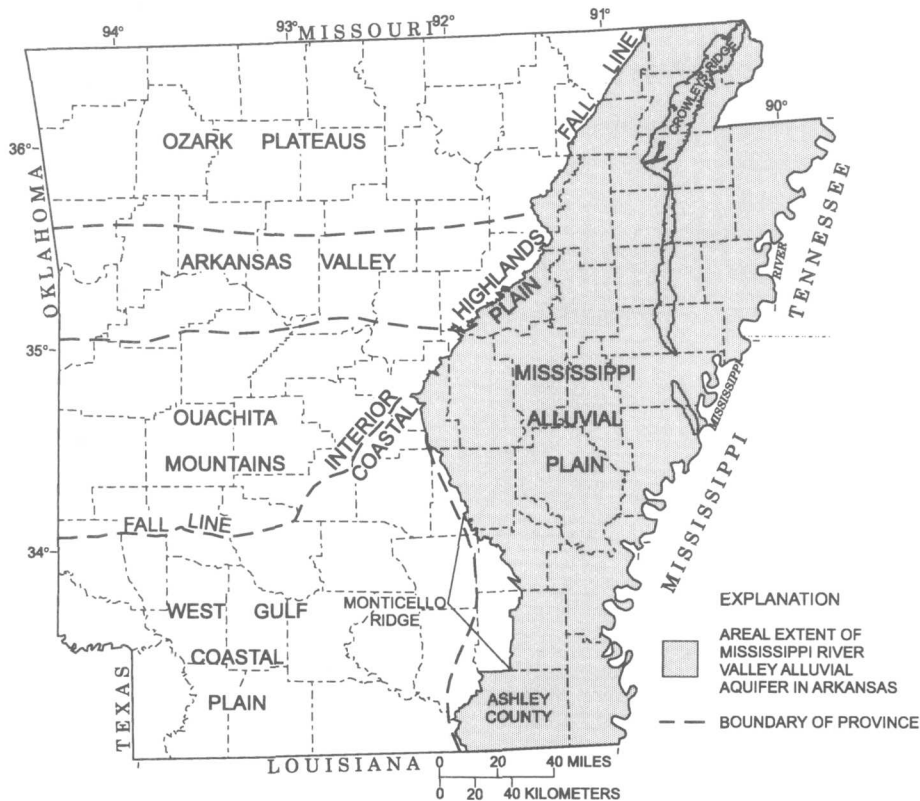


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Prepared in cooperation with the
Arkansas Soil and Water Conservation Commission and the
Arkansas Geological Commission

STATUS OF WATER LEVELS AND SELECTED WATER-QUALITY CONDITIONS IN THE MISSISSIPPI RIVER VALLEY ALLUVIAL AQUIFER IN EASTERN ARKANSAS, 2000

Water-Resources Investigations Report 01-4124



U.S. Department of the Interior
 U.S. Geological Survey



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by T.P. Schrader

**U.S. GEOLOGICAL SURVEY
Water-Resources Investigations Report 01-4124**

Prepared in cooperation with the
Arkansas Soil and Water Conservation Commission
and the **Arkansas Geological Commission**

Little Rock, Arkansas
2001

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ABSTRACT

During the spring of 2000, water levels were measured in 735 wells completed in the Mississippi River Valley Alluvial aquifer in eastern Arkansas. Water samples were collected during the summer of 2000 from 151 wells completed in the alluvial aquifer. All samples were measured for specific conductance, and samples from 104 wells were analyzed for dissolved chloride concentrations.

The regional direction of ground-water flow is generally to the south and east except where affected by ground-water withdrawals. In 2000, the highest water-level altitude measured was 289 feet above sea level in northeastern Clay County. The lowest water-level altitude measured was 78 feet above sea level in southwestern Ashley County. A large depression in the potentiometric surface is located in Arkansas, Lonoke, and Prairie Counties. Two shallower depressions are located in Craighead, Cross, and Poinsett Counties and Lee, Monroe, St. Francis, and Woodruff Counties. Potentiometric depressions seem to be forming in four new areas in Ashley, Chicot, Desha, Greene, and Lincoln Counties. Comparisons of water-level changes in cones of depression from 1994 to 2000 show increases in depth and areal extent. Water-level data from 25 wells with 26 or more years of record indicate long-term water levels in the alluvial aquifer declined an average of about 0.6 foot per year from 1975 to 2000.

Specific conductance measurements made on water samples collected during the study ranged from 190 microsiemens per centimeter at 25 degrees Celsius at a well in Drew County to 1,690 microsiemens per centimeter at 25 degrees Celsius at a well in Ashley County. Dissolved chloride concentrations ranged from 2.2 milligrams per liter at wells in Crittenden and St. Francis Counties to 550 milligrams per liter at a well in Chicot County. The areas of high chloride concen-

trations generally coincide with areas of high specific conductance.

INTRODUCTION

The Mississippi Alluvial Plain (fig. 1) encompasses an area of approximately 32,000 square miles and includes parts of Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri, and Tennessee. Approximately 54 percent of the Mississippi Alluvial Plain covers the eastern one-third of Arkansas. The Mississippi River Valley alluvial aquifer (herein referred to as the alluvial aquifer) underlies the Mississippi Alluvial Plain in eastern Arkansas. Within Arkansas, the alluvial aquifer extends from the Missouri State line south to the Louisiana State line, and from the Mississippi River west to the Fall Line (the physiographic boundary between the Coastal Plain and the Interior Highlands) and the Monticello Ridge (a topographic feature in southeastern Arkansas), and near the western Ashley County line (fig. 1).

The land use in eastern Arkansas has become more agricultural since 1900 with production consisting predominately of rice, soybeans, cotton, and in recent years aquaculture, all of which are highly dependent on the availability of water. Eastern Arkansas receives sufficient precipitation to support these crops, receiving an average 46 to 54 inches of precipitation annually (Freiwald, 1984). However, during a critical portion of the growing season from late spring through early summer, most precipitation in eastern Arkansas falls as rain from widely scattered thunderstorms. Increasingly farmers are relying on water from the alluvial aquifer for agriculture and aquaculture irrigation. In 1985, estimated water withdrawals from the alluvial aquifer in Arkansas totaled about 3,500 million gallons per day (Mgal/d) (Holland, 1987); estimated withdraw

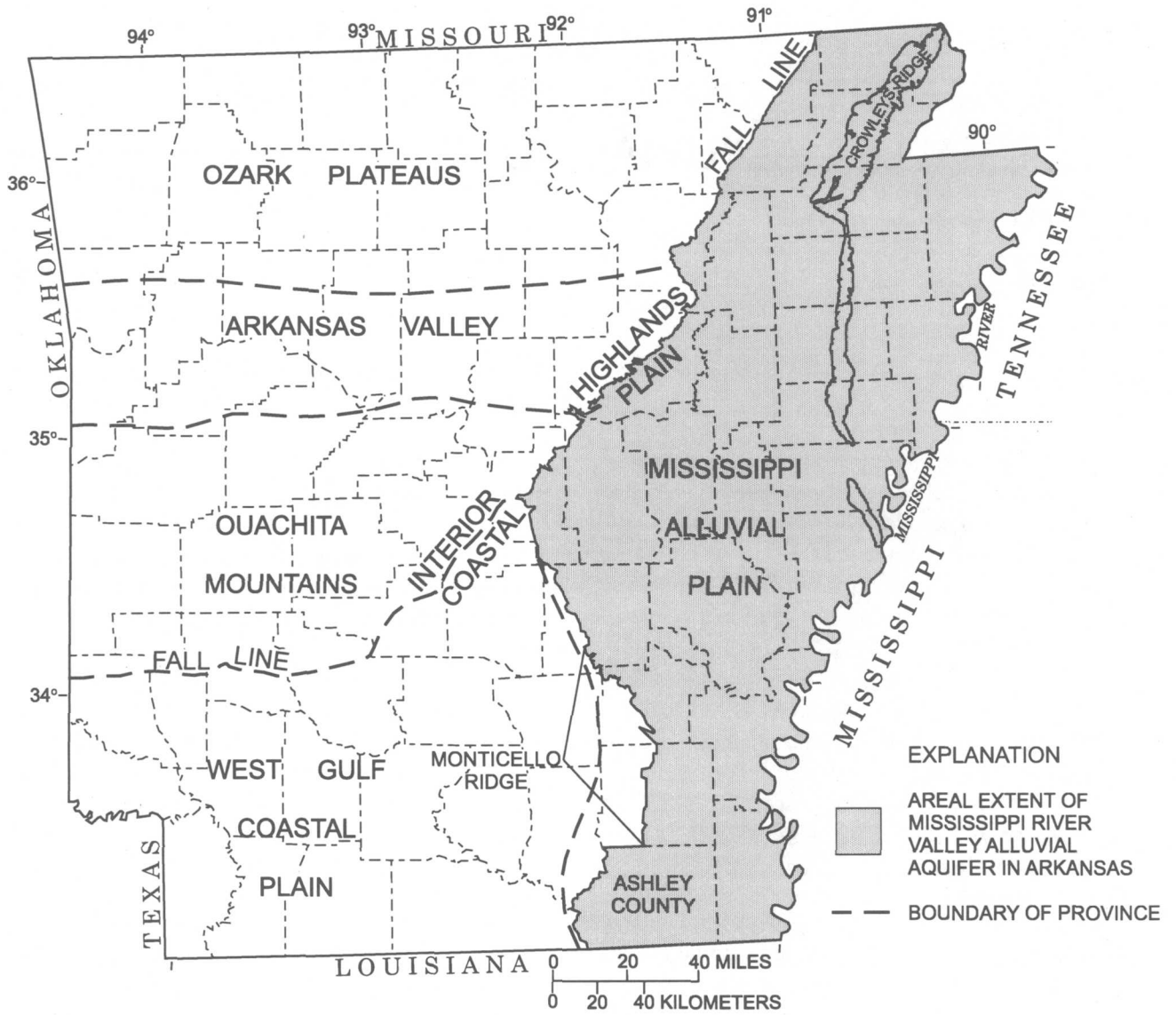


Figure 1. Location of study area.

als increased to 4,300 Mgal/d in 1990 (Holland, 1993). In 1995, estimated water withdrawals totaled about 5,062 Mgal/d (Holland, 1999); the 1995 withdrawal rate previously reported in Stanton and others (1998) was in error. The increase in estimated water withdrawals from 1985 to 1995 is about 45 percent.

The USGS, in cooperation with the Arkansas Soil and Water Conservation Commission (ASWCC) and the Arkansas Geological Commission, conducted a study of water levels and selected water-quality conditions in the alluvial aquifer in eastern Arkansas. The U.S. Department of Agriculture-Natural Resources Conservation Service (NRCS) also measured water levels in wells completed in the alluvial aquifer and provided these data to the ASWCC. These data were made available to the USGS and were incorporated into the database used to develop a potentiometric-surface map of the alluvial aquifer for the spring of 2000. In the spring of 2000, a total of 735 water-level measurements were collected, 351 by the USGS and 384 by the NRCS.

During the summer of 2000, water samples were analyzed for specific conductance from 151 wells and dissolved chloride concentrations from 104 wells completed in the alluvial aquifer. These measurements provided information for a supplemental database of selected water-quality data for the alluvial aquifer.

This report describes the status and trends of water levels and selected water-quality constituents in the alluvial aquifer. The report includes maps, long-term hydrographs, and data tables. Scheduled monitoring and evaluation of conditions in the alluvial aquifer provide information necessary for resource management.

The well-numbering system used in this report is based upon the locations of the wells according to the Federal land survey used in Arkansas. The component parts of a well number are the township number; the range number; the section number; three letters which indicate respectively, the quarter section, the quarter-quarter section, and the quarter-quarter-quarter section in which the well is located; and a sequence number of the well in the quarter-quarter-quarter section. The letters are assigned counterclockwise, beginning with "A" in the northeast quarter or quarter-quarter or quarter-quarter-quarter section in which the well is located. For example, well 01S03W04BBD16 (fig. 2) is located in Township 1 South, Range 3 West, and in the southeast quarter of the northwest quarter of the northwest quarter of section 4. This well is the 16th well in this

quarter-quarter-quarter section of section 4 from which data were collected.

AQUIFER DESCRIPTION

The alluvial aquifer comprises alluvial and terrace deposits of Quaternary age (Ackerman, 1996). Lithologically, the Quaternary alluvial and terrace deposits are similar, consisting of unconsolidated sediments that grade from gravel and coarse sand in the lower sections to silt and clay in the upper sections (Boswell and others, 1968). The coarse sediments in the lower sections of the alluvial and terrace deposits are the materials that compose the alluvial aquifer and are the reason for its productive hydraulic properties (Ackerman, 1996). The finer sediments in the upper sections of the alluvial and terrace deposits form a confining unit above much of the aquifer. These finer sediments are thin or have been completely removed by erosion in some areas, especially in the areas near large rivers within the study area (Gonthier and Mahon, 1993). Channel fill, point bar, and backswamp deposits associated with present or former channels of these rivers have produced abrupt changes in lithology and result in large spatial variations in the hydraulic properties of the aquifer (Joseph, 1999).

Sedimentary rocks and unconsolidated sediments of Tertiary age or older underlie the alluvial aquifer and have been deformed by geological processes into an undulating surface (Mahon and Poynter, 1993). In most areas, these rocks and sediments are less permeable than the overlying alluvial and terrace deposits of Quaternary age and form the confining unit below the alluvial aquifer (Boswell and others, 1968).

In the northern half of the study area, the alluvial and terrace deposits of Quaternary age are separated by Crowleys Ridge (fig. 1), an erosional remnant of Tertiary-age deposits trending north-south from the Missouri-Arkansas border to northeastern Phillips County. Crowleys Ridge is a prominent topographic feature on the otherwise low-relief surface of the Mississippi Alluvial Plain and forms a physical barrier to groundwater flow in the alluvial aquifer.

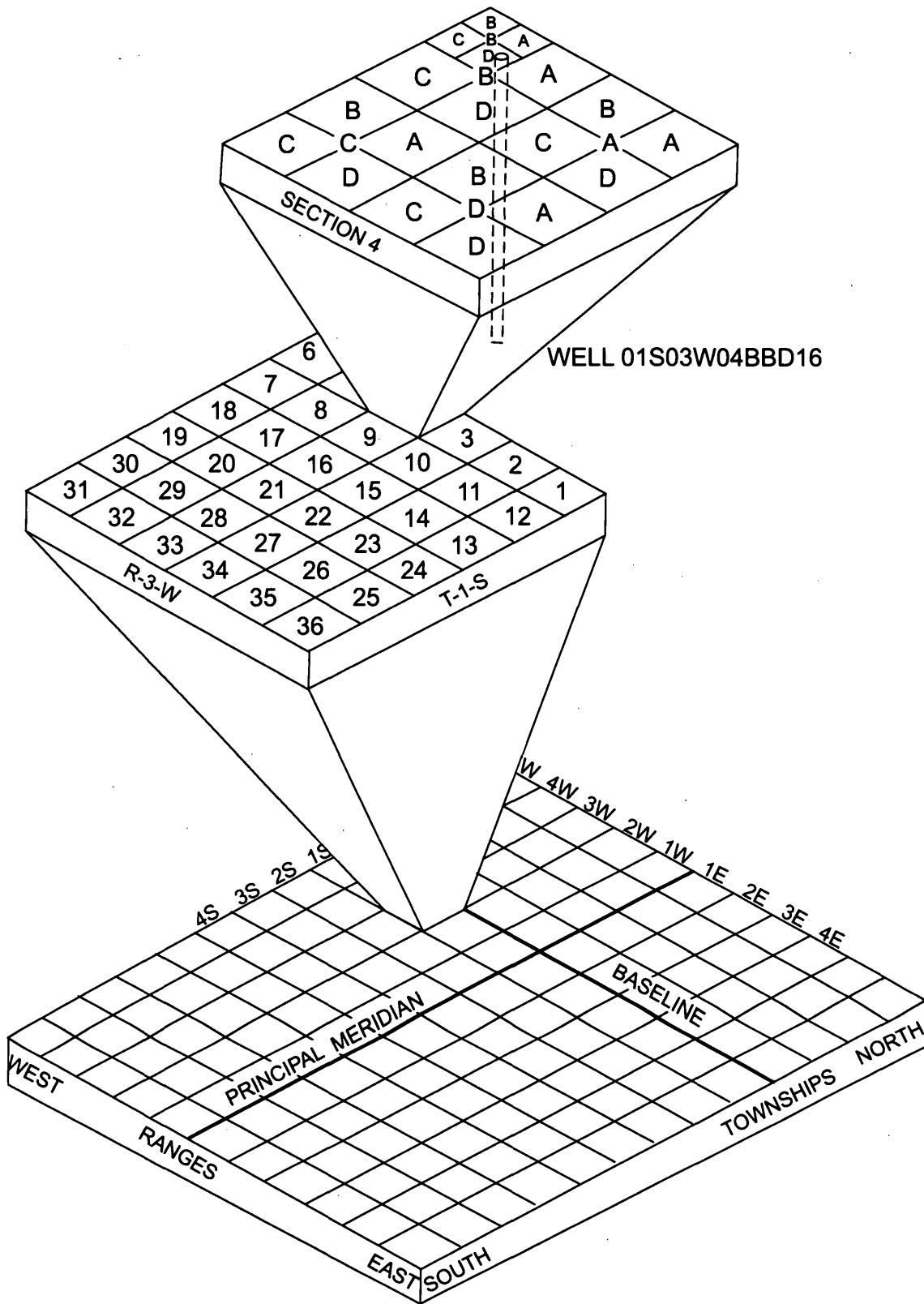


Figure 2. Well-numbering system.

WATER LEVELS

Water-level measurements collected in wells screened in the alluvial aquifer (Appendix 1) were used to produce a regional potentiometric-surface map shown on plate 1. Data from wells that have water-level measurements with 26 or more years of record were used to produce hydrographs shown on figure 3. The water-level changes shown in the hydrographs indicate long-term changes in hydrologic conditions. Short-term water-level changes in cones of depression in the potentiometric surface are shown by comparing contour lines for 1994, 1998, and 2000. Long-term water-level changes shown by the hydrographs reflect the development of the cones of depression in the potentiometric surface.

Potentiometric Surface

The potentiometric-surface map (plate 1) shows the altitude at which water would have risen in tightly cased wells screened in the alluvial aquifer. The map on plate 1 is based on 735 water-level measurements made during the spring of 2000 (appendix 1). The surface was mapped using the altitude of the water levels measured in the wells and is represented on the map by contours that connect points of equal value. The general direction of ground-water flow is perpendicular to the contours in the direction of decreasing potentiometric altitude.

The regional direction of ground-water flow is generally to the south and east except where affected by intense ground-water withdrawals. In 2000, the highest measured water-level altitude (289 feet above sea level¹) was in northeastern Clay County. The lowest measured water-level altitude (78 feet above sea level) was in southwestern Ashley County. Previous reports discuss the existence of three cones of depression in the alluvial aquifer potentiometric surface (Stanton and others, 1998; Joseph, 1999). A large, elongated cone of depression extends across Arkansas, Lonoke, and Prairie Counties. Shallower potentiometric depressions are located in Lee, Monroe, St. Francis, and Woodruff Counties, and in Craighead, Cross, and Poinsett Counties.

¹In this report, sea level refers to the National Geodetic Vertical Datum of 1992--a geodetic datum derived from a general adjustment of the first-order level nets of the United States and Canada, formerly call Sea Level Datum of 1929.

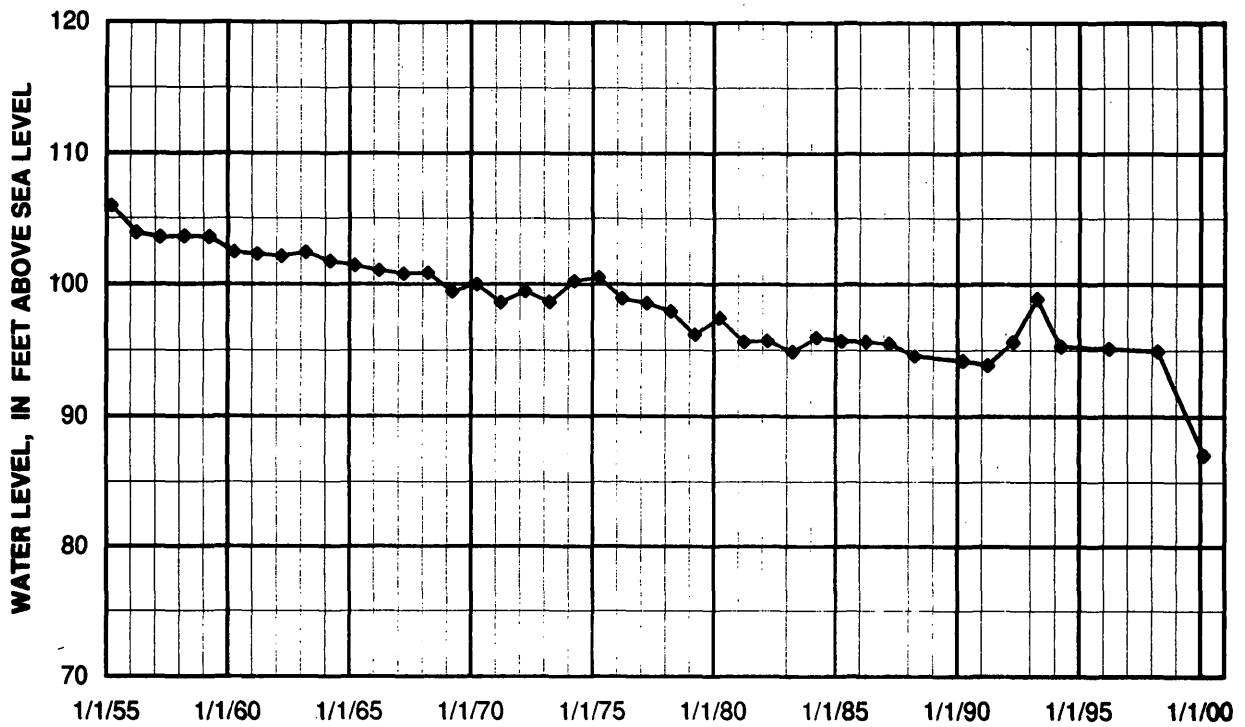
Three potentiometric depressions are evident in southeastern Arkansas—one each in eastern Lincoln County, southern Desha and northern Chicot Counties, and western Chicot and eastern Ashley Counties. The depression in southern Desha and northern Chicot Counties was first evident in the 1998 potentiometric surface (Joseph, 1999). This depression has expanded radially and vertically. The depressions in eastern Lincoln County and western Chicot and eastern Ashley Counties were not evident in 1994 and 1998. A potentiometric depression is evident in Greene County in northeastern Arkansas. The initial formation of this depression is shown in the 1998 potentiometric surface (Joseph, 1999). The recent occurrence of these four depressions is insufficient evidence to determine if these depressions are long-term or short-term phenomena. Continued monitoring of the potentiometric surface will determine if these depressions are the result of short-term variations or long-term changes in the hydrologic conditions in the alluvial aquifer.

Long-Term Water-Level Changes

Water-level measurements for 25 selected wells screened in the alluvial aquifer were plotted to illustrate the history of water levels in the study area (fig. 3; wells A-Y, plate 1). The selection process required each well to have 26 or more years of data. Analysis of water-level data, representing the period 1975 to 2000, for the 25 wells indicates an average decline of 0.6 foot per year (ft/yr).

During the period 1975 to 2000, average rates of water-level decline varied across the study area. Water-level measurements indicated an average rate of decline greater than 1.0 ft/yr for the wells in Craighead, Cross, Desha, and Poinsett Counties (fig. 3; hydrographs F, H, I, and T), and between 0.5 and 0.9 ft/yr for the wells in Arkansas, Clay, Greene, Jackson, Jefferson, Lee, Lincoln, Lonoke, Monroe, Prairie, St. Francis, and Woodruff Counties (fig. 3; hydrographs A, E, K, L, M, N, O, P, R, V, W, and Y). Average rates of decline were less than 0.5 ft/yr in the wells in Arkansas, Ashley, Chicot, Crittenden, Drew, Mississippi, Phillips, Prairie, and White Counties (fig. 3; hydrographs B, C, D, G, J, Q, S, U, and X). Hydrographs from Mississippi and Phillips Counties showed very little or no water-level change since 1955.

A. ARKANSAS COUNTY, WELL 04S04W02ABB1



B. ARKANSAS COUNTY, WELL 05S06W02DDD1

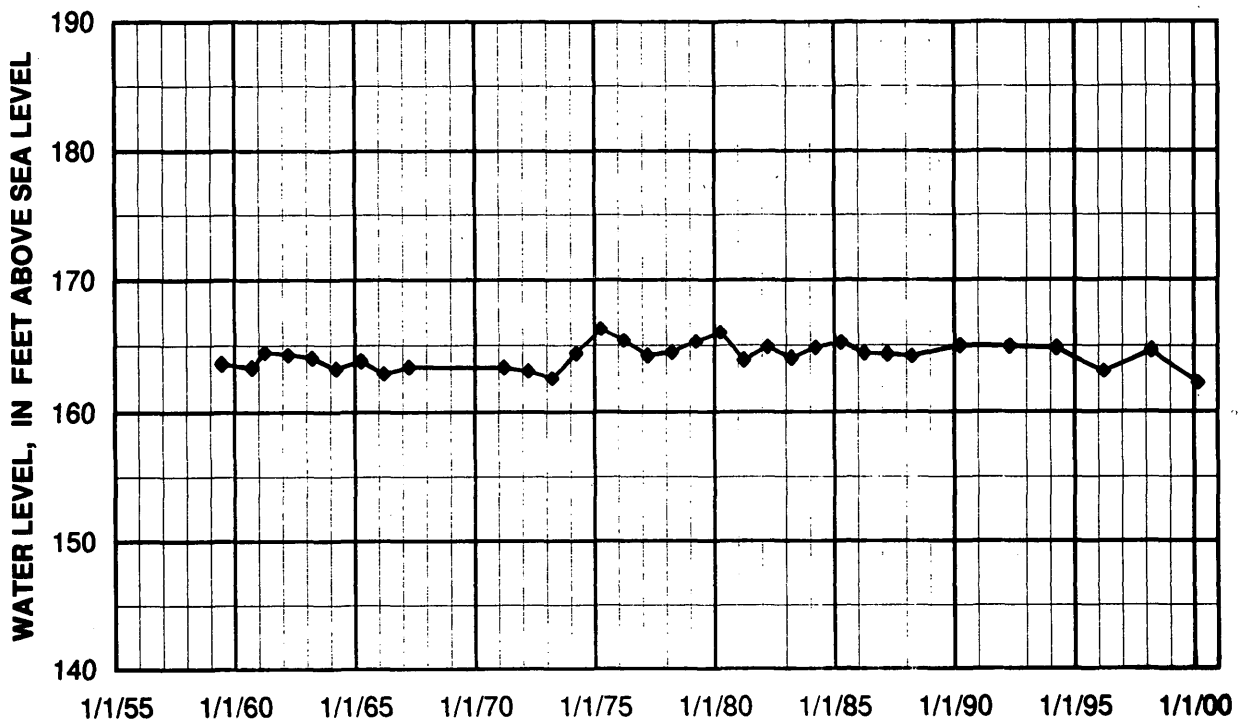
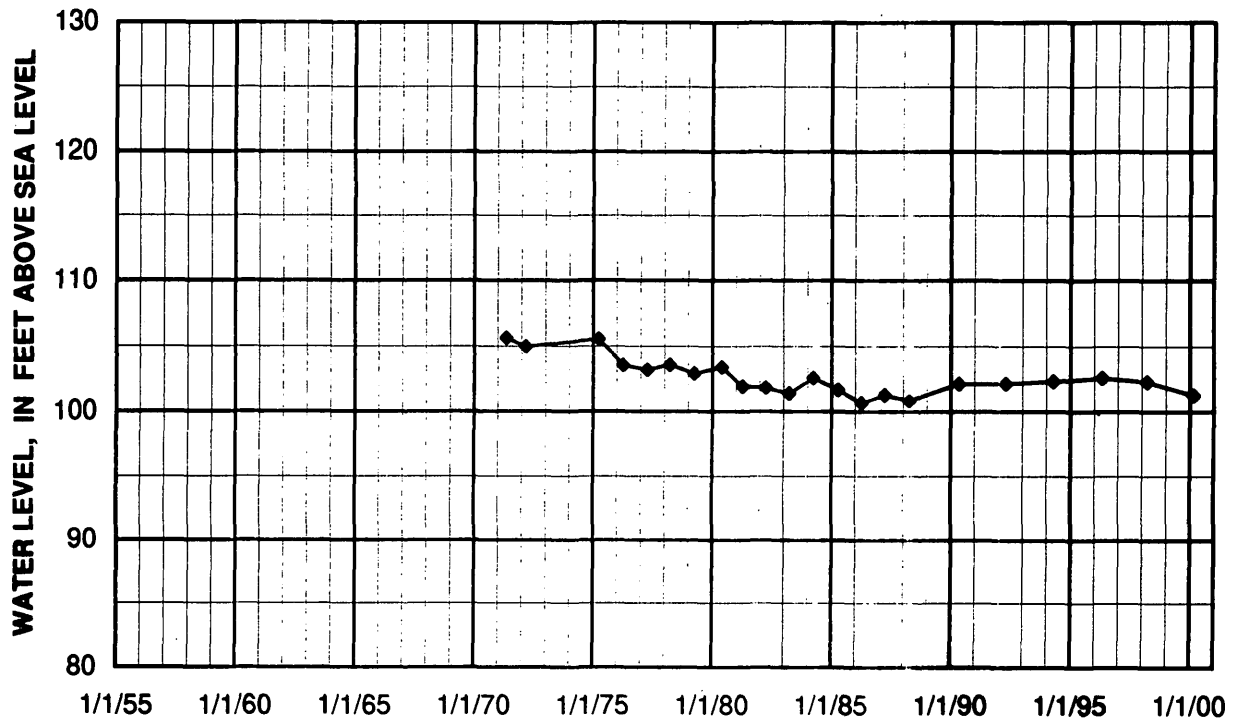


Figure 3. Water-level hydrographs (A to Y) for selected wells in the Mississippi River Valley alluvial aquifer.

C. ASHLEY COUNTY, WELL 17S06W01ADD1



D. CHICOT COUNTY, WELL 18S01W19DAB1

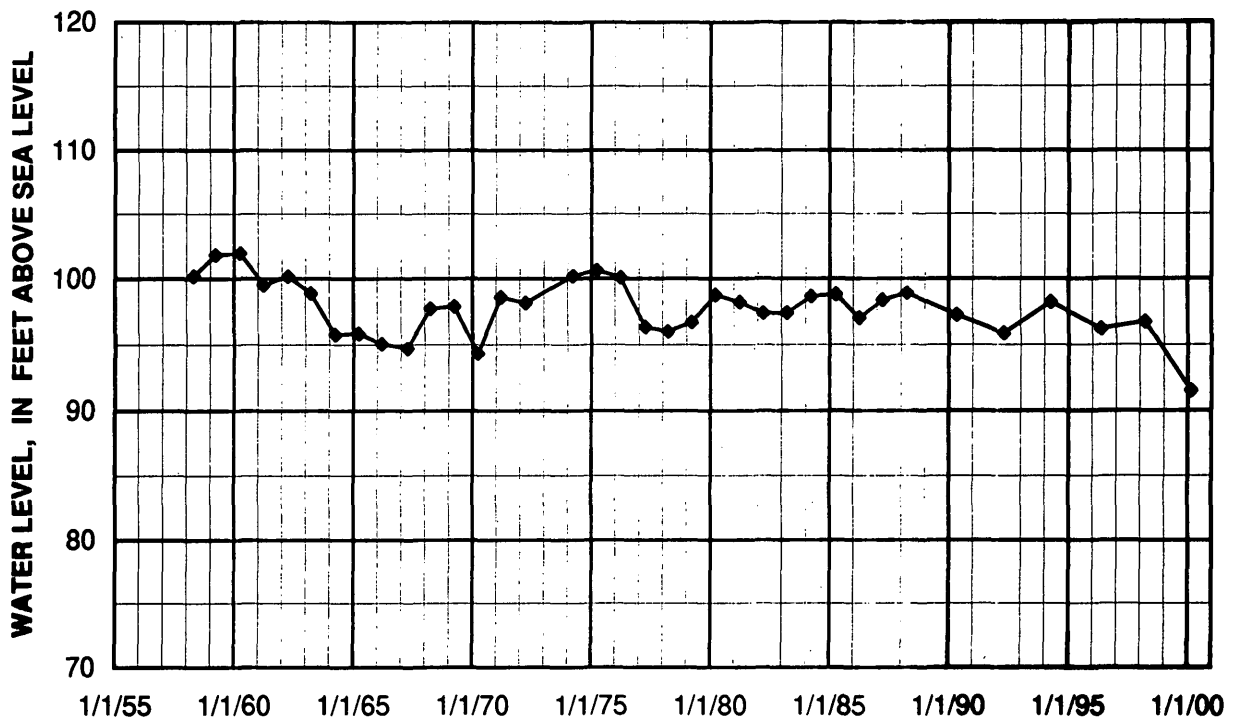
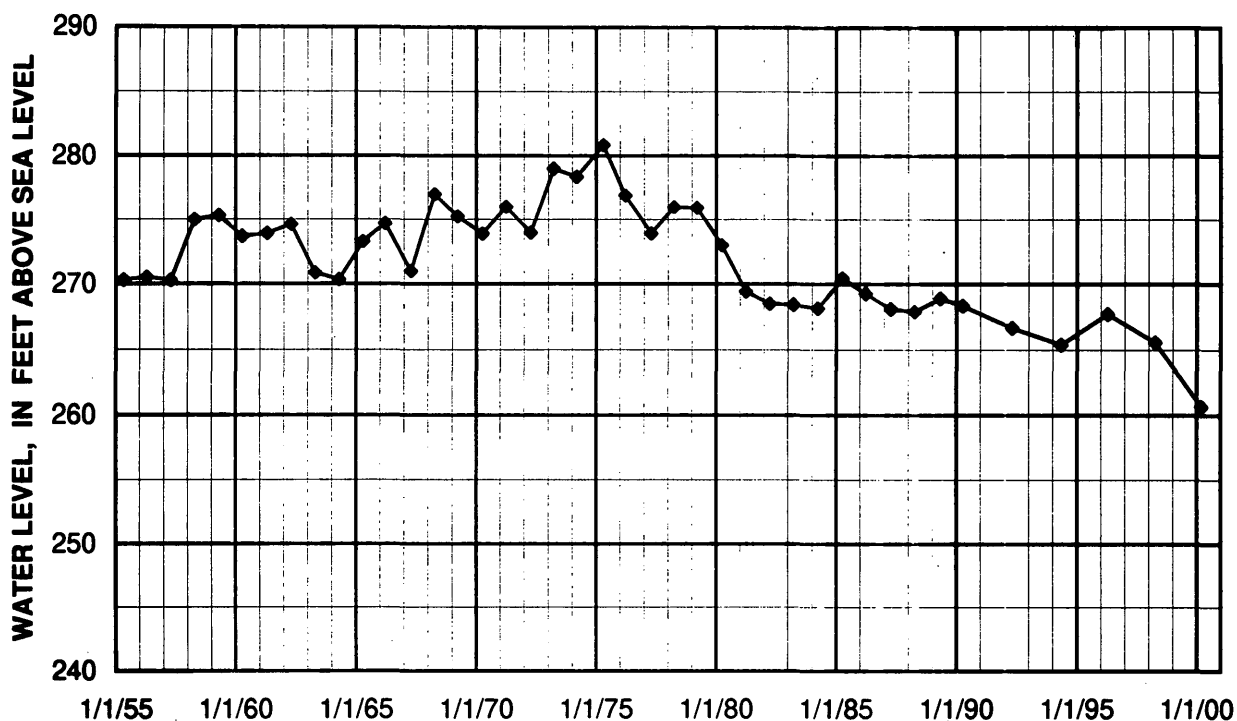


Figure 3. Water-level hydrographs (A to Y) for selected wells in the Mississippi River Valley alluvial aquifer—Continued.

E. CLAY COUNTY, WELL 20N05E34DBA1



F. CRAIGHEAD COUNTY, WELL 14N02E18BDD1

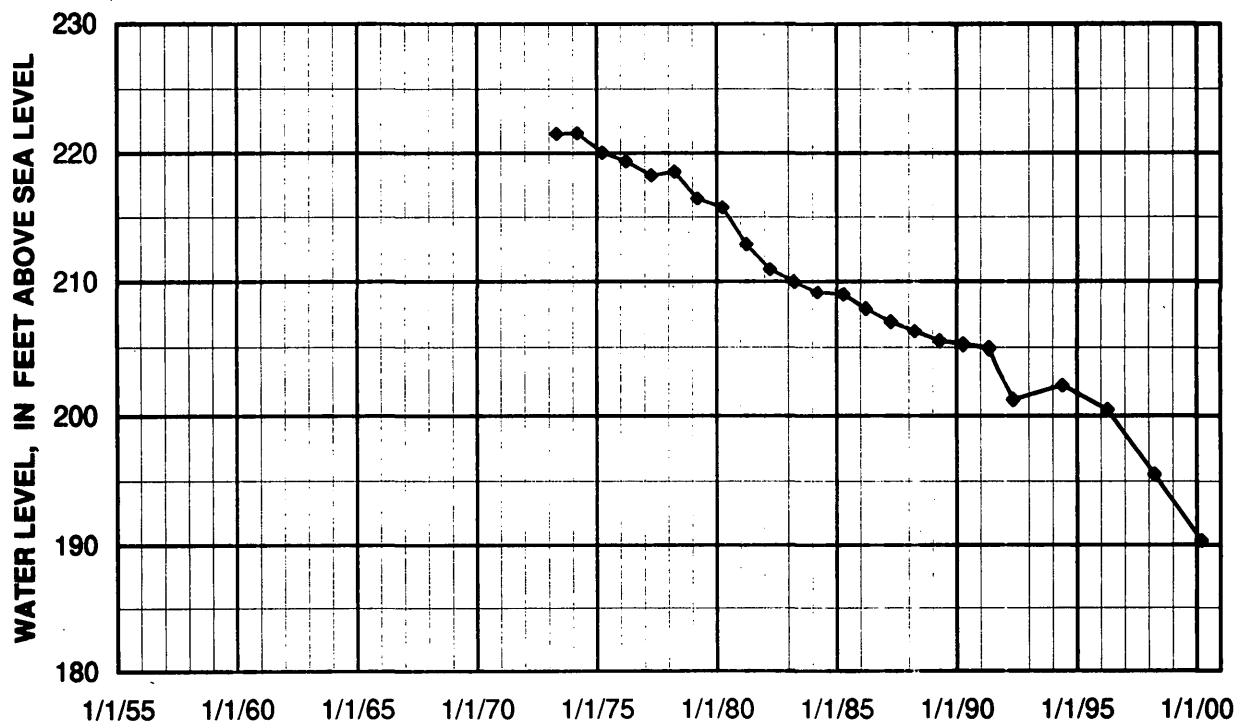
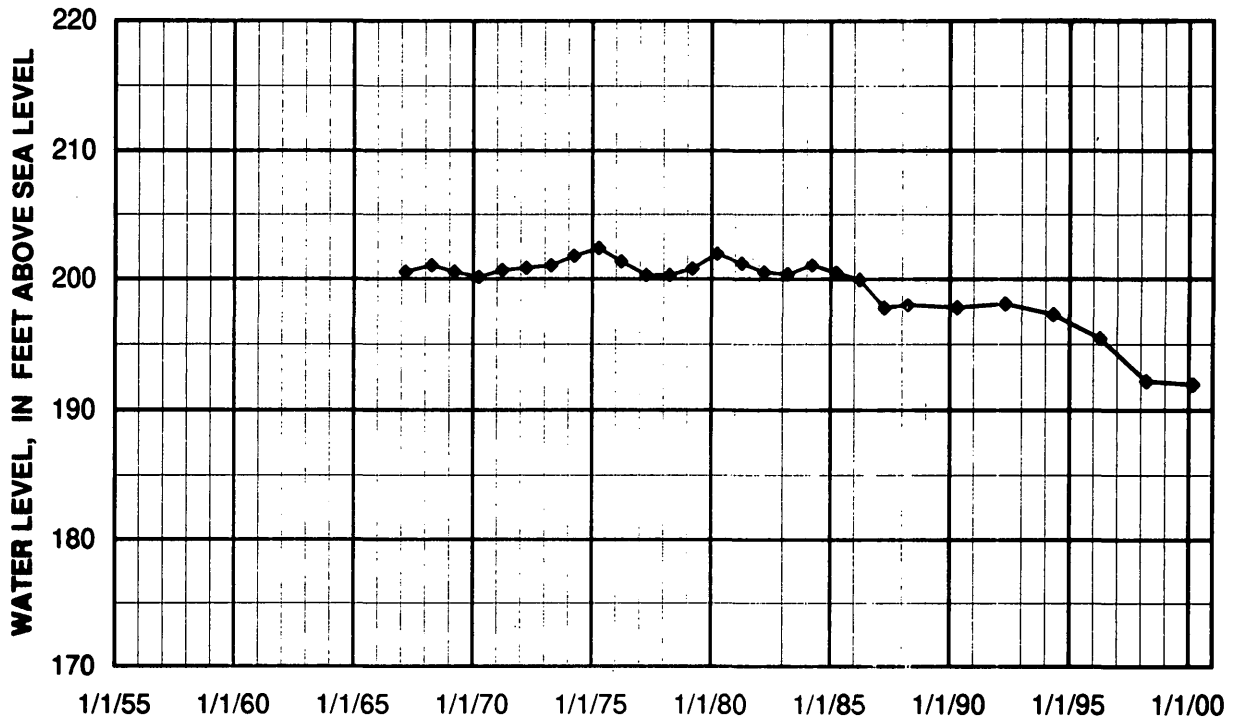


Figure 3. Water-level hydrographs (A to Y) for selected wells in the Mississippi River Valley alluvial aquifer—Continued.

G. CRITTENDEN COUNTY, WELL 08N07E14DAA2



H. CROSS COUNTY, WELL 09N01E33BBA1

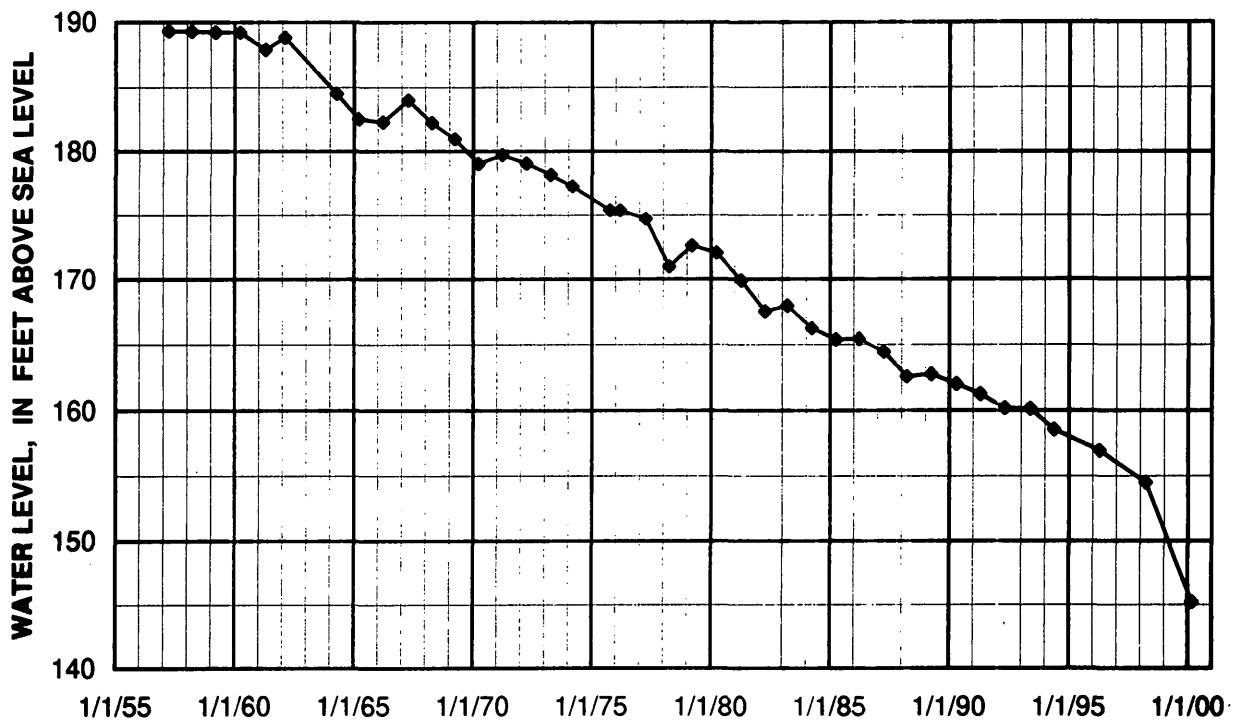
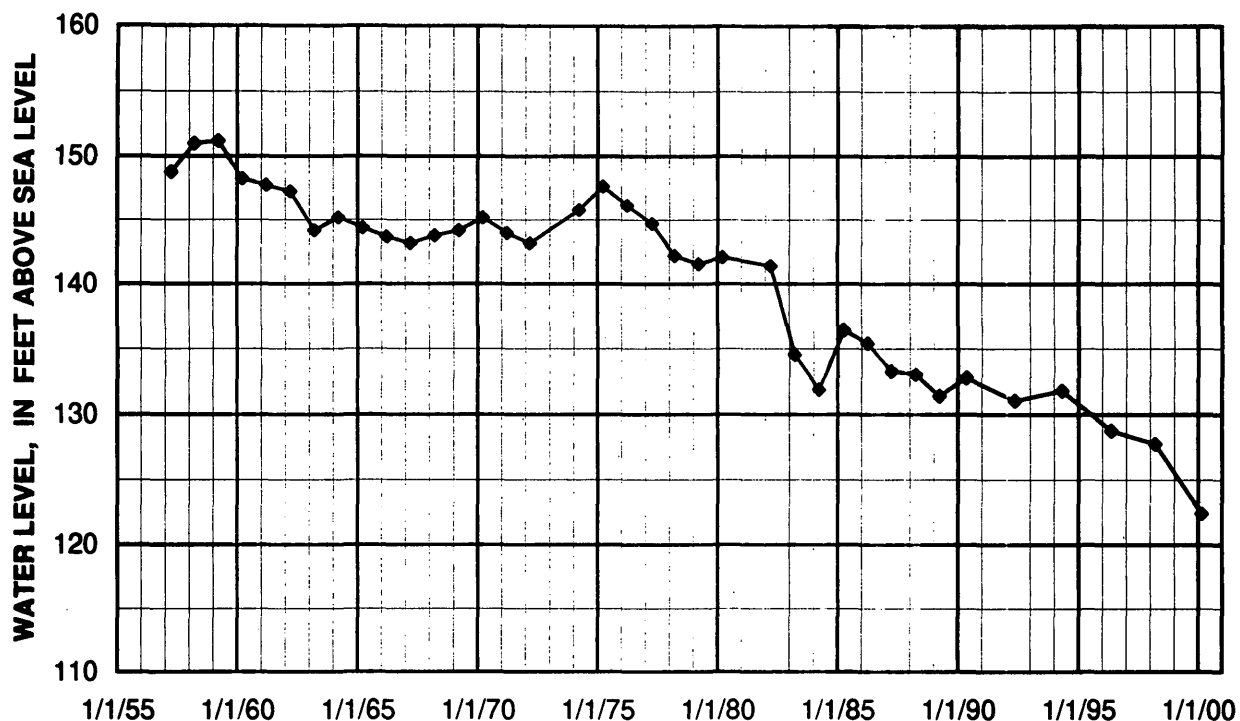


Figure 3. Water-level hydrographs (A to Y) for selected wells in the Mississippi River Valley alluvial aquifer—Continued.

I. DESHA COUNTY, WELL 09S03W17DCB1



J. DREW COUNTY, WELL 11S05W08CCC1

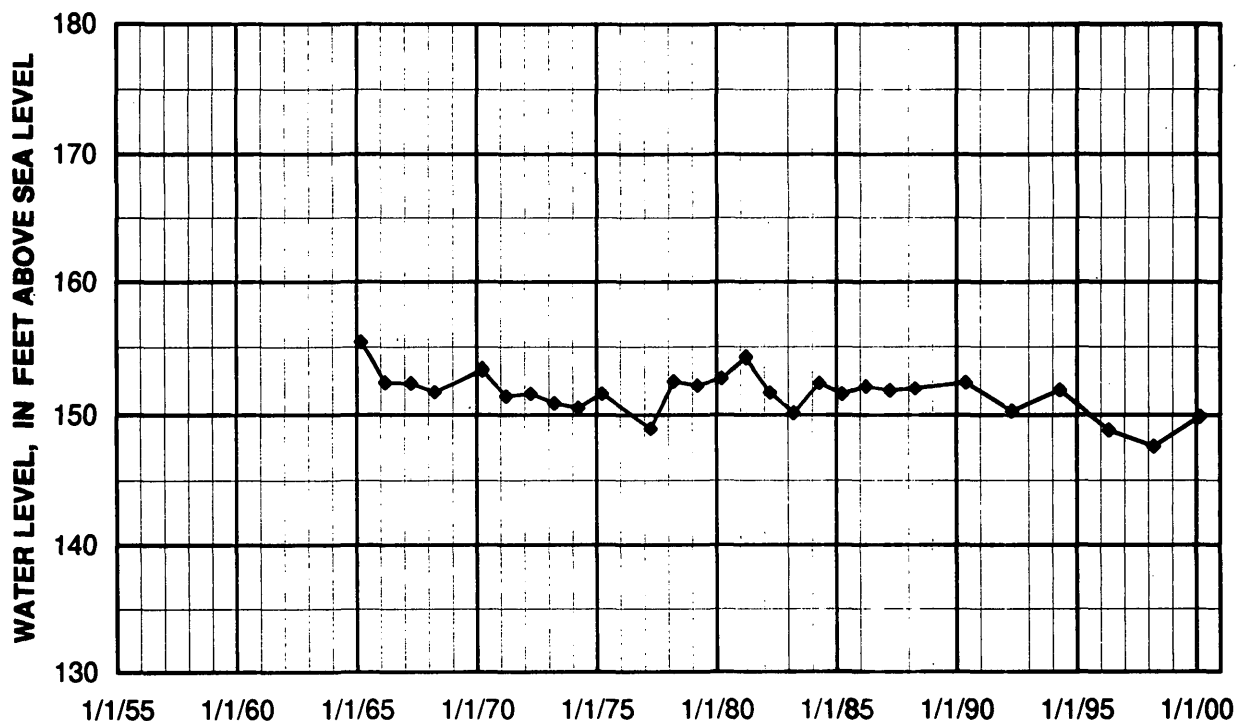
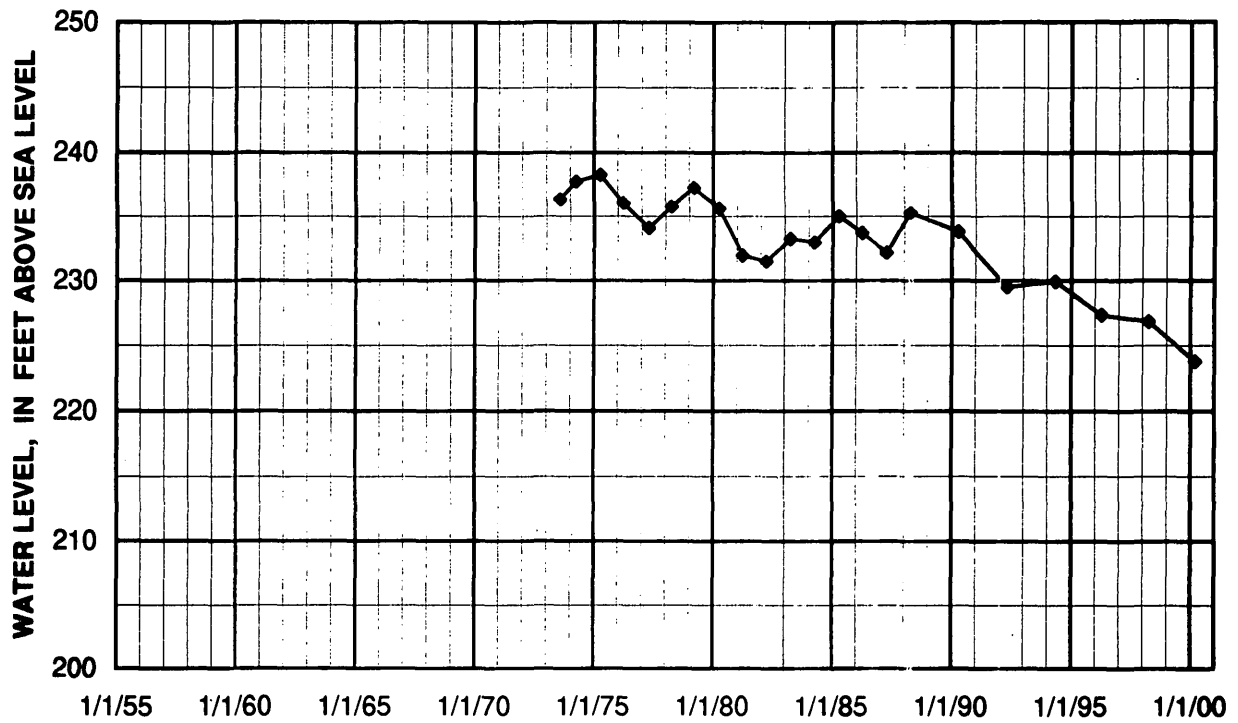


Figure 3. Water-level hydrographs (A to Y) for selected wells in the Mississippi River Valley alluvial aquifer—Continued.

K. GREENE COUNTY, WELL 16N06E28ABB1



L. JACKSON COUNTY, WELL 12N02W25ABB2

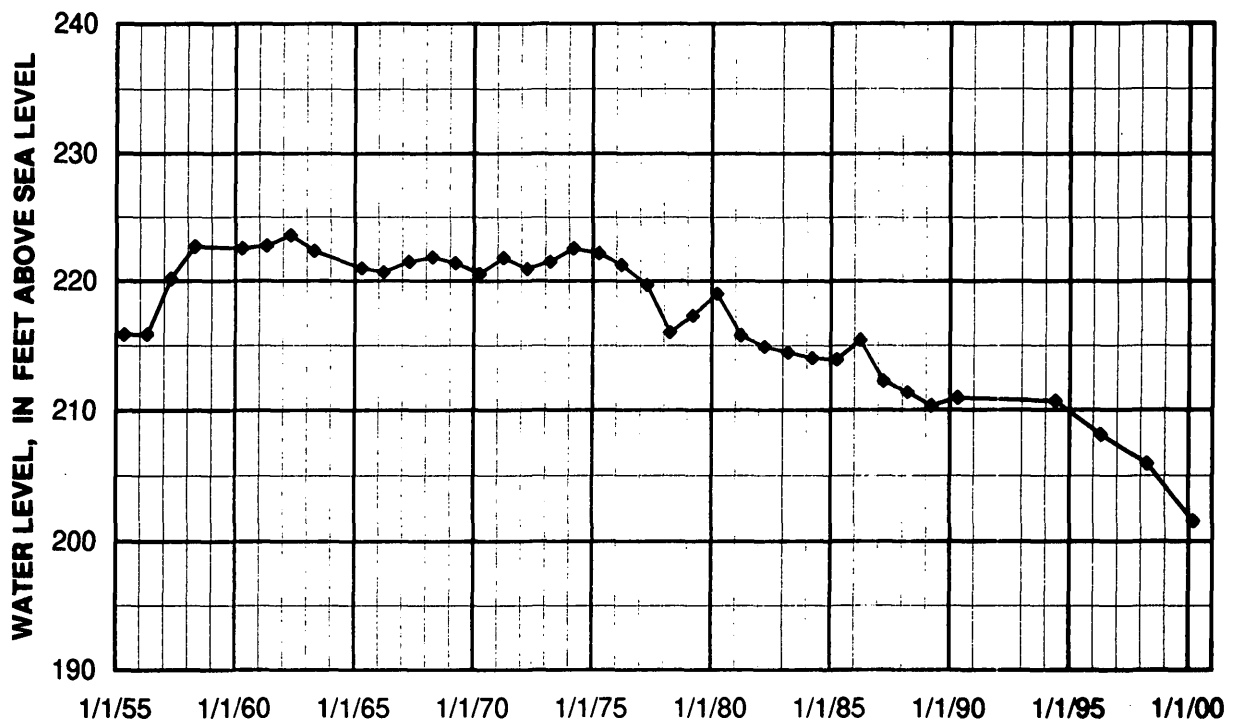


Figure 3. Water-level hydrographs (A to Y) for selected wells in the Mississippi River Valley alluvial aquifer—Continued.

M. JEFFERSON COUNTY, WELL 03S08W24BBC1



N. LEE COUNTY, WELL 02N01E23BAA2

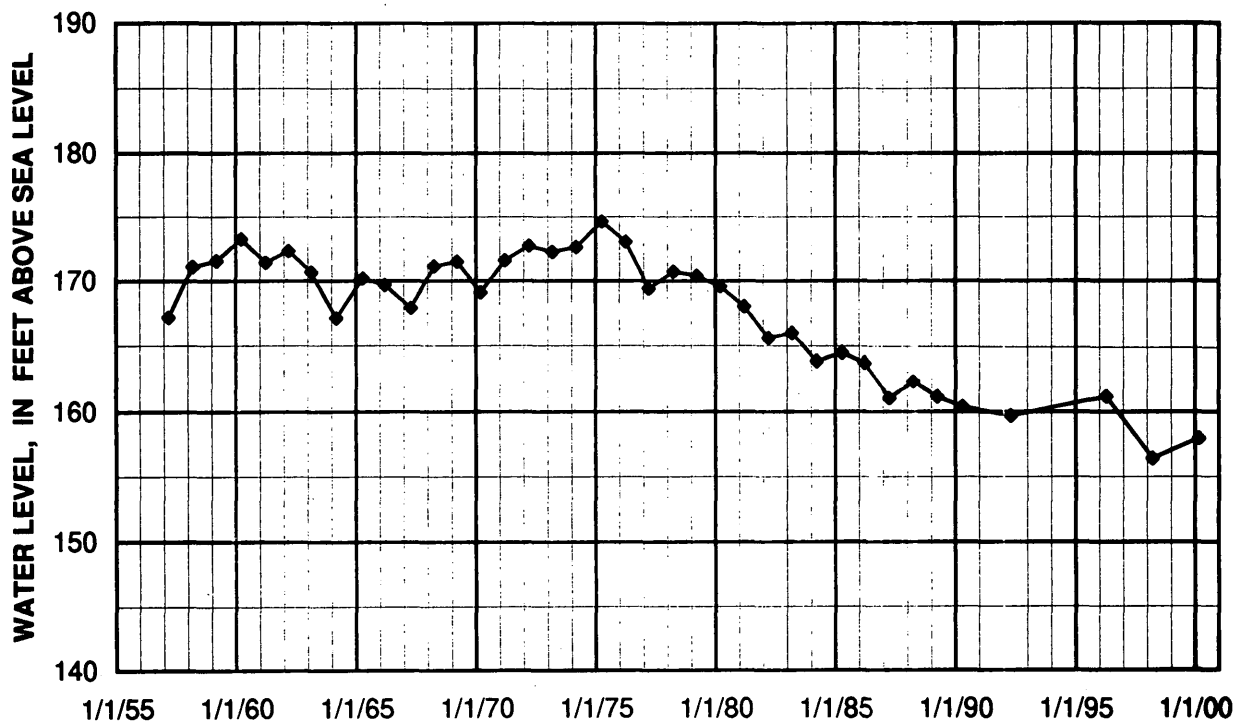
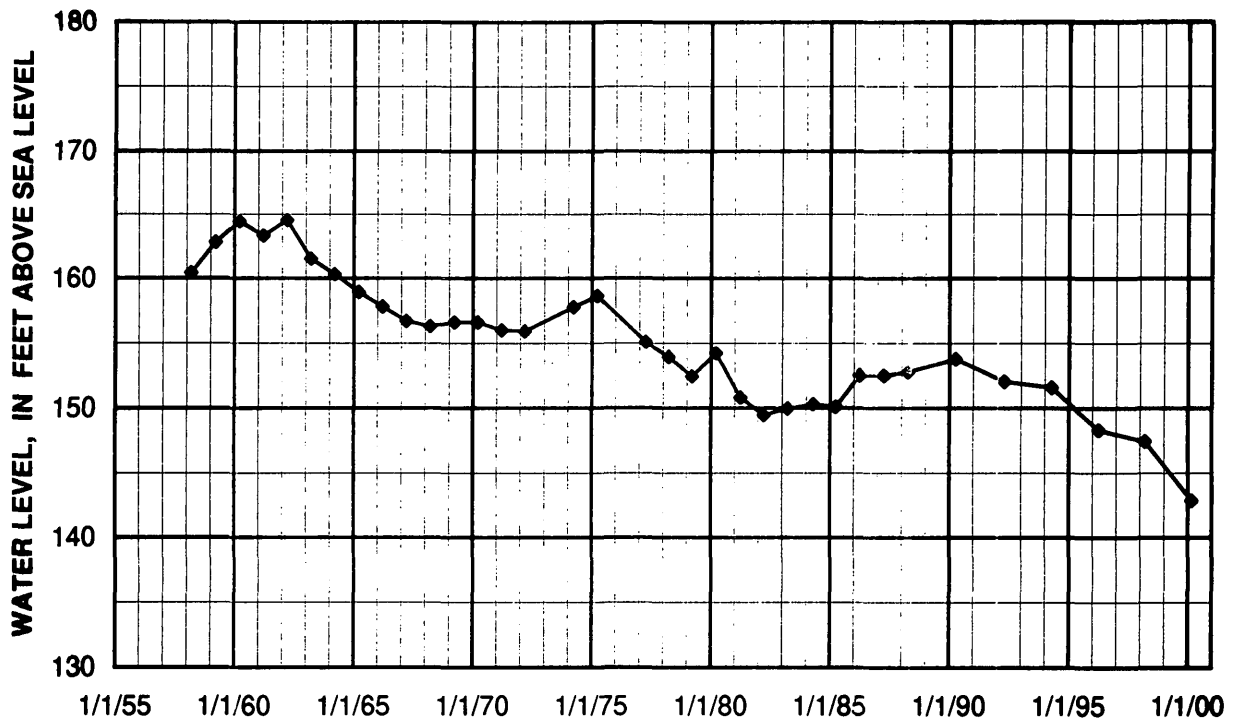


Figure 3. Water-level hydrographs (A to Y) for selected wells in the Mississippi River Valley alluvial aquifer—Continued.

O. LINCOLN COUNTY, WELL 08S06W02ACB1



P. LONOKE COUNTY, WELL 02N09W17CCB1

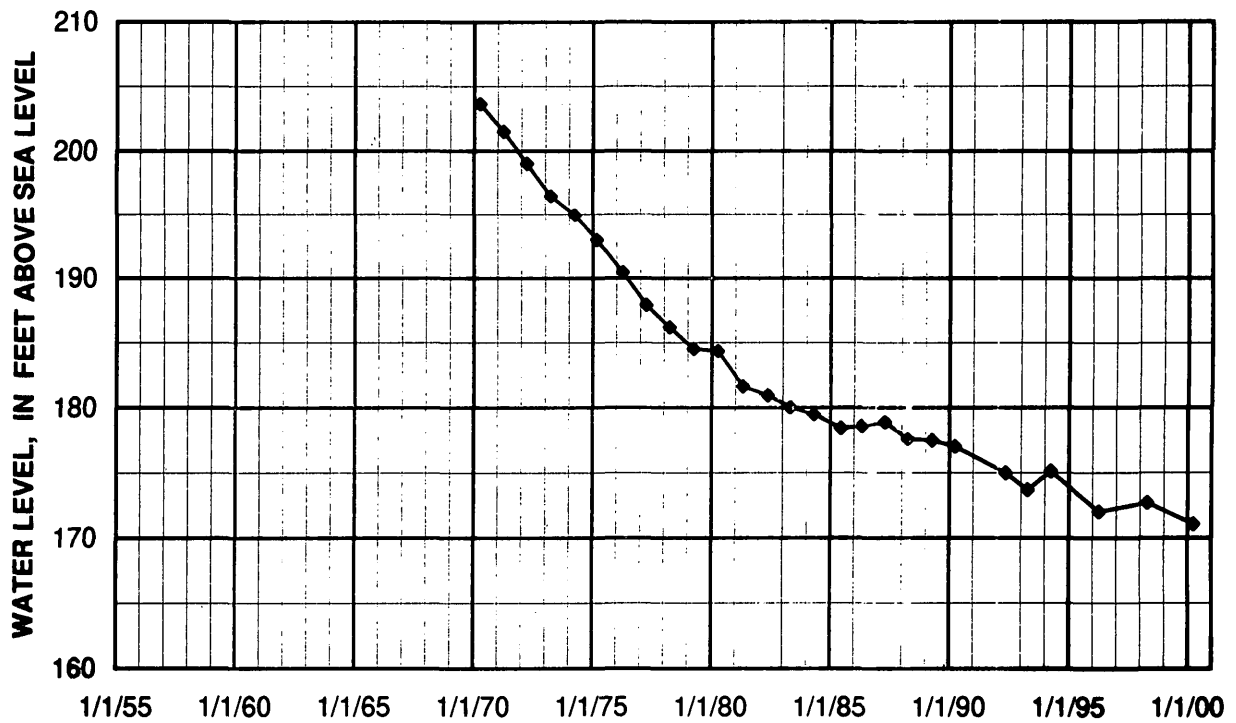
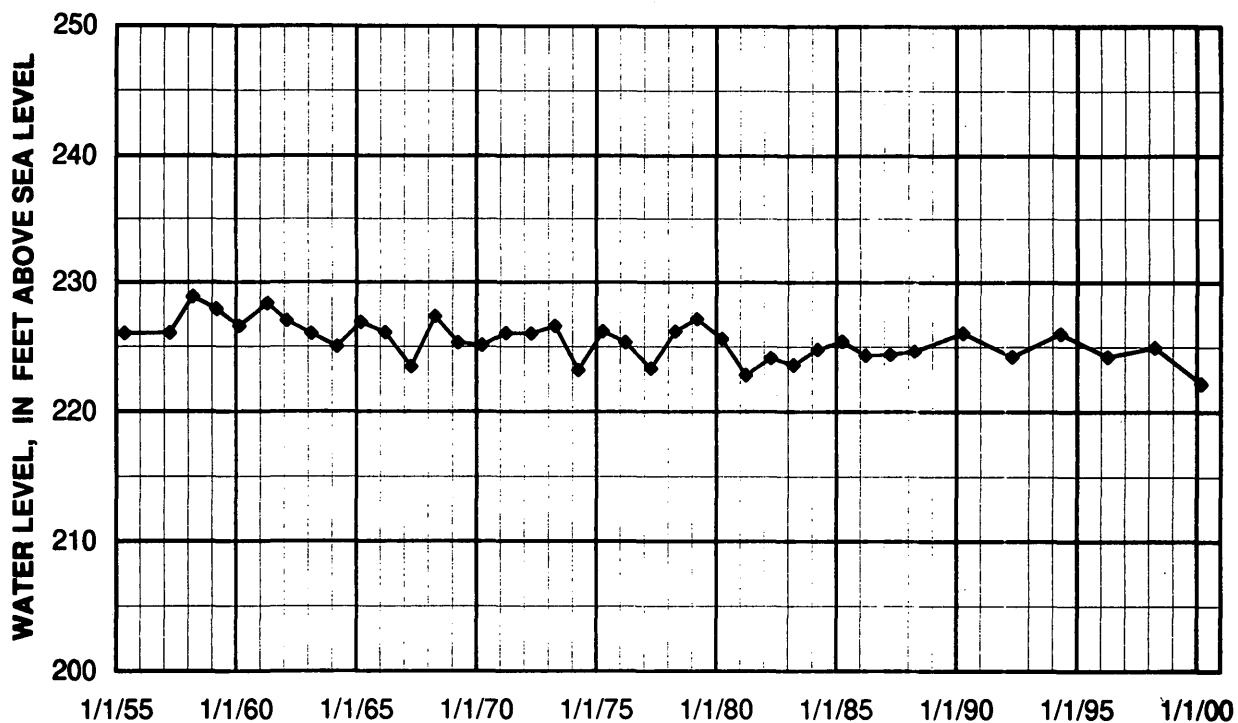


Figure 3. Water-level hydrographs (A to Y) for selected wells in the Mississippi River Valley alluvial aquifer—Continued.

Q. MISSISSIPPI COUNTY, WELL 14N10E18ABC1



R. MONROE COUNTY, WELL 03N01W20ABA1

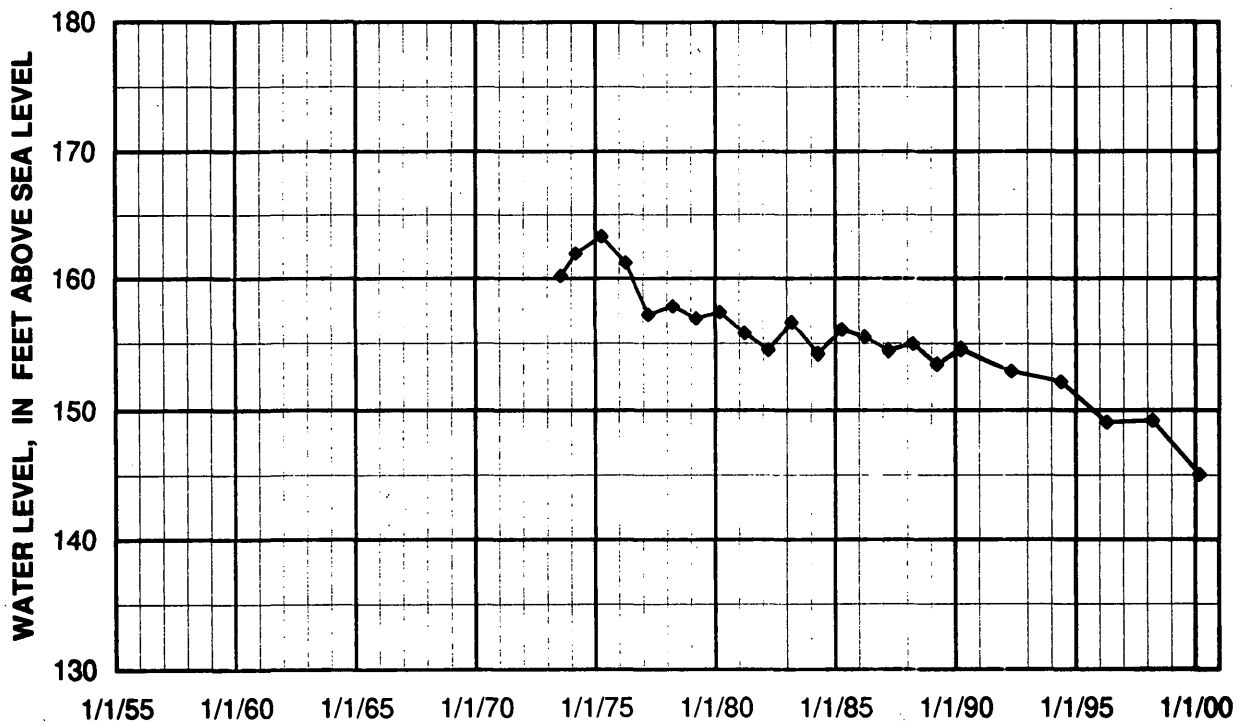
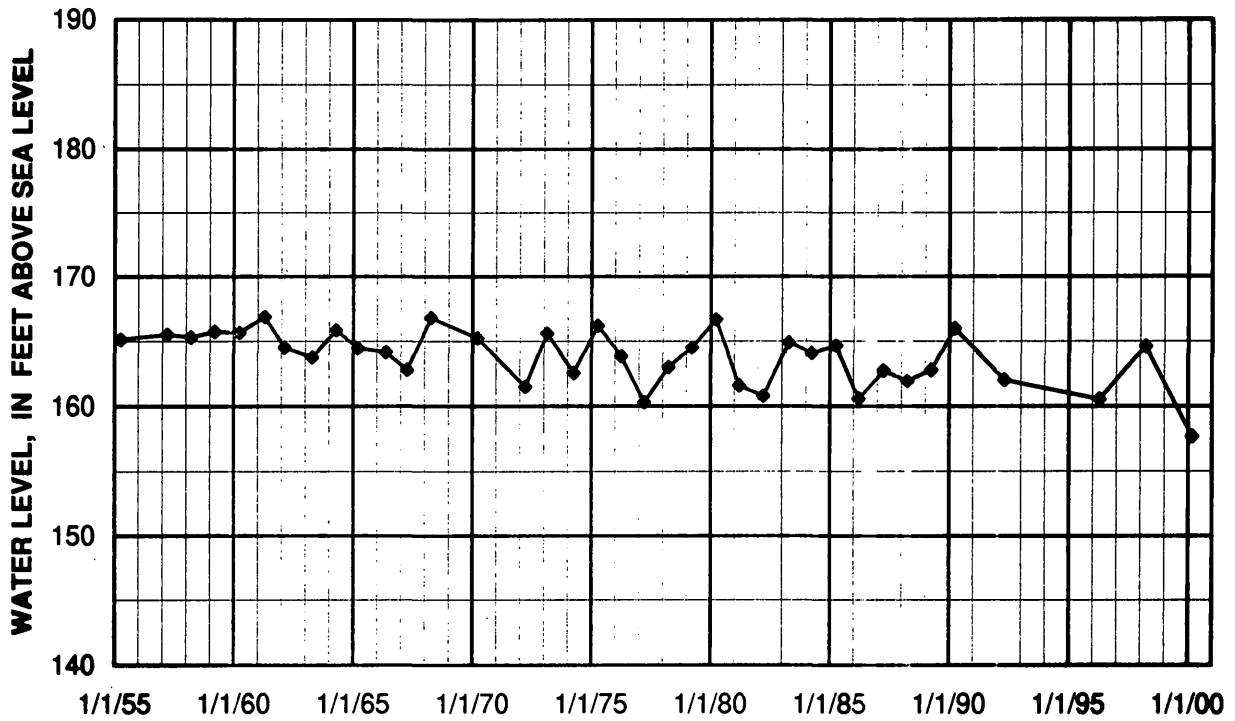


Figure 3. Water-level hydrographs (A to Y) for selected wells in the Mississippi River Valley alluvial aquifer—Continued.

S. PHILLIPS COUNTY, WELL 02S03E15ACD1



T. POINSETT COUNTY, WELL 11N02E26AAB1

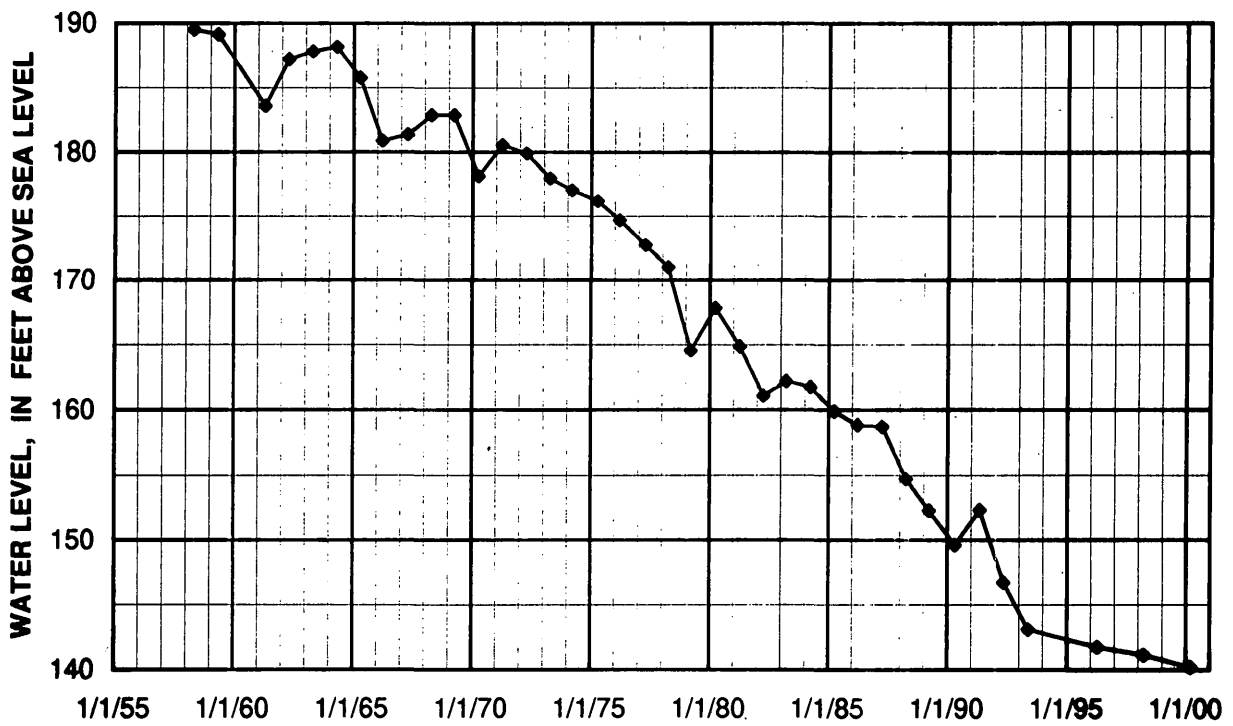
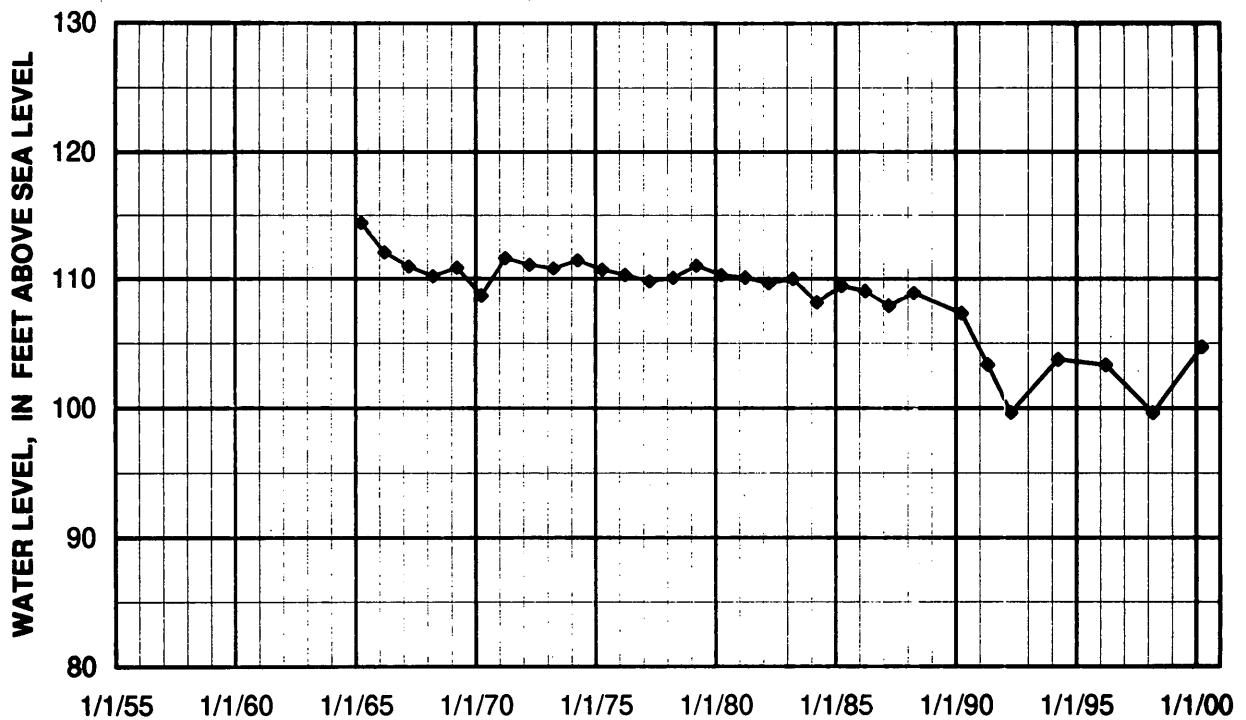


Figure 3. Water-level hydrographs (A to Y) for selected wells in the Mississippi River Valley alluvial aquifer—Continued.

U. PRAIRIE COUNTY, WELL 01S05W14BBC1



V. PRAIRIE COUNTY, WELL 03N06W01BCB1

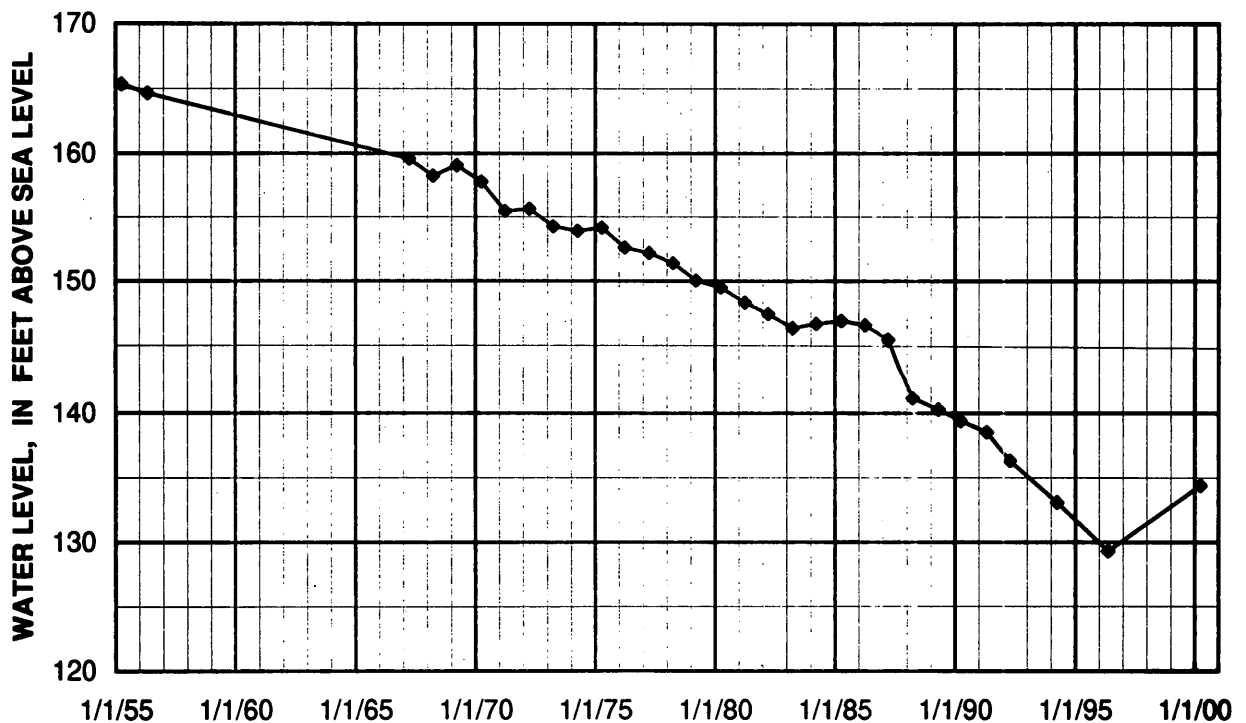
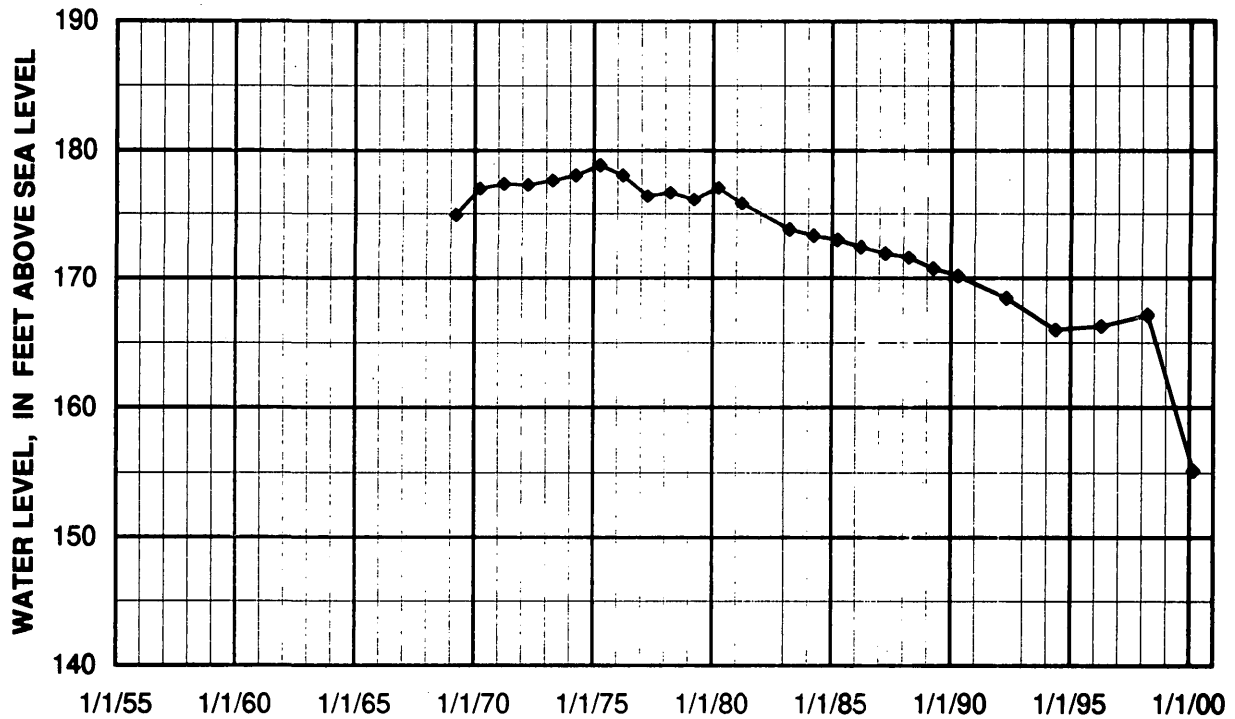


Figure 3. Water-level hydrographs (A to Y) for selected wells in the Mississippi River Valley alluvial aquifer—Continued.

W. ST. FRANCIS COUNTY, WELL 06N05E22ACC1



X. WHITE COUNTY, WELL 07N06W19CAB1

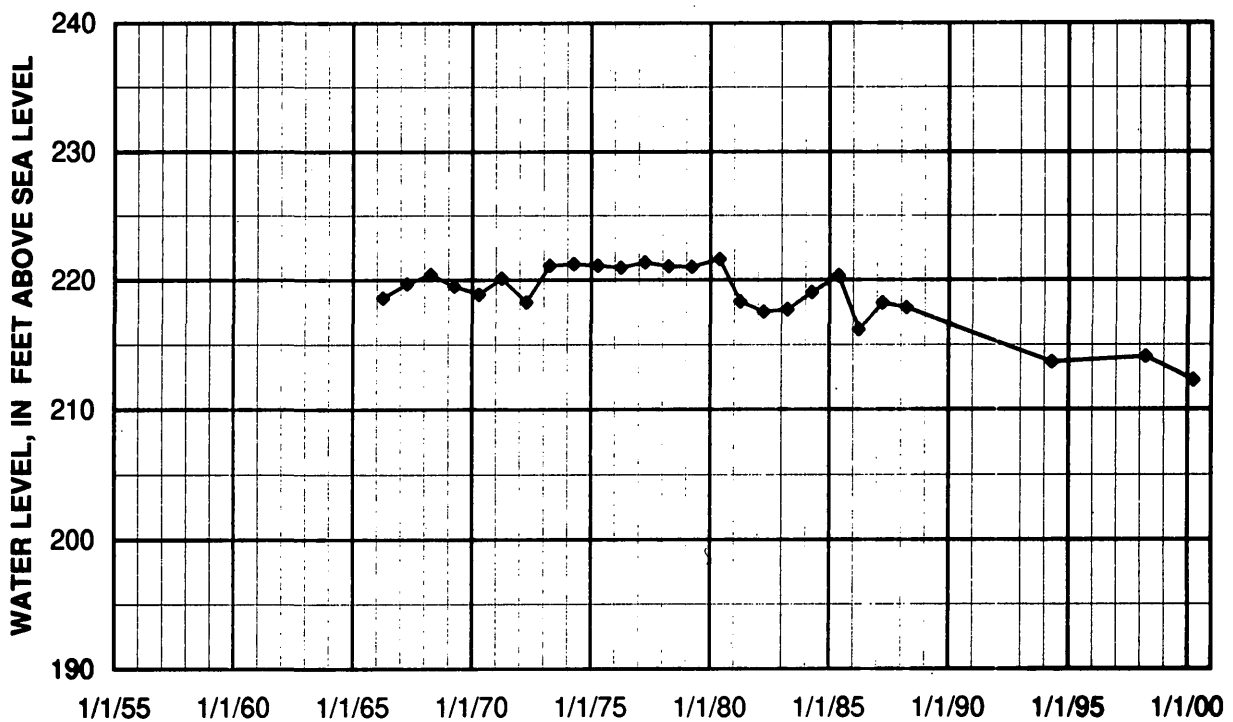


Figure 3. Water-level hydrographs (A to Y) for selected wells in the Mississippi River Valley alluvial aquifer—Continued.

Y. WOODRUFF COUNTY, WELL 06N01W06BAB1

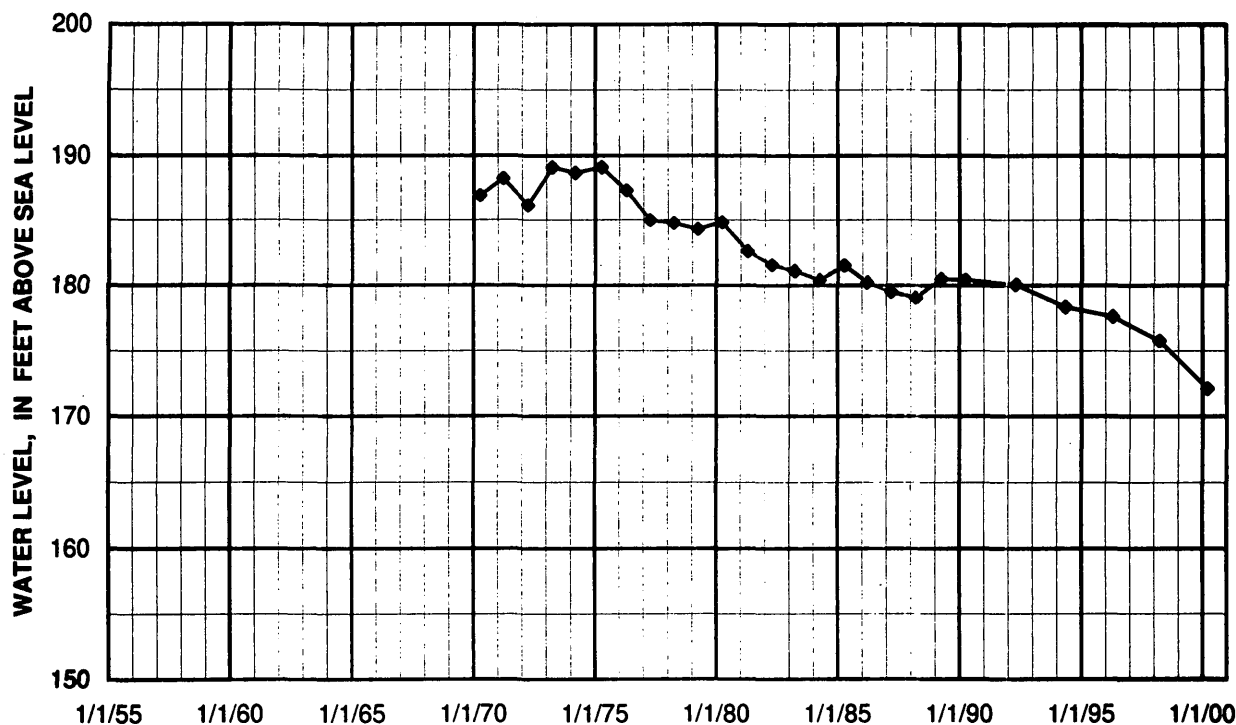


Figure 3. Water-level hydrographs (A to Y) for selected wells in the Mississippi River Valley alluvial aquifer—Continued.

Comparison of Water-Level Changes in Cones of Depression from 1994 to 2000

A comparison of water-level altitudes from 1994 to 2000 at the lowest point in the cone of depression in central Arkansas County indicates that water levels declined, then rose slightly. The cone of depression elongated in a north-south direction. The lowest water-level altitudes in the alluvial aquifer in Arkansas County in 1994, 1998, and 2000 were 86, 78, and 80 ft above sea level, respectively. The area enclosed by the 90-foot contour in 1994 expanded northwestward and southeastward by 1998, followed by a shift northward by 2000 (fig. 4). The extension of this cone of depression in Lonoke and Prairie Counties shows that water levels had declined from 1994 to 2000 and the cone had changed size and shape. In 1994, the area enclosed by the 100-foot contour was elongated from northwest to southeast across Lonoke and Prairie Counties (fig. 5). In 1998, the area enclosed by the 100-foot contour was oriented in a north-south direction in south-central Prairie County. By 2000, the 100-foot contour became elongated in a mostly west to east direction across

Lonoke and Prairie Counties and enclosed 80-foot and 90-foot contours.

The potentiometric depression in Poinsett County had expanded from 1994 to 2000. The area enclosed by the 150-foot contour in 1994 extended from southern Poinsett County to southern Craighead County. By 1998, the area enclosed by the 150-foot contour had expanded south into central Cross County, north along Crowleys Ridge, and westward in Poinsett County. By 2000, this area had expanded into southern Cross County and westward in Poinsett and Cross Counties (fig. 6). The potentiometric depression in St. Francis County expanded from 1994 to 2000. In 1994, the area enclosed by the 150-foot contour was confined mostly to St. Francis and Lee Counties (fig. 7). By 1998, the area enclosed by the 150-foot contour expanded farther into Lee, Monroe, St. Francis, and Woodruff Counties and enclosed the 140-foot and 130-foot contours. By 2000, the 150-foot contour extended farther south in Monroe County and farther northeast in St. Francis County. The 130-foot contour, present in 1998, is not evident in the 2000 St. Francis cone of depression. Areas enclosed by 140-foot contours have decreased to very local areas in northern and east-

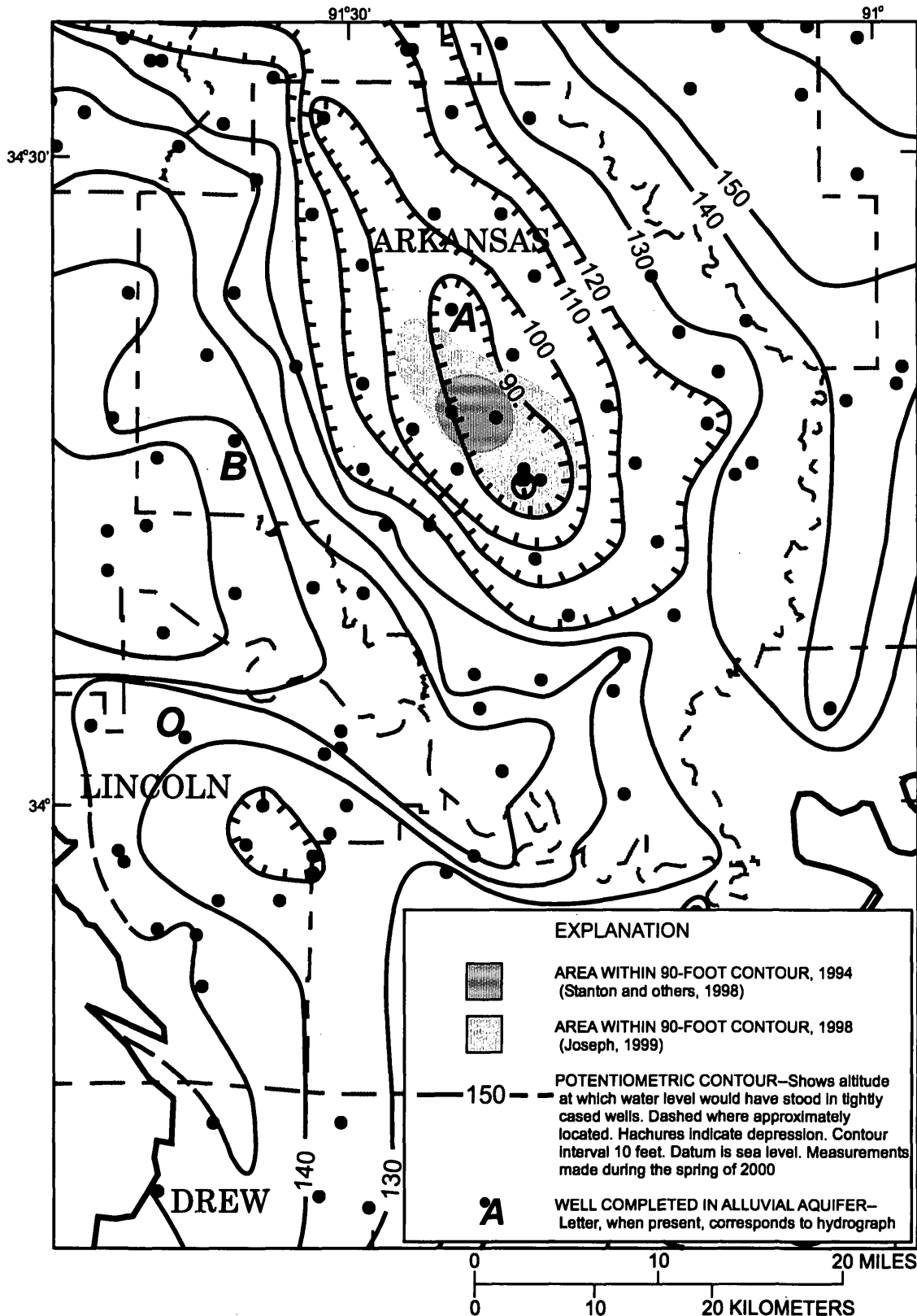


Figure 4. Cone of depression in the potentiometric surface of the Mississippi River Valley alluvial aquifer in Arkansas County, eastern Arkansas, 1994 to 2000.

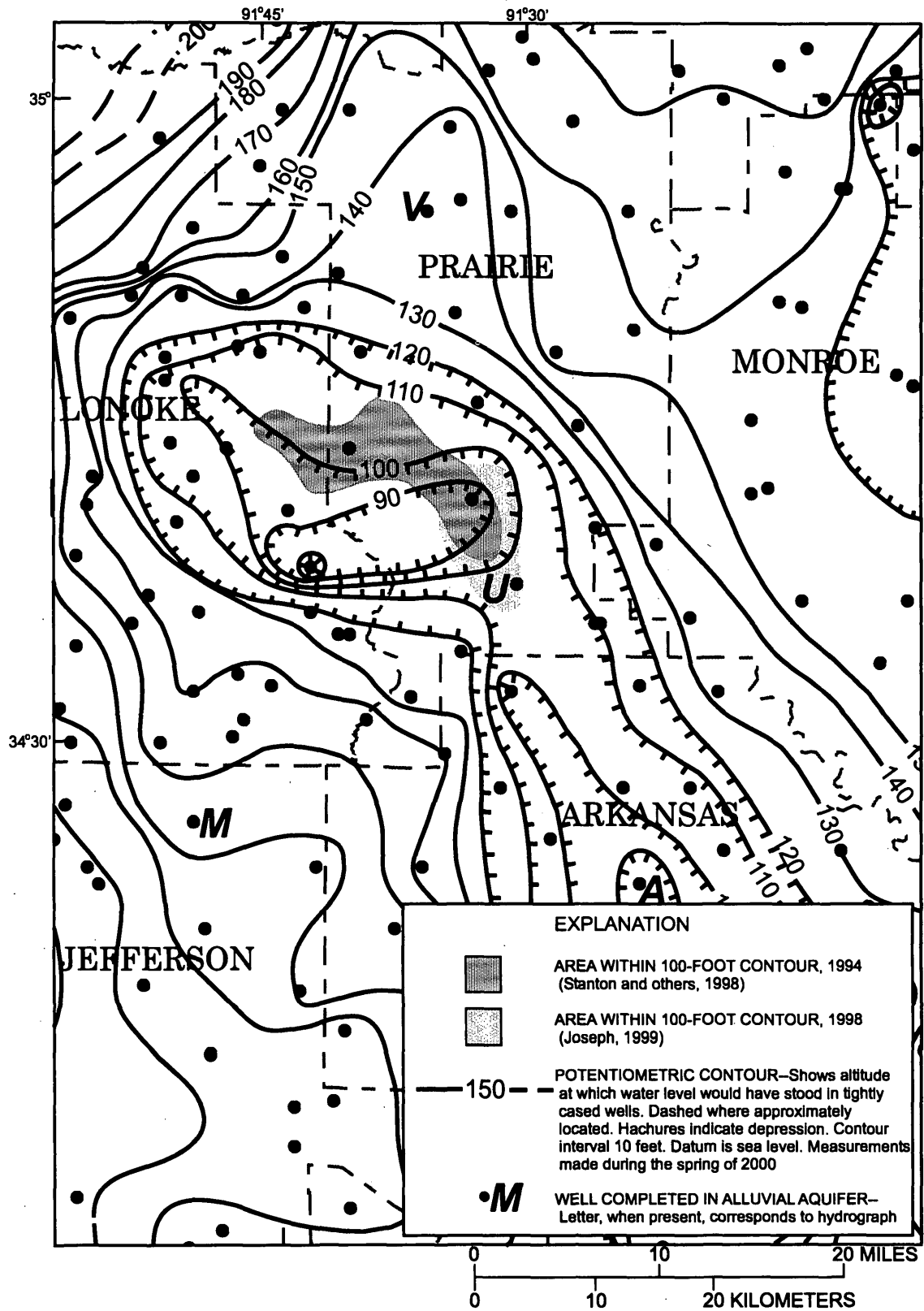


Figure 5. Cone of depression in the potentiometric surface of the Mississippi River Valley alluvial aquifer in Lonoke and Prairie Counties, eastern Arkansas, 1994 to 2000.

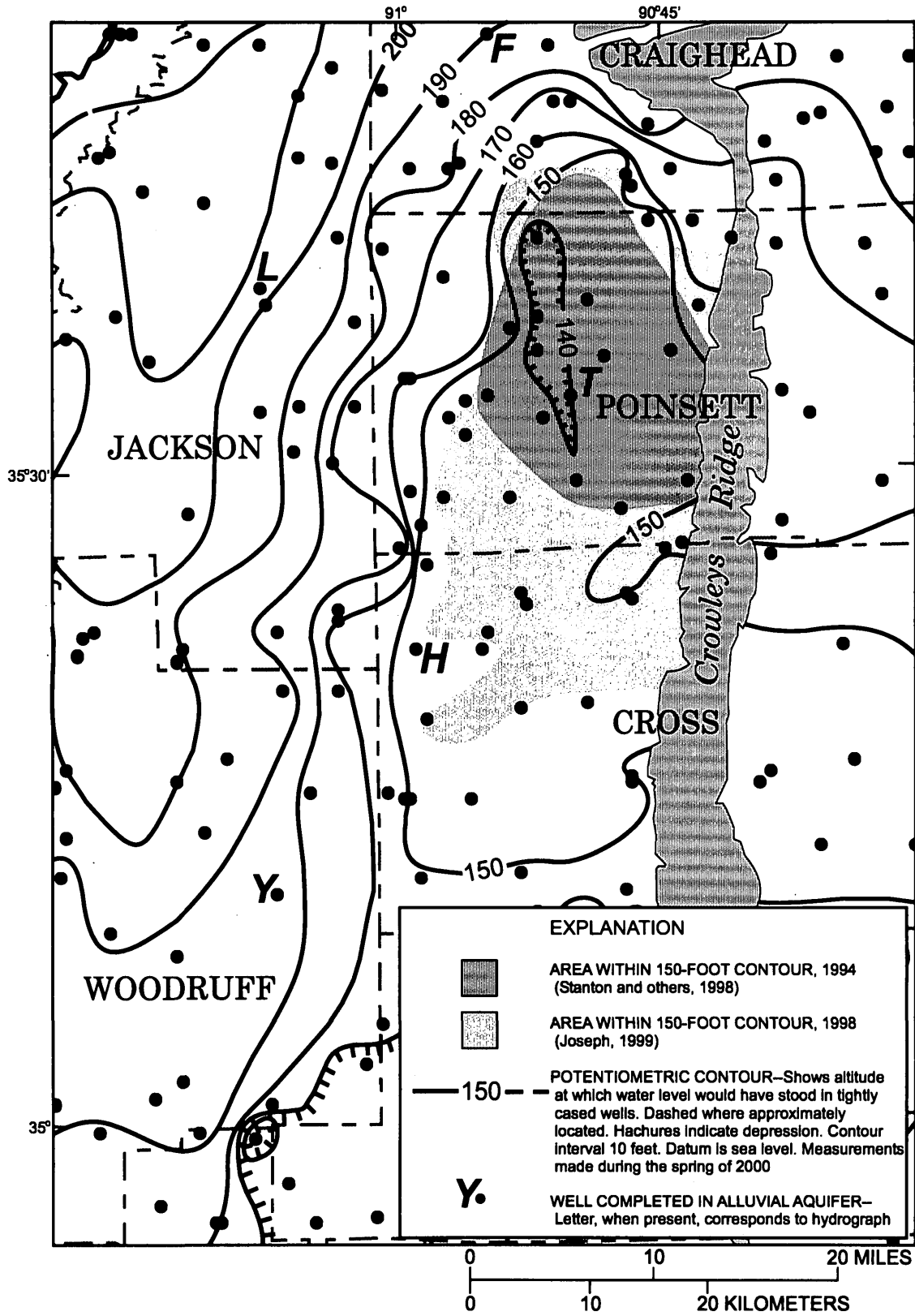


Figure 6. Cone of depression in the potentiometric surface of the Mississippi River Valley alluvial aquifer in Poinsett County, eastern Arkansas, 1994 to 2000.

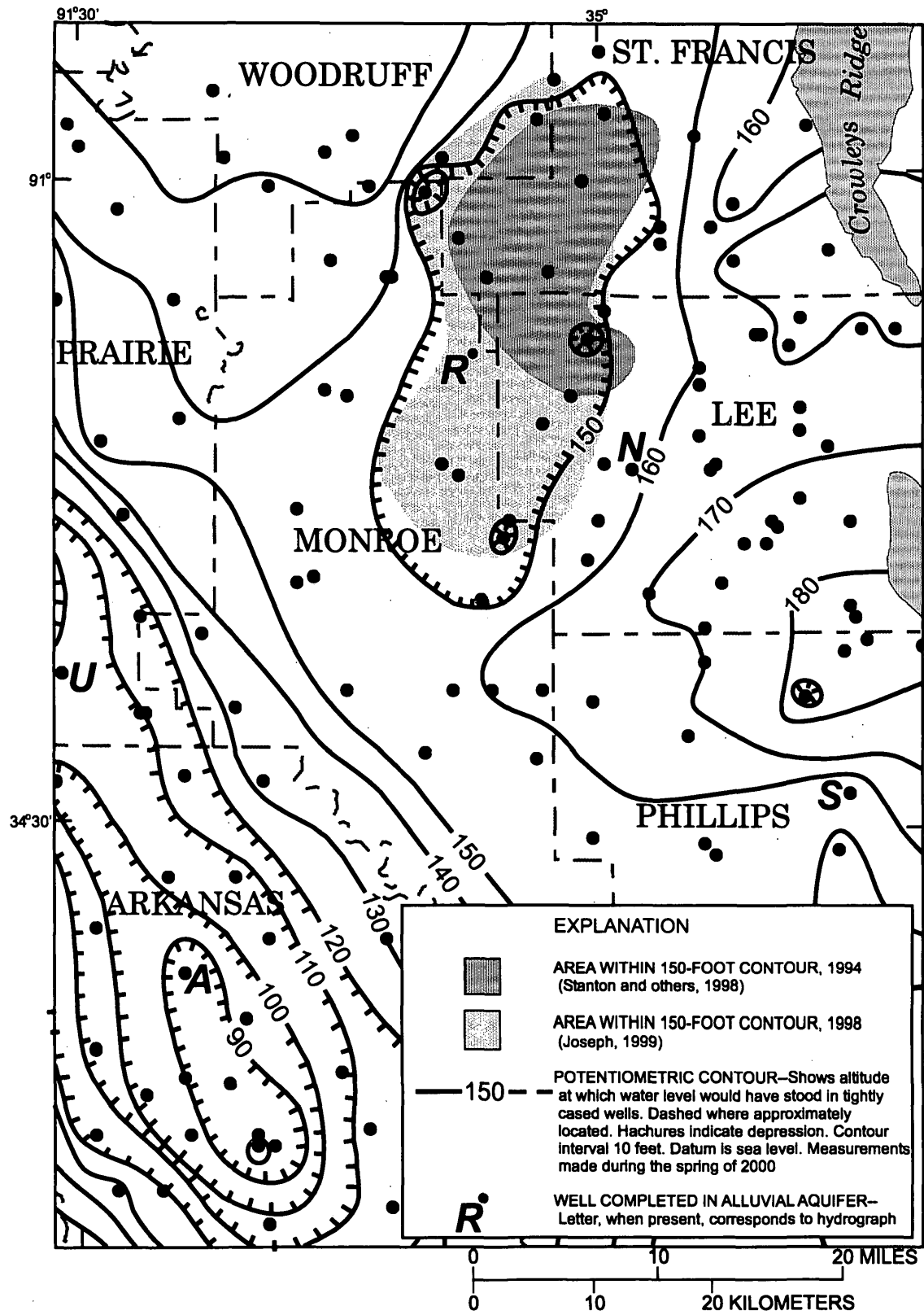


Figure 7. Cone of depression in the potentiometric surface of the Mississippi River Valley alluvial aquifer in St. Francis County, eastern Arkansas, 1994 to 2000.

central Monroe and northwestern Lee Counties. The water-level altitudes did not decline in every well monitored in this area from 1994 to 2000; however, water-level altitudes generally declined during this period and the area extent of the cones of depression increased.

The comparison of water-level altitudes from 1994, 1998, and 2000 indicates that water levels have declined and the four potentiometric depressions have become larger since 1994. The two shallow depressions have expanded since 1994 (Stanton and others, 1998; Joseph, 1999). The continuation of this trend might result in the coalescing of these two depressions into one large depression.

Long-Term Water-Level Changes in Cones of Depression

The analysis of long-term water-level changes in the cone of depression in Arkansas and Prairie Counties shows the effects of the elongation of this cone of depression. Both Arkansas and Prairie Counties have two different average rates of decline for the two hydrographs shown in each county. In Arkansas County well 04S04W02ABB1 (fig. 3A) has an average rate of water-level decline of about 0.5 ft/yr. Well A is located near the center of the cone of depression in Arkansas County and shows a consistent rate of decline during the 45-year period of record. Well B is located near the Arkansas River and shows a stable water level for the 41-year period of record. The water level in the Arkansas River is maintained by a lock and dam system and can be a source of water for the alluvial aquifer in southern and western Arkansas County. In Prairie County, well 01S05W14BBC1 (fig. 3U) is near the center of the cone of depression and has an average rate of decline of about 0.2 ft/yr. Well 03N06W01BCB1 (fig. 3V) is located in the north part of the cone of depression and has an average rate of decline of about 0.8 ft/yr. These two hydrographs show that the rate of decline is about three times greater in the north part of the cone of depression than in the center and supports the potentiometric-surface evidence that this cone of depression is expanding.

Water-level changes in neighboring counties show the expansion of the cone of depression centered in Arkansas and Prairie Counties. In Lonoke County, well 02N09W17CCB1 (fig. 3P) has an average rate of decline of 0.9 ft/yr over 25 years and shows a continuous decline in water level during the 30 years of record. In Jefferson County well 03S08W24BBC1 (fig. 3M)

has an average rate of decline of 0.7 ft/yr during the period 1975 to 2000.

In Poinsett County, data for well 11N02E26AAB1 (fig. 3T) show that water levels declined an average of 1.4 ft/yr since 1975. The cone of depression is expanding northward and southward along Crowleys Ridge and westward into Jackson County. Water levels at well 14N02E28BDD1 (fig. 3F) in Craighead County declined an average of 1.2 ft/yr and water levels at well 09N01E33BBA1 (fig. 3H) in Cross County declined at average of 1.2 ft/yr since 1975. In Jackson County, well 12N02W25ABB2 (fig. 3L) has an average rate of decline of 0.8 ft/yr and water levels from well 06N01W06BAB1 (fig. 3Y) in Woodruff County declined an average of 0.7 ft/yr since 1975.

In Monroe County, data for well 03N01W20ABA1 (fig. 3R) show that water levels declined an average of 0.7 ft/yr since 1975. Water levels in well 02N01E23BAA2 (fig. 3N) in Lee County declined an average of 0.7 ft/yr since 1975.

SPECIFIC CONDUCTANCE AND DISSOLVED CHLORIDE

Specific-conductance data indicate regional variations of dissolved solids within the alluvial aquifer across the study area (plate 2). Water samples were collected from 151 wells screened in the alluvial aquifer and measured on site for specific conductance and analyzed for dissolved chloride at 104 wells. Specific conductance ranged from 190 microsiemens per centimeter at 25 degrees Celsius ($\mu\text{S}/\text{cm}$) at a well in Drew County to 1,690 $\mu\text{S}/\text{cm}$ at a well in Ashley County (appendix 2). Ground water in the alluvial aquifer generally has lower specific conductances along the western and northern borders of the study area. Two areas of relatively high specific conductance (greater than 1,100 $\mu\text{S}/\text{cm}$) are centered in southeastern Ashley and western Chicot Counties and Desha County.

Generally, the occurrences of higher specific conductance in the alluvial aquifer probably are caused by movement of water containing elevated concentrations of dissolved solids from sources at depth (Bryant and others, 1985). Water with higher concentrations of dissolved solids may have moved upward where the confining units are thin or absent, along faults, or through unplugged casings of abandoned oil and gas test wells (Fitzpatrick, 1985). Morris and Bush (1986)

cite two possible sources of high dissolved solids concentration water—a zone of ground-water stagnation present in the alluvial aquifer caused by localized restricted horizontal or vertical flow, and upward movement of water with higher dissolved solids concentration from deeper formations in response to pumping.

Dissolved chloride concentrations (appendix 2) ranged from 2.2 milligrams per liter (mg/L) at wells in Crittenden and St. Francis Counties to 550 mg/L at a well in Chicot County. The sample with the highest chloride concentration also had the third highest specific conductance (1,400 $\mu\text{S}/\text{cm}$). The areas of higher chloride concentrations generally coincide with areas of higher specific conductance.

SUMMARY

The Mississippi River Valley alluvial aquifer is increasingly relied upon for agriculture and aquaculture irrigation in eastern Arkansas. In 1990, withdrawals from the alluvial aquifer in Arkansas totaled about 4,300 Mgal/d; in 1995, withdrawals had increased to about 5,062 Mgal/d.

The regional direction of ground-water flow is generally to the south and east except where affected by intense ground-water withdrawals. In spring of 2000, the highest water-level altitude measured was 289 feet above sea level in northeastern Clay County. The lowest water-level altitude measured was 78 feet above sea level in southwestern Ashley County. A large depression in the potentiometric surface is located in Arkansas, Lonoke, and Prairie Counties; two shallower depressions are located in Lee, Monroe, St. Francis, and Woodruff Counties and Craighead, Cross, and Poinsett Counties. Potentiometric depressions seem to be forming in four new areas in Ashley, Chicot, Desha, Greene, and Lincoln Counties. Comparisons of water-level changes in cones of depression from 1994 to 2000 show increases in depth and areal extent.

Water-level data from 25 wells with 26 or more years of record indicate long-term water levels in the alluvial aquifer declined an average of 0.6 ft/yr from 1975 to 2000. Average rates of water-level decline varied across the study area. Water-level measurements indicated an average rate of decline greater than 1.0 ft/yr for the wells in Craighead, Cross, Desha, and Poinsett Counties.

Specific conductance measurements made on water samples collected during summer of 2000 ranged

from 190 $\mu\text{S}/\text{cm}$ at a well in Drew County to 1,690 $\mu\text{S}/\text{cm}$ at a well in Ashley County. Ground water in the alluvial aquifer generally has lower specific conductances along the western and northern borders of the study area. Two areas of higher specific conductance are centered in southeastern Ashley and western Chicot Counties and Desha County. Possible explanations include a zone of ground-water stagnation caused by localized restricted horizontal or vertical flow, or upward movement of higher dissolved solid concentration water (through confining units, along faults, or through unplugged casings of abandoned oil and gas test wells) in response to pumping. Dissolved chloride concentrations ranged from 2.2 mg/L at a well in Crittenden County to 550 mg/L at a well in Chicot County. The areas of higher chloride concentrations generally coincide with areas of higher specific conductance.

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APPENDICES

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 2000

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
Arkansas County								
02S03W09DCD1	343207	911956	USGS	135	211	75.85	158	3/01/2000
02S04W11DBB1	343233	912415	USGS	114	213	99.48	152	3/01/2000
02S05W15AAB1	343213	913127	USGS	97	213	116.11	180	5/02/2000
02S05W31BBB1	342937	913536	USGS	140	198	58.1	90	5/02/2000
03S02W27ABB1	342448	911251	USGS	132	197	65.02	87	3/01/2000
03S03W05CCD1	342737	912132	USGS	107	201	93.87	145	5/02/2000
03S03W27BBC1	342455	911944	USGS	107	195	87.55	120	5/02/2000
03S04W03DCA16	342753	912515	USGS	106	205	98.89	126	3/01/2000
03S05W03CCC1	342752	913227	USGS	112	215	103.37	110	5/02/2000
03S05W24DAA1	342525	912922	USGS	101	207	105.63	145	5/02/2000
03S06W35ADD1	342416	913651	USGS	133	190	56.91	--	2/29/2000
04S01W04ACD2	342233	910733	USGS	139	155	16.07	52.4	2/29/2000
04S01W04DBB1	342232	910733	USGS	135	193	58.08	62.5	2/29/2000
04S01W19AAD1	342012	910919	USGS	123	196	73.33	157.2	2/29/2000
04S01W31DCB1	341753	910949	USGS	111	179	68.29	130	2/29/2000
04S02W11AAA1	342207	911125	USGS	130	195	65.02	--	2/29/2000
04S02W29CCC1	341846	911539	USGS	107	191	84.27	--	2/24/2000
04S03W17ADD1	342101	912057	USGS	93	200	107.13	--	3/01/2000
04S03W32BCB1	341820	912202	USGS	87	192	104.75	--	2/24/2000
04S04W02ABB1	342313	912424	USGS	87	200	112.93	--	3/01/2000
04S05W16CDC1	342045	913321	USGS	130	201	71.08	--	2/28/2000
04S05W24DAA1	342001	912930	USGS	108	198	90.22	--	2/28/2000
04S06W15DBB1	342122	913827	USGS	157	190	32.64	100	3/01/2000
05S01W16BAB1	341552	910729	USGS	151	183	32.39	--	2/29/2000
05S01W17CAD1	341515	910819	USGS	134	180	45.62	140	5/02/2000
05S02W16ABD1	341552	911358	USGS	113	190	77.23	154	2/29/2000
05S03W21BAA1	341511	912035	USGS	80	190	110.13	180	5/02/2000
05S03W22ABB1	341511	911930	USGS	88	195	107.07	180	5/02/2000
05S04W07CCC1	341555	912932	USGS	113	194	81.47	--	2/28/2000
05S04W32BBA1	341316	912822	USGS	131	191	60.48	--	2/24/2000
05S06W02DDD1	341724	913651	USGS	162	183	20.69	60	2/29/2000
05S06W07DDC1	341637	914128	USGS	171	181	9.69	32	3/03/2000
06S02W23DCD1	340853	911206	USGS	123	188	65.45	--	2/24/2000
06S03W10BBA1	341136	911954	USGS	101	184	82.77	155	2/29/2000
06S03W27AAA1	340857	911811	USGS	117	183	65.98	132	2/29/2000
06S04W18CBB1	341014	912938	USGS	151	190	39.11	--	2/28/2000
07S02W04BBB1	340704	911451	USGS	143	176	32.99	--	2/29/2000

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 2000--Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
07S02W17BBA1	340530	911539	USGS	131	184	53.39	95	2/29/2000
07S03W18CCD1	340440	912312	USGS	142	186	43.96	--	2/29/2000
07S04W01DDD1	340625	912327	USGS	138	186	47.84	155	2/29/2000
08S02W08ACA1	340041	911506	USGS	134	179	44.85	--	2/29/2000
08S03WT2299	340146	912201	USGS	156	178	22.22	158	2/29/2000
04S04W35ABC1	341835	912437	NRCS	103	193	90	--	4/20/2000
05S03W16ABD1	341551	912019	NRCS	87	196	109	196	4/20/2000
05S04W04BAA1	341750	912654	NRCS	96	186	90	--	4/20/2000
05S04W14AAD1	341549	912411	NRCS	95	186	91	160	4/20/2000
05S04W34BAC1	341309	912603	NRCS	121	191	70	142	4/20/2000
06S02W03AAC1	341215	911256	NRCS	115	187	72	--	4/20/2000
07S03W10ACB1	340607	911938	NRCS	134	181	47	--	4/20/2000
Ashley County								
15S04W26DCC1	332232	912902	USGS	96	127	31.37	64.1	2/23/2000
16S06W08CAA1	331941	914438	USGS	111	185	74.31	--	2/23/2000
17S04W15DDC1	331252	912954	USGS	89	116	26.53	57	2/23/2000
17S06W01ADD1	331518	913956	USGS	101	182	80.72	144	2/23/2000
17S07W05CDD1	331502	915050	USGS	94	185	90.97	130	2/23/2000
18S08W01AAB1	331015	915224	USGS	94	181	86.94	128	2/23/2000
18S08W28DDD2	330625	915528	USGS	78	163	85.29	156	2/23/2000
19S04W06BAB2	330504	913329	USGS	85	110	24.99	98	2/23/2000
19S06W07BCC1	330404	914608	USGS	103	135	31.48	--	2/23/2000
16S05W35DDA1	331549	913452	NRCS	109	125	16	100	4/21/2000
18S04W23DDD1	330658	912856	NRCS	79	103	24	100	4/21/2000
18S05W11CCD1	330841	913538	NRCS	93	118	25	75	4/21/2000
18S05W22DDA1	330712	913555	NRCS	104	125	21	100	4/21/2000
19S04W14BBB1	330310	912913	NRCS	87	107	20	100	4/21/2000
19S05W08ACA1	330405	913815	NRCS	86	111	25	--	4/21/2000
19S05W16ABB1	330323	913718	NRCS	99	116	17	100	4/21/2000
19S05W22DCD1	330139	913615	NRCS	84	107	23	--	4/21/2000
Chicot County								
13S03W34BAA1	333203	912341	USGS	97	133	36.49	100	2/22/2000
13S03W35BAC1	333154	912245	USGS	99	134	34.74	90	2/22/2000
14S03W07BBD1	332925	912704	USGS	108	134	25.51	--	2/22/2000
14S03W32CDB2	332613	912551	USGS	100	134	34.06	90	2/22/2000
15S02W20DDC1	332225	911919	USGS	98	126	27.97	--	2/22/2000
16S03W11ADC1	331920	912234	USGS	92	118	26.02	--	2/22/2000
17S01E17CDA1	331308	910748	USGS	93	118	25.13	110	2/22/2000
17S01E18ADA1	331340	910755	USGS	104	121	16.72	--	2/22/2000
17S01W06BCC1	331500	911507	USGS	92	115	23.44	100	2/22/2000

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 2000--Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
17S03W28DBA1	331125	912440	USGS	86	110	23.84	--	2/23/2000
18S01W19DAB1	330706	911422	USGS	92	110	18.48	--	2/22/2000
19S01W17BCC1	330249	911406	USGS	84	106	22.16	120	2/22/2000
19S03W14ABB1	330304	912249	USGS	86	111	25.38	--	2/23/2000
13S03W27AAA1	333253	912310	NRCS	100	138	38	--	4/19/2000
14S02W09BDD1	332859	911729	NRCS	104	133	29	--	4/19/2000
14S02W18BDD1	332859	912038	NRCS	102	129	27	--	4/19/2000
17S03W18CBC1	331257	912736	NRCS	79	117	38	--	4/19/2000
18S01W33BAD1	330543	911245	NRCS	94	116	22	--	4/19/2000
Clay County								
18N08E03DAB1	361323	901153	USGS	249	257	7.71	105	3/14/2000
19N03E24AAA1	361655	904157	USGS	258	278	19.57	--	3/13/2000
19N04E19AAA1	361651	904045	USGS	253	282	28.51	--	3/13/2000
19N08E02ABB1	361859	901104	USGS	262	269	7.32	--	3/13/2000
20N04E06BB1	362444	904131	USGS	271	290	19.2	110	3/13/2000
20N05E34DBA1	361939	903117	USGS	261	285	24.33	110	3/13/2000
21N05E17ABB1	362755	903329	USGS	277	298	21.38	105	3/13/2000
21N06E28BB1	362605	902608	USGS	276	293	16.48	130	3/13/2000
21N08E18CCC1	362651	901550	USGS	287	324	36.9	110	3/13/2000
18N08E11BAA1	361253	901117	NRCS	251	259	8	100	4/26/2000
19N04E11DAA1	361805	903621	NRCS	259	280	21.5	--	4/27/2000
19N04E19BAA1	361649	904125	NRCS	258	279	21.5	100	4/27/2000
19N05E15BBD1	361716	903152	NRCS	261	289	28.5	110	4/26/2000
19N06E18DBC1	361642	902815	NRCS	266	297	30.9	--	4/26/2000
19N07E25BCB1	361519	901700	NRCS	250	268	18.1	--	4/26/2000
19N08E08DCA1	361729	901402	NRCS	263	270	7.1	--	4/26/2000
19N09E19CDC1	361539	900908	NRCS	258	265	7	--	4/26/2000
20N03E25BAA1	362112	904225	NRCS	265	288	22.8	100	4/27/2000
20N04E03ADA1	362425	903725	NRCS	273	290	17.4	--	4/27/2000
20N05E22CAD1	362118	903132	NRCS	267	290	23.5	--	4/26/2000
20N05E30CAC1	362003	903454	NRCS	267	283	15.6	--	4/27/2000
20N06E09BBA1	362327	902620	NRCS	273	290	16.7	--	4/26/2000
20N06E28CCD1	362005	902630	NRCS	267	290	23	--	4/26/2000
20N08E22BDC1	362111	901220	NRCS	266	275	9	--	4/26/2000
20N09E09ABC1	362306	900642	NRCS	269	279	9.7	--	4/26/2000
20N09E33DDC1	361904	900628	NRCS	263	270	7.3	--	4/26/2000
21N03E15CBC1	362738	904453	NRCS	280	292	12.5	90	4/27/2000
21N03E36CDD1	362450	904214	NRCS	271	290	18.9	--	4/27/2000
21N04E09DBC1	362828	903853	NRCS	280	291	10.6	--	4/27/2000
21N05E22BAB1	362704	903132	NRCS	281	288	6.9	105	4/27/2000

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 2000--Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
21N06E11BBB1	362839	902421	NRCS	283	296	12.9	100	4/26/2000
21N07E01DDC1	362835	901607	NRCS	281	303	21.6	90	4/26/2000
21N07E19BDA1	362640	902148	NRCS	277	295	17.9	--	4/26/2000
21N08E04DDC1	362835	901252	NRCS	289	310	20.8	120	4/26/2000
21N09E31BDA1	362447	900851	NRCS	276	284	7.9	100	4/26/2000
Craighead County								
13N01E23DAA1	354436	905651	USGS	176	242	66.24	--	3/09/2000
13N03E29AAA1	354402	904712	USGS	147	251	103.68	122	3/09/2000
13N04E12ABB1	354635	903656	USGS	208	231	23.34	110	3/09/2000
13N05E22BAD1	354449	903243	USGS	210	226	15.6	--	3/09/2000
13N07E20BBA1	354439	902216	USGS	218	223	5.14	22.3	3/29/2000
14N02E18BDD1	355049	905506	USGS	190	242	51.65	120	3/09/2000
14N05E25ABB1	354921	903026	USGS	218	238	19.52	--	3/08/2000
14N06E20CCD1	354921	902812	USGS	219	226	7.18	150	3/08/2000
14N07E26DAB1	354828	901838	USGS	215	227	12	--	3/08/2000
14N07E26DBB1	354834	901843	USGS	219	228	9.34	100	3/29/2000
14N07W26DCA1	354820	901836	USGS	218	230	12	--	3/08/2000
15N03E19ADA1	355506	904802	USGS	220	262	41.76	116	3/09/2000
15N06E20DDD1	355426	902739	USGS	223	234	10.64	--	3/10/2000
15N07E10DBA1	355627	901944	USGS	226	236	9.97	120	3/08/2000
13N01E03AAA1	354739	905753	NRCS	189	240	51.1	135	3/06/2000
13N01E21CAB	354434	905945	NRCS	181	240	58.6	120	3/06/2000
13N01E23CAB1	354430	905736	NRCS	181	245	64.3	118	3/06/2000
13N02E02AAB1	354731	905032	NRCS	169	251	82.1	130	3/06/2000
13N02E03AAA1	354733	905129	NRCS	169	250	81.3	105	3/06/2000
13N02E15BBD2	354540	905220	NRCS	159	245	85.6	120	3/06/2000
13N03E10BDB1	354625	904546	NRCS	183	265	82	150	3/06/2000
13N03E23CDA1	354419	904434	NRCS	169	249	79.6	135	3/06/2000
13N03E28CDB1	354322	904652	NRCS	151	250	98.8	121	3/06/2000
13N04E15DBA1	354521	903857	NRCS	205	230	25.1	130	3/02/2000
13N04E26BCC1	354340	903829	NRCS	198	225	27	100	3/02/2000
13N05E02CCC1	354648	903202	NRCS	216	230	14.3	120	3/02/2000
13N05E06DCC1	354637	903547	NRCS	207	229	21.8	110	3/02/2000
13N05E24BAC1	354451	903045	NRCS	213	225	11.9	120	3/02/2000
13N06E03ACB1	354711	902610	NRCS	216	221	5.3	105	3/02/2000
13N06E21CBD1	354425	902745	NRCS	212	221	9	100	3/02/2000
13N07E02CAB1	354642	901901	NRCS	220	226	5.6	120	3/02/2000
13N07E05ABB1	354716	902158	NRCS	214	225	10.7	100	3/02/2000
13N07E23BCD1	354419	901909	NRCS	214	225	11.1	120	3/02/2000
13N07E35BCD1	354233	901837	NRCS	210	221	11.1	120	3/02/2000

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 2000--Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
14N01E03ACB1	355246	905816	NRCS	203	249	45.6	96	3/06/2000
14N01E10BAB1	355204	905828	NRCS	198	246	47.7	96	3/06/2000
14N01E31DCA1	354817	910121	NRCS	197	251	54.4	126	3/06/2000
14N02E22AAA1	355007	905129	NRCS	187	255	67.8	132	3/06/2000
14N05E29BAB1	354915	903454	NRCS	218	236	17.6	120	3/02/2000
14N06E06BAA1	355234	902934	NRCS	219	240	21.4	120	3/02/2000
14N07E07BCB1	355124	902323	NRCS	218	230	11.6	98	3/02/2000
14N07E14DDC1	354956	901831	NRCS	217	230	12.7	120	3/02/2000
15N02E01BCA1	355748	904955	NRCS	224	254	29.7	100	3/06/2000
15N02E12DCB1	355626	904930	NRCS	222	250	28.5	120	3/06/2000
15N05E22BAB1	355513	903241	NRCS	224	260	35.8	197	3/02/2000
15N06E04BAD1	355744	902706	NRCS	222	239	16.7	104	3/02/2000
15N07E10DAB1	355622	901934	NRCS	227	235	8	106	3/02/2000
15N07E21DAB1	355444	902043	NRCS	221	236	14.7	110	3/02/2000
15N07E35DCB1	355241	901831	NRCS	216	231	14.9	120	3/02/2000
Crittenden County								
04N07E21AAD1	345643	902121	USGS	189	202	12.84	82.1	3/07/2000
05N07E28CBA1	350121	902140	USGS	182	201	19.38	--	3/07/2000
05N07E34BAB1	350058	902033	USGS	183	203	20.18	100	3/07/2000
05N08E11CCD2	350345	901308	USGS	182	211	28.77	63	3/07/2000
06N07E13BAA1	350850	901808	USGS	186	205	19.09	130	3/29/2000
07N07E01ACC1	351514	902447	USGS	189	215	25.75	132	3/07/2000
07N07E31CCC1	351042	902359	USGS	177	207	30.19	110	3/07/2000
07N07E31CCC1	351042	902359	USGS	177	207	29.99	110	3/29/2000
07N09E05CDD1	351453	900934	USGS	200	214	14.02	120	3/07/2000
08N07E13CCC1	351827	901800	USGS	195	221	26.13	100	3/07/2000
08N07E14DAA2	351854	901833	USGS	192	219	27.03	--	3/07/2000
09N07E10DDA1	352448	901925	USGS	198	221	23.13	--	3/07/2000
09N07E31BAB1	352160	902327	USGS	191	221	30.12	110	3/07/2000
05N07E08BDC1	350407	902234	NRCS	183	204	21.5	110	4/10/2000
05N07E34CDD1	350010	902028	NRCS	186	205	19	110	4/10/2000
06N07E14ABA1	350848	901858	NRCS	191	211	20.4	110	4/10/2000
07N06E29CBC1	351152	902914	NRCS	174	210	36	120	4/10/2000
07N08E04BBD1	351538	901505	NRCS	202	224	21.8	120	4/18/2000
08N06E01DCC1	352021	902408	NRCS	184	215	31.1	120	4/18/2000
08N06E06DDB1	352030	902920	NRCS	182	214	31.6	120	4/18/2000
08N07E32DAA1	351618	902146	NRCS	187	215	27.6	110	4/10/2000
08N08E06ABB1	352103	901644	NRCS	196	223	27.1	110	4/18/2000
09N07E02CDB1	352537	901905	NRCS	195	225	30.5	130	4/18/2000
09N07E31BAB1	352160	902327	NRCS	195	221	25.9	110	4/18/2000

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 2000--Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
09N08E04CDC1	352527	901444	NRCS	202	225	22.6	120	4/11/2000
Cross County								
07N01E05CDA1	351520	910052	USGS	151	217	66.1	140	3/06/2000
07N01E11AAA1	351501	905707	USGS	147	217	69.86	120	3/06/2000
07N02E29DDC1	351136	905408	USGS	151	220	68.57	100	3/06/2000
07N03E05ADA1	351541	904738	USGS	147	254	107.24	160	3/06/2000
07N03E32DCC1	351045	904810	USGS	159	251	92.39	--	3/06/2000
07N05E19CCC1	351238	903644	USGS	172	207	34.7	--	3/06/2000
07N05E25ABA1	351223	903047	USGS	172	205	32.6	140	3/06/2000
08N05E32ADD1	351632	903438	USGS	174	204	29.99	--	3/06/2000
09N01E33BBA1	352204	910002	USGS	145	225	79.77	--	3/06/2000
09N03E17DDC1	352411	904731	USGS	148	251	103.46	160	3/06/2000
09N05E32BDB1	352151	903511	USGS	179	210	31.05	--	3/06/2000
06N02E04DCD1	350953	905322	NRCS	158	217	59	--	4/10/2000
06N02E11BDB1	350934	905132	NRCS	162	220	58	--	4/10/2000
06N02E12AAA1	350934	904952	NRCS	161	235	74	--	4/10/2000
07N01E05DCA1	351514	910033	NRCS	149	215	66	160	4/10/2000
07N01E06CAA1	351530	910154	NRCS	155	220	65	--	4/10/2000
07N01E33BBA1	351134	910010	NRCS	151	215	64	--	4/10/2000
07N02E29DDC1	351136	905408	NRCS	155	220	65	100	4/10/2000
07N03E05AAD1	351558	904737	NRCS	152	255	103	--	4/10/2000
07N04E04DBB1	351534	904021	NRCS	174	201	27	--	3/06/2000
07N05E24CCC1	351232	903121	NRCS	174	205	31	110	4/10/2000
07N05E25ABA1	351223	903047	NRCS	173	205	32	140	3/06/2000
08N01E16DBB1	351855	905933	NRCS	148	225	77	140	4/10/2000
08N02E12DCC1	351938	905002	NRCS	149	230	81	--	4/10/2000
08N02E17AAA1	351923	905354	NRCS	147	225	78	--	4/10/2000
08N04E34CCD1	351605	903945	NRCS	178	205	27	--	3/06/2000
09N01E04ACD1	352608	905914	NRCS	147	225	78	140	4/06/2000
09N01E36AAB1	352155	905605	NRCS	148	225	77	160	4/06/2000
09N02E17AAB1	352438	905359	NRCS	148	235	87	100	4/06/2000
09N02E20AAA1	352402	905342	NRCS	147	230	83	120	4/06/2000
09N02E30CBB1	352243	905551	NRCS	143	225	82	--	4/06/2000
09N03E03ACA1	352630	904529	NRCS	150	250	100	--	4/06/2000
09N03E17CDD1	352422	904753	NRCS	150	245	95	--	4/06/2000
09N04E03DBB1	352614	903918	NRCS	190	215	25	120	3/06/2000
09N05E32BCB1	352151	903525	NRCS	177	206	29	--	3/06/2000
Desha County								
08S03W33ABD1	335801	912337	USGS	157	165	7.96	60	2/24/2000
09S02W26DDC1	335258	911523	USGS	121	149	28.61	94	2/24/2000

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 2000--Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
09S03W17DCB1	335450	912445	USGS	122	155	32.65	126	2/24/2000
09S04W06BCA1	335754	913243	USGS	130	161	31.18	--	2/24/2000
10S02W24DBC1	334851	911441	USGS	117	143	26.24	--	2/24/2000
10S03W26CAA1	334810	912206	USGS	113	155	41.87	96	2/24/2000
11S03W31BBA1	334130	912651	USGS	125	148	23.24	--	2/24/2000
12S01W33BAA1	333706	911207	USGS	119	135	15.76	95	2/24/2000
13S02W27CAC1	333212	911736	USGS	101	133	32.09	120	2/24/2000
13S03W10DAA1	333503	912304	USGS	98	140	41.88	86	2/24/2000
07S01E19ABA1	340428	910303	NRCS	141	154	13.2	120	3/14/2000
09S01W15CBB1	335501	911055	NRCS	119	152	33	--	3/17/2000
09S01W27CBD1	335419	911835	NRCS	121	152	31	--	3/17/2000
09S03W05BAC1	335704	912506	NRCS	125	161	36	--	3/17/2000
09S03W13BAB1	335500	911922	NRCS	127	156	29	--	3/17/2000
10S01W23CDA1	335305	911032	NRCS	121	151	30	--	3/17/2000
10S02W11ADD1	335045	911517	NRCS	122	146	24	--	3/17/2000
11S02W15ADD1	334446	911635	NRCS	109	144	35	--	3/17/2000
11S03W16CBA1	334439	912433	NRCS	124	155	31	--	3/17/2000
13S02W17ADA1	333421	911858	NRCS	90	138	48	--	3/17/2000
13S02W32DBD1	333126	911917	NRCS	98	135	37	--	3/17/2000
13S03W11CAB1	333503	912241	NRCS	99	142	43	--	3/17/2000
Drew County								
11S04W08DBA1	334532	913136	USGS	134	160	25.69	--	2/25/2000
11S05W08CCC1	334546	913837	USGS	150	185	35.12	153	2/25/2000
11S06W34DAC2	334231	914205	USGS	141	209	67.59	175	2/25/2000
12S04W03ABB1	334133	912949	USGS	132	155	23.48	--	2/25/2000
13S04W33ABA1	333206	913042	USGS	120	140	20.03	100	2/25/2000
13S05W25CDD1	333211	913415	USGS	131	171	40.27	40.9	2/25/2000
13S06W03DDC1	333545	914202	USGS	133	191	58.06	110	2/25/2000
14S05W23DCB1	332802	913512	USGS	130	161	31.11	--	2/25/2000
11S04W31DBA1	334207	913243	NRCS	139	153	14.3	100	3/31/2000
12S04W25DBB1	333739	912738	NRCS	120	149	29.5	90	3/31/2000
13S04W09ACD1	333512	913034	NRCS	122	145	23.4	90	3/31/2000
13S04W29CAB1	333231	913206	NRCS	122	135	13	100	4/19/2000
13S06W21DAA1	333324	914258	NRCS	120	207	87	142	3/31/2000
14S04W03ADD1	333050	912929	NRCS	117	141	24	92	3/31/2000
14S04W05CBA1	333047	913218	NRCS	117	131	14	90	4/19/2000
14S04W05CBC1	333042	913226	NRCS	116	131	15	90	4/19/2000
14S04W22CAA1	332805	912957	NRCS	111	135	24	100	3/31/2000
15S04W13DAD1	332338	912730	NRCS	96	131	35	--	4/19/2000

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 2000--Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
Greene County								
16N03E03BA1	360316	904516	USGS	234	260	26.07	100	3/10/2000
16N06E03CCC1	360224	902626	USGS	210	258	47.84	194	3/10/2000
16N06E28ABB1	355938	902657	USGS	224	251	27.23	--	3/10/2000
17N03E02BDB1	360832	904413	USGS	240	266	25.96	115	3/14/2000
17N04E30CDC1	360410	904209	USGS	233	265	32.18	100	3/10/2000
17N07E18ABB1	360638	902235	USGS	234	245	10.68	--	3/14/2000
18N04E21CBD1	361052	903725	USGS	244	294	50.44	--	3/14/2000
18N07E20BBA1	361110	902113	USGS	245	257	12.5	--	3/14/2000
19N03E26ADI	361601	904258	USGS	254	281	27.05	100	3/14/2000
16N03E05BBB1	360316	904750	NRCS	233	257	24.4	105	4/07/2000
16N03E12BBC1	360218	904333	NRCS	228	275	47.3	120	4/07/2000
16N03E16DDD1	360049	904547	NRCS	234	258	23.8	100	4/07/2000
16N03E29ACC1	355926	904722	NRCS	231	257	26.3	100	4/07/2000
16N06E09ABB1	360215	902651	NRCS	223	261	37.7	90	4/07/2000
16N06E21BAA1	360031	902705	NRCS	220	249	29.2	130	4/07/2000
17N03E02DCC1	360806	904352	NRCS	239	267	27.7	100	4/05/2000
17N03E28CDB1	360422	904626	NRCS	233	260	26.6	100	4/07/2000
17N04E07ADI	360718	904122	NRCS	235	273	38.4	100	4/05/2000
17N04E29ADD1	360434	904019	NRCS	232	282	50	110	4/07/2000
17N06E15ABC1	360631	902546	NRCS	238	268	30.4	168	4/07/2000
17N06E22CBB1	360520	902521	NRCS	230	268	37.6	200	4/07/2000
17N07E03CCC1	360744	901951	NRCS	239	246	6.7	87	4/05/2000
17N07E29CBC1	360419	902201	NRCS	239	245	5.9	80	4/07/2000
18N03E24ACA1	361119	904216	NRCS	243	271	27.6	120	4/05/2000
18N04E04AAC1	361356	903854	NRCS	245	273	28.5	127	4/05/2000
18N04E28DAD1	361003	903845	NRCS	239	277	38	100	4/05/2000
18N06E23ACB1	361056	902357	NRCS	263	277	14	109	4/05/2000
18N07E17BAB1	361203	902105	NRCS	250	262	11.8	100	4/05/2000
18N08E29CBA1	360952	901447	NRCS	245	250	4.8	105	4/05/2000
19N03E33DDD1	361418	904516	NRCS	245	276	30.8	100	4/13/2000
19N04E30DBB1	361532	904119	NRCS	247	281	33.7	100	4/05/2000
19N05E34AAD1	361437	903102	NRCS	254	282	28.5	130	4/05/2000
Independence County								
12N04W09CAA1	354047	912535	USGS	209	236	27.42	--	3/15/2000
12N04W14DD1	353950	912250	USGS	204	231	27.5	60	3/15/2000
12N04W34CBB1	353718	912506	USGS	206	231	25.24	--	3/15/2000
12N05W36AAA1	353733	912825	USGS	210	236	26.23	--	3/15/2000
14N03W14DAA2	355107	911602	USGS	224	230	6.11	--	3/15/2000
14N03W14DBB1	355106	911628	USGS	225	230	4.85	65	3/15/2000

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 2000--Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
14N03W12CAB1	355152	911541	NRCS	227	230	2.8	--	4/18/2000
14N03W14CBB1	355101	911703	NRCS	234	235	0.8	--	4/18/2000
Jackson County								
09N01W22ADD1	352332	910433	USGS	159	215	55.83	125	3/15/2000
09N02W32CBB1	352152	911348	USGS	191	220	28.78	117	3/15/2000
10N02W29ABB1	352829	911312	USGS	201	227	26.09	--	3/15/2000
10N03W30DBB1	352739	912146	USGS	202	225	22.86	100	3/30/2000
11N01W26AAD1	353326	910329	USGS	165	227	61.73	95	3/15/2000
11N01W29AAD1	353339	910635	USGS	187	225	37.72	97	3/02/2000
11N03W06DAB1	353655	912009	USGS	199	223	23.87	100	3/15/2000
11N03W06DAB1	353655	912009	USGS	200	223	22.72	100	3/30/2000
12N02W25ABB2	353910	910852	USGS	202	234	32.44	--	3/14/2000
12N03W35BCA1	353800	911706	USGS	207	220	12.54	95	3/30/2000
13N01W20AAA1	354514	910627	USGS	206	242	35.83	147	3/14/2000
13N03W15CDD1	354526	911749	USGS	212	232	19.98	--	3/14/2000
14N01W09AAA1	355220	910515	USGS	213	251	38.18	--	3/14/2000
09N01W15DDD1	352357	910433	NRCS	166	220	54.4	90	3/30/2000
09N01W30BAC1	352258	910813	NRCS	178	218	39.8	120	3/30/2000
09N02W32BBB1	352215	911344	NRCS	190	220	30.3	100	3/30/2000
10N01W05ADD1	353132	910702	NRCS	185	227	42.1	--	3/30/2000
10N01W10ABA1	353055	910445	NRCS	170	223	53	135	4/07/2000
11N01W26AAD1	353326	910329	NRCS	166	227	61.2	95	4/07/2000
11N02W25BBD1	353322	910855	NRCS	196	221	25.2	100	3/30/2000
11N03W12DDB1	353542	911515	NRCS	211	231	20	150	4/24/2000
12N01W11BCB1	354127	910416	NRCS	197	233	36.1	110	4/07/2000
12N01W30CCC2	353812	910821	NRCS	197	227	30.3	140	3/24/2000
12N01W36CBC1	353724	910317	NRCS	187	236	49.1	120	3/30/2000
13N01W23BCC1	354444	910413	NRCS	205	246	41.5	100	3/27/2000
13N02W34CBB1	354306	911151	NRCS	221	240	19	100	4/24/2000
13N03W15DCB1	354540	911718	NRCS	218	238	19.9	80	5/01/2000
13N03W36ABB1	354337	911532	NRCS	224	241	16.7	110	5/01/2000
14N01W08AAA1	355216	910623	NRCS	220	252	32.3	80	3/27/2000
14N01W19BBB1	355032	910823	NRCS	217	246	28.6	100	3/27/2000
14N01W26BCB1	354922	910407	NRCS	208	247	39	110	3/27/2000
14N01W33CCD1	354759	910610	NRCS	210	245	35.5	100	3/27/2000
14N02W22BBC1	355026	911145	NRCS	223	250	27	100	3/27/2000
Jefferson County								
03S08W24BBC1	342620	914953	USGS	156	202	45.77	--	2/28/2000
03S09W06DDA1	342840	920037	USGS	187	225	37.76	--	2/28/2000
03S09W29CBD1	342517	920023	USGS	191	216	25.16	--	2/28/2000

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 2000--Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
04S08W13DCB1	342123	914926	USGS	164	204	39.68	110	2/28/2000
05S06W31CAA1	341330	914206	USGS	172	189	17.53	--	2/28/2000
05S07W19BCC1	341538	914908	USGS	176	199	23.22	59	2/28/2000
06S05W15BCA1	341024	913240	USGS	158	177	19.21	120	2/28/2000
06S06W23AAD1	341007	913712	USGS	167	189	22.06	107	2/28/2000
06S07W14BAA1	341125	914426	USGS	179	199	19.68	110	2/28/2000
07S07W18CAC1	340647	915037	USGS	160	186	25.77	--	2/25/2000
07S08W06BAA1	340859	915647	USGS	181	202	21.09	160	2/25/2000
03S07W36ACC1	342410	914253	NRCS	168	185	17.5	--	4/19/2000
03S09W14BCD1	342712	915712	NRCS	177	220	43	--	4/18/2000
03S09W27AAB1	342542	915742	NRCS	184	219	35.5	--	4/18/2000
03S09W36ACC1	342428	915555	NRCS	180	214	34.5	--	4/18/2000
03S10W25BBB1	342550	920254	NRCS	201	216	15.5	--	4/18/2000
03S10W26BBB2	342427	920249	NRCS	200	215	15	--	4/18/2000
04S07W35DDB1	341836	914347	NRCS	157	185	28	--	4/19/2000
04S08W33CDA1	341848	915244	NRCS	178	209	31.5	--	4/19/2000
04S09W01DAA2	342333	915526	NRCS	181	213	32	--	4/18/2000
04S09W32DDA1	341859	920008	NRCS	194	212	18	--	4/18/2000
06S07W02ABB2	341307	914411	NRCS	178	193	15.5	--	4/19/2000
07S07W16BAA1	340722	914828	NRCS	163	190	27	--	4/18/2000
Lawrence County								
15N01E26DDA1	355402	905639	USGS	206	251	44.76	100	3/14/2000
15N01W35CBB1	355336	910356	USGS	209	250	40.53	--	3/14/2000
16N01E11DAC2	360203	905639	USGS	220	262	41.77	--	3/14/2000
17N02E19CDC1	360516	905459	USGS	230	265	35.47	105	3/14/2000
15N01E11ADD1	355657	905638	NRCS	216	255	39.4	100	4/21/2000
15N01E23DAD1	355502	905637	NRCS	206	250	44.1	100	4/25/2000
15N01W03BAB1	355831	910441	NRCS	223	259	36.3	105	4/25/2000
16N01E29ADD1	355943	905945	NRCS	218	261	43	105	4/24/2000
16N01E35AAA1	355908	905632	NRCS	215	256	41.2	105	4/21/2000
16N01W30DDC1	355937	910723	NRCS	230	255	25.5	105	4/25/2000
16N02E09AAD1	360219	905212	NRCS	226	261	35	110	4/24/2000
16N02E19ACA1	360031	905442	NRCS	222	260	38.4	110	4/26/2000
16N02E34CBB1	355831	905208	NRCS	215	255	40	100	4/21/2000
17N01E02BBA1	360901	905707	NRCS	248	260	12	90	4/25/2000
17N01E21CBC1	360543	905931	NRCS	245	265	20.3	110	4/24/2000
17N01E27AAA1	360519	905732	NRCS	238	270	32	110	4/21/2000
17N01W36AAB1	360435	910158	NRCS	246	257	11.4	85	4/24/2000
17N02E04DCA1	360758	905224	NRCS	234	270	36	110	4/21/2000
17N02E19CDC1	360516	905459	NRCS	230	265	35.5	105	4/21/2000

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 2000--Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
17N02E21ABD1	360554	905225	NRCS	230	268	38.5	105	4/21/2000
17N02E25CBD1	360423	904948	NRCS	234	265	31	100	4/25/2000
Lee County								
01N03E02BBC1	344341	904600	USGS	175	236	61.62	168	3/02/2000
01N03E35BBA1	343923	904549	USGS	183	202	18.74	120	3/02/2000
02N01W12BAA1	344828	910330	USGS	147	185	37.64	95	5/04/2000
02N01W23BAA2	344630	905817	USGS	158	202	44.04	137	3/02/2000
02N02E08ADC1	344756	905434	USGS	164	201	37.29	120	3/02/2000
02N02E21ABC1	344620	905358	USGS	167	200	32.63	120	3/02/2000
02N03E08AAD1	344811	904838	USGS	168	211	42.67	100	5/04/2000
02N04E15DAC1	344636	903949	USGS	171	192	21.34	--	3/02/2000
03N01E16CBA1	345223	910041	USGS	140	202	62.29	110	3/02/2000
03N02E13BBA1	345237	905103	USGS	166	212	46.17	--	3/02/2000
03N02E29DAD1	345015	905429	USGS	165	205	39.83	135	3/02/2000
03N03E32CAB1	344914	904837	USGS	158	204	46	116	5/04/2000
03N05E14DDA1	345148	903202	USGS	178	193	14.55	120	3/02/2000
01N01E04AAB1	344358	910015	NRCS	154	175	21.5	140	5/03/2000
01N01E09CCC1	344215	910054	NRCS	158	182	24.5	140	4/14/2000
01N01E24CBD1	344033	905729	NRCS	170	185	14.8	140	4/14/2000
01N02E01ADD1	344330	905016	NRCS	178	207	29.5	140	4/14/2000
01N02E11BAB1	344255	905208	NRCS	184	202	18	140	5/04/2000
01N02E12ABB1	344254	905040	NRCS	172	206	34	140	4/14/2000
01N02E22CBA1	344056	905318	NRCS	171	200	29.5	140	4/14/2000
01N02E33CBB1	343858	905434	NRCS	172	186	14.5	140	4/14/2000
01N02E33CCB1	343851	905433	NRCS	172	185	13	140	4/14/2000
01N03E27ADD1	343952	904605	NRCS	183	204	21	120	4/14/2000
02N01E21BAA1	344633	910005	NRCS	157	185	28.3	140	4/14/2000
02N01W34DDC1	344410	910520	NRCS	140	180	40.5	140	4/14/2000
02N02E22BBB1	344628	905327	NRCS	168	200	31.7	140	4/14/2000
02N02E36DDC1	344355	905020	NRCS	175	205	30.5	140	4/14/2000
02N03E09DDD1	344723	904707	NRCS	169	220	51	120	5/03/2000
02N03E29CAD1	344500	904846	NRCS	178	220	42	140	5/04/2000
02N04E03ABD1	344855	903954	NRCS	167	192	25	140	5/03/2000
03N01E03CBC1	345355	905941	NRCS	150	205	55	140	5/03/2000
03N01E32BCC1	344951	910150	NRCS	145	200	55.5	140	4/14/2000
03N02E12CDC1	345239	905053	NRCS	167	210	43.5	140	4/14/2000
03N02E21CBC1	345111	905428	NRCS	160	209	49.5	140	5/03/2000
03N03E05CDD1	345327	904837	NRCS	159	204	45	110	4/27/2000
03N03E11DCC1	345245	904507	NRCS	168	229	61	140	4/27/2000
03N03E18DAB1	345206	904919	NRCS	174	196	22	140	5/03/2000

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 2000--Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
03N04E07CBB1	345245	904312	NRCS	171	200	29	140	4/27/2000
03N05E03ADB1	345403	903316	NRCS	174	197	23	140	5/03/2000
03N05E26ADC1	345020	903215	NRCS	178	185	7	140	5/03/2000
Lincoln County								
08S04W08BBB2	340254	913100	USGS	151	171	19.87	65.2	2/24/2000
08S04W31CBA1	335901	913150	USGS	133	162	28.83	99	2/24/2000
08S06W02ACB1	340339	913958	USGS	143	181	38.15	68	2/24/2000
08S07W05DDD1	340301	914903	USGS	161	190	28.79	97	2/24/2000
09S05W14ABC1	335553	913439	USGS	138	173	34.51	98	2/24/2000
09S05W17CCB1	335552	913820	USGS	133	171	37.77	97	2/24/2000
09S06W04BCD1	335821	914346	USGS	144	181	37.49	62.6	2/24/2000
09S06W23CDB1	335440	914136	USGS	143	175	31.78	--	2/24/2000
10S05W06DCC1	335155	913908	USGS	147	175	27.59	--	2/24/2000
07S06W03CCA2	340828	914114	NRCS	179	190	11	110	5/01/2000
07S07W36CBD1	340411	914529	NRCS	148	183	35	123	5/01/2000
08S04W06ABD1	340341	913116	NRCS	155	171	16	95	5/01/2000
08S04W29ABC1	340021	913044	NRCS	139	176	37	100	5/01/2000
08S05W12AAD1	340246	913214	NRCS	145	165	20	83	5/01/2000
08S05W21DCD1	340027	913533	NRCS	124	169	45	120	5/01/2000
08S05W32DCC1	335840	913644	NRCS	129	172	43	100	5/01/2000
09S04W06CBB1	335721	913252	NRCS	130	163	33	110	5/01/2000
09S05W19CCC1	335428	913941	NRCS	150	171	21	110	5/01/2000
09S06W04BDD1	335759	914335	NRCS	141	178	37	100	5/01/2000
Lonoke County								
01N07W07ABB2	344351	914748	USGS	100	226	126.22	--	3/01/2000
01N07W27AAD1	344103	914410	USGS	92	220	128.5	148	5/01/2000
01N08W26CCB1	344035	915043	USGS	114	212	98.02	155	5/01/2000
01N09W13DAB1	344235	915517	USGS	141	226	84.52	--	3/27/2000
01N10W11BBD1	344355	920321	USGS	211	240	29.31	--	3/27/2000
01S06W31ABB1	343459	914131	USGS	123	200	76.57	124	5/03/2000
01S07W12BCB1	343820	914308	USGS	79	211	131.66	--	3/01/2000
01S07W24CCC1	343603	914309	USGS	127	206	78.95	153	5/03/2000
01S08W24CD1	343607	914926	USGS	134	210	75.6	120	5/01/2000
01S08W29DBA1	343544	915312	USGS	149	219	70.3	88	5/01/2000
01S09W36CCC1	343435	915619	USGS	162	220	57.77	--	3/27/2000
01S10W01ACB1	343927	920215	USGS	192	236	43.81	--	3/27/2000
02N07W16BAB1	344815	914540	USGS	109	240	130.82	184	5/01/2000
02N08W16ABC1	344806	915114	USGS	116	230	114.06	128	3/27/2000
02N09W02BDB1	344955	915642	USGS	142	251	108.84	140	3/27/2000
02N09W17CCB1	344747	920007	USGS	171	253.2	82.14	127	3/27/2000

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 2000--Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
02S07W10CCB1	343246	914525	USGS	143	201	57.65	--	3/01/2000
02S08W13BBB1	343230	914950	USGS	140	200	60.07	--	3/01/2000
02S08W34DBB1	343003	915150	USGS	144	214	70.4	--	3/01/2000
02S09W30CDD1	343014	920116	USGS	191	226	35.43	80	3/27/2000
03N07W15DBC2	345253	914417	USGS	151	227	76.49	144.5	3/01/2000
03N08W11ABD1	345419	914936	USGS	166	260	93.83	160	3/27/2000
03N08W11ACA1	345413	914934	USGS	165	256	90.91	144	3/01/2000
03N08W21BCC1	345220	915220	USGS	170	247	77.4	155	3/27/2000
03N10W34ABB1	345101	920352	USGS	197	257	60.12	116	3/27/2000
04N08W15BCB2	345833	915121	USGS	193	225	32.18	104	3/28/2000
01N08W03DDA1	344411	915050	NRCS	103	229	126	--	4/14/2000
01N08W14DAA1	344237	914946	NRCS	105	230	125.2	--	4/14/2000
01N09W07DAA1	344337	920029	NRCS	193	240	47.3	--	4/27/2000
01N09W25BAA1	344120	915537	NRCS	138	226	87.7	--	4/27/2000
01N10W15CDA1	344236	920414	NRCS	214	240	25.8	100	4/27/2000
01S06W32BBB1	343501	914056	NRCS	124	201	76.8	--	4/27/2000
01S08W16DCC1	343702	915220	NRCS	139	216	77.3	100	4/27/2000
01S09W02DDD1	343857	915623	NRCS	144	230	85.8	--	4/27/2000
01S09W36CCC1	343435	915619	NRCS	163	220	57.2	--	4/27/2000
02N07W07DAA1	344845	914707	NRCS	110	232	122.2	--	4/14/2000
02N08W23CAB1	344659	915118	NRCS	101	229	128	--	4/14/2000
02N10W15ACC1	344807	920352	NRCS	210	241	31.5	135	4/27/2000
02S07W05CDC1	343326	914715	NRCS	141	205	64.2	--	4/27/2000
02S07W20ACD1	343112	914655	NRCS	145	201	56.3	--	4/27/2000
02S07W29BCC1	343021	914728	NRCS	144	203	59.2	--	4/27/2000
02S09W22AAA1	343153	915727	NRCS	169	226	57.3	--	4/27/2000
02S09W35AB1	343008	915652	NRCS	171	217	45.8	100	4/27/2000
03N07W29CDD1	345057	914632	NRCS	142	232	90	157	4/27/2000
03N08W26CDC1	345100	915007	NRCS	128	235	107.5	150	4/14/2000
03N08W32BBA1	345057	915256	NRCS	147	250	103.5	154	5/10/2000
Mississippi County								
10N08E22ABA2	352851	901312	USGS	203	224	21.5	100	3/08/2000
10N09E08ACC1	353006	900910	USGS	215	230	15.06	110	3/08/2000
11N09E34BBB1	353218	900715	USGS	218	235	16.92	94	3/08/2000
12N08E08BCB1	354050	901559	USGS	215	225	9.86	120	3/07/2000
13N09E30CCD1	354248	901029	USGS	217	230	13.48	--	3/07/2000
13N10E34DBB1	354218	900024	USGS	221	235	13.55	98	3/08/2000
14N08E12DAB1	355104	901052	USGS	227	235	7.87	--	3/29/2000
14N10E18ABC1	355022	900345	USGS	222	236	13.83	101	3/08/2000
14N11E03BCB1	355200	895434	USGS	237	247	9.82	128	3/08/2000

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 2000--Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
14N12E05DCB1	355134	894935	USGS	235	250	15.22	--	3/08/2000
15N08E08DBC2	355605	901526	USGS	224	236	12.1	120	3/08/2000
16N10E28BBD1	355906	900156	USGS	230	240	10.05	120	3/08/2000
16N11E23ADA1	355947	895231	USGS	240	255	14.68	--	3/08/2000
10N08E21ABA1	352852	901415	NRCS	199	224	25	110	3/03/2000
10N08E21BDC1	352830	901407	NRCS	199	224	25	100	3/03/2000
11N10E09BCB1	353530	900202	NRCS	221	236	15	110	3/06/2000
12N08E28DDB1	353707	901406	NRCS	205	225	20.3	120	3/06/2000
12N09E12ABC1	354054	900449	NRCS	209	232	23	120	3/06/2000
12N10E04CAA1	354124	900136	NRCS	222	235	13.5	120	3/02/2000
12N10E07BCD1	354036	900404	NRCS	214	234	20	110	3/06/2000
12N10E21DBA1	353842	900122	NRCS	220	236	16.2	110	3/06/2000
13N08E24ABB1	354428	901112	NRCS	219	230	11	120	3/02/2000
14N08E20DAA1	354921	901458	NRCS	217	225	8.2	110	3/02/2000
14N08E26CC1	354803	901235	NRCS	223	230	7.5	100	3/02/2000
14N11E17CCB1	354955	895639	NRCS	230	240	10.3	120	3/06/2000
14N11E33CAA1	354727	895508	NRCS	224	240	16	120	3/02/2000
15N10E21ABC1	355447	900135	NRCS	225	240	15.5	120	3/06/2000
15N12E01BCD1	355704	894601	NRCS	244	258	14	100	3/02/2000
16N10E28BBD1	355906	900156	NRCS	226	240	14	120	3/02/2000
Monroe County								
01N01W21CDC2	344034	910706	USGS	149	181	31.56	150	3/02/2000
01N03W24BBB1	344135	911651	USGS	152	185	32.68	125	3/02/2000
01N04W33BBB2	343959	912648	USGS	125	218	92.64	--	3/02/2000
01S01W13CDD1	343613	910344	USGS	161	178	17.48	135	3/02/2000
01S01W18DCD1	343617	910848	USGS	157	178	21.36	110	3/02/2000
01S03W20BBA1	343539	912118	USGS	137	210	72.72	140	3/02/2000
01S04W01BAB1	343906	912317	USGS	130	210	80.03	160	3/02/2000
02N01W19BBA1	344645	910910	USGS	142	191	48.93	--	3/03/2000
02S02W01BCA1	343318	911030	USGS	158	171	13.28	--	3/02/2000
03N01W20ABA1	345201	910721	USGS	145	189	43.94	--	3/03/2000
03N02W31ADC1	344958	911446	USGS	153	190	37.13	--	3/03/2000
03N03W36AAA1	345021	911547	USGS	153	176	22.59	120	3/03/2000
04N02W27CDD3	345539	911150	USGS	156	200	44.11	181	3/03/2000
04N02W28DDD3	345535	911221	USGS	160	192	31.96	137	3/03/2000
04N02W30BBB1	345628	911524	USGS	168	185.16	17.46	119	3/03/2000
01N01W03CDB1	344322	910557	NRCS	139	185	46	100	4/17/2000
01N03W23BAC1	344124	911743	NRCS	156	170	14	100	4/17/2000
01S01W16DB	343615	910632	NRCS	160	175	15	100	4/17/2000
01S02W20BBB1	343614	911451	NRCS	156	170	14	100	4/17/2000

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 2000--Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
01S03W20BBA1	343539	912118	NRCS	133	210	77	140	4/12/2000
02N01W19ADD1	344624	910814	NRCS	141	188	47	80	4/17/2000
02N03W35BCA1	344455	911745	NRCS	157	188	31	100	4/17/2000
02S01W01BCD1	343305	910408	NRCS	158	176	18	100	4/17/2000
04N02W01BCC1	345929	911004	NRCS	139	175	36	100	4/19/2000
04N02W05BBB1	345957	911311	NRCS	173	188	15	100	4/19/2000
Phillips County								
01S02E09CBB1	343718	905433	USGS	168	185	17.09	110	3/01/2000
02S01E28CCB1	342916	910058	USGS	156	174	17.99	108	3/01/2000
02S03E15ACD1	343108	904626	USGS	158	174	16.31	112	3/01/2000
02S04E27AAC1	342932	904002	USGS	167	179	12.31	175	3/01/2000
03S02E35DDA1	342258	905133	USGS	145	163	18.29	50	3/01/2000
04S01E23CCA1	341928	905853	USGS	142	156	13.54	--	3/01/2000
05S02E18BDA1	341534	905630	USGS	136	156	19.52	130	3/01/2000
01S01E20DDB1	343529	910058	NRCS	167	185	17.8	114	3/14/2000
01S02E09CBB1	343718	905433	NRCS	173	185	11.8	110	3/14/2000
01S02E32BCC1	343350	905526	NRCS	166	200	34	120	3/14/2000
01S03E02ADD1	343814	904511	NRCS	184	200	16.4	120	3/14/2000
01S03E10ABB1	343741	904634	NRCS	190	205	15.2	120	3/14/2000
01S03E20BDD1	343533	904846	NRCS	176	210	33.6	120	3/14/2000
01S04E05DCD1	343802	904151	NRCS	186	230	44.2	120	3/14/2000
02S02E29DDD1	342901	905444	NRCS	157	180	23.5	125	3/14/2000
02S02E33ACC1	342824	905412	NRCS	154	177	22.8	120	3/14/2000
02S03E34BCD1	342828	904653	NRCS	148	165	17.2	120	3/14/2000
02S04E27AAC1	342932	904002	NRCS	169	179	10.4	175	3/14/2000
03S04E02CAA1	342732	903918	NRCS	161	176	15.3	120	3/14/2000
04S01E01AAD1	342238	905700	NRCS	145	156	11.3	120	3/14/2000
04S01E14CDD1	342014	905837	NRCS	142	155	12.8	120	3/14/2000
04S01E29CDC1	341844	910148	NRCS	142	150	8	120	3/14/2000
04S02E01DBB1	342220	905053	NRCS	156	163	7.4	--	3/14/2000
Poinsett County								
10N01E14CC1	352910	905813	USGS	146	231	84.75	150	3/03/2000
10N01E16CCB1	352922	910005	USGS	156	225	68.75	120	5/04/2000
10N02E13BCC1	352948	905027	USGS	141	237	96.43	167	3/09/2000
10N03E14DAB1	352947	904407	USGS	149	263	114.03	--	3/09/2000
10N03E35CDD1	352651	904437	USGS	156	275	118.87	--	3/09/2000
10N05E15BDD1	352936	903250	USGS	192	207	14.97	--	3/09/2000
10N07E22AAC1	352847	901935	USGS	188	215	26.66	--	3/07/2000
11N01E17DDD1	353437	910024	USGS	158	230	72.44	100	3/09/2000
11N01E26AA1	353338	905654	USGS	142	236	93.55	140	3/09/2000

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 2000--Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
11N02E05BDA1	353704	905405	USGS	158	245	86.86	175	3/09/2000
11N02E26AAB1	353349	905035	USGS	140	241	100.8	158	3/09/2000
11N03E10DDA1	353546	904457	USGS	144	243	99.33	145	5/04/2000
11N03E18BAB1	353538	904852	USGS	144	243	98.91	157	5/04/2000
11N07E18CAB1	353435	902320	USGS	201	217	15.97	100	3/07/2000
12N01E07CDA1	354051	910142	USGS	179	236	56.8	120	3/03/2000
12N03E04DAD1	354158	904602	USGS	145	247	102.24	120	3/03/2000
12N03E36ACB1	353749	904319	USGS	157	250	93.2	120	5/04/2000
12N05E34ABA1	353804	903231	USGS	203	215	12.25	100	3/09/2000
12N07E04BAA1	354201	902100	USGS	216	223	7.42	--	3/09/2000
10N01E02AAA	353205	905654	NRCS	145	235	90	100	3/31/2000
10N01E32CBB1	352657	910053	NRCS	174	222	48	120	3/31/2000
10N01E33ACB1	352746	905931	NRCS	149	220	71	153	3/31/2000
10N02E20BAB1	352906	905418	NRCS	141	237	96	155	3/31/2000
10N03E29BBD1	352820	904805	NRCS	148	236	88	100	3/31/2000
10N04E35BBA1	352745	903831	NRCS	191	212	21	100	3/14/2000
11N01E17DDC1	353437	910015	NRCS	159	232	73	100	3/31/2000
11N01E34AAA	353256	905759	NRCS	148	229	81	100	3/31/2000
11N02E10CBC1	353555	905228	NRCS	132	245	113	170	3/31/2000
11N02E30BBB1	353352	905540	NRCS	142	239	97	100	3/31/2000
11N02E34CBA1	353238	905222	NRCS	147	240	93	130	3/31/2000
11N04E23CCB1	353356	903834	NRCS	191	215	24	100	3/08/2000
11N04E36ABA1	353251	903654	NRCS	193	211	18	100	3/08/2000
12N01E22DAB1	353922	905809	NRCS	166	235	69	115	3/31/2000
12N02E10CBD	354108	905229	NRCS	136	250	114	200	3/31/2000
12N02E25DCC1	353820	904944	NRCS	142	245	103	145	3/31/2000
12N02E34CCC1	353724	905230	NRCS	140	245	105	180	3/31/2000
12N03E01CBD1	354154	904329	NRCS	161	250	89	190	3/31/2000
12N03E04DAD1	354158	904602	NRCS	148	247	99	120	3/31/2000
12N04E08CDA	354053	904112	NRCS	166	250	84	100	3/31/2000
12N04E15AAA1	354040	903833	NRCS	197	225	28	60	3/08/2000
12N05E16ABA1	354039	903333	NRCS	208	221	13	140	3/08/2000
12N07E10CBB1	354042	902022	NRCS	208	220	12	100	3/08/2000
Prairie County								
01N05W20DCB1	344118	913348	USGS	86	211	124.78	157	3/28/2000
01N06W05CCB1	344354	914049	USGS	107	220	113.44	155	3/28/2000
01S04W28BDB1	343521	912630	USGS	110	205	94.53	112	3/28/2000
01S05W14BBC1	343722	913108	USGS	105	211	106.28	118	3/28/2000
01S05W31DDA1	343417	913432	USGS	126	206	79.56	120	5/03/2000
02N04W02BCB1	344916	912419	USGS	159	188	29.36	140	3/28/2000

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 2000--Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
02N04W32CCB1	344436	912737	USGS	138	221	82.81	--	3/28/2000
02N05W06BAB1	344958	913421	USGS	135	221	86.23	145	3/28/2000
02N05W13AAB1	344805	912854	USGS	160	223	62.73	130	3/28/2000
02N05W29DDB2	344544	913308	USGS	111	228	116.72	--	3/28/2000
02N06W17ABB1	344809	913959	USGS	117	235	117.99	180	3/25/2000
02S06W14BBB1	343213	913729	USGS	125	201	76.13	105	3/28/2000
02S06W21DAD1	343102	913956	USGS	142	207	64.74	140	5/03/2000
03N04W03AAC1	345439	912424	USGS	162	187	24.81	106	3/28/2000
03N05W03BDD2	345444	913115	USGS	144	207	63.06	110	3/28/2000
03N06W01BCB1	345455	913601	USGS	134	216	81.58	115	3/28/2000
03N06W19BDD1	345207	914110	USGS	131	221	90.38	105	3/28/2000
04N04W07ADC1	345850	912733	USGS	167	195	27.94	110	3/28/2000
04N05W07CDC2	345842	913441	USGS	141	212	70.55	115	3/28/2000
04N05W31DDC1	345514	913406	USGS	133	206	72.64	104	3/28/2000
04N06W05CCC1	345934	914018	USGS	149	206	57.11	100	3/28/2000
04N07W03DCB1	345942	914412	USGS	171	255	84.49	100	5/03/2000
04N07W28BBA1	345701	914545	USGS	167	258	91.43	110	5/03/2000
05N05W14DCD1	350252	913034	USGS	167	205	37.74	--	3/28/2000
01S04W28BBC1	343529	912650	NRCS	108	206	98.2	180	5/24/2000
05N05W25BAA1	350153	912949	NRCS	164	187	23.3	100	5/24/2000
05N05W28DDA1	350119	913228	NRCS	160	191	30.6	85	5/24/2000
Pulaski County								
01S10W29CC1	343538	920708	USGS	220	239	18.98	100	3/01/2000
02S10W14DC1	343205	920334	USGS	197	225	27.51	60	3/01/2000
02S10W16CCA1	343216	920549	USGS	207	231	23.5	--	3/01/2000
Randolph County								
18N01E34AAC1	360943	905729	USGS	250	266	16.44	--	3/13/2000
18N02E22DCD1	361046	905105	USGS	239	273	33.68	110	3/13/2000
19N02E09DCA1	361757	905157	USGS	256	267	11.01	--	3/13/2000
20N02E01ADD1	362424	904811	USGS	267	280	13.48	65	3/13/2000
20N03E28BA1	362114	904538	USGS	263	276	12.65	--	3/13/2000
18N01E13BAB1	361230	905551	NRCS	251	266	15.3	100	5/18/2000
18N01E28AAD1	361040	905820	NRCS	248	265	16.8	120	5/18/2000
18N02E03DAD1	361336	905043	NRCS	246	280	33.8	120	5/18/2000
18N02E17CBB1	361204	905356	NRCS	250	265	15.2	--	5/18/2000
18N02E20BDA1	361125	905332	NRCS	244	274	30.5	110	5/18/2000
18N02E34BCC1	360933	905150	NRCS	233	265	32	100	5/18/2000
19N02E04AAB1	361930	905145	NRCS	258	268	10.2	80	5/19/2000
19N02E09ABD1	361826	905157	NRCS	253	266	12.7	80	5/19/2000
19N02E22DAB1	361622	905049	NRCS	257	266	8.7	90	5/19/2000

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 2000--Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
20N02E12BAA1	362352	904848	NRCS	273	281	7.7	60	5/23/2000
20N02E14DAB1	362232	904930	NRCS	264	274	9.9	100	5/19/2000
20N02E21CDD1	362117	905107	NRCS	262	270	8.3	110	5/22/2000
20N03E06DAD1	362406	904707	NRCS	268	281	12.9	65	5/19/2000
20N03E07AAD1	362424	904811	NRCS	265	281	16	65	5/19/2000
20N03E33CCA1	361941	904552	NRCS	264	287	22.8	--	5/19/2000
St. Francis County								
04N01E13ADA1	345738	905638	USGS	150	206	55.79	--	3/01/2000
04N01W28CDD1	345535	910634	USGS	143	208	65.27		3/01/2000
04N02E03DDD3	345848	905219	USGS	153	210	57.11	151	3/01/2000
04N02E19BBB1	345701	905633	USGS	156	209	53.39	72.2	3/29/2000
04N03E21DAD1	345623	904655	USGS	179	236	57.37	--	3/01/2000
04N05E22BBB1	345651	903357	USGS	171	200	28.92	--	3/02/2000
05N01E15BCB1	350303	905942	USGS	147	209	62.41	94.1	3/02/2000
05N02E20ADC1	350157	905437	USGS	160	211	50.54	79	3/02/2000
05N03E20AAA2	350214	904801	USGS	157	250	92.82	153.45	3/02/2000
05N04E25BCC1	350054	903815	USGS	162	203	40.74	122.2	3/02/2000
05N05E19DCA1	350128	903629	USGS	167	203	36.4	110	3/02/2000
05N06E34CAB1	350026	902657	USGS	179	200	20.88	110	3/02/2000
06N01E33ACA2	350552	905942	USGS	151	211	59.85	--	3/02/2000
06N02E13DCA1	350813	905003	USGS	158	231	73.16	--	3/02/2000
06N02E15BDD1	350842	905247	USGS	160	215	54.45	75	3/02/2000
06N02E24AAA1	350755	905002	USGS	165	232	67.33	147	3/02/2000
06N05E22ACC1	350723	903252	USGS	155	200	44.84	--	3/02/2000
06N06E20ABB2	350747	902842	USGS	168	200	31.57	150	3/02/2000
04N01E05AAA1	345952	910054	NRCS	141	207	66.5	140	5/22/2000
04N01W20BBB1	345716	910759	NRCS	142	200	58	140	5/22/2000
04N01W25DBD1	345549	910303	NRCS	144	199	55	140	5/22/2000
04N02E16ACD1	345733	905341	NRCS	166	209	43.5	140	5/22/2000
04N02E27AAA1	345604	905220	NRCS	171	211	40.5	140	5/22/2000
04N04E15ABA1	345752	903948	NRCS	171	201	30	120	5/23/2000
05N01E06CDA1	350437	910218	NRCS	157	211	54.5	--	5/23/2000
05N05E21CAB1	350144	903448	NRCS	169	203	34.5	140	5/23/2000
05N05E33BCC1	350004	903506	NRCS	167	196	29	120	5/22/2000
05N06E05BBB1	350508	902922	NRCS	165	195	30	120	5/23/2000
06N02E16CCC1	350804	905403	NRCS	156	216	60.5	120	5/22/2000
06N03E17CAA1	350822	904810	NRCS	161	258	97.5		5/23/2000
06N04E36CCD1	350512	903744	NRCS	168	200	32	120	5/23/2000
06N06E17DDC1	350749	902830	NRCS	171	202	31		5/23/2000

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 2000--Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
White County								
05N07W09AAA1	350447	914441	USGS	191	205	13.97	29.5	3/17/2000
05N07W10CCC1	350401	914435	USGS	196	203	6.61	80	3/17/2000
06N06W04BAA1	351047	913910	USGS	182	220	37.87	70	3/16/2000
06N06W18BBC1	350858	914051	USGS	187	210	23.05	--	3/16/2000
06N06W34AAB1	350624	913754	USGS	155	213	58.1	--	3/16/2000
06N06W34AAB1	350624	913754	USGS	155	213	58.22	--	3/30/2000
06N07W17DCC1	350822	914635	USGS	200	217	16.74	90	3/17/2000
06N08W13ABA1	350907	914826	USGS	214	228	13.92	60	3/17/2000
06N08W26DDDB1	350640	914931	USGS	212	230	18.09	89	3/17/2000
07N05W01AAA1	351553	912858	USGS	187	205	18.27	--	3/16/2000
07N05W32BAB1	351137	913358	USGS	182	214	31.75	80	3/16/2000
07N06W19CAB1	351259	914142	USGS	212	224	11.76	38	3/30/2000
08N04W06CCB1	352028	912847	USGS	193	214	20.77	74	3/16/2000
08N05W32CBC1	351616	913417	USGS	197	199	1.9	--	3/16/2000
10N04W36CCA1	352647	912249	USGS	190	215	25.44	--	3/17/2000
06N06W04BAD1	351037	913903	NRCS	172	215	43.5	--	4/19/2000
06N06W13DBB1	350918	913552	NRCS	166	213	47	--	4/19/2000
06N06W18BCA1	350835	914150	NRCS	185	210	25	--	4/19/2000
Woodruff County								
04N03W03AB1	345951	911900	USGS	169	185	15.94	100	3/15/2000
05N02W20DCB1	350209	911356	USGS	177	192	15.48	--	3/15/2000
05N02W20DCB1	350209	911356	USGS	177	192	15.14	--	3/29/2000
05N04W12DBA1	350426	912211	USGS	178	186	7.7	92	3/15/2000
06N01W06BAB1	351047	910832	USGS	172	202	29.9	--	3/15/2000
06N03W15BAB1	350905	911812	USGS	182	189	6.47	111	3/29/2000
07N03W19AAA1	351337	912027	USGS	188	203	14.34	--	3/16/2000
08N01W06DDD1	352028	910747	USGS	184	218	34.44	--	3/03/2000
08N02W31DDD1	351611	911411	USGS	190	195	4.2	40	3/03/2000
08N03W31AAD1	351655	912028	USGS	190	212	22.35	110	3/03/2000
08N04W27AAA1	351757	912341	USGS	186	200	13.87	--	3/03/2000
09N03W29AAD1	352258	911921	USGS	197	220	22.96	--	3/03/2000
05N01W13CDC1	350244	910331	NRCS	142	210	67.8	135	4/20/2000
05N01W31CCC1	350106	910900	NRCS	155	210	55.1	140	4/20/2000
05N03W25DDDB1	350133	911531	NRCS	176	190	14.2	120	4/20/2000
05N03W31BAC1	350110	912127	NRCS	173	178	4.9	120	4/20/2000
06N02W19AAA1	350802	911419	NRCS	179	225	45.8	130	4/20/2000
06N04W22BDA1	350807	912428	NRCS	179	186	7	120	4/02/2000
07N01W04ACB1	351541	910626	NRCS	168	225	57.2	125	4/20/2000
07N02W16DBB1	351353	911225	NRCS	182	206	24.4	110	4/20/2000

Appendix 1. Information pertaining to water levels measured in wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas, 2000--Continued

[USGS, U.S. Geological Survey; NRCS, Natural Resources Conservation Service; --, no data]

Local well number	Latitude (degrees, minutes, seconds)	Longitude (degrees, minutes, seconds)	Source of data	Water-level altitude (feet above sea level)	Land-surface datum altitude (feet above sea level)	Depth to water (feet below land-surface datum)	Depth of well (feet)	Date of measure- ment
07N03W06BAC1	351607	912109	NRCS	189	211	22.3	100	4/20/2000
07N03W31BBA1	351152	912103	NRCS	176	190	14.2	120	4/02/2000
08N01W10AAA1	352018	910431	NRCS	161	211	49.8	160	4/20/2000
08N02W27DDB1	351711	911107	NRCS	187	213	26.1	60	4/20/2000
09N03W28ABB1	352310	911845	NRCS	199	220	21.2	120	4/20/2000
09N03W32ACA1	352205	911936	NRCS	197	217	19.8	120	4/20/2000

Appendix 2. Specific conductance and chloride data from wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas and sampled during the summer of 2000

[$\mu\text{S/cm}$, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams per liter; --, no data]

Local well number	Latitude (degrees)	Longitude (degrees)	Date	Well depth (feet)	Temperature (degrees Celsius)	Specific conductance ($\mu\text{S/cm}$)	Chloride, dissolved (mg/L)
Arkansas County							
02S03W09DCD1	343207	911956	7/19/2000	158	19.6	436	12
02S04W11DBB1	343233	912415	7/19/2000	152	19.0	773	39
02S04W14CD1	343100	912445	7/19/2000	130	19.0	804	--
03S02W27ABB1	342448	911251	7/20/2000	87	18.3	480	6.6
03S05W08DD1	342713	913346	7/25/2000	110	17.9	507	--
04S01W08CCB1	342142	910916	7/20/2000	--	18.5	344	--
04S02W11AAA1	342207	911125	7/20/2000	--	18.5	512	15
04S02W29CCC1	341846	911539	7/20/2000	140	18.6	942	--
04S03W32BCB1	341820	912202	7/20/2000	--	19.5	728	22
04S04W02ABB1	342313	912424	7/20/2000	155	18.9	884	--
04S06W16BD1	342130	914000	7/21/2000	--	17.9	482	--
05S04W07CCC1	341555	912932	7/21/2000	120	18.6	860	120
06S03W23CC1	340621	911904	7/25/2000	172	20.4	686	--
06S03W27AAA1	340857	911811	7/20/2000	132	18.8	1,020	150
07S02W04BBB1	340704	911451	7/20/2000	--	18.6	450	18
07S04W01DDD1	340625	912327	7/21/2000	155	19.0	695	36
Ashley County							
15S04W23DBD1	332247	912852	7/04/2000	--	19.4	539	23
16S06W27BAB1	331729	914240	7/03/2000	115	20.0	405	29
17S07W05CDD1	331502	915050	7/03/2000	130	20.5	667	26
18S04W27DA1	330606	912941	7/03/2000	100	20.5	1,690	--
18S08W01AAB1	331015	915224	7/03/2000	128	22.5	754	31
Chicot County							
13S03W35BAC1	333154	912245	6/03/2000	90	19.4	1,103	--
14S03W32CDB2	332613	912551	7/03/2000	90	19.9	381	12
17S01E17CDA1	331308	910748	7/26/2000	110	19.0	466	3.7
17S03W09ADA1	331415	912426	7/26/2000	--	19.0	1,400	550
17S03W28BAA1	331152	912503	6/26/2000	--	20.0	1,334	--
18S02W01BAA1	331011	911540	7/26/2000	--	19.0	736	--
19S01W17BCC1	330249	911406	7/03/2000	120	20.1	536	6.2
Clay County							
19N04E19AAA1	361651	904045	7/11/2000	--	16.6	315	5.4
19N08E28BB1	361519	901318	7/11/2000	105	16.3	388	--
19N08E31DAB1	361412	901503	7/11/2000	100	17.2	333	3.2
20N05E34DBA1	361939	903117	7/11/2000	110	16.5	548	11
21N04E34DDC1	362445	903729	7/11/2000	104	16.5	420	6.9
Craighead County							
13N02E02AD1	354712	905038	7/12/2000	110	16.9	777	--

Appendix 2. Specific conductance and chloride data from wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas and sampled during the summer of 2000--Continued

[$\mu\text{S}/\text{cm}$, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams per liter; --, no data]

Local well number	Latitude (degrees)	Longitude (degrees)	Date	Well depth (feet)	Temperature (degrees Celsius)	Specific conductance ($\mu\text{S}/\text{cm}$)	Chloride, dissolved (mg/L)
15N06E19AAB1	355517	902857	7/12/2000	110	16.6	383	8.5
16N07E32ADD1	355813	902138	7/11/2000	100	16.5	331	9.1
Crittenden County							
06N07E11BBB1	350930	901924	6/13/2000	127	17.3	510	--
06N07E13BAA1	350850	901808	7/13/2000	130	17.0	535	3.9
07N07E09BC1	351434	902140	7/13/2000	100	17.4	558	--
07N07E31CCC1	351042	902359	7/13/2000	110	17.0	495	3.0
07N08E01BBB2	352104	901823	7/13/2000	60	17.1	449	2.2
07N08E26BDA1	351204	901240	7/13/2000	125	17.4	438	23
Cross County							
07N01E05CDA1	351520	910052	7/14/2000	140	17.4	853	86
07N02E29DDC1	351136	905408	7/14/2000	100	17.2	1,030	120
07N05E19CCC1	351238	903644	7/13/2000	--	17.4	658	6.2
07N05E32AA1	351136	903443	7/13/2000	120	17.6	588	--
09N05E32BDB1	352151	903511	7/12/2000	--	17.1	540	3.4
Desha County							
09S02W22ABB2	335442	911642	7/04/2000	105	18.9	1,450	240
09S04W06BCA1	335754	913243	7/03/2000	--	19.0	685	88
10S03W26CAA1	334810	912206	7/04/2000	96	20.5	779	74
10S04W08BDD1	335046	913144	7/26/2000	106	18.4	480	13
12S01W31AAB1	333709	911342	7/04/2000	96	19.6	1,170	92
12S03W20AB1	333902	912533	7/26/2000	100	19.3	491	--
13S02W27CAC1	333212	911736	7/04/2000	120	19.9	226	390
13S03W10DAA1	333503	912304	7/26/2000	86	19.5	580	--
Drew County							
11S04W08DBA1	334532	913136	7/03/2000	70	18.9	353	15
11S05W08CCC1	334546	913837	7/04/2000	153	18.6	532	27
14S04W27AA1	332734	912925	7/04/2000	100	17.1	190	--
Greene County							
16N06E28ABB1	355938	902657	7/11/2000	--	17.4	714	17
17N04E30CDC1	360410	904209	7/11/2000	100	17.0	958	8.0
19N03E26AD1	361601	904258	7/11/2000	100	16.6	383	--
Jackson County							
09N01W20BDD1	352338	910805	7/12/2000	60	17.2	499	11
10N02W08CD1	353040	911257	7/12/2000	110	17.5	421	--
11N01W26AAD1	353326	910329	7/10/2000	95	17.0	509	9.9
12N02W25ABB2	353910	910852	7/10/2000	--	17.8	590	5.6
13N01W23BC1	354456	910418	7/10/2000	100	17.3	322	5.4
13N02W28DDC1	354341	911208	7/10/2000	102	18.0	451	--

Appendix 2. Specific conductance and chloride data from wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas and sampled during the summer of 2000--Continued

[μ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams per liter; --, no data]

Local well number	Latitude (degrees)	Longitude (degrees)	Date	Well depth (feet)	Temperature (degrees Celsius)	Specific conductance (μ S/cm)	Chloride, dissolved (mg/L)
Jefferson County							
03S07W03DB1	342832	914442	7/25/2000	100	22.3	739	--
03S07W16AAA1	342714	914538	7/25/2000	102	18.1	616	74
03S09W18CC2	342656	920139	7/25/2000	100	18.7	402	--
03S09W31DDA1	342415	920048	7/25/2000	--	18.3	375	31
04S08W02DD1	342308	914959	7/24/2000	110	18.0	386	--
04S08W13DCB1	342123	914926	7/24/2000	110	18.2	447	6.7
05S06W31CAA1	341330	914206	7/25/2000	--	18.9	382	8.2
05S07W18BBB1	341644	914902	7/25/2000	110	17.9	555	--
06S06W23AAD1	341007	913712	7/25/2000	107	18.3	481	36
06S08W24CD1	341055	915137	6/26/2000	110	18.1	473	--
07S07W18CAC1	340647	915037	7/24/2000	65	18.1	362	27
07S08W06BAA1	340859	915647	7/24/2000	160	17.9	325	7.5
Lawrence County							
16N02E05BA1	360326	905352	7/10/2000	100	17.2	712	--
16N02E34BDA1	355839	905150	7/10/2000	120	17.5	525	13
Lee County							
01N03E02BBC1	344341	904600	7/13/2000	168	17.6	453	5.1
01N03E23CCC1	344025	904604	7/05/2000	120	17.6	715	6.7
02N02E21ABC1	344620	905358	7/15/2000	120	17.4	706	9.1
03N03E33CB1	344941	904804	7/5/2000	120	17.5	650	--
Lincoln County							
07S06W28CBB1	340508	914232	7/05/2000	90	18.4	684	52
08S04W08BBB2	340254	913100	7/05/2000	65.2	18.4	487	--
08S04W19CC1	340021	913205	7/05/2000	100	18.5	767	60
09S05W13CDB1	335505	913350	7/04/2000	133	19.1	443	25
09S06W04BCD1	335821	914346	7/04/2000	62.6	18.4	687	62
09S07W01DC1	335714	914637	7/04/2000	100	19.0	687	--
10S05W06DCC1	335155	913908	7/04/2000	65	20.8	303	14
Lonoke County							
01N07W29BBB1	344114	914720	7/19/2000	--	18.4	450	8.0
01N09W13DA1	344242	915515	7/18/2000	155	17.9	646	--
02N07W02BBA1	344957	914338	7/18/2000	--	17.9	683	49
02N08W16ABC1	344806	915114	7/18/2000	128	18.1	307	19
02N10W15AD1	344806	920335	6/18/2000	135	18.4	475	--
02N10W23BCA1	344725	920321	7/18/2000	--	19.2	453	--
02S07W04DA1	343339	914535	7/19/2000	105	18.2	523	--
02S08W13BBB1	343230	914950	7/18/2000	--	17.9	664	45
03N08W21BCC1	345220	915220	7/18/2000	155	18.4	246	17

Appendix 2. Specific conductance and chloride data from wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas and sampled during the summer of 2000--Continued

[μ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams per liter; --, no data]

Local well number	Latitude (degrees)	Longitude (degrees)	Date	Well depth (feet)	Temperature (degrees Celsius)	Specific conductance (μ S/cm)	Chloride, dissolved (mg/L)
Mississippi County							
12N08E08BCB1	354050	901559	7/11/2000	120	18.3	462	3.4
12N08E20DAD1	353842	901458	7/11/2000	110	16.8	628	4.9
14N10E22BB1	354941	900101	7/11/2000	120	17.0	575	--
15N13E08AAB1	355639	894302	7/11/2000	85	17.2	616	3.4
Monroe County							
01N02W12CBC1	344242	911032	7/06/2000	110	17.9	829	36
01N03W24BBB1	344135	911651	7/06/2000	125	18.2	211	4.7
01N04W33BBB2	343959	912648	7/06/2000	--	18.2	776	22
02S02W01BCA1	343318	911030	7/06/2000	--	17.9	277	6.5
03N02W31ADC1	344958	911446	7/06/2000	95	18.0	818	68
Phillips County							
02S01E28CCB1	342916	910058	7/05/2000	108	17.8	499	17
02S04E27AAC1	342932	904002	7/05/2000	175	18.0	619	6.1
03S02E35AD1	342320	905033	7/05/2000	120	18.1	598	--
04S01E23CCA1	341928	905853	7/05/2000	--	18.0	733	13
Poinsett County							
10N02E13BCC1	352948	905027	7/12/2000	167	17.2	1,100	140
10N03E14DAB1	352947	904407	7/12/2000	--	17.6	651	--
10N03E35CDD1	352651	904437	7/12/2000	--	17.6	617	31
10N06E16ADD1	352938	902656	7/12/2000	120	17.0	616	7.8
11N01E17DDD1	353437	910024	7/12/2000	100	17.5	508	16
11N02E05BDD1	353658	905408	7/12/2000	180	18.1	688	7.1
11N02E26AAB1	353349	905035	7/12/2000	158	17.2	801	--
11N03E19BB1	353436	904859	7/12/2000	180	17.2	802	--
12N05E27DB1	353830	903202	7/12/2000	150	18.0	459	--
Prairie County							
01N05W20DCB1	344118	913348	7/18/2000	157	18.3	578	13
01S04W28BD1	343521	912624	7/19/2000	149	18.2	704	--
01S05W14BBC1	343722	913108	7/18/2000	118	18.6	292	14
02N04W02BCB1	344916	912419	7/18/2000	140	17.4	283	10
02N05W29DDB2	344544	913308	7/18/2000	135	18.6	781	31
02N06W17ABB1	344809	913959	6/17/2000	180	19.2	357	--
02S06W14BBB1	343213	913729	7/18/2000	105	18.4	746	65
04N05W31DDC1	345514	913406	7/17/2000	104	18.1	626	19
04N06W05CCC1	345934	914018	7/17/2000	100	17.6	603	46
05N05W14DCD1	350252	913034	7/17/2000	--	17.7	688	27
Pulaski County							
01S10W29CC1	343538	920708	7/27/2000	100	19.2	523	9.0
02S10W14DC1	343205	920334	7/27/2000	60	18.0	633	120

Appendix 2. Specific conductance and chloride data from wells completed in the Mississippi River Valley alluvial aquifer in eastern Arkansas and sampled during the summer of 2000--Continued

[μ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L, milligrams per liter; --, no data]

Local well number	Latitude (degrees)	Longitude (degrees)	Date	Well depth (feet)	Temperature (degrees Celsius)	Specific conductance (μ S/cm)	Chloride, dissolved (mg/L)
Randolph County							
18N02E11DB1	361254	905008	7/10/2000	--	17.2	507	--
21N03E31DA1	362505	904710	7/11/2000	65	16.1	480	--
St. Francis County							
04N01E13DDA1	345708	905638	7/13/2000	--	17.7	768	44
04N01W24DA1	345649	910247	7/13/2000	130	18.0	872	--
04N01W28CDD1	345535	910634	7/13/2000	--	18.3	714	30
04N02E22DAC1	345626	905229	7/13/2000	120	17.9	556	14
04N06E19DAA1	345628	902957	7/13/2000	100	17.4	456	2.2
06N02E13DCA1	350813	905003	7/13/2000	--	17.2	783	38
White County							
06N06W34AAB1	350624	913754	7/17/2000	--	17.2	894	140
06N07W17DCC1	350822	914635	7/17/2000	90	17.6	369	76
Woodruff County							
05N03W35CC2	350021	911735	7/17/2000	100	17.5	334	6.9
06N01W10AB1	350945	910513	7/14/2000	150	17.4	391	5.7
06N01W33ADB2	350600	910559	7/14/2000	--	17.6	760	--
07N01W32CCD1	351046	910741	7/14/2000	--	17.1	382	8.6
07N02W04ADA1	351550	911201	7/14/2000	127	17.4	496	3.8
08N03W31AAD1	351655	912028	7/17/2000	110	17.0	465	17

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