	-	-
2aa	-	Dr	190	2½	P	Kcg	CY,H	D,S	-	-	-	7- 1-47	-
2bc	-	Du	41	-	-	Qgt	CY,W	D,S	L	-	5.	7- 1-47	-
2cd	-	Dr	-	2	P	-	CY,W	D,S	-	-	-	8-18-47	-
3ad	-	Du	12	30	-	Qco	P,H	D,S	L	-	5.	7- 1-47	-
3bc	-	B	50	18	-	Qgt	CY,W	D,S	L	-	18.	7- 1-47	-
4bc	-	B	50	18	-	Qgt	CY,W	D,S	L	-	20.	7- 1-47	-
5aa	-	B	60	18	-	Qgt	CY,W	D,S	L	-	25.	7- 1-47	-
11ab	-	Dr	-	-	-	-	CY,W	D,S	-	-	-	8-18-47	-
12ab	-	Dr	150	2	-	-	CY,W	D,S	-	-	-	8-18-47	-
12da	-	Dr	225	-	-	Kcg	CY,W	D,S	-	-	-	8-18-47	-
13bb	-	B	26.5	12	P	Qgt	N	N	Tca	.2	26.	8-18-47	-
13cd	-	Dr	170	3	-	Kd	CY,W	D,S,O	Tca	2.0	31.88	3-14-47	-
16aa	-	Dr	150	4	-	Kcg	CY,H	O	Tca	1.0	44.31	10-29-46	-
24dd	-	B	165	-	-	-	CY,W	D,S	-	-	-	10- 4-47	-
107-64- 5aa	-	Du	19.5	36	W	Qco	CY,G	D,S	Tco	1.0	7.33	9-11-48	51P
18da	-	Du	40	60	-	Qgt	CY,H	S,O	Tcu	3.0	9.44	6-12-46	-
26bb	-	B	40	24	-	Qgt	N	O	Tco	1.0	9.70	6-12-46	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Jerauld County--Continued								
108-63- 1bc	O. Kunze	Dr	150	4	P	Kcg	CY,W	D,S	-	-	-	-	-
1dc	-	Dr	150	4	P	Kcg	CY,H	D,S	-	-	-	-	-
2cc	G. Rice	Du	22	18	T	Qco	CY,H	D,S	Tca	0.8	6.90	5-29-47	-
2cd	C. Ochsner	Du	22.5	-	W	Qco	CY,W	S	Tca	.0	4.60	5-28-47	-
2da	O. Kunze	Du	34.1	24	W	Qgt	CY,H	N	Bp	.8	14.85	5-29-47	-
2dd	-	Dr	150	2	P	Kcg	CY,W	D,S	-	-	-	-	C
3cd	A. Koerner	B	30	18	T	Qgt	CY,W	D,S	L	-	15.	5-29-47	C
3dd1	-	Du	20	20	C	Qco	CY,H	D,S	Bp	.8	9.05	6-30-47	-
3dd2	-	Du	20	-	-	Qco	CY,H	D,S	L	-	12.	6-30-47	-
3dd3	-	Du	20	-	-	Qgt	CY,W	D,S	L	-	14.	6-30-47	-
4cd	-	Dr	150	4	P	Kcg	CY,W	D,S	-	-	-	-	-
5aa	J. Tebay	B	38.5	18	T	Qgt	CY,W	D,S	Bp	1.5	35.15	5-29-47	-
5dd	G. Orth	B	66	24	P	Qgt	CY,W	D,S,O	Hc	2.2	33.40	5-29-47	-
6cd	do.	B	62	24	T	Qgt	CY,W	D,S	L	-	30.	5-29-47	-
6dd	-	Dr	-	-	P	Kd	F5.0	D,S	-	-	-	5-29-47	-
7bb	W. M. Holmes	B	66	24	T	Qgt	CY,W	D,S	Bp	.6	53.10	5-29-47	C
7cc1	-	Dr	810	-	P	Kd	F5.0	D,S	-	-	-	5-29-47	-
7cc2	R. Neumyer	Du	16.0	24	C,W	Qal	P,H	N	Tca	2.6	8.40	5-29-47	-
8aa	A. Hine	Dr	150	4	P	Kcg	CY,H	D,S	-	-	-	-	-
8bb	-	B	-	24	T	Qgt	CY,W	S	Tca	1.0	43.40	5-29-47	-
8cd	-	B	72	20	W	Qgt	CY,W	D,S	L	-	40.	7- 1-47	-
9bb	-	B	28.8	10	T	Qgt	CY,H	N	Bp	.4	14.95	5-29-47	-
9cd	-	Du	40.0	20	C	Qgt	CY,W	N	Bp	.3	18.65	7- 1-47	-
10aa1	-	Du	18.2	18	T	Qgt	CY,H	D	Tca	1.5	13.05	5-28-47	-
10aa2	N. Hins	B	21	18	T	Qco	CY,W	D,S	Bp	1.2	10.45	5-29-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Jerauld County--Continued								
108-63-10ab	O. McMillen	Du	7.3	60	W	Qco	CY,N	N	Tco	3.3	5.30	5-29-47	-
10ba	H. Hirsch	Du	23.8	29	P	Qco	CY,H	D	Bp	1.4	9.30	5-29-47	-
10dd	-	Du	25	24	-	Qco	CY,W	D,S	Bp	1.4	7.90	7- 2-47	-
11ac	-	Du	12	24	W	Qco	CY,W	S	Bp	.5	5.10	7- 1-47	-
11bc1	Town of Alpena	Dr	790	3	P	Kd	F160.0	D,S,P	-	-	-	5-29-47	C
11bc2	do.	Dr	800/	4	P	Kd	N	N	-	-	-	-	-
11bd1	-	Du	15.0	18	T	Qco	CY,W	S	Bp	1.5	7.08	7- 1-47	-
11bd2	J. M. Meyer	Du	20.	24	C	Qco	CY,W	S,O	Tco	1.0	6.62	3-22-47	-
11bd3	-	Du	15	24	W	Qco	N	O	Tco	1.0	5.33	6- 6-46	-
11ca	-	B	40	18	W	Qco	CY,W	D,S	L	-	11.	7- 1-47	-
12bb	A. Nelson	Dr	150	3	P	Kcg	CY,W	D,S	-	-	-	-	-
12cd	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	7- 2-47	-
13ab	-	B	60	18	-	Qgt	CY,W	D,S	L	-	18.	7- 2-47	-
14bb	-	Dr	-	-	P	Kd	F6.0	D,S	-	-	-	7- 2-47	-
14db	-	B	20	1	P	Qgt	CY,W	D,S	L	-	15.	7- 1-47	-
15db	-	B	40	18	-	Qgt	CY,W	D,S	L	-	12.	7- 2-47	-
16cc	-	Dr	-	3	P	Kcg	CY,W	D,S	-	-	-	-	-
17da	-	B	-	24	T	Qgt	CY,W	D,S	Tca	1.0	45.0	5-29-47	-
18ad	-	B	60	-	-	Qgt	CY,W	D,S	L	-	40.	7- 1-47	-
18ca	Mrs. R. S. Cook	B	70	24	C,W	Qgt	CY,W	D,S	Bp	1.0	43.50	5-29-47	-
19ab	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	7- 1-47	-
20db	-	B	60	-	-	Qgt	CY,W	D,S	L	-	30.	7- 1-47	-
21ad	-	B	40	18	-	Qgt	CY,W	D,S	L	-	15.	7- 1-47	-
21dd	-	B	60	18	-	Qgt	CY,W	D,S	L	-	18.	7- 1-47	-
22bb	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	7- 1-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Jerauld County--Continued										
108-63-22dd	-	B	30	18	-	Qco	CY,W	S	L	-	10.	7- 2-47	-
23cc	-	B	40	18	-	Qco	CY,W	D,S	Bp	1.2	9.05	7- 2-47	-
23da	M. Brose	Dr	180	-	P	Kcg	CY,W	D,S	-	-	-	-	-
24ad	-	B	40	18	T	Qgt	CY,W	D,S	Bp	1.6	18.45	7- 2-47	-
24cc	Skinner Public School	D	10.2	8	P	Qco	CY,W	O	Tca	1.0	5.08	6-12-46	-
24cd	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	7- 2-47	60
25ab	-	Dr	-	-	P	Kd	N	N	Bp	3.8	28.70	7- 2-47	-
25bc	-	Du	12.6	24	W	Qco	CY,W	D,S	Bp	1.2	4.90	7- 1-47	-
25cb	-	Dr	-	-	P	Kd	F1.5	D,S	-	-	-	7- 1-47	-
26ad1	-	Du	-	18	T	Qco	N	N	Tca	.7	6.40	5-28-47	-
26ad2	-	B	-	10	P	Qco	CY,W	S	Tca	1.0	6.10	5-28-47	-
26bc	-	B	62.9	18	P	Qgt	CY,W	D,S	Bp	1.2	19.30	7- 2-47	-
26cc	G. Miller	B	40	15	W	Qgt	CY,W	D,S	L	-	21.	5-28-47	-
26dd	-	Dr	182	-	P	Kcg	CY,W	D,S	L	-	6.	7- 1-47	-
27dd	-	Dr	150	3	P	Kcg	CY,W	D,S	L	-	4.	7- 2-47	-
28aa	-	B	50	18	-	Qgt	CY,W	D,S	L	-	22.	7- 1-47	-
28bb	-	B	60	20	C	Qgt	CY,W	D,S	L	-	25.	7- 1-47	-
28cc1	-	B	64	18	W	Qgt	CY,W	S	L	-	35.	7- 1-47	-
28cc2	-	B	63	18	T	Qgt	CY,W	D,S	L	-	35.	7- 1-47	-
29aa	-	B	62	18	-	Qgt	CY,W	D,S	L	-	30.	7- 1-47	-
29ba	-	B	60	18	P	Qgt	CY,W	D,S	L	-	40.	7- 1-47	-
29cb	-	Dr	-	2½	P	Kd	F1.5	D,S	-	-	-	7- 1-47	60
30dd	-	Dr	-	2½	-	Kd	F2.0	D,S	-	-	-	7- 1-47	-
31bb	-	B	60	18	-	Qgt	CY,W	D,S	L	-	25.	7- 1-47	-
31cd	-	Dr	-	-	P	Kd	F6.0	D,S	-	-	-	7- 1-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Jerauld County--Continued								
108-63-31da	-	B	50	18	-	Qgt	CY,H	D,S	L	-	30.	7- 1-47	-
32ab	-	B	60	-	-	Qgt	CY,W	D,S	-	-	30.	7- 1-47	-
32cd	-	B	70	18	-	Qgt	CY,W	D,S	L	-	26.	7- 1-47	-
32da	-	B	65	18	-	Qgt	CY,G	D,S	L	-	30.	7- 1-47	-
33bc	-	B	60	-	-	Qgt	CY,W	D,S	L	-	30.	7- 1-47	-
33cd	-	Du	52.5	24	C	Qgt	N	O	Tca	0.5	24.80	5-28-47	-
33dc	-	B	60	18	T	Qgt	CY,W	D,S	L	-	30.	7- 1-47	-
34cc	-	B	60	18	T	Qgt	CY,W	D,S	L	-	30.	7- 1-47	-
34dd	-	Du	20	24	W	Qgt	CY,W	D,S	Bp	1.4	6.80	7- 2-47	-
35ad	-	Dr	184	-	P	Kcg	CY,W	D,S	-	-	-	-	-
35bc	-	Dr	180	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
36cc	-	B	42	18	W	Qgt	CY,W	N	Bp	1.0	7.30	5-28-47	-
108-64- 1da	A. J. Siedschlaw	B	76	24	T	Qgt	CY,W	D,S	Tca	2.0	74.10	5-29-47	-
2bc	-	Du	50	24	P	Qgt	CY,W	D,S	Tca	2.3	46.97	6-30-47	-
2dd	-	Dr	-	1½	P	Kd	F2.0	D,S	-	-	-	6-30-47	-
3dd1	M. Neumeyer	Dr	180	3	P	Kcg	CY,W	D,S	-	-	-	-	-
3dd2	do.	B	50	24	-	Qgt	N	O	Tca	.5	13.58	6- 6-47	-
4dc1	-	Dr	-	2	P	-	CY,W	N	-	-	-	9- 9-48	-
4dc2	-	Du	52.2	36	C	Qgt	N	N	Tco	1.0	41.21	9- 9-48	-
4dd	C. Bremer	Dr	886	1¼	P	Kd	F4.0	D,S	Tca	2.5	-	9- 9-48	58
5bc	B. Hotchkiss	B	33.3	18	T	Qgt	CY,W	D,S	Tco	2.0	20.10	9- 9-48	50P
5cd	-	Dr	-	3/4	P	Kd	F4.0	S	Tca	2.5	-	9- 9-48	63
6ad	W. Burma	B	35	24	T	Qgt	CY,W	D,S,I	L	-	15.	9- 9-48	50P
6cc1	A. C. Crouch	Du	23.3	12	T	Qgt	N	O	Tco	-.2	11.79	9- 9-48	-
6cc2	do.	Dr	889	1¼	P	Kd	F5.0	D,S	Tca	2.5	-	9- 9-48	67

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Jerauld County--Continued								
108-64- 6dc	A. Vessey	B	32.2	6	P	Qgt	CY,W	D,S	L	-	28.	9- 9-48	50P
7cc	E. Linafelter	Dr	-	2	P	Kd	F6.0	D,S	Tca	3.0	-	9- 9-48	64
8dd	-	Du	14.8	36	C	Qgt	CY,W	D,S	Bp	1.5	7.87	9- 9-48	54P
9bc	L. Scott	B	42.0	18	W	Qgt	CY,W	D,S	Tco	1.0	33.03	9- 9-48	50P
9dc	R. E. Shuey	Du	16.8	48	C	Qgt	CY,W	D,S	Tco	1.0	10.25	9- 9-48	51P
11aa	-	Dr	-	1½	P	Kd	F2.0	D,S	-	-	-	6-30-47	-
11dd	J. Brandenburg	Dr	800	2	P	Kd	F4.5	D,S	-	-	-	6-30-47	-
12aa	-	Du	15	-	-	Qal	CY,H	S	-	-	5.	5-29-47	-
12cb	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	6-30-47	-
13dd	-	Dr	-	-	P	Kd	F10.0	D,S	-	-	-	6- 3-47	-
14ad	K. Calwell	Dr	840	-	P	Kd,X	F6.0	D,S	-	-	-	6- 3-47	64
14dd	W. Daleske	Dr	-	2½	P	Kd	F4.0	D,S	-	-	-	6-30-47	64
15cc	-	B	18	3	P	Qgt	CY,W	D,S	L	-	9.	6-30-47	-
16cd	-	B	26.5	24	W	Qgt	CY,W	D,S	Tca	1.6	15.30	8-18-47	-
17dc1	R. Eagle	B	20	-	-	Qco	CY,H	D	L	-	18.	9-10-48	53
17dc2	do.	Du	22.6	-	C	Qco	CY,W	S,I	Tco	1.5	20.15	9-10-48	51P
18ca	W. Butz	B	32.9	-	C	Qco	CY,W	D,S,I	Bp	2.0	24.79	9-11-48	51P
18dd1	B. Schonfeld	B	13.6	-	-	Qgt	CY,W	D,S	Bp	1.5	9.65	9-11-48	57P
18dd2	W. Butz	B	12.5	18	W	Qgt	CY,H	D,S	Tca	2.5	9.95	9-11-48	57P
20ab	E. Lamley	Du	22.4	24	W	Qu	CY,W	D,S	Tco	.0	15.50	9-10-48	51P
20bb	B. Winters	B	22.4	-	-	Qco	CY,W	D,S	Tcu	.0	13.85	9-10-48	51P
21bc	S. J. Whitney	Dr	-	1¼	P	Qgt	F3.0	D,S	Tca	2.5	-	9-10-48	65P
21cc1	O. Bathke	Dr	858	3	P	Kd	F5.0	D,S	Tca	1.0	-	9-10-48	60P
21cc2	do.	Dr	860	3/4	P	Kd	F0.1	D	Tca	2.7	-	9-10-48	64
22cb	-	B	26.5	24	W	Qgt	CY,W	D,S	Tca	1.6	15.30	8-18-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Jerauld County--Continued								
108-64-22dd	-	B	25	1½	P	Qgt	CY,W	S	L	-	14.	8-18-47	-
23bb	-	Du	-	18	T	Qco	CY,W	D,S	Tca	1.5	8.75	6-30-47	-
24cb	F. F. G. Dethlefs	Dr	844	2	P	Kd	F4.0	D,S	-	-	-	8-18-47	63
25bb	D. Smith	Dr	800	1½	P	Kd	F12.0	D,S	-	-	-	8-18-47	-
25cc	-	Dr	-	2	P	Kd	F5.0	D,S	-	-	-	8-18-47	-
25dc	-	Dr	-	-	P	Kd	F3.0	N	-	-	-	8-18-47	-
27ab	-	B	-	-	-	Qgt	CY,W	S	L	-	15.	8-18-47	-
28bc	-	Du	12.2	36	W	Qco	CY,W	S	Tco	1.0	7.15	9-11-48	-
28db	C. Hotchkiss	B	19.9	18	P	Qco	CY,W	D,S	Tca	1.5	6.73	9-11-48	53P
29ad	-	Du	10.2	24	T	Qco	CY,W	S	Tca	1.0	6.95	9-11-48	59P
29cc	L. J. Hurley	Dr	-	1¼	P	Kd	F3.0	D,S	Tca	2.5	-	9-10-48	65
30bd	D. Buckles	B	20.6	-	C	Qgt	CY,W	D,S	Tco	1.5	11.98	9-11-48	51P
30cd	-	Du	17.1	-	-	Qco	N	N	L	-	Dry	9-10-48	-
31aal	C. Hurley	Du	-	-	-	Qco	CY,W	S	L	-	15.	9-10-48	52
31aa2	-	B	35	24	T	Qco	CY,H	D	Bp	.5	15.54	9-10-48	50P
31cc	Mrs. H. B. Gilbertson	Dr	900	3	P	Kd	CY,W	D,S	L	-	15.	9-10-48	57
32ab1	C. F. McVey	Du	25	36	C	Qco	CY,W	D,S	Tco	1.0	9.55	9-11-48	53P
32ab2	do.	Du	30	36	C	Qco	N	N	L	-	8.5	9-11-48	-
33bb	-	Du	15.4	24	W	Qco	N	N	Tco	.0	7.49	9-11-48	-
33cc	A. M. Christenson	Dr	840	1¼	P	Kd	F3.0	D,S	Tca	2.0	-	9-11-48	66
34bb	-	Dr	-	2	P	Kd	F7.5	S	-	-	-	8-18-47	63
35dd	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	8-18-47	-
					Sanborn County								
105-60- 3bd	-	Dr	150	3	P	Kcg	CY,H	D,S,O	Tca	2.0	59.95	10-28-46	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Sanborn County--Continued										
106-60- 4bb	-	Dr	100	3	P	Kcg	CY,W	D,S	-	-	-	-	-
5ad	-	Dr	-	2	P	Kd	F4.0	D,S	-	-	-	6-19-47	-
5cc	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	6-19-47	-
6bc	-	Dr	142	-	P	Kcg	CY,W	D,S	-	-	-	-	-
6bd	-	Dr	182	3	P	Kcg	CY,W	S	-	-	-	-	-
7ad	-	Dr	-	-	P	Kd	F2.2	D,S	-	-	-	6-18-47	-
8aa	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	6-19-47	-
8bc	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	6-18-47	-
9bb	-	Dr	-	-	P	Kd	F2.5	D,S	-	-	-	6-19-47	-
106-61- 1ba	-	Dr	-	2½	P	Kcg	CY,H	D	Bp	0.9	6.50	7- 3-47	-
1bd1	Town of Forestburg	Dr	740	3	P	Kcg	F	P	-	-	-	-	-
1bd2	H. Torgeson	B	14	1	P	Qgt	CY,H	D,S,O	Tca	.8	7.33	6- 6-46	-
2cb	-	Dr	-	3½	P	Kcg	CY,H	D,S	-	-	-	-	-
3aa	-	Dr	-	3	P	Kcg	CY,W	D,S	-	-	-	-	-
4bd	-	Dr	-	2½	P	Kcg	CY,G	D,S	-	-	-	-	-
5cd	-	Dr	-	2½	P	Kcg	FO.2	S	-	-	-	-	-
6cb	-	Dr	-	-	P	Kcg	CY,W	D,S	-	-	-	-	-
6dc	-	Dr	-	-	P	Kcg	CY,W	D,S	-	-	-	-	-
10ab	-	Dr	-	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
106-62- 2ab	S. Kutil	Dr	130	3	P	Kcg	CY,W	D,S	-	-	-	-	-
2bb	H. Johnson	Dr	-	3	P	Kcg	CY,W	D,S	-	-	-	-	-
2cd	-	Dr	-	-	P	Kcg	CY,W	D,S	-	-	-	-	-
3aa	-	Dr	-	3	P	Kcg	CY,W	S	-	-	-	-	-
3bc	-	Dr	150	-	P	Kcg	CY,W	D,S	-	-	-	-	-
3dd1	-	Dr	-	-	P	Kcg	CY,H	N	-	-	-	-	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Sanborn County--Continued								
106-62- 3dd2	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	10- 4-47	-
4bb	-	Dr	-	3	P	Kcg	CY,W	D,S	-	-	-	-	-
4cd	-	Dr	-	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
4da	-	Dr	-	-	P	Kcg	CY,W	D,S	-	-	-	-	-
5da	-	Dr	-	-	P	Kcg	CY,W	D,S	-	-	-	-	-
6aa1	-	Dr	-	3	P	Kcg	CY,W	D,S	-	-	-	-	-
6aa2	-	Dr	-	2½	P	Kcg	CY,H	N	-	-	-	-	-
6cd	-	Dr	-	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
6dc	-	Dr	-	-	P	Kcg	CY,W	D,S	-	-	-	-	-
8ba	-	Dr	-	-	P	Kcg	CY,W	D,S	-	-	-	-	-
9aa	-	Dr	-	2½	P	Kcg	CY,W	S	-	-	-	-	-
11ba	-	Dr	-	-	P	Kcg	CY,W	D,S	-	-	-	-	-
23da	B. Goeman	Dr	170	3	P	Kcg	N	O	Tca	1.5	13.63	10-30-46	-
107-60- 4bc	-	Dr	196	3	P	Kcg	CY,H	N	-	-	-	6-19-47	-
5da	-	Dr	-	-	P	Kd	F5.0	D,S	-	-	-	7- 7-47	-
6bc	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	7- 7-47	-
6cc	-	Dr	-	-	-	Kd	F2.0	D,S	-	-	-	7- 7-47	-
7bc	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	7- 7-47	-
8ca	F. Rubert	Dr	720	2	P	Kd	F2.0	D,S	-	-	-	7- 7-47	58
17aa	Public School	Dr	-	2	P	Kcg	CY,H	D	-	-	-	-	-
17ab	-	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	6-19-47	-
17dd	-	Dr	100	3	P	Kcg	CY,W	D,S	-	-	-	-	-
19ba	C. Morse	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	7- 7-47	-
20aa	-	Dr	100	3	P	Kcg	CY,W	D,S	-	-	-	-	-
20ca	-	Dr	-	2	P	Kd	F2.5	D,S	-	-	-	7- 7-47	62

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
				Sanborn County--Continued									
107-60-21cc	-	Dr	-	-	P	Kd	F3.0	S	-	-	-	6-19-47	-
28cc	-	Dr	-	2	P	Kd	F0.3	D,S	-	-	-	7- 7-47	-
29ad	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	6-19-47	-
29cb	-	Dr	-	2	P	Kd	F2.0	D,S	-	-	-	7- 7-47	-
29dd	-	Dr	-	-	P	Kd	F3.5	S	-	-	-	6-19-47	59
30bc	-	Du	-	-	-	Qgt	CY,H	D	L	-	15.00	6-18-47	-
32dd	-	Dr	-	-	P	Kd	-	D,S	-	-	-	6-19-47	-
33bc	-	Dr	-	-	P	Kd	-	D,S	-	-	-	6-19-47	-
107-61- 1cc	-	Dr	-	-	P	Kd	F5.0	D,S	-	-	-	6-20-47	-
2aa	-	-	-	-	P	Kd	F2.5	D,S	-	-	-	6-20-47	-
2dd	-	-	-	-	P	Kd	F3.0	D,S	-	-	-	6-20-47	-
4bb	-	Dr	-	3½	P	Kcg	CY,W	D,S	-	-	-	-	-
4dd	-	Dr	-	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
5bc	-	Dr	-	-	P	Kcg	F1.0	D,S	-	-	-	6- 6-47	-
5cd	-	Dr	-	2½	P	Kcg	CY,H	N	-	-	-	-	-
5dc	-	Dr	150	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
6cb	-	Dr	180	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
6dd	-	Dr	-	2½	P	Kcg	N	N	Tca	2.0	7.0	6- 6-47	-
7ab	-	Dr	180	-	P	Kcg	CY,W	D,S	-	-	-	-	-
7da	-	Dr	150	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
8ac	-	Dr	150	-	P	Kcg	CY,W	D,S	-	-	-	-	-
8cc	-	Dr	-	2	P	Kd	F2.0	D,S	-	-	-	-	-
8dd	-	Dr	750	2	P	Kd	F7.0	D,S	-	-	-	-	-
9aa	-	Dr	150	2½	P	-	-	D,S	-	-	-	-	-
9dc	-	Dr	150	2½	P	Kcg	-	D,S	-	-	-	-	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Sanborn County--Continued										
107-61- 9dd	-	Dr	150	2½	P	Keg	-	D,S	-	-	-	-	-
10cc	-	Dr	150	2½	P	Keg	-	D,S	-	-	-	-	-
11cd	-	Dr	-	2	P	Keg	F6.0	D,S	-	-	-	-	60
12cc1	-	Dr	702	-	P	Kd	F7.5	D,S	-	-	-	6-20-47	-
12cc2	-	Dr	-	3	P	Keg	CY,H	N	-	-	-	-	-
14ad	-	Dr	-	-	P	Kd	F5.0	D,S	-	-	-	6-20-47	-
14cc	-	Dr	-	2½	P	Keg	CY,H	N	-	-	-	-	-
14dd	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	6-20-47	-
15ad	-	Dr	-	3	P	Keg	CY,W	D,S	-	-	-	-	-
15bb	-	Dr	-	-	P	Keg	CY,W	N	-	-	-	-	-
15bc	M. L. Larson	Dr	150	2½	P	Keg	CY,W	D,S	-	-	-	-	-
15cb	Mrs. Anna Straud	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	6- 6-47	-
15dc	-	Dr	-	3	P	Keg	CY,W	D,S	-	-	-	-	-
16cb	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	-	-
17ad	-	Dr	750	-	P	Kd	F4.0	D,S	-	-	-	-	-
17cb	-	Dr	120	3	P	Keg	CY,G	D,S	-	-	-	-	-
17cc	Public School	Dr	-	3	P	Keg	CY,H	P	-	-	-	-	-
17da	-	Dr	120	3	P	Keg	FO.7	S	-	-	-	6-19-47	-
18ba	-	Dr	-	-	P	Kd	F1.0	-	-	-	-	6-19-47	-
18cc1	-	Dr	160	2½	P	Keg	CY,H	D	-	-	-	-	-
18cc2	-	Dr	800	-	P	Kd	F2.0	S	-	-	-	6- 9-47	-
18dc	-	Dr	130	3	P	Keg	CY,H	D,S	-	-	-	-	-
19ab	-	Dr	130	3	P	Keg	CY,W	D,S	-	-	-	-	-
19cd	-	Dr	150	3	P	Keg	CY,W	D,S	-	-	-	-	-
19da	-	Dr	130	3	P	Keg	CY,W	D,S	-	-	-	-	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Sanborn County--Continued										
107-61-20ad	-	Dr	120	3	P	Kcg	CY,W	D,S	-	-	-	-	-
20dd	-	Dr	170	3	P	Kcg	CY,W	S	-	-	-	-	-
21aa	-	Dr	140	2½	P	Kcg	CY,H	D,S	-	-	-	-	-
21bb	-	Dr	130	3	P	Kcg	CY,W	D,S	-	-	-	-	-
22bb	Public School	Dr	-	2	P	Kcg	CY,H	P	L	-	15.	5-22-47	-
22bc	M. E. Hilton	Dr	-	-	P	Kd	F4.5	D,S	-	-	-	6- 8-47	-
22dc	-	Dr	-	-	P	Kd	F2.5	D,S	-	-	-	6-18-47	-
23aa	Public School	Dr	-	3	P	Kcg	CY,H	P	-	-	15.	5-22-47	-
23ba	-	Dr	130	-	P	Kcg	CY,W	D,S	-	-	-	-	-
23dd	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	6-18-47	-
24cc	-	Dr	-	2	P	Kcg	CY,G	D,S	-	-	-	-	-
25bb	-	Dr	143	-	-	Kcg	CY,W	N	-	-	-	-	-
26aa	-	Dr	165	-	P	Kcg	CY,W	D,S	-	-	-	-	-
26bc	-	Dr	-	-	P	Kd	F2.5	D,S	-	-	-	6-18-47	-
26cb	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	6-18-47	-
26dd	-	Dr	-	3	P	Kcg	CY,W	D,S	-	-	-	-	-
27ba	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	6-18-47	-
27da	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	6-20-47	-
28ad	-	Dr	-	2	P	Kd	F4.5	D,S	-	-	-	6-20-47	-
28cd	L. Peterson	Dr	750	2	P	Kd	F13.0	D,S	-	-	-	6-20-47	C
28dd	Public School	Dr	150	-	P	Kcg	CY,H	O	-	-	-	-	-
29bb1	--	Dr	140	3	P	Kcg	CY,H	D	-	-	-	-	-
29bb2	--	Dr	-	-	P	Kd	FO.2	S	-	-	-	5-21-47	-
29cb	-	B	15	1¼	P	Qgt	CY,H	S	L	-	12.	5-21-47	-
30aa	-	Dr	-	-	P	Kd	F3.0	S	-	-	-	-	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Sanborn County--Continued								
107-61-30cb	-	Dr	130	3	P	Kcg	CY,H	D,S	-	-	-	-	-
30da	-	Dr	140	-	P	Kcg	CY,H	D,S	-	-	-	-	-
30dc	-	Dr	140	3	P	Kcg	CY,W	D,S	-	-	-	-	-
31cb	-	Dr	140	3	P	Kcg	CY,W	D,S	-	-	-	-	-
32cc	-	Dr	160	3	P	Kcg	CY,W	D,S	-	-	-	-	-
33ba	-	Dr	130	3	P	Kcg	CY,W	D,S	-	-	-	-	-
33dd	-	Dr	152	-	P	Kcg	CY,W	D,S	-	-	-	-	-
34ad	-	Dr	-	3	P	Kcg	CY,H	S	-	-	-	-	-
34dc	-	Dr	160	3½	P	Kcg	CY,W	D,S	-	-	-	-	-
35ca	-	Dr	-	2	P	Kd	F13.0	D,S	-	-	-	6-20-47	-
107-62- 1bc	-	Dr	170	2½	P	Kcg	CY,W	-	-	-	-	-	-
1dd	-	Dr	-	-	P	Kd	F5.0	-	-	-	-	6- 6-47	-
2ad	-	Dr	165	2½	P	Kcg	-	-	-	-	-	-	-
3ba	-	Dr	160	2½	P	Kcg	-	-	-	-	-	-	-
3cc	-	B	10	6	T	Qco	-	-	-	-	-	-	-
4bc	-	Dr	-	2½	P	Kcg	CY,W	S	-	-	-	-	-
4cc	-	Dr	160	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
4dc	-	Du	10	-	-	Qco	CY,W	S	L	0.0	6.	6- 9-47	-
5bc	-	Dr	-	3	P	Kcg	CY,W	D,S	-	-	-	-	-
5cb	-	Dr	-	3	P	Kcg	CY,W	D,S	-	-	-	-	-
5da	-	Dr	160	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
6ba	-	Dr	-	-	P	Kcg	CY,W	D,S	-	-	-	-	-
6cd	-	Dr	-	3	P	Kcg	CY,W	D,S	-	-	-	-	-
6dd	-	Dr	-	2	P	Kd	F10.0	D,S	-	-	-	6- 9-47	-
7ab	M. Goergen	Dr	-	2½	P	Kcg	CY,G	D,S	-	-	-	-	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
				Sanborn County--Continued									
107-62- 7cd	O. Teller	Dr	140	3	P	Kcg	CY,W	D,S	-	-	-	-	-
8aa	-	Dr	160	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
8bb	Public School	Dr	-	2½	P	Kcg	CY,H	D	-	-	-	-	-
8cd	-	Dr	-	-	P	Kcg	CY,H	D,S	-	-	-	-	-
8da	-	Dr	-	-	P	Kcg	F2.5	-	-	-	-	6- 9-47	-
9bd	-	Dr	160	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
9db	-	Dr	160	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
10ab	-	Dr	165	3	P	Kcg	CY,W	D,S	L	-	13.	6- 9-47	-
10cb	-	Dr	150	2½	P	Kcg	CY,H	D,S	-	-	-	-	-
11aa	-	Dr	160	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
11dd	-	Dr	-	2½	P	Kcg	CY,G	D,S	-	-	-	-	-
12ac	-	Dr	150	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
12bc	-	Dr	160	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
12cd	-	Dr	160	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
12dc	M. Thompson	Dr	160	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
13dd	-	Dr	160	2½	P	Kcg	CY,H	D,S	-	-	-	-	-
14aa	-	Dr	156	2½	P	Kcg	CY,H	D,S	-	-	-	-	-
14bb	-	Dr	-	2½	P	Kcg	N	N	Tca	2.3	7.90	5-22-47	-
14bd	-	Dr	-	3	P	Kcg	CY,W	N	Bp	.9	6.60	5-22-47	-
15bc	-	Dr	160	2½	P	Kcg	CY,H	N	Bp	1.0	6.60	5-22-47	-
15cd	-	Dr	150	2½	P	Kcg	CY,H	D,S	-	-	-	-	-
15dd	-	Dr	-	-	P	Kd	F12.0	D,S	-	-	-	6- 9-47	-
16ad	-	Dr	160	2½	P	Kcg	CY,H	N	-	-	-	-	-
16db	-	Dr	150	2½	P	Kcg	CY,H	D,S	-	-	-	-	-
17dd	-	Dr	160	2½	P	Kcg	CY,H	D,S	-	-	-	-	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Sanborn County--Continued										
107-62-18ad	F. Foos	Dr	-	3	P	Kcg	CY,W	D,S	-	-	-	-	-
18bb	-	Dr	-	3	P	Kcg	CY,W	D,S	-	-	-	-	-
19ad	-	Dr	160	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
19bd	-	Du	10	-	-	Qgt	CY,W	N	L	-	8.	6-30-47	-
19dd	-	Dr	150	2½	P	Kcg	CY,H	D,S	Tca	2.0	17.00	6- 9-47	-
20cc	-	Dr	139	-	P	Kcg	CY,H	D,S	-	-	-	-	-
20dd	-	Dr	-	-	P	Kcg	CY,W	D,S	-	-	-	-	-
21aa	-	Dr	160	2½	P	Kcg	CY,H	S	-	-	-	-	-
21bc	-	B	40	2½	P	Qco	N	N	L	-	8.	6- 9-47	-
21da	-	Du	20	36	W	Qco	CY,H	D	L	-	8.	6- 9-47	-
21dc	Town of Woonsocket	Dr	775	2	P	Kd,X	F30.0	P	-	-	-	6-17-47	64C
21dd	do.	Dr	725	6	P	Kd	FO.01	P	-	-	-	6-17-47	-
22ac	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	6-30-47	-
22bc	-	Dr	160	-	P	Kcg	CY,G	D,S	-	-	-	-	-
22dd	-	Dr	-	-	P	Kcg	CY,H	D,S	-	-	-	-	-
23ad	-	Dr	-	-	P	Kcg	CY,W	D,S	-	-	-	-	-
23dd	-	Dr	-	-	P	Kcg	CY,W	D,S	-	-	-	-	-
24cc	-	Dr	150	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
24dc	-	Dr	150	2½	P	Kcg	CY,H	D,S	-	-	-	-	-
25aa	Filling Station	B	12	2	P	Qco	P,H	D	L	-	8.	6-20-47	-
25ab	-	Dr	150	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
25bb	-	Dr	150	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
25cd	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	5-21-47	-
26ab	-	Dr	160	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
26bb	-	Dr	160	2½	P	Kcg	CY,W	D,S	-	-	-	-	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
				Sanborn County--Continued									
107-62-26bc	-	Dr	140	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
27aa	-	Dr	160	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
28aa1	-	Du	20	36	W	Qco	CY,H	D	L	-	8.	6- 9-47	-
28aa2	Town of Woonsocket	Dr	163	-	P	Kcg	T,E	P	-	-	-	6-17-47	-
28ab	do.	Dr	163	-	P	Kcg	T,E	P	-	-	-	6-17-47	C
28ba1	-	Dr	-	-	P	Kd	FO.5	D,S	-	-	-	6-30-47	-
28ba2	-	Dr	150	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
28ba3	-	Dr	150	2½	P	Kcg	CY,H	N	-	-	-	-	-
28ca	-	Dr	160	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
28da	M. Wingert	B	14.3	3	P	Qgt	CY,H	O	Tca	1.0	14.35	6-13-46	-
29aa	-	Dr	160	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
29bb	-	Dr	160	3	P	Kcg	CY,W	D,S	-	-	-	-	-
29cb	-	Dr	150	2½	P	Kcg	CY,W	S	L	-	8.	6- 9-47	-
29cc	Public School	Dr	-	2½	P	Kcg	CY,W	D	-	-	-	-	-
29da	-	Dr	150	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
30ab1	-	Dr	160	2½	P	Kcg	CY,H	D	-	-	-	-	-
30ab2	-	Dr	150	2½	P	Kcg	CY,W	S	-	-	-	-	-
30cc	-	Dr	-	3	P	Kcg	CY,W	D,S	-	-	-	-	-
31ba1	-	Dr	-	2	P	Kd	F8.0	S	-	-	-	6-20-47	-
31ba2	-	Dr	-	3	P	Kcg	CY,H	D	-	-	-	-	-
32da	J. Burkel	Dr	135	3	P	Kcg	CY,W	D,S	-	-	-	-	-
33ab	-	Dr	160	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
33da	W. A. Goergen	Dr	150	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
34aa	-	Dr	179	3	P	Kcg	CY,W	D,S	-	-	-	-	-
34cb	-	Dr	150	-	P	Kcg	CY,G	D,S	-	-	-	-	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
				Sanborn County--Continued									
107-62-35bc	-	Dr	160	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
35cd	-	Dr	-	3	P	Kcg	CY,W	D,S	-	-	-	-	-
35dc	-	Dr	-	2½	P	Kcg	CY,H	N	-	-	-	-	-
108-60- 4cc	-	Dr	-	2	P	Kd	F0.01	N	-	-	-	7- 7-47	-
5cd	-	Dr	-	-	P	Kd	F1.5	D,S	-	-	-	6-19-47	-
6aa	-	Dr	-	-	P	Kcg	CY,W	D,S	-	-	-	-	-
6cb	-	Dr	-	2	P	Kd	F5.0	D,S	-	-	-	7- 7-47	-
7aa	-	Dr	150	3	P	Kcg	CY,W	D,S	-	-	-	-	-
7cd	-	Dr	-	2	P	Kd	F3.0	D,S	-	-	-	6-19-47	-
9bb1	G. E. Rhoods	Dr	965	1¼	P	Kd	F50.0	D,S	-	-	-	7- 7-47	63
9bb2	do.	Dr	168	-	P	Kcg	CY,H	D	-	-	-	-	-
17aa	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	6-19-47	-
17ab	-	Dr	160	-	P	Kcg	CY,W	D,S	-	-	-	-	-
17ba	-	Dr	160	-	P	Kcg	N	N	-	-	-	-	-
17da1	-	Dr	-	-	P	-	F0.7	D,S	-	-	-	6-19-47	-
17da2	-	Dr	-	3	P	Kcg	CY,H	N	-	-	-	-	-
18cc	-	Dr	994	-	P	-	F100.0	D,S	-	-	-	7- 7-47	-
19bb	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	7- 7-47	-
19dd	-	Dr	530	-	P	Kcg	N	N	-	-	-	-	-
20ab	-	Dr	150	-	P	Kcg	CY,H	D,S	-	-	-	-	-
20ba1	-	Dr	500	-	P	Kcg	F4.0	D,S	-	-	-	7- 7-47	60C
20ba2	-	Dr	150	-	P	Kcg	CY,H	D	-	-	-	-	-
20dd	-	Dr	-	-	P	Kcg	CY,W	D,S	-	-	-	-	-
28bb	-	Dr	-	-	P	Kcg	CY,H	N	-	-	-	-	-
28cb	O. Zimmerman	Dr	-	-	P	Kd	F1.5	D,S	-	-	-	6-19-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Sanborn County--Continued										
108-60-29aa1	-	Dr	170	-	P	Kcg	CY,H	D	-	-	-	-	-
29aa2	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	6-19-47	-
29da	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	6-19-47	-
30bb1	D. Rogers	Dr	699	1½	P	Kd	F2.2	D,S	-	-	-	7- 7-47	59
30bb2	do.	Dr	800	-	P	Kd	F0.5	S	-	-	-	7- 7-47	-
30cc	-	Dr	-	2	P	Kd	N	N	L	-	8.	7- 7-47	-
32dd	-	Dr	-	-	P	Kd	F1.5	D,S	-	-	-	6-19-47	-
33cc	-	Dr	-	3	P	Kcg	CY,W	D,S	-	-	-	-	-
108-61- 1cc	-	Dr	-	-	P	Kd	F1.0	D,S	-	-	-	6-19-47	-
2aa1	-	Dr	800	-	P	Kd	F2.0	D,S	-	-	-	7- 7-47	-
2aa2	-	Dr	160	-	P	Kcg	CY,H	D	-	-	-	-	-
3cd	-	Dr	-	-	P	Kd	F1.5	D,S	-	-	-	6- 5-47	-
3dd	-	Dr	-	-	P	Kd	F1.0	S	-	-	-	6- 5-47	60
4bb	W. W. Hegg	B	80	-	-	Qgt	CY,W	D,S	L	-	25.	7- 3-47	-
4cc	E. Mogck	B	80	-	W	Qgt	CY,W	D,S,O	Bp	1.5	16.30	6- 4-47	C
4dc	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	6- 5-47	-
5cd	-	Du	40	-	-	Qgt	CY,W	D,S	L	-	25.	6- 5-47	-
5dc	-	Du	18	18	T	Qgt	CY,W	D,S	L	-	30.	6- 5-47	-
6cc	-	Dr	400	-	P	Kcg	F0.2	D	-	-	-	6- 5-47	-
6da	-	Dr	-	-	P	Kd	F3.5	D,S	-	-	-	6- 5-47	-
6dd	-	Du	40	18	T	Qgt	CY,W	S	Bp	1.0	23.30	6- 5-47	-
7aa	-	Dr	800	-	P	Kd	F4.0	D,S	-	-	-	6- 5-47	-
7ba	-	Du	40	36	-	Qgt	CY,W	D,S	L	-	30.	6- 5-47	-
7cb	-	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	6- 5-47	-
8ab	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	6- 5-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Sanborn County--Continued										
108-61- 8ba	-	Dr	-	-	P	Kd	F2.0	S	-	-	-	6- 5-47	-
8cd	-	Dr	-	-	P	Kd	F0.5	S	-	-	-	6- 5-47	-
9ab	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	6- 5-47	-
9da	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	6- 5-47	-
10da	-	Dr	-	-	P	Kd	F2.5	D,S	-	-	-	6- 5-47	-
11ab1	-	Dr	782	2	P	Kd	F25.0	D,S	-	-	-	6-19-47	-
11ab2	-	Dr	120	-	P	Kcg	CY,W	D,S	-	-	-	-	-
12aa	-	Dr	150	-	P	Kcg	N	N	-	-	-	-	-
12bb	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	6-19-47	-
14bb	-	Dr	-	1½	P	Kd	F1.0	S	-	-	-	7- 7-47	58
14dd	-	Dr	-	-	P	Kd	F1.5	D,S	-	-	-	7- 7-47	-
15cd	-	Dr	800	-	P	Kd	F1.5	D,S	-	-	-	6- 5-47	-
16cc	-	Dr	800	-	P	Kd	F3.0	S	-	-	-	6- 5-47	-
17ad	-	B	73	-	-	Qgt	CY,W	D,S	L	-	31.	6- 5-47	-
17dc	Amick	Dr	850	-	P	Kd	F8.0	D,S	-	-	-	6- 5-47	-
18ab	-	Dr	-	2	P	Kd	F0.2	N	-	-	-	6- 5-47	-
18bd	-	Dr	800	-	P	Kd	F3.0	D,S	-	-	-	6-19-47	C
19bc	J. J. Nelson	Dr	150	3	P	Kcg	CY,W	D,S	L	-	3.	6- 6-47	-
20ab	Amick	Dr	850	-	P	Kd	F6.0	D,S	-	-	-	6- 5-47	-
20ba	do.	Dr	850	-	P	Kd	F4.0	D,S	-	-	-	6- 5-47	-
20dc	-	Dr	-	-	P	Kd	F1.5	D,S	-	-	-	6- 5-47	-
21dd	Neilson	Dr	900	-	P	Kd	F7.0	D,S	-	-	-	-	-
22ab	-	Dr	-	2	P	Kd	F0.01	N	-	-	-	7- 3-47	-
23ab	-	Dr	825	2	P	Kd	F1.0	D,S	-	-	-	7- 7-47	59
23cc	-	Dr	-	2	P	Kd	F5.0	D,S	-	-	-	7- 3-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
				Sanborn County--Continued									
108-61-24ac	-	Dr	-	-	P	Kd	F1.0	D,S	-	-	-	7- 7-47	58
25da	-	Dr	-	-	P	Kd	F14.0	S	-	-	-	7- 7-47	62
26ac	Clute	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	7- 3-47	-
26cd	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	6- 5-47	-
26dd	-	Dr	-	-	P	Kd	F2.5	D,S	-	-	-	6- 5-47	-
27bc	-	Dr	900	-	P	Kd	F7.0	S	-	-	-	6- 5-47	63
27dc	-	Dr	-	-	P	Kd	F1.0	S	-	-	-	6- 5-47	-
28cc	-	Dr	900	-	P	Kd	F0.5	D,S	-	-	-	6- 5-47	-
29bc	-	Dr	160	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
29cd	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	6- 5-47	-
30bb	-	Dr	150	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
30cc	-	Dr	150	2½	P	Kcg	CY,H	D,S	-	-	-	-	-
30da	-	B	-	-	-	Qgt	CY,H	D,S,O	Bp	1.2	17.40	6- 5-47	-
31ad	-	Dr	150	-	P	Kcg	CY,G	D,S	-	-	-	-	-
31bc	G. Doering	Dr	150	3	P	Kcg	CY,W	D,S,O	Tca	.5	6.16	6-13-46	-
31dd	-	Dr	-	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
32ab	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	6- 5-47	-
32bc	-	Dr	150	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
32dd	-	Dr	150	3	P	Kcg	CY,G	D,S	-	-	-	-	-
33cc	-	Dr	165	3	P	Kcg	CY,H	D,S	-	-	-	-	-
33dd	-	Du	30	18	-	Qgt	CY,W	D,S,O	Bp	.5	16.00	6- 5-47	-
34ad	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	6- 5-47	-
34cc	-	Dr	-	-	P	Kd	F1.5	D,S	-	-	-	6- 5-47	-
35cb	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	6- 5-47	-
108-62- 1cc	H. H. Grant	Du	48.0	30	D	Qgt	C ,W	D,S,O	Bp	1.7	35.50	6- 4-47	C

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Sanborn County--Continued								
108-62- 1dc	-	Dr	-	-	P	Kd	Fl.5	D,S	-	-	-	6- 9-47	-
2bd	-	Dr	-	2	P	Kd	Fl.5	D,S	-	-	-	6-27-47	-
2cc	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	6-27-47	-
5aa	-	Dr	792	2	P	Kd	Fl.0	D,S	-	-	-	6-27-47	-
5bal	H. Baruth	Dr	780	2	P	Kd	Fl.5	D,S	-	-	-	7-29-47	-
5ba2	do.	Du	60	30	C	Qgt	CY,G	S	L	-	18.	7-29-47	-
6cdl	J. Sims	Dr	-	1½	P	Kd	Fl.0	D,S	-	-	-	6-30-47	-
6cd2	do.	B	50	12	P	Qco	CY,H	O	Tca	0.5	7.38	6-12-46	-
7bc	-	Dr	170	3	P	Kcg	CY,W	D,S	-	-	-	-	-
7dd	-	Dr	-	-	P	Kd	Fl.0	D,S	-	-	-	6-27-47	-
8ad	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	6-27-47	-
8bal	-	Dr	191	3	P	Kcg	CY,G	D	-	-	-	-	-
8ba2	-	Du	38	18	T	Qgt	CY,W	D,S	L	-	18.	6- 3-47	C
9aa	-	Du	-	36	W	Qgt	CY,W	D,S	Tca	1.5	14.40	6- 9-47	-
9dc	-	Du	30	24	C	Qgt	CY,W	D,S	Bp	1.5	16.05	6-27-47	-
10ba	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	6- 9-47	-
10cd	-	Dr	380	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
10dd	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	6-27-47	-
11aa	C. E. Lynch	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	6- 9-47	-
11bc	-	Dr	-	-	P	Kd	Fl.5	D,S	-	-	-	6-27-47	-
12ba	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	6- 9-47	-
12cb	-	Dr	-	-	P	Kd	Fl.5	D,S	-	-	-	7- 3-47	-
13ab	-	Dr	-	2½	P	Kd	F2.0	D,S	-	-	-	6- 5-47	-
13bcl	-	Dr	-	-	P	Kcg	CY,W	D,S	-	-	-	-	-
13bc2	-	B	-	-	-	Qgt	CY,W	N	L	-	20.	7- 3-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Sanborn County--Continued								
108-62-13cd	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	6- 9-47	-
14bc	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	6- 9-47	-
14cc	-	Dr	-	-	P	Kd	F1.0	D,S	-	-	-	6- 9-47	-
14dd	-	Dr	-	-	P	Kd	F2.5	D,S	-	-	-	6- 9-47	-
15aa	-	Du	25	24	T	Qgt	CY,W	D,S	Bp	1.7	12.55	6-27-47	-
15ba	-	Du	15	30	-	Qgt	CY,W	S	Bp	1.7	13.30	6-27-47	-
15cc	-	Dr	-	-	P	Kd	F3.5	D,S	-	-	-	6- 9-47	-
17ab	-	Dr	150	3	P	Kcg	CY,W	D,S	-	-	-	-	-
17ba	Mrs. O. Jones	Dr	-	2	P	Kd	F2.5	D,S	-	-	-	6- 9-47	-
18aa	-	Du	8	20	-	Qal	P,H	S	Bp	1.5	2.40	6- 9-47	-
18dc	-	Dr	-	2	P	Kd	F4.5	D,S	-	-	-	6- 9-47	-
19bb	-	Dr	-	3	P	Kcg	CY,E	D,S	-	-	-	-	-
19cd	-	Dr	-	2	P	Kd	F1.0	D,S	-	-	-	7- 2-47	-
19dd	-	Dr	-	2	P	Kd	F2.0	D,S	-	-	-	7- 2-47	-
20ad	-	Dr	-	2½	P	Kcg	CY,W	N	-	-	-	-	-
20cc	-	Dr	-	3	P	Kcg	CY,W	D,S	-	-	-	-	-
21cd	-	Dr	150	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
22cc	-	Dr	150	3	P	Kcg	CY,W	D,S	-	-	-	-	-
23cc	-	Dr	-	-	P	Kcg	CY,W	N	Bp	1.2	28.55	7-24-47	-
24cc	-	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	7- 3-47	61
24dd	-	Dr	150	3	P	Kcg	CY,G	D,S	-	-	-	-	-
25bb1	-	Dr	-	-	P	Kd	F3.5	D,S	-	-	-	7- 3-47	63
25bb2	-	Dr	160	2½	P	Kcg	CY,H	D	-	-	-	-	-
25cc	-	Dr	-	-	P	Kcg	CY,G	D,S	-	-	-	-	-
25da	-	Dr	150	2½	P	Kcg	CY,H	D,S	-	-	-	-	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Sanborn County--Continued								
108-62-26bb	-	Dr	170	2½	P	Kcg	CY,G	D,S	-	-	-	-	-
29da	-	Dr	-	-	P	Kd	F1.5	D,S	-	-	-	7- 2-47	-
30da	-	Dr	-	2	P	Kd	F20.0	N	-	-	-	7- 2-47	-
31bb	-	Dr	-	-	P	Kcg	CY,W	D,S	-	-	-	-	-
31dc	-	Dr	165	3	P	Kcg	CY,G	D,S	-	-	-	-	-
32bb	-	Du	15	20	W	Qal	N	O	Tca	2.0	6.50	5-22-47	-
32da	-	Dr	-	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
33dd	-	Dr	165	-	P	Kcg	N	N	-	-	-	-	-
34dd	-	B	40	-	-	Qgt	CY,H	D	L	-	9.	7- 2-47	-
35ab	-	Dr	160	-	P	Kcg	CY,H	D,S	-	-	-	-	-
35cc	-	Dr	-	2	P	Kd	F4.0	D,S	-	-	-	7- 2-47	64
36aa	-	Dr	180	2½	P	Kcg	CY,W	D,S	-	-	-	-	-
					Spink County								
114-61- 6cc	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	9-29-47	-
7cc	-	Dr	770	-	P	Kd	F1.5	D,S	-	-	-	9-29-47	-
19bb	-	Dr	800	-	P	Kd	F2.0	D,S	-	-	-	9-29-47	-
19cc	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	9-29-47	-
30bc	-	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	9-29-47	-
31bb	-	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	9-29-47	-
31cc	-	Dr	-	-	P	Kd	F2.2	D,S	-	-	-	9-26-47	63
114-62- 1aa	-	Du	46	24	W	Qgt	CY,G	S,O	Bp	2.7	40.55	6-25-47	-
2dc	-	B	40	24	P	Qgt	CY,W	D,S	Bp	1.2	19.80	9-29-47	-
3aa	-	Du	31.0	40	W	Qgt	CY,W	D,S,O	Bp	1.2	23.15	6-24-47	-
3cc	R. Cole	Dr	900	3/4	P	Kd	F1.6	D,S	-	-	-	9-18-47	63

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Spink County--Continued										
114-62- 5aa	-	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	9-26-47	-
5ba	-	Dr	-	-	P	Kd	F1.3	N	-	-	-	9-18-47	-
5cc1	Stellmaker	Dr	870	3/4	P	Kd	F4.7	D,S	-	-	-	9-18-47	64
5cc2	do.	Dr	835	-	P	Kd	N	N	-	-	-	-	-
5dc	F. Paulson	Dr	-	1¼	P	Kd	F4.0	D,S	-	-	-	9-18-47	-
6cd	J. F. Heinemen	Dr	930	1½	P	Kd	F3.0	D,S	-	-	-	-	-
6da	-	B	19.6	18	T	Qgt	CY,W	S	Bp	0.7	14.34	9-18-47	-
8cd	E. Klug	Dr	-	3/4	P	Kd	F1.9	-	-	-	-	9-17-47	59
9da	-	Dr	-	3/4	P	Kd	F2.4	D,S	-	-	-	9-18-47	63
10ad	-	Dr	-	2	P	Kd	F4.0	S	-	-	-	9-19-47	63
11bc	-	Dr	-	2	P	Kd	F30.0	D,S	-	-	-	9-19-47	64
12cb	-	Dr	500	4	P	Kcg	CY,W	S	L	-	35.	9-23-47	-
13ad	-	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	9-23-47	64
14aa	-	Dr	-	-	P	Kd	F3.0	S	-	-	-	9-29-47	-
14bc	-	B	46.0	-	-	Qgt	CY,W	S	L	-	40.	9-19-47	-
14cc	-	Du	29.0	30	P	Qgt	CY,W	N	Bp	1.0	25.40	9-19-47	-
15ba	-	Dr	-	3/4	P	Kd	F8.5	D,S	-	-	-	9-19-47	62
17ab	R. Cole	B	50	6	P	Qgt	CY,W	D,S	L	-	25.	9-17-47	-
17dc	H. Klug	Dr	-	1½	P	Kd	F3.7	D,S	-	-	-	9-17-47	66
18aa	E. Stellmocker	Dr	970	1¼	P	Kd	F7.2	D,S	-	-	-	9-17-47	-
18cd	Budlong	Dr	1002	2	P	Kd,x	F11.0	S	-	-	-	9-12-47	64
19dc	-	Dr	-	-	P	Kd	F0.1	N	-	-	-	9-22-47	-
20dc	-	Dr	-	-	P	Kd	F4.5	S	-	-	-	9-22-47	-
21ab	-	B	-	18	T	Qgt	CY,H	N	Bp	.3	19.40	9-17-47	-
21dc	-	B	-	-	-	Qgt	CY,W	N	L	-	25.	9-17-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Spink County--Continued								
114-62-23cd	-	Dr	-	-	P	Kd	F4.0	S	-	-	-	9-17-47	63
25cc	-	B	21.5	12	T	Qgt		N	L	-	23.	10-13-47	-
25dd	-	Dr	-	2	P	Kd	F4.0	D,S	-	-	-	9-29-47	61
26bc	-	Dr	790	-	P	Kd	F17.0	D,S	-	-	-	9-19-47	64
28cd	-	B	23.4	18	W	Qgt	CY,W	S	Tca	0.6	22.37	9-17-47	-
28dd	P. Anderson	Dr	900	1¼	P	Kd	F1.2	D,S	-	-	-	9-17-47	-
29cb	-	Dr	850	1¼	P	Kd	F3.8	D,S	-	-	-	9-17-47	C
30aa	J. J. W. Cross	Dr	875	1¼	P	Kd	F10.0	D,S	-	-	-	9-17-47	-
30bb	K. Voorhees	Dr	950	1	P	Kd	F2.6	D,S	-	-	-	9-17-47	64
31bb	I. D. Gilbert	Dr	1050	1	P	Kd	F5.0	D,S	-	-	-	9-17-47	65
31dc	S. Miedema	B	45	6	P	Qgt	CY,W	D,S	L	-	30.	9-17-47	-
33bc	F. E. McDonald	Du	35.4	36	C	Qgt	CY,W	D,S,O	Bp	1.0	24.00	4- 9-46	-
33dd	-	Du	11.6	36	W	Qal	CY,W	S	Tcu	2.8	7.30	5-27-47	-
34ab	-	Dr	950	-	P	Kd	N	N	-	-	-	-	-
34bc	-	Dr	-	-	P	Kd	F3.5	N	-	-	-	9-17-47	-
34dc	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	9-22-47	-
35cc	-	Dr	-	-	P	Kd	F3.3	S	-	-	-	9- 2-47	64
36ad	-	B	32.5	20	W	Qgt	CY,H	S	Bp	1.1	20.60	9-23-47	-
114-63- 1dc	E. E. Bucholz	Dr	920	1¼	P	Kd	F6.0	D,S	-	-	-	9-16-47	64
2cc	H. C. Steinheuker	Dr	990	1½	P	Kd	F5.3	D,S	-	-	-	9-16-47	65
3ad	F. Kietzkie	Dr	860	1¼	P	Kd	F7.5	N	-	-	-	9-16-47	63
3bc	-	Du	36.4	30	W	Qgt	CY,W	D,S	Bp	1.8	23.90	9-16-47	-
4bb	S. A. Walter	Dr	950	3/4	P	Kd	F5.3	D,S	-	-	-	9-16-47	64
4cc	C. Kuestermeyer	Dr	-	1½	P	Kd	F4.0	D,S	-	-	-	9-16-47	64
4da	L. Kreiman	Dr	918	1½	P	Kd	F12.0	D,S	-	-	-	9-16-47	63

See footnotes at end of table

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Spink County--Continued										
114-63- 5dd	L. Harnes	Dr	-	1¼	P	Kd	F6.5	D,S	-	-	-	9-16-47	66
6ba	-	Dr	-	1¼	P	Kd	F3.3	S	-	-	-	9-16-47	-
6dd	E. Gatzke	Dr	960	2	P	Kd	F5.0	D,S	-	-	-	9-16-47	-
7cd	-	Dr	-	3/4	P	Kd	F1.1	D,S	-	-	-	9-15-47	65
8ba	-	B	-	18	T	Qgt	CY,H	D,S	Bp	1.2	30.81	9-16-47	-
10ac	E. Fogtesong	Dr	950	2	P	Kd	F8.4	D,S	-	-	-	-	64
10bc	W. Nowell	Dr	980	1	P	Kd	F3.0	D,S	-	-	-	9-16-47	-
10dd	A. J. Tie	B	40	36	P	Qgt	CY,W	D,S	L	-	-	9-16-47	-
11dd	-	Du	29.5	48	W	Qgt	CY,W	O	Tco	3.0	28.20	4- 9-46	-
12cc1	A. G. Hiklemier	Dr	1013	1	P	Kd	F3.1	D,S	-	-	-	9-16-47	67
12cc2	do.	B	24.4	8	P	Qgt	N	N	Tca	.0	21.04	9-16-47	-
13bb	D. Farries	B	35	18	T	Qgt	CY,W	D,S	L	-	25.	9-16-47	-
13cc	A. Gotzke	Dr	900	1¼	P	Kd	F3.3	D,S	-	-	-	9-16-47	-
14bc	-	B	29.8	6	P	Qgt	CY,W	S	Tca	.4	24.17	9-16-47	-
14dc	-	Du	34.5	36	W	Qgt	N	N	Tca	1.2	29.90	9-12-47	-
15bc	-	Du	50	48	C	Qgt	CY,H	O	Bp	1.2	32.92	11-14-46	-
17ba	J. Schroeder	Dr	950	1¼	P	Kd	F4.3	D,S	-	-	-	9-15-47	64
18dd	-	Dr	-	3/4	P	Kd	F1.6	S	-	-	-	9-15-47	63
19ba	-	B	-	2½	P	Qgt	CY,W	D,S	L	-	22.	9-15-47	-
19dd	-	Dr	-	-	P	Kd	F2.3	S	-	-	-	9-15-47	-
20bc	S. R. Elliot	B	33	18	W	Qgt	CY,H	D,S	Bp	.9	17.21	9-15-47	-
21da	W. Lips	Dr	1000	1	P	Kd	F3.3	D,S	-	-	-	9-15-47	65
22da	-	Du	10.0	40	N	Qgt	CY,H	N	L	-	23.	9-18-47	-
24cc	G. N. Johnson	Dr	-	1	P	Kd	F2.2	D,S	-	-	-	9-16-47	-
24dc	E. C. Anderson	Dr	-	3/4	P	Kd	F2.5	D,S	-	-	-	9-16-47	65

See footnotes at end of table.

Table 7.--Recoed of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Spink County--Continued										
114-63-25dd	-	Dr	-	1½	P	Kd	F6.6	S	-	-	-	9-15-47	-
26aa	R. Dubois	Dr	960	1½	P	Kd	F12.0	D,S	-	-	-	9-16-47	66
26bc1	L. J. Hoezel	Dr	850	1½	P	Kd	F15.0	D,S	-	-	-	9-16-47	63
26bc2	do.	B	60	6	P	Qgt	CY,H	N	L	-	30.	9-16-47	-
27dd	G. Kavf	Dr	863	1	P	Kd	F1.3	D,S	-	-	-	9-15-47	-
28cd	V. Kendon	Dr	863	1½	P	Kd	F3.4	D,S	-	-	-	9-15-47	68
29bb	-	Dr	884	-	P	Kd	N	N	-	-	-	-	-
29dd	C. D. Rodman	Dr	960	1¼	P	Kd	F2.6	D,S	-	-	-	9-15-47	64
30aa	K. Pinto	B	28.2	24	T	Qgt	CY,H	S	Tca	0.7	15.08	9-15-47	-
30cc	A. Green	B	39.7	18	T	Qgt	CY,W	D,S	Tca	.4	9.9	9-11-47	-
31bc	L. Swenson	Dr	-	1¼	P	Kd	F3.0	D,S	-	-	-	9-11-47	66
31dd	D. E. Danielson	Dr	960	3/4	P	Kd	F2.0	D,S	-	-	-	9-11-47	-
32cd	-	Dr	-	3/4	P	Kd	F2.0	S	-	-	-	9-11-47	-
32da	Glidden Estate	Dr	1150	1¼	P	Kd,X	F2.1	D,S	-	-	-	9-15-47	-
32dd	L. Sharen	Dr	965	1¼	P	Kd	F0.9	D,S	-	-	-	9-15-47	-
33aa	F. M. Pearson	Dr	846	1½	P	Kd	F4.3	D,S	-	-	-	9-16-47	63
33dd1	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	10-11-47	-
33dd2	-	B	54	-	-	Qgt	CY,G	D,S	L	-	30.	10-11-47	-
34ac	-	B	31.0	18	P	Qgt	CY,H	N	Bp	.8	29.80	9-18-47	-
34cb	H. & C. Haelzel	Dr	938	1¼	P	Kd	F1.8	D,S	-	-	-	9-16-47	65
34cc	-	Dr	915	-	P	Kd	N	N	-	-	-	-	-
35cd	W. Gatzke	B	32	18	T	Qgt	CY,W	D,S,O	Tco	1.0	18.30	4- 6-46	-
114-64- 1ba	-	Du	-	-	-	Qgt	CY,W	S	L	-	5.	9-18-47	-
1bb	Erlich	Dr	1100	1¼	P	Kd	F8.0	D,S	-	-	-	9-10-47	-
1cc	-	B	30	1½	P	Qgt	F5.0	S	-	-	-	9-10-47	-

See footnotes at end of table.

Table 7.--Recoed of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Spink County--Continued								
114-64- 1dd	-	Dr	-	1	P	Kd	F3.0	N	-	-	-	9-10-47	65
2bb	-	Dr	-	3/4	P	Kd	F3.0	D,S	-	-	-	9-10-47	64
2cb	-	Du	32	30	P	Qgt	CY,W	D,S	L	-	12.	9-10-47	-
3ad	-	B	-	-	-	Qgt	CY,W	N	L	-	15.	10-11-47	-
3cc	-	Dr	-	1	P	Kd	F3.0	D,S	-	-	-	9- 4-47	65
4ad	F. Conrad	Du	28	29	W	Qgt	CY,H	S	Bp	0.4	14.06	4-22-47	-
4bb	-	Du	32.2	48	C	Qgt	N	N	Tca	.2	25.95	8-16-47	-
5ab	W. Schniedegger	Dr	-	3/4	P	Kd	F2.5	D,S	-	-	-	9- 4-47	63
6bb	-	Dr	921	3/4	P	Kd	F4.0	S	-	-	-	9- 4-47	-
6da	C. Ernster	B	50	24	W	Qgt	CY,W	D,S	L	-	25.	9- 4-47	-
7cc	-	B	-	24	T	Qgt	CY,W	D,S	L	-	23.	9- 4-47	-
7da1	W. Otto	Dr	998	1¼	P	Kd	F10.0	D,S	-	-	-	9- 4-47	65
7da2	do.	B	53.4	24	T	Qgt	CY,H	N	Bp	1.3	24.04	9- 4-47	-
8ba	-	Dr	-	1	P	Kd	F2.5	S	-	-	-	9-16-47	-
8cc	-	Du	37.5	18	T	Qgt	N	O	Tca	1.5	18.90	4-23-47	-
8da	D. Otto	Dr	-	3/4	P	Kd	F6.0	D,S	-	-	-	9- 4-47	68
9cd	C. Alfson	Du	-	24	W	Qgt	CY,W	D,S	L	-	25.	9- 4-47	-
10ab1	A. Nietzel	Dr	950	1	P	Kd	F3.0	D,S	-	-	-	9- 4-47	63
10ab2	do.	Dr	860	1¼	P	Kd	F2.0	S	-	-	-	9- 4-47	-
10cb	M. Neitzel	B	45	18	T	Qgt	CY,W	D,S	L	-	25.	9- 4-47	-
10da	-	Du	15.6	24	P	Qgt	CY,H	N	Tca	.3	9.20	9-10-47	-
11bc	-	Du	9.8	48	W	Qgt	N	O	Tco	1.7	3.40	4-13-46	-
11dc	C. Hoffman	Dr	960	1	P	Kd	F1.5	D,S	-	-	-	9-10-47	55
12bb1	R. Maxwell	B	32	8	P	Qgt	CY,H	D	L	-	15.	9-10-47	-
12bb2	do.	B	38	18	T	Qgt	CY,H	S	Bp	1.5	17.35	9-10-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Spink County--Continued										
114-64-12bb3	R. Maxwell	B	35.7	18	T	Qgt	CY,W	S	Bp	0.8	16.74	9-16-47	-
13cb	T. Feldson	Du	32	36	W	Qgt	CY,W	D,S	Bp	1.3	14.68	9-10-47	-
14dd	-	Du	31.7	30	D	Qgt	CY,W	N	Bp	.3	12.84	9-10-47	-
15bc	E. Kloss	Dr	900	1¼	P	Kd	F3.0	D,S	-	-	-	9- 4-47	63
15cb	E. Hoffman	B	46	18	T	Qgt	CY,W	D,S	Bp	1.8	26.23	9-10-47	-
15dc	H. Kloss	B	35	18	T	Qgt	CY,W	D,S	L	-	15.	9-10-47	-
16da	E. Price	B	47	18	T	Qgt	CY,W	S	Bp	1.7	33.01	9- 4-47	-
17aa	J. Wilke	B	50	18	W	Qgt	CY,W	D,S,O	Bp	1.2	26.45	4- 9-46	-
17cd	-	Du	12	30	-	Qgt	N	N	L	-	15.	9-10-47	-
18ad	C. Haferman	Dr	-	3/4	P	Kd	F1.5	S	-	-	-	9- 4-47	-
19bc1	B. Haag	Dr	-	1¼	P	Kd	F4.0	D,S	-	-	-	9- 4-47	-
19bc2	do.	B	54.0	18	W	Qgt	CY,H	S	Bp	.1	14.76	9- 4-47	-
19cd1	-	Dr	-	1¼	P	Kd	F3.0	D,S	-	-	-	9- 4-47	66
19cd2	-	B	37.1	24	W	Qgt	CY,H	N	Bp	1.0	16.63	9- 4-47	-
20ad	-	B	30.8	18	T	Qgt	CY,W	N	Tca	1.0	19.10	9-10-47	-
20dd	R. Hanze	Dr	-	1¼	P	Kd	F4.0	D,S	-	-	-	9-10-47	68
21ab	W. Price	B	40	24	T	Qgt	CY,W	D,S	L	-	25.	9-10-47	-
21da	D. E. Williams	Dr	-	3/4	P	Kd	F3.0	D,S	-	-	-	9-10-47	-
22bb	W. Boyd	Dr	975	1	P	Kd	F3.0	D,S	-	-	-	9-10-47	C
22ca	-	B	52.1	18	T	Qgt	CY,W	N	Bp	1.6	-	9-10-47	-
23ab	W. Jockeck	Dr	900	1¼	P	Kd	F2.0	D,S	-	-	-	9-10-47	-
23cc	J. E. Nicholl	B	38.4	18	T	Qgt	CY,W	D,S	Tca	1.0	18.20	9-10-47	-
24aa	E. Harmes	B	36	18	T	Qgt	CY,W	D,S	Bp	1.4	15.93	9-10-47	-
24da	-	Dr	942	-	P	Kd	N	N	-	-	-	-	-
25bc	H. Gilbert	B	55	24	W	Qgt	CY,W	D,S	L	-	15.	9-11-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
				Sioux County--Continued									
114-64-25cd	-	Dr	-	1¼	P	Kd	F3.0	S	-	-	-	9-11-47	63
25dd1	-	B	40	-		Qgt	CY,W	S	L	-	22.	9-18-47	-
25dd2	L. Reno	B	46.2	18	T	Qgt	CY,W	D,S	Bp	1.4	26.71	9-11-47	-
27cd	J. W. Daugherty	Du	40	30	W	Qgt	CY,W	D,S	Bp	1.4	26.93	9-10-47	-
27da	L. Christianson	Dr	900	3/4	P	Kd	F6.0	D,S	-	-	-	9-10-47	68
28bb	R. Sargent	Du	39.7	24	P	Qgt	CY,H	D,S	Tca	.0	17.61	9-10-47	-
28dd	-	Dr	-	1	P	Kd	F3.0	D,S	-	-	-	9-10-47	65
30ad	T. Ward	B	40	18	T	Qgt	CY,H	D,S	L	-	15.	9- 4-47	-
31ad	-	Du	6	30	W	Qgt	N	N	L	-	15.	9-18-47	-
32ad	H. Kloss	B	53.5	18	W	Qgt	CY,W	D,S	Tca	1.1	19.20	9- 4-47	-
32bb	-	Dr	920	3/4	P	Kd	F2.0	S	-	-	-	9- 4-47	-
33ba	-	B	40.0	18	T	Qgt	CY,W	N	Tca	1.3	20.10	9-10-47	-
33dd	V. McNeil	B	39.1	18	T	Qgt	CY,W	D,S	Bp	2.3	20.76	9- 4-47	-
35bb1	H. L. Sweney	Dr	-	1¼	P	Kd	F5.0	D,S	-	-	-	9-10-47	66
35bb2	-	B	7.2	6	P	Qgt	N	N	Tca	1.4	6.05	5-26-47	-
114-65- 1dd	-	B	-	-	-	Qgt	CY,W	D,S	L	-	23.	9-16-47	-
8cb	H. L. Binger	B	32	18	T	Qgt	CY,W	S,O	Tca	.7	19.55	4- 9-46	-
13aa	-	Dr	-	-	P	Kd	N	N	-	-	-	9-16-47	-
13da	-	Du	30	24	-	Qgt	CY,G	D,S	L	-	22.	9-16-47	-
24ad	-	B	50	18	W	Qgt	CY,W	D,S	L	-	25.	9-16-47	-
25da	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	9-16-47	-
115-61-30bb	-	B	40	18	-	Qgt	CY,W	D,S	L	-	18.	9-29-47	-
31cc1	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	9-26-47	-
31cc2	-	Du	50	-	-	Qgt	CY,H	N	L	-	46.	9-26-47	-
115-62- 3aa	-	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	9-25-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Spink County--Continued										
115-62- 3da	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	9-25-47	-
4ab	J. G. McFerland	Dr	980	2	P	Kd	F8.0	D,S	-	-	-	9-29-47	-
4ad	-	Dr	-	2	P	Kd	F5.0	D,S	-	-	-	9-25-47	-
5bb1	-	Dr	-	-	P	Kd	F8.0	D,S	-	-	-	10- 7-47	-
5bb2	-	Dr	-	2	P	Kd	F0.01	N	-	-	-	10- 7-47	-
6ab	-	Dr	-	2	P	Kd	F1.5	D,S	-	-	-	10- 7-47	-
6dd	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	9-24-47	-
7cc	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	9-24-47	-
8aa	-	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	9-26-47	-
8da	-	Dr	-	-	P	Kd	F0.01	N	-	-	-	9-26-47	-
10cb	-	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	9-25-47	63
10dd	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	9-25-47	-
11bb	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	9-24-47	-
15da	-	Du	26.8	30	P	Qgt	N	N	Tca	1.6	14.10	9-25-47	-
17bb	-	Dr	-	2	P	Kd	F0.01	N	-	-	-	10- 7-47	-
18bb	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	9-24-47	-
18cb	Pleasant View Farm	Dr	850	-	P	Kd	F2.0	D,S	-	-	-	9-10-47	C
19cd	-	Du	10	-	P	Qgt	CY,H	N	L	-	22.	9-22-47	-
19dc	Mrs. G. Hanson	Du	30.2	24	P	Qgt	CY,G	D,S	Bp	.8	12.80	5-26-47	C
20cc	-	Dr	-	-	P	Kd	F2.5	D,S	-	-	-	10-13-47	-
20dd	-	Dr	-	-	P	Kd	F4.5	S	-	-	-	9-23-47	62
21cd	Spink Colony	Dr	-	-	P	Kd	F4.0	S	-	-	-	9-22-47	-
22dc	-	Dr	-	-	P	Kd	F1.5	S	-	-	-	9-22-47	61
23bb	-	Du	17.5	36	N	Qgt	N	S	Tco	.0	11.60	9-25-47	-
23cd	-	B	54.0	24	W	Qgt	CY,W	N	Bp	1.7	45.95	9-23-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Spink County--Continued										
115-62-25aa	-	Du	28.3	30	W	Qgt	CY,W	S,O	Bp	1.5	9.30	6-25-47	-
25cb	-	Du	12	-	-	Qgt	CY,W	N	L	-	15.	9-29-47	-
26aa	Spink Colony	Dr	-	3/4	P	Kd	F18.0	S	-	-	-	9-29-47	61
27ad	-	Dr	-	2	P	Kd	F4.0	D,S	-	-	-	9-23-47	-
28ba	Spink Colony	Dr	936	-	P	Kd	F5.0	-	-	-	-	9-22-47	-
29dc	-	Dr	-	-	P	Kd	F5.0	D,S	-	-	-	9-23-47	-
30bb	-	B	6	-	-	Qgt	N	N	L	-	25.	9-22-47	-
30cd	-	Dr	858	-	-	Kd	F6.0	D,S	-	-	-	9-23-47	-
31cb	-	Dr	-	-	P	Kd	F8.5	D,S	-	-	-	9-23-47	62
31dc	J. L. Bixler	Dr	840	1¼	P	Kd	F6.0	D,S	-	-	-	9-18-47	-
32dc	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	9-23-47	-
33dc	P. M. Barness	Dr	915	3/4	P	Kd	F4.8	D,S	-	-	-	9-18-47	-
34ab	-	Dr	850	2	P	Kd	F4.0	D,S	-	-	-	9-26-47	-
34cd	H. Barness	Dr	890	1¼	P	Kd	F5.0	D,S	-	-	-	9-18-47	-
35cc	-	B	58.5	18	P	Qgt	CY,W	D,S	Bp	1.6	15.	9-19-47	-
115-63- 1dc	-	Dr	988	-	P	Kd	F3.0	D,S	-	-	-	10- 6-47	-
2cc	-	B	29.2	30	W	Qgt	CY,W	D,S,O	Bp	1.0	23.33	4-23-47	-
3cd	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	10- 6-47	-
3dd	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	10- 6-47	-
4cc	-	Dr	815	-	P	Kd	F2.0	D,S	-	-	-	10- 6-47	-
4dc	-	Dr	931	1¼	P	Kd	F30.0	D,S	-	-	-	10- 6-47	-
5aa	-	Dr	-	-	N	Kd	F0.01	N	-	-	-	10-13-47	-
5cd	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	10- 6-47	-
6bb	-	Dr	-	1	P	Kd	F1.0	S	-	-	-	10-13-47	-
7ad	-	Dr	950	-	P	Kd	F4.0	D,S	-	-	-	10- 6-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Spink County--Continued										
115-63- 7ca	-	B	-	-	-	Qgt	N	N	L	-	25.	10- 6-47	-
9cc	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	9-24-47	-
10bb	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	10- 6-47	-
11aa	-	Du	10.0	-	-	Qgt	CY,W	S	Tco	0.2	3.60	10- 6-47	-
11cc	-	Dr	-	-	P	Kd	F5.0	D,S	-	-	-	9-24-47	-
11cd	-	Dr	-	-	P	Kd	F6.0	N	-	-	-	9-24-47	62
12ab	-	B	-	18	T	Qgt	CY,W	D,S	L	-	15.	10- 6-47	-
12dd	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	9-24-47	-
13bb	-	B	29.3	24	T	Qgt	CY,W	N	Bp	.8	19.20	9-24-47	-
14ba	-	Dr	-	-	-	Kd	F0.01	N	-	-	-	9-24-47	-
15aa	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	9-24-47	-
15bb	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	9-24-47	-
15dd	Frankenstein	B	25	18	W	Qgt	CY,W	D,S,O	Bp	1.0	15.90	4-10-46	-
17dc	-	B	-	-	-	Qgt	CY,W	D,S	L	-	22.	9-24-47	-
18ba	-	B	30	-	-	Qgt	CY,W	D,S	L	-	18.	10- 6-47	-
18bb	C. Backer	B	40	-	-	Qgt	CY,G	D,S	L	-	22.	10- 6-47	-
18bc	-	B	30	24	T	Qgt	CY,H	D,S	L	-	24.	10- 6-47	-
18bd1	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	10- 6-47	-
18bd2	-	B	22.0	24	T	Qgt	N	N	Tca	1.6	19.60	10- 6-47	-
18cb	-	B	-	-	-	Qgt	CY,W	N	L	-	25.	10- 6-47	-
18db	-	B	55	-	-	Qgt	CY,W	D,S	L	-	25.	10- 6-47	-
19cb	-	Dr	-	-	-	Kd	F3.0	D,S	-	-	-	10- 6-47	-
19da	-	B	-	-	-	Qgt	CY,W	D,S	L	-	30.	9-24-47	-
20ad	-	B	-	-	-	Qgt	CY,W	D,S	L	-	25.	10- 6-47	-
20bb	-	B	45	24	T	Qgt	CY,W	D,S	Bp	.8	16.80	9-24-47	-

See footnotes at end of table.

Table 7.--Recoed of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Spink County--Continued										
115-63-20cd	R. Binger	Du	21.1	24	P	Qgt	CY,W	D,S	Bp	1.7	17.40	5-26-47	C
21aa	-	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	9-24-47	-
21ba	-	Du	12.4	36	P	Qgt	CY,W	S	Tca	.0	12.00	9-24-47	-
22ba	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	9-24-47	-
22dd	-	Dr	-	1	P	Kd	F3.0	D,S	-	-	-	9-23-47	-
23cc	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	9-23-47	-
24ad	-	B	40	18	W	Qgt	CY,W	D,S	L	-	28.	9-24-47	-
24bb	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	9-24-47	-
24cd	-	Dr	1050	-	P	Kd	F3.0	D,S	-	-	-	9-23-47	-
24dc1	-	Dr	-	-	-	Kd	F1.0	D,S	-	-	-	9-23-47	-
24dc2	-	B	40	18	T	Qgt	CY,H	D,S	L	-	25.	9-23-47	-
25ac	R. O. Watzek	Dr	900	-	P	Kd	F3.5	D,S	-	-	-	9-23-47	-
25db	-	Dr	-	-	P	Kd	F3.0	S	-	-	-	9-23-47	-
26bb	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	9-23-47	-
26cc	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	9-23-47	-
26dc	-	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	9-23-47	-
27cd	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	9-23-47	-
28cb	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	10- 6-47	-
28dd	-	Dr	-	-	P	Kd	F2.5	D,S	-	-	-	9-23-47	-
29ba	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	9-23-47	-
30aa1	-	Dr	910	-	P	Kd	F30.0	D,S	-	-	-	9-23-47	-
30aa2	-	B	40	-	P	Qgt	N	N	L	-	32.	9-23-47	-
31ba	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	9-23-47	-
32aa	-	Dr	-	-	P	Kd	F2.5	D,S	-	-	-	9-23-47	-
33bb	-	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	9-23-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
					Spink County--Continued								
115-63-33cb	-	Dr	867	-	P	Kd	F3.0	D,S	-	-	-	9-23-47	-
33dd	-	B	-	5	P	Qgt	CY,W	S	Bp	1.7	22.80	9-23-47	-
34ab	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	9-23-47	-
34cc	-	B	-	-		Qgt	CY,H	D	L	-	23.	9-23-47	-
34dc	-	Dr	-	-	P	Kd	F2.5	D,S	-	-	-	9-23-47	-
35ab	-	Dr	-	-	P	Kd	F1.0	D,S	-	-	-	9-23-47	-
35bb	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	9-23-47	-
36bb	-	B	40.0	10	P	Qgt	CY,W	S	Bp	1.8	14.10	5-26-47	C
115-64- 1aa	-	Du	17	-	-	Qgt	N	N	L	-	16.	10-13-47	-
2bc	-	Du	8.6	36	W	Qgt	CY,W	S	Bp	1.5	7.40	10- 9-47	-
3dd	Mrs. McCone	Dr	1200	1¼	P	Kd	FO.4	D,S	-	-	-	9-23-47	55
4ad	J. Noot	Dr	1050	1¼	P	Kd	CY,W	D,S	L	-	21.	9-23-47	-
4cd1	-	Du	26.6	36	W	Qgt	CY,H	N	Tca	1.4	11.83	9-23-47	-
4cd2	-	Du	-	36	W	Qgt	CY,H	N	L	-	12.	9-23-47	-
6da	-	Dr	-	1	P	Kd	F2.0	D,S	-	-	-	10- 2-47	-
7aa1	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	10- 2-47	-
7aa2	-	Du	-	-	C	Qgt	CY,W	N	L	-	25.	10- 2-47	-
8ba1	-	Dr	1100	2	P	Kd	F8.0	D,S	-	-	-	10- 6-47	-
8ba2	-	Dr	1100	2	P	Kd	FO.01	N	-	-	-	10- 6-47	-
8db	-	B	60	24	W	Qgt	CY,H	D,S	L	-	25.	10- 6-47	-
9db	-	Dr	930	1¼	P	Kd	F3.4	D,S	-	-	-	9-23-47	-
10cd	F. Miller	Dr	935	1	P	Kd	FO.3	D,S	-	-	-	9-23-47	-
10dd	H. Klink	Dr	-	1¼	P	Kd	F1.2	D,S	-	-	-	9-23-47	-
11ab	G. Harms, Jr.	Dr	1020	1¼	P	Kd	F3.0	D,S	-	-	-	9-23-47	-
11cc	-	B	65	18	T	Qgt	CY,W	S,O	Bp	1.0	28.42	4-10-46	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Spink County--Continued										
115-64-12dd	-	Dr	-	2	P	Kd	F0.01	N	-	-	-	10- 6-47	-
13cc	-	Du	-	30	N	Qgt	N	N	L	-	25.	10- 6-47	-
13da	E. Harms	Dr	900	1	P	Kd	F2.6	D,S	-	-	-	9-23-47	63
13dd	-	Dr	992	-	P	O	N	N	-	-	-	-	-
14ab	-	Dr	-	1¼	P	Kd	F6.7	D,S	-	-	-	9-23-47	63
14ba	-	Dr	-	1¼	P	Kd	F5.0	D,S	-	-	-	9-23-47	62
14dc	J. Allen	B	44.6	10	T	Qgt	CY,W	D,S	Bp	1.8	38.95	5-26-47	C
15cc	-	B	-	18	-	Qgt	CY,W	D,S	L	-	18.	10- 6-47	-
17cd	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	10- 6-47	-
17dd	-	Dr	-	-	P	Kd	F1.0	S	-	-	-	10- 6-47	-
18bc	-	Dr	-	1½	P	Kd	F1.5	D,S	-	-	-	10- 2-47	-
18dd	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	10- 6-47	-
19cc	-	Dr	920	1	P	Kd	F1.4	S	-	-	-	9-22-47	-
19dd	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	10- 2-47	-
20cc	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	10- 6-47	-
21cd	-	B	40	18	T	Qgt	CY,H	D,S	L	-	18.	10- 6-47	-
22bb	-	Dr	-	2	P	Kd	F4.0	D,S	-	-	-	10- 6-47	-
22dd	-	Dr	-	-	P	Kd	F1.5	D,S	-	-	-	10- 6-47	-
23bb	A. Boyd	Dr	1350	1¼	P	Kd	F0.6	D,S	-	-	-	9-23-47	58
23cc	-	Dr	-	-	P	Kd	CY,G	S	L	-	25.	10- 6-47	-
24ba	-	Dr	-	1	P	Kd	F0.01	N	-	-	-	9-23-47	-
25ac	J. Polak	Dr	1005	1½	P	Kd	F3.3	D,S	-	-	-	9-23-47	63
26aa	E. Schmidt	Dr	856	1¼	P	Kd	F0.9	D,S	-	-	-	9-23-47	58
26cb1	-	B	-	-	-	Qgt	CY,E	D	L	-	15.	10- 2-47	-
26cb2	-	B	35	-	-	Qgt	CY,E	D,S	L	-	18.	10- 8-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Spink County--Continued										
115-64-27cd	R. Wenland	Du	32	30	W	Qco	CY,H	S	Tca	0.8	6.26	5-26-47	C
27dd	Town of Tulare	Dr	850	-	-	Kd	F20.0	P	-	-	-	9-10-47	C
28cd	A. Hanson	Dr	960	1¼	P	Kd	F2.2	D,S	-	-	-	9-22-47	62
29ba	-	B	40	-	-	Qgt	CY,W	D,S	L	-	15.	10- 6-47	-
30cc1	O. Gunther	B	26.3	18	T	Qgt	N	O	Tca	.8	13.90	4- 9-46	-
30cc2	do.	B	30	18	T	Qgt	CY,W	D,S	Bp	1.0	14.00	5-26-47	C
31aa1	O. N. Ratcliff	B	47.0	18	T	Qgt	CY,W	D,S	Tco	1.7	23.45	9-22-47	-
31aa2	do.	Dr	964	-	-	Kd	N	N	-	-	-	-	-
31ba	H. Meltzel	Dr	-	1	P	Kd	F1.2	D,S	-	-	-	9-22-47	-
32aa	-	B	-	18	W	Qgt	CY,G	S	L	-	25.	9-22-47	-
32ba1	-	B	39.3	24	P	Qgt	CY,H	D	Bp	.4	16.31		
32ba2	-	Du	29.1	30	P	Qgt	CY,G	S	Tca	.6	17.00	9-22-47	-
32da	-	B	-	18	T	Qgt	CY,W	D,S	L	-	25.	9-22-47	-
33bb	A. Hanson	Du	16	24	W	Qco	CY,H	N	Bp	.5	9.18	9-22-47	-
33cc	-	B	33.6	18	T	Qgt	N	N	Tca	.5	14.50	9-16-47	-
34bb	-	Dr	-	1¼	P	Kd	F8.5	D,S	-	-	-	9-22-47	60
34bc	-	B	24.1	24	W	Qco	CY,W	N	Bp	1.3	8.94	9-22-47	-
34dc	H. Cockrell	Du	18.9	24	P	Qgt	CY,H	D,S	Bp	.6	12.67	9- 4-47	-
35bb	-	Du	12.6	48	W	Qco	CY,H	O	Bp	.0	6.25	4- 9-46	-
35dc	-	B	-	-	-	Qgt	CY,W	S	L	-	15.	9-23-47	-
115-65- 1aa	-	B	26.0	20	T	Qgt	N	N	Tca	1.3	21.6	10- 2-47	-
5ac	-	Du	29.9	36	W	Qgt	CY,H	O	Tco	.2	26.95	4-15-46	-
5cd	-	Du	17.8	18	P	Qgt	CY,H	O	Bp	1.2	11.50	4-15-46	-
13da	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	10- 2-47	-
24ad	-	B	40	-	-	Qgt	CY,W	D,S	L	-	25.	10- 2-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Spink County--Continued										
115-65-25da	-	Du	30	30	C	Qgt	CY,H	D,S	L	-	21.	9-22-47	-
30da	-	B	42.9	12	-	-	-	-	Tca	-	35.55	9- 9-48	49C
33aa	-	B	23.3	24	P	Qgt	N	O	Tca	0.8	18.23	4- 9-46	-
116-61-20cc	O. Malone	Du	18.5	24	-	Qgt	CY,W	D,S,O	Bp	1.5	16.05	6-25-47	-
116-62- 3ab	-	Du	21.8	18	-	Qgt	CY,W	S,O	Bp	2.0	18.08	6-26-47	48C
3bc	-	Dr	968	-	P	Kd	N	N	-	-	-	-	-
4ad	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	9-26-47	-
4cb	-	Dr	875	-	P	Kd	N	N	-	-	-	-	-
5ab	-	Dr	-	2	P	Kd	F1.5	D,S	-	-	-	9-26-47	62
5da	-	Dr	915	-	P	Kd	N	N	-	-	-	-	-
5dc	Town of Frankfort	Dr	-	-	P	Kd	F5.0	P,S	-	-	-	9-11-47	-
6ab	-	Dr	999	1½	P	Kd	F11.0	D,S	-	-	-	9-26-47	-
6bc	-	Dr	865	-	P	Kd	N	N	-	-	-	-	-
7aa	-	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	9-26-47	-
7cd	-	Dr	-	-	P	Kd	F1.0	D,S	-	-	-	10- 3-47	56
7db	-	Dr	-	-	P	Kd	F5.0	D,S	-	-	-	9-26-47	-
8aa	Town of Frankfort	Dr	803	-	P	Kd	F20.0	P	-	-	-	9-11-47	-
8ad	do.	Dr	1008	-	P	Kd,X	F20.0	P	-	-	-	9-11-47	C
8da	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	9-26-47	-
8dd	-	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	9-26-47	-
9dd	-	Dr	893	-	P	Kd	N	N	-	-	-	-	-
11cb	-	B	30	-	-	Qgt	CY,W	D,S	L	-	18.	9-26-47	-
14cb	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	9-26-47	-
15bc	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	9-26-47	-
15dd	-	Dr	-	-	P	Kd	F1.0	D,S	-	-	-	9-29-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Spink County--Continued										
116-62-16eb	-	B	15	4	P	Qgt	P,H	D,S	L	-	13.	9-26-47	-
17da	-	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	9-26-47	-
18dd1	A. A. Haskell	Dr	1161	2	P	Kd	F45.0	D,S	-	-	-	10-14-47	-
18dd2	do.	Dr	-	-	P	Kd	F1.0	S	-	-	-	10-14-47	-
19ad	Riverside Stock farm	Dr	-	-	P	Kd	F5.0	D,S	-	-	-	10- 7-47	-
21ab	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	9-26-47	-
21cc	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	9-26-47	-
22dd	-	Du	24.6	36	W	Qgt	CY,W	D,S,O	Bp	1.6	26.05	6-25-47	-
27aa	-	Dr	-	1½	P	Kd	F1.0	D,S	-	-	-	9-25-47	-
27cb	-	Dr	860	1½	P	Kd	F10.0	D,S	-	-	-	9-26-47	-
28aa1	-	Du	35	36	C	Qgt	CY,G	D,S	L	-	16.	9-26-47	-
28aa2	-	Du	15	-	-	Qgt	CY,H	S	L	-	12.	9-26-47	-
28cd	G. Johnson	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	9-26-47	-
29aa	-	Dr	-	2	P	Kd	F6.0	D,S	-	-	-	9-26-47	-
29ac	-	B	-	-	-	Qgt	N	N	L	-	18.	10- 7-47	-
30ad	-	Dr	-	-	P	Kd	F8.0	D,S	-	-	-	10- 7-47	-
30cb	-	Dr	-	3	P	Kd	F2.0	D,S	-	-	-	10- 7-47	56
31aa	-	Dr	942	3/4	P	Kd	F1.2	D,S	-	-	-	10- 7-47	-
32da	-	Dr	-	1½	P	Kd	F1.0	D,S	-	-	-	9-26-47	-
33bd	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	9-26-47	-
34ad	-	Dr	-	-	P	Kd	F8.0	D,S	-	-	-	9-25-47	-
35bb	-	Dr	900	2	P	Kd	F10.0	D,S	-	-	-	9-25-47	63
35cc	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	9-25-47	-
116-63- 1ca	Public Park	Dr	-	-	P	Kd	F5.0	D	-	-	-	-	-
2aa	-	Dr	815	-	P	Kd	F1.0	D,S	-	-	-	10- 3-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Spink County--Continued										
116-63- 2bc	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	10- 8-47	-
2dd	-	Dr	880	-	P	Kd	F3.0	D,S	-	-	-	10- 3-47	-
3bc	-	Dr	1028	-	P	Kd	F15.0	D,S	-	-	-	10- 8-47	-
3bd	-	Dr	840	-	P	Kd	F2.0	S	-	-	-	10- 8-47	-
3cc	-	Dr	913	-	P	Kd	N	N	-	-	-	-	-
4aa	-	Dr	820	-	P	Kd	F8.0	D,S	-	-	-	10- 8-47	-
4bd	-	Dr	1000	-	P	Kd	F5.0	D,S	-	-	-	10- 8-47	-
5adl	-	Dr	-	-	P	Kd	F1.0	D	-	-	-	10-14-47	-
5ad2	-	Du	25	36	C	Qgt	CY,W	S	Bp	1.0	16.50	10-14-47	50C
5cb	-	Dr	892	-	P	Kd	N	N	-	-	-	-	-
5cd	-	Dr	-	-	P	Kd	F0.01	N	-	-	-	10- 3-47	-
6ad	-	Dr	925	1	P	Kd	F3.3	D,S	-	-	-	10- 3-47	58
6bb	L. Osborn	Dr	-	1	P	Kd	F2.0	D,S	-	-	-	10-14-47	-
6cd	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	10-14-47	-
8cc	-	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	10- 3-47	-
9dd	-	Dr	851	-	P	Kd	F4.0	D,S	-	-	-	10- 8-47	-
10aa	-	Dr	900	-	P	Kd	F3.0	D,S	-	-	-	10- 3-47	C
12bb	-	Du	20	-	-	Qgt	N	N	L	-	18.	10- 3-47	-
13bc1	-	Dr	905	-	P	Kd	F3.0	D,S	-	-	-	10- 8-47	-
13bc2	-	Dr	1060	1¼	P	Kd	F5.0	D,S	-	-	-	10- 8-47	-
13bc3	-	B	90	-	-	Qgt	N	N	L	-	35.	10- 8-47	-
14aa	-	Dr	-		P	Kd	F6.0	D,S	-	-	-	10- 3-47	-
14ad	-	Dr	919	-	P	Kd	N	N	-	-	-	-	-
14bc	-	Dr	-	-	P	Kd	F1.5	D,S	-	-	-	10- 7-47	-
14cb	-	Dr	-	-	P	Kd	F5.0	D,S	-	-	-	10- 7-47	-

See footnotes at end of table.

Table 7.--Recoed of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Spink County--Continued										
116-63-17bb	-	Dr	865	-	P	Kd	F2.0	D,S	-	-	-	10- 9-47	-
17dd	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	10- 9-47	-
18bb	H. Fuss	Dr	980	1	P	Kd	F1.5	D,S	-	-	-	10- 9-47	58
18cc	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	10- 9-47	-
18da	-	Dr	-	-	P	Kd	F4.0	S	-	-	-	10- 3-47	61
19aa	-	B	17.4	24	W	Qco	N	N	Teo	0.5	7.60	10- 3-47	-
19ab	-	Dr	800	1	P	Kd	F5.0	S	-	-	-	10- 3-47	-
19dd	-	Dr	-	2	P	Kd	F5.0	S	-	-	-	10- 3-47	-
20aa	-	Dr	-	-	P	Kd	F0.5	D,S	-	-	-	10-13-47	-
20bb	-	Dr	-	2	P	Kd	F0.01	N	-	-	-	10-13-47	-
20cd	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	10-13-47	-
22bb	-	Dr	1000	-	P	Kd	F4.0	D,S	-	-	-	10- 8-47	59
22ca	-	Dr	1015	-	P	Kd	F12.0	D,S	-	-	-	10- 8-47	-
22cb	-	Dr	1050	-	P	Kd	F1.0	N	-	-	-	4-10-46	-
22dc	-	Dr	-	1¼	P	Kd	F1.5	D,S	-	-	-	10-13-47	-
23aa	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	10- 7-47	-
23bc	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	10- 7-47	60
24ab	-	Dr	-	-	P	Kd	F0.01	N	-	-	-	10- 8-47	-
25ab	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	10- 7-47	-
25ca	-	Dr	-	1¼	P	Kd	F1.0	D,S	-	-	-	10- 8-47	58
26aa	-	Dr	898	-	P	Kd	N	N	-	-	-	-	-
26bc	-	B	25	24	W	Qgt	CY,G	S	L	-	18.	10- 7-47	-
27ad	-	Du	50	24	W	Qgt	CY,W	D,S,O	Bp	1.5	23.30	4-10-46	-
27cb	-	Dr	-	-	P	Kd	F0.01	N	-	-	-	10-13-47	-
28aal	O. Johnson	Dr	1040	-	P	Kd	F60.0	D	-	-	-	10-13-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Spink County--Continued										
116-63-28aa2	O. Johnson	Dr	840	-	P	Kd	F0.5	D	-	-	-	10-13-47	-
28bb	-	Dr	943	-	P	Kd	N	N	-	-	-	-	-
28cb	A. A. Mager	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	10-13-47	-
29ad	-	Dr	-	-	P	Kd	F6.0	D,S	-	-	-	10-13-47	-
30bb	-	Dr	923	-	P	Kd	F5.0	D,S	-	-	-	10- 3-47	-
30cc	-	Dr	-	-	P	Kd	F0.5	D	-	-	-	10-11-47	-
31da	-	B	-	4	P	Qgt	CY,W	N	L	-	25.	10-13-47	-
32bb	-	Dr	860	1¼	P	Kd	F6.3	D,S	-	-	-	10-13-47	-
33bb	-	Dr	-	1	P	Kd	F5.5	D,S	-	-	-	10-13-47	-
34ab	-	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	10- 7-47	-
34cb	-	Dr	-	1¼	P	Kd	F3.0	D,S	-	-	-	10- 7-47	-
34dd	-	Dr	-	2	P	Kd	F1.5	S	-	-	-	10- 7-47	-
35ad	-	Dr	900	1½	P	Kd	F3.0	D,S	-	-	-	10- 8-47	-
35bb	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	10- 8-47	-
116-64- 1bc	-	Dr	-	-	P	Kd	F1.0	D,S	-	-	-	10-11-47	-
2ad1	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	10-11-47	-
2ad2	-	Du	15	-	-	Qgt	CY,H	D	L	-	12.	10-11-47	-
2bb	-	Dr	895	1¼	P	Kd	F4.0	D,S	-	-	-	10-11-47	-
2dc	-	Dr	858	-	P	Kd	F2.0	D,S	-	-	-	10-11-47	-
3ab	Hassell & Myers	Du	950	-	P	Kd	N	N	-	-	-	-	-
3cd	City of Redfield	Dr	1030	4½	P	Kd	N	N	-	-	-	-	-
3db	L. J. Hillstead	Du	22.0	18	P	Qgt	P,H	D,S,O	Bp	2.2	13.13	11-16-46	-
4ad	State Home	Dr	1050	-	P	Kd,X	-	D,S	-	-	-	-	-
4cd1	G. Miller	Du	23.0	24	C	Qgt	CY,H	S,O	Tco	.4	14.06	4-22-47	-
4cd2	R. Gallup	Du	-	18	W	Qgt	CY,H	S,O	Tcu	1.0	12.30	4-10-46	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Spink County--Continued										
116-64- 4da	-	Dr	956	-	P	Kd	N	N	-	-	-	-	-
4dd	-	Dr	967	-	P	Kd	N	N	-	-	-	-	-
5ba	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	10- 2-47	-
5bd	-	Dr	-	-	P	Kd	F1.5	N	-	-	-	10- 2-47	-
5cal	-	Dr	-	-	P	Kd	CY,H	D	L	-	40.	10- 2-47	-
5ca2	-	B	32	24	T	Qgt	CY,G	D,S	L	-	15.	10- 2-47	50C
6bd	-	Dr	-	-	P	Kd	F1.5	D,S	-	-	-	10- 2-47	-
6cd	-	Dr	-	-	P	Kd	F1.5	N	-	-	-	10- 2-47	-
6da	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	10- 2-47	-
7db	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	10- 2-47	-
8bd	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	10- 2-47	-
8dd	-	Dr	-	-	P	Kd	F2.0	S	-	-	-	10-11-47	-
9aal	City of Redfield	Dr	900	-	P	Kd	F	P	-	-	-	10-11-47	-
9aa2	do.	Dr	-	-	P	Kd	-	-	-	-	-	-	-
9bd	-	Dr	-	-	P	Kd	F5.0	D,S	-	-	-	10-11-47	-
9db	-	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	10-11-47	-
9dd	-	Du	16	-	-	Qgt	CY,H	D	L	-	13.	10-11-47	-
10bb	City of Redfield	Dr	920	-	P	Kd	E	P	-	-	-	-	C
11cd	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	10- 9-47	-
12cb	-	Dr	-	-	P	Kd	F0.01	N	-	-	-	10-11-47	-
12dc1	O. B. Nelson	Dr	-	2	P	Kd	F30.0	D,S	-	-	-	10- 9-47	-
12dc2	do.	B	-	-	-	Qgt	CY,W	N	L	-	25.	10- 9-47	-
13cb	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	10-11-47	-
14ab	-	Dr	1048	-	P	Kd	F1.0	D,S	-	-	-	10- 9-47	-
15aal	-	Du	30	-	-	Qgt	CY,H	D	L	-	15.	10- 1-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Spink County--Continued										
116-64-15aa2	-	Du	35	-	-	Qgt	P,H	D	L	-	15.	10- 1-47	-
15aa3	-	B	20	18	W	Qgt	CY,H	D	L	-	12.	10- 1-47	-
15ac	Plainview Academy	Dr	-	-	P	Kd	F	D,S	-	-	-	10- 1-47	-
15ba1	-	Du	37	-	-	Qgt	CY,G	D,S	L	-	20.	10- 1-47	-
15ba2	-	Du	30	-	-	Qgt	CY,H	D	L	-	15.	10- 1-47	-
15ba3	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	10- 1-47	-
15da	-	B	50	3	P	Qgt	N	N	L	-	40.	10- 9-47	-
15dc	-	B	-	-	-	Qgt	CY,W	D,S	L	-	15.	10- 9-47	-
16ca	-	Du	30	36	-	Qgt	N	N	L	-	25.	10- 1-47	-
17bd	-	Dr	-	-	P	Kd	F8.0	S	-	-	-	10- 2-47	-
17cc	-	Du	17.8	-	N	Qgt	N	N	Tco	0.0	12.55	10- 9-47	-
17da	-	Dr	877	-	P	Kd	FO.2	D,S	-	-	-	10- 1-47	-
18bb	-	Dr	-	1	P	Kd	F3.0	D,S	-	-	-	10- 2-47	-
18da	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	10- 2-47	-
19bb	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	10- 2-47	-
19cb	-	Dr	-	1½	P	Kd	F2.0	D,S	-	-	-	10- 2-47	-
19da	-	Du	27.1	36	P	Qgt	N	N	Tca	.5	25.90	10- 2-47	-
20ad	R. J. Meier	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	10- 1-47	-
20ba	-	Dr	-	-	P	Kd	F1.5	D,S	-	-	-	10- 9-47	-
20dd1	-	Dr	-	-	P	Kd	FO.01	N	-	-	-	10- 1-47	-
20dd2	-	Dr	-	-	P	Kd	F1.5	D,S	-	-	-	10- 1-47	-
21ad	-	Dr	-	-	P	Kd	CY,G	D,S	L	-	25.	10- 1-47	-
21ba	-	Du	12.4	24	T	Qgt	CY,H	N	Bp	.1	13.60	10- 9-47	-
22bc	-	Dr	974	-	P	Kd	CY,W	D,S	L	-	25.	10- 1-47	-
22dd	-	Dr	-	1	P	Kd	FO.01	N	-	-	-	10- 3-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Spink County--Continued										
116-64-23bb	-	B	28	18	-	Qgt	CY,G	D,S	L	-	16.	10- 9-47	-
23dc	-	Dr	-	1	P	Kd	F1.0	S	-	-	-	10- 3-47	-
24ba	-	Dr	870	-	P	Kd	N	N	-	-	-	-	-
24bc	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	10- 3-47	62
24dd	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	10- 3-47	-
25ac	-	B	50	18	T	Qgt	N	N	L	-	17.	10- 3-47	-
25db	-	Dr	800	1	P	Kd	F6.0	D,S	-	-	-	10- 3-47	-
26bb	-	B	22.0	18	T	Qgt	CY,W	D,S	Tca	0.7	19.40	10- 1-47	-
27cb	-	Dr	950	-	P	Kd	CY,G	D,S	L	-	25.	10- 1-47	-
29ad	-	Dr	860	-	P	Kd	F2.0	D,S	-	-	-	10- 1-47	-
30aa	-	Du	35	36	C	Qgt	CY,W	D,S	L	-	25.	10- 2-47	-
31bb1	-	Du	30	-	-	Qgt	CY,H	D,S	L	-	23.	10- 1-47	-
31bb2	-	Dr	912	-	P	Kd	N	N	-	-	-	-	-
32aa	R. P. Sharp	Du	23.0	24	-	Qgt	CY,E	D,S,O	Bp	.2	17.43	4-10-46	-
33bc	-	Dr	-	-	P	Kd	F1.2	D,S	-	-	-	10- 1-47	-
34ad	-	Dr	-	-	P	Kd	F8.0	D,S	-	-	-	10- 9-47	-
34dd	-	Dr	-	-	P	Kd	F1.5	D,S	-	-	-	10- 9-47	-
35ad	-	Dr	-	-	P	Kd	F4.0	D,S	-	-	-	10-11-47	-
36aa	-	Dr	-	-	P	Kd	FO.2	S	-	-	-	10-11-47	-
116-65- 4ba	-	B	14.9	18	W	Qgt	N	O	Tcu	1.8	7.83	4-10-46	-
5bd	-	Du	10.1	48	W	Qgt	CY,W	O	Tcu	.0	7.30	4-10-46	-
13da1	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	10- 2-47	-
13da2	-	B	30	-	-	Qgt	CY,H	N	L	-	25.	10- 2-47	-
24dd	-	Dr	858	-	P	Kd	N	N	-	-	-	-	-
25dd	-	Du	60	48	D	Qgt	CY,H	N	Bp	.3	41.00	10- 1-47	-

See footnotes at end of table.

Table 7.--Record of wells--Continued

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
			Spink County--Continued										
116-65-36aa	-	Dr	-	-	P	Kd	F3.0	D,S	-	-	-	10- 1-47	-
117-62-35bb	-	Du	30	18	-	Qgt	CY,G	D,S,O	Bp	1.1	22.72	6-26-47	-
117-64-32cd	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	10-11-47	-
33cd	-	Dr	-	-	P	Kd	FO.01	N	-	-	-	10-11-47	-
34cc	-	Dr	800	2	P	Kd	F6.0	D,S	-	-	-	10-11-47	-
35dd	-	Dr	902	-	P	Kd	N	N	-	-	-	-	-
36cc	-	Dr	-	-	P	Kd	F2.0	D,S	-	-	-	10-11-47	-
118-64- 2bc	-	Du	12.4	30	D	[illegible]t	N	O	Tcu	.0	6.83	4-11-46	-
118-65-25ab	Snyder	Du	20.3	36	W	[illegible]	CY,H	D,O	Tco	1.9	19.20	4-13-46	-
119-63- 6ab	J. McCall	Du	40	48	C	[illegible]gt	CY,H	D,S,O	Bp	1.1	27.43	4-11-46	-
119-65- 3aa	H. Wilkins	B	15	5	T	Qgt	N	O	L	-	13.	4-11-46	-
120-64-35cc	Mellette Corner Station	B	38	18	T	Qgt	CY,H	D,O	Tco	.5	19.70	4-11-46	-

See footnotes on following page.

Table 7.--Record of wells--Continued

Footnotes:

1. For description of well-numbering system, see p. 13 and figure 3.
2. B, bored well; Dn, driven well; Dr, drilled well; Du, dug well; Sp, spring.
3. Reported depths below the land surface are given in feet; measured depths are given in feet and tenths below measuring points.
4. C, concrete (brick tile, pipe, or stone masonry); P, iron or steel pipe; T, clay tile; W, wood.
5. Q, undifferentiated Quaternary deposits; Qal, alluvium; Qco, glacial channel outwash; Qgt, glacial drift; Qu, quicksand; K, undifferentiated Cretaceous; Kcg, Carlile or Graneros shale; Kd, Dakota sandstone; Kp, Pierre shale; X, log available.
6. Method of lift: C, horizontal centrifugal; Cy, cylinder; F, natural flow; N, none; P, pitcher pump; S, submersible turbine; T, turbine; VC, vertical centrifugal. Type of power: B, butane, E, electric; G, gas engine; H, hand operated; T, tractor; W, windmill. Flow given in gallons a minute.
7. D, domestic; I, irrigation; In, industrial; N, not being used; O, observation; P, public supply; S, stock.
8. Description of measuring point: Bp, base of pump; Hp, hole in pump base; Hc, hole in casing; L, land surface; Tca, top of casing; Tco, top of cover, Tcu, top of curb, Tp, top of pump; Bco, bottom of cover.
9. Measured depths to water level are given in feet, tenths and hundredths; reported depths to water level are given in feet.
10. Chemical analysis: P, partial; C, complete; U, reported as ~~not~~ suitable for domestic use.