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GEOLOGICAL SURVEY OF CANADA
WATER SUPPLY PAPER No. 194

GROUND-WATER RESOURCES OF THE RURAL MUNICIPALITY OF GOOD LAKE NO. 274 SASKATCHEWAN

By B. R. MacKay, H. N. Hainstock, and P. D. Bugg.

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DEPARTMENT OF MINES

BUREAU OF ECONOMIC GEOLOGY

GEOLOGICAL SURVEY

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B.R. MacKAY, H.N. HAINSTOCK, and P.D. BUGG

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CONTENTS

Illustrations

GROUND WATER RESOURCES OF THE RURAL MUNICIPALITY OF GOOD LAKE, NO. 274 SASKATCHEWAN

INTRODUCTION

Lack of rainfall during the years 1930 to 1934 over a large part of the Prairie Provinces brought about an acute shortage both in the larger supplies of surface water used for irrigation and the smaller supplies of ground water required for domestic purposes and for stock. In an effort to relieve the serious situation the Geological Survey began an extensive study of the problem from the standpoint of domestic uses and stock raising. During the field season of 1935 an area of 80,000 square miles, comprising all that part of Saskatchewan south of the north boundary of township 32, was systemically examined, records of approximately 60,000 wells were obtained, and 720 samples of water were collected for analyses. The facts obtained have been classified and the information pertaining to any well is readily accessible. The examination of so large an area and the interpretation of the data collected were possible because the bedrock geology and the Pleistocene deposits had been studied previously by McLearn, Warren, Rose, Stansfield, Wickenden, Russell, and others of the Geological Survey. The Department of Natural Resources of Saskatchewan and local well drillers assisted considerably in supplying several hundred well records. The base maps used were supplied by the Topographical Surveys Branch of the Department of the Interior.

Publication of Results

The essential information pertaining to the ground water conditions is being published in reports, one being issued for each municipality. Copies of these reports are being sent to the secretary treasurers of the municipalities and to certain Provincial and Federal Departments, where they can be consulted by residents of the municipalities or by other persons, or they may be obtained by writing direct to the Director, Bureau of Economic Geology, Department of Mines, Ottawa. Should anyone require more detailed information than that contained in the reports such additional information as the Geological Survey possesses can be obtained on application to the director. In making such request the applicant should indicate the exact location of the area by giving the quarter section, township, range, and meridian concerning which further information is desired.

The reports are written principally for farm residents, municipal bodies, and well drillers who are either planning to sink new wells or to deepen existing wells. Technical terms used in the reports are defined in the glossary,

How to Use the Report

Anyone desiring information about ground water in any particular locality should read first the part dealing with the municipality as a whole in order to understand more fully the part of the report that deals with the place in which he is interested. At the same time he should study the two figures accompanying the report. Figure 1 shows the surface and bedrock geology as related to the ground water supply, and Figure 2 shows the relief and the location and type of water wells. Relief is shown by lines of equal elevation called "contours". The elevation above sea-level

is given on some or all of the contour lines on the figure.

If one intends to sink a well and wishes to find the approximate depth to a water-bearing horizon, he must learn: (1) the elevation of the site, and (2) the probable elevation of the water-bearing bed. The elevation of the well site is obtained by marking its position on the map, Figure 2, and estimating its elevation with respect to the two contour lines between which it lies and whose elevations are given on the figure. Where contour lines are not shown on the figure, the elevations of adjacent wells as indicated in the Table of Well Records accompanying each report can be used. The approximate elevation of the water-bearing horizon at the well-site can be obtained from the Table of Well Records by noting the elevation of the water-bearing horizon in surrounding wells and by estimating from these known elevations its elevation at the well-site.[1] If the water-bearing horizon is in bedrock the depth to water can be estimated fairly accurately in this way. If the water-bearing horizon is in unconsolidated deposits such as gravel, sand, clay, or glacial debris, however, the estimated elevation is less reliable, because the water-bearing horizon may be inclined, or may be in lenses or in sand beds which may lie at various horizons and may be of small lateral extent. In calculating the depth to water, care should be taken that the water-bearing horizons selected from the Table of Well Records be all in the same geological horizon either in the glacial drift or in the bedrock. From the data in the Table

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[1] If the well-site is near the edge of the municipality, the map and report dealing with the adjoining municipality should be consulted in order to obtain the needed information about nearby wells.

of Well Records it is also possible to form some idea of the quality and quantity of the water likely to be found in the proposed well.

GLOSSARY OF TERMS USED

Alkaline. The term "alkaline" has been applied rather loosely to some ground-waters. In the Prairie Provinces, a water is usually described as "alkaline" when it contains a large amount of salts, chiefly sodium sulphate and magnesium sulphate in solution. Water that tastes strongly of common salt is described as "salty". Many "alkaline" waters may be used for stock. Most of the so-called "alkaline" waters are more correctly termed "sulphate waters".

Alluvium. Deposits of earth, clay, silt, sand, gravel, and other material on the flood-plains of modern streams and in lake beds.

Aquifer or Water-bearing Horizon. A water-bearing bed, lens, or pocket in unconsolidated deposits or in bedrock.

Buried pre-Glacial Stream Channels. A channel carved into the bedrock by a stream before the advance of the continental ice-sheet, and subsequently either partly or wholly filled in by sands, gravels, and boulder clay deposited by the ice-sheet or later agencies.

Bedrock. Bedrock, as here used, refers to partly or wholly consolidated deposits of gravel, sand, silt, clay, and marl that are older than the glacial drift.

Coal Seam. The same as a coal bed. A deposit of carbonaceous material formed from the remains of plants by partial decomposition and burial.

Contour. A line on a map joining points that have the same elevation above sea-level.

Continental Ice-sheet. The great ice-sheet that covered most of the surface of Canada many thousands of years age.

Escarpment. A cliff or a relatively steep slope separating level or gently sloping areas.

Flood-plain. A flat part in a river valley ordinarily above water but covered by water when the river is in flood.

Glacial Drift. The loose, unconsolidated surface deposits of sand, gravel, and clay, or a mixture of these, that were deposited by the continental ice-sheet. Clay containing boulders forms part of the drift and is referred to as glacial till or boulder clay. The glacial drift occurs in several forms:

(1) Ground Moraine. A boulder clay or till plain (includes areas where the glacial drift is very thin and the surface uneven).

(2) Terminal Moraine or Moraine. A hilly tract of country formed by glacial drift that was laid down at the margin of the continental ice-sheet during its retreat. The surface is characterized by irregular hills and undrained basins.

(3) Glacial Outwash. Sand and gravel plains or deltas formed by streams that issued from the continental ice-sheet.

(4) Glacial Lake Deposits. Sand and clay plains formed in glacial lakes during the retreat of the ice-sheet.

Ground Water. Sub-surface water, or water that occurs below the surface of the land.

Hydrostatic Pressure. The pressure that causes water in a well to rise above the point at which it is struck.

Impervious or Impermeable. Beds, such as fine clays or shale, are considered to be impervious or impermeable when they do not permit of the perceptible passage or movement of the ground water.

Pervious or Permeable. Beds are pervious when they permit of the perceptible passage or movement of ground water, as for example porous sands, gravel, and sandstone.

Pre-Glacial Land Surface. The surface of the land before it was covered by the continental ice-sheet.

Recent Deposits. Deposits that have been laid down by the agencies of water and wind since the disappearance of the continental ice-sheet.

Unconsolidated Deposits. The mantle or covering of alluvium and glacial drift consisting of loose sand, gravel, clay, and boulders that overlie the bedrock.

Water Table. The upper limit of the part of the ground wholly saturated with water. This may be very near the surface or many feet below it.

Wells. Holes sunk into the earth so as to reach a supply of water. When no water is obtained they are referred to as dry holes. Wells in which water is encountered are of three classes.

(1) Wells in which the water is under sufficient pressure to flow above the surface of the ground. These are called Flowing Artesian Wells.

(2) Wells in which the water is under pressure but does not rise to the surface. These wells are called Non-Flowing Artesian Wells.

(3) Wells in which the water does not rise above the water table. These wells are called Non-Artesian Wells.

NAMES AND DESCRIPTIONS OF GEOLOGICAL FORMATIONS, REFERRED TO IN THESE REPORTS

Wood Mountain Formation. The name given to a series of gravel and sand beds which have a maximum thickness of 50 feet, and which occur as isolated patches on the higher parts of Wood Mountain. This is the youngest bedrock formation and, where present, overlies the Ravenscrag formation.

Cypress Hills Formation. The name given to a series of conglomerates and sand beds which occur in the southwest corner of Saskatchewan, and rests upon the Ravenscrag or older formations. The formation is 30 to 125 feet thick.

Ravenscrag Formation. The name given to a thick series of light-coloured sandstones and shales containing one or more thick lignite coal seams. This formation is 500 to 1,000 feet thick, and covers a large part of southern Saskatchewan. The principal coal deposits of the province occur in this formation.

Whitemud Formation. The name given to a series of white, grey, and buff coloured clays and sands. The formation is 10 to 75 feet thick. At its base this formation grades in places into coarse, limy sand beds having a maximum thickness of 40 feet.

Eastend Formation. The name given to a series of fine-grained sands and silts. It has been recognized at various localities over the southern part of the province, from the Alberta boundary east to the escarpment of Missouri coteau. The thickness of the formation seldom exceeds 40 feet.

Bearpaw Formation. The Bearpaw consists mostly of incoherent dark grey to dark brownish grey, partly bentonitic shales, weathering light grey, or, in places where much iron

is present, buff. Beds of sand occur in places in the lower part of the formation. It forms the uppermost bedrock formation over much of western and southwestern Saskatchewan and has a maximum thickness of 700 feet or somewhat more.

Belly River Formation. The Belly River consists mostly of non-marine sand, shale, and coal, and underlies the Bearpaw in the western part of the area. It passes eastward and northeastward into marine shale. The principal area of transition is in the western half of the area where the Belly River is mostly thinner than it is to the west and includes marine zones. In the southwestern corner of the area it has a thickness of several hundred feet.

Marine Shale Series. This series of beds consists of dark grey to dark brownish grey, plastic shales, and underlies the central and northeastern parts of Saskatchewan. It includes beds equivalent to the Bearpaw, Belly River, and older formations that underlie the western part of the area.

WATER BEARING HORIZONS OF THE MUNICIPALITY

The rural municipality of Good Lake, No. 274, comprises an area of approximately 316 square miles in southeastern Saskatchewan. The area consists of eight full townships, described as townships 28, ranges 4 and 5; townships 29 and 30, ranges 4, 5, and 6; and one partial township, described as township 28, range 6; all west of the Second meridian. A branch line of the Canadian National railways runs in a north-south direction one-half mile west of the eastern border. The town of Canora in the northeastern corner of the municipality is situated on this line at its junction with another branch of the Canadian National railways that runs in a southeasterly direction. Canora lies 29 miles due north of the city of Yorkton.

Good Spirit lake is situated near the centre of the municipality and covers an area of approximately 44 square miles. A glacial lake formerly covered a much larger area, and deposits of glacial lake sands and gravels mantle a large area to the northwest, west, and southeast of the lake. A small moraine occurs in the southwestern corner, and a small area in the northeastern corner is covered by glacial lake clay; the remainder of the municipality is mantled by glacial till or boulder clay.

The ground surface of the municipality varies from very flat to undulating. The maximum elevation of 1,700 feet above sea-level is attained in the northwestern and southwestern corners, from where it slopes to 1,588 feet above sea-level at Good Spirit lake. The average elevation in the eastern half of the municipality is 1,600 feet above sea-level. Whitesand river flows in an easterly direction through the southern part of the municipality to township 28, range 4, where it turns and flows in a northeasterly direction, leaving the municipality in township 29, range 4. It is a permanent stream although during periods of drought it almost ceases to flow and the water becomes very stagnant.

Smaller tributary creeks drain the run-off water from the other parts of the municipality into Whitesand river. Whitesand river, several small creeks, Good Spirit lake, and other smaller lakes, are used extensively as sources of water for stock.

Water-bearing Horizons in the Unconsolidated Deposits

In those areas where the glacial lake sands are quite thick little difficulty is experienced in locating adequate supplies of water at depths of 5 to 20 feet. At the edge of the lake basin, however, particularly in some sections in townships 28 and 29, range 4, the deposits are very thin and contain little or no water. In townships 29, ranges 5 and 6, and township 30, range 6, practically the entire supply of water is obtained from wells sunk into the glacial lake sands. The water is moderately hard and is usable for all farm purposes including irrigation. Most of the wells yield sufficient supplies for 10 to 30 head of stock, and some farmers use two or more wells for convenience, or to obtain larger supplies of water. No water is obtained from the small deposit of glacial lake clay in the northeastern corner of the municipality, but water could probably be obtained from the underlying glacial till. The main water-bearing horizon in the glacial till and moraine-covered areas is located in the upper 25 feet of the drift. This water-bearing horizon is formed by scattered pockets of sand and gravel in the oxidized or yellow boulder clay, or by discontinuous layers of sand and gravel lying between the yellow clay and the underlying, unoxidized, blue boulder clay. The amount of water obtained depends upon the areal extent of the deposit encountered and upon the amount of annual precipitation. In the area outlined by the "A" boundary line the blue boulder clay occurs near the surface and only a few deposits of sand and gravel have been located. In most sections

of this outlined area a shortage of water, even for domestic purposes, is experienced, and most farmers haul from Whitesand river or from McOuat lake. The numerous dry holes within this area indicate that many attempts have been made to locate water. Drinking water is hauled from two wells, in sec. 2 and 12, tp.29, range 4, that yield large quantities of slightly mineralized water. Outside the outlined area, shallow wells have located pockets of sand and gravel in the boulder clay. The water from wells that yield a fairly abundant supply is moderately hard and usable for all farm purposes including irrigation. That from wells that yield smaller supplies is more highly mineralized, but with few exceptions it is usable for domestic purposes. In many cases two or more wells are used in order to obtain sufficient water for local requirements.

A few wells from 35 to 110 feet have encountered thin layers of sand in the blue boulder clay. Moderate supplies of highly mineralized water are obtained, and the water can be used for domestic purposes. These wells are a very poor source of supply and only ten are being used, most of these being located in the southwestern part of the municipality. In other parts of the municipality holes from 40 to 125 feet deep were dry.

Over the greater part of the municipality outside the area outlined by the "A" boundary line adequate supplies of water are obtained from shallow wells. As it is very improbable that an abundant supply of usable water can be located at depth within the outlined area, the only method of obtaining suitable supplies in this area appears to be by the use of artificial reservoirs. A few small ravines or creeks can be dammed and the impounded water used for stock, and in most sections dugouts could be used to advantage. These reservoirs should be located in depressions and should be at least 12 feet deep. Cemented cisterns for the

collection of rain water are also recommended, and if water so collected is boiled or filtered, it can be used for domestic purposes.

Water-bearing Horizons in the Bedrock

The Marine Shale series underlies the glacial drift in this part of Saskatchewan. The upper part of the shales series is a dark, fine-textured, clayey shale, and it is hard to distinguish from the blue boulder clay. A 1,200-foot dry hole was drilled in the NE.$\frac{1}{4}$, sec. 25, tp. 30, range 4, but the point of contact of the drift and Marine Shale bedrock is not known. The base of the well, at an elevation of 400 feet above sea-level, is in grey shale. It is useless to drill into the Marine Shale series in this part of Saskatchewan as it is non-water bearing.

GROUND WATER CONDITIONS BY TOWNSHIPS

Township 28, Range 4

The average elevation of this township is 1,600 feet above sea-level, but at McOuat lake, near the centre of the township, it decreases to 1,556 feet. Whitesand river occupies a shallow valley and runs through the central part of the area in a northeasterly direction. The eastern half of the township is slightly rolling and is mantled by glacial till or boulder clay. In the western half the boulder clay is overlain by a deposit of glacial lake sands that is from a few inches to at least 15 feet thick, the greater thickness being found in the northwestern corner.

Most of the farmers in this township have been unable to obtain sufficient water for farm needs. Out of fifty-three farms visited, at least thirty-five were short of water, and on the others only a few head of stock are kept. In the glacial lake sand-covered area the sand deposits are only a few feet thick in most sections. In the south half of section 20 wells obtain fairly abundant supplies of water from glacial lake sands at a depth of 15 feet, but in the northern half of the same section wells, 12 and 14 feet deep, in the glacial lake sands, were dry. None of the wells in this township yields a large supply of water. The water from the wells that are dug in the glacial lake sands is moderately hard and usable for all farm purposes.

A few wells have tapped pockets of sand and gravel in the glacial till and yield small supplies of water that is being used for all farm purposes. Most of the wells yield intermittent supplies, and in many places it is necessary to haul water during part of the year. The water from most of these wells is highly mineralized, but it is used for drinking as water

of better quality is not available. Water for stock use is hauled to all parts of the township from Whitesand river and McOuat lake.

In the NE.$\frac{1}{4}$, section 13, dry holes have been sunk to a depth of 83 feet into blue boulder clay, and no attempts have been made to locate water at greater depths. Deposits of water-bearing sand may be encountered at depth in the glacial drift, but it is probable that the hole will prove to be dry or that if water is located it will be too highly mineralized to be of any farm use. It is not advisable to drill to depth in this township. In the glacial till-covered area the best method for increasing water supplies is to excavate large dugouts to retain surface water. The dugout should be of sufficient depth to retain at least 12 feet of water. In the glacial lake sand-covered area, where the sands are thin, dugouts could also be used to retain surface water.

Township 28, Range 5

Whitesand river dissects the southern sections of the township and flows in an easterly direction. It occupies a shallow valley at an elevation of slightly less than 1,600 feet above sea-level. The ground surface is slightly undulating in the southwestern corner where the township is mantled by glacial till, but the remainder of the area is mantled by glacial lake sands and the ground surface is very flat. In the northeastern corner of the township part of Horseshoe lake and another smaller lake occur. The area surrounding the lakes is either too marshy or too sandy for cultivation, and is not settled.

Of the fifty-one farms visited only eight have an insufficient supply of water for local needs. The wells do not yield a large supply of water, and if larger herds of stock were kept there would be a shortage of water on many farms. Wells from

7 to 14 feet deep obtain from the glacial lake sands moderate supplies of fairly hard, usable water. Some wells have been dug through the glacial lake sand and tap pockets of sand or gravel in the underlying glacial till.

Wells from 8 to 18 feet deep in the glacial till-covered area tap pockets of sand and gravel in the yellow or weathered boulder clay. The supply in most sections is sufficient for local needs, and the water is used for all farm purposes. It is probable that with further prospecting other pockets of sand and gravel would be located in this area.

Several attempts have been made to locate water at depths of 60 to 90 feet. In the south half of section 4 holes dug in the blue boulder clay were dry. A 58-foot well in the SE.$\frac{1}{4}$, section 30, taps a gravel aquifer and yields sufficient water for local needs. The water rises to a point 30 feet below the surface, where it maintains a constant level. A 90-foot well in the NW.$\frac{1}{4}$, section 30, taps an aquifer of white sand and yields water that is under sufficient hydrostatic pressure to rise to a point 20 feet below the surface. The water is highly mineralized and is not used, as a shallow well yields an adequate supply. It is possible that other holes to similar depths in this township would encounter water-bearing deposits, but it is not advisable to drill to great depths as the uncertainty of obtaining water and the poor quality of water obtained do not warrant the expense of drilling. It is recommended that dugouts be used to collect and store surface water in the glacial till-covered area.

Township 28, Range 6

Whitesand river enters the township in section 31 and flows in a southeasterly direction to section 8, from where it flows in an easterly direction, leaving the township in section 1. Lawrence creek joins the river in section 30. In this township

the river occupies a steep valley 60 to 100 feet deep. The maximum elevation of 1,700 feet above sea-level is attained in sections 18 and 19. Sections 4 to 7, inclusive, and parts of sections 1, 2, 3, 8, 9, 10, and 11, occur in the municipality of Orkney, No. 244, and are not discussed in this report.

Parts of sections 18 and 19 are covered by moraine, but glacial till or boulder clay mantles the remainder of the township. Glacial lake sands overlie the glacial till in the northeastern and north-central sections of the township. The glacial lake sands are from a few inches to 15 feet thick, and the thicker deposits are in the northern part of the area. No difficulty is experienced in obtaining water at shallow depths in the glacial lake sand-covered area. The wells are from 6 to 15 feet deep, and an individual well yields sufficient water for local needs. The water is moderately hard, though often termed soft, and is usable for all farm purposes. In the glacial till and moraine-covered areas greater difficulty is experienced in locating adequate water supplies. A spring in the NW.$\frac{1}{4}$, section 19, flows continuously and yields an abundant supply of moderately hard water. Shallow wells from 8 to 34 feet deep have encountered pockets of sand and gravel in the glacial drift. A few tap pockets of large areal extent and yield fairly large supplies of moderately hard water which is under slight hydrostatic pressure and is usable for all farm purposes. Other wells yield small and intermittent quantities of water that is more highly mineralized, but with one exception the water from all wells is used for domestic purposes.

Four wells in the SE.$\frac{1}{4}$, section 15, NE.$\frac{1}{4}$, section 16, NW.$\frac{1}{4}$, section 18, and SE.$\frac{1}{4}$, section 22, strike sand aquifers at depths of 45, 56, 50, and 110 feet, respectively. Each well yields sufficient water for local needs, and the water is usable for household purposes. The water in the two deeper wells is

under sufficient hydrostatic pressure to rise to points 48 and 70 feet below the surface. The deposits do not form a continuous water-bearing horizon as dry holes from 100 to 180 feet deep have been sunk in sections 14 and 15. The 180-foot dry hole in the SW.$\frac{1}{4}$, section 14, is reported to have struck shale at a depth of 100 feet, or at an elevation of 1,570 feet above sea-level. It is thought that the drift is more than 100 feet thick in this area, and the material reported as shale probably is hard, blue boulder clay.

It is possible that water will be located at depths of 50 to 150 feet, but it is not advisable to drill any deeper as the uncertainty of obtaining water, and the poor quality of water if located, do not warrant the expense of drilling. The only practical method of increasing the supply of water in this township is by using more shallow wells, and by conserving surface water. Prior to digging shallow wells the water-bearing deposits should be located by a small test auger.

Township 29, Range 4

The ground surface of this township is slightly rolling, and the elevation varies between 1,600 and 1,570 feet above sea-level. Whitesand river occupies a shallow valley in the eastern part of the township. The water from the river is used by many farmers for stock, but during the drought of 1930 to 1934 the river became almost dry and the water was very stagnant. The township is mantled by glacial till or boulder clay, but several feet of glacial lake sands overlie the till in the southwestern corner.

With few exceptions the residents of this township experience a shortage of water or have barely sufficient supplies for local needs. Many holes have been sunk in the glacial drift to depths of 9 to 18 feet. Two wells in the NE.$\frac{1}{4}$, section 2, and

the NE.$\frac{1}{4}$, section 12, tap sand and gravel aquifers that yield an abundant supply of water. The water is moderately hard and many farmers haul from these two wells. It is estimated that the well in section 2 would supply water for at least 200 head of stock. All the other wells yield small or intermittent supplies of water that with few exceptions is usable for all farm purposes. In most cases a farmer has dug a number of dry holes before water is located, and before digging it is advisable to locate the water-bearing deposits by means of a small test auger. A dry hole in the NE.$\frac{1}{4}$, section 20, was dug to a depth of 70 feet. It is not probable that an abundant supply of water will be located at depth, although thin layers of sand may be located from which highly mineralized water may be obtained. However, in no instance is it advisable to drill to depths greater than 100 to 150 feet. The best method of increasing water supplies in this township is to conserve the surface water. A dam could be constructed across Whitesand river, but in other sections it would be necessary to excavate dugouts as no suitable locations for the construction of dams exist. The "A" boundary line outlines an area in which it is very difficult to obtain water. It should not be difficult, however, to obtain water from the lake sands in the southwestern part of the township unless the deposits are very thin.

Township 29, Range 5

The average elevation of this township is 1,600 feet above sea-level. Good Spirit lake occupies a large area in the north-central part. This lake is a remnant of a large glacial lake, and deposits of glacial lake sands cover all of the township except a small area in the northeastern corner that is mantled by boulder clay or glacial till. Horseshoe lake occurs in the southeastern corner of the township.

The field party was unable to visit this township as the roads were blocked by snow, but some information was obtained from farmers in adjoining townships. The area is thickly wooded with small poplar, and few farmers reside in this township. The farmers have sufficient water for local needs. Stock can be watered at the lakes, and most wells yield adequate supplies of water for several head of stock. All wells are shallow, not more than 20 feet deep, and some are not more than 4 feet deep, and they are dug in glacial lake sands. The yield from the wells decreases during the months of February and March, due to freezing of the ground. It is reported, however, that the residents of this township do not experience a shortage of water for either domestic or stock purposes.

Township 29, Range 6

The glacial till or boulder clay in this township, with the exceptions of parts of sections 6, 7, and 18, is concealed by glacial lake sands. This deposit of lake sands is fairly thick in the western sections, where wells 25 feet deep have been sunk in sand. The surface is flat and the elevation rises from 1,600 feet above sea-level in the east to 1,680 feet above sea-level in the west. Numerous bluffs of small poplar and willow are common throughout the area.

Water supplies are entirely derived from a spring, a number of wells from 6 to 25 feet deep, and two wells 74 and 65 feet deep. The spring is located in the SW.$\frac{1}{4}$, section 18, and yields an abundant supply of moderately hard water that is usable for stock and for household purposes. The shallow wells are sunk in glacial lake sands and yield sufficient water for all local needs. No dry holes were reported, and wells sunk at almost any locality in the glacial lake sand-covered area should locate water. The water is moderately hard and is used for all

farm purposes, including irrigation. Most of the wells supply sufficient water for 15 to 50 head of stock.

The 74- and 65-foot wells are sunk in the NW.$\frac{1}{4}$, section 7, and the NW.$\frac{1}{4}$, section 18, respectively, and tap layers of sand and gravel in the blue boulder clay. These wells yield sufficient water for local needs, and the well in section 18 waters 20 head of stock. The water is under sufficient hydrostatic pressure to rise to points 54 and 50 feet below the surface. The water is hard and is used for drinking, cooking, and other domestic purposes. It is possible that other wells to similar depths in this township would encounter water-bearing deposits, but it is not thought that the aquifers of the above-mentioned wells are continuous.

The residents of this township do not experience a shortage of water, and it is probable that if larger supplies are required more shallow wells would supply the necessary water. Due to the sandy nature of the soil covering water cannot be easily retained by dams or dugouts.

Township 30, Range 4

The average elevation in this township is 1,600 feet above sea-level. The ground surface is flat or slightly undulating, and it is remarkably free from stones or boulders. Several of the sections are very swampy and ditches have been dug to drain the water from them. Clumps of poplar and small willow are common in the township.

The entire township is mantled by glacial till or boulder clay. A thin deposit of glacial lake clay overlies the till in parts of sections 34 and 35. The glacial till consists of a few feet of loam top soil; 8 to 25 feet of bright yellow boulder clay containing scattered pockets or lenses of sand and gravel; a discontinuous layer of sand and gravel that varies in

thickness from a few inches to 3 or 4 feet; and fine-textured, compact, blue boulder clay in which thin layers of sand occasionally occur at various elevations.

The uppermost and principal water-bearing horizon is formed by the pockets of sand and gravel and by the discontinuous layer of sand and gravel lying between the yellow and blue boulder clays. A few wells tap aquifers of large areal extent at depths of 10 to 15 feet, and yield an abundant supply of water that is usually under slight hydrostatic pressure. The water is moderately hard and usable for all farm purposes. Most of the shallow wells, however, yield small or intermittent supplies of water that is more highly mineralized, but the water with few exceptions is usable for drinking. In some sections water is hauled from wells yielding abundant supplies or from the town of Canora. In other places from two to five wells are used to obtain sufficient water for local needs. In most places a number of dry holes are dug before water is located, and it is advisable to prospect the upper part of the drift with a small auger before digging a well.

Several wells from 20 to 35 feet deep tap thin layers of sand and gravel in the blue boulder clay and yield very small supplies of highly mineralized water. These wells are very poor sources of water. Three dry holes, 100 to 125 feet deep, in sections 19, 28, and 32, were sunk in the blue boulder clay, the deepest being sunk to an elevation of 1,478 feet above sea-level. Another dry hole in the NW.$\frac{1}{4}$, section 25, was drilled by the Marland Oil Company to a depth of 1,200 feet, or to an elevation of 400 feet above sea-level. This hole passes through grey shale, black shale, and brown shale, and drilling was discontinued in grey shale. It is known that the upper shale beds belong to the Marine Shale series which is considered to be non-

water bearing in this part of Saskatchewan. It is not advisable to drill into the shale in this township.

The residents of this township do not experience a shortage of water in years of normal rainfall, but the wells are readily affected by the amount of precipitation, and in drought periods many of them become dry. The best method of increasing water supplies is by the conservation of surface water. Dugouts excavated to a depth of at least 12 feet, and located where the maximum amount of surface water can be collected, are highly recommended.

Township 30, Range 5

Good Spirit lake occupies an area of approximately 8 square miles in the southwestern corner of the township, and lies at an elevation of 1,588 feet. The ground surface is very flat and the elevation rises gradually from the lake to the northeastern corner, where it attains 1,620 feet above sea-level. The township is mantled by boulder clay or glacial till, but in the vicinity of the lake the till is overlain by glacial lake sands.

The glacial lake sands at the north end of the lake are at least 12 feet thick and wells sunk in this area tap an abundant supply of water that is moderately hard and usable for all farm purposes. The glacial lake sands on the eastern side of the lake are only a few feet thick and contain no water. Several farmers haul from the wells at the north end of the lake, and it is estimated that the well in the NE.$\frac{1}{4}$, section 30, will yield sufficient water for at least 300 head of stock.

In the glacial till-covered area the uppermost water-bearing horizon is formed by pockets of sand and gravel in the yellow boulder clay, or by layers of sand and gravel lying between the yellow and blue boulder clays. The wells are from 10 to 25 feet deep and many yield sufficient water for 10 to 20 head of

stock. The water from the wells is moderately hard and usable for all domestic purposes. Other wells that tap pockets of sand and gravel of smaller areal extent yield small or intermittent supplies of more highly mineralized water, and that from some wells is not usable for household purposes. During periods of drought most of these wells become dry and the owners are forced to haul water from wells yielding a permanent supply, or from Good Spirit lake. The blue boulder clay has not been extensively prospected, but a 40-foot hole was dry. It is doubtful if any large amount of water will be derived from sand deposits in the blue clay.

A fair supply of water is obtained in this township, although during periods of drought many of the farms are short of water. Dugouts to collect and retain surface water are the best means of increasing water supplies. It is also probable that with further prospecting other shallow wells yielding a permanent supply will be located. It is not advisable to drill to depth as the uncertainty of obtaining water and the usual poor quality, if obtained, do not warrant the expense of drilling.

Township 30, Range 6

The ground surface of this township is flat to slightly undulating, and the elevation rises gradually from 1,600 feet above sea-level at the eastern border to 1,700 feet at the western border. The area is mantled by glacial lake sands and gravels that vary in thickness from a few feet to at least 20 feet. The deposits are thicker in the eastern sections, and are quite thin in the northwestern sections. The glacial lake deposits are underlain by glacial till which appears at the surface in section 31.

Water supplies are obtained from wells 5 to 20 feet deep sunk into the glacial lake deposits. The water is moderately

hard and usable for all domestic purposes. Most of the wells yield sufficient water to supply 10 to 20 head of stock. During periods of drought some of the wells do not yield adequate water for local needs, but by the use of two or more wells sufficient water is usually obtained.

The residents of this township do not experience a shortage of water and water is not hauled. One dry hole is reported. It is located in the NW.$\frac{1}{4}$, section 23, and is only 6 feet deep. It is not probable that large supplies of water would be encountered in the glacial till although it probably contains pockets of water-bearing sand and gravel.

STATISTICAL SUMMARY OF WELL INFORMATION IN RURAL MUNICIPALITY OF GOOD LAKE, NO. 274, SASKATCHEWAN

Township	28	28	28	29	29	29	30	30	30	Total No. in muni-
West of 2nd mer. Range	4	5	6	4	5	6	4	5	6	cipality
Total No. of Wells in Township	84	63	56	123	*	61	144	141	60	732 *
No. of wells in bedrock	0	0	0	0		0	1	0	0	1
No. of wells in glacial drift	84	63	56	123		61	143	141	60	731
No. of wells in alluvium	0	0	0	0		0	0	0	0	0
Permanency of Water Supply										
No. with permanent supply	35	51	47	41		60	82	69	51	436
No. with intermittent supply	22	6	4	20		1	29	23	8	113
No. dry holes	27	6	5	62		0	33	49	1	183
Types of Wells										
No. of flowing artesian wells	0	0	0	0		0	0	0	0	0
No. of non-flowing artesian wells	0	2	5	1		2	5	5	0	20
No. of non-artesian wells	57	55	46	60		59	106	87	59	529
Quality of Water										
No. with hard water	49	46	39	49		59	101	78	48	469
No. with soft water	8	11	12	12		2	10	14	11	80
No. with salty water	0	0	0	2		0	0	0	0	2
No. with "alkaline" water	15	1	3	20		0	27	13	12	91
Depths of Wells										
No. from 0 to 50 feet deep	82	59	52	121		59	139	141	60	713
No. from 51 to 100 feet deep	2	4	2	2		2	3	0	0	15
No. from 101 to 150 feet deep	0	0	1	0		0	1	0	0	2
No. from 151 to 200 feet deep	0	0	1	0		0	0	0	0	1
No. from 201 to 500 feet deep	0	0	0	0		0	0	0	0	0
No. from 501 to 1,000 feet deep	0	0	0	0		0	0	0	0	0
No. over 1,000 feet deep	0	0	0	0		0	1	0	0	0
How the Water is Used										
No. usable for domestic purposes	55	53	47	48		61	92	73	58	487
No. not usable for domestic purposes	2	4	4	13		0	19	19	1	62
No. usable for stock	57	55	49	56		61	109	88	59	534
No. not usable for stock	0	2	2	5		0	2	4	0	15
Sufficiency of Water Supply										
No. sufficient for domestic needs	33	51	47	41		60	79	69	51	431
No. insufficient for domestic needs	24	6	4	20		1	32	23	8	118
No. sufficient for stock needs	25	47	42	34		59	60	51	43	361
No. insufficient for stock needs	32	10	9	27		2	51	41	16	188

* The record does not include the well data for township 29, range 5, as when the field party visited the area late in October a heavy snowfall blocked the roads and prevented examination of the wells in the township.

ANALYSES AND QUALITY OF WATER

General Statement

Samples of water from representative wells in surface deposits and bedrock were taken for analyses. Except as otherwise stated in the table of analyses the samples were analysed in the laboratory of the Borings Division of the Geological Survey by the usual standard methods. The quantities of the following constituents were determined; total dissolved mineral solids, calcium oxide, magnesium oxide, sodium oxide by difference, sulphate, chloride, and alkalinity. The alkalinity referred to here is the calcium carbonate equivalent of all acid used in neutralizing the carbonates of sodium, calcium, and magnesium. The results of the analyses are given in parts per million--that is, parts by weight of the constituents in 1,000,000 parts of water; for example, 1 ounce of material dissolved in 10 gallons of water is equal to 625 parts per million. The samples were not examined for bacteria, and thus a water that may be termed suitable for use on the basis of its mineral salt content might be condemned on account of its bacteria content. Waters that are high in bacteria content have usually been polluted by surface waters.

Total Dissolved Mineral Solids

The term "total dissolved mineral solids" as here used refers to the residue remaining when a sample of water is evaporated to dryness. It is generally considered that waters that have less than 1,000 parts per million of dissolved solids are suitable for ordinary uses, but in the Prairie Provinces this figure is often exceeded. Nearly all waters that contain more than 1,000 parts per million of total solids have a taste due to the dissolved mineral matter. Residents

accustomed to the waters may use those that have much more than 1,000 parts per million of dissolved solids without any marked inconvenience, although most persons not used to highly mineralized water would find such waters highly objectionable.

Mineral Substances Present

Calcium and Magnesium

The calcium (Ca) and magnesium (Mg) content of water is dissolved from rocks and soils, but mostly from limestone, dolomite, and gypsum. The calcium and magnesium salts impart hardness to water. The magnesium salts are laxative, especially magnesium sulphate (Epsom salts, $MgSO_4$), and they are more detrimental to health than the lime or calcium salts. The calcium salts have no laxative or other deleterious effects. The scale found on the inside of steam boilders and tea-kettles is formed from these mineral salts.

Sodium

The salts of sodium are next in importance to those of calcium and magnesium. Of these, sodium sulphate (Glauber's salt, Na_2SO_4) is usually in excess of sodium chloride (common salt, NaCl). These sodium salts are dissolved from rocks and soils. When there is a large amount of sodium sulphate present the water is laxative and unfit for domestic use. Sodium carbonate (Na_2CO_3) "black alkali", sodium sulphate "white alkali", and sodium chloride are injurious to vegetation.

Sulphates

Sulphates (SO_4) are one of the common constituents of natural water. The sulphate salts most commonly found are sodium sulphate, magnesium sulphate, and calcium sulphate ($CaSO_4$). When the water contains large quantities of the sulphate of sodium it is injurious to vegetation.

Chlorides

Chlorides are common constituents of all natural water and are dissolved in small quantities from rocks. They usually occur as sodium chloride and if the quantity of salt is much over 400 parts per million the water has a brackish taste.

Iron

Iron (Fe) is dissolved from many rocks and the surface deposits derived from them, and also from well casings, water pipes, and other fixtures. More than 0.1 part per million of iron in solution will settle as a red precipitate upon exposure to the air. A water that contains a considerable amount of iron will stain porcelain, enamelled ware, and clothing that is washed in it, and when used for drinking purposes has a tendency to cause constipation, but the iron can be almost completely removed by aeration and filtration of the water.

Hardness

Calcium and magnesium salts impart hardness to water. Hardness of water is commonly recognized by its soap-destroying powers as shown by the difficulty of obtaining lather with soap. The total hardness of a water is the hardness of the water in its original state. Total hardness is divided into "permanent hardness" and "temporary hardness". Permanent hardness is the hardness of the water remaining after the sample has been boiled and it represents the amount of mineral salts that cannot be removed by boiling. Temporary hardness is the difference between the total hardness and the permanent hardness and represents the amount of mineral salts that can be removed by boiling. Temporary hardness is due mainly to the bicarbonates of calcium and magnesium and iron, and permanent hardness to the sulphates and chlorides of calcium and magnesium. The permanent hardness

can be partly eliminated by adding simple chemical softeners such as ammonia or sodium carbonate, or many prepared softeners. Water that contains a large amount of sodium carbonate and small amounts of calcium and magnesium salts is soft, but if the calcium and magnesium salts are present in large amounts the water is hard. Water that has a total hardness of 300 parts per million or more is usually classed as excessively hard. Many of the Saskatchewan water samples have a total hardness greatly in excess of 300 parts per million; when the total hardness exceeded 3,000 parts per million no exact hardness determination was made. Also no determination for temporary hardness was made on waters having a total hardness less than 50 parts per million. As the determinations of the soap hardness in some cases were made after the samples had been stored for some time, the temporary hardness of some of the waters as they come from the wells probably is higher than that given in the table of analyses.

Analyses of Water Samples from the Municipality of Good Lake, No. 274, Saskatchewan

LOCATION						Depth of Well, Ft.	Total dis'vd solids	HARDNESS			CONSTITUENTS AS ANALYSED						CONSTITUENTS AS CALCULATED IN ASSUMED COMBINATIONS									Source of Water
No.	Qtr.	Sec.	Tp.	Rge.	Mer.			Total	Perm.	Temp.	Cl	Alkalinity	CaO	MgO	SO_4	Na_2O	Solids	$CaCO_3$	$CaSO_4$	$MgCO_3$	$MgSO_4$	Na_2CO_3	Na_2SO_4	NaCl	$CaCl_2$	
1	Town of Canora					Tap Water	486										480	(3)	(1)		(2)		(4)		(5)	✱1

Water samples indicated thus, ✱1, are from glacial drift.
Analyses are reported in parts per million; where numbers (1), (2), (3), (4), and (5) are used instead of parts per million, they represent the relative amounts in which the five main constituents are present in the water.
Hardness is the soap hardness expressed as calcium carbonate ($CaCO_3$).

Analysis No. 1 by Provincial Analyst, Regina.
For interpretation of this table read the section on Analyses and Quality of Water.

Water from the Unconsolidated Deposits

No samples of water from wells in the glacial drift of this municipality were analysed. The analysis listed in the accompanying table is of a sample of the water from the mains in the town of Canora. This water has a low total dissolved solid content and is moderately soft as compared with water from most of the wells. This water is suitable for all domestic uses and it is also being used by the Canadian National Railways for their locomotives.

Water from wells sunk into glacial lake sands and gravels is locally termed soft or moderately hard. It is clear, slightly mineralized, and usable for drinking and for all farm purposes. As these sand deposits are extensive and outcrop at the surface, the water is easily polluted by surface seepage water containing animal refuse. The wells should be located a considerable distance from all outbuildings and the water should be frequently tested for bacteria.

The water from the wells that tap pockets of sand and gravel in the glacial till is usually more highly mineralized than that from wells sunk in the glacial lake sands and gravels. It is frequently termed "alkaline" and that from some wells cannot be used for domestic purposes. Water from these wells probably contains a high content of magnesium sulphate (Epsom salts) and sodium sulphate (Glauber's salt), and smaller amounts of calcium sulphate, calcium carbonate, and calcium chloride. The first two mentioned salts have a strong laxative effect. The water from many of the drift wells in the municipality is reported to have a laxative effect on those not accustomed to the use of highly mineralized water.

The water from the few deeper wells is reported to be very hard, and usually "alkaline". It probably contains the

same mineral salts in solution as found in the other water, but in greater quantities. The water is being used for all farm purposes, but it is not satisfactory for drinking.

Water from the Bedrock

No water is obtained from the Marine Shale series in this municipality. Water from the bedrock in this part of Saskatchewan is frequently too highly mineralized to be used.

WELL RECORDS[1]—Rural Municipality of GOOD LAKE NO. 274, SASKATCHEWAN

WELL No.	LOCATION ¼	Sec.	Tp.	Rge.	Mer.	TYPE OF WELL	DEPTH OF WELL	ALTITUDE WELL (above sea level)	HEIGHT TO WHICH WATER WILL RISE: Above (+) Below (−) Surface	Elev.	PRINCIPAL WATER-BEARING BED: Depth	Elev.	Geological Horizon	CHARACTER OF WATER	TEMP. OF WATER (in °F.)	USE TO WHICH WATER IS PUT	YIELD AND REMARKS
1	SW.	2	28	4	2	Dug	15	1,590	- 10	1,580	10	1,580	Glacial sand	Soft, clear		D, S	Sufficient for local needs.
2	NW.	2	"	"	"	Dug	16	1,560									Dry hole in glacial blue clay.
3	NE.	2	"	"	"	Dug	16	1,590	- 11	1,579			Glacial drift	Hard, clear, "alkaline"		D, S	Intermittent supply; another well 18 feet deep is sufficient for domestic needs.
4	SE.	3	"	"	"	Dug	14	1,560	- 10	1,550	10	1,550	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
5	SW.	3	"	"	"	Dug	16	1,560	- 12	1,548	14	1,546	Glacial sand	Hard, clear		D, S	Insufficient for local needs.
6	NE.	3	"	"	"	Dug	12	1,560	- 6	1,554	6	1,554	Glacial sand	Hard, clear		D, S	Intermittent supply.
7	NW.	6	"	"	"	Dug	12	1,590	- 10	1,580	10	1,580	Glacial gravel	Hard, clear		D, S	Intermittent supply; also another well 22 feet deep.
8	SW.	7	"	"	"	Dug	12	1,590	- 11	1,579	11	1,579	Glacial sand	Hard, clear		D	Intermittent supply; stock watered at river.
9	SW.	9	"	"	"	Dug	14	1,560	- 8	1,552			Glacial drift	Hard, clear		D, S	Intermittent supply; another well 12 feet deep is sufficient for domestic needs.
10	SW.	9	"	"	"	Dug	12	1,560	- 7	1,553			Glacial drift	Hard, clear		D	Intermittent supply; stock watered at a creek.
11	NE.	9	"	"	"	Dug	10	1,570	- 5	1,565	5	1,565	Glacial sand	Hard, clear		D	Intermittent supply; a 12-foot well supplies stock water.
12	SE.	10	"	"	"	Dug	10	1,570	- 6	1,564			Glacial drift	Hard, clear, "alkaline"		D, S	Intermittent supply.
13	SE.	11	"	"	"	Dug	15	1,590	- 13	1,577			Glacial drift	Hard, "alkaline"		D, S	Intermittent supply.
14	NE.	12	"	"	"	Dug	11	1,590	- 6	1,584	6	1,584	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
15	SW.	13	"	"	"	Bored	30	1,600	- 22	1,578			Glacial drift	Hard, clear, "alkaline"		D, S	Insufficient for local needs
16	NW.	13	"	"	"	Dug	12	1,600	- 9	1,591	9	1,591	Glacial sand	Soft, clear		D, S	Sufficient for local needs.
17	NE.	13	"	"	"	Dug	83	1,610									Dry hole in glacial blue clay; also many other dry holes.
18	SW.	14	"	"	"	Dug	16	1,670	- 6	1,664			Glacial sandy clay	Hard, clear		D, S	Intermittent supply.
19	NW.	14	"	"	"	Dug	20	1,660	- 18	1,642	18	1,642	Glacial sand	Hard, clear		D	Insufficient supply; stock watered at a lake.
20	NE.	14	"	"	"	Dug	12	2,595	- 8	1,587	8	1,587	Glacial gravel	Soft, clear		D, S	Sufficient for local needs.
21	SW.	15	"	"	"	Dug	15	1,570	- 6	1,564	6	1,564	Glacial sand	Hard, clear, "alkaline"		D, S	Intermittent supply.
22	SE.	16	"	"	"	Dug	30	1,580	- 20	1,560			Glacial drift	Hard, clear, "alkaline"		D	Sufficient supply; stock watered at a lake.
23	SW.	16	"	"	"	Dug	25	1,570									Deepest of 15 dry holes in glacial blue clay; water hauled from river.
24	NE.	16	"	"	"	Dug	18	1,580	- 11	1,569	11	1,569	Glacial sand	Soft, clear		D	Sufficient supply; stock watered at a river.
25	SW.	17	"	"	"	Dug	9	1,570	- 4	1,566	4	1,566	Glacial sand	Hard, clear		S	Sufficient supply; a spring is used for domestic supply.
26	NE.	17	"	"	"	Dug	8	1,570	- 7	1,563	7	1,563	Glacial sand	Soft, clear		D, S	Sufficient supply; stock watered at a lake.

NOTE—All depths, altitudes, heights and elevations given above are in feet.

(D) Domestic; (S) Stock; (I) Irrigation; (M) Municipality; (N) Not used.
(#) Sample taken for analysis.

WELL RECORDS—Rural Municipality of GOOD LAKE NO.274, SASKATCHEWAN

WELL No.	LOCATION ¼	Sec.	Tp.	Rge.	Mer.	TYPE OF WELL	DEPTH OF WELL	ALTITUDE WELL (above sea level)	HEIGHT TO WHICH WATER WILL RISE Above (+) Below (−) Surface	Elev.	PRINCIPAL WATER-BEARING BED Depth	Elev.	Geological Horizon	CHARACTER OF WATER	TEMP. OF WATER (in °F.)	USE TO WHICH WATER IS PUT	YIELD AND REMARKS
27	SE.	20	28	4	2	Dug	15	1,570	- 9	1,561	9	1,561	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
28	SW.	20	"	"	"	Dug	15	1,570	- 11	1,579	11	1,579	Glacial sand	Hard, clear		D, S	Sufficient of local needs.
29	NE.	20	"	"	"	Dug	12	1,580									Dry hole; base in glacil drift; haul water from river.
30	NE.	20	"	"	"	Dug	14	1,580									Dry hole; base in glacial drift; haul water from river.
31	SE.	21	"	"	"	Dug	10	1,560	- 6	1,554	6	1,554	Glacial sand	Hard, clear		D	Sufficient supply; stock watered at a lake.
32	SE.	21	"	"	"	Dug	32	1,570									Dry hole; base in glacial blue clay; haul water from river.
33	SE.	21	"	"	"	Dug	14	1,570	- 10	1,560	10	1,560	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
34	NE.	22	"	"	"	Dug	15	1,600	- 8	1,592			Glacial drift	Hard, clear		D, S	Intermittent supply.
35	SE.	23	"	"	"	Dug	20	1,560									One of several dry holes in glacial drift.
36	SW.	25	"	"	"	Dug	11	1,600	- 10	1,590			Glacial drift	Hard, clear "alkaline"		D	Intermittent supply.
37	NW.	25	"	"	"	Dug	13	1,600	- 7	1,593	7	1,593	Glacial sandy clay	Soft, clear		D, S	Sufficient for local needs.
38	SE.	26	"	"	"	Dug	11	1,600	- 5	1,595	5	1,595	Glacial gravel	Soft, clear		D, S	Sufficient for local needs.
39	NW.	26	"	"	"	Dug	16	1,600	- 10	1,590			Glacial gravel	Hard, clear		D	Insufficient supply; stock watered at a river.
40	SE.	27	"	"	"	Dug	12	1,570	- 4	1,566	11	1,559	Glacial gravel	Hard, clear		D	Sufficient supply; stock watered at a river.
41	SW.	27	"	"	"	Dug	15	1,600	- 10	1,590			Glacial drift	Hard, clear, "alkaline"		D	Intermittent supply; hauls water from river.
42	NW.	27	"	"	"	Dug	18	1,580	- 12	1,568	12	1,568	Glacial sand	Hard, clear		D	Water-level constant, stock water at a creek.
43	NE.	27	"	"	"	Dug	10	1,590	0	1,590	0	1,590	Glacial sand	Hard, clear		D	Sufficient for local needs.
44	NW.	28	"	"	"	Dug	14	1,580	- 12	1,568			Glacial drift	Hard, clear, "alkaline"		D, S	Intermittent supply.
45	SW.	29	"	"	"	Dug	14	1,580									Dry hole in glacial drift; haul water from river.
46	NE.	29	"	"	"	Dug	11	1,580	- 7	1,573	7	1,573	Glacial sand	Hard, clear		D, S	Sufficient supply; two other similar wells 6 and 10 feet deep.
47	SW.	32	"	"	"	Dug	12	1,580	- 11	1,569	11	1,569	Glacial sandy clay	Hard, clear, "alkaline"		D, S	Intermittent supply; also two other similar wells.
48	SE.	33	"	"	"	Dug	16	1,580	- 12	1,568	12	1,568	Glacial sand	Hard, clear		D	Intermittent supply; also a 40-foot dry hole.
49	SW.	33	"	"	"	Dug	12	1,580	- 9	1,571	9	1,571	Glacial sand	Soft, clear		D, S	Sufficient for local needs.
50	NE.	34	"	"	"	Dug	6	1,585	- 4	1,581	4	1,581	Glacial sand and gravel	Hard, clear		D	Sufficient for local needs.
51	SW.	35	"	"	"	Dug	14	1,600	- 7	1,593	7	1,593	Glacial sand	Hard, clear, "alkaline"		D, S	Intermittent supply.
52	SE.	36	"	"	"	Dug	16	1,620	- 10	1,610			Glacial drift	Hard, clear		D	Intermittent supply; also another well 16 feet deep with a good supply.
53	SW.	36	"	"	"	Dug	14	1,600	- 8	1,592	8	1,592	Glacial sand	Hard, clear		D, S	Sufficient for local needs.

NOTE—All depths, altitudes, heights and elevations given above are in feet.

(D) Domestic; (S) Stock; (I) Irrigation; (M) Municipality; (N) Not used.
(#) Sample taken for analysis.

WELL RECORDS—[3] Rural Municipality of GOOD LAKE NO. 274, SASKATCHEWAN

WELL No.	LOCATION ¼	Sec.	Tp.	Rge.	Mer.	TYPE OF WELL	DEPTH OF WELL	ALTITUDE WELL (above sea level)	HEIGHT TO WHICH WATER WILL RISE Above (+) Below (−) Surface	Elev.	PRINCIPAL WATER-BEARING BED Depth	Elev.	Geological Horizon	CHARACTER OF WATER	TEMP. OF WATER (in °F.)	USE TO WHICH WATER IS PUT	YIELD AND REMARKS
54	NW.	36	28	4	2	Dug	7	1,600	- 5	1,595	5	1,595	Glacial gravel	Hard, clear, iron		S	Sufficient supply; a 14-foot well is used for domestic needs.
1	SW.	1	28	5	2	Dug	11	1,590	- 6	1,584	6	1,584	Glacial sand	Hard, clear		D	Sufficient for local needs.
2	NW.	1	"	"	"	Dug	12	1,580	- 8	1,572	8	1,572	Glacial gravel	Hard, clear, "alkaline"		D	Sufficient for local needs.
3	NE.	1	"	"	"	Dug	7	1,580	- 5	1,575	5	1,575	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
4	SE.	2	"	"	"	Dug	12	1,590	- 7	1,583	7	1,583	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
5	SW.	2	"	"	"	Dug	16	1,590	- 12	1,578	12	1,578	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
6	NW.	2	"	"	"	Dug	10	1,590	- 4	1,586	4	1,586	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
7	SW.	3	"	"	"	Dug	12	1,610	0	1,610	10	1,600	Glacial sand	Hard, clear		S	Intermittent supply; also another similar well.
8	NE.	3	"	"	"	Dug	9	1,590	0	1,590	0	1,590	Glacial sand and gravel	Hard, clear		D, S	Sufficient for local needs.
9	SE.	4	"	"	"	Dug	16	1,610	- 12	1,598	12	1,598	Glacial gravel	Hard, clear		D	Intermittent supply; also a dry hole 84 feet deep.
10	SW.	4	"	"	"	Dug	60	1,610									Dry hole in glacial clay; uses a seepage well for domestic needs.
11	NE.	4	"	"	"	Dug	9	1,610	- 4	1,606	4	1,606	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
12	SW.	5	"	"	"	Dug	18	1,620	- 5	1,615			Glacial drift	Hard, clear		D, S	Sufficient for local needs.
13	NW.	7	"	"	"	Dug	18	1,645	- 5	1,640	5	1,640	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
14	NE.	7	"	"	"	Dug	8	1,620	- 5	1,615	5	1,615	Glacial sand and gravel	Hard, clear		D, S	Sufficient for local needs.
15	SW.	8	"	"	"	Dug	20	1,610	- 14	1,596			Glacial sand	Soft, rusty, iron		D, S	Insufficient for local needs.
16	NW.	8	"	"	"	Dug	9	1,630	- 6	1,624	6	1,624	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
17	SE.	9	"	"	"	Dug	11	1,600	- 7	1,593	7	1,593	Glacial gravel	Hard, clear		D, S	Sufficient for local needs; cattle are also watered at a creek.
18	NE.	9	"	"	"	Dug	12	1,600	- 6	1,594	6	1,594	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
19	SE.	10	"	"	"	Dug	15	1,590	- 10	1,580	10	1,580	Glacial gravel	Hard, clear		D, S	Sufficient for local needs.
20	NW.	10	"	"	"	Dug	14	1,600	- 6	1,594	6	1,594	Glacial gravel	Hard, clear		D, S	Sufficient for local needs.
21	NW.	12	"	"	"	Dug	12	1,590	- 10	1,580	10	1,580	Glacial sand	Hard, clear		D, S	Constant water-level.
22	SW.	14	"	"	"	Dug	7	1,590	- 3	1,587	3	1,587	Glacial sand	Soft, clear		D	Sufficient supply; another 7-foot well is used for stock needs.
23	NW.	14	"	"	"	Dug	18	1,590	- 17	1,563			Glacial sand	Hard, clear		D	Intermittent supply; also four dry holes.
24	SE.	16	"	"	"	Dug	10	1,600	- 7	1,593	7	1,593	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
25	NW.	16	"	"	"	Dug	12	1,600	- 7	1,593	7	1,593	Glacial gravel	Hard, clear		D, S	Sufficient for local needs.
26	NE.	16	"	"	"	Dug	15	1,600	- 11	1,589	11	1,589	Glacial gravel	Hard, clear		D, S	Sufficient for local needs.

NOTE—All depths, altitudes, heights and elevations given above are in feet.

(D) Domestic; (S) Stock; (I) Irrigation; (M) Municipality; (N) Not used.
(#) Sample taken for analysis.

WELL RECORDS—Rural Municipality of GOOD LAKE NO. 274, SASKATCHEWAN

B 4-4
1860—10,000

WELL No.	LOCATION ¼	Sec.	Tp.	Rge.	Mer.	TYPE OF WELL	DEPTH OF WELL	ALTITUDE WELL (above sea level)	HEIGHT TO WHICH WATER WILL RISE Above (+) Below (−) Surface	Elev.	PRINCIPAL WATER-BEARING BED Depth	Elev.	Geological Horizon	CHARACTER OF WATER	TEMP. OF WATER (in°F.)	USE TO WHICH WATER IS PUT	YIELD AND REMARKS
27	NW.	17	28	5	2	Dug	6	1,600	- 4	1,596	4	1,596	Glacial sand	Soft, clear		D, S	Sufficient for local needs.
28	SW.	18	"	"	"	Dug	18	1,640	- 5	1,635	5	1,635	Glacial sand	Hard, clear		D, S	Insufficient for local needs.
29	NW.	18	"	"	"	Dug	16	1,620	- 8	1,612	8	1,612	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
30	SW.	19	"	"	"	Dug	10	1,620	- 3	1,617			Glacial sand	Hard, clear		D, S	Sufficient for local needs.
31	SE.	20	"	"	"	Dug	11	1,600	- 7	1,593	7	1,593	Glacial sand	Soft, clear		D, S	Intermittent supply.
32	NW.	20	"	"	"	Dug	9	1,600	- 6	1,594	6	1,594	Glacial sand and gravel	Hard, clear		D, S	Sufficient for local needs.
33	SW.	21	"	"	"	Dug	12	1,600	- 8	1,592	8	1,592	Glacial gravel	Hard, clear		D	Sufficient supply; a similar well is used for stock.
34	NW.	21	"	"	"	Dug	9	1,600	- 5	1,595	5	1,595	Glacial sand	Soft, clear		D, S	Sufficient for local needs.
35	NW.	22	"	"	"	Dug	8	1,590	- 4	1,586	4	1,586	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
36	NE.	22	"	"	"	Dug	8	1,590	- 4	1,586	4	1,586	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
37	SE.	27	"	"	"	Dug	14	1,590	- 9	1,581	9	1,581	Glacial sand	Soft, yellow, iron		D, S	Sufficient for local needs.
38	SW.	28	"	"	"	Dug	8	1,590	- 4	1,586	4	1,586	Glacial sand	Soft, clear		D, S	Sufficient for local needs.
39	NW.	28	"	"	"	Dug	14	1,590	- 10	1,580	10	1,580	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
40	NE.	28	"	"	"	Dug	8	1,590	- 4	1,586	4	1,586	Glacial sand	Soft, yellow, iron		D, S	Sufficient for local needs.
41	NW.	29	"	"	"	Dug	33	1,590	- 8	1,482	16	1,574	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
42	SE.	30	"	"	"	Bored	60	1,620	- 30	1,590	58	1,562	Glacial gravel	Hard, clear			Also another well 24 feet deep.
43	SW.	30	"	"	"	Dug	14	1,615	- 4	1,611	4	1,611	Glacial sand	Hard, clear		D, S	Sufficient supply; also another well 6 feet deep.
44	NW.	30	"	"	"	Dug	12	1,600	- 6	1,594	10	1,590	Glacial sand	Hard, clear		D, S	Sufficient supply; also a 90-foot well that is not used.
45	SE.	31	"	"	"	Dug	12	1,580	- 4	1,576	7	1,573	Glacial sand	Soft, clear		D, S	Sufficient for local needs.
46	NW.	31	"	"	"	Dug	10	1,600	- 5	1,595	5	1,595	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
47	SE.	32	"	"	"	Dug	14	1,600	- 8	1,592	8	1,592	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
48	SW.	32	"	"	"	Dug	10	1,590	0	1,590	0	1,590	Glacial sand	Soft, clear		D, S	Sufficient for local needs.
49	NW.	32	"	"	"	Dug	9	1,590	- 7	1,583	7	1,583	Glacial gravel	Hard, clear		D, S	Intermittent supply.
50	NW.	33	"	"	"	Dug	14	1,590	- 6	1,584	6	1,584	Glacial sand	Hard, clear		D, S	Sufficient supply; also another similar well for stock.
1	NW.	1	28	6	2	Bored	35	1,600	- 32	1,568	32	1,568	Glacial sand	Hard, clear		D, S	Comstant water-level, another well 30 feet deep is not used due to mineralized water.
2	NE.	2	"	"	"	Bored	10	1,650	- 6	1,644	6	1,644	Glacial gravel	Hard, clear		D, S	Sufficient supply; also another well 50 feet deep and two dry holes 45 and 19 feet deep.

NOTE—All depths, altitudes, heights and elevations given above are in feet.

(D) Domestic; (S) Stock; (I) Irrigation; (M) Municipality; (N) Not used.
(#) Sample taken for analysis.

WELL RECORDS—Rural Municipality of GOOD LAKE NO. 274, SASKATCHEWAN

B 4-4
1860—10,000

WELL No.	LOCATION ¼	Sec.	Tp.	Rge.	Mer.	TYPE OF WELL	DEPTH OF WELL	ALTITUDE WELL (above sea level)	HEIGHT TO WHICH WATER WILL RISE Above (+) Below (−) Surface	Elev.	PRINCIPAL WATER-BEARING BED Depth	Elev.	Geological Horizon	CHARACTER OF WATER	TEMP. OF WATER (in°F.)	USE TO WHICH WATER IS PUT	YIELD AND REMARKS
3	SE.	9	28	6	2	Dug	12	1,600	- 8	1,592	8	1,592	Glacial gravel	Hard,clear		D, S	Sufficient supply; also another well 45 feet deep.
4	NE.	10	"	"	"	Bored	30	1,650									Dry hole; base in glacial clay.
5	NW.	11	"	"	"	Dug	14	1,650	- 7	1,643	13	1,637	Glacial sand	Hard,clear		D, S	Sufficient for local needs.
6	NW.	12	"	"	"	Dug	12	1,650	- 7	1,643	7	1,643	Glacial sand	Hard,clear		D	Sufficient for local needs.
7	NE.	14	"	"	"	Dug	9	1,650	- 6	1,644	6	1,644	Glacial gravel	Soft,clear		D, S	Sufficient for local needs; also another well 11 feet deep.
8	SW.	14	"	"	"	Dug	16	1,670	- 10	1,660	10	1,660	Glacial gravel	Hard,clear		D, S	Sufficient for local needs; also a dry hole 180 feet deep.
9	SE.	15	"	"	"	Dug	45	1,660	- 40	1,620	40	1,620	Glacial sand	Hard,clear		D	Intermittent supply; also a 100-foot dry hole.
10	NW.	15	"	"	"	Dug	8	1,675	- 5	1,670	5	1,670	Glacial sand	Hard,clear		D, S	Sufficient for local needs.
11	NE.	16	"	"	"	Bored	56	1,670	- 48	1,622	56	1,614	Glacial sand	Hard,clear, "alkaline"		D, S	Sufficient for local needs.
12	SE.	16	"	"	"	Dug	30	1,700	- 4	1,697	17	1,683	Glacial gravel	Hard,clear		D, S	Insufficient supply; also two wells 100 feet deep caved in.
13	NW.	18	"	"	"	Dug	50	1,700	- 44	1,656	44	1,656	Glacial sand	Hard,clear		D, S	Sufficient for local needs; also another well 8 feet deep.
14	SW.	19	"	"	"	Dug	16	1,680	- 10	1,670	10	1,670	Glacial sand	Hard,clear		D, S	Sufficient for local needs.
15	NW.	19	"	"	"	Spring		1,600					Glacial gravel	Hard,clear		D, S	Sufficient for local needs.
16	SE.	19	"	"	"	Bored	34	1,660	- 23	1,637	34	1,626	Glacial sand	Hard,clear		D	Sufficient supply; another well 11 feet deep is used for stock needs.
17	NE.	21	"	"	"	Dug	12	1,660	- 9	1,651	9	1,651	Glacial sand	Soft,clear		D, S	Sufficient for local needs.
18	SE.	22	"	"	"	Drilled	110	1,660	- 70	1,590	110	1,550	Glacial sand	Hard,clear		D, S	Sufficient supply.
19	NE.	22	"	"	"	Dug	14	1,660	- 10	1,650	10	1,650	Glacial sand	Soft,clear		S	Sufficient for local needs.
20	SW.	23	"	"	"	Dug	12	1,650	- 2	1,648	2	1,648	Glacial sand	Hard,clear		D, S	Intermittent supply; also 2 other similar wells.
21	SE.	23	"	"	"	Dug	12	1,640	- 8	1,632	8	1,632	Glacial sand	Hard,clear		D, S	Sufficient for local needs.
22	SW.	24	"	"	"	Dug	15	1,645	- 9	1,636	15	1,630	Glacial sand	Hard,clear		D, S	Sufficient for local needs.
23	SE.	25	"	"	"	Dug	11	1,625	- 8	1,617	8	1,617	Glacial sand and gravel	Soft,clear		D	Sufficient for local needs; a similar well 9 feet deep is used for stock needs.
24	NE.	25	"	"	"	Dug	12	1,640	- 8	1,632	8	1,632	Glacial sand	Hard,clear		D, S	Sufficient for local needs.
25	SE.	26	"	"	"	Dug	8	1,645	- 3	1,642	7	1,638	Glacial sand	Hard,clear		D	Sufficient for local needs.
26	NE.	26	"	"	"	Dug	13	1,635	- 10	1,625	10	1,625	Glacial sand	Hard,clear		D, S	Sufficient for local needs.
27	NW.	27	"	"	"	Bored	12	1,660	- 7	1,653	7	1,653	Glacial gravel	Hard,clear		D	Sufficient supply; another well 8 feet deep is used for stock needs.
28	NE.	28	"	"	"	Dug	15	1,670	- 10	1,660	10	1,660	Glacial sand	Hard,clear, "alkaline"		D, S	Sufficient for local needs.

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(D) Domestic; (S) Stock; (I) Irrigation; (M) Municipality; (N) Not used.
(#) Sample taken for analysis.

WELL RECORDS—Rural Municipality of GOOD LAKE NO. 274, SASKATCHEWAN

B 4-4
1860—10,000

WELL No.	LOCATION ¼	Sec.	Tp.	Rge.	Mer.	TYPE OF WELL	DEPTH OF WELL	ALTITUDE WELL (above sea level)	HEIGHT TO WHICH WATER WILL RISE Above (+) Below (−) Surface	Elev.	PRINCIPAL WATER-BEARING BED Depth	Elev.	Geological Horizon	CHARACTER OF WATER	TEMP. OF WATER (in°F.)	USE TO WHICH WATER IS PUT	YIELD AND REMARKS
29	NW.	28	28	6	2	Dug	12	1,660	- 8	1,652	8	1,652	Glacial sand	Hard,clear		D, S	Sufficient for local needs.
30	NE.	30	"	"	"	Dug	8	1,650	- 5	1,645	5	1,645	Glacial gravel	Soft,clear		D, S	Sufficient for local needs.
31	NE.	31	"	"	"	Dug	32	1,650	- 28	1,622	28	1,622	Glacial sand	Hard,clear		D, S	Insufficient for local needs.
32	NE.	32	"	"	"	Dug	6	1,670	- 4	1,666	4	1,666	Glacial sand	Hard,clear		D, S	Sufficient for local needs.
33	NW.	33	"	"	"	Dug	14	1,660	- 6	1,654	6	1,654	Glacial sand	Hard,clear		D, S	Sufficient for local needs.
34	SE.	33	"	"	"	Dug	9	1,660	- 4	1,656	4	1,656	Glacial sand	Soft,clear		D, S	Sufficient for local needs.
35	SW.	34	"	"	"	Dug	5	1,650	- 4	1,646	4	1,646	Glacial sand	Soft,clear		D, S	Insufficient for local needs.
36	NW.	34	"	"	"	Dug	10	1,650	- 7	1,643	7	1,643	Glacial sand	Soft,clear		D, S	Sufficient for local needs.
37	NW.	35	"	"	"	Dug	8	1,650	- 4	1,646	4	1,646	Glacial sand	Soft,clear		D, S	Sufficient for local needs; also another similar well.
38	SW.	36	"	"	"	Dug	10	1,635	- 5	1,630	5	1,630	Glacial sand	Hard,clear		D, S	Sufficient for local needs.
39	SW.	36	"	"	"	Dug	17	1,635	- 11	1,624	11	1,624	Glacial sand	Hard,clear		D, S	Sufficient for local needs.
40	NE.	36	"	"	"	Dug	14	1,610	- 11	1,599	11	1,599	Glacial sand and gravel	Hard,clear		D, S	Sufficient supply; also another well 8 feet deep.
1	SE.	2	29	4	2	Dug	12	1,575	- 8	1,567	8	1,567	Glacial gravel	Soft,clear		D, S	Sufficient for 14 head stock.
2	NE.	2	"	"	"	Dug	8	1,570	- 3	1,567	3	1,567	Glacial gravel	Soft,clear		D, S	Sufficient for 200 head stock; another well 10 feet deep with intermittent supply.
3	NE.	4	"	"	"	Dug	9	1,580	- 0	1,580	7	1,573	Glacial sand	Soft,clear		D, S	Sufficient for 40 head stock with aid of two other wells.
4	SE.	9	"	"	"	Dug	9	1,590	- 2	1,588	2	1,588	Glacial blue sand	Hard,iron, cloudy		D, S	Sufficient for 24 head stock; also numerous dry holes to a depth of 16 feet.
5	SW.	10	"	"	"								Glacial drift				Farmer on SE.¼,section 9, uses this well.
6	NE.	10	"	"	"	Dug	12	1,580	- 3	1,577	11	1,569	Glacial sand	Hard,cloudy, "alkaline"		S	Intermittent supply; also many dry holes.
7	NW.	12	"	"	"	Dug	10	1,575	- 6	1,569	6	1,569	Glacial gravel	Soft,cloudy		S	Sufficient for 15 head stock; also one dry hole.
8	SE.	12	"	"	"	Dug	16	1,590	- 6	1,584			Glacial sand	Hard,cloudy, iron,"alkaline"		D, S	Intermittent supply.
9	NE.	12	"	"	"	Dug	13	1,585	- 4	1,581	10	1,575	Glacial sand	Hard,clear		D, S,I	Sufficient for 12 head stock.
10	NE.	13	"	"	"	Bored	15	1,590									One of 6 dry holes in glacial clay.
11	SE.	14	"	"	"	Dug	15	1,590	- 12	1,578	12	1,578	Glacial sand	Hard,cloudy		D, S	Sufficient for 14 head stock.
12	NE.	14	"	"	"	Dug	8	1,580	- 4	1,576	4	1,576	Glacial gravel	Soft,clear		D, S	Sufficient for 26 head stock; also two dry holes.
13	NW.	14	"	"	"	Dug	20	1,590									Numerous dry holes in glacial drift;also a seepage well for domestic needs.
14	SW.	16	"	"	"	Dug	16	1,580	- 2	1,578			Glacial drift	Hard,cloudy, "alkaline"		D, S	Intermittent supply; also 16 dry holes to a depth of 45 feet.

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(#) Sample taken for analysis.

WELL RECORDS—Rural Municipality of GOOD LAKE NO. 274, SASKATCHEWAN

B 4-4
1860—10,000

WELL No.	LOCATION ¼	Sec.	Tp.	Rge.	Mer.	TYPE OF WELL	DEPTH OF WELL	ALTITUDE WELL (above sea level)	HEIGHT TO WHICH WATER WILL RISE Above (+) Below (−) Surface	Elev.	PRINCIPAL WATER-BEARING BED Depth	Elev.	Geological Horizon	CHARACTER OF WATER	TEMP. OF WATER (in°F.)	USE TO WHICH WATER IS PUT	YIELD AND REMARKS
15	NW.	16	29	4	2	Dug	16	1,580	- 9	1,571	9	1,571	Glacial sand	Soft, clear		D, S, I	Sufficient for 20 head stock; also another well 13 feet deep.
16	NE.	17	"	"	"	Dug	16	1,580	- 9	1,571	9	1,571	Glacial sand	Soft, clear		D, S, I	Sufficient for 35 head stock.
17	NE.	19	"	"	"	Dug	14	1,585	- 8	1,577	8	1,577	Glacial sand	Hard, clear		D, S	Sufficient for 20 head stock.
18	NE.	20	"	"	"	Dug	16	1,590	- 11	1,579	14	1,576	Glacial sand	Hard, cloudy, "alkaline"		D, S	Intermittent supply; another similar well; also dry holes to a depth of 70 feet.
19	SW.	22	"	"	"	Dug	16	1,580	- 1	1,579	1	1,579	Glacial sand	Hard, cloudy, iron, "alkaline"		S	Sufficient for 20 head stock; also three dry holes to a depth of 16 feet.
20	NW.	22	"	"	"	Dug	14	1,585	- 10	1,575	10	1,575	Glacial gravel	Hard, clear, "alkaline"		D, S, I	Sufficient for 13 head stock.
21	SE.	22	"	"	"	Dug	14	1,585	- 7	1,578	7	1,578	Glacial gravel	Hard, clear		D, S, I	Sufficient for 25 head stock.
22	NE.	23	"	"	"	Dug	12	1,580	- 8	1,572	8	1,572	Glacial sand	Hard, clear, iron		D, S	Sufficient for 30 head stock.
23	SW.	24	"	"	"	Dug	14	1,580	- 2	1,578	12	1,568	Glacial gravel	Hard, clear, "alkaline"		D	Intermittent supply; stock watered at river.
24	NE.	26	"	"	"	Dug	14	1,600	- 9	1,591	9	1,591	Glacial sand	Hard, clear, iron		D, S	Sufficient for 30 head stock; also another well with good supply.
25	SW.	28	"	"	"	Dug	14	1,585	- 8	1,577	8	1,577	Glacial sand	Hard, clear		D, S	Intermittent supply; also three similar wells.
26	NE.	28	"	"	"	Dug	13	1,590	- 9	1,581			Glacial drift	Hard, cloudy, iron, "alkaline"		S, I	Sufficient for 10 head stock; a 12-foot well is used for domestic needs.
27	SE.	28	"	"	"	Dug	14	1,585	- 11	1,574	13	1,572	Glacial gravel	Hard, clear, "alkaline"		S	Sufficient for 20 head stock; another well for domestic needs; also dry holes to a depth of 13 feet.
28	SE.	29	"	"	"	Dug	14	1,590	- 8	1,582	8	1,582	Glacial sand	Hard, cloudy, "alkaline"		S	Sufficient for 16 head stock.
29	SW.	29	"	"	"	Dug	10	1,585	- 6	1,579	6	1,579	Glacial sand	Soft, clear		D, S, I	Sufficient for 20 head stock; also three dry holes to a depth of 16 feet.
30	SE.	30	"	"	"	Dug	14	1,585	- 10	1,575	10	1,575	Glacial sand	Hard, clear		D, S	Sufficient for 17 head stock; also two other wells.
31	NE.	30	"	"	"	Dug	8	1,585	0	1,585	0	1,585	Glacial sand	Hard, cloudy, iron, "alkaline"		S	Sufficient for 13 head stock; also another well, haul drinking water.
32	SE.	31	"	"	"	Dug	10	1,590	- 7	1,583	7	1,583	Glacial sand	Soft, clear		D, S	Insufficient for 1y head stock; also other wells with intermittent supplies of poor quality water and some with salty water.
33	NW.	32	"	"	"	Dug	14	1,600	- 13	1,587	13	1,587	Glacial sand	Hard, clear, "alkaline" iron		D, S	Intermittent supply.
34	NE.	32	"	"	"	Dug	14	1,580	- 2	1,578	11	1,569	Glacial sand	Hard, clear, "alkaline"		D, S	Sufficient for local needs; also 10 dry holes to a depth of 16 feet.
35	SE.	33	"	"	"	Dug	10	1,585	- 5	1,580	5	1,580	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
36	NE.	33	"	"	"	Dug	14	1,590	- 9	1,581	9	1,581	Glacial sand	Hard, clear		D, S	Sufficient for 30 head stock; also two other wells with good supplies.
37	SW.	35	"	"	"	Dug	10	1,585	- 3	1,582	3	1,582	Glacial sand	Hard, clear		D, S	Intermittent supply; also another well 14 feet deep.
38	SE.	35	"	"	"	Dug	12	1,600	- 6	1,594	6	1,594	Glacial sand	Hard, clear, "alkaline" iron		D, S, I	Sufficient for local needs.

NOTE—All depths, altitudes, heights and elevations given above are in feet.

(D) Domestic; (S) Stock; (I) Irrigation; (M) Municipality; (N) Not used.
(#) Sample taken for analysis.

WELL RECORDS—Rural Municipality of GOOD LAKE NO. 274, SASKATCHEWAN

B 4-4
1860—10,000

WELL No.	LOCATION ¼	Sec.	Tp.	Rge.	Mer.	TYPE OF WELL	DEPTH OF WELL	ALTITUDE WELL (above sea level)	HEIGHT TO WHICH WATER WILL RISE Above (+) Below (−) Surface	Elev.	PRINCIPAL WATER-BEARING BED Depth	Elev.	Geological Horizon	CHARACTER OF WATER	TEMP. OF WATER (in°F.)	USE TO WHICH WATER IS PUT	YIELD AND REMARKS
39	SW.	36	29	4	2	Dug	10	1,590	- 8	1,582	8	1,582	Glacial sand	Hard, clear, iron		D	Yields 1 barrel a day; this well is in Hamlet of Burgis.
40	NW.	36	"	"	"	Dug	10	1,600	- 4	1,596	9	1,591	Glacial gravel	Hard, cloudy, "alkaline"		D, S	Intermittent supply; also numerous dry holes.
41	SE.	36	"	"	"	Dug	16	1,600									Numerous dry holes in glacial drift.
1	SE.	1	29	6	2	Dug	10	1,605	- 6	1,599	6	1,599	Glacial sand	Hard, clear		D, S	Sufficient for 10 head stock.
2	SW.	1	"	"	"	Dug	10	1,610	- 7	1,603	7	1,603	Glacial sand	Hard, clear		D, S	Sufficient for 25 head stock.
3	NE.	2	"	"	"	Dug	9	1,650	- 6	1,644	6	1,644	Glacial sand	Hard, clear		D, S	Sufficient for 10 head stock.
4	SW.	2	"	"	"	Dug	10	1,640	- 6	1,634	6	1,634	Glacial sand	Hard, clear		D, S	Sufficient for 20 head stock.
5	SE.	3	"	"	"	Dug	12	1,640	- 8	1,632	10	1,630	Glacial sand	Hard, clear		D, S	Sufficient for 25 head stock.
6	SW.	4	"	"	"	Dug	7	1,650	- 3	1,647	3	1,647	Glacial gravel	Hard, clear		D, S	Sufficient for 25 head stock.
7	NW.	4	"	"	"	Dug	10	1,650	- 6	1,644	6	1,644	Glacial sand	Hard, clear		D, S	Intermittent supply.
8	SE.	6	"	"	"	Dug	16	1,650	- 10	1,640	10	1,640	Glacial gravel	Hard, clear		D, S	Insufficient for 7 head stock.
9	NE.	6	"	"	"	Dug	6	1,650	- 2	1,648	2	1,648	Glacial gravel	Hard, clear		D, S	Sufficient for 20 head stock.
10	SE.	7	"	"	"	Dug	6	1,650	- 2	1,648	2	1,648	Glacial gravel	Hard, clear		D, S	Sufficient for 25 head stock.
11	NW.	7	"	"	"	Drilled	74	1,630	- 54	1,576	74	1,556	Glacial sand and gravel	Hard, clear		D, S	Sufficient for local needs.
12	SE.	8	"	"	"	Dug	10	1,650	- 6	1,644	6	1,644	Glacial sand	Hard, clear		D, S	Sufficient for 15 head stock.
13	SW.	9	"	"	"	Dug	5	1,650	- 2	1,648	2	1,648	Glacial sand	Hard, clear		D, S	Sufficient for 17 head stock.
14	SE.	10	"	"	"	Dug	6	1,650	- 3	1,647	3	1,647	Glacial sand	Hard, clear		D, S	Sufficient for 6 head stock.
15	NE.	10	"	"	"	Dug	6	1,640	- 3	1,637	3	1,637	Glacial sand	Hard, clear		D, S	Sufficient for 10 head stock.
16	NW.	12	"	"	"	Dug	12	1,630	- 8	1,622	8	1,622	Glacial sand	Hard, clear		D, S	Sufficient for 30 head stock.
17	SW.	14	"	"	"	Dug	10	1,640	- 6	1,634	6	1,634	Glacial sand	Hard, clear		D, S	Sufficient for 30 head stock.
18	NE.	15	"	"	"	Dug	10	1,640	- 6	1,634	6	1,634	Glacial sand	Hard, clear		D, S	Sufficient for 48 head stock.
19	NW.	15	"	"	"	Dug	10	1,650	- 6	1,644	6	1,644	Glacial sand	Hard, clear		D, S	Sufficient for 12 head stock.
20	NE.	17	"	"	"	Dug	10	1,660	- 6	1,654	6	1,654	Glacial gravel	Hard, clear		D, S	Sufficient for 15 head stock.
21	SW.	18	"	"	"	Spring		1,660	0	1,660	0	1,660	Glacial gravel	Hard, clear		D, S	Sufficient for 25 head stock.
22	NW.	18	"	"	"	Dug	65	1,670	- 50	1,620	63	1,607	Glacial sand	Hard, clear		D, S	Sufficient for 20 head stock.
23	SE.	19	"	"	"	Dug	7	1,680	- 3	1,677	3	1,677	Glacial gravel	Hard, clear		D, S	Sufficient for 20 head stock.
24	NE.	19	"	"	"	Dug	10	1,670	- 7	1,663	7	1,663	Glacial gravel	Hard, clear		D, S	Sufficient for 30 head stock.

NOTE—All depths, altitudes, heights and elevations given above are in feet.

(D) Domestic; (S) Stock; (I) Irrigation; (M) Municipality; (N) Not used.
(#) Sample taken for analysis.

WELL RECORDS—Rural Municipality of GOOD LAKE NO. 274, SASKATCHEWAN

B 4-4
1860—10,000

WELL No.	LOCATION ¼	Sec.	Tp.	Rge.	Mer.	TYPE OF WELL	DEPTH OF WELL	ALTITUDE WELL (above sea level)	HEIGHT TO WHICH WATER WILL RISE Above (+) Below (−) Surface	Elev.	PRINCIPAL WATER-BEARING BED Depth	Elev.	Geological Horizon	CHARACTER OF WATER	TEMP. OF WATER (in°F.)	USE TO WHICH WATER IS PUT	YIELD AND REMARKS
25	SW.	20	29	6	2	Dug	7	1,670	- 4	1,666	4	1,666	Glacial sand	Hard, clear		D, S	Sufficient for 20 head stock.
26	NW.	20	"	"	"	Dug	6	1,670	- 4	1,666	4	1,666	Glacial sand	Hard, clear		D, S	Sufficient for 25 head stock.
27	SE.	20	"	"	"	Dug	7	1,670	- 3	1,667	3	1,667	Glacial sand	Hard, clear		D, S	Sufficient for 15 head stock.
28	NE.	20	"	"	"	Dug	6	1,670	- 4	1,666	4	1,666	Glacial sand	Hard, clear		D, S	Sufficient for 4 head stock.
29	NW.	21	"	"	"	Dug	10	1,660	- 6	1,654	6	1,654	Glacial sand	Hard, clear		D, S	Sufficient for 60 head stock.
30	NE.	21	"	"	"	Dug	8	1,660	- 6	1,654	6	1,654	Glacial sand and gravel	Hard, clear		D, S	Sufficient for 25 head stock.
31	NW.	22	"	"	"	Dug	8	1,650	- 5	1,645	5	1,645	Glacial gravel	Hard, clear		D, S	Sufficient for 3 head stock.
32	NE.	22	"	"	"	Dug	14	1,650	- 11	1,639	11	1,639	Glacial sand	Hard, clear		D, S	Sufficient for 12 head stock.
33	SW.	23	"	"	"	Dug	10	1,640	- 6	1,634	6	1,634	Glacial sand	Hard, clear		D, S	Sufficient for 40 head stock.
34	NW.	23	"	"	"	Dug	14	1,640	- 11	1,629	11	1,629	Glacial sand	Hard, clear		D, S	Sufficient for 28 head stock.
35	SW.	24	"	"	"	Dug	25	1,630	- 15	1,615	15	1,615	Glacial sand	Hard, clear		D, S	Sufficient for 40 head stock.
36	NW.	24	"	"	"	Dug	15	1,620	- 10	1,610	10	1,610	Glacial sand	Hard, clear		D, S	Sufficient for 20 head stock.
37	NE.	24	"	"	"	Dug	15	1,620	- 10	1,610	10	1,610	Glacial sand	Hard, clear		D, S	Sufficient for 7 head stock.
38	SW.	25	"	"	"	Dug	10	1,620	- 5	1,615	5	1,615	Glacial sand	Hard, clear		D, S	Sufficient for 8 head stock.
39	NW.	27	"	"	"	Dug	8	1,650	- 4	1,646	4	1,646	Glacial sand	Hard, clear		D, S	Sufficient for 13 head stock.
40	SE.	28	"	"	"	Dug	8	1,660	- 5	1,655	5	1,655	Glacial sand	Hard, clear		D, S	Sufficient for 8 head stock.
41	NE.	28	"	"	"	Dug	8	1,660	- 4	1,656	4	1,656	Glacial sand	Hard, clear		D, S	Sufficient for 15 head stock.
42	SW.	28	"	"	"	Dug	12	1,660	- 9	1,651	9	1,651	Glacial gravel	Hard, clear		D, S	Sufficient for 25 head stock.
43	NW.	28	"	"	"	Dug	12	1,660	- 3	1,657	3	1,657	Glacial sand	Hard, clear		D, S	Sufficient for 20 head stock.
44	NE.	29	"	"	"	Dug	12	1,670	- 2	1,668	2	1,668	Glacial sand	Hard, clear		D, S	Sufficient for 40 head stock.
45	SE.	30	"	"	"	Dug	8	1,680	- 5	1,675	5	1,675	Glacial sand	Hard, clear		D, S	Sufficient for 20 head stock.
46	NE.	30	"	"	"	Dug	8	1,680	- 4	1,676	4	1,676	Glacial gravel	Hard, clear		D, S	Sufficient for 15 head stock.
47	SW.	30	"	"	"	Dug	10	1,680	- 6	1,674	6	1,674	Glacial gravel	Hard, clear		D, S	Sufficient for 25 head stock.
48	NW.	30	"	"	"	Dug	8	1,680	- 4	1,676	4	1,676	Glacial gravel	Hard, clear		D, S	Sufficient for 15 head stock.
49	SW.	31	"	"	"	Dug	11	1,690	- 8	1,682	8	1,682	Glacial gravel	Hard, clear		D, S	Sufficient for 5 head stock.
50	SE.	31	"	"	"	Dug	10	1,680	- 6	1,674	6	1,674	Glacial gravel	Hard, clear		D, S	Sufficient for 32 head stock.

NOTE—All depths, altitudes, heights and elevations given above are in feet.

(D) Domestic; (S) Stock; (I) Irrigation; (M) Municipality; (N) Not used.
(#) Sample taken for analysis.

WELL RECORDS—Rural Municipality of GOOD LAKE NO. 274, SASKATCHEWAN

B 4-4
1860—10,000

WELL No.	LOCATION ¼	Sec.	Tp.	Rge.	Mer.	TYPE OF WELL	DEPTH OF WELL	ALTITUDE WELL (above sea level)	HEIGHT TO WHICH WATER WILL RISE Above (+) Below (−) Surface	Elev.	PRINCIPAL WATER-BEARING BED Depth	Elev.	Geological Horizon	CHARACTER OF WATER	TEMP. OF WATER (in°F.)	USE TO WHICH WATER IS PUT	YIELD AND REMARKS
51	SW.	32	29	6	2	Dug	13	1,670	- 9	1,661	9	1,661	Glacial gravel	Hard, clear		D, S	Sufficient for 41 head stock.
52	SE.	32	"	"	"	Dug	12	1,670	- 6	1,664	6	1,664	Glacial sand	Hard, clear		D, S	Sufficient for 21 head stock.
53	SW.	33	"	"	"	Dug	6	1,660	- 2	1,658	2	1,658	Glacial sand	Hard, clear		D, S	Sufficient for 20 head stock.
54	NW.	33	"	"	"	Dug	12	1,660	- 8	1,652	8	1,652	Glacial sand	Hard, clear		D, S	Sufficient for 24 head stock.
55	NE.	33	"	"	"	Dug	8	1,660	- 4	1,656	4	1,656	Glacial sand	Soft, clear		D, S	Sufficient for 11 head stock.
56	SW.	34	"	"	"	Dug	8	1,650	- 4	1,646	4	1,646	Glacial sand	Hard, clear		D, S	Sufficient for 2 head stock.
57	SE.	34	"	"	"	Dug	12	1,650	- 6	1,644	6	1,644	Glacial sand	Hard, clear		D, S	Sufficient for 11 head stock.
58	NE.	34	"	"	"	Dug	10	1,650	- 8	1,642	8	1,642	Glacial sand	Soft, clear		D, S	Sufficient for 15 head stock.
59	NW.	35	"	"	"	Dug	10	1,640	- 8	1,632	8	1,632	Glacial sand	Hard, clear		D, S	Sufficient for 18 head stock.
60	SE.	35	"	"	"	Dug	15	1,630	- 10	1,620	10	1,620	Glacial sand	Hard, clear		D, S	Sufficient for 8 head stock.
61	SW.	36	"	"	"	Dug	15	1,625	- 10	1,615	10	1,615	Glacial gravel	Hard, clear		D, S	Sufficient for 8 head stock.
1	SE.	1	30	4	2	Dug	12	1,605	0	1,605	7	1,598	Glacial sand and gravel	Hard, clear, "alkaline"		D, S, I	Intermittent supply; also dry holes to a depth of 16 feet.
2	NE.	2	"	"	"	Dug	14	1,590	- 6	1,584	6	1,584	Glacial gravel	Hard, clear		S, I	Sufficient for 25 head stock; a 14-foot well with intermittent supply is used for domestic needs.
3	SW.	2	"	"	"	Dug	11	1,595	- 7	1,588	7	1,588	Glacial sand and gravel	Hard, clear		D, S, I	Sufficient for local needs; also another similar well.
4	SE.	2	"	"	"	Dug	20	1,600	- 17	1,583	17	1,583	Glacial sand	Hard, clear		D	Sufficient supply; another well is used for stock needs.
5	NE.	3	"	"	"	Dug	20	1,610	- 12	1,598	12	1,598	Glacial gravel	Soft, clear		D, S, I	Sufficient for local needs; also another well 15 feet deep.
6	SW.	3	"	"	"	Dug	16	1,610	- 2	1,608	15	1,595	Glacial gravel	Hard, clear, "alkaline" iron		S	Intermittent supply.
7	SW.	4	"	"	"	Dug	14	1,602	- 6	1,596	6	1,596	Glacial sand	Hard, clear		D, S, I	Sufficient supply with aid of three other similar wells.
8	SE.	4	"	"	"	Dug	15	1,598	- 12	1,586			Glacial drift	Hard, clear, "alkaline"		S	Sufficient for local needs; also 20-foot well is used for domestic needs.
9	NW.	4	"	"	"	Dug	16	1,610	- 9	1,601	14	1,596	Glacial gravel	Hard, clear		D, S, I	Sufficient for local needs.
10	SE.	5	"	"	"	Dug	15	1,600	- 11	1,589			Glacial sand	Hard, clear		N	Intermittent supply.
11	NW.	5	"	"	"	Dug	6	1,596	0	1,596	0	1,596	Glacial gravel	Hard, clear		S	Intermittent supply; also a 14-foot well for domestic needs.
12	SW.	6	"	"	"	Dug	12	1,600	- 4	1,596	8	1,592	Glacial sand	Hard, clear		D, S	Intermittent supply.
13	NW.	6	"	"	"	Dug	7	1,595	- 4	1,591			Glacial drift	Hard, clear		D, S	Intermittent supply; 5 other similar wells.
14	NE.	7	"	"	"	Dug	8	1,598	- 5	1,593	5	1,593	Glacial gravel	Soft, clear		D, S, I	Sufficient for 25 head stock.
15	NW.	8	"	"	"	Dug	17	1,600	- 14	1,586			Glacial drift	Hard, clear		D, S, I	Intermittent supply.

NOTE—All depths, altitudes, heights and elevations given above are in feet.

(D) Domestic; (S) Stock; (I) Irrigation; (M) Municipality; (N) Not used.
(#) Sample taken for analysis.

B 4-4
R. 7526

WELL RECORDS—Rural Municipality of GOOD LAKE NO. 274, SASKATCHEWAN

WELL No.	LOCATION ¼	Sec.	Tp.	Rge.	Mer.	TYPE OF WELL	DEPTH OF WELL	ALTITUDE WELL (above sea level)	HEIGHT TO WHICH WATER WILL RISE: Above (+) Below (−) Surface	Elev.	PRINCIPAL WATER-BEARING BED: Depth	Elev.	Geological Horizon	CHARACTER OF WATER	TEMP. OF WATER (in °F.)	USE TO WHICH WATER IS PUT	YIELD AND REMARKS
16	SE.	9	30	4	2	Dug	16	1,605	- 11	1,594			Glacial drift	Hard, iron, yellow		S	Sufficient for 24 head stock; also a 20-foot dry hole .
17	NE.	9	"	"	"	Dug	14	1,600	- 12	1,588	12	1,588	Glacial sand	Hard, clear, "alkaline"		S	Intermittent supply.
18	SW.	9	"	"	"	Dug	12	1,590	- 10	1,580	10	1,580	Glacial gravel	Hard, clear "alkaline"		D, S, I	Intermittent supply.
19	NE.	10	"	"	"	Dug	16	1,606	- 12	1,594	12	1,594	Glacial gravel	Hard, clear		D, S	Sufficient for local needs.
20	SE.	10	"	"	"	Dug	14	1,604	- 11	1,593	11	1,593	Glacial sand and gravel	Soft, clear		D, S, I	Sufficient for 42 head stock; also 2 wells 12 feet deep with intermittent supplies.
21	SW.	11	"	"	"	Dug	15	1,605					Glacial sandy clay	Hard, clear		D, S	Sufficient for local needs.
22	NE.	11	"	"	"	Dug	14	1,615	- 4	1,611	12	1,603	Glacial fine gravel	Hard, clear, "alkaline"		D, S	Sufficient for 45 head stock; also 2 other wells 14 and 12 feet deep.
23	NE.	12	"	"	"	Dug	20	1,608	- 16	1,592	16	1,592	Glacial gravel	Hard, clear		D, S	Sufficient for local needs.
24	SE.	12	"	"	"	Dug	22	1,605	- 19	1,586			Glacial drift	Hard, clear		D	Insufficient supply; another similar well 12 feet deep.
25	NW.	12	"	"	"	Dug	22	1,610	- 4	1,606	12	1,598	Glacial gravel	Hard, clear, "alkaline"		D, S	Sufficient for 20 head stock; 4 other similar wells filled in.
26	NE.	13	"	"	"	Dug	16	1,598	- 9	1,589	13	1,585	Glacial sand and gravel	Hard, clear		D, S, I	Sufficient for 75 head stock; also a 14-foot dry hole.
27	SW.	14	"	"	"	Dug	20	1,605	- 10	1,595	10	1,595	Glacial gravel	Hard, clear		D, S, I	Intermittent supply; another similar well 7 feet deep.
28	NE.	14	"	"	"	Dug	15	1,605	- 12	1,593	13	1,592	Glacial gravel	Hard, clear		D, S	Sufficient for local needs.
29	SE.	14	"	"	"	Dug	10	1,602	- 5	1,597	5	1,597	Glacial gravel	Hard, clear		D, S, I	Oversufficient for local needs.
30	NW.	14	"	"	"	Dug	9	1,605	- 7	1,598	8	1,597	Glacial gravel	Hard, clear, "alkaline"		D, S	Insufficient supply; also another similar well.
31	SW.	15	"	"	"	Dug	16	1,605	- 13	1,592	13	1,592	Glacial gravel	Hard, clear		D, S, I	Oversufficient for local needs.
32	SE.	16	"	"	"	Dug	14	1,604	- 8	1,596	8	1,596	Glacial gravel	Hard, clear		D, S, I	Sufficient for local needs.
33	NW.	16	"	"	"	Dug	12	1,597	- 6	1,591	8	1,589	Glacial sand	Hard, clear		D, S	Sufficient for 38 head stock; another similar well and an 8-foot dry hole.
34	SW.	16	"	"	"	Dug	12	1,612	- 1	1,611	4	1,608	Glacial gravel	Hard, iron, red sediment		S	Sufficient for 25 head stock; another well 10 foot deep for domestic needs.
35	SW.	17	"	"	"	Dug	12	1,595	0	1,595	0	1,595	Glacial sand	Hard, iron, yellow		S	Intermittent supply.
36	SE.	18	"	"	"	Dug	16	1,600	- 4	1,596	4	1,596	Glacial sand	Hard, clear, "alkaline"		D, S	Insufficient for local needs.
37	SE.	19	"	"	"	Dug	8	1,603	0	1,603	0	1,603	Glacial gravel	Hard, yellow		S	Insufficient supply; also 8 shallow dry holes.
38	NE.	19	"	"	"	Bored	125	1,600									Dry hole; base in glacial blue clay.
39	NW.	20	"	"	"	Dug	14	1,604	- 7	1,597	7	1,597	Glacial sand	Hard, clear		D, S, I	Oversufficient for local needs; also another well 18 foot deep.
40	SE.	20	"	"	"	Dug	12	1,612	- 6	1,606	9	1,603	Glacial gravel	Hard, clear		D, S	Sufficient for 25 head stock; also a 10-foot well caved in.
41	NE.	21	"	"	"	Dug	16	1,608	- 14	1,594			Glacial drift	Hard, clear		D, S, I	Intermittent supply.
42	SW.	22	"	"	"	Dug	16	1,610									Dry hole in glacial drift; 6 other dry holes.

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(D) Domestic; (S) Stock; (I) Irrigation; (M) Municipality; (N) Not used
(#) Sample taken for analysis.

WELL RECORDS—Rural Municipality of GOOD LAKE NO. 274, SASKATCHEWAN

WELL No.	LOCATION ¼	Sec.	Tp.	Rge.	Mer.	TYPE OF WELL	DEPTH OF WELL	ALTITUDE WELL (above sea level)	HEIGHT TO WHICH WATER WILL RISE Above (+) Below (−) Surface	Elev.	PRINCIPAL WATER-BEARING BED Depth	Elev.	Geological Horizon	CHARACTER OF WATER	TEMP. OF WATER (in °F.)	USE TO WHICH WATER IS PUT	YIELD AND REMARKS
43	NW.	22	30	4	2	Dug	12	1,610	- 5	1,605	5	1,605	Glacial gravel	Hard, clear, "alkaline"		D, S	Intermittent supply; another similar well.
44	SE.	23	"	"	"	Dug	15	1,610	- 10	1,600	13	1,597	Glacial gravel	Hard, clear		D, S	Sufficient for 30 head stock.
45	NE.	24	"	"	"	Dug	16	1,600	- 10	1,590	10	1,590	Glacial sand	Hard, clear		D, I	Sufficient only for domestic needs.
46	SE.	24	"	"	"	Dug	13	1,600	- 9	1,591	9	1,591	Glacial fine sand	Hard, clear		D, S, I	Sufficient for 40 head stock.
47	NE.	24	"	"	"	Dug	18	1,600	- 15	1,585			Glacial drift	Hard, clear, "alkaline"		D, S	Sufficient for local needs; also 2 other similar wells.
48	SW.	24	"	"	"	Dug	10	1,605	- 5	1,600	5	1,600	Glacial sand	Hard, clear		D, S	Sufficient supply; another 14-foot well with intermittent supply.
49	NE.	25	"	"	"	Drilled	1,200	1,600									Dry hole in Marine shale.
50	NE.	26	"	"	"	Dug	30	1,602	- 20	1,582	28	1,574	Glacial gravel	Hard, clear, "alkaline"		D, S, I	Sufficient supply with aid of 5 other similar wells.
51	NE.	27	"	"	"	Dug	14	1,610	- 9	1,601			Glacial drift	Hard, clear		S, I	Intermittent supply; another well for domesti needs; also a 22-foot well unfit for use and a 100-foot dry hole.
52	NW.	27	"	"	"	Dug	9	1,610	- 4	1,606	4	1,606	Glacial sand	Hard, clear		D, S, I	Intermittent supply.
53	NE.	28	"	"	"	Dug	15	1,610	- 8	1,602	12	1,598	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
54	NE.	28	"	"	"	Dug	12	1,612	- 5	1,607	5	1,607	Glacial gravel	Hard, clear		D, S	Sufficient for local needs.
55	SW.	28	"	"	"	Bored	100	1,610									Dry hole in glacial clay.
56	SW.	28	"	"	"	Dug	15	1,610	- 13	1,597	13	1,597	Glacial sand	Hard, clear		D, I	Intermittent supply; also several dry holes to a depth of 12 feet.
57	NE.	29	"	"	"	Dug	8	1,610	- 4	1,606	5	1,605	Glacial gravel	Hard, clear		D, S	Sufficient supply; also a 6-foot well with good supply and a dry hole.
58	NE.	29	"	"	"	Dug	12	1,612	- 2	1,610	5	1,607	Glacial gravel	Hard, clear, "alkaline"		S	Sufficient for local needs.
59	NE.	30	"	"	"	Dug	16	1,610	0	1,610	0	1,610	Glacial sand	Hard, clear, "alkaline"		S, I	Sufficient for 40 head stock; another similar well.
60	NW.	30	"	"	"	Dug	12	1,612	- 2	1,610	9	1,603	Glacial gravel	Hard, clear, "alkaline"		S	Sufficient for local needs.
61	NE.	32	"	"	"	Dug	10	1,610	- 6	1,604	6	1,604	Glacial sand	Soft, clear		D, S	Sufficient for 15 head stock; also a 100-foot dry hole.
62	SW.	32	"	"	"	Dug	15	1,610	- 2	1,608	11	1,599	Glacial gravel	Hard, clear, "alkaline"		D, S	Sufficient for local needs; also another well in pasture for stock.
63	SE.	32	"	"	"	Dug	16	1,615	- 9	1,606	12	1,603	Glacial gravel	Soft, clear		D, S	Sufficient for local needs.
64	SW.	34	"	"	"	Dug	12	1,612	- 7	1,605	10	1,602	Glacial sand	Soft, clear		D, S	Sufficient for 20 head stock; also 3 other similar wells.
65	SE.	34	"	"	"	Dug	8	1,600	- 5	1,595	5	1,595	Glacial sand	Hard, clear		D, S	Intermittent supply; also 3 dry holes 35 to 3 feet deep.
66	SE.	35	"	"	"	Dug	10	1,600	- 8	1,592	8	1,592	Glacial gravel	Hard, clear		D, S, I	Sufficient for 20 head stock; another similar well 13 feet deep.
67	NE.	36	"	"	"	Dug	18	1,595	- 14	1,581	16	1,579	Glacial sand	Hard, clear		D, S,	Sufficient supply; this well is in town of Canora; also other similar wells.
68	NW.	36	"	"	"	Dug	16	1,606	- 8	1,598	8	1,598	Glacial gravel	Hard, clear		D, S, I	Oversufficient for local needs; also another well 12 feet deep.

NOTE—All depths, altitudes, heights and elevations given above are in feet.

(D) Domestic; (S) Stock; (I) Irrigation; (M) Municipality; (N) Not used.
(#) Sample taken for analysis.

WELL RECORDS—Rural Municipality of GOOD LAKE NO. 274, SASKATCHEWAN

B 4-4
R. 7526

WELL No.	LOCATION					TYPE OF WELL	DEPTH OF WELL	ALTITUDE WELL (above sea level)	HEIGHT TO WHICH WATER WILL RISE		PRINCIPAL WATER-BEARING BED			CHARACTER OF WATER	TEMP. OF WATER (in °F.)	USE TO WHICH WATER IS PUT	YIELD AND REMARKS
	¼	Sec.	Tp.	Rge.	Mer.				Above (+) Below (−) Surface	Elev.	Depth	Elev.	Geological Horizon				
69	SE.	36	30	4	2	Dug	35	1,600	- 34	1,566			Glacial drift	Hard, clear, "alkaline"		D	Intermittent supply.
1	NE.	1	30	5	2	Dug	10	1,596	- 6	1,590	6	1,590	Glacial sand	Hard, clear		D, S	Intermittent supply; also a 10-foot well with good supply.
2	SE.	2	"	"	"	Dug	12	1,604	- 8	1,596	9	1,595	Glacial sand	Hard, yellow		D, S	Sufficient for 24 head stock; another well 12 feet deep is unfit for use.
3	NW.	3	"	"	"	Dug	16	1,600	- 9	1,591	12	1,588	Glacial gravel	Hard, clear		D, S	Sufficient for 12 head horses; another similar well 12 feet deep.
4	SW.	9	"	"	"	Dug	12	1,600	- 8	1,592			Glacial drift	Hard, clear		D, S, I	Intermittent supply; also another similar well.
5	SE.	9	"	"	"	Dug	12	1,600	- 5	1,595	5	1,595	Glacial sand	Hard, clear		D, I	Intermittent supply; also another similar well.
6	SE.	9	"	"	"	Dug	12	1,600	- 7	1,593	7	1,593	Glacial sand	Hard, clear		D, S, I	Sufficient for local needs.
7	NE.	9	"	"	"	Dug	10	1,605	- 6	1,599	6	1,599	Glacial sand	Hard, clear		D, S	Also use a lake for stock needs.
8	NW.	9	"	"	"	Dug	12	1,603	- 4	1,599	4	1,599	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
9	NW.	10	"	"	"	Dug	12	1,603	- 6	1,597			Glacial drift	Hard, clear, "alkaline"		N	Intermittent supply; unfit for use; also 2 other similar wells.
10	SE.	10	"	"	"	Dug	12	1,605	- 10	1,595	10	1,595	Glacial sand	Hard, clear		D, S	Sufficient for local needs.
11	NE.	10	"	"	"	Dug	17	1,605	- 1	1,604	1	1,604	Glacial sand	Soft, clear		D, S	Sufficient for local needs; also a 6-foot well that freezes in winter.
12	NW.	12	"	"	"	Dug	12	1,604	- 7	1,597	7	1,597	Glacial sand	Hard, clear, "alkaline" odour		D, S	Insufficient supply; a 14-foot well with good supply, also a 14-foot well with intermittent supply and 6 dry holes 15 feet deep.
13	SE.	12	"	"	"	Dug	12	1,596	- 6	1,590	6	1,590	Glacial sand	Hard, clear		D, S	Intermittent supply.
14	SW.	13	"	"	"	Dug	10	1,603	- 6	1,597	6	1,597	Glacial sand	Hard, clear		D, S	Sufficient for 20 head stock.
15	SE.	13	"	"	"	Dug	14	1,603	- 11	1,592	11	1,592	Glacial gravel	Hard, clear		D, S	Intermittent supply; also a 10-foot well with a good supply.
16	SE.	14	"	"	"	Dug	14	1,608	- 8	1,600	12	1,596	Glacial red sand	Hard, clear		D	Sufficient supply; also a 14-foot well with intermittent supply.
17	NE.	14	"	"	"	Dug	10	1,610	- 4	1,606	6	1,604	Glacial gravel	Hard, clear, "alkaline"		S	Oversufficient supply; also 2 other wells for stock needs.
18	NE.	15	"	"	"	Dug	12	1,608	- 10	1,598	10	1,598	Glacial sand	Hard, clear, "alkaline"		D, S	Sufficient for local needs.
19	SW.	15	"	"	"	Dug	12	1,602	- 4	1,598	4	1,598	Glacial sand	Hard, clear		D, S, I	Insufficient supply; 3 other similar wells; also a 40-foot dry hole.
20	NW.	16	"	"	"	Dug	8	1,605	- 7	1,598	7	1,598	Glacial sand	Soft, clear		D	Intermittent supply; also many dry holes to a depth of 15 feet.
21	SE.	16	"	"	"	Dug	11	1,603	- 8	1,595	8	1,595	Glacial sand	Hard, clear		D, S	Intermittent supply; another similar well 12 feet deep.
22	SE.	17	"	"	"	Dug	14	1,598	- 8	1,590	10	1,588	Glacial gravel	Hard, clear		D, S	Sufficient supply; also 2 other wells 12 and 15 feet deep with good supplies.
23	SE.	19	"	"	"	Dug	12	1,590	- 1	1,589	1	1,589	Glacial sand	Soft, clear		D, S, I	Oversufficient for local needs.
24	NE.	21	"	"	"	Dug	14	1,605	- 9	1,596	9	1,596	Glacial sand	Hard, clear		D, S, I	Sufficient for 20 head stock.
25	SE.	23	"	"	"	Dug	13	1,610	- 7	1,603	7	1,603	Glacial sand	Hard, clear, "alkaline"		S	Sufficient for 20 head stock.

NOTE—All depths, altitudes, heights and elevations given above are in feet.

(D) Domestic; (S) Stock; (I) Irrigation; (M) Municipality; (N) Not used.
(#) Sample taken for analysis.

WELL RECORDS—Rural Municipality of GOOD LAKE NO. 274, SASKATCHEWAN

B 4-4
R. 7526

WELL No.	LOCATION ¼	Sec.	Tp.	Rge.	Mer.	TYPE OF WELL	DEPTH OF WELL	ALTITUDE WELL (above sea level)	HEIGHT TO WHICH WATER WILL RISE Above (+) Below (−) Surface	Elev.	PRINCIPAL WATER-BEARING BED Depth	Elev.	Geological Horizon	CHARACTER OF WATER	TEMP. OF WATER (in °F.)	USE TO WHICH WATER IS PUT	YIELD AND REMARKS
26	NE.	24	30	5	2	Dug	12	1,602	- 6	1,596	9	1,593	Glacial sand	Hard, clear		D, S	Sufficient for local needs; also a 14-foot well with a good supply.
27	SE.	24	"	"	"	Dug	7	1,600	- 4	1,596	4	1,596	Glacial sand and gravel	Hard, clear		D	Intermittent supply; also a 10-foot well with a good supply.
28	SW.	25	"	"	"	Dug	12	1,608	0	1,608	4	1,604	Glacial sand	Hard, clear		S	Sufficient supply; another 12-foot well is used for domestic needs.
29	NW.	27	"	"	"	Dug	9	1,615	- 4	1,611	8	1,607	Glacial gravel	Hard, clear		D, S, I	Intermittent supply; also another well 12 feet deep.
30	NE.	28	"	"	"	Dug	12	1,608	- 2	1,606	6	1,602	Glacial sand	Hard, clear		D, S	Sufficient supply; also 2 other wells 12 and 14 feet deep.
31	SW.	28	"	"	"	Dug	10	1,608	- 5	1,603	8	1,600	Glacial gravel	Soft, clear		D, S	Sufficient supply; also 4 other similar wells
32	SW.	29	"	"	"	Dug	8	1,602	- 4	1,598	4	1,598	Glacial sand	Soft, clear		S, I	Sufficient supply; also another similar well for stock and a 12-foot well for domestic needs.
33	SE.	30	"	"	"	Dug	20	1,600	- 10	1,590	10	1,590	Glacial sand	Hard, clear		D, S, I	Sufficient for 30 head stock; also another well 8 feet deep.
34	NE.	30	"	"	"	Dug	14	1,602	- 11	1,591	11	1,591	Glacial sand	Hard, clear		S, I	Sufficient for 300 head stock; also a 16-foot well for domestic needs.
35	NE.	31	"	"	"	Dug	6	1,605	- 3	1,602	3	1,602	Glacial sand	Hard, clear		S	Sufficient for stock needs.
36	SW.	32	"	"	"	Dug	10	1,605	- 6	1,599	10	1,595	Glacial gravel	Hard, clear		D, S	Oversufficient for local needs; also numerous dry holes.
37	NW.	32	"	"	"	Dug	10	1,608	- 6	1,602	6	1,602	Glacial sand	Hard, clear		D, S	Insufficient for local needs; also another similar well.
38	NE.	32	"	"	"	Dug	12	1,610	- 8	1,602	11	1,599	Glacial sand	Hard, clear		S	Sufficient for local needs; also a 14-foot wekk now filled in.
39	NW.	33	"	"	"	Dug	13	1,615	- 8	1,607	8	1,607	Glacial gravel	Hard, cloudy, "alkaline" iron		S, I	Sufficient for 32 head stock; another well for domestic needs; 3 dry holes 13 feet deep.
40	SW.	33	"	"	"	Dug	12	1,610	- 7	1,603	7	1,603	Glacial sand	Hard, clear		D	Intermittent supply; also a 16-foot well with good supply for stock needs.
41	SE.	33	"	"	"	Dug	12	1,615	- 4	1,611	4	1,611	Glacial sand	Soft, clear		D, S	Sufficient for 20 head stock; another well 14 feet deep; numerous dry holes 10 to 20 feet deep.
42	SW.	34	"	"	"	Dug	12	1,620	- 8	1,612	11	1,609	Glacial sand	Hard, clear		D, S	Insufficient supply; also 4 other wells 12 to 22 feet deep.
43	NE.	34	"	"	"	Dug	12	1,620	- 8	1,612	11	1,609	Glacial sand	Hard, clear, "alkaline"		S	Sufficient for 18 head stock; also 3 other wells with intermittent supplies; 10 dry holes to a depth of 20 feet.
44	SE.	35	"	"	"	Dug	16	1,615	- 8	1,607	11	1,604	Glacial sand	Hard, clear		D, S, I	Oversufficient for local needs; another similar well 17 feet deep.
45	SW.	36	"	"	"	Dug	15	1,615	- 10	1,605	13	1,602	Glacial sand	Hard, clear, "alkaline"		S	Sufficient supply with aid of another similar well; also 20 dry holes to a depth of 30 feet.
1	NW.	1	30	6	2	Dug	10	1,605	- 7	1,598	7	1,598	Glacial gravel	Hard, clear		D, S	Sufficient for 30 head stock.
2	SE.	2	"	"	"	Dug	10	1,610	- 7	1,603	7	1,603	Glacial gravel	Hard, clear		D, S	Sufficient for 37 head stock.
3	NE.	2	"	"	"	Dug	12	1,610	- 10	1,600	10	1,600	Glacial gravel	Hard, clear		D, S	Sufficient for 15 head stock.
4	SW.	2	"	"	"	Dug	12	1,630	- 9	1,621	9	1,621	Glacial sand	Hard, clear		D, S	Sufficient for 16 head stock.

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(D) Domestic; (S) Stock; (I) Irrigation; (M) Municipality; (N) Not used
(#) Sample taken for analysis.

WELL RECORDS—Rural Municipality of GOOD LAKE NO. 274, SASKATCHEWAN

B 4-4
R. 7526

WELL No.	LOCATION ¼	Sec.	Tp.	Rge.	Mer.	TYPE OF WELL	DEPTH OF WELL	ALTITUDE WELL (above sea level)	HEIGHT TO WHICH WATER WILL RISE Above (+) Below (−) Surface	Elev.	PRINCIPAL WATER-BEARING BED Depth	Elev.	Geological Horizon	CHARACTER OF WATER	TEMP. OF WATER (in °F.)	USE TO WHICH WATER IS PUT	YIELD AND REMARKS
5	NW.	2	30	6	2	Dug	20	1,625	- 15	1,610	15	1,610	Glacial gravel	Hard,clear		D, S	Sufficient for 12 head stock; also another well 5 feet deep.
6	NE.	3	"	"	"	Dug	18	1,645	- 15	1,630	15	1,630	Glacial sand	Hard,clear		D, S	Sufficient for 15 head stock.
7	SE.	5	"	"	"	Dug	6	1,680	- 2	1,678	2	1,678	Glacial sand	Hard,clear, "alkaline"		D, S	Intermittent supply.
8	NE.	5	"	"	"	Dug	20	1,690	- 13	1,677	13	1,677	Glacial gravel	Hard,clear		D, S	Sufficient for 10 head stock.
9	SW.	5	"	"	"	Dug	4	1,680	- 2	1,678	2	1,678	Glacial gravel	Hard,clear		D, S	Sufficient for 19 head stock.
10	NE.	6	"	"	"	Dug	10	1,700	- 2	1,698			Glacial drift	Hard,clear , "alkaline"		S	Sufficient for 7 head stock.
11	SW.	6	"	"	"	Dug	12	1,690	- 8	1,682	8	1,682	Glacial gravel	Hard,clear		D, S	Sufficient for 18 head stock.
12	NW.	6	"	"	"	Dug	12	1,700	- 4	1,696	4	1,696	Glacial gravel	Hard,clear		D, S	Intermittent supply; another similar well 8 feet deep.
13	SW.	7	"	"	"	Dug	12	1,700	- 8	1,692			Glacial drift	Hard,clear, "alkaline"		D, S	Intermittent supply; also another similar well.
14	NW.	7	"	"	"	Dug	10	1,700	- 6	1,694	6	1,694	Glacial gravel	Hard,clear		D, S	Sufficient for 21 head stock.
15	SE.	7	"	"	"	Dug	14	1,700	- 7	1,693	7	1,693	Glacial gravel	Hard,clear		D, S	Intermittent supply.
16	NE.	7	"	"	"	Dug	9	1,700	- 1	1,699	1	1,699	Glacial gravel	Hard,clear		D, S	Sufficient for 15 head stock.
17	SE.	9	"	"	"	Dug	6	1,640	- 2	1,638	2	1,638	Glacial gravel	Hard,clear		D, S	Sufficient for 14 head stock.
18	SW.	10	"	"	"	Dug	12	1,650	- 7	1,643	7	1,643	Glacial gravel	Hard,clear		D, S	Sufficient for 3 head stock.
19	SE.	10	"	"	"	Dug	15	1,650	- 12	1,638	12	1,638	Glacial gravel	Hard,clear		D, S	Sufficient for 8 head stock.
20	NE.	10	"	"	"	Dug	10	1,640	- 7	1,633	7	1,633	Glacial gravel	Hard,clear		D, S	Sufficient for 10 head stock.
21	SW.	14	"	"	"	Dug	10	1,635	- 5	1,630	5	1,630	Glacial sand	Hard,clear		D, S	Sufficient for 15 head stock.
22	SE.	15	"	"	"	Dug	14	1,645	- 10	1,635	10	1,635	Glacial gravel	Hard,clear		D, S	Sufficient for 10 head stock.
23	NW.	15	"	"	"	Dug	9	1,600	- 6	1,594	6	1,594	Glacial sand	Soft,clear		D, S	Sufficient for 10 head stock.
24	SW.	16	"	"	"	Dug	12	1,660	- 8	1,652	8	1,652	Glacial sand	Hard,clear		D, S	Sufficient for domestic needs only; another well 10 feet deep.
25	NW.	17	"	"	"	Dug	6	1,690	- 2	1,688	2	1,688	Glacial gravel	Hard,clear		D, S	Sufficient for 16 head stock.
26	SE.	18	"	"	"	Dug	10	1,700	- 7	1,693	7	1,693	Glacial gravel	Hard,clear		D, S	Sufficient for 6 head stock.
27	NE.	18	"	"	"	Dug	16	1,700	- 2	1,698	2	1,698	Glacial gravel	Hard,clear		D, S	Sufficient for 14 head stock.
28	SW.	18	"	"	"	Dug	10	1,700	0	1,700	0	1,700	Glacial gravel	Hard,clear		D, S	Sufficient for 18 head stock.
29	NW.	20	"	"	"	Dug	8	1,695	- 5	1,690	5	1,690	Glacial sand	Hard,clear		D, S	Insufficient for 27 head stock.
30	NE.	20	"	"	"	Dug	10	1,680	- 5	1,675	5	1,675	Glacial sand	Soft,clear		D	Sufficient for domestic needs.
31	SW.	22	"	"	"	Dug	10	1,640	0	1,640	0	1,640	Glacial sand	Soft,clear		D, S	Sufficient for 5 head stock.

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(D) Domestic; (S) Stock; (I) Irrigation; (M) Municipality; (N) Not used
(#) Sample taken for analysis.

B 4-4
R. 7526

WELL RECORDS—Rural Municipality of GOOD LAKE NO. 274, SASKATCHEWAN

WELL No.	LOCATION					TYPE OF WELL	DEPTH OF WELL	ALTITUDE WELL (above sea level)	HEIGHT TO WHICH WATER WILL RISE		PRINCIPAL WATER-BEARING BED			CHARACTER OF WATER	TEMP. OF WATER (in °F.)	USE TO WHICH WATER IS PUT	YIELD AND REMARKS
	¼	Sec.	Tp.	Rge.	Mer.				Above (+) Below (−) Surface	Elev.	Depth	Elev.	Geological Horizon				
32	NE.	22	30	6	2	Dug	6	1,645	- 3	1,642	3	1,642	Glacial sand	Hard, clear		D	Sufficient for domestic needs.
33	SW.	23	"	"	"	Dug	12	1,625	- 6	1,619	6	1,619	Glacial sand	Soft, clear		D, S	Sufficient for 19 head stock.
34	NW.	23	"	"	"	Dug	6	1,600	- 3	1,597	3	1,597	Glacial sand	Soft, clear		D, S	Sufficient for 3 head stock; also a 6-foot dry hole.
35	SE.	23	"	"	"	Dug	10	1,600	- 5	1,595	3	1,595	Glacial sand	Hard, clear, "alkaline"		D, S	Sufficient for 10 head stock.
36	NE.	23	"	"	"	Dug	8	1,600	- 4	1,596	4	1,596	Glacial sand	Soft, clear		D, S	Intermittent supply.
37	SW.	24	"	"	"	Dug	12	1,600	- 3	1,597	3	1,597	Glacial sand	Soft, clear		D, S	Sufficient for 9 head stock.
38	NW.	24	"	"	"	Dug	6	1,600	0	1,600	0	1,600	Glacial sand	Hard, iron, red sediment		D, S	Sufficient for 5 head stock.
39	NE.	24	"	"	"	Dug	20	1,580	- 17	1,563	17	1,563	Glacial sand	Soft, clear		D, S	Insufficient for 12 head stock.
40	SE.	25	"	"	"	Dug	10	1,590	0	1,590	0	1,590	Glacial sand	Soft, clear		D, S	Sufficient for 3 head stock.
41	NE.	26	"	"	"	Dug	6	1,600	- 3	1,597	3	1,597	Glacial sand	Hard, clear		D, S	Insufficient for 4 head stock.
42	NE.	27	"	"	"	Dug	10	1,625	- 6	1,619	6	1,619	Glacial sand	Soft, clear		D, S	Sufficient for 16 head stock.
43	SW.	27	"	"	"	Dug	12	1,640	- 6	1,636	6	1,636	Glacial sand	Hard, clear		D, S	Sufficient for 33 head stock.
44	NW.	27	"	"	"	Dug	6	1,640	- 3	1,637	3	1,637	Glacial sand	Hard, clear		D, S	Sufficient for 2 head stock.
45	NE.	28	"	"	"	Dug	15	1,650	- 12	1,638	12	1,638	Glacial sand	Hard, clear		D, S	Sufficient for 35 head stock.
46	SW.	28	"	"	"	Dug	10	1,675	- 6	1,669	6	1,669	Glacial sand	Hard, clear		D, S	Sufficient for 13 head stock.
47	SE.	30	"	"	"	Dug	10	1,700	- 4	1,696	4	1,696	Glacial sand	Hard, clear		D, S	Sufficient for 15 head stock.
48	SW.	30	"	"	"	Dug	6	1,720	- 4	1,716	4	1,716	Glacial sand	Hard, clear, "alkaline"		D, S	Sufficient only for domestic needs.
49	NW.	33	"	"	"	Dug	11	1,660	- 3	1,657	3	1,657	Glacial sand	Hard, clear, "alkaline"		D, S	Sufficient for 6 head stock.
50	SW.	34	"	"	"	Dug	6	1,650	- 3	1,647	3	1,647	Glacial sand	Hard, clear, "alkaline"		D, S	Insufficient for 17 head stock.
51	NE.	34	"	"	"	Dug	10	1,620	- 5	1,615	5	1,615	Glacial sand	Hard, clear, "alkaline"		D, S	Sufficient for 11 head stock; also 2 other wells 12 feet deep.
52	SW.	35	"	"	"	Dug	10	1,600	- 7	1,593	7	1,593	Glacial sand	Hard, clear, "alkaline"		D, S	Sufficient for 15 head stock.
53	NW.	35	"	"	"	Dug	12	1,600	- 7	1,593	7	1,593	Glacial sand	Soft, clear		D, S	Sufficient for 35 head stock.

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(#) Sample taken for analysis.