

Technical Series 11

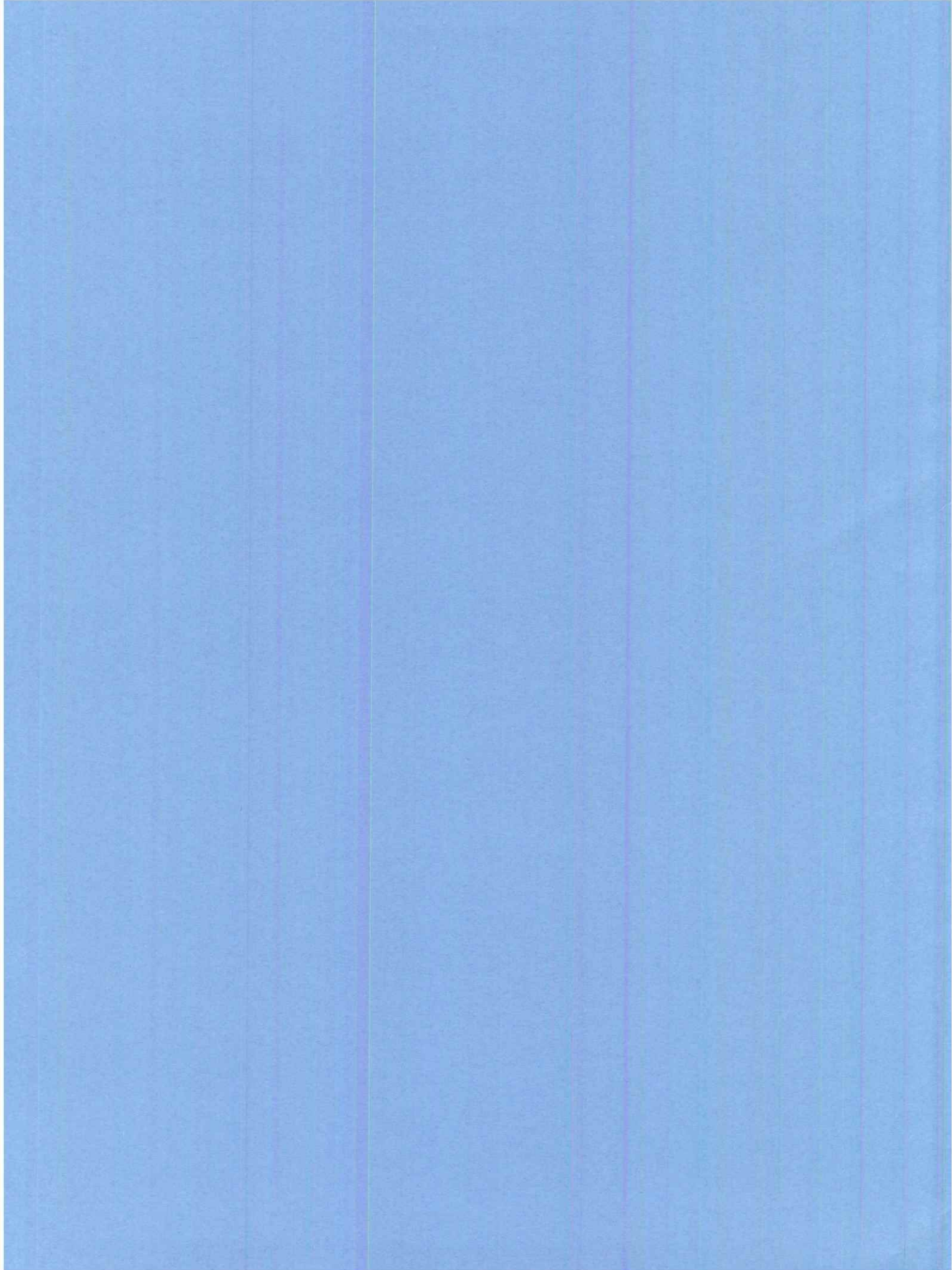
January 1997 Kansas Water Levels
and Data Related to Water-level Changes

John J. Woods, Jeffrey A. Schloss, and P. Allen Macfarlane



Kansas Geological Survey

1997



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Abstract

Water levels measured in January 1997 generally showed more increases and fewer declines in the western regions (I, II, and III) (see fig. 1), while in the south-central region (V), 1997 water-level changes generally mirrored the pattern of annual precipitation during 1996. The 1997 measurements showed an average water-level rise of 0.06 ft (1.8 cm) over the 1996 measurements, compared to an average decline of 0.5 ft (15 cm) during the 1995–1996 period. The overall pattern of rising water levels is probably a result of increased recharge and decreased pumpage in the western regions and in the western portion of the south-central region since the 1996 measurements. The single largest rise in water level was 20.0 ft (6.10 m), and the largest decline was 23.1 ft (7.04 m). Annual water-level rises outnumbered declines 53% to 47% for wells in this report, compared to 54% declines and 46% rises in the 1996 report. Regional breakdowns of the data indicate an increase in the areas that experienced rising water levels in the western regions I and II. Region III showed more areas with water-level declines in the western part of the region and more areas with water-level rises in the eastern part of the region. In region V, the water table is relatively shallow. In most of the western counties of this region, rising water levels correlate with increases in annual precipitation during 1996. In contrast, water-level declines are more prevalent in the eastern counties and correlate with decreases in annual precipitation during 1996. Small areas of sharp decline seem to indicate localized areas of increased irrigation pumpage. In the remainder of the state (regions IV, VI, VII, and VIII), the water-level data are too sparse to lend themselves to regional analysis.

Introduction

In this report we summarize hydrologic data from the cooperative program of ground-water-level measurements in Kansas. This program is carried out jointly by the Kansas Geological Survey and the Kansas Department of Agriculture's Water Resources Division and involves water-level measurements on a network of approximately 1,400 wells. In recent years, the U.S. Geological Survey has participated in data acquisition, but this past year those field activities have become the responsibility of the Kansas Geological Survey, and the U.S. Geological Survey's role was limited to assisting with the preparation of materials for this field component of the program. A compilation of water-resources data is published annually on a water-year basis (October 1–September 30) by the U.S. Geological Survey (see the list of references in appendix A). This Kansas Geological Survey report presents the annual water-level data in the context of both recent and long-term water-level changes to provide information on the ground-water resources of the state.

Appendix A is a list of publications containing ground-water level data for Kansas. The data tables of

appendix B contain the primary information on well locations and characteristics, past and present water-level measurements, trends in the measurements, other information on water resources, and the amounts and types of information available for each well. To make this information more understandable, we provide in the text that follows some basic definitions and descriptions of the occurrence of ground water in Kansas, a discussion of the relationship between precipitation and ground water, and tables and maps summarizing the long- and short-term changes in water levels in selected areas of the state. Appendix C lists those wells previously reported that are not contained in this report because of a lack of recent data. Wells that have not been measured for three consecutive years or wells that have been taken out of service have been eliminated from this report.

Information in this report is generalized and regional in nature and should not be used in lieu of site-specific data collection for decisions concerning local ground-water conditions.

Data-collection program

Most of the wells in the water-level-measurement program are measured annually, some are measured quarterly, and a few are equipped with continuous recorders. For continuously recorded wells, depth to water values are picked from the record at specific times, typically one value per month. Because many of the wells are used for irrigation or are in areas of major irrigation pumpage, the annual measurement program is timed for mid-winter to maximize the recovery of water levels from seasonal

pumping. The nominal time of measurement is January, but for logistical reasons some of the wells are measured in December of the preceding year or in February. Because of this, the current water-level report presents data collected before the irrigation season of the present year and includes measurements taken primarily from December through February. In rare cases, measurements taken in late November or early March have been used for some wells.

Ideally, the data should provide a snapshot of regional water levels undisturbed by pumping or other factors. In practice, it is physically impossible to measure all wells at exactly the same time. In addition, recovery of local water levels from pumping depends on several factors. These include the local hydrogeology, the schedule of pumping, the volume of irrigation water pumped during the preceding season, and the proximity of high-capacity industrial or municipal wells that are pumped year round. Because irrigation varies from year to year, successive measure-

ments at the same time of year may represent different degrees of water-table recovery. Other factors can also influence the apparent water levels; for example, changes in barometric pressure or the method of measurement. An apparent change in water level for a particular well during a one-year period may reflect only temporary deviations from the fully equilibrated water table. Because of these uncertainties, any assessment of trends should be based on a comparison of changes that occur over a period of several years or that emerge as a consistent geographic pattern involving a number of wells.

Aquifers and ground-water occurrence

Bedrock or unconsolidated sediments that have a sufficiently large number of interconnected pores to contain substantial amounts of extractable water are defined as aquifers. In Kansas most of the regional aquifers occur in the western and south-central portions of the state. Because these areas receive relatively little rainfall, ground water is extensively used. Fewer ground-water resources are found in eastern Kansas, and surface water is used for many water supplies. For a general overview of the aquifers in Kansas, we refer readers to *Kansas Ground Water*, Educational Series 10, published by the Kansas Geological Survey in 1993.

Aquifers are more commonly known by popular or geographic names that may or may not coincide with the names of the formations that make up the aquifer. Throughout Kansas, stream and river systems flow over unconsolidated Quaternary alluvial deposits that may be locally important sources of ground water, forming stream-aquifer systems. Depending on the conditions in the stream and in the aquifer, considerable interchange of water between the subsurface and the stream may occur. The High Plains aquifer consists of the Ogallala Formation and associated Quaternary deposits in western Kansas and the Quaternary alluvial deposits of the Equus Beds and Great Bend Prairie in south-central Kansas. The Dakota is a regional bedrock aquifer in western and central Kansas that consists of sandstones in the Dakota and Kiowa Formations and in the Cheyenne Sandstone. In southeastern Kansas, the major bedrock aquifer is the Ozark aquifer,

which consists of solution cavities and fractures in Ordovician and Cambrian limestone and dolomite formations. In northeastern Kansas, Pennsylvanian sandstones in the Lawrence and Stranger Formations are a locally important source of ground water for small municipal and domestic users. The tables in Appendix B contain abbreviated designations of the geologic units that make up the aquifers. These abbreviations, along with descriptions of the geologic units and the aquifers with which they are associated, are listed below.

Geologic units		Aquifer name
Symbol	Description	
JM	Jurassic Morrison Formation	Morrison
OU	Ordovician undifferentiated	Ozark
PL	Pennsylvanian Lawrence and Stranger formations	Douglas Group
KJ	Lower Cretaceous/Upper Jurassic undifferentiated	Dakota/Morrison
KD	Cretaceous Dakota and Kiowa Formations and Cheyenne Sandstone	Dakota
KN	Cretaceous Niobrara Chalk	
TO	Tertiary Ogallala Formation/Quaternary deposits	High Plains
QA	Quaternary alluvium	Alluvial
QU	Quaternary undifferentiated	

Factors influencing infiltration, recharge, and water-level fluctuations

Most aquifer systems are recharged primarily by the percolation of infiltrated precipitation that moves downward through the soil zone to the water table. Recharge may also result from downward seepage from water bodies at the earth's surface.

Infiltration of water through the soil is affected by a number of interrelated factors. The intensity and duration of precipitation affect this rate. Moderate rainfall over an

extended period of time favors infiltration. Heavy rain over a short period of time will eventually exceed the soil's ability to absorb and transmit water and produce runoff. Drainage patterns within a watershed and local topography also affect infiltration rates. In general, steep slopes favor rapid surface runoff, and gentle slopes retain water longer, favoring infiltration. However, extremely flat terrain often develops tight surface soils that impede

infiltration. Land use, agricultural practices, and vegetation also influence the balance between runoff, recharge, and evaporation.

The rate of recharge also varies with the permeability and thickness of the soil and other earth materials which the water must infiltrate to reach the zone of saturation. Relatively rapid downward movement commonly occurs where the soils contain a greater proportion of sand and silt than clay. However, even in areas where the soil zone is dominated by sand, thin clay layers may significantly retard the downward movement of recharge.

The major factors that cause water-level fluctuations in an aquifer are the volume, rate, and timing of ground-

water pumping in the area, and the rate of replenishment by local recharge or regional flow. If the annual ground-water pumpage from an aquifer exceeds its replenishment, the elevation of the water table will decline. Likewise, if the annual pumpage is less than or equal to the amount of water that can be supplied by local recharge or regional flow, the water table will rise or remain unchanged. The response of a deep water table to recharge events may be delayed for years or decades if the water table is deep below the surface (such as in much of northwestern and southwestern Kansas). In contrast, a shallow water table in permeable sediments may respond rapidly to recharge events.

Hydrographs and precipitation graphs

For this report, the state is divided into eight ground-water regions (fig. 1). Regional tables and maps depict ground-water level changes in the major aquifers of the central and western parts of the state. Regions I, II, and III cover the High Plains aquifer and coincide approximately with the areas of Groundwater Management Districts 3, 1, and 4, respectively. Region V covers the Great Bend Prairie and Equus Beds regions and is roughly coincident with the combined areas of Groundwater Management Districts 5 and 2. No tables or maps are included for the

remaining four regions because they contain fewer wells and no laterally extensive major aquifers.

Hydrographs are plots of the depth to water or the water-level elevation in a given well as a function of time. These graphs are used to portray both long-term changes in ground-water levels and short-term fluctuations resulting from recharge or pumpage. In this section we present several representative well hydrographs and local rainfall records for various aquifers and geographic regions. The hydrographs in figs. 2–8 contain historical information

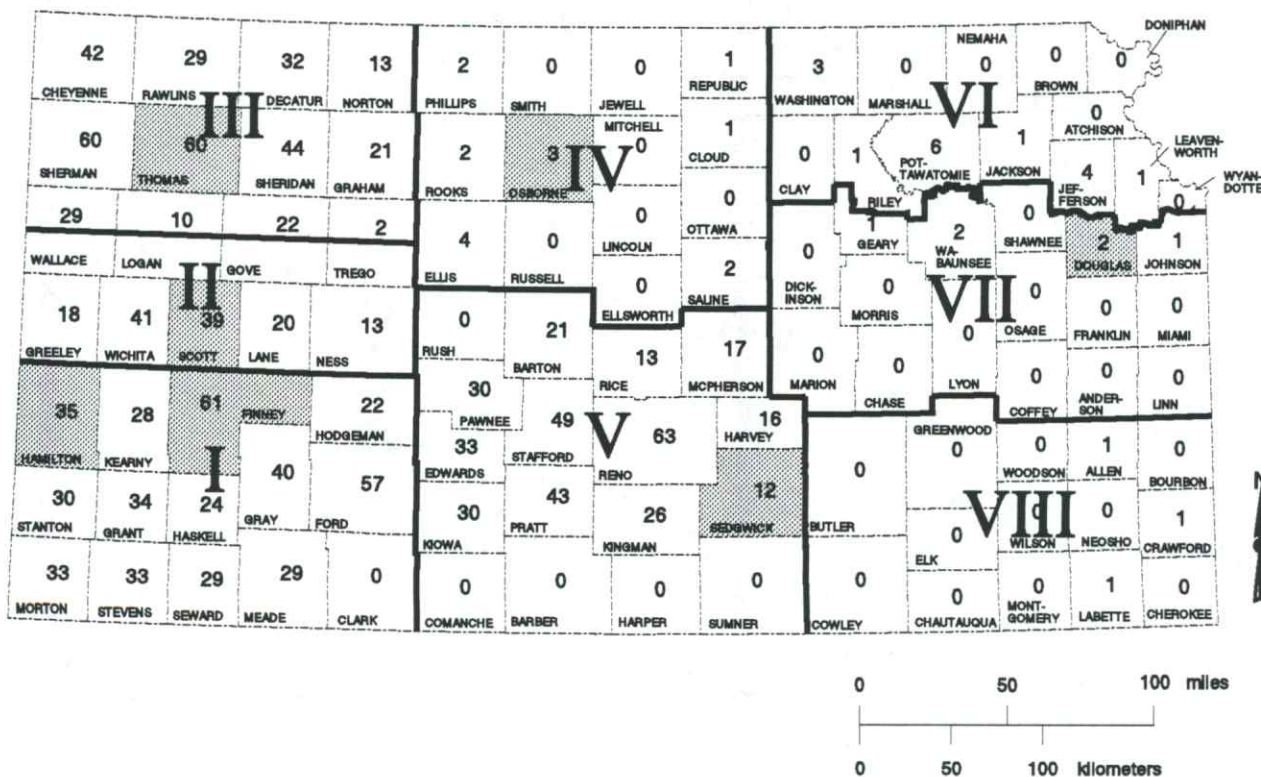


FIGURE 1—Number of ground-water-level observation wells measured in each county for the 1997 water-level census. Shaded counties are those for which precipitation graphs and well hydrographs are presented in the text.

regarding precipitation and water-table fluctuations in Douglas, Finney, Hamilton, Osborne, Scott, Sedgwick, and Thomas counties. The increases in ground-water usage and the associated declines in the water table in some counties are demonstrated on several of the graphs.

In viewing the graphs in figs. 2–8, it is important to remember that rainfall and water levels are represented by two different types of measurements. The precipitation is expressed as the annual total for the preceding calendar year at a specific location in the general vicinity of the well. The corresponding depth-to-water measurement is taken at a single point in time, before the onset of irrigation, usually early in the year. Although the graphs are a reasonable way to compare the available data, no direct correspondence exists between the plots. The relationship is only theoretical, because of the importance of the timing of precipitation events to the recharge process. For example, a wet spring season may have less influence on next year's water level than a single storm event closer to the time of water-level measurement.

Some of the graphs in figs. 2–8 display discontinuous lines. The breaks indicate years during which the data-collecting agencies encountered sampling problems, resulting in no data having been reported in the desired time interval. No attempt is made to connect these data points because of the variable and seasonal nature of the natural processes. Lines joining two points do not accurately represent the behavior of the water table between sampling observations. In all of the hydrographs, measurements were plotted primarily for the months of December or January.

The figures demonstrate that the deeper aquifers in more arid regions do not show rapid responses to recharge events because of the greater thickness of the unsaturated zone and the low recharge rate. Water levels in shallow aquifers, however, respond more rapidly to recharge. This is particularly true where surface water and ground water commonly interact.

Douglas County, alluvial aquifer (QA)

The observation well in fig. 2, for Douglas County, is screened in the Kansas River alluvium. In this area, alluvial deposits are the primary geologic unit for water usage and yield water of good quality and moderate quantity. The alluvium consists of unconsolidated clay, sand, and gravel located along major stream courses. The thickness of the alluvial deposits varies according to the amount of downcutting and sedimentation by streams.

The hydrograph of well 12S-20E-07CBC-01 (fig. 2) illustrates a relatively prompt response of the water table to precipitation. This is probably because of the shallow depth of the water table, relative proximity of the well to the river, the types of sediment through which the water moves, and the small volume of ground water pumped in the area.

Finney County, High Plains aquifer (QU, TO)

Most of the observation wells in Finney County are screened in the High Plains aquifer. The depth to bedrock (bottom of the aquifer) at well 24S-33W-28DAA-01 (fig. 3) is 386 ft (118 m), and the well is screened in deposits that consist of poorly consolidated sand and gravel of Pleistocene age.

The depth to water for 1997 is 106.8 ft (32.55 m). Compared to the 1940 depth to water of 34 ft (10 m) (Appendix B, Finney County, table 1), the decline of 72.8 ft (22.2 m) represents a decrease of about 21% in saturated thickness. Changes in saturated thickness of this magnitude or greater for the period 1940–1997 are typical of the High Plains aquifer in Finney County.

Figure 3 illustrates the lack of effect of precipitation recharge on the water table in the High Plains aquifer and the prominent effect of ground-water pumping on the water table. As the precipitation graph indicates, rainfall has regularly fluctuated over time with an average annual total precipitation of 18.1 in/yr (46.0 cm/yr).

Hamilton County, alluvial aquifer (QA)

The aquifers used in Hamilton County are associated with various geologic units (KJ, TO, QU, QA). The hydrograph (fig. 4) is for well 23S-43W-21ABA-01 in the Quaternary alluvium of the Arkansas River valley. Alluvial aquifer systems consist of unconsolidated sand and gravel

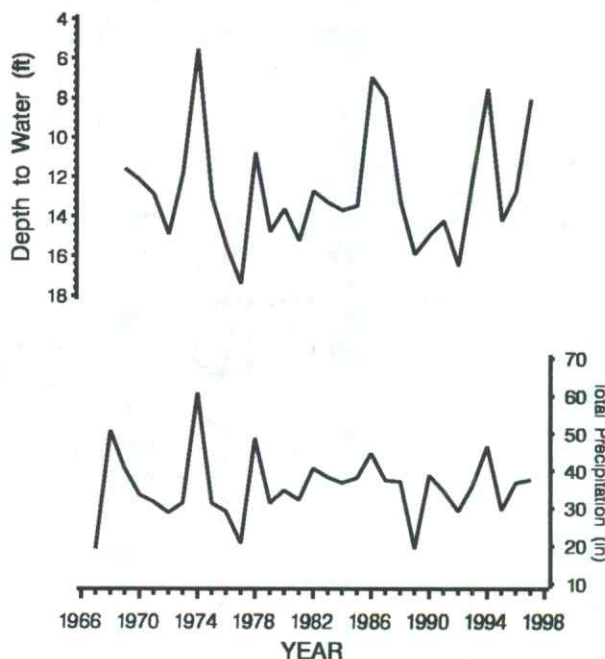


FIGURE 2—Depth to water in Douglas County, well 12S-20E-07CBC-01 [29 ft (8.8 m) deep; alluvial aquifer], and precipitation at Topeka WSFO airport (station 14816706).

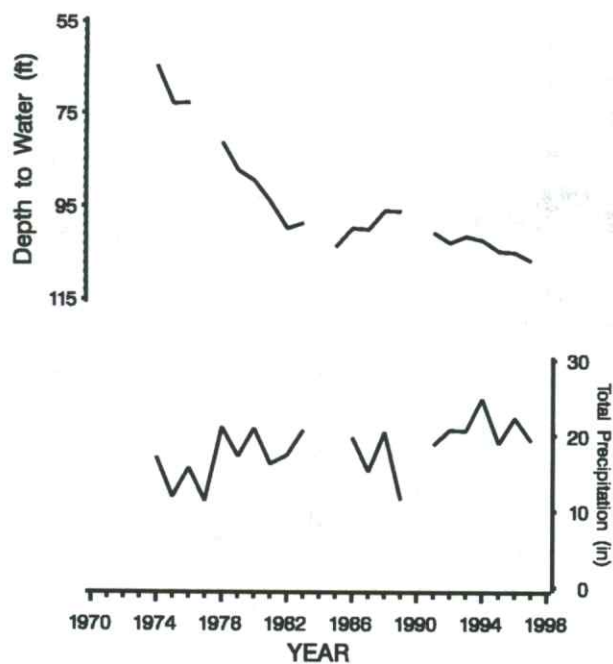


FIGURE 3—Depth to water in Finney County, well 24S-33W-28DAA-01 [185 ft (56.4 m) deep; High Plains aquifer], and precipitation at Garden City Experimental Station (station 14298007).

at relatively shallow depths. The depth to bedrock at the well is 29 ft (8.8 m), with a 1940 depth to water of 15 ft (4.6 m) and a 1997 depth to water of 12.6 ft (3.84 m). This local increase in saturated thickness is reasonable for an alluvial aquifer because the water level fluctuates in response to recharge from the Arkansas River and from rainfall events. However, aquifer systems such as the High Plains and Dakota aquifers in Hamilton County show steady long-term declines in the water level. This is a result of ground-water withdrawals that exceeded natural recharge. Some individual wells in these aquifer units show declines in excess of 70 ft (21 m) since predevelopment, as shown in Appendix B.

The hydrograph (fig. 4) for well 23S-43W-21ABA-01 shows some relationship between water level and precipitation. Large-scale and variable local irrigation-pumping can influence these relationships. In addition, precipitation and water use influence streamflow in the Arkansas River over a much larger area than that represented by the single precipitation gauge.

Osborne County, terrace deposits of Quaternary age (QU)

Osborne County contains few observation wells for data collection. The major aquifers in this county are the Dakota (KD) and the terrace deposits of Quaternary age (QU). The hydrograph of the observation well 06S-12W-23CDC-01 is presented in fig. 5. The well is in the alluvial terrace deposits along the North Fork Solomon River.

The hydrograph illustrates the combined effects of recharge, ground-water pumping, releases from upstream reservoirs, and surface water irrigation on yearly changes in water level. Precipitation patterns drive these factors directly or indirectly. In turn, they interact in various ways that either cancel their effects (e.g., diverting surface water can be less expensive than pumping and is therefore used in its place) or compound their effects (e.g., increased rainfall increases reservoir levels, which allows for more instream releases). This is a shallow well, with a shallow water table [at a depth of 13–28 ft (4.0–8.5 m), on average] and is located in alluvial terrace deposits of sands, gravels, and clays. These permeable materials allow the water table to respond more rapidly to local recharge and changes in the stream-channel water level. A comparison of figs. 2 and 5 supports these conclusions. The well in fig. 2 is also an alluvial well, but it is not subject to fluctuations resulting from variable local releases and irrigation. Thus depth to water and precipitation in fig. 2 show greater correspondence than in fig. 5.

Scott County, High Plains aquifer (TO)

All of the observation wells in Scott County are screened in the Ogallala Formation (TO). Well 20S-33W-09BBB-01 is used for the hydrograph (fig. 6), and it penetrates 128 ft (39.0 m) to the bottom of this geologic unit. The High Plains aquifer consists of the Ogallala Formation, which is composed of sand, gravel, silt, and clay and overlain by Pleistocene loess deposits of sand, silt, and clay.

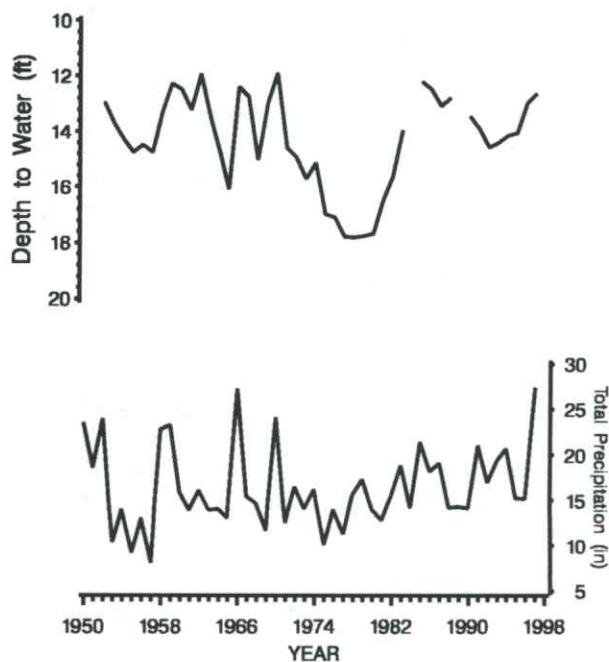


FIGURE 4—Depth to water in Hamilton County, well 23S-43W-21ABA-01 [29 ft (8.8 m) deep; alluvial aquifer], and precipitation at Syracuse (station 14803807).

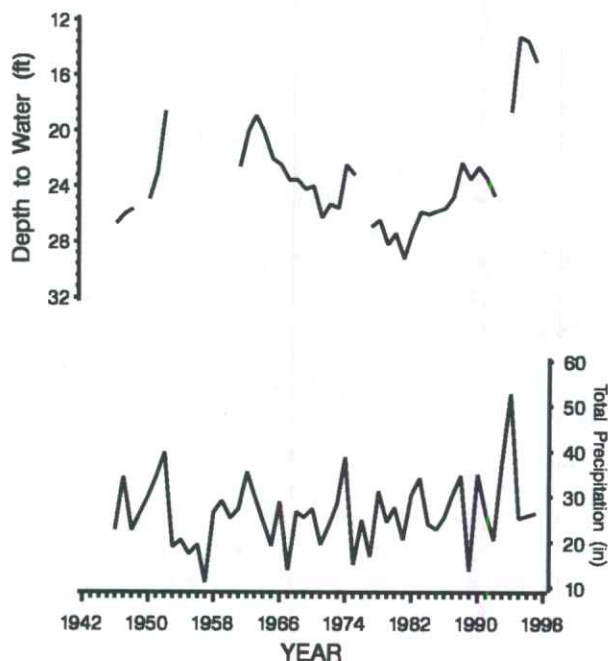


FIGURE 5—Depth to water in Osborne County, well 06S-12W-23CDC-01 [30 ft (9.1 m) deep; unconsolidated Quaternary aquifer and alluvial terrace deposits], and precipitation at Cawker City (station 14137102).

The 1997 depth to water is 102.6 ft (31.27 m). Compared to the 1940 level [60 ft (18 m)] (Appendix B, Scott County, table 1), the water-level decline is 42.6 ft (13.0 m) and represents a nearly 63% decrease in saturated thickness. This change in saturated thickness for the period 1940–1997 is typical of the High Plains aquifer in Scott County.

The water-level changes and the low and variable annual rainfall shown in the hydrograph (fig. 6) bear no observable relationship. This is consistent with other studies that indicate that average annual recharge is on the order of 0.25 in/yr (0.6 cm/yr) and that the time required for water to move from the surface to the water table in some locations is more than 30 years. Clearly, the dominant effect is the decline in the water table resulting from ground-water pumping.

Sedgwick County, alluvial aquifer (QA)

The hydrograph of the observation well 25S-01W-14DDD-01 (fig. 7) is representative of ground-water conditions in Sedgwick County. In previous reports, well 25S-01W-26DBD-01 was used for this figure, but no depth-to-water data were available for winter 1997, so a replacement well was selected.

The well is screened in the Arkansas River alluvium. The hydrograph illustrates the effect of recharge on changes in water level on a yearly basis. Because this well is shallow and located in alluvial terrace deposits with an

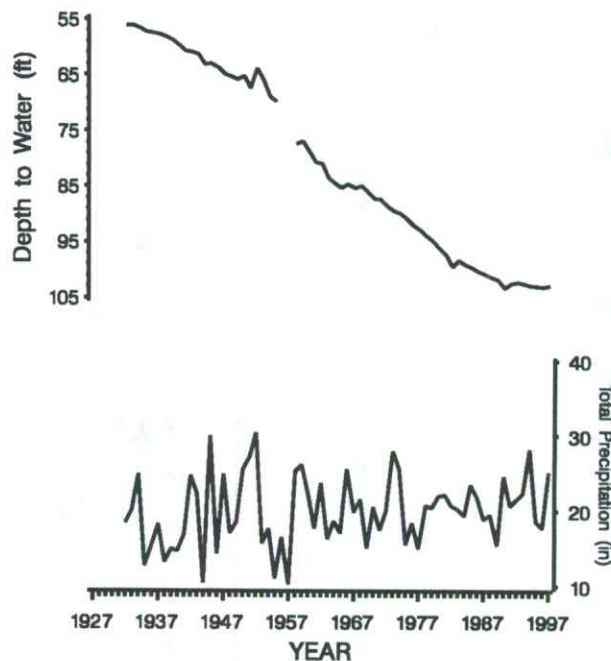


FIGURE 6—Depth to water in Scott County, well 20S-33W-09BBB-01 [128 ft (39.0 m) deep; High Plains aquifer], and precipitation at Scott City (station 14727104).

average water-table depth of 15–20 ft (4.6–6.1 m), the depth to water is greatly influenced by recharge from the river and infiltrating precipitation.

A comparison of fig. 7 with figs. 2 and 5 shows that the Sedgwick County well is more similar to the Douglas County well in the Kansas River alluvium (fig. 2). Unlike the well in fig. 5 (in Osborne County), the wells in Sedgwick and Douglas counties are subject to streamflow regimes that are less affected by local flow regulation.

Thomas County, High Plains aquifer (TO)

The primary aquifer in Thomas County is the High Plains, which consists of the Ogallala Formation in this area. The Ogallala is composed of sand, gravel, silt, and clay and is overlain by Pleistocene loess. The depth to bedrock at observation well 08S-34W-01BAC-01 is 270 ft (82.3 m). The depth to water in this well has increased from 113 ft (34.4 m) below land surface in 1950 to 130.6 ft (39.81 m) in 1997. This drop in water level represents an 11% decrease in saturated thickness since predevelopment.

As in the hydrograph for Scott County (fig. 6), the hydrograph in fig. 8 shows no obvious correspondence between total annual rainfall and the depth to the water table. In this part of Kansas, the water table in the High Plains aquifer is much deeper than it is elsewhere in the state. This deep water table combined with thick, overly-

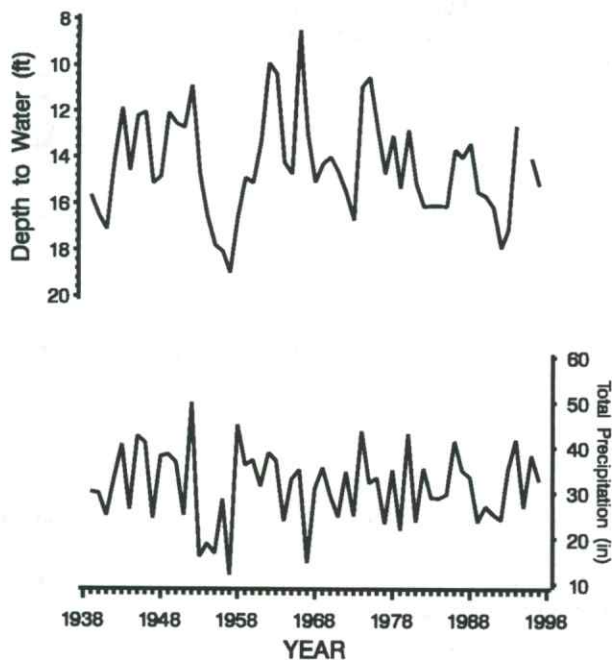


FIGURE 7—Depth to water in Sedgwick County, well 25S-01W-14DDD-01 [alluvial aquifer], and precipitation at Mount Hope (station 14553908).

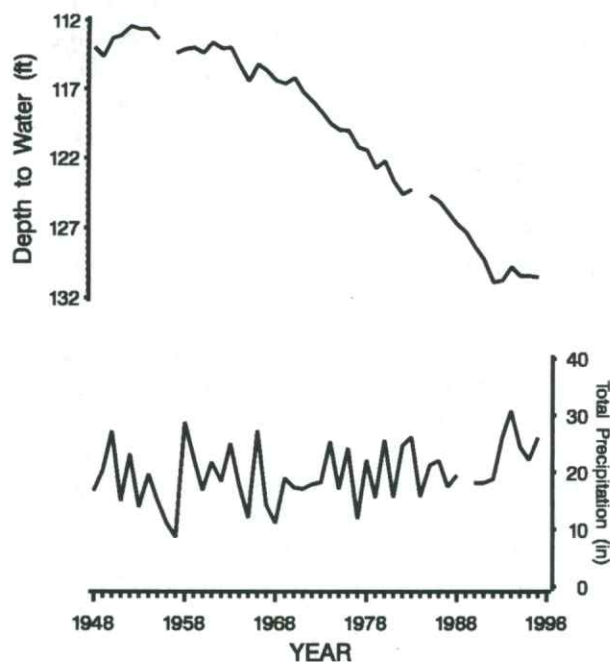


FIGURE 8—Depth to water in Thomas County, well 08S-34W-01BAC-01 [160 ft (48.8 m) deep; High Plains aquifer], and precipitation at Colby 1 SW (station 14169901).

ing, unsaturated sediments and low annual rainfall results in long time-lags between rainfall and recharge. The long-term imbalance between ground-water withdrawal and

replenishment is evident from the decline of water levels over a 40-year period with relatively stable amounts of precipitation.

Regional change in water levels

The state of Kansas has been divided into eight hydrologic regions (see fig. 1). In regions IV, VI, VII, and VIII, the water-level data are too sparse to lend themselves to regional analysis. For each of the remaining four regions that contain major portions of the High Plains aquifer, two types of water-level change are presented in this section. Each is based on the measured depths to water reported in table 1 of Appendix B. Because the amount of water available and the elevation of the water table both decrease as the depth to water increases, changes are discussed in terms of change in water level, or elevation of the water table. These values are presented in table 2 of Appendix B.

Wells are normally measured in the same month in each sample year. This provides a benchmark for short-term changes, and differences between successive annual measurements are reported as the annual change. When measurements are not available within a month of the intended month of measurement, no comparison is made. Long-term effects are represented by changes since the predevelopment period. The predevelopment water level represents conditions before ground water in that region was used extensively and is usually taken as a specific

year in the range 1940–1950, depending on the availability of early data for the region.

Tables 1–8 summarize regional changes in water level since the predevelopment period and during the past seven years. Figures 9–12 are divided into three maps each, depicting the spatial distribution of water level and saturated thickness changes in the High Plains aquifer. Part A displays a generalized interpretation of the absolute vertical change in water level from the assigned predevelopment period to the present. Part B shows a generalized interpretation of the percentage change in the saturated thickness of the aquifer from predevelopment to present. Finally, part C shows the generalized change in water level since the last annual sample. The areal extent of the High Plains aquifer is shown as an outline on each map, and except for fringe areas, generally coincides with the shaded regions. On each map, an average value of the variable (water-level change or percent change in saturated thickness) is determined for each section in a township. The sections are then classified into different intervals according to their specific average values. For example, all sections with an average decline of water level since predevelopment between 25 to 50 ft (7.6–15.2 m) are

shaded the same color and assigned to the interval which is labeled 25 to 50 ft decrease, and so forth. The classification schemes are based on the range of possible values and are limited as to the total number of classes, and therefore may vary from one region to another. It must also be kept in mind that the general intensities of gray shades may differ from one annual report to the next. In this report we have indicated areas of sparse data in figs. 9–12.

For the production of figs. 9–12, not every well listed in the tables of Appendix B was used. Wells drilled in any formations of type KD, KN, JM (even in combination with any other type) and those drilled only in Lower Cretaceous/Upper Jurassic undifferentiated (KJ) units were not used since these formations are not considered part of the High Plains aquifer system. For the same reason, wells with a geologic unit code containing any alluvial (QA) type were eliminated from the maps of regions I, II, and III. Wells drilled in units of this type (QA) were used for the production of region V maps since such units are generally considered part of the aquifer system in this region.

Statistical analysis is an important tool for understanding observed patterns of ground-water data. This report employs a statistic to help describe the behavior of annual water-level changes. Tables 2, 4, 6, and 8 report the results of a “paired t-test” on the difference between each successive annual depth-to-water measurement for each well. This statistic, the average of all annual water-level changes, is tested to determine whether that difference is large enough to indicate that a “statistically significant” change has occurred.

Statistical significance relates the value of a statistic with the probability of observing that calculated value. It is often measured by the “p-value.” This quantity reports the probability of encountering a larger value than was calculated from the sample of data. A 5% level of significance is commonly used as an indication of statistical significance (this convention is followed in this report). This means that the p-value must be less than 0.05 (5%) to indicate statistical significance. In other words, there is less than a 5% risk that the statistic could be larger, by

TABLE 1—CHANGE IN WATER LEVEL (ft), predevelopment to present, for reported wells in region I.

Year	Average change	Number of wells	Largest rise	Largest decline
1991	–49.4	362	21.3	205.1
1992	–49.3	347	20.3	209.0
1993	–48.0	331	19.8	210.4
1994	–49.4	327	19.8	207.9
1995	–49.6	302	19.6	212.0
1996	–53.4	307	18.6	216.9
1997	–52.2	304	19.9	218.9

random chance. This is commonly accepted as sufficient evidence of a statistically significant result. However, there remains a 1 in 20 (5%) chance that this relationship is not significant. Conversely, if statistical significance is rejected because of a large p-value, a possibility always remains that the difference is nonetheless real.

Region I: Southwestern Kansas

Table 1 shows the changes in regional water levels in the High Plains aquifer over the past seven years. Although the average decline of water levels between 1996 and 1997 is small, the average decline since predevelopment of 52.2 ft (15.9 m) is still relatively large. The map in fig. 9A shows large declines from predevelopment ground-water levels in parts of Stanton, Grant, Haskell, Stevens, and Finney counties. Because of the large original saturated thickness of the High Plains aquifer in this area, substantial reserves of ground-water still exist. There are limited areas, primarily in Grant, Stanton, Morton, Hamilton, and Finney counties, where saturated thickness has decreased by over 50% (see fig. 9B).

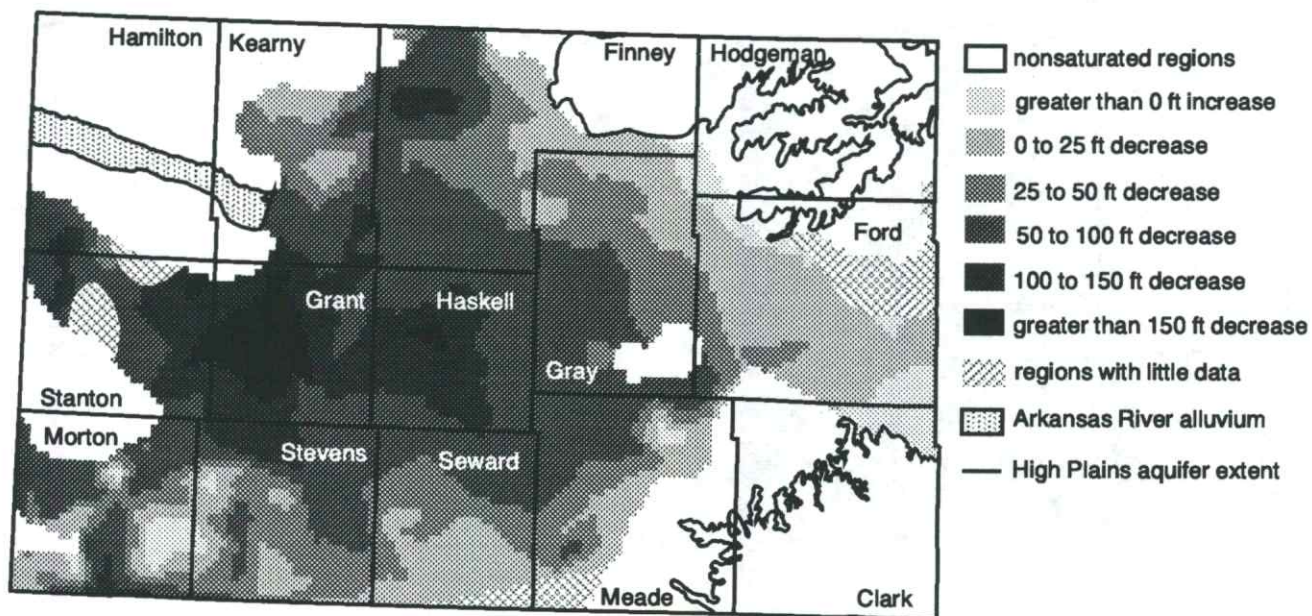
Annual changes in water level (table 2) for Region I show an average decline of 0.3 ft (9.1 cm) this year, compared with 1.6 ft last year. Declines in water levels were observed in 57% of the wells reported, compared to

TABLE 2—ANNUAL CHANGE IN WATER LEVEL (ft) for reported wells in region I.

Interval	Average change	Number of wells	Largest rise	Largest decline	Percentage of wells with rise ^a	Percentage of wells with decline ^a	Is change statistically significant?
1991–1992	–2.0	451	15.0	38.3	21	78	yes
1992–1993	+0.6	427	84.9	11.1	45	55	no
1993–1994	–0.1	415	43.1	21.5	34	66	no
1994–1995	–2.2	385	9.6	29.9	17	82	yes
1995–1996	–1.6	387	20.0	20.2	24	76	yes
1996–1997	–0.3	423	20.0	21.1	43	57	no

a. The percentage of wells with water-level rises and the percentage of wells with water-level declines will not always sum to 100. Each year it is possible that a small number of wells will remain at the same level as the previous year.

A



B

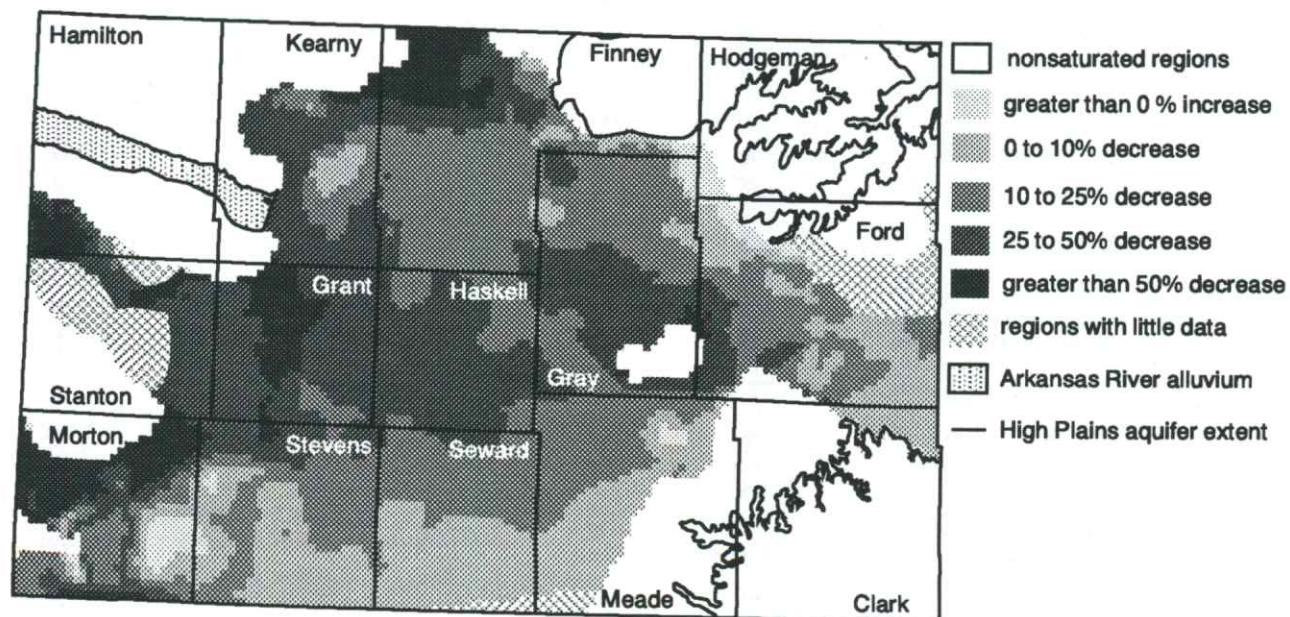


FIGURE 9—Ground-water changes in the area of the High Plains aquifer in Region I, southwestern Kansas. See fig. 10 for adjacent areas to the north and fig. 12 for adjacent areas to the east. (A) Generalized water-level changes (ft), predevelopment to 1997. (B) Percentage change in saturated thickness, predevelopment to 1997. (C, following page.)

C

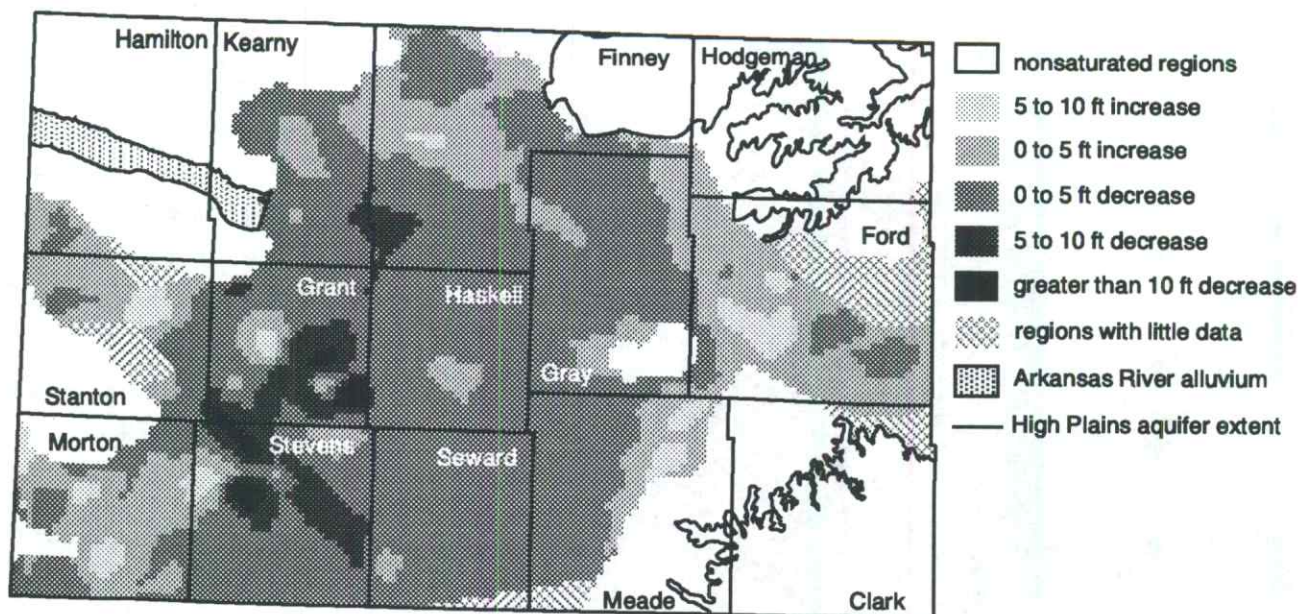


FIGURE 9—(C) Annual water-level change (ft), 1996–1997.

76% last year. The average water-level change for this region is statistically insignificant (table 2). The annual change map for 1996–1997 (fig. 9C) shows a significant decrease in the total area of declines of 10 ft (3 m) or more when compared to the 1995–1996 period. A significant increase in the total area of water-level rise and a significant decrease in the total area of water-level decline can be seen in Ford, Meade, Stanton, Morton, and Hamilton counties. Grant and Stevens counties continue to have rather large areas of declines greater than 5 ft (1.5 m).

Region II: West-central Kansas

Region II encompasses Greeley, Wichita, Scott, Lane, and Ness counties as well as the southern half of Wallace, Logan, Gove, and Trego counties. In this region the primary aquifer is the High Plains aquifer. The average decline in water level since predevelopment for reported wells (table 3) has been approximately 35 ft (11 m), with the largest decline equal to 84.7 ft (25.8 m). Water-level declines since the predevelopment period (fig. 10A) exceed 50 ft (15 m) in many areas, primarily in Wallace, Greeley, Wichita, and Scott counties. The areal extent of the largest declines appears to be about the same as that observed in 1996. The depth to bedrock in region II is less than that in regions I and III. As a result, small declines in water-level elevation represent a larger percentage (50% or more in many areas—see fig. 10B) of the total water reserves than is the case in the High Plains aquifer in regions I and III. The hydrograph for Scott County (fig. 6)

illustrates the typical pattern of decline in the region.

Water levels in region II (table 4) rose by an average of 0.1 ft (3.0 cm) in the 1996–1997 period, a statistically insignificant change (table 4). The percentage of wells exhibiting a decline was just less than the percentage of wells exhibiting a rise (47% vs. 53%). As fig. 10C indicates, there are large areas of both declining and rising water levels throughout this region. The areas of decline seem to be more prevalent in the western part of the region, with the greatest declines in Wallace and Greeley counties. Areas of water-level rise are distributed throughout all counties in the region, but are most prevalent in Scott and Lane counties. These observations indicate a continuing trend of decline in the western part of the region, and a reduced trend of decline or a trend of rise in the eastern part of region II.

TABLE 3—CHANGE IN WATER LEVEL (ft), predevelopment to present, for reported wells in region II.

Year	Average change	Number of wells	Largest rise	Largest decline
1991	−36.0	139	2.2	87.6
1992	−34.0	115	2.6	88.4
1993	−34.0	89	4.1	86.5
1994	−32.4	107	5.2	83.9
1995	−34.2	111	2.5	84.7
1996	−35.3	108	2.8	95.2
1997	−34.8	110	3.0	84.7

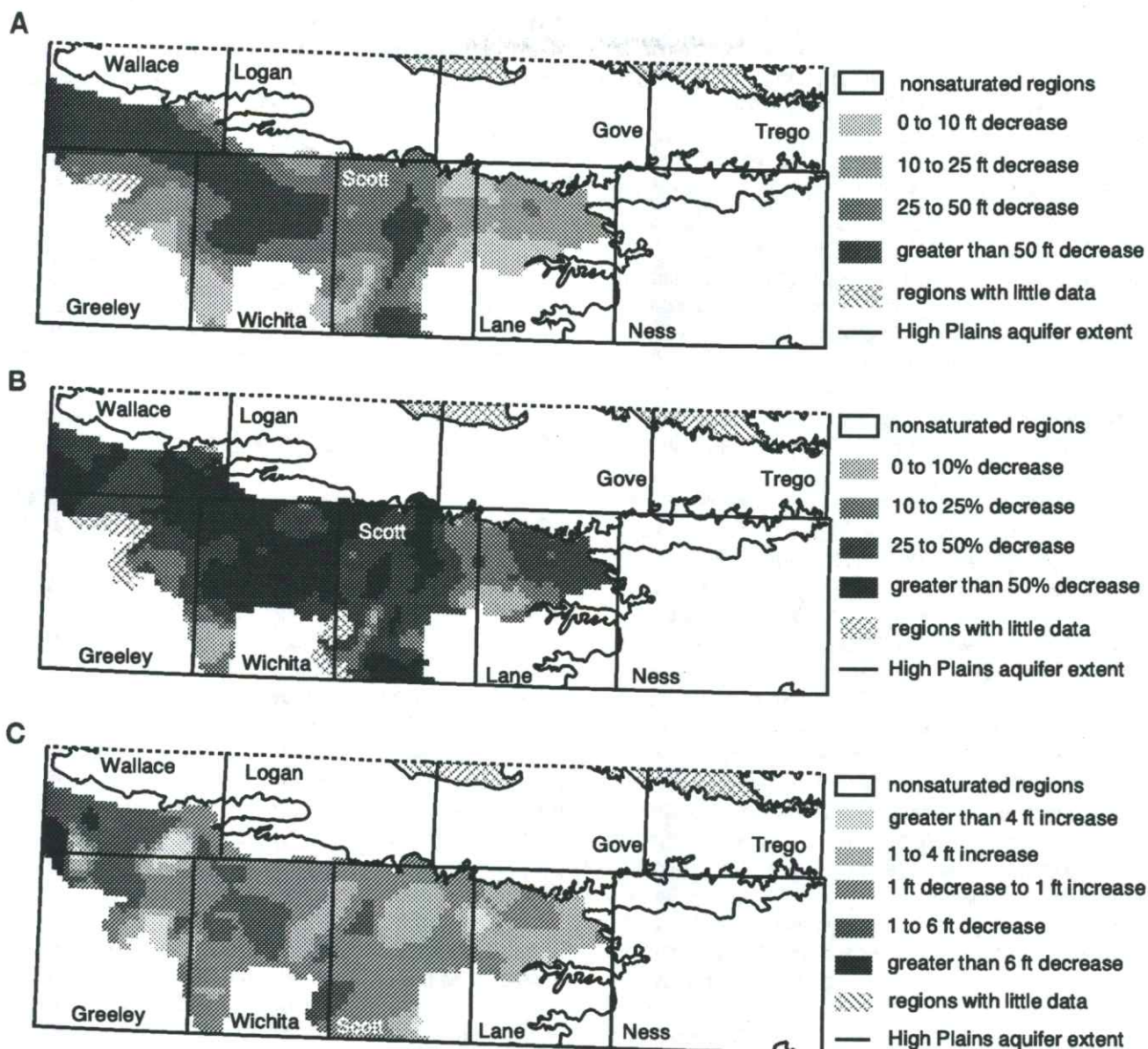


FIGURE 10—Ground-water changes in the area of the High Plains aquifer in Region II, west-central Kansas. See fig. 11 for adjacent areas to the north and fig. 9 for adjacent areas to the south. (A) Generalized water-level changes (ft), predevelopment to 1997. (B) Percentage change in saturated thickness, predevelopment to 1997. (C) Annual water-level change (ft), 1996–1997.

TABLE 4—ANNUAL CHANGE IN WATER LEVEL (ft) for reported wells in region II.

Interval	Average change	Number of wells	Largest rise	Largest decline	Percentage of wells with rise ^a	Percentage of wells with decline ^a	Is change statistically significant?
1991–1992	−0.3	145	11.1	11.8	31	68	no
1992–1993	+0.6	111	5.8	9.7	76	24	yes
1993–1994	+0.9	109	7.7	5.5	66	33	yes
1994–1995	−1.1	131	5.4	10.1	24	76	yes
1995–1996	−0.9	134	6.6	14.6	31	69	yes
1996–1997	+0.1	148	15.4	23.1	53	47	no

a. The percentage of wells with water-level rises and the percentage of wells with water-level declines will not always sum to 100. Each year it is possible that a small number of wells will remain at the same level as the previous year.

Region III: Northwestern Kansas

In northwestern Kansas the High Plains is the primary aquifer. The average water-level change since predevelopment for this region (table 5) was a decline of 14.2 ft (4.33 m), with the largest decline equal to 67.4 ft (20.5 m). The largest areas of declines (greater than 25 ft; 7.6 m) in water level (fig. 11A) and of declines (greater than 25%) in saturated thickness (fig. 11B) since predevelopment continue to be in Sherman, Sheridan, and Thomas counties, where well development is greatest. Declines in saturated thickness in this region have not yet reached the 50% level because of the large predevelopment saturated thickness of the aquifer. The hydrograph for Thomas County (fig. 8) illustrates a sustained water-table decline, which is typical for much of the region.

The 1997 average annual change in water level was a decline of 0.1 ft (3.0 cm) (table 6), which is statistically insignificant. This average annual decline was slightly less than that of the 1995–1996 period, which was 0.4 ft (12 cm). The percentage of wells with a decline in water level during 1996–1997 was 48%, while the percentage of wells with a rise was 51%. These percentages can be compared to those observed in the 1995–1996 period during which 54% showed a decline and 45% showed a rise. Figure 11C shows that the largest areas of greatest decline (greater than 5 ft; 1.5 m) continue to be in Rawlins, Thomas, and Sheridan counties and the largest areas of (greater than 1 ft; 0.3 m) rise were in Norton, Decatur, Graham, Sheridan, Gove, and (again) Thomas counties. The latter observation is quite different than that made for the 1995–1996 period, during which the largest areas of greatest water-level increase were primarily in Thomas and Sherman counties. The 1996–1997 annual change map (fig. 11C) for region III shows areas of 5–10-ft water-level rises and a small area of 10–15-ft water-level decline. These extremes were not observed during the 1995–1996 period. These observations, taken as a whole, indicate larger areas of 1–5-ft decline in the westernmost part of the region, and a trend of rise in the northeastern part of the region. Isolated areas of rise and decline can be observed throughout the remaining areas.

TABLE 5—CHANGE IN WATER LEVEL (ft), predevelopment to present, for reported wells in region III.

Year	Average change	Number of wells	Largest rise	Largest decline
1991	-14.5	236	5.8	66.4
1992	-15.2	217	4.0	68.2
1993	-13.8	209	6.1	66.6
1994	-12.4	238	8.7	64.8
1995	-13.2	234	22.3	67.1
1996	-14.2	225	23.5	67.8
1997	-14.2	227	21.8	67.4

Region V: South-central Kansas

The south-central region of Kansas is located east of the easternmost extension of the High Plains aquifer. In this region the primary geologic unit used for ground-water supply is the Quaternary alluvium. As table 7 shows, the average change since predevelopment has been a decline of 2.6 ft (79 cm), much smaller than the average amount of change in other regions (table 7). Significant areas of water-level decline greater than 10 ft (3 m) and saturated thickness decline greater than 10% (figs. 12A, 12B) continue to appear in Edwards and Pawnee counties and, to a lesser extent, in Stafford, Kiowa, Pratt, Rice, Reno, and Kingman counties. Water tables higher than the predevelopment value by 0–10 ft (0–3 m) were observed primarily in Stafford, Reno, Kingman, Pratt, and Kiowa counties.

Water-level changes in the 1996–1997 period (table 8) had an average rise of 0.6 ft (18 cm) in 1997, with 64% of the wells exhibiting an increase in water level (compared to 80% during the 1995–1996 period). The total area over which declines occurred during 1996–1997 is considerably larger than that observed for the previous year. Larger areas of decline can be observed in the eastern part of the region in McPherson, Harvey, Sedgwick, Reno, Kingman, and Rice counties (fig. 12C). Larger areas of decline can also be seen in Stafford County in the western part of the

TABLE 6—ANNUAL CHANGE IN WATER LEVEL (ft) for reported wells in region III.

Interval	Average change	Number of wells	Largest rise	Largest decline	Percentage of wells with rise ^a	Percentage of wells with decline ^a	Is change statistically significant?
1991–1992	-0.9	291	4.8	21.8	31	67	yes
1992–1993	+1.1	269	21.6	6.6	78	22	yes
1993–1994	+1.3	290	15.6	11.3	73	26	yes
1994–1995	-0.5	317	16.2	13.0	34	66	yes
1995–1996	-0.4	306	9.9	17.4	45	54	yes
1996–1997	-0.1	313	8.6	13.8	51	48	no

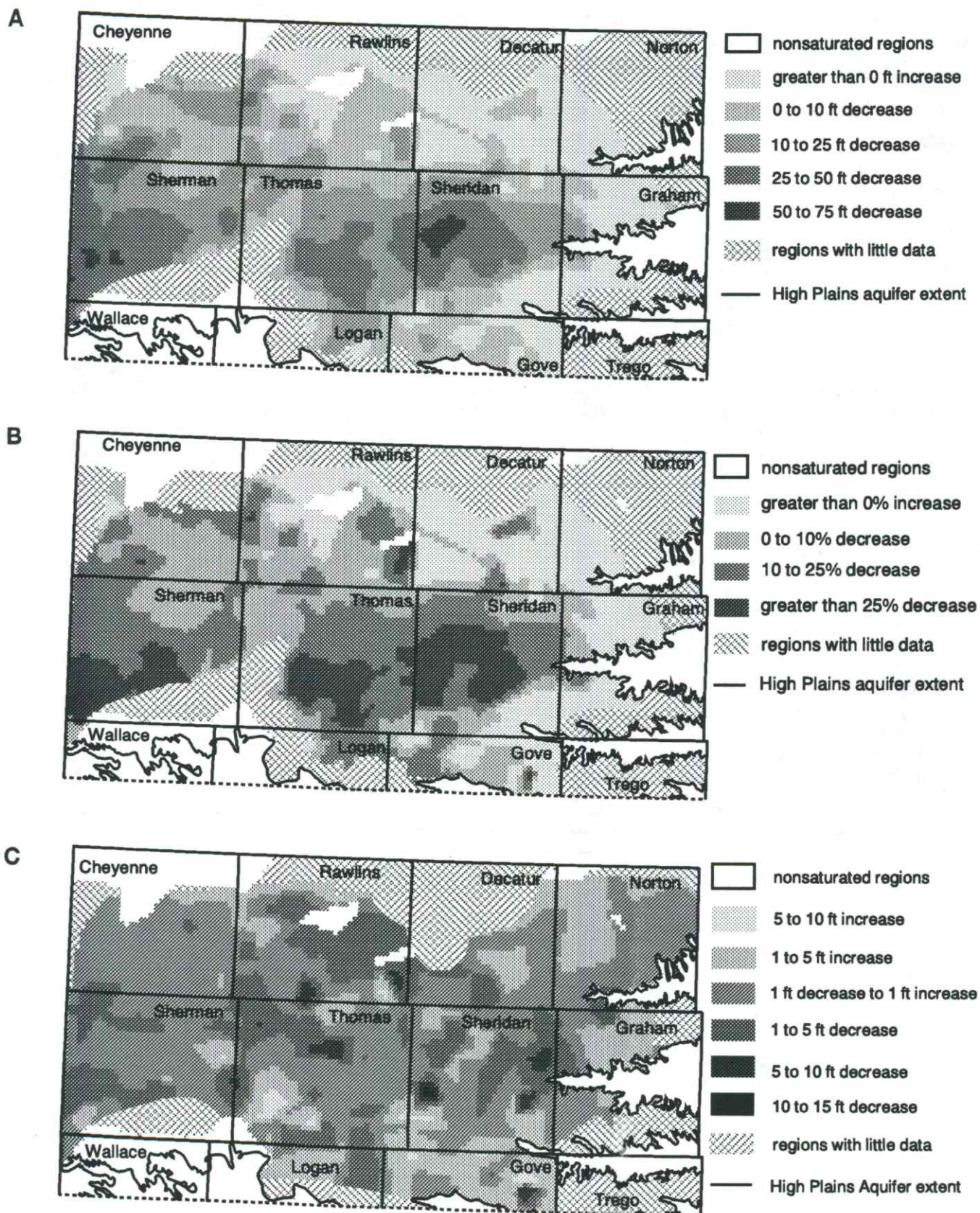


FIGURE 11—Ground-water changes in the area of the High Plains aquifer in Region III, northwestern Kansas. See fig. 10 for adjacent areas to the south. (A) Generalized water-level changes (ft), predevelopment to 1997. (B) Percentage change in saturated thickness, predevelopment to 1997. (C) Annual water-level change (ft), 1996–1997.

TABLE 7—CHANGE IN WATER LEVEL (ft), predevelopment to present, for reported wells in region V.

Year	Average change	Number of wells	Largest rise	Largest decline
1991	-3.8	232	15.7	29.0
1992	-5.4	224	17.8	31.1
1993	-4.3	222	21.1	31.9
1994	-1.7	224	19.4	31.4
1995	-4.0	219	16.9	33.2
1996	-3.4	220	17.8	32.3
1997	-2.6	219	20.5	32.3

region. Smaller areas of decline and larger areas of water-level increase can be seen in the western part of the region in Pawnee, Edwards, Pratt, and Kiowa counties. The greatest contrast between the 1995–1996 and 1996–1997 periods is in southwestern Pratt county, where 4 to 10-ft

(1.2–3-m) declines were observed for the 1995–1996 period and water-level rises were observed during the 1996–1997 period. These observations demonstrate the dominant effect of an increase in annual precipitation (and thus recharge) in the westernmost counties of the region and a decrease in annual precipitation in the central and eastern counties of the region during 1996 relative to 1995 (see NOAA, 1995 and 1996, Climatological Data Summaries for Kansas).

In the central and eastern portions of this area, the freshwater aquifer is underlain by formations containing saltwater, which can move up to replace the freshwater if pumping exceeds recharge. This means that local areas are subject to both water-table declines (reduction of saturated thickness) and upconing of saltwater. Because of this, reporting of water levels alone is not sufficient for determining the availability of usable water. The relationship between saltwater and freshwater is currently being studied by the Kansas Geological Survey, Big Bend Groundwater Management District 5, and Equus Beds Groundwater Management District 2.

TABLE 8—ANNUAL CHANGE IN WATER LEVEL (ft) for reported wells in region V.

Interval	Average change	Number of wells	Largest rise	Largest decline	Percentage of wells with rise ^a	Percentage of wells with decline ^a	Is change statistically significant?
1991–1992	-1.3	350	42.1	9.8	5	94	yes
1992–1993	+1.3	339	10.0	5.9	77	22	yes
1993–1994	+2.5	335	13.6	4.7	85	15	yes
1994–1995	-2.4	329	5.2	10.0	6	94	yes
1995–1996	+0.7	322	5.9	9.5	80	19	yes
1996–1997	+0.6	341	18.3	3.5	64	35	yes

a. The percentage of wells with water-level rises and the percentage of wells with water-level declines will not always sum to 100. Each year it is possible that a small number of wells will remain at the same level as the previous year.

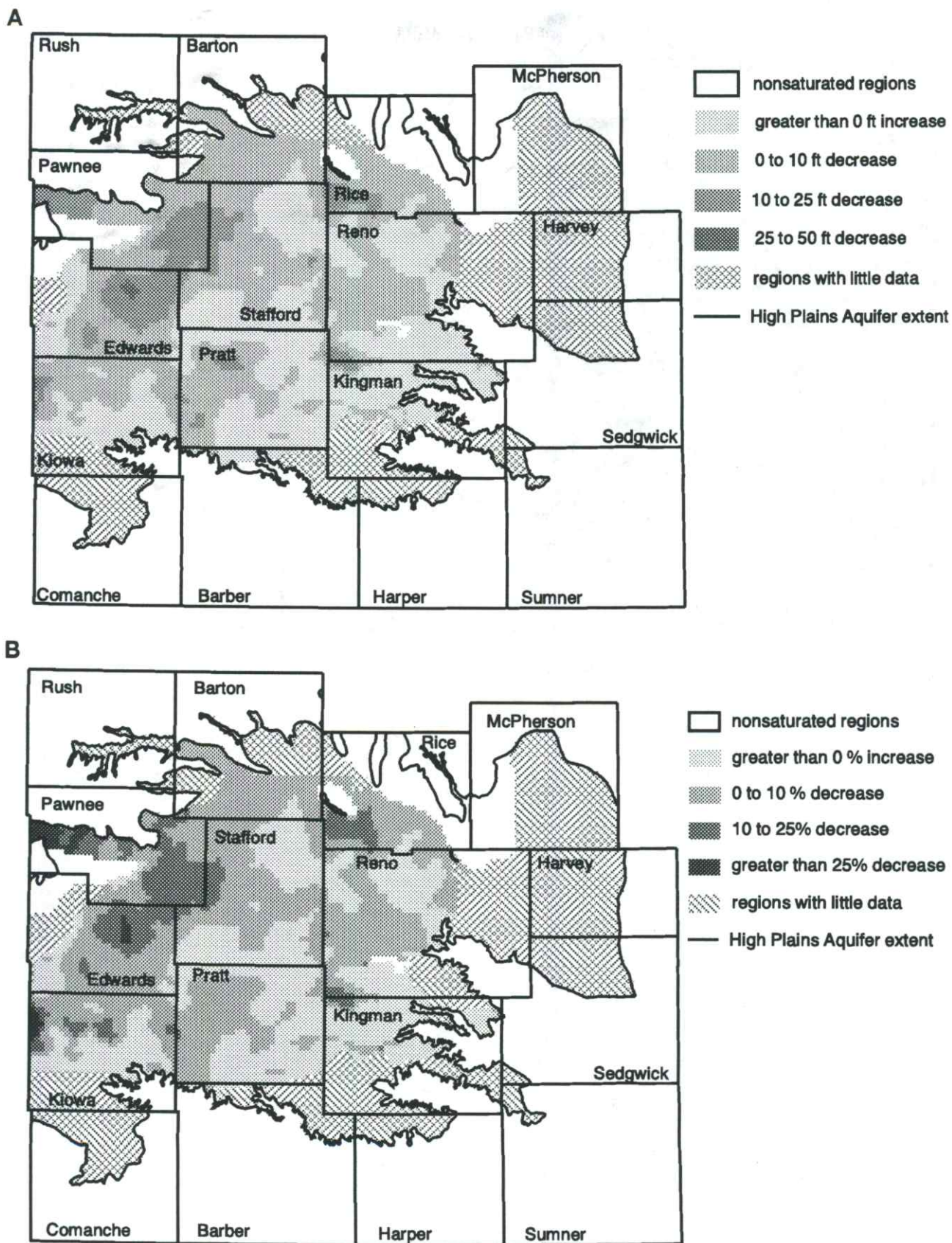


FIGURE 12—Ground-water changes in the area of the High Plains aquifer in Region V, south-central Kansas. See fig. 9 for adjacent areas to the west. (A) Generalized water-level changes (ft), predevelopment to 1997. (B) Percentage change in saturated thickness, predevelopment to 1997. (C, following page.)

C

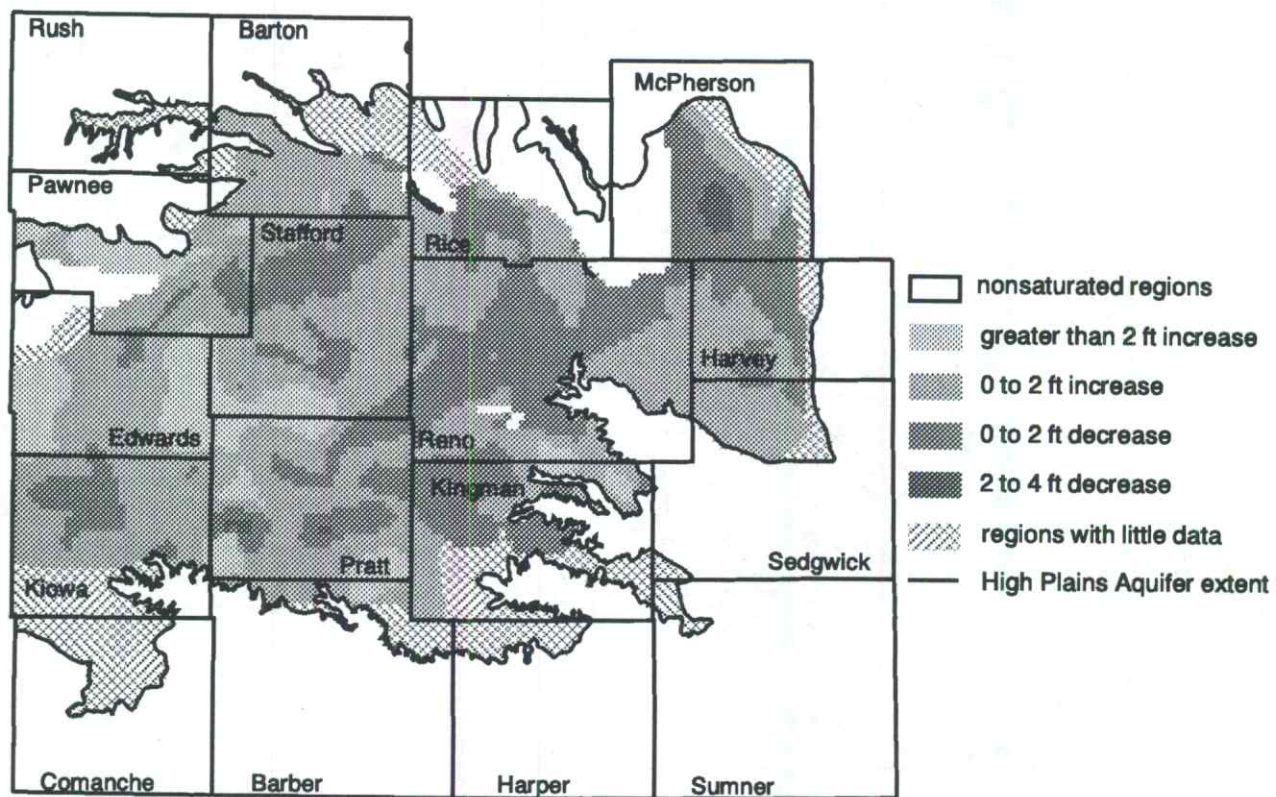


FIGURE 12—(C) Annual water-level change (ft), 1996–1997.

Appendix A: Publications containing ground-water level data for Kansas

Records of ground-water level data for Kansas were published in U.S. Geological Survey Water-Supply Papers for 1935–1971. These water-supply papers are listed in table A.1. A series of annual reports that contain records of water-level measurements for Kansas for 1956–1965 have been published in Kansas Geological Survey bulletins, listed in table A.2.

Recent literature of interest to water-level-data users

In addition to the water-supply papers and bulletins, information of interest to users of water-level data in Kansas can be found in the following recent publications. For literature more than seven years old, refer to earlier issues of this report or to Sorensen (1990).

1990

- Dugan, J. T., Schild, D. E., and Kastner, W. M., 1990, Water-level changes in the High Plains aquifer underlying parts of South Dakota, Wyoming, Nebraska, Colorado, Kansas, New Mexico, Oklahoma, and Texas—predevelopment through nonirrigation season 1988–89: U.S. Geological Survey, Water Resources Investigations Report 90-4153, 29 p.
- Geiger, C. O., Lacock, D. L., Schneider, D. R., Carlson, M. D., and Merry, C. E., 1990, Water resources data, Kansas water year 1989: U.S. Geological Survey, Water-Data Report KS-89-1, 457 p.
- Sorensen, J. H., 1990, Kansas water bibliography through 1989: Kansas Geological Survey, Open-file Report 90-41a-m.

1991

- Buddemeier, R. W., Shamsnia, S., Woods, J., and McClain, T. J., 1991, January 1990 Kansas water levels and data related to water-level changes: Kansas Geological Survey, Open-file Report 91-12, 129 p.
- Buddemeier, R. W., Woods, J., McClain, T. J., and Mitchell, J. E., 1991, January 1991 Kansas water levels and data related to water-level changes: Kansas Geological Survey, Groundwater Series 13, 134 p.
- Dugan, J. T., and Schild, D. E., 1991, Water-level changes in the High Plains aquifer—predevelopment to 1990: U.S. Geological Survey, Water Resources Investigations Report 91-4165, 55 p.
- Geiger, C. O., Lacock, D. L., Schneider, D. R., Carlson, M. D., and Pabst, B. J., 1991, Water resources data, Kansas water year 1990: U.S. Geological Survey, Water-Data Report KS-90-1, 370 p.
- Gillespie, J. B., Hargadine, G. D., Myers, N. C., and Hargadine, D. A., 1991, Geohydrologic data for the South Fork Ninescaw River valley and adjacent plains in Pratt and Kingman counties, south-central

Kansas: U.S. Geological Survey, Open-file Report 91-0186, 55 p.

Hansen, C. V., 1991, Estimates of freshwater storage and potential natural recharge for principal aquifers in Kansas: U.S. Geological Survey, Water Resources Investigations Report 87-4230, 100 p.

Kenny, J. F., 1991, Reported water use in Kansas, 1987: U.S. Geological Survey, Open-file Report 91-0212, 39 p.

1992

- Geiger, C. O., Lacock, D. L., Schneider, D. R., Carlson, M. D., and Pabst, B. J., 1992, Water resources data, Kansas, water year 1991: U.S. Geological Survey, Open-file Report 92-90, 130 p.
- _____, 1992, Water resources data, Kansas water year 1991: U.S. Geological Survey, Water-Data Report KS-91-1, 358 p.
- Hansen, C. V., Underwood, E. J., Wolf, R. J., and Spinazola, J. M., 1992, Geohydrologic systems in Kansas—physical framework of the upper aquifer unit of the Western Interior Plains aquifer system: U.S. Geological Survey, Hydrologic Investigations Atlas HA-722-D, 2 sheets, scales 1:1,000,000 and 1:3,000,000.
- Hansen, C. V., Wolf, R. J., and Spinazola, J. M., 1992, Geohydrologic systems in Kansas—physical framework of the confining unit in the Western Interior Plains aquifer system: U.S. Geological Survey, Hydrologic Investigations Atlas HA-722-E, 2 sheets, scales 1:1,000,000 and 1:3,000,000.
- Spinazola, J. M., Wolf, R. J., and McGovern, H. E., 1992, Geohydrologic systems in Kansas—physical framework of the Great Plains aquifer system: U.S. Geological Survey, Hydrologic Investigations Atlas HA-722-B, 2 sheets, scales 1:1,000,000 and 1:2,000,000.
- Wolf, R. J., McGovern, H. E., and Spinazola, J. M., 1992, Geohydrologic systems in Kansas—physical framework of the Western Interior Plains confining system: U.S. Geological Survey, Hydrologic Investigations Atlas HA-772-C, 2 sheets, scales 1:1,000,000 and 1:3,000,000.

1993

- Buchanan, R., and Buddemeier, R. W., 1993, Kansas ground water: Kansas Geological Survey, Educational Series 10, 44 p.
- Combs, L. J., Hansen, C. V., and Wolf, R. J., 1993, Geohydrologic systems in Kansas—geohydrology of the lower aquifer unit in the Western Interior Plains aquifer system: U.S. Geological Survey, Hydrologic Investigations Atlas HA-722-1, 3 sheets, scale 1:1,500,000.
- Hansen, C. V., 1993, Description of geographic-information-system files containing water-resource-related

data compiled and collected for Wyandotte County, northeastern Kansas: U.S. Geological Survey, Open-file Report 93-92, 46 p.

Mitchell, J. E., Woods, J., McClain, T. J., and Buddemeier, R. W., 1993, January 1992 Kansas water levels and data related to water-level changes: Kansas Geological Survey, Technical Series 3, 134 p.

Wolf, R. J., and Helgesen, J. O., 1993, Ground- and surface-water interaction between the Kansas River and associated alluvial aquifer, northeastern Kansas: U.S. Geological Survey, Water-Resources Investigations Report 92-4137, 49 p.

1994

Dugan, J. T., McGrath, T., and Zelt, R. B., 1994, Water-level changes in the High Plains aquifer—predevelopment to 1992: U.S. Geological Survey, Water-Resources Investigations Report 94-4027, 56 p.

Mitchell, J. E., Woods, J., McClain, T. J., and Buddemeier, R. W., 1994, January 1993 Kansas water levels and data related to water-level changes: Kansas Geological Survey, Technical Series 4, 114 p.

Woods, J. J., Mitchell, J. E., Buddemeier, R. W., 1994, January 1994 Kansas water levels and data related to water-level changes: Kansas Geological Survey, Technical Series 5, 106 p.

1995

Buddemeier, R. W., 1995, Kansas research and data needs, 1995-2000: Kansas Geological Survey, Open-file Report 95-46, 6 p.

Geiger, C. O., Lacock, D. L., Schneider, D. R., Carlson, M. D., and Dague, B. J., 1995, Water-resources data, Kansas water year 1994: U.S. Geological Survey, Water-data report KS-94-1, 479 p.

Goolsby, D. A., Scribner, E. A., Thurman, E. M., Pomes, M. L., and Meyer, M. T., 1995, Data on selected herbicides and two triazine metabolites in precipitation of the midwestern and northeastern United States, 1990-91: U.S. Geological Survey, Open-file Report 95-0469, 341 p.

Hedman, E. R., and Engel, G. B., 1995, Flow characteristics of selected streams in the Great Plains subregion of the Central Midwest Regional Aquifer System and selected adjacent areas; Kansas and Nebraska, and parts of Colorado, Iowa, Missouri, New Mexico, Oklahoma, South Dakota, Texas, and Wyoming: U.S. Geological Survey, Hydrologic Investigations Series HA-708, 3 sheets.

Jordan, P. R., and Stamer, J. K. (eds), 1995, Surface-water-quality assessment of the Lower Kansas River basin, Kansas and Nebraska; analysis of available data through 1986: U.S. Geological Survey, Water-supply Paper 2352-B, 161 p.

Roberts, D. J., and Combs, L. J. (compls.), 1995, Water-resource reports prepared by or in cooperation with the U.S. Geological Survey, Kansas, 1886-1994: U.S. Geological Survey, Open-file Report 95-0120, 122 p.

Southard, R. E., 1995, Flood volumes in the Upper Mississippi River basin, April 1 through September 30, 1993: U.S. Geological Survey, Circular 1120-H, 32 p.

Woods, J. J., Schloss, J. A., and Buddemeier, R. W., 1995, January 1995 water levels and data related to water-level changes: Kansas Geological Survey, Technical Series 8, 138 p.

1996

Bell, R. W., Joseph, R. L., and Freiwald, D. A., 1996, Water-quality assessment of the Ozark Plateaus study unit, Arkansas, Kansas, Missouri, and Oklahoma—Summary of information on pesticides, 1970-90: U.S. Geological Survey, Water-resources Investigations Report 96-4003, 51 p.

Council of Water Research Directors, 1996, Water research in Kansas, 1994-1995: Kansas Agricultural Experiment Station, Manhattan, KS, 34 p.

Jorgensen, D. G., Helgesen, J. O., Signor, D. C., Leonard, R. B., Imes, J. L., and Christenson, S. C., 1996, Analysis of regional aquifers in the central midwest of the United States in Kansas, Nebraska, and parts of Arkansas, Colorado, Missouri, New Mexico, Oklahoma, South Dakota, Texas, and Wyoming—Summary: U.S. Geological Survey, Professional Paper 1414-A, 67 p.

Putman, J. E., Lacock, D. L., Schneider, D. R., Carlson, M. D., and Dague, B. J., 1996, Water resources data, Kansas water year 1995: U.S. Geological Survey, Water-data Report KS-95-1, 488 p.

Tanner, D. Q., 1996, Surface-water-quality assessment of the Lower Kansas River basin, Kansas and Nebraska—Selected metals, arsenic, and phosphorus in streambed sediments of first- and second-order streams, 1987: U.S. Geological Survey, Water-resources Investigations Report 94-4196, 13 p.

Whittemore, D. O., Mingshu, T., and Grauer, J., 1996, Upper Arkansas River corridor study—Inventory of available data and development of conceptual models—A Kansas water plan project: Kansas Geological Survey, Open-file Report 96-19, 83 p.

Woods, J. J., and Schloss, J. A., January 1996 Kansas water-level measurements: Kansas Geological Survey, Open-file Report 96-21, 100 p.

Woods, J. J., and Schloss, J. A., 1996, January 1996 Kansas water levels and data related to water-level changes: Kansas Geological Survey, Technical Series, no. 9, 124 p.

TABLE A.1—U.S. GEOLOGICAL SURVEY water-supply papers.

Year	Water-supply paper number ^a
1935	777
1936	817
1937	840
1938	845
1939	886
1940	908
1941	938
1942	946
1943	988
1944	1018
1945	1025
1946	1073
1947	1098
1948	1128
1949	1158
1950	1167
1951	1193
1952	1223
1953	1267
1954	1323
1955	1406
1956	1456

a. Can be purchased from the Publications Sales Office, Kansas Geological Survey, University of Kansas, 1930 Constant Avenue, Lawrence, KS 66047-3726.

TABLE A.2—KANSAS GEOLOGICAL SURVEY bulletins with water-level measurements.

Year	Bulletin number ^a
1956	125
1957	131
1958	141
1959	146
1960	153
1961	159
1962	167
1963	173
1964	177
1965	184

a. Can be purchased from the Publications Sales Office, Kansas Geological Survey, University of Kansas, 1930 Constant Avenue, Lawrence, KS 66047-3726.

Appendix B: Water-level data tables

This appendix contains water-level data for wells in the cooperative monitoring network, arranged in alphabetical order by county. For each county two tables are presented. Table 1 contains descriptive information on each well and depth-to-water measurements for the past seven years. Table 2 displays information about saturated thickness and water-level changes based on the data in table 1. The nature of the information presented in these tables and how to use them is described in the following text.

An apparent anomaly in the tables should be noted. A few of the wells in these tables are preceded by a plus sign (e.g., +21S-34W-14DBB-01 in Finney County). In these wells, the water level listed is below the top of the bedrock. This situation can occur where predevelopment water levels were above the bedrock surface and subsequent water-level declines lowered the water level below the bedrock surface. There are other instances where wells are intentionally drilled into the bedrock to allow for greater yields, as well as instances where the top of the bedrock contains fractures that were filled with unconsolidated

material from overlying units and can produce substantial amounts of ground water. Another possible explanation of this apparent anomaly is the fact that for many wells the depth to the top of bedrock is estimated based on data from nearby wells, rather than having been directly measured or obtained from logging data from the subject well.

Table 1

Column 1 contains the well number, which is a unique identifier based primarily on the legal location description of the well. Wells in this report are numbered according to a modification of the U.S. Bureau of Land Management system of land subdivision (fig. 13). The location is composed of the township, range, and section numbers followed by letters indicating the subdivision of the section in which the well is located. The first letter encloses a 160-acre tract; the second, a 40-acre tract; the third, a 10-acre tract; and the fourth, if present, a 2.5-acre tract. The letters A, B, C, and D designate the tract in a counterclockwise manner, starting in the northeast corner.

Therefore a location described as SW NW NW sec. 7, T. 18 S., R. 39 W. [the SW quarter of the NW quarter of the NW quarter of sec(tion) 7, T(ownship) 18 S(outh), R(ange) 39 W(est)], is translated to 18S-39W-07-BBC. A final two-digit number is appended to the location to identify the specific well in cases where there is more than one well in the same tract. If there were two wells in the parcel of land described above, the second well ID would be 18S-39W-07BBC-02. Identifiers preceded by an asterisk (*) indicate wells whose 1997 measurement was not made in the same month as the 1996 measurement.

Column 2 identifies the principal geologic unit or units (up to 3) in which the well is screened. Designations for the geologic units in the tables are listed in table 1. In some cases, geologic unit designations are inferred from designations for neighboring wells or the general geology of the area. Where more than one unit designation is given for a single well, the designations indicate that the well was drilled through more than one water-bearing formation or that the geologic units are so similar or in such close proximity that the hydrology at that well may be influenced by more than one unit.

Column 3 gives the land-surface altitude of the well (in feet above mean sea level). By subtracting the depth to water from the land-surface altitude, the altitude of the water table can be calculated.

Column 4 presents the depth to bedrock where that is known. The bedrock is assumed to be the consolidated formation at the bottom of the aquifer. The difference between the depth to water and the depth to bedrock is the saturated thickness of the aquifer.

Column 5 gives the depth to water during the base reference year. Depending on the area of the state, the base reference year is 1940, 1944, or 1950. These are the earliest predevelopment years (before significant irrigation withdrawals of ground water) for which a significant amount of water-table data are available. For those wells that did not exist during the predevelopment period, predevelopment water levels are assigned on the basis of nearby data.

Column 6 gives the depth to water for the reference year of either 1966 or 1974. Depending on the locale, these years mark the beginning of modern continuous water-level monitoring operations for the major Kansas aquifers.

Columns 7–13 give the depths to water measured in each year (when available) for the current year and the past six years.

Column 14 indicates the present frequency of measurement (a = annual, q = quarterly, m = monthly) and the present month of measurement (D = December, J = January, F = February, M = March); the length of record available is indicated by the last two digits of the first year for which data are available. The symbol U (or u) indicates that no consistent temporal category could be assigned to that data field on the basis of records. It is important to recognize that December values are reported as part of the

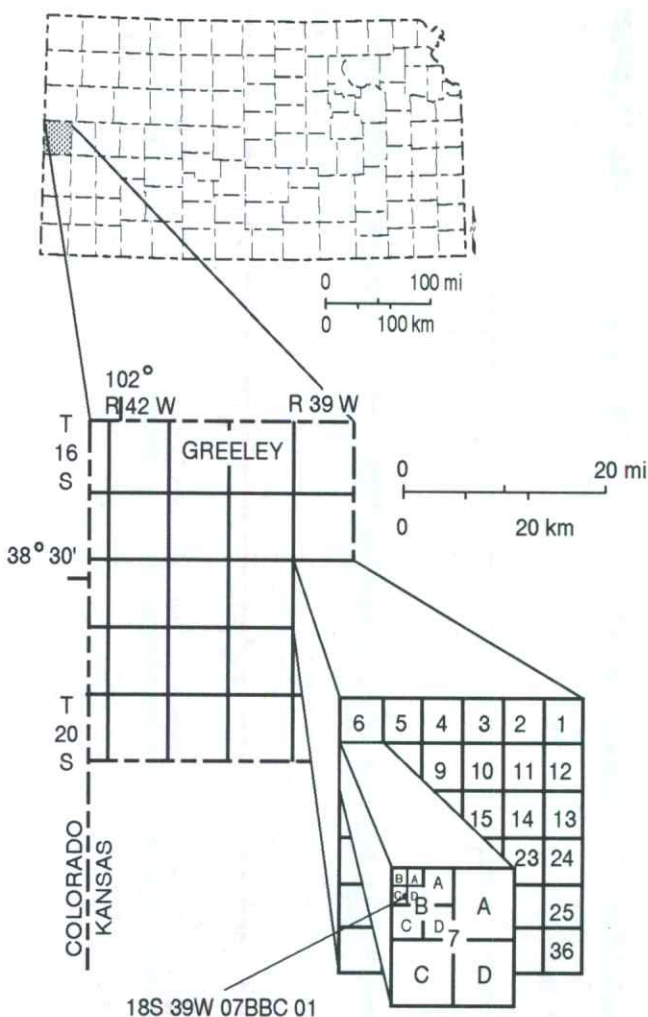


FIGURE 13—Locating wells using their legal location designation.

water-level record for the subsequent calendar year (i.e., December 1996 water levels are treated as 1997 values), and that measurement frequency and month of observation may not be consistent throughout the entire record. Monthly records are actually obtained from wells by continuous water-level recorders, from which monthly values are extracted.

Table 2

Columns 1 and 2 list the well numbers and geologic units as described for table 1.

Column 3 gives the depth to water for the current measurement year (see table 1, column 14, for actual month of measurement). This is the same value entered in column 13 of table 1.

Columns 4–6 give water-level change from the base reference (predevelopment), from the reference year (1966 or 1974), and over the preceding year, respectively.

Columns 7 and 8 present the average annual water-level changes between the base reference

(predevelopment) year and the current year and between the reference year (1966 or 1974) and the current year, respectively.

Columns 9 and 10 present the saturated thicknesses of the water-bearing formations in the base reference (predevelopment) year and in the present year, respectively. Where the depth to bedrock or the depth to water is not known, no values are given.

Column 11 gives the percentage change in saturated thickness from the base reference (predevelopment) year to present. This is roughly equivalent to the percentage change (in most cases, a depletion) of the original water resource. If we abbreviate "saturated thickness" as ST, the percent change can be calculated using the formula:

$$\% \text{ change in ST} = \frac{(ST_{\text{present}} - ST_{\text{predevelopment}})}{ST_{\text{predevelopment}}} \times 100.$$

TABLE 1. SELECTED HYDROLOGIC DATA, ALLEN COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
				1950	1966	1991	1992	1993	1994	1995	1996		1997
24S 18E 28CDD 01	QU	948				13.3	15.0	5.0	9.3		13.8	11.4	qD64

TABLE 1. SELECTED HYDROLOGIC DATA, BARBER COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
				1940	1966	1991	1992	1993	1994	1995	1996		1997
32S 12W 04DBC 01	QA	1480		16	16.4	14.8	15.1	14.6	14.1		14.1		aD40

TABLE 1. SELECTED HYDROLOGIC DATA, BARTON COUNTY

Well Number			Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type
						1944	1974	1991	1992	1993	1994	1995	1996	
18S 14W 27CDD	01	QU	1896				45.7	48.6	44.6	37.6	38.4	36.5	35.5	aJ72
18S 15W 28CCC	03	QA	1913		9		22.7	25.3	19.2	5.6	11.3	10.8	9.0	aJ60
19S 11W 19BDD	01	QU	1791		13		21.0	21.6	20.9	18.9	19.7	19.3	19.5	aJ85
19S 11W 26BDA	01	QU	1772		7		14.9	15.5	14.3	10.8	12.7	12.0	12.1	aJ85
19S 12W 28DBC	01	QA	1815				15.9	16.3	14.9	13.4	15.9	15.5	13.6	aJ88
19S 13W 08BAD	01	QA,QU	1855		11		21.2	23.3	20.4	14.2	17.1	16.7	15.4	aJ77
19S 13W 33DDB	01	QA,QU	1848		4	4.4					10.2	10.3	9.1	aJ63
19S 14W 06BBB	02	QA	1895				20.4	22.7	20.3	10.7	12.6	12.8	10.2	uJ87
19S 14W 23BBD	01	QA	1873				18.4	20.6	19.0	15.1	17.8	17.5	16.3	aJ86
19S 14W 30CDD	01	QA	1905							34.4	34.5	34.5	34.6	aJ94
19S 14W 36BBC	01	QA,QU	1868		8		10.9	12.9	11.7	9.0	11.1	10.8	10.2	aJ85
20S 11W 06CCC	01	QA	1788	138	9	5.6	11.0	11.5	9.9	8.3	10.5	9.9	8.7	aJ67
20S 11W 26AAC	01	QU	1752	112	3	1.6	11.5	12.5	11.1	6.0	10.1	9.1	8.6	aJ73
20S 12W 03DAC	01	QA	1799	144	2	1.3	8.1	8.5	7.0	5.5	7.7	7.1	5.2	aJ72
20S 12W 06AAC	01	QU	1822	117	7	5.1	9.8	10.1	9.2	7.7	9.3	9.2	7.6	aJ73
20S 12W 23CCA	01	QU	1814	159	11	3.7	16.2		14.2	8.1	12.5	10.4	11.8	aJ73
20S 13W 17DDC	01	QU	1876	126	11	7.2	16.4		15.0	11.4	14.9	14.9	14.3	aJ73
20S 13W 24DCB	01	QU	1850	140	12	9.6	21.5	23.4	20.1	14.9	17.8	17.6	15.2	aJ68
20S 14W 22DCB	01	QA	1897	152	6	6.5	14.6	17.2	14.5	11.4	14.7	14.4	13.0	aJ67
20S 15W 24DBD	01	QA	1915		10		13.7	16.0	14.6	11.3	13.7	13.6	12.6	aJ77
20S 15W 33ADD	01	QA	1945		15		19.2	20.9	20.0	16.9	18.7	19.4	18.5	aJ84

TABLE 1. SELECTED HYDROLOGIC DATA, CHEYENNE COUNTY

Well Number				Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
							1950	1966	1991	1992	1993	1994	1995	1996		1997
01S	38W	02CDC	01	QA	3034	41	23	22.6	24.0	23.9	23.0	23.1	24.2	23.2	22.8	aJ48
01S	38W	08DCC	01	QA	3057	33	12	12.3		13.5	13.1	13.3	14.1	13.4	13.3	aJ46
01S	38W	30BDC	01	QA	3090	28	7	8.0	10.3	10.0	8.9	8.9	9.2	8.6	8.3	aJ64
01S	39W	25CBC	01	QA	3102	26	7	8.5	9.8	9.5	8.9	9.6	9.7	9.4	9.6	aJ66
02S	37W	33DCC	01	TO	3420				212.6	214.3	213.4	213.2	214.3	214.2	214.0	aJ84
02S	40W	28DBA	01	TO	3452	140	112	112.5	110.7	110.8	110.4	110.4	110.7	110.3	109.9	aJ65
02S	40W	32BCB	01	TO	3492				129.1	131.4	130.1	129.9	129.9	129.7	129.5	aJ84
02S	41W	27BBD	01	TO	3620	242	200	198.6	200.1	202.8	200.1	199.9	201.1	200.2	199.9	aJ64
02S	41W	33DBC	01	TO	3650	288	235	235.2	236.0	236.4	235.9	236.5	236.6	236.3	235.9	aJ65
03S	37W	19BBC	01	TO	3468	325	215	219.8	229.6	231.1	230.4	229.7	229.8	229.1	229.0	aJ50

TABLE 2. DERIVED HYDROLOGIC DATA, ALLEN COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
24S 18E 28CDD 01	QU	11.4			2.4					

TABLE 2. DERIVED HYDROLOGIC DATA, BARBER COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1940-97	1966-97	1996-97	1940-97	1966-97	1940	1997	
32S 12W 04DBC 01	QA									

TABLE 2. DERIVED HYDROLOGIC DATA, BARTON COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1944-97	1974-97	1996-97	1944-97	1974-97	1944	1997	
18S 14W 27CDD 01	QU	35.5			1.0					
18S 15W 28CCC 03	QA	9.0			1.8	0.0				
19S 11W 19BDD 01	QU	19.5	-7		-0.2	-0.1				
19S 11W 26BDA 01	QU	12.1	-5		-0.1	-0.1				
19S 12W 28DBC 01	QA	13.6			1.9					
19S 13W 08BAD 01	QA,QU	15.4	-4		1.3	-0.1				
19S 13W 33DDB 01	QA,QU	9.1	-5	-4.7	1.2	-0.1	-0.2			
19S 14W 06BBB 02	QA	10.2			2.6					
19S 14W 23BBD 01	QA	16.3			1.2					
19S 14W 30CDD 01	QA	34.6			-0.1					
19S 14W 36BBC 01	QA,QU	10.2	-2		0.6	0.0				
20S 11W 06CCC 01	QA	8.7	0	-3.1	1.2	0.0	-0.1	129	129	0
20S 11W 26AAC 01	QU	8.6	-6	-7.0	0.5	-0.1	-0.3	109	103	-6
20S 12W 03DAC 01	QA	5.2	-3	-3.9	1.9	-0.1	-0.2	142	139	-2
20S 12W 06AAC 01	QU	7.6	-1	-2.5	1.6	0.0	-0.1	110	109	-1
20S 12W 23CCA 01	QU	11.8	-1	-8.1	-1.4	0.0	-0.4	148	147	-1
20S 13W 17DDC 01	QU	14.3	-3	-7.1	0.6	-0.1	-0.3	115	112	-3
20S 13W 24DCB 01	QU	15.2	-3	-5.6	2.4	-0.1	-0.2	128	125	-2
20S 14W 22DCB 01	QA	13.0	-7	-6.5	1.4	-0.1	-0.3	146	139	-5
20S 15W 24DBD 01	QA	12.6	-3		1.0	-0.1				
20S 15W 33ADD 01	QA	18.5	-4		0.9	-0.1				

TABLE 2. DERIVED HYDROLOGIC DATA, CHEYENNE COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
01S 38W 02CDC 01	QA	22.8	0	-0.2	0.4	0.0	0.0	18	18	0
01S 38W 08DCC 01	QA	13.3	-1	-1.0	0.1	0.0	0.0	21	20	-5
01S 38W 30BDC 01	QA	8.3	-1	-0.3	0.3	0.0	0.0	21	20	-5
01S 39W 25CBC 01	QA	9.6	-3	-1.1	-0.2	-0.1	0.0	19	16	-16
02S 37W 33DCC 01	TO	214.0			0.2					
02S 40W 28DBA 01	TO	109.9	2	2.6	0.4	0.0	0.1	28	30	7
02S 40W 32BCB 01	TO	129.5			0.2					
02S 41W 27BBD 01	TO	199.9	0	-1.3	0.3	0.0	0.0	42	42	0
02S 41W 33DBC 01	TO	235.9	-1	-0.7	0.4	0.0	0.0	53	52	-2
03S 37W 19BBC 01	TO	229.0	-14	-9.2	0.1	-0.3	-0.3	110	96	-13

TABLE 1. SELECTED HYDROLOGIC DATA, CHEYENNE COUNTY (cont'd)

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1950	1966	1991	1992	1993	1994	1995	1996	1997	
03S 37W 21DDD 01	TO	3422	312	194		218.8		218.2	218.2	219.0	219.3	219.0	aJ79
03S 37W 36ADB 01	TO	3381	300	175	182.0	201.6	202.6	200.4	200.6	202.8	201.9	201.5	aJ65
03S 38W 04BCC 01	TO	3479				217.2	217.6	217.1	216.7	216.7	216.8	216.1	aJ66
03S 38W 21BCB 01	TO	3512				246.8		241.4	240.9	240.4	240.2	243.7	aJ66
03S 38W 25BBB 01	TO	3479				226.6	228.2	226.4	225.7	225.4	225.5	224.6	aJ85
03S 39W 04CCC 01	TO	3351				64.9	64.6	64.0	63.5	63.6	63.4	63.0	aJ50
03S 39W 20DAC 01	TO	3450	199	130	140.4	140.6	138.8	138.6	138.6	139.0	139.0	139.0	aJ64
03S 39W 24DDD 01	TO	3505	275	205		222.5		222.2	222.3	223.2	223.1	223.0	aJ78
03S 39W 32BDB 01	TO	3490	223	150	153.6	153.6	157.7	152.4	151.9	152.5	152.7	153.0	aJ60
03S 40W 09BAA 02	QA, TO	3358	22	20	19.9	20.0	19.6	19.7	19.3	19.4	19.3	19.2	aJ51
03S 40W 35AAC 01	TO	3445	144	95	96.1	97.6	97.4	97.1	96.8	97.4	97.2	97.0	aJ64
03S 41W 33ABB 01	TO	3594	184	164		160.6		160.4	160.6	160.2	159.9	159.2	aJ81
03S 42W 26CCD 01	TO	3702				206.7		204.8	204.4	204.9	205.7		aJ85
04S 37W 17AAC 01	TO	3446	325	187	187.9	202.7	198.4	198.4	198.4	203.1	198.8	198.9	aJ66
04S 37W 25DCA 01	TO	3374	284	147	141.5	152.6	154.7	154.4	154.4	154.2	154.2	154.5	aJ64
04S 38W 04BAC 01	TO	3509	327	207	207.0	221.2	221.6	220.8	220.5	220.4	221.1	220.1	aJ66
04S 38W 20CCC 01	TO	3485	297	151	149.5	157.5	157.5	157.9	158.0	158.3	158.5	158.7	aJ67
04S 38W 21ADC 01	TO	3491	316	178	188.0	194.8		185.7	186.5	187.3	186.5	186.6	aJ65
04S 40W 22BCB 01	TO	3520	215	123	123.9	125.7	124.9	125.1	125.2	125.4	125.5	125.8	aJ50
04S 41W 16DAA 01	QA	3403	38	13	14.2	16.1	15.4	15.4	15.6	16.1	15.8	15.7	aJ64
04S 41W 23AAA 01	TO	3526				122.2		121.4	122.3	122.8	122.8	122.4	aJ85
04S 41W 25BCB 02	TO	3571							144.3			144.8	aU94
04S 41W 31ACA 01	TO	3552	142	94	94.0	97.5	97.6	97.8	97.8	98.1	99.1	98.7	aJ46
04S 42W 02BCC 01	TO	3704				213.2	216.0	212.4	212.5	212.5	212.3	212.4	aJ85
04S 42W 16CCD 01	TO	3590				90.4		88.6	88.9	89.3		90.1	aJ84
05S 37W 15DBB 01	TO	3397	297	137	136.4	152.7	152.5	144.7	144.4	145.2	145.1	143.8	aJ64
05S 38W 13BAD 01	TO	3390	220	74	72.5	78.6		78.4	77.5	79.1	79.2	79.4	aJ64
05S 38W 22ACB 01	TO	3437	270	90	90.6	96.0	97.3	96.7	96.8	98.4	98.0	98.4	aJ64
05S 39W 06DAA 01	TO	3607				213.9	214.7	213.4	214.1	214.1	214.6	214.8	aJ80
05S 39W 11CBC 01	TO	3530	291	140	140.1	152.0	151.0	151.0	152.0	151.3	151.9	151.7	aJ65
05S 39W 25CDA 01	TO	3533	295	127	125.0	132.7	133.2	133.3	133.7	134.2	134.2	134.1	aJ65
05S 40W 14BCD 01	TO	3645	325	187		224.1	224.6	222.3	223.0	224.2	224.0	224.7	aJ75
05S 42W 14DCC 01	TO	3670	215			133.4	134.1	132.8	132.6	133.1	133.6	133.9	aJ87

TABLE 1. SELECTED HYDROLOGIC DATA, CLARK COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type
				1940	1966	1991	1992	1993	1994	1995	1996	
30S 23W 06AAA 01	QU	2557			140.6	146.2	142.6	150.3	144.6		142.8	aD39
33S 22W 30CBC 01	QA	1899				14.4	18.1	17.0	14.8		14.5	aD61

TABLE 1. SELECTED HYDROLOGIC DATA, CLOUD COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
				1944	1974	1991	1992	1993	1994	1995	1996		1997
05S 02W 01BAC 01	KD	1380			43.9	43.1	44.1	42.1	40.2			40.8	aM70

TABLE 2. DERIVED HYDROLOGIC DATA, CHEYENNE COUNTY (cont'd)

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
03S 37W 21DDD 01	TO	219.0	-25		0.3	-0.5		118	93	-21
03S 37W 36ADB 01	TO	201.5	-27	-19.5	0.4	-0.6	-0.6	125	99	-21
03S 38W 04BCC 01	TO	216.1			0.7					
03S 38W 21BCB 01	TO	243.7			-3.5					
03S 38W 25BBB 01	TO	224.6			0.9					
03S 39W 04CCC 01	TO	63.0			0.4					
03S 39W 20DAC 01	TO	139.0	-9	1.4	0.0	-0.2	0.0	69	60	-13
03S 39W 24DDD 01	TO	223.0	-18		0.1	-0.4		70	52	-26
03S 39W 32BDB 01	TO	153.0	-3	0.6	-0.3	-0.1	0.0	73	70	-4
03S 40W 09BAA 02	QA, TO	19.2	1	0.7	0.1	0.0	0.0	2	3	50
03S 40W 35AAC 01	TO	97.0	-2	-0.9	0.2	0.0	0.0	49	47	-4
03S 41W 33ABB 01	TO	159.2	5		0.7	0.1		20	25	25
03S 42W 26CCD 01	TO									
04S 37W 17AAC 01	TO	198.9	-12	-11.0	-0.1	-0.3	-0.4	138	126	-9
04S 37W 25DCA 01	TO	154.5	-8	-13.0	-0.3	-0.2	-0.4	137	130	-5
04S 38W 04BAC 01	TO	220.1	-13	-13.1	1.0	-0.3	-0.4	120	107	-11
04S 38W 20CCC 01	TO	158.7	-8	-9.2	-0.2	-0.2	-0.3	146	138	-5
04S 38W 21ADC 01	TO	186.6	-9	1.4	-0.1	-0.2	0.0	138	129	-7
04S 40W 22BCB 01	TO	125.8	-3	-1.9	-0.3	-0.1	-0.1	92	89	-3
04S 41W 16DAA 01	QA	15.7	-3	-1.5	0.1	-0.1	0.0	25	22	-12
04S 41W 23AAA 01	TO	122.4			0.4					
04S 41W 25BCB 02	TO	144.8								
04S 41W 31ACA 01	TO	98.7	-5	-4.7	0.4	-0.1	-0.2	48	43	-10
04S 42W 02BCC 01	TO	212.4			-0.1					
04S 42W 16CCD 01	TO	90.1								
05S 37W 15DBB 01	TO	143.8	-7	-7.4	1.3	-0.1	-0.2	160	153	-4
05S 38W 13BAD 01	TO	79.4	-5	-6.9	-0.2	-0.1	-0.2	146	141	-3
05S 38W 22ACB 01	TO	98.4	-8	-7.8	-0.4	-0.2	-0.3	180	172	-4
05S 39W 06DAA 01	TO	214.8			-0.2					
05S 39W 11CBC 01	TO	151.7	-12	-11.6	0.2	-0.3	-0.4	151	139	-8
05S 39W 25CDA 01	TO	134.1	-7	-9.1	0.1	-0.1	-0.3	168	161	-4
05S 40W 14BCD 01	TO	224.7	-38		-0.7	-0.8		138	100	-28
05S 42W 14DCC 01	TO	133.9			-0.3				81	

TABLE 2. DERIVED HYDROLOGIC DATA, CLARK COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1940-97	1966-97	1996-97	1940-97	1966-97	1940	1997	
30S 23W 06AAA 01	TO									
33S 22W 30CBC 01	QA									

TABLE 2. DERIVED HYDROLOGIC DATA, CLOUD COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1944-97	1974-97	1996-97	1944-97	1974-97	1944	1997	
05S 02W 01BAC 01	KD	40.8		3.1			0.1			

TABLE 1. SELECTED HYDROLOGIC DATA, CRAWFORD COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
				1950	1966	1991	1992	1993	1994	1995	1996		1997
29S 23E 24DBA 01	OU	995				318.1	321.4		318.6		310.9	322.0	qD77

TABLE 1. SELECTED HYDROLOGIC DATA, DECATUR COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
				1950	1966	1991	1992	1993	1994	1995	1996		1997
*01S 26W 18DDB 01	QA	2413	59	28	26.4	28.3		27.8	24.9	25.5	26.1	23.7	aD59
*01S 29W 03DDB 01	QA	2539	45	23	23.0	28.7	29.3	28.7	26.9	22.8	23.9	23.9	aD61
*01S 29W 19BDD 01	QA	2572	53	10	10.9	18.8	19.5	18.8	15.7	14.4	14.9	12.2	qD59
*01S 30W 34DDD 01	QA	2610	60	20	21.5	31.0	32.6	30.0	24.9	21.1	21.0	20.4	aD62
*02S 26W 11BBA 01	TO	2509	110	85	87.3	85.3	85.5	84.9	83.3	82.6	81.8	80.7	aD66
*02S 28W 13ABA 01	QA	2487		27	26.2	29.1	29.8	27.7	25.8	24.3	26.6	24.3	aD62
02S 30W 23ADD 01	TO	2835				135.6		135.2	134.7	133.6		131.0	aD87
*03S 26W 30CBB 02	TO	2610	142	119	119.4	124.2	123.9	123.7	123.3	122.6	121.7	121.2	uD65
03S 27W 32ABA 01	TO	2637	120	74	74.8	70.0	70.0	69.6	68.4	67.2			aD67
*03S 28W 06DCB 01	QA	2571	55	34	25.6	36.5	35.9	33.3	30.1	28.8	28.7	26.4	aD67
*03S 28W 32BCA 01	TO	2749	180	133	133.6	130.5	130.4		129.1	130.7	128.1	127.4	aD62
*03S 29W 12BBA 01	QA	2556	55	26	24.9	24.9	24.6	22.3	17.3	16.4	16.9	14.5	qD59
*03S 29W 17DCB 01	QA,TO	2587	50	19	20.0	23.1	22.8	16.8	14.4	11.2	18.2	18.1	aD62
*03S 29W 31DCC 01	QA	2633	38	20	20.3	24.3	25.2	24.0	20.2	19.5	19.5	18.3	aD62
03S 30W 03CBA 01	TO	2807	177	96	98.6	93.7		93.0	96.5	99.5	91.6		aD64
*03S 30W 26BBB 01	QA	2629	49	7	10.2	5.1	5.7	5.2	0.4	10.5	0.6	6.5	aD62
*04S 26W 08DDD 01	QA	2456	70	26	28.7	29.5	30.6	27.7	28.4	28.6	28.6	27.9	aD59
*04S 26W 19DCA 01	QA	2464	37	14	14.0	15.6	15.7	14.6	14.2	14.7	14.7	14.1	aD62
*04S 27W 17DAC 01	TO	2648	162	105	103.8	106.1			100.0	99.0	101.7	97.3	aD62
*04S 27W 33BBB 01	QA	2528	54	13	16.0	18.4	18.1	18.1	10.0	18.8	16.5	14.7	aD62
*04S 28W 15AAA 01	TO	2700	130	92	94.1		91.2	91.1	89.9	89.4	89.8	87.9	aD53
*04S 28W 3 DDD 01	TO	2726	110	92	92.7	91.6	89.9	88.8	89.2	89.6	91.4	92.5	aD62
*04S 30W 07BBB 01	QA	2697	21	7	7.3		14.1	13.2	10.2	7.7	7.7	6.7	aD64
*05S 26W 05ADD 01	TO	2607	170	128	128.9	126.5	125.8	125.6		126.3	124.9	124.4	aD62
*05S 26W 26DDA 01	QA	2437	74	26	22.4	23.2	25.4	23.3	21.3	23.4	20.9	20.8	aD62
*05S 26W 33DCC 01	QA	2475	60	20	18.2	18.4	18.9	18.4	16.9	22.3	17.0	16.8	aD62
*05S 27W 21CCA 01	TO	2675		103	104.2	103.2	103.0	102.8	102.3	102.1	101.8	101.1	aD64
*05S 28W 07BBC 01	QA	2644	52	19	19.9	19.3	18.9	13.9	14.3	15.1	14.2	13.9	aD64
*05S 28W 10BBB 01	QA	2600	47	12	8.0	10.0	9.8	8.5	7.7	7.8	8.4	6.9	aD64
*05S 28W 14ADD 01	TO	2723	160	133	135.0	133.6	133.2	133.2	131.3	137.5	136.3	140.5	aD62
05S 28W 17DAC 01	TO	2734	124	102	102.3	101.9	101.7		100.2	99.6		95.5	aD62
*05S 29W 22CBB 01	QA	2686	46	11	12.6	12.8	13.9	11.7	11.4	12.4	11.9	11.0	aD66
*05S 30W 15CCB 01	TO	2878				97.6	98.2	97.3	91.9	91.5	90.3	90.8	aD84
*05S 30W 35BCB 01	TO	2891	200	112	111.6	119.0	119.3	118.2	117.0	117.7	118.0	117.2	aD66

TABLE 1. SELECTED HYDROLOGIC DATA, DOUGLAS COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
				1950	1966	1991	1992	1993	1994	1995	1996		1997
12S 20E 07CBC 01	QA	826			14.0	14.2	16.5	12.0	7.5	14.2	12.7	8.0	qD66
15S 19E 15AAD 01	PL	1000				43.0		45.0	39.8			42.4	aM72

TABLE 2. DERIVED HYDROLOGIC DATA, CRAWFORD COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness 1950-97
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
29S 23E 24DBA 01	OU	322.0			-11.1					

TABLE 2. DERIVED HYDROLOGIC DATA, DECATUR COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness 1950-97
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
*01S 26W 18DDB 01	QA	23.7	4	2.7	2.4	0.1	0.1	31	35	13
*01S 29W 03DDB 01	QA	23.9	-1	-0.9	0.0	0.0	0.0	22	21	-5
*01S 29W 19BDD 01	QA	12.2	-2	-1.3	2.7	0.0	0.0	43	41	-5
*01S 30W 34DDD 01	QA	20.4	0	1.1	0.6	0.0	0.0	40	40	0
*02S 26W 11BBA 01	TO	80.7	4	6.6	1.1	0.1	0.2	25	29	16
*02S 28W 13ABA 01	QA	24.3	3	1.9	2.3	0.1	0.1			
02S 30W 23ADD 01	TO	131.0								
*03S 26W 30CBB 02	TO	121.2	-2	-1.8	0.5	0.0	-0.1	23	21	-9
03S 27W 32ABA 01	TO									
*03S 28W 06DCB 01	QA	26.4	8	-0.8	2.3	0.2	0.0	21	29	38
*03S 28W 32BCA 01	TO	127.4	6	6.2	0.7	0.1	0.2	47	53	13
*03S 29W 12BBA 01	QA	14.5	12	10.4	2.4	0.3	0.3	29	41	41
*03S 29W 17DCB 01	QA, TO	18.1	1	1.9	0.1	0.0	0.1	31	32	3
*03S 29W 31DCC 01	QA	18.3	2	2.0	1.2	0.0	0.1	18	20	11
03S 30W 03CBA 01	TO									
*03S 30W 26BBB 01	QA	6.5	1	3.7	-5.9	0.0	0.1	42	43	2
*04S 26W 08DDD 01	QA	27.9	-2	0.8	0.7	0.0	0.0	44	42	-5
*04S 26W 19DCA 01	QA	14.1	0	-0.1	0.6	0.0	0.0	23	23	0
*04S 27W 17DAC 01	TO	97.3	8	6.5	4.4	0.2	0.2	57	65	14
*04S 27W 33BBB 01	QA	14.7	-2	1.3	1.8	0.0	0.0	41	39	-5
*04S 28W 15AAA 01	TO	87.9	4	6.2	1.9	0.1	0.2	38	42	11
*04S 28W 30DDD 01	TO	92.5	-1	0.2	-1.1	0.0	0.0	18	18	0
*04S 30W 07BBB 01	QA	6.7	0	0.6	1.0	0.0	0.0	14	14	0
*05S 26W 05ADD 01	TO	124.4	4	4.5	0.5	0.1	0.1	42	46	10
*05S 26W 26DDA 01	QA	20.8	5	1.6	0.1	0.1	0.1	48	53	10
*05S 26W 33DCC 01	QA	16.8	3	1.4	0.2	0.1	0.0	40	43	8
*05S 27W 21CCA 01	TO	101.1	2	3.1	0.7	0.0	0.1			
*05S 28W 07BBC 01	QA	13.9	5	6.0	0.3	0.1	0.2	33	38	15
*05S 28W 10BBB 01	QA	6.9	5	1.1	1.5	0.1	0.0	35	40	14
*05S 28W 14ADD 01	TO	140.5	-8	-5.5	-4.2	-0.2	-0.2	27	20	-26
05S 28W 17DAC 01	TO	95.5	7	6.8		0.1	0.2	22	29	32
*05S 29W 22CBB 01	QA	11.0	0	1.6	0.9	0.0	0.1	35	35	0
*05S 30W 15CCB 01	TO	90.8			-0.5					
*05S 30W 35BCB 01	TO	117.2	-5	-5.6	0.8	-0.1	-0.2	88	83	-6

TABLE 2. DERIVED HYDROLOGIC DATA, DOUGLAS COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness 1950-97
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
12S 20E 07CBC 01	QA	8.0		6.0	4.7		0.2			
15S 19E 15AAD 01	PL	42.4								

TABLE 1. SELECTED HYDROLOGIC DATA, EDWARDS COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1950	1966	1991	1992	1993	1994	1995	1996	1997	
24S 16W 12CBD 01	QU	2055	130	5	9.2	28.6	30.5	32.0	27.7	28.9	26.1	22.3	aJ70
24S 17W 20ADC 01	QU	2126	121	3	15.8	32.0	34.0	34.9	34.4	36.2	35.3	35.3	aJ73
24S 17W 24DDD 01	QU	2100	170	15	13.3	33.4	34.9	34.8	32.8	35.4	34.5	31.7	qJ73
24S 18W 13DAC 01	QU	2130	115			31.3	32.8	33.7	33.2	34.8	34.4	34.7	aJ86
24S 18W 17ABD 01	QU	2147	92	27	18.8	31.5	33.1	33.4	31.7	32.7	31.5	30.5	aJ73
24S 18W 28DAC 01	QU	2158	98	25	16.6	35.6	37.2	37.7	37.1	41.9	37.7	37.5	aJ73
24S 18W 36DDC 01	QU	2149	119	28	24.2	37.5	40.1		42.6		42.0		aJ72
24S 19W 34ADD 01	QA	2160		8	7.0	8.7	10.3	6.3	8.3	8.9	8.0	7.1	qJ61
25S 16W 02BBB 01	QU	2069	184	6	6.6	27.1	28.3	27.6	23.8	26.7	23.4	19.6	aJ73
25S 16W 27AAC 01	QU	2063	188	3	6.1	19.5	20.5	18.0	14.8		15.9	12.4	aJ73
25S 16W 31DCC 01	TO	2089				21.7	23.4	24.8	21.0	24.8			qJ81
25S 17W 01DAB 01	QU	2102	162	12	8.8	29.4	30.6	30.0	29.3	30.5	30.4	28.6	aJ45
25S 17W 17AAC 01	QU	2129	74	14	14.4	32.5	34.9	31.1	33.0	34.9	34.4	33.2	aJ73
25S 17W 31BBB 01	QU	2148	178	22	11.1		28.0	28.4	21.9	29.1	29.1	28.4	aJ64
25S 18W 09AAA 01	QU	2161	131	21	15.6	31.8	33.8	33.5	33.1	35.5	33.9	33.8	qJ73
25S 18W 20AAB 01	QU	2193				38.7	41.0	41.8	40.4	42.9	42.2	41.3	aJ88
25S 18W 33CDC 01	QU	2182	172	29	23.2	33.3	34.8	35.9	36.2	37.6	37.7	37.1	aJ72
25S 19W 08BDD 01	QA	2184				6.3	8.3	7.1	5.5	7.8	6.1	2.7	aJ84
25S 19W 26DDB 01	QU	2206	146	31	30.1	40.9	40.2	41.4	40.9	42.0	41.4	40.9	aJ73
25S 19W 31CAB 01	QU	2220		17	15.2	19.4	21.2	20.1			19.2	16.8	aJ73
25S 20W 03BCD 01	QU, TO	2237				29.6	30.7	30.1	27.3	29.4	29.7	27.4	aJ84
25S 20W 34CCC 01	QA	2219				7.6	9.0	10.0	9.5	10.5	8.1	4.6	aJ45
26S 16W 10CCC 01	QU	2065	220	5	3.8	11.8	13.1	9.9	8.0	11.8	9.8	7.6	aJ73
26S 16W 18CAC 01	QU	2092							13.4	17.7	16.9	14.3	aU94
26S 16W 31CCA 01	QU	2110	285	25	19.6	34.0	36.4	34.8	30.7	34.7	34.0	32.2	aJ73
26S 16W 34ABC 01	QU	2079	289	25	6.8	24.0	25.5	23.0	18.4	23.8	23.1	21.1	aJ66
26S 17W 14BAA 01	QU	2109	194	16	20.7	26.1	29.4	27.1	23.1	26.3	25.5	23.3	aJ73
26S 17W 33DDB 01	QU	2127	227	22	12.4	25.6	27.9	26.5	24.4	27.2	27.4	26.4	aJ73
26S 18W 15DCB 01	QU	2174	229	33	22.0	33.3	35.0	36.2	35.4	37.3	37.1	36.1	aJ69
26S 18W 31CCC 01	QU	2215	195	47	33.6	49.2	51.6	52.4	51.6	53.1	51.7	52.5	aJ73
26S 19W 12ABB 02	QU	2210	155	38		45.6	47.4	53.3	53.6	54.2	54.5	53.8	qJ79
26S 19W 16BCB 01	QU	2231	176	35	29.4	40.1	41.6	42.3	42.1	42.8	42.1	41.3	aJ66
26S 19W 31AAC 01	QU	2250				40.0	43.0	41.9	41.7			40.8	aJ91
26S 19W 34BBB 01	QU	2232	187	36	30.8	41.8	43.0	44.1	44.3	45.0	44.6	43.3	aJ73
26S 20W 20BBC 01	QA	2251		19		11.2	13.4	13.0	12.0	13.4	13.0	8.7	aJ85

TABLE 1. SELECTED HYDROLOGIC DATA, ELLIS COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1950	1966	1991	1992	1993	1994	1995	1996	1997	
13S 18W 29CCC 01	QU	2000				21.8			17.7		19.4	13.7	qD82
14S 18W 12AAD 01	QU	2000				26.4			23.8		23.8	23.7	qD76
15S 18W 25CCD 01	QA	1910							16.5		16.9	15.1	qD82
15S 19W 25CAB 01	QA	1937				16.1			15.4		16.2	15.4	qD82

TABLE 1. SELECTED HYDROLOGIC DATA, ELLSWORTH COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1940	1966	1991	1992	1993	1994	1995	1996	1997	
17S 09W 20BCD 01	QU	1770				25.5	25.7		17.3		19.0		qD61
17S 09W 21BCC 01	KD	1775			92.2	81.1	95.1		78.2		83.1		qD66
17S 09W 28CBB 02	QU	1761				36.3	37.4		32.8		32.0		qD66
17S 09W 31AAB 01	KD	1762			99.6	51.5	51.3		48.7		45.7		qD66

TABLE 2. DERIVED HYDROLOGIC DATA, EDWARDS COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
24S 16W 12CBD 01	QU	22.3	-17	-13.1	3.8	-0.4	-0.4	125	108	-14
24S 17W 20ADC 01	QU	35.3	-32	-19.5	0.0	-0.7	-0.6	118	86	-27
24S 17W 24DDD 01	QU	31.7	-17	-18.4	2.8	-0.4	-0.6	155	138	-11
24S 18W 13DAC 01	QU	34.7			-0.3				80	
24S 18W 17ABD 01	QU	30.5	-4	-11.7	1.0	-0.1	-0.4	65	62	-5
24S 18W 28DAC 01	QU	37.5	-13	-20.9	0.2	-0.3	-0.7	73	61	-16
24S 18W 36DDC 01	QU									
24S 19W 34ADD 01	QA	7.1	1	-0.1	0.9	0.0	0.0			
25S 16W 02BBB 01	QU	19.6	-14	-13.0	3.8	-0.3	-0.4	178	164	-8
25S 16W 27AAC 01	QU	12.4	-9	-6.3	3.5	-0.2	-0.2	185	176	-5
25S 16W 31DCC 01	TO									
25S 17W 01DAB 01	QU	28.6	-17	-19.8	1.8	-0.4	-0.6	150	133	-11
25S 17W 17AAC 01	QU	33.2	-19	-18.8	1.2	-0.4	-0.6	60	41	-32
25S 17W 31BBD 01	QU	28.4	-6	-17.3	0.7	-0.1	-0.6	156	150	-4
25S 18W 09AAA 01	QU	33.8	-13	-18.2	0.1	-0.3	-0.6	110	97	-12
25S 18W 20AAB 01	QU	41.3			0.9					
25S 18W 33CDC 01	QU	37.1	-8	-13.9	0.6	-0.2	-0.4	143	135	-6
25S 19W 08BDD 01	QA	2.7			3.4					
25S 19W 26DDB 01	QU	40.9	-10	-10.8	0.5	-0.2	-0.3	115	105	-9
25S 19W 31CAB 01	QU	16.8	0	-1.6	2.4	0.0	-0.1			
25S 20W 03BCD 01	QU, TO	27.4			2.3					
25S 20W 34CCC 01	QA	4.6			3.5					
26S 16W 10CCC 01	QU	7.6	-3	-3.8	2.2	-0.1	-0.1	215	212	-1
26S 16W 18CAC 01	QU	14.3			2.6					
26S 16W 31CCA 01	QU	32.2	-7	-12.6	1.8	-0.1	-0.4	260	253	-3
26S 16W 34ABC 01	QU	21.1	4	-14.3	2.0	0.1	-0.5	264	268	2
26S 17W 14BAA 01	QU	23.3	-7	-2.6	2.2	-0.1	-0.1	178	171	-4
26S 17W 33DDB 01	QU	26.4	-4	-14.0	1.0	-0.1	-0.5	205	201	-2
26S 18W 15DCB 01	QU	36.1	-3	-14.1	1.0	-0.1	-0.5	196	193	-2
26S 18W 31CCC 01	QU	52.5	-6	-18.9	-0.8	-0.1	-0.6	148	143	-3
26S 19W 12ABB 02	QU	53.8	-16		0.7	-0.3		117	101	-14
26S 19W 16BCB 01	QU	41.3	-6	-11.9	0.8	-0.1	-0.4	141	135	-4
26S 19W 31AAC 01	QU	40.8								
26S 19W 34BBD 01	QU	43.3	-7	-12.5	1.3	-0.1	-0.4	151	144	-5
26S 20W 20BBC 01	QA	8.7	10		4.3	0.2				

TABLE 2. DERIVED HYDROLOGIC DATA, ELLIS COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
13S 18W 29CCC 01	QU	13.7			5.7					
14S 18W 12AAD 01	QU	23.7			0.1					
15S 18W 25CCD 01	QA	15.1			1.8					
15S 19W 25CAB 01	QA	15.4			0.8					

TABLE 2. DERIVED HYDROLOGIC DATA, ELLSWORTH COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1940-97	1966-97	1996-97	1940-97	1966-97	1940	1997	
17S 09W 20BCD 01	QU									
17S 09W 21BCC 01	KD									
17S 09W 28CBB 02	QU									
17S 09W 31AAB 01	KD									

TABLE 1. SELECTED HYDROLOGIC DATA, FINNEY COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)										Data Type
				1940	1966	1991	1992	1993	1994	1995	1996	1997		
21S 31W 26CCC 01	QU,TO	2900		75		75.3	75.1	75.0	74.8	74.7	75.3	75.0	aU85	
21S 32W 20CBD 01	QU,TO	2898	200	31	45.1	109.9	112.0	111.0	113.6	113.1	115.1	116.5	aJ64	
21S 32W 26DAA 01	QU,TO	2946	171	96	98.8	109.1	109.1	109.2	108.2	109.5		110.3	aJ61	
21S 33W 29BBC 01	QU,TO	2891	106	16		88.3	86.2	87.0		87.6	87.1	91.5	aJ85	
+21S 34W 14DBB 01	KN	2947	97	56	69.0	110.7	101.0		106.9	99.9	101.6	101.3	aJ61	
22S 27W 14ADC 01	KJ	2458				178.1	178.7	172.2	173.2	174.5	168.3	168.0	aJ77	
22S 31W 08CCC 01	QU,TO	2911	171	81		102.0	97.9	102.9	103.3	104.7	106.1	106.0	aJ85	
22S 32W 08ACB 01	QU,TO	2884	224	33	40.0	99.3	101.6	102.6	102.9	104.2	105.4	106.5	aJ60	
22S 32W 21CDC 01	QU,TO	2903	198	58	66.4	136.4	138.0	137.9	138.6	140.0	143.3	143.0	aJ58	
22S 33W 22BAA 01	QU,TO	2900	190	40	47.1	125.3		127.8	132.4	133.8	137.5	141.3	qJ60	
22S 33W 36BCCC01	QU,TO	2869						131.0	132.6	131.1	132.7	133.0	uJ93	
+22S 34W 08BCB 01	KN	2987	132	87	108.9	138.3	141.3	135.4	135.4	135.6	135.5	135.5	aJ61	
22S 34W 10AAA 01	QU,TO	2933	153	43	59.2	107.3	107.3	108.1	108.4	107.7	107.7	107.1	aJ61	
22S 34W 18CDD 01	QU,TO	2984	234	67		145.8	149.1		151.8	152.6	151.3	146.9	aJ85	
22S 34W 26CCC 01	QU,TO	2939				173.3	174.5	174.5	172.3	170.4	170.7	170.7	qJ85	
23S 27W 22DAB 01	QU,TO	2654		82			80.3	79.1	76.7	76.0	75.8	75.3	aJ76	
23S 28W 22DCD 01	QU,TO	2729		74		76.2	75.8	75.3	74.4	74.9	74.9	74.6	aJ76	
23S 28W 34DDC 01	QU,TO	2738		76		93.2		94.2	94.4	94.2	94.9	95.5	aJ76	
23S 29W 30BBB 01	QU,TO	2794		75		78.4	78.5	78.3	77.7	78.0	78.2	78.0	aJ76	
23S 29W 34CDD 01	TO	2772	147	84	84.0	88.8	91.0	89.7	87.8	89.3	89.4	90.4	aJ66	
23S 30W 04ACC 01	QU,TO	2846		65		68.5	69.0	69.6	69.4	70.0	70.3	70.8	aJ76	
23S 30W 19CCB 01	QU,TO	2862	142	89	82.2	89.4	90.3	90.9	90.6	90.7	91.0	91.1	aJ61	
23S 31W 03DCD 01	QU,TO	2877	167	72	83.0	110.6		119.7	116.7	112.1	112.6	112.7	aJ61	
23S 31W 17ABA 01	QU,TO	2900	210	90		112.4	113.9	113.8	113.6	114.6	115.7	115.9	aJ85	
23S 32W 31CBD 01	QU,TO	2876	324	41	49.4	90.8	94.8	88.3	85.6	86.8	86.5	81.9	aJ58	
23S 33W 08BBCC01	QU,TO	2914									166.2		aU94	
23S 33W 26ABB 01	QU,TO	2890	327	42	50.4	108.3	110.8	101.7	102.1	104.5	101.4	95.6	aJ58	
23S 33W 28CDC 01	QU,TO	2904		46	61.2	103.9	109.3	101.0	94.5	99.5	99.6	93.2	qJ58	
23S 34W 17CCC 01	QU,TO	2974	349	46	70.0	135.1	142.8	135.9	129.8	133.5	130.3	126.1	aJ58	
23S 34W 21DDC 01	QU,TO	2961	356	41	71.6	120.2	131.0	121.4	113.9		117.4	112.2	mJ58	
24S 31W 27CCB 01	QU,TO	2883	295	114	119.5	136.6	142.9	138.6	139.9	143.7	141.4	141.1	qD42	
24S 32W 10ACA 01	QU,TO	2860							83.0			82.8	aU93	
24S 33W 09CCD 01	QU,TO	2865	355	11		49.6	52.7	52.2	47.6	51.5	48.1	47.1	mJ77	
24S 33W 09CCD 02	QA	2865				16.8	19.3	22.2	14.1	17.6	12.5	11.4	mJ77	
24S 33W 09CCD 03	KD	2865				63.1	65.4	61.8	58.0	62.0	59.2	57.4	mJ80	
24S 33W 18BDB 02	KD	2878	338	8		101.7	107.8	101.6	84.7	101.0	84.3	93.4	aJ79	
24S 33W 19DBB 02	KD	2928	447	57		143.5	142.8	143.0	131.4	148.3	128.4	118.7	aJ77	
24S 33W 22BCC 01	QU,TO	2888		38		70.6	75.1	78.3	73.8	76.0	74.2		qD75	
24S 33W 22DCA 01	QU,TO	2905	405	71		111.2	113.7	112.6	111.4	114.5	113.5	114.9	qD73	
24S 33W 28DAA 01	QU,TO	2886	386	34		100.7	103.0	101.6	102.4	104.8	105.0	106.8	qD73	
24S 33W 34CAC 01	QU,TO	2910	435	60		130.3	133.1	131.6	132.6	135.5	136.8	139.1	aD74	
24S 34W 01BCBB01	QU,TO	2894	316	12	24.7	53.6	60.3	55.8	47.7	50.8	49.3	49.1	aJ61	
25S 32W 22DBC 01	QU,TO	2865	373	65	62.0	116.6	113.5	113.8	115.0	118.3	119.6	122.3	aD68	
25S 32W 31DDC 01	QU,TO	2871				119.7	125.5	126.7	127.7	129.7	136.2	139.1	qD83	
25S 32W 35ADB 01	QU,TO	2857	417	67	68.0	111.7	114.9	116.3	117.8	121.0	123.3	125.6	aD60	
25S 33W 03BCC 01	QU,TO	2902		47		50.4	53.1	52.6		55.1	55.4	54.5	qD75	
25S 33W 05ABD 01	QU,TO	2920	510	52		132.2	135.9	134.8	137.8	140.5	141.6	144.4	qD73	
25S 33W 09ABD 01	QU,TO	2909	514	50		128.2	131.3	130.0	131.8	134.8	136.9	139.8	qD73	
*25S 33W 15DAC 01	QU,TO	2915	535	71		150.3	152.7	151.4	153.6	156.7	157.5	160.7	qD72	
25S 33W 16DCC 01	QU,TO	2920		62		89.4	89.9	90.1	89.1	90.0	91.4	91.1	qD75	
25S 33W 17DBD 01	QU,TO	2940	530	78		151.4	155.1	153.8	157.5	160.5	163.2	167.1	qD73	
25S 33W 33CDA 01	QU,TO	2915	460	65		135.5	140.8	142.8	144.9	147.9	152.6	157.1	aJ85	
25S 34W 06AAA 01	QU,TO	2972	397	52		118.8	125.4	128.9	129.1	132.4	135.3	140.6	aJ75	
25S 34W 10ABB 01	QU,TO	2962	412	62		105.9	106.6	108.4	107.5	110.8	111.4	113.4	qJ75	
25S 34W 34DBD 01	QU,TO	2945	440	65	70.0	150.7	140.1	143.9	146.6	151.6	154.0	161.6	aJ70	
26S 31W 01DDA 01	QU,TO	2811	301	75	74.0	115.5	118.3	120.1	121.1	123.8	126.5	129.9	aD59	
26S 31W 06BBBB01	QU,TO	2832	327	55	55.6	102.2	102.2	104.0	105.4	108.6	111.4	114.2	aD61	
26S 31W 31CDC 01	QU,TO	2841	496	83	86.1	148.3	152.3	153.1	155.9	160.1	164.1	167.5	aJ61	
26S 31W 36CAB 01	QU,TO	2817	332	82	80.3	138.0	139.1	141.3	142.2	146.7	158.4		aD61	
26S 32W 22ABB 01	QU,TO	2899	564	113	115.6	156.4	159.1	165.7	168.4	162.4	163.4	165.3	aD62	

TABLE 2. DERIVED HYDROLOGIC DATA, FINNEY COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1940-97	1966-97	1996-97	1940-97	1966-97	1940	1997	
21S 31W 26CCC 01	QU,TO	75.0	0		0.3	0.0				
21S 32W 20CBD 01	QU,TO	116.5	-86	-71.4	-1.4	-1.5	-2.3	169	84	-50
21S 32W 26DAA 01	QU,TO	110.3	-14	-11.5		-0.2	-0.4	75	61	-19
21S 33W 29BBC 01	QU,TO	91.5	-76		-4.4	-1.3		90	15	-83
+21S 34W 14DBB 01	KN	101.3	-45	-32.3	0.3	-0.8	-1.0	41	-4	-110
22S 27W 14ADC 01	KJ	168.0			0.3					
22S 31W 08CCC 01	QU,TO	106.0	-25		0.1	-0.4		90	65	-28
22S 32W 08ACB 01	QU,TO	106.5	-74	-66.5	-1.1	-1.3	-2.1	191	118	-38
22S 32W 21CDC 01	QU,TO	143.0	-85	-76.6	0.3	-1.5	-2.5	140	55	-61
22S 33W 22BAA 01	QU,TO	141.3	-101	-94.2	-3.8	-1.8	-3.0	150	49	-67
22S 33W 36BCCC01	QU,TO	133.0			-0.3					
+22S 34W 08BCB 01	KN	135.5	-49	-26.6	0.0	-0.9	-0.9	45	-4	-109
22S 34W 10AAA 01	QU,TO	107.1	-64	-47.9	0.6	-1.1	-1.5	110	46	-58
22S 34W 18CDD 01	QU,TO	146.9	-80		4.4	-1.4		167	87	-48
22S 34W 26CCC 01	QU,TO	170.7			0.0					
23S 27W 22DAB 01	QU,TO	75.3	7		0.5	0.1				
23S 28W 22DCD 01	QU,TO	74.6	-1		0.3	0.0				
23S 28W 34DDC 01	QU,TO	95.5	-20		-0.6	-0.4				
23S 29W 30BBB 01	QU,TO	78.0	-3		0.2	-0.1				
23S 29W 34CDD 01	TO	90.4	-6	-6.4	-1.0	-0.1	-0.2	63	57	-10
23S 30W 04ACC 01	QU,TO	70.8	-6		-0.5	-0.1				
23S 30W 19CCB 01	QU,TO	91.1	-2	-8.9	-0.1	0.0	-0.3	53	51	-4
23S 31W 03DCD 01	QU,TO	112.7	-41	-29.7	-0.1	-0.7	-1.0	95	54	-43
23S 31W 17ABA 01	QU,TO	115.9	-26		-0.2	-0.5		120	94	-22
23S 32W 31CBD 01	QU,TO	81.9	-41	-32.5	4.6	-0.7	-1.0	283	242	-14
23S 33W 08BBCC01	QU,TO									
23S 33W 26ABB 01	QU,TO	95.6	-54	-45.2	5.8	-0.9	-1.5	285	231	-19
23S 33W 28CDC 01	QU,TO	93.2	-47	-32.0	6.4	-0.8	-1.0			
23S 34W 17CCC 01	QU,TO	126.1	-80	-56.1	4.2	-1.4	-1.8	303	223	-26
23S 34W 21DDC 01	QU,TO	112.2	-71	-40.6	5.2	-1.2	-1.3	315	244	-23
24S 31W 27CCB 01	QU,TO	141.1	-27	-21.6	0.3	-0.5	-0.7	181	154	-15
24S 32W 10ACA 01	QU,TO	82.8								
24S 33W 09CCD 01	QU,TO	47.1	-36		1.0	-0.6		344	308	-10
24S 33W 09CCD 02	QA	11.4			1.1					
24S 33W 09CCD 03	KD	57.4			1.8					
24S 33W 18BDB 02	KD	93.4	-85		-9.1	-1.5		330	245	-26
24S 33W 19DBB 02	KD	118.7	-62		9.7	-1.1		390	328	-16
24S 33W 22BCC 01	QU,TO									
24S 33W 22DCA 01	QU,TO	114.9	-44		-1.4	-0.8		334	290	-13
24S 33W 28DAA 01	QU,TO	106.8	-73		-1.8	-1.3		352	279	-21
24S 33W 34CAC 01	QU,TO	139.1	-79		-2.3	-1.4		375	296	-21
24S 34W 01BCBB01	QU,TO	49.1	-37	-24.4	0.2	-0.6	-0.8	304	267	-12
25S 32W 22DBC 01	QU,TO	122.3	-57	-60.3	-2.7	-1.0	-1.9	308	251	-19
25S 32W 31DDC 01	QU,TO	139.1			-2.9					
25S 32W 35ADB 01	QU,TO	125.6	-59	-57.6	-2.3	-1.0	-1.9	350	291	-17
25S 33W 03BCC 01	QU,TO	54.5	-8		0.9	-0.1				
25S 33W 05ABD 01	QU,TO	144.4	-92		-2.8	-1.6		458	366	-20
25S 33W 09ABD 01	QU,TO	139.8	-90		-2.9	-1.6		464	374	-19
*25S 33W 15DAC 01	QU,TO	160.7	-90		-3.2	-1.6		464	374	-19
25S 33W 16DCC 01	QU,TO	91.1	-29		0.3	-0.5				
25S 33W 17DBD 01	QU,TO	167.1	-89		-3.9	-1.6		452	363	-20
25S 33W 33CDA 01	QU,TO	157.1	-92		-4.5	-1.6		395	303	-23
25S 34W 06AAA 01	QU,TO	140.6	-89		-5.3	-1.6		345	256	-26
25S 34W 10ABB 01	QU,TO	113.4	-51		-2.0	-0.9		350	299	-15
25S 34W 34DBD 01	QU,TO	161.6	-97	-91.6	-7.6	-1.7	-3.0	375	278	-26
26S 31W 01DDA 01	QU,TO	129.9	-55	-55.9	-3.4	-1.0	-1.8	226	171	-24
26S 31W 06BBB01	QU,TO	114.2	-59	-58.6	-2.8	-1.0	-1.9	272	213	-22
26S 31W 31CDC 01	QU,TO	167.5	-85	-81.4	-3.4	-1.5	-2.6	413	329	-20
26S 31W 36CAB 01	QU,TO									
26S 32W 22ABB 01	QU,TO	165.3	-52	-49.7	-1.9	-0.9	-1.6	451	399	-12

TABLE 1. SELECTED HYDROLOGIC DATA, FINNEY COUNTY (cont'd)

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type			
				1940	1966	1991	1992	1993	1994	1995	1996		1997		
*26S 33W 10CCD 01	QU, TO	2890													
26S 33W 17DBD 01	TO	2900	520	60		127.9	132.2	137.1	143.7				142.4	146.3	aU96
26S 34W 05ADC 01	TO	2960		72		144.1	144.5	147.6						150.2	aJ81
26S 34W 21BBD 01	TO	2955		77		150.9		159.5	162.0	166.2	170.3			162.8	aJ81
								175.7						175.7	aJ81

TABLE 1. SELECTED HYDROLOGIC DATA, FORD COUNTY

Well Number				Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
							1940	1966	1991	1992	1993	1994	1995	1996		1997
*25S	22W	20AAA	01	TO	2438		65	62.6	59.0	61.1	58.7	58.2	58.0	57.8	57.4	qD39
*25S	22W	27CCD	01	KD	2432				135.0	142.8	57.9	46.2	45.6	44.0	41.4	qD70
*25S	23W	11CCC	01	KD	2424				81.7	93.0	89.9	46.9	53.3	65.6	80.0	ad68
*25S	23W	12BBB	01	KD	2390				154.7	164.7	155.7	152.9	162.7	161.2	158.5	qD73
25S	25W	32CDD	01	QU,KD	2607				202.1	202.6	196.4	197.5	201.4	203.5	202.3	aJ81
25S	25W	32DAD	01	QU,TO	2593				75.0	75.7	75.3	74.5	74.5	74.6	74.5	aJ85
25S	26W	25CDD	01	TO	2623	187	79		87.1	78.5		77.0		78.6	78.0	aJ77
25S	26W	30ABC	01	TO	2679	225	104		115.0	114.7	114.6	113.9	115.1	115.3	114.4	aJ77
26S	21W	17DBC	01	KD	2348				62.8	65.3	63.7		67.6	68.8		qD73
26S	21W	23ADA	01	QA	2262		6	7.3	6.2	7.0	8.3		7.3	7.0		qD38
26S	21W	25CCC	01	QA	2270				5.1	8.2	6.4	7.0	8.4	7.7	4.5	aJ85
26S	22W	21DCD	01	KD	2377				39.5	41.8	41.2	39.7	41.1	40.8	39.4	aJ82
26S	23W	02ABB	01	KD	2451						80.9	81.1	80.9	85.0	78.7	aJ85
*26S	23W	10DAD	01	KD	2463				177.2	179.8	179.8	184.8	179.8	180.5	180.5	qD68
*26S	24W	29DDD	01	TO	2575		130		143.8	149.1	146.4	146.9	151.4	152.5	150.9	qD68
*26S	24W	31DDA	01	TO	2463		11		20.3	26.6	24.3	22.5	30.8	25.4	15.5	qD68
*26S	24W	33CDA	01	TO	2466		26		33.5	40.8	39.5	38.9	44.4	44.1	34.3	ad68
26S	25W	16DCC	01	TO	2619				141.8	145.5	145.8			147.8	146.5	aJ80
26S	26W	18CCB	01	QA,TO	2558				13.6	13.8	16.2	14.7	17.2	15.1	13.1	aJ81
*26S	26W	32DCC	01	TO	2616		74		91.4	95.8	95.4	95.5	99.4	101.5	100.5	qD77
26S	26W	36DCC	01	TO	2543	168	31		52.6	57.3	48.8	49.2	50.8	50.3	50.8	aJ77
27S	21W	10DBB	01	QA,QU	2291				7.6	8.0	5.7	6.6	7.3	5.5	3.2	aJ85
*27S	23W	24BCB	01	KD	2395				57.2	74.6	61.8	57.6	84.9	74.6	54.7	ad74
27S	23W	36CCC	01	TO	2428	147	46			47.8	47.9	47.9	48.6	49.3	49.6	aJ77
*27S	24W	03BBB	01	TO	2455		19		25.3	27.1	28.1	18.0	30.6	33.0	34.1	ad68
*27S	24W	03CDD	01	TO	2445				14.9	18.8	17.7	31.0	21.4	21.8	16.7	qD73
*27S	24W	04BBC	01	TO	2453		11		19.5	24.2	22.3	23.2	30.8	30.6	22.5	qD68
*27S	24W	09AAD	01	TO	2448		10		24.7	28.3	26.8	27.1	30.8	31.5	25.7	ad72
*27S	24W	16BDB	01	TO	2515				79.6	83.1	82.9	82.5	85.3	86.3	83.3	qD73
27S	24W	26DAA	01	TO	2512	191	79		93.9	95.7	95.5	95.6	96.7	97.9	97.6	aJ77
27S	25W	09ACA	01	TO	2546				70.8	73.2	73.9	74.1	76.8	76.2	75.7	aJ81
27S	25W	25BBB	01	TO	2574				120.8	123.0	122.9	123.5	124.6	125.6	125.4	aJ81
28S	21W	10DDD	01	QU,TO	2349		41		47.5	46.4	46.6	47.0	48.0	48.4	47.5	aJ77
28S	21W	23DBC	01	TO	2370				77.5		79.6	80.0	80.8	81.4	80.3	aJ77
28S	21W	25ABB	01	QU,TO	2365	149			72.4	74.9	73.9	74.7	75.5	75.8	74.5	aJ81
28S	22W	05ADD	01	QA	2370				19.0	19.4	19.2	19.6	20.9	20.7	19.5	aJ81
28S	22W	12CAC	01	TO	2405	82	66		69.5	63.9	64.5	64.4	65.6	65.7	65.5	aJ76
28S	22W	32BAB	01	TO	2485	161	121		139.7	142.1	125.8	125.9	126.7	127.1	127.2	aJ77
28S	23W	18BAB	01	QU,TO	2547	239			144.7	140.0	140.5	141.0	141.8	142.6	143.0	aJ81
28S	23W	24ABB	01	QU,TO	2465				101.7	96.6		97.1	97.8	98.0	98.0	aJ80
*28S	24W	08DCC	01	QU,TO	2578		133		144.4	146.1	146.1	146.2	170.6	160.3	147.9	qD77
*28S	24W	22CDA	01	QU,TO	2500				109.3	110.6	111.1	111.5	112.3	117.7	113.2	aJ76
*28S	24W	35CAB	01	QU,TO	2528	450			111.8	106.1	106.9	107.0	107.8	112.1	108.6	aJ81
*28S	25W	06ABB	01	QU,TO	2643		144		161.1	154.7	154.0	154.7	170.3	165.2	156.4	qD72
28S	25W	19BBB	01	TO	2635	265	133		164.5	151.1	151.0	150.7	153.5	154.8	154.0	aJ77

TABLE 2. DERIVED HYDROLOGIC DATA, FINNEY COUNTY (cont'd)

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness 1940-97
			1940-97	1966-97	1996-97	1940-97	1966-97	1940	1997	
*26S 33W 10CCD 01	QU,TO	146.3			-3.9					
26S 33W 17DBD 01	TO	150.2	-90			-1.6		460	370	-20
26S 34W 05ADC 01	TO	162.8	-91			-1.6				
26S 34W 21BBD 01	TO	175.7	-99		-5.4	-1.7				

TABLE 2. DERIVED HYDROLOGIC DATA, FORD COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness 1940-97
			1940-97	1966-97	1996-97	1940-97	1966-97	1940	1997	
*25S 22W 20AAA 01	TO	57.4	8	5.2	0.4	0.1	0.2			
*25S 22W 27CCD 01	KD	41.4			2.6					
*25S 23W 11CCC 01	KD	80.0			-14.4					
*25S 23W 12BBB 01	KD	158.5			2.7					
25S 25W 32CDD 01	QU,KD	202.3			1.2					
25S 25W 32DAD 01	QU,TO	74.5			0.1					
25S 26W 25CDD 01	TO	78.0	1		0.6	0.0		108	109	1
25S 26W 30ABC 01	TO	114.4	-10		0.9	-0.2		121	111	-8
26S 21W 17DBC 01	KD									
26S 21W 23ADA 01	QA									
26S 21W 25CCC 01	QA	4.5			3.2					
26S 22W 21DCD 01	KD	39.4			1.4					
26S 23W 02ABB 01	KD	78.7			6.3					
*26S 23W 10DAD 01	KD	180.5			0.0					
*26S 24W 29DDD 01	TO	150.9	-21		1.6	-0.4				
*26S 24W 31DDA 01	TO	15.5	-5		9.9	-0.1				
*26S 24W 33CDA 01	TO	34.3	-8		9.8	-0.1				
26S 25W 16DCC 01	TO	146.5			1.3					
26S 26W 18CCB 01	QA,TO	13.1			2.0					
*26S 26W 32DCC 01	TO	100.5	-27		1.0	-0.5				
26S 26W 36DCC 01	TO	50.8	-20		-0.5	-0.4		137	117	-15
27S 21W 10DBB 01	QA,QU	3.2			2.3					
*27S 23W 24BCB 01	KD	54.7			19.9					
27S 23W 36CCC 01	TO	49.6	-4		-0.3	-0.1		101	97	-4
*27S 24W 03BBD 01	TO	34.1	-15		-1.1	-0.3				
*27S 24W 03CDD 01	TO	16.7			5.1					
*27S 24W 04BBC 01	TO	22.5	-12		8.1	-0.2				
*27S 24W 09AAD 01	TO	25.7	-16		5.8	-0.3				
*27S 24W 16BDB 01	TO	83.3			3.0					
27S 24W 26DAA 01	TO	97.6	-19		0.3	-0.3		112	93	-17
27S 25W 09ACA 01	TO	75.7			0.5					
27S 25W 25BBB 01	TO	125.4			0.2					
28S 21W 10DDD 01	QU,TO	47.5	-7		0.9	-0.1				
28S 21W 23DBC 01	TO	80.3			1.1					
28S 21W 25ABB 01	QU,TO	74.5			1.3				75	
28S 22W 05ADD 01	QA	19.5			1.2					
28S 22W 12CAC 01	TO	65.5	1		0.2	0.0		16	17	6
28S 22W 32BAB 01	TO	127.2	-6		-0.1	-0.1		40	34	-15
28S 23W 18BAB 01	QU,TO	143.0			-0.4				96	
28S 23W 24ABB 01	QU,TO	98.0			0.0					
*28S 24W 08DCC 01	QU,TO	147.9	-15		12.4	-0.3				
*28S 24W 22CDA 01	QU,TO	113.2			4.5					
*28S 24W 35CAB 01	QU,TO	108.6			3.5				341	
*28S 25W 06ABB 01	QU,TO	156.4	-12		8.8	-0.2				
28S 25W 19BBB 01	TO	154.0	-21		0.8	-0.4		132	111	-16

TABLE 1. SELECTED HYDROLOGIC DATA, FORD COUNTY (cont'd)

Well Number				Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type
							1940	1966	1991	1992	1993	1994	1995	1996	
28S 26W 06ABB 01		TO	2685		195	133		184.4	174.2	168.9	169.6	172.4	173.8	174.2	aJ77
28S 26W 13CAA 01		QU,TO	2635					142.9	144.4	145.4	144.9			147.7	qD78
*29S 21W 05BBB 01		TO	2418			98	96.6	101.3	102.2	102.1	101.8	102.8	99.5	103.5	qD56
29S 21W 20CAD 01		QU,TO	2445					136.7	135.8	135.8	135.8	136.3	139.0	136.1	aJ80
29S 22W 17DAD 01		TO	2475		240	119		143.8	136.1	131.4	131.5	132.5	133.1	132.4	aJ77
29S 22W 36ACA 01		QU,TO	2445		242				137.8		137.9	138.6	140.0	138.9	aJ79
*29S 23W 12BAC 01		QU,TO	2545							180.7	182.4	184.2	183.6	183.4	aU80
29S 24W 01ABA 01		TO	2560		220	140		146.3	147.5	148.0	148.2	149.1	149.9	149.8	aJ76
29S 24W 13BCA 01		QU,TO	2530		212			115.5	116.3	116.1	116.4	117.3	117.7	117.8	aJ80
29S 24W 18BAA 01		TO	2610		210	149		160.6	160.4	160.7	161.3	161.5	162.6	161.8	aJ76
29S 25W 03ADA 01		TO	2630		220	152		193.5	192.2	188.5	188.0			188.6	aJ77
29S 25W 10BBBC01		QU,TO	2617			139				166.1	164.5	167.4	170.4	167.9	aJ78
29S 26W 29ABB 01		QU,TO	2558					96.6	102.5	102.4	102.7	103.6	105.0	106.9	aJ71
29S 26W 36BBB 01		TO	2532		212	26		33.1	37.2	33.8	33.8	36.1	37.6	34.8	aJ77

TABLE 1. SELECTED HYDROLOGIC DATA, GEARY COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1950	1966	1991	1992	1993	1994	1995	1996	1997	
11S 06E 27CBB 01	QA	1057			20.7	21.0	22.4	19.5	11.9		19.0	19.4	qD66

TABLE 1. SELECTED HYDROLOGIC DATA, GOVE COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1950	1966	1991	1992	1993	1994	1995	1996	1997	
11S 26W 04CDC 01	TO	2583	190	62	60.0	64.6	67.1	66.1	62.0	64.4	63.9	62.5	aJ70
11S 26W 19AAA 01	TO	2680							126.5			120.9	aU93
11S 27W 36BCC 01	TO	2676	140	71		77.3	76.7	76.4	73.2	75.7	78.5	70.9	aJ70
11S 28W 08AAA 01	TO	2797				116.3	122.0	121.6	119.0	119.0	120.4	114.4	aJ84
11S 28W 17DCB 01	TO	2790								97.7	97.2	95.9	aU94
11S 28W 26ABB 01	TO	2755								90.6	90.3	91.7	aU94
11S 29W 04DAD 01	TO	2844	170	109		113.4	113.8	113.4	112.9	113.4	113.2	112.2	aJ68
11S 29W 33BBA 01	TO	2857				105.4	105.4	105.5	103.6	103.6	102.6	101.1	aJ84
11S 30W 27ABB 01	TO	2922	165	117		127.9	129.3	129.6	125.3	126.3	125.8	123.3	aJ70
11S 30W 28CBA 01	TO	2925				125.5	125.1	125.3	122.2	122.9	122.7	122.8	aJ85
11S 30W 36CBB 01	TO	2885				104.8	107.3	106.3	104.2	103.9	103.9	104.8	aJ85
11S 31W 12AAB 01	TO	2959				108.4	106.9	105.7	104.9	104.7	108.8	103.0	aJ70
11S 31W 27ADC 01	TO	2913				51.8	52.3	51.7	48.8	49.8	50.0	47.2	aJ84
11S 31W 35BDC 01	TO	2951						100.4	98.4	98.9	98.4	96.0	aJ84
12S 26W 12BCC 01	TO	2573				38.7	41.1	41.1	38.2	34.5	35.8	33.4	aJ70
12S 27W 10CCB 01	TO	2700				78.4	79.5	78.4	75.1	75.1	76.7	73.2	aJ85
12S 27W 12BBA 01	TO	2625								34.3	33.8	44.8	aU94
12S 28W 07DDD 01	TO	2742				49.6	49.6	48.1	43.6	48.1	47.3	45.6	aJ84
12S 28W 12DDD 01	TO	2741				95.1	95.5	94.3	92.8	93.1	92.2	90.8	aJ68
13S 26W 20CBC 01	QA	2432	43		11.1	15.7	16.7	14.7	10.8	8.3	5.9	5.4	aJ71
13S 27W 16CA 02	QA	2490				14.7	15.6			11.9	10.6	13.5	uJ87
13S 28W 14AC 01	OU	2538				16.1	16.1			8.6	9.3	7.5	uU56

TABLE 2. DERIVED HYDROLOGIC DATA, FORD COUNTY (cont'd)

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1940-97	1966-97	1996-97	1940-97	1966-97	1940	1997	1940-97
28S 26W 06ABB 01	TO	174.2	-41		-0.4	-0.7		62	21	-66
28S 26W 13CAA 01	QU, TO	147.7								
*29S 21W 05BBB 01	TO	103.5	-6	-6.9	-4.0	-0.1	-0.2			
29S 21W 20CAD 01	QU, TO	136.1			2.9					
29S 22W 17DAD 01	TO	132.4	-13		0.7	-0.2		121	108	-11
29S 22W 36ACA 01	QU, TO	138.9			1.1				103	
*29S 23W 12BAC 01	QU, TO	183.4			0.2					
29S 24W 01ABA 01	TO	149.8	-10		0.1	-0.2		80	70	-13
29S 24W 13BCA 01	QU, TO	117.8			-0.1				94	
29S 24W 18BAA 01	TO	161.8	-13		0.8	-0.2		61	48	-21
29S 25W 03ADA 01	TO	188.6	-37			-0.6		68	31	-54
29S 25W 10BBBC 01	QU, TO	167.9	-29		2.5	-0.5				
29S 26W 29ABB 01	QU, TO	106.9			-1.9					
29S 26W 36BBB 01	TO	34.8	-9		2.8	-0.2		186	177	-5

TABLE 2. DERIVED HYDROLOGIC DATA, GEARY COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	1950-97
11S 06E 27CBB 01	QA	19.4		1.3	-0.4		0.0			

TABLE 2. DERIVED HYDROLOGIC DATA, GOVE COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	1950-97
11S 26W 04CDC 01	TO	62.5	-1	-2.5	1.4	0.0	-0.1	128	128	0
11S 26W 19AAA 01	TO	120.9								
11S 27W 36BCC 01	TO	70.9	0		7.6	0.0		69	69	0
11S 28W 08AAA 01	TO	114.4			6.0					
11S 28W 17DCB 01	TO	95.9			1.3					
11S 28W 26ABB 01	TO	91.7			-1.4					
11S 29W 04DAD 01	TO	112.2	-3		1.0	-0.1		61	58	-5
11S 29W 33BBA 01	TO	101.1			1.5					
11S 30W 27ABB 01	TO	123.3	-6		2.5	-0.1		48	42	-13
11S 30W 28CBA 01	TO	122.8			-0.1					
11S 30W 36CBB 01	TO	104.8			-0.9					
11S 31W 12AAB 01	TO	103.0			5.8					
11S 31W 27ADC 01	TO	47.2			2.8					
11S 31W 35BDC 01	TO	96.0			2.4					
12S 26W 12BCC 01	TO	33.4			2.4					
12S 27W 10CCB 01	TO	73.2			3.5					
12S 27W 12BBA 01	TO	44.8			-11.0					
12S 28W 07DDD 01	TO	45.6			1.7					
12S 28W 12DDD 01	TO	90.8			1.4					
13S 26W 20CBC 01	QA	5.4		5.7	0.5		0.2		38	
13S 27W 16CA 02	QA	13.5			-2.9					
13S 28W 14AC 01	QU	7.5			1.8					

TABLE 1. SELECTED HYDROLOGIC DATA, GRAHAM COUNTY

Well Number				Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)							Data Type
							1950	1966	1991	1992	1993	1994	1995	
06S 21W 19CDC 01	TO	2305	135				101.0	99.8	98.9	95.2			92.2	aD78
06S 22W 16DCC 01	TO	2360							136.5	132.8			130.0	aU93
*06S 22W 19CCC 01	TO	2395	198				107.2	107.0	107.0	106.4	105.3	104.3	102.5	aD76
*06S 23W 13BBB 01	TO	2340	183		55		57.1	57.8	56.9	53.5	52.3	50.8	49.4	aD76
*06S 23W 17CCA 01	TO	2406					73.9	74.1	73.4	72.3	69.5	67.7	63.9	aD84
*06S 24W 14AAA 01	TO	2527					116.4	118.9	118.6	118.8	115.6	111.3	116.3	aD84
*06S 24W 28BAB 01	TO	2478		96				101.5		99.0	94.3	94.4	93.0	qD76
*06S 25W 12CCC 01	TO	2538	224	135			142.6	142.5	142.8	142.1	141.6	141.5	141.0	aD76
*06S 25W 28CBC 01	TO	2540	180	109	102.7		109.4	110.0	109.8	107.2	107.9	108.7	107.8	qD62
*07S 22W 10BBC 01	TO	2217	72	6			8.5	7.9	7.6	7.9	8.2	8.3	8.3	aD78
*07S 22W 19BBB 01	TO	2295	63	39			37.4	38.5	35.3	30.6	32.5	32.7	29.2	aD76
07S 24W 08CBA 01	TO	2519	244	126			127.6	128.1	127.6	126.8	128.0		121.4	aD78
*07S 25W 24BBB 01	TO	2495	210	85			88.6	89.0		87.5	86.9	86.0	85.3	aD78
*07S 25W 33DDD 01	TO	2502					101.4	101.1	99.3	97.3	98.4	99.1	101.6	aD84
*08S 21W 17ABB 01	QA	2035					23.1	24.2	24.4	19.7	21.1	20.1	20.5	qD75
*08S 22W 18CDC 01	QA	2122					9.8	9.3	8.9	7.4	7.8	8.0	7.8	qD77
*08S 24W 23ACC 01	QA	2242					35.9	36.7	36.0	31.3	32.1	30.0	29.6	qD76
*08S 25W 24BAB 01	TO	2302					29.1	29.7	29.2	25.2		26.7	25.3	aD84
09S 23W 26BAA 01	TO	2380							49.1	45.3			43.4	aU93
*09S 24W 22BAA 01	TO	2491	110	94			92.4	93.0	92.1	89.0	88.7	87.0	86.1	aD77
*09S 25W 14DDD 01	TO	2534	134	90			92.0	92.2		89.6	89.1	88.8	88.3	aD79

TABLE 1. SELECTED HYDROLOGIC DATA, GRANT COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1940	1966	1991	1992	1993	1994	1995	1996	1997	
27S 35W 17ADD 01	QU,TO	3086	462	175	185.7	259.8	264.9	269.2	272.4	278.1	278.7	282.7	aU54
27S 35W 25BDC 01	TO	3046				242.0	246.7	249.9	252.8	256.9	261.8	266.9	aJ82
27S 36W 21DCC 01	QU,TO	3132		199		289.0	293.8	296.3	298.3	302.2	305.2	307.2	aJ60
27S 37W 04ABB 01	QU,TO	3080	316	70	86.4	186.2	187.4	189.1	189.3	192.0	194.1	195.1	aJ58
27S 37W 16AAD 01	TO,KJ	3075	324	54		222.7	225.9	226.9	226.2	229.6	230.5	231.6	aJ84
27S 37W 21BDD 01	TO,KJ	3058		58		205.9	208.7	209.3	207.8	212.1	213.3	214.6	aJ67
27S 38W 12ADC 01	QU,TO	3076	280	34	65.5	202.2	204.1	205.6	203.0	205.2	207.1	207.9	aJ60
27S 38W 15BBB 01	KJ	3148			132.9	178.7	172.2	181.1	179.6	182.4	183.2	185.4	aJ58
27S 38W 23CBB 01	QU,TO	3105	335	50	98.2	161.1	160.0	161.2	160.8	161.1	163.7	171.3	aJ43
28S 35W 03DBB 01	TO	3079				288.9	292.0	294.4	297.0	303.3	302.9	306.6	aJ84
28S 35W 05BCC 01	QU,TO	3117	457	237	253.2	330.2	332.8		334.6	338.4	340.9		aJ64
28S 35W 36ABC 01	QU,TO	3032	572	222	236.4	323.8	326.9		330.2	332.8	336.0	338.1	aJ59
28S 36W 18ABC 01	TO,KJ	3050	345	95		232.6	240.7	240.6	238.0	240.8	247.3	250.0	aJ84
28S 37W 02BBB 04	TO,KJ	3072				251.0	253.7	255.5	253.3	256.9	258.3	259.0	aJ81
28S 38W 12BCB 01	QU,TO	3087				203.8	206.8	208.1	206.3	211.9	210.6	211.3	uJ48
28S 38W 33BDB 01	TO	3125				214.4	218.9			227.8	230.3	232.3	aJ82
29S 35W 07CBD 01	QU,TO	3036	441	168		278.4	263.4	261.0	253.9	251.0	250.9	262.4	aJ79
29S 35W 24BAA 01	TO	3037	562	239		343.9	347.5	348.6		365.5	356.5	357.7	aJ84
29S 35W 28ACC 01	QU,TO	2975	500	147	185.4	265.1	266.6	268.7	268.5		277.7	282.1	aJ59
29S 36W 19BCB 01	QU,TO	2995	405	44	118.0	212.5	217.2	212.8	213.0	216.5	224.0	232.7	aJ59
29S 36W 33ADB 01	QU,TO	3011	466	91		246.1			240.8	251.5	245.4	253.3	aJ84
29S 37W 03CDB 01	QU,TO	3051	421	71	133.0		254.0	243.6	242.2		259.9	250.0	aJ67
29S 37W 08CBA 01	QU,TO	3065	430	46	114.5	244.5	248.9	247.5	243.8	250.8	258.4		aJ59
29S 37W 29BBA 01	QU,TO	3095	504	74	148.0	279.1	283.0	284.4	281.9	286.0	290.9	292.9	aJ53
29S 38W 20CDC 01	QU,TO,KJ	3139	489	59	80.8				197.2	201.1	207.8	209.2	aJ63
29S 38W 35CCD 01	QU,TO	3124	469	74	115.1	185.7	187.0	190.4	190.4	194.6	200.7	198.6	aJ58
30S 35W 02DBC 01	QU,TO	3020	525	225	240.5	318.3		315.8	322.2		310.9	332.0	aJ58
30S 35W 19BCD 01	QU,TO	3004	474	134	153.3	205.1	206.8		206.6	207.4	204.3	213.3	aJ58
30S 36W 01BBB 01	QU,TO	2973	463	98	130.4	218.4	220.8	217.6	214.5	224.3	232.7	226.5	aJ63
30S 36W 04ABB 01	QU,TO,KJ	3033	493	113		151.4	152.3		163.6		152.7	160.6	aJ68

TABLE 2. DERIVED HYDROLOGIC DATA, GRAHAM COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
06S 21W 19CDC 01	TO	92.2							43	
06S 22W 16DCC 01	TO	130.0								
*06S 22W 19CCC 01	TO	102.5			1.8				96	
*06S 23W 13BBB 01	TO	49.4	6		1.4	0.1		128	134	5
*06S 23W 17CCA 01	TO	63.9			3.8					
*06S 24W 14AAA 01	TO	116.3			-5.0					
*06S 24W 28BAB 01	TO	93.0	3		1.4	0.1				
*06S 25W 12CCC 01	TO	141.0	-6		0.5	-0.1		89	83	-7
*06S 25W 28CBC 01	TO	107.8	1	-5.1	0.9	0.0	-0.2	71	72	1
*07S 22W 10BBC 01	TO	8.3	-2		0.0	0.0		66	64	-3
*07S 22W 19BBB 01	TO	29.2	10		3.5	0.2		24	34	42
07S 24W 08CBA 01	TO	121.4	5			0.1		118	123	4
*07S 25W 24BBB 01	TO	85.3	0		0.7	0.0		125	125	0
*07S 25W 33DDD 01	TO	101.6			-2.5					
*08S 21W 17ABB 01	QA	20.5			-0.4					
*08S 22W 18CDC 01	QA	7.8			0.2					
*08S 24W 23ACC 01	QA	29.6			0.4					
*08S 25W 24BAB 01	TO	25.3			1.4					
09S 23W 26BAA 01	TO	43.4								
*09S 24W 22BAA 01	TO	86.1	8		0.9	0.2		16	24	50
*09S 25W 14DDD 01	TO	88.3	2		0.5	0.0		44	46	5

TABLE 2. DERIVED HYDROLOGIC DATA, GRANT COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1940-97	1966-97	1996-97	1940-97	1966-97	1940	1997	
27S 35W 17ADD 01	QU,TO	282.7	-108	-97.0	-4.0	-1.9	-3.1	287	179	-38
27S 35W 25BDC 01	TO	266.9			-5.1					
27S 36W 21DCC 01	QU,TO	307.2	-108		-2.0	-1.9				
27S 37W 04ABB 01	QU,TO	195.1	-125	-108.7	-1.0	-2.2	-3.5	246	121	-51
27S 37W 16AAD 01	TO,KJ	231.6	-178		-1.1	-3.1		270	92	-66
27S 37W 21BDD 01	TO,KJ	214.6	-157		-1.3	-2.8				
27S 38W 12ADC 01	QU,TO	207.9	-174	-142.4	-0.8	-3.1	-4.6	246	72	-71
27S 38W 15BBB 01	KJ	185.4		-52.5	-2.2		-1.7			
27S 38W 23CBB 01	QU,TO	171.3	-121	-73.1	-7.6	-2.1	-2.4	285	164	-42
28S 35W 03DBB 01	TO	306.6			-3.7					
28S 35W 05BCC 01	QU,TO									
28S 35W 36ABC 01	QU,TO	338.1	-116	-101.7	-2.1	-2.0	-3.3	350	234	-33
28S 36W 18ABC 01	TO,KJ	250.0	-155		-2.7	-2.7		250	95	-62
28S 37W 02BBB 04	TO,KJ	259.0			-0.7					
28S 38W 12BCB 01	QU,TO	211.3			-0.7					
28S 38W 33BDB 01	TO	232.3			-2.0					
29S 35W 07CBD 01	QU,TO	262.4	-94		-11.5	-1.6		273	179	-34
29S 35W 24BAA 01	TO	357.7	-119		-1.2	-2.1		323	204	-37
29S 35W 28ACC 01	QU,TO	282.1	-135	-96.7	-4.4	-2.4	-3.1	353	218	-38
29S 36W 19BCB 01	QU,TO	232.7	-189	-114.7	-8.7	-3.3	-3.7	361	172	-52
29S 36W 33ADB 01	QU,TO	253.3	-162		-7.9	-2.8		375	213	-43
29S 37W 03CDB 01	QU,TO	250.0	-179	-117.0	9.9	-3.1	-3.8	350	171	-51
29S 37W 08CBA 01	QU,TO									
29S 37W 29BBA 01	QU,TO	292.9	-219	-144.9	-2.0	-3.8	-4.7	430	211	-51
29S 38W 20CDC 01	QU,TO,KJ	209.2	-150	-128.4	-1.4	-2.6	-4.1	430	280	-35
29S 38W 35CCD 01	QU,TO	198.6	-125	-83.5	2.1	-2.2	-2.7	395	270	-32
30S 35W 02DBC 01	QU,TO	332.0	-107	-91.5	-21.1	-1.9	-3.0	300	193	-36
30S 35W 19BCD 01	QU,TO	213.3	-79	-60.0	-9.0	-1.4	-1.9	340	261	-23
30S 36W 01BBB 01	QU,TO	226.5	-129	-96.1	6.2	-2.3	-3.1	365	237	-35
30S 36W 04ABB 01	QU,TO,KJ	160.6	-48		-7.9	-0.8		380	332	-13

TABLE 1. SELECTED HYDROLOGIC DATA, GRANT COUNTY (cont'd)

Well Number				Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
							1940	1966	1991	1992	1993	1994	1995	1996	1997	
30S 36W 32BBC 01	QU,TO	3064	384	113	122.5	174.5	180.0	183.9	183.9	187.5	195.0	197.7	aJ60			
30S 37W 02BAA 02	QU,TO	3102	507	122	221.7	306.4	308.9	311.5	309.0	311.8	314.7	aJ57				
30S 37W 03DBA 01	QU,TO,KJ	3108	458	120		284.2	283.8		283.8		295.4	301.7	aJ59			
30S 37W 20CBC 02	QU,TO	3125										249.3	uU97			
30S 38W 13CCC 01	QU,TO,KJ	3142	467	102	146.7	227.6	231.5	228.1	231.6		229.3	233.6	aJ57			
30S 38W 15DBC 01	QU	3144	360	89	118.7	196.1	200.2	201.9	202.4	206.5	212.1	214.3	aJ58			
30S 38W 30ACA 01	QU,TO	3152	377	69	82.1	194.5		209.0	209.4		207.3	218.2	aJ59			

TABLE 1. SELECTED HYDROLOGIC DATA, GRAY COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)										Data Type
				1940	1966	1991	1992	1993	1994	1995	1996	1997		
24S 27W 08CCC 01	QU,TO	2697	138	66	59.1	77.9	78.5	77.9	76.7	79.6		80.0	aJ56	
24S 27W 14ABB 01	QU,TO	2654	92	74	66.2	64.2	65.1	65.7	63.4	64.0	64.6	63.6	aJ56	
24S 27W 29BCC 01	QU,TO	2703	152	72		87.9	89.1	88.8		89.8	91.2	90.9	aJ85	
24S 27W 31CDD 01	QU,TO	2709				93.4	94.2	94.3	93.4	94.6	95.3	96.1	uJ91	
24S 28W 28BBA 01	QU,TO	2750	240	93		111.8	112.9	112.7	112.1	113.8	114.3	116.4	aJ85	
24S 28W 31DD 01	QU,TO	2754	264	91	87.9	128.1	130.8	129.9	128.1	131.3	131.9	134.3	aJ64	
24S 29W 16DCA 01	QU,TO	2787	222	98	96.2	124.9	119.0		116.6	118.7	119.2	120.0	aJ64	
24S 29W 18CCB 01	QU,TO	2814	220	106	109.8	132.9	134.4	132.4	131.8	135.3	137.0	137.6	aJ64	
24S 30W 15CCC 02	QU,TO	2846				144.6	145.9	146.8	145.0	148.2	149.9	152.2	uJ89	
24S 30W 33ADD 01	TO	2857	282	130		170.6		162.1	160.3	162.9	166.2	169.0	aJ85	
25S 27W 33ABB 01	QU,TO	2728	249	134	131.8	148.0	140.9	141.9	142.5		143.2	143.2	aJ65	
25S 29W 07BCB 01	QU,TO	2830	281	131	129.0	150.4	152.4	152.6	152.4	154.9	156.9	158.4	aJ64	
25S 29W 14ABB 01	QU,TO	2776		107	107.1	137.8	139.8		138.8		143.2	145.3	aJ56	
25S 30W 20BCB 01	QU,TO	2734	184	9	9.8	13.4	16.2	18.0	18.9	21.8	12.8	10.1	aJ56	
26S 27W 12CDD 01	QU,TO	2592									40.9	37.9	uJ96	
26S 27W 27CDD 01	QU,TO	2612	222	33		61.4		68.4	67.7	70.1	71.8	72.1	aJ70	
26S 28W 06DDDB 01	QA,QU	2647	147	9		14.3	15.5	16.8	17.1	18.4	14.1	12.4	aJ85	
26S 29W 35CCC 01	QU,TO	2742	242	72	71.6	113.6	119.5	121.3	122.6	125.4		136.3	aJ65	
*26S 30W 01ABC 01	QU,TO	2740				71.3	75.5		73.4	79.6	79.6	78.5	aJ84	
26S 30W 24DDD 01	QU,TO	2754	253	54		105.6	111.9	113.7	109.7	111.4	115.8	117.3	aJ72	
27S 27W 01BAA 01	TO	2631				92.4	95.7	97.8	98.5	100.0	101.8	103.4	aJ85	
27S 27W 07ADC 01	QU,TO	2686	186	82	74.0	107.4	109.1		110.4	112.3	115.0	117.3	aJ67	
27S 27W 10CDB 01	QU,TO	2712	235	131	123.4	151.9	153.8	154.5	157.8	157.4	158.4	159.8	aJ64	
27S 28W 05AAA 01	QU,TO	2707	228	66		109.2	109.1	110.6	111.7	117.3	115.9	118.0	aJ71	
27S 28W 30CCA 01	QU,TO	2738	218	78		117.3	120.0	121.3	122.4	124.3		131.7	aJ70	
27S 29W 27CAA 01	QU,TO	2760	235	83		118.3	122.0	124.4	126.1	128.9	131.2	134.8	aJ85	
27S 30W 08BBB 01	QU,TO	2790	265	68	66.6	121.2	124.3	126.2		131.9	137.4	137.8	aJ64	
27S 30W 23BBC 01	QU,TO	2773							130.5			141.1	uJ93	
27S 30W 34CCC 01	QU,TO	2807	404	102	101.0	158.9	163.5	164.6	166.0	168.5	172.4	175.1	aJ67	
28S 27W 03BBB 01	QU,TO	2755	260	166		191.0	189.8	192.6	191.0	192.9	194.5	194.9	aJ72	
28S 29W 16ACC 01	QU,TO	2799	299	121	125.0	166.9	168.5		169.8	170.7	171.2	172.1	aJ65	
28S 30W 10DDD 01	QU,TO	2814	469	115	120.9	180.0	180.6	181.8	182.7	184.0	186.1	186.9	aJ64	
28S 30W 17BBA 01	TO	2817	497	110	110.4	173.8	177.5	179.3	181.2	184.2	186.8	189.6	aJ59	
28S 30W 24BAB 01	QU,TO	2804	429	114	119.5	176.9	179.2	178.6	179.3	180.6	182.5	183.5	aJ61	
29S 27W 30BBC 01	QU,TO	2655	280	87	103.0	145.8	146.7	147.3	148.8	149.6	153.4	154.4	aJ59	
29S 28W 28CDC 01	TO	2688	278	88	91.2	133.6	133.9	137.6	138.9	140.8	143.7	145.5	aJ59	
29S 29W 10ABB 01	TO	2745				129.2	135.9	131.3	136.8		136.5	133.6	aJ81	
29S 29W 27BCB 01	QU,TO	2739	494	98	101.0	147.9	150.3	152.0	153.2	155.1	157.6	158.9	aJ65	
29S 30W 22BBC 01	QU,TO	2816	446	144	144.6	206.1		211.6	213.7	216.5	218.4	222.3	aJ65	
29S 30W 35ACD 01	QU,TO	2805	445	146	147.8	211.5		217.1	221.9	221.5	224.8	228.4	aJ65	

TABLE 2. DERIVED HYDROLOGIC DATA, GRANT COUNTY (cont'd)

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1940-97	1966-97	1996-97	1940-97	1966-97	1940	1997	
30S 36W 32BBC 01	QU,TO	197.7	-85	-75.2	-2.7	-1.5	-2.4	271	186	-31
30S 37W 02BAA 02	QU,TO									
30S 37W 03DBA 01	QU,TO,KJ	301.7	-182		-6.3	-3.2		338	156	-54
30S 37W 20CBC 02	QU,TO	249.3								
30S 38W 13CCC 01	QU,TO,KJ	233.6	-132	-86.9	-4.3	-2.3	-2.8	365	233	-36
30S 38W 15DBC 01	QU	214.3	-125	-95.6	-2.2	-2.2	-3.1	271	146	-46
30S 38W 30ACA 01	QU,TO	218.2	-149	-136.1	-10.9	-2.6	-4.4	308	159	-48

TABLE 2. DERIVED HYDROLOGIC DATA, GRAY COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1940-97	1966-97	1996-97	1940-97	1966-97	1940	1997	
24S 27W 08CCC 01	QU,TO	80.0	-14	-20.9		-0.2	-0.7	72	58	-19
24S 27W 14ABB 01	QU,TO	63.6	10	2.6	1.0	0.2	0.1	18	28	56
24S 27W 29BCC 01	QU,TO	90.9	-19		0.3	-0.3		80	61	-24
24S 27W 31CDD 01	QU,TO	96.1			-0.8					
24S 28W 28BBA 01	QU,TO	116.4	-23		-2.1	-0.4		147	124	-16
24S 28W 31DD 01	QU,TO	134.3	-43	-46.4	-2.4	-0.8	-1.5	173	130	-25
24S 29W 16DCA 01	QU,TO	120.0	-22	-23.8	-0.8	-0.4	-0.8	124	102	-18
24S 29W 18CCB 01	QU,TO	137.6	-32	-27.8	-0.6	-0.6	-0.9	114	82	-28
24S 30W 15CCC 02	QU,TO	152.2			-2.3					
24S 30W 33ADD 01	TO	169.0	-39		-2.8	-0.7		152	113	-26
25S 27W 33ABB 01	QU,TO	143.2	-9	-11.4	0.0	-0.2	-0.4	115	106	-8
25S 29W 07BCB 01	QU,TO	158.4	-27	-29.4	-1.5	-0.5	-0.9	150	123	-18
25S 29W 14ABB 01	QU,TO	145.3	-38	-38.2	-2.1	-0.7	-1.2			
25S 30W 20BCB 01	QU,TO	10.1	-1	-0.3	2.7	0.0	0.0	175	174	-1
26S 27W 12CDD 01	QU,TO	37.9			3.0					
26S 27W 27CDD 01	QU,TO	72.1	-39		-0.3	-0.7		189	150	-21
26S 28W 06DDB 01	QA,QU	12.4	-3		1.7	-0.1		138	135	-2
26S 29W 35CCC 01	QU,TO	136.3	-64	-64.7		-1.1	-2.1	170	106	-38
*26S 30W 01ABC 01	QU,TO	78.5			1.1					
26S 30W 24DDD 01	QU,TO	117.3	-63		-1.5	-1.1		199	136	-32
27S 27W 01BAA 01	TO	103.4			-1.6					
27S 27W 07ADC 01	QU,TO	117.3	-35	-43.3	-2.3	-0.6	-1.4	104	69	-34
27S 27W 10CDB 01	QU,TO	159.8	-29	-36.4	-1.4	-0.5	-1.2	104	75	-28
27S 28W 05AAA 01	QU,TO	118.0	-52		-2.1	-0.9		162	110	-32
27S 28W 30CCA 01	QU,TO	131.7	-54			-0.9		140	86	-39
27S 29W 27CAA 01	QU,TO	134.8	-52		-3.6	-0.9		152	100	-34
27S 30W 08BBB 01	QU,TO	137.8	-70	-71.2	-0.4	-1.2	-2.3	197	127	-36
27S 30W 23BBC 01	QU,TO	141.1								
27S 30W 34CCC 01	QU,TO	175.1	-73	-74.1	-2.7	-1.3	-2.4	302	229	-24
28S 27W 03BBB 01	QU,TO	194.9	-29		-0.4	-0.5		94	65	-31
28S 29W 16ACC 01	QU,TO	172.1	-51	-47.1	-0.9	-0.9	-1.5	178	127	-29
28S 30W 10DDD 01	QU,TO	186.9	-72	-66.0	-0.8	-1.3	-2.1	354	282	-20
28S 30W 17BBA 01	TO	189.6	-80	-79.2	-2.8	-1.4	-2.6	387	307	-21
28S 30W 24BAB 01	QU,TO	183.5	-70	-64.0	-1.0	-1.2	-2.1	315	246	-22
29S 27W 30BCC 01	QU,TO	154.4	-67	-51.4	-1.0	-1.2	-1.7	193	126	-35
29S 28W 28CDC 01	TO	145.5	-58	-54.3	-1.8	-1.0	-1.8	190	133	-30
29S 29W 10ABB 01	TO	133.6			2.9					
29S 29W 27BCB 01	QU,TO	158.9	-61	-57.9	-1.3	-1.1	-1.9	396	335	-15
29S 30W 22BBC 01	QU,TO	222.3	-78	-77.7	-3.9	-1.4	-2.5	302	224	-26
29S 30W 35ACD 01	QU,TO	228.4	-82	-80.6	-3.6	-1.4	-2.6	299	217	-27

TABLE 1. SELECTED HYDROLOGIC DATA, GREELEY COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1950	1966	1991	1992	1993	1994	1995	1996	1997	
16S 39W 02BDC 01	TO	3520	220	81		142.6	154.4	149.5	149.3	150.7	156.7	154.2	aJ70
16S 39W 22DCB 01	TO	3529	163	95	88.8	136.9			139.9	141.0	142.7	142.8	qJ64
16S 40W 15ACC 01	TO	3650	192	114	119.9	159.9	156.3		157.0	162.8	162.4	159.9	aJ65
16S 40W 17CBC 01	TO	3688				164.7	164.8	165.2	165.6	167.7	166.0	168.7	qJ85
16S 40W 26ADA 01	TO	3602	157	93		120.9	121.1	120.9	121.3	122.0	122.3	122.5	aJ76
16S 41W 20ABC 01	TO	3739							175.5	174.5	179.6	181.6	aJ93
16S 42W 22BCB 01	TO	3828	237	183	198.5	201.7	207.3	201.5	207.0	204.8	202.8	203.1	aJ66
16S 42W 25AAA 01	TO	3763				183.0	185.8	186.1	185.9	187.5	190.4	191.7	aJ89
17S 39W 02BAA 01	TO	3511	161	102		118.6	118.8	120.7	121.1	124.5	121.6	121.6	qJ72
17S 39W 22ABB 01	TO	3527	195	118	123.3	134.1	132.3	139.3	137.1	139.9	137.5	137.8	aJ65
17S 39W 34CCB 01	TO	3505	135	95		96.7	96.6		101.5	100.8	98.8	101.0	aJ77
17S 40W 15CCB 01	TO	3607	209	123	127.0	137.5	139.7		140.4	140.6	141.2	141.3	aJ62
17S 40W 17BBA 01	TO	3663	217	165		186.5	186.0	186.1	185.6	189.5	195.3	199.5	aJ72
17S 40W 31BBA 01	TO	3663	218	151	168.1	162.7	161.5		161.7	162.4	163.8	163.1	aJ65
17S 42W 28DAB 01	TO	3762							28.0	34.3	32.9	28.1	aJ93
18S 39W 07BBD 01	TO	3564	145	109		114.8	114.8		119.7	124.7	127.7	115.4	aJ69
18S 39W 19CDA 01	TO	3510	100	70		76.6	75.8		77.1	76.6	78.3	74.7	aJ72
18S 39W 24AAC 01	TO	3467	183	105		138.1	138.4	135.6	134.5	140.2	143.0	138.8	aJ63

TABLE 1. SELECTED HYDROLOGIC DATA, HAMILTON COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1940	1966	1991	1992	1993	1994	1995	1996	1997	
21S 39W 07CBA 01	TO	3497	215	196	194.0	181.0	183.4	187.6	190.2	187.5	190.9	186.6	aU62
22S 39W 03BBB 01	TO	3453	199		191.2	191.5	191.6		192.0	191.4			aU62
23S 39W 15ADD 01	QU,TO	3325	144		130.1	129.5	133.8	130.0	130.1	130.6	131.4	130.7	aU62
23S 40W 29DDB 01	KD	3397			240.3	307.4	309.9	305.6	308.9	304.8	310.0	313.7	aU62
23S 42W 19CBB 01	QA,QU	3339	67	20	24.1	24.8	26.0	25.2	25.5	24.1	27.3	24.7	aU62
23S 42W 26DCA 01	QA	3309	70	29	23.7	27.0	26.7	26.7	26.6	26.7	26.0	25.1	aU61
23S 42W 27DDB 01	QA	3311	70	23	20.0	22.7	23.2	23.1	22.6	22.6	22.3	22.0	aJ61
23S 42W 34CBB 01	QA	3307	58	13	9.6	11.0	11.2	10.6	10.7	10.7	10.9	9.7	aU61
23S 43W 21ABA 01	QA	3364	29	15	15.0	13.9	14.5	14.4	14.1	14.0	12.9	12.6	aU44
23S 43W 23BCB 01	QA	3356	68	21	20.5	21.7	21.8	21.6	21.3	21.2	22.1	20.5	aU47
23S 43W 25CBD 02	QA	3335	47	8	8.8	8.4	8.7	8.6	8.3	8.6	8.3	7.5	aU58
23S 43W 26BCC 01	QA	3343	22	7	7.1	8.0	8.2	8.0	8.3	8.0	7.8	7.4	aU60
24S 39W 19CBC 01	QA	3175	65	6	6.7	9.5	9.8	9.1	9.3	9.4	8.9	8.4	aU50
24S 39W 22CCB 01	QA	3152	42	8	11.8	11.5	11.8	11.4	11.9	12.9	11.5	11.3	aU48
24S 39W 35BAC 01	QA	3143	43	9	5.4	8.3	8.8	8.4		8.4	8.2	7.6	aU53
24S 39W 35CBA 01	QU	3146	97	11	11.4	15.3	15.8	15.6	15.5	15.3	15.3	14.7	aU58
24S 40W 07CBB 01	QA	3233	58	14	13.9	15.7	17.3	15.5	15.4	15.5	14.9	14.2	aU48
24S 40W 17BBB 01	QA	3221	71	13		15.4	16.0	15.1	15.1	15.1	15.8	13.7	aD70
24S 40W 23AAB 01	QA	3204	104	26	24.4	27.2	27.4	26.5	27.4	26.8	26.3	24.8	aU59
*24S 40W 31BBB 01	QU	3287			63.6	64.7	64.4	63.6	64.6	63.7	62.1	62.9	aU60
24S 41W 01DAD 01	QA,QU	3254	45		14.7	25.8	27.0	26.7	25.3	24.7	22.5	19.3	aU61
24S 42W 04AAD 01	QA	3304	44	7	6.5		15.8	16.4		19.2	20.8	32.8	aU62
24S 42W 28DDD 01	KJ	3455			160.0	167.2	166.9			169.2	171.4	169.8	aJ61
24S 43W 14CBB 01	KJ	3452		114	110.8	120.8	119.0	115.7	120.8	119.5	117.8	119.8	aJ39
25S 39W 02CAD 01	QU,TO	3156	46	24	27.9	32.6	32.9	33.1	33.4	32.1	32.0	32.4	aU60
25S 39W 23BDD 01	QU,TO	3286	133		78.7	89.6	89.4	89.0		88.9	88.8	88.8	aU62
25S 40W 01CA 01	QU	3218	58	46	45.8			50.9	50.9	50.5		49.4	au62
25S 40W 26BBB 01	KJ	3412		213	215.0	226.6	226.3	223.9	226.4	226.7	226.3	226.3	aU40
25S 43W 03ABB 01	KJ	3575			190.5	263.8	262.9	264.9	266.4	267.6	267.9	268.7	aJ62
25S 43W 25CCD 01	QU,TO	3490	225	101	121.4	153.3	154.4		154.1	156.4	160.3	159.8	aU61
26S 41W 20BCD 01	QU,TO	3317	242	17	20.7	40.5	42.2	43.9	45.0	46.4	47.7	46.4	aU62
26S 41W 32DDB 01	KJ	3354				161.9	161.2				170.0	174.0	aJ89
26S 42W 10BB 02	QU,TO	3405	245	52	77.2	128.0	130.2	129.8	131.2	133.2	137.7	136.6	aJ61
26S 42W 17CBB 01	QU,TO,KJ	3458			108.1	182.8	185.8	187.0	189.5	193.1	196.6	198.5	uU60
26S 42W 22DCC 02	TO	3413							182.3			199.0	au94

TABLE 2. DERIVED HYDROLOGIC DATA, GREELEY COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
16S 39W 02BDC 01	TO	154.2	-73		2.5	-1.6		139	66	-53
16S 39W 22DCB 01	TO	142.8	-48	-54.0	-0.1	-1.0	-1.7	68	20	-71
16S 40W 15ACC 01	TO	159.9	-46	-40.0	2.5	-1.0	-1.3	78	32	-59
16S 40W 17CBC 01	TO	168.7			-2.7					
16S 40W 26ADA 01	TO	122.5	-30		-0.2	-0.6		64	35	-45
16S 41W 20ABC 01	TO	181.6			-2.0					
16S 42W 22BCB 01	TO	203.1	-20	-4.6	-0.3	-0.4	-0.1	54	34	-37
16S 42W 25AAA 01	TO	191.7			-1.3					
17S 39W 02BAA 01	TO	121.6	-20		0.0	-0.4		59	39	-34
17S 39W 22ABB 01	TO	137.8	-20	-14.5	-0.3	-0.4	-0.5	77	57	-26
17S 39W 34CCB 01	TO	101.0	-6		-2.2	-0.1		40	34	-15
17S 40W 15CCB 01	TO	141.3	-18	-14.3	-0.1	-0.4	-0.5	86	68	-21
17S 40W 17BBA 01	TO	199.5	-35		-4.2	-0.7		52	18	-65
17S 40W 31BBA 01	TO	163.1	-12	5.0	0.7	-0.3	0.2	67	55	-18
17S 42W 28DAB 01	TO	28.1			4.8					
18S 39W 07BBD 01	TO	115.4	-6		12.3	-0.1		36	30	-17
18S 39W 19CDA 01	TO	74.7	-5		3.6	-0.1		30	25	-17
18S 39W 24AAC 01	TO	138.8	-34		4.2	-0.7		78	44	-44

TABLE 2. DERIVED HYDROLOGIC DATA, HAMILTON COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1940-97	1966-97	1996-97	1940-97	1966-97	1940	1997	
21S 39W 07CBA 01	TO	186.6	9	7.4	4.3	0.2	0.2	19	28	47
22S 39W 03BBB 01	TO									
23S 39W 15ADD 01	QU, TO	130.7		-0.6	0.7		0.0		13	
23S 40W 29DDB 01	KD	313.7		-73.4	-3.7		-2.4			
23S 42W 19CBB 01	QA, QU	24.7	-5	-0.6	2.6	-0.1	0.0	47	42	-11
23S 42W 26DCA 01	QA	25.1	4	-1.4	0.9	0.1	0.0	41	45	10
23S 42W 27DDB 01	QA	22.0	1	-2.0	0.3	0.0	-0.1	47	48	2
23S 42W 34CBB 01	QA	9.7	3	-0.1	1.2	0.1	0.0	45	48	7
23S 43W 21ABA 01	QA	12.6	2	2.4	0.3	0.0	0.1	14	16	14
23S 43W 23BCB 01	QA	20.5	1	0.0	1.6	0.0	0.0	47	48	2
23S 43W 25CBD 02	QA	7.5	1	1.3	0.8	0.0	0.0	39	40	3
23S 43W 26BCC 01	QA	7.4	0	-0.3	0.4	0.0	0.0	15	15	0
24S 39W 19CBC 01	QA	8.4	-2	-1.7	0.5	0.0	-0.1	59	57	-3
24S 39W 22CCB 01	QA	11.3	-3	0.5	0.2	-0.1	0.0	34	31	-9
24S 39W 35BAC 01	QA	7.6	1	-2.2	0.6	0.0	-0.1	34	35	3
24S 39W 35CBA 01	QU	14.7	-4	-3.3	0.6	-0.1	-0.1	86	82	-5
24S 40W 07CBB 01	QA	14.2	0	-0.3	0.7	0.0	0.0	44	44	0
24S 40W 17BBB 01	QA	13.7	-1		2.1	0.0		58	57	-2
24S 40W 23AAB 01	QA	24.8	1	-0.4	1.5	0.0	0.0	78	79	1
*24S 40W 31BBB 01	QU	62.9		0.7	-0.8		0.0			
24S 41W 01DAD 01	QA, QU	19.3		-4.6	3.2		-0.1		26	
24S 42W 04AAD 01	QA	32.8	-26	-26.3	-12.0	-0.5	-0.8	37	11	-70
24S 42W 28DDD 01	KJ	169.8		-9.8	1.6		-0.3			
24S 43W 14CBB 01	KJ	119.8	-6	-9.0	-2.0	-0.1	-0.3			
25S 39W 02CAD 01	QU, TO	32.4	-8	-4.5	-0.4	-0.1	-0.1	22	14	-36
25S 39W 23BDD 01	QU, TO	88.8		-10.1	0.0		-0.3		44	
25S 40W 01CA 01	QU	49.4	-3	-3.6		-0.1	-0.1	12	9	-25
25S 40W 26BBB 01	KJ	226.3	-13	-11.3	0.0	-0.2	-0.4			
25S 43W 03ABB 01	KJ	268.7		-78.2	-0.8		-2.5			
25S 43W 25CCD 01	QU, TO	159.8	-59	-38.4	0.5	-1.0	-1.2	124	65	-48
26S 41W 20BCD 01	QU, TO	46.4	-29	-25.7	1.3	-0.5	-0.8	225	196	-13
26S 41W 32DDB 01	KJ	174.0			-4.0					
26S 42W 10BB 02	QU, TO	136.6	-85	-59.4	1.1	-1.5	-1.9	193	108	-44
26S 42W 17CBB 01	QU, TO, KJ	198.5		-90.4	-1.9		-2.9			
26S 42W 22DCC 02	TO	199.0								

TABLE 1. SELECTED HYDROLOGIC DATA, HAMILTON COUNTY (cont'd)

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1940	1966	1991	1992	1993	1994	1995	1996	1997	
26S 43W 25DCC 01	QU,TO,KJ	3508	258	128		229.3	232.1	233.1	236.0	236.6	238.9	242.0	aJ72

TABLE 1. SELECTED HYDROLOGIC DATA, HARPER COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type		
				1950	1966	1991	1992	1993	1994	1995	1996		1997	
32S 06W 01DDD 01	QA	1360				28.5	30.3	24.9				25.0		aU86

TABLE 1. SELECTED HYDROLOGIC DATA, HARVEY COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type	
				1944	1974	1991	1992	1993	1994	1995	1996	1997		
22S 02W 05CBD 01	QU	1468				48.8	49.4	49.6	48.3	48.7			49.2	aJ84
22S 02W 29BBA 01	QU	1424				24.1	24.1	21.3	18.9	22.1	20.9	20.9		aJ70
22S 03W 02DCD 01	QU	1450				39.1	41.1	38.0	34.2	38.0	37.5	37.9		aJ70
22S 03W 29BAD 01	QU	1430				19.4	22.0	13.3	7.0	16.2	13.5	13.0		aJ81
22S 03W 35AAA 01	QU	1420				16.9	19.0	11.4	7.7	14.5	11.4	12.0		aJ70
23S 01W 28AAD 01	QU	1403				22.0	22.5	20.5	19.2	21.8	18.9	19.5		aJ71
23S 02W 22CCD 01	QU	1395				18.4	18.4	15.5	14.4	17.6	15.1	14.5		aJ81
23S 02W 34DCC 01	QU	1399				16.3	16.9	13.8	16.7	16.7	16.5	16.6		qJ49
23S 03W 06DDD 01	QU	1495				73.9	78.2	69.3	66.8	74.9	72.4	71.7		aJ82
23S 03W 14AAC 01	QU	1450				39.6	42.3	37.2	33.9	39.3	36.8	36.6		aJ81
23S 03W 32DCC 02	QU	1445				11.2	12.5	11.3	8.0		9.3			qJ39
23S 03W 32DCC 03	QA	1444										10.5		uU97
24S 01W 05AAB 01	QU	1394				26.9	28.9	25.3	21.0	27.1	24.1	24.0		aJ81
24S 01W 19BCC 01	QU	1383				23.2	25.6	25.5	21.0	26.0	23.3	23.0		aJ84
24S 01W 22BCC 01	QU	1390				28.9	29.3	27.6	24.6	29.1	26.6	25.8		aJ81
24S 02W 28DDD 01	QU	1403				82.2	40.1	40.9	34.3	36.4	33.7	34.2		qJ58
24S 03W 14BBB 01	QU	1430				15.8	16.2	16.6	16.6	16.6	16.5	16.5		qJ65

TABLE 1. SELECTED HYDROLOGIC DATA, HASKELL COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
				1940	1966	1991	1992	1993	1994	1995	1996		1997
27S 31W 24CDC 01	QU,TO	2816	366	94	97.8	162.2	166.1	168.2	169.9	174.0	177.4	180.4	aJ64
27S 31W 31BCC 01	QU,TO	2895	520	151	154.8	214.6	219.8	221.3	224.4	230.1	234.4	236.6	aJ48
27S 32W 03CBB 01	TO	2872		92		154.3	159.0	160.8	163.2	169.1	174.4	178.6	aJ85
27S 32W 06CBB 01	QU,TO	2905	465	107		171.4	176.2	179.7	182.2	187.6	192.4	197.2	aJ73
27S 32W 19CCD 01	QU,TO	2906	456	118	130.0	204.1	211.3	216.9	218.4	223.5	235.0	239.8	aJ54
27S 33W 19CDC 01	TO	3009							267.9			276.8	aU93
27S 34W 16DDD 01	QU,TO	3000				205.4	210.5	213.9			223.5		aJ82
*27S 34W 16DDD 02	TO	2995							212.6	218.2	223.5	227.1	aJ94
27S 34W 28DAA 02	TO	3042				251.5	258.3	261.0	262.1	271.0	279.3	281.4	aJ77
28S 31W 35CCB 01	QU,TO	2863	443	156	171.9	225.3	228.8	229.7	231.3	232.5	235.0	239.0	aJ64
28S 32W 17CDD 01	TO	2948							315.6			327.4	aU93
28S 32W 24BCC 01	QU,TO	2910	549	175	181.5	232.6	234.7	234.9	239.3	246.8	238.1	237.6	aF64
28S 33W 20ACD 01	TO	2976									376.0	379.6	aU96
28S 33W 20DDD 01	QU,TO	2967				323.3	322.6	323.5	321.1	314.4			aJ85
28S 34W 14CCC 01	TO	3013									382.0	384.8	aU95

TABLE 2. DERIVED HYDROLOGIC DATA, HAMILTON COUNTY (cont'd)

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1940-97	1966-97	1996-97	1940-97	1966-97	1940	1997	1940-97
26S 43W 25DCC 01	QU,TO,KJ	242.0	-114		-3.1	-2.0		130	16	-88

TABLE 2. DERIVED HYDROLOGIC DATA, HARPER COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	1950-97
32S 06W 01DDD 01	QA									

TABLE 2. DERIVED HYDROLOGIC DATA, HARVEY COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1944-97	1974-97	1996-97	1944-97	1974-97	1944	1997	1944-97
22S 02W 05CBD 01	QU	49.2								
22S 02W 29BBA 01	QU	20.9			0.0					
22S 03W 02DCD 01	QU	37.9			-0.4					
22S 03W 29BAD 01	QU	13.0			0.5					
22S 03W 35AAA 01	QU	12.0			-0.6					
23S 01W 28AAD 01	QU	19.5			-0.6					
23S 02W 22CCD 01	QU	14.5			0.6					
23S 02W 34DCC 01	QU	16.6			-0.1					
23S 03W 06DDD 01	QU	71.7			0.7					
23S 03W 14AAC 01	QU	36.6			0.2					
23S 03W 32DCC 02	QU									
23S 03W 32DCC 03	QA	10.5								
24S 01W 05AAB 01	QU	24.0			0.1					
24S 01W 19BCC 01	QU	23.0			0.3					
24S 01W 22BCC 01	QU	25.8			0.8					
24S 02W 28DDD 01	QU	34.2			-0.5					
24S 03W 14BBB 01	QU	16.5			0.0					

TABLE 2. DERIVED HYDROLOGIC DATA, HASKELL COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1940-97	1966-97	1996-97	1940-97	1966-97	1940	1997	1940-97
27S 31W 24CDC 01	QU,TO	180.4	-86	-82.6	-3.0	-1.5	-2.7	272	186	-32
27S 31W 31BCC 01	QU,TO	236.6	-86	-81.8	-2.2	-1.5	-2.6	369	283	-23
27S 32W 03CBB 01	TO	178.6	-87		-4.2	-1.5				
27S 32W 06CBB 01	QU,TO	197.2	-90		-4.8	-1.6		358	268	-25
27S 32W 19CCD 01	QU,TO	239.8	-122	-109.8	-4.8	-2.1	-3.5	338	216	-36
27S 33W 19CDC 01	TO	276.8								
27S 34W 16DDD 01	QU,TO									
*27S 34W 16DDD 02	TO	227.1			-3.6					
27S 34W 28DAA 02	TO	281.4			-2.1					
28S 31W 35CCB 01	QU,TO	239.0	-83	-67.1	-4.0	-1.5	-2.2	287	204	-29
28S 32W 17CDD 01	TO	327.4								
28S 32W 24BCC 01	QU,TO	237.6	-63	-56.1	0.5	-1.1	-1.8	374	311	-17
28S 33W 20ACD 01	TO	379.6			-3.6					
28S 33W 20DDD 01	QU,TO									
28S 34W 14CCC 01	TO	384.8			-2.8					

TABLE 1. SELECTED HYDROLOGIC DATA, HASKELL COUNTY (cont'd)

Well Number				Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type
							1940	1966	1991	1992	1993	1994	1995	1996	
28S 34W 15DAB 01	QU,TO	3020	570	243	263.0	369.3	373.7	377.3		372.5				qJ66	
29S 31W 09CB 01	QU,TO	2871	466	166	169.4	234.0	238.2	240.9	247.1	246.6	252.3	254.1		aJ64	
29S 32W 04AAA 01	TO	2914				266.1	271.0	273.9	275.3	280.8	286.7	289.5		aJ85	
29S 32W 19CCC 01	QU,TO	2923	598	208	218.2	315.3	313.1	316.1	316.6	346.6	329.8	325.7		aJ59	
29S 32W 26CBB 02	QU,TO	2895		191	204.1	273.5	277.0	279.9	280.3	283.6	287.6			qJ60	
29S 33W 01AAB 01	QU,TO	2946	601	213	226.3	352.8	351.7	350.1	348.7			363.1		aJ58	
29S 33W 28BCB 01	QU,TO	2963	558	212		321.0	323.5	326.0	326.1	331.8	334.8	335.9		aJ70	
29S 33W 34DDD 01	TO	2950				326.7	332.8	335.4	336.2	340.7	344.8	348.2		aJ85	
30S 31W 26ABB 01	TO	2834				238.3	235.7	236.6	235.4	236.2	238.5	240.3		aJ85	
30S 32W 22BBB 01	TO	2876							277.6	283.4	286.9	287.8		uJ64	
30S 32W 31BAB 01	QU,TO	2906	466	194	202.0	274.1	276.8	279.5	280.4	284.3	284.4	288.2		aJ58	
30S 34W 05BBB 01	QU,TO	3006	531	223	232.7	310.7	314.0	315.6		319.0	323.0	325.2		aJ57	
30S 34W 30ADD 02	QU,TO	2843		63		118.8	122.2	123.7	123.8	127.4	131.4	133.0		aJ78	

TABLE 1. SELECTED HYDROLOGIC DATA, HODGEMAN COUNTY

Well Number				Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type
							1940	1966	1991	1992	1993	1994	1995	1996	
21S 22W 12BCB 01		QA	2157				35.5		56.7	63.3	52.4		52.8		qD60
*22S 22W 13CCC 01		QA	2152				24.0	36.7	39.2	38.4	29.5		32.2	25.2	qD65
22S 24W 14BBC 01		KD	2460					271.6	285.0	246.7	254.0	258.9	255.0		aD71
22S 24W 15BDA 01		KD	2463					271.6	281.9	261.3	254.8	259.9	263.9	255.6	aJ71
*22S 24W 24DDD 01		KD	2360					164.9	177.8	163.2		158.1	162.3	152.9	aJ70
*22S 24W 25DDC 01		KD	2332					147.1	156.6	138.0	127.7		144.2	128.1	qD70
22S 24W 26DDA 01		KD	2365					158.1	158.6	158.1			156.7	152.3	aJ70
*22S 24W 35DAC 01		KD	2312					129.5	137.7	115.5	106.7	115.3	127.0	107.0	aD70
*23S 22W 07DAA 01		KD	2239					82.6	90.2	90.6	80.2		79.6	81.8	qD72
*23S 23W 04AAD 01		KD	2235					39.2	45.5	33.0	26.6	32.0	40.3	25.2	uD70
23S 23W 04DCA 01		KD	2236					40.3	46.2	34.2	24.9			24.9	aD70
23S 23W 12ABD 01		KD	2256					74.1	66.9	70.3	74.5			66.9	aD70
*23S 24W 11DAA 01		KD	2335					148.7	156.5	129.2	118.9	142.6	141.6	125.1	qD70
23S 26W 07CCC 01		KD	2612						325.0	318.1	314.1	314.9	317.2	315.7	qJ68
23S 26W 20CCC 01		TO	2594					47.5	47.7		44.0		44.7	44.2	aJ85
23S 26W 26AAD 01		TO	2590					69.1	69.0	68.4	67.2	67.2	66.6	66.9	aJ85
23S 26W 31CDD 01		TO	2621	122	71			70.0	71.1	70.5	70.8	69.0	68.6	68.3	aJ77
24S 21W 20CBB 01		KD	2348					77.4	77.5	76.5	75.9	75.9	75.5	75.2	aJ77
24S 23W 03CCC 01		TO	2422	90				61.0	63.2	62.0	58.7	62.3	61.8	60.3	aJ77
*24S 23W 06AAB 01		KD	2457					209.5	214.7	209.5	205.7	207.6	214.7	203.9	qD73
24S 24W 02CCC 01		TO	2478	90				61.9	68.7	70.1	67.0	68.7	71.7	71.9	aJ77
24S 24W 20CCC 01		TO	2511	86				64.1	64.5	64.2	64.8	63.6	64.0	63.8	aJ77
24S 25W 22BAB 01		TO	2545					86.1	87.3	85.9	82.4	85.2	85.6	85.2	aJ85
*24S 26W 35CBC 01		TO	2609		63			59.0	59.5	59.4	58.4	61.5	58.5	56.4	qD54

TABLE 1. SELECTED HYDROLOGIC DATA, JACKSON COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
				1944	1974	1991	1992	1993	1994	1995	1996		1997
06S 15E 27BAB 01	QU	1135			76.2	88.9	89.8	90.4	90.6			91.6	aM72

TABLE 2. DERIVED HYDROLOGIC DATA, HASKELL COUNTY (cont'd)

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1940-97	1966-97	1996-97	1940-97	1966-97	1940	1997	
28S 34W 15DAB 01	QU,TO									
29S 31W 09CB 01	QU,TO	254.1	-88	-84.7	-1.8	-1.5	-2.7	300	212	-29
29S 32W 04AAA 01	TO	289.5			-2.8					
29S 32W 19CCC 01	QU,TO	325.7	-118	-107.5	4.1	-2.1	-3.5	390	272	-30
29S 32W 26CBB 02	QU,TO									
29S 33W 01AAB 01	QU,TO	363.1	-150	-136.8		-2.6	-4.4	388	238	-39
29S 33W 28BCB 01	QU,TO	335.9	-124		-1.1	-2.2		346	222	-36
29S 33W 34DDD 01	TO	348.2			-3.4					
30S 31W 26ABB 01	TO	240.3			-1.8					
30S 32W 22BBB 01	TO	287.8			-0.9					
30S 32W 31BAB 01	QU,TO	288.2	-94	-86.2	-3.8	-1.6	-2.8	272	178	-35
30S 34W 05BBB 01	QU,TO	325.2	-102	-92.5	-2.2	-1.8	-3.0	308	206	-33
30S 34W 30ADD 02	QU,TO	133.0	-70		-1.6	-1.2				

TABLE 2. DERIVED HYDROLOGIC DATA, HODGEMAN COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1940-97	1966-97	1996-97	1940-97	1966-97	1940	1997	
21S 22W 12BCB 01	QA									
*22S 22W 13CCC 01	QA	25.2		-1.2	7.0		0.0			
22S 24W 14BBC 01	KD									
22S 24W 15BDA 01	KD	255.6			8.3					
*22S 24W 24DDD 01	KD	152.9			9.4					
*22S 24W 25DDC 01	KD	128.1			16.1					
22S 24W 26DDA 01	KD	152.3			4.4					
*22S 24W 35DAC 01	KD	107.0			20.0					
*23S 22W 07DAA 01	KD	81.8			-2.2					
*23S 23W 04AAD 01	KD	25.2			15.1					
23S 23W 04DCA 01	KD	24.9								
23S 23W 12ABD 01	KD	66.9								
*23S 24W 11DAA 01	KD	125.1			16.5					
23S 26W 07CCC 01	KD	315.7			1.5					
23S 26W 20CCC 01	TO	44.2			0.5					
23S 26W 26AAD 01	TO	66.9			-0.3					
23S 26W 31CDD 01	TO	68.3	3		0.3	0.1		51	54	6
24S 21W 20CBB 01	KD	75.2			0.3					
24S 23W 03CCC 01	TO	60.3			1.5					
*24S 23W 06AAB 01	KD	203.9			10.8				30	
24S 24W 02CCC 01	TO	71.9			-0.2				18	
24S 24W 20CCC 01	TO	63.8			0.2				22	
24S 25W 22BAB 01	TO	85.2			0.4					
*24S 26W 35CBC 01	TO	56.4	7		2.1	0.1				

TABLE 2. DERIVED HYDROLOGIC DATA, JACKSON COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1944-97	1974-97	1996-97	1944-97	1974-97	1944	1997	
06S 15E 27BAB 01	QU	91.6		-15.4			-0.7			

TABLE 1. SELECTED HYDROLOGIC DATA, JEFFERSON COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1950	1966	1991	1992	1993	1994	1995	1996	1997	
11S 16E 25CBA 01	QA	873			26.1	26.7		25.3				24.2	qD66
11S 17E 27BBC 01	QA	860			17.7	19.5		18.0				15.7	qD66
11S 18E 08DAC 01	QA	852			15.1	14.0		13.4				8.0	qD66
11S 19E 29CCA 01	QA	848			19.7	22.6		20.6				18.3	qD66

TABLE 1. SELECTED HYDROLOGIC DATA, JOHNSON COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type	
				1950	1966	1991	1992	1993	1994	1995	1996	1997		
12S 22E 29BBD 01	QA	791				20.9		21.5					18.7	qD67

TABLE 1. SELECTED HYDROLOGIC DATA, KEARNY COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1940	1966	1991	1992	1993	1994	1995	1996	1997	
22S 35W 23CDD 01		TO 3025	175	95	107.6	134.2	134.7	135.2	135.8	136.3	136.9	137.3	aJ61
22S 37W 34BBC 01		TO 3230					137.2	138.9	136.7	136.7	136.4	137.6	aJ86
23S 35W 05ACC 01		TO 3096	180	118	122.7	151.6	151.8	150.7	151.6	151.2	151.9	151.8	aJ66
23S 35W 12CCC 02	QU,TO	3010							146.6			140.1	aU93
23S 35W 16BBC 01		TO 3038	263	52		138.4	136.4	136.7	133.0	136.0	136.5	135.9	aJ85
23S 35W 25BBB 03	QU,TO	3000										98.7	uU97
23S 36W 04CBB 01		TO 3183	198	142	132.9	142.5	146.7	145.9	143.8	146.8	144.7	145.7	aJ61
23S 36W 32BBB 01		TO 3234	305	189	218.0	247.8	242.3	243.5	240.2	240.6	242.8	240.1	aJ62
23S 36W 35BBB 01		TO 3193	293	169		213.6	214.0	213.6	213.9	213.6	212.1	212.9	aJ85
23S 37W 04ABC 01		TO 3281	233	183		192.2	192.5	201.4	192.4	191.9	190.9	191.9	aJ78
23S 37W 28CCB 01		TO 3303	300	218	236.9	255.7	256.2	257.2	254.3	253.8	253.0	254.2	aJ61
24S 35W 09CCC 01	QU,TO	2998	358	30	31.0	39.2	43.5	38.2	38.9	40.3	36.8	40.0	aJ58
24S 35W 24BCB 01		QA 2941	341	11		27.9	27.8	28.1	27.5	29.7	28.8	28.8	aJ58
24S 36W 23CBB 02	QU,TO	3014	310	26	24.8	30.7	32.3	31.4	30.7	31.0	30.3	29.3	aJ58
25S 35W 02BAA 01	QU,TO	2990	400	52		107.7	111.2	112.3	113.4	115.3	118.1	121.0	qJ75
*25S 35W 04BDD 01	QU,TO	2990	410	40		72.7	75.9	76.3	77.6		80.8	82.4	aJ85
25S 35W 17AAA 01	QU,TO	2995	405	37		108.9	113.6	113.3	115.1	115.8	119.8	120.8	qJ75
*25S 35W 26BAB 01	QU,TO	3005	450	70		156.0	163.5	164.8	166.7	169.2	175.8	181.7	aJ75
25S 36W 14B 01	QU,TO	3050				94.2	95.8	93.7	95.9	98.9	92.9	96.8	aJ85
25S 36W 28CBD 01	QU,TO	3050								116.9	118.8	118.3	aU95
25S 36W 35CCA 01	QU,TO	3025				113.6	116.4	117.4	119.1	122.5	125.4	127.1	qJ77
25S 37W 15ABA 02		QA 3050	30	5		10.2	9.8	9.9	9.0	9.0	8.0	7.4	qJ67
25S 38W 08CAA 01	QU,TO,KJ	3140	90	30	37.5	44.8	45.0	45.1	45.0	45.0	45.0	44.6	aJ66
+25S 38W 20ACC 01	QU,TO,KJ	3175	75	65	63.2	95.2	81.0	77.9	77.2	82.0	69.5	87.4	aJ62
26S 35W 29BBD 01		TO 3045		113		194.5	198.8	201.0	203.5	207.5	212.0	215.0	aJ81
26S 36W 01DBB 01	QU,TO	3010								120.8	124.5	127.3	aJ75
26S 36W 22CCA 01		TO 3090	440	125		190.3	194.0	196.5	199.5	202.9	205.8	209.8	aJ82
26S 37W 06ACB 01	QU,TO	3092	102		26.1	29.0	28.8	27.6	27.8	27.3	28.7	25.8	aJ62

TABLE 2. DERIVED HYDROLOGIC DATA, JEFFERSON COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
11S 16E 25CBA 01	QA	24.2		1.9			0.1			
11S 17E 27BBC 01	QA	15.7		2.0			0.1			
11S 18E 08DAC 01	QA	8.0		7.1			0.2			
11S 19E 29CCA 01	QA	18.3		1.4			0.0			

TABLE 2. DERIVED HYDROLOGIC DATA, JOHNSON COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
12S 22E 29BBD 01	QA	18.7								

TABLE 2. DERIVED HYDROLOGIC DATA, KEARNY COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1940-97	1966-97	1996-97	1940-97	1966-97	1940	1997	
22S 35W 23CDD 01	TO	137.3	-42	-29.7	-0.4	-0.7	-1.0	80	38	-53
22S 37W 34BBC 01	TO	137.6			-1.2					
23S 35W 05ACC 01	TO	151.8	-34	-29.1	0.1	-0.6	-0.9	62	28	-55
23S 35W 12CCC 02	QU, TO	140.1								
23S 35W 16BBC 01	TO	135.9	-84		0.6	-1.5		211	127	-40
23S 35W 25BBB 03	QU, TO	98.7								
23S 36W 04CBB 01	TO	145.7	-4	-12.8	-1.0	-0.1	-0.4	56	52	-7
23S 36W 32BBB 01	TO	240.1	-51	-22.1	2.7	-0.9	-0.7	116	65	-44
23S 36W 35BBB 01	TO	212.9	-44		-0.8	-0.8		124	80	-35
23S 37W 04ABC 01	TO	191.9	-9		-1.0	-0.2		50	41	-18
23S 37W 28CCB 01	TO	254.2	-36	-17.3	-1.2	-0.6	-0.6	82	46	-44
24S 35W 09CCC 01	QU, TO	40.0	-10	-9.0	-3.2	-0.2	-0.3	328	318	-3
24S 35W 24BCB 01	QA	28.8	-18		0.0	-0.3		330	312	-5
24S 36W 23CBB 02	QU, TO	29.3	-3	-4.5	1.0	-0.1	-0.1	284	281	-1
25S 35W 02BAA 01	QU, TO	121.0	-69		-2.9	-1.2		348	279	-20
*25S 35W 04BDD 01	QU, TO	82.4	-42		-1.6	-0.7		370	328	-11
25S 35W 17AAA 01	QU, TO	120.8	-84		-1.0	-1.5		368	284	-23
*25S 35W 26BAB 01	QU, TO	181.7	-112		-5.9	-2.0		380	268	-29
25S 36W 14B 01	QU, TO	96.8			-3.9					
25S 36W 28CBD 01	QU, TO	118.3			0.5					
25S 36W 35CCA 01	QU, TO	127.1			-1.7					
25S 37W 15ABA 02	QA	7.4	-2		0.6	0.0		25	23	-8
25S 38W 08CAA 01	QU, TO, KJ	44.6	-15	-7.1	0.4	-0.3	-0.2	60	45	-25
+25S 38W 20ACC 01	QU, TO, KJ	87.4	-22	-24.2	-17.9	-0.4	-0.8	10	-12	-220
26S 35W 29BBD 01	TO	215.0	-102		-3.0	-1.8				
26S 36W 01DBB 01	QU, TO	127.3			-2.8					
26S 36W 22CCA 01	TO	209.8	-85		-4.0	-1.5		315	230	-27
26S 37W 06ACB 01	QU, TO	25.8		0.3	2.9		0.0		76	

TABLE 1. SELECTED HYDROLOGIC DATA, KINGMAN COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1944	1974	1991	1992	1993	1994	1995	1996	1997	
27S 05W 24CDC 01	QU	1477		14	12.6	17.1	18.6	16.2	14.2	17.1	14.1	15.8	aJ55
27S 05W 33ABB 02	QU	1460	60	25	4.0	9.3	7.2	3.9	8.6	10.5	7.2	4.5	aJ73
27S 06W 12CCD 01	QU	1488		7	6.6	12.4	12.3	7.4	10.0	11.4	8.6	6.3	aJ70
27S 06W 16CCB 01	QA	1462	17	1	0.9	4.1	3.8	2.4	3.7	3.9	2.9	2.4	aJ73
27S 07W 03ADC 01	QU	1545	25	20	8.2	11.2	11.9	8.9	7.9	11.2	8.7	3.8	aJ56
27S 07W 23BCC 01	QU	1567	14		7.3	8.7	8.9	7.7	7.0	8.1	6.7	7.2	aJ73
27S 08W 14DDC 01	QU	1610		2	0.6	2.2	2.8	1.0	1.5	2.4	1.4	0.9	aJ66
27S 08W 17DAB 01	QU	1665	118	45	34.4	39.1	41.1	40.8	37.4	40.1	38.4	39.5	aJ73
27S 08W 35CBC 01	QU	1610	54	32	20.4	23.1	24.0	22.7	21.0	23.1	21.9	21.6	aJ66
27S 09W 15ABA 01	QU	1702	153	50	49.8	48.2	49.7		49.3	48.0			aJ73
27S 09W 29AAA 01	QU	1700		30		24.8	26.2	25.3	23.8	25.6	25.3	26.4	aJ80
27S 10W 03DDD 01	QU	1743	145	33	51.0	54.2	56.1	55.5	52.5	53.9	54.3	55.1	qJ66
27S 10W 17DDD 01	QU	1755	171	77	61.9	65.0	65.6	66.1	62.1	63.9	64.6	65.5	aJ74
27S 10W 24DAD 01	QU	1692	117	20	16.0	17.1		18.5	16.3	16.7		18.2	aJ73
28S 07W 29CDD 01	QU	1601	151	30	26.6	26.9	28.0	26.9	25.9	26.9	26.4	26.8	qJ55
28S 07W 35CCD 01	QU	1585		23	21.9	21.8	22.6	21.9	20.9	23.1	21.0	21.4	aJ67
28S 08W 21BBB 01	QU	1562	49	1	2.3	2.7	3.1	2.7	2.0	2.3	2.1	2.1	aJ74
28S 08W 26ABC 01	QU	1652		77	63.2	62.3	62.2	62.7	59.2	60.1	59.8	61.3	aJ71
28S 09W 01BCC 01	QA, QU	1580	55	15	7.5	8.3	8.5	7.3	7.5	8.4	7.7	7.3	aJ69
28S 09W 21AAA 01	QU	1666	118	34	28.1	28.9	30.2	30.3	27.8	29.4	28.9	29.3	aJ74
28S 09W 29CCC 01	QU	1708	107	30	32.7	33.8	35.1	34.7	32.4	34.1	33.3	33.9	aJ74
28S 09W 34AAB 01	QU	1690	75	41	42.8	43.8	45.4	45.2	44.2	43.8	43.5	43.8	aJ68
28S 10W 16BCB 01	QU	1756	154	51	50.2	51.8	52.9	52.6	53.2	50.8	51.1	51.5	aJ71
29S 10W 19DDB 01	QU	1765				26.7	26.9	24.0	24.8	26.6	25.0	23.1	aJ85
30S 05W 12CCA 01	QU	1484				20.4	22.2	21.9		21.7	22.3	21.4	aJ55
30S 10W 05BBD 01	QU	1770				45.6	46.9	46.4	43.3	46.3	44.1	44.0	aJ88
30S 10W 28DAC 01	QU	1730				22.1	23.9	21.8	19.8	23.6	20.7	18.6	aJ88

TABLE 1. SELECTED HYDROLOGIC DATA, KIOWA COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1944	1974	1991	1992	1993	1994	1995	1996	1997	
27S 16W 10BAC 01	QU	2088	248	28	12.1	30.6	32.3	31.1	29.2	30.6	30.4	30.6	aJ62
27S 16W 19BBD 01	QU	2112	182	37	20.3	35.3	37.1	37.6	34.4	36.5	36.0	35.5	aJ72
27S 16W 28CDD 01	QU	2120	168	65	56.7	67.2	68.4	68.8	68.5	69.6	68.9	68.9	aJ73
27S 17W 21ADC 01	QU	2140	175	39	24.4	37.1	38.3	39.6	37.7	39.1	38.8	38.3	qJ41
27S 18W 13AAA 01	QU	2152	219	24	15.6	26.5	28.3	29.2	27.1	29.1	28.9	27.5	qJ73
27S 18W 18DDC 01	QU	2192	187	26	15.7	21.0	21.7	22.3	22.8	23.3	23.6	23.8	qJ40
27S 18W 22ADC 01	QU	2175	210	29	14.1	25.7	27.3	28.1	28.4	29.2	28.3	28.3	aJ70
27S 18W 35AAC 01	QU	2160										37.5	uU97
27S 19W 28CBD 01	QU	2262	187	60	67.9	75.9	78.2	78.5	78.8	79.3			aJ73
27S 20W 26ABD 01	QU	2274	174	38	40.6	44.0	45.5	45.4	45.4	46.7	46.7	47.0	qJ69
27S 20W 32ABD 01	QU	2308	108	36	45.2	45.9	49.4	49.0	49.0	49.6	49.4	49.3	aJ69
28S 16W 12BCA 01	QU	2111	211	92	101.0	102.6	103.2	104.8	103.1	103.8	104.2	103.5	aJ60
28S 16W 17AAC 01	QU	2165	245	120	118.0	118.5	119.4	119.7	119.8	120.3	120.6	120.3	aJ62
28S 16W 31DCA 01	QU	2110	192	75		70.4	70.9	71.3	70.5	71.3	71.1	70.8	aJ85
28S 17W 01CAB 01	QU	2135	180	65	55.6	62.7	64.0	68.4	63.6	64.1	64.6	64.2	aJ68
28S 17W 15DDB 01	QU	2178	191	105	96.0	98.4	99.7	100.0	101.6	100.1	100.2	100.0	aJ62
28S 18W 05CDB 01	QU	2230							81.5			83.0	aU94
28S 18W 19CCB 01	QU	2268		103	88.0	89.7	90.5	90.8	91.0	91.3	91.8	92.0	aJ66
28S 18W 25CAC 01	QU	2220				113.8	114.5	114.7	114.6	115.2	115.6	115.6	aJ89
28S 19W 10AAC 01	TO	2270				95.5	97.4	98.1	98.4	99.4	99.7	100.1	qJ77
28S 19W 30CBC 01	QU	2335	185	116	115.0	113.2	114.7	114.3	114.4	114.5	114.7	113.8	aJ73
28S 19W 33CBD 01	QU	2325	220	133	134.0	134.2	135.1	134.7	134.8	135.1	135.4	135.4	aJ66
28S 20W 12BBD 01	QU	2288	190	64	55.7	57.2	58.0		58.4	59.3	59.6	59.9	aJ54
28S 20W 30ACA 01	QU	2319	69	32	39.4	42.7	44.5	43.9	44.0	43.8	44.7	43.8	aJ60
29S 16W 02ADB 01	QU	2047				50.3	50.8	51.1	50.8	51.7	51.3	50.8	aJ88

TABLE 2. DERIVED HYDROLOGIC DATA, KINGMAN COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1944-97	1974-97	1996-97	1944-97	1974-97	1944	1997	
27S 05W 24CDC 01	QU	15.8	-2	-3.2	-1.7	0.0	-0.1			
27S 05W 33ABB 02	QU	4.5	21	-0.5	2.7	0.4	0.0	35	56	60
27S 06W 12CCD 01	QU	6.3	1	0.3	2.3	0.0	0.0			
27S 06W 16CCB 01	QA	2.4	-1	-1.5	0.5	0.0	-0.1	16	15	-6
27S 07W 03ADC 01	QU	3.8	16	4.4	4.9	0.3	0.2	5	21	320
27S 07W 23BCC 01	QU	7.2		0.1	-0.5		0.0		7	
27S 08W 14DDC 01	QU	0.9	1	-0.3	0.5	0.0	0.0			
27S 08W 17DAB 01	QU	39.5	6	-5.1	-1.1	0.1	-0.2	73	79	8
27S 08W 35CBC 01	QU	21.6	10	-1.2	0.3	0.2	-0.1	22	32	45
27S 09W 15ABA 01	QU									
27S 09W 29AAA 01	QU	26.4	4		-1.1	0.1				
27S 10W 03DDD 01	QU	55.1	-22	-4.1	-0.8	-0.4	-0.2	112	90	-20
27S 10W 17DDD 01	QU	65.5	12	-3.6	-0.9	0.2	-0.2	94	106	13
27S 10W 24DAD 01	QU	18.2	2	-2.2		0.0	-0.1	97	99	2
28S 07W 29CDD 01	QU	26.8	3	-0.2	-0.4	0.1	0.0	121	124	2
28S 07W 35CCD 01	QU	21.4	2	0.5	-0.4	0.0	0.0			
28S 08W 21BBB 01	QU	2.1	-1	0.2	0.0	0.0	0.0	48	47	-2
28S 08W 26ABC 01	QU	61.3	16	1.9	-1.5	0.3	0.1			
28S 09W 01BCC 01	QA, QU	7.3	8	0.2	0.4	0.2	0.0	40	48	20
28S 09W 21AAA 01	QU	29.3	5	-1.2	-0.4	0.1	-0.1	84	89	6
28S 09W 29CCC 01	QU	33.9	-4	-1.2	-0.6	-0.1	-0.1	77	73	-5
28S 09W 34AAB 01	QU	43.8	-3	-1.0	-0.3	-0.1	0.0	34	31	-9
28S 10W 16BCB 01	QU	51.5	-1	-1.3	-0.4	0.0	-0.1	103	103	0
29S 10W 19DDB 01	QU	23.1			1.9					
30S 05W 12CCA 01	QU	21.4			0.9					
30S 10W 05BBD 01	QU	44.0			0.1					
30S 10W 28DAC 01	QU	18.6			2.1					

TABLE 2. DERIVED HYDROLOGIC DATA, KIOWA COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1944-97	1974-97	1996-97	1944-97	1974-97	1944	1997	
27S 16W 10BAC 01	QU	30.6	-3	-18.5	-0.2	-0.1	-0.8	220	217	-1
27S 16W 19BBD 01	QU	35.5	2	-15.2	0.5	0.0	-0.7	145	147	1
27S 16W 28CDD 01	QU	68.9	-4	-12.2	0.0	-0.1	-0.5	103	99	-4
27S 17W 21ADC 01	QU	38.3	1	-13.9	0.5	0.0	-0.6	136	137	1
27S 18W 13AAA 01	QU	27.5	-4	-11.9	1.4	-0.1	-0.5	195	192	-2
27S 18W 18DDC 01	QU	23.8	2	-8.1	-0.2	0.0	-0.4	161	163	1
27S 18W 22ADC 01	QU	28.3	1	-14.2	0.0	0.0	-0.6	181	182	1
27S 18W 35AAC 01	QU	37.5								
27S 19W 28CBD 01	QU									
27S 20W 26ABD 01	QU	47.0	-9	-6.4	-0.3	-0.2	-0.3	136	127	-7
27S 20W 32ABD 01	QU	49.3	-13	-4.1	0.1	-0.2	-0.2	72	59	-18
28S 16W 12BCA 01	QU	103.5	-12	-2.5	0.7	-0.2	-0.1	119	108	-9
28S 16W 17AAC 01	QU	120.3	0	-2.3	0.3	0.0	-0.1	125	125	0
28S 16W 31DCA 01	QU	70.8	4		0.3	0.1		117	121	3
28S 17W 01CAB 01	QU	64.2	1	-8.6	0.4	0.0	-0.4	115	116	1
28S 17W 15DDB 01	QU	100.0	5	-4.0	0.2	0.1	-0.2	86	91	6
28S 18W 05CDB 01	QU	83.0								
28S 18W 19CCB 01	QU	92.0	11	-4.0	-0.2	0.2	-0.2			
28S 18W 25CAC 01	QU	115.6			0.0					
28S 19W 10AAC 01	TO	100.1			-0.4					
28S 19W 30CBC 01	QU	113.8	2	1.2	0.9	0.0	0.1	69	71	3
28S 19W 33CBD 01	QU	135.4	-2	-1.4	0.0	0.0	-0.1	87	85	-2
28S 20W 12BBD 01	QU	59.9	4	-4.2	-0.3	0.1	-0.2	126	130	3
28S 20W 30ACA 01	QU	43.8	-12	-4.4	0.9	-0.2	-0.2	37	25	-32
29S 16W 02ADB 01	QU	50.8			0.5					

TABLE 1. SELECTED HYDROLOGIC DATA, KIOWA COUNTY (cont'd)

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1944	1974	1991	1992	1993	1994	1995	1996	1997	
29S 17W 04ABC 01	QU	2125	122	60	50.0	52.2	52.9	53.4	54.7	53.3	52.7	52.4	aJ57
29S 17W 12DAA 01	QU	2092				48.6	49.5	49.7	49.3	49.3	48.2	48.8	aJ88
29S 18W 02ACC 01	TO	2251	196			143.2	143.6	143.8	143.8	138.6	138.8	138.7	qJ77
29S 18W 07BBD 01	QU	2311	256	155	153.5	153.8	154.5	153.6	153.8	154.3	154.7	154.1	aJ68
29S 19W 22BAA 01	QU	2340	250	158	157.0	156.4	156.9	156.5	156.4	156.9	157.3	157.3	aJ67
29S 20W 11CDD 01	QU	2398		170	168.0	166.4	169.3	166.2	166.5	166.3	166.5	166.3	aJ70

TABLE 1. SELECTED HYDROLOGIC DATA, LABETTE COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1944	1974	1991	1992	1993	1994	1995	1996	1997	
31S 21E 15CCC 02	QU	836			7.3	14.8		6.9	11.1		14.7	11.1	qD67

TABLE 1. SELECTED HYDROLOGIC DATA, LANE COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1950	1966	1991	1992	1993	1994	1995	1996	1997	
16S 29W 26CCD 01	TO	2803	140	90	89.2	109.0	109.5	109.2	108.5	108.1	109.0	109.3	aJ72
16S 29W 33BAB 01	TO	2813				110.9	111.2	110.7	110.2	110.3	110.7	110.0	aJ88
16S 30W 24DCC 01	TO	2840	155	109		122.9	124.5	123.4	124.0	124.9	125.3	122.8	aJ72
16S 30W 29CDD 01	TO	2884	174	121		129.3	129.9	129.3	128.7	128.7	128.9	128.4	aJ72
17S 27W 20CCC 01	TO	2717	127	84		100.0		100.7	99.1	100.1	102.5	98.9	aJ73
17S 27W 26CCC 01	TO	2678	127	80		95.9	95.4	95.4	92.4	94.6	94.4	94.2	aJ73
17S 28W 07BBB 01	TO	2785	170	83		102.0	101.4	101.0	100.2	100.5	102.2	102.1	aJ73
17S 28W 15BBC 01	TO	2760	150	84		106.7	107.5	107.1	106.6	107.0		105.7	aJ73
17S 28W 26ABB 01	TO	2735	140	85	88.2	103.5	104.0	103.0	102.2	103.3	103.7	102.4	aJ63
17S 28W 34CBB 01	TO	2747	132	78		94.7	96.2	95.0	94.2	92.3	96.2	95.0	aJ77
17S 29W 10BAC 01	TO	2807				112.5	112.8	112.0	112.1			113.3	aJ91
17S 29W 36BAA 01	TO	2784	119	70		89.0	89.2	89.1	89.0	89.6	90.3	88.9	aJ73
17S 30W 13CBB 01	TO	2846	151	84	83.9	93.5	94.9	93.6	92.9	93.9	94.7	94.1	aJ48
17S 30W 20BBB 01	TO	2889	165	87		121.5	123.4		105.9	107.9	116.9	108.0	aJ77
18S 27W 13CCC 01	TO	2674	95	88	86.1	85.8	85.9	86.1	85.9	85.5	85.2	85.0	aJ48
18S 28W 18ACC 01	TO	2764	95	51		65.3	66.0	64.6	61.7	61.6	61.3	57.0	aJ72
18S 29W 04DDA 01	TO	2801							67.9	68.9	70.4	66.8	aJ94
18S 30W 02AAA 01	TO	2849	124	68		89.0	91.0	88.3	85.3	85.9	86.3	84.8	aJ71
18S 30W 04BAB 01	TO	2872	125	69		77.3	77.4	76.9	76.4	76.8	77.6	76.2	aJ77
18S 30W 23AAA 01	TO	2848	150	55		61.3	63.5	61.3	60.3	59.4	58.8	58.2	aJ77

TABLE 1. SELECTED HYDROLOGIC DATA, LEAVENWORTH COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1944	1974	1991	1992	1993	1994	1995	1996	1997	
12S 22E 22CAA 01	QA	785			13.7	23.7		22.8				22.6	qD67

TABLE 2. DERIVED HYDROLOGIC DATA, KIOWA COUNTY (cont'd)

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1944-97	1974-97	1996-97	1944-97	1974-97	1944	1997	
29S 17W 04ABC 01	QU	52.4	8	-2.4	0.3	0.2	-0.1	62	70	13
29S 17W 12DAA 01	QU	48.8			-0.6					
29S 18W 02ACC 01	TO	138.7			0.1				57	
29S 18W 07BBD 01	QU	154.1	1	-0.6	0.6	0.0	0.0	101	102	1
29S 19W 22BAA 01	QU	157.3	1	-0.3	0.0	0.0	0.0	92	93	1
29S 20W 11CDD 01	QU	166.3	4	1.7	0.2	0.1	0.1			

TABLE 2. DERIVED HYDROLOGIC DATA, LABETTE COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1944-97	1974-97	1996-97	1944-97	1974-97	1944	1997	
31S 21E 15CCC 02	QU	11.1		-3.8	3.6		-0.2			

TABLE 2. DERIVED HYDROLOGIC DATA, LANE COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
16S 29W 26CCD 01	TO	109.3	-19	-20.1	-0.3	-0.4	-0.6	50	31	-38
16S 29W 33BAB 01	TO	110.0			0.7					
16S 30W 24DCC 01	TO	122.8	-14		2.5	-0.3		46	32	-30
16S 30W 29CDD 01	TO	128.4	-7		0.5	-0.1		53	46	-13
17S 27W 20CCC 01	TO	98.9	-15		3.6	-0.3		43	28	-35
17S 27W 26CCC 01	TO	94.2	-14		0.2	-0.3		47	33	-30
17S 28W 07BBB 01	TO	102.1	-19		0.1	-0.4		87	68	-22
17S 28W 15BBC 01	TO	105.7	-22			-0.5		66	44	-33
17S 28W 26ABB 01	TO	102.4	-17	-14.2	1.3	-0.4	-0.5	55	38	-31
17S 28W 34CBB 01	TO	95.0	-17		1.2	-0.4		54	37	-31
17S 29W 10BAC 01	TO	113.3								
17S 29W 36BAA 01	TO	88.9	-19		1.4	-0.4		49	30	-39
17S 30W 13CBB 01	TO	94.1	-10	-10.2	0.6	-0.2	-0.3	67	57	-15
17S 30W 20BBB 01	TO	108.0	-21		8.9	-0.4		78	57	-27
18S 27W 13CCC 01	TO	85.0	3	1.1	0.2	0.1	0.0	7	10	43
18S 28W 18ACC 01	TO	57.0	-6		4.3	-0.1		44	38	-14
18S 29W 04DDA 01	TO	66.8			3.6					
18S 30W 02AAA 01	TO	84.8	-17		1.5	-0.4		56	39	-30
18S 30W 04BAB 01	TO	76.2	-7		1.4	-0.1		56	49	-13
18S 30W 23AAA 01	TO	58.2	-3		0.6	-0.1		95	92	-3

TABLE 2. DERIVED HYDROLOGIC DATA, LEAVENWORTH COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1944-97	1974-97	1996-97	1944-97	1974-97	1944	1997	
12S 22E 22CAA 01	QA	22.6		-8.9			-0.4			

TABLE 1. SELECTED HYDROLOGIC DATA, LOGAN COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type	
				1950	1966	1991	1992	1993	1994	1995	1996	1997		
11S 32W 01BCC 01	TO	3040							114.9				113.9	aU93
11S 32W 19AAB 01	TO	3073	183	92		105.1	105.5	105.1	104.6	104.4	104.5	109.0	aJ75	
11S 32W 31CCD 01	TO	3054				73.3	73.6	68.9	67.1	68.3		65.9	aJ84	
11S 32W 36ABA 01	TO	3009				91.9	92.4	91.9	91.8	96.4		97.5	aJ70	
11S 33W 10BDD 01	TO	3113					118.4	117.9	116.8	116.7	118.1	116.2	aJ84	
11S 33W 14DCC 01	TO	3117				137.4	133.7	137.5	132.0	132.8	134.2	133.9	aJ69	
11S 34W 13AAB 01	TO	3184				144.1	142.0	144.7	144.1	143.6	144.7		aJ84	
11S 34W 16CDB 01	TO	3218	170	122	118.4	120.2	120.9	121.0	120.8	120.4	123.8	119.8	aJ59	
11S 36W 06ADD 02	TO	3380	220	142	137.0	177.9	178.9	175.0	171.9	171.7	172.4	175.0	aJ65	
11S 37W 01DCD 01	TO	3369				169.3	167.9	167.7		168.3	170.5	173.3	aJ79	
13S 36W 20CCB 01	QA	3023	30			10.6	10.8	11.3	10.0	10.9	10.8	8.8	aJ70	

TABLE 1. SELECTED HYDROLOGIC DATA, MCPHERSON COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1944	1974	1991	1992	1993	1994	1995	1996	1997	
18S 03W 30CCC 01	QU	1515				114.1	115.0	113.9	112.9	114.3	113.5	114.6	aJ70
18S 04W 21CCC 01	QU	1412				13.7	14.4	12.5	9.5	11.8	11.5	12.2	aJ70
19S 01W 32DAC 01	QU	1590				46.5	47.8	46.4	45.3	46.1	45.2	41.9	aJ70
19S 03W 16BCB 01	QU	1511				101.6	101.5	100.8	99.8	100.7	100.4	100.8	aJ70
19S 04W 15AAC 01	QU	1494				87.0	89.1	87.6	86.6	87.8	88.8	89.5	aJ70
20S 01W 22BBB 01	QU	1527				11.4	12.7	9.4	7.4	11.2	8.2	8.4	aJ70
20S 03W 22DAA 01	QU	1473				40.2	43.2	42.1	40.6	42.0	41.3	44.8	aJ70
20S 03W 30BBA 01	QU	1476				56.5	58.1	58.0	56.9	57.9	57.1	58.7	aJ70
20S 04W 15BDD 01	QU	1474					57.3		55.6	56.6	56.5	57.0	aJ70
20S 04W 27DAC 01	QU	1467				46.2	48.0	46.1	43.9	46.5	45.4	46.4	aJ70
21S 02W 12BBB 01	QU	1503				14.1	15.3	13.4	11.8	12.7	10.2	9.0	aJ81
21S 02W 28CBA 01	QU	1467				38.1	41.0	40.5	36.8	39.4	38.5	39.4	aJ70
21S 02W 36ACA 01	QU	1475				14.0	14.5	10.6	9.4	12.4	9.7	11.1	aJ80
21S 03W 06CBD 01	QU	1464				45.9	49.1	48.5	46.0	47.8	47.9	49.0	aJ70
21S 03W 22BBB 01	QU	1450				34.9	35.4	34.6	31.0	34.0	33.1	34.7	aJ70
21S 03W 33BBC 01	QU	1461				49.2	52.2	49.9	43.3	47.7	47.0	47.9	aJ70
21S 04W 26CDC 01	QU	1445				38.8	42.5	36.5	29.6	36.3	35.1	36.4	aJ70

TABLE 1. SELECTED HYDROLOGIC DATA, MEADE COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)										Data Type
				1940	1966	1991	1992	1993	1994	1995	1996	1997		
30S 26W 04CBB 01	QU,TO	2525	415	11	20.7	62.3	74.3	64.0	65.0	69.5	75.3	69.0	aJ39	
30S 26W 13ABB 01	QU,TO	2575				67.4	68.4	69.6	69.5	69.9	70.2	70.6	aJ86	
30S 26W 32DDD 01	QU,TO	2488	388	16		20.6	22.5	18.1	21.5	23.1	23.7	20.4	aJ85	
30S 27W 20ABA 01	QU,TO	2564				74.2	75.1	72.8	73.8	75.9	80.6	79.0	aJ85	
30S 27W 23ABB 01	QU,TO	2531	321	12	16.5	54.4	63.0	54.3	54.5	57.8	65.3	58.5	aJ39	
30S 27W 27BBB 01	QU,TO	2518				36.3	37.8	32.2	33.3	35.5	43.0	37.0	aJ85	
30S 27W 32DDD 01	QU,TO	2475	315	26	11.8	8.6	9.6	7.3	6.9	7.5	7.4	6.1	qJ53	
30S 28W 17ABB 01	QU,TO	2697	517	102	109.6	156.0	157.4	158.8	160.9	167.5	166.1	167.4	aJ65	
30S 28W 33AAA 01	QU,TO	2646	466	85		128.4	131.4	132.4	134.2	136.0	138.2	139.4	aJ85	
30S 29W 23CAD 01	QU,TO	2744	544	134	141.3	188.5	192.8	194.1	195.9	197.8	202.6		aJ65	
30S 29W 28BBB 01	QU,TO	2758	553	137	137.8	191.0	194.5		197.1	198.9	200.8	202.0	aJ59	
30S 30W 06CCC 01	QU,TO	2825	449	152		213.0	217.1	219.3	221.4	223.7	226.6	228.8	aJ65	
30S 30W 28ABB 01	QU,TO	2803	508	150	145.9	214.3	208.1	209.9	210.2	211.9	214.3	215.3	aJ59	
31S 26W 30BBB 01	QU,TO	2516		98		105.2	106.3	106.8	107.2	107.9		108.0	aJ75	
31S 27W 20AAA 02	QU,TO	2466	326	15		39.8	43.4		38.0	39.1	44.7	35.5	aJ75	

TABLE 2. DERIVED HYDROLOGIC DATA, LOGAN COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	1950-97
11S 32W 01BCC 01	TO	113.9								
11S 32W 19AAB 01	TO	109.0	-17		-4.5	-0.4		91	74	-19
11S 32W 31CCD 01	TO	65.9								
11S 32W 36ABA 01	TO	97.5								
11S 33W 10BDD 01	TO	116.2			1.9					
11S 33W 14DCC 01	TO	133.9			0.3					
11S 34W 13AAB 01	TO									
11S 34W 16CDB 01	TO	119.8	2	-1.4	4.0	0.0	0.0	48	50	4
11S 36W 06ADD 02	TO	175.0	-33	-38.0	-2.6	-0.7	-1.2	78	45	-42
11S 37W 01DCD 01	TO	173.3			-2.8					
13S 36W 20CCB 01	QA	8.8			2.0				21	

TABLE 2. DERIVED HYDROLOGIC DATA, MCPHERSON COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1944-97	1974-97	1996-97	1944-97	1974-97	1944	1997	1944-97
18S 03W 30CCC 01	QU	114.6			-1.1					
18S 04W 21CCC 01	QU	12.2			-0.7					
19S 01W 32DAC 01	QU	41.9			3.3					
19S 03W 16BCB 01	QU	100.8			-0.4					
19S 04W 15AAC 01	QU	89.5			-0.7					
20S 01W 22BBB 01	QU	8.4			-0.2					
20S 03W 22DAA 01	QU	44.8			-3.5					
20S 03W 30BBA 01	QU	58.7			-1.6					
20S 04W 15BDD 01	QU	57.0			-0.5					
20S 04W 27DAC 01	QU	46.4			-1.0					
21S 02W 12BBB 01	QU	9.0			1.2					
21S 02W 28CBA 01	QU	39.4			-0.9					
21S 02W 36ACA 01	QU	11.1			-1.4					
21S 03W 06CBD 01	QU	49.0			-1.1					
21S 03W 22BBB 01	QU	34.7			-1.6					
21S 03W 33BBC 01	QU	47.9			-0.9					
21S 04W 26CDC 01	QU	36.4			-1.3					

TABLE 2. DERIVED HYDROLOGIC DATA, MEADE COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1940-97	1966-97	1996-97	1940-97	1966-97	1940	1997	1940-97
30S 26W 04CBB 01	QU,TO	69.0	-58	-48.3	6.3	-1.0	-1.6	404	346	-14
30S 26W 13ABB 01	QU,TO	70.6			-0.4					
30S 26W 32DDD 01	QU,TO	20.4	-4		3.3	-0.1		372	368	-1
30S 27W 20ABA 01	QU,TO	79.0			1.6					
30S 27W 23ABB 01	QU,TO	58.5	-47	-42.0	6.8	-0.8	-1.4	309	263	-15
30S 27W 27BBB 01	QU,TO	37.0			6.0					
30S 27W 32DDD 01	QU,TO	6.1	20	5.7	1.3	0.4	0.2	289	309	7
30S 28W 17ABB 01	QU,TO	167.4	-65	-57.8	-1.3	-1.1	-1.9	415	350	-16
30S 28W 33AAA 01	QU,TO	139.4	-54		-1.2	-0.9		381	327	-14
30S 29W 23CAD 01	QU,TO									
30S 29W 28BBB 01	QU,TO	202.0	-65	-64.2	-1.2	-1.1	-2.1	416	351	-16
30S 30W 06CCC 01	QU,TO	228.8	-77		-2.2	-1.4		297	220	-26
30S 30W 28ABB 01	QU,TO	215.3	-65	-69.4	-1.0	-1.1	-2.2	358	293	-18
31S 26W 30BBB 01	QU,TO	108.0	-10			-0.2				
31S 27W 20AAA 02	QU,TO	35.5	-21		9.2	-0.4		311	291	-6

TABLE 1. SELECTED HYDROLOGIC DATA, MEADE COUNTY (cont'd)

Well Number				Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type
							1940	1966	1991	1992	1993	1994	1995	1996	
31S 28W 02CCC 01	QU,TO	2623						140.9	133.9	134.5	135.8	137.5	140.3	140.2	aJ84
31S 28W 10BCB 01	QU,TO	2643	463	114	112.2	169.0	171.3	172.5	174.1					181.5	aJ65
31S 28W 26ABB 01	QU,TO	2496				45.1	49.9	46.1	49.7	49.7	49.9	49.9	46.8		aJ86
31S 29W 02DBB 01	QU,TO	2720	420	130		175.8		181.2	182.3	184.2	185.9	185.9	187.4		aJ85
31S 29W 25AAA 02	QU,TO	2698	438	145	156.5	195.3	191.9	192.8	193.4	194.5	195.0	195.0	195.1		aJ65
31S 29W 30AAA 01	QU,TO	2741	461	136	130.2	174.1	181.8	178.8	179.3	181.0	185.0	185.0	188.2		aJ65
31S 30W 16BBC 01	QU,TO	2770	505	136	133.9	206.3	206.1	206.7	209.7	212.8	216.7	216.7	220.3		aJ65
32S 28W 04ADD 01	QU,TO	2546	366	63	66.1	75.1	75.9	77.1	77.7	78.4	77.9	77.9	77.8		aJ39
32S 29W 27AAB 02	QU,TO	2688	555	143		144.8	154.5	150.2	156.0	156.9	157.7	157.7	158.8		aJ75
32S 30W 09CCC 01	QU,TO	2764	504	155	156.7	199.5	207.2	208.8	210.6	213.0	215.4	215.4	217.9		aJ65
33S 28W 29BCB 01	TO	2371	160	14	14.3	14.9	15.2	15.0	15.7	16.2	16.4	16.4	16.1		aJ39
33S 29W 36AAB 01	QU,TO	2463	283	81	81.3	88.6	88.5	87.0	88.8	88.8	89.2	89.2	89.1		aJ65
34S 28W 05BDA 01	QU	2350				24.5	25.6	24.0		26.9	26.8	26.8	26.8		aJ86
34S 30W 22CBC 01	TO	2675	675	191		189.9	202.0	202.4	202.9	203.5	204.7	204.7	205.8		aJ75
35S 30W 10CDA 01	QA,QU,TO	2393	318	23	23.1	24.4	26.5	23.2	24.6	24.9	25.4	25.4	25.0		aJ65

TABLE 1. SELECTED HYDROLOGIC DATA, MORTON COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1940	1966	1991	1992	1993	1994	1995	1996	1997	
+31S 39W 18CCC 01	QU,TO,KD	3246	226	116	135.6	215.2	212.1	218.9	219.5	220.7	231.2	228.1	aJ62
31S 40W 29ABB 01	QU,TO	3331	233	141	166.1	186.2	186.7	187.7	186.6	187.2	188.7	188.9	aJ59
31S 41W 07CDD 01	KJ	3441				135.1	135.3	135.1	134.0	134.3	134.4	134.2	aJ67
31S 41W 31CBC 01	KJ	3441									100.5	103.1	aU96
31S 42W 29AAB 01	QU,TO,KJ	3510		74	93.1	99.9	101.0	102.3	103.4	104.6	104.9	105.7	aJ62
31S 43W 03CB 01	QU,TO,KJ	3609		61	65.7	65.7	63.9	65.6	68.1	67.0	67.5		aJ60
31S 43W 14DDC 01	KD	3576			67.7	71.6	72.1	72.3	72.6	72.6	73.3	73.2	aJ39
32S 40W 07BDC 01	QU,TO,KJ	3302		52		111.5	112.3	112.7	113.6	113.4	113.9	114.7	aJ84
32S 40W 21ADB 01	QU,TO	3342	237	132	156.0	195.2	196.3		200.5	192.9	196.1	194.9	aJ67
32S 41W 15CDC 01	QU,TO,KJ	3360			18.0	21.7	23.5	23.9	24.3	24.4	25.4	24.5	aJ67
32S 41W 35DCC 01	QU,TO,KJ	3420				181.9	188.4		182.8	174.5	181.8	182.0	aJ84
32S 42W 14CCC 01	QU,TO,KJ	3500			90.6	126.7	127.0	127.8	129.6		130.9	135.2	aJ62
32S 42W 21BCC 01	QU,TO,KJ	3526	186	64	113.6	158.6	157.7	158.0	159.6	160.1	157.9	156.5	aJ59
32S 42W 26CDD 01	QU,TO,KJ	3485	175	75	102.0	125.9	126.8	124.3	124.0		169.6	159.8	aJ67
32S 43W 08CBD 01	QU,TO,KJ	3615		45		101.6	102.5	101.5	110.2	114.5	115.3	107.2	aJ84
32S 43W 28BBC 01	QU,TO,KJ	3526				67.9	67.0	67.1	68.4		71.5	71.0	aJ84
33S 39W 04DBB 01	TO	3237	357	87		103.4	104.5	104.8	105.3	110.3	116.8	111.8	aJ84
33S 39W 16ABB 01	QU,TO	3234	344	82	70.0	83.3	80.6	84.8	81.3	82.7	85.7	84.8	aJ62
33S 40W 27CCC 01	QU,TO	3308	323	98	80.0	82.3	82.0	82.5	82.6	81.9	82.7	82.0	aJ67
33S 41W 03ADA 01	TO	3430							165.8	166.0	167.2	167.1	aU93
33S 42W 05DCC 01	QU,TO	3525				71.3	71.3	71.1	72.3	73.6	72.9	74.2	aJ84
33S 42W 21BCB 01	QU,TO	3527	167	87	85.0	89.6	89.4	90.1		90.2	91.2	90.8	aJ67
33S 43W 08BDA 01	QU,TO,KJ	3643	183	86	95.0	112.3	107.2	107.7	109.8	110.6			aJ67
33S 43W 09DBA 01	QU,TO,KJ	3612							92.7	93.3	94.0	95.0	aJ86
34S 39W 06CCA 01	QU,TO,KJ	3310	355	140		118.7	119.7	120.3	120.1	120.8	122.6	124.5	aJ84
34S 40W 16ABB 01	QU,TO	3363	388	163		148.5	143.3	147.3	144.9	143.4	144.4	143.9	aJ84
34S 41W 26DCD 01	QU,TO	3360	290	120		163.8	164.5	162.8	162.8	163.7	164.6	164.0	aJ84
34S 41W 28CBA 01	QU,TO	3299				124.2	125.0	127.2			131.4	122.0	aJ84
34S 42W 05BDC 01	QU,KJ	3449	69	31	38.4	39.8	39.8	39.8	40.0	39.9	40.2		aJ59
34S 42W 22CDB 01	QU,TO	3492	112	92		79.0	80.1	80.3	80.5	80.6	80.9	81.6	aJ67
34S 43W 07BDD 01	KJ	3655		125	147.2	149.9	151.0		150.6	150.5			aJ63
35S 39W 06CDD 01	QU,TO	3330	510	175		216.1	218.5	220.2	217.3	214.6	229.6	226.7	aJ84
35S 40W 03BBB 02	QU,TO	3369				180.7	181.3	181.6	181.0	182.6	183.6	184.0	qJ87
35S 41W 16CCD 01	QU,TO	3385		80		218.1	220.9	223.9	224.3	222.7	224.7	224.0	aJ84
35S 42W 02DBB 01	QU,TO	3554				174.1	173.4	177.1	174.7	175.3	176.2	176.6	aJ84
35S 43W 04AAC 01	QU,TO	3554	179	76		88.3	90.2	90.5	91.3	93.0	94.4	94.8	aJ84
35S 43W 13BDB 01	QU,TO	3615	305	151		190.6		190.2	193.9	194.8	197.6	200.2	aJ71

TABLE 2. DERIVED HYDROLOGIC DATA, MEADE COUNTY (cont'd)

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1940-97	1966-97	1996-97	1940-97	1966-97	1940	1997	
+31S 28W 02CCC 01	QU,TO,KD	140.2			0.1					
31S 28W 10BCB 01	QU,TO	181.5	-68	-69.3		-1.2	-2.2	349	282	-19
31S 28W 26ABB 01	QU,TO	46.8			3.1					
31S 29W 02DBB 01	QU,TO	187.4	-57		-1.5	-1.0		290	233	-20
31S 29W 25AAA 02	QU,TO	195.1	-50	-38.6	-0.1	-0.9	-1.2	293	243	-17
31S 29W 30AAA 01	QU,TO	188.2	-52	-58.0	-3.2	-0.9	-1.9	325	273	-16
31S 30W 16BBC 01	QU,TO	220.3	-84	-86.4	-3.6	-1.5	-2.8	369	285	-23
32S 28W 04ADD 01	QU,TO	77.8	-15	-11.7	0.1	-0.3	-0.4	303	288	-5
32S 29W 27AAB 02	QU,TO	158.8	-16		-1.1	-0.3		412	396	-4
32S 30W 09CCC 01	QU,TO	217.9	-63	-61.2	-2.5	-1.1	-2.0	349	286	-18
33S 28W 29BCB 01	TO	16.1	-2	-1.8	0.3	0.0	-0.1	146	144	-1
33S 29W 36AAB 01	QU,TO	89.1	-8	-7.8	0.1	-0.1	-0.3	202	194	-4
34S 28W 05BDA 01	QU	26.8			0.0					
34S 30W 22CBC 01	TO	205.8	-15		-1.1	-0.3		484	469	-3
35S 30W 10CDA 01	QA,QU,TO	25.0	-2	-1.9	0.4	0.0	-0.1	295	293	-1

TABLE 2. DERIVED HYDROLOGIC DATA, MORTON COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1940-97	1966-97	1996-97	1940-97	1966-97	1940	1997	
31S 39W 18CCC 01	QU,TO	228.1	-112	-92.5	3.1	-2.0	-3.0	110	-2	-102
31S 40W 29ABB 01	QU,TO	188.9	-48	-22.8	-0.2	-0.8	-0.7	92	44	-52
31S 41W 07CDD 01	KJ	134.2			0.2					
31S 41W 31CBC 01	KJ	103.1			-2.6					
31S 42W 29AAB 01	QU,TO,KJ	105.7	-32	-12.6	-0.8	-0.6	-0.4			
31S 43W 03CB 01	QU,TO,KJ									
31S 43W 14DDC 01	KD	73.2		-5.5	0.1		-0.2			
32S 40W 07BDC 01	QU,TO,KJ	114.7	-63		-0.8	-1.1				
32S 40W 21ADB 01	QU,TO	194.9	-63	-38.9	1.2	-1.1	-1.3	105	42	-60
32S 41W 15CDC 01	QU,TO,KJ	24.5		-6.5	0.9		-0.2			
32S 41W 35DCC 01	QU,TO,KJ	182.0			-0.2					
32S 42W 14CCC 01	QU,TO,KJ	135.2		-44.6	-4.3		-1.4			
32S 42W 21BCC 01	QU,TO,KJ	156.5	-93	-42.9	1.4	-1.6	-1.4	122	30	-75
32S 42W 26CDD 01	QU,TO,KJ	159.8	-85	-57.8	9.8	-1.5	-1.9	100	15	-85
32S 43W 08CBD 01	QU,TO,KJ	107.2	-62		8.1	-1.1				
32S 43W 28BBC 01	QU,TO,KJ	71.0			0.5					
33S 39W 04DBB 01	TO	111.8	-25		5.0	-0.4		270	245	-9
33S 39W 16ABB 01	QU,TO	84.8	-3	-14.8	0.9	-0.1	-0.5	262	259	-1
33S 40W 27CCC 01	QU,TO	82.0	16	-2.0	0.7	0.3	-0.1	225	241	7
33S 41W 03ADA 01	TO	167.1			0.1					
33S 42W 05DCC 01	QU,TO	74.2			-1.3					
33S 42W 21BCB 01	QU,TO	90.8	-4	-5.8	0.4	-0.1	-0.2	80	76	-5
33S 43W 08BDA 01	QU,TO,KJ									
33S 43W 09DBA 01	QU,TO,KJ	95.0			-1.0					
34S 39W 06CCA 01	QU,TO,KJ	124.5	16		-1.9	0.3		215	231	7
34S 40W 16ABB 01	QU,TO	143.9	19		0.5	0.3		225	244	8
34S 41W 26DCD 01	QU,TO	164.0	-44		0.6	-0.8		170	126	-26
34S 41W 28CBA 01	QU,TO	122.0			9.4					
34S 42W 05BDC 01	QU,KJ									
34S 42W 22CDB 01	QU,TO	81.6	10		-0.7	0.2		20	30	50
34S 43W 07BDD 01	KJ									
35S 39W 06CDD 01	QU,TO	226.7	-52		2.9	-0.9		335	283	-16
35S 40W 03BBB 02	QU,TO	184.0			-0.4					
35S 41W 16CCD 01	QU,TO	224.0	-144		0.7	-2.5				
35S 42W 02DBB 01	QU,TO	176.6			-0.4					
35S 43W 04AAC 01	QU,TO	94.8	-19		-0.4	-0.3		103	84	-18
35S 43W 13BDB 01	QU,TO	200.2	-49		-2.6	-0.9		154	105	-32

TABLE 1. SELECTED HYDROLOGIC DATA, NESS COUNTY

Well Number				Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type
							1950	1966	1991	1992	1993	1994	1995	1996	
*16S	24W	15ABB	01	TO	2500			29.7	29.8	29.5	28.2	28.3	28.0	27.9	aJ75
16S	26W	24DDA	01	TO	2587					62.2	58.4			57.5	aJ93
18S	21W	25AAB	01	QA	2085			28.8	30.0	27.8	24.2	26.0	26.4	24.9	aJ74
18S	21W	31CAA	01	QA,QU	2122			30.0	31.5	28.5	28.6	27.7	27.4	26.5	qJ71
18S	24W	36ADB	01	QA	2235			32.7	32.5	32.2	31.3	32.1	32.0	32.0	aJ74
18S	25W	33BBC	01	QA	2402			28.2	28.9	26.0	19.6	18.5	16.6	15.0	aJ74
18S	26W	06BAB	02	QA,TO	2570			7.7	7.7	7.4	6.9	7.1	7.1	6.9	aJ74
19S	23W	01CCB	01	KD	2214			90.0	89.4	88.8	87.3	87.7	87.6	87.4	aJ71
19S	23W	08CBB	01	QA,QU	2220			21.7	22.0	20.6	16.1	17.8	18.1	17.6	qJ65
20S	22W	20CCC	01	QA	2189			47.0	47.8	46.3	40.6	40.5	40.3	38.9	qJ40
20S	22W	35BCC	01	QA	2168			45.9	48.4	45.3	37.8	37.6	37.9	36.0	aJ74
20S	23W	32CDA	01	QA	2233			36.5	37.1	37.3	33.3	35.5	36.3	33.4	qJ40
20S	26W	07BDC	01	QA	2538			23.5	24.7	22.0	19.3	20.9	20.4	19.6	aJ74

TABLE 1. SELECTED HYDROLOGIC DATA, NORTON COUNTY

Well Number			Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
						1950	1966	1991	1992	1993	1994	1995	1996		1997
01S	21W	17AAA	01	QU,TO	2290			83.0	82.6	82.5	81.1	80.1	78.9	77.8	aD76
01S	23W	15AAA	01		2340			32.6	32.8	32.9	30.4	30.6	29.9	28.6	aD76
01S	24W	13BCB	01		2425			115.0	115.0	115.0	114.8	114.2	113.8	113.3	aD76
01S	25W	25BBB	01		2405			43.4	43.4	43.1	41.3	40.7	40.3	39.3	aD85
02S	21W	33CCC	01	TO	2300			93.6	93.8	93.5	92.3	91.8	90.4	89.8	aD76
02S	23W	22AAA	01	TO	2378			75.2	75.3	74.7	72.9	72.9	72.4	71.4	aD76
02S	25W	14AAA	01	TO	2530			141.1	140.9	141.1	140.4	140.3	139.8	138.7	aD76
*04S	23W	03DDD	01	TO	2370			89.1	89.0	88.2	88.0	87.4	86.5	85.6	aD76
*04S	23W	26CCC	01	TO	2320			45.9	46.2	45.7	44.6	44.3	43.5	43.0	aD76
*04S	25W	13CCC	01	TO	2515			118.3	118.2	117.9	116.6	115.5	113.6	112.3	aD76
*05S	21W	10AAA	01	QA	1996			9.8	10.6		5.4	6.5	7.3	7.7	qD82
*05S	22W	18CCD	01	QA	2130			12.4	12.6		7.3	8.3	8.7	7.7	uJ82
05S	24W	14BDC	01	QU	2250			13.8						12.0	uU91

TABLE 1. SELECTED HYDROLOGIC DATA, OSBORNE COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1950	1966	1991	1992	1993	1994	1995	1996	1997	
*06S 12W 23CDC 01	QU	1506			23.0	23.4	24.6		18.5	13.2	13.5	15.0	qD45
*07S 12W 28ABA 01	QU	1531				33.5			26.9	28.7	28.8	29.3	qD46
*07S 15W 10CCC 01	QA	1648			17.2	17.1			12.2	16.0	15.8	16.3	qD64

TABLE 1. SELECTED HYDROLOGIC DATA, PAWNEE COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
				1944	1974	1991	1992	1993	1994	1995	1996		1997
21S 15W 11CBB 01	QA	1932		3	4.9	10.4	11.6	10.6	9.3	10.9	10.7	7.8	aJ73
21S 15W 17CCC 01	QU	1961				16.6	18.8	17.7	12.9	15.6	16.5	14.7	aJ88
21S 15W 31BAD 01	QU	1972		8	10.3	16.3	22.6	21.3	17.2	19.4	19.5	17.5	aJ73
21S 16W 14ADC 01	QA,QU	1970		5		14.8	18.7	18.2	12.3	12.5	16.0	14.6	aJ85
21S 18W 32DAA 01	QA	2056		19	16.5	31.0	35.1	32.8	26.1	28.8	28.8	24.4	qJ63

TABLE 2. DERIVED HYDROLOGIC DATA, NESS COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	1950-97
*16S 24W 15ABB 01	TO	27.9			0.1					
16S 26W 24DDA 01	TO	57.5								
18S 21W 25AAB 01	QA	24.9			1.5					
18S 21W 31CAA 01	QA,QU	26.5			0.9					
18S 24W 36ADB 01	QA	32.0			0.0					
18S 25W 33BBC 01	QA	15.0			1.6					
18S 26W 06BAB 02	QA,TO	6.9			0.2					
19S 23W 01CCB 01	KD	87.4			0.2					
19S 23W 08CBB 01	QA,QU	17.6			0.5					
20S 22W 20CCC 01	QA	38.9			1.4					
20S 22W 35BCC 01	QA	36.0			1.9					
20S 23W 32CDA 01	QA	33.4			2.9					
20S 26W 07BDC 01	QA	19.6			0.8					

TABLE 2. DERIVED HYDROLOGIC DATA, NORTON COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	1950-97
01S 21W 17AAA 01	TO	77.8			1.1					
01S 23W 15AAA 01	QU,TO	28.6			1.3					
01S 24W 13BCB 01	TO	113.3			0.5					
01S 25W 25BBB 01	TO	39.3			1.0					
02S 21W 33CCC 01	TO	89.8			0.6					
02S 23W 22AAA 01	TO	71.4			1.0					
02S 25W 14AAA 01	TO	138.7			1.1					
*04S 23W 03DDD 01	TO	85.6			0.9					
*04S 23W 26CCC 01	TO	43.0			0.5					
*04S 25W 13CCC 01	TO	112.3			1.3					
*05S 21W 10AAA 01	QA	7.7			-0.4					
*05S 22W 18CCD 01	QA	7.7			1.0					
05S 24W 14BDC 01	QU	12.0								

TABLE 2. DERIVED HYDROLOGIC DATA, OSBORNE COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	1950-97
*06S 12W 23CDC 01	QU	15.0		8.0	-1.5		0.3			
*07S 12W 28ABA 01	QU	29.3			-0.5					
*07S 15W 10CCC 01	QA	16.3		0.9	-0.5		0.0			

TABLE 2. DERIVED HYDROLOGIC DATA, PAWNEE COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1944-97	1974-97	1996-97	1944-97	1974-97	1944	1997	1944-97
21S 15W 11CBB 01	QA	7.8	-5	-2.9	2.9	-0.1	-0.1			
21S 15W 17CCC 01	QU	14.7			1.8					
21S 15W 31BAD 01	QU	17.5	-10	-7.2	2.0	-0.2	-0.3			
21S 16W 14ADC 01	QA,QU	14.6	-10		1.4	-0.2				
21S 18W 32DAA 01	QA	24.4	-5	-7.9	4.4	-0.1	-0.3			

TABLE 1. SELECTED HYDROLOGIC DATA, PAWNEE COUNTY (cont'd)

Well Number			Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type
						1944	1974	1991	1992	1993	1994	1995	1996	
21S 19W 27CCC 01	QA,QU	2077		23		47.3	49.9	48.3	44.5	44.8	44.6	42.3	aJ44	
21S 19W 30BCC 01	QA,QU	2087		29	33.3	50.3	53.2	50.3	45.8	46.0	45.8	44.3	qJ65	
21S 20W 29BBB 01	QA,QU	2104		24	34.8	48.6	51.6	48.1	41.9	43.5	43.5	40.9	qJ65	
*22S 15W 03AAA 01	QU	1970	207	18	15.5	29.1	32.7	33.4	31.1	31.5	32.2	32.4	aJ73	
22S 15W 03AAA 02	QU	1970	207		18.7	33.6	35.1	35.5	31.7	33.2	34.0	34.0	qJ73	
22S 15W 13DCA 01	QU	1976	171	29	17.5	41.5	42.9	43.2	39.7	41.5	42.2	42.0	aJ69	
22S 15W 33DDD 01	QU	2003	128	28		38.1	39.5	39.9	37.3	39.1	39.6	39.9	aJ85	
*22S 16W 03CBC 02	QA	1996		8	9.4	16.8	18.3	16.6	14.0	15.7	15.5	13.3	aJ73	
*22S 16W 06BBA 01	QA	2010		8	14.6	18.4	20.0	17.8	15.4	18.0	17.7	15.1	qJ61	
22S 16W 23AAA 01	QU	2011	106	24	21.8	39.7	40.1	40.9	39.3	39.6	39.9	39.9	qJ70	
*22S 16W 32CDD 01	QU	2047				35.3	37.6	37.5	34.8	36.7	37.9	38.2	aJ85	
22S 17W 05BBC 02	QA,QU	2036		15		27.6	28.6		21.4	23.3	24.0	19.5	aJ81	
22S 17W 18AAD 01	QU	2047		27		38.5	40.8	39.8	29.6	36.4	36.2	32.7	qJ64	
*22S 17W 24CBC 01	QA	2034		12	5.6	12.0	15.5	14.4	11.0	14.8	11.4	9.3	aJ71	
*22S 17W 27BAB 01	QA,QU	2037				7.7	9.5	8.2	6.4	8.4	7.9	5.5	aJ88	
22S 19W 07AAA 01	KD	2102				64.2	66.8	63.8	56.7	58.3	63.7	55.9	qJ77	
22S 19W 10BBA 01	KD	2087				59.2	66.3	57.7	52.3	57.5	57.4	50.3	qJ78	
23S 15W 12DDB 01	QU	1974	145			32.8	34.2	33.3	28.7	31.5	30.0	30.8	aJ86	
23S 16W 11CDC 01	QU	2038				27.1	27.7	28.3	27.4	28.3	28.6	27.8	aJ88	
*23S 16W 35CCD 02	QU	2060				32.8	34.2	33.3	29.8	33.3	32.0	28.8	qJ81	
*23S 17W 07DBB 01	QU	2070					8.3	7.0	6.5	7.6	7.0	5.3	aJ87	
23S 17W 25AAC 01	QU	2075				25.3	26.5	25.8	24.5			26.0	aJ91	
*23S 17W 33CCA 02	QU	2109				30.5	33.0	33.1	31.9	33.3	33.2	33.3	aJ90	
*23S 18W 28DAD 01	QU	2102	51	5	6.3	9.6	9.4	8.5	8.1	8.7	8.7	7.8	qJ73	
*23S 18W 36DAC 01	QU	2116	96	21	8.2	27.3	28.5	28.7	27.7	29.0	28.7	29.2	aJ61	

TABLE 1. SELECTED HYDROLOGIC DATA, PHILLIPS COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1950	1966	1991	1992	1993	1994	1995	1996	1997	
*04S 18W 27DDD 01	QA	1770							8.8	9.0	10.1	9.9	uU93
*04S 19W 35DDD 01	QA	1851				23.4	25.2		12.2	14.5	23.3	11.5	qD82

TABLE 1. SELECTED HYDROLOGIC DATA, POTTAWATOMIE COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
				1950	1966	1991	1992	1993	1994	1995	1996		1997
09S 11E 19CDB 01	QU	975				33.4		32.8				31.4	qD74
09S 11E 31DCC 01	QA	962			15.3	16.9		15.6				5.2	qD59
09S 11E 32ADC 01	QA	968				23.4		23.9				22.8	qD77
10S 10E 10DBC 01	QA	973			20.6	22.3		19.3				18.3	qD66
10S 11E 04ACB 01	QU	968				29.0		26.5				26.1	qD67
10S 12E 07BBC 01	QA	944				17.5		16.3				15.1	qD74

TABLE 2. DERIVED HYDROLOGIC DATA, PAWNEE COUNTY (cont'd)

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1944-97	1974-97	1996-97	1944-97	1974-97	1944	1997	
21S 19W 27CCC 01	QA,QU	42.3	-19		2.3	-0.4				
21S 19W 30BCC 01	QA,QU	44.3	-15	-11.0	1.5	-0.3	-0.5			
21S 20W 29BBB 01	QA,QU	40.9	-17	-6.1	2.6	-0.3	-0.3			
*22S 15W 03AAA 01	QU	32.4	-14	-16.9	-0.2	-0.3	-0.7	189	175	-7
22S 15W 03AAA 02	QU	34.0		-15.3	0.0		-0.7		173	
22S 15W 13DCA 01	QU	42.0	-13	-24.5	0.2	-0.2	-1.1	142	129	-9
22S 15W 33DDD 01	QU	39.9	-12		-0.3	-0.2		100	88	-12
*22S 16W 03CBC 02	QA	13.3	-5	-3.9	2.2	-0.1	-0.2			
*22S 16W 06BBA 01	QA	15.1	-7	-0.5	2.6	-0.1	0.0			
22S 16W 23AAA 01	QU	39.9	-16	-18.1	0.0	-0.3	-0.8	82	66	-20
*22S 16W 32CDD 01	QU	38.2			-0.3					
22S 17W 05BBC 02	QA,QU	19.5	-5		4.5	-0.1				
22S 17W 18AAD 01	QU	32.7	-6		3.5	-0.1				
*22S 17W 24CBC 01	QA	9.3	3	-3.7	2.1	0.1	-0.2			
*22S 17W 27BAB 01	QA,QU	5.5			2.4					
22S 19W 07AAA 01	KD	55.9			7.8					
22S 19W 10BBA 01	KD	50.3			7.1					
23S 15W 12DDB 01	QU	30.8			-0.8				114	
23S 16W 11CDC 01	QU	27.8			0.8					
*23S 16W 35CCD 02	QU	28.8			3.2					
*23S 17W 07DBB 01	QU	5.3			1.7					
23S 17W 25AAC 01	QU	26.0								
*23S 17W 33CCA 02	QU	33.3			-0.1					
*23S 18W 28DAD 01	QU	7.8	-3	-1.5	0.9	-0.1	-0.1	46	43	-7
*23S 18W 36DAC 01	QU	29.2	-8	-21.0	-0.5	-0.2	-0.9	75	67	-11

TABLE 2. DERIVED HYDROLOGIC DATA, PHILLIPS COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
*04S 18W 27DDD 01	QA	9.9			0.2					
*04S 19W 35DDD 01	QA	11.5			11.8					

TABLE 2. DERIVED HYDROLOGIC DATA, POTTAWATOMIE COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
09S 11E 19CDB 01	QU	31.4								
09S 11E 31DCC 01	QA	5.2		10.1			0.3			
09S 11E 32ADC 01	QA	22.8								
10S 10E 10DBC 01	QA	18.3		2.3			0.1			
10S 11E 04ACB 01	QU	26.1								
10S 12E 07BBC 01	QA	15.1								

TABLE 1. SELECTED HYDROLOGIC DATA, PRATT COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1944	1974	1991	1992	1993	1994	1995	1996	1997	
26S 11W 01DDB 01	QU	1801	171	23	23.5	23.3	24.9	24.1	21.6	24.4	24.3	24.9	aJ73
26S 11W 27AAC 01	QU	1808	143	23	23.1	24.0	24.4	24.2	20.8	24.7	25.2	23.4	aJ64
26S 11W 29BCB 01	QU	1830	183	19	16.0	14.5	15.7	16.2	12.6	16.8	15.6	15.4	aJ64
26S 12W 02ABA 01	QU	1880				32.5	34.0	34.7	34.6	34.0	34.1	35.0	aJ89
26S 12W 17CCA 01	QU	1906	196	37	34.1	32.7	34.0	34.6	36.2	35.1	34.8	35.3	aJ64
26S 12W 34CDC 01	QU	1884	207	46	43.2	34.5	44.3	45.0	42.0	45.2	44.3	43.6	aJ64
26S 12W 34CDC 02	QU	1884	207	46	41.0	42.3	43.5	44.2	40.8	44.4	43.5	42.5	aJ64
26S 13W 16DAA 01	QU	1929	174	20	15.6	23.1	24.6	24.1	21.3	25.7	26.8	24.1	aJ67
26S 13W 19BBD 01	QU	1953	193	18	14.4	25.2	26.3	24.8	23.5	27.1	27.1	26.4	aJ63
26S 13W 34BCB 01	QU	1950	230	44	46.7	49.5	50.5	50.9	49.0	51.2	52.1	51.5	qJ59
26S 14W 17DBC 01	QU	2010							26.7	32.0	31.6	30.8	uJ93
26S 15W 01AAB 01	QU	2020				25.2	26.8	22.9	20.3	24.9	24.0	21.1	aJ86
26S 15W 17BBC 01	QU	2050				23.4	24.4	21.9	22.4	21.7	21.7	18.9	aJ88
27S 11W 12CBC 01	QU	1783	99	51	46.3	49.0	49.7	49.6	45.5	47.5	48.0	48.8	aJ74
27S 11W 31DAA 01	QA	1726	126	8	2.7	5.9	6.1	4.9	5.1	6.1	5.0	4.9	aJ64
27S 12W 12DAA 01	QU	1838				56.9	58.5	57.6	54.8	56.8	56.7	57.2	qJ80
27S 12W 33CBA 01	QU	1777	152	3	1.2	3.6	3.5	3.3	3.2	3.9	3.7	3.1	aJ64
27S 13W 13DDC 01	QU	1897	145	72	57.0	58.1	58.7	59.1	58.3	58.7	58.5	58.7	aJ64
27S 14W 03DAC 01	QU	1995	220	35		45.6	46.3	46.4	44.7	47.8	48.0	48.3	aJ79
27S 14W 12DDD 01	QU	1983	252	53	57.7	61.4	62.4	62.1	61.9	63.2	63.8	64.0	qJ74
27S 14W 21CAB 01	QU	1998	203	39	34.2	45.4	46.3	46.6	45.5	47.0	47.1	46.8	aJ64
27S 15W 02ABC 01	QU	2036		26		35.3	35.8	34.0	33.3	34.2	36.1	34.2	aJ82
27S 15W 05CDB 01	QU	2070				31.8	32.7	32.1	28.5	31.6	32.4	31.5	aJ87
27S 15W 32CCA 01	QU	2068	193	48	45.9	57.1	55.0	55.3	59.4	54.9	56.9	54.7	aU73
27S 15W 36ADD 01	QU	2050	245	75	73.7	77.7	78.6	77.5	78.0	79.1	81.5	78.4	aJ73
28S 11W 12ACC 01	QU	1755	155	36	32.1	37.2	38.4	39.9	33.6	35.9	36.3	35.9	aJ73
28S 11W 20CAC 01	QU	1840	215	70		71.0	72.9	72.2	69.5	71.4	70.7	71.2	qJ79
28S 12W 21BAD 01	QU	1882	207	83	81.8	82.6	83.2	83.1	81.6	82.2	81.8	82.9	aJ64
28S 13W 02DDC 01	QU	1827	179	9	8.1	13.4	15.1	13.9	14.9	14.0	13.1	12.6	aJ73
28S 13W 17AAA 01	QU	1938	189	72	72.0	70.8	70.8	71.0	70.3	71.2	70.8	70.4	aJ64
28S 13W 26DCB 01	QU	1916	191	89	91.0	90.5	91.0	90.8	92.5	90.6	90.3	93.0	aJ64
28S 14W 14CCC 01	QU	1984	194	80	76.9	78.5	78.8	78.9	78.0	79.2	79.2	78.4	aJ64
28S 15W 23CCD 01	QU	2071	271	109	108.0	107.3	107.9	108.4	108.1	115.7	115.4	118.9	aJ73
29S 11W 06AAA 01	QU	1828	173	50		45.9	48.1	47.7	44.5	47.2	46.3	45.4	aJ84
29S 11W 09ADD 01	QU	1830	170	55	48.9	56.4	58.8	58.3	58.6	57.8	56.0	53.8	aJ64
29S 11W 29AAD 01	QU	1849	199	63	57.4	64.8	64.5	65.3	63.5	64.8	63.5	58.5	aJ73
29S 12W 20CCD 01	QU	1907	232	95	98.4	98.6	98.8	99.2	98.8	98.9	98.5	98.1	qJ66
29S 13W 12ABB 01	QU	1906	196	76		70.5	71.4	71.3	70.8	70.9	71.3	71.1	aJ84
29S 13W 31CAA 01	QU	1893	154	31	30.6	31.1	31.5	31.7	32.3	31.1	30.0	28.4	aJ64
29S 14W 12ABB 01	QU	1988	233	108		99.1	99.3	99.8	99.1		99.6	98.5	aJ84
29S 14W 17DBD 01	QU	2012	222	102		97.7	98.1	97.9	102.6	98.3	98.4	97.7	aJ79
29S 15W 02CCA 01	QU	2035	215	78	85.2	102.3	106.5	100.2	102.8	98.6	105.4		aJ73
29S 15W 18ADA 01	QU	2050	175	78	86.0	91.6	90.4	94.3	93.1	94.3	103.8	85.6	aJ73
29S 15W 25AAB 02	QU	1952	117			34.4	34.7	34.6	34.3	34.8	34.3	33.4	aJ86

TABLE 1. SELECTED HYDROLOGIC DATA, RAWLINS COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1950	1966	1991	1992	1993	1994	1995	1996	1997	
*01S 33W 29CCC 01	TO	2992	144	115	115.6	112.3	112.6	112.1	114.7	114.2	115.4	111.4	aJ60
*02S 31W 03CAD 01	QA	2665	42	15	14.7	18.7	19.3	17.1	14.9	15.2	16.2	12.4	aJ65
*02S 32W 20DCD 01	QA	2735	32	5	8.3	13.0	14.2	13.4	8.7	9.9	10.0	6.9	aJ65
*02S 33W 26DCC 01	QA	2798	46	13	19.8	24.2	25.3	22.2	18.6	19.5	20.1	16.4	aJ65
*02S 35W 13ABB 01	TO	3178	208	174	170.3	168.2		167.9	167.9	151.7	150.5	152.2	aJ52

TABLE 2. DERIVED HYDROLOGIC DATA, PRATT COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1944-97	1974-97	1996-97	1944-97	1974-97	1944	1997	
26S 11W 01DDB 01	QU	24.9	-2	-1.4	-0.6	0.0	-0.1	148	146	-1
26S 11W 27AAC 01	QU	23.4	0	-0.3	1.8	0.0	0.0	120	120	0
26S 11W 29BCB 01	QU	15.4	4	0.6	0.2	0.1	0.0	164	168	2
26S 12W 02ABA 01	QU	35.0			-0.9					
26S 12W 17CCA 01	QU	35.3	2	-1.2	-0.5	0.0	-0.1	159	161	1
26S 12W 34CDC 01	QU	43.6	2	-0.4	0.7	0.0	0.0	161	163	1
26S 12W 34CDC 02	QU	42.5	4	-1.5	1.0	0.1	-0.1	161	165	2
26S 13W 16DAA 01	QU	24.1	-4	-8.5	2.7	-0.1	-0.4	154	150	-3
26S 13W 19BBD 01	QU	26.4	-8	-12.0	0.7	-0.2	-0.5	175	167	-5
26S 13W 34BCB 01	QU	51.5	-8	-4.8	0.6	-0.2	-0.2	186	179	-4
26S 14W 17DBC 01	QU	30.8			0.8					
26S 15W 01AAB 01	QU	21.1			2.9					
26S 15W 17BBC 01	QU	18.9			2.8					
27S 11W 12CBC 01	QU	48.8	2	-2.5	-0.8	0.0	-0.1	48	50	4
27S 11W 31DAA 01	QA	4.9	3	-2.2	0.1	0.1	-0.1	118	121	3
27S 12W 12DAA 01	QU	57.2			-0.5					
27S 12W 33CBA 01	QU	3.1	0	-1.9	0.6	0.0	-0.1	149	149	0
27S 13W 13DDC 01	QU	58.7	13	-1.7	-0.2	0.2	-0.1	73	86	18
27S 14W 03DAC 01	QU	48.3	-13		-0.3	-0.2		185	172	-7
27S 14W 12DDD 01	QU	64.0	-11	-6.3	-0.2	-0.2	-0.3	199	188	-6
27S 14W 21CAB 01	QU	46.8	-8	-12.6	0.3	-0.2	-0.5	164	156	-5
27S 15W 02ABC 01	QU	34.2	-8		1.9	-0.2				
27S 15W 05CDB 01	QU	31.5			0.9					
27S 15W 32CCA 01	QU	54.7	-7	-8.8	2.2	-0.1	-0.4	145	138	-5
27S 15W 36ADD 01	QU	78.4	-3	-4.7	3.1	-0.1	-0.2	170	167	-2
28S 11W 12ACC 01	QU	35.9	0	-3.8	0.4	0.0	-0.2	119	119	0
28S 11W 20CAC 01	QU	71.2	-1		-0.5	0.0		145	144	-1
28S 12W 21BAD 01	QU	82.9	0	-1.1	-1.1	0.0	0.0	124	124	0
28S 13W 02DDC 01	QU	12.6	-4	-4.5	0.5	-0.1	-0.2	170	166	-2
28S 13W 17AAA 01	QU	70.4	2	1.6	0.4	0.0	0.1	117	119	2
28S 13W 26DCB 01	QU	93.0	-4	-2.0	-2.7	-0.1	-0.1	102	98	-4
28S 14W 14CCC 01	QU	78.4	2	-1.5	0.8	0.0	-0.1	114	116	2
28S 15W 23CCD 01	QU	118.9	-10	-10.9	-3.5	-0.2	-0.5	162	152	-6
29S 11W 06AAA 01	QU	45.4	5		0.9	0.1		123	128	4
29S 11W 09ADD 01	QU	53.8	1	-4.9	2.2	0.0	-0.2	115	116	1
29S 11W 29AAD 01	QU	58.5	5	-1.1	5.0	0.1	0.0	136	141	4
29S 12W 20CCD 01	QU	98.1	-3	0.3	0.4	-0.1	0.0	137	134	-2
29S 13W 12ABB 01	QU	71.1	5		0.2	0.1		120	125	4
29S 13W 31CAA 01	QU	28.4	3	2.2	1.6	0.1	0.1	123	126	2
29S 14W 12ABB 01	QU	98.5	10		1.1	0.2		125	135	8
29S 14W 17DBD 01	QU	97.7	4		0.7	0.1		120	124	3
29S 15W 02CCA 01	QU									
29S 15W 18ADA 01	QU	85.6	-8	0.4	18.2	-0.2	0.0	97	89	-8
29S 15W 25AAB 02	QU	33.4			0.9				84	

TABLE 2. DERIVED HYDROLOGIC DATA, RAWLINS COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
*01S 33W 29CCC 01	TO	111.4	4	4.2	4.0	0.1	0.1	29	33	14
*02S 31W 03CAD 01	QA	12.4	3	2.3	3.8	0.1	0.1	27	30	11
*02S 32W 20DCD 01	QA	6.9	-2	1.4	3.1	0.0	0.0	27	25	-7
*02S 33W 26DCC 01	QA	16.4	-3	3.4	3.7	-0.1	0.1	33	30	-9
*02S 35W 13ABB 01	TO	152.2	22	18.1	-1.7	0.5	0.6	34	56	65

TABLE 1. SELECTED HYDROLOGIC DATA, RAWLINS COUNTY (cont'd)

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1950	1966	1991	1992	1993	1994	1995	1996	1997	
*02S 35W 34CAA 01	QA,TO	3064	112	29	29.6		31.7	30.5	31.7	31.7	32.5	31.9	aJ52
*02S 36W 13DDD 01	TO	3286	260	186	190.1	187.6	189.3	185.9	187.0	186.4	186.3	186.1	aJ64
*02S 36W 36BAA 01	TO	3263	280	160	169.8	173.7	168.9	173.4	173.1	172.7	174.6	175.8	aJ65
*03S 31W 07CBD 01	TO	2960	200	142	146.3	144.8		144.7	144.5	143.5	146.4	149.8	aJ59
*03S 33W 03DCC 01	QA	2823	62	22	20.6	26.8	27.0	25.3	23.4	23.6	24.3	20.3	aJ59
*03S 33W 08CDC 01	QA	2855	52	20	16.1	21.7	21.3	18.3	15.5	17.3	17.9	14.4	aJ64
*03S 34W 03ABB 01	QA	2882	40	12	13.8		14.3	12.2	10.7	12.8	13.0	10.6	aJ64
*03S 34W 26BAC 01	QA	2900	40	7	8.4	11.7	9.7	9.5	7.9	9.7	10.0	7.4	aJ64
*03S 35W 24CBB 01	QA	3001	50	21	24.7	27.1	26.3	26.0	25.4	25.9	26.2	25.1	aJ65
*03S 36W 14CBB 01	TO	3332	309	188	191.2	220.0	220.1		199.5	199.8	204.7	200.4	aJ65
*03S 36W 17CCC 01	TO	3375	300	196	195.3	212.5	211.8	210.5	199.1	212.1	214.3	212.8	aJ62
*03S 36W 21DBC 01	TO	3345				203.3	220.2	198.6	209.9	199.3	216.8	216.4	aJ87
*04S 31W 16ABD 01	QA	2761	50	7	7.9	11.8	12.5	11.7	7.4	9.6	8.6	7.5	aJ65
*04S 33W 10ABC 01	TO	3086				143.2	143.1	142.0	141.7	141.7	145.5	150.0	aJ85
04S 33W 18DDA 01	TO	3068	153	88	87.6	85.3	85.3	85.3	83.9	83.5			aJ52
04S 33W 28DCA 01	TO	3125	237	152	151.2	149.5	152.2	152.8	148.6	148.1			aJ64
*04S 34W 33CBC 01	TO	3160	210	115	117.2	119.9	119.1	117.3	116.9	116.8	116.6	116.6	aJ64
04S 35W 06DCD 01	TO	3252	260	157	157.8	160.0	160.1	161.9	159.4	161.0			aJ52
04S 35W 29DDD 01	TO	3219	224	150	150.1	149.7	149.6	149.6	149.5	149.5		151.3	aJ52
*04S 36W 23CBB 01	TO	3351				216.0	214.4	212.6	214.0	212.6	215.2	219.9	aJ67
*04S 36W 23DCA 01	TO	3339				214.2	212.2	211.8	212.5	211.7	213.0	213.1	aJ85
*05S 31W 10DDA 01	TO	2820	70	30	40.1	43.7		43.7	38.5	39.9	41.1	48.0	aJ64
*05S 31W 20CCA 01	TO	2865	68	22	29.7	33.4	33.5	33.0	29.7	38.3	38.4	30.3	aJ65
*05S 32W 14CDD 01	TO	3020	180	130	130.8	129.6	129.7	129.6	129.4	129.4	128.8	128.8	aJ64
*05S 33W 29BDA 01	TO	3042	115	12	17.0	20.3	20.3	19.1	17.5	15.7	17.9	17.6	aJ64
*05S 34W 01BBB 01	TO	3137	237	116	114.3		113.7	113.7	115.9	117.2	114.8	113.4	aJ52
*05S 34W 28ADC 01	TO	3207	247	127	134.1	133.3		133.1	133.1	133.9	142.1	152.6	aJ65
05S 35W 30CBC 01	TO	3336				172.6	172.4	171.4	172.2	172.9	173.4		aJ85
05S 36W 21BCD 01	QA,TO	3220	155	17	15.5	18.6	22.5	17.6	18.0	21.8			aJ64

TABLE 1. SELECTED HYDROLOGIC DATA, RENO COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
				1944	1974	1991	1992	1993	1994	1995	1996		1997
22S 04W 12CDA 01	QU	1449				43.1	47.4	37.5	28.4	38.4	36.4	37.2	aJ70
22S 04W 32BBC 01	QU	1510				18.0	19.6	12.8	9.9	17.4	14.8	16.0	aJ71
22S 06W 18BCB 01	QA	1577				10.0	10.9	8.8	7.5	10.7	9.3	9.0	aJ84
22S 06W 28CCB 01	QA	1555				9.7	11.2	10.2	8.3	9.5	9.0	9.0	qJ82
22S 07W 17DCB 01	QU	1596			2.0		6.1	4.9	3.7	6.1	5.2	4.5	aJ73
22S 08W 09DBB 01	QU	1670	35			31.3	33.8	33.0	28.0	31.9	31.0	31.2	aJ73
22S 08W 23DAD 01	QU	1651			29.3	26.4	29.8	30.4	25.9	29.1	28.0	29.9	aJ73
22S 08W 33CCD 02	QU	1660				8.0	10.3	8.3	6.2	9.4	8.3	8.5	aJ89
22S 09W 03BBB 01	QU	1712	20		29.1	32.6	36.1	33.8	25.8	33.4	31.5	32.2	aJ73
22S 09W 17BAB 01	QU	1732	10		9.8	18.2	19.7	18.3	10.7	18.9	16.8	16.3	aJ73
22S 09W 25BBA 01	QU	1705			18.9	21.4	23.3	22.2	18.4	21.1	20.3	19.8	aJ73
22S 10W 02DCC 01	QU	1736	12		1.6	10.5	14.1	10.0	3.8	10.1	8.1	6.6	aJ73
22S 10W 08BBB 01	QU	1764	6		5.9	15.4	18.3	17.3	9.6	15.3	13.2	12.0	aJ74
22S 10W 30DAA 01	QU	1775	10		3.9	13.3	16.2	12.7	7.5	10.9	8.1	7.9	aJ74
23S 04W 03BAB 02	QU	1470				7.9	7.8	3.3	4.3		5.9	4.8	aJ70
23S 04W 16BBB 01	QU	1570				24.4	26.1	20.1	16.0	22.8	20.5	20.8	aJ70
23S 04W 30BAA 01	QU	1491				9.9	10.0	8.2	6.5	9.7	8.3	8.1	aJ71
23S 05W 05DDC 01	QA	1529				19.6	20.3	19.5	15.4	17.9	16.8	18.6	aJ88
23S 06W 31DCB 01	QU	1577	27		32.4	30.1	30.8	31.0	29.9	30.5	30.1	30.6	qJ71
23S 07W 09DDD 01	QA	1600							6.0			8.0	aU94

TABLE 2. DERIVED HYDROLOGIC DATA, RAWLINS COUNTY (cont'd)

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
*02S 35W 34CAA 01	QA, TO	31.9	-3	-2.3	0.6	-0.1	-0.1	83	80	-4
*02S 36W 13DDD 01	TO	186.1	0	4.0	0.2	0.0	0.1	74	74	0
*02S 36W 36BAA 01	TO	175.8	-16	-6.0	-1.2	-0.3	-0.2	120	104	-13
*03S 31W 07CBD 01	TO	149.8	-8	-3.5	-3.4	-0.2	-0.1	58	50	-14
*03S 33W 03DCC 01	QA	20.3	2	0.3	4.0	0.0	0.0	40	42	5
*03S 33W 08CDC 01	QA	14.4	6	1.7	3.5	0.1	0.1	32	38	19
*03S 34W 03ABB 01	QA	10.6	1	3.2	2.4	0.0	0.1	28	29	4
*03S 34W 26BAC 01	QA	7.4	0	1.0	2.6	0.0	0.0	33	33	0
*03S 35W 24CBB 01	QA	25.1	-4	-0.4	1.1	-0.1	0.0	29	25	-14
*03S 36W 14CBB 01	TO	200.4	-12	-9.2	4.3	-0.3	-0.3	121	109	-10
*03S 36W 17CCC 01	TO	212.8	-17	-17.5	1.5	-0.4	-0.6	104	87	-16
*03S 36W 21DBC 01	TO	216.4			0.4					
*04S 31W 16ABD 01	QA	7.5	-1	0.4	1.1	0.0	0.0	43	43	0
*04S 33W 10ABC 01	TO	150.0			-4.5					
04S 33W 18DDA 01	TO									
04S 33W 28DCA 01	TO									
*04S 34W 33CBC 01	TO	116.6	-2	0.6	0.0	0.0	0.0	95	93	-2
04S 35W 06DCD 01	TO									
04S 35W 29DDD 01	TO	151.3	-1	-1.2		0.0	0.0	74	73	-1
*04S 36W 23CBB 01	TO	219.9			-4.7					
*04S 36W 23DCA 01	TO	213.1			-0.1					
*05S 31W 10DDA 01	TO	48.0	-18	-7.9	-6.9	-0.4	-0.3	40	22	-45
*05S 31W 20CCA 01	TO	30.3	-8	-0.6	8.1	-0.2	0.0	46	38	-17
*05S 32W 14CDD 01	TO	128.8	1	2.0	0.0	0.0	0.1	50	51	2
*05S 33W 29BDA 01	TO	17.6	-6	-0.6	0.3	-0.1	0.0	103	97	-6
*05S 34W 01BBB 01	TO	113.4	3	0.9	1.4	0.1	0.0	121	124	2
*05S 34W 28ADC 01	TO	152.6	-26	-18.5	-10.5	-0.6	-0.6	120	94	-22
05S 35W 30CBC 01	TO									
05S 36W 21BCD 01	QA, TO									

TABLE 2. DERIVED HYDROLOGIC DATA, RENO COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1944-97	1974-97	1996-97	1944-97	1974-97	1944	1997	
22S 04W 12CDA 01	QU	37.2			-0.8					
22S 04W 32BBC 01	QU	16.0			-1.2					
22S 06W 18BCB 01	QA	9.0			0.3					
22S 06W 28CCB 01	QA	9.0			0.0					
22S 07W 17DCB 01	QU	4.5		-2.5	0.7		-0.1			
22S 08W 09DBB 01	QU	31.2	4		-0.2	0.1				
22S 08W 23DAD 01	QU	29.9		-0.6	-1.9		0.0			
22S 08W 33CCD 02	QU	8.5			-0.2					
22S 09W 03BBD 01	QU	32.2	-12	-3.1	-0.7	-0.2	-0.1			
22S 09W 17BAB 01	QU	16.3	-6	-6.5	0.5	-0.1	-0.3			
22S 09W 25BBA 01	QU	19.8		-0.9	0.5		0.0			
22S 10W 02DCC 01	QU	6.6	5	-5.0	1.5	0.1	-0.2			
22S 10W 08BBB 01	QU	12.0	-6	-6.1	1.2	-0.1	-0.3			
22S 10W 30DAA 01	QU	7.9	2	-4.0	0.2	0.0	-0.2			
23S 04W 03BAB 02	QU	4.8			1.1					
23S 04W 16BBB 01	QU	20.8			-0.3					
23S 04W 30BAA 01	QU	8.1			0.2					
23S 05W 05DDC 01	QA	18.6			-1.8					
23S 06W 31DCB 01	QU	30.6	-4	1.8	-0.5	-0.1	0.1			
23S 07W 09DDD 01	QA	8.0								

TABLE 1. SELECTED HYDROLOGIC DATA, RENO COUNTY (cont'd)

Well Number				Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type
							1944	1974	1991	1992	1993	1994	1995	1996	
23S 07W 13DDD 01	QU	1604			49	52.8	52.4	53.0	53.2	50.4	52.6	52.6	52.4	aJ73	
23S 08W 18AAD 01	QU	1675			15	10.5	13.0	14.2	15.1	13.1	13.3	11.8	12.4	aJ73	
23S 09W 05CBD 01	QU	1740			9	12.0	18.0	21.6	18.4	12.8	18.1	16.0	14.9	aJ69	
23S 09W 21DDB 01	QU	1732			7	3.2	12.9	17.0	10.0	7.5	13.5	10.8	10.3	aJ57	
23S 09W 35CCC 01	QU	1718		110	10	13.6	18.1	18.8	19.0	16.9	24.0	20.1	20.4	qJ74	
23S 10W 01AAA 03	QU	1740								8.0	12.6	10.6	8.9	aJ94	
23S 10W 25CAC 01	QU	1752			18	4.5	14.3		12.9	6.4	12.5	10.4	10.6	aJ59	
23S 10W 29DCA 01	QU	1783					19.0	21.5	18.7	10.0	16.4	14.3	14.8	aJ88	
24S 04W 05CDB 01	QU	1480					10.4	10.4	7.8	7.5	10.4	9.1	8.2	aJ71	
24S 04W 25BBD 01	QU	1448					6.7	6.9	5.1	4.9	6.4	5.3	4.1	aJ81	
24S 04W 31DAB 02	QA	1487								23.2	27.8	25.6	25.4	aJ94	
24S 05W 10CCA 01	QU	1509					21.2	21.4	20.9	20.0	21.4	21.0	20.3	aJ72	
24S 06W 03AAB 01	QU	1554					28.2	28.8	28.8	27.1	28.9	28.0	28.6	aJ86	
24S 06W 23CBA 01	QU	1560					10.7	10.8	7.5	8.8	12.1	10.4	10.1	aJ84	
24S 07W 08ADA 02	QU	1633					41.5	42.2	42.4	41.2	41.5	41.3	41.9	aJ85	
24S 07W 28AAA 01	QU	1588			13	14.1	11.3	12.0	11.0	9.6	11.3	10.0	10.6	aJ73	
24S 08W 04AB 01	QU	1660			13		13.0	14.9	12.8	9.1	13.2	11.3	11.6	aJ79	
24S 08W 18BAC 01	QU	1649				2.5	6.3	8.0	3.1	4.1	6.9	6.1	6.0	aJ55	
24S 08W 34DAC 01	QU	1590				6.4	6.1	6.3	5.1	4.4	5.3	4.8	5.1	aJ71	
24S 09W 19DDB 01	QU	1704			17	21.9	24.1	25.2	24.0	21.0	23.7	23.2	23.9	aJ66	
24S 10W 06DBB 01	QU	1797			17	17.9	24.0	26.5	24.6	16.1	21.1	20.5	21.3	aJ73	
24S 10W 17DDC 01	QU	1755			9	11.8	17.9	19.4	17.1	13.7	16.6	16.5	16.0	aJ73	
24S 10W 31CBC 01	QA, QU	1750					10.6	11.0	9.8	9.1	10.3	10.3	10.0	aJ84	
25S 04W 02ABB 01	QU	1449					9.3	9.8	9.0	8.8	9.8	9.4	8.1	aJ81	
25S 07W 07BBD 01	QU	1602				24.3	23.2	23.6	22.8	21.5	22.6	21.8	22.5	aJ67	
25S 07W 36CCC 01	QU	1570				24.5	27.9	29.3	28.5	25.7	33.4	27.7	28.3	aJ72	
25S 08W 19ADB 01	QU	1607				7.3	9.2	10.6	7.1	7.9	9.7	9.1	7.9	aJ73	
25S 09W 01DCD 01	QU	1658			10	12.8	14.5	15.9	14.5	11.5	14.0	13.3	14.3	aJ65	
25S 09W 17BBC 01	QU	1710			7	12.6	14.6	16.3	14.4	12.6	16.4	14.9	15.7	aJ73	
25S 09W 30DDA 01	QU	1693			15	16.0	17.5	18.5	16.4	16.7	18.1	17.6	17.3	aJ54	
25S 10W 14BBB 01	QU	1748		115	25	24.9	25.7	26.9	26.6	23.6	25.9	25.9	27.3	aJ73	
25S 10W 19ABD 01	QU	1790			33	27.9	29.3	30.9	30.4	26.7	30.5	29.2	31.1	aJ73	
26S 06W 13BAB 01	QU	1475				7.2	10.9	12.1	6.9	8.6	10.6	9.0	6.8	aJ72	
26S 06W 34BBC 01	QU	1545				17.6	17.8	19.1	18.4	18.4	19.3	18.1	17.7	aJ68	
26S 07W 12DCC 01	QU	1582				30.6	31.4	33.3	33.3	30.9	32.8	32.4	32.7	aJ70	
26S 08W 06DCC 01	QU	1670					9.7	11.1	6.7	5.8	9.8	8.4	8.7	aJ87	
26S 08W 30DAA 01	QU	1679					47.4	49.0	48.6	44.6			47.5	aJ91	
26S 09W 10DDB 01	QU	1686			26	19.8	19.8	20.0	19.4	20.0	21.4	20.9	19.9	aJ53	
26S 09W 18AAA 01	QU	1668			17	8.3	8.4	9.7	7.2	7.2	9.7	9.3	8.0	aJ74	
26S 09W 31DCC 01	QU	1735					57.0	58.8	58.5	53.9	57.9	57.2	57.7	aJ84	
26S 09W 34DBD 01	QU	1685			25	25.3	27.6	30.1	28.7	25.3	28.2	27.3	28.1	aJ73	
26S 10W 18CDC 01	QU	1797			13	24.6	25.1	25.8	25.0	22.4	25.1	24.9	25.2	qJ73	
26S 10W 32BBD 01	QU	1760			5	24.5	28.2	29.4	27.6	25.1	29.6	28.1	27.7	aJ72	

TABLE 1. SELECTED HYDROLOGIC DATA, REPUBLIC COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
				1944	1974	1991	1992	1993	1994	1995	1996		1997
01S 03W 01CCA 01	QU	1610				145.2	145.2	143.7	141.6		142.7	142.5	qD72

TABLE 2. DERIVED HYDROLOGIC DATA, RENO COUNTY (cont'd)

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1944-97	1974-97	1996-97	1944-97	1974-97	1944	1997	1944-97
23S 07W 13DDD 01	QU	52.4	-3	0.4	0.2	-0.1	0.0			
23S 08W 18AAD 01	QU	12.4	3	-1.9	-0.6	0.1	-0.1			
23S 09W 05CBD 01	QU	14.9	-6	-2.9	1.1	-0.1	-0.1			
23S 09W 21DDB 01	QU	10.3	-3	-7.1	0.5	-0.1	-0.3			
23S 09W 35CCC 01	QU	20.4	-10	-6.8	-0.3	-0.2	-0.3	100	90	-10
23S 10W 01AAA 03	QU	8.9			1.7					
23S 10W 25CAC 01	QU	10.6	7	-6.1	-0.2	0.1	-0.3			
23S 10W 29DCA 01	QU	14.8			-0.5					
24S 04W 05CDB 01	QU	8.2			0.9					
24S 04W 25BBD 01	QU	4.1			1.2					
24S 04W 31DAB 02	QA	25.4			0.2					
24S 05W 10CCA 01	QU	20.3			0.7					
24S 06W 03AAB 01	QU	28.6			-0.6					
24S 06W 23CBA 01	QU	10.1			0.3					
24S 07W 08ADA 02	QU	41.9			-0.6					
24S 07W 28AAA 01	QU	10.6	2	3.5	-0.6	0.0	0.2			
24S 08W 04AB 01	QU	11.6	1		-0.3	0.0				
24S 08W 18BAC 01	QU	6.0		-3.5	0.1		-0.2			
24S 08W 34DAC 01	QU	5.1		1.3	-0.3		0.1			
24S 09W 19DDB 01	QU	23.9	-7	-2.0	-0.7	-0.1	-0.1			
24S 10W 06DBB 01	QU	21.3	-4	-3.4	-0.8	-0.1	-0.1			
24S 10W 17DDC 01	QU	16.0	-7	-4.2	0.5	-0.1	-0.2			
24S 10W 31CBC 01	QA, QU	10.0			0.3					
25S 04W 02ABB 01	QU	8.1			1.3					
25S 07W 07BBD 01	QU	22.5		1.8	-0.7		0.1			
25S 07W 36CCC 01	QU	28.3		-3.8	-0.6		-0.2			
25S 08W 19ADB 01	QU	7.9		-0.6	1.2		0.0			
25S 09W 01DCD 01	QU	14.3	-4	-1.5	-1.0	-0.1	-0.1			
25S 09W 17BBC 01	QU	15.7	-9	-3.1	-0.8	-0.2	-0.1			
25S 09W 30DDA 01	QU	17.3	-2	-1.3	0.3	0.0	-0.1			
25S 10W 14BBB 01	QU	27.3	-2	-2.4	-1.4	0.0	-0.1	90	88	-2
25S 10W 19ABD 01	QU	31.1	2	-3.2	-1.9	0.0	-0.1			
26S 06W 13BAB 01	QU	6.8		0.4	2.2		0.0			
26S 06W 34BBC 01	QU	17.7		-0.1	0.4		0.0			
26S 07W 12DCC 01	QU	32.7		-2.1	-0.3		-0.1			
26S 08W 06DCC 01	QU	8.7			-0.3					
26S 08W 30DAA 01	QU	47.5								
26S 09W 10DDB 01	QU	19.9	6	-0.1	1.0	0.1	0.0			
26S 09W 18AAA 01	QU	8.0	9	0.3	1.3	0.2	0.0			
26S 09W 31DCC 01	QU	57.7			-0.5					
26S 09W 34DBD 01	QU	28.1	-3	-2.8	-0.8	-0.1	-0.1			
26S 10W 18CDC 01	QU	25.2	-12	-0.6	-0.3	-0.2	0.0			
26S 10W 32BBD 01	QU	27.7	-23	-3.2	0.4	-0.4	-0.1			

TABLE 2. DERIVED HYDROLOGIC DATA, REPUBLIC COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1944-97	1974-97	1996-97	1944-97	1974-97	1944	1997	1944-97
01S 03W 01CCA 01	QU	142.5			0.2					

TABLE 1. SELECTED HYDROLOGIC DATA, RICE COUNTY

Well Number				Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type
							1944	1974	1991	1992	1993	1994	1995	1996	
20S	08W	22AAA	01	QA	1644	14		15.1	17.3	15.6	12.6	15.6	14.5	14.3	qJ79
20S	09W	12DDA	01	QA	1664	11	8.3	15.4	16.2	12.6	10.5	13.4	11.6	11.5	qJ60
20S	09W	28ACD	01	QA	1693				22.1	19.7	17.1	19.8	19.3	19.4	aJ88
20S	10W	27BBB	01	KD	1786	46		34.0	34.9	33.7	30.9	33.0	32.4	32.1	aJ85
20S	10W	36ACD	01	QA	1715	10		14.8	15.8	14.2	10.0	13.4	12.3	12.3	aJ77
21S	07W	04AAC	01	QA	1615	14		15.8	16.4	13.8	13.1	15.9	14.8	14.6	aJ77
21S	07W	26CBD	01	QA	1595	10		13.6	15.0	12.2	11.0	14.3	12.9	12.8	aJ77
21S	08W	09CBD	01	QA	1647	9		12.6	14.4	13.1	9.3	12.3	11.0	11.6	qJ77
21S	08W	25ABB	01	QA	1620	7		5.8	7.0	5.6	3.6	6.6	5.3	5.3	qJ77
21S	08W	32DBB	01	QA	1641	3		7.8	7.8		6.4	8.2	7.6	5.9	aJ85
21S	09W	02DDA	01	QA	1670	9		14.3	15.8	13.3	11.3	15.0	12.5	13.0	aJ77
21S	09W	15AAC	02	QA	1669			6.5	6.5	5.1	4.5	7.3		6.0	aJ85
21S	10W	16CDC	01	QU,QA	1720			5.6	7.6	5.5	5.0	7.2	6.6	5.9	aJ84

TABLE 1. SELECTED HYDROLOGIC DATA, RILEY COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
				1950	1966	1991	1992	1993	1994	1995	1996		1997
10S 09E 17BDD 01	QA	996			20.7	19.9		19.7	11.4			18.9	aM66

TABLE 1. SELECTED HYDROLOGIC DATA, ROOKS COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
				1950	1966	1991	1992	1993	1994	1995	1996		1997
07S 17W 14CDD 01	QA	1725									14.0	16.4	uU95
*07S 19W 23CDB 01	QA	1879			18.7	16.6			14.5		15.2	15.0	qD58

TABLE 1. SELECTED HYDROLOGIC DATA, RUSH COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
				1950	1966	1991	1992	1993	1994	1995	1996		1997
18S 16W 23DCC 01	QA	1930				24.7	26.5		10.0		12.4		qD86
18S 16W 23DCC 02	QA	1930				27.3	28.9		10.1		15.1		qD86
18S 17W 22AAD 01	QU	1960			25.8	35.9	37.1		18.4		25.0		qD60
18S 17W 23BCC 01	QU	1958			25.1	36.4	37.3		18.5		24.0		qD60
18S 18W 27AAC 01	QA	1993			27.6	33.7	33.4		29.7		29.3		qD65
18S 19W 20ADD 01	QA	2034				31.6	31.2		16.6		21.7		qD69
18S 20W 14CCC 01	QA	2050				22.5	24.7		17.5		20.7		qD60
18S 20W 19AAD 01	QA	2077			31.2	26.5	30.3		21.9		24.9		qD60

TABLE 1. SELECTED HYDROLOGIC DATA, SALINE COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
				1950	1966	1991	1992	1993	1994	1995	1996		1997
13S 01W 23BCB 02	QA	1172				20.4	21.1	17.7	8.0		14.3	13.5	qD82
13S 02W 33DDC 01	QA	1207				24.5	25.6	22.7	15.0		20.0	19.3	qD85

TABLE 2. DERIVED HYDROLOGIC DATA, RICE COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1944-97	1974-97	1996-97	1944-97	1974-97	1944	1997	1944-97
20S 08W 22AAA 01	QA	14.3	0		0.2	0.0				
20S 09W 12DDA 01	QA	11.5	-1	-3.2	0.1	0.0	-0.1			
20S 09W 28ACD 01	QA	19.4			-0.1					
20S 10W 27BBB 01	KD	32.1	14		0.3	0.3				
20S 10W 36ACD 01	QA	12.3	-2		0.0	0.0				
21S 07W 04AAC 01	QA	14.6	-1		0.2	0.0				
21S 07W 26CBD 01	QA	12.8	-3		0.1	-0.1				
21S 08W 09CBD 01	QA	11.6	-3		-0.6	-0.1				
21S 08W 25ABB 01	QA	5.3	2		0.0	0.0				
21S 08W 32DBB 01	QA	5.9	-3		1.7	-0.1				
21S 09W 02DDA 01	QA	13.0	-4		-0.5	-0.1				
21S 09W 15AAC 02	QA	6.0								
21S 10W 16CDC 01	QU,QA	5.9			0.7					

TABLE 2. DERIVED HYDROLOGIC DATA, RILEY COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	1950-97
10S 09E 17BDD 01	QA	18.9		1.8			0.1			

TABLE 2. DERIVED HYDROLOGIC DATA, ROOKS COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	1950-97
07S 17W 14CDD 01	QA	16.4			-2.4					
*07S 19W 23CDB 01	QA	15.0		3.7	0.2		0.1			

TABLE 2. DERIVED HYDROLOGIC DATA, RUSH COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	1950-97
18S 16W 23DCC 01	QA									
18S 16W 23DCC 02	QA									
18S 17W 22AAD 01	QU									
18S 17W 23BCC 01	QU									
18S 18W 27AAC 01	QA									
18S 19W 20ADD 01	QA									
18S 20W 14CCC 01	QA									
18S 20W 19AAD 01	QA									

TABLE 2. DERIVED HYDROLOGIC DATA, SALINE COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	1950-97
13S 01W 23BCB 02	QA	13.5			0.8					
13S 02W 33DDC 01	QA	19.3			0.7					

TABLE 1. SELECTED HYDROLOGIC DATA, SCOTT COUNTY

Well Number				Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type
							1940	1966	1991	1992	1993	1994	1995	1996	
16S 31W 17DDD	01	TO	2931	161	118			122.0	121.5	120.4	122.8	122.0	121.2	121.6	aJ51
16S 31W 31BCB	01	TO	2958	168	127	128.4		136.9	140.4	135.0	134.4	136.0	138.1	135.4	aJ51
16S 32W 16BCA	01	TO	2999					157.7	158.0	158.0	162.9	157.6	157.8	157.1	aJ88
16S 33W 19BBC	01	TO	3098										161.1	161.5	aU94
16S 33W 33BAA	01	TO	3066	194	130		154.0	154.8	154.6	155.5	156.3	156.9	157.1		aJ69
16S 34W 09CCB	01	TO	3146	181	118	133.5	160.9	161.3	161.8	161.8	162.0	162.4	162.6		aJ51
16S 34W 29CBB	01	TO	3160	181	119	134.1	170.9	174.1	170.0	168.7	169.5	173.0	169.7		aJ67
17S 31W 04DCC	01	TO	2932	170	117		134.5	127.6	126.0	125.9	128.1	128.4	128.4		aJ76
17S 31W 19CDA	01	TO	2960				127.3	129.9	129.1	130.0			133.1		aJ83
17S 31W 35CCB	01	TO	2925	147	86		99.4	100.0	98.8	99.0	100.3	100.6	99.5		aJ77
17S 32W 16BBB	01	TO	2980	231	88			140.2		135.8		145.6	146.2		aJ71
17S 32W 27BBB	01	TO	2990	180	95	107.0		150.2		151.2	154.2			155.0	aJ65
17S 33W 07BBA	01	TO	3093					154.9	153.6	152.0	150.4	151.9		152.7	aJ89
17S 33W 14ACB	01	TO	3014	214	93			146.2	147.4	145.4	145.3	147.5	149.1	145.0	aJ69
17S 34W 06BCB	01	TO	3163	194	108	118.5		152.7	154.6	153.5	152.1	154.7	157.6	154.2	aJ65
17S 34W 16ACB	01	TO	3134	194	107	112.1	135.2	136.3	136.2		140.2			126.2	aJ51
17S 34W 25DBB	01	TO	3092	189	103	114.5	141.4	143.7		140.4	142.2	143.3	146.3		aJ65
18S 31W 24BCB	01	TO	2913	110	68		73.4	72.9	71.6	69.8	68.9	68.3	67.9		aJ73
18S 31W 27ABA	01	TO	2930	105	70		69.1	67.4	65.9	64.8	67.7	69.6	68.9		aJ77
18S 32W 14BBB	01	TO	2980	175	85	98.4	120.7		123.2	115.4	117.0	117.0	116.5		aJ67
18S 32W 17ABA	02	TO	2973				119.9	122.0	121.3	120.2	120.7	122.0	121.8		aJ81
18S 33W 03CCB	01	TO	3008	182	71	83.1	122.8	124.1	124.8	123.6	125.3	128.6	126.5		aJ51
18S 33W 05CCC	01	TO	3041	119	75	84.7	102.0	102.4	102.8	103.0	103.2	103.6	103.7		qJ44
18S 33W 25BBB	01	TO	2972				115.9	116.9	117.1	116.2	116.6	118.4	118.7		uJ89
18S 34W 05CBB	01	TO	3148	168	88		119.5	118.2			118.5	118.1	118.7		aJ77
18S 34W 25BBD	01	TO	3092	132	90	95.8	114.8	115.2	114.9	114.5	114.3	114.2	114.2		aJ40
18S 34W 34BBC	01	TO	3130	160	90	100.6	118.1	118.1	116.6	115.2	114.8	114.6	114.5		aJ44
19S 32W 06CCB	01	QA, TO	2937	199	21		77.2	77.9	76.8	74.7	75.9	78.4	77.6		mJ72
19S 32W 32ACB	01	QU, TO	2984	204	69		90.5	91.2	89.2	87.9	89.9	89.3	89.6		aJ73
19S 33W 06DBB	01	TO	3021	117	59		61.2	61.3		60.6	60.6	60.7	61.2		aJ71
19S 33W 15BBD	01	TO	2964	132	56	70.9	109.3	110.9	110.6	107.0	109.2	110.4	110.7		qJ36
19S 33W 29CBB	02	QA, TO	2994	174	76	101.0	115.7	113.9	114.9	114.9	115.4	116.0	115.6		qJ71
19S 34W 19DCCC	01	TO	3138				126.5	127.1		126.7	126.7	126.8	128.9		aJ80
20S 32W 16DAD	01	TO	2955	155	57		117.9	116.2	110.8	105.4	109.0	110.5	105.6		aJ71
20S 32W 30BCD	01	TO	2917	187	25		112.6	113.4	111.5	108.9	109.7	112.7	109.7		aJ77
20S 33W 09BBB	01	TO	2973	128	60	84.5	102.2	102.1	102.3	102.7	102.7	102.8	102.6		qJ31
20S 33W 21ABA	01	TO	2955				131.5	132.9	131.5	134.9			138.7		uJ91
20S 33W 36CAD	01	TO	2925							112.1	113.2	113.7	113.8		aJ94
20S 34W 15BAA	01	TO	3060	138	97		102.4	103.8	101.8	98.9	101.3	101.2	101.4		aJ77
20S 34W 36CCD	01	TO	2962	107	53		77.3	78.3	76.4	74.7	73.9	74.5	73.2		aJ71

TABLE 1. SELECTED HYDROLOGIC DATA, SEDGWICK COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1944	1974	1991	1992	1993	1994	1995	1996	1997	
25S 01W 07ABD 01	QU	1377				32.1	34.1	33.6	31.6	31.8	31.0	30.8	aJ81
25S 01W 14DDD 01	QA	1360				16.2	17.9	17.1	12.7		14.1	15.3	uJ38
25S 01W 26DBD 01	QU	1352	17	14.5		20.2	21.1	19.3	17.6	19.0	19.1		qJ37
25S 01W 28DBA 01	QU	1364				16.0	17.2	14.1	12.4	16.1	14.9	14.5	aJ81
25S 02W 23DBD 02	QA	1380										15.5	uU97
25S 03W 03DDD 01	QA,QU	1423				13.3	13.7	11.9	10.9	12.6	11.3	10.4	qJ53
25S 03W 15CCC 01	QU	1428				22.9	23.9	22.3	20.7	22.7	21.3	20.2	aJ81
26S 01W 12BAD 01	QU	1341				16.9	17.8	15.3	15.3	17.3	16.4	16.0	aJ81
26S 01W 19ABA 01	QU	1352				8.4	8.7	5.6	5.4	7.5	7.3	6.5	qJ38
26S 01W 31CCD 01	QA,QU	1370				39.9	40.8	39.6	37.1	38.8	38.0	37.6	aJ44
26S 02W 08AAB 01	QU	1397				32.2	33.4	31.6	29.2	31.4	30.5	29.3	aJ81
26S 02W 29AAA 01	QU	1384				25.6	26.7	25.8	23.8	25.1	24.8	24.5	qJ60
26S 03W 02AAC 01	QU	1409				23.0	24.4	22.3	20.2	22.3	21.2	20.1	aJ81

TABLE 2. DERIVED HYDROLOGIC DATA, SCOTT COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1940-97	1966-97	1996-97	1940-97	1966-97	1940	1997	
16S 31W 17DDD 01	TO	121.6	-4		-0.4	-0.1		43	39	-9
16S 31W 31BCB 01	TO	135.4	-8	-7.0	2.7	-0.1	-0.2	41	33	-20
16S 32W 16BCA 01	TO	157.1			0.7					
16S 33W 19BBC 01	TO	161.5			-0.4					
16S 33W 33BAA 01	TO	157.1	-27		-0.2	-0.5		64	37	-42
16S 34W 09CCB 01	TO	162.6	-45	-29.1	-0.2	-0.8	-0.9	63	18	-71
16S 34W 29CBB 01	TO	169.7	-51	-35.6	3.3	-0.9	-1.1	62	11	-82
17S 31W 04DCC 01	TO	128.4	-11		0.0	-0.2		53	42	-21
17S 31W 19CDA 01	TO	133.1								
17S 31W 35CCB 01	TO	99.5	-14		1.1	-0.2		61	48	-21
17S 32W 16BBB 01	TO									
17S 32W 27BBB 01	TO	155.0	-60	-48.0		-1.1	-1.5	85	25	-71
17S 33W 07BBA 01	TO	152.7								
17S 33W 14ACB 01	TO	145.0	-52		4.1	-0.9		121	69	-43
17S 34W 06BCB 01	TO	154.2	-46	-35.7	3.4	-0.8	-1.2	86	40	-53
17S 34W 16ACB 01	TO	126.2	-19	-14.1		-0.3	-0.5	87	68	-22
17S 34W 25DBB 01	TO	146.3	-43	-31.8	-3.0	-0.8	-1.0	86	43	-50
18S 31W 24BCB 01	TO	67.9	0		0.4	0.0		42	42	0
18S 31W 27ABA 01	TO	68.9	1		0.7	0.0		35	36	3
18S 32W 14BBB 01	TO	116.5	-32	-18.1	0.5	-0.6	-0.6	90	59	-34
18S 32W 17ABA 02	TO	121.8			0.2					
18S 33W 03CCB 01	TO	126.5	-56	-43.4	2.1	-1.0	-1.4	111	56	-50
18S 33W 05CCC 01	TO	103.7	-29	-19.0	-0.1	-0.5	-0.6	44	15	-66
18S 33W 25BBB 01	TO	118.7			-0.3					
18S 34W 05CBB 01	TO	118.7	-31		-0.6	-0.5		80	49	-39
18S 34W 25BBD 01	TO	114.2	-24	-18.4	0.0	-0.4	-0.6	42	18	-57
18S 34W 34BBC 01	TO	114.5	-25	-13.9	0.1	-0.4	-0.4	70	46	-34
19S 32W 06CCB 01	QA, TO	77.6	-57		0.8	-1.0		178	121	-32
19S 32W 32ACB 01	QU, TO	89.6	-21		-0.3	-0.4		135	114	-16
19S 33W 06DBB 01	TO	61.2	-2		-0.5	0.0		58	56	-3
19S 33W 15BBD 01	TO	110.7	-55	-39.8	-0.3	-1.0	-1.3	76	21	-72
19S 33W 29CBB 02	QA, TO	115.6	-40	-14.6	0.4	-0.7	-0.5	98	58	-41
19S 34W 19DCCC 01	TO	128.9			-2.1					
20S 32W 16DAD 01	TO	105.6	-49		4.9	-0.9		98	49	-50
20S 32W 30BCD 01	TO	109.7	-85		3.0	-1.5		162	77	-52
20S 33W 09BBB 01	TO	102.6	-43	-18.1	0.2	-0.8	-0.6	68	25	-63
20S 33W 21ABA 01	TO	138.7								
20S 33W 36CAD 01	TO	113.8			-0.1					
20S 34W 15BAA 01	TO	101.4	-4		-0.2	-0.1		41	37	-10
20S 34W 36CCD 01	TO	73.2	-20		1.3	-0.4		54	34	-37

TABLE 2. DERIVED HYDROLOGIC DATA, SEDGWICK COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1944-97	1974-97	1996-97	1944-97	1974-97	1944	1997	
25S 01W 07ABD 01	QU	30.8			0.2					
25S 01W 14DDD 01	QA	15.3			-1.2					
25S 01W 26DBD 01	QU									
25S 01W 28DBA 01	QU	14.5			0.4					
25S 02W 23DBD 02	QA	15.5								
25S 03W 03DDD 01	QA, QU	10.4			0.9					
25S 03W 15CCC 01	QU	20.2			1.1					
26S 01W 12BAD 01	QU	16.0			0.4					
26S 01W 19ABA 01	QU	6.5			0.8					
26S 01W 31CCD 01	QA, QU	37.6			0.4					
26S 02W 08AAB 01	QU	29.3			1.2					
26S 02W 29AAA 01	QU	24.5			0.3					
26S 03W 02AAC 01	QU	20.1			1.1					

TABLE 1. SELECTED HYDROLOGIC DATA, SEWARD COUNTY

Well Number				Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
							1940	1966	1991	1992	1993	1994	1995	1996		1997
31S	31W	08BCC	01	QU,TO	2829	519	164	169.4	240.9	256.6	244.4	244.9	251.2			aJ62
31S	32W	03DAD	01	QU,TO	2845	496	158	174.1	238.6	242.3	244.9	248.7	254.5			aJ58
31S	32W	31BBB	01	TO	2864	454	174		226.1	226.3	227.6	228.0	230.9	234.1	238.0	aJ85
31S	33W	06CBD	01	QU,TO	2948	498	210	211.2	255.5	257.3	259.0	260.7	261.4	265.0	267.8	aJ58
31S	33W	20DBB	01	QU,TO	2897	537	179	179.1	218.5	220.5	222.9	224.1	226.3	228.9	230.1	aJ64
31S	34W	18BBB	01	QU,TO	2951	421	186	186.3	232.3	235.6	238.0	239.6	247.8	250.1	250.4	aJ58
32S	31W	03DAA	01	QU,TO	2790							214.2			221.9	aU94
32S	31W	08BBB	01	QU,TO	2815	455	175	165.5	216.0	219.2	222.6	224.2	226.4	230.3	233.1	aJ64
32S	31W	26CAA	01	QU,TO	2783	453	180	182.9	227.7	229.8	227.3	229.3	237.0	233.2	235.4	aJ79
32S	32W	14BBB	01	QU,TO	2830	435	180	192.8	233.8	237.2	236.9	237.6	240.2	243.0	246.5	qJ64
32S	32W	19BAB	01	QU,TO	2854	475	189	194.7	225.0	224.0	229.1	229.5	231.5	233.7	234.8	aJ58
32S	33W	32DBD	01	QU,TO	2830				163.9	165.6	167.8	169.1	171.7	173.2	175.3	aJ85
32S	34W	10DAA	01	QU,TO	2925	470	205	203.5		240.0	238.6		244.0	245.7	248.3	aJ66
32S	34W	32BBB	01	QU,TO	2921	491	159	154.3	182.6	185.2	186.4	187.3	188.1	191.3	193.9	aJ58
33S	31W	09AAB	01	TO	2766				212.9	212.2	213.0	213.9	215.0	216.8	218.4	aJ88
33S	32W	28CDD	02	QU,TO	2630	399	60		58.7	59.4	58.9	59.0	59.7	60.8	60.9	aJ74
33S	33W	12AAD	01	QU,TO	2626	316	5	5.7	10.2	12.4	13.8	15.1			29.7	aJ64
33S	33W	20BCC	01	TO	2866		176		202.4	203.8	204.8	206.5	207.9	208.8	211.3	aJ81
33S	33W	25DCC	01	TO	2810		197		202.4	204.0	203.0	204.3	205.6	206.6	207.9	aJ67
33S	34W	17DCC	01	TO	2918		123		124.1	127.6	128.6	129.5	144.9	139.5	142.4	aJ83
34S	31W	01CAA	01	TO	2720										216.9	uU97
34S	31W	30BBB	01	TO	2731	671	208		213.9	214.3	215.0	215.3	215.5	216.0	216.6	aJ40
34S	32W	29BAA	01	TO	2765	525	175		171.2	173.2	173.1	173.9	174.2	175.3	177.1	aJ85
34S	32W	35ADA	01	QU,TO	2734		189		194.1	195.9	195.8	196.1	196.0		197.0	aJ77
*34S	33W	07CCB	01	QU,TO	2901	575	140	126.7		142.4	143.0	144.0	144.8	146.0	147.2	qJ64
34S	34W	16DAA	01	QU,TO	2943	673	114	94.5	129.5	138.1	143.7	141.1	150.6	156.3	152.8	aJ65
34S	34W	26BCA	01	QU,TO	2908		98		117.6	117.4	116.8	116.8	121.2	127.4	128.6	aJ85
35S	31W	10AAC	01	TO	2690					197.9	200.5	201.7	200.7		195.5	aJ85
35S	32W	06CBB	01	TO	2780	540	150		168.9	169.5	167.4	169.8	169.8	171.7	173.6	aJ85
35S	33W	16BCA	01	QU,TO	2838	658	126	103.7	133.7	138.7	135.4	135.5	137.4	139.1	139.5	aJ64
35S	34W	10BBB	01	QU,TO	2912	647	90	80.3	83.7	85.8	86.6	87.7	88.8	90.5	91.8	aJ54

TABLE 1. SELECTED HYDROLOGIC DATA, SHERIDAN COUNTY

Well Number				Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
							1950	1966	1991	1992	1993	1994	1995	1996	1997	
*06S	26W	26CBB	01	TO	2636				167.4	168.5	168.1	167.6	168.1	168.6	171.2	aD84
*06S	27W	05CBB	01	TO	2684				112.3	113.1	111.9	111.2	111.6	111.5	110.6	aD84
*06S	27W	08DCA	01	QA,TO	2588	108	21	14.6	22.4	22.4	21.2	16.4	18.4	18.0	15.9	aD64
*06S	27W	19ADC	01	TO	2620				34.4	35.1	34.5	32.5	31.5	33.0	33.2	aD87
*06S	29W	10DBC	01	TO	2823	205	116	118.6	130.2			129.4	129.6	130.3	129.1	aD65
*06S	29W	24ABB	01	TO	2781	205	91	96.2	108.5	109.3	107.2	104.6	105.9	106.9	106.1	aD66
*06S	29W	33CDA	01	TO	2828	207	94	93.3	112.4	113.5		111.7	112.1	112.7	118.0	aD65
*06S	30W	13BAA	01	TO	2875	216	115		130.1	130.4	128.3	127.6	127.3	128.1	126.3	qD75
*06S	30W	14CCD	01	TO	2884	203	95	102.8	112.6	113.1	110.4	111.8	111.9	111.8	109.3	aD65
*07S	26W	06AAB	01	TO	2634	204	125	125.9	137.1	137.0	135.1	136.1	135.7	136.8	136.6	aD64
*07S	26W	12BAC	01	TO	2559	170	94	91.9	102.4	101.1	100.3	100.1	101.5	101.3	106.2	aD65
*07S	26W	19BBC	01	TO	2625	201	115		127.7	128.1	126.5	126.8	126.8	127.5	129.5	qD75
*07S	26W	28CAB	01	TO	2634	243	142	148.4	156.4	157.3		155.8	155.1	154.5	162.1	aD65
*07S	27W	22DAC	01	TO	2644				117.2	118.1	117.1	115.9	116.2	117.1	118.8	aD84
07S	28W	08DCC	01	TO	2797										168.8	uU96
*07S	28W	21ABB	01	TO	2774	235	129	131.0	164.7	166.9	163.2	159.9	160.4	164.9	161.9	aD65
*07S	28W	36ABA	01	TO	2725	233	123	127.5	145.3	146.0	145.9	145.6	146.2	145.4	149.7	aD64
*07S	29W	05BBB	01	TO	2841				108.3			107.8	106.9	108.6	108.3	aD84
*07S	29W	27CCC	01	TO	2869	265	131		190.7	191.0	187.2	185.2	186.0	188.9	187.5	aD76
*07S	29W	30ABA	01	TO	2887	255	113	121.8	165.1	168.9	168.3	165.3	164.1	164.3	169.8	aD62

TABLE 2. DERIVED HYDROLOGIC DATA, SEWARD COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1940-97	1966-97	1996-97	1940-97	1966-97	1940	1997	
31S 31W 08BCC 01	QU,TO									
31S 32W 03DAD 01	QU,TO									
31S 32W 31BBB 01	TO	238.0	-64		-3.9	-1.1		280	216	-23
31S 33W 06CBD 01	QU,TO	267.8	-58	-56.6	-2.8	-1.0	-1.8	288	230	-20
31S 33W 20DBB 01	QU,TO	230.1	-51	-51.0	-1.2	-0.9	-1.6	358	307	-14
31S 34W 18BBB 01	QU,TO	250.4	-64	-64.1	-0.3	-1.1	-2.1	235	171	-27
32S 31W 03DAA 01	QU,TO	221.9								
32S 31W 08BBB 01	QU,TO	233.1	-58	-67.6	-2.8	-1.0	-2.2	280	222	-21
32S 31W 26CAA 01	QU,TO	235.4	-55	-52.5	-2.2	-1.0	-1.7	273	218	-20
32S 32W 14BBB 01	QU,TO	246.5	-67	-53.7	-3.5	-1.2	-1.7	255	189	-26
32S 32W 19BAB 01	QU,TO	234.8	-46	-40.1	-1.1	-0.8	-1.3	286	240	-16
32S 33W 32DBD 01	QU,TO	175.3			-2.1					
32S 34W 10DAA 01	QU,TO	248.3	-43	-44.8	-2.6	-0.8	-1.4	265	222	-16
32S 34W 32BBB 01	QU,TO	193.9	-35	-39.6	-2.6	-0.6	-1.3	332	297	-11
33S 31W 09AAB 01	TO	218.4			-1.6					
33S 32W 28CDD 02	QU,TO	60.9	-1		-0.1	0.0		339	338	0
33S 33W 12AAD 01	QU,TO	29.7	-25	-24.0		-0.4	-0.8	311	286	-8
33S 33W 20BCC 01	TO	211.3	-35		-2.5	-0.6				
33S 33W 25DCC 01	TO	207.9	-11		-1.3	-0.2				
33S 34W 17DCC 01	TO	142.4	-19		-2.9	-0.3				
34S 31W 01CAA 01	TO	216.9								
34S 31W 30BBB 01	TO	216.6	-9		-0.6	-0.2		463	454	-2
34S 32W 29BAA 01	TO	177.1	-2		-1.8	0.0		350	348	-1
34S 32W 35ADA 01	QU,TO	197.0	-8			-0.1				
*34S 33W 07CCB 01	QU,TO	147.2	-7	-20.5	-1.2	-0.1	-0.7	435	428	-2
34S 34W 16DAA 01	QU,TO	152.8	-39	-58.3	3.5	-0.7	-1.9	559	520	-7
34S 34W 26BCA 01	QU,TO	128.6	-31		-1.2	-0.5				
35S 31W 10AAC 01	TO	195.5								
35S 32W 06CBB 01	TO	173.6	-24		-1.9	-0.4		390	366	-6
35S 33W 16BCA 01	QU,TO	139.5	-14	-35.8	-0.4	-0.2	-1.2	532	519	-2
35S 34W 10BBB 01	QU,TO	91.8	-2	-11.5	-1.3	0.0	-0.4	557	555	0

TABLE 2. DERIVED HYDROLOGIC DATA, SHERIDAN COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
*06S 26W 26CBB 01	TO	171.2			-2.6					
*06S 27W 05CBB 01	TO	110.6			0.9					
*06S 27W 08DCA 01	QA,TO	15.9	5	-1.3	2.1	0.1	0.0	87	92	6
*06S 27W 19ADC 01	TO	33.2			-0.2					
*06S 29W 10DBC 01	TO	129.1	-13	-10.5	1.2	-0.3	-0.3	89	76	-15
*06S 29W 24ABB 01	TO	106.1	-15	-9.9	0.8	-0.3	-0.3	114	99	-13
*06S 29W 33CDA 01	TO	118.0	-24	-24.7	-5.3	-0.5	-0.8	113	89	-21
*06S 30W 13BAA 01	TO	126.3	-11		1.8	-0.2		101	90	-11
*06S 30W 14CCD 01	TO	109.3	-14	-6.5	2.5	-0.3	-0.2	108	94	-13
*07S 26W 06AAB 01	TO	136.6	-12	-10.7	0.2	-0.3	-0.3	79	67	-15
*07S 26W 12BAC 01	TO	106.2	-12	-14.3	-4.9	-0.3	-0.5	76	64	-16
*07S 26W 19BBC 01	TO	129.5	-15		-2.0	-0.3		86	72	-16
*07S 26W 28CAB 01	TO	162.1	-20	-13.7	-7.6	-0.4	-0.4	101	81	-20
*07S 27W 22DAC 01	TO	118.8			-1.7					
07S 28W 08DCC 01	TO	168.8								
*07S 28W 21ABB 01	TO	161.9	-33	-30.9	3.0	-0.7	-1.0	106	73	-31
*07S 28W 36ABA 01	TO	149.7	-27	-22.2	-4.3	-0.6	-0.7	110	83	-25
*07S 29W 05BBB 01	TO	108.3			0.3					
*07S 29W 27CCC 01	TO	187.5	-57		1.4	-1.2		134	78	-42
*07S 29W 30ABA 01	TO	169.8	-57	-48.0	-5.5	-1.2	-1.5	142	85	-40

TABLE 1. SELECTED HYDROLOGIC DATA, SHERIDAN COUNTY (cont'd)

Well Number				Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
							1950	1966	1991	1992	1993	1994	1995	1996		1997
*07S	30W	08CBB	01	TO	2919				102.2	103.4	101.6	96.4	103.1	103.2	103.4	aD84
*08S	26W	14DAA	01	QA	2398	66	13	19.5	19.5	20.5	19.6	9.3	14.2	13.9	12.0	aD65
08S	27W	11DCD	01	QA	2504	60	13	8.5	10.6	11.1		10.1	9.8	9.6		aD64
*08S	27W	35CBB	01	TO	2670				128.9	128.9	129.1	127.8	126.3	124.4	123.2	aD84
*08S	28W	11DAA	01	TO	2692				100.1	100.6	100.5	99.1	99.7	100.4	102.8	aD84
08S	29W	01DCB	01	TO	2823	240	125	122.6	161.8	163.0	162.7	162.3	162.3	163.3		aD64
*08S	30W	11CBC	01	TO	2941	277	123	133.5	189.4	191.3	189.6	187.8	190.1	190.8	190.4	aD64
*08S	30W	13DAA	01	TO	2891	257	103	109.7	153.0	154.8	155.5	149.2	154.9	156.6	155.8	qD64
*08S	30W	30ABC	01	TO	2962	234	107	105.8	142.2	143.3		140.7	141.9	142.1	143.1	aD65
*09S	26W	22BBB	01	TO	2669				141.5	142.5		139.1	137.6	137.1	135.9	aD84
*09S	27W	12CCC	01	TO	2678	198	104	106.5	107.5	107.3		105.7	101.1	100.6	111.1	aD66
09S	27W	19DDD	01	TO	2750	205	124	123.6	131.4	134.7	131.8	132.0	129.7	128.7		aD52
*09S	27W	27DAA	01	TO	2705				114.3	112.6	115.2	108.0	106.8	106.7	105.1	aD84
*09S	28W	04BCC	01	QA, TO	2677	98	18	25.7	28.1	28.5		25.3	26.7	26.2	25.4	aD64
*09S	29W	03AAA	01	TO	2819				110.9	110.7	111.1	108.2	109.5	110.3	109.4	aD84
*09S	29W	17BAB	01	TO	2854	196	84	84.2	109.4	111.0		106.1	105.8	106.1	106.7	aD66
09S	29W	26BAA	01	TO	2863	210	123	132.0	135.5			140.3		138.8		aD64
*09S	30W	03AAB	02	TO	2933	217	118	119.2	152.7	163.9	154.7	154.9	156.6	156.6	170.4	aD64
*09S	30W	35BBB	01	TO	2944	215	120	129.3	151.1	150.8	150.1	148.7	157.3	161.7	155.0	qD62
*10S	26W	12AAD	01	TO	2534				29.3	28.4	25.7	24.0	24.0	22.9	22.5	aD84
*10S	27W	20CBC	01	QA	2605	50	12	13.9	23.1			15.4	17.9	17.2	16.9	aD66
*10S	27W	22DBA	01	QA	2568	65	10	18.5	23.0	23.6		17.5	18.0	17.3	17.3	aD65
*10S	28W	05DDB	01	TO	2789	173	99	95.2	109.9	110.5		105.2	105.5	106.3	107.3	aD65
*10S	28W	29DAA	01	QA, TO	2691	62	22	25.4	26.7	31.1	29.3	25.0	25.8	35.5	34.9	aD64
*10S	29W	02DDD	01	TO	2803				83.4	83.7	83.3	79.6	79.2	79.4	79.8	aD84
*10S	29W	20CAA	01	TO	2820				70.9	70.9		65.7	65.8	65.6	66.4	aD84
*10S	30W	08DDD	01	TO	2930	186	96	93.0	103.5	102.3	101.0	98.7	98.2	97.9	97.3	qD64
*10S	30W	12ADA	01	TO	2874	187	89	87.7	102.9	102.5	101.8	99.5	100.2	99.8	97.4	aD65

TABLE 1. SELECTED HYDROLOGIC DATA, SHERMAN COUNTY

Well Number				Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type
							1950	1966	1991	1992	1993	1994	1995	1996	
06S 37W 07BBA 01	QA	3304	134	5	6.1	7.2	7.8		6.6	8.0	7.6	7.4	aJ64		
06S 37W 16CDD 01	TO	3460	264	157	163.8	173.0	173.6	173.1	172.2	171.4	172.3	172.6	aJ66		
06S 37W 19ABB 01	TO	3476	309	150	155.4	160.2	159.6		159.7	160.1	159.7	159.1	aJ65		
06S 39W 09DDD 01	TO	3585	330	145	142.7	150.7	150.9	151.1	152.0	151.4	151.6	151.8	aJ49		
06S 40W 10AAC 01	TO	3641	341	151	151.2	163.2		164.1	163.9	164.3	164.8	165.2	aJ64		
06S 40W 13CBC 01	TO	3624				150.1	150.1	149.6	150.0	150.3	150.4	150.8	aJ85		
06S 40W 30DCC 01	TO	3718	326	159	153.6	170.1	170.0	170.0	170.3	170.4	170.6	171.0	aJ65		
06S 41W 19DBD 01	TO	3792	325	162	169.5	190.9	192.8	192.3	189.2	189.9	189.9	191.2	aJ65		
06S 41W 27DBD 01	TO	3741	325	141	142.1	166.6	167.7	165.5	164.8	167.3		167.7	aJ64		
06S 42W 02AAA 01	TO	3777	277	179	181.7	199.6	201.3	202.8	199.2	200.3	200.1	201.7	aJ59		
06S 42W 08CBB 01	TO	3841	304	183	201.3	213.3	211.8	212.1	210.9	212.6	212.8	213.3	aJ64		
06S 42W 22DCC 01	TO	3837	315	177	183.1	197.6	198.2	199.7	197.4	199.3	200.7	201.8	aJ65		
06S 42W 30ADA 01	TO	3871	309	176	183.6	205.2	205.4	206.2	206.0	207.5	208.1	209.6	aJ64		
07S 37W 04BBC 01	TO	3455	270	122		139.1	143.0	139.5	143.3	138.8	138.6	140.6	aJ75		
07S 37W 05CCB 01	TO	3472	294	124	129.9	140.2	140.5	140.8	140.2	141.5	142.1	143.6	aJ65		
07S 38W 28DAA 01	TO	3545				149.6	148.9	148.1	147.8	148.5	152.1	151.0	aJ85		
07S 39W 01DCD 01	TO	3563				135.6	135.3	135.9	134.4	135.1	135.5	135.7	aJ85		
07S 39W 09BBB 01	TO	3589	295	106	104.8	117.6	118.3	117.9	117.8	118.0	117.8	119.1	aJ64		
07S 39W 24BAA 01	TO	3587	300	137	133.9	146.7		145.2	147.6	149.8	150.4	151.2	aJ64		
07S 40W 06ADB 01	TO	3722	343	152	149.4	170.6	171.1	169.0	169.9	168.9	168.9	170.6	aJ64		
07S 40W 29BBA 01	TO	3708	288	121	121.5	143.1	143.8	144.2	143.5	145.0	144.9	145.3	aJ49		
07S 40W 35BBB 01	TO	3650	255	102	103.0	128.7	128.7	128.1	128.0			128.8	aJ65		
07S 40W 36BAB 01	TO	3643	321	105	109.9	137.0	136.6	134.7	133.7	136.2	134.8	134.9	aJ64		
07S 41W 07BCB 01	TO	3840	300	180	174.4	202.2	207.2	201.3	200.9	203.9	202.6		aJ49		
07S 41W 28DBB 01	TO	3774	280	111	111.4	135.5	135.9	134.4	132.1	133.6	134.1	133.9	aJ64		

TABLE 2. DERIVED HYDROLOGIC DATA, SHERIDAN COUNTY (cont'd)

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
*07S 30W 08CBB 01	TO	103.4			-0.2					
*08S 26W 14DAA 01	QA	12.0	1	7.5	1.9	0.0	0.2	53	54	2
08S 27W 11DCD 01	QA									
*08S 27W 35CBB 01	TO	123.2			1.2					
*08S 28W 11DAA 01	TO	102.8			-2.4					
08S 29W 01DCB 01	TO									
*08S 30W 11CBC 01	TO	190.4	-67	-56.9	0.4	-1.4	-1.8	154	87	-44
*08S 30W 13DAA 01	TO	155.8	-53	-46.1	0.8	-1.1	-1.5	154	101	-34
*08S 30W 30ABC 01	TO	143.1	-36	-37.3	-1.0	-0.8	-1.2	127	91	-28
*09S 26W 22BBB 01	TO	135.9			1.2					
*09S 27W 12CCC 01	TO	111.1	-7	-4.6	-10.5	-0.1	-0.1	94	87	-7
09S 27W 19DDD 01	TO									
*09S 27W 27DAA 01	TO	105.1			1.6					
*09S 28W 04BCC 01	QA, TO	25.4	-7	0.3	0.8	-0.1	0.0	80	73	-9
*09S 29W 03AAA 01	TO	109.4			0.9					
*09S 29W 17BAB 01	TO	106.7	-23	-22.5	-0.6	-0.5	-0.7	112	89	-21
09S 29W 26BAA 01	TO									
*09S 30W 03AAB 02	TO	170.4	-52	-51.2	-13.8	-1.1	-1.7	99	47	-53
*09S 30W 35BBB 01	TO	155.0	-35	-25.7	6.7	-0.7	-0.8	95	60	-37
*10S 26W 12AAD 01	TO	22.5			0.4					
*10S 27W 20CBC 01	QA	16.9	-5	-3.0	0.3	-0.1	-0.1	38	33	-13
*10S 27W 22DBA 01	QA	17.3	-7	1.2	0.0	-0.1	0.0	55	48	-13
*10S 28W 05DDB 01	TO	107.3	-8	-12.1	-1.0	-0.2	-0.4	74	66	-11
*10S 28W 29DAA 01	QA, TO	34.9	-13	-9.5	0.6	-0.3	-0.3	40	27	-33
*10S 29W 02DDD 01	TO	79.8			-0.4					
*10S 29W 20CAA 01	TO	66.4			-0.8					
*10S 30W 08DDD 01	TO	97.3	-1	-4.3	0.6	0.0	-0.1	90	89	-1
*10S 30W 12ADA 01	TO	97.4	-8	-9.7	2.4	-0.2	-0.3	98	90	-8

TABLE 2. DERIVED HYDROLOGIC DATA, SHERMAN COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
06S 37W 07BBA 01	QA	7.4	-2	-1.3	0.2	0.0	0.0	129	127	-2
06S 37W 16CDD 01	TO	172.6	-16	-8.8	-0.3	-0.3	-0.3	107	91	-15
06S 37W 19ABB 01	TO	159.1	-9	-3.7	0.6	-0.2	-0.1	159	150	-6
06S 39W 09DDD 01	TO	151.8	-7	-9.1	-0.2	-0.1	-0.3	185	178	-4
06S 40W 10AAC 01	TO	165.2	-14	-14.0	-0.4	-0.3	-0.5	190	176	-7
06S 40W 13CBC 01	TO	150.8			-0.4					
06S 40W 30DCC 01	TO	171.0	-12	-17.4	-0.4	-0.3	-0.6	167	155	-7
06S 41W 19DBD 01	TO	191.2	-29	-21.7	-1.3	-0.6	-0.7	163	134	-18
06S 41W 27DBD 01	TO	167.7	-27	-25.6		-0.6	-0.8	184	157	-15
06S 42W 02AAA 01	TO	201.7	-23	-20.0	-1.6	-0.5	-0.6	98	75	-23
06S 42W 08CBB 01	TO	213.3	-30	-12.0	-0.5	-0.6	-0.4	121	91	-25
06S 42W 22DCC 01	TO	201.8	-25	-18.7	-1.1	-0.5	-0.6	138	113	-18
06S 42W 30ADA 01	TO	209.6	-34	-26.0	-1.5	-0.7	-0.8	133	99	-26
07S 37W 04BBC 01	TO	140.6	-19		-2.0	-0.4		148	129	-13
07S 37W 05CCB 01	TO	143.6	-20	-13.7	-1.5	-0.4	-0.4	170	150	-12
07S 38W 28DAA 01	TO	151.0			1.1					
07S 39W 01DCD 01	TO	135.7			-0.2					
07S 39W 09BBB 01	TO	119.1	-13	-14.3	-1.3	-0.3	-0.5	189	176	-7
07S 39W 24BAA 01	TO	151.2	-14	-17.3	-0.8	-0.3	-0.6	163	149	-9
07S 40W 06ADB 01	TO	170.6	-19	-21.2	-1.7	-0.4	-0.7	191	172	-10
07S 40W 29BBA 01	TO	145.3	-24	-23.8	-0.4	-0.5	-0.8	167	143	-14
07S 40W 35BBB 01	TO	128.8	-27	-25.8		-0.6	-0.8	153	126	-18
07S 40W 36BAB 01	TO	134.9	-30	-25.0	-0.1	-0.6	-0.8	216	186	-14
07S 41W 07BCB 01	TO									
07S 41W 28DBB 01	TO	133.9	-23	-22.5	0.2	-0.5	-0.7	169	146	-14

TABLE 1. SELECTED HYDROLOGIC DATA, SHERMAN COUNTY (cont'd)

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1950	1966	1991	1992	1993	1994	1995	1996	1997	
07S 42W 07DAA 01	TO	3903	320	163	164.4	189.9	192.6	190.0	189.3	189.6	191.6	192.0	aJ49
07S 42W 17CCC 01	TO	3864	263	119	117.9	143.7	145.7	146.6	144.7	145.4	145.9	146.5	aJ66
07S 42W 27AAB 01	TO	3862	321	142	140.6	169.5	170.7	170.2	170.5	172.0	171.3	172.4	aJ64
08S 37W 03ADB 01	TO	3476	273	126	143.5	164.6		160.7		160.8	167.7	161.8	aJ64
08S 37W 21CCC 01	TO	3496	230	120	121.1	143.5	142.9	141.6	141.5	144.1	143.2	144.6	aJ64
08S 37W 32ABB 01	TO	3468	216	83	80.0	98.2	98.6	97.6	96.7	98.0	98.5	98.4	aJ64
08S 38W 17CDD 01	TO	3603	293	143	142.0	165.1	166.1	166.0	166.4	167.6	168.4	169.0	aJ64
08S 38W 24AAB 01	TO	3513	260	110	111.0	123.0	123.7		122.7	123.2	123.5	124.2	aJ64
08S 39W 15CCC 01	TO	3642	272	127	135.0	166.6	167.5	166.7	166.3	166.3	166.5	167.2	aJ49
08S 40W 12DBA 01	TO	3670	290	120	133.0	170.0	170.0	168.9	166.2	166.6	166.1	166.3	aJ65
08S 40W 17CDB 01	TO	3727	277	102	108.0	137.5	140.7	137.7	135.8	140.2	138.3	139.0	aJ64
08S 40W 25AAC 01	TO	3701	290	133	158.0	183.8	183.8	182.9	182.3	182.8	183.2	183.5	aJ67
08S 41W 17CBA 01	TO	3843	300	129	129.0	150.9	151.7	153.8	151.6	151.9	153.6	153.5	aJ65
08S 41W 25BBC 01	TO	3754	264	94	96.0	123.0	123.8	124.2	124.7	124.8	125.2	126.2	aJ65
08S 42W 15DDB 01	TO	3859	274	98	99.0	128.1	130.7	128.6	129.1	129.9	130.5	131.1	aJ64
08S 42W 31DCD 01	TO	3872	207	50	58.0	83.7	84.3	85.0	85.5	86.2	87.1	88.2	aJ64
09S 37W 07DDB 01	TO	3496				95.8			92.7	93.8	93.9	94.1	aJ85
09S 38W 13BCC 01	TO	3510				82.4	82.0	81.6	80.6	82.9	80.7	81.2	aJ76
09S 39W 01DBA 01	TO	3619				143.7		145.4	145.4	146.8	147.6	148.7	aJ85
09S 39W 02BAB 01	TO	3646	246	133		176.7		175.8		176.5	181.8	180.0	aJ78
09S 39W 10CCB 01	TO	3661				154.0		154.0	150.8	154.6	152.3	155.3	aJ85
09S 39W 19CCC 01	TO	3695	245	105		140.5	140.4	140.7	139.4	141.3	140.8	141.9	aJ72
09S 40W 13CDC 01	TO	3722	260	123	125.0	164.1	164.0	162.6	162.5	164.2	164.3	165.4	aJ64
09S 40W 29BBB 01	TO	3782	246	122	119.0	163.4	163.0	163.7	163.6	165.3	166.3	167.4	aJ64
09S 41W 05DCC 01	TO	3860	265	128	136.0	175.5	176.6		171.0	170.1	167.8	171.8	aJ64
09S 41W 14BBC 01	TO	3835		129		182.2	181.9	182.7	184.1	185.5	187.0	188.4	aJ69
09S 41W 34BAB 01	TO	3841	290	111	114.0	153.5		157.8	153.5	154.8	155.3	156.0	aJ64
09S 42W 08AAA 01	TO	3943	271	120	131.0		160.0	161.1	161.3	162.4	162.4	164.6	aJ64
09S 42W 14AAA 01	TO	3901	291	116	131.0	166.1	166.6	166.8	166.9	169.9	170.5	173.8	aJ64
09S 42W 35ABB 01	TO	3916	268	102	103.0	146.2		146.3	146.5	147.1	149.5	151.3	aJ65
10S 37W 23ABB 01	TO	3421	289	171	174.0	204.1	203.0	204.7		202.1	203.7	209.0	aJ67
10S 40W 10ADC 01	QA, TO	3624	68	12	16.0	18.8	18.8	19.0	16.6	17.1	17.8	18.0	aJ64
10S 41W 15CAD 01	QA, TO	3762	117	12	12.0	28.0	27.8	28.3	26.1	27.8	29.6	29.0	aJ64
10S 42W 20ABB 01	TO	3968				120.3	121.0	119.8	120.9		122.3	122.6	aJ84
10S 42W 21BBB 01	TO	3963	223	73	86.0		116.0			118.4	119.1	119.9	aJ64
10S 42W 24BAB 01	TO	3903	204	73	84.0	105.0	106.6	104.3	107.1	105.5	112.3	106.1	aJ64

TABLE 1. SELECTED HYDROLOGIC DATA, STAFFORD COUNTY

Well Number				Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type
							1944	1974	1991	1992	1993	1994	1995	1996	
21S 11W 07BBB 01	QU	1808	193	20		21.6	24.8	21.2	10.1	16.2	14.6	15.5	aJ84		
21S 13W 05CBD 01	QU	1893				30.7	33.6	28.4	23.9	27.0	26.5	26.0	aJ56		
21S 13W 27DDD 02	QU	1877	152	11	0.6	11.1	13.0	10.0	4.3	8.2	7.4	7.7	qJ63		
21S 14W 22AAC 01	QU	1926	196	16	4.8	24.2	25.9	25.8	21.3	23.3	23.3	22.8	aJ73		
21S 14W 32BAC 01	QU	1949	219	22	16.2	32.9	34.3	35.0	32.1	32.7	33.0	32.8	aJ73		
22S 11W 07BBB 01	QU	1785	54	10	3.3	4.8	5.4	4.7	3.8	4.8	4.4	4.3	aJ73		
22S 12W 05BBD 01	QU	1870	220	21	8.9	20.3	23.2	20.5	11.4	16.2	15.0	15.5	aJ73		
22S 12W 30BBD 01	QU	1872	162	13	7.0	17.4	19.3	16.7	10.1	14.9	13.3	14.2	aJ66		
22S 12W 36BBB 02	QU	1827	146		0.7	6.6	7.9	3.3	2.9	4.8	4.0	3.3	aJ73		
22S 13W 05CBC 01	QU	1905	165	6	3.1	19.8	21.5	19.3	13.3	16.6		17.0	aJ73		
22S 13W 12CAC 01	QU	1885	180	20	8.6	21.8	24.0	20.9	12.4	17.7	16.4	17.6	aJ70		
22S 13W 29DAD 01	QU	1902	204	17	5.2	20.2	22.2	20.9	12.8	17.3	17.4	17.6	qJ61		
22S 14W 14CCA 01	QU	1930	200	12	0.8	25.3	27.2	25.8	19.8	23.1	22.8	23.4	aJ72		
22S 14W 35DDB 01	QU	1930	130	20	11.1	31.4	33.1	33.0	26.0	28.9	29.4	30.0	aJ73		
23S 11W 02BBB 01	QU	1789	125		1.0	3.0	4.1	0.1	1.1	2.6	1.9	1.7	aJ74		

TABLE 2. DERIVED HYDROLOGIC DATA, SHERMAN COUNTY (cont'd)

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
07S 42W 07DAA 01	TO	192.0	-29	-27.6	-0.4	-0.6	-0.9	157	128	-18
07S 42W 17CCC 01	TO	146.5	-28	-28.6	-0.6	-0.6	-0.9	144	117	-19
07S 42W 27AAB 01	TO	172.4	-30	-31.8	-1.1	-0.6	-1.0	179	149	-17
08S 37W 03ADB 01	TO	161.8	-36	-18.3	5.9	-0.8	-0.6	147	111	-24
08S 37W 21CCC 01	TO	144.6	-25	-23.5	-1.4	-0.5	-0.8	110	85	-23
08S 37W 32ABB 01	TO	98.4	-15	-18.4	0.1	-0.3	-0.6	133	118	-11
08S 38W 17CDD 01	TO	169.0	-26	-27.0	-0.6	-0.6	-0.9	150	124	-17
08S 38W 24AAB 01	TO	124.2	-14	-13.2	-0.7	-0.3	-0.4	150	136	-9
08S 39W 15CCC 01	TO	167.2	-40	-32.2	-0.7	-0.9	-1.0	145	105	-28
08S 40W 12DBA 01	TO	166.3	-46	-33.3	-0.2	-1.0	-1.1	170	124	-27
08S 40W 17CDB 01	TO	139.0	-37	-31.0	-0.7	-0.8	-1.0	175	138	-21
08S 40W 25AAC 01	TO	183.5	-51	-25.5	-0.3	-1.1	-0.8	157	107	-32
08S 41W 17CBA 01	TO	153.5	-25	-24.5	0.1	-0.5	-0.8	171	147	-14
08S 41W 25BBC 01	TO	126.2	-32	-30.2	-1.0	-0.7	-1.0	170	138	-19
08S 42W 15DDB 01	TO	131.1	-33	-32.1	-0.6	-0.7	-1.0	176	143	-19
08S 42W 31DCD 01	TO	88.2	-38	-30.2	-1.1	-0.8	-1.0	157	119	-24
09S 37W 07DDB 01	TO	94.1			-0.2					
09S 38W 13BCC 01	TO	81.2			-0.5					
09S 39W 01DBA 01	TO	148.7			-1.1					
09S 39W 02BAB 01	TO	180.0	-47		1.8	-1.0		113	66	-42
09S 39W 10CCB 01	TO	155.3			-3.0					
09S 39W 19CCC 01	TO	141.9	-37		-1.1	-0.8		140	103	-26
09S 40W 13CDC 01	TO	165.4	-42	-40.4	-1.1	-0.9	-1.3	137	95	-31
09S 40W 29BBB 01	TO	167.4	-45	-48.4	-1.1	-1.0	-1.6	124	79	-36
09S 41W 05DCC 01	TO	171.8	-44	-35.8	-4.0	-0.9	-1.2	137	93	-32
09S 41W 14BBC 01	TO	188.4	-59		-1.4	-1.3				
09S 41W 34BAB 01	TO	156.0	-45	-42.0	-0.7	-1.0	-1.4	179	134	-25
09S 42W 08AAA 01	TO	164.6	-45	-33.6	-2.2	-1.0	-1.1	151	106	-30
09S 42W 14AAA 01	TO	173.8	-58	-42.8	-3.3	-1.2	-1.4	175	117	-33
09S 42W 35ABB 01	TO	151.3	-49	-48.3	-1.8	-1.0	-1.6	166	117	-30
10S 37W 23ABB 01	TO	209.0	-38	-35.0	-5.3	-0.8	-1.1	118	80	-32
10S 40W 10ADC 01	QA, TO	18.0	-6	-2.0	-0.2	-0.1	-0.1	56	50	-11
10S 41W 15CAD 01	QA, TO	29.0	-17	-17.0	0.6	-0.4	-0.5	105	88	-16
10S 42W 20ABB 01	TO	122.6			-0.3					
10S 42W 21BBB 01	TO	119.9	-47	-33.9	-0.8	-1.0	-1.1	150	103	-31
10S 42W 24BAB 01	TO	106.1	-33	-22.1	6.2	-0.7	-0.7	131	98	-25

TABLE 2. DERIVED HYDROLOGIC DATA, STAFFORD COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1944-97	1974-97	1996-97	1944-97	1974-97	1944	1997	
21S 11W 07BBB 01	QU	15.5	5		-0.9	0.1		173	178	3
21S 13W 05CBD 01	QU	26.0			0.5					
21S 13W 27DDD 02	QU	7.7	3	-7.1	-0.3	0.1	-0.3	141	144	2
21S 14W 22AAC 01	QU	22.8	-7	-18.0	0.5	-0.1	-0.8	180	173	-4
21S 14W 32BAC 01	QU	32.8	-11	-16.6	0.2	-0.2	-0.7	197	186	-6
22S 11W 07BBB 01	QU	4.3	6	-1.0	0.1	0.1	0.0	44	50	14
22S 12W 05BBD 01	QU	15.5	6	-6.6	-0.5	0.1	-0.3	199	205	3
22S 12W 30BBD 01	QU	14.2	-1	-7.2	-0.9	0.0	-0.3	149	148	-1
22S 12W 36BBB 02	QU	3.3		-2.6	0.7		-0.1		143	
22S 13W 05CBC 01	QU	17.0	-11	-13.9		-0.2	-0.6	159	148	-7
22S 13W 12CAC 01	QU	17.6	2	-9.0	-1.2	0.0	-0.4	160	162	1
22S 13W 29DAD 01	QU	17.6	-1	-12.4	-0.2	0.0	-0.5	187	186	-1
22S 14W 14CCA 01	QU	23.4	-11	-22.6	-0.6	-0.2	-1.0	188	177	-6
22S 14W 35DDB 01	QU	30.0	-10	-18.9	-0.6	-0.2	-0.8	110	100	-9
23S 11W 02BBB 01	QU	1.7		-0.7	0.2		0.0		123	

TABLE 1. SELECTED HYDROLOGIC DATA, STAFFORD COUNTY (cont'd)

Well Number		Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type		
					1944	1974	1991	1992	1993	1994	1995	1996	1997			
23S	11W	22BCC	01	QU	1802	172	5	17.4	22.9	24.7	21.0	18.8	21.8	20.1	19.1	aJ70
23S	11W	36CCA	01	QU	1803				20.4	22.6	19.9	13.8	18.2	16.3	15.1	aJ88
23S	12W	07DBD	01	QU	1859	174	1	0.5	8.9		9.4	4.6	9.6	8.3	7.5	aJ66
23S	12W	22BCC	01	QU	1853	163	4	5.4	15.6	17.8	14.3	9.3	13.7	11.9	10.8	aJ73
23S	12W	36BBC	01	QU	1849	154	8	11.7	17.6	20.6	15.5	11.6	15.1	13.8	12.8	aJ70
23S	13W	08CCB	01	QU	1895	120	8	4.4	14.8	16.6	15.7	9.8	13.4	13.3	13.3	qJ72
23S	13W	30CBB	01	QU	1906	86	11	7.9	14.4	15.5	14.2	11.8	13.6	13.5	13.3	aJ73
23S	13W	35CCA	01	QU	1897	150	19	7.3	21.8	23.6	22.6	16.0	19.2	17.8	17.9	aJ68
23S	14W	15ADD	01	QU	1927	76	7	3.3	13.5	15.1	14.6	10.3	13.2	12.3	11.6	aJ70
23S	14W	30BBB	01	QU	1988	168	24	34.4	44.8	46.2	45.2	42.0	43.3	43.2	42.8	qJ74
24S	11W	17DDB	01	QU	1833	133	23	22.8	23.2	25.3	22.9	19.4	22.3	21.9	21.1	aJ73
24S	12W	04CDB	01	QU	1875				23.8	26.9	23.3	14.9	20.8	18.9	19.2	aJ88
24S	12W	17CAB	01	QU	1893	144	22	16.8	29.9	33.0	29.6	20.6	27.1	25.2	25.7	aJ73
24S	12W	34ABC	01	QU	1880	150	29	20.0	22.9	25.6	23.9	16.8	20.7	20.9	20.6	aJ73
24S	13W	16ACA	01	QU	1915	137	18	8.6	23.4	25.2	24.8	18.9	21.4	20.4	20.0	aJ68
24S	13W	20CDD	01	QU	1932				24.3	25.7	25.7	21.1	23.2	22.2	22.3	qJ86
24S	13W	36DDD	01	QU	1907	155	21		23.3	25.5	23.9	16.1	21.4	21.2	21.9	aJ79
24S	14W	17AAC	01	QU	1982	132	27	21.7	34.4	36.8	34.9	32.4	34.7	34.2	34.4	aJ67
24S	14W	31BBD	01	QU	1998	158	23	7.8	23.8	25.0	24.3	18.4	22.8	19.5	18.6	aJ65
24S	15W	10BAB	01	QU	2024	114	24	14.6	32.4	33.6	33.3	30.0	31.8	30.7	30.2	aJ70
24S	15W	32DBC	01	QU	2044	184	21	9.9	29.5	31.1	29.9	24.9	27.8	24.3	23.1	aJ73
25S	11W	02ACB	01	QU	1770	90	10	10.3	11.8	11.9	11.0	10.9	11.9	11.5	11.2	aJ73
25S	11W	23DDD	01	QU	1796	156	13	12.9	16.0	17.5	17.0	12.8	17.0	16.0	17.1	qJ74
25S	12W	11AAA	01	QU	1846	81	16		15.0	18.3	14.8	11.2	17.0	16.6	15.3	aJ84
25S	12W	16DCA	01	QU	1868				13.5	16.3	13.5	9.9	15.1	14.7	13.2	aJ88
25S	12W	24DDB	01	QU	1840	145	17	10.2	12.8	14.7	13.4	11.0	14.3	13.9	13.5	aJ73
25S	13W	16AAC	01	QU	1940	142	22		29.7	31.9	30.2	21.8	29.5	29.7	27.1	qJ77
25S	13W	31DDA	01	QU	1973	221	38		25.9		25.5	18.6	26.1	25.0	21.8	aJ84
25S	13W	36DCC	01	QU	1902	177	22		14.7	16.1	14.8	11.4	16.1	15.2	12.5	aJ84
25S	14W	04AAD	01	QU	1969	149	24	9.2	15.4	16.1	14.6	12.0	14.7	13.5	12.2	aJ73
25S	14W	21DDB	01	QU	1980				16.1	17.3	15.3	11.8	15.9	14.6	11.7	aJ84
25S	14W	30CDB	01	QU	2004	214	14	7.2	17.8	18.4	16.5	13.6	16.9	16.6	14.1	aJ59
25S	15W	11BCB	01	QU	2020	174	16	11.7	21.4	20.8	21.8	17.8	18.2	12.3	12.7	aJ73
25S	15W	29BBD	01	QU	2034	184	16	4.3	13.4	14.0	11.0	9.1	11.9	10.4	6.6	aJ73

TABLE 1. SELECTED HYDROLOGIC DATA, STANTON COUNTY

Well Number				Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
							1940	1966	1991	1992	1993	1994	1995	1996		1997
27S	39W	27BBA	01	QU,TO	3175	395	68	102.2	205.0	200.7	209.1	205.5	215.9	230.2	229.6	qJ58
27S	40W	07ABB	01	QU,TO,KD	3273	228	63		131.2	138.3	138.6			191.6		aJ85
27S	40W	25CBC	01	QU,TO	3228	328	73	85.8	179.6	189.7	187.5	185.4	189.5	199.2		aJ59
27S	41W	35CCC	01	QU,TO,KJ	3340			135.0	186.7	187.1	185.9	188.1	189.7	192.8	192.6	aJ59
27S	42W	17CCC	01	QU,TO,KJ	3496				226.7	236.3	236.7	238.2	240.9	248.2	245.3	aJ86
27S	43W	02BDD	01	QU,TO,KD	3545						259.4	258.6	257.8	269.7		aJ92
28S	39W	14BBC	01	QU,TO,KJ	3158	408	53	97.1		155.5	156.7	158.3	162.1	163.3	165.2	qJ59
28S	39W	16CCC	01	QU,TO,KD	3171	391	49		182.3	185.5	182.7	183.6	190.6	199.2	199.0	aJ84
28S	39W	33ACC	01	QU,TO	3201	428	82	120.1	190.2	191.2	202.3	203.9	209.9	199.4	204.6	aJ59
28S	39W	36ABB	02	QU,TO	3145										227.2	uU97
28S	40W	04CCC	01	QU,TO	3289				225.4	230.7	233.6	235.1	232.6	250.2	238.2	aJ59
28S	40W	12DDD	02	QU,TO	3225	385	83	107.4	219.2	219.0	217.9	218.9	225.3	228.0	222.6	aJ63
28S	40W	32CCB	01	QU,TO	3320	446	158	172.5	252.6	255.9		257.6	253.2	254.7		aJ59
28S	41W	02CCC	01	QU,TO	3343	343	141		238.6	236.8	236.5	236.1	234.3	236.9	235.5	aJ85
28S	42W	06DBB	01	QU,TO	3529				243.3	245.1	246.6	247.1	253.7	257.8	259.8	uJ91

TABLE 2. DERIVED HYDROLOGIC DATA, STAFFORD COUNTY (cont'd)

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1944-97	1974-97	1996-97	1944-97	1974-97	1944	1997	
23S 11W 22BCC 01	QU	19.1	-14	-1.7	1.0	-0.3	-0.1	167	153	-8
23S 11W 36CCA 01	QU	15.1			1.2					
23S 12W 07DBD 01	QU	7.5	-7	-7.0	0.8	-0.1	-0.3	173	167	-3
23S 12W 22BCC 01	QU	10.8	-7	-5.4	1.1	-0.1	-0.2	159	152	-4
23S 12W 36BBC 01	QU	12.8	-5	-1.1	1.0	-0.1	0.0	146	141	-3
23S 13W 08CCB 01	QU	13.3	-5	-8.9	0.0	-0.1	-0.4	112	107	-4
23S 13W 30CBB 01	QU	13.3	-2	-5.4	0.2	0.0	-0.2	75	73	-3
23S 13W 35CCA 01	QU	17.9	1	-10.6	-0.1	0.0	-0.5	131	132	1
23S 14W 15ADD 01	QU	11.6	-5	-8.3	0.7	-0.1	-0.4	69	64	-7
23S 14W 30BBB 01	QU	42.8	-19	-8.4	0.4	-0.4	-0.4	144	125	-13
24S 11W 17DDB 01	QU	21.1	2	1.7	0.8	0.0	0.1	110	112	2
24S 12W 04CDB 01	QU	19.2			-0.3					
24S 12W 17CAB 01	QU	25.7	-4	-8.9	-0.5	-0.1	-0.4	122	118	-3
24S 12W 34ABC 01	QU	20.6	8	-0.6	0.3	0.2	0.0	121	129	7
24S 13W 16ACA 01	QU	20.0	-2	-11.4	0.4	0.0	-0.5	119	117	-2
24S 13W 20CDD 01	QU	22.3			-0.1					
24S 13W 36DDD 01	QU	21.9	-1		-0.7	0.0		134	133	-1
24S 14W 17AAC 01	QU	34.4	-7	-12.7	-0.2	-0.1	-0.6	105	98	-7
24S 14W 31BBD 01	QU	18.6	4	-10.8	0.9	0.1	-0.5	135	139	3
24S 15W 10BAB 01	QU	30.2	-6	-15.6	0.5	-0.1	-0.7	90	84	-7
24S 15W 32DBC 01	QU	23.1	-2	-13.2	1.2	0.0	-0.6	163	161	-1
25S 11W 02ACB 01	QU	11.2	-1	-0.9	0.3	0.0	0.0	80	79	-1
25S 11W 23DDD 01	QU	17.1	-4	-4.2	-1.1	-0.1	-0.2	143	139	-3
25S 12W 11AAA 01	QU	15.3	1		1.3	0.0		65	66	2
25S 12W 16DCA 01	QU	13.2			1.5					
25S 12W 24DDB 01	QU	13.5	4	-3.3	0.4	0.1	-0.1	128	132	3
25S 13W 16AAC 01	QU	27.1	-5		2.6	-0.1		120	115	-4
25S 13W 31DDA 01	QU	21.8	16		3.2	0.3		183	199	9
25S 13W 36DCC 01	QU	12.5	10		2.7	0.2		155	165	6
25S 14W 04AAD 01	QU	12.2	12	-3.0	1.3	0.2	-0.1	125	137	10
25S 14W 21DDB 01	QU	11.7			2.9					
25S 14W 30CDB 01	QU	14.1	0	-6.9	2.5	0.0	-0.3	200	200	0
25S 15W 11BCB 01	QU	12.7	3	-1.0	-0.4	0.1	0.0	158	161	2
25S 15W 29BBB 01	QU	6.6	9	-2.3	3.8	0.2	-0.1	168	177	5

TABLE 2. DERIVED HYDROLOGIC DATA, STANTON COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1940-97	1966-97	1996-97	1940-97	1966-97	1940	1997	
27S 39W 27BBA 01	QU, TO	229.6	-162	-127.4	0.6	-2.8	-4.1	327	165	-50
27S 40W 07ABB 01	QU, TO, KD									
27S 40W 25CBC 01	QU, TO									
27S 41W 35CCC 01	QU, TO, KJ	192.6		-57.6	0.2		-1.9			
27S 42W 17CCC 01	QU, TO, KJ	245.3			2.9					
27S 43W 02BDD 01	QU, TO, KD									
28S 39W 14BBC 01	QU, TO, KJ	165.2	-112	-68.1	-1.9	-2.0	-2.2	355	243	-32
28S 39W 16CCC 01	QU, TO, KD	199.0	-150		0.2	-2.6		342	192	-44
28S 39W 33ACC 01	QU, TO	204.6	-123	-84.5	-5.2	-2.2	-2.7	346	223	-36
28S 39W 36ABB 02	QU, TO	227.2								
28S 40W 04CCC 01	QU, TO	238.2			12.0					
28S 40W 12DDD 02	QU, TO	222.6	-140	-115.2	5.4	-2.5	-3.7	302	162	-46
28S 40W 32CCB 01	QU, TO									
28S 41W 02CCC 01	QU, TO	235.5	-95		1.4	-1.7		202	108	-47
28S 42W 06DBB 01	QU, TO	259.8			-2.0					

TABLE 1. SELECTED HYDROLOGIC DATA, STANTON COUNTY (cont'd)

Well Number				Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
							1940	1966	1991	1992	1993	1994	1995	1996	1997	
28S 42W 20BCC 01			QU,TO	3553					251.5	251.3	251.0	250.9	251.4	253.1	252.5	aJ84
28S 42W 32BBBB 01			KJ	3540				215.9			209.4	209.3	209.5	210.4	211.6	aJ59
29S 39W 21DBD 01			QU,TO	3183	413	62		82.6	196.1	200.8	203.5	204.1	210.3	215.2	217.5	aJ59
29S 39W 24DDA 01			QU,TO	3154	449	62		80.0	185.3	187.0	189.0	194.7	200.2	203.6	204.0	aJ48
29S 40W 28ABB 01			QU,TO,KD	3282	422	132			247.5	261.7	257.1	278.6		268.6		aJ84
29S 41W 13ACC 01			QU,TO	3344	400	176		192.6	282.5			288.8	292.6	297.7		aJ59
29S 42W 08CDC 01			KJ	3517				186.9	190.6	191.4	187.8	193.5	188.5	190.7	191.0	aJ59
29S 42W 26BDC 01			QU,TO,KD	3490										231.6		aU94
29S 43W 21DCDD01			KD	3566								92.4			104.9	aU93
29S 43W 21DCDD02			JM	3568								109.9	113.5	123.2	121.1	aJ93
29S 43W 21DCDD03			KD	3566								89.6			101.6	aU93
29S 43W 33CDB 01			KJ	3654				119.8	114.7	111.8	115.1	115.5	121.2	126.3	125.4	aJ59
30S 39W 23BBB 01			QU,TO	3179	404	72		89.5	162.5	164.7	163.0	162.3	160.8	160.9	162.4	aJ58
30S 40W 12BBB 01			QU,TO	3274	434	138			261.0	257.6	257.8	262.5	260.9	268.9	266.7	aJ84
30S 40W 24CDC 01			QU,TO,KJ	3237				115.3		177.8	168.0	183.3		183.4	184.6	aJ59
30S 40W 33CCB 01			KJ	3309				164.3	189.3	190.7	190.2	190.3	191.1	193.0	192.5	aJ59
30S 41W 13CCC 02			QU,TO	3347					212.3	203.6	199.6	200.9	199.7	198.5	199.0	aJ77
30S 41W 23DDB 01			QU,TO,KJ	3365	205	178			196.0	198.3	192.8	192.8	191.6	197.4	191.9	aJ84
30S 42W 12ACC 01			KJ	3457				188.0	192.7	194.2	194.3	193.8	193.1	193.6	193.4	aJ59
30S 42W 16BDB 01			KJ	3524				187.8	173.9	173.8	174.4	176.8	172.1	172.5	172.7	aJ59
30S 43W 34BBA 01			QU,TO,KD	3622										87.8	85.7	aU96
30S 43W 36BB 01			QU,TO,KJ	3595				71.6	83.6	84.1	85.0	85.3		86.3	86.3	aJ59

TABLE 1. SELECTED HYDROLOGIC DATA, STEVENS COUNTY

Well Number				Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
							1940	1970	1991	1992	1993	1994	1995	1996		1997
31S	35W	15BAA	01	QU,TO	3009	449	224	236.4	291.0	295.3	298.5	298.9	300.8		305.6	aJ58
31S	36W	02CDD	01	QU,TO	3019	365	139	155.8	176.9	180.6	182.2	183.5		194.1	191.8	qJ58
31S	37W	09BBC	01	QU,TO	3102				222.9	229.1	234.6	236.4	241.0	247.2	253.0	aJ90
31S	37W	22BCC	01	QU,TO	3096	440	106	128.3	229.0	236.8	241.5	242.0	247.1	252.8	258.5	qJ56
31S	37W	30DDB	01	TO	3138	498	123		226.0	229.4	232.7	235.2	241.4	247.2	258.9	aJ84
31S	39W	23BBB	01	QU,TO	3199	259	98	116.9		177.0	179.0	181.5	182.6	185.3	186.3	aJ58
32S	35W	08DDD	01	QU,TO	3012	502	130		171.9	177.0	176.9	180.1	183.7	186.8	188.3	aJ70
32S	36W	21AAC	01	TO	3067	467	125		191.8	195.5	193.9	195.8	186.3	192.5	200.4	aJ84
32S	37W	10DCC	01	QU,TO	3120	540	127	136.4	177.0	175.8	176.5	175.9		181.2	179.6	aJ58
32S	37W	26BAC	01	QU,TO	3118		124		126.0	123.7	122.2	123.7	124.5	127.7	132.6	aJ83
32S	38W	11ADA	01	QU,TO	3159	529	118	114.1	136.5	137.5	138.8	139.9	141.3	142.8	144.2	aJ65
32S	38W	23CAD	01	QU,TO	3175						149.2	149.8	143.2	150.1	168.2	aJ65
32S	39W	02BBB	01	QU,TO	3216	296	96	132.9	198.1	191.8	192.8	199.6	203.3	198.1		aJ58
32S	39W	14DDD	01	QU,TO	3202				77.6	78.5	80.8	74.7	77.0	80.9	72.2	aJ84
33S	35W	23CBB	01	TO	2968		104		132.9	143.6	141.8	145.3	149.9	157.5	164.3	aJ81
33S	36W	26DDD	01	QU,TO	3032	422	121	118.7	147.8	165.2	165.5	173.0	185.4	205.5		aJ42
33S	37W	17CCC	01	QU,TO	3124	554	83	89.3	109.3	109.0	112.3	114.3	116.9	121.1	126.9	aJ64
33S	37W	23CDB	01	QU,TO	3092	562	87	83.8	97.2	101.5	100.5	101.0	102.9	106.0		aJ64
33S	38W	06AAB	01	QU,TO	3203	378	93	94.6	94.5	94.2	93.8	95.0	95.4	96.4	96.1	aJ59
33S	38W	10ACC	01	QU,TO	3166	466	101	107.7	145.8	150.2	152.0	153.6	156.4	159.9	163.3	aJ58
33S	38W	20DDB	01	QU,TO	3191				153.6	154.9	146.9	154.3	154.6	158.9	161.4	uJ59
34S	35W	26ACC	01	TO	2977		112		134.4	137.6	135.2	137.2	141.3	147.8	152.7	aJ81
34S	36W	10CAC	01	TO	3065		135		163.0	169.2	170.6	170.8	173.5	177.5	180.4	aJ81
34S	36W	21DBD	01	TO	3079		144		165.6	170.2	174.0	178.4	181.3	185.8	189.6	aJ84
34S	37W	08DAC	01	QU,TO	3162	642	133	113.0	135.0	137.3	138.8	140.4	142.6	144.7	146.9	aJ64
34S	37W	27ABC	02	QU,TO	3132				127.9	129.0	131.2	133.0	135.6	139.8	141.3	aJ89
34S	37W	29BBB	01	TO	3170	550	138		151.4	153.4	155.6	157.8		162.6	165.4	aJ84
34S	37W	35AAD	01	TO	3111	666	129		125.4	129.4	133.0	131.0	138.6	141.7	143.2	aJ84
34S	38W	02ADC	01	TO	3171				153.6	153.1	155.7	157.7			168.5	aJ91
34S	38W	34CAA	01	TO	3194					169.0	171.7	174.1		180.1	183.5	aJ84

TABLE 2. DERIVED HYDROLOGIC DATA, STANTON COUNTY (cont'd)

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1940-97	1966-97	1996-97	1940-97	1966-97	1940	1997	
28S 42W 20BCC 01	QU,TO	252.5			0.6					
28S 42W 32BBB 01	KJ	211.6		4.3	-1.2		0.1			
29S 39W 21DBD 01	QU,TO	217.5	-156	-134.9	-2.3	-2.7	-4.4	351	196	-44
29S 39W 24DDA 01	QU,TO	204.0	-142	-124.0	-0.4	-2.5	-4.0	387	245	-37
29S 40W 28ABB 01	QU,TO,KD									
29S 41W 13ACC 01	QU,TO									
29S 42W 08CDC 01	KJ	191.0		-4.1	-0.3		-0.1			
29S 42W 26BDC 01	QU,TO,KD									
29S 43W 21DCDD01	KD	104.9								
29S 43W 21DCDD02	JM	121.1			2.1					
29S 43W 21DCDD03	KD	101.6								
29S 43W 33CDB 01	KJ	125.4		-5.6	0.9		-0.2			
30S 39W 23BBB 01	QU,TO	162.4	-90	-72.9	-1.5	-1.6	-2.4	332	242	-27
30S 40W 12BBB 01	QU,TO	266.7	-129		2.2	-2.3		296	167	-44
30S 40W 24CDC 01	QU,TO,KJ	184.6		-69.3	-1.2		-2.2			
30S 40W 33CCB 01	KJ	192.5		-28.2	0.5		-0.9			
30S 41W 13CCC 02	QU,TO	199.0			-0.5					
30S 41W 23DDB 01	QU,TO,KJ	191.9	-14		5.5	-0.2		27	13	-52
30S 42W 12ACC 01	KJ	193.4		-5.4	0.2		-0.2			
30S 42W 16BDB 01	KJ	172.7		15.1	-0.2		0.5			
30S 43W 34BBA 01	QU,TO,KD	85.7			2.1					
30S 43W 36BB 01	QU,TO,KJ	86.3		-14.7	0.0		-0.5			

TABLE 2. DERIVED HYDROLOGIC DATA, STEVENS COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1940-97	1970-97	1996-97	1940-97	1970-97	1940	1997	
31S 35W 15BAA 01	QU,TO	305.6	-82	-69.2		-1.4	-2.6	225	143	-36
31S 36W 02CDD 01	QU,TO	191.8	-53	-36.0	2.3	-0.9	-1.3	226	173	-23
31S 37W 09BBC 01	QU,TO	253.0			-5.8					
31S 37W 22BCC 01	QU,TO	258.5	-153	-130.2	-5.7	-2.7	-4.8	334	182	-46
31S 37W 30DDB 01	TO	258.9	-136		-11.7	-2.4		375	239	-36
31S 39W 23BBB 01	QU,TO	186.3	-88	-69.4	-1.0	-1.5	-2.6	161	73	-55
32S 35W 08DDD 01	QU,TO	188.3	-58		-1.5	-1.0		372	314	-16
32S 36W 21AAC 01	TO	200.4	-75		-7.9	-1.3		342	267	-22
32S 37W 10DCC 01	QU,TO	179.6	-53	-43.2	1.6	-0.9	-1.6	413	360	-13
32S 37W 26BAC 01	QU,TO	132.6	-9		-4.9	-0.2				
32S 38W 11ADA 01	QU,TO	144.2	-26	-30.1	-1.4	-0.5	-1.1	411	385	-6
32S 38W 23CAD 01	QU,TO	168.2			-18.1					
32S 39W 02BBB 01	QU,TO									
32S 39W 14DDD 01	QU,TO	72.2			8.7					
33S 35W 23CBB 01	TO	164.3	-60		-6.8	-1.1				
33S 36W 26DDD 01	QU,TO									
33S 37W 17CCC 01	QU,TO	126.9	-44	-37.6	-5.8	-0.8	-1.4	471	427	-9
33S 37W 23CDB 01	QU,TO									
33S 38W 06AAB 01	QU,TO	96.1	-3	-1.5	0.3	-0.1	-0.1	285	282	-1
33S 38W 10ACC 01	QU,TO	163.3	-62	-55.6	-3.4	-1.1	-2.1	365	303	-17
33S 38W 20DDB 01	QU,TO	161.4			-2.5					
34S 35W 26ACC 01	TO	152.7	-41		-4.9	-0.7				
34S 36W 10CAC 01	TO	180.4	-45		-2.9	-0.8				
34S 36W 21DBD 01	TO	189.6	-46		-3.8	-0.8				
34S 37W 08DAC 01	QU,TO	146.9	-14	-33.9	-2.2	-0.2	-1.3	509	495	-3
34S 37W 27ABC 02	QU,TO	141.3			-1.5					
34S 37W 29BBD 01	TO	165.4	-27		-2.8	-0.5		412	385	-7
34S 37W 35AAD 01	TO	143.2	-14		-1.5	-0.2		537	523	-3
34S 38W 02ADC 01	TO	168.5								
34S 38W 34CAA 01	TO	183.5			-3.4					

TABLE 1. SELECTED HYDROLOGIC DATA, STEVENS COUNTY (cont'd)

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1940	1970	1991	1992	1993	1994	1995	1996	1997	
34S 39W 02CCA 01	QU,TO	3248	533	118	108.3	100.7	106.6	101.0	101.6	102.2	103.8	104.4	aJ64
34S 39W 15CAD 01	QU,TO	3280	510	141	141.7		138.1		139.3	140.5	142.0	143.2	aJ65
35S 35W 15BCC 01	TO	2978	618	107		113.3	113.6	118.1	120.5	123.4	126.9	130.7	aJ84
35S 36W 01AAA 01	QU,TO	3022	590	120		131.7	134.1	138.4	142.2	139.1	144.6	147.3	aJ70
35S 37W 16BCC 01	TO	3138					139.4	141.4	143.3	145.1	150.1	152.1	aJ84
35S 39W 10CAD 01	QU,TO	3302	502	183	188.0	198.3	199.6	204.5	203.1	208.0	213.1	216.0	aJ67

TABLE 1. SELECTED HYDROLOGIC DATA, SUMNER COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1950	1966	1991	1992	1993	1994	1995	1996	1997	
30S 04W 34BAA 01	QU	1460					28.3	27.3			24.4		aU81
31S 04W 01DAC 01	QU	1441					22.0	20.3			16.4		aU86
31S 04W 02BBB 01	QU	1435					11.4	8.9			8.2		aU86

TABLE 1. SELECTED HYDROLOGIC DATA, THOMAS COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1950	1966	1991	1992	1993	1994	1995	1996	1997	
*06S 31W 03ADB 01	TO	2957	192	109	115.0	115.1			115.0	115.1	113.9	114.9	aJ65
06S 31W 19ABA 01	TO	3010						118.4	118.6			119.2	aU93
*06S 31W 33CCD 01	QA,TO	2916	131	18	10.0		29.7	34.7	37.7	34.7	36.1	35.4	aJ64
*06S 32W 12CBC 01	TO	3020	210	115	114.0	117.6	117.8	118.3	118.2	118.1	118.1	118.3	aJ42
*06S 32W 29CDC 01	TO	3077	204	113	111.0	125.4	125.8	124.0	123.8		126.1	126.4	aJ64
*06S 33W 07BBB 01	TO	3177	234	137		141.4	141.5	141.8	139.5	140.1	144.1	139.6	aJ79
*06S 33W 23DDD 01	QA	2997	81	9		16.4	16.4	10.0	9.7	11.0	12.4	12.2	aJ78
06S 34W 11CDD 01	TO	3218	253	158	156.0	162.9	163.9	163.1	163.7	164.2		164.8	aJ67
*06S 34W 17CBC 01	TO	3261	258	151	151.0	161.2	167.6	166.8	159.7	159.8	160.5	161.2	aJ62
*06S 34W 22DCA 01	TO	3207				131.8	132.5	130.5	131.7	131.1	130.5	132.1	aJ84
*06S 34W 31CDB 01	TO	3255				134.0	135.9	134.9	136.1	136.3	136.4	138.2	aJ85
*06S 35W 02CDD 01	TO	3245	250	117	127.0	130.7	131.1	130.5	130.5	131.0	132.3	131.1	aJ64
*06S 35W 26ACB 01	TO	3300	255	151	150.0	158.4	159.7	158.0	161.5	159.5	158.8	160.4	aJ65
*06S 36W 07BBB 01	TO	3412							180.3	181.3	179.1	182.1	aD93
*06S 36W 11ACC 01	TO	3360	280	168	161.0	171.4	171.4		172.0	173.6	174.8	178.3	aJ64
*06S 36W 30DCB 01	TO	3417	307	152	147.0	157.6	156.9		157.3	162.6	158.9	159.6	aJ64
*06S 36W 34DDDB 01	TO	3334	246	99	94.0	104.1	104.5	103.9	104.4	109.8	106.4	112.0	aJ64
*07S 31W 01DCA 01	TO	2956	246	108	101.0	121.7	122.4	122.5	119.2	126.3	122.5	124.0	aJ64
*07S 32W 07ACA 01	TO	3056	146	68	64.0	82.2			81.8	82.1	81.0	81.5	aJ42
*07S 32W 13DBD 01	TO	3028							115.6	114.1	115.5	115.6	aD93
07S 32W 33BCB 01	TO	3082				120.9	121.7	119.7	121.0	122.1	126.1	127.3	aJ84
*07S 33W 07BDA 01	TO	3203	254	141	149.0	155.1	156.2		155.4	156.1	156.8	157.8	aJ64
07S 34W 25AAA 01	TO	3167	240	106	106.0	119.0	121.7	120.5	114.3	115.2	115.5	127.2	aJ66
07S 34W 26DBD 01	TO	3177	230	104	104.0	114.6	127.2		127.6	123.6	121.8	130.1	aJ64
07S 35W 09CCC 01	TO	3315	265	124		132.8		131.8	127.6	127.3	132.7	133.4	aJ80
07S 36W 17CCC 01	TO	3417	267	139	134.0	149.2	153.8	149.3	149.7	149.7	148.7	150.2	aJ62
*08S 31W 03CDD 01	TO	3003	110			146.2	148.3	146.2	145.8	146.1	147.8	148.0	aJ80
08S 31W 20CDD 01	TO	3026	220	98	101.0	128.0	130.3	132.0	122.9	126.8	127.8	127.9	aJ64
08S 32W 07BAA 01	TO	3102	272	98	99.0	129.5	129.8	128.3	127.3	127.6	128.1	128.4	aJ64
08S 32W 12DBC 01	TO	3057	217	110	108.0	124.8	125.9	126.9	126.0			128.5	aJ64
08S 32W 27DAB 01	TO	3078	228	112	110.0	128.2	129.2	129.3	128.8	128.1	129.0	129.2	aJ42
08S 33W 34BBC 01	TO	3168	197	130	130.0	161.0	162.0	160.7	160.9		161.0	161.2	aJ64
08S 34W 01BAC 01	TO	3177	270	113	116.0	129.3	131.0	130.8	129.9	130.5	130.5	130.6	aJ47
08S 34W 06CBC 01	TO	3266	227	130	135.0	139.1	145.5	137.9	138.4	141.5	139.8	139.9	aJ64
08S 34W 23CBD 01	TO	3232	235	162	155.0	182.5	182.9		185.0	185.8	186.1	186.3	aJ64

TABLE 2. DERIVED HYDROLOGIC DATA, STEVENS COUNTY (cont'd)

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1940-97	1970-97	1996-97	1940-97	1970-97	1940	1997	
34S 39W 02CCA 01	QU,TO	104.4	14	3.9	-0.6	0.2	0.1	415	429	3
34S 39W 15CAD 01	QU,TO	143.2	-2	-1.5	-1.2	0.0	-0.1	369	367	-1
35S 35W 15BCC 01	TO	130.7	-24		-3.8	-0.4		511	487	-5
35S 36W 01AAA 01	QU,TO	147.3	-27		-2.7	-0.5		470	443	-6
35S 37W 16BCC 01	TO	152.1			-2.0					
35S 39W 10CAD 01	QU,TO	216.0	-33	-28.0	-2.9	-0.6	-1.0	319	286	-10

TABLE 2. DERIVED HYDROLOGIC DATA, SUMNER COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
30S 04W 34BAA 01	TO									
31S 04W 01DAC 01	QU									
31S 04W 02BBB 01	QU									

TABLE 2. DERIVED HYDROLOGIC DATA, THOMAS COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
*06S 31W 03ADB 01	TO	114.9	-6	0.1	-1.0	-0.1	0.0	83	77	-7
06S 31W 19ABA 01	TO	119.2								
*06S 31W 33CCD 01	QA,TO	35.4	-17	-25.4	0.7	-0.4	-0.8	113	96	-15
*06S 32W 12CBC 01	TO	118.3	-3	-4.3	-0.2	-0.1	-0.1	95	92	-3
*06S 32W 29CDC 01	TO	126.4	-13	-15.4	-0.3	-0.3	-0.5	91	78	-14
*06S 33W 07BBB 01	TO	139.6	-3		4.5	-0.1		97	94	-3
*06S 33W 23DDD 01	QA	12.2	-3		0.2	-0.1		72	69	-4
06S 34W 11CDD 01	TO	164.8	-7	-8.8		-0.1	-0.3	95	88	-7
*06S 34W 17CBC 01	TO	161.2	-10	-10.2	-0.7	-0.2	-0.3	107	97	-9
*06S 34W 22DCA 01	TO	132.1			-1.6					
*06S 34W 31CDB 01	TO	138.2			-1.8					
*06S 35W 02CDD 01	TO	131.1	-14	-4.1	1.2	-0.3	-0.1	133	119	-11
*06S 35W 26ACB 01	TO	160.4	-9	-10.4	-1.6	-0.2	-0.3	104	95	-9
*06S 36W 07BBB 01	TO	182.1			-3.0					
*06S 36W 11ACC 01	TO	178.3	-10	-17.3	-3.5	-0.2	-0.6	112	102	-9
*06S 36W 30DCB 01	TO	159.6	-8	-12.6	-0.7	-0.2	-0.4	155	147	-5
*06S 36W 34DDB 01	TO	112.0	-13	-18.0	-5.6	-0.3	-0.6	147	134	-9
*07S 31W 01DCA 01	TO	124.0	-16	-23.0	-1.5	-0.3	-0.7	138	122	-12
*07S 32W 07ACA 01	TO	81.5	-14	-17.5	-0.5	-0.3	-0.6	78	65	-17
*07S 32W 13DBD 01	TO	115.6			-0.1					
07S 32W 33BCB 01	TO	127.3			-1.2					
*07S 33W 07BDA 01	TO	157.8	-17	-8.8	-1.0	-0.4	-0.3	113	96	-15
07S 34W 25AAA 01	TO	127.2	-21	-21.2	-11.7	-0.4	-0.7	134	113	-16
07S 34W 26DBD 01	TO	130.1	-26	-26.1	-8.3	-0.6	-0.8	126	100	-21
07S 35W 09CCC 01	TO	133.4	-9		-0.7	-0.2		141	132	-6
07S 36W 17CCC 01	TO	150.2	-11	-16.2	-1.5	-0.2	-0.5	128	117	-9
*08S 31W 03CDD 01	TO	148.0	-38		-0.2	-0.8				
08S 31W 20CDD 01	TO	127.9	-30	-26.9	-0.1	-0.6	-0.9	122	92	-25
08S 32W 07BAA 01	TO	128.4	-30	-29.4	-0.3	-0.6	-0.9	174	144	-17
08S 32W 12DBC 01	TO	128.5	-19	-20.5		-0.4	-0.7	107	89	-17
08S 32W 27DAB 01	TO	129.2	-17	-19.2	-0.2	-0.4	-0.6	116	99	-15
08S 33W 34BBC 01	TO	161.2	-31	-31.2	-0.2	-0.7	-1.0	67	36	-46
08S 34W 01BAC 01	TO	130.6	-18	-14.6	-0.1	-0.4	-0.5	157	139	-11
08S 34W 06CBC 01	TO	139.9	-10	-4.9	-0.1	-0.2	-0.2	97	87	-10
08S 34W 23CBD 01	TO	186.3	-24	-31.3	-0.2	-0.5	-1.0	73	49	-33

TABLE 1. SELECTED HYDROLOGIC DATA, THOMAS COUNTY (cont'd)

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1950	1966	1991	1992	1993	1994	1995	1996	1997	
08S 34W 29CCC 01	TO	3283				210.3			212.6	213.2	213.5	213.0	aJ84
08S 35W 04CCC 01	TO	3302				95.2	95.3	95.4	95.1	94.7	95.4	95.1	aJ84
08S 36W 15CBB 01	TO	3365				87.1	87.5	87.2	86.6	86.7	86.4	87.0	aJ84
08S 36W 18ABA 02	TO	3428	120			131.3	132.1	132.5	131.5	132.1	131.3	132.9	aJ42
08S 36W 31BCD 01	TO	3369				50.8			38.0	38.1	37.5	43.7	aJ84
09S 31W 10BBB 01	TO	2999	177	85	83.0	93.0	94.3	93.5	93.0	92.7			aJ66
09S 31W 17CCC 01	TO	3016				93.5	94.1	92.6	89.5	90.1	90.5	91.6	aJ84
09S 31W 36AAB 01	TO	3013	209	130	131.0	148.3	152.6	148.3	146.6	149.1	156.7	149.7	aJ64
09S 32W 03AAA 01	TO	3051				103.3	103.6	100.6	100.3	100.8	101.3	101.6	aJ84
09S 32W 27BCD 01	TO	3076	207	97	98.0	126.1	126.6	125.4	122.0	124.4	124.2	125.7	aJ64
09S 33W 35AAD 01	TO	3145	250	125	129.0	164.7	166.4		166.4	168.0	168.3	169.3	aJ64
09S 34W 11CCC 01	TO	3180				130.4	136.8	137.9	136.9	131.7	131.1	132.8	aJ85
09S 34W 12ADA 01	TO	3199	269	134		170.0	190.0	170.7	171.0	171.0	171.3	172.2	aJ79
09S 34W 17ABA 01	TO	3229				159.7	160.2	159.1	159.1	160.2		159.3	aJ84
09S 35W 32DAA 01	TO	3361	235	182	188.0	189.4	211.2	209.6	194.0	186.0	193.7	185.1	aJ68
10S 31W 26AAA 01	QA, TO	2891	31	11	5.0	13.2	14.5	11.0	10.3	10.9	10.5	9.7	aJ64
10S 31W 29AAB 01	TO	2997	190	82	82.0	91.8	92.7	92.3	91.8	91.0		91.2	aJ64
10S 32W 11BAA 01	TO	3072	171	110	105.0	122.0	123.0	123.7	123.8	125.3	124.9	125.8	aJ65
10S 32W 29DCB 01	TO	3064	184	78	80.0	103.4	98.6	105.2	96.5	97.1	101.3	104.8	aJ64
10S 33W 06BBC 01	TO	3191	315	136		178.5	181.5		177.8	175.2	177.9	176.9	aJ71
10S 33W 11BAB 01	TO	3140							160.4	159.8	158.3	157.9	aU93
10S 33W 19CBD 01	TO	3161	166	100	99.0	106.5	107.3	105.9	102.8	101.7	107.0	112.5	aJ64
10S 34W 12BCD 01	TO	3220	297	157	169.0	178.4	179.7		175.4	172.8	178.6	171.3	aJ64
10S 34W 29BBC 01	TO	3208				88.8	88.7		82.6	84.5	83.3	87.7	aJ84
10S 35W 09ABB 01	TO	3290				112.7	112.4	112.2	111.8	110.5	111.4	110.6	aJ84
10S 36W 16CCC 01	TO	3366				133.5	133.1	133.9	134.1	134.1	133.8	134.3	aJ84

TABLE 1. SELECTED HYDROLOGIC DATA, TREGO COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1950	1966	1991	1992	1993	1994	1995	1996	1997	
12S 23W 20CCC 01	QA, TO	2374				20.9			16.5		17.2	16.3	qD60
14S 25W 13ABC 01	QA	2245									15.4	15.2	uU95

TABLE 1. SELECTED HYDROLOGIC DATA, WABAUNSEE COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type	
				1950	1966	1991	1992	1993	1994	1995	1996		1997
10S 10E 15DCC 01	QA	971			15.5	14.8		14.9				13.9	qD66
10S 12E 29ADD 01	QA	944				19.2		15.8				18.8	qD74

TABLE 1. SELECTED HYDROLOGIC DATA, WALLACE COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1950	1966	1991	1992	1993	1994	1995	1996	1997	
11S 38W 35CCC 02	TO	3372	189	81	76.0	120.3	118.7	116.5	113.8	114.3	115.0	116.3	aJ66
+11S 42W 08DDC 01	TO	3953	98	98		110.9	112.7	111.8	111.3	112.0	113.8	112.8	aJ69
11S 42W 10AAD 01	TO	3948				136.7	132.5	130.6	130.4	130.4	131.6	130.9	aJ70
13S 39W 33BBB 01	TO	3322				27.2	27.2	26.8	25.8	27.0	26.7	25.4	qJ70
13S 43W 36ABB 01	TO	3894	270	149	149.0	191.6	184.4	189.2	189.2	191.9	193.7	198.1	aJ57

TABLE 2. DERIVED HYDROLOGIC DATA, THOMAS COUNTY (cont'd)

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	1950-97
08S 34W 29CCC 01	TO	213.0			0.5					
08S 35W 04CCC 01	TO	95.1			0.3					
08S 36W 15CBB 01	TO	87.0			-0.6					
08S 36W 18ABA 02	TO	132.9	-13		-1.6	-0.3				
08S 36W 31BCD 01	TO	43.7			-6.2					
09S 31W 10BBB 01	TO									
09S 31W 17CCC 01	TO	91.6			-1.1					
09S 31W 36AAB 01	TO	149.7	-20	-18.7	7.0	-0.4	-0.6	79	59	-25
09S 32W 03AAA 01	TO	101.6			-0.3					
09S 32W 27BCD 01	TO	125.7	-29	-27.7	-1.5	-0.6	-0.9	110	81	-26
09S 33W 35AAD 01	TO	169.3	-44	-40.3	-1.0	-0.9	-1.3	125	81	-35
09S 34W 11CCC 01	TO	132.8			-1.7					
09S 34W 12ADA 01	TO	172.2	-38		-0.9	-0.8		135	97	-28
09S 34W 17ABA 01	TO	159.3								
09S 35W 32DAA 01	TO	185.1	-3	2.9	8.6	-0.1	0.1	53	50	-6
10S 31W 26AAA 01	QA, TO	9.7	1	-4.7	0.8	0.0	-0.2	20	21	5
10S 31W 29AAB 01	TO	91.2	-9	-9.2		-0.2	-0.3	108	99	-8
10S 32W 11BAA 01	TO	125.8	-16	-20.8	-0.9	-0.3	-0.7	61	45	-26
10S 32W 29DCB 01	TO	104.8	-27	-24.8	-3.5	-0.6	-0.8	106	79	-25
10S 33W 06BBC 01	TO	176.9	-41		1.0	-0.9		179	138	-23
10S 33W 11BAB 01	TO	157.9			0.4					
10S 33W 19CBD 01	TO	112.5	-13	-13.5	-5.5	-0.3	-0.4	66	54	-18
10S 34W 12BCD 01	TO	171.3	-14	-2.3	7.3	-0.3	-0.1	140	126	-10
10S 34W 29BBC 01	TO	87.7			-4.4					
10S 35W 09ABB 01	TO	110.6			0.8					
10S 36W 16CCC 01	TO	134.3			-0.5					

TABLE 2. DERIVED HYDROLOGIC DATA, TREGO COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	1950-97
12S 23W 20CCC 01	QA, TO	16.3			0.9					
14S 25W 13ABC 01	QA	15.2			0.2					

TABLE 2. DERIVED HYDROLOGIC DATA, WABAUNSEE COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	1950-97
10S 10E 15DCC 01	QA	13.9		1.6			0.1			
10S 12E 29ADD 01	QA	18.8								

TABLE 2. DERIVED HYDROLOGIC DATA, WALLACE COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	1950-97
11S 38W 35CCC 02	TO	116.3	-35	-40.3	-1.3	-0.7	-1.3	108	73	-32
+11S 42W 08DDC 01	TO	112.8	-15		1.0	-0.3		0	-15	
11S 42W 10AAD 01	TO	130.9			0.7					
13S 39W 33BBB 01	TO	25.4			1.3					
13S 43W 36ABB 01	TO	198.1	-49	-49.1	-4.4	-1.0	-1.6	121	72	-40

TABLE 1. SELECTED HYDROLOGIC DATA, WALLACE COUNTY (cont'd)

Well Number				Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)								Data Type
							1950	1966	1991	1992	1993	1994	1995	1996	
14S 38W 21DCC 01	TO	3538	94	82	80.1	82.6	82.4		82.8	82.7	82.8	82.8	aJ51		
14S 39W 28CAA 01	TO	3602				150.8	149.9		150.7	151.6	152.8	152.6	aJ88		
14S 40W 14CCC 01	TO	3610										115.6	aU95		
14S 40W 29ABA 01	TO	3702	230	137		183.0	184.0	185.1	185.9	187.2	188.6	192.0	aJ69		
14S 41W 18DCB 01	TO	3778	387	106		170.8	167.6	167.5	168.0	167.9	171.6	176.1	aJ77		
14S 41W 22BBC 01	TO	3729	218	84	86.1	142.8	144.4	144.3	144.5	147.2	150.3	153.1	aJ58		
14S 42W 10BAA 01	TO	3838	403	133		195.3	195.6	196.5	196.2	206.3	199.7	204.0	aJ69		
14S 43W 25ABA 01	TO	3885				202.6	205.2		206.0	211.2	210.9	212.5	aJ91		
15S 38W 05CCB 01	TO	3531	144	76		106.3	106.3		106.6	107.0	107.5	108.0	aJ77		
15S 38W 14CCD 01	TO	3486	150	70	81.1	106.6	106.5	107.4	108.0	108.5	109.2	109.8	aJ58		
15S 38W 21CCC 01	TO	3510				150.6	151.4	150.4	150.7	153.4	154.4	157.0	aJ88		
15S 39W 02BCA 01	TO	3585	195	109	125.0	155.9	154.7		150.3	151.4	155.5	157.3	aJ58		
15S 39W 06CBC 01	TO	3631	223	106	118.8	163.6	162.8			167.8	168.3	173.0	aJ65		
15S 39W 08ACC 01	TO	3623	222	113	129.9	166.0	169.3		171.6	169.4	167.8	171.9	qJ48		
15S 39W 26ACC 01	TO	3561	239	90	111.5	160.0	159.8		163.7	170.7	185.2	169.8	aJ60		
15S 40W 03BAB 01	TO	3636	254	86	85.0	132.4	134.0	133.6	134.1	137.2	139.0	142.7	qJ57		
15S 40W 09DCB 01	TO	3653	261	85	90.8	142.4			143.8	145.6	147.4	150.4	aJ67		
15S 40W 26CAB 01	TO	3646	245	100	102.0	146.3	148.8	148.5	150.8	153.8			aJ69		
*15S 41W 02AAA 01	TO	3766				211.4	215.9	214.7	214.6	216.3	222.8	225.0	aJ88		
15S 41W 05ACB 01	TO	3794	235	136	147.2	199.4	200.7	201.2	197.2	203.4	204.9	214.8	aJ58		
15S 41W 27CBC 01	TO	3750	230	145		198.8	200.1	199.2	199.6	203.1	204.6	205.6	aJ69		
15S 41W 36DDB 02	TO	3695	265	104	113.1	153.1	155.4	154.0	154.6	157.8	157.5	160.0	aJ66		
15S 42W 02BBB 01	TO	3854	225	159	166.9	205.9	206.0	207.3	208.7	209.4	210.6	211.8	aJ69		
+15S 42W 32BDA 01	TO	3901	271	216	233.9	247.4	244.6		244.4	246.1	250.3	273.4	aJ69		
15S 42W 36CDC 01	TO	3844	270	194	214.1	249.4	250.7	250.6	251.4	252.3	259.7	253.0	aJ51		

TABLE 1. SELECTED HYDROLOGIC DATA, WASHINGTON COUNTY

Well Number				Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)							Data Type	
							1950	1966	1991	1992	1993	1994	1995		1996
01S	05E	05ADA	01	KD	1370			39.2	42.6	39.5	32.9		35.9	35.3	qD79
*04S	02E	14CCC	01	KD	1485			45.5	16.9	47.8	45.6		43.8	44.1	qD79
05S	01E	31DDD	01	QU	1278			18.8	19.8	16.9	13.0		16.6	16.8	qD79

TABLE 1. SELECTED HYDROLOGIC DATA, WICHITA COUNTY

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)										Data Type
				1950	1966	1991	1992	1993	1994	1995	1996	1997		
16S 35W 06AAB 01	TO	3208	118	71	81.5	86.9	77.6	81.5	81.5	79.5	79.1	78.6	aJ48	
16S 35W 13CCC 01	TO	3182	170	118	126.6	159.7		161.2	160.7	162.6	161.6	161.9	aJ65	
16S 35W 20CCC 01	TO	3228	189	103	124.6	160.0	159.1	159.4		160.3	161.2		aJ50	
16S 36W 03DCC 01	TO	3267	138	87		136.6	135.6			133.9			aJ47	
16S 36W 07BCB 01	TO	3319	140	80	91.8	119.6	120.3	121.5	122.3		123.4	123.6	aJ48	
16S 36W 30CBC 01	TO	3319	218	87	109.3	155.3	157.1	156.3	156.1	157.2	158.0	158.4	aJ56	
16S 36W 34CCC 02	TO	3275				145.0	143.8		145.8	144.5	145.4	146.0	aJ85	
16S 37W 17BBB 01	TO	3399	194	86	101.0	150.0	151.7	151.4	151.3	153.3	154.6	156.1	aJ66	
16S 37W 30BAB 01	TO	3404				159.4	160.3	160.0		163.7	163.2	164.2	aJ85	
16S 38W 10ABB 01	TO	3458	208	83	96.3	154.0	153.8		150.0	154.7	156.2	157.3	aJ51	
16S 38W 26BBB 01	TO	3424	197	75	112.0	144.8	142.8		146.9	147.4	147.6	148.3	aJ61	
17S 35W 02ABC 01	TO	3185				157.4			165.1	157.9	158.9	158.6	aJ91	
17S 35W 18DCC 01	TO	3227				158.3		157.1	155.8	158.2	159.5	159.4	aJ91	
17S 35W 27CCC 01	TO	3195	210	91	109.6	152.5	151.3	149.7	146.8	149.3	153.3	151.0	aJ55	
17S 35W 30CBB 01	TO	3235	218	94	126.6	171.3	169.6	166.2	162.6	168.8	171.6	169.3	aJ51	

TABLE 2. DERIVED HYDROLOGIC DATA, WALLACE COUNTY (cont'd)

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
14S 38W 21DCC 01	TO	82.8	-1	-2.7	0.0	0.0	-0.1	12	11	-8
14S 39W 28CAA 01	TO	152.6			0.2					
14S 40W 14CCC 01	TO	115.6								
14S 40W 29ABA 01	TO	192.0	-55		-3.4	-1.2		93	38	-59
14S 41W 18DCB 01	TO	176.1	-70		-4.5	-1.5		281	211	-25
14S 41W 22BBC 01	TO	153.1	-69	-67.0	-2.8	-1.5	-2.2	134	65	-51
14S 42W 10BAA 01	TO	204.0	-71		-4.3	-1.5		270	199	-26
14S 43W 25ABA 01	TO	212.5			-1.6					
15S 38W 05CCB 01	TO	108.0	-32		-0.5	-0.7		68	36	-47
15S 38W 14CCD 01	TO	109.8	-40	-28.7	-0.6	-0.9	-0.9	80	40	-50
15S 38W 21CCC 01	TO	157.0			-2.6					
15S 39W 02BCA 01	TO	157.3	-48	-32.3	-1.8	-1.0	-1.0	86	38	-56
15S 39W 06CBC 01	TO	173.0	-67	-54.2	-4.7	-1.4	-1.7	117	50	-57
15S 39W 08ACC 01	TO	171.9	-59	-42.0	-4.1	-1.3	-1.4	109	50	-54
15S 39W 26ACC 01	TO	169.8	-80	-58.3	15.4	-1.7	-1.9	149	69	-54
15S 40W 03BAB 01	TO	142.7	-57	-57.7	-3.7	-1.2	-1.9	168	111	-34
15S 40W 09DCB 01	TO	150.4	-65	-59.6	-3.0	-1.4	-1.9	176	111	-37
15S 40W 26CAB 01	TO									
*15S 41W 02AAA 01	TO	225.0			-2.2					
15S 41W 05ACB 01	TO	214.8	-79	-67.6	-9.9	-1.7	-2.2	99	20	-80
15S 41W 27CBC 01	TO	205.6	-61		-1.0	-1.3		85	24	-72
15S 41W 36DDB 02	TO	160.0	-56	-46.9	-2.5	-1.2	-1.5	161	105	-35
15S 42W 02BBB 01	TO	211.8	-53	-44.9	-1.2	-1.1	-1.4	66	13	-80
+15S 42W 32BDA 01	TO	273.4	-57	-39.5	-23.1	-1.2	-1.3	55	-2	-104
15S 42W 36CDC 01	TO	253.0	-59	-38.9	6.7	-1.3	-1.3	76	17	-78

TABLE 2. DERIVED HYDROLOGIC DATA, WASHINGTON COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
01S 05E 05ADA 01	KD	35.3			0.6					
*04S 02E 14CCC 01	KD	44.1			-0.3					
05S 01E 31DDD 01	QU	16.8			-0.2					

TABLE 2. DERIVED HYDROLOGIC DATA, WICHITA COUNTY

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
16S 35W 06AAB 01	TO	78.6	-8	2.9	0.5	-0.2	0.1	47	39	-17
16S 35W 13CCC 01	TO	161.9	-44	-35.3	-0.3	-0.9	-1.1	52	8	-85
16S 35W 20CCC 01	TO									
16S 36W 03DCC 01	TO									
16S 36W 07BCB 01	TO	123.6	-44	-31.8	-0.2	-0.9	-1.0	60	16	-73
16S 36W 30CBC 01	TO	158.4	-71	-49.1	-0.4	-1.5	-1.6	131	60	-54
16S 36W 34CCC 02	TO	146.0			-0.6					
16S 37W 17BBB 01	TO	156.1	-70	-55.1	-1.5	-1.5	-1.8	108	38	-65
16S 37W 30BAB 01	TO	164.2			-1.0					
16S 38W 10ABB 01	TO	157.3	-74	-61.0	-1.1	-1.6	-2.0	125	51	-59
16S 38W 26BBB 01	TO	148.3	-73	-36.3	-0.7	-1.6	-1.2	122	49	-60
17S 35W 02ABC 01	TO	158.6			0.3					
17S 35W 18DCC 01	TO	159.4			0.1					
17S 35W 27CCC 01	TO	151.0	-60	-41.4	2.3	-1.3	-1.3	119	59	-50
17S 35W 30CBB 01	TO	169.3	-75	-42.7	2.3	-1.6	-1.4	124	49	-60

TABLE 1. SELECTED HYDROLOGIC DATA, WICHITA COUNTY (cont'd)

Well Number	Geologic Unit	Land surface altitude (ft)	Depth to bedrock (ft)	Depth to water by year (ft)									Data Type
				1950	1966	1991	1992	1993	1994	1995	1996	1997	
17S 36W 33BCB 01	TO	3286	208	98	113.3	151.7	149.6	154.0	151.3	153.4	154.0	158.5	uJ65
17S 37W 08BAA 01	TO	3374	196	84	101.2	143.3	144.1		140.4		141.4	142.6	aJ51
17S 37W 13CDD 01	TO	3300	175	70		118.8	116.7	115.8	116.9	118.5	118.6	120.5	aJ72
17S 37W 28CBC 01	TO	3359							142.4	144.0	143.4	144.7	aJ93
17S 37W 36BCC 01	TO	3316									144.4	145.6	aU96
17S 38W 21BBB 01	TO	3446	165	100	100.3	126.7	126.9	126.8	127.0	127.6	127.7	128.7	aJ64
17S 38W 28CCC 01	TO	3446	190	105	113.6	147.1	150.5	146.2		148.2		147.6	aJ67
18S 35W 08BBC 02	TO	3217	186	82		139.4	139.4	138.8	137.4	140.1	142.8	138.8	aJ70
18S 35W 14DCD 01	TO	3171	137	80	91.1	118.8	116.9	115.5	116.1	115.2	114.7	116.6	aJ51
18S 35W 31DDD 01	TO	3210				99.7	100.5	98.7	99.6	98.8	99.4	99.7	aJ72
18S 37W 21BBB 01	TO	3360	175	85	113.6	166.6	159.5	158.6	158.6	156.6	160.1	159.3	aJ62
18S 37W 25ABC 01	TO	3302				122.5	124.1	128.9	123.1	128.3	123.7	124.5	aJ90
18S 38W 02BCC 01	TO	3414	199	95	115.7	156.3	156.9	156.2	155.3	159.1	156.9	160.4	aJ65
18S 38W 20ACC 02	TO	3440	169	90	108.7	133.6	133.2	129.8	133.0	134.3	135.4	135.3	aJ51
18S 38W 23BAB 01	QA, TO	3340	108	23		47.1	36.0	45.7		76.0	71.6	71.1	aJ71
18S 38W 31DBC 01	TO	3450	148	109	108.7	119.1	119.7	123.3	117.8	118.5	118.1	118.7	aJ48
19S 35W 01ABB 01	TO	3158				110.5	110.9	102.0	101.8	102.1	102.2	102.1	aJ89
19S 35W 08BBB 01	TO	3217	135	85		101.6	99.8	99.4	99.6	99.9	100.4	100.3	aJ77
19S 36W 15BAA 01	TO	3236	112	71		79.8	80.3		80.5	80.4	80.9	80.9	aJ69
19S 37W 22AAB 01	TO	3330	138	98		103.4	104.7	103.8	102.4	103.6	104.1	104.4	aJ69
19S 37W 28ABB 01	TO	3357				103.6	105.1	104.3	103.9	104.6		109.3	aJ88
19S 38W 26CCB 01	TO	3408	173	96		98.4	99.7		101.3	98.1	99.5	98.2	aJ69
19S 38W 31CBC 01	TO	3463	205	140		139.6	140.8		140.8	140.9	141.3	141.1	aJ69
20S 35W 15BBB 01	TO	3129				67.9	68.0	68.1	67.9	68.1	68.1	70.0	aJ81
20S 36W 24ACC 01	TO	3200				100.3			100.3			100.1	aJ91
20S 37W 29DCC 01	TO	3359	139	98		104.2	103.7	108.2	103.1	103.0	102.7	102.7	aJ70
20S 38W 17CBD 01	TO	3442	232	135		141.7	141.9		138.5	139.0	139.2	138.5	aJ71
20S 38W 33BBA 01	TO	3424	205	126	134.0	140.3	138.9	138.8	138.0	137.9	137.8	137.5	aJ63

TABLE 2. DERIVED HYDROLOGIC DATA, WICHITA COUNTY (cont'd)

Well Number	Geologic Unit	1997 Depth to water (ft)	Water-level change (ft)			Average annual water-level change (ft/year)		Saturated thickness (ft)		% change saturated thickness
			1950-97	1966-97	1996-97	1950-97	1966-97	1950	1997	
17S 36W 33BCB 01	TO	158.5	-61	-45.2	-4.5	-1.3	-1.5	110	50	-55
17S 37W 08BAA 01	TO	142.6	-59	-41.4	-1.2	-1.3	-1.3	112	53	-53
17S 37W 13CDD 01	TO	120.5	-51		-1.9	-1.1		105	55	-48
17S 37W 28CBC 01	TO	144.7			-1.3					
17S 37W 36BCC 01	TO	145.6			-1.2					
17S 38W 21BBB 01	TO	128.7	-29	-28.4	-1.0	-0.6	-0.9	65	36	-45
17S 38W 28CCC 01	TO	147.6	-43	-34.0		-0.9	-1.1	85	42	-51
18S 35W 08BBC 02	TO	138.8	-57		4.0	-1.2		104	47	-55
18S 35W 14DCD 01	TO	116.6	-37	-25.5	-1.9	-0.8	-0.8	57	20	-65
18S 35W 31DDD 01	TO	99.7			-0.3					
18S 37W 21BBB 01	TO	159.3	-74	-45.7	0.8	-1.6	-1.5	90	16	-82
18S 37W 25ABC 01	TO	124.5			-0.8					
18S 38W 02BCC 01	TO	160.4	-65	-44.7	-3.5	-1.4	-1.4	104	39	-63
18S 38W 20ACC 02	TO	135.3	-45	-26.6	0.1	-1.0	-0.9	79	34	-57
18S 38W 23BAB 01	QA, TO	71.1	-48		0.5	-1.0		85	37	-56
18S 38W 31DBC 01	TO	118.7	-10	-10.0	-0.6	-0.2	-0.3	39	29	-26
19S 35W 01ABB 01	TO	102.1			0.1					
19S 35W 08BBB 01	TO	100.3	-15		0.1	-0.3		50	35	-30
19S 36W 15BAA 01	TO	80.9	-10		0.0	-0.2		41	31	-24
19S 37W 22AAB 01	TO	104.4	-6		-0.3	-0.1		40	34	-15
19S 37W 28ABB 01	TO	109.3								
19S 38W 26CCB 01	TO	98.2	-2		1.3	0.0		77	75	-3
19S 38W 31CBC 01	TO	141.1	-1		0.2	0.0		65	64	-2
20S 35W 15BBB 01	TO	70.0			-1.9					
20S 36W 24ACC 01	TO	100.1								
20S 37W 29DCC 01	TO	102.7	-5		0.0	-0.1		41	36	-12
20S 38W 17CBD 01	TO	138.5	-4		0.7	-0.1		97	94	-3
20S 38W 33BBA 01	TO	137.5	-12	-3.5	0.3	-0.3	-0.1	79	68	-14

Appendix C: Wells not appearing in this report because of no recent measurements.

01S 03W 09CBD 01	11S 32W 04ACD 01	19S 14W 29DDB 01
01S 04W 15AAA 01	11S 35W 01DCC 01	19S 33W 12DDC 01
02S 36W 15CDD 01	12S 22E 21BCD 01	19S 35W 01AAA 01
02S 39W 27BBB 01	12S 22E 25BCCB01	20S 01W 29DDD 01
03S 31W 23BBB 01	12S 27W 12ABB 01	20S 33W 02DBB 01
03S 42W 04AAA 01	14S 40W 23ADD 01	20S 33W 17BAB 01
04S 31W 25DDD 01	14S 42W 14DBD 01	20S 33W 21ABD 01
04S 35W 13DAD 01	14S 42W 30BCA 01	20S 33W 35DBA 01
04S 41W 25BCB 01	15S 37W 29AAA 01	20S 36W 14DAD 01
05S 01E 20ADA 01	15S 38W 28DBB 01	21S 12W 10CDD 01
05S 29W 11BAA 01	15S 38W 36CBB 01	21S 29W 36CCB 01
05S 35W 10CDD 01	15S 41W 10BAB 01	21S 30W 05BBB 01
05S 39W 18CCC 01	16S 30W 34DAB 01	21S 31W 08ABB 01
05S 41W 20DAA 01	16S 33W 19CBB 01	21S 32W 08ABD 01
06S 22W 28ACA 01	16S 36W 21CCC 01	21S 33W 07DDAA01
06S 24W 35DDD 01	16S 36W 36CBC 01	21S 34W 16AADA02
06S 27W 27BCC 01	16S 41W 20BAD 01	22S 05W 17BCC 01
06S 34W 01DDD 01	16S 41W 33AAB 01	22S 05W 33DBD 01
06S 36W 06BCD 01	17S 09W 31ADC 01	22S 08W 33CCD 01
06S 38W 09ABD 01	17S 29W 03BDC 01	22S 15W 09CCA 01
06S 41W 01ABB 01	17S 32W 31BCB 01	22S 15W 20CDC 01
07S 17W 24BBB 01	17S 33W 07BBB 01	22S 23W 31ADD 01
07S 23W 17BBC 01	17S 35W 02BBB 01	22S 24W 16ADB 02
07S 28W 08BDC 01	17S 35W 15CDC 01	22S 31W 16ADD 01
07S 32W 13AAA 01	17S 35W 18ACB 01	22S 31W 29DCC 01
07S 33W 35ADD 01	17S 36W 10CBB 01	22S 33W 36AAA 02
07S 36W 35CBB 01	17S 36W 23BCC 01	22S 36W 28DCC 01
08S 28W 09ABC 01	17S 37W 28CCC 01	22S 39W 08DDD 01
08S 40W 20CCC 01	17S 38W 24ACC 01	23S 01W 19AAC 01
09S 11E 27CAA 01	17S 42W 27CBB 01	23S 06W 15BAC 01
09S 11E 35DDD 01	18S 29W 04DAD 01	23S 07W 01ABA 01
09S 22W 19BBB 01	18S 33W 11ABB 01	23S 07W 05ABA 01
09S 24W 12BCC 01	18S 33W 15DDD 01	23S 10W 02BAB 01
09S 41W 28AAA 01	18S 33W 26DAD 02	23S 15W 18DDB 01
09S 42W 29CBB 01	18S 33W 34ADB 01	23S 15W 21DCC 01
10S 08E 14CBA 01	18S 36W 15DAD 01	23S 16W 16BAB 01
10S 11E 03BCA 01	18S 37W 01BBB 01	23S 17W 10CDB 01
10S 26W 08BAA 01	18S 37W 36ABB 01	23S 17W 25ADC 01
10S 33W 03DBC 01	18S 38W 08BBB 01	23S 17W 33CCA 01
10S 36W 36ACC 01	18S 38W 12BCC 01	23S 25W 22DBB 01
11S 24E 14BDA 01	18S 38W 36DDD 01	23S 27W 12CCC 01
11S 27W 04CCD 01	18S 39W 23CCB 01	23S 31W 35CCC 01
11S 27W 13ABB 01	19S 03W 31BBA 01	23S 32W 11ADC 01
11S 28W 17DDC 01	19S 12W 06ADA 01	23S 33W 17BBB 01
11S 28W 26ABA 01	19S 14W 06BBB 01	23S 35W 12CCC 01

23S 35W 25BBB 02	27S 23W 28AAA 01	30S 33W 06DBD 01
23S 37W 19CCC 01	27S 27W 25CCD 01	30S 33W 30CBD 01
24S 04W 14DAC 01	27S 30W 23BBA 01	30S 37W 20CBC 01
24S 04W 31DAB 01	27S 33W 29DAA 01	30S 39W 18BBB 01
24S 11W 14CAB 01	27S 36W 18DCB 01	30S 43W 34BBB 01
24S 28W 36ACA 01	27S 36W 25CC 01	31S 04W 01BBB 01
24S 30W 15CCC 01	27S 37W 11ABA 01	31S 31W 13BBC 01
24S 32W 03DAC 01	27S 38W 22CBB 01	31S 31W 32DCC 01
24S 32W 35DD 01	27S 38W 32BCC 01	31S 35W 19CCC 01
24S 35W 13CCC 02	27S 39W 02BBB 01	31S 35W 26DCC 01
25S 02W 16DDA 01	27S 40W 16CCC 01	31S 36W 27BCB 01
25S 02W 23DBD 01	27S 41W 31CCB 02	31S 37W 09BCC 01
25S 23W 14ADD 01	27S 42W 11DBD 01	31S 38W 17CDA 01
25S 24E 36AAC 01	27S 42W 31CCC 01	31S 39W 33BCC 01
25S 29W 27CCB 01	27S 43W 02BBD 01	31S 40W 01DA 01
25S 31W 21CAB 01	28S 12W 34CCC 01	31S 41W 31CBB 01
25S 31W 35DBA 01	28S 17W 05DDB 01	32S 29W 05CC 01
25S 33W 35DBD 01	28S 18W 09BAC 01	32S 30W 28BBC 01
25S 36W 28BBD 01	28S 18W 26DCA 01	32S 31W 02BBB 01
25S 37W 25BAD 02	28S 26W 10BAA 01	32S 33W 04BAA 01
25S 38W 02BDA 01	28S 28W 07CDD 01	32S 34W 17DCC 01
25S 38W 26ACC 01	28S 28W 20ADD 02	32S 36W 27DDD 01
25S 43W 21AAB 01	28S 32W 18BBB 01	32S 43W 17DCC 01
26S 02W 13ACA 01	28S 33W 29CD 01	33S 30W 21ACC 01
26S 07W 21DDC 01	28S 34W 13BBB 01	33S 30W 35CBB 01
26S 08W 30DCB 01	28S 35W 15CBB 01	33S 31W 28DDB 01
26S 12W 02DBD 01	28S 36W 02CDD 02	33S 36W 03ACA 01
26S 14W 17DCB 01	28S 36W 21CDD 01	33S 38W 20DAD 01
26S 15W 18DAB 01	28S 37W 10BCD 02	33S 41W 03AAD 01
26S 17W 04AAC 01	28S 38W 12DDD 01	33S 41W 33DDD 01
26S 19W 31BAC 01	28S 38W 17AAA 01	34S 33W 04BCD 01
26S 24W 32CBA 01	28S 39W 36ABB 01	34S 35W 03DCC 01
26S 27W 13BBC 01	28S 40W 23ACC 01	34S 35W 07CBB 01
26S 29W 15BCA 01	28S 41W 19CBB 01	34S 37W 27ABC 01
26S 33W 26ABB 01	28S 41W 31BDD 01	34S 38W 02CAC 01
26S 34W 30BD 01	28S 42W 08CCC 01	35S 31W 18BBA 01
26S 35W 06ACC 01	29S 26W 01CDD 01	35S 34W 03CBC 01
26S 41W 12DCC 01	29S 26W 20BDD 01	35S 36W 15AAD 01
26S 41W 36CCC 01	29S 31W 34BCA 01	
26S 42W 22CDB 01	29S 34W 11CCC 01	
26S 42W 22DCC 01	29S 39W 17BCB 01	
26S 43W 10DBB 01	29S 41W 31CBD 01	
27S 08W 25DAD 01	29S 42W 24CCC 01	
27S 18W 36CCA 01	30S 31W 24BBC 01	
27S 22W 09DAB 01	30S 32W 11BBB 01	

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Kansas Geological Survey
1930 Constant Avenue
The University of Kansas
Lawrence, Kansas 66047-3726
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