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# *Groundwater Availability in Shelby County*

by E. W. SANDERSON

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# GROUNDWATER AVAILABILITY IN SHELBY COUNTY, ILLINOIS

by E. W. Sanderson

## SUMMARY

Throughout Shelby County adequate water supplies for normal household and farm use generally can be obtained from wells tapping glacial deposits of sand and gravel. In the central part of the county, wells capable of producing more than 100 gallons per minute (gpm) have been developed from extensive deposits of permeable sand and gravel contained in the preglacial Kaskaskia valley. In 1966 more than 2 million gallons of water was pumped from wells each day to satisfy industrial, municipal, and domestic needs. A much larger quantity of groundwater can be withdrawn without overdevelopment. Maps and tables of data illustrating localized groundwater conditions and quality are included in this report to serve as a guide in the proper development and utilization of available groundwater resources.

## INTRODUCTION

More than 500 requests for information concerning groundwater conditions in specific locations of Illinois are answered yearly by the Illinois State Water Survey. Approximately 40 percent of these requests are from individuals seeking advice on locating, developing, or treating home or farm groundwater supplies. Many of these requests are answered with letter—type reports prepared jointly by the State Water Survey and State Geological Survey from available geohydrologic data in the basic record files. These reports, containing pertinent information on groundwater and geologic conditions at a specific site, permit meaningful cost appraisals for well construction which have saved considerable time, effort, and money in many cases. However, several thousand wells are constructed each year without the use of such information. If comprehensive summaries of groundwater conditions were available for all possible sites, great savings could result. This report presents such a summary for Shelby County, where fairly complex groundwater conditions exist.

Shelby County is located in the south-central part of the state (figure 1 and plate 1). It encompasses an area of 772 square miles and is mainly cultivated land. According to 1960 figures, the county has a population of 23,404, and 11,697 of the residents live in incorporated cities and villages. The county seat and largest city, Shelbyville, has a population of 4821 (1960 census). All known water supplies in the county are from groundwater sources.

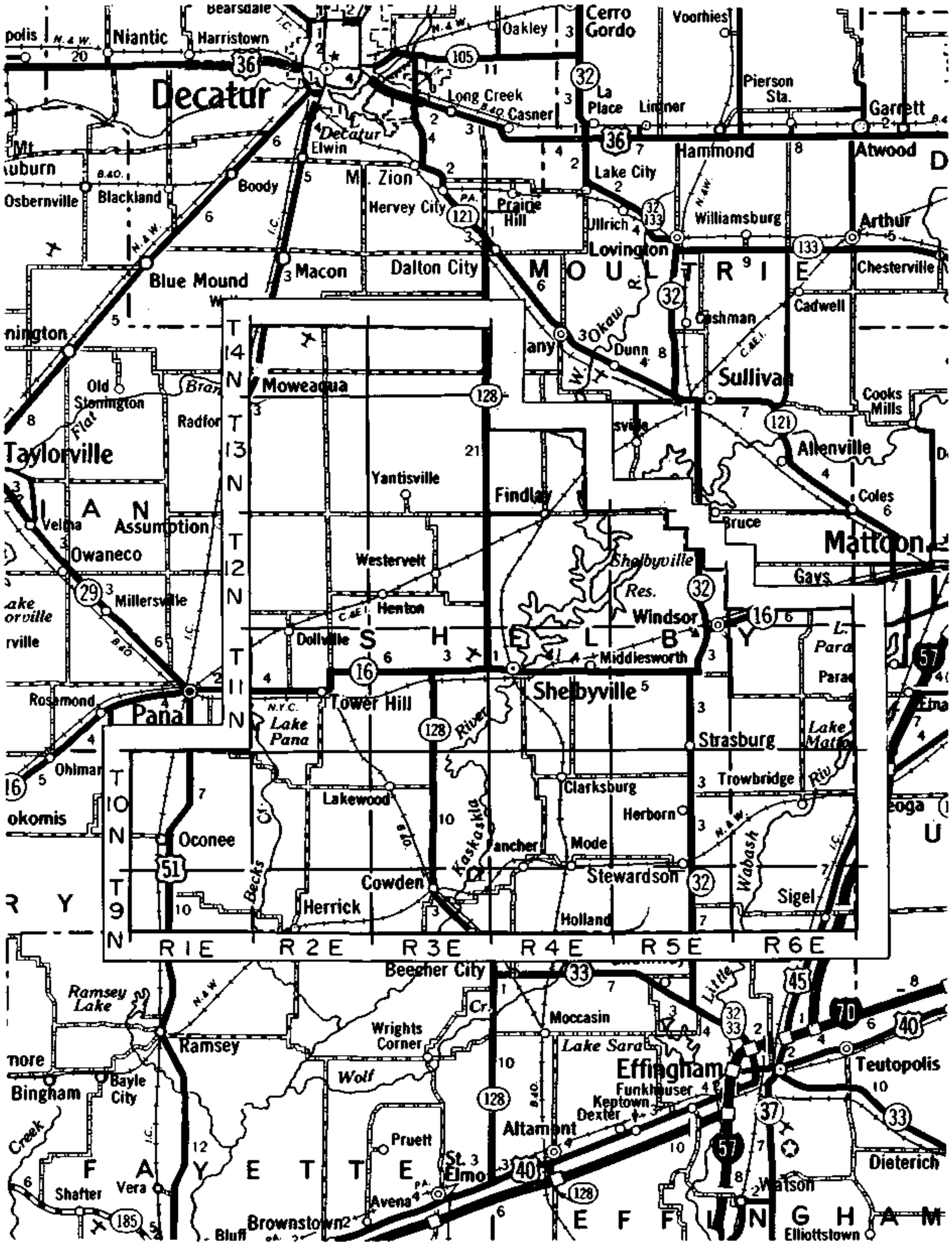


Figure 1.  Location of Shelby County

Although the present economy of the county is largely dependent on the production of farm crops such as corn, soybeans, and wheat, a noticeable economic contribution from industrial, commercial, and recreational developments should be realized after the Shelbyville Reservoir on the Kaskaskia River is completed in 1968. These and other allied developments will create additional demands for dependable water supplies of good chemical quality. Surface water from the Shelbyville Reservoir undoubtedly will furnish part of that quantity. However, it is probable that groundwater supplies always will predominate in the county.

This report summarizes groundwater conditions in Shelby County including pertinent geologic factors, occurrence and movement, temperature and chemical quality, and well development. Appendix A lists the results of chemical analyses of all wells sampled, and appendix B contains available records of existing wells.

This report is part of a continuing program of water-resource investigations being conducted by the Illinois State Water Survey under the direction of William C. Ackermann, Chief, and H. F. Smith, Head of the Hydrology Section. Grateful acknowledgment is made to the many well drillers, engineers, and public officials who provided invaluable information for use in this report. Mrs. Dorothy Woller tabulated the well data and typed the manuscript, and John W. Brother, Jr. prepared the illustrations. The suggestions and constructive criticisms of William H. Walker were of great value in the preparation of this report.

## GEOLOGY

The geology of Shelby County is summarized in general terms in State Geological Survey Circular 225, "Groundwater Geology in South-Central Illinois." The following brief discussion of geologic conditions in the county is taken largely from that publication. In addition to the summary in Circular 225, the files of the State Geological Survey are available for greater definition of the geology in this portion of the state.

Information from wells and exposures of rocks indicate that the land surface of Shelby County has been shaped principally by ice and running water. The features produced by ice were developed long ago when glaciers, nourished by snow accumulation in Canada, several times advanced across Shelby County and melted away leaving a vast quantity of rock debris. In front of the ice, sediment-laden meltwaters escaped down valleys, partially filling them with outwash deposits of sorted sand, gravel, and finer material. Thick extensive till sheets of unsorted clay, silt, sand, and pebbles also were laid down under the advancing ice or dumped in place during melting. Glacial deposits blanket practically all of Shelby County resulting in a relatively level plain broken only by isolated knobs, stream valleys, and long ridges formed at the front of the glacier (end moraines).

Running water continues to modify this surface today by cutting into the land, carrying away soil and rock particles, and depositing the debris in river bottoms. This modification is a small-scale version of the changes made on the bedrock surface by glacial meltwaters.

Below the glacial deposits in Shelby County are layers of consolidated rocks representing several geologic ages. The uppermost consolidated rocks consist of beds of shale, sandstone, and limestone arranged one upon the other; the top surface of these rocks is called the bedrock surface. Originally the bedrock formations also were unconsolidated materials, deposited over many years as sediments in shallow seas or bordering marshes. They were then buried and hardened into solid rock during the several million years after the seas retreated from the area.

Erosion of the bedrock was not uniform through the county. In areas where soft shales and sandstone formations were exposed to weathering, valleys were formed by water and ice action, while hard sandstone and limestone formations in other areas resisted erosion and remained to form ridges and hills on the bedrock surface. Some of the old bedrock valleys coincide with present-day stream valleys, but some are partially or even completely buried by the glacial deposits so that there is little or no surface evidence of their presence. In parts of the county, the bedrock surface is exposed in dry washes and gullies in the higher lands, and in some of the creek and river valley lowlands.

## GROUNDWATER

Groundwater in Shelby County begins as precipitation which seeps downward through the soils. Figure 2 shows the cycle of water movement from the atmosphere as precipitation to the surface and into the ground, and then away from the area either through the ground and in flowing streams or again into the atmosphere through transpiration of plants and evaporation.

### Occurrence and Movement

Water enters and filters slowly down through the ground until it reaches a level where all available voids are completely water-filled. Water thus contained in this zone of saturation is groundwater, and its upper surface is the water table.

In glacial drift deposits, water fills the voids between the grains that make up the formations. In bedrock, water occurs primarily in two ways--it is contained in the spaces between partially cemented grains of sandstone strata or in the fractures, bedding planes, and solution cracks of limestone formations. A saturated formation of sand, gravel, sandstone, or limestone that is capable of yielding water to wells in usable quantities is called an aquifer.

Usually, glacial drift aquifers are regularly recharged (refilled) by rainfall occurring directly on the soil surface. If a glacial drift aquifer contacts

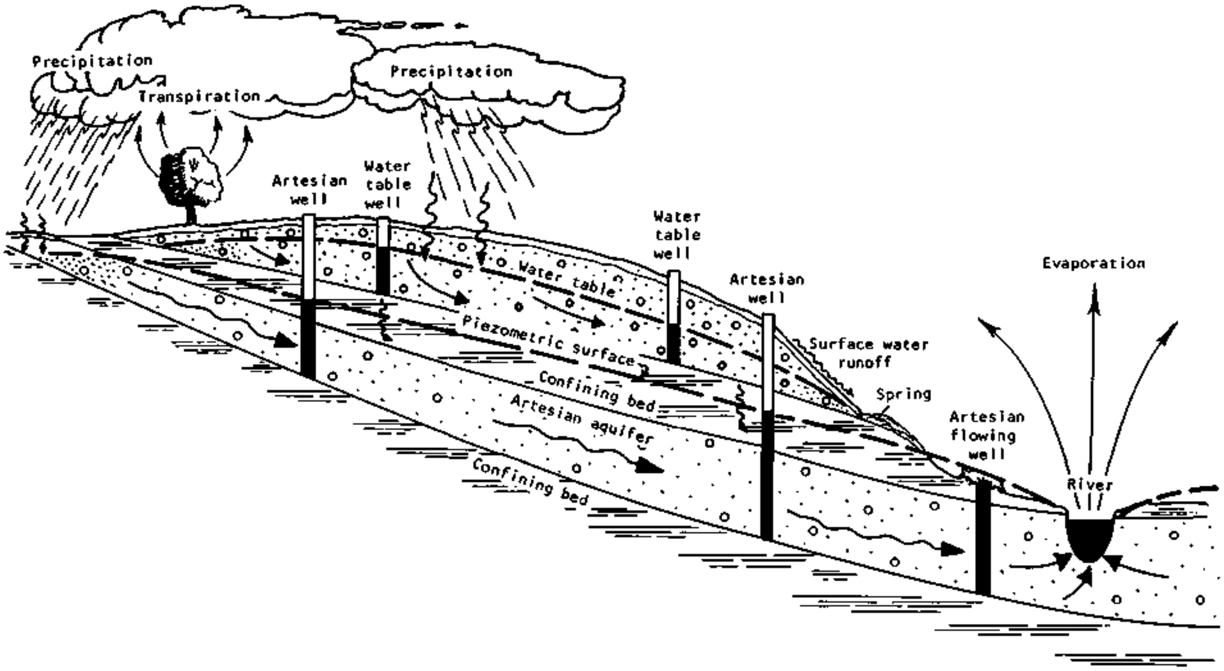


Figure 2. Cycle of water movement

a bedrock water-bearing unit below it, the water continues freely downward to recharge the bedrock aquifer. However, layers of very dense (almost impermeable) materials separating water-bearing units impede the downward movement of water. These layers, or confining beds, are usually clays or shales so dense that they cannot yield enough water to be classified as an aquifer. When such confining beds are present, most of the water reaching the aquifer may come from a distant recharge area where the confining beds no longer exist or where the aquifer crops out at the land surface.

Water entering permeable strata in an area of outcrop may become confined downslope beneath relatively impermeable beds. Pressure is exerted on the groundwater in a confined aquifer by the weight of water at higher levels in the aquifer. When a well penetrates such an aquifer downslope from the recharge intake area, the pressure forces the water to rise in the well above the top of the aquifer. The water in this instance is confined (or artesian) water, the well is an artesian well, and the upper surface of the water in the well is the piezometric surface. Thus, the piezometric surface is the level to which water from a given artesian aquifer will rise under its full head in tightly cased wells.

Groundwater moves under the influence of gravity or other pressure differences from recharge areas to discharge points of lower pressure. Major points of discharge are springs, lakes, streams, swamps, drainage tiles, or pumping wells.

The movement toward the discharge points may amount to only a few hundred feet a year in unconsolidated materials and to only a few feet a year in sandstone formations. Water may be held in bedrock aquifers for many years.

## Availability

Glacial drift sand-and-gravel aquifers offer the best possibilities for developing groundwater supplies in Shelby County. Throughout much of the county, the upper bedrock is composed primarily of shale and other deposits which do not bear water. Only in the vicinity of Tower Hill and Clarksburg-Stewardson are there shallow fresh-water sandstone formations. In the remainder of the county, deeper lying bedrock aquifers yield water too highly mineralized for most purposes.

Plate 1 (see pages 8-9) depicts the availability of groundwater in glacial drift aquifers. Areas of excellent, good, fair, and poor groundwater possibilities are delineated. Also noted are the probable maximum depths for wells and the areas where the bedrock is known to contain fresh water. The information on plate 1 was based on groundwater data including: 1) the chemical analyses and well records in appendices A and B; 2) topographic and bedrock surface maps; 3) geologic reports; 4) electrical earth resistivity surveys; and 5) drillers logs from oil and coal test holes.

According to these data, groundwater availability in the county is largely controlled by geologic factors such as the thickness, nature, and origin of glacial drift deposits; their degree of interconnection with the upper bedrock aquifers; and the occurrence and permeability of water-bearing sandstone and limestone units in the bedrock.

Parts of the county covered by the Shelbyville moraine and areas having preglacial bedrock valleys filled with material from the glacial front are underlain by fairly extensive sheets or strips of water-bearing sand and gravel. Farm and home water supplies nearly always can be obtained from these aquifers, and the chances are also good for developing higher capacity wells for industrial and municipal use, although test drilling may be necessary to locate the more permeable and thicker sections of water-bearing material required for this type of installation. In the preglacial Kaskaskia valley, a major drainage way from the Shelbyville moraine of Wisconsinan age, wells capable of producing more than 100 gpm on a long-term basis have been constructed (see Shelbyville and Findlay municipal well data in appendix B).

In those parts of the county covered with about 40 or more feet of older glacial deposits (Illinoian), water-bearing sand and gravel formations are generally thinner, less permeable, and discontinuous. However, well records indicate that supplies adequate for normal domestic needs usually can be developed from small-diameter wells, although in some locations several test holes may have to be drilled to find a suitable aquifer. The chances of developing dependable supplies from drilled wells are poor only where the Illinoian drift mantle is less than about 40 feet thick. In these areas, one or more large-diameter dug or augered wells may be required to furnish an adequate home or farm supply.

## QUALITY

The sources and significance of the major dissolved elements and substances in groundwater and their ranges of concentration in waters of Shelby County are shown in table 1. The U. S. Public Health Service drinking water standards (1962) for these major constituents also are included in the table. These standards have been accepted by the American Water Works Association as minimal for public water supplies, and should serve as a guide to owners of farm and home water supplies in evaluating their water quality.

### Chemical Character

As may be generally inferred from the information in table 1, the dissolved minerals in groundwater are derived chiefly from the earth materials through which the water flows. The soils and glacial materials above bedrock are particularly rich in calcium, magnesium, iron, and other minerals which are readily absorbed by the groundwater as it passes over and through these deposits. Calcium and magnesium are responsible for hardness of water, and iron causes reddish-brown staining.

Groundwater from glacial deposits throughout the county is generally considered very hard, from 250 to 450 parts per million (ppm), but normally hardness can be successfully removed by home water-softening units that are now readily obtainable. The iron content of these waters usually is between 1.0 and 5.0 ppm, well above the recommended limit of 0.3 ppm. Iron can be removed by units similar to home water softeners; however, for domestic users, tolerance rather than removal is the usual practice.

The deeper bedrock aquifers in Shelby County contain highly mineralized groundwater not suited for most farm and domestic uses. Chloride, sulfate, and sodium are present in especially high concentrations. In most cases, these bedrock aquifers are sandwiched between beds of shale, coal, and fire clay so that free exchange between these formations and the upper glacial drift containing fresh water has not occurred. For this reason, the highly mineralized water contained in these aquifers has not been flushed out by fresh water. Available geochemical data for the county indicate that groundwater from elevations lower than about 475 feet above sea level is unusable for most domestic purposes. Any hole drilled into the bedrock should be terminated at this elevation if no fresh water zones have been penetrated in the overlying rocks.

Water from wells in Shelby County contain varying quantities of carbon dioxide and, in some cases, methane gas. These gases are colorless, odorless, and tasteless. Methane gas is lighter than air whereas carbon dioxide is

▩ Excellent groundwater possibilities. Municipal water supply developments at Shelbyville and Findlay indicate that large quantities of groundwater for industrial, municipal, and farm use can be developed from wells tapping the thicker and more permeable parts of this aquifer. Wells generally range in depth from 50 to 150 feet, and yields in excess of 100 gpm have been obtained. Nonpumping water levels vary with topography from about 25 to 50 feet below ground level. The bedrock is usually not tapped as a source of supply.

▨ Good groundwater possibilities. Small-diameter wells predominate. From Henton north to the county line, wells are usually from 70 to 125 feet deep. In the Middlesworth-Windsor area, they range from 80 to 110 feet deep. Well yields of 10 gpm or more are common. Nonpumping water levels vary with topography from about 25 to 50 feet below ground level. The bedrock is usually not tapped as a source of supply, and water may be salty below depths of 75 feet in the lowland areas near the Kaskaskia River and below depths of 250 feet in the highlands of north and east Shelby County.

▧ Fair groundwater possibilities. Small-diameter drilled wells usually are 35 to 75 feet deep; the large-diameter dug wells present are 20 to 40 feet in depth. Most wells yield less than 10 gpm, but a few located on the floodplain of the Kaskaskia River have yielded 100 gpm or more. Nonpumping water levels vary with topography from about 25 to 50 feet below ground level. The bedrock is not usually tapped as a source of supply, and water may be salty below depths of about 50 feet in the Kaskaskia River bottoms and below depths of 200 feet in the highland areas between Findlay and Westervelt.

□ Poor groundwater possibilities. Large-diameter dug wells ranging in depth from 15 to 35 feet predominate. Yields in excess of 5 gpm are rare and some wells go dry during long drought periods. Nonpumping water levels vary with topography and range from 10 to 25 feet below land surface.

░ Areas known to be underlain by shallow sandstone aquifers containing fresh water. Near Tower Hill bedrock wells are around 50 feet deep and produce up to 9 gpm. Nonpumping water levels are about 10 feet below ground level. In the Clarksburg-Stewardson area wells usually are 75 to 175 feet deep, and yield from less than 3 to about 8 gpm. Nonpumping water levels vary with topography from about 15 to 30 feet below land surface. Water from elevations less than about 475 feet above sea level is too mineralized for most domestic uses.

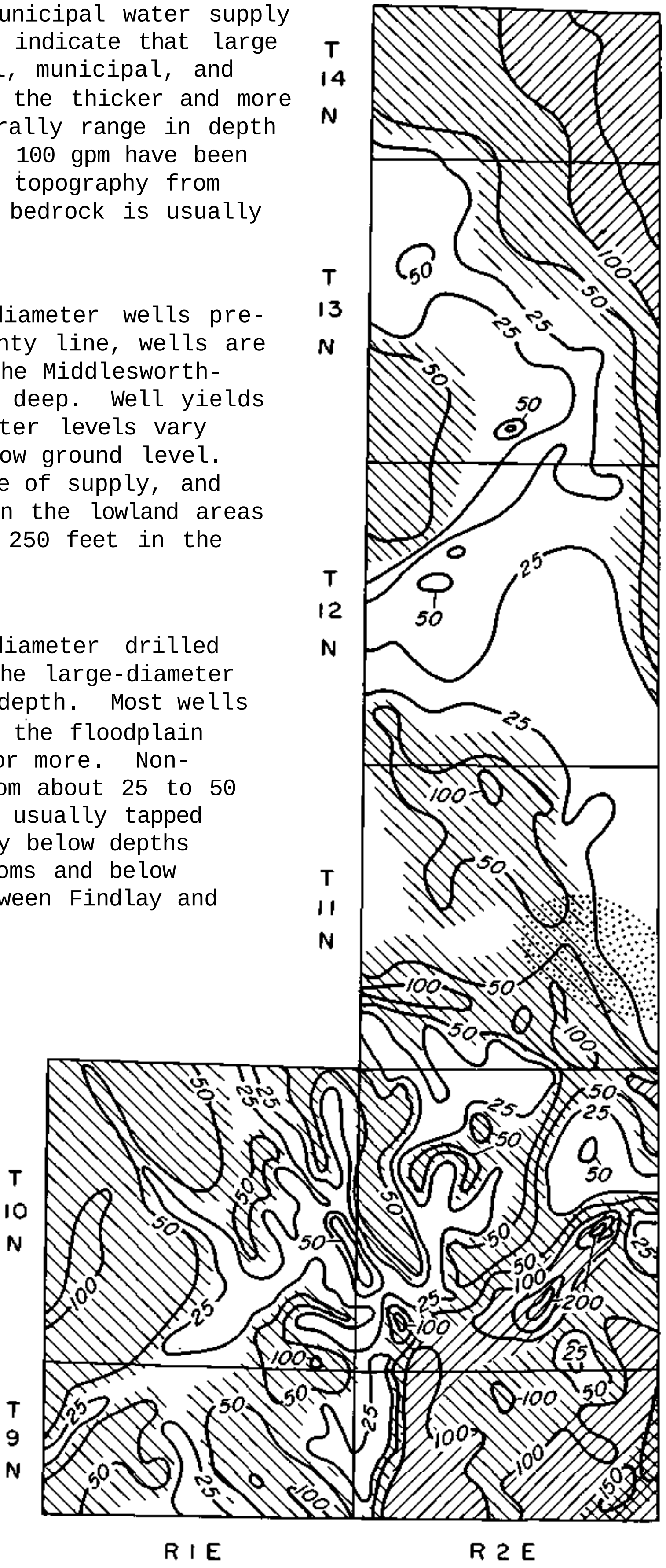
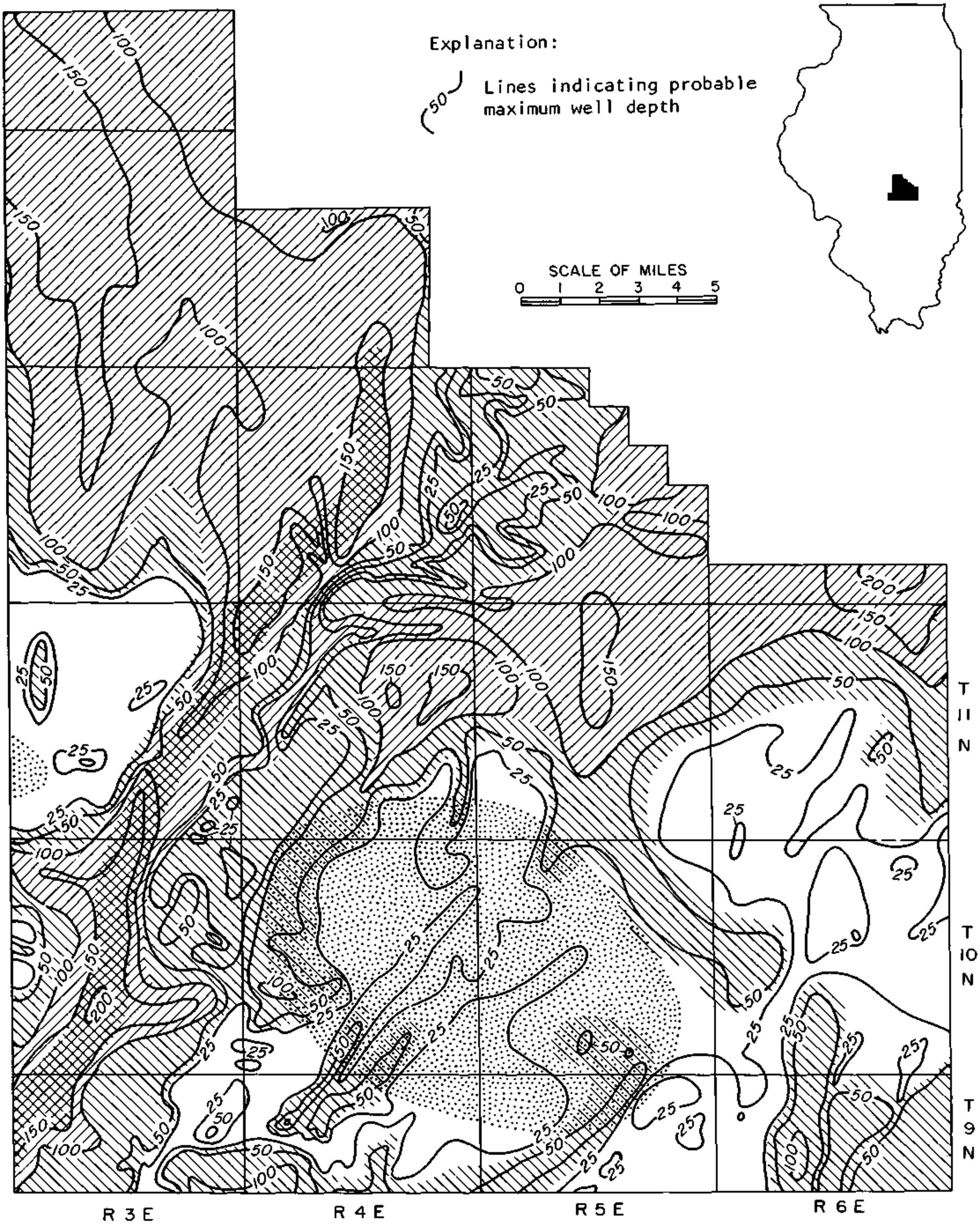


Plate 1. Groundwater availability and



probable maximum depth of wells finished in glacial deposits

# Table 1. Elements and substances commonly found in groundwater in Shelby County

| Constituent and recommended. upper limit | Source | Remarks |
|---|---|---|
| Iron<br>(Fe)<br>0.3 ppm | Dissolved from common iron-bearing minerals present in practically all rocks, clays, and soils; may also be derived from iron pipes, pumps, and other equipment. | On exposure to air, iron oxidizes to a reddish-brown sediment. More than about 0.3 ppm stains laundry and porcelainware reddish brown; objectionable for food and beverage processing. Of 76 county samples analyzed, 56 had an iron content greater than 0.3 ppm. |
| Manganese<br>(Mn)<br>0.05 ppm | From soils and sediments. Less abundant in rocks than is iron. | Resembles iron in chemical behavior and has same objectionable features, except stains are brown to black. Of 43 samples analyzed, 17 had more than 0.05 ppm manganese. |
| Nitrate<br>($NO_3$)<br>45 ppm | Results from decayed organic matter such as that from barnyards, feedlots, manure piles, septic tank fields, as well as from silage juices and animal tissue. Usually occurs in waters from shallow wells of less than 50-foot depth, often as the result of poor well construction permitting drainage into the well at or near the surface. | Values higher than a few ppm may suggest pollution. More than about 45 ppm nitrate may cause methemoglobinemia (blue babies) when such water is used in preparation of infant feeding formulas. Of 53 samples analyzed, 4 showed more than 45 ppm nitrate content. |
| Chloride<br>(Cl)<br>250 ppm | Dissolved from rocks and found in large amounts in ancient brines, sea water, and industrial brines. | In concentrations over about 250 ppm chloride gives a salty taste to water and increases its corrosiveness. Of 77 samples analyzed, 3 showed a chloride content greater than 250 ppm. |
| Sulfate<br>($SO_4$)<br>250 ppm | Dissolved from rocks and soils containing gypsum, iron sulfides, and other sulfur compounds. Present in waters from coal mine drainage and some industrial wastes. | Sulfate in water containing calcium forms a hard scale. In large amounts, sulfate in combination with sodium or magnesium has a laxative effect, most noted by infrequent users of the water. Of 42 samples analyzed, 2 had a sulfate content greater than 250 ppm. |
| Alkalinity [bicarbonate ($HCO_3$) and carbonate ($CO_3$)] | Results from action of carbon dioxide or acid in water on carbonate rocks such as limestone and dolomite. | In the presence of calcium, carbonates may produce a carbonate scale; they decompose on heating with release of carbon dioxide gas and attendant formation of calcium carbonate scale. Of 76 samples, 2 had an alkalinity content less than 200 ppm; 43 were between 200 and 400 ppm; 27 were between 400 and 600 ppm; and 4 were between 600 and 800 ppm. |
| Hardness<br>(as $CaCO_3$) | Caused by calcium and magnesium which occurs in some amount in almost all rocks but especially in limestone, dolomite, and gypsum. | Before a lather will form, hard water precipitates soap, forming a sludge which causes deposits on bathtubs and is responsible for gray laundry and dingy glassware. Hard water also forms scale in boilers, hot water heaters, and pipes. Of 77 samples analyzed, 11 had a hardness less than 200 ppm; 44 were between 200 and 400 ppm; 17 were between 400 and 600 ppm, and 5 were between 600 and 1000 ppm. |
| Total dissolved minerals<br>500 ppm | Includes all mineral ingredients dissolved from rocks and soil. | Mineralization of more than 500 ppm is normally detectable to taste; over 1000 ppm is undesirable for most domestic purposes; livestock may tolerate concentrations up to 7000 ppm.[2] Of 77 samples analyzed, 29 had a total mineral content less than 500 ppm; 43 were between 500 and 1000 ppm; and 5 were between 1000 and 1400 ppm. |

[1] U.S. Public Health Service. 1962. Drinking water standards. Publication No. 956.

[2] South Dakota State College Agricultural Experiment Station. 1959. Salinity and livestock water quality. Bulletin 481.

heavier. When methane gas is mixed with air in concentrations of 5 to 15 percent, it is highly explosive if ignited. Most dangerous points of concentration are in the well house, within the air cushion of pressure tanks, and in hot water heaters. All such points should be vented to the outside air if methane gas is detected in a water supply. All new wells constructed should be checked for methane gas by the driller before the installation is placed in service. Further, no one should ever enter a large-diameter dug well without previously checking for the presence of methane gas or carbon dioxide, both of which can cause asphyxiation. These gases can be readily removed from water by standard aeration procedures.

Mineral analyses of groundwater from throughout the county are included in appendix A of this report. Wells of comparable depths near these sampling points generally should produce a similar quality of water.

### Temperature

Temperature of groundwater varies with the location and depth of the aquifer, the origin and time of occurrence of recharge, and the proximity of the aquifer to bodies of surface water. Where the primary source of recharge is precipitation, the groundwater is fairly cool, because water enters the groundwater reservoir mostly during early spring and late fall, and little temperature variation occurs because the earth materials provide insulation. In Shelby County such aquifers generally contain water ranging from about 54 to 57 degrees Fahrenheit (see appendix A).

Shallow aquifers near the Kaskaskia, or any river, may have a wider temperature fluctuation, and range from about 50 to as high as 68 degrees throughout any given year. Water temperature fluctuations in such an aquifer are primarily controlled by the quantity and range in temperature of surface water entering the groundwater reservoir by floods, artificial recharge, or as a result of heavy pumping. However, changes in water temperature in a well a few hundred feet from a river's edge may lag behind temperature changes in the surface water by as much as several months because of slow water movement through the aquifer.

## DEVELOPMENT

### Types of Wells

Wells may be classified into types according to the method used in sinking the hole. The most common types of wells in Shelby County are drilled, dug, and augered; however, some driven and bored wells also exist. The type of well chosen for a given location depends on the aquifer and the needs and economic limitations of the user.

Drilled wells with a diameter of 4 to 12 inches are generally used in aquifers occurring from about 40 to as much as 265 feet below the surface. Data on 286 drilled wells are included in appendix B.

Dug or augered wells 2 to 5 feet in diameter are common where water-bearing materials are not highly permeable (cannot transmit much water) and where they are less than about 40 feet below the surface. Most of the 209 large-diameter dug and augered wells inventoried (appendix B) are between 3 and 5 feet in diameter and from 15 to 40 feet deep.

Driven wells, constructed by driving a pointed screen and attached pipe directly into the aquifer, are feasible only where the aquifer is shallow (less than about 30 feet below the surface) and overlain by easily penetrated material such as that in the floodplain of the Kaskaskia River. They usually are 1 to 2 inches in diameter. Only two driven wells are recorded.

Bored wells 6 to 12 inches in diameter were commonly sunk prior to 1930 when home and farm water demands were small. Most of the 75 recorded bored wells range in depth from about 40 to 90 feet. Because the bored well has a small capacity for receiving and storing water from the aquifer, it usually is inadequate for present-day water requirements.

## Drilling Methods

Drilled wells, which are most common in Shelby County, may be constructed by the cable-tool or hydraulic-rotary methods. An explanation of these drilling procedures follows.

In the cable-tool method, the earth materials are broken into small fragments by the alternate raising and dropping of a heavy chisel-edged bit, and these fragments are removed from the hole at intervals by a bailer. In an unconsolidated formation, an open hole is maintained by driving the casing as drilling progresses. After the aquifer has been penetrated, the well screen usually is placed opposite the water-bearing formation, the casing pulled upward to expose the screen, and the screen sealed to the casing.

In the conventional hydraulic-rotary method, the drill pipe with a bit attached to the lower end is rotated to break up the material into small particles. A thin mud is pumped through the drill pipe, then out through the openings in the bit, and up to the surface through the space between the drill pipe and the walls of the hole. The circulating mud thus removes the drill cuttings and prevents caving by plastering and supporting the formations penetrated until the final well casing and screen are placed in the hole.

In reverse hydraulic-rotary drilling, the flow of the drilling fluid is reversed from that in the conventional rotary method. The drilling fluid, usually a relatively clear water rather than mud, moves slowly down through the opening between the drill pipe and the bore hole, picks up formation cuttings loosened by the drill bit, enters the drill pipe through the holes in the bit, and by suction pumping moves to the surface where the cuttings settle in a surface pit. The fluid level in the hole must be kept at ground level at all times, because the difference in pressure between the water column in the hole and that in the aquifer prevents caving of the hole until the final well casing with attached screen is installed.

## Construction Features

Construction features vary with the type of well and the characteristics of the aquifer to be utilized. Some of the features commonly employed in various types of wells in the county are casing, screening, gravel packing, and grouting (figure 3). These features, along with those for a dug well shown in detail in figure 4, are recommended by the Sanitary Engineering Division of the Illinois Department of Public Health. They are designed to minimize contamination from the surface. Detailed requirements are given in the rules and regulations of the Illinois Water Well Construction Code.

Casing. Wells are cased to maintain an open hole and to assist in protecting the quality of the water supply. Wells penetrating bedrock aquifers are cased opposite the overlying unconsolidated materials (figure 3a) and opposite any bedrock formations subject to caving. Drilled wells tapping water-bearing sand and gravel deposits are cased to the top of the well screen (figure 3b,c). Steel casing is used in drilled wells and some large-diameter dug wells; bored and dug wells may be cased with 6-inch thick reinforced concrete to a minimum depth of 10 feet with the lower portion usually lined with clay or concrete tile or uncemented brick (figures 3d and A). Sanitary protection for bored and dug wells also may be provided by placing a concrete slab at a point at least 10 feet below ground level and by filling in above the slab with compacted earth (figure 4b).

Screening. Most successful drilled wells tapping sand and gravel are equipped with a length of commercially made well screen placed opposite the water-bearing formation (figure 3b,c). A properly selected and installed screen is designed to retain the aquifer material yet permit water to freely enter the well. Torch-cut and hand-sawed slotted casing sometimes is substituted for commercially made well screens; this practice is not recommended because the openings in such a casing are usually too large to retain the aquifer material and too few to allow free water flow into the well. Most wells so equipped have a history of silt or sand pumping, low yield, and short production life.

Wells finished in bedrock aquifers not subject to caving do not require well screens.

Gravel packing. Drilled wells finished in sand and gravel (figure 3c) usually are equipped with a screen that will retain the coarser 30 to 60 percent of the aquifer material immediately adjacent to the well screen; the fine grains are removed from this area by surging, pumping, and bailing. If the aquifer is uniformly fine-grained (figure 3b), an artificial gravel pack envelope at least 6 inches thick may be required around the outside of the screen to prevent migration of fine material into the well. The grain size of this gravel pack should be about five times as large as the average grain size of the water-bearing material.

Some drillers partially fill the well casing with gravel to hold back the aquifer and term this gravel packing. This procedure, however, greatly reduces the yield-capability of the well and is a very poor substitute for a true gravel pack.

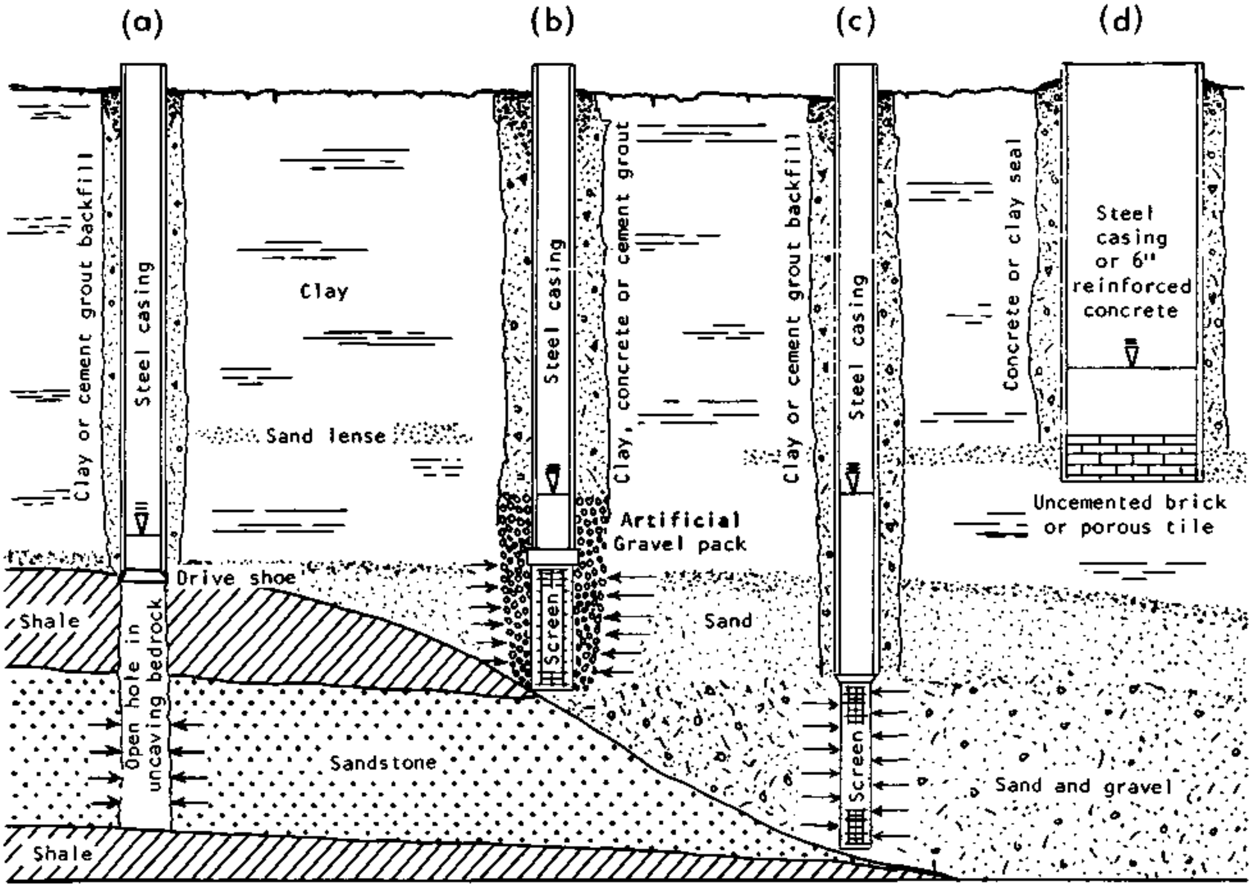
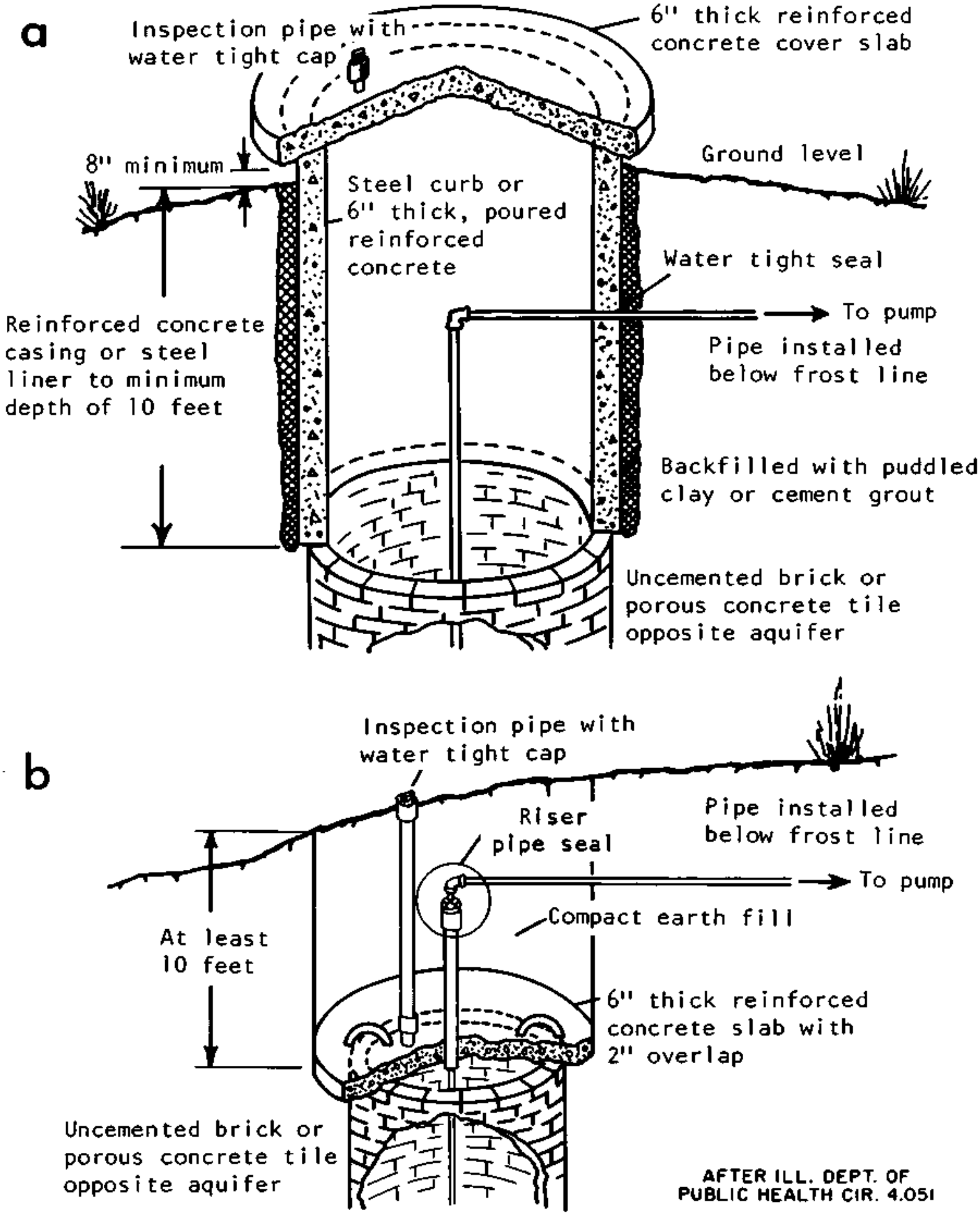


Figure 3. Construction features used in Shelby County wells--(a) drilled well finished in bedrock sandstone; (b) artificial gravel-packed drilled well in fine-grained unconsolidated material; (c) drilled well in coarse-grained unconsolidated material; and (d) shallow large-diameter dug or augered well in relatively impermeable silt, sand, or gravel

Grouting. The annular space between the casing and the bore hole must be sealed to minimize the chance of contamination from the surface. In drilled, dug, or bored wells (figure 3a,c,d), a clay slurry or cement grout must be used to seal the opening between the casing and the bore hole above the aquifer. A cement or concrete grout is required to insure an adequate seal for artificial gravel-pack wells (figure 3b).

## Methods of Pumping Water

Most wells in Shelby County are equipped with electrically driven pumps of the suction, jet, cylinder, or turbine types. Suction pumps can be used only where the pumping level is less than about 18 feet. For greater lifts, deep-well jet, cylinder, or vertical or submersible turbine pumps are required. Most of the commercially available submersible and vertical turbine pumps are used in wells with a minimum inside diameter of 4 inches. Vertical turbine pumps are usually installed on large-capacity municipal supply wells in the county.



AFTER ILL. DEPT. OF
PUBLIC HEALTH CIR. 4.051

Figure 4. Recommended construction features for large-diameter dug well

## Disinfection of Wells

New wells, or old installations after rehabilitation, usually are contaminated and should be disinfected prior to being placed in service. The Illinois Department of Public Health recommends disinfection procedures using a strong chlorine laundry bleach. The correct amount to use can be determined from figure 5, as explained in their instructions which follow.

1) Calculate the amount of water in the well by multiplying the storage capacity per foot (from figure 5a) by the number of feet of water in the well. For example, a 24-inch diameter well with 10 feet of water stores 23 gallons per foot times 10 feet, or 230 gallons. (Considering the well full of water will be satisfactory in most cases since a slight overdose does no harm.)

2) Determine the amount of laundry bleach (from figure 5b) and mix this total amount in about 10 gallons of water. For example, 230 gallons would require 6.9 cups, say 7 cups, of laundry bleach (5.25 percent chlorine).

3) Pour this solution into the well between the casing and the drop pipe. (This may involve raising the pump about 4 inches to allow sufficient space for the addition of the solution and for the placement of a sanitary well seal.)

4) Connect one or more hoses from faucets on the discharge side of the pressure tank to the top of the well and let water from these flow back into the well for at least 15 minutes. Then open each faucet in the system until a chlorine odor or taste appears. Close all faucets. Seal the top of the casing.

5) Let stand for several hours, preferably overnight.

6) Operate the pump, discharging water from all outlets until all chlorine odor and taste disappears.

Chlorine always should be used outside or in well-ventilated places because breathing the fumes is dangerous. In heavy concentrations, chlorine also is harmful to the skin and clothing.

Additional instructions on safe water supplies from wells can be obtained from the Sanitary Engineering Division of the Illinois Department of Public Health, Springfield.

## Summary of Major Water Supplies

Municipalities and industries in Shelby County pump about 0.9 million gallons of water per day (mgd) from wells. Groundwater pumped for farm and domestic purposes is estimated to be 1.2 mgd.

The major portion of the municipal pumpage occurs at Shelbyville where more than 500,000 gallons a day is withdrawn from three wells tapping sand and gravel

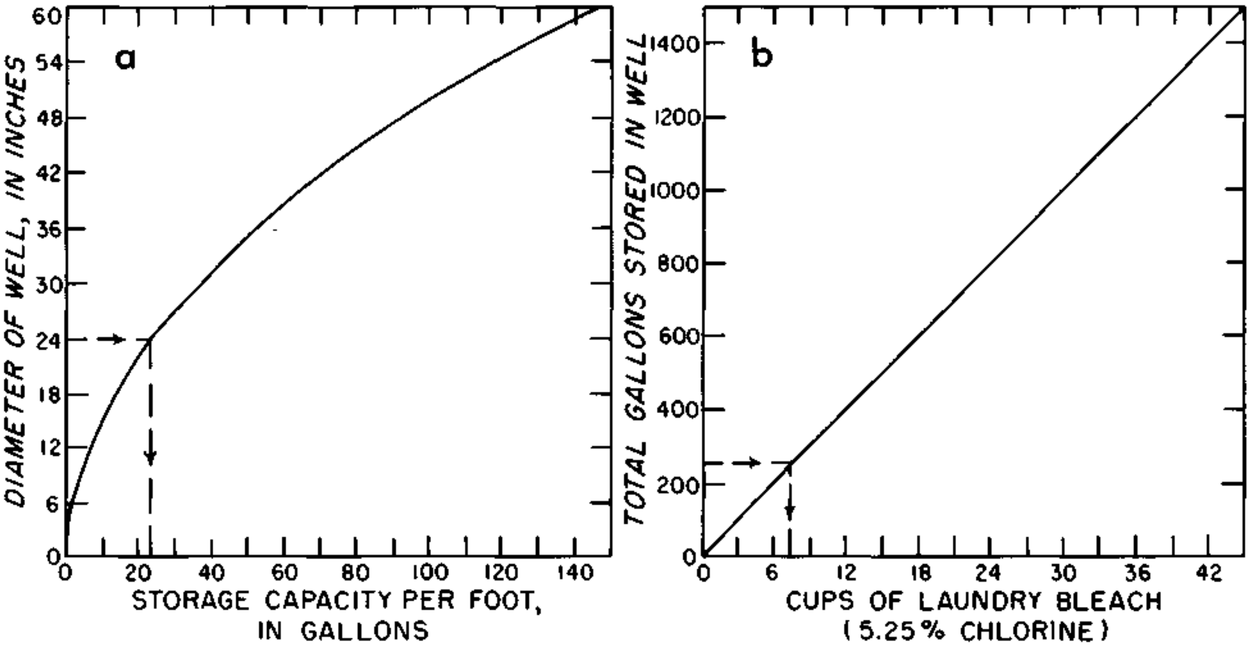


Figure 5. Method for figuring recommended chlorine dosages for well disinfection

deposits in the buried Kaskaskia valley. This buried valley roughly follows and lies near the present Kaskaskia River in Shelby County. Recent studies of the long-term safe yield (the quantity of water that can be withdrawn without exceeding the long-term recharge rate to the formation) of the Shelbyville aquifer indicate that the existing municipal wells can produce about 1.3 mgd on a continuous basis. More than 2 mgd probably can be obtained by constructing additional wells adjacent to the river in areas where that stream and the aquifer are interconnected.

Similar developments also should be possible in other parts of the buried Kaskaskia aquifer where comparable geohydrologic conditions exist (Plate 1). Outside the area underlain by this aquifer, groundwater development for farm and domestic use is largely from scattered and fairly thin layers of sand and gravel, usually within the lower part of the drift deposits.

Wells tapping the bedrock aquifers generally produce less than 10 gpm and usually range from 1 to 4 gpm. The only municipality in the county utilizing the bedrock as a source of supply is Tower Hill. It is estimated that the long-term safe yield of the two-well system tapping the shallow sandstone formations at Tower Hill is 25,000 gallons a day. Similar quantities should be obtainable in the Clarksburg-Stewardson area as shown in Plate 1.

The following is a description of each major municipal groundwater supply in Shelby County. Population figures are taken from the 1960 census; pumping figures are the most recent available and in most cases are for 1966.

COWDEN: The village of Cowden (population 575) uses two wells, located on the bank of the Kaskaskia River, as a source of municipal water supply.

The older well (No. 2) was drilled in 1944 by E. C. Baker and Sons, Sigel, to a depth of 54 feet below ground level. It is 10 inches in diameter and equipped with 11 feet of Johnson Everdur well screen. Upon completion, the well produced 225 gpm for 9 hours with 20 feet of drawdown from a nonpumping water level 18 feet below land surface. The well is equipped with a turbine pump capable of producing 100 gpm. The other well (No. 3), located about 54 feet from Well No. 2, was drilled in 1954 by E. C. Baker and Sons to a depth of 52 feet. It is a 10-inch well equipped with 14 feet of No. 60 slot screen. Upon completion, it produced 141 gpm for 4 hours with a drawdown of 5.3 feet. This well has a 120-gpm turbine pump.

Average daily pumpage is reported to be 46,000 gallons.

Analysis of a sample (appendix A, Lab. No. 136069) showed the water to have a hardness of 340 ppm, total dissolved minerals of 404 ppm, and an iron content of 0.2 ppm.

The water is not treated.

FINDLAY: The village of Findlay (population 759) utilizes one well, located in town, as a source of water supply. It was constructed in 1935 by L. R. Burt, Decatur, to a depth of 154 feet. It is a 26-inch gravel-packed well and has a 12-inch casing to a depth of 129 feet followed by 25 feet of No. 187 slot Cook well screen. When completed, the well produced 150 gpm with a drawdown of 14 feet from a nonpumping water level 96 feet below ground surface. The well was equipped with a 150-gpm turbine pump.

Average daily pumpage is reported to be 40,000 gallons.

Analysis of a sample (appendix A, Lab. No. 115228) showed the water to have a hardness of 263 ppm, total dissolved minerals of 642 ppm, and an iron content of 4.8 ppm. Methane gas is present in the water.

The water is aerated to remove the methane gas and to aid in precipitating the iron; it is filtered to reduce iron, softened to an average of 154 ppm, and chlorinated.

HERRICK: The village of Herrick (population 440) uses one well, located about 3 miles southeast of town, for a municipal water supply. It was drilled in 1964 by E. C. Baker and Sons, Sigel, to a depth of 78 feet. It is a 6-inch well equipped with 13 feet of No. 20 slot and 7 feet of No. 50 slot Cook Red Brass well screen. Upon completion, it produced 180 gpm for 4 hours with a drawdown of 8 feet from a nonpumping water level of 5 feet below land surface. A 60-gpm submersible pump is installed in the well. The long-term safe yield of the well is estimated to be 144,000 gallons per day, or 100 gpm.

Analysis of a sample (appendix A, Lab. No. 163030) showed the water to have a hardness of 318 ppm, total dissolved minerals of 586 ppm, and an iron content of 4.3 ppm.

The water is aerated, filtered, softened, and chlorinated.

MOWEAQUA: The village of Moweaqua (population 1614) now uses 12 wells as a source of water supply. All wells are located in a 2-acre plot about 2 miles north of town in Macon County.

Four of the wells were drilled in 1947 by Cyrus Stevens, Findlay, and range in depth from 23 to 26 feet. They are 2.5 inches in diameter and equipped with 7 feet of slotted screen. Two 3-inch wells constructed in 1952 by Stevens are 28 feet deep and equipped with 7 feet of well screen. These six wells are pumped by a 120-gpm centrifugal pump through a common suction header.

Five additional wells were drilled in 1961 by Stevens and range in depth from 25 to 27 feet. They are 4 inches in diameter and are equipped with 5 feet of well screen. A 150-gpm centrifugal pump is used to pump these five wells through a common suction header.

One well, now on standby, was constructed in 1953 by Luther Burt, Decatur, to a depth of 33.5 feet. It is an 8-inch well equipped with 9 feet of No. 30 slot well screen. A 60-gpm submersible pump is installed in the well.

Average daily pumpage is estimated to be 110,000 gallons.

Analysis of a sample showed the water to have a hardness of 440 ppm, total dissolved minerals of 494 ppm, and an iron content of 1.1 ppm.

The water is aerated and filtered to reduce iron, and is chlorinated.

SHELBYVILLE: Three wells, located about 3 miles southwest of town, furnish the water supply for Shelbyville (population 4821).

The wells, spaced 300 feet apart, were drilled in 1955 by Layne-Western Company, Kirkwood, Missouri, and have finished depths of 54 to 60 feet. All are gravel packed and have a 12-inch casing and 15 feet of Layne stainless steel screen. The gravel-pack envelopes on these wells range from 11 to 13 inches thick. Production tests were conducted on the completed wells as indicated below:

| | No. 1 | No. 2 | No. 3 |
|---|---|---|---|
| Length of test, hours | 6.5 | 12 | 24 |
| Pumping rate, gpm | 328 | 545 | 500 |
| Nonpumping water level, ft | 22.2 | 18.5 | 15.5 |
| Drawdown, ft | 6.5 | 11.2 | 10.3 |

Although all wells are equipped with 500-gpm turbine pumps, the practical sustained yield of the existing well field is estimated to be 900 gpm or 1.3 mgd. A total of 2.0 mgd can probably be developed if additional, widely spaced wells are constructed farther to the south nearer the Kaskaskia River.

Pumpage is reported to average 500,000 gallons a day.

Analyses of samples (see appendix A) showed the water to have a range in hardness of 275 to 475 ppm, total dissolved minerals of 400 to 500 ppm, and an iron content of 0.1 ppm.

The water is chlorinated.

SIGEL: The town of Sigel (population 387) uses one well, located near the center of town, as a source of water supply. It was completed in 1954 by Holkenbrink Drilling Company, Effingham, to a depth of 65 feet. It is 8 inches in diameter and equipped with 10 feet of No. 20 slot well screen. During a production test the well produced 31 gpm for 21 hours with a drawdown of 36.5 feet from a nonpumping water level of 15.5 feet below the top of the casing. A submersible pump is installed in the well.

Average daily pumpage is estimated to be 8500 gallons.

Analysis of a sample (appendix A, Lab. No. 144606) showed the water to have a hardness of 217 ppm, total dissolved minerals of 372 ppm, and an iron content of 2.7 ppm.

The water is aerated, settled, chlorinated, and filtered to remove iron; and is softened to an average of 89 ppm.

STEWARDSON: The village of Stewardson (population 656) now uses one well, in the southeast part of town, as a source of water supply. It was drilled in 1955 by E. C. Baker and Sons, Sigel, to a depth of 50 feet. It has a 10-inch outer casing to a depth of 40 feet and an 8-inch inner casing to a depth of 50 feet. The 10 feet of exposed 8-inch pipe was perforated with 1/8-inch slots. Upon completion, the well produced 150 gpm for 6 hours with a drawdown of 5 feet from a nonpumping water level 9.4 feet below the top of the casing. It is equipped with a 100-gpm turbine pump.

Average daily pumpage is estimated to be 27,000 gallons.

Analysis of a sample (appendix A, Lab. No. 137786) showed the water to have a hardness of 288 ppm, total dissolved minerals of 371 ppm, and an iron content of 1.0 ppm.

The water is aerated, settled, and filtered to remove iron.

STRASBURG: The village of Strasburg (population 467) uses one well, located about 4.5 miles southeast of town, for a municipal water supply. It was constructed in 1964 by E. C. Baker and Sons, Sigel, to a depth of 37 feet. It is a 6-inch well with 6.5 feet of No. 80 slot Johnson Red Brass well screen. During a 3"hour production test, the well produced 72 gpm with a drawdown of 10 feet from a nonpumping water level 4 feet below the land surface. The permanent pump is a 50-gpm submersible.

Average daily pumpage is estimated to be 25,000 gallons.

Analysis of a sample (appendix A, Lab. No. 162782) showed the water to have a hardness of 348 ppm, total dissolved minerals of 489 ppm, and an iron content of 2.6 ppm.

The water is aerated and filtered to remove iron, softened to an average of 176 ppm, and chlorinated.

TOWER HILL: The village of Tower Hill (population 700) now uses two wells, located about 1.25 miles east of town, as a source of water supply. These are the only municipal wells in Shelby County that tap water-bearing sandstone formations in the bedrock.

The older well was drilled in 1950 by E. C. Baker and Sons, Sigel, to a depth of 50 feet below land surface. It is 24 inches in diameter to a depth of 17 feet and 10 inches in diameter from 17 to 50 feet. Upon completion, the well was pumped at a rate of 50 gpm for 14 hours with a drawdown of 15 feet from a nonpumping water level of 6 feet below ground level. The well is equipped with a 15-gpm submersible pump.

The other well, drilled in 1950 by E. C. Baker and Sons, is about 600 feet north of the first well. It is an 8-inch well 59 feet deep. During a 6-hour production test, the well was pumped at rates from 8.5 to 21.5 gpm with a final drawdown of 27.5 feet from a nonpumping water level 8 feet below ground surface. A 10-gpm submersible pump is installed in the well. The safe yield of the existing well field is estimated to be 25,000 gallons per day, or 17 gpm.

Average daily pumpage is estimated to be 20,000 gallons.

Analysis of a sample (appendix A, Lab. No. 123680) showed the water to have a hardness of 259 ppm, total dissolved minerals of 337 ppm, and an iron content of 2.6 ppm.

The water is not treated.

WINDSOR: The city of Windsor (population 1021) uses three wells as a source of water supply.

Two of the wells are located about 1.5 miles south of town and were drilled 120 feet apart in 1951 and 1952 by E. C. Baker and Sons, Sigel, to depths of 99 and 95 feet. They are 7.5-inch wells and have 1/8-inch slots cut in the lower 6 feet of casing. Submersible pumps of 50 and 60 gpm capacity are installed in the wells.

One standby well, located in town, was drilled in 1949 by Hayes and Sims, Champaign, to a depth of 131 feet. It is a 12-inch well equipped with 11 feet of No. 25 slot well screen. Upon completion, the well produced 33.5 gpm for 7 hours with a drawdown of 87 feet from a nonpumping water level 28.5 feet below ground surface. A 20-gpm submersible pump is installed in the well.

Average daily pumpage is estimated to be 78,000 gallons.

Analysis of a sample (appendix A, Lab. No. 115143) showed the water to have a hardness of 331 ppm, total dissolved minerals of 573 ppm, and an iron content of 5.4 ppm. Methane gas is also present in the water.

The water is aerated, filtered, and chlorinated.

# APPENDIX A - CHEMICAL QUALITY OF GROUNDWATER

Tabulated data of mineral content for groundwater supplies in Shelby County follow.

Symbols used in the tabulations are:

D - glacial drift
BR - bedrock
* - State Department of Public Health chemical analyses

The sources and significance of the major dissolved elements and substances in groundwater, their ranges in waters of Shelby County, and U. S. Public Health Service drinking water limits (1962) are included in table 1.

# Appendix A. Chemical quality of groundwater

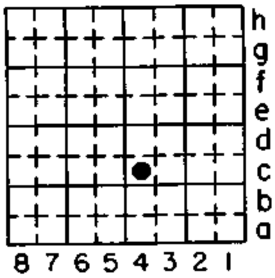
| Well number | Owner | Depth | Source | Laboratory number | Iron Fe | Manganese Mn | Ammonium $NH_4$ | Sodium Na | Calcium Ca | Magnesium Mg | Silica $SiO_2$ | Fluoride F | Nitrate $NO_3$ | Chloride Cl | Sulfate $SO_4$ | Alkalinity (as $CaCO_3$) | Hardness (as $CaCO_3$) | Total dissolved minerals | Temperature °F |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T9N, R2E | | | | | | | | | | | | | | | | | | | |
| 17.5d | Herrick (V) | 30 | D | 155044 | 8.7 | .4 | -- | -- | -- | -- | -- | .4 | 5.3 | 10 | -- | 244 | 236 | 312 | -- |
| T9N, R3E | | | | | | | | | | | | | | | | | | | |
| 10.1g1 | Cowden (V) | 51 | D | 91357 | .2 | .0 | .1 | 64 | 83.1 | 8.4 | 15 | -- | 1.2 | 11 | 81 | 282 | 242 | 437 | -- |
| 10.1g2 | Cowden (V) | 53 | D | 115229 | .1 | Tr | Tr | 3 | 87.3 | 34.5 | 20 | .1 | 9.5 | 7 | 62 | 284 | 361 | 420 | -- |
| 10.1g3 | Cowden (V) | 52 | D | 136069 | .2 | .1 | Tr | 14 | 83.5 | 31.9 | 16 | .4 | 10.1 | 7 | 59 | 292 | 340 | 404 | -- |
| 15.3h | James Beaumont | 45 | D | 136352 | 2.8 | -- | -- | -- | -- | -- | -- | .1 | .6 | 59 | -- | 280 | 280 | 421 | 56 |
| T9N, R5E | | | | | | | | | | | | | | | | | | | |
| 4.6a | Henry Vonderheid | 184 | BR | 169753 | .5 | -- | -- | -- | -- | -- | -- | -- | -- | 64 | -- | 456 | 20 | 609 | -- |
| 6.6h | Everett Kessler | 160 | BR | 169750 | .1 | -- | -- | -- | -- | -- | -- | -- | -- | 208 | -- | 520 | 10 | 948 | -- |
| 11.2d | Mound School | 220 | BR | 169756 | 6.5 | -- | -- | -- | -- | -- | -- | -- | -- | 7 | -- | 344 | 112 | 378 | -- |
| T9N, R6E | | | | | | | | | | | | | | | | | | | |
| 14.2f4 | Sigel (T) | 65 | D | 144606 | 2.7 | Tr | .3 | 59 | 49.5 | 22.6 | 17 | .5 | .4 | 17 | 5 | 316 | 217 | 372 | 56 |
| 15.5a | Francis Stodden | 267 | BR | 169751 | 1.0 | -- | -- | -- | -- | -- | -- | -- | -- | 3150 | -- | 880 | 84 | 6395 | -- |
| 16.1g2 | Bernard Schumacher | 43 | D | 149862 | 7.2 | -- | -- | -- | -- | -- | -- | -- | -- | 10 | -- | 320 | 475 | 590 | -- |
| T10N, R4E | | | | | | | | | | | | | | | | | | | |
| 1.2f | Henry Biedert | 24 | D | 81112 | .0 | .0 | .1 | 47 | 89.2 | 36.0 | 10 | -- | 119.6 | 56 | 53 | 242 | 371 | 560 | -- |
| 4.8g | Government Land Bank | 50 | D | 80885 | .3 | .0 | .1 | 43 | 80.4 | 30.7 | 12 | -- | 4.9 | 22 | 40 | 344 | 328 | 448 | -- |
| 7.5a | Lewis, Heirs | 48 | D | 80833 | 1.6 | -- | Tr | 41 | 117.0 | 47.8 | 12 | -- | 4.0 | 54 | 101 | 394 | 489 | 642 | -- |
| 8.7a | Ruby Strohl | 40 | D | 80832 | .4 | -- | Tr | 30 | 120.0 | 40.1 | 12 | -- | 49.7 | 35 | 155 | 280 | 465 | 630 | -- |
| 10.5g | Frank Wheat | 34 | BR | 81054 | Tr | Tr | Tr | 54 | 90.0 | 25.9 | 9 | -- | 19.5 | 53 | 105 | 250 | 332 | 546 | -- |
| 17.8e | Ollie Reid | 89 | BR | 169754 | 5.4 | -- | -- | -- | -- | -- | -- | -- | -- | 15 | -- | 408 | 568 | 756 | -- |
| 20.4d | T. C. Dove | 31 | D | 81130 | .0 | .0 | Tr | 95 | 58.2 | 21.5 | 10 | -- | 38.9 | 37 | 55 | 300 | 234 | 492 | -- |
| T10N, R5E | | | | | | | | | | | | | | | | | | | |
| 1.4a | Orville Bauer | 221 | BR | 130618 | 1.0 | -- | -- | -- | -- | -- | -- | -- | -- | 2450 | -- | 800 | 40 | 5028 | -- |
| 3.1h | Edgar Schlecte | 18 | D | 157055 | .4 | -- | -- | -- | -- | -- | -- | -- | 32.0 | 30 | -- | 196 | 396 | 598 | -- |
| 22.4h | John Falk | 138 | BR | 163802 | .2 | -- | -- | -- | -- | -- | -- | -- | -- | 20 | -- | 544 | 24 | 615 | -- |
| 23.8g | Stewardson-Strasburg Comm. Schools | 170 | BR | 165386 | -- | -- | -- | -- | -- | -- | -- | .6 | 2.3 | 256 | -- | 456 | 12 | 969 | -- |
| 23.8h | Stewardson-Strasburg Comm. Schools | 170 | BR | 165385 | 1.5 | .06 | -- | -- | -- | -- | -- | .6 | 2.4 | 240 | -- | 448 | 12 | 943 | -- |
| 34.5c | Stewardson (V) | 20 | D | 37049 | .6 | -- | -- | -- | -- | 196.0 | -- | -- | 110.0 | 93 | 193 | 256 | 432 | 885 | -- |
| 35.7a2 | Stewardson (V) | 50 | D | 137786 | 1.0 | -- | -- | -- | -- | -- | -- | .3 | .1 | 5 | -- | 316 | 288 | 371 | 56 |
| T10N, R6E | | | | | | | | | | | | | | | | | | | |
| 5.7c | R. Ensign | 140 | BR | 90716 | .5 | -- | -- | -- | -- | -- | -- | -- | -- | 547 | 17 | 132 | 192 | 1192 | -- |
| 15.4b | Orville Wassom | 35 | D | 150417 | 1.5 | -- | -- | -- | -- | -- | -- | -- | 11.8 | 20 | -- | 320 | 390 | 616 | -- |
| 18.8d7 | Strasburg (V) | 37 | D | 162782 | 2.6 | .27 | -- | -- | -- | -- | -- | .3 | .9 | 7 | -- | 324 | 348 | 489 | 55 |
| T11N, R2E | | | | | | | | | | | | | | | | | | | |
| 15.5a | Tower Hill (V) | 30 | D | 150927 | 6.5 | .3 | -- | -- | -- | -- | -- | .5 | .9 | 7 | -- | 208 | 212 | 311 | -- |
| 22 | L. C. Cannon | 30 | D | 85961 | .1 | -- | -- | -- | -- | -- | -- | -- | -- | 56 | -- | -- | 568 | 835 | -- |
| 22 | Mrs. Ida Foltz | 14 | D | 91718 | .3 | -- | -- | -- | -- | -- | -- | -- | -- | 58 | -- | 412 | 668 | 1060 | -- |
| 22.1f | Tower Hill (V) | 35 | D | 150926 | 8.7 | .3 | -- | -- | -- | -- | -- | .3 | 3.3 | 25 | -- | 244 | 420 | 529 | -- |
| 23.2g3 | Tower Hill (V) | 50 | BR | 123680 | 2.6 | -- | -- | -- | -- | -- | -- | -- | -- | 9 | -- | 272 | 259 | 337 | 56 |
| 23.2h3 | Tower Hill (V) | 59 | BR | 123246 | 3.6 | -- | -- | -- | -- | -- | -- | .3 | -- | 9 | -- | 312 | 247 | 335 | 55 |
| 23.7g2 | Tower Hill (V) | 77 | BR | 144607 | 2.9 | .1 | .6 | 44 | 63.0 | 16.4 | 24 | .3 | .0 | 24 | 2 | 284 | 224 | 376 | -- |
| 23.8e5 | Tower Hill (V) | 36 | D | 121992 | 1.5 | -- | -- | -- | -- | -- | -- | .3 | -- | 15 | 3 | 272 | 251 | 314 | 55 |
| 24 | Tower Hill (V) | 37 | D | 122759 | 10.8 | -- | -- | -- | -- | -- | -- | .3 | .0 | 5 | -- | 272 | 262 | 321 | -- |
| T11N, R3E | | | | | | | | | | | | | | | | | | | |
| 1.1d | J. I. Reed | 72 | D | 165926 | 8.9 | -- | 10.7 | -- | -- | -- | -- | -- | -- | 33 | -- | 648 | 400 | 722 | -- |
| 14.4a | T. C. Dove | 72 | D | 140406 | 2.4 | -- | -- | 92 | -- | -- | -- | -- | -- | 61 | 26 | 440 | 352 | 563 | -- |
| 21.1d | R. A. Creswell | 94 | BR | 169749 | 4.6 | -- | -- | -- | -- | -- | -- | -- | -- | 1010 | -- | 464 | 252 | 2276 | -- |
| 23.2h1 | Henry Hortenstine | 69 | D | 140407 | .9 | -- | -- | 3 | -- | -- | -- | -- | -- | 4 | 59 | 264 | 324 | 334 | -- |
| 23.2h2 | Shelbyville (C) | 51 | D | 37529* | .5 | .15 | -- | 33 | 93.0 | 37 | -- | -- | 6.2 | 31 | 73 | 332 | 384 | 470 | -- |
| 25.7e | Dr. C. A. Spears | 51 | D | 152857 | .1 | .0 | -- | -- | -- | -- | -- | -- | 5.7 | 4 | -- | 260 | 286 | 316 | -- |
| 26.3h | John & Owen Shull | 55 | D | 135710 | Tr | -- | -- | -- | -- | -- | -- | -- | -- | 15 | -- | 340 | 428 | 513 | -- |
| 26.4h1 | Shelbyville (C) | 52 | D | 136376 | .2 | .3 | -- | -- | -- | -- | -- | .1 | 5.7 | 33 | -- | 360 | 448 | 504 | 54 |
| 26.4h3 | Shelbyville (C) | 60 | D | 41274* | .1 | .2 | 0 | 5 | 66 | 29 | 8 | .0 | 1.4 | 5 | 35 | 250 | 284 | 390 | -- |
| 26.4h5 | Shelbyville (C) | 54 | D | 137848 | .1 | .4 | .5 | 0 | 117.6 | 43.7 | 17 | .1 | 2.2 | 24 | 87 | 348 | 474 | 508 | 55 |

# Appendix A (Continued)

| Well number | Owner | Depth | Source | Laboratory number | Iron Fe | Manganese Mn | Ammonium $NH_4$ | Sodium Na | Calcium Ca | Magnesium Mg | Silica $SiO_2$ | Fluoride F | Nitrate $NO_3$ | Chloride Cl | Sulfate $SO_4$ | Alkalinity (as $CaCO_3$) | Hardness | Total dissolved minerals | Temperature °F |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **T11N, R4E** | | | | | | | | | | | | | | | | | | | |
| -- | Isaac Neut | 23 | D | 39029 | 1.6 | .40 | -- | 28 | 78.4 | 29.5 | -- | -- | 2.6 | 26 | 86 | 280 | 341 | 460 | -- |
| 8.6a | Shelbyville (C) | 26 | D | 134307 | 1.4 | 1.00 | -- | -- | -- | -- | -- | -- | -- | 48 | 296 | 364 | 364 | 856 | -- |
| 8.6a | Shelbyville (C) | 26 | D | 134514 | 1.0 | 1.70 | -- | -- | -- | -- | -- | -- | -- | 56 | 338 | 380 | 332 | 976 | -- |
| 22.1g1 | John Switzer | 57 | D | 111235 | 11.9 | -- | -- | -- | -- | -- | -- | -- | -- | 33 | -- | 800 | 523 | 925 | -- |
| 22.1g2 | John Switzer | 72 | D | 81111 | 4.4 | .0 | 25.3 | 101 | 119.6 | 40.7 | 10 | -- | 2.0 | 27 | 0 | 716 | 467 | 697 | -- |
| **T11N, R5E** | | | | | | | | | | | | | | | | | | | |
| 3.2b | T. D. Hennigh | 105 | D | 170018 | 1.8 | -- | 7.9 | -- | -- | -- | -- | -- | -- | 8 | -- | 464 | 136 | 529 | 59 |
| 12.7h1 | Windsor (C) | 86 | D | 75696 | 4.0 | .0 | 8.2 | 109 | 66.2 | 34.2 | 10 | -- | .9 | 4 | 0 | 560 | 306 | 569 | -- |
| 12.7h3 | Windsor (C) | 101 | D | 115143 | 5.4 | .0 | 13.4 | 90 | 71.7 | 36.7 | 29 | .2 | .2 | 3 | 0 | 560 | 331 | 573 | 56 |
| 12.7h4 | Windsor (C) | 99 | D | 145470 | 6.0 | .0 | 8.2 | 35 | 73 | 39.5 | 18 | .7 | 5.5 | 5 | 0 | 432 | 344 | 446 | 56 |
| 12.7h5 | Windsor (C) | 98 | D | 128973 | 5.7 | .0 | 15.4 | 79 | 71.4 | 36.6 | 27 | .4 | 1.2 | 3 | 2 | 536 | 329 | 556 | 57 |
| 13.1g | J. Turner | 265 | BR | 103064 | .9 | -- | -- | -- | -- | -- | -- | -- | -- | 2350 | -- | 678 | 89 | 5222 | 55 |
| 15.4a | Clark Schmidt | 68 | D | 156933 | 1.1 | -- | 11.8 | -- | -- | -- | -- | -- | 28.6 | 60 | -- | 548 | 736 | 1028 | -- |
| 22.6d | Roy F. Schmidt | 26 | D | 156932 | 10.0 | -- | 21.9 | -- | -- | -- | -- | -- | 9.1 | 11 | -- | 592 | 502 | 604 | -- |
| **T11N, R6E** | | | | | | | | | | | | | | | | | | | |
| 20.7h | Lloyd Elson | 259 | BR | 169752 | 2.9 | -- | -- | -- | -- | -- | -- | -- | -- | 3950 | -- | 620 | 84 | 7508 | -- |
| **T12N, R2E** | | | | | | | | | | | | | | | | | | | |
| 1.4b | Dudley Smith | 190 | BR | 169748 | .4 | -- | 2.2 | -- | -- | -- | -- | -- | .4 | 500 | -- | 456 | 200 | 1309 | -- |
| 18.6621 | Assumption (C) | 24 | D | 115314 | .3 | .3 | Tr | 9 | 91 | 29.4 | 19 | .3 | .3 | 7 | 125 | 228 | 349 | 412 | 54 |
| 18.6d1 | Assumption (C) | 28 | D | 141834 | 9.9 | -- | -- | -- | -- | -- | -- | .2 | .2 | 8 | -- | 232 | 216 | 276 | 57 |
| **T12N, R3E** | | | | | | | | | | | | | | | | | | | |
| 16.1a | Westervelt H.S. | 75 | D | 90574 | 8.7 | -- | -- | -- | -- | -- | -- | -- | -- | 67 | -- | 448 | 399 | 648 | -- |
| **T12N, R4E** | | | | | | | | | | | | | | | | | | | |
| 3.8g1 | Findlay (V) | 167 | D | 75739 | 2.8 | .0 | 8.5 | 167 | 51.6 | 26.0 | 12 | -- | 1.3 | 86 | 8 | 512 | 236 | 659 | -- |
| 3.8g2 | Findlay (V) | 171 | D | 75860 | 4.0 | .0 | 9.5 | 179 | 46.4 | 26.2 | 12 | -- | 1.3 | 97 | 12 | 490 | 224 | 705 | -- |
| 3.8g3 | Findlay (V) | 154 | D | 115228 | 4.8 | .0 | 11.3 | 148 | 58.9 | 27.9 | 23 | .3 | .4 | 82 | 0 | 500 | 263 | 642 | 58 |
| 33.2b | Martha James | 165 | D | 72585 | 1.2 | 0 | .1 | 82 | 55.6 | 25.7 | 8 | -- | .4 | 34 | 44 | 328 | 245 | 455 | -- |
| **T12N, R5E** | | | | | | | | | | | | | | | | | | | |
| 6.1e | Leroy Hugo | 200 | BR | 137257 | 1.6 | -- | -- | -- | -- | -- | -- | -- | -- | 5700 | -- | 320 | 730 | 9858 | -- |
| 18.7b | Boy Scouts of America | 137 | BR | 144060 | .9 | -- | -- | -- | -- | -- | -- | -- | -- | 1700 | -- | 524 | 96 | 3394 | -- |
| 36 | Windsor Comm. H.S. | 100 | D | 78851 | .6 | .0 | 2.8 | 117 | 31.3 | 16.6 | 10 | -- | 1.2 | 17 | 0 | 384 | 147 | 469 | -- |
| 36.5b3 | Windsor (C) | 134 | D | 75526 | 3.0 | .1 | 3.9 | 148 | 49.6 | 21.0 | 15 | -- | 1.6 | 15 | 0 | 520 | 211 | 590 | -- |
| 36.5c2 | Windsor (C) | 132 | D | 117362 | 4.1 | .0 | 5.1 | 141 | 53.9 | 21.6 | 26 | .3 | .1 | 21 | 3 | 512 | 224 | 591 | 59 |
| 36.6b | Windsor (C) | 85 | D | 75175 | 25.0 | .0 | 5.2 | 78 | 66.8 | 29.8 | 15 | -- | 1.9 | 0 | 5 | 468 | 290 | 472 | -- |
| **T13N, R3E** | | | | | | | | | | | | | | | | | | | |
| 1.1g | George Reuss | 50 | D | 81030 | 1.0 | .0 | 3.1 | 100 | 66.5 | 30.1 | 12 | -- | 1.4 | 40 | 3 | 456 | 290 | 543 | -- |
| 12.1b | Henry Atkinson | 95 | D | 81029 | 1.2 | .0 | 2.0 | 126 | 36.2 | 10.2 | 12 | -- | 1.7 | 22 | 2 | 376 | 132 | 426 | -- |
| 16.1e | Dr. C. D. Casey | 224 | BR | 103710 | 2.0 | -- | -- | -- | -- | -- | -- | -- | -- | 83 | -- | 468 | 125 | 638 | -- |
| 28.1a | J. R. Ward | 241 | BR | 134067 | 3.8 | -- | -- | -- | -- | -- | -- | -- | -- | 69 | -- | 484 | 192 | 746 | -- |
| 35.5h2 | Roy Macklin | 232 | BR | 134066 | 4.0 | -- | -- | -- | -- | -- | -- | -- | -- | 2650 | -- | 296 | 344 | 5340 | -- |
| **T13N, R4E** | | | | | | | | | | | | | | | | | | | |
| 16.2g | Raymond Robinson | 265 | BR | 169755 | 2.3 | -- | -- | -- | -- | -- | -- | -- | -- | 1600 | -- | 800 | 40 | 3485 | -- |
| 19.1g | Birkett L. Williams | 11 | D | 141833 | 1.8 | .3 | -- | -- | -- | -- | -- | -- | -- | 38 | -- | 396 | 524 | 600 | -- |
| **T14N, R2E** | | | | | | | | | | | | | | | | | | | |
| 20.7h | Marjorie Porter | 29 | D | 168986 | Tr | -- | -- | -- | -- | -- | -- | -- | 95.8 | 58 | -- | 280 | 660 | 913 | -- |
| **T14N, R3E** | | | | | | | | | | | | | | | | | | | |
| 21.3e | M. A. Sanner & B. S. Clark | 26 | D | 80800 | .1 | .0 | Tr | 29 | 144.0 | 78.3 | 10 | -- | 173.0 | 93 | 218 | 248 | 682 | 937 | -- |
| 27.1d1 | Naomi Coultas | 99 | D | 80798 | 3.0 | .0 | 3.4 | 126 | 88.0 | 46.1 | 14 | -- | 3.4 | 59 | 13 | 594 | 410 | 709 | -- |
| 32.6h | George Elliott | 100 | D | 143748 | 39.0 | -- | -- | -- | -- | -- | -- | -- | -- | 100 | -- | 428 | 976 | 1365 | -- |
| 35.1e | D. E. Baird | 65 | D | 80799 | 4.0 | Tr | 11.3 | 132 | 126.0 | 50.8 | 14 | -- | 2.7 | 77 | 6 | 726 | 524 | 882 | -- |

## APPENDIX B - RECORDS OF WELLS

The well-numbering system used in this report is based on the location of the well, and uses the township, range, and section for identification. The well number consists of five parts: county abbreviation (SHL), township (T), range (R), section, and coordinate within the section. Sections are divided into rows of 1/8-mile squares. Each 1/8-mile square contains 10 acres and corresponds to a quarter of a quarter of a quarter section. A normal section of 1 square mile contains 8 rows of 1/8-mile squares; an odd-sized section contains more or fewer rows. Rows are numbered from east to west and lettered from south to north as shown in the diagram.



Shelby County
T11N, R4E
Section 23

The number of the well shown is SHL 11N4E-23.4c. Where there is more than one well in a 10-acre square they are identified by arabic numbers after the lower case letter in the well number.

In the listing of wells owned by municipalities, the place-name is followed by V, T, or C in parentheses to indicate whether it is a village, town, or city, except where the word City is part of the place-name.

Owners are listed according to the most current information available - the 1964 plat book and recent well records for Shelby County.

Symbols and abbreviations shown indicate the following:

→ - constructed before year given, exact date unknown
* - test hole not developed as well
** - abandoned well
drv - driven well
drl - drilled well
bor - bored well
drl-GP - drilled well, gravel packed

The types of wells and methods of construction used in Shelby County, their susceptibility to surface contamination, and methods of disinfection are discussed in the text of this report.

# Appendix B. Record of wells

| Well number | Owner | Well | | | | Screen | | | Land surface elev (ft above msl) | Non-pumping water level (ft) | Draw-down (ft) | Pumping rate (gpm) | Observed specific capacity (gpm/ft) | Length of test (hr) | Water-bearing formation and depth (ft) | Driller |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Year con-structed | Type | Depth (ft) | Diam (in) | Length (ft) | Diam (ft) | Slot size (in) | | | | | | | | |
| T9N, R1E | | | | | | | | | | | | | | | | |
| 4.5h | Richard Temmen | 1964 | dug & drl | 26 | 7-6 | 6 | 6 | .040 | 650 | -- | -- | -- | -- | -- | Sand & gravel, 20-26 | Baker |
| 4.8b | Cletus Tex | +1926 | dug | 20 | -- | -- | -- | -- | 655 | -- | -- | -- | -- | -- | -- | -- |
| 5.4a | Malcolm Price | -- | dug | -- | 36 | -- | -- | -- | 668 | 13 | -- | -- | -- | -- | -- | -- |
| 7.7g | Shubel Burnett | 1963 | drl | 42 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | * | Stevens |
| 7.8g | Shubel Burnett | 1963 | drl | 107 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | * | Stevens |
| 8.2a | Joe Flesch | -- | dug | -- | 48 | -- | -- | -- | 655 | 5.2 | -- | -- | -- | -- | -- | -- |
| 11.1h | John Kay | 1964 | bor | 51 | 18 | -- | -- | -- | 635 | 13.1 | -- | -- | -- | -- | -- | Luttrell |
| 12.4c | Ross Chamberlain | 1965 | bor | 42 | 18 | -- | -- | -- | 605 | 7.6 | -- | -- | -- | -- | -- | Luttrell |
| 13.3f | Paul Temmen | 1963 | drl | 25 | 6 | 3 | 6 | .040 | 600 | -- | -- | -- | -- | -- | Sand & gravel, 24-25 | Baker |
| 14.5a | C. E. Chamberlain | -- | dug | 40 | 30 | -- | -- | -- | 585 | 35.2 | -- | -- | -- | -- | -- | -- |
| 18.6b | Gus Behl | -- | dug | -- | 48 | -- | -- | -- | 655 | 2.3 | -- | -- | -- | -- | -- | -- |
| T9N, R2E | | | | | | | | | | | | | | | | |
| 2.6h | Herrick (V) | 1964 | drl | 52 | -- | -- | -- | -- | 590 | -- | -- | -- | -- | -- | *Mud sand, 24-30 | Baker |
| 2.7h | Herrick (V) | 1964 | drl | 75 | -- | -- | -- | -- | 590 | -- | -- | -- | -- | -- | *Sand & gravel, 23-75 | Baker |
| 4.7c | Mason Horsman | -- | drl | 56 | 4 | 4 | 2 | .025 | 598 | 15 | 35 | 5 | 0.1 | 6 | Sand & gravel, 53-56 | Fleming |
| 7 | P. W. Stephens | 1950 | drl | 30 | 10 | 10 | 10 | .100 | -- | 16 | 6 | 20 | 3.3 | 6 | Sand & gravel, 20-30 | Baker |
| 10.3c | Herrick (V) | 1964 | drl | 62 | -- | -- | -- | -- | 600 | -- | -- | -- | -- | -- | * | Baker |
| 10.3h | Maurice Buchanan | 1963 | drl | 28 | 6 | 3 | 6 | .040 | 595 | 16.5 | 9.5 | 5 | 0.5 | 2 | Sand & gravel, 25-28 | Baker |
| 12.2f | A. F. Sarver | 1956 | drl | 81 | 6 | 3 | 6 | .040 | 560 | 31.5 | 43.5 | 3 | 0.1 | 4 | Sand & gravel, 78-81 | Baker |
| 16 | Herrick (V) | 1941 | drl | 60 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | *Sand & gravel, at 60 | -- |
| 16.1e | Herrick (V) | 1941 | drl | 40 | -- | -- | -- | -- | 585 | -- | -- | -- | -- | -- | *Sand & gravel, 10-20 | Baker |
| 16.2a | Shelby Co. Hwy. | 1938 | drl | 29 | -- | -- | -- | -- | 550 | -- | -- | -- | -- | -- | * | -- |
| 16.2c | Herrick (V) | 1941 | drl | 80 | -- | -- | -- | -- | 560 | -- | -- | -- | -- | -- | * | Baker |
| 16.4e | Herrick Sch. Dist. 154 | 1937 | drl | 128 | -- | -- | -- | -- | 590 | -- | -- | -- | -- | -- | *Sand, 21-30; sand & gravel, 119-128 | Baker |
| 16.6d | J. E. Burns | +1912 | dug | 16 | -- | -- | -- | -- | 595 | -- | -- | -- | -- | -- | Sand & gravel, at 16 | -- |
| 16.8a | Herrick (V) | 1941 | drl | 80 | -- | -- | -- | -- | 598 | -- | -- | -- | -- | -- | * | Baker |
| 17.1e | Herrick (V) | 1961 | drl | 50 | -- | -- | -- | -- | 595 | -- | -- | 5 | -- | -- | * | Baker |
| 17.5d | Herrick (V) | 1961 | drl | 30 | -- | -- | -- | -- | 595 | -- | -- | -- | -- | -- | * | -- |
| 17.5e1 | Herrick (V) | 1941 | drl | 70 | -- | -- | -- | -- | 595 | -- | -- | -- | -- | -- | *Sand & gravel, 12-26; sand, 36-44 | Baker |
| 17.5e2 | Herrick (V) | 1961 | drl | 38 | -- | -- | -- | -- | 595 | -- | -- | 5 | -- | -- | *Sand, 11-23, 28-29 | Baker |
| 18.1a | O. D. Corley | -- | drl | 30 | -- | -- | -- | -- | 590 | -- | -- | -- | -- | -- | -- | -- |
| 18.4a | Herrick (V) | 1962 | drl | 29 | -- | -- | -- | -- | 520 | -- | -- | -- | -- | -- | *Dirty sand, 7-27 | Baker |
| 18.5a1 | Herrick (V) | 1962 | drl | 32 | -- | -- | -- | -- | 520 | -- | -- | -- | -- | -- | * | Baker |
| 18.5a2 | Herrick (V) | 1962 | drl | 27 | -- | -- | -- | -- | 520 | -- | -- | -- | -- | -- | *Dirty sand, 7-26 | Baker |
| 18.5a3 | Herrick (V) | 1962 | drl | 27 | -- | -- | -- | -- | 520 | -- | -- | -- | -- | -- | *Dirty sand, 12-22 | Baker |
| 18.5a4 | Herrick (V) | 1962 | drl | 27 | -- | -- | -- | -- | 520 | -- | -- | -- | -- | -- | *Dirty sand, 7-25 | Baker |
| 18.5a5 | Lloyd Hayes | 1964 | drl | 23 | -- | -- | -- | -- | 520 | -- | -- | -- | -- | -- | * | Baker |
| 18.5a6 | Lloyd Hayes | 1964 | drl | 29 | 6 | 3 | 6 | .040 | 520 | 9 | 15 | 9 | 0.6 | 4 | Sand, 25-29 | Baker |
| 18.6a | Lloyd Hayes | 1964 | drl | 58 | -- | -- | -- | -- | 540 | -- | -- | -- | -- | -- | * | Baker |
| T9N, R3E | | | | | | | | | | | | | | | | |
| -- | William Steele | +1918 | dug | 35 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| -- | Harold V. Jones** | -1921 | dug | 15 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Sand, at 15 | -- |
| -- | Harold V. Jones** | +1921 | dug | 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Sand, at 12 | -- |
| -- | Dr. J. B. McCauley | -1922 | dug | 20 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| -- | Cowden School | -- | dug | 19 | -- | -- | -- | -- | -- | -- | -- | 3 | -- | -- | -- | -- |
| 3 | Cowden (V) | 1961 | drl | 27 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | * | Baker |
| 3.8d | W. W. Mance | 1914 | bor | 57 | -- | -- | -- | -- | 600 | -- | -- | -- | -- | -- | -- | -- |
| 4 | Cowden H.S. | 1935 | drl | 82 | -- | -- | -- | -- | -- | -- | -- | 2 | -- | 6 | *Sand & gravel, 43-48 | Baker |
| 4 | Cowden H.S. | 1935 | drl | 91 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Sand, 60-61 | Baker |
| 4.1a | Cowden School | +1920 | dug | 24 | -- | -- | -- | -- | 590 | -- | -- | -- | -- | -- | Sand & gravel, at 24 | -- |
| 5.8b | Walter R. Boehm | 1961 | drl | 104 | 4 | 4 | 2 | .025 | 580 | 20 | 60 | 10 | 0.2 | 5 | Sand & gravel, 65-80, 100-104 | Fleming |
| 6.5e | Gordon Prater | 1947 | drl | 150 | 7 | 3 | 7 | .035 | 590 | 57 | 13 | 10 | 0.8 | 3 | Sand, 137-150 | Baker |
| 10 | Cowden H.S. | 1935 | drl | 72 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | * | Baker |
| 10.1g1 | Cowden (V)** | 1935 | drl | 51 | 10 | 4 | 10 | -- | 520 | 21 | 4 | 20 | 5.0 | 27.5 | Sand & gravel, 47-51 | Baker |
| 10.1g2 | Cowden (V) | 1944 | drl | 53 | 10 | 3 | 10 | .080 | 520 | 16.2 | 20.3 | 225 | 11.1 | 9 | Sand & gravel, 38-53 | Baker |
| | | | | | | 7 | 10 | .150 | | 16.2 | 18.7 | 225 | 12.1 | 9 | | |
| 10.1g3 | Cowden (V) | 1954 | drl | 52 | 10 | 14 | 10 | .060 | 520 | 18.5 | 5.3 | 141 | 26.6 | 4 | Sand & gravel, 25-52 | Baker |
| 10.6e | Richard Soldner | 1962 | drl | 116 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | *Sand & gravel, 48-51, 81-90 | Baker |
| 10.6f | Richard Soldner | 1962 | drl | 61 | -- | -- | -- | -- | 590 | -- | -- | -- | -- | -- | *Sand, 34-39 | Baker |
| 13.1c | Dr. Peter Kallinger | 1957 | drl | 70 | -- | -- | -- | -- | 600 | -- | -- | -- | -- | -- | *Sandstone, 60-68 | Baker |
| 15.3h | James Beaumont | 1954 | drl | 45 | 10 | 20 | 8 | slotted pipe | 520 | 14.8 | 4.5 | 250 | 55.5 | 5 | Sand & gravel, 18-45 | Baker |
| 17.5e1 | Burl Evans | 1955 | drl | 138 | -- | -- | -- | -- | 570 | -- | -- | -- | -- | -- | * | Baker |
| 17.5e2 | Burl Evans | 1955 | drl | 57 | -- | -- | -- | -- | 570 | -- | -- | -- | -- | -- | * | Baker |
| 17.5e3 | Burl Evans | 1955 | drl | 40 | -- | -- | -- | -- | 570 | -- | -- | -- | -- | -- | * | Baker |
| T9N, R4E | | | | | | | | | | | | | | | | |
| 2.1c | Harold Ulhorn | 1920 | dug | 15 | 30 | -- | -- | -- | 620 | 3 | -- | -- | -- | -- | -- | -- |
| 3.8c | E. F. Dove | -- | dug | 12 | 36 | -- | -- | -- | 610 | 2 | -- | -- | -- | -- | -- | -- |
| 6.3e1 | Paul Jones | -- | dug | 20 | 30 | -- | -- | -- | 595 | 3.5 | -- | -- | -- | -- | -- | -- |
| 6.3e2 | Paul Jones | -- | dug | 18 | 36 | -- | -- | -- | 595 | -- | -- | -- | -- | -- | -- | -- |
| 7.8b | James Miller | -- | dug | 29 | 48 | -- | -- | -- | 560 | 18.3 | -- | -- | -- | -- | -- | -- |
| 14.1g1 | Joseph Waldhoff | -- | dug | 14 | 96 | -- | -- | -- | 620 | 4.5 | -- | -- | -- | -- | -- | -- |
| 14.1g2 | Joseph Waldhoff | 1955 | dug | 26 | 72 | -- | -- | -- | 620 | 8 | -- | -- | -- | -- | -- | -- |
| 15.7d | Alva Brandt | -- | dug | 17 | 30 | -- | -- | -- | 610 | 3 | -- | -- | -- | -- | -- | -- |

# Appendix B (Continued)

| | | Well | | | | Screen | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Well number | Owner | Year con-structed | Type | Depth (ft) | Diam (in) | Length (ft) | Diam (ft) | Slot size (in) | Land surface elev (ft above msl) | Non-pumping water level (ft) | Draw-down (ft) | Pumping rate (gpm) | Observed specific capacity (gpm/ft) | Length of test (hr) | Water-bearing formation and depth (ft) | Driller |
| T9N, R5E | | | | | | | | | | | | | | | | |
| 3.1g1 | Stewardson (V) | 1955 | drl | 50 | -- | -- | -- | -- | 632 | -- | -- | -- | -- | -- | *Mud sand, 9-14; sand & gravel, 17-47 | Baker |
| 3.1g2 | Stewardson (V) | 1955 | drl | 42 | -- | -- | -- | -- | 632 | -- | -- | -- | -- | -- | *Mud sand, 10-15; mud sand & gravel, 17-35 | Baker |
| 3.1g3 | Stewardson (V) | 1955 | drl | 40 | -- | -- | -- | -- | 632 | -- | -- | -- | -- | -- | *Sand & gravel, 10-40 | Baker |
| 3.1h1 | Stewardson (V) | 1955 | drl | 32 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | *Sand, 15-25 | Baker |
| 3.1h2 | Stewardson (V) | 1955 | drl | 37 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | *Sand & gravel, 17-37 | Baker |
| 3.1h3 | Stewardson (V) | 1955 | drl | 47 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | *Mud sand, 9-14; sand & gravel, 17-42 | Baker |
| 3.1h4 | Stewardson (V) | 1955 | drl | 39 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | *Sand & gravel, 10-39 | Baker |
| 3.2h1 | Stewardson (V) | 1955 | drl | 47 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | *Sand & gravel, 19-46 | Baker |
| 3.2h2 | Stewardson (V) | 1955 | drl | 46 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | *Sand & gravel, 10-45 | Baker |
| 3.3g | Stewardson (V) | 1955 | drl | 50 | -- | -- | -- | -- | 635 | -- | -- | -- | -- | -- | *Sand & gravel, 14-48 | Baker |
| 3.3h1 | Stewardson (V) | 1955 | drl | 37 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | *Sand, 17-18 | Baker |
| 3.3h2 | Stewardson (V) | 1955 | drl | 17 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | * | Baker |
| 4.6a | Henry Vonderhaid | 1964 | drl | 184 | 6 | 22 | 6 | slotted pipe | 640 | 28 | -- | 13 | -- | -- | Sandstone, 162-184 | Cummins |
| 6.1f | Oscar Kessler | 1961 | drl | 148 | 4 | -- | -- | -- | 636 | 30 | 60 | 4 | 0.1 | 6 | Sandstone, 110-148 | Fleming |
| 6.6h | Everett Kessler | 1961 | drl | 160 | 4 | -- | -- | -- | 628 | 20 | 70 | 2.5 | -- | 7 | Sandstone, 126-147, 155-160 | Fleming |
| 11.2d | Mound School | 1932 | drl | 220 | -- | -- | -- | -- | 650 | -- | -- | -- | -- | -- | Sandstone, 200-220 | Baker |
| 12.8e | Paul Wittenberg | 1958 | drl | 78 | 4 | -- | -- | -- | 652 | 18 | -- | 2 | -- | -- | Sand, 30-37 | Holkenbrink |
| T9N, R6E | | | | | | | | | | | | | | | | |
| 1.4d | Norbert Hoene | 1952 | drl | 67 | 6 | -- | -- | -- | 645 | 3.8 | 51.2 | 5 | 0.1 | 2 | Crack in shale, at 60 | Baker |
| 1.6a | Ambrose Probst | 1962 | drl | 67 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | * | Baker |
| 3.4f1 | Alphonse Hoene | 1955 | dug & drl | 80 | 35-5 | -- | -- | -- | 625 | 7 | -- | 1.5 | -- | -- | Lime, 60-80 | Holkenbrink |
| 3.4f2 | Alphonse Hoene | 1955 | drl | 40 | -- | -- | -- | -- | 625 | -- | -- | 0.5 | -- | -- | * | Holkenbrink |
| 5.6f | Clark Boling | 1955 | drl | 52 | -- | -- | -- | -- | 560 | -- | -- | -- | -- | -- | * | Baker |
| 5.8e | Bessie Boling | 1959 | drl | 42 | 6 | 4 | 6 | .080 | 580 | 28 | 8 | 1 | 0.1 | 5 | Sand & gravel, 38-42 | Baker |
| 9.1h | Albert Hoene | 1964 | drl | 100 | 7 | 70 | 7 | .030 | 620 | 15 | -- | 2 | -- | 0.5 | Sand & gravel, 15-35; sandstone, 55-100 | Woodward |
| 9.8e | Charles Ludwig | 1959 | drl | 60 | 6 | -- | -- | -- | 645 | 20 | 26 | 3 | 0.1 | 6 | Sand & gravel, 36-48; sandy lime, 48-60 | Baker |
| 9.8h1 | Eley's Tavern | 1935 | drl | 60 | 6 | 4 | 6 | .040 | 640 | 15 | 21 | 15 | 0.7 | 1 | Sand & gravel, 48-60 | Baker |
| 9.8h2 | Sinclair Station | 1935 | drl | 58 | 5 | -- | -- | -- | 640 | 14 | 16 | 15 | 0.9 | -- | Sand, 54-58 | Baker |
| 10.3g1 | Harry Schutte | 1955 | drl | 80 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | *Mud sand, 32-37, 57-62, 67-72 | Baker |
| 10.3g2 | Harry Schutte | 1955 | drl | 42 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | * | Baker |
| 10.3g3 | Harry Schutte | 1956 | drl | 52 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | * | Baker |
| 12.2a | Lydia Baker | 1952 | dug & drl | 59 | ?-6 | -- | -- | -- | 641 | 12.5 | 1.5 | 3 | 2.0 | 6 | Sand & gravel, 52-59 | Baker |
| 12.4h1 | Ambrose Probst | 1962 | drl | 62 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | *Dirty sand, 46-47 | Baker |
| 12.4h2 | Ambrose Probst | 1962 | drl | 82 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | * | Baker |
| 12.5h1 | Ambrose Probst | 1962 | drl | 67 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | * | Baker |
| 12.5h2 | Ambrose Probst | 1962 | drl | 30 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | * | Baker |
| 12.5h3 | Ambrose Probst | 1962 | drl | 97 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | * | Baker |
| 12.6h | Ambrose Probst | 1962 | drl | 72 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | * | Baker |
| 14.1g | St. Michael School | 1953 | drl | 220 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | * | Baker |
| 14.1h | Ben Renschen | ~1915 | dug | 25 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | -- | -- |
| 14.2c | Victor Czerwonka | ~1921 | dug | 15 | -- | -- | -- | -- | 635 | -- | -- | -- | -- | -- | -- | -- |
| 14.2e | Sigel (T) | 1954 | drl | 68 | -- | -- | -- | -- | 635 | -- | -- | -- | -- | -- | *Sand, 29-33, 46-67 | Holkenbrink |
| 14.2f1 | Sigel (T) | 1954 | drl | 66 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | *Sand, 48-65 | Holkenbrink |
| 14.2f2 | Sigel (T) | 1954 | drl | 67 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | *Sand, 49-67 | Holkenbrink |
| 14.2f3 | Sigel (T) | 1954 | drl | 67 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | *Sand, 43-45; sand & gravel, 53-67 | Holkenbrink |
| 14.2f4 | Sigel (T) | 1954 | drl | 65 | 8 | 10 | 8 | .020 | 640 | 14<br>11.8 | 36.5<br>42.8 | 31<br>50 | 0.9<br>1.2 | 21<br>8 | Sand, 48-65 | Holkenbrink |
| 14.2g | S. S. Bigler | ~1912 | dug | 25 | -- | -- | -- | -- | 635 | -- | -- | -- | -- | -- | Sand & gravel, at 25 | -- |
| 14.3a | Carl Althoff | 1949 | drl | 57 | 6 | 5 | 6 | .035 | 635 | 4.1 | 20.9 | 3 | 0.1 | -- | Sand & gravel, 50-57 | Baker |
| 14.3f | Sigel (T) | 1954 | drl | 76 | -- | -- | -- | -- | 635 | -- | -- | -- | -- | -- | *Sand, 47-76 | Holkenbrink |
| 14.3g1 | Dr. H. H. C. Henck | ~1915 | dug | 22 | -- | -- | -- | -- | 635 | -- | -- | -- | -- | -- | -- | -- |
| 14.3g2 | Charles Ludwig | 1939 | drl | 57 | -- | -- | -- | -- | 635 | -- | -- | -- | -- | -- | * | Baker |
| 14.4f | Rev. G. E. Faller | 1929 | drl | 121 | 5 | -- | -- | -- | 630 | -- | -- | -- | -- | -- | -- | -- |
| 14.5h1 | Leonard Siemer | ~1909 | dug | 35 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | -- | -- |
| 14.5h2 | Leonard Siemer | 1935 | drl | 58 | 6 | -- | -- | -- | 630 | 14 | 16 | 20 | 1.3 | -- | Sand & gravel, at 58 | Baker |
| 15.3e | Henry Berchtold | ~1915 | dug | 25 | -- | -- | -- | -- | 625 | -- | -- | -- | -- | -- | -- | -- |
| 15.5a | Francis Stodden | 1954 | drl | 267 | 6-5 | -- | -- | -- | 620 | 37 | -- | 4 | -- | -- | Sandstone, 165-188, 221-237; sandstone & shale, 237-267 | Holkenbrink |
| 16.1g1 | B. J. Schumacher | ~1959 | -- | 22 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | -- | -- |
| 16.1g2 | B. J. Schumacher | 1959 | drl | 43 | 6 | 5 | 1.25 | .025 | 630 | -- | -- | 2.5 | -- | -- | Sand & gravel, 39-43 | Baker |
| T10N, R1E | | | | | | | | | | | | | | | | |
| 7.8a | Everett Kuhn | -- | dug | 18 | 48 | -- | -- | -- | 666 | 3.2 | -- | -- | -- | -- | -- | -- |
| 9.5a | Wayne Smith | -- | dug | 18 | 24 | -- | -- | -- | 680 | 5 | -- | -- | -- | -- | -- | -- |
| 12.8a | Kuhn Bros. Garage | ~1928 | spring | -- | -- | -- | -- | -- | 480 | -- | -- | -- | -- | -- | Limestone | -- |
| 14.2h | Ray M. Tuetken | 1966 | drl | 161 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | *Mud sand, 141-149; lime, 157-161 | Baker |
| 29.3f | Telephone Co. | -- | bor | 16 | 18 | -- | -- | -- | 675 | -- | -- | -- | -- | -- | -- | -- |
| 29.4d | Mrs. Bertha Morgan | ~1918 | dug | 25 | -- | -- | -- | -- | 675 | -- | -- | -- | -- | -- | -- | -- |
| 30.7h | Margaret Gudehus | -- | dug | -- | 36 | -- | -- | -- | 660 | 3.9 | -- | -- | -- | -- | -- | -- |
| 32.4h | Herman Hanniken | ~1867 | dug | 14 | 42 | -- | -- | -- | 672 | 3.6 | -- | -- | -- | -- | -- | -- |
| T10N, R2E | | | | | | | | | | | | | | | | |
| 7.6c | Frances Mathewson | -- | drl | 96 | -- | -- | -- | -- | 645 | -- | -- | -- | -- | -- | *Sand, 34-36; sand & gravel, at 96 | Warren |

## Appendix B (Continued)

| | | Well | | | | Screen | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Well number | Owner | Year con- structed | Type | Depth (ft) | Diam (in) | Length (ft) | Diam (ft) | Slot size (in) | Land surface elev (ft above msl) | Non-pumping water level (ft) | Draw-down (ft) | Pumping rate (gpm) | Observed specific capacity (gpm/ft) | Length of test (hr) | Water-bearing formation and depth (ft) | Driller |
| T10N, R2E (Continued) | | | | | | | | | | | | | | | | |
| 11.3d | Clyde Glick | -- | drl | 67 | 4 | 5 | 2 | .025 | 620 | 30 | 25 | 10 | 0.4 | 5 | Sand & gravel, 62-67 | Fleming |
| 15.8a1 | Lyle C. Woodard | 1948 | drl | 99 | 4 | -- | -- | -- | 620 | -- | -- | -- | -- | -- | *Mud sand, at 38 | Baker |
| 15.8a2 | Lyle C. Woodard | 1948 | drl | 49 | -- | -- | -- | -- | 620 | -- | -- | -- | -- | -- | *Mud sand, at 21 | Baker |
| 23.4d | Charles Cunningham | 1946 | drl | 57 | 3 | 4 | 2 | .010 | 690 | 41 | -- | 7 | -- | 2.5 | Sand & gravel, 41-57 | Hanks |
| 25.7a1 | Fred B. Smith | 1946 | drl | 90 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | *Sand, 24-30 | Hanks |
| 25.7a2 | Fred B. Smith | 1946 | drl | 145 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | *Sand, 22-35 | Hanks |
| 25.7a3 | Fred B. Smith | 1946 | drl | 50 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | * | Hanks |
| 26.8d | Virgle L. Walker | 1929 | bor | 40 | 15 | -- | -- | -- | 690 | 30 | -- | -- | -- | -- | -- | -- |
| 27.2a | Franklin Stoneburner | 1946 | drl | 160 | -- | -- | -- | -- | 700 | -- | -- | -- | -- | -- | * | Hanks |
| 27.5a | Carl E. Frost | 1946 | drl | 75 | -- | -- | -- | -- | 720 | -- | -- | -- | -- | -- | *Sand, 51-67 | Hanks |
| 28.1e | Merrell Corley | 1959 | drl | 91 | -- | -- | -- | -- | 650 | -- | -- | -- | -- | -- | * | Baker |
| 32.1e | Ethel Henderson | 1947 | drl | 55 | -- | -- | -- | -- | 600 | -- | -- | -- | -- | -- | *Sand, 30-34 | Hanks |
| 35.6a | Clara Cherry | 1964 | drl | 87 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | * | Baker |
| 35.7a1 | Clara Cherry | 1964 | drl | 73 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | * | Baker |
| 35.7a2 | Clara Cherry | 1964 | drl | 67 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | * | Baker |
| 35.7a3 | Clara Cherry | 1964 | drl | 52 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | * | Baker |
| 35.7a4 | Clara Cherry | 1965 | drl | 51 | 22 | 8 | 22 | 1/8 x 3/8 | 580 | 38.8 | -- | -- | -- | -- | Sand & gravel, 50-51 | Gibbs |
| T10N, R3E | | | | | | | | | | | | | | | | |
| 5.1b | Vernell West | 1964 | drl | 22 | -- | -- | -- | -- | 605 | -- | -- | -- | -- | -- | * | Baker |
| 5.2a1 | Vernell West | 1964 | drl | 57 | -- | -- | -- | -- | 610 | -- | -- | -- | -- | -- | *Sand, 20-28 | Baker |
| 5.2a2 | Vernell West | 1964 | drl | 37 | -- | -- | -- | -- | 610 | -- | -- | -- | -- | -- | *Sand, 16-18 | Baker |
| 5.2b1 | Vernell West | 1963 | drl | 155 | -- | -- | -- | -- | 620 | -- | -- | -- | -- | -- | *Sandstone, 68-87, 149-153 | Baker |
| 5.2b2 | Vernell West | 1964 | drl | 37 | -- | -- | -- | -- | 620 | -- | -- | -- | -- | -- | *Sand, 27-29 | Baker |
| 5.2c | Vernell West | 1964 | drl | 52 | -- | -- | -- | -- | 620 | -- | -- | -- | -- | -- | *Sand, 18-21 | Baker |
| 5.3b | Vernell West | 1964 | drl | 47 | -- | -- | -- | -- | 620 | -- | -- | -- | -- | -- | * | Baker |
| 7.1b | S. H. Sealy | 1955 | drl | 82 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | * | Baker |
| 26.3e | V. A. Lewis | 1964 | drl | 110 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | *Gravel, 31-42 | Baker |
| 27.8c | Gary Harrison | 1950 | drl | 60 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | *Sand, 55-60 | Baker |
| 28.6a | H. A. VanHorn | -- | drl | 126 | 4 | 4 | 2 | .020 | 580 | 20 | 70 | 5 | 0.1 | 8 | Sand, 124-126 | Fleming |
| 29.1c | Francis O. Foster | -- | drl | 135 | 4 | 5 | 2 | .025 | 590 | 70 | 30 | 10 | 0.3 | 5 | Sand, 120-130; sand & gravel, 130-135 | Fleming |
| 31.1a | Gilbert Beaumont | 1958 | drl | 50 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | * | Baker |
| 31.1b | Gilbert Beaumont | 1958 | drl | 65 | -- | -- | -- | -- | 560 | -- | -- | -- | -- | -- | *Gravel, 16-48 | Baker |
| T10N, R4E | | | | | | | | | | | | | | | | |
| 1.2f | Henry Biedert | 1883 | dug | 24 | 48 | -- | -- | -- | 635 | 9 | -- | 3 | -- | 0.5 | Sand & gravel, 19-24 | Welton & McNeely |
| 1.6c | Nettie Shafer | 1894 | dug | 25 | 72 | -- | -- | -- | 640 | 15 | -- | 6 | -- | 0.5 | Sand, 24-25 | Watts |
| 1.8g | Fred Patterson | -- | dug | 16 | 48 | -- | -- | -- | 630 | 8 | 4 | 6 | 1.5 | 2 | Sand, at 16 | -- |
| 2 | Judge Dove | 1959 | drl | 56 | 6 | -- | -- | -- | -- | 4 | 41 | 3 | 0.1 | 2 | Sandstone, 35-56 | Baker |
| 2.2a | Bivard, Inc. | -- | dug | 26 | 60 | -- | -- | -- | 630 | 18 | 7 | 6.8 | 1.0 | 3 | Sand, at 26 | -- |
| 2.3a | Bivard, Inc. | 1964 | dug & drl | 38 | 7-6 | 6 | 6 | .060 | 630 | -- | -- | -- | -- | -- | Sand, 27-29; sand & gravel, 29-37 | Baker |
| 2.6h | Elizabeth & Neva Wheat | -- | dug | 28 | 144 | -- | -- | -- | 620 | 3 | 0.7 | 8 | 11.4 | 2 | -- | -- |
| 3.4e | Lee Shuff | -- | dug | 28 | 60 | -- | -- | -- | 610 | 8 | -- | 6 | -- | 1 | Sand, at 28 | -- |
| 3.7a | Alta Schutt | -- | dug | 25 | 48 | -- | -- | -- | 620 | 11 | 6 | 8 | 1.3 | 5 | Sand, at 17 | Hickman |
| 4.1f | Amos Wood | -- | dug | 32 | 60 | -- | -- | -- | 600 | 23.4 | -- | -- | -- | -- | Sandstone, 23-30 | -- |
| 4.7a | T. C. Dove** | -- | dug | 19 | 60 | -- | -- | -- | 600 | 12.2 | 5.8 | 15 | 2.6 | 5 | Sand, at 19 | -- |
| 4.8g | Government Land Bank | -- | dug | 50 | 60 | -- | -- | -- | 580 | 14 | -- | -- | -- | -- | Sand & gravel, at 40 | -- |
| 5.1e | Terry Ragan | 1882 | dug | 35 | 60 | -- | -- | -- | 600 | 14.2 | -- | -- | -- | -- | -- | Miller |
| 5.3a | Paul Lane | ~1880 | dug | 32 | 48 | -- | -- | -- | 600 | 11.9 | -- | 3 | -- | 4 | -- | -- |
| 5.6h | Ernest Ragan | -- | dug & drl | 34 | 48-4 | -- | -- | -- | 590 | 27 | 4 | 6 | 1.5 | 0.25 | Sandstone, 28-34 | Yancer |
| 6.3d | Albert Wortman | 1902 | dug | 24 | 48 | -- | -- | -- | 580 | 16.8 | -- | 15 | -- | 1 | Sand, at 24 | Severe |
| 6.7h | I. F. Wortman | 1918 | dug | 12 | 72 | -- | -- | -- | 600 | 9.1 | 1.5 | 6 | 4.0 | 0.25 | Mud sand, 9-12 | Wortman |
| 7.3f | Guy Compton** | -- | dug | 35 | 60 | -- | -- | -- | 580 | 18 | 17 | 15 | 0.9 | 4 | Sand, at 35 | Severe |
| 7.5a | Lewis, Heirs | 1900 | bor | 48 | 15 | -- | -- | -- | 530 | 33 | 15 | 7 | 0.5 | 1.5 | -- | -- |
| 8.6e | Cliff Thompson | 1906 | dug & drl | 37 | 48-2 | -- | -- | -- | 580 | 14.7 | 2.5 | 7 | 2.8 | 0.5 | Sand, at 37 | Barbee |
| 8.7a | Ruby Strohl | 1892 | dug | 40 | 48 | -- | -- | -- | 590 | 23 | -- | 7 | -- | 4 | Sand, at 40 | Summers |
| 9.2e | Lorene Soward** | 1894 | dug & drl | 27 | 72-2 | -- | -- | -- | 620 | 7 | -- | -- | -- | -- | -- | Westenhaver |
| 9.2h | Lorene Soward | -- | dug & drl | 24 | 48-2 | -- | -- | -- | 620 | 14 | 3 | 6 | 2.0 | 0.25 | Sand, at 18 | Westenhaver |
| 9.4a | Charles Flenner | 1912 | dug | 15 | 60 | -- | -- | -- | 620 | 8 | 6 | 7 | 1.2 | 3 | -- | Flenner |
| 9.7b | Verne Hoskins | 1922 | dug | 16 | 54 | -- | -- | -- | 605 | 6 | 4 | 15 | 3.8 | 0.5 | Sand, at 16 | Ragan |
| 10.5f | Bivard, Inc. | 1933 | drl | 43 | 5 | -- | -- | -- | 620 | 12 | 28 | 6.4 | 0.2 | 0.5 | Sandstone, 17-43 | Baker |
| 10.5g | Frank Wheat | 1933 | dug | 34 | 48 | -- | -- | -- | 625 | 10 | 2 | 7 | 3.5 | 1 | Sandstone (?), 15-34 | -- |
| 10.6d | Richard Ross | 1914 | dug & drl | 19 | 54-1 | -- | -- | -- | 620 | 12.5 | 2.5 | 6.8 | 2.7 | 1 | Sandstone (?), 16-19 | Westenhaver |
| 11.6a | Max Elbert | 1882 | dug | 17 | 72 | -- | -- | -- | 632 | 8 | 1 | 6.4 | 6.4 | 0.5 | Sand & gravel, at 17 | Wheat |
| 11.8h | Purl Stephens | 1914 | dug | 22 | 60 | -- | -- | -- | 623 | 10 | 9 | 6.8 | 0.8 | 3 | Sand & gravel, at 22 | Stevens |
| 12.6d | Charles Augenstein | -- | dug | 30 | 30 | -- | -- | -- | 640 | 18 | 12 | 22 | 1.8 | 3 | Sand & gravel, at 30 | -- |
| 12.6g | B. & F. Sanders | -- | dug | 18 | 36 | -- | -- | -- | 640 | 8 | 10 | 20 | 2.0 | 2.5 | Sand & gravel, at 18 | -- |
| 13.4f | George Fouste | -- | dug | 22 | 60 | -- | -- | -- | 627 | 20 | 2 | 6.8 | 3.4 | 0.17 | -- | Smith |
| 13.8g | George Fouste | 1898 | dug | 18 | 66 | -- | -- | -- | 620 | 13 | 2 | 7 | 3.5 | 4 | Sand & gravel, at 18 | Wheat |
| 14.3d | Burl Harrison | ~1880 | dug | 18 | 60 | -- | -- | -- | 620 | 15 | 2 | 7 | 3.5 | 0.25 | Sand, at 18 | -- |
| 14.6a | R. E. Syfert | 1910 | dug | 22 | 60 | -- | -- | -- | 620 | 10 | 11.5 | 7 | 0.6 | 4 | Sand, at 18, 21-22 | Williams |
| 15.1a | Shutt & Bettis | -- | dug | 16 | 60 | -- | -- | -- | 620 | 8 | 6 | 7 | 1.2 | 4 | -- | -- |
| 15.1c | Victor Elbert, Jr. | -- | dug | 18 | 54 | -- | -- | -- | 622 | 14 | 4 | 5.7 | 1.4 | 3 | Sand, at 18 | -- |
| 16.5d | Levert Compton | -- | dug | 26 | 60 | -- | -- | -- | 600 | 22 | 3 | 7 | 2.3 | 3 | Sand, at 26 | -- |
| 16.7a | Carl Rittgers | -- | dug | 23 | 48 | -- | -- | -- | 615 | 20 | 3 | 7 | 2.3 | 1 | Sand, at 23 | Ragan |
| 17.6h | Charles Flenner | 1933 | dug & drl | 101 | 60-6 | -- | -- | -- | 600 | 50 | 50 | 2 | -- | 1 | Limestone, 100-101 | Ragan & Baker |

Appendix B (Continued)

| Well number | Owner | Well: Year constructed | Well: Type | Well: Depth (ft) | Well: Diam (in) | Screen: Length (ft) | Screen: Diam (ft) | Screen: Slot size (in) | Land surface elev (ft above msl) | Non-pumping water level (ft) | Drawdown (ft) | Pumping rate (gpm) | Observed specific capacity (gpm/ft) | Length of test (hr) | Water-bearing formation and depth (ft) | Driller |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T10N, R4E (Continued) | | | | | | | | | | | | | | | | |
| 17.8a | Jennie Howe | -- | dug | 20 | 48 | -- | -- | -- | 560 | 5 | 14 | 6 | 0.4 | 4 | Sand, at 20 | -- |
| 17.8e | Ollie Reid | 1965 | drl | 89 | 6 | 10 | 6 | .016 | 560 | 27.4 | 44.6 | 6 | 0.1 | 48 | Sand & sandstone, 81-89 | Baker |
| 18.3h | D. W. Howe | 1894 | dug | 26 | 54 | -- | -- | -- | 590 | 21 | 0.4 | 8 | 20.0 | 0.5 | Sand & gravel, at 26 | Howe |
| 18.4a | G. L. Tallman | 1910 | dug | 14 | 60 | -- | -- | -- | 580 | 11 | -- | 6.7 | -- | 4 | Sand & gravel, at 14 | Young |
| 19.5c | Milo McKittrick | 1908 | dug | 51 | 72 | -- | -- | -- | 580 | 42 | 3 | 6 | 2.0 | 6 | Sand, at 15 | Smith |
| 19.5g | Glen Miller | 1908 | dug | 31 | 48 | -- | -- | -- | 580 | 25 | 5 | 6 | 1.2 | 2 | -- | Smith |
| 20.4d | T. C. Dove | -- | dug | 31 | 54 | -- | -- | -- | 600 | 8 | 4 | 15 | 3.8 | 0.5 | Sand & gravel, at 31 | -- |
| 20.4h | Nettie Aichele | 1929 | dug | 17 | 54 | -- | -- | -- | 600 | 9 | 2 | 7 | 3.5 | 1 | Sand, at 17 | Ragan |
| 20.5e | G. A. Aichele | 1962 | bor & drl | 69 | 12-6 | -- | -- | -- | 570 | 7 | -- | 2 | -- | -- | Sandstone, 41-69 | Baker |
| 21.1a | Carl Allen | 1890 | dug | 30 | 60 | -- | -- | -- | 615 | 15 | 13 | 7 | 0.5 | 4 | Sand, at 30 | Smith |
| 21.4g | Ralph Hoskins | -- | dug | 22 | 54 | -- | -- | -- | 620 | 12 | 10 | 7 | 0.7 | 2.5 | Sand, at 22 | -- |
| 21.5e | Lloyd Compton | 1961 | drl | 202 | -- | -- | -- | -- | 610 | -- | -- | -- | -- | -- | *Mud sand, at 80; sandstone, 170-194 | Baker |
| 21.6e | Lloyd Compton | 1961 | drl | 82 | 6 | 4 | 6 | .010 | 600 | 9 | 61 | 5 | 0.1 | 4 | Sand, 75-82 | Baker |
| 21.8a | Strasburg (V) | 1963 | drl | 45 | -- | -- | -- | -- | 615 | -- | -- | -- | -- | -- | * | Baker |
| 22.2c | Virgil Miller | -- | dug | 30 | 48 | -- | -- | -- | 620 | 5 | 15 | 6 | 0.4 | 4 | Sand, at 30 | -- |
| 22.3b | L. M. Miller | -- | dug | 50 | 60 | -- | -- | -- | 600 | 30 | 18 | 5 | 0.3 | 4 | Sand, at 50 | -- |
| 23.1a | C. E. Nichols | 1909 | dug | 18 | 54 | -- | -- | -- | 630 | 14 | 4 | 7 | 1.8 | 2 | Sand, at 18 | Nichols |
| 23.8h | Elmer Wheeler | 1910 | bor | 28 | 16 | -- | -- | -- | 610 | 10 | -- | 7 | -- | 1 | Sand, at 28 | -- |
| 24.2a1 | Bruce Koontz | -- | dug | 20 | 48 | -- | -- | -- | 620 | 12 | 8 | 7 | 0.9 | 4 | Sandstone, at 20 | Elliot |
| 24.2a2 | Bruce Koontz** | -- | dug & drl | 18 | 7-2 | -- | -- | -- | 620 | -- | -- | -- | -- | -- | Sandstone, 9-18 | -- |
| 24.6g | Bertha Rogers | -- | dug | 35 | 54 | -- | -- | -- | 635 | 18 | -- | 4 | -- | -- | Sandstone, at 35 | -- |
| 25.3a | Arthur Davis | 1931 | dug | 28 | 60 | -- | -- | -- | 600 | 16.5 | 11 | 6.8 | 0.6 | 2 | -- | Shifer |
| 25.4a | Arthur Davis | -- | bor | 16 | 6 | -- | -- | -- | 580 | -- | -- | -- | -- | -- | Limestone, at 16 | -- |
| 25.4h | Willard Prosser | 1890 | dug | 13 | 54 | -- | -- | -- | 625 | 10 | 2.5 | 7.3 | 2.9 | 2 | Sandstone, at 13 | Peifer |
| 26.1c | C. H. Jenkins | -- | dug | 20 | 48 | -- | -- | -- | 620 | 16 | 4 | 6 | 1.5 | 2 | Sand, at 20 | -- |
| 26.7a | Jude Bixler | 1963 | drl | 17 | -- | -- | -- | -- | 629 | -- | -- | -- | -- | -- | * | Baker |
| 26.8c | John Bixler | 1925 | dug | 21 | 48 | -- | -- | -- | 625 | 11 | 5 | 6.2 | 1.2 | 2 | Sand, 11-12 | Bixler |
| 27.5a | Della D. Miller | -- | dug | 23 | 48 | -- | -- | -- | 600 | 12 | 11 | 10 | 0.9 | 3 | Sandstone, at 23 | Gallagher |
| 27.6h | Carl Allen | -- | dug | 35 | 54 | -- | -- | -- | 620 | 15 | 9 | 6 | 0.7 | 3 | Sand, at 35 | -- |
| 28.1a | Mrs. Fannie Gallagher | 1933 | bor | 10 | 6 | -- | -- | -- | 560 | 4 | 6 | 3 | 0.5 | 0.5 | Sand, at 10 | Gallagher |
| 28.5c | Kenneth Gallagher | 1867 | dug | 22 | 60 | -- | -- | -- | 600 | 13 | 9 | 3.5 | 0.4 | 4 | Sand, at 15 | -- |
| 29.4a | William Vickory | 1908 | dug | 35 | 54 | -- | -- | -- | 610 | 28 | 7 | 6.5 | 0.9 | 2 | -- | Gallagher |
| 29.7f | W. B. Lewis | -- | dug | 15 | 48 | -- | -- | -- | 580 | 11 | -- | 6 | -- | 1 | Sand & gravel, at 15 | -- |
| 30.2d | Edward Miller | 1916 | dug | 24 | 48 | -- | -- | -- | 600 | 19 | 2 | 5 | 2.5 | 0.5 | Sand & gravel, at 24 | Howe |
| 30.5g | Fred Smith | 1900 | dug | 32 | 48 | -- | -- | -- | 600 | 20 | 12 | 6.8 | 0.6 | 6 | Sand & gravel, at 32 | Smith |
| T10N, R5E | | | | | | | | | | | | | | | | |
| 1.4a | Orville Bauer | 1952 | drl | 221 | -- | -- | -- | -- | 634 | -- | -- | -- | -- | -- | Sandstone, at 187 | Baker |
| 1.8a | Emma Vogel | 1952 | drl | 221 | 5 | -- | -- | -- | 634 | 34 | 84 | 4.5 | 0.1 | 2 | Sandstone, 185-221 | Baker |
| 3.1h | Edgar Schlecte | 1957 | dug | 18 | 48 | -- | -- | -- | 640 | 8 | -- | -- | -- | -- | Sand & gravel, at 18 | Schlecte |
| 3.8h | Strasburg (V) | 1956 | drl | 42 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | * | Baker |
| 4.7h | August Doeding | -- | dug & drl | 107 | -- | -- | -- | -- | 620 | -- | -- | -- | -- | -- | *Sandstone, 80-107 | Baker |
| 13.2h | Strasburg (V) | 1964 | drl | 32 | -- | -- | -- | -- | 620 | -- | -- | -- | -- | -- | * | Baker |
| 13.8g | Strasburg (V) | 1964 | drl | 22 | -- | -- | -- | -- | 620 | -- | -- | -- | -- | -- | * | Baker |
| 14.8a | Herman Alwardt | 1954 | drl | 199 | 6 | -- | -- | -- | 620 | 22 | -- | 6 | -- | -- | Sandstone, 136-150, 153-199 | Holkenbrink |
| 16.8a | Calvin C. Ruff | -- | drl | 45 | 5 | -- | -- | -- | 629 | 13 | 27 | 5 | 0.2 | 4 | Sandstone, 40-45 | Fleming |
| 18.6h | Shelby Co. St. Forest | 1965 | drl | 113 | 6 | -- | -- | -- | 620 | 30.8 | 69.2 | 4 | 0.1 | 5 | Sandstone, 54-113 | Baker |
| 18.7h | Shelby Co. St. Forest | 1965 | drl | 117 | 6 | -- | -- | -- | 620 | 32 | 50 | 6 | 0.1 | 3.5 | Sandstone, 47-117 | Baker |
| 19.7a1 | Ida H. Yakey | 1936 | dug & drl | 142 | 7-5 | -- | -- | -- | 629 | 37 | -- | 5 | -- | -- | Sandstone, 102-142 | Baker |
| 19.7a2 | Ida H. Yakey | 1936 | drl | 152 | 6 | -- | -- | -- | 629 | 45 | -- | 1.3 | -- | -- | Sandstone, 98-142, at 152 | Baker |
| 22.4h | John Falk | 1964 | drl | 138 | 5 | -- | -- | -- | 630 | 12.5 | 82.5 | 3 | -- | 4 | Sandstone, 96-138 | Baker |
| 23.8g | Stewardson-Strasburg Comm. Schools | 1950 | drl | 170 | 10 | -- | -- | -- | 635 | 55 | 69 | 6 | 0.1 | 1.5 | Sandstone, 83-170 | Baker |
| 23.8h | Stewardson-Strasburg Comm. Schools | 1950 | drl | 170 | 10 | -- | -- | -- | 635 | 56 | 44 | 8 | 0.2 | 0.4 | Sandstone | Baker |
| 34.1b | Stewardson (V) | 1955 | drl | 27 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | * | Baker |
| 34.1c | Stewardson (V) | 1955 | drl | 37 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | *Sand & gravel, 10-28 | Baker |
| 34.2c | Stewardson (V) | 1955 | drl | 22 | -- | -- | -- | -- | 635 | -- | -- | -- | -- | -- | * | Baker |
| 34.3b | Stewardson (V) | 1955 | drl | 22 | -- | -- | -- | -- | 635 | -- | -- | -- | -- | -- | * | Baker |
| 34.4f | Stewardson (V) | 1955 | drl | 27 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | *Mud sand, 13-15 | Baker |
| 34.5c | Stewardson (V) | ~1917 | dug | 20 | 48 | -- | -- | -- | 640 | 12 | -- | 7 | -- | -- | -- | -- |
| 35.7a1 | Stewardson (V) | 1955 | drl | 46 | -- | -- | -- | -- | 635 | -- | -- | -- | -- | -- | *Sand & gravel, 24-44 | Baker |
| 35.7a2 | Stewardson (V) | 1955 | drl | 50 | 10-8 | 10 | 8 | .100 | 635 | 7.5 | 5 | 150 | 30.0 | 6 | Sand & gravel, 18-50 | Baker |
| 35.8a1 | Stewardson (V) | 1955 | drl | 22 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | *Mud sand, 13-16 | Baker |
| 35.8a2 | Stewardson (V) | 1955 | drl | 52 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | *Sand & gravel, 2-15, 18-50 | Baker |
| 35.8a3 | Stewardson (V) | 1955 | drl | 42 | -- | -- | 8 | -- | 635 | -- | -- | -- | -- | -- | *Sand & gravel, 9-36 | Baker |
| 35.8a4 | Stewardson (V) | 1955 | drl | 52 | -- | -- | -- | -- | 635 | -- | -- | -- | -- | -- | *Sand & gravel, 18-49 | Baker |
| 35.8a5 | Stewardson (V) | 1955 | drl | 52 | -- | -- | -- | -- | 635 | -- | -- | -- | -- | -- | *Sand & gravel, 18-48 | Baker |
| T10N, R6E | | | | | | | | | | | | | | | | |
| 1 | G. W. Prosser | 1959 | drl | 64 | 6 | -- | -- | -- | -- | 20.5 | 29.5 | 0.3 | -- | 2 | Crack in shale, at 50 | Baker |
| 1.1e | Kermit Reid | -- | dug | 14 | -- | -- | -- | -- | 642 | -- | -- | -- | -- | -- | -- | -- |
| 1.6a | Shelby Co. Hwy. Dept. | 1965 | drl | 11.5 | -- | -- | -- | -- | 610 | -- | -- | -- | -- | -- | * | Baker |
| 4.3h | Strasburg (V) | 1964 | drl | 55 | -- | -- | -- | -- | 600 | -- | -- | -- | -- | -- | * | Baker |
| 5.7c | R. Ensign | 1932 | drl | 140 | -- | -- | -- | -- | 620 | -- | -- | -- | -- | -- | Sandstone, at 140 | -- |
| 5.7h | Strasburg (V) | 1964 | drl | 12 | -- | -- | -- | -- | 600 | -- | -- | -- | -- | -- | * | Baker |
| 6.6h | Strasburg (V) | 1963 | drl | 72 | -- | -- | -- | -- | 605 | -- | -- | -- | -- | -- | * | Baker |
| 7.6h | Orville Engel | ~1919 | dug | 17 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | -- | -- |
| 8.3g1 | John & Helen Smith | ~1919 | spring | -- | -- | -- | -- | -- | 632 | -- | -- | -- | -- | -- | -- | -- |
| 8.3g2 | John & Helen Smith | ~1919 | dug | 15 | -- | -- | -- | -- | 632 | -- | -- | -- | -- | -- | -- | -- |

## Appendix B (Continued)

| Well number | Owner | Well | | | | Screen | | | Land surface elev (ft above msl) | Non-pumping water level (ft) | Draw-down (ft) | Pumping rate (gpm) | Observed specific capacity (gpm/ft) | Length of test (hr) | Water-bearing formation and depth (ft) | Driller |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Year con-structed | Type | Depth (ft) | Diam (in) | Length (ft) | Diam (ft) | Slot size (in) | | | | | | | | |
| T10N, R8E (Continued) | | | | | | | | | | | | | | | | |
| 8.8h | Strasburg (V) | 1963 | drl | 37 | -- | -- | -- | -- | 600 | -- | -- | -- | -- | -- | * | Baker |
| 14.4a | Paul Kaufman | 1964 | drl | 120 | -- | -- | -- | -- | 640 | -- | -- | 0.5 | -- | 1 | *Sand & gravel, 10-20; sandstone, 20-60 | Woodward |
| 15.4b | Orville Wassom | -- | -- | 35 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | -- | -- |
| 15.4d | W. I. Curry | +1919 | dug | 25 | -- | -- | -- | -- | 645 | -- | -- | -- | -- | -- | -- | -- |
| 15.4e1 | Neoga Sch. Dist. | 1950 | drl | 42 | -- | -- | -- | -- | 645 | -- | -- | -- | -- | -- | *Sand & gravel, 17-36 | Holkenbrink |
| 15.4e2 | Neoga Sch. Dist. | 1950 | drl | 113 | 6 | -- | -- | -- | 645 | 7 | 26 | 4 | 0.2 | 8 | Sandstone, 100-113 | Holkenbrink |
| 16.7a | Paul Williams | 1965 | drl | 120 | -- | -- | -- | -- | 625 | -- | -- | -- | -- | -- | * | Baker |
| 16.8h | Wilbert Kaufman | 1964 | drl | 65 | 7 | 30 | 7 | .030 | 580 | 10 | 15 | 80 | 5.3 | 1 | Sand & gravel, 25-65 | Woodward |
| 17.8a | Strasburg (V) | 1964 | drl | 27 | -- | -- | -- | -- | 633 | -- | -- | -- | -- | -- | * | Baker |
| 18.1a | Strasburg (V) | 1964 | drl | 42 | -- | -- | -- | -- | 620 | -- | -- | -- | -- | -- | * | Baker |
| 18.7h | Strasburg (V) | 1964 | drl | 17 | -- | -- | -- | -- | 610 | -- | -- | -- | -- | -- | * | Baker |
| 18.8c1 | Strasburg (V) | 1964 | drl | 37 | -- | -- | -- | -- | 620 | -- | -- | -- | -- | -- | * | Baker |
| 18.8c2 | Strasburg (V) | 1964 | drl | 37 | -- | -- | -- | -- | 620 | -- | -- | -- | -- | -- | * | Baker |
| 18.8c3 | Strasburg (V) | 1964 | drl | 27 | -- | -- | -- | -- | 620 | -- | -- | -- | -- | -- | * | Baker |
| 18.8d1 | Strasburg (V) | 1964 | drl | 40 | 1.25 | 5 | 1.25 | -- | 620 | -- | -- | -- | -- | -- | *Sand & gravel, 15-35 | Baker |
| 18.8d2 | Strasburg (V) | 1964 | drl | 32 | -- | -- | -- | -- | 620 | -- | -- | -- | -- | -- | * | Baker |
| 18.8d3 | Strasburg (V) | 1964 | drl | 37 | -- | -- | -- | -- | 620 | -- | -- | -- | -- | -- | *Sand, 7-35 | Baker |
| 18.8d4 | Strasburg (V) | 1964 | drl | 62 | 1.25 | 5 | 1.25 | -- | 620 | -- | -- | -- | -- | -- | *Sand & gravel, 15-60 | Baker |
| 18.8d5 | Strasburg (V) | 1964 | drl | 67 | -- | -- | -- | -- | 620 | -- | -- | -- | -- | -- | *Sand & gravel, 14-67 | Baker |
| 18.8d6 | Strasburg (V) | 1964 | drl | 37 | 1.25 | 3 | 1.25 | .020 | 620 | -- | -- | -- | -- | -- | *Sand, 25-37 | Baker |
| 18.8d7 | Strasburg (V) | 1964 | drl | 37 | 6 | 7 | 6 | .080 | 620 | 4.2 | 10.3 | 72 | 7.0 | 3 | Sand & gravel, 15-37 | Baker |
| 18.8h | Strasburg (V) | 1964 | drl | 37 | -- | -- | -- | -- | 620 | -- | -- | -- | -- | -- | * | Baker |
| 20.6g | George Cantlon | 1956 | drl | 29 | 6 | 4 | 6 | .014 | 634 | 13.6 | 9.4 | 2.5 | 0.3 | 2 | Sand, 24-29 | Baker |
| 23.2e | Linda McClory | 1932 | drl | 56 | 5 | -- | -- | -- | 650 | 13 | -- | 15 | -- | 5 | Sand & gravel, 45-56 | Baker |
| 25 | C.I.P.S. Substation | 1950 | drl | 56 | 6 | 3 | 6 | .035 | -- | 13 | -- | 0.5 | -- | -- | -- | Baker |
| 27.2a | Harold Sudkamp | 1964 | drl | 98 | -- | -- | -- | -- | 632 | -- | -- | -- | -- | -- | * | Baker |
| 27.6h | Albert Kinkelaar | 1961 | drl | 119 | 4 | -- | -- | -- | 650 | 13.7 | 66.3 | 5.5 | 0.1 | 3 | Sandstone, 96-119 | Stevens |
| 28.2a | Herbert Gentry | 1964 | drl | 35 | 6-5 | 4 | 5 | .040 | 645 | 11.7 | 18.3 | 3 | 0.2 | 4 | Sand & gravel, 31-35 | Baker |
| 28.2f | Bernard Schumacher | 1964 | drl | 46 | 6 | -- | -- | -- | 650 | 12.8 | 17.2 | 10 | 0.6 | 10 | Lime, 41-46 | Baker |
| 30.8f | Ora Anderson | 1966 | drl | 41 | 6 | -- | -- | -- | 640 | 11.5 | 22.5 | 1.5 | 0.1 | 17 | Sandstone, 26-41 | Baker |
| 31.2h | J. Mueller | 1936 | dug & drl | 127 | 7-5 | -- | -- | -- | 630 | 27 | -- | 9 | -- | -- | Sandstone, 87-91, 115-127 | Baker |
| 33.1d | Leonard Greuel | 1961 | drl | 66 | 6 | 4 | 6 | .040 | 640 | 14 | 33 | 10 | 0.3 | 9 | Sand & gravel, 62-66 | Baker |
| 34.1d | Louis Schutte | 1954 | drl | 100 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | *Sandstone, at 100 | Holkenbrink |
| 35.4h | Norbert Schumacher | 1963 | drl | 82 | 6 | -- | -- | -- | 640 | 18.2 | 51.8 | 6 | 0.1 | 5 | Sandstone, 56-59; crack in shale, at 82 | Baker |
| T11N, R2E | | | | | | | | | | | | | | | | |
| -- | Paul Blauth | -- | bor | 33 | 12 | -- | -- | -- | -- | 27 | -- | 4 | -- | -- | -- | -- |
| -- | Edward Cross | -- | drl | 75 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Sand, at 75 | -- |
| -- | Dr. J. W. Green | -1922 | dug | 35 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Sand, 29-35 | -- |
| -- | Dr. J. W. Green | -1922 | dug | 30 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Sand, at 30 | -- |
| 3.8a | Eva Myers | 1957 | drl | 69 | 6 | 4 | 6 | .040 | 690 | 33.5 | 21.5 | 6 | 0.3 | 6 | Sand & gravel, 65-69 | Baker |
| 10.3a | Truman T. Tilley | 1956 | drl | 44 | 6 | 3 | 6 | .035 | 680 | 11 | 23 | 4 | 0.2 | 3 | Sand & gravel, 40-44 | Baker |
| 10.5a | H. S. Barringer | 1956 | drl | 35 | 6 | 3 | 6 | .035 | 680 | -- | -- | 15 | -- | 1 | Sand & gravel, 17-35 | Baker |
| 10.6g | H. S. Barringer | 1959 | drl | 88 | 6 | 5 | 6 | .080 | 720 | 51 | 24 | 5 | 0.2 | 3 | Sand & gravel, 70-88 | Baker |
| 13.4h | Claude Cullumber | 1941 | drl | 43 | 5 | -- | -- | -- | 560 | 10 | 20 | 0.5 | -- | -- | Lime, 15-29; sandstone, 42-43 | Baker |
| 13.8a | Paul Halbrook | +1904 | dug | 18 | -- | -- | -- | -- | 650 | -- | -- | -- | -- | -- | -- | -- |
| 15.1a | Tower Hill (V) | 1950 | drl | 83 | -- | -- | -- | -- | 670 | -- | -- | -- | -- | -- | *Mud sand, 22-39 | Baker |
| 15.2h | Tower Hill (V) | 1950 | drl | 100 | -- | -- | -- | -- | 690 | -- | -- | -- | -- | -- | *Sand & gravel, 27-34, 44-54 | Baker |
| 15.4a | Sibbitt | -- | drl | 32 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | *Sand, 28-32 | -- |
| 15.5a | Tower Hill (V) | 1959 | drl | 30 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | * | Stevens |
| 17.8g | Mrs. Roe Darst | 1964 | drl | 115 | 6 | -- | -- | -- | 680 | 9 | 26.5 | 1.5 | 0.1 | 72 | -- | Baker |
| 22 | L. C. Cannon | 1871 | dug | 30 | 30 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 22 | Mrs. Ida Foltz | -- | -- | 14 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 22.1a | Tower Hill H.S. | 1936 | drl | 60 | 5 | -- | -- | -- | 660 | 12 | -- | -- | -- | -- | *Mud sand, 18-26 | Baker |
| 22.1d1 | Tower Hill (V) | 1950 | drl | 75 | -- | -- | -- | -- | 650 | -- | -- | -- | -- | -- | * | Baker |
| 22.1d2 | Tower Hill (V) | 1950 | drl | 60 | -- | -- | -- | -- | 650 | 4.5 | -- | 3 | -- | -- | *Sand, 32-55 | Baker |
| 22.1e | Tower Hill H.S. | -- | dug | 21 | 72 | -- | -- | -- | 650 | 14 | -- | -- | -- | -- | Sand, 19-21 | -- |
| 22.1f | Tower Hill (V) | 1959 | drl | 35 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | * | Stevens |
| 22.1g1 | Tower Hill (V) | 1941 | drl | 40 | -- | -- | -- | -- | 650 | -- | -- | -- | -- | -- | *Sand, 28-32 | Baker |
| 22.1g2 | Tower Hill (V) | 1941 | drl | 50 | -- | -- | -- | -- | 650 | -- | -- | -- | -- | -- | * | Baker |
| 22.2g1 | Tower Hill (V) | 1941 | drl | 31 | -- | -- | -- | -- | 652 | -- | -- | -- | -- | -- | *Sand, 27-31 | Baker |
| 22.2g2 | Tower Hill (V) | 1941 | drl | 60 | -- | -- | -- | -- | 652 | -- | -- | -- | -- | -- | *Sand & gravel, 25-30 | Baker |
| 22.2h | Tower Hill (V) | 1941 | drl | 94 | -- | -- | -- | -- | 695 | -- | -- | -- | -- | -- | *Sand & gravel, 55-65 | Baker |
| 22.3f | Tower Hill (V) | 1941 | drl | 30 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | * | Baker |
| 22.3g | Big Four R.R. | 1930 | dug & drl | 32 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | -- | -- |
| 22.4g | Blacksmith Shop | -- | dug | 28 | -- | -- | -- | -- | 660 | 4 | -- | -- | -- | -- | -- | -- |
| 22.5a1 | Florence Cullumber | -- | drl | 40 | -- | -- | -- | -- | 650 | -- | -- | -- | -- | -- | *Limestone, at 40 | -- |
| 22.5a2 | Tower Hill (V) | 1941 | drl | 30 | -- | -- | -- | -- | 650 | -- | -- | -- | -- | -- | * | Baker |
| 23.2g1 | Tower Hill (V) | -- | drl | 46 | -- | -- | -- | -- | 652 | -- | -- | 30 | -- | -- | *Sandstone, 16-44 | -- |
| 23.2g2 | Tower Hill (V) | -- | drl | 47 | 6 | -- | -- | -- | 652 | -- | -- | -- | -- | -- | *Sandstone, 16-47 | -- |
| 23.2g3 | Tower Hill (V) | 1950 | drl | 50 | 24-10 | -- | -- | -- | 652 | 6.3<br>6.4 | 15<br>9.5 | 50<br>30 | 3.3<br>3.2 | 14<br>75 | Sandstone, 16-50 | Baker |
| 23.2h1 | Tower Hill (V) | -- | drl | 66 | 6 | -- | -- | -- | 652 | -- | -- | 15 | -- | -- | *Sandstone, 18-63 | -- |
| 23.2h2 | Tower Hill (V) | 1950 | drl | 59 | 7 | -- | -- | -- | 652 | -- | -- | -- | -- | -- | *Sandstone, 16-56 | Baker |
| 23.2h3 | Tower Hill (V) | 1950 | drl | 59 | 8 | -- | -- | -- | 652 | 7.7 | 27.5 | 8.5-21.5 | -- | 6 | Sandstone, 16-56 | Baker |
| 23.6c | Tower Hill (V) | 1950 | drl | 87 | -- | -- | -- | -- | 650 | -- | -- | -- | -- | -- | *Sand, 16-22 | Baker |
| 23.6h | Tower Hill (V) | 1950 | drl | 60 | -- | -- | -- | -- | 655 | -- | -- | -- | -- | -- | *Mud sand & gravel, 24-34; sand, 49-52 | Baker |

## Appendix B (Continued)

| Well number | Owner | Well: Year constructed | Well: Type | Well: Depth (ft) | Well: Diam (in) | Screen: Length (ft) | Screen: Diam (ft) | Screen: Slot size (in) | Land surface elev (ft above msl) | Nonpumping water level (ft) | Drawdown (ft) | Pumping rate (gpm) | Observed specific capacity (gpm/ft) | Length of test (hr) | Water-bearing formation and depth (ft) | Driller |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T11N, R2E (Continued) | | | | | | | | | | | | | | | | |
| 23.7e | Tower Hill (V) | 1950 | drl | 37 | 24 | -- | -- | -- | 649 | 1.4 | 32.7 | 38 | 1.2 | 12 | Sand, 35-37 | Baker |
| 23.7f1 | Old Mine | -- | drl | 50 | -- | -- | -- | -- | 660 | -- | -- | 100 | -- | -- | Sand & gravel, 44-50 | Baker |
| 23.7f2 | Old Mine | -- | drl | 44 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | Sand & gravel, 38-44 | -- |
| 23.7g1 | Tower Hill (V) | 1950 | drl | 59 | -- | -- | -- | -- | 652 | 3.5 | -- | 21 | -- | 1 | *Mud sand, 22-32; sandstone, 44-52 | Baker |
| 23.7g2 | Tower Hill (V)** | 1954 | drl | 77 | 6 | -- | -- | -- | 652 | 22 | 23 | 12 | 0.5 | 8 | Sandstone | Stevens |
| 23.8e1 | Tower Hill (V) | 1950 | drl | 57 | -- | -- | -- | -- | 650 | -- | -- | 25 | -- | 1 | *Sand & gravel, 31-38 | Baker |
| 23.8e2 | Tower Hill (V) | 1950 | drl | 34 | 7 | -- | -- | -- | 650 | -- | -- | -- | -- | -- | * | Baker |
| 23.8e3 | Tower Hill (V) | 1950 | drl | 36 | 5 | -- | -- | -- | 650 | -- | -- | -- | -- | -- | *Sand & gravel, 33-36 | Baker |
| 23.8e4 | Tower Hill (V) | 1950 | drl | 31 | -- | -- | -- | -- | 650 | -- | -- | -- | -- | -- | *Sand & gravel, 27-31 | Baker |
| 23.8e5 | Tower Hill (V) | 1950 | drl | 36 | 7-5 | 5 | 5 | .100 | 650 | 1.7 | 27.3 | 8 | 0.3 | 4 | Sand & gravel, 30-36 | Baker |
| 23.8e6 | Tower Hill (V) | 1965 | drl | 42 | -- | -- | -- | -- | 650 | 1.5 | -- | -- | -- | -- | *Sand, 30-31 | Baker |
| 23.8e7 | Tower Hill (V) | 1965 | drl | 28 | -- | -- | -- | -- | 650 | 1.5 | -- | -- | -- | -- | * | Baker |
| 24 | Tower Hill (V) | -- | drl | 37 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | -- | -- |
| 24.3a1 | Florence Cullumber | 1953 | drl | 47 | 6 | -- | -- | -- | 620 | 6.7 | 35.3 | 3 | 0.1 | 4 | Sandstone, 41-47 | Baker |
| 24.3a2 | Florence Cullumber | 1953 | drl | 42 | 6 | -- | -- | -- | 620 | 10 | 8 | 35 | 4.4 | 4.5 | Sandstone, 28-42 | Baker |
| 24.7c | Tower Hill (V) | -- | drl | 62 | -- | -- | -- | -- | 640 | -- | -- | 15 | -- | -- | *Mud sand, 23-28; sandstone, 28-60 | -- |
| 24.8f | Tower Hill (V) | -- | drl | 71 | -- | -- | -- | -- | 645 | -- | -- | 10 | -- | -- | *Sandstone, 19-66 | -- |
| 25.5h | Tower Hill (V) | -- | drl | 37 | -- | -- | -- | -- | 635 | -- | -- | 40 | -- | -- | *Sandstone, 24-37 | -- |
| 25.8h | Tower Hill (V) | -- | drl | 53 | -- | -- | -- | -- | 637 | -- | -- | 10 | -- | -- | *Sandstone, 32-50 | -- |
| 26.1e | Homer Mink | 1954 | drl | 57 | 6 | -- | -- | -- | 640 | -- | -- | 9 | -- | -- | Sandstone, 35-57 | Baker |
| 26.8f | Tower Hill (V) | -- | drl | 92 | -- | -- | -- | -- | 665 | -- | -- | -- | -- | -- | * | -- |
| 27.4h | K. L. Harvey | -- | drl | 30 | -- | -- | -- | -- | 645 | -- | -- | -- | -- | -- | *Sand & gravel, 20-30 | -- |
| 30.7c1 | Pana Damsite | 1942 | drl | 31 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | *Sand & gravel, 14-16; sandstone, 30-31 | -- |
| 30.7c2 | Pana Damsite | 1942 | drl | 20 | -- | -- | -- | -- | 610 | -- | -- | -- | -- | -- | *Sandstone, 14-20 | -- |
| 30.7c3 | Pana Damsite | 1942 | drl | 24 | -- | -- | -- | -- | 600 | -- | -- | -- | -- | -- | * | -- |
| 30.7c4 | Pana Damsite | 1942 | drl | 41 | -- | -- | -- | -- | 600 | -- | -- | -- | -- | -- | *Sand, 13-18 | -- |
| 30.7c5 | Pana Damsite | 1942 | drl | 35 | -- | -- | -- | -- | 600 | -- | -- | -- | -- | -- | *Sand, 8-19 | -- |
| 30.7c6 | Pana Damsite | 1942 | drl | 29 | -- | -- | -- | -- | 600 | -- | -- | -- | -- | -- | * | -- |
| 30.7c7 | Pana Damsite | 1942 | drl | 20 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | * | -- |
| T11N, R3E | | | | | | | | | | | | | | | | |
| 1.1d | J. I. Reed | 1947 | drl | 72 | 2.5 | -- | -- | -- | 665 | -- | -- | 8 | -- | -- | -- | -- |
| 4.4e | Shelby Co. Farm | 1946 | drl | 150 | -- | -- | -- | -- | 622 | 23.6 | 126.4 | 1 | -- | -- | * | Baker |
| 9.5a1 | Dr. Richard Larson | 1960 | drl | 75 | -- | -- | -- | -- | 620 | -- | -- | -- | -- | -- | *Sand, 14-22 | Baker |
| 9.5a2 | Dr. Richard Larson | 1960 | drl | 19 | 6 | 1.5 | 6 | .080 | 620 | 5.4 | 10.6 | 1.25 | 0.1 | 10 | Sand & gravel, 17-19 | Baker |
| 10.4d1 | Shelby Co. Airport | 1947 | drl | 51 | -- | -- | -- | -- | 615 | -- | -- | -- | -- | -- | * | Baker |
| 10.4d2 | Shelby Co. Airport | 1947 | drl | 41 | 22 | 2 | 22 | slotted pipe | 615 | 3 | -- | 7 | -- | 24 | Sand & gravel, 20-22 | Baker |
| 11.2a1 | Bill Dunaway | 1963 | drl | 57 | -- | -- | -- | -- | 600 | -- | -- | -- | -- | -- | * | Baker |
| 11.2a2 | Bill Dunaway | 1963 | drl | 36 | -- | -- | -- | -- | 600 | -- | -- | -- | -- | -- | * | Baker |
| 11.2b | Bill Dunaway | 1963 | drl | 47 | -- | -- | -- | -- | 610 | -- | -- | -- | -- | -- | * | Baker |
| 12 | Shelbyville (C) | 1954 | drl | 140 | -- | -- | -- | -- | 600 | -- | -- | -- | -- | -- | *Sand, 20-25 | S & F Co. |
| 12.1a | Shelbyville (C) | 1954 | drl | 150 | -- | -- | -- | -- | 625 | -- | -- | -- | -- | -- | *Sand & gravel, 95-105 | Stevens |
| 12.1b | Shelbyville (C) | 1954 | drl | 130 | -- | -- | -- | -- | 627 | -- | -- | -- | -- | -- | *Sand & gravel, 80-125 | Stevens |
| 12.2b | Hobert Yakey | 1937 | drl | 40 | 5 | -- | 5 | slotted pipe | 610 | 12 | 28 | 10 | 0.4 | 1 | Sand, 26-30, 36-40 | Baker |
| 13 | Shelbyville (C) | 1954 | drl | 55 | -- | -- | -- | -- | 605 | -- | -- | -- | -- | -- | * | S & F Co. |
| 14 | Shelbyville (C) | 1954 | drl | 70 | -- | -- | -- | -- | 585 | -- | -- | -- | -- | -- | *Sand & gravel, 60-70 | S & F Co. |
| 14 | Shelbyville (C) | 1954 | drl | 55 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | * | S & F Co. |
| 14.1a | Shelbyville (C) | 1954 | drl | 90 | -- | -- | -- | -- | 568 | -- | -- | -- | -- | -- | *Sand & gravel, 40-85 | Layne-Western |
| 14.1d | Shelbyville (C) | 1954 | drl | 135 | -- | -- | -- | -- | 595 | -- | -- | -- | -- | -- | *Sand & gravel, 35-55, 70-95 | Stevens |
| 14.2a | T. C. Dove | -- | drl | 28 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | *Sand & gravel, 27-28 | Warren |
| 14.4a | T. C. Dove | 1953 | drl | 72 | 4 | -- | -- | -- | 582 | -- | -- | -- | -- | -- | Sand & gravel, 56-72 | Stevens |
| 14.5g | Bert Venters | -- | drl | 35 | -- | -- | -- | -- | 605 | -- | -- | -- | -- | -- | * | Warren |
| 14.6f | Bert Venters | 1937 | drl | 93 | -- | -- | -- | -- | 610 | -- | -- | -- | -- | -- | * | Baker |
| 15.1e | Alfred Nieman | 1940 | drl | 25 | 6 | 2 | 6 | slotted pipe | 610 | 12 | 11 | 2 | 0.2 | 8 | Sand, 23-25 | Baker |
| 15.7e | L. C. Peek | 1961 | drl | 42 | 6 | 2 | 5 | .080 | 600 | 9.4 | 27.6 | 2 | 0.1 | 7 | Sand & gravel, 41-42 | Baker |
| 21.1d | R. A. Creswell | 1947 | drl | 94 | 8 | -- | -- | -- | 559 | 4 | 86 | 1 | -- | -- | Sandstone, 80-85 | Baker |
| 23 | Shelbyville (C) | 1954 | drl | 65 | -- | -- | -- | -- | 540 | -- | -- | -- | -- | -- | * | Stevens |
| 23.2h1 | Henry Hortenstine | -- | drl | 69 | 4 | -- | -- | -- | 570 | -- | -- | -- | -- | -- | Sand & gravel, 52-69 | Stevens |
| 23.2h2 | Shelbyville (C) | 1954 | drl-GP | 51 | 16-8 | 15 | 8 | slotted pipe | 570 | 22.5 | 8.4 | 200 | 23.8 | 3.5 | *Sand & gravel, 26-51 | Layne-Western |
| 23.3d | Shelbyville (C) | 1954 | drl | 82 | -- | -- | -- | -- | 570 | -- | -- | -- | -- | -- | *Sand & gravel, 35-82 | Layne-Western |
| 23.3f | Shelbyville (C) | 1954 | drl | 90 | -- | -- | -- | -- | 575 | -- | -- | -- | -- | -- | *Sand & gravel, 50-90 | Layne-Western |
| 23.4b | Shelbyville (C) | 1954 | drl | 68 | -- | -- | -- | -- | 553 | -- | -- | -- | -- | -- | *Sand & gravel, 25-68 | Layne-Western |
| 23.4e | Shelbyville (C) | 1954 | drl | 105 | -- | -- | -- | -- | 562 | -- | -- | -- | -- | -- | *Sand & gravel, 40-55, 70-75; sand, 90-100 | Stevens |
| 23.8a | Shelbyville (C) | 1954 | drl | 60 | -- | -- | -- | -- | 545 | -- | -- | -- | -- | -- | *Sand & gravel, 15-60 | Stevens |
| 25.7e | Dr. C. A. Spears | 1955 | drl | 51 | 6 | 5 | 6 | .030 | 560 | 29 | 6 | 10 | 1.7 | 2 | Sand, 46-51 | Baker |
| 25.8h | Dr. C. A. Spears | 1955 | drl | 88 | -- | -- | -- | -- | 600 | -- | -- | -- | -- | -- | *Sandstone, 46-51, 55-62, 71-74 | Baker |
| 26.1d | Shelbyville (C) | 1954 | drl | 70 | -- | -- | -- | -- | 560 | -- | -- | -- | -- | -- | *Sand & gravel, 5-45, 50-55, 60-65 | Layne-Western |
| 26.3h | John & Owen Shull | -- | drl | 55 | -- | -- | -- | -- | 570 | -- | -- | -- | -- | -- | -- | -- |
| 26.4c | Shelbyville (C) | 1954 | drl | 64 | -- | -- | -- | -- | 550 | -- | -- | -- | -- | -- | *Sand & gravel, 10-60 | Layne-Western |
| 26.4h1 | Shelbyville (C) | 1954 | drl-GP | 52 | 15-8 | 11 | 8 | .105 | 560 | 15.5 | 9.7 | 300 | 30.9 | 2 | *Sand, 15-52 | Layne-Western |
| 26.4h2 | Shelbyville (C) | 1954 | drl | 55 | -- | -- | -- | -- | 560 | -- | -- | -- | -- | -- | *Sand & gravel, 30-42 | Layne-Western |

# Appendix B (Continued)

| Well number | Owner | Well | | | | Screen | | | Land surface elev (ft above msl) | Non-pumping water level (ft) | Draw-down (ft) | Pumping rate (gpm) | Observed specific capacity (gpm/ft) | Length of test (hr) | Water-bearing formation and depth (ft) | Driller |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Year con-structed | Type | Depth (ft) | Diam (in) | Length (ft) | Diam (ft) | Slot size (in) | | | | | | | | |
| T11N, R3E (Continued) | | | | | | | | | | | | | | | | |
| 26.4h3 | Shelbyville (C) | 1955 | drl-GP | 60 | 26-12 | 15 | 12 | -- | 560 | 22.2 | 6.5 | 328 | 50.5 | 6.5 | Sand & gravel | Layne-Western |
| 26.4h4 | Shelbyville (C) | 1955 | drl-GP | 58 | 26-12 | 15 | 12 | -- | 560 | 18.5 | 11.2 | 545 | 48.7 | 12 | Sand & gravel, 19-58 | Layne-Western |
| 26.4h5 | Shelbyville (C) | 1955 | drl-GP | 54 | 30-12 | 15 | 12 | -- | 560 | 13.2 | 10.3 | 500 | 48.5 | 24 | Sand & gravel | Layne-Western |
| 26.6e | Shelbyville (C) | 1954 | drl | 60 | -- | -- | -- | -- | 540 | -- | -- | -- | -- | -- | *Sand & gravel, 15-60 | Layne-Western |
| 26.8h | Shelbyville (C) | 1954 | drl | 65 | -- | -- | -- | -- | 540 | -- | -- | -- | -- | -- | *Sand & gravel, 10-65 | Layne-Western |
| 27.6h | Shelbyville (C) | 1954 | drl | 64 | -- | -- | -- | -- | 540 | -- | -- | -- | -- | -- | *Sand & gravel, 15-64 | Layne-Western |
| 28.1a | Arch Tallman | 1940 | drl | 67 | -- | -- | -- | -- | 605 | -- | -- | -- | -- | -- | *Sandstone, 49-57 | Baker |
| 30 | Pat Mathues | 1950 | drl | 75 | 7 | -- | -- | -- | 600 | 13.5 | 51.5 | 0.5 | -- | -- | Sandstone, 61-63 | Baker |
| 30 | Pat Mathues | 1950 | drl | 18 | -- | -- | -- | -- | 600 | -- | -- | -- | -- | -- | * | Baker |
| 32.4a | Homer McDonald** | ~1927 | dug | 35 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | Sand & gravel, at 35 | -- |
| 35.1c | Don Rogers | 1965 | drl | 100 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | * | Baker |
| 36.8g1 | Haufland Sand & Gravel Co. | 1950 | drl | 46 | -- | -- | -- | -- | 540 | -- | -- | -- | -- | -- | *Sand & gravel, 5-38 | Baker |
| 36.8g2 | Haufland Sand & Gravel Co. | 1950 | drl | 42 | -- | -- | -- | -- | 540 | -- | -- | -- | -- | -- | *Sand & gravel, 5-39 | Baker |
| 36.8g3 | Haufland Sand & Gravel Co. | 1950 | drl | 7 | -- | -- | -- | -- | 540 | -- | -- | -- | -- | -- | * | Baker |
| 36.8g4 | Haufland Sand & Gravel Co. | 1950 | drl | 28 | -- | -- | -- | -- | 540 | -- | -- | -- | -- | -- | *Sand & gravel, 4-28 | Baker |
| 36.8g5 | Haufland Sand & Gravel Co. | 1950 | drl | 37 | -- | -- | -- | -- | 540 | -- | -- | -- | -- | -- | *Sand & gravel, 3-36 | Baker |
| T11N, R4E | | | | | | | | | | | | | | | | |
| -- | Dan W. Anderson | ~1919 | dug | 14 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| -- | E. M. Harwood | ~1915 | drl | 30 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| -- | C. H. Hulick | ~1913 | bor | 70 | 2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| -- | Lithia Springs Park | ~1898 | spring | 6 | -- | -- | -- | -- | -- | 1 | -- | -- | -- | -- | -- | -- |
| -- | Lithia Springs Park | ~1898 | spring | 6 | -- | -- | -- | -- | -- | 1 | -- | -- | -- | -- | -- | -- |
| -- | Isaac Neur | ~1918 | drv | 23 | 6 | -- | -- | -- | -- | -- | -- | -- | -- | -- | Sand & gravel, 7-23 | -- |
| 4 | Arch Tallman | 1937 | drl | 128 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | *Sand & gravel, 50-117 | Baker |
| 5 | Shelbyville (C) | 1943 | drl | 50 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | * | Baker |
| 5 | Shelbyville (C) | 1943 | drl | 70 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | * | Baker |
| 5 | Shelbyville (C) | 1943 | drl | 80 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | *Sand, 30-70 | Baker |
| 5 | Shelbyville (C) | 1943 | drl | 92 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | *Sand & gravel, 30-85 | Baker |
| 5 | Shelbyville CCb. | 1925 | dug | 15 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | Sand, at 15 | -- |
| 5.1d | U.S. Engineers | ~1912 | drl | 27 | -- | -- | -- | -- | 560 | -- | -- | -- | -- | -- | Sand & gravel, 12-27 | -- |
| 7.8g | Shelbyville (C) | 1954 | drl | 50 | -- | -- | -- | -- | 540 | -- | -- | -- | -- | -- | *Sand & gravel, 25-45 | Stevens |
| 8.5a | Shelbyville (C)** | 1924 | drl | 26 | 8 | -- | -- | slotted pipe | 550 | -- | -- | -- | -- | -- | Gravel | Warren |
| 8.5b1 | Shelbyville (C)** | 1924 | drl | 26 | 8 | -- | -- | slotted pipe | 550 | -- | -- | -- | -- | -- | Gravel | Warren |
| 8.5b2 | Shelbyville (C)** | 1924 | drl | 26 | 8 | -- | -- | slotted pipe | 550 | -- | -- | -- | -- | -- | Gravel | Warren |
| 8.5b3 | Shelbyville (C)** | 1924 | drl | 26 | 8 | -- | -- | slotted pipe | 550 | -- | -- | -- | -- | -- | Gravel | Warren |
| 8.5b4 | Shelbyville (C)** | 1924 | drl | 26 | 8 | -- | -- | slotted pipe | 550 | -- | -- | -- | -- | -- | Gravel | Warren |
| 8.5b5 | Shelbyville (C)** | 1930 | drl | 23 | 30 | -- | -- | -- | 550 | -- | -- | -- | -- | -- | Gravel | Thorpe |
| 8.5b6 | Shelbyville (C)** | 1930 | drl | 24 | 30 | -- | -- | -- | 550 | -- | -- | -- | -- | -- | Gravel | Thorpe |
| 8.5b7 | Shelbyville (C)** | 1930 | drl | 24 | 30 | -- | -- | -- | 550 | -- | -- | -- | -- | -- | Gravel | Thorpe |
| 8.6a1 | Shelbyville (C)** | 1915 | dug | 26 | 264 | -- | -- | -- | 550 | -- | -- | -- | -- | -- | Gravel | City Employees |
| 8.6a2 | Shelbyville (C)** | 1918 | dug | 26 | 144 | -- | -- | -- | 550 | -- | -- | -- | -- | -- | Gravel | City Employees |
| 8.6a3 | Shelbyville (C)** | 1918 | dug | 26 | 144 | -- | -- | -- | 550 | -- | -- | -- | -- | -- | Gravel | City Employees |
| 8.6a4 | Shelbyville (C)** | ~1918 | drl | 25 | -- | -- | -- | -- | 550 | -- | -- | -- | -- | -- | -- | -- |
| 8.6a5 | Shelbyville (C)** | 1929 | drl | 25 | 26 | -- | -- | -- | 550 | -- | -- | -- | -- | -- | Gravel | Thorpe |
| 8.6a6 | Shelbyville (C)** | 1929 | drl | 25 | 26 | -- | -- | -- | 550 | -- | -- | -- | -- | -- | Gravel | Thorpe |
| 8.6a7 | Shelbyville (C)** | 1929 | drl | 22 | 26 | -- | -- | -- | 550 | -- | -- | -- | -- | -- | Gravel | Thorpe |
| 9.7a | Malcolm Price | 1958 | drl | 55 | 6 | 5 | 6 | .016 | 640 | 32 | 6 | 5 | 0.8 | 7 | Sand, 49-55 | Baker |
| 9.8a | Shelbyville (C) | 1954 | drl | 85 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | * | Stevens |
| 10.5a | W. C. Kellett | 1940 | drl | 70 | 6 | -- | -- | -- | 685 | 61 | -- | 3 | -- | 10 | Sand, 68-70 | Baker |
| 12.7a | Floyd Hazen | ~1905 | dug | 20 | -- | -- | -- | -- | 710 | -- | -- | -- | -- | -- | -- | -- |
| 13.5h | C. H. Hulick | 1939 | drl | 125 | -- | -- | -- | -- | 704 | -- | -- | -- | -- | -- | *Sand & gravel, 45-50; sand streaks, 85-100 | Baker |
| 13.6a | James Huffer Est. | 1915 | dug | 23 | 60 | -- | -- | -- | 645 | 8 | -- | 7 | -- | 1 | -- | Small |
| 13.7f | Herbert Barker | -- | bor | 48 | 12 | -- | -- | -- | 680 | 16 | -- | 5 | -- | 1 | Sand, at 48 | Florey |
| 14.6h | Golda L. Cihak | 1930 | bor | 82 | 12 | -- | -- | -- | 692 | 42 | -- | 7 | -- | 5 | Sand, at 82 | Clay |
| 14.8c | Rose Manning | -- | dug & bor | 60 | 48-12 | -- | -- | -- | 660 | 40 | 20 | 6 | 0.3 | 1 | Sand & gravel, at 60 | -- |
| 15.3a | Daniel R. Wright | 1904 | bor | 53 | 14 | -- | -- | -- | 660 | 25 | 25 | 6 | 0.2 | 2 | Sand & gravel, at 53 | Abercrombie |
| 15.8e | Lloyd E. Loftin | -- | bor | 46 | 12 | -- | -- | -- | 670 | 25 | 5 | 5 | 1.0 | 8 | Sand, at 46 | -- |
| 16.6h | Lane Stewardson | -- | dug | 20 | 48-30 | -- | -- | -- | 655 | 17 | -- | 8 | -- | 1 | Sand & gravel, at 20 | Stewardson |
| 16.8h | Shelbyville (C) | 1954 | drl | 65 | -- | -- | -- | -- | 635 | -- | -- | -- | -- | -- | * | Stevens |
| 17 | Donald Ingham | ~1907 | bor | 21 | 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | Sand & gravel, at 21 | -- |
| 17 | Shelbyville (C) | 1954 | drl | 88 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | *Sand, 5-70 | Stevens |
| 17.2h | Ethel G. Braden | -- | dug | 20 | 48 | -- | -- | -- | 640 | 15 | 5 | 5 | 1.0 | 2 | Sand & gravel, at 20 | -- |
| 17.4h | Harry Riley | 1940 | drl | 101 | -- | -- | -- | -- | 575 | -- | -- | -- | -- | -- | *Mud sand, 25-35; sandstone, 96-101 | Baker |
| 17.6f | H. Prosser | 1918 | bor | 40 | 12 | -- | -- | -- | 620 | 25 | -- | -- | -- | -- | Sand, at 40 | Warren |
| 18.6g | Shelbyville (C) | 1954 | drl | 30 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | *Sand & gravel, 15-30 | Layne-Western |

## Appendix B (Continued)

| Well number | Owner | Well |  |  |  | Screen |  |  | Land surface elev (ft above msl) | Nonpumping water level (ft) | Drawdown (ft) | Pumping rate (gpm) | Observed specific capacity (gpm/ft) | Length of test (hr) | Water-bearing formation and depth (ft) | Driller |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | Year constructed | Type | Depth (ft) | Diam (in) | Length (ft) | Diam (ft) | Slot size (in) |  |  |  |  |  |  |  |  |
| T11N, R4E (Continued) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18.8d | Albert Mochel | 1915 | dug | 16 | 48 | -- | -- | -- | 610 | 10 | 6 | 5 | 0.8 | 2 | Sand, at 16 | Fisher |
| 19.5f | A. Thornton | -- | dug | 20 | 60 | -- | -- | -- | 600 | 10 | 2 | 5 | 2.5 | 1 | Sand, at 20 | -- |
| 19.6h | Gaylord Terry | -- | dug | 30 | 48 | -- | -- | -- | 600 | 25 | 5 | 5 | 1.0 | 1 | -- | -- |
| 20.4g | Clyde Compton | 1900 | bor | 51 | 12 | -- | -- | -- | 620 | 8 | -- | 4 | -- | 4 | Sand & gravel, at 51 | Abercrombie |
| 20.6a1 | Hugh Walden | 1964 | drl | 37 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | * | Baker |
| 20.6a2 | Hugh Walden | 1964 | drl | 27 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | *Sand & gravel, 12-17 | Baker |
| 20.6a3 | Hugh Walden | 1964 | drl | 42 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | * | Baker |
| 20.8d | Carl Hogley | 1911 | bor | 42 | 10 | -- | -- | -- | 600 | 30 | 12 | 7.6 | 0.6 | 1 | Sand & gravel, at 42 | Florey |
| 21.3h | Lewis Stewardson | -- | bor | 60 | 12 | -- | -- | -- | 640 | 20 | 40 | 7 | 0.2 | 2 | Sand & gravel, at 60 | -- |
| 21.6e | Arthur Rawlings | -- | dug & bor | -- | 48-12 | -- | -- | -- | 600 | 4 | 16 | 8 | 0.5 | 2 | -- | Warren |
| 22.1g1 | John Switzer | -- | drl | 57 | 6 | -- | -- | -- | 640 | -- | -- | 7 | -- | 3 | -- | -- |
| 22.1g2 | John Switzer | 1930 | drl | 72 | 2 | -- | -- | -- | 640 | -- | -- | 23 | -- | -- | Sand & gravel, at 72 | Bolan |
| 22.8b1 | D. D. Kensil | 1955 | drl | 92 | -- | -- | -- | -- | 600 | -- | -- | -- | -- | -- | * | Baker |
| 22.8b2 | D. D. Kensil | 1955 | drl | 47 | -- | -- | -- | -- | 600 | -- | -- | -- | -- | -- | * | Baker |
| 22.8f | D. D. Kensil | 1922 | dug & bor | 57 | 54-12 | -- | -- | -- | 630 | 24 | -- | -- | -- | -- | Sand, at 57 | Warren |
| 23.2h | Hope H. Henry | 1917 | bor | 78 | 12 | -- | -- | -- | 670 | 25 | 25 | 9 | 0.4 | 1 | Sand & gravel, at 78 | Florey |
| 23.4a | Ralph Shew | 1930 | bor | 49 | 12 | -- | -- | -- | 640 | 20 | 29 | 5.8 | 0.7 | 2 | Sand | Clay |
| 23.6a | Ralph Shew | 1959 | drl | 99 | 6 | -- | -- | -- | 650 | 34.3 | 25.7 | 4 | 0.2 | 5 | Sand, 67-70; sandstone, 88-99 | Baker |
| 24.2d | C. E. Sholes | -- | dug | 28 | 54 | -- | -- | -- | 650 | 8 | 17 | 8 | 0.5 | 3 | Sand, at 28 | -- |
| 24.2g | Henry Robinson | ~1916 | bor | 50 | -- | -- | -- | -- | 650 | -- | -- | -- | -- | -- | -- | -- |
| 24.3h | Robert Stewardson | 1953 | drl | 60 | 6 | -- | -- | -- | 655 | 14.7 | 45.3 | 1 | -- | -- | Sand, 29-30, 59-60 | Baker |
| 24.6c | Fern Fox | 1895 | dug | 20 | 72 | -- | -- | -- | 640 | 10 | 10 | 8 | 0.8 | 3 | Sand, at 20 | Fox |
| 25.4c | Gilbert Hopper | -- | bor | 80 | 12 | -- | -- | -- | 645 | 60 | 20 | 7.5 | 0.4 | 0.5 | Sand & gravel, at 80 | Warren |
| 25.8h | Ralph Shew | 1879 | dug | 16 | 48 | -- | -- | -- | 625 | 8 | 1 | 5.8 | 5.8 | 2 | Sand & gravel, at 16 | Broomfield |
| 26.2a | Wallace Carnes | -- | dug | 25 | 48 | -- | -- | -- | 625 | 10 | 10 | 7 | 0.7 | 2 | Sand, at 25 | -- |
| 26.8c | Charles Durst | 1920 | bor | 56 | 12 | -- | -- | -- | 620 | 20 | 20 | 5.8 | 0.3 | 1 | Sand, at 56 | Warren |
| 27.5h | Don McCormick | -- | bor | 21 | 8 | -- | -- | -- | 620 | 4 | 11 | 5.6 | 0.5 | 2 | Sand, at 21 | Florey |
| 27.6c1 | F. R. Dove | 1930 | dug | 26 | 66 | -- | -- | -- | 590 | 18 | 8 | 6.4 | 0.8 | 3 | Sand, at 26 | Kropf |
| 27.6c2 | F. R. Dove** | -- | -- | 13 | 8 | -- | -- | -- | 590 | -- | -- | 2 | -- | -- | -- | -- |
| 28.1f | Wilse Henry | -- | dug | 25 | 60 | -- | -- | -- | 600 | 6 | -- | -- | -- | -- | Sand, at 25 | -- |
| 28.6a | F. H. Summers | 1925 | dug & bor | 76 | 60-18 | -- | -- | -- | 580 | 6 | -- | 9 | -- | 20 | Sand & gravel, at 76 | Warren |
| 29.6a | Christy Christner | 1908 | bor | 22 | 12 | -- | -- | -- | 595 | 4 | 18 | 5 | 0.3 | 0.5 | Sand & gravel, at 22 | Fleming |
| 29.6h1 | Hugh Walden | 1964 | drl | 42 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | * | Baker |
| 29.6h2 | Hugh Walden | 1964 | drl | 59 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | * | Baker |
| 29.6h3 | Hugh Walden | 1964 | drl | 100 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | * | Baker |
| 29.8d | S. M. Shrock | -- | dug | 23 | 48 | -- | -- | -- | 580 | 10 | 6 | 5 | 0.8 | 3 | Sand, at 23 | -- |
| 30.4a | Lloyd McKittrick | 1951 | drl | 20 | 8 | 3 | 8 | .070 | 590 | 5 | 15 | 3 | 0.2 | 1 | Sand, 17-20 | Baker |
| 30.5a | Harold Foor | 1885 | dug | 27 | 72 | -- | -- | -- | 595 | 5 | 5 | 5.2 | 1.0 | 2 | Sand, at 27 | Copeland |
| 30.8c | Keith McKittrick | -- | dug | 50 | 60 | -- | -- | -- | 600 | 10 | 15 | 6 | 0.4 | 4 | Sand & gravel, at 50 | -- |
| 31.3h1 | Lloyd McKittrick | -- | dug | 24 | 36 | -- | -- | -- | 580 | 8 | 16 | 6.4 | 0.4 | 3 | Sand, at 24 | -- |
| 31.3h2 | Lloyd McKittrick | 1952 | drl | 40 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | *Mud sand, 26-40 | Baker |
| 31.8f | Margaret Mars | 1915 | dug | 21 | 48 | -- | -- | -- | 605 | 6 | 4 | 8.3 | 2.1 | 1 | Sandstone, at 21 | Mars |
| 32.3h | Glen Jones | 1914 | dug | 16 | 48 | -- | -- | -- | 600 | 12 | 4 | 5.2 | 1.3 | 1 | Sand & gravel, at 16 | Shrock |
| 32.5b | Phoebe Hostetler | -- | dug & drl | 125 | 48-6 | -- | -- | -- | 590 | 10 | 20 | 2.5 | 0.1 | 3 | -- | -- |
| 33.4f | Vera Adams | -- | dug & bor | 22 | 54-12 | -- | -- | -- | 590 | 15 | 5 | 5.8 | 1.2 | 2 | Sand, at 22 | -- |
| 33.5d | Robert Gill | -- | dug | 30 | 60 | -- | -- | -- | 590 | 24 | 6 | 6.2 | 1.0 | 2 | -- | -- |
| 34.1g | W. C. Carnes | -- | dug | 24 | 60 | -- | -- | -- | 610 | 21 | 3 | 5.7 | 1.9 | 2 | Sand, at 24 | -- |
| 34.2b | D. O. Rice Est. | 1898 | dug | 30 | 48 | -- | -- | -- | 615 | 10 | 5 | 6 | 1.2 | 2 | Sand, at 13; sandstone | Rice |
| 34.4e | Clarence Dust | 1951 | drl | 68 | 8 | -- | -- | -- | 610 | 11.5 | 48.5 | 2 | -- | 3 | Sandstone, 26-55 | Baker |
| 35.4a | Emma Seaman | -- | dug | 38 | 54 | -- | -- | -- | 620 | 18 | 20 | 6 | 0.3 | 24 | Sand & gravel, at 38 | -- |
| 35.6h | Dr. J. W. Carnes | -- | dug | 30 | 72 | -- | -- | -- | 610 | 22 | -- | 6.2 | -- | 0.4 | Sand & gravel, at 30 | -- |
| 36.2c | Merle Tirey | 1914 | dug | 16 | 48 | -- | -- | -- | 630 | 13 | 3 | 6.4 | 2.1 | 2 | Sand & gravel, at 16 | Milligan |
| 36.7a | Glen Radloff | -- | dug | 20 | 48 | -- | -- | -- | 632 | 12 | 6 | 6.2 | 1.0 | 5 | Sandstone, at 20 | -- |
| T11N, R5E |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.5b | Windsor (C) | 1959 | drl | 130 | -- | -- | -- | -- | 720 | -- | -- | -- | -- | -- | *Sand, 95-102 | Stevens |
| 1.8a | Edith Shreiber | 1960 | drl | 73 | 4 | -- | -- | -- | 718 | 26 | 40 | 2.5 | 0.1 | 3 | Sand, 71-73 | Stevens |
| 2.1a | Windsor (C) | 1959 | drl | 102 | -- | -- | -- | -- | 718 | -- | -- | -- | -- | -- | *Sand & gravel, 60-66; sand, 80-102 | Stevens |
| 2.8g | L. D. Hennigh | 1919 | drl | 90 | -- | -- | -- | -- | 705 | 17.6 | 32 | 20 | 0.6 | -- | *Sand & gravel, at 90 | Warren |
| 3.2b | T. D. Hennigh | ~1927 | drl | 105 | -- | -- | -- | -- | 710 | -- | -- | -- | -- | -- | -- | -- |
| 4.1e | George B. Roberts | 1940 | drl | 80 | 5 | -- | -- | -- | 700 | 52 | 13 | 5 | 0.4 | 15 | Sand & gravel, 79-80 | Baker |
| 5.4h | F. D. Hennigh | 1952 | drl | 125 | 6 | -- | -- | -- | 690 | 47 | 73 | 2.5 | -- | 5 | Mud sand, 69-83; crack in shale, at 116 | Baker |
| 5.8h | Walden School | -- | drl | 70 | -- | -- | -- | -- | 685 | -- | -- | -- | -- | -- | *Sand & gravel, at 70 | Warren |
| 6.1g | B. J. Bryson | -- | dug | 15 | 36 | -- | -- | -- | 680 | 4.5 | -- | -- | -- | -- | -- | -- |
| 6.8b | John A. Cihak | -- | drl | 80 | 10-5 | -- | -- | .070 | 685 | 34 | 6 | 3 | 0.5 | 24 | Sand, 76-80 | Baker |
| 7.8a | LaRue Tice | 1936 | drl | 135 | -- | -- | -- | -- | 706 | -- | -- | -- | -- | -- | *Sand, 112-123 | Baker |
| 11 | William Tilford | -- | bor | 62 | 12 | -- | -- | -- | 715 | 11 | -- | -- | -- | -- | -- | -- |
| 11.1a | Fred Krile, Jr. | -- | -- | 100 | -- | -- | -- | -- | 720 | -- | -- | -- | -- | -- | -- | -- |
| 11.1f | Windsor (C) | 1959 | drl | 110 | -- | -- | -- | -- | 719 | -- | -- | -- | -- | -- | *Sand & gravel, 75-100 | Stevens |
| 11.4e | Prairie School | 1936 | drl | 91 | 5 | 1.5 | 5 | slotted pipe | 710 | 54 | 4 | 7 | 1.8 | 7 | Sand, 81-91 | Baker |
| 12.5h | Windsor (C) | 1959 | drl | 110 | -- | -- | -- | -- | 718 | -- | -- | -- | -- | -- | *Sand, 75-110 | Stevens |
| 12.7h1 | Windsor (C) | 1925 | drl | 86 | 2 | -- | -- | -- | 720 | 64 | -- | -- | -- | -- | *Sand & gravel, at 86 | -- |
| 12.7h2 | Windsor (C) | 1934 | drl | 99 | 6 | 10 | 6 | .100 | 720 | 64.5 | 18.2 | 91 | 5.0 | -- | *Sand & gravel, 85-99 | -- |
| 12.7h3 | Windsor (C)** | 1934 | drl-GP | 101 | 26-12 | 12 | 12 | .187 | 720 | 63.5<br>86 | 35.5<br>10 | 100<br>45 | 2.8<br>4.5 | 4.75<br>9 | -- | Thorne |
| 12.7h4 | Windsor (C) | 1951 | drl | 99 | 8 | 6 | 8 | .125 | 720 | 79.1 | 1.7 | 26 | 15.7 | 5.5 | Sand & gravel, 86-99 | Baker |

## Appendix B (Continued)

| Well number | Owner | Well | | | | Screen | | | Land surface elev (ft above msl) | Non-pumping water level (ft) | Draw-down (ft) | Pumping rate (gpm) | Observed specific capacity (gpm/ft) | Length of test (hr) | Water-bearing formation and depth (ft) | Driller |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Year con-structed | Type | Depth (ft) | Diam (in) | Length (ft) | Diam (ft) | Slot size (in) | | | | | | | | |
| T11N, R5E (Continued) | | | | | | | | | | | | | | | | |
| 12.7h5 | Windsor (C) | 1952 | drl | 98 | 7 | 6 | 6 | slotted pipe | 720 | 83.4 | 3.5 | 35 | 9.9 | 1 | -- | Baker |
| 13.1g | J. Turner | 1940 | drl | 265 | 6 | -- | -- | -- | 680 | 80 | 10 | 15 | 1.5 | 1 | -- | Baker |
| 13.7h | G. J. York | 1941 | drl | 259 | 5 | -- | -- | -- | 705 | 87 | 53 | 8 | 0.2 | 4 | Sandstone, 162-164, 222-259 | Baker |
| 13.8c | Charles Krile | 1936 | drl | 255 | 5 | -- | -- | -- | 680 | 85 | -- | 6 | -- | -- | Sandstone, 130-140, 223-255 | Baker |
| 13.8h | G. J. York | 1940 | drl | 100 | 5 | -- | -- | -- | 702 | 30 | 64 | 1.5 | -- | 10 | -- | Baker |
| 14.8c | Fannie Snyder | -- | drl | 200 | -- | -- | -- | -- | 705 | -- | -- | -- | -- | -- | * | Baker |
| 15.4a | Clark Schmidt | 1900 | bor | 68 | 12 | -- | -- | -- | 703 | 48 | -- | -- | -- | -- | -- | Curry |
| 15.5a | William Pikesh, Jr. | 1962 | drl | 83 | 4 | 3 | -- | slotted pipe | 700 | 39 | 1 | 7.5 | 7.5 | 1 | Sand & gravel, 77-83 | Stevens |
| 16.1a | Clarence Schultz | 1931 | drl | 128 | -- | -- | -- | -- | 700 | -- | -- | -- | -- | -- | *Sand, at 95 & 98 | Baker |
| 16.7h | D. F. Rincker | -- | drl | 65 | -- | -- | -- | -- | 690 | 25 | -- | -- | -- | -- | Sand & gravel, at 65 | Warren |
| 18.4d | William Pikesh, Jr. | 1953 | drl | 60 | 6 | -- | -- | -- | 704 | 14.7 | 45.3 | 1 | -- | -- | Sand, 59-60 | Baker |
| 22.6d | Roy F. Schmidt | 1961 | bor | 26 | 32 | -- | -- | -- | 635 | -- | -- | -- | -- | -- | Sand, at 26 | Schmitt |
| 25.6a | Strasburg (V) | 1963 | drl | 52 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | * | Baker |
| 26.2a | Strasburg (V) | 1963 | drl | 50 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | * | Baker |
| 27 | S. Vernon Richards | +1908 | dug | 18 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Sand, 10-18 | -- |
| 27 | F. J. Harvey | +1921 | dug | 18 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Sand & gravel, 7-18 | -- |
| 27 | Strasburg (V) | 1956 | drl | 21 | -- | -- | -- | -- | 633 | -- | -- | -- | -- | -- | * | Baker |
| 27 | Strasburg (V) | 1956 | drl | 21 | -- | -- | -- | -- | 636 | -- | -- | -- | -- | -- | * | Baker |
| 28.7e | Strasburg (V) | 1963 | drl | 18 | -- | -- | -- | -- | 620 | -- | -- | -- | -- | -- | * | Baker |
| 31.2a | Edward Reel | 1952 | dug & drl | 98 | 7-6 | -- | -- | -- | 630 | 22 | 58 | 4 | 0.1 | 2 | Sandstone, 33-50, 60-83, 92-98 | Baker |
| 31.4d | Noel Hopper | 1960 | drl | 105 | 5 | -- | -- | -- | 622 | 12 | 16 | 15 | 0.9 | 1.5 | Sandstone, 45-105 | Stevens |
| 32.4h | Virgil Collins | 1963 | drl | 36 | 6 | 4.5 | 6 | .040 | 631 | 11.6 | 8.4 | 6 | 0.7 | 2 | Sand & gravel, 31-36 | Baker |
| 33.2b | Strasburg (V) | 1963 | drl | 37 | -- | -- | -- | -- | 650 | -- | -- | -- | -- | -- | * | Baker |
| 34 | Biehler Hatchery | 1952 | drl | 36 | 6 | 5 | 6 | .080 | 640 | 9.5 | 25.5 | -- | -- | -- | -- | Baker |
| 34.2e | Strasburg (V) | 1964 | drl | 35 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | * | Baker |
| 34.3b | William H. Elzy | 1940 | drl | 104 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | * | Baker |
| 34.3d1 | Strasburg (V) | 1956 | drl | 42 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | *Sand, 20-24 | Baker |
| 34.3d2 | Strasburg (V) | 1956 | drl | 42 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | *Mud sand, 10-17 | Baker |
| 34.3d3 | Strasburg (V) | 1956 | drl | 42 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | *Sand, 12-15 | Baker |
| 34.3h | Strasburg (V) | 1956 | drl | 42 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | *Sand, 20-24 | Baker |
| 35.6g | Strasburg (V) | 1942 | drl | 46 | -- | -- | -- | -- | 635 | -- | -- | -- | -- | -- | *Sand & gravel, 12-13 | Woollen |
| 35.7e | Strasburg (V) | 1942 | drl | 40 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | *Sand & gravel, 18-19 | Woollen |
| 35.8e | Strasburg (V) | 1942 | drl | 39 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | *Sand & gravel, 12-17 | Woollen |
| 36.4h1 | Strasburg (V) | 1963 | drl | 27 | -- | -- | -- | -- | 638 | -- | -- | -- | -- | -- | * | Baker |
| 36.4h2 | Strasburg (V) | 1963 | drl | 52 | -- | -- | -- | -- | 638 | -- | -- | -- | -- | -- | * | Baker |
| 36.5d | Strasburg (V) | 1963 | drl | 72 | -- | -- | -- | -- | 650 | -- | -- | -- | -- | -- | * | Baker |
| 36.8a | Clarence Wittenberg | -- | drl | 123 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | *Sand & gravel, 60-70 | Boland |
| T11N, R6E | | | | | | | | | | | | | | | | |
| -- | Dr. J. P. Dechard | +1915 | dug | 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Sand, at 24 | -- |
| -- | Tremont School | -1918 | bor | 20 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 3.8f | M. T. Venters | -- | bor | 21 | 12 | -- | -- | -- | 710 | 2 | -- | -- | -- | -- | -- | -- |
| 4.1f | M. T. Venters** | -- | bor | 39 | 12 | -- | -- | -- | 720 | 4.3 | -- | -- | -- | -- | -- | -- |
| 5.1e | H. E. Wallace | 1952 | drl | 87 | 6 | 3 | 6 | .100 | 730 | 65.5 | -- | 3 | -- | 2 | Sand & gravel, 84-87 | Baker |
| 6.5c | Charles Juhnke | 1920 | drl | 48 | 2 | -- | -- | -- | 724 | 8 | -- | -- | -- | -- | Sand & gravel, 38-48 | Welsh |
| 6.5h | Albert Juhnke | 1918 | drl | 116 | -- | -- | -- | -- | 727 | 19 | -- | -- | -- | -- | Sand & gravel, at 116 | Welsh |
| 8.1e | William E. Anderson | -- | drl | 60 | 6 | -- | -- | -- | 685 | 36.3 | -- | -- | -- | -- | -- | -- |
| 8.5h | W. H. Tilford** | -- | bor | 62 | 12 | -- | -- | -- | 720 | 11 | -- | -- | -- | -- | -- | -- |
| 12.3b | Vincent Welsh | -- | drl | 30 | 4 | sand point | | | 660 | -- | -- | -- | -- | -- | Sand & gravel, at 30 | Fleming |
| 13.2h | R. Montgomery | 1954 | drl | 108 | 4 | -- | 4 | slotted pipe | 650 | -- | -- | -- | -- | -- | Sand & gravel, at 108 | Glascock |
| 18.1a | Clem Slifer | 1954 | drl | 264 | 6-5 | -- | -- | -- | 640 | 24.6 | 35.4 | 5 | 0.1 | -- | Sandstone, 209-264 | Baker |
| 18.4g | W. L. Anderson | 1907 | -- | 50 | -- | -- | -- | -- | 685 | 45 | -- | -- | -- | -- | -- | Ferguson |
| 20.7h | Lloyd Elson | 1954 | drl | 259 | 6 | -- | -- | -- | 635 | 38.5 | 69.5 | 5.5 | 0.1 | 48 | Sandstone, 202-259 | Baker |
| 22.5g | Burl Bennett | 1952 | drl | 37 | 6 | 5 | 6 | .100 | 645 | 3 | 20 | 5 | 0.3 | 2 | Sand & gravel, 31-37 | Baker |
| 25.1b | William H. Price | -- | dug | 24 | 24 | -- | -- | -- | 652 | 6.6 | -- | -- | -- | -- | -- | -- |
| 30.6h | Martha Baue | -- | dug | -- | 42 | -- | -- | -- | 640 | 5.3 | -- | -- | -- | -- | -- | -- |
| 32.8a | Strasburg (V) | 1964 | drl | 22 | -- | -- | -- | -- | 625 | -- | -- | -- | -- | -- | *Mud sand, 8-12 | Baker |
| 34.5h | Charles Latch | -- | dug | 37 | 24 | -- | -- | -- | 640 | 3.6 | -- | -- | -- | -- | -- | -- |
| T12N, R2E | | | | | | | | | | | | | | | | |
| -- | Paul Hansen | +1913 | drl | 17 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Sand & gravel, 6-17 | -- |
| -- | J. W. Reynolds | +1936 | spring | -- | -- | -- | -- | -- | -- | -- | -- | 3 | -- | -- | Sandstone | -- |
| 1.4b | Dudley Smith | 1954 | drl | 190 | 2 | -- | -- | -- | 645 | 19 | -- | 8 | -- | -- | Sandstone, 138-170 | Stevens |
| 3.8a | Harley Burke | -- | dug | 31 | 36 | -- | -- | -- | 635 | 24.3 | -- | -- | -- | -- | -- | -- |
| 7.8g1 | Richard Workman | -- | dug | 24 | 30 | -- | -- | -- | 635 | 5.5 | -- | -- | -- | -- | -- | -- |
| 7.8g2 | Richard Workman** | -- | dug | 26 | 48 | -- | -- | -- | 635 | 3 | -- | -- | -- | -- | -- | -- |
| 14.8c | Thomas M. Beck | 1966 | dug & drl | 32 | 7-6 | -- | -- | -- | 620 | 11.5 | -- | 0.5 | -- | -- | Sandstone, 27-32 | Baker |
| 18 | Assumption (C) | 1956 | drl | 50 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 18 | Assumption (C) | 1961 | drl | 24 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | *Sand & gravel, 18-20 | Mashburn |
| 18.3c1 | Assumption (C) | 1961 | drl | 32 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | *Sand, 20-22 | Mashburn |
| 18.3c2 | Assumption (C) | 1961 | drl | 23 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | * | Mashburn |
| 18.5c | Assumption (C) | 1956 | drl | 50 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | *Sand, 16-22 | Mashburn |
| 18.5e | Assumption (C) | 1958 | drl | 37 | -- | -- | -- | -- | 634 | 3.1 | -- | -- | -- | -- | *Sand & gravel, 34-35 | Mashburn |
| 18.5f1 | Assumption (C) | 1958 | drl | 29 | -- | -- | -- | -- | 639 | -- | -- | -- | -- | -- | *Sand & gravel, 15-29 | Mashburn |
| 18.5f2 | Assumption (C) | 1958 | drl | 22 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | *Sand & gravel, 14-19 | Mashburn |
| 18.5f3 | Assumption (C) | 1958 | drl | 31 | -- | -- | -- | -- | 632 | -- | -- | -- | -- | -- | *Sand & gravel, 20-30 | Mashburn |
| 18.5h | Assumption (C) | 1958 | drl | 22 | -- | -- | -- | -- | 629 | -- | -- | -- | -- | -- | *Sandstone, 21-22 | Mashburn |
| 18.6a1 | Assumption (C) | 1960 | drl | 22 | -- | -- | -- | -- | 645 | 11 | -- | -- | -- | -- | *Sand & gravel, 17-21 | Mashburn |
| 18.6a2 | Assumption (C) | 1960 | drl | 23 | -- | -- | -- | -- | 645 | 13 | -- | -- | -- | -- | *Sand & gravel, 18-21 | Mashburn |
| 18.6a3 | Assumption (C) | 1960 | drl | 27 | -- | -- | -- | -- | 645 | -- | -- | -- | -- | -- | *Sand & gravel, 20-27 | Mashburn |

# Appendix B (Continued)

| | | Well | | | | Screen | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Well number | Owner | Year constructed | Type | Depth (ft) | Diam (in) | Length (ft) | Diam (ft) | Slot size (in) | Land surface elev (ft above msl) | Non-pumping water level (ft) | Draw-down (ft) | Pumping rate (gpm) | Observed specific capacity (gpm/ft) | Length of test (hr) | Water-bearing formation and depth (ft) | Driller |
| T12N, R2E (Continued) | | | | | | | | | | | | | | | | |
| 18.6a4 | Assumption (C) | 1960 | drl | 24 | -- | -- | -- | -- | 645 | -- | -- | -- | -- | -- | *Sand & gravel, 18-22 | Mashburn |
| 18.6a5 | Assumption (C) | 1960 | drl | 29 | -- | -- | -- | -- | 645 | -- | -- | -- | -- | -- | *Sand & gravel, 15-24 | Mashburn |
| 19.6b1 | Assumption (C)** | 1913 | drl | 17 | 4 | 5 | 4 | slotted pipe | 639 | -- | -- | -- | -- | -- | Sand & gravel, 6-17 | -- |
| 18.6b2 | Assumption (C)** | 1913 | drl | 17 | 4 | 5 | 4 | slotted pipe | 639 | -- | -- | -- | -- | -- | Sand & gravel, 6-17 | -- |
| 18.6b3 | Assumption (C)** | 1913 | drl | 17 | 4 | 5 | 4 | slotted pipe | 639 | -- | -- | -- | -- | -- | Sand & gravel, 6-17 | -- |
| 18.6b4 | Assumption (C)** | 1913 | drl | 17 | 4 | 5 | 4 | slotted pipe | 639 | -- | -- | -- | -- | -- | Sand & gravel, 6-17 | -- |
| 18.6b5 | Assumption (C)** | 1913 | drl | 17 | 4 | 5 | 4 | slotted pipe | 639 | -- | -- | -- | -- | -- | Sand & gravel, 6-17 | -- |
| 18.6b6 | Assumption (C)** | 1913 | drl | 17 | 4 | 5 | 4 | slotted pipe | 639 | -- | -- | -- | -- | -- | Sand & gravel, 6-17 | -- |
| 18.6b7 | Assumption (C)** | 1914 | drl | 17 | 4 | -- | -- | -- | 639 | -- | -- | -- | -- | -- | -- | -- |
| 18.6b8 | Assumption (C)** | 1914 | drl | 17 | 4 | -- | -- | -- | 639 | -- | -- | -- | -- | -- | -- | -- |
| 18.6b9 | Assumption (C)** | 1914 | drl | 17 | 4 | -- | -- | -- | 639 | -- | -- | -- | -- | -- | -- | -- |
| 18.6b10 | Assumption (C)** | 1928 | drl | 24 | 10 | -- | 10 | slotted pipe | 639 | -- | -- | -- | -- | -- | -- | -- |
| 18.6b11 | Assumption (C)** | 1928 | drl | 24 | 10 | -- | 10 | slotted pipe | 639 | -- | -- | -- | -- | -- | -- | -- |
| 18.6b12 | Assumption (C)** | 1928 | drl | 24 | 10 | -- | 10 | slotted pipe | 639 | -- | -- | -- | -- | -- | -- | -- |
| 18.6b13 | Assumption (C)** | 1928 | drl | 24 | 10 | -- | 10 | slotted pipe | 639 | 7.5 | -- | 50 | -- | -- | -- | -- |
| 18.6b14 | Assumption (C)** | 1928 | drl | 24 | 10 | -- | 10 | slotted pipe | 639 | -- | -- | -- | -- | -- | -- | -- |
| 18.6b15 | Assumption (C)** | 1928 | drl | 24 | 10 | -- | 10 | slotted pipe | 639 | -- | -- | -- | -- | -- | -- | -- |
| 18.6b16 | Assumption (C)** | 1927 | drl | 21 | -- | -- | -- | -- | 639 | -- | -- | -- | -- | -- | -- | Meyster |
| 18.6b17 | Assumption (C)** | 1927 | drl | 21 | -- | -- | -- | -- | 639 | -- | -- | -- | -- | -- | -- | Meyster |
| 18.6b18 | Assumption (C)** | 1927 | drl | 21 | -- | -- | -- | -- | 639 | -- | -- | -- | -- | -- | -- | Meyster |
| 18.6b19 | Assumption (C)** | 1927 | drl | 21 | -- | -- | -- | -- | 639 | -- | -- | -- | -- | -- | -- | Meyster |
| 18.6b20 | Assumption (C)** | 1927 | drl | 21 | -- | -- | -- | -- | 639 | -- | -- | -- | -- | -- | -- | Meyster |
| 18.6b21 | Assumption (C) | 1936 | dug | 24 | 120 | -- | -- | -- | 639 | 6.5 | 11 | 125 | 11.4 | 9 | Sand & gravel, 7-24 | Emerick |
| 18.6b22 | Assumption (C) | 1954 | dug | 24 | 96 | 8 | 8 | -- | 639 | -- | -- | -- | -- | -- | -- | -- |
| 18.6b23 | Assumption (C)** | 1954 | dug | 19 | 216 | -- | -- | -- | 639 | -- | -- | -- | -- | -- | -- | -- |
| 18.6b24 | Assumption (C) | 1955 | dug | 15 | -- | -- | -- | -- | 639 | -- | -- | -- | -- | -- | -- | -- |
| 18.6d1 | Assumption (C) | 1956 | drl | 28 | -- | -- | -- | -- | 634 | -- | -- | -- | -- | -- | *Sand & gravel, 8-27 | -- |
| 18.6d2 | Assumption (C) | 1956 | drl | 28 | 6 | -- | -- | -- | 633 | 11.6 | 7.7 | -- | -- | 7.25 | * | Mashburn |
| 18.6d3 | Assumption (C) | 1961 | drl-GP | 27 | 24-12 | 6 | 12 | .050 | 633 | 3.22 | 10.58 | 15.5 | 1.5 | 4 | Sand & gravel, 16-19, 20-27 | Mashburn |
| 18.6e1 | Assumption (C) | -- | drl | 22 | -- | -- | -- | -- | 630 | 11 | -- | -- | -- | -- | *Sand & gravel, 17-21 | Mashburn |
| 18.6e2 | Assumption (C) | 1956 | drl | 40 | 6 | 4 | 6 | -- | 630 | -- | -- | -- | -- | -- | *Sand, 12-18; sand & gravel, 18-29 | Mashburn |
| 18.6e3 | Assumption (C) | 1958 | drl | 20 | -- | -- | -- | -- | 631 | 3.2 | -- | -- | -- | -- | *Sand & gravel, 17-19; sandstone, 19-20 | Mashburn |
| 18.7b1 | Assumption (C)** | 1917 | drl | 19 | 10 | 8 | 10 | -- | 640 | -- | -- | -- | -- | -- | -- | -- |
| 18.7b2 | Assumption (C)** | 1917 | drl | 19 | 10 | 8 | 10 | -- | 640 | -- | -- | -- | -- | -- | -- | -- |
| 18.7b3 | Assumption (C)** | 1917 | drl | 19 | 10 | 10 | 10 | -- | 640 | -- | -- | -- | -- | -- | -- | -- |
| 18.7b4 | Assumption (C) | 1956 | drl | 40 | 6 | -- | -- | -- | 640 | -- | -- | -- | -- | -- | *Sand, 12-29 | Mashburn |
| 18.7b5 | Assumption (C) | 1956 | drl | 35 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | *Sand, 12-25 | Mashburn |
| 18.7d1 | Assumption (C) | 1956 | drl | 24 | -- | -- | -- | -- | 634 | -- | -- | -- | -- | -- | *Sand & gravel, 16-20 | -- |
| 18.7d2 | Assumption (C) | 1956 | drl | 24 | -- | -- | -- | -- | 634 | -- | -- | -- | -- | -- | *Sand & gravel, 20-24 | -- |
| 18.7e1 | Assumption (C) | 1958 | drl | 20 | -- | -- | -- | -- | 634 | 4 | -- | -- | -- | -- | * | Mashburn |
| 18.7e2 | Assumption (C) | 1958 | drl | 22 | -- | -- | -- | -- | 631 | 2.1 | -- | -- | -- | -- | * | Mashburn |
| 18.7e3 | Assumption (C) | 1958 | drl | 22 | -- | -- | -- | -- | 632 | -- | -- | -- | -- | -- | * | Mashburn |
| 18.8c | Assumption (C) | 1956 | drl | 30 | -- | -- | -- | -- | 635 | -- | -- | -- | -- | -- | * | Mashburn |
| 18.8d | Assumption (C) | -- | drl | 19 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | *Sand & gravel, 12-14; sandstone, 16-19 | Mashburn |
| 19.6h1 | Assumption (C) | 1956 | drl | 28 | -- | -- | -- | -- | 645 | -- | -- | -- | -- | -- | *Sand, 10-19 | Mashburn |
| 19.6h2 | Assumption (C) | 1956 | drl | 35 | -- | -- | -- | -- | 645 | -- | -- | -- | -- | -- | *Sand, 12-25 | Mashburn |
| 20.7h | Clive Ersman | -- | dug | 20 | 54 | -- | -- | -- | 655 | 5.3 | -- | -- | -- | -- | -- | -- |
| 22.8h | Guy Crickman | -- | dug | 30 | 48 | -- | -- | -- | 645 | 14.5 | -- | -- | -- | -- | -- | -- |
| 27.1a | W. F. Woosters | 1953 | drl | 185 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | * | Baker |
| 29.2a1 | St. Paul E.R. Church | 1958 | drl | 67 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | *Sand & gravel, 42-57 | Baker |
| 29.2a2 | St. Paul E.R. Church | 1958 | drl | 57 | 6 | 4 | 6 | .035 | 660 | 25 | 20 | 5 | 0.3 | 5 | Sand & gravel, 52-57 | Baker |
| 33 | Church | 1954 | drl | 48 | 6 | -- | -- | -- | -- | 14 | 21 | 3 | 0.1 | -- | -- | Baker |
| 33.8a1 | Edward Bartow | ~1915 | dug | 14 | -- | -- | -- | -- | 700 | -- | -- | -- | -- | -- | Sand & gravel, at 14 | -- |
| 33.8a2 | Edward Bartow | ~1915 | dug | 16 | -- | -- | -- | -- | 700 | -- | -- | -- | -- | -- | -- | -- |
| 33.8a3 | Edward Bartow | ~1915 | bor | 16 | -- | -- | -- | -- | 700 | -- | -- | -- | -- | -- | Sand & gravel, at 16 | -- |
| T12N, R3E | | | | | | | | | | | | | | | | |
| 5.8a | U. M. Holmes | 1936 | drl | 265 | -- | -- | -- | -- | 650 | -- | -- | -- | -- | -- | *Limestone, 119-123, 235-240, 245-265 | Baker |
| 7.7a | J. H. Eversole | -- | drl | 75 | -- | -- | -- | -- | 639 | 56 | -- | -- | -- | -- | * | Warren |
| 8.5a | D. A. Smith | 1936 | drl | 133 | 5 | 4 | 5 | .070 | 660 | 36.3 | 35.3 | 4 | 0.1 | 6.5 | Sand & gravel, 130-133 | Baker |
| 10.3d1 | Ray Coventry | 1950 | drl | 51 | 7 | 3 | 7 | .035 | 660 | 17 | 13 | 5 | 0.4 | -- | Mud sand, 43-51 | Baker |
| 10.3d2 | Ray Coventry | 1956 | drl | 97 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | * | Baker |
| 10.4d1 | Ray Coventry | 1956 | drl | 72 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | * | Baker |
| 10.4d2 | Ray Coventry | 1956 | drl | 57 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | *Sand, 35-37 | Baker |
| 10.4d3 | Ray Coventry | 1956 | drl | 85 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | * | Baker |
| 10.4d4 | Ray Coventry | 1956 | drl | 97 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | * | Baker |
| 11.1c | James O. Finks | 1964 | drl | 159 | 6 | 10 | 6 | .040 | 660 | 80.9 | 1 | 15 | 15.0 | 24 | Sand & gravel, 118-159 | Baker |
| 11.7e | C. T. DeMonbrun | 1954 | dug & drl | 176 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | *Sandstone, 112-118 | Baker |
| 11.8f | C. T. DeMonbrun | -- | drl | 120 | -- | -- | -- | -- | 640 | 29 | -- | -- | -- | -- | *Sand & gravel, at 120 | Warren |
| 13 | Leslie Tallman | 1947 | drl | 93 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | * | Baker |
| 13 | Leslie Tallman | 1947 | drl | 100 | 7-6 | 18 | 6 | .040 | -- | 15 | 65 | 3 | 0.1 | 2 | Sand | Baker |
| 13.6d | Leslie Tallman | 1963 | drl | 93 | -- | -- | -- | -- | 650 | -- | -- | -- | -- | -- | *Sand, 54-73, 79-87 | Baker |

## Appendix B (Continued)

| | | Well | | | | Screen | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Well number | Owner | Year con-structed | Type | Depth (ft) | Diam (in) | Length (ft) | Diam (ft) | Slot size (in) | Land surface elev (ft above msl) | Non-pumping water level (ft) | Draw-down (ft) | Pumping rate (gpm) | Observed specific capacity (gpm/ft) | Length of test (hr) | Water-bearing formation and depth (ft) | Driller |
| T12N, R3E (Continued) | | | | | | | | | | | | | | | | |
| 13.8a | Pearl Johnson | 1956 | drl | 66 | 6 | 3 | 6 | .035 | 670 | 43.3 | 6.7 | 7 | 1.1 | 3 | Sand & gravel, 57-66 | Baker |
| 15 | Westervelt H.S. | 1940 | drl | 98 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | *Sand, 30-46 | Baker |
| 15 | Westervelt H.S. | 1940 | drl | 100 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | * | Baker |
| 15.3f | Aletha M. Davis | -- | drl | 113 | 4 | -- | -- | -- | 655 | 70.8 | 5 | 10 | 2.0 | 0.25 | Sand, 110-113 | -- |
| 15.5d | William Lowery | 1940 | drl | 115 | 4 | 3 | 4 | .025 | 655 | 71 | 1 | 6 | 6.0 | -- | Sand & gravel, 105-115 | Woollen |
| 16.1a | Westervelt H.S. | 1940 | drl | 75 | 6 | -- | -- | slotted pipe | 650 | -- | -- | 11 | -- | 10 | Sand & gravel, 60-75 | Baker |
| 16.3a | Lester Donnell | 1941 | drl | 68 | 5 | 3 | 5 | slotted pipe | 660 | 50 | 1 | 4 | 4.0 | 3 | Sand, 60-68 | Baker |
| 17 | Charles Donnell | 1940 | drl | 124 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | *Sandstone, 122-124 | Baker |
| 21 | Lynn McKleroy | 1950 | drl | 87 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | * | Baker |
| 21.2c | Louise C. Pawley | 1940 | drl | 102 | 5 | 3 | 5 | slotted pipe | 640 | 58.3 | 1.8 | 4 | 2.3 | 4 | Sand, 93-102 | Baker |
| 21.8g | Dorothy Beem | 1955 | drl | 75 | 3 | 5 | 1.5 | .030 | 670 | 45 | 25 | 3 | 0.1 | 12 | Sand & gravel, 70-71, 73-75 | Fleming |
| 22.8h | C. Pawley | 1936 | drl | 116 | 5 | -- | -- | -- | 650 | 59 | -- | 2 | -- | -- | Sand, at 116 | Baker |
| 23 | J. Sands-R. Weakly | 1959 | drl | 64 | 6 | 2 | 6 | .040 | -- | 33.3 | 1.8 | 9 | 5.1 | 6 | Sand, 57-64 | Baker |
| 23.2g | Roy B. Killam | 1955 | drl | 63 | 6 | 3 | 6 | .030 | 660 | -- | -- | 10 | -- | 1 | Sand, 60-63 | Baker |
| 23.3h | Glen Perry | 1960 | drl | 52 | 6 | 3 | 6 | .040 | 655 | 33.5 | 2.5 | 6 | 2.4 | 6 | Sand, 49-52 | Baker |
| 23.6a | O. A. Smith | 1955 | drl | 108 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | * | Baker |
| 23.7a | O. A. Smith | 1955 | drl | 143 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | * | Baker |
| 26.4b | Everett Eversole | 1950 | drl | 56 | 10 | -- | -- | -- | 650 | 10.8 | 31.7 | 2 | 0.1 | 5 | Mud sand, 53-56 | Baker |
| 26.5b | Everett Eversole | 1947 | drl | 55 | 10 | -- | -- | -- | 650 | 10 | -- | -- | -- | -- | Sand, 53-55 | Baker |
| 28.4e | Dan Smith, Jr. | 1953 | drl | 46 | 6 | 3 | 6 | .070 | 620 | 25 | 18 | 5 | 0.3 | 2 | Sand & gravel, 43-46 | Baker |
| 30 | C. S. Watson | +1915 | bor | 16 | 12 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 36.1b | Kenneth Roney | -- | drl | 90 | -- | -- | -- | -- | 684 | -- | -- | -- | -- | -- | * | Warren |
| 36.1c | Kenneth Roney | 1961 | drl | 227 | -- | -- | -- | -- | 685 | -- | -- | -- | -- | -- | *Sandstone, 137-140, 145-152, 199-205 | Baker |
| 36.7h | Marion A. Fry | 1942 | drl | 73 | 6 | -- | -- | slotted pipe | 670 | 15 | 20 | 3 | 0.2 | 10 | Sand, 70-73 | Baker |
| T12N, R4E | | | | | | | | | | | | | | | | |
| -- | Frank A. Brown | +1927 | drl | 122 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| -- | A. F. Geer | +1921 | dug | 15 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 1.1f | LeRoy Tullock | 1959 | drl | 80 | -- | -- | -- | -- | 645 | -- | -- | -- | -- | -- | *Sand, 40-48; sand & gravel, 72-76 | Stevens |
| 2.7c | L. Mowry | -- | dug | 12 | 36 | -- | -- | -- | 660 | 2.5 | -- | -- | -- | -- | -- | -- |
| 3.8g1 | Findlay (V) | 1935 | drl | 167 | 6 | 20 | 6 | .020 | 680 | 99.5 | 7.5 | 107 | 14.3 | -- | *Sand & gravel, 127-167 | Burt |
| 3.8g2 | Findlay (V) | 1935 | drl | 171 | 6 | 21 | 6 | .020 | 680 | 96.3 | 7.1 | 137 | 19.4 | -- | *Sand & gravel, 122-171 | Burt |
| | | | | | | | | | | 96.3 | 6.6 | 126 | 19.2 | | | |
| | | | | | | | | | | 96.3 | 6.1 | 110 | 18.1 | | | |
| | | | | | | | | | | 96.3 | 4.1 | 91 | 22.3 | | | |
| 3.8g3 | Findlay (V) | 1935 | drl-GP | 154 | 26-12 | 25 | 12 | .187 | 680 | 96 | 14.3 | 150 | 10.5 | -- | Sand & gravel, 122-154 | Burt |
| | | | | | | | | | | 108 | 7 | 75 | 10.7 | | | |
| 3.8h | J. E. Maddy | +1905 | dug | -- | -- | -- | -- | -- | 680 | -- | -- | -- | -- | -- | -- | -- |
| 4 | Findlay (V) | 1935 | drl | 116 | -- | -- | -- | -- | 675 | -- | -- | -- | -- | -- | * | Burt |
| 8.8d | Zola Hendrick | +1891 | bor | 67 | 12 | -- | -- | -- | 676 | 1 | -- | -- | -- | -- | -- | -- |
| 16.8a | A. E. Staley, Jr. | 1965 | drl | 106 | 4 | -- | -- | -- | 665 | 46 | 44 | 5.5 | 0.1 | 3 | Sand & gravel, 95-106 | Stevens |
| 18.1h | Lasha Guin, et al. | 1944 | drl | 90 | 4 | -- | -- | -- | 675 | 30 | 55 | 3 | 0.1 | 1 | Sand & gravel, 88-90 | Woollen |
| 18.8d1 | C. S. Bartscht | -- | drl | 112 | -- | -- | -- | -- | 674 | -- | -- | -- | -- | -- | Sand & gravel, 110-112 | -- |
| 18.8d2 | C. S. Bartscht | 1932 | drl | 122 | -- | -- | -- | -- | 674 | -- | -- | -- | -- | -- | Sand & gravel, 115-116, 120-122 | -- |
| 19 | Dan Smith | 1955 | drl | 107 | -- | -- | -- | -- | 675 | -- | -- | -- | -- | -- | * | Baker |
| 19.1h | John Dunaway | -- | dug | 10 | 36 | -- | -- | -- | 675 | 3 | -- | -- | -- | -- | -- | -- |
| 22.8a | Chester Brown | 1942 | drl | 112 | 5 | 5 | 5 | .070 | 670 | 56 | 23 | 10 | 0.4 | 5 | Sand, 109-112 | Baker |
| 23.5c | Wallis Orndorff | 1955 | drl | 165 | -- | -- | -- | -- | 670 | -- | -- | -- | -- | -- | *Sand, 86-89; sandstone, 146-164 | Holkenbrink |
| 26.7a1 | G. C. Woodard | 1963 | drl | 17 | -- | -- | -- | -- | 600 | -- | -- | -- | -- | -- | *Sand & gravel, 5-15 | Baker |
| 26.7a2 | G. C. Woodard | 1963 | drl | 15 | -- | -- | -- | -- | 600 | -- | -- | -- | -- | -- | * | Baker |
| 26.7a3 | G. C. Woodard | 1963 | drl | 17 | -- | -- | -- | -- | 600 | -- | -- | -- | -- | -- | *Sand & gravel, 5-15 | Baker |
| 26.7b | G. C. Woodard | 1963 | drl | 15 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | *Sand & gravel, 5-12 | Baker |
| 26.8a1 | G. C. Woodard | 1963 | drl | 12 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | *Sand & gravel, 5-9 | Baker |
| 26.8a2 | G. C. Woodard | 1963 | drl | 20 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | *Sand & gravel, 4-17 | Baker |
| 26.8a3 | G. C. Woodard | 1963 | drl | 17 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | *Sand & gravel, 5-11 | Baker |
| 26.8a4 | G. C. Woodard | 1963 | drl | 17 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | *Sand & gravel, 5-14 | Baker |
| 26.8a5 | G. C. Woodard | 1963 | drl | 12 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | *Sand & gravel, 5-10 | Baker |
| 26.8a6 | G. C. Woodard | 1963 | drl | 17 | -- | -- | -- | -- | 580 | -- | -- | -- | -- | -- | *Sand & gravel, 5-13 | Baker |
| 26.8c | G. C. Woodard | 1963 | drl | 17 | -- | -- | -- | -- | 560 | -- | -- | -- | -- | -- | * | Baker |
| 29.3a | E. W. Griffith | -- | drl | 78 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | *Sand & gravel, at 78 | Warren |
| 29.8h | Earl Hendricks | 1946 | drl | 92 | 6 | -- | -- | -- | 670 | 36 | -- | 3 | -- | -- | Mud sand, 77-80; gravel, 80-92 | Baker |
| 31.3e | R. G. Klauser | -- | dug | 17 | 42 | -- | -- | -- | 680 | 4.9 | -- | -- | -- | -- | -- | -- |
| 32 | -- | -- | drl | 262 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | *Sand & gravel, 6-16; sand, 65-83, 118-135; sand & gravel, 160-168 | -- |
| 32.1h | Ida M. Yakey | 1946 | drl | 118 | 4-3 | -- | -- | -- | 620 | 102 | -- | 3 | -- | -- | Mud sand, 53-59; sand & gravel, 70-118 | Baker |
| 32.8h | Louie Biehler | 1939 | drl | 82 | -- | -- | -- | -- | 680 | -- | -- | -- | -- | -- | * | Clay |
| 33.2b | Martha James | -- | drl | 165 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | -- | -- |
| 35.8h1 | G. C. Woodard | 1963 | drl | 22 | -- | -- | -- | -- | 540 | -- | -- | -- | -- | -- | *Sand & gravel, 5-16 | Baker |
| 35.8h2 | G. C. Woodard | 1963 | drl | 11 | -- | -- | -- | -- | 540 | -- | -- | -- | -- | -- | *Sand & gravel, 5-10 | Baker |
| 36 | Prudential Life Ins. Co. | 1941 | drl | 84 | 5 | 4 | 5 | .070 | 675 | -- | -- | 4 | -- | 6 | Sand, 80-84 | Baker |
| 36.8a | Delbert DeVore | 1936 | drl | 93 | 5 | 3 | 5 | .060 | 680 | 44 | -- | 7 | -- | -- | Sand & gravel, 89-93 | Baker |
| T12N, R5E | | | | | | | | | | | | | | | | |
| 4.1a1 | Clyde Doehring | 1961 | drl | 17 | -- | -- | -- | -- | 655 | -- | -- | -- | -- | -- | * | Baker |
| 4.1a2 | Clyde Doehring | 1961 | drl | 22 | -- | -- | -- | -- | 655 | -- | -- | -- | -- | -- | * | Baker |
| 4.1a3 | Clyde Doehring | 1961 | drl | 22 | -- | -- | -- | -- | 655 | -- | -- | -- | -- | -- | * | Baker |

# Appendix B (Continued)

| Well number | Owner | Well: Year constructed | Well: Type | Well: Depth (ft) | Well: Diam (in) | Screen: Length (ft) | Screen: Diam (ft) | Screen: Slot size (in) | Land surface elev (ft above msl) | Nonpumping water level (ft) | Drawdown (ft) | Pumping rate (gpm) | Observed specific capacity (gpm/ft) | Length of test (hr) | Water-bearing formation and depth (ft) | Driller |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T12N, R5E (Continued) | | | | | | | | | | | | | | | | |
| 4.1a4 | Clyde Doehring | 1961 | drl | 22 | -- | -- | -- | -- | 655 | -- | -- | -- | -- | -- | * | Baker |
| 4.5e | Edna Warren | -- | drl | 175 | 6 | -- | -- | -- | 640 | -- | -- | -- | -- | -- | -- | Baker |
| 6 | W. E. Elder | 1954 | drl | 85 | 6 | 3 | 6 | 125 | -- | -- | -- | 4 | -- | -- | Sand & gravel, 82-85 | Baker |
| 6.1e | Leroy Hugo | -- | drl | 200 | -- | -- | -- | -- | 650 | -- | -- | -- | -- | -- | -- | -- |
| 6.7h | W. E. Elder | -- | drl | 80 | -- | -- | -- | -- | 640 | 35 | -- | -- | -- | -- | *Sand & gravel, at 80 | Warren |
| 8.3a | Fred Walter, Jr. | 1949 | drl | 40 | 6 | 4 | 6 | .070 | 645 | 24.5 | 12.5 | 4 | 0.3 | 10 | Sand & gravel, 37-39 | Baker |
| 10.3b | Vida Stevens | -- | dug | 61 | 36 | -- | -- | -- | 660 | 14.5 | -- | -- | -- | -- | -- | -- |
| 18.6c | Boy Scouts of America | 1957 | drl | 150 | 6-5 | -- | -- | -- | 640 | 68 | 67 | 3 | -- | 4 | Sandstone, 104-150 | Baker |
| 18.7b | Boy Scouts of America | -- | drl | 137 | -- | -- | -- | -- | 570 | -- | -- | -- | -- | -- | -- | -- |
| 19.2a1 | Roy Cooley | -- | dug | 55 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | -- | -- |
| 19.2a2 | Roy Cooley | -- | bor | 55 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | -- | -- |
| 19.2a3 | Roy Cooley | 1952 | drl | 102 | 6 | 3 | 6 | .100 | 660 | -- | -- | 3 | -- | 2 | Sand & gravel, 100-102 | Baker |
| 19.8a | G. C. Woodard | -- | drl | 40 | -- | -- | -- | -- | 570 | -- | -- | -- | -- | -- | Sand, 7-40 | -- |
| 21.3a1 | Steven Elliott | 1963 | drl | 125 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | * | Baker |
| 21.3a2 | Steven Elliott | 1963 | drl | 62 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | * | Baker |
| 21.3a3 | Steven Elliott | 1963 | drl | 67 | -- | -- | -- | -- | 630 | -- | -- | -- | -- | -- | * | Baker |
| 21.4a1 | Steven Elliott | 1963 | drl | 62 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | * | Baker |
| 21.4a2 | Steven Elliott | 1963 | drl | 62 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | * | Baker |
| 22.6h | Charles Tipton | -- | dug | 19 | 48 | -- | -- | -- | 660 | 3.8 | -- | -- | -- | -- | -- | -- |
| 23.1a | Harry Leeds | 1909 | drl | 70 | -- | -- | -- | -- | 670 | 28 | -- | -- | -- | -- | *Sand, 68-70 | Warren |
| 23.8d | Paul Bennett | -- | drl | 50 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | *Sand & gravel, 42-50 | Warren |
| 27.4b | D. Evans | -- | drl | 47 | -- | -- | -- | -- | 675 | 24 | -- | -- | -- | -- | * | Warren |
| 28.8a | Joe Hampton | -- | drl | 74 | -- | -- | -- | -- | 650 | -- | -- | -- | -- | -- | *Sand & gravel, 38-39; sand, 73-74 | Warren |
| 33.8e1 | W. D. Wageman | 1940 | drl | 120 | -- | -- | -- | -- | 688 | -- | -- | -- | -- | -- | * | Baker |
| 33.8e2 | W. D. Wageman | 1940 | drl | 70 | -- | -- | -- | -- | 688 | -- | -- | -- | -- | -- | * | Baker |
| 33.8g | W. D. Wageman | 1940 | drl | 85 | 6 | -- | -- | -- | 680 | 34.3 | 45.7 | 2 | -- | 10 | Sand, 84-85 | Baker |
| 34.2a | Edna M. Smith | 1933 | drl | 91 | 5 | 3 | 5 | .020 | 700 | -- | -- | -- | -- | -- | Sand, 81-91 | Baker |
| 34.3h | Horace Doty | -- | drl | 70 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | *Sand & gravel, at 70 | Warren |
| 34.4h | Roscoe Hamilton | 1918 | drl | 96 | -- | -- | -- | -- | 695 | 37.5 | 3 | 7 | 2.3 | -- | Sand & gravel, 91-96 | Warren |
| 35.1a | A. Daily | -- | drl | 94 | -- | -- | -- | -- | 710 | -- | -- | -- | -- | -- | *Sand, 79-94 | Warren |
| 35.8a | Shelby Cemetery | 1940 | drl | 84 | 5 | 3 | 5 | slotted pipe | 700 | 13 | 19 | 5 | 0.3 | 3 | Sand, 78-84 | Baker |
| 36 | C. L. Bence | ·1927 | dug | 15 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 36 | Windsor (C) | 1935 | drl | 121 | -- | -- | -- | -- | 708 | -- | -- | -- | -- | -- | *Sand & gravel, 103-117 | Thorne |
| 36 | Windsor (C) | 1934 | drl | 150 | -- | -- | -- | -- | 701 | -- | -- | -- | -- | -- | *Sand & gravel, 39-43; sand, 109-138 | Thorne |
| 36 | Windsor Comm. H.S. | -- | drl | 100 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 36 | Windsor (C) | 1934 | drl | 140 | -- | -- | -- | -- | 698 | -- | -- | -- | -- | -- | *Sand, 90-104; sand & gravel, 106-130 | Thorne |
| 36.1e | Windsor (C) | 1934 | drl | 119 | -- | -- | -- | -- | 710 | -- | -- | -- | -- | -- | *Sand & gravel, 19-25, 85-88, sand, 101-109 | Thorne |
| 36.3a | Alec Bays | -- | drl | 55 | -- | -- | -- | -- | 710 | 31 | -- | -- | -- | -- | -- | Warren |
| 36.3e | Windsor (C) | 1934 | drl | 148 | -- | -- | -- | -- | 703 | -- | -- | -- | -- | -- | *Sand & gravel, 77-78; sand, 125-140 | Thorne |
| 36.4e1 | W. D. Herron | ·1923 | dug | 20 | 36 | -- | -- | -- | 700 | -- | -- | -- | -- | -- | -- | -- |
| 36.4e2 | Windsor (C) | 1934 | drl | 150 | -- | -- | -- | -- | 700 | 45.8 | 17.5 | 25 | 1.4 | 20 | *Sand & gravel, 127-133 | Thorne |
| 36.5b1 | H. J. Hamilton | -- | drl | 117 | -- | -- | -- | -- | 710 | -- | -- | -- | -- | -- | Sand & gravel, at 117 | Warren |
| 36.5b2 | Big 4 Stock Pens | 1913 | drl | 104 | -- | -- | -- | -- | 710 | 25 | -- | -- | -- | -- | Sand & gravel, 99-104 | Warren |
| 36.5b3 | Windsor (C) | 1934 | drl | 134 | 6 | 8 | 4 | .020 | 708 | 24 | 42.6 | 50 | 1.2 | 2.5 | *Sand & gravel, 117-134 | Thorne |
| | | | | | | 11 | 6 | .020 | | 24 | 84.1 | 34.5 | 0.4 | | | |
| 36.5c1 | Gaylord & Moberly | -- | drl | 77 | -- | -- | -- | -- | 710 | -- | -- | -- | -- | -- | Sand & gravel, 75-77 | Warren |
| 36.5c2 | Windsor (C) | 1949 | drl | 132 | 12 | 11 | 12 | .025 | 708 | 28.6 | 87 | 33.5 | 0.4 | 7 | -- | Hayes & Sims |
| 36.6b | Windsor (C) | -- | drl | 85 | -- | -- | -- | -- | 710 | -- | -- | -- | -- | -- | * | -- |
| 36.6c1 | C. F. Hunt | -- | drl | 92 | -- | -- | -- | -- | 710 | 25.3 | -- | -- | -- | -- | Sand, at 92 | Warren |
| 36.6c2 | Windsor (C) | -- | drl | 157 | -- | -- | -- | -- | 710 | -- | -- | -- | -- | -- | *Sand, 79-84, 85-94; sand & gravel, 98-101; sand, 106-107 | Thorne |
| 36.6g1 | Windsor (C) | 1959 | drl | 122 | -- | -- | -- | -- | 690 | -- | -- | -- | -- | -- | *Sand, 50-56; sand & gravel, 99-101 | Stevens |
| 36.6g2 | Windsor (C) | 1959 | drl | 110 | -- | -- | -- | -- | 690 | -- | -- | -- | -- | -- | *Sand, 39-43 | Stevens |
| 36.8d | C. C. Linebaugh | 1927 | dug | 20 | -- | -- | -- | -- | 705 | -- | -- | -- | -- | -- | -- | -- |
| T12N, R6E | | | | | | | | | | | | | | | | |
| 34.1h | T. R. Storm | 1936 | drl | 105 | 5 | 3 | 5 | .016 | 760 | 63.5 | -- | -- | -- | -- | Sand & gravel, 93-105 | Baker |
| 36.3e | H. G. Andrews | 1938 | drl | 129 | -- | -- | -- | -- | 760 | -- | -- | -- | -- | -- | Sand, 120-129 | Welch |
| 36.7d | Jennie Roby | -- | dug | 21 | 42 | -- | -- | -- | 760 | 6.3 | -- | -- | -- | -- | -- | -- |
| T13N, R2E | | | | | | | | | | | | | | | | |
| 1.8h | Fred Becker | 1954 | bor | 47 | 18 | -- | -- | -- | 690 | 39.8 | -- | -- | -- | -- | -- | -- |
| 8.5e | Blanchette Snyder | ·1916 | dug | 31 | -- | -- | -- | -- | 620 | -- | -- | -- | -- | -- | Sand & gravel, 8-31 | -- |
| 14.1g | Harry Miller | ·1928 | dug | 17 | 96 | -- | -- | -- | 660 | 3 | -- | -- | -- | -- | -- | -- |
| 15.8e | Charles Harris | 1956 | drl | 39 | 6 | 5 | 6 | .035 | 622 | 8.7 | 15.3 | 11 | 0.7 | 6 | Sand & gravel, 34-39 | Baker |
| 15.8h1 | Charles Harris | 1956 | drl | 77 | -- | -- | -- | -- | 629 | -- | -- | -- | -- | -- | * | Baker |
| 15.8h2 | Charles Harris | 1956 | drl | 48 | -- | -- | -- | -- | 629 | -- | -- | -- | -- | -- | * | Baker |
| 17.1e | Charles Harris | ·1904 | dug | 18 | 36 | -- | -- | -- | 620 | 6-12 | -- | -- | -- | -- | -- | -- |
| 22.8h | Charles Harris | 1956 | drl | 30 | -- | -- | -- | -- | 620 | -- | -- | -- | -- | -- | * | Baker |
| 25.2a | Dwight Storey | -- | bor | 45 | 18 | -- | -- | -- | 665 | 8 | -- | -- | -- | -- | -- | -- |
| 26.8f | Charles Harris | ·1908 | dug | 34 | 48 | -- | -- | -- | 630 | -- | -- | -- | -- | -- | Sand, at 34 | -- |
| 29.7f1 | Ora McDaniel, Heirs | -- | dug | 23 | 30 | -- | -- | -- | 630 | 6 | -- | -- | -- | -- | -- | -- |
| 29.7f2 | Ora McDaniel, Heirs | -- | dug | 31 | 48 | -- | -- | -- | 630 | 2.7 | -- | -- | -- | -- | -- | -- |
| T13N, R3E | | | | | | | | | | | | | | | | |
| 1.1a | George Reuss | 1892 | bor | 40 | 12 | -- | -- | -- | 673 | 5.7 | 3.7 | 7 | 1.9 | 0.5 | Sand & gravel, at 40 | Waggoner |
| 1.1g | George Reuss | 1900 | bor | 50 | 12 | -- | -- | -- | 670 | 2.3 | -- | -- | -- | -- | Sand, at 50 | Waggoner |
| 1.1h | George Reuss | 1943 | drl | 55 | 6 | -- | -- | -- | 670 | -- | -- | 5 | -- | -- | Sand, 52-55 | Baker |
| 2.1g | H. G. Alward | 1925 | bor | 59 | 12 | -- | -- | -- | 680 | 6.8 | 2.3 | 7 | 3.0 | 0.5 | Sand & gravel, at 59 | Younger |
| 2.8c | Edna Rowman & Eileen Spencer | 1911 | drl | 102 | 2 | -- | -- | -- | 695 | -- | -- | -- | -- | -- | Sand & gravel, at 102 | Copeland |

## Appendix B (Continued)

| | | Well | | | | Screen | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Well number | Owner | Year con-structed | Type | Depth (ft) | Diam (in) | Length (ft) | Diam (ft) | Slot size (in) | Land surface elev (ft above msl) | Non-pumping water level (ft) | Draw-down (ft) | Pumping rate (gpm) | Observed specific capacity (gpm/ft) | Length of test (hr) | Water-bearing formation and depth (ft) | Driller |
| T13N, R3E (Continued) | | | | | | | | | | | | | | | | |
| 3.7h | Paul Kroenlein | 1916 | drl | 133 | 2 | 3 | 2 | -- | 710 | -- | -- | -- | -- | -- | Sand, at 133 | Payne |
| 3.8b | Estella Thompson | 1900 | drl | 130 | 2 | 3 | 2 | -- | 720 | -- | -- | -- | -- | -- | Sand, at 130 | Beard & Payne |
| 4.1a | Estella Thompson | 1914 | drl | 124 | 2 | 3 | 2 | -- | 725 | -- | -- | -- | -- | -- | Sand, at 124 | Payne |
| 4.7a | Charles Lefarge | 1923 | bor | 115 | 12 | -- | -- | -- | 735 | 18.3 | 4.3 | 9 | 2.1 | 0.5 | Sand, at 115 | Younger |
| 5.4a | Jesse L. Pearson | 1900 | dug | 13 | 36-24 | -- | -- | -- | 745 | 7 | -- | -- | -- | -- | Sand, at 13 | Pearson |
| 5.5h | H. J. Cutler | 1913 | drl | 131 | 2 | 3 | 2 | -- | 730 | -- | -- | -- | -- | -- | Sand, at 131 | Payne |
| 6.5h | Robert Sanders | 1933 | drl | 132 | 2 | 3 | 2 | -- | 730 | -- | -- | -- | -- | -- | Sand, at 132 | Payne |
| 6.8d | Carl Miller | 1914 | drl | 98 | 2 | 3 | 2 | -- | 720 | 50 | -- | -- | -- | -- | Sand & gravel, at 98 | Payne |
| 7.3h | Joseph Lash | 1923 | bor | 104 | 12 | -- | -- | -- | 740 | 64.6 | 2.7 | 5 | 1.9 | 0.5 | Sand & gravel, at 104 | Younger |
| 7.8h | Emanuel Meryman | 1932 | drl | 74 | 2 | 3 | 2 | -- | 720 | -- | -- | -- | -- | -- | Sand, 63-66, 71-74 | Payne |
| 8.7b | V. Tolley & A. Angel | 1928 | drl | 135 | 2 | 3 | 2 | -- | 735 | -- | -- | -- | -- | -- | Sand, at 135 | Payne |
| 8.7g | Harry T. Weeks | 1914 | drl | 138 | 2 | 3 | 2 | -- | 750 | -- | -- | -- | -- | -- | Sand, at 138 | Payne |
| 9.1h | Friendship School | 1916 | drl | 112 | 2 | 3 | 2 | -- | 730 | -- | -- | -- | -- | -- | Sand, at 112 | Payne |
| 9.8c | Mrs. J. S. Wright, et al. | 1912 | drl | 115 | 2 | 3 | 2 | -- | 745 | 25 | -- | -- | -- | -- | Sand, at 115 | Phillips |
| 10.1a | Olive R. Pogue | 1910 | bor | 97 | 12 | -- | -- | -- | 707 | 27.7 | 3.8 | 6 | 1.6 | 0.5 | Sand, at 97 | -- |
| 10.1e | Estelle Thompson | 1916 | drl | 119 | 2 | 3 | 2 | -- | 703 | -- | -- | -- | -- | -- | Sand, at 119 | Payne |
| 10.5h | Estelle Thompson | 1914 | drl | 119 | 4 | 8 | 4 | -- | 713 | 27.3 | 6.3 | 6 | 1.0 | 0.5 | Sand, 111-119 | Copeland |
| 11.8h | E. G. Yearsley | 1915 | drl | 128 | 2 | 3 | 2 | -- | 695 | -- | -- | -- | -- | -- | Sand, at 128 | Payne |
| 12.1b | Henry Atkinson | 1890 | drl | 95 | 5 | 6 | 5 | -- | 660 | 2.5 | -- | -- | -- | -- | Sand, at 95 | Phillips |
| 12.1f | James Atkinson | 1910 | bor | 56 | 12 | -- | -- | -- | 672 | 17.7 | 2.8 | 7 | 2.6 | 0.5 | Sand, at 56 | Younger |
| 13.1a | J. Morris | 1905 | bor | 38 | 12 | -- | -- | -- | 670 | 16.6 | 2.8 | 5 | 1.8 | 0.5 | Sand & gravel, at 38 | Waggoner |
| 13.1f | W. M. Welker | 1920 | bor | 102 | 12 | -- | -- | -- | 670 | 12.4 | 1.5 | 5 | 3.3 | 0.5 | Sand & gravel, at 102 | Waggoner |
| 14.4a | Everett Lash | 1900 | drl | 107 | 2 | 3 | 2 | -- | 690 | -- | -- | -- | -- | -- | Sand, at 107 | -- |
| 14.8a | Lillie W. Wood | 1919 | drl | 60 | 2 | 3 | 2 | -- | 690 | -- | -- | -- | -- | -- | Sand, at 60 | Phillips |
| 15.1g | Olive R. Pogue | 1913 | bor | 108 | 12 | -- | -- | -- | 705 | 25.4 | 2.1 | 6 | 2.9 | 0.5 | Sand, at 80 & 94 | Copeland |
| 15.8b | Mark Primmer | 1910 | bor | 78 | 12 | -- | -- | -- | 720 | 4.2 | 2.4 | 6 | 2.5 | 0.5 | Sand, at 78 | -- |
| 16.1e | Dr. C. O. Casey | 1945 | drl | 224 | 4-3 | -- | -- | -- | 720 | 60 | 65 | 4 | 0.1 | 2 | Sandstone, 206-224 | Woollen |
| 16.1f | Dr. C. O. Casey | 1926 | drl | 111 | 2 | 3 | 2 | -- | 720 | 50 | -- | -- | -- | -- | Sand, at 111 | Payne |
| 16.8c | Emerson Mathias | 1930 | dug | 22 | 44 | -- | -- | -- | 740 | 14.6 | 1.9 | 5 | 2.6 | 0.5 | -- | Bennett |
| 17.1d | Glen Stump | 1931 | bor | 106 | 12 | -- | -- | -- | 742 | 27.5 | 3.7 | 7 | 1.9 | 0.5 | Sand & gravel, at 106 | Younger |
| 17.7d | M. F. Cutler | 1890 | dug | 10 | 60 | -- | -- | -- | 715 | 5.2 | 1.1 | 6 | 5.6 | 0.5 | Sand, 8-10 | -- |
| 18 | Dr. Charles Schmidli | ~1917 | dug & bor | 64 | ?-2 | -- | -- | -- | -- | -- | -- | -- | -- | -- | Sand & gravel, at 27 & 64 | -- |
| 18.1b | Ed Cole | 1900 | dug | 18 | 54 | -- | -- | -- | 700 | 10.5 | 1.2 | 6 | 5.1 | 0.5 | Sand, at 18 | -- |
| 18.8a | J. E. Jordan | 1926 | bor | 38 | 12 | -- | -- | -- | 640 | 14.2 | 2.4 | 5 | 2.1 | 0.25 | -- | Younger |
| 19.5h | Ward Gregory | 1910 | dug | 19 | 42 | -- | -- | -- | 660 | 10.3 | 2.9 | 5 | 1.7 | 0.5 | Sand, at 19 | -- |
| 19.8g | Charles Longenbaugh | 1900 | dug | 26 | 48 | -- | -- | -- | 652 | 15.6 | 1.9 | 5 | 2.6 | 0.5 | Sand, at 26 | -- |
| 20.6h | Harley Stead | 1923 | drl | 120 | 2 | 3 | 2 | -- | 710 | -- | -- | -- | -- | -- | Sand, at 120 | Phillips |
| 20.8e | Henry Atkinson | 1924 | bor | 70 | 12 | -- | -- | -- | 695 | 27.6 | 3.1 | 6 | 1.9 | 0.5 | Sand, at 70 | Younger |
| 21.8f | O. K. Hawley | 1905 | drl | 120 | 2 | 3 | 2 | -- | 720 | -- | -- | -- | -- | -- | Sand, at 120 | Copeland |
| 21.8h | Logan Abraham | 1916 | drl | 141 | 2 | 3 | 2 | -- | 730 | -- | -- | -- | -- | -- | Sand, at 141 | Payne |
| 22.6h | Robert Primmer | 1929 | drl | 90 | 2 | 3 | 2 | -- | 715 | -- | -- | -- | -- | -- | Sand, at 90 | Phillips |
| 23.2h | Everett Lash | 1912 | drl | 65 | 2 | 3 | 2 | -- | 690 | 10 | -- | -- | -- | -- | Sand, at 65 | Phillips |
| 23.5a | John Rodgers | 1966 | drl | 55 | 6 | 6 | 6 | .016 | 675 | 14.5 | 34.5 | 6 | 0.2 | 6 | Sand, 48-55 | Baker |
| 23.8h | Pleasant DeBruler | 1910 | drl | 96 | 2 | 3 | 2 | -- | 690 | -- | -- | -- | -- | -- | Sand, at 96 | Copeland |
| 24.2g | Ada A. Lumop | 1917 | drl | 69 | 2 | 3 | 2 | -- | 673 | -- | -- | -- | -- | -- | Sand, at 69 | Payne |
| 24.7h | Beryl K. Freeland | 1917 | bor | 44 | 12 | -- | -- | -- | 681 | 12.7 | 2.5 | 6 | 2.4 | 0.5 | Sand & gravel, at 44 | Younger |
| 26.8h1 | Harry Stewardson | 1963 | drl | 76 | -- | -- | -- | -- | 690 | -- | -- | -- | -- | -- | *Mud sand, 61-63 | Baker |
| 26.8h2 | Harry Stewardson | 1963 | drl | 48 | 6 | 3 | 6 | .040 | 690 | 10 | -- | 2 | -- | -- | *Sand & gravel, 44-48 | Baker |
| 28.1a | J. R. Ward | 1953 | drl | 241 | 5 | -- | -- | -- | 690 | -- | -- | 6 | -- | 10 | Sandstone, 198-241 | Holkenbrink |
| 28.2a | J. R. Ward | 1916 | drl | 98 | 2 | 3 | 2 | -- | 700 | -- | -- | -- | -- | -- | Sand, at 98 | Payne |
| 28.6b | Homer Hunter | 1924 | drl | 93 | 2 | 3 | 2 | -- | 720 | -- | -- | -- | -- | -- | Sand, at 93 | Payne |
| 28.8a | Evelyn Matlock | -- | drl | 91 | -- | -- | -- | -- | 720 | -- | -- | -- | -- | -- | *Sand & gravel, at 91 | Warren |
| 29.2b | Dwight Storey | 1931 | bor | 89 | 12 | -- | -- | -- | 720 | 29.5 | 2.7 | 6 | 2.3 | 0.5 | Sand & gravel, at 89 | Younger |
| 29.4e | Dixie Kneller | 1931 | bor | 94 | 12 | -- | -- | -- | 700 | 31.8 | 2.7 | 6 | 2.3 | 0.5 | Sand, at 94 | Younger |
| 32.2b | J. D. Homrighous | 1926 | bor | 88 | 12 | -- | -- | -- | 714 | 23.5 | 2.7 | 6 | 2.3 | 0.5 | Sand & gravel, at 88 | Younger |
| 33.1c | James Hunter | 1925 | bor | 102 | 12 | -- | -- | -- | 692 | 26.7 | 3.1 | 6 | 2.0 | 0.5 | Sand & gravel, at 102 | Younger |
| 33.7a1 | Dale Donnell | 1948 | drl | 202 | -- | -- | -- | -- | 714 | -- | -- | -- | -- | -- | *Sand & gravel, 90-125; mud sand, 167-170; sand & gravel, 198-202 | Baker |
| 33.7a2 | Dale Donnell | 1948 | drl | 140 | -- | -- | -- | -- | 714 | -- | -- | -- | -- | -- | *Mud sand & gravel, 24-66; sand, 90-137 | Baker |
| 33.7a3 | Dale Donnell | 1948 | drl | 112 | -- | -- | -- | -- | 714 | -- | -- | -- | -- | -- | *Sand, 86-112 | Baker |
| 33.7a4 | Dale Donnell | 1948 | drl | 100 | -- | -- | -- | -- | 714 | -- | -- | -- | -- | -- | *Sand, 59-69, 84-100 | Baker |
| 33.7a5 | Dale Donnell | 1949 | drl | 127 | -- | -- | -- | -- | 714 | -- | -- | -- | -- | -- | *Sand & gravel, 96-125 | Baker |
| 33.7a6 | Dale Donnell | 1949 | drl | 110 | 7 | -- | -- | -- | 714 | 19 | -- | -- | -- | -- | *Mud sand, 85-90; sand, 90-110 | Baker |
| 33.7a7 | Dale Donnell | 1950 | drl | 95 | 4 | 2 | 4 | .040 | 714 | -- | -- | 4 | -- | 2 | Sand, 89-95 | Holkenbrink |
| 33.7h | Homer Hunter | 1910 | drl | 105 | 2 | 3 | 2 | -- | 715 | -- | -- | -- | -- | -- | Sand, at 105 | Copeland |
| 34.8h | Union School | 1936 | drl | 70 | -- | -- | -- | -- | 688 | -- | -- | -- | -- | -- | * | Baker |
| 35.5h1 | Roy Macklin | 1954 | drl | 72 | -- | -- | -- | -- | 660 | -- | -- | -- | -- | -- | * | Holkenbrink |
| 35.5h2 | Roy Macklin | 1954 | drl | 232 | 6 | -- | -- | -- | 660 | 30 | -- | 1 | -- | -- | Sandstone, 188-193, 208-213 | Holkenbrink |
| T13N, R4E | | | | | | | | | | | | | | | | |
| 16.2g | Raymond Robinson | 1937 | bor & drl | 265 | ?-5 | -- | -- | -- | 640 | 38 | 127 | 2 | -- | 5.5 | Sandstone, 207-265 | Baker |
| 16.5g | Raymond Robinson | 1959 | drl | 96 | -- | -- | -- | -- | 640 | -- | -- | -- | -- | -- | *Sand & gravel, 75-85 | Baker |
| 16.6d | Paul Loehr | 1960 | drl | 106 | 2 | -- | -- | -- | 660 | 61 | -- | 2.5 | -- | 7 | Sand, 103-106 | Stevens |
| 19.1g | Birkett L. Williams | -- | dug | 11 | -- | -- | -- | -- | 670 | -- | -- | -- | -- | -- | -- | -- |
| 26.7d | Susan Totten | -- | drl | 118 | 18-2 | -- | -- | -- | 670 | -- | -- | -- | -- | -- | -- | -- |
| 26.7e | Susan Totten | -- | bor | 53 | 12 | -- | -- | -- | 670 | 3 | -- | -- | -- | -- | -- | -- |
| 28.4b | D. D. Wright | ~1914 | dug | 26 | 48 | -- | -- | -- | 673 | -- | -- | -- | -- | -- | Sand & gravel, at 26 | -- |
| 30.1f | F. Schlohbohm, et al. | 1931 | drl | 218 | -- | -- | -- | -- | 670 | 36 | 62 | 15-20 | -- | -- | Sandstone, 194-218 | Baker |
| 31.1a | James Millikin Univ. | 1948 | drl | 108 | 2 | 6 | 2 | .035 | 664 | -- | -- | 7 | -- | 3 | Sand & gravel, 104-108 | Stevens |

# Appendix B (Continued)

| Well number | Owner | Well | | | | Screen | | | Land surface elev (ft above msl) | Non-pumping water level (ft) | Draw-down (ft) | Pumping rate (gpm) | Observed specific capacity (gpm/ft) | Length of test (hr) | Water-bearing formation and depth (ft) | Driller |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Year con-structed | Type | Depth (ft) | Diam (in) | Length (ft) | Diam (ft) | Slot size (in) | | | | | | | | |
| T14N, R2E | | | | | | | | | | | | | | | | |
| -- | Ralph Ayars | ~1916 | dug | 20 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| -- | J. W. Dobson | ~1915 | dug | 20 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Sand, at 20 | -- |
| -- | J. W. Dobson | ~1915 | dug | 30 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| -- | Moweaqua (V)** | 1893 | dug | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| -- | School Dist. 176 | ~1917 | bor | 28 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Sand, at 28 | -- |
| -- | S. A. Thomas | ~1919 | bor | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 20.7h | Marjorie Porter | -- | bor | 29 | 18 | -- | -- | -- | 630 | 6.5 | -- | -- | -- | -- | -- | -- |
| 22.1h | Ralph Clipston | 1947 | bor | 99 | 12 | -- | -- | -- | 690 | -- | -- | -- | -- | -- | -- | Younger |
| 23.1d | Nellie Bohlen | 1948 | drl | 115 | 6-4 | 3 | 4 | .030 | 705 | 31 | 36 | 3 | 0.1 | 4 | Sand & gravel, 98-114 | Baker |
| 24.8a | William Bunning | 1941 | drl | 156 | 5 | 1.5 | 5 | slotted pipe | 715 | 48 | 97 | 1 | -- | 5 | Sand, 80-82, 154-156 | Baker |
| 27.1e | Opal DeWalt | -- | dug | 22 | 42 | -- | -- | -- | 670 | 4.5 | -- | -- | -- | -- | -- | -- |
| 29.8c | Nathan Smith | ~1912 | bor | 30 | 12 | -- | -- | -- | 635 | -- | -- | -- | -- | -- | Sand, 24-30 | -- |
| 30 | Whitworth farm | ~1906 | drv | 34 | 2 | -- | -- | -- | -- | -- | -- | 12 | -- | -- | Sand & gravel, 30-34 | -- |
| 30 | Dr. M. H. Duckwall | ~1906 | dug | 20 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 30 | Dr. M. H. Duckwall | ~1906 | dug | 30 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 31 | Dr. M. H. Duckwall** | 1906 | dug | 17 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 34.7f1 | Donald C. Drew | 1963 | drl | 100 | 6 | 2 | 6 | .100 | 635 | -- | -- | 2 | -- | -- | *Sand & gravel, 70-72 | Baker |
| 34.7f2 | Donald C. Drew | 1963 | drl | 52 | 6 | 10 | 6 | .040 | 635 | 1 | 43 | 10 | 0.2 | 48 | Sand & gravel, 45-52 | Baker |
| T14N, R3E | | | | | | | | | | | | | | | | |
| 19.1a | Earl Otto | 1911 | drl | 108 | 2 | 3 | 2 | -- | 730 | -- | -- | -- | -- | -- | Sand, at 108 | Payne |
| 19.5h | Rosalie M. Weck | 1918 | drl | 121 | 2 | 3 | 2 | -- | 710 | -- | -- | -- | -- | -- | Sand, at 121 | Payne |
| 20.2b | T. Q. Sanner | 1917 | drl | 95 | 2 | 3 | 2 | -- | 723 | -- | -- | -- | -- | -- | Sand, at 95 | Payne |
| 20.8h1 | T. Q. Sanner** | ~1913 | dug | 28 | -- | -- | -- | -- | 723 | -- | -- | -- | -- | -- | -- | -- |
| 20.8h2 | T. Q. Sanner | 1916 | drl | 117 | 2 | 3 | 2 | -- | 723 | -- | -- | -- | -- | -- | Sand, at 117 | Payne |
| 21.3e | M. A. Sanner & B. S. Clark | 1925 | bor | 26 | 12 | -- | -- | -- | 720 | 12.2 | 4.1 | 7 | 1.7 | 0.5 | Sand, at 26 | -- |
| 21.8a | Earl Smull | 1900 | dug | 20 | 36 | -- | -- | -- | 725 | 15.3 | 2.3 | 7 | 3.1 | 0.25 | Sand, at 20 | -- |
| 22.1g | Mrs. Leslie Daniels | 1930 | bor | 74 | 12 | -- | -- | -- | 700 | 11.3 | 2.8 | 7.3 | 2.6 | 0.5 | Sand & gravel, at 74 | Younger |
| 22.6b | Lina H. Orris | 1900 | drl | 108 | 2 | -- | -- | -- | 715 | 45.4 | -- | -- | -- | -- | -- | -- |
| 23.3b | Daniel Sanner | 1900 | dug & drl | 107 | 36-2 | -- | -- | -- | 690 | -- | -- | -- | -- | -- | Sand, at 107 | -- |
| 23.8e | Cora Sanner | 1930 | bor | 70 | 12 | -- | -- | -- | 700 | 8.3 | 2.3 | 9.7 | 4.2 | 0.5 | Sand & gravel, at 70 | Younger |
| 24.2h | J. A. McReynolds | 1914 | bor | 65 | 12 | -- | -- | -- | 684 | 21.7 | 3.2 | 7 | 2.2 | 0.5 | Sand & gravel, 64-65 | McReynolds |
| 24.6d | Jean Shelton | 1900 | bor | 60 | 12 | -- | -- | -- | 680 | 9.3 | 2.5 | 7 | 2.8 | 0.5 | Sand & gravel, at 60 | -- |
| 25.1e | Lloyd Younger | ~1900 | bor | 35 | 12 | -- | -- | -- | 672 | 15.3 | 5.8 | 9 | 1.5 | 0.25 | -- | -- |
| 25.2a | Nellie Bohlen | 1905 | bor | 90 | 12 | -- | -- | -- | 675 | 6 | 5.5 | 9 | 1.6 | 0.5 | Sand, at 90 | -- |
| 26.1a | J. E. Garman Est. | 1900 | dug | 26 | 32 | -- | -- | -- | 688 | 24.2 | -- | -- | -- | -- | -- | -- |
| 26.8c | James Weakley | 1911 | bor | 86 | 24-18 | -- | -- | -- | 700 | 7 | -- | -- | -- | -- | Sand, at 86 | Cox |
| 27.1d1 | Naomi Coultas | 1922 | bor | 99 | 12 | -- | -- | -- | 702 | 28.8 | 7.3 | 9 | 1.2 | 0.2 | Sand & gravel, at 99 | Younger |
| 27.1d2 | Naomi Coultas | 1952 | drl | 102 | 6 | 10 | 6 | .035 | 702 | 13.5 | 29.5 | 7 | 0.2 | 24 | Sand & gravel, 91-102 | Baker |
| 27.6a | I. M. Baird & L. Cook | 1917 | drl | 106 | 2 | 3 | 2 | -- | 713 | -- | -- | -- | -- | -- | Sand, at 106 | Payne |
| 28.1c | West Center School | 1910 | dug | 21 | 24 | -- | -- | -- | 715 | 12.3 | 3.3 | 7 | 2.2 | 0.25 | -- | -- |
| 28.4h | O. L. Ekiss | 1915 | drl | 137 | 2 | 3 | 2 | -- | 722 | -- | -- | -- | -- | -- | Sand, at 137 | Payne |
| 29.6a | Sanders Bros. | 1916 | drl | 104 | 2 | 3 | 2 | -- | 730 | -- | -- | -- | -- | -- | Sand, at 104 | Payne |
| 29.8e | H. Cooper | 1929 | drl | 120 | 2 | 3 | 2 | -- | 730 | -- | -- | -- | -- | -- | Sand, at 120 | Payne |
| 30.3h | Cora Williams | 1917 | drl | 104 | 2 | 3 | 2 | -- | 732 | -- | -- | -- | -- | -- | Sand, at 104 | Payne |
| 30.8a | Cora Williams | 1911 | drl | 111 | 2 | 3 | 2 | -- | 724 | -- | -- | -- | -- | -- | Sand, at 111 | Payne |
| 30.8f1 | Noble Elmers | 1956 | drl | 116 | 6 | 5 | 6 | .012 | 734 | 52.5 | 44.5 | 5 | 0.1 | 5 | Sand, 112-116 | Baker |
| 30.8f2 | Noble Elmers | 1957 | drl | 148 | 6 | 3 | 6 | .014 | 734 | 52.5 | 92.5 | 2 | -- | 3 | Mud sand, 95-123; sand & gravel, 147-148 | Baker |
| 31.1b | Verna King | 1916 | drl | 120 | 2 | 3 | 2 | -- | 732 | -- | -- | -- | -- | -- | Sand, at 120 | Payne |
| 31.1h | Ervil Pierce | 1944 | drl | 108 | 4 | -- | -- | -- | 727 | 16 | 25 | 5 | 0.2 | 1 | Sand & gravel, 97-99, 106-108 | Woollen |
| 31.7e | Glen Humphrey | 1917 | drl | 100 | 2 | 3 | 2 | -- | 670 | -- | -- | -- | -- | -- | Sand, at 100 | Payne |
| 32.2a | Florence Alward | 1905 | bor | 108 | 12 | -- | -- | -- | 730 | 18.2 | 5.3 | 7 | 1.3 | 0.5 | Sand, at 108 | -- |
| 32.6h | George Elliott | -- | bor | 100 | -- | -- | -- | -- | 740 | -- | -- | -- | -- | -- | -- | -- |
| 32.8g | Irene Goodwin | 1913 | drl | 121 | 2 | 3 | 2 | -- | 730 | 50 | -- | -- | -- | -- | Sand, at 121 | Payne |
| 33.1g | R. L. Settle | 1925 | bor | 88 | 12 | -- | -- | -- | 712 | 31.8 | 2.4 | 9 | 3.7 | 0.5 | Sand, at 88 | Younger |
| 33.4h | Guy E. Cox | 1916 | drl | 106 | 2 | -- | -- | -- | 723 | -- | -- | -- | -- | -- | Sand, at 106 | Payne |
| 33.8g | Alice Morton | 1932 | drl | 112 | 2 | 3 | 2 | -- | 730 | -- | -- | -- | -- | -- | Sand, at 112 | Payne |
| 34.6a | Paul Kroenlein | 1925 | bor | 85 | 12 | -- | -- | -- | 710 | 8.3 | 2.9 | 7 | 2.4 | 0.5 | Sand, at 85 | Younger |
| 35.1e | D. E. Baird | 1900 | dug | 65 | 24 | -- | -- | -- | 682 | 8.5 | -- | -- | -- | -- | Sand & gravel, at 65 | -- |
| 35.6a | Leslie Moss | 1917 | drl | 120 | 2 | 8 | 2 | -- | 690 | -- | -- | -- | -- | -- | Sand, at 120 | Payne |
| 36.1d | Public Hwy. | -- | dug & drl | 53 | 20 | -- | -- | -- | 670 | 3.9 | 1.7 | 9.7 | 5.8 | 0.5 | -- | Stewart |
| 36.8e | D. E. Baird | 1915 | bor | 66 | 12 | -- | -- | -- | 680 | 5.3 | 3.3 | 7 | 2.2 | 0.5 | Sand & gravel, at 66 | Younger |

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