USGS
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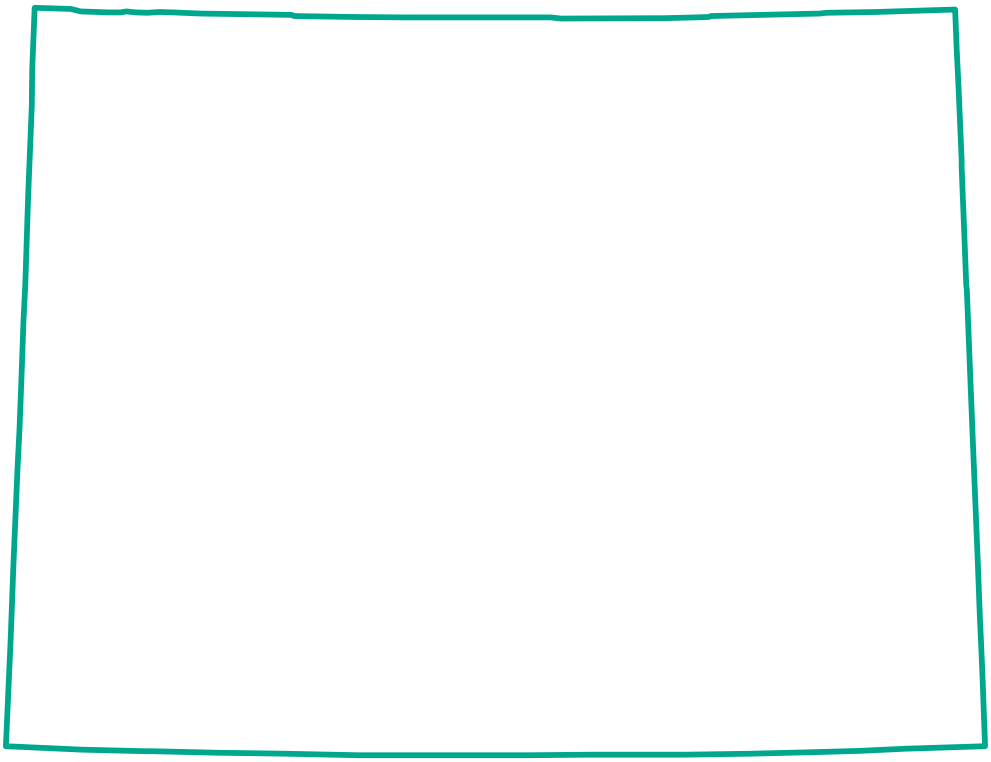
Water Resources Data
Wyoming
Water Year 2005

Volume 2. Ground Water

Water-Data Report WY-05-2



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

Prepared in cooperation with the
State of Wyoming
and with other agencies

Calendar for Water Year 2005

2004

October

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2005

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August

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September

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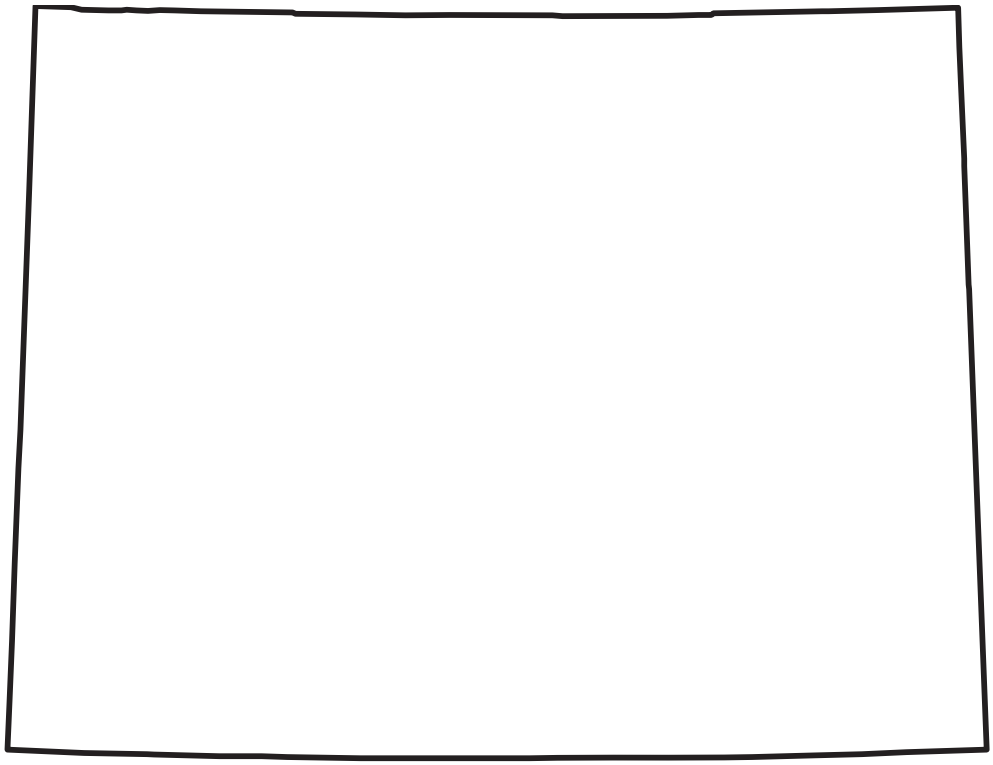
25	26	27	28	29	30	

Water Resources Data
Wyoming
Water Year 2005

Volume 2. Ground Water

By E.J. Blajszczak, J.P. Mason, K.R. Watson, S.C. Roberts, and K.A. Miller

Water-Data Report WY-05-2



Prepared by the Wyoming Water Science Center in cooperation with the State of Wyoming and other agencies

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

U.S. Department of the Interior
Gale A. Norton, Secretary

U.S. Geological Survey
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2006

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PREFACE

This annual hydrologic data report of Wyoming is one of a series of annual reports that documents hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and the quality of water provide the hydrologic information needed by Federal, State, and local agencies, and the private sector for administrating, developing, and managing our Nation's land and water resources. These records for Wyoming are contained in 2 volumes:

Volume 1. Surface-Water Data

Volume 2. Ground-Water Data

These reports are the culmination of a concerted effort by personnel from the Wyoming Water Science Center of the U.S. Geological Survey and other agencies. Some water-level data and all of the water-quality data were collected by U.S. Geological Survey personnel. In addition, U.S. Geological Survey compiled, analyzed, verified, and organized the data, as well as typed, edited, and assembled this report. The authors had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to U.S. Geological Survey policies and guidelines. The following personnel are recognized for their significant contributions to this report:

Tim Bartos	Nolan Friday	Jon Mason	Tom Pointon	Karen Watson
Ty Blacklock	Laura Hallberg	Cheryl Miller	Kendra Remley	Jerrod Wheeler
Eric Blajszczak	Glenn Laidlaw	Jake Neumiller	Wil Sadler	Ray Woodruff
Melanie Clark	Tom Leman	Jodi Norris	Jason Swanson	

Most water-level data contained in this report were collected by personnel from the Wyoming State Engineer’s Office and reviewed and published by the U.S. Geological Survey. Wyoming State Engineer’s Office personnel who contributed significantly to this report are under the direction of Lisa Lindemann, Ground Water Administrator.

Sue Roberts provided the illustrations and assembled the report.

This report was prepared under the general supervision of Myron Brooks, Director, Wyoming Water Science Center, and in cooperation with the State of Wyoming and other agencies.

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13. ABSTRACT *(Maximum 200 words)*

Water resources data for the 2004 water year for Wyoming consists of records of stage, discharge and water quality of streams; stage and contents of lakes and reservoirs, and water levels and water quality of ground water. Volume 2 of this report contains water levels records for 61 wells. Additional ground-water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous studies and programs. These data together with the data in Volume 1 represent part of the National Water Information System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Wyoming.

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ILLUSTRATIONS—Continued

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INTRODUCTION

The Water Resources Division of the U.S. Geological Survey (USGS), in cooperation with State, Tribal, county, municipal, and other Federal agencies, collects data each water year describing the water resources of Wyoming. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the USGS, the data are published annually in this report series entitled, "**Water Resources Data - Wyoming**".

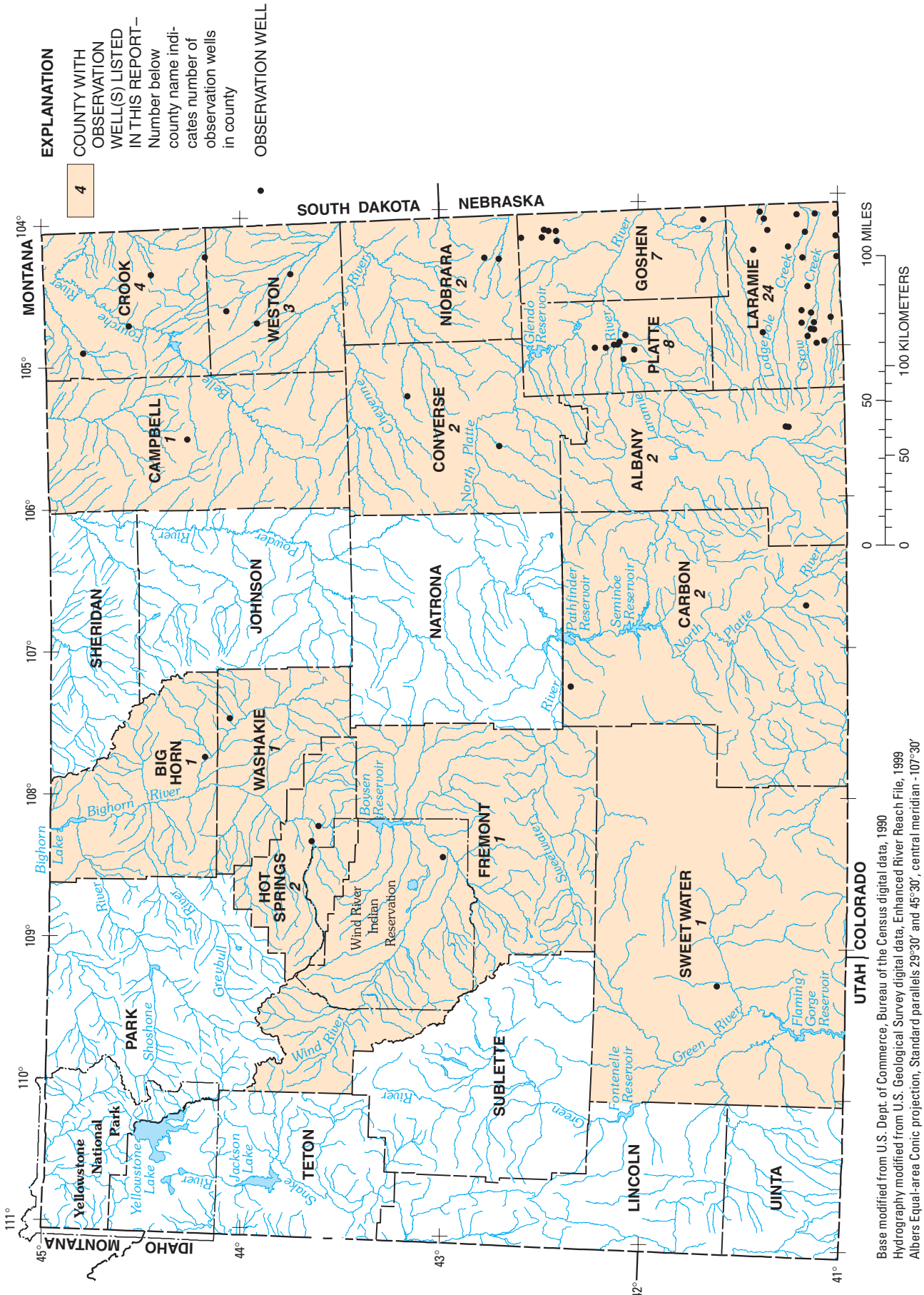
Water resources data for Wyoming in this volume consists of records of ground-water levels and quality for water year 2005, which began October 1, 2004, and ended September 30, 2005. This report contains historic water levels from 61 observation wells in the form of tables and hydrographs. The locations of observation wells listed in this report are shown in figure 1. Additional ground-water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements.

Since 1940, the USGS, in cooperation with State, Tribal, county, municipal, and other Federal agencies, has measured ground-water levels in observation wells in Wyoming. Ground-water levels were systematically measured in 61 observation wells in 15 counties in Wyoming during the water year. The observation-well program is conducted by the USGS in cooperation with the Wyoming State Engineers Office. Water-level data were collected at 52 of the 61 observation wells by Wyoming State Engineer personnel; data at the remaining 9 wells were collected by USGS personnel. The wells are located primarily in areas where ground water is used in large quantities for irrigation or municipal purposes.

Prior to 1997, only miscellaneous ground-water data were published in this report. In the past, the majority of ground-water level data collected in Wyoming was published in other report series of the USGS. Records of ground-water levels were published from 1935 to 1974 in a series of USGS water-supply papers entitled “Ground-Water Levels in the United States.” Wyoming ground-water-level data and hydrographs can be found in a series of 14 open-file reports published by the USGS between 1973 and 1995. Water-supply papers and open-file reports may be consulted in the libraries of the principal cities of the United States or may be purchased from USGS Information Services, Box 25286, Denver Federal Center, Denver, Colorado 80225. Most water-supply papers and many open-file reports also are available from the USGS Publications Warehouse on the World Wide Web at *http://infotrek.er.usgs.gov/pubs/*.

Beginning with the 1971 water year, water data for streamflow, water quality, and ground water have been published in official USGS reports on a State-boundary basis. These official USGS reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as “**U.S. Geological Survey Water-Data Report WY-05-2**.” These water-data reports are for sale, in paper copy or on microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161. Water-data reports also are available from the USGS Publications Warehouse on the World Wide Web at *http://infotrek.er.usgs.gov/pubs/*.

Additional information, including current prices, for ordering specific reports may be obtained from the Director at the address given on the back of the title page, by telephone to (307) 778-2931, or by email to state_rep_wy@usgs.gov. Hydrologic data for Wyoming is available on the World Wide Web at: *http://wy.water.usgs.gov/*



Base modified from U.S. Dept. of Commerce, Bureau of the Census digital data, 1990
Hydrography modified from U.S. Geological Survey digital data, Enhanced River Reach File, 1999
Albers Equal-area Conic projection, Standard parallels 29°30′ and 45°30′, central meridian - 107°30′

Figure 1. Location of observation wells covered by this report.

COOPERATION

The USGS and organizations of the State of Wyoming have had cooperative agreements for measurement of ground-water levels since 1940 and for collection of water-quality samples since 1946. Agencies and organizations that assisted in data collection through cooperative agreements with the USGS during water year 2005 were:

State Agencies

Wyoming State Engineers Office, Patrick T. Tyrrell, State Engineer

Wyoming Department of Agriculture, John Etchepare, Director

SUMMARY OF HYDROLOGIC CONDITIONS

Ground-Water Levels

Wyoming continued to experience prolonged drought during water year 2005. In general water-levels in wells measured over the last several years have been declining and continued to decline in water year 2005. On average, water-levels in the statewide observation-well network decreased by 4.49 ft between water years 1999 and 2005. Record low water levels were recorded at 44 percent of the wells with complete data in the statewide network in water year 2005. The average period of record from wells with record-setting low water levels was 27 years with the longest record being 37 years.

Wells completed in the High Plains aquifer coincide with areas of ground-water withdrawal in southeastern Wyoming and comprise nearly 70 percent of the observation-well network. Ground water is withdrawn from the High Plains aquifer for irrigation in Niobrara County, Platte County, Goshen County, and the eastern part of Laramie County. In addition, large quantities of ground water are withdrawn from the High Plains aquifer for municipal and domestic use in central Laramie County. Record low water levels were recorded during water year 2005 at 59 percent of the network observation wells with complete records and screened in the High Plains aquifer. The average period of record from wells with record-setting low water levels in the High Plains aquifer was 27 years with the longest record being 37 years. Hydrographs from representative High Plains observation wells in southeastern Wyoming are shown in figure 2.

Water levels were measured in at least one observation well in 15 of 23 counties in Wyoming. During 2005, water levels were measured continuously in 45 wells equipped with float-driven digital water-level recorders or electronic data recorders. Hydraulic heads in two flowing wells were measured continuously using pressure-sensing transducers and electronic data recorders. The remaining 14 wells were periodically measured using a steel tape, electric tape, or an air line.

Changes in water levels for the statewide observation-well network and for wells completed only in the High Plains aquifer are summarized in table 1. Many of the observation wells in these networks are located in areas with extensive ground-water withdrawal or in areas of artificial recharge. Water levels from some of these wells may reflect local, rather than regional ground-water conditions. Local influences such as nearby pumping can cause water levels in observaton wells to be lower than the regional-water table, while artificial recharge by surface-water irrigation can cause the water levels in observation wells to be higher than the regional-water table. The changes in water levels from water year 1999 to water year 2005 were determined from the difference between the highest water levels measured each year. Some

wells in the network were not included in the comparison of water-level changes between water years because few water-level measurements were made at the wells.

Table 1.--Changes in ground-water levels in statewide observation-well network and wells completed in the High Plains aquifer. [Hydrographs for five representative observation wells in southeast Wyoming are shown in figure 2]

Observation-well network	Water years[1]	Number of wells in network	Number of wells with water-level increases	Average water-level increase (in feet)	Number of wells with water-level decrease	Average water-level decrease (in feet)	Number of wells with few water-level measurements
Statewide network	1999-2005	61	4	4.65	46	-5.28	11
High Plains aquifer	1999-2005	41	2	3.99	37	-5.21	2

1.Water year is from October 1 to September 30 of the following year.

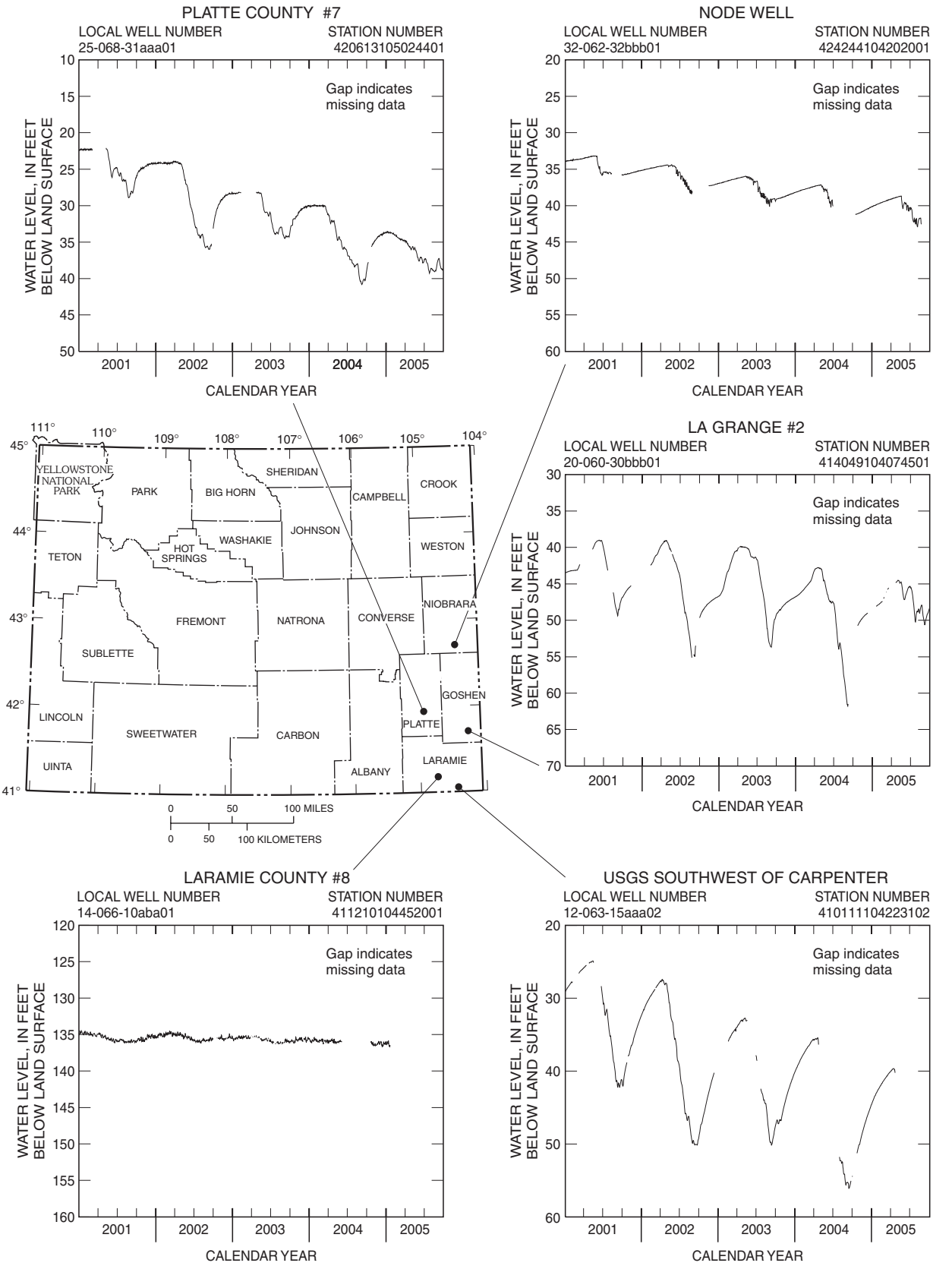


Figure 2. Water-level hydrographs for observation wells in areas of extensive ground-water withdrawals, calendar year 2001 through September 30, 2005.

NUMBERING SYSTEM FOR WELLS

The USGS well numbering system is based on the grid system of latitude and longitude. The system provides the geographic location of the well and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, and the next 7 digits denote degrees, minutes, and seconds of longitude; the last 2 digits are a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for more than one well are the same, a sequential number such as "01," "02," and so forth, would be assigned (see fig. 3).

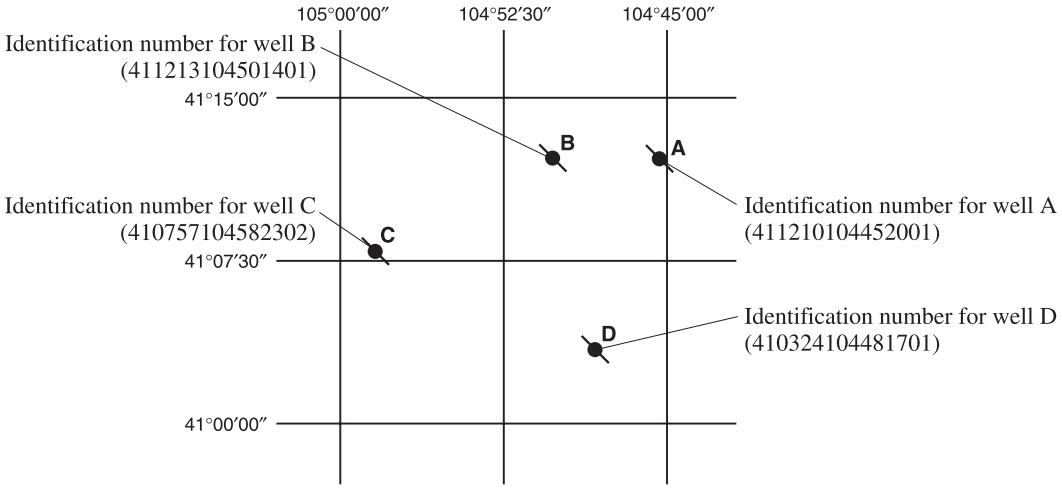


Figure 3. System for numbering wells (latitude and longitude).

In addition to the well number that is based on latitude and longitude given for each well, another well number is given that is based on the Public Land Survey (PLS) system of land subdivision. This well number is familiar to the water users of Wyoming and shows the location of the well by township, range, section, and position within the section (see fig. 4). The first numeral indicates the township, the second the range, and the third the section in which the well is located. Lowercase letters following the section number locate the well within the section. The first letter denotes the quarter section, the second the quarter-quarter section, and the third the quarter-quarter-quarter section. The letters are assigned within the section in a counter-clockwise direction beginning with (a) in the northeast quarter of the section. Letters are assigned within each quarter section and quarter-quarter section in the same manner. Where two or more wells are located within the smallest subdivision, consecutive numbers beginning with 1 are added to the letters in the order in which the wells are inventoried. For example, in figure 4, observation well 14-063-15aaa01 is the first well inventoried in the northeastern quarter of the northeastern quarter of the northeastern quarter of section 15, township 14 north (T. 14 N.), range 63 west (R. 63 W.). All wells in this report have ranges west of the Sixth Principal Meridian and townships north of the 40th Parallel Base Line.

On the Wind River Indian Reservation, the township-range system is based on the Wind River Meridian and Base Line system. Townships are denoted as north or south of the base line and ranges are denoted as east or west of the meridian. Wells may be located in the northeastern, northwestern, southwestern, or southeastern quadrants of this base-line and meridian net. For example, in figure 4, observation well 1N-4E-28acc01 is the first well inventoried in the southwestern quarter of the southwestern quarter of the northeastern quarter of section 28, township 1 north (T. 1 N.), range 4 east (R. 4 E.), in the northeastern quadrant of the Wind River Indian Reservation.

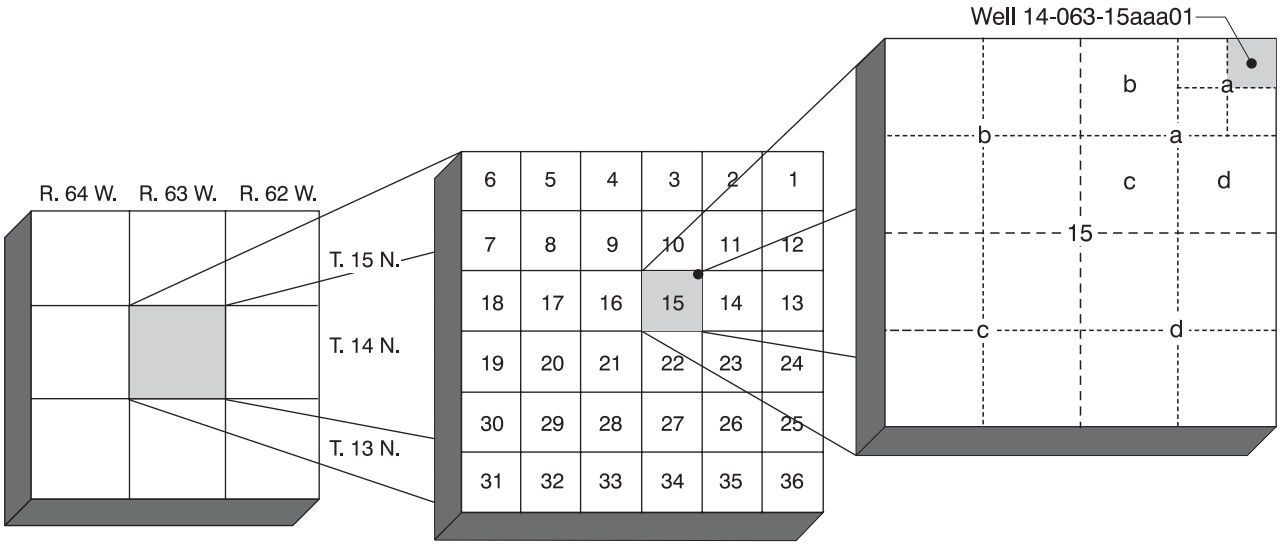


Figure 4. Federal township-range system for numbering wells.

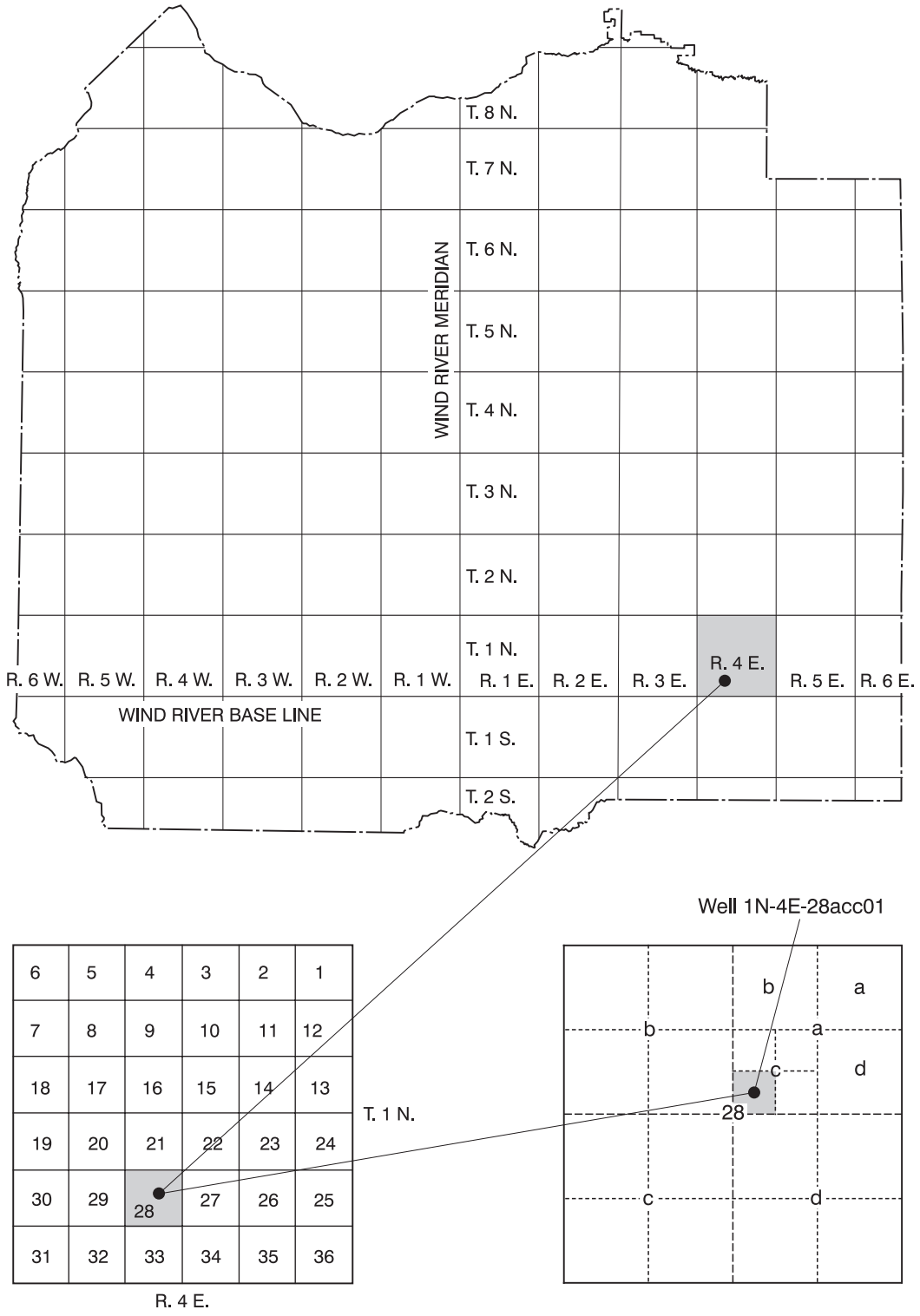


Figure 5. System for numbering wells on the Wind River Indian Reservation.

SPECIAL NETWORKS AND PROGRAMS

The USGS National Water-Quality Assessment (NAWQA) Program is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; to provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and to provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 42 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents is measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for water-resources managers to use in making decisions and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and Federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key Federal, State, and local water-resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies. Additional information about the NAWQA Program may be accessed from *http://water.usgs.gov/nawqa/*.

EXPLANATION OF GROUND-WATER-LEVEL RECORDS

Generally, only ground-water-level data from selected wells with continuous recorders from a basic network of observation wells are published in this report. This basic network contains observation wells located so that the most significant data are obtained from the fewest wells in the most important aquifers.

Site Identification Numbers

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is produced for local needs (see previous section NUMBERING SYSTEM FOR WELLS).

Data Collection and Computation

Measurements are made in many types of wells, under varying conditions of access and at different temperatures; hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Most methods for collecting and analyzing water samples are described in the TWRIs referred to in the On-site Measurements and Sample Collection and the Laboratory Measurements sections in this report. In addition, TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRIs Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4;

and Book 9, Chapters A1 through A9. The TWRI publications may be accessed from http://water.usgs.gov/pubs/twri/. The values in this report represent water-quality conditions at the time of sampling, as much as possible, and that are consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. Trained personnel collected all samples. The wells sampled were pumped long enough to ensure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum above sea level is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every day.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth of water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

Data Presentation

Water-level data are presented in alphabetical order by county. The primary identification number for a given well is the 15-digit site identification number that appears in the upper left corner of the table. The secondary identification number is the local or county well number. Well locations are shown and each well is identified by its local well or county well number on a map in this report (figures 6-20).

Each well record consists of three parts: the well description, the data table of water levels observed during the water year, and, for most wells, a hydrograph following the data table. Well descriptions are presented in the headings preceding the tabular data.

The following comments clarify information presented in these various headings.

LOCATION.—This paragraph follows the well-identification number and reports the hydrologic-unit number and a geographic point of reference. Latitudes and longitudes used in this report are reported as North American Datum of 1927 unless otherwise specified.

AQUIFER.—This entry designates by name and geologic age the aquifer that the well taps.

WELL CHARACTERISTICS.—This entry describes the well in terms of depth, casing diameter and depth or screened interval, method of construction, use, and changes since construction.

INSTRUMENTATION.—This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on continuous, monthly, or some other frequency of measurement.

DATUM.—This entry describes both the measuring point and the land-surface elevation at the well. The altitude of the land-surface datum is described in feet above the altitude datum; it is reported with a

precision depending on the method of determination. The measuring point is described physically (such as top of casing, top of instrument shelf, and so forth), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above National Geodetic Vertical Datum of 1929 (NGVD 29); it is reported with a precision depending on the method of determination.

REMARKS.—This entry describes factors that may affect the water level in a well or the measurement of the water level, when various methods of measurement were begun, and the network (climatic, terrane, local, or areal effects) or the special project to which the well belongs.

PERIOD OF RECORD.—This entry indicates the time period for which records are published for the well, the month and year at the start of publication of water-level records by the USGS, and the words "to current year" if the records are to be continued into the following year. Time periods for which water-level records are available, but are not published by the USGS, may be noted.

EXTREMES FOR PERIOD OF RECORD.—This entry contains the highest and lowest instantaneously recorded or measured water levels of the period of published record, with respect to land-surface datum or sea level, and the dates of occurrence.

Water-Level Tables

A table of water levels follows the well description for each well. Water-level measurements in this report are given in feet with reference to either sea level or land-surface datum (lsd). Missing records are indicated by dashes in place of the water-level value.

For wells not equipped with recorders, water-level measurements were obtained periodically by steel or electric tape. Tables of periodic water-level measurements in these wells show the date of measurement and the measured water-level value.

Hydrographs

Hydrographs are a graphic display of water-level fluctuations over a period of time. In this report, period-of-record hydrographs are shown. Hydrographs that display periodic water-level measurements show points that may be connected with a dashed line from one measurement to the next. Hydrographs that display recorder data show a solid line representing the highest water level recorded for each day. Missing data are indicated by a blank space or break in a hydrograph. Missing data may occur as a result of recorder malfunctions, battery failures, or mechanical problems related to the response of the recorder's float mechanism to water-level fluctuations in a well.

GROUND-WATER-QUALITY DATA

Data Collection and Computation

The ground-water-quality data in this report were obtained as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some wells within a county but not for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality statewide.

Most methods for collecting and analyzing water samples are described in the Techniques of Water-Resources Investigations of the United States Geological Survey (TWRI), which may be accessed from http://water.usgs.gov/pubs/twri/. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in TWRI, Book 1, Chapter D2; Book 5, Chapters A1, A3, and A4; and Book 9, Chapters A1-A6. Also, detailed information on collecting, treating, and shipping samples may be obtained from the USGS Water Science Center (see address shown on back of title page in this report).

EXPLANATION OF WATER-QUALITY RECORDS

Water Analysis

Most of the methods used for collecting and analyzing water samples are described in the TWRIs, which may be accessed from http://water.usgs.gov/pubs/twri/.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

Onsite Measurements and Sample Collection

In obtaining water-quality data, a major concern is assuring that the data obtained represent the naturally occurring quality of the water. To ensure this, certain measurements, such as water temperature, pH, and dissolved oxygen, must be made on site when the samples are taken. To assure that measurements made in the laboratory also represent the naturally occurring water, carefully prescribed procedures must be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRIs Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1-A9. Most of the methods used for collecting and analyzing water samples are described in the TWRIs, which may be accessed from http://water.usgs.gov/pubs/twri/. Also, detailed information on collecting, treating, and shipping samples can be obtained from the USGS Water Science Center (see address that is shown on the back of title page in this report).

Laboratory Measurements

Samples for biochemical oxygen demand (BOD) and indicator bacteria are analyzed locally. All other samples are analyzed in the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chapter C1. Methods used by the USGS laboratories are given in the TWRIs, Book 1, Chapter D2; and Book 5, Chapters A1, A3, and A4. The TWRI publications may be accessed from http://water.usgs.gov/pubs/twri/. These methods are consistent with ASTM standards and generally follow ISO standards.

Remark Codes

Remark codes may appear with the water-quality data in this section (table 4).

Table 2.--Water-quality data remark codes.

Printed Output	Remark
E	Value is estimated.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
M	Presence of material verified, but not quantified.
N	Presumptive evidence of presence of material.
U	Material specifically analyzed for, but not detected.
A	Value is an average.
V	Analyte was detected in both the environmental sample and the associated blanks.
S	Most probable value.

Water-Quality Control Data

The USGS National Water Quality Laboratory collects quality-control data on a continuing basis to evaluate selected analytical methods to determine long-term method detection levels (LT-MDLs) and laboratory reporting levels (LRLs). These values are re-evaluated each year on the basis of the most recent quality-control data and, consequently, may change from year to year.

This reporting procedure limits the occurrence of false positive error. Falsely reporting a concentration greater than the LT-MDL for a sample in which the analyte is not present is 1 percent or less. Application of the LRL limits the occurrence of false negative error. The chance of falsely reporting a non-detection for a sample in which the analyte is present at a concentration equal to or greater than the LRL is 1 percent or less.

Accordingly, concentrations are reported as less than LRL for samples in which the analyte was either not detected or did not pass identification. Analytes detected at concentrations between the LT-MDL and the LRL and that pass identification criteria are estimated. Estimated concentrations will be noted with a remark code of “E.” These data should be used with the understanding that their uncertainty is greater than that of data reported without the E remark code.

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples collected by this District office are described in the following section. Procedures have been established for the storage of water-quality-control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples. These data are not presented in this report but are available from the District office.

Blank Samples

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated in the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. Many types of blank samples are possible; each is designed to segregate a different part of the overall data-collection process. The types of blank samples collected in this district are:

Field blank—A blank solution that is subjected to all aspects of sample collection, field processing preservation, transportation, and laboratory handling as an environmental sample.

Trip blank—A blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

Equipment blank—A blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office).

Sampler blank—A blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Filter blank—A blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank—A blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank—A blank solution that is treated with the sampler preservatives used for an environmental sample.

Reference Samples

Reference material is a solution or material prepared by a laboratory. The reference material composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

Replicate Samples

Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. Many types of replicate samples are possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this district are:

Concurrent samples—A type of replicate sample in which the samples are collected simultaneously with two or more samplers or by using one sampler and alternating the collection of samples into two or more compositing containers.

Sequential samples—A type of replicate sample in which the samples are collected one after the other, typically over a short time.

Split sample—A type of replicate sample in which a sample is split into subsamples, each subsample contemporaneous in time and space.

Spike Samples

Spike samples are samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

ACCESS TO USGS WATER DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily mean and peak-flow discharge data for most current or discontinued gaging stations through the World Wide Web (WWW). These data may be accessed from *http://water.usgs.gov*.

Water-quality data and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on various media. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each USGS Water Science Center (See address that is shown on the back of the title page of this report).

DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Terms such as algae, water level, and precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting English units to International System (SI) Units. Other glossaries that also define water-related terms are accessible from *http://water.usgs.gov/glossaries.html*.

Acid neutralizing capacity (ANC) is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point. This term designates titration of an "unfiltered" sample (formerly reported as alkalinity).

Acre-foot (AC-FT, acre-ft) is a unit of volume, commonly used to measure quantities of water used or stored, equivalent to the volume of water required to cover 1 acre to a depth of 1 foot and equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters. (See also "Annual runoff")

Adenosine triphosphate (ATP) is an organic, phosphate-rich compound important in the transfer of energy in organisms. Its central role in living cells makes ATP an excellent indicator of the presence of living material in water. A measurement of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter.

Adjusted discharge is discharge data that have been mathematically adjusted (for example, to remove the effects of a daily tide cycle or reservoir storage).

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample. (See also "Biomass" and "Dry weight")

Alkalinity is the capacity of solutes in an aqueous system to neutralize acid. This term designates titration of a "filtered" sample.

Annual runoff is the total quantity of water that is discharged ("runs off") from a drainage basin in a year. Data reports may present annual runoff data as volumes in acre-feet, as discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches.

Annual 7-day minimum is the lowest mean value for any 7-consecutive-day period in a year. Annual 7-day minimum values are reported herein for the calendar year and the water year (October 1 through September 30). Most low-flow frequency analyses use a climatic year (April 1-March 31), which tends to prevent the low-flow period from being artificially split between adjacent years. The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day, 10-year low-flow statistic.)

Aroclor is the registered trademark for a group of polychlorinated biphenyls that were manufactured by the Monsanto Company prior to 1976. Aroclors are assigned specific 4-digit reference numbers dependent upon molecular type and degree of substitution of the biphenyl ring hydrogen atoms by chlorine atoms. The first two digits of a numbered aroclor represent the molecular type, and the last two digits represent the percentage weight of the hydrogen-substituted chlorine.

Artificial substrate is a device that purposely is placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is collected. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection. (See also "Substrate")

Ash mass is the mass or amount of residue present after the residue from a dry-mass determination has been ashed in a muffle furnace at a temperature of 500 °C for 1 hour. Ash mass of zooplankton and phytoplankton is expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2). (See also "Biomass" and "Dry mass")

Aspect is the direction toward which a slope faces with respect to the compass.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, whereas others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Bankfull stage, as used in this report, is the stage at which a stream first overflows its natural banks formed by floods with 1- to 3-year recurrence intervals.

Base discharge (for peak discharge) is a discharge value, determined for selected stations, above which peak discharge data are published. The base discharge at each station is selected so that an average of about three peak flows per year will be published. (See also "Peak flow")

Base flow is sustained flow of a stream in the absence of direct runoff. It includes natural and human-induced streamflows. Natural base flow is sustained largely by ground-water discharge.

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed. (See also "Bedload" and "Sediment")

Bedload is material in transport that primarily is supported by the streambed. In this report, bedload is considered to consist of particles in transit from the bed to the top of the bedload sampler nozzle (an elevation ranging from 0.25 to 0.5 foot). These particles are retained in the bedload sampler. A sample collected with a pressure-differential bedload sampler also may contain a component of the suspended load.

Bedload discharge (tons per day) is the rate of sediment moving as bedload, reported as dry weight, that passes through a cross section in a given time. NOTE: Bedload discharge values in this report may include a component of the suspended-sediment discharge. A correction may be necessary when computing the total sediment discharge by summing the bedload discharge and the suspended-sediment discharge. (See also "Bedload," "Dry weight," "Sediment," and "Suspended-sediment discharge")

Benthic organisms are the group of organisms inhabiting the bottom of an aquatic environment. They include a number of types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. They are useful as indicators of water quality.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as mass per unit area or volume of habitat.

Biomass pigment ratio is an indicator of the total proportion of periphyton that are autotrophic (plants). This also is called the Autotrophic Index.

Blue-green algae (*Cyanophyta*) are a group of phytoplankton and periphyton organisms with a blue pigment in addition to a green pigment called chlorophyll. Blue-green algae can cause nuisance water-quality conditions in lakes and slow-flowing rivers; however, they are found commonly in streams throughout the year. The abundance of blue-green algae in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (μm^3/mL). The abundance of blue-green algae in periphyton samples is given in cells per square centimeter (cells/cm^2) or biovolume per square centimeter ($\mu m^3/cm^2$). (See also "Phytoplankton"and "Periphyton")

Bottom material (See "Bed material")

Bulk electrical conductivity is the combined electrical conductivity of all material within a doughnut-shaped volume surrounding an induction probe. Bulk conductivity is affected by different physical and chemical properties of the material including the dissolved-solids content of the pore water, and the lithology and porosity of the rock.

Canadian Geodetic Vertical Datum 1928 is a geodetic datum derived from a general adjustment of Canada's first order level network in 1928.

Cell volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are used frequently in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume (μm^3) is determined by obtaining critical cell measurements or cell dimensions (for example, length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

$$\text{sphere } 4/3\ \pi r^3 \quad \text{cone } 1/3\ \pi r^2 h \quad \text{cylinder } \pi r^2 h.$$

pi (π) is the ratio of the circumference to the diameter of a circle; pi = 3.14159….

From cell volume, total algal biomass expressed as biovolume (μm^3/mL) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes for all species.

Cells/volume refers to the number of cells of any organism that is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per

sample volume, and generally are reported as cells or units per milliliter (mL) or liter (L).

Cfs-day (See "Cubic foot per second-day")

Channel bars, as used in this report, are the lowest prominent geomorphic features higher than the channel bed.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with BOD or with carbonaceous organic pollution from sewage or industrial wastes. [See also "Biochemical oxygen demand (BOD)"]

Clostridium perfringens *(C. perfringens)* is a spore-forming bacterium that is common in the feces of human and other warmblooded animals. Clostridial spores are being used experimentally as an indicator of past fecal contamination and the presence of microorganisms that are resistant to disinfection and environmental stresses. (See also "Bacteria")

Coliphages are viruses that infect and replicate in coliform bacteria. They are indicative of sewage contamination of water and of the survival and transport of viruses in the environment.

Color unit is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Confined aquifer is a term used to describe an aquifer containing water between two relatively impermeable boundaries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be higher or lower than the water table that may be present in the material above it. In some cases, the water level can rise above the ground surface, yielding a flowing well.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Continuous-record station is a site where data are collected with sufficient frequency to define daily mean values and variations within a day.

Control designates a feature in the channel that physically affects the water-surface elevation and thereby determines the stage-discharge relation at the gage. This feature may be a constriction of the channel, a bedrock outcrop, a gravel bar, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure, as used in this report, is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of saltwater.

Cubic foot per second (CFS, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to approximately 7.48 gallons per second or approximately 449 gallons per minute, or 0.02832 cubic meters per second. The term "second-foot" sometimes is used synonymously with "cubic foot per second" but is now obsolete.

Cubic foot per second-day (CFS-DAY, Cfs-day, [$(ft^3/s)/d$]) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily mean discharges reported in the daily value data tables numerically are equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

Cubic foot per second per square mile [CFSM, $(ft^3/s)/mi^2$] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area. (See also "Annual runoff")

Daily mean suspended-sediment concentration is the time-weighted mean concentration of suspended sediment passing a stream cross section during a 24-hour day. (See also "Sediment" and "Suspended-sediment concentration")

Daily record station is a site where data are collected with sufficient frequency to develop a record of one or more data values per day. The frequency of data collection can range from continuous recording to data collection on a daily or near-daily basis.

Data collection platform (DCP) is an electronic instrument that collects, processes, and stores data from various sensors, and transmits the data by satellite data relay, line-of-sight radio, and/or landline telemetry.

Data logger is a microprocessor-based data acquisition system designed specifically to acquire, process, and store data. Data usually are downloaded from onsite data loggers for entry into office data systems.

Datum is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of gage height, stage, or elevation; a horizontal datum is a reference for positions given in terms of latitude-longitude, State Plane coordinates, or Universal Transverse Mercator (UTM) coordinates. (See also "Gage datum," "Land-surface datum," "National Geodetic Verti-

cal Datum of 1929," and "North American Vertical Datum of 1988")

Diatoms *(Bacillariophyta)* are unicellular or colonial algae with a siliceous cell wall. The abundance of diatoms in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (μm^3/mL). The abundance of diatoms in periphyton samples is given in cells per square centimeter (cells/cm^2) or biovolume per square centimeter ($\mu m^3/cm^2$). (See also "Phytoplankton" and "Periphyton")

Diel is of or pertaining to a 24-hour period of time; a regular daily cycle.

Discharge, or **flow**, is the rate that matter passes through a cross section of a stream channel or other water body per unit of time. The term commonly refers to the volume of water (including, unless otherwise stated, any sediment or other constituents suspended or dissolved in the water) that passes a cross section in a stream channel, canal, pipeline, and so forth, within a given period of time (cubic feet per second). Discharge also can apply to the rate at which constituents, such as suspended sediment, bedload, and dissolved or suspended chemicals, pass through a cross section, in which cases the quantity is expressed as the mass of constituent that passes the cross section in a given period of time (tons per day).

Dissolved refers to that material in a representative water sample that passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal and State agencies that collect water-quality data. Determinations of "dissolved" constituent concentrations are made on sample water that has been filtered.

Dissolved oxygen (DO) is the molecular oxygen (oxygen gas) dissolved in water. The concentration in water is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved-solids concentration. Photosynthesis and respiration by plants commonly cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved-solids concentration in water is the quantity of dissolved material in a sample of water. It is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4917 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L $CaCO_3$) can be converted to carbonate concentration by multiplying by 0.60.

Diversity index (H) (Shannon index) is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i \approx 1}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n},$$

where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area upstream from the location, measured in a horizontal plane, that has a common outlet at the site for its surface runoff from precipitation that normally drains by gravity into a stream. Drainage areas given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the Earth's surface that contains a drainage system with a common outlet for its surface runoff. (See "Drainage area")

Dry mass refers to the mass of residue present after drying in an oven at 105 °C, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass. (See also "Ash mass," "Biomass," and "Wet mass")

Dry weight refers to the weight of animal tissue after it has been dried in an oven at 65 °C until a constant weight is achieved. Dry weight represents total organic and inorganic matter in the tissue. (See also "Wet weight")

Embeddedness is the degree to which gravel-sized and larger particles are surrounded or enclosed by finer-sized particles. (See also "Substrate embeddedness class")

Enterococcus bacteria commonly are found in the feces of humans and other warmblooded animals. Although some strains are ubiquitous and not related to fecal pollution, the presence of enterococci in water is an indication of fecal pollution and the possible presence of enteric pathogens. Enterococcus bacteria are those bacteria that produce pink to red colonies with black or reddish-brown precipitate after incubation at 41 °C on mE agar (nutrient medium for bacterial growth) and subsequent transfer to EIA medium. Enterococci include *Streptococcus feacalis, Streptococcus*

feacium, Streptococcus avium, and their variants. (See also "Bacteria")

EPT Index is the total number of distinct taxa within the insect orders Ephemeroptera, Plecoptera, and Trichoptera. This index summarizes the taxa richness within the aquatic insects that generally are considered pollution sensitive; the index usually decreases with pollution.

Escherichia coli *(E. coli)* are bacteria present in the intestine and feces of warmblooded animals. *E. coli* are a member species of the fecal coliform group of indicator bacteria. In the laboratory, they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5 °C on mTEC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Estimated (E) value of a concentration is reported when an analyte is detected and all criteria for a positive result are met. If the concentration is less than the method detection limit (MDL), an E code will be reported with the value. If the analyte is identified qualitatively as present, but the quantitative determination is substantially more uncertain, the National Water Quality Laboratory will identify the result with an E code even though the measured value is greater than the MDL. A value reported with an E code should be used with caution. When no analyte is detected in a sample, the default reporting value is the MDL preceded by a less than sign (<). For bacteriological data, concentrations are reported as estimated when results are based on non-ideal colony counts.

Euglenoids (*Euglenophyta*) are a group of algae that usually are free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark. (See also "Phytoplankton")

Extractable organic halides (EOX) are organic compounds that contain halogen atoms such as chlorine. These organic compounds are semivolatile and extractable by ethyl acetate from air-dried streambed sediment. The ethyl acetate extract is combusted, and the concentration is determined by microcoulometric determination of the halides formed. The concentration is reported as micrograms of chlorine per gram of the dry weight of the streambed sediment.

Fecal coliform bacteria are present in the intestines or feces of warmblooded animals. They often are used as indicators of the sanitary quality of the water. In the laboratory, they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5 °C plus or minus 0.2 °C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Fecal streptococcal bacteria are present in the intestines of warmblooded animals and are ubiquitous in the environment. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at 35 °C plus or minus 1.0 °C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Filtered pertains to constituents in a water sample passed through a filter of specified pore diameter, most commonly 0.45 micrometer or less for inorganic analytes and 0.7 micrometer for organic analytes.

Filtered, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that has passed through a filter has been extracted. Complete recovery is not achieved by the extraction procedure and thus the analytical determination represents something less than 95 percent of the total constituent concentration in the sample. To achieve comparability of analytical data, equivalent extraction procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results.

Fire algae (*Pyrrhophyta*) are free-swimming unicells characterized by a red pigment spot. (See also "Phytoplankton")

Flow-duration percentiles are values on a scale of 100 that indicate the percentage of time for which a flow is exceeded. For example, the 90th percentile of river flow is the streamflow exceeded 90 percent of the time in the period of interest.

Gage datum is a horizontal surface used as a zero point for measurement of stage or gage height. This surface usually is located slightly below the lowest point of the stream bottom such that the gage height is usually slightly greater than the maximum depth of water. Because the gage datum is not an actual physical object, the datum is usually defined by specifying the elevations of permanent reference marks such as bridge abutments and survey monuments, and the gage is set to agree with the reference marks. Gage datum is a local datum that is maintained independently of any national geodetic datum. However, if the elevation of the gage datum relative to the national datum (North American Vertical Datum of 1988 or National Geodetic Vertical Datum of 1929) has been determined, then the gage readings can be converted to elevations above the national datum by adding the elevation of the gage datum to the gage reading.

Gage height (G.H.) is the water-surface elevation, in feet above the gage datum. If the water surface is below the gage datum, the gage height is negative. Gage height often is used interchangeably with the more general term "stage," although gage height is more appropriate when used in reference to a reading on a gage.

Gage values are values that are recorded, transmitted, and/or computed from a gaging station. Gage values typically are collected at 5-, 15-, or 30-minute intervals.

Gaging station is a site on a stream, canal, lake, or reservoir where systematic observations of stage, discharge, or other hydrologic data are obtained.

Gas chromatography/flame ionization detector (GC/FID) is a laboratory analytical method used as a screening technique for semivolatile organic compounds that are extractable from water in methylene chloride.

Geomorphic channel units, as used in this report, are fluvial geomorphic descriptors of channel shape and stream velocity. Pools, riffles, and runs are types of geomorphic channel units considered for National Water-Quality Assessment (NAWQA) Program habitat sampling.

Green algae *(Chlorophyta)* are unicellular or colonial algae with chlorophyll pigments similar to those in terrestrial green plants. Some forms of green algae produce mats or floating "moss" in lakes. The abundance of green algae in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (μm^3/mL). The abundance of green algae in periphyton samples is given in cells per square centimeter (cells/cm^2) or biovolume per square centimeter ($\mu m^3/cm^2$). (See also "Phytoplankton" and "Periphyton")

Habitat, as used in this report, includes all nonliving (physical) aspects of the aquatic ecosystem, although living components like aquatic macrophytes and riparian vegetation also are usually included. Measurements of habitat typically are made over a wider geographic scale than are measurements of species distribution.

Habitat quality index is the qualitative description (level 1) of instream habitat and riparian conditions surrounding the reach sampled. Scores range from 0 to 100 percent with higher scores indicative of desirable habitat conditions for aquatic life. Index only applicable to wadable streams.

Hardness of water is a physical-chemical characteristic that commonly is recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations (primarily calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate ($CaCO_3$).

High tide is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. See NOAA Web site: *http://www.csc.noaa.gov/text/glossary.html* (see "High water")

Hilsenhoff's Biotic Index (HBI) is an indicator of organic pollution that uses tolerance values to weight taxa abundances; usually increases with pollution. It is calculated as follows:

$$HBI = sum\frac{(n)(a)}{N},$$

where n is the number of individuals of each taxon, a is the tolerance value of each taxon, and N is the total number of organisms in the sample.

Horizontal datum (See "Datum")

Hydrologic index stations referred to in this report are continuous-record gaging stations that have been selected as representative of streamflow patterns for their respective regions. Station locations are shown on index maps.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as defined by the former Office of Water Data Coordination and delineated on the State Hydrologic Unit Maps by the USGS. Each hydrologic unit is identified by an 8-digit number.

Inch (IN., in.), in reference to streamflow, as used in this report, refers to the depth to which the drainage area would be covered with water if all of the runoff for a given time period were distributed uniformly on it. (See also "Annual runoff")

Instantaneous discharge is the discharge at a particular instant of time. (See also "Discharge")

International Boundary Commission Survey Datum refers to a geodetic datum established at numerous monuments along the United States-Canada boundary by the International Boundary Commission.

Island, as used in this report, is a mid-channel bar that has permanent woody vegetation, is flooded once a year, on average, and remains stable except during large flood events.

Laboratory reporting level (LRL) generally is equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a nondetection for a sample that contained an analyte at a concentration equal to or greater than the LRL is predicted to be less than or

equal to 1 percent. The value of the LRL will be reported with a "less than" (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory (NWQL) collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually on the basis of the most current quality-control data and, therefore, may change. The LRL replaces the term 'non-detection value' (NDV).

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Latent heat flux (often used interchangeably with latent heat-flux density) is the amount of heat energy that converts water from liquid to vapor (evaporation) or from vapor to liquid (condensation) across a specified cross-sectional area per unit time. Usually expressed in watts per square meter.

Light-attenuation coefficient, also known as the extinction coefficient, is a measure of water clarity. Light is attenuated according to the Lambert-Beer equation:

$$I = I_o e^{-\lambda L},$$

where I_o is the source light intensity, I is the light intensity at length L (in meters) from the source, λ is the light-attenuation coefficient, and e is the base of the natural logarithm. The light-attenuation coefficient is defined as

$$\lambda = -\frac{1}{L}\log_e \frac{I}{I_o}.$$

Lipid is any one of a family of compounds that are insoluble in water and that make up one of the principal components of living cells. Lipids include fats, oils, waxes, and steroids. Many environmental contaminants such as organochlorine pesticides are lipophilic.

Long-term method detection level (LT-MDL) is a detection level derived by determining the standard deviation of a minimum of 24 method detection limit (MDL) spike-sample measurements over an extended period of time. LT-MDL data are collected on a continuous basis to assess year-to-year variations in the LT-MDL. The LT-MDL controls false positive error. The chance of falsely reporting a concentration at or greater than the LT-MDL for a sample that did not contain the analyte is predicted to be less than or equal to 1 percent.

Low tide is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day. See NOAA Website: *http://www.csc.noaa.gov/text/glossary.html* (see "Low water")

Macrophytes are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that usually are arranged in zones in aquatic ecosystems and restricted in the area by the extent of illumination through the water and sediment deposition along the shoreline.

Mean concentration of suspended sediment (Daily mean suspended-sediment concentration) is the time-weighted concentration of suspended sediment passing a stream cross section during a given time period. (See also "Daily mean suspended-sediment concentration" and "Suspended-sediment concentration")

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period. (See also "Discharge")

Mean high or **low tide** is the average of all high or low tides, respectively, over a specific period.

Mean sea level is a local tidal datum. It is the arithmetic mean of hourly heights observed over the National Tidal Datum Epoch. Shorter series are specified in the name; for example, monthly mean sea level and yearly mean sea level. In order that they may be recovered when needed, such datums are referenced to fixed points known as benchmarks. (See also "Datum")

Measuring point (MP) is an arbitrary permanent reference point from which the distance to water surface in a well is measured to obtain water level.

Megahertz is a unit of frequency. One megahertz equals one million cycles per second.

Membrane filter is a thin microporous material of specific pore size used to filter bacteria, algae, and other very small particles from water.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Method code is a one-character code that identifies the analytical or field method used to determine a value stored in the National Water Information System (NWIS).

Method detection limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the analyte concentration is greater than zero. It is determined from the analysis of a

sample in a given matrix containing the analyte. At the MDL concentration, the risk of a false positive is predicted to be less than or equal to 1 percent.

Method of Cubatures is a method of computing discharge in tidal estuaries based on the conservation of mass equation.

Methylene blue active substances (MBAS) indicate the presence of detergents (anionic surfactants). The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram (UG/G, µg/g) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per kilogram (UG/KG, µg/kg) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

Microsiemens per centimeter (US/CM, µS/cm) is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of Units nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in water as the mass (milligrams) of constituent per unit volume (liter) of water. Concentration of suspended sediment also is expressed in milligrams per liter and is based on the mass of dry sediment per liter of water-sediment mixture.

Minimum reporting level (MRL) is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method.

Miscellaneous site, miscellaneous station, or miscellaneous sampling site is a site where streamflow, sediment, and/or water-quality data or water-quality or sediment samples are collected once, or more often on a random or discontinuous basis to provide better areal coverage for defining hydrologic and water-quality conditions over a broad area in a river basin.

Most probable number (MPN) is an index of the number of coliform bacteria that, more probably than any other number, would give the results shown by the laboratory examination; it is not an actual enumeration. MPN is determined from the distribution of gas-positive cultures among multiple inoculated tubes.

Multiple-plate samplers are artificial substrates of known surface area used for obtaining benthic invertebrate samples. They consist of a series of spaced, hardboard plates on an eyebolt.

Nanograms per liter (NG/L, ng/L) is a unit expressing the concentration of chemical constituents in solution as mass (nanograms) of solute per unit volume (liter) of water. One million nanograms per liter is equivalent to 1 milligram per liter.

National Geodetic Vertical Datum of 1929 (NGVD 29) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It formerly was called "Sea Level Datum of 1929" or "mean sea level." Although the datum was derived from the mean sea level at 26 tide stations**,** it does not necessarily represent local mean sea level at any particular place. *See NOAA Web site: http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88* (See "North American Vertical Datum of 1988")

Natural substrate refers to any naturally occurring immersed or submersed solid surface, such as a rock or tree, upon which an organism lives. (See also "Substrate")

Nekton are the consumers in the aquatic environment and consist of large, free-swimming organisms that are capable of sustained, directed mobility.

Nonfilterable refers to the portion of the total residue retained by a filter.

North American Datum of 1927 (NAD 27) is the horizontal control datum for the United States that was defined by a location and azimuth on the Clarke spheroid of 1866.

North American Datum of 1983 (NAD 83) is the horizontal control datum for the United States, Canada, Mexico, and Central America that is based on the adjustment of 250,000 points including 600 satellite Doppler stations that constrain the system to a geocentric origin. NAD 83 has been officially adopted as the legal horizontal datum for the United States by the Federal government.

North American Vertical Datum of 1988 (NAVD 88) is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and

mapping activities in the United States. This datum was established in 1991 by minimum-constraint adjustment of the Canadian**,** Mexican, and United States first-order terrestrial leveling networks.

Open or **screened interval** is the length of unscreened opening or of well screen through which water enters a well, in feet below land surface.

Organic carbon (OC) is a measure of organic matter present in aqueous solution, suspension, or bottom sediment. May be reported as dissolved organic carbon (DOC), particulate organic carbon (POC), or total organic carbon (TOC).

Organic mass or **volatile mass** of a living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. Organic mass is expressed in the same units as for ash mass and dry mass. (See also "Ash mass," "Biomass," and "Dry mass")

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Organochlorine compounds are any chemicals that contain carbon and chlorine. Organochlorine compounds that are important in investigations of water, sediment, and biological quality include certain pesticides and industrial compounds.

Parameter code is a 5-digit number used in the USGS computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent or property.

Partial-record station is a site where discrete measurements of one or more hydrologic parameters are obtained over a period of time without continuous data being recorded or computed. A common example is a crest-stage gage partial-record station at which only peak stages and flows are recorded.

Particle size is the diameter, in millimeters (mm), of a particle determined by sieve or sedimentation methods. The sedimentation method uses the principle of Stokes Law to calculate sediment particle sizes. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube, sedigraph) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification, as used in this report, agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay	>0.00024 - 0.004	Sedimentation
Silt	>0.004 - 0.062	Sedimentation
Sand	>0.062 - 2.0	Sedimentation/sieve
Gravel	>2.0 - 64.0	Sieve
Cobble	>64 - 256	Manual measurement
Boulder	>256	Manual measurement

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. For the sedimentation method, most of the organic matter is removed, and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

Peak flow (peak stage) is an instantaneous local maximum value in the continuous time series of streamflows or stages, preceded by a period of increasing values and followed by a period of decreasing values. Several peak values ordinarily occur in a year. The maximum peak value in a year is called the annual peak; peaks lower than the annual peak are called secondary peaks. Occasionally, the annual peak may not be the maximum value for the year; in such cases, the maximum value occurs at midnight at the beginning or end of the year, on the recession from or rise toward a higher peak in the adjoining year. If values are recorded at a discrete series of times, the peak recorded value may be taken as an approximation of the true peak, which may occur between the recording instants. If the values are recorded with finite precision, a sequence of equal recorded values may occur at the peak; in this case, the first value is taken as the peak.

Percent composition or **percent of total** is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, weight, mass, or volume.

Percent shading is a measure of the amount of sunlight potentially reaching the stream. A clinometer is used to measure left and right bank canopy angles. These values are added together, divided by 180, and multiplied by 100 to compute percentage of shade.

Periodic-record station is a site where stage, discharge, sediment, chemical, physical, or other hydrologic measure-

ments are made one or more times during a year but at a frequency insufficient to develop a daily record.

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. Although primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton are useful indicators of water quality.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7.0 standard units are termed "acidic," and solutions with a pH greater than 7.0 are termed "basic." Solutions with a pH of 7.0 are neutral. The presence and concentration of many dissolved chemical constituents found in water are affected, in part, by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms also are affected, in part, by the hydrogen-ion activity of water.

Phytoplankton is the plant part of the plankton. They usually are microscopic, and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment and commonly are known as algae. (See also "Plankton")

Picocurie (PC, pCi) is one-trillionth (1×10^{-12}) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that yields 3.7×10^{10} radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Polychlorinated naphthalenes (PCNs) are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

Pool, as used in this report, is a small part of a stream reach with little velocity, commonly with water deeper than surrounding areas.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated (carbon method) by the plants.

Primary productivity (carbon method) is expressed as milligrams of carbon per area per unit time [mg C/(m^2/time)] for periphyton and macrophytes or per volume [mg C/(m^3/time)] for phytoplankton. The carbon method defines the amount of carbon dioxide consumed as measured by radioactive carbon (carbon-14). The carbon-14 method is of greater sensitivity than the oxygen light- and dark-bottle method and is preferred for use with unenriched water samples. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

Primary productivity (oxygen method) is expressed as milligrams of oxygen per area per unit time [mg O/(m^2/time)] for periphyton and macrophytes or per volume [mg O/(m^3/time)] for phytoplankton. The oxygen method defines production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light- and dark-bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

Radioisotopes are isotopic forms of elements that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus; for example, ordinary chlorine is a mixture of isotopes having atomic weights of 35 and 37, and the natural mixture has an atomic weight of about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

Reach, as used in this report, is a length of stream that is chosen to represent a uniform set of physical, chemical, and biological conditions within a segment. It is the principal sampling unit for collecting physical, chemical, and biological data.

Recoverable is the amount of a given constituent that is in solution after a representative water sample has been

extracted or digested. Complete recovery is not achieved by the extraction or digestion and thus the determination represents something less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent extraction or digestion procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results. (See also "Bed material")

Recurrence interval, also referred to as return period, is the average time, usually expressed in years, between occurrences of hydrologic events of a specified type (such as exceedances of a specified high flow or nonexceedance of a specified low flow). The terms "return period" and "recurrence interval" do not imply regular cyclic occurrence. The actual times between occurrences vary randomly, with most of the times being less than the average and a few being substantially greater than the average. For example, the 100-year flood is the flow rate that is exceeded by the annual maximum peak flow at intervals whose average length is 100 years (that is, once in 100 years, on average); almost two-thirds of all exceedances of the 100-year flood occur less than 100 years after the previous exceedance, half occur less than 70 years after the previous exceedance, and about one-eighth occur more than 200 years after the previous exceedance. Similarly, the 7-day, 10-year low flow ($7Q_{10}$) is the flow rate below which the annual minimum 7-day-mean flow dips at intervals whose average length is 10 years (that is, once in 10 years, on average); almost two-thirds of the nonexceedances of the $7Q_{10}$ occur less than 10 years after the previous nonexceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous nonexceedance. The recurrence interval for annual events is the reciprocal of the annual probability of occurrence. Thus, the 100-year flood has a 1-percent chance of being exceeded by the maximum peak flow in any year, and there is a 10-percent chance in any year that the annual minimum 7-day-mean flow will be less than the $7Q_{10}$.

Replicate samples are a group of samples collected in a manner such that the samples are thought to be essentially identical in composition.

Return period (See "Recurrence interval")

Riffle, as used in this report, is a shallow part of the stream where water flows swiftly over completely or partially submerged obstructions to produce surface agitation.

River mileage is the curvilinear distance, in miles, measured upstream from the mouth along the meandering path of a stream channel in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council and typically is used to denote location along a river.

Run, as used in this report, is a relatively shallow part of a stream with moderate velocity and little or no surface turbulence.

Runoff is the quantity of water that is discharged ("runs off") from a drainage basin during a given time period. Runoff data may be presented as volumes in acre-feet, as mean discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches. (See also "Annual runoff")

Salinity is the total quantity of dissolved salts, measured by weight in parts per thousand. Values in this report are calculated from specific conductance and temperature. Seawater has an average salinity of about 35 parts per thousand (for additional information, refer to: Miller, R.L., Bradford, W.L., and Peters, N.E., 1988, Specific conductance: theoretical considerations and application to analytical quality control: U.S. Geological Survey Water-Supply Paper 2311, 16 p.)

Sea level, as used in this report, refers to one of the two commonly used national vertical datums (NGVD 1929 or NAVD 1988). See separate entries for definitions of these datums.

Sediment is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as "fluvial sediment." Sediment includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are affected by environmental and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

Sensible heat flux (often used interchangeably with latent sensible heat-flux density) is the amount of heat energy that moves by turbulent transport through the air across a specified cross-sectional area per unit time and goes to heating (cooling) the air. Usually expressed in watts per square meter.

Seven-day, 10-year low flow ($7Q_{10}$) is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-term average. The recurrence interval of the $7Q_{10}$ is 10 years; the chance that the annual 7-day minimum flow will be less than the $7Q_{10}$ is 10 percent in any given year. (See also "Annual 7-day minimum" and "Recurrence interval")

Shelves, as used in this report, are streambank features extending nearly horizontally from the flood plain to the lower limit of persistent woody vegetation.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

Soil heat flux (often used interchangeably with soil heat-flux density) is the amount of heat energy that moves by conduction across a specified cross-sectional area of soil per unit time and goes to heating (or cooling) the soil. Usually expressed in watts per square meter.

Soil-water content is the water lost from the soil upon drying to constant mass at 105 °C; expressed either as mass of water per unit mass of dry soil or as the volume of water per unit bulk volume of soil.

Specific electrical conductance (conductivity) is a measure of the capacity of water (or other media) to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 °C. Specific electrical conductance is a function of the types and quantity of dissolved substances in water and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stable isotope ratio (per MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific water, to evaluate mixing of different water, as an aid in determining reaction rates, and other chemical or hydrologic processes.

Stage (See "Gage height")

Stage-discharge relation is the relation between the water-surface elevation, termed stage (gage height), and the volume of water flowing in a channel per unit time.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Substrate embeddedness class is a visual estimate of riffle streambed substrate larger than gravel that is surrounded or covered by fine sediment (<2 mm, sand or finer). Below are the class categories expressed as the percentage covered by fine sediment:

0	no gravel or larger substrate	3	26-50 percent
1	> 75 percent	4	5-25 percent
2	51-75 percent	5	< 5 percent

Surface area of a lake is that area (acres) encompassed by the boundary of the lake as shown on USGS topographic maps, or other available maps or photographs. Because surface area changes with lake stage, surface areas listed in this report represent those determined for the stage at the time the maps or photographs were obtained.

Surficial bed material is the upper surface (0.1 to 0.2 foot) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Surrogate is an analyte that behaves similarly to a target analyte, but that is highly unlikely to occur in a sample. A surrogate is added to a sample in known amounts before extraction and is measured with the same laboratory procedures used to measure the target analyte. Its purpose is to monitor method performance for an individual sample.

Suspended is the amount (concentration) of undissolved material in a water-sediment mixture. Most commonly refers to that material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer filter has been extracted or digested. Complete recovery is not achieved by the extraction or digestion procedures and thus the determination represents less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent extraction or digestion procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results. (See also "Suspended")

Suspended sediment is sediment carried in suspension by the turbulent components of the fluid or by the Brownian movement (a law of physics). (See also "Sediment")

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 foot above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also "Sediment" and "Suspended sediment")

Suspended-sediment discharge (tons/d) is the rate of sediment transport, as measured by dry mass or volume, that passes a cross section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft^3/s) x 0.0027. (See also "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

Suspended-sediment load is a general term that refers to a given characteristic of the material in suspension that passes a point during a specified period of time. The term needs to be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It is not synonymous with either suspended-sediment discharge or concentration. (See also "Sediment")

Suspended solids, total residue at 105 °C concentration is the concentration of inorganic and organic material retained on a filter, expressed as milligrams of dry material per liter of water (mg/L). An aliquot of the sample is used for this analysis.

Suspended, total is the total amount of a given constituent in the part of a water-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. Knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total." Determinations of "suspended, total" constituents are made either by directly analyzing portions of the suspended material collected on the filter or, more commonly, by difference, on the basis of determinations of (1) dissolved and (2) total concentrations of the constituent. (See also "Suspended")

Synoptic studies are short-term investigations of specific water-quality conditions during selected seasonal or hydrologic periods to provide improved spatial resolution for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

Taxa (Species) richness is the number of species (taxa) present in a defined area or sampling unit.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchial scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata,* is the following:

Kingdom:	Animal
Phylum:	Arthropeda
Class:	Insecta
Order:	Ephemeroptera
Family:	Ephemeridae
Genus:	*Hexagenia*
Species:	*Hexagenia limbata*

Thalweg is the line formed by connecting points of minimum streambed elevation (deepest part of the channel).

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table descriptions and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water resulting from the mixing of flow proportionally to the duration of the concentration.

Tons per acre-foot (T/acre-ft) is the dry mass (tons) of a constituent per unit volume (acre-foot) of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY, tons/d) is a common chemical or sediment discharge unit. It is the quantity of a substance in solution, in suspension, or as bedload that passes a stream section during a 24-hour period. It is equivalent to 2,000 pounds per day, or 0.9072 metric ton per day.

Total is the amount of a given constituent in a representative whole-water (unfiltered) sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined at least 95 percent of the constituent in the sample.)

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestine of warmblooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-

negative, nonspore-forming, rod-shaped bacteria that ferment lactose with gas formation within 48 hours at 35 °C. In the laboratory, these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35 °C plus or minus 1.0 °C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 milliliters of sample. (See also "Bacteria")

Total discharge is the quantity of a given constituent, measured as dry mass or volume, that passes a stream cross section per unit of time. When referring to constituents other than water, this term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total in bottom material is the amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total length (fish) is the straight-line distance from the anterior point of a fish specimen's snout, with the mouth closed, to the posterior end of the caudal (tail) fin, with the lobes of the caudal fin squeezed together.

Total load refers to all of a constituent in transport. When referring to sediment, it includes suspended load plus bed load.

Total organism count is the number of organisms collected and enumerated in any particular sample. (See also "Organism count/volume")

Total recoverable is the amount of a given constituent in a whole-water sample after a sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data for whole-water samples, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures may produce different analytical results.

Total sediment discharge is the mass of suspended-sediment plus bed-load transport, measured as dry weight, that passes a cross section in a given time. It is a rate and is reported as tons per day. (See also "Bedload," "Bedload discharge," "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

Total sediment load or **total load** is the sediment in transport as bedload and suspended-sediment load. The term may be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It differs from total sediment discharge in that load refers to the material, whereas discharge refers to the quantity of material, expressed in units of mass per unit time. (See also "Sediment," "Suspended-sediment load," and "Total load")

Transect, as used in this report, is a line across a stream perpendicular to the flow and along which measurements are taken, so that morphological and flow characteristics along the line are described from bank to bank. Unlike a cross section, no attempt is made to determine known elevation points along the line.

Turbidity is an expression of the optical properties of a liquid that causes light rays to be scattered and absorbed rather than transmitted in straight lines through water. Turbidity, which can make water appear cloudy or muddy, is caused by the presence of suspended and dissolved matter, such as clay, silt, finely divided organic matter, plankton and other microscopic organisms, organic acids, and dyes (ASTM International, 2003, D1889–00 Standard test method for turbidity of water, *in* ASTM International, Annual Book of ASTM Standards, Water and Environmental Technology, v. 11.01: West Conshohocken, Pennsylvania, 6 p.). The color of water, whether resulting from dissolved compounds or suspended particles, can affect a turbidity measurement. To ensure that USGS turbidity data can be understood and interpreted properly within the context of the instrument used and site conditions encountered, data from each instrument type are stored and reported in the National Water Information System (NWIS) using parameter codes and measurement reporting units that are specific to the instrument type, with specific instruments designated by the method code. The respective measurement units, many of which also are in use internationally, fall into two categories: (1) the designations NTU, NTRU, BU, AU, and NTMU signify the use of a broad spectrum incident light in the wavelength range of 400-680 nanometers (nm), but having different light detection configurations; (2) The designations FNU, FNRU, FBU, FAU, and FNMU generally signify an incident light in the range between 780-900 nm, also with varying light detection configurations. These reporting units are equivalent when measuring a calibration solution (for example, formazin or polymer beads), but their respective instruments may not produce equivalent results for environmental samples. Specific reporting units are as follows:

NTU (Nephelometric Turbidity Units): white or broadband [400-680 nm] light source, 90 degree detection angle, one detector.

NTRU (Nephelometric Turbidity Ratio Units): white or broadband [400-680 nm] light source, 90 degree detection angle, multiple detectors with ratio compensation.

BU (Backscatter Units): white or broadband [400-680 nm] light source, 30 ± 15 degree detection angle (backscatter).

AU (Attenuation Units): white or broadband [400-680 nm] light source, 180 degree detection angle (attenuation).

NTMU (Nephelometric Turbidity Multibeam Units): white or broadband [400-680 nm] light source, multiple light sources, detectors at 90 degrees and possibly other angles to each beam.

FNU (Formazin Nephelometric Units): near infrared [780-900 nm] or monochrome light source, 90 degree detection angle, one detector.

FNRU (Formazin Nephelometric Ratio Units): near infrared [780-900 nm] or monochrome light source, 90 degree detection angle, multiple detectors, ratio compensation.

FBU (Formazin Backscatter Units): near infrared [780-900 nm] or monochrome light source, 30±15 degree detection angle.

FAU (Formazin Attenuation Units): near infrared [780-900 nm] light source, 180 degree detection angle.

FNMU (Formazin Nephelometric Multibeam Units): near infrared [780-900 nm] or monochrome light source, multiple light sources, detectors at 90 degrees and possibly other angles to each beam.

For more information please see http://water.usgs.gov/owq/FieldManual/Chapter6/6.7_contents.html.

Ultraviolet (UV) absorbance (absorption) at 254 or 280 nanometers is a measure of the aggregate concentration of the mixture of UV absorbing organic materials dissolved in the analyzed water, such as lignin, tannin, humic substances, and various aromatic compounds. UV absorbance (absorption) at 254 or 280 nanometers is measured in UV absorption units per centimeter of path length of UV light through a sample.

Unconfined aquifer is an aquifer whose upper surface is a water table free to fluctuate under atmospheric pressure. (See "Water-table aquifer")

Unfiltered pertains to the constituents in an unfiltered, representative water-suspended sediment sample.

Unfiltered, recoverable is the amount of a given constituent in a representative water-suspended sediment sample that has been extracted or digested. Complete recovery is not achieved by the extraction or digestion treatment and thus the determination represents less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent extraction or digestion procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results.

Vertical datum (See "Datum")

Volatile organic compounds (VOCs) are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and, subsequently, analyzed by gas chromatography. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They often are components of fuels, solvents, hydraulic fluids, paint thinners, and dry-cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human-health concern because many are toxic and are known or suspected human carcinogens.

Water table is that surface in a ground-water body at which the water pressure is equal to the atmospheric pressure.

Water-table aquifer is an unconfined aquifer within which the water table is found.

Water year in USGS reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 2002, is called the "2002 water year."

Watershed (See "Drainage basin")

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports. (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976.)

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

Wet mass is the mass of living matter plus contained water. (See also "Biomass" and "Dry mass")

Wet weight refers to the weight of animal tissue or other substance including its contained water. (See also "Dry weight")

WSP is used as an acronym for "Water-Supply Paper" in reference to previously published reports.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and often are large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers. (See also "Plankton")

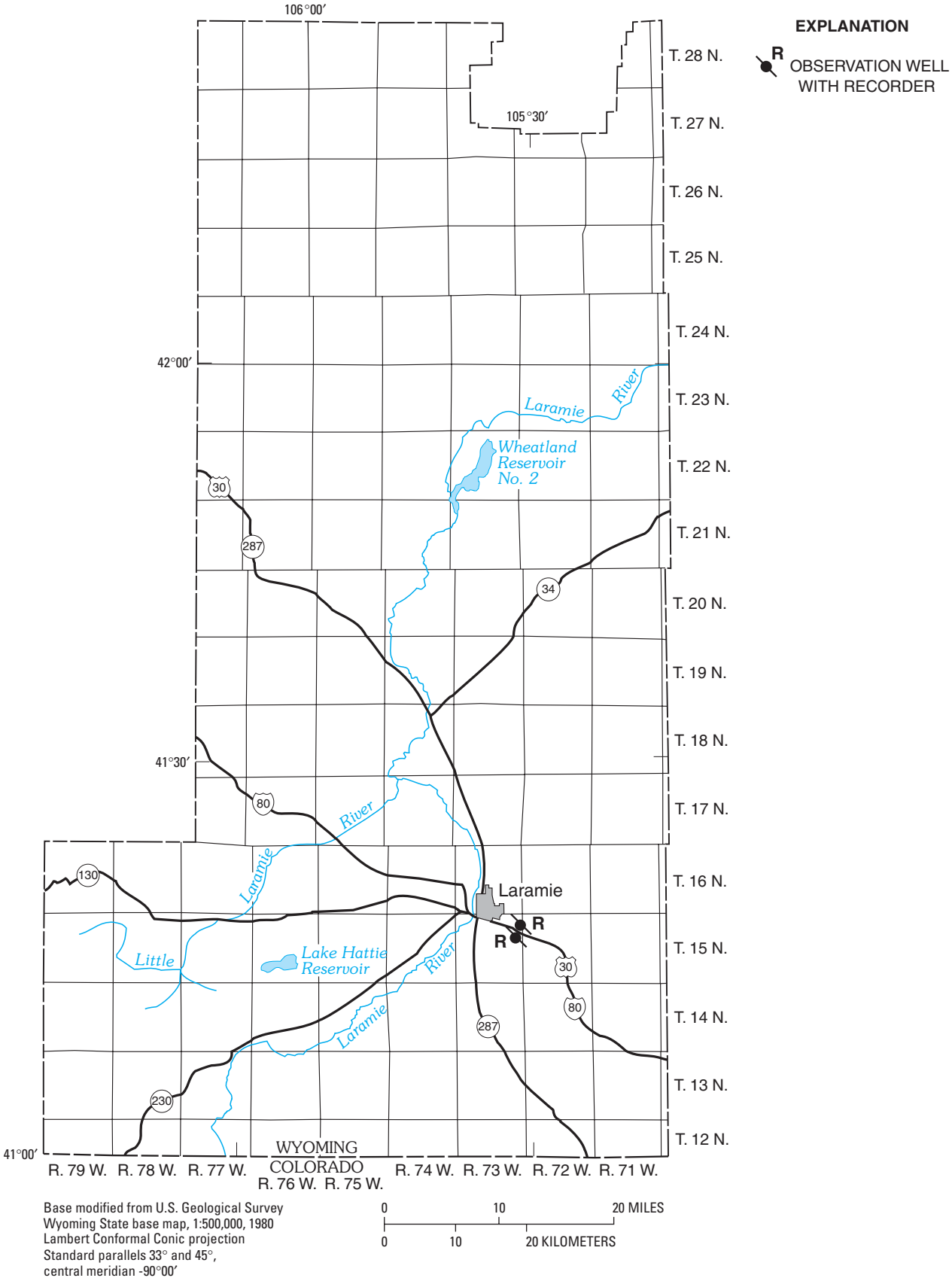


Figure 6. Location of observation wells in Albany County, Wyoming.

ALBANY COUNTY

411751105312701 15-073-01dba01 Huntoon #1

Location.--Lat 41°17'51", long 105°31'27", in NE ¼ NW ¼ SE ¼ sec.1, T.15 N., R.73 W., Hydrologic Unit 10180010.

Aquifer.--Casper Formation.

WELL CHARACTERISTICS.--Depth of well, 182 ft below land surface.

DATUM.--Elevation of land surface is 6,500 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 0.9 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1977 to current year.

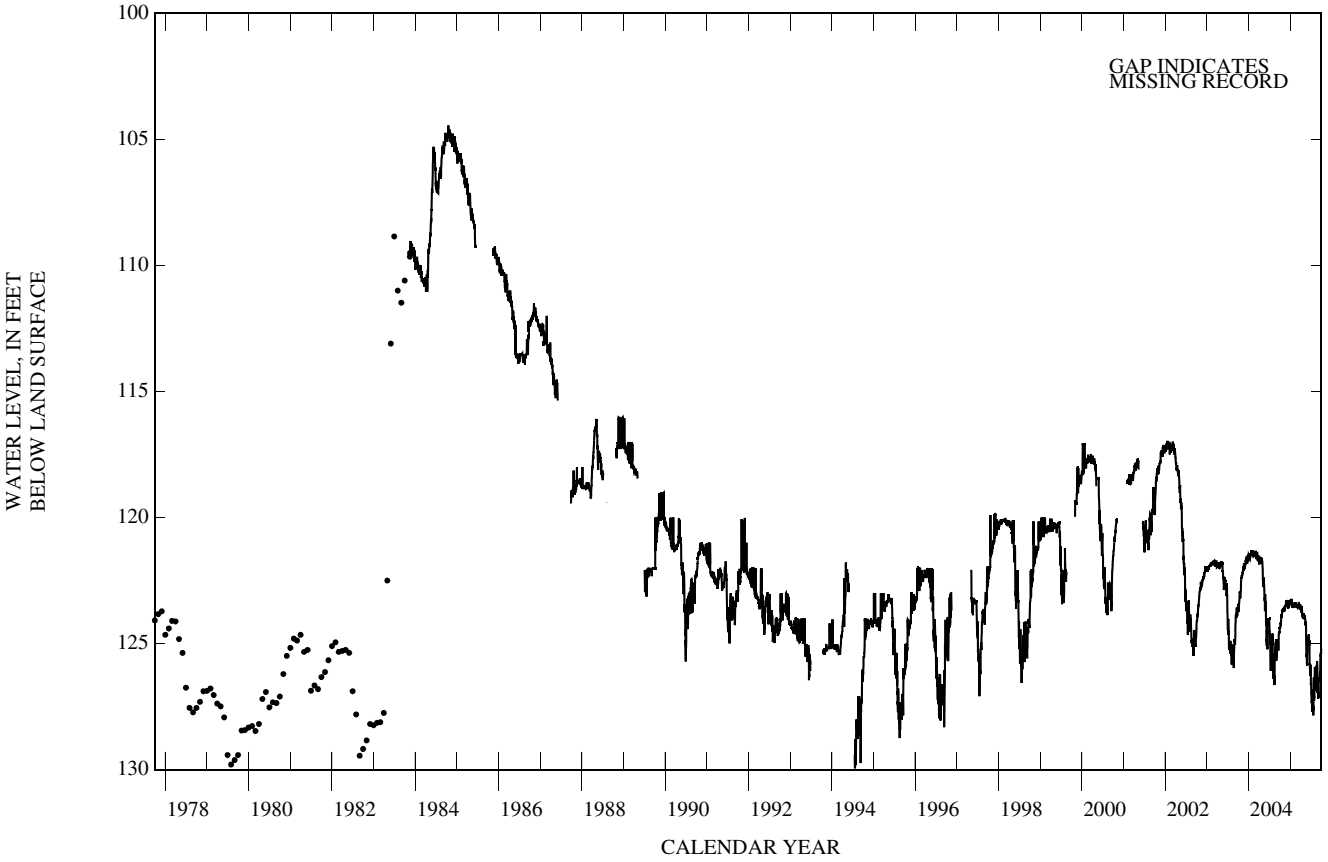
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 104.45 ft below land surface, Oct. 17, 1984; lowest, 130.56 ft below land surface, July 10, 2005.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124.36	123.70	123.45	123.30	123.51	123.48	123.67	124.00	125.38	126.64	126.75	126.80
2	124.37	123.74	123.46	123.43	123.55	123.50	123.62	124.00	125.25	126.54	126.56	126.80
3	124.37	123.65	123.46	123.44	123.59	123.51	123.61	123.94	125.01	126.72	126.36	127.19
4	124.38	123.70	123.33	123.32	123.49	123.54	123.57	123.93	124.84	126.97	126.06	126.94
5	124.35	123.69	123.28	123.32	123.38	123.55	123.60	123.97	124.85	127.00	125.93	127.13
6	124.28	123.65	123.30	123.27	123.40	123.51	123.76	124.00	124.78	127.16	126.18	127.04
7	124.23	123.71	123.36	123.32	123.38	123.55	123.69	123.91	124.77	127.22	126.76	126.74
8	124.24	123.68	123.34	123.32	123.41	123.53	123.53	123.92	124.84	127.36	126.58	126.56
9	124.17	123.55	123.31	123.36	123.48	123.59	123.53	123.96	124.89	127.25	126.69	126.49
10	124.20	123.60	123.47	123.40	123.49	123.60	123.59	123.92	124.77	127.23	126.21	126.50
11	124.17	123.59	123.41	123.25	123.46	123.57	123.68	124.01	124.68	127.69	126.20	126.35
12	124.11	123.56	123.45	123.22	123.38	123.45	123.74	124.03	124.68	127.61	126.39	126.50
13	124.07	123.52	123.61	123.37	123.41	123.51	123.75	124.07	124.65	127.66	126.09	126.42
14	123.94	123.56	123.54	123.44	123.43	123.50	123.67	124.17	124.87	127.66	125.92	126.48
15	123.98	123.61	123.49	123.49	123.43	123.48	123.79	124.28	124.90	126.84	125.90	126.34
16	123.88	123.59	123.59	123.53	123.47	123.45	123.83	124.19	125.07	126.82	126.11	126.50
17	123.98	123.60	123.55	123.58	123.49	123.35	123.90	124.13	124.86	127.43	125.94	126.20
18	123.93	123.54	123.52	123.55	123.46	123.40	123.95	124.20	124.88	127.41	125.88	126.20
19	123.86	123.50	123.43	123.58	123.37	123.41	123.85	124.44	125.30	127.43	126.28	126.12
20	123.86	123.47	123.27	123.52	123.41	123.50	123.86	124.70	125.86	127.64	126.87	126.37
21	123.76	123.48	123.35	123.42	123.46	123.50	123.89	124.90	125.78	127.47	126.51	125.96
22	123.71	123.51	123.41	123.55	123.51	123.53	124.00	125.27	126.01	127.85	125.95	125.65
23	123.72	123.42	123.40	123.51	123.52	123.43	123.92	125.52	125.89	127.62	125.78	125.49
24	123.66	123.43	123.36	123.50	123.52	123.49	123.80	125.41	126.14	126.92	125.69	125.43
25	123.71	123.39	123.40	123.47	123.51	123.54	123.85	125.57	125.99	126.53	125.75	125.44
26	123.68	123.36	123.37	123.47	123.44	123.58	123.88	125.66	126.12	126.39	125.87	125.51
27	123.68	123.35	123.45	123.41	123.50	123.56	123.89	125.75	126.28	126.35	125.93	125.34
28	123.65	123.28	123.42	123.42	123.50	123.51	123.81	125.87	126.13	126.99	126.34	125.39
29	123.67	123.49	123.34	123.47	---	123.45	123.85	125.69	125.84	127.27	126.70	125.22
30	123.64	123.47	123.26	123.45	---	123.48	123.92	125.59	125.86	127.12	126.62	125.27
31	123.59	---	123.36	123.54	---	123.63	---	125.42	---	127.15	126.94	---
MAX	124.38	123.74	123.61	123.58	123.59	123.63	124.00	125.87	126.28	127.85	126.94	127.19
MIN	123.59	123.28	123.26	123.22	123.37	123.35	123.53	123.91	124.65	126.35	125.69	125.22

ALBANY COUNTY—Continued

411751105312701 15-073-01dba01 Huntoon #1—Continued



ALBANY COUNTY—Continued

411703105314001 15-073-12dbb01 Huntoon #2

LOCATION.--Lat 41°17'03", long 105°31'40", in NW ¼ NW ¼ SE ¼ sec.12, T.15 N., R.73 W., Hydrologic Unit 10180010.

AQUIFER.--Casper Formation.

WELL CHARACTERISTICS.--Depth of well, 243 ft below land surface.

DATUM.--Elevation of land surface is 6,500 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.30 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

REMARKS.--Data from July 28 through Sept. 30, 2005 are in review.

PERIOD OF RECORD.--1978 to current year.

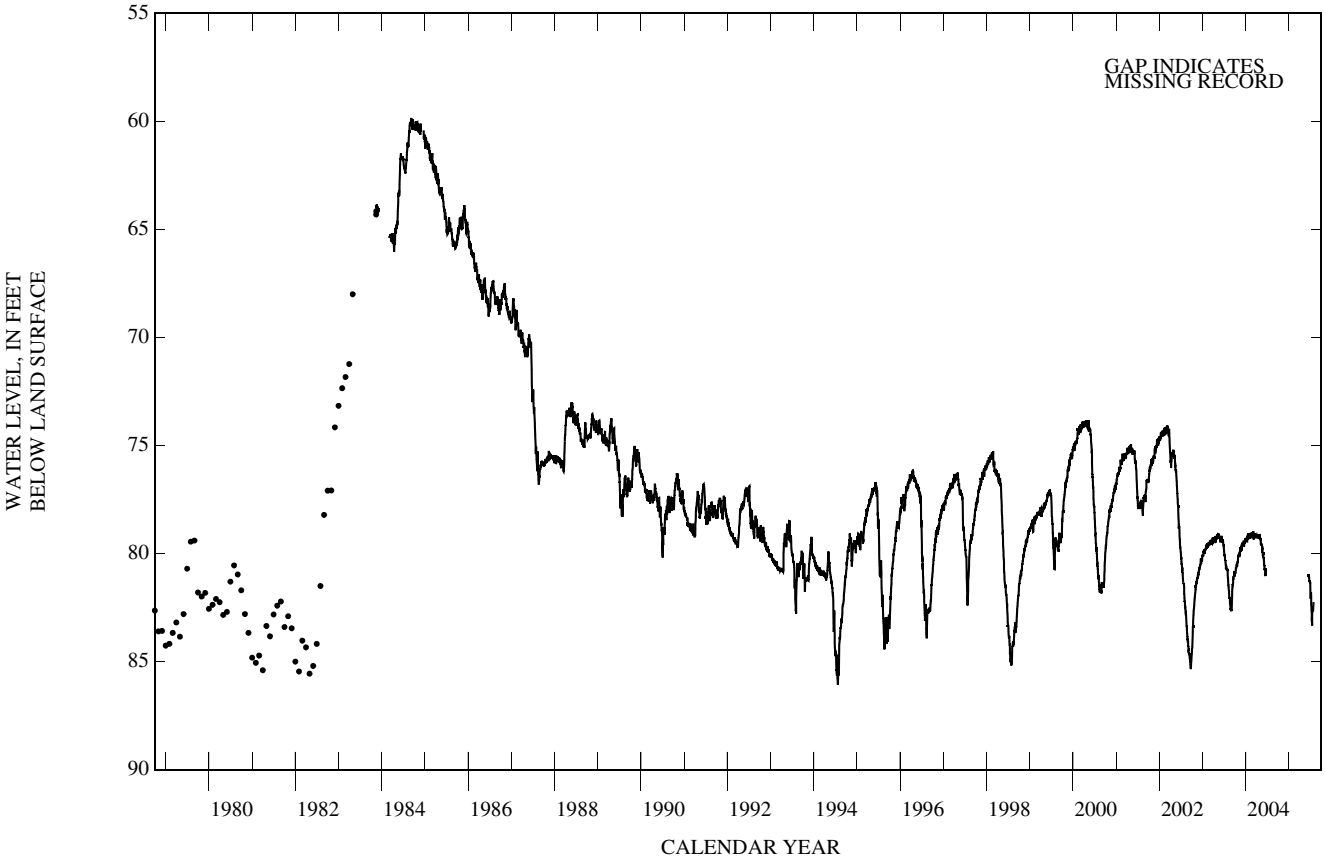
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 59.84 ft below land surface, Sept. 7, 1984; lowest, 86.08 ft below land surface, July 24, 1994.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	81.89	---	---
2	---	---	---	---	---	---	---	---	---	82.10	---	---
3	---	---	---	---	---	---	---	---	---	81.98	---	---
4	---	---	---	---	---	---	---	---	---	81.92	---	---
5	---	---	---	---	---	---	---	---	---	81.80	---	---
6	---	---	---	---	---	---	---	---	---	82.00	---	---
7	---	---	---	---	---	---	---	---	---	82.36	---	---
8	---	---	---	---	---	---	---	---	---	82.41	---	---
9	---	---	---	---	---	---	---	---	81.06	82.66	---	---
10	---	---	---	---	---	---	---	---	81.02	82.71	---	---
11	---	---	---	---	---	---	---	---	81.01	82.99	---	---
12	---	---	---	---	---	---	---	---	80.95	83.15	---	---
13	---	---	---	---	---	---	---	---	81.06	83.19	---	---
14	---	---	---	---	---	---	---	---	81.09	83.33	---	---
15	---	---	---	---	---	---	---	---	81.06	82.85	---	---
16	---	---	---	---	---	---	---	---	81.04	82.70	---	---
17	---	---	---	---	---	---	---	---	80.98	82.63	---	---
18	---	---	---	---	---	---	---	---	81.07	82.63	---	---
19	---	---	---	---	---	---	---	---	81.10	82.52	---	---
20	---	---	---	---	---	---	---	---	81.25	82.53	---	---
21	---	---	---	---	---	---	---	---	81.28	82.67	---	---
22	---	---	---	---	---	---	---	---	81.24	82.64	---	---
23	---	---	---	---	---	---	---	---	81.29	82.63	---	---
24	---	---	---	---	---	---	---	---	81.26	82.44	---	---
25	---	---	---	---	---	---	---	---	81.33	82.34	---	---
26	---	---	---	---	---	---	---	---	81.26	82.30	---	---
27	---	---	---	---	---	---	---	---	81.38	82.25	---	---
28	---	---	---	---	---	---	---	---	81.34	---	---	---
29	---	---	---	---	---	---	---	---	81.36	---	---	---
30	---	---	---	---	---	---	---	---	81.84	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---

ALBANY COUNTY—Continued

411703105314001 15-073-12dbb01 Huntoon #2—Continued



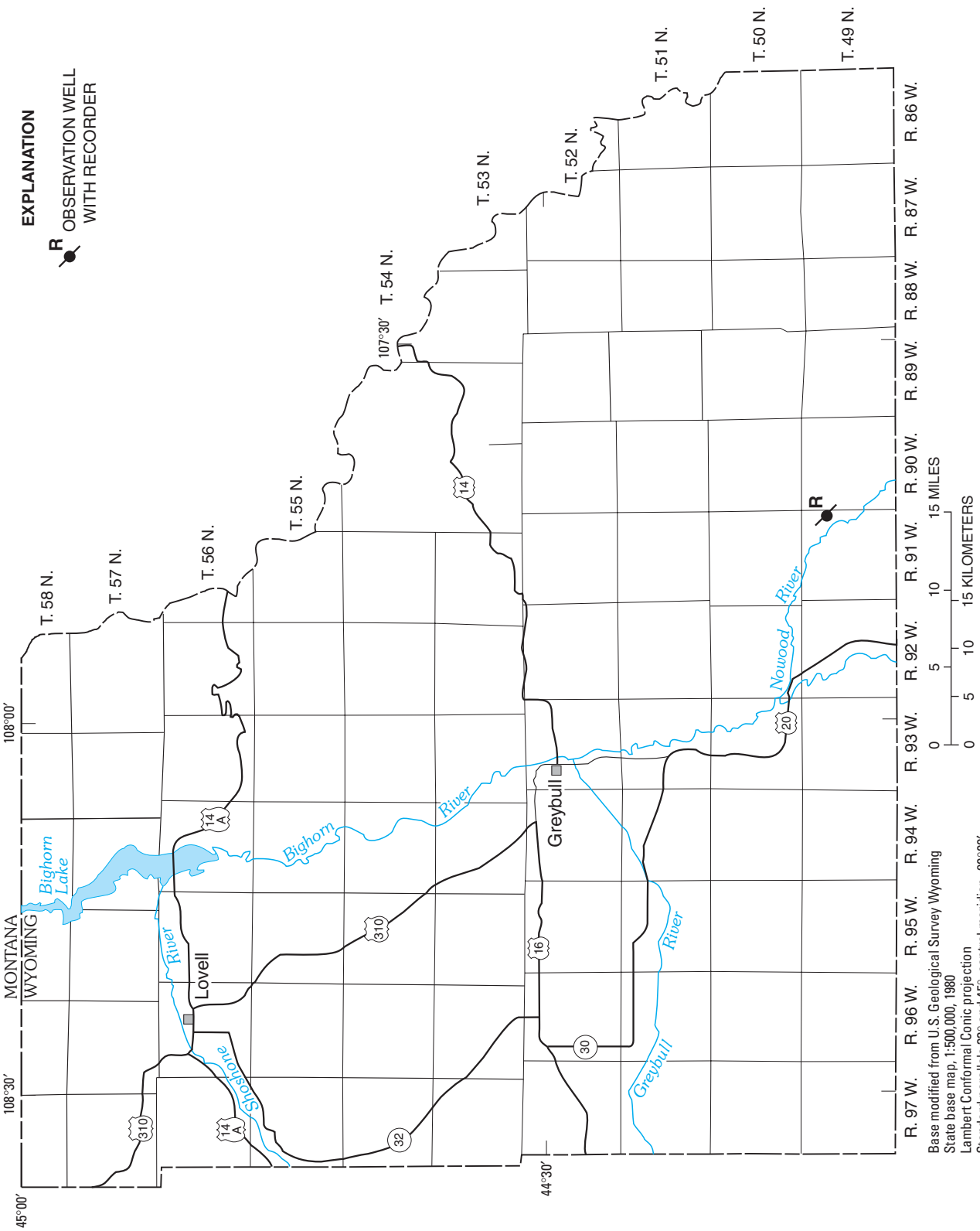


Figure 7. Location of observation well in Big Horn County, Wyoming.

BIG HORN COUNTY

441351107434701 49-091-12dba01 Worland-1

LOCATION.--Lat 44°13'53", long 107°43'41", in NE ¼ NW ¼ SE ¼ sec.12, T.49 N., R.91 W., Hydrologic Unit 10080008.

AQUIFER.--Madison Limestone.

WELL CHARACTERISTICS.--Depth of well, 2,730 ft below land surface.

DATUM.--Elevation of land surface is 4,421.7 ft above NGVD of 1929, from levels.

REMARKS.--Shut-in pressure was measured by pressure transducer and converted to hydraulic head above land surface for illustration purposes. Hydraulic head, in feet above land surface, was calculated by multiplying the shut-in pressure in pounds per square inch by 2.31. The accuracy of the hydraulic head measurements is 5.0 ft. Data collected by U.S. Geological Survey.

PERIOD OF RECORD.--1988 to current year.

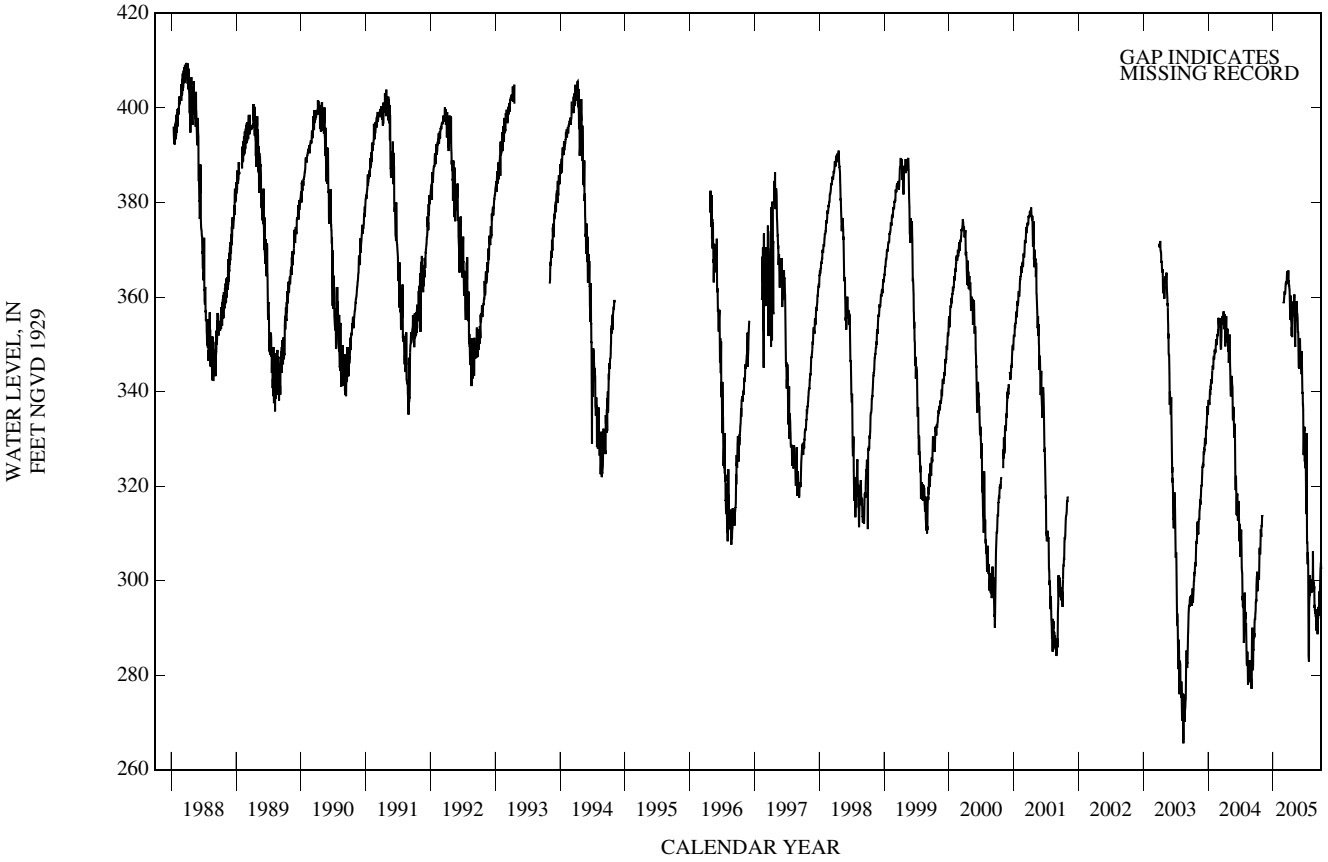
EXTREMES FOR PERIOD OF RECORD.--Highest hydraulic head, 409.50 ft above land surface, Mar. 26, 1988; lowest, 245.20 ft above land surface, Aug. 13, 2003.

HYDRAULIC HEAD, IN FEET ABOVE LAND SUFRACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	300.65	313.83	---	---	---	358.90	362.13	360.52	351.04	325.85	299.97	289.57
2	300.91	313.60	---	---	---	358.67	362.60	358.44	351.04	323.77	299.74	289.57
3	301.38	313.60	---	---	---	358.90	361.67	354.97	349.65	325.85	300.20	292.11
4	301.86	---	---	---	---	359.36	361.44	353.81	347.57	325.62	298.35	293.27
5	299.10	---	---	---	---	359.82	359.82	350.12	347.11	322.15	299.04	293.96
6	297.74	---	---	---	---	360.75	357.74	349.42	346.19	319.61	297.43	292.34
7	298.68	---	---	---	---	361.21	356.13	352.43	346.65	314.06	297.89	290.72
8	298.47	---	---	---	---	360.75	355.20	355.20	347.81	318.46	297.66	289.57
9	300.36	---	---	---	---	360.52	358.44	355.89	346.19	331.17	298.12	288.64
10	301.28	---	---	---	---	360.75	359.82	354.97	345.73	316.14	298.58	293.03
11	301.54	---	---	---	---	360.98	360.28	356.59	343.65	313.37	298.58	293.96
12	300.86	---	---	---	---	361.67	357.74	356.59	348.50	308.06	300.89	291.88
13	300.65	---	---	---	---	362.36	354.97	358.67	346.42	308.06	301.59	293.03
14	300.20	---	---	---	---	362.83	354.74	358.44	343.18	306.21	306.21	294.42
15	302.74	---	---	---	---	362.83	353.81	359.13	339.49	303.43	300.66	292.57
16	304.59	---	---	---	---	362.60	351.73	357.97	339.72	305.98	297.66	293.27
17	306.21	---	---	---	---	363.29	353.58	356.36	339.72	304.59	297.89	294.65
18	306.90	---	---	---	---	362.83	353.12	356.36	337.17	304.13	297.66	296.50
19	305.51	---	---	---	---	363.52	351.50	355.66	337.17	301.12	299.74	297.66
20	305.75	---	---	---	---	364.21	354.51	354.51	336.02	299.04	298.12	295.58
21	305.75	---	---	---	---	365.37	356.13	352.43	330.70	284.25	298.81	296.04
22	306.67	---	---	---	---	363.52	356.13	352.66	327.01	282.87	297.43	296.73
23	308.06	---	---	---	---	362.83	358.44	352.43	326.54	294.42	294.19	297.89
24	310.83	---	---	---	---	363.29	358.90	348.50	327.47	295.58	294.88	300.89
25	310.14	---	---	---	---	363.29	358.90	347.11	331.86	296.50	293.73	302.51
26	309.91	---	---	---	---	363.98	356.59	345.26	331.86	300.89	293.73	302.74
27	309.21	---	---	---	---	364.91	356.13	345.26	332.55	301.12	293.03	303.43
28	311.52	---	---	---	---	365.60	357.74	344.80	327.01	296.73	293.50	303.90
29	311.52	---	---	---	---	364.68	358.44	347.57	325.16	297.19	292.57	302.51
30	311.98	---	---	---	---	363.29	359.36	350.35	327.24	299.51	292.34	302.74
31	313.37	---	---	---	---	363.52	---	351.04	---	299.97	292.80	---
MAX	313.37	---	---	---	---	365.60	362.60	360.52	351.04	331.17	306.21	303.90
MIN	297.74	---	---	---	---	358.67	351.50	344.80	325.16	282.87	292.34	288.64

BIG HORN COUNTY—Continued

441351107434701 49-091-12dba01 Worland-1—Continued



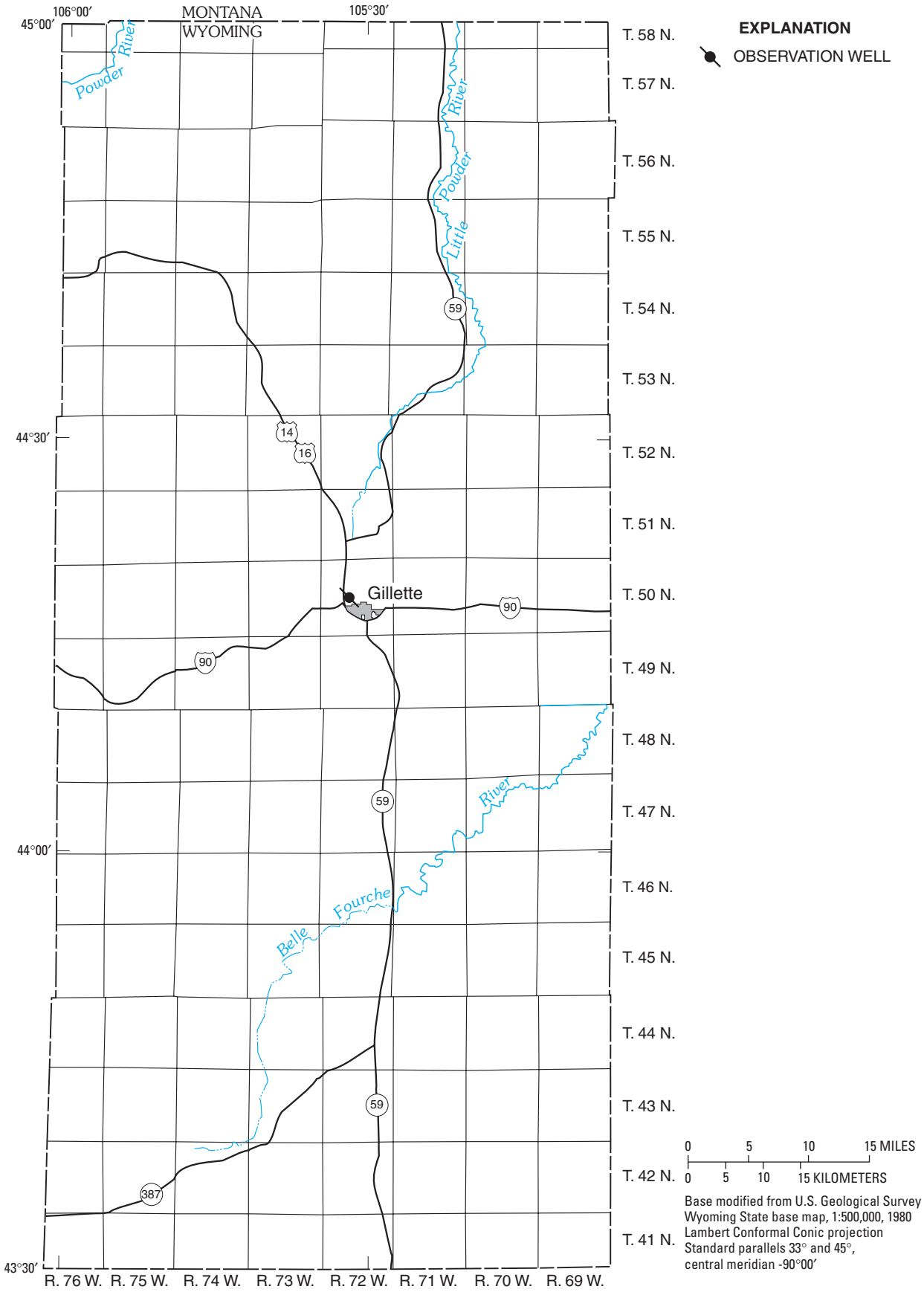


Figure 8. Location of observation well in Campbell County, Wyoming.

CAMPBELL COUNTY

441819105305701 50-072-21aba01 Gillette H-13

LOCATION.--Lat 44°18'19", long 105°30'57", in NE$^1/_4$ NW$^1/_4$ NE$^1/_4$ sec.21, T.50 N., R.72 W., Hydrologic Unit 10120201.

AQUIFER.--Wasatch Formation.

WELL CHARACTERISTICS.--Depth of well, 320 ft below land surface.

DATUM.--Elevation of land surface is 4,500 ft above sea level, from topographic map. Measuring point: top of casing, 6.35 ft below land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

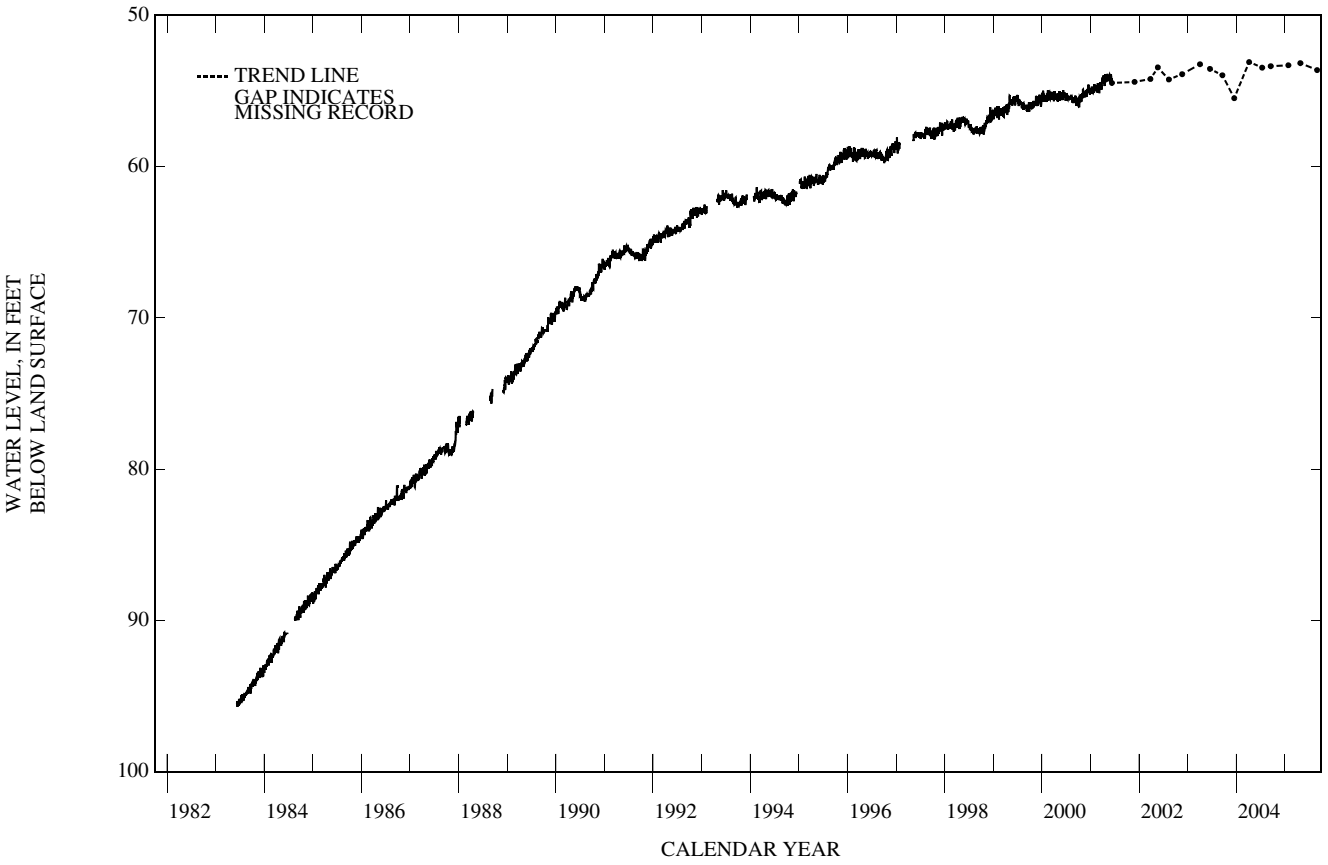
PERIOD OF RECORD.--1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 53.16 ft below land surface, Apr. 26, 2005; lowest, 95.71 ft below land surface, June 14, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 26	53.30	APR 26	53.16	AUG 30	53.62

WATER YEAR 2005 HIGHEST 53.16 APR 26, 2005 LOWEST 53.62 AUG 30, 2005



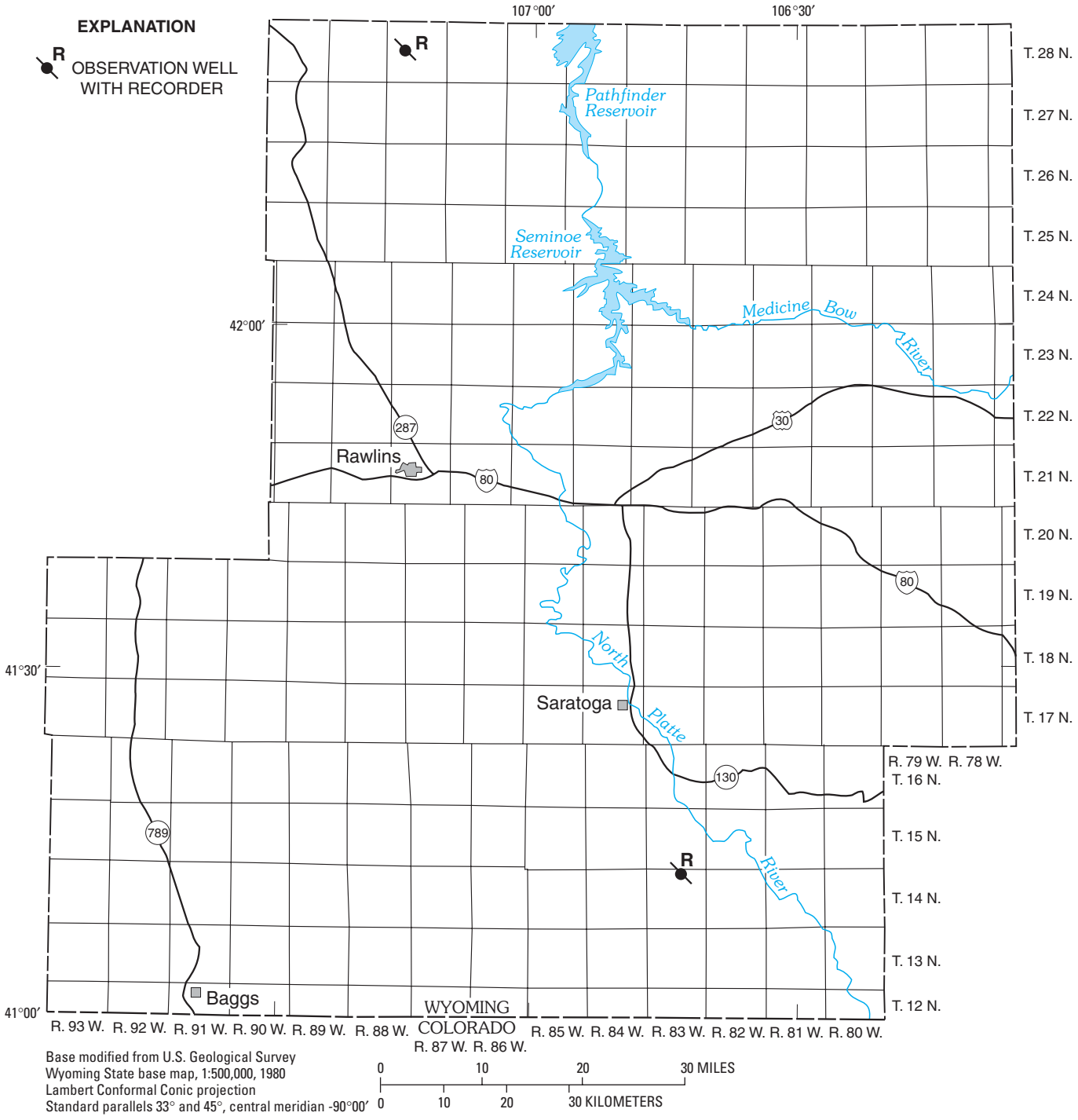


Figure 9. Location of observation wells in Carbon County, Wyoming.

CARBON COUNTY

411234106424601 14-083-03cab01 Helmer South

LOCATION.--Lat 41°12'34", long 106°42'46", in NW¼ NE¼ SW¼ sec.3, T.14 N., R.83 W., Hydrologic Unit 10180002.

AQUIFER.--Browns Park Formation (formerly North Park Formation).

WELL CHARACTERISTICS.--Depth of well, 58 ft below land surface.

DATUM.--Elevation of land surface is 7,245 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 5.40 ft below land surface.

REMARKS.--Data collected by U.S. Geological Survey.

PERIOD OF RECORD.--1980 to current year.

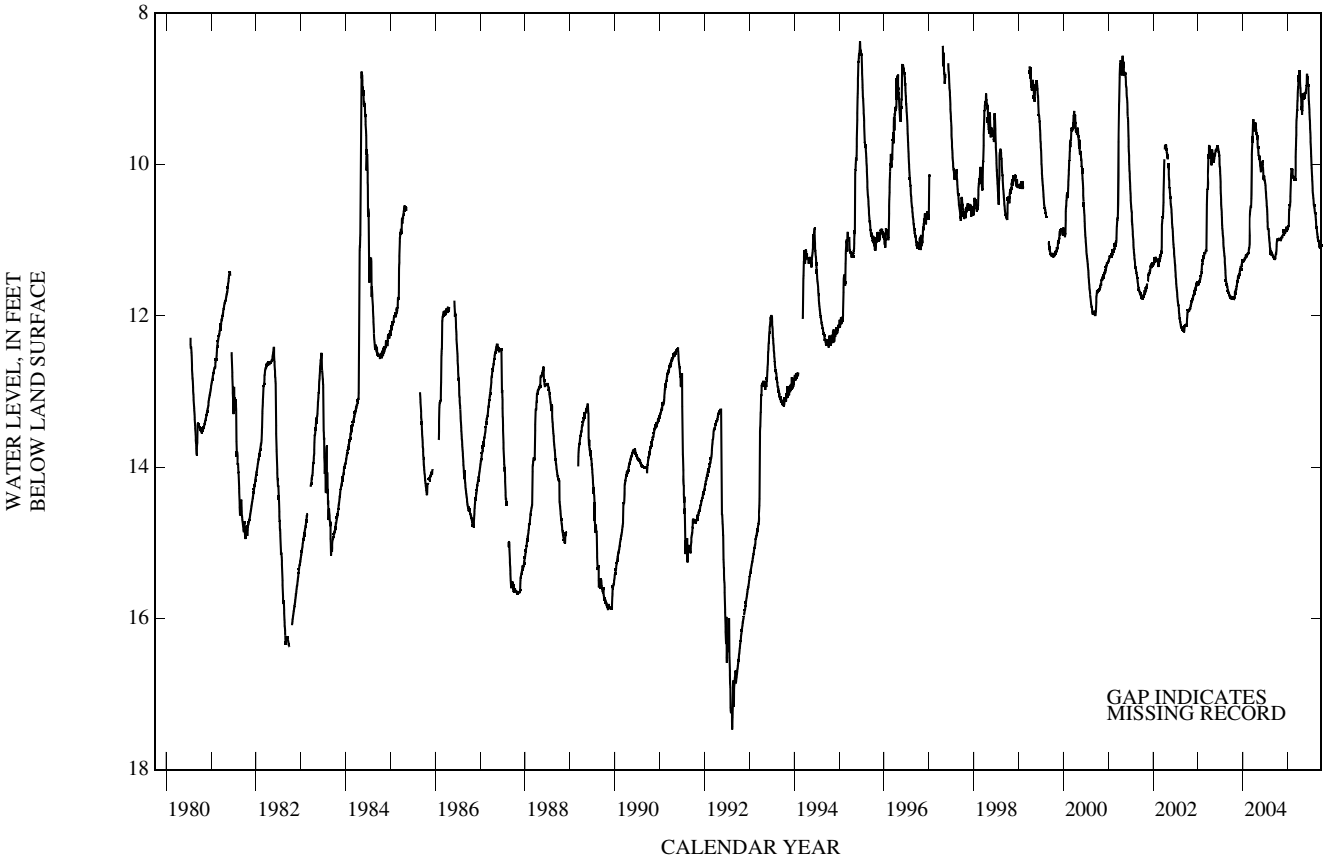
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.37 ft below land surface, June 20, 1995; lowest, 17.47 ft below land surface, Aug. 13, 1992.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.08	11.00	10.92	10.83	10.06	10.20	8.87	9.17	8.96	9.52	10.54	10.96
2	11.05	11.01	10.92	10.84	10.07	10.21	8.81	9.07	8.96	9.55	10.54	10.97
3	11.03	10.99	10.91	10.83	10.07	10.20	8.77	9.06	8.94	9.58	10.54	10.99
4	11.01	11.00	10.87	10.81	10.06	10.19	8.75	9.07	8.83	9.65	10.56	11.00
5	10.99	11.00	10.87	10.82	10.05	10.08	8.79	9.10	8.81	9.70	10.57	11.00
6	10.99	11.00	10.88	10.80	10.07	9.90	8.87	9.07	8.80	9.73	10.58	11.01
7	10.99	10.99	10.88	10.81	10.07	9.80	8.79	9.10	8.81	9.78	10.60	11.02
8	11.01	10.98	10.87	10.81	10.09	9.75	8.76	9.13	8.85	9.82	10.61	11.02
9	10.99	10.96	10.87	10.81	10.14	9.65	8.82	9.12	8.88	9.85	10.63	11.01
10	10.99	10.97	10.91	10.74	10.17	9.61	8.89	9.14	8.85	9.89	10.65	11.01
11	11.00	10.96	10.88	10.60	10.16	9.51	8.95	9.13	8.85	9.95	10.64	11.04
12	11.00	10.96	10.88	10.60	10.15	9.41	8.98	9.10	8.85	10.01	10.64	11.05
13	11.00	10.96	10.88	10.58	10.17	9.39	8.99	9.11	8.91	10.04	10.65	11.07
14	10.99	10.96	10.86	10.57	10.16	9.37	8.99	9.11	8.94	10.05	10.67	11.08
15	10.98	10.96	10.86	10.56	10.17	9.36	9.06	9.10	8.95	10.10	10.69	11.09
16	10.98	10.96	10.88	10.54	10.19	9.31	9.10	9.06	8.96	10.14	10.72	11.08
17	10.98	10.96	10.87	10.55	10.19	9.27	9.09	9.05	8.96	10.16	10.73	11.09
18	10.98	10.94	10.87	10.54	10.16	9.29	9.09	9.12	9.00	10.20	10.74	11.09
19	10.99	10.94	10.84	10.54	10.15	9.23	9.11	9.13	9.07	10.22	10.80	11.11
20	10.99	10.93	10.82	10.50	10.18	9.16	9.17	9.08	9.15	10.27	10.81	11.11
21	10.98	10.94	10.83	10.49	10.20	9.15	9.25	9.08	9.17	10.31	10.83	11.10
22	10.97	10.93	10.84	10.42	10.20	9.05	9.28	9.06	9.19	10.34	10.83	11.09
23	10.99	10.92	10.84	10.34	10.20	9.01	9.26	9.05	9.20	10.37	10.84	11.07
24	10.99	10.93	10.86	10.27	10.21	9.01	9.23	9.04	9.25	10.39	10.85	11.07
25	10.98	10.92	10.86	10.22	10.18	8.98	9.29	9.06	9.27	10.40	10.87	11.09
26	10.99	10.91	10.86	10.17	10.18	8.98	9.34	9.05	9.31	10.41	10.88	11.09
27	10.99	10.87	10.87	10.14	10.20	8.90	9.32	9.04	9.35	10.44	10.90	11.09
28	10.99	10.87	10.86	10.12	10.20	8.83	9.28	9.02	9.40	10.45	10.91	11.09
29	10.99	10.93	10.84	10.08	---	8.83	9.28	9.02	9.42	10.48	10.92	11.07
30	10.99	10.93	10.84	10.07	---	8.82	9.23	9.00	9.49	10.51	10.93	11.07
31	10.98	---	10.84	10.06	---	8.91	---	8.99	---	10.53	10.96	---
MAX	11.08	11.01	10.92	10.84	10.21	10.21	9.34	9.17	9.49	10.53	10.96	11.11
MIN	10.97	10.87	10.82	10.06	10.05	8.82	8.75	8.99	8.80	9.52	10.54	10.96

CARBON COUNTY—Continued

411234106424601 14-083-03cab01 Helmer South—Continued



CARBON COUNTY—Continued

422338107145001 28-087-16cca01 Split Rock #2

LOCATION.--Lat 42°23'38", long 107°14'50", in NE¼ SW¼ SW¼ sec.16, T.28 N, R.87 W., Hydrologic Unit 10180006.

AQUIFER.--White River Formation (formerly Arikaree Formation).

WELL CHARACTERISTICS.--Depth of well, 812 ft below land surface.

DATUM.--Elevation of land surface is 6,000 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.95 ft above land surface.

REMARKS.--The record from a twenty-day pumping test conducted in September and October 1981 is not shown on the hydrograph.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1981 to current year.

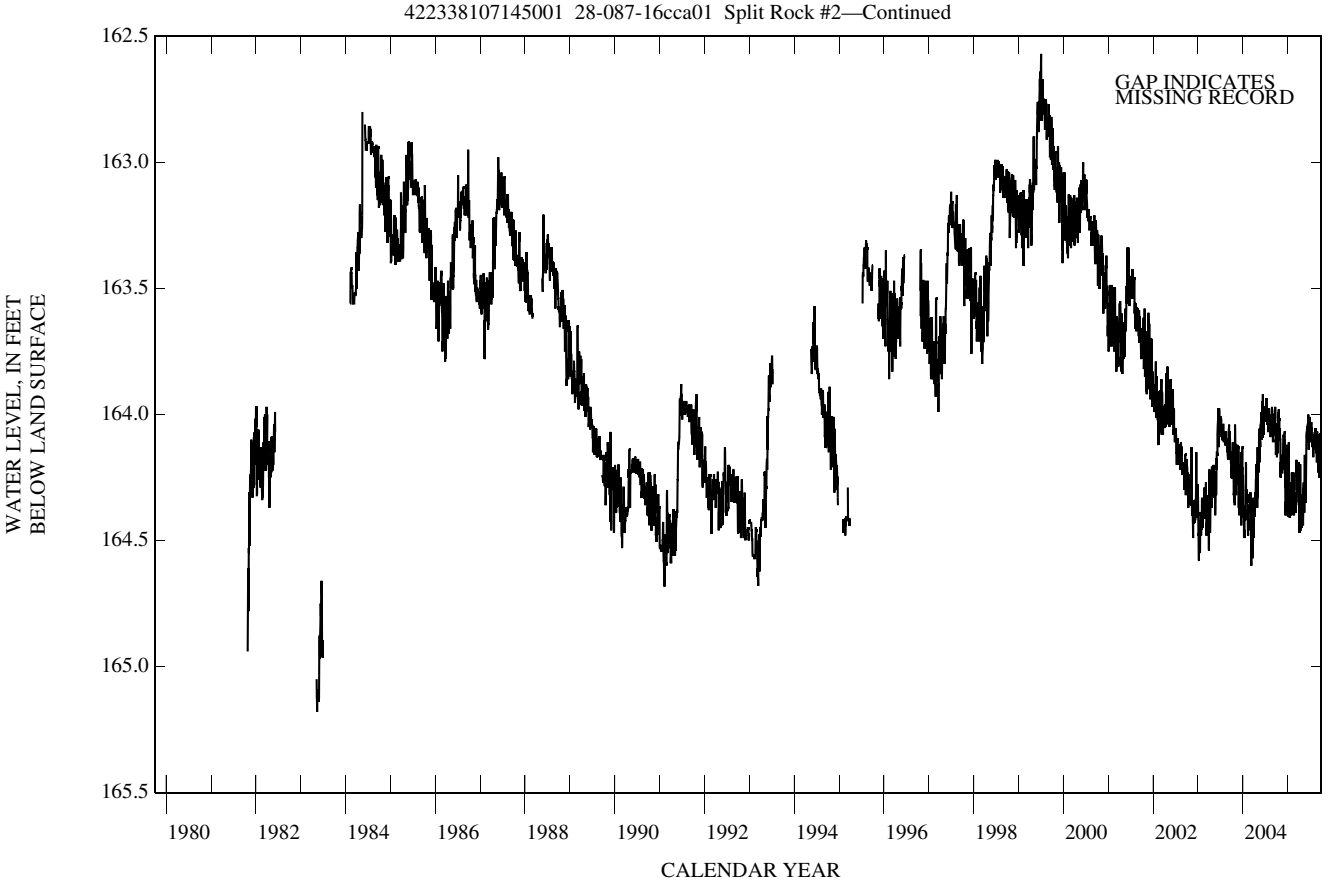
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 162.57 ft below land surface, July 3, 1999; lowest, 182.66 ft below land surface, Oct. 16, 1981, affected by pumping test.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164.04	164.12	164.21	164.29	164.24	164.34	164.19	164.34	164.09	164.09	164.11	164.13
2	164.11	164.25	164.21	164.29	164.23	164.36	164.20	164.37	164.08	164.06	164.10	164.11
3	164.14	164.19	164.15	164.19	164.24	164.36	164.33	164.41	164.07	164.06	164.08	164.13
4	164.17	164.20	164.07	164.13	164.24	164.38	164.47	164.44	164.07	164.06	164.11	164.19
5	164.14	164.25	164.07	164.15	164.30	164.39	164.39	164.40	164.09	164.04	164.11	164.23
6	164.12	164.22	164.11	164.15	164.37	164.34	164.31	164.40	164.05	164.05	164.09	164.20
7	164.11	164.23	164.10	164.20	164.38	164.31	164.25	164.37	164.05	164.11	164.07	164.12
8	164.12	164.22	164.11	164.17	164.24	164.34	164.29	164.30	164.06	164.10	164.08	164.11
9	164.11	164.16	164.29	164.11	164.24	164.36	164.47	164.27	164.08	164.10	164.10	164.12
10	164.09	164.16	164.22	164.13	164.25	164.33	164.30	164.32	164.08	164.04	164.14	164.23
11	164.12	164.22	164.28	164.23	164.27	164.19	164.20	164.30	164.04	164.03	164.11	164.19
12	164.15	164.22	164.40	164.31	164.37	164.18	164.20	164.29	164.04	164.06	164.07	164.21
13	164.15	164.19	164.35	164.39	164.39	164.24	164.30	164.33	164.11	164.05	164.07	164.15
14	164.12	164.20	164.35	164.40	164.30	164.25	164.36	164.33	164.10	164.05	164.11	164.10
15	164.08	164.23	164.40	164.40	164.23	164.23	164.38	164.39	164.05	164.11	164.13	164.08
16	164.01	164.23	164.39	164.41	164.24	164.30	164.35	164.35	164.00	164.10	164.12	164.08
17	164.00	164.23	164.36	164.39	164.30	164.22	164.38	164.19	164.02	164.09	164.06	164.11
18	163.98	164.20	164.15	164.35	164.37	164.21	164.46	164.16	164.09	164.08	164.06	164.25
19	163.99	164.18	164.15	164.39	164.39	164.29	164.39	164.19	164.14	164.10	164.15	164.15
20	164.03	164.18	164.18	164.40	164.40	164.29	164.32	164.29	164.10	164.13	164.15	164.08
21	164.03	164.17	164.22	164.37	164.35	164.29	164.32	164.31	164.10	164.11	164.15	164.08
22	164.02	164.15	164.25	164.36	164.34	164.29	164.34	164.31	164.07	164.11	164.14	---
23	164.02	164.15	164.24	164.33	164.37	164.29	164.36	164.31	164.04	164.13	164.14	---
24	164.03	164.12	164.23	164.27	164.36	164.29	164.45	164.29	164.04	164.11	164.19	---
25	164.08	164.09	164.23	164.28	164.35	164.29	164.43	164.28	164.04	164.10	164.18	---
26	164.09	164.09	164.27	164.34	164.35	164.29	164.34	164.34	164.04	164.10	164.09	---
27	164.10	164.08	164.12	164.34	164.36	164.29	164.34	164.35	164.09	164.17	164.07	---
28	164.06	164.09	164.12	164.38	164.38	164.31	164.37	164.25	164.03	164.14	164.07	---
29	164.06	164.22	164.15	164.38	---	164.34	164.36	164.20	164.01	164.12	164.11	---
30	164.10	164.20	164.15	164.40	---	164.35	164.34	164.17	164.04	164.10	164.14	---
31	164.10	---	164.23	164.40	---	164.21	---	164.15	---	164.10	164.13	---
MAX	164.17	164.25	164.40	164.41	164.40	164.39	164.47	164.44	164.14	164.17	164.19	---
MIN	163.98	164.08	164.07	164.11	164.23	164.18	164.19	164.15	164.00	164.03	164.06	---

CARBON COUNTY—Continued

422338107145001 28-087-16cca01 Split Rock #2—Continued



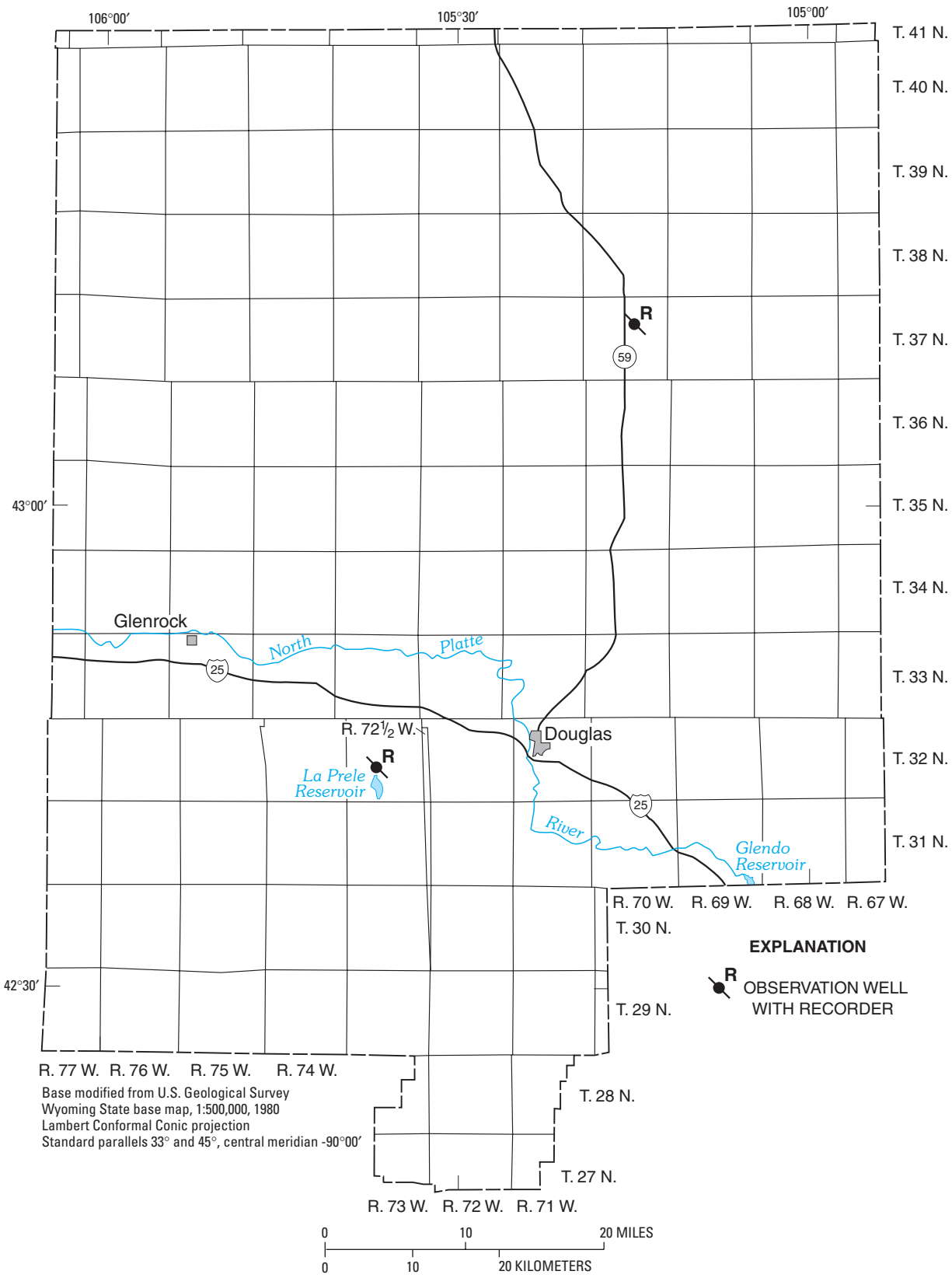


Figure 10. Location of observation wells in Converse County, Wyoming.

CONVERSE COUNTY

424420105364201 32-073-16cdb01 Natural Bridge East

LOCATION.--Lat 42°44'20", long 105°36'42", in NW¼ SE¼ SW¼ sec.16, T.32 N., R.73 W., Hydrologic Unit 10180007.

AQUIFER.--Casper Formation.

WELL CHARACTERISTICS.--Depth of well, 220 ft below land surface.

DATUM.--Elevation of land surface is 5,316.4 ft above NGVD of 1929, from levels. Measuring point: top of casing, 1.70 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1986 to current year.

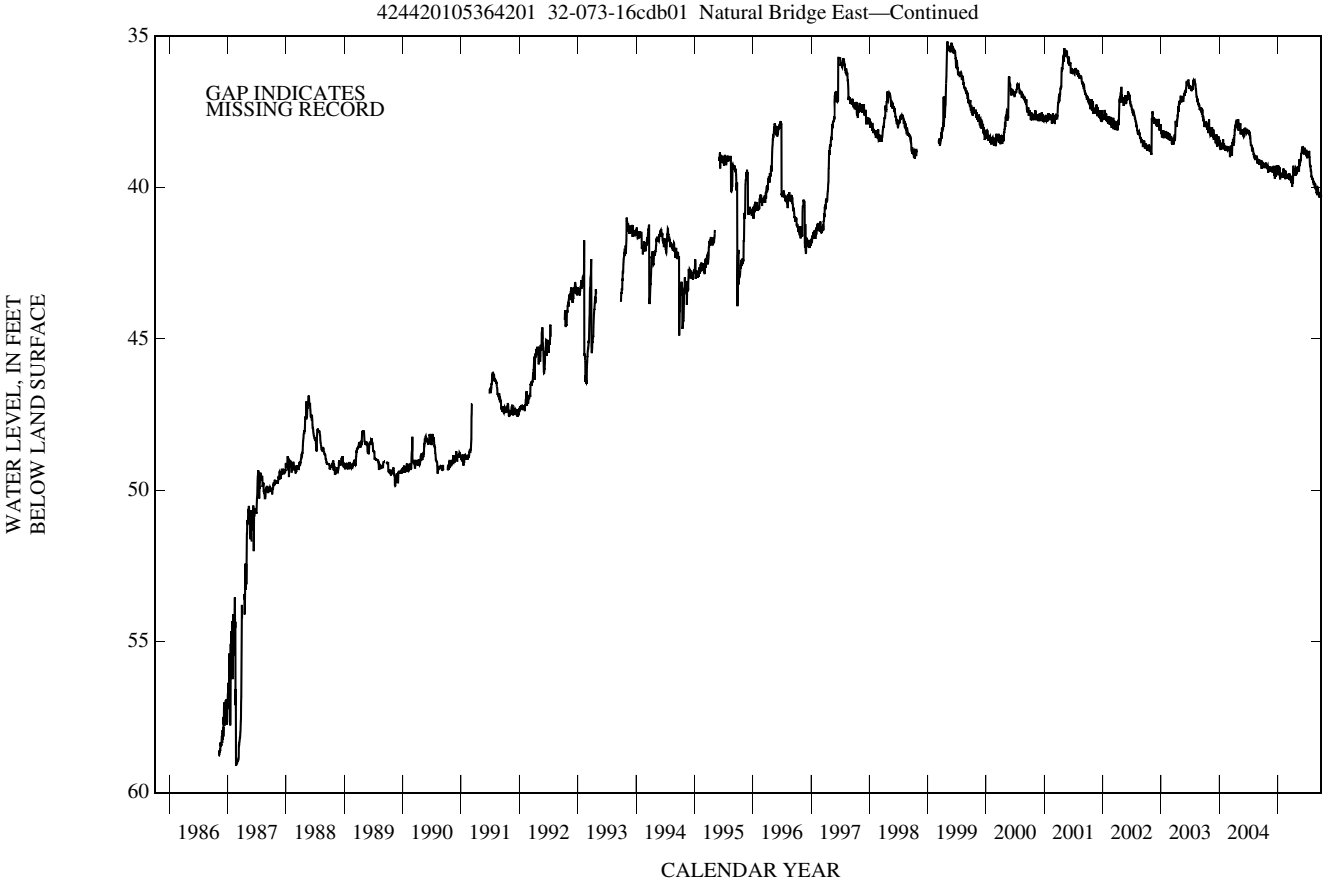
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 35.19 ft below land surface, May 3, 4, 1999; lowest, 59.12 ft below land surface , Feb. 21, 1987.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39.26	39.51	39.49	39.45	39.61	39.62	39.86	39.56	38.74	38.91	39.64	40.17
2	39.33	39.45	39.43	39.58	39.65	39.63	39.80	39.47	38.73	38.83	39.65	40.18
3	39.35	39.40	39.39	39.54	39.68	39.66	39.71	39.42	38.72	38.91	39.68	40.15
4	39.31	39.48	39.37	39.59	39.49	39.68	39.70	39.41	38.73	39.03	39.75	40.15
5	39.26	39.42	39.28	39.48	39.37	39.70	39.81	39.42	38.68	38.97	39.70	40.15
6	39.26	39.43	39.33	39.28	39.56	39.54	39.88	39.32	38.63	38.89	39.70	40.22
7	39.27	39.47	39.36	39.43	39.52	39.62	39.48	39.29	38.67	38.89	39.70	40.17
8	39.34	39.42	39.32	39.39	39.61	39.64	39.28	39.33	38.74	38.91	39.72	40.07
9	39.23	39.29	39.40	39.50	39.65	39.62	39.31	39.33	38.81	38.85	39.74	39.99
10	39.25	39.44	39.61	39.53	39.68	39.69	39.51	39.34	38.81	38.86	39.81	40.00
11	39.36	39.41	39.41	39.33	39.56	39.56	39.46	39.43	38.81	38.95	39.82	40.13
12	39.32	39.45	39.53	39.37	39.42	39.53	39.47	39.42	38.78	39.00	39.78	40.17
13	39.34	39.42	39.71	39.60	39.46	39.71	39.43	39.44	38.81	38.93	39.88	40.24
14	39.24	39.48	39.47	39.69	39.54	39.75	39.39	39.44	38.90	38.92	39.88	40.21
15	39.24	39.41	39.49	39.73	39.62	39.71	39.55	39.24	38.84	38.88	39.88	40.24
16	39.17	39.43	39.63	39.64	39.72	39.65	39.48	39.11	38.81	38.79	39.87	40.18
17	39.19	39.46	39.57	39.65	39.66	39.54	39.38	39.06	38.68	38.80	39.84	40.18
18	39.21	39.35	39.61	39.56	39.56	39.71	39.36	39.24	38.71	38.99	39.85	40.28
19	39.32	39.34	39.33	39.66	39.44	39.73	39.43	39.29	38.82	39.00	39.91	40.33
20	39.30	39.45	39.28	39.57	39.56	39.69	39.50	39.18	38.88	39.11	39.98	40.28
21	39.30	39.41	39.51	39.51	39.63	39.74	39.53	39.17	38.84	39.25	39.99	40.25
22	39.24	39.34	39.57	39.64	39.68	39.77	39.61	39.16	38.79	39.27	39.93	40.24
23	39.30	39.39	39.56	39.60	39.70	39.67	39.43	39.13	38.75	39.27	39.90	40.18
24	39.30	39.33	39.45	39.56	39.68	39.78	39.36	39.09	38.81	39.30	39.90	40.22
25	39.34	39.31	39.53	39.58	39.60	39.83	39.37	39.11	38.78	39.30	39.99	40.31
26	39.37	39.35	39.47	39.56	39.61	39.85	39.46	39.02	38.78	39.44	40.02	40.33
27	39.39	39.35	39.52	39.51	39.68	39.72	39.49	38.91	38.82	39.44	40.03	40.27
28	39.28	39.36	39.51	39.53	39.62	39.61	39.47	38.86	38.85	39.44	40.03	40.33
29	39.27	39.51	39.27	39.63	---	39.62	39.48	38.88	38.87	39.48	39.99	40.24
30	39.34	39.43	39.29	39.62	---	39.75	39.52	38.85	38.97	39.60	39.99	40.23
31	39.36	---	39.46	39.62	---	39.98	---	38.82	---	39.66	40.19	---
MAX	39.39	39.51	39.71	39.73	39.72	39.98	39.88	39.56	38.97	39.66	40.19	40.33
MIN	39.17	39.29	39.27	39.28	39.37	39.53	39.28	38.82	38.63	38.79	39.64	39.99

CONVERSE COUNTY—Continued

424420105364201 32-073-16cdb01 Natural Bridge East—Continued



CONVERSE COUNTY—Continued

431140105151901 37-070-10cbb01 Bill #6

LOCATION.--Lat 43°11'40", long 105°15'19", in NW¼ NW¼ SW¼ sec.10, T.37 N., R.70 W., Hydrologic Unit 10120105.

AQUIFER.--Wasatch Formation.

WELL CHARACTERISTICS.--Depth of well, 268 ft below land surface.

DATUM.--Elevation of land surface is 4,720 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 0.40 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1986 to current year.

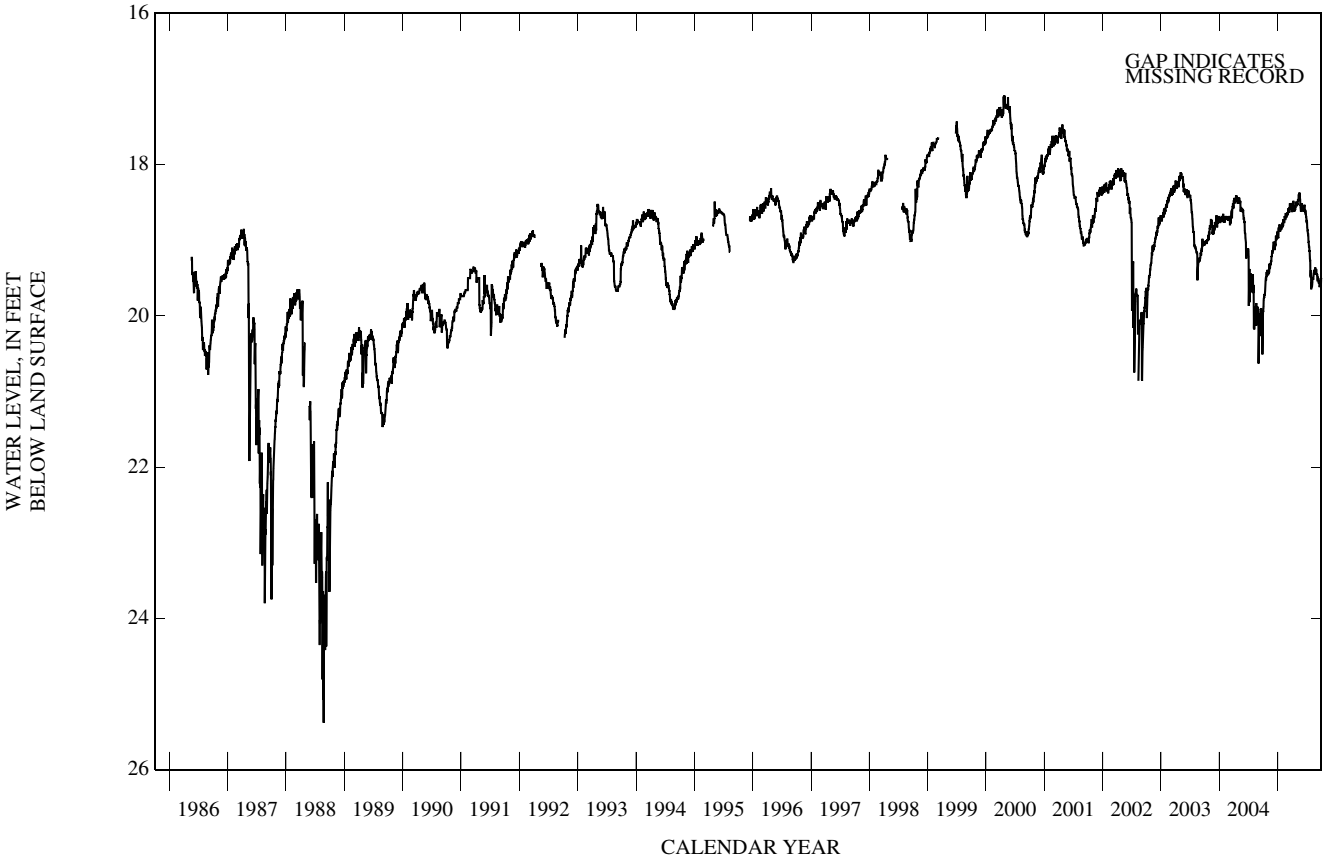
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 17.09 ft below land surface, Apr. 23, 25, 2000; lowest, 25.38 ft below land surface, Aug. 31, 1988.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.95	19.46	19.14	18.95	18.80	18.64	18.58	18.55	18.51	18.76	19.56	19.45
2	19.90	19.41	19.09	18.97	18.80	18.64	18.56	18.54	18.54	18.73	19.62	19.45
3	19.88	19.41	19.07	18.96	18.81	18.66	18.53	18.52	18.57	18.76	19.61	19.44
4	19.79	19.44	19.03	18.96	18.74	18.66	18.52	18.51	18.58	18.83	19.59	19.46
5	19.77	19.41	19.02	18.91	18.72	18.65	18.56	18.53	18.57	18.85	19.56	19.46
6	19.76	19.39	19.03	18.83	18.76	18.58	18.62	18.50	18.56	18.87	19.52	19.53
7	19.75	19.43	19.04	18.87	18.74	18.61	18.54	18.47	18.55	18.87	19.51	19.53
8	19.75	19.39	19.02	18.84	18.75	18.62	18.49	18.46	18.59	18.90	19.51	19.49
9	19.71	19.31	19.03	18.87	18.76	18.58	18.49	18.47	18.60	18.92	19.52	19.48
10	19.72	19.38	19.09	18.87	18.76	18.63	18.57	18.47	18.61	18.92	19.51	19.50
11	19.72	19.35	19.03	18.79	18.72	18.58	18.54	18.45	18.62	18.95	19.52	19.52
12	19.70	19.38	19.08	18.81	18.68	18.57	18.57	18.41	18.60	19.02	19.48	19.54
13	19.67	19.36	19.13	18.85	18.69	18.62	18.57	18.39	18.59	19.02	19.46	19.55
14	19.62	19.31	19.05	18.89	18.69	18.62	18.55	18.45	18.58	19.05	19.44	19.56
15	19.58	19.32	19.06	18.87	18.71	18.59	18.62	18.43	18.54	19.08	19.44	19.57
16	19.54	19.31	19.08	18.88	18.72	18.55	18.59	18.38	18.55	19.08	19.42	19.54
17	19.52	19.33	19.05	18.87	18.72	18.51	18.56	18.37	18.53	19.09	19.40	19.54
18	19.49	19.29	19.06	18.85	18.68	18.56	18.56	18.41	18.56	19.15	19.40	19.57
19	19.53	19.27	18.95	18.85	18.64	18.55	18.58	18.42	18.60	19.13	19.42	19.61
20	19.48	19.29	18.94	18.85	18.67	18.54	18.60	18.45	18.61	19.19	19.43	19.62
21	19.49	19.27	18.99	18.81	18.68	18.55	18.56	18.46	18.64	19.24	19.43	19.61
22	19.42	19.21	19.00	18.86	18.69	18.56	18.57	18.53	18.61	19.27	19.40	19.59
23	19.47	19.22	18.99	18.84	18.70	18.54	18.53	18.53	18.61	19.27	19.36	19.60
24	19.47	19.21	18.94	18.83	18.69	18.56	18.49	18.57	18.66	19.48	19.37	19.58
25	19.43	19.17	18.97	18.81	18.66	18.58	18.50	18.59	18.65	19.48	19.38	19.58
26	19.47	19.14	18.95	18.83	18.64	18.59	18.53	18.62	18.66	19.48	19.42	19.58
27	19.45	19.18	18.98	18.78	18.65	18.55	18.53	18.57	18.69	19.41	19.43	19.50
28	19.39	19.15	18.97	18.78	18.64	18.52	18.52	18.56	18.69	19.41	19.43	19.58
29	19.41	19.14	18.89	18.82	---	18.52	18.52	18.62	18.71	19.65	19.38	19.50
30	19.43	19.13	18.89	18.82	---	18.55	18.53	18.58	18.76	19.61	19.40	19.51
31	19.42	---	18.95	18.82	---	18.63	---	18.56	---	19.57	19.46	---
MAX	19.95	19.46	19.14	18.97	18.81	18.66	18.62	18.62	18.76	19.65	19.62	19.62
MIN	19.39	19.13	18.89	18.78	18.64	18.51	18.49	18.37	18.51	18.73	19.36	19.44

CONVERSE COUNTY—Continued

431140105151901 37-070-10cbb01 Bill #6—Continued



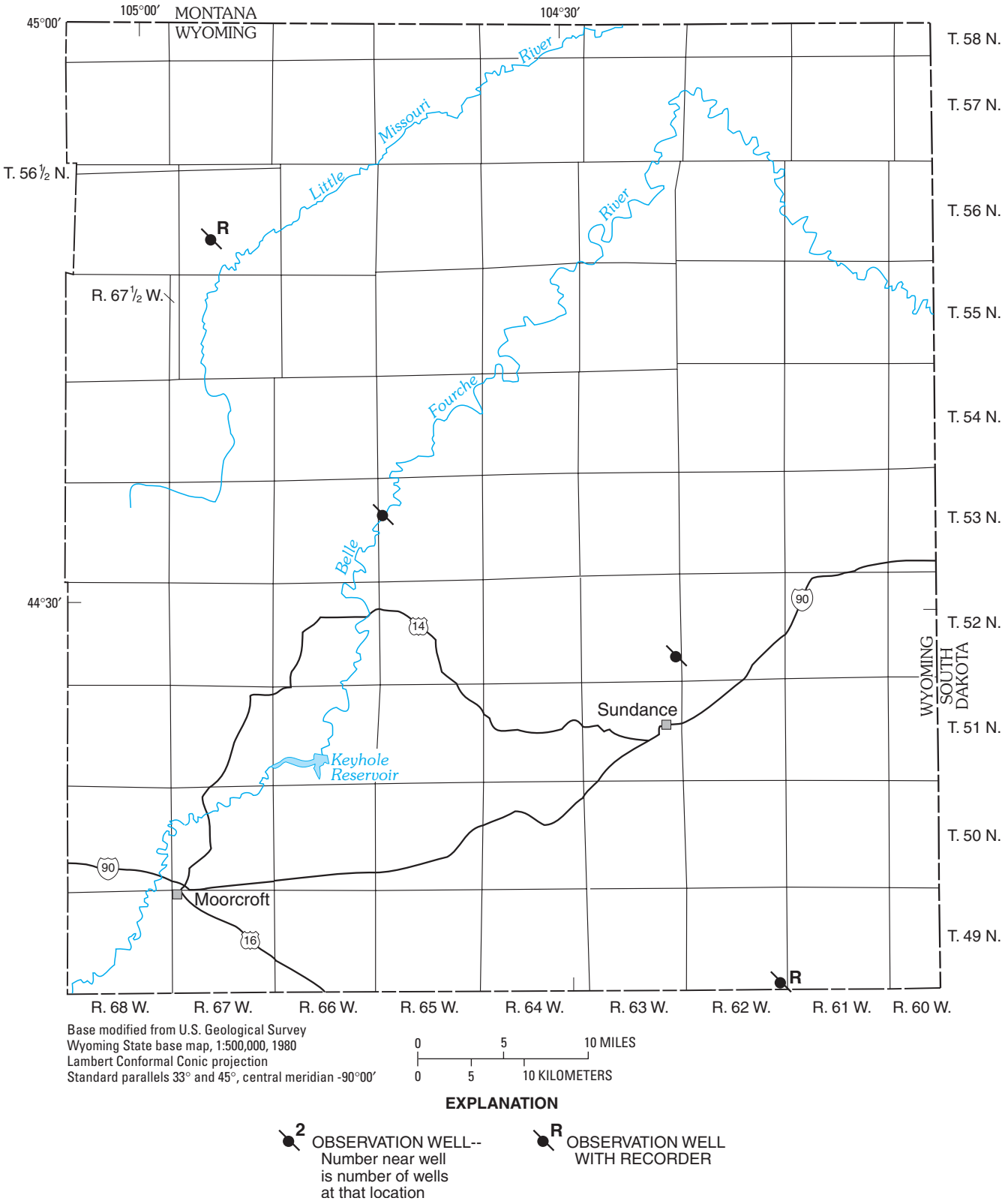


Figure 11. Location of observation wells in Crook County, Wyoming.

CROOK COUNTY

441113104151002 49-062-36cbb02 Inyan Kara Mountain CCMOW6A

LOCATION.--Lat 44°11'13", long 104°15'10", in NW¼ NW¼ SW¼ sec.36, T.49 N., R.62 W., Hydrologic Unit 10120201.

AQUIFER.--Minnelusa Formation.

WELL CHARACTERISTICS.--Depth of well, 500 ft below land surface.

DATUM.--Elevation of land surface is 5,403 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 0.90 ft above land surface.

REMARKS.--This well was included in the Wyoming State Engineer's Office/U.S. Geological Survey cooperative program on Oct. 1, 1997. Data prior to Oct. 1, 1997 is available from the Wyoming State Engineer's Office. Water-level records from Sept. 22, 2000 through Sept. 30, 2003 published in previous reports have been found to be erroneous and should not be used.

COOPERATION.--Data collected by the Wyoming State Engineer's Office and compiled and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1995 to current year.

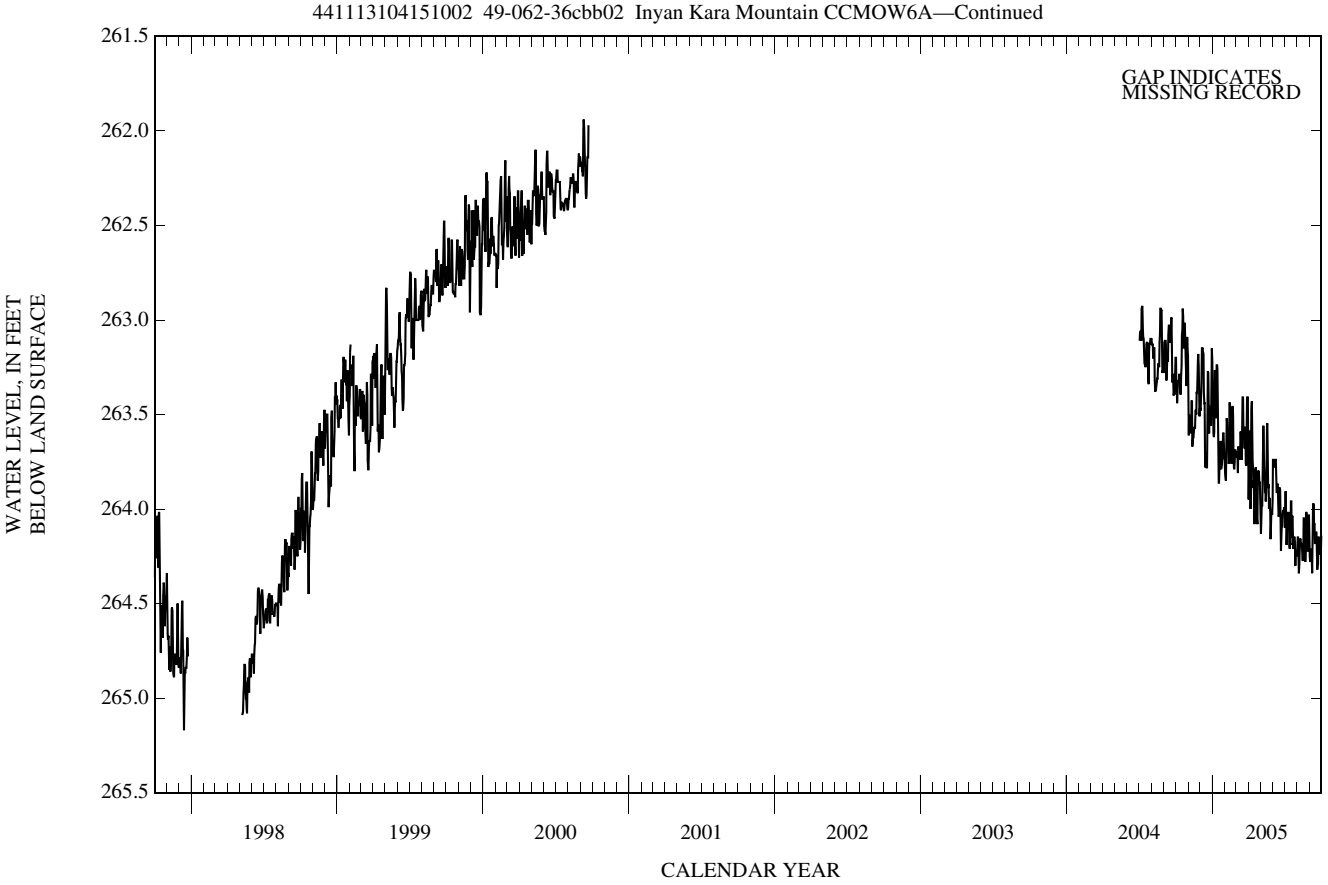
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 261.94 ft below land surface, Sept. 9, 2000; lowest, 267.30 ft below land surface, Mar. 1, 1995.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	263.20	263.33	263.47	263.40	263.81	263.70	263.95	264.04	263.74	264.10	264.20	264.25
2	263.34	263.61	263.48	263.45	263.83	263.70	263.86	264.13	263.74	263.91	264.15	264.28
3	263.36	263.50	263.39	263.60	263.85	263.70	263.68	264.04	263.76	263.91	264.15	264.24
4	263.44	263.54	263.34	263.62	263.70	263.72	263.59	263.98	263.76	264.08	264.28	264.22
5	263.38	263.55	263.15	263.59	263.52	263.81	263.59	263.98	263.78	264.19	264.34	264.21
6	263.33	263.52	263.15	263.27	263.54	263.67	264.00	263.78	263.74	264.11	264.29	264.24
7	263.32	263.52	263.15	263.27	263.66	263.68	263.84	263.62	263.74	264.09	264.22	264.34
8	263.33	263.60	263.17	263.36	263.66	263.68	263.48	263.56	263.74	264.09	264.16	264.18
9	263.29	263.43	263.18	263.36	263.66	263.73	263.43	263.72	263.83	264.02	264.16	264.01
10	263.29	263.43	263.38	263.52	263.76	263.74	263.58	263.78	263.91	264.02	264.19	263.97
11	263.36	263.67	263.44	263.24	263.75	263.64	263.75	263.83	263.91	264.03	264.18	263.98
12	263.39	263.64	263.44	263.24	263.44	263.59	263.77	263.91	263.87	264.19	264.19	264.08
13	263.39	263.62	263.78	263.26	263.44	263.65	263.89	263.91	263.87	264.21	264.21	264.08
14	263.30	263.62	263.73	263.47	263.48	263.72	263.85	263.96	263.96	264.18	264.27	264.18
15	263.24	263.59	263.70	263.71	263.51	263.74	263.95	263.91	264.04	264.19	264.27	264.18
16	263.08	263.57	263.76	263.86	263.73	263.60	264.08	263.67	264.03	263.96	264.20	264.16
17	263.05	263.57	263.78	263.86	263.76	263.41	263.84	263.55	263.89	263.96	264.05	264.12
18	262.94	263.57	263.78	263.76	263.67	263.41	263.79	263.55	263.89	264.15	264.05	264.13
19	262.98	263.48	263.43	263.79	263.46	263.56	263.78	263.72	263.90	264.04	264.06	264.24
20	263.15	263.48	263.27	263.75	263.46	263.59	263.88	263.89	264.10	264.04	264.15	264.32
21	263.14	263.50	263.28	263.64	263.51	263.59	263.93	263.87	264.22	264.13	264.28	264.29
22	263.02	263.38	263.49	263.79	263.70	263.68	264.05	264.00	264.14	264.21	264.22	264.29
23	263.02	263.39	263.60	263.78	263.78	263.57	264.08	263.94	264.09	264.17	264.02	264.15
24	263.08	263.34	263.46	263.76	263.79	263.57	263.87	263.97	264.09	264.15	264.02	264.15
25	263.23	263.21	263.46	263.73	263.75	263.76	263.80	264.01	264.03	264.15	264.04	264.16
26	263.28	263.18	263.48	263.73	263.69	263.77	263.80	264.16	264.01	264.17	264.18	264.24
27	263.35	263.24	263.55	263.60	263.69	263.65	263.82	264.09	264.01	264.30	264.22	264.22
28	263.20	263.33	263.56	263.60	263.73	263.41	263.86	264.02	264.01	264.22	264.22	264.22
29	263.09	263.51	263.30	263.66	---	263.41	263.86	264.02	263.99	264.22	264.12	264.21
30	263.15	263.47	263.15	263.72	---	263.41	263.91	264.03	264.02	264.22	264.03	264.14
31	263.19	---	263.22	263.74	---	263.71	---	263.95	---	264.25	264.10	---
MAX	263.44	263.67	263.78	263.86	263.85	263.81	264.08	264.16	264.22	264.30	264.34	264.34
MIN	262.94	263.18	263.15	263.24	263.44	263.41	263.43	263.55	263.74	263.91	264.02	263.97

CROOK COUNTY—Continued

441113104151002 49-062-36cbb02 Inyan Kara Mountain CCMOW6A—Continued



CROOK COUNTY—Continued

442739104214601 52-063-25dcd01 Cole #3A

LOCATION.--Lat 44°27'39", long 104°21'46", in SE$^1/_4$ SW$^1/_4$ SE$^1/_4$ sec. 25, T.52 N., R.63 W., Hydrologic Unit 10120203.

AQUIFER.--Madison Limestone.

WELL CHARACTERISTICS.--Depth of well, 1,120 ft below land surface.

DATUM.--Elevation of land surface is 4,740 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 2.0 ft above land surface.

REMARKS.--Data reflect static and pumping water levels.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

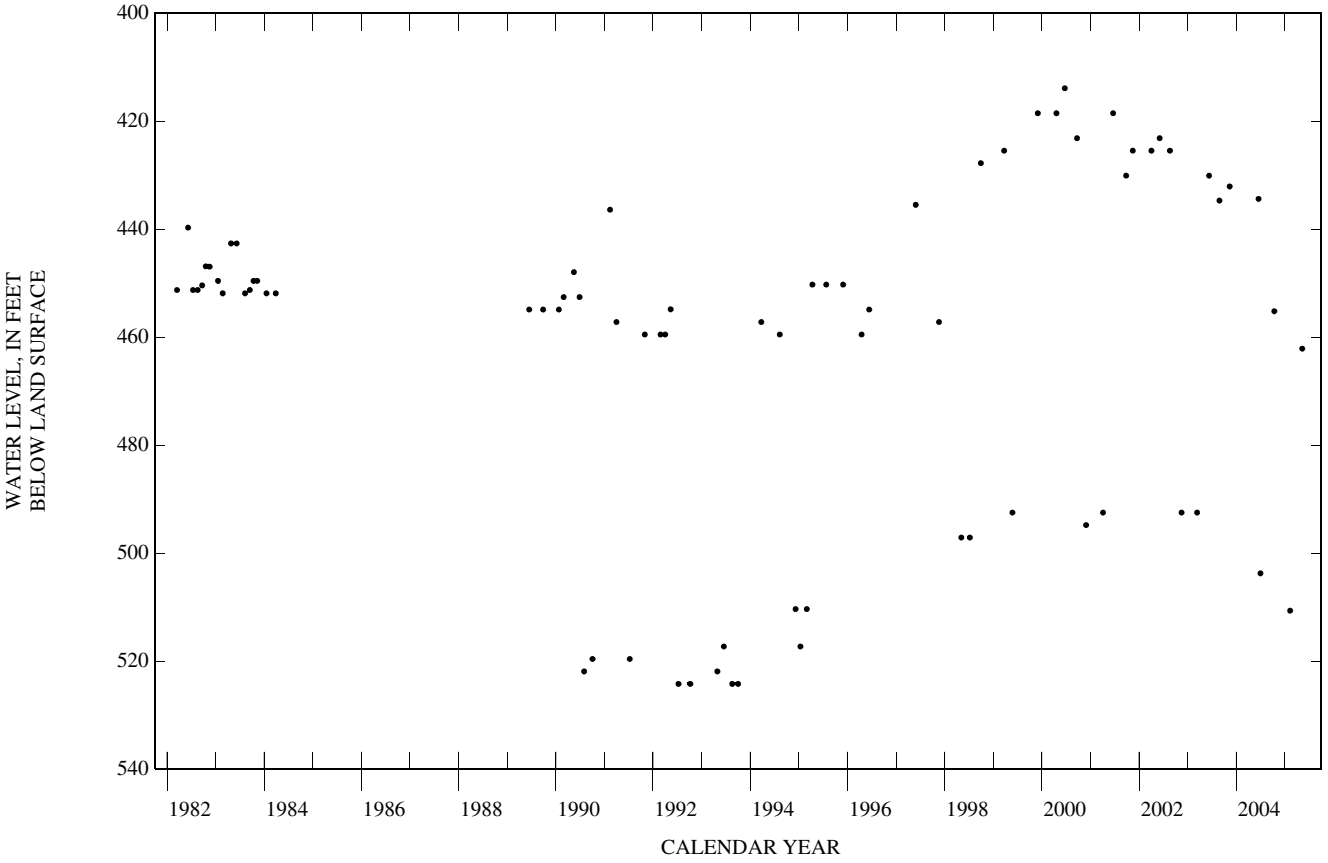
PERIOD OF RECORD.--1982 to 1984, 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 413.93 ft below land surface, June 21, 2000; lowest, 524.19 ft below land surface, July 10, Oct. 7, 1992, Aug. 18, Oct. 1, 1993.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	455.20	FEB 08	510.64	MAY 10	462.13

WATER YEAR 2005 HIGHEST 455.20 OCT 12, 2004 LOWEST 510.64 FEB. 8, 2005 (Pumping water level)



CROOK COUNTY—Continued

443453104425602 53-065-18bbd02 Park Service

LOCATION.--44°34'53", long 104°42'56", in SE¼ NW¼ NW¼ sec.18, T.53 N., R.65 W., Hydrologic Unit 10120201.

AQUIFER.--Madison (Pahasapa) Limestone.

WELL CHARACTERISTICS.--Depth of well, 1,340 ft below land surface.

DATUM.--Elevation of land surface is 3,865 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 2.3 ft above land surface.

REMARKS.--After 1982, some water levels were measured while well was being pumped or recently after the well was pumped.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

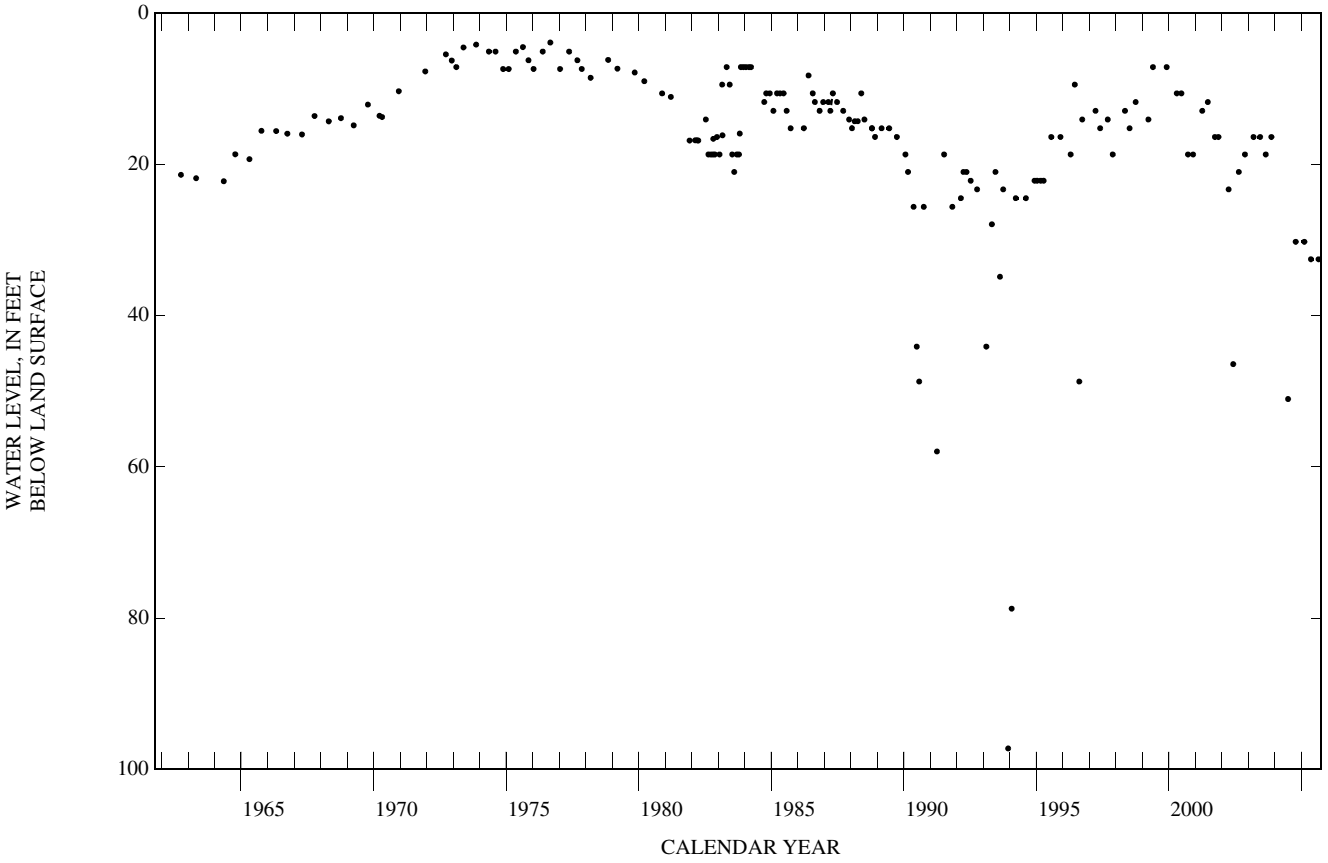
PERIOD OF RECORD.--1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.90 ft below land surface, Sept. 1, 1976; lowest, 97.24 ft below land surface (well being pumped), Dec. 8, 1993.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 13	30.25	FEB 09	30.25	MAY 11	32.56	AUG 24	32.56

WATER YEAR 2005 HIGHEST 30.25 OCT 13, 2004 FEB 09, 2005LOWEST 32.56 MAY 11, 2005 AUG 24, 2005



CROOK COUNTY—Continued

444854104534502 56-067-28aab02 Cole #41 Minnelusa

LOCATION.--Lat 44°48'54", long 104°53'45", in NW¼ NE¼ NE¼ sec.28, T.56 N., R.67 W., Hydrologic Unit 10110201.

AQUIFER.--Minnelusa Formation.

WELL CHARACTERISTICS.--Depth of well, 2,230 ft below land surface.

DATUM.--Elevation of land surface is 4,500 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.20 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1983 to current year.

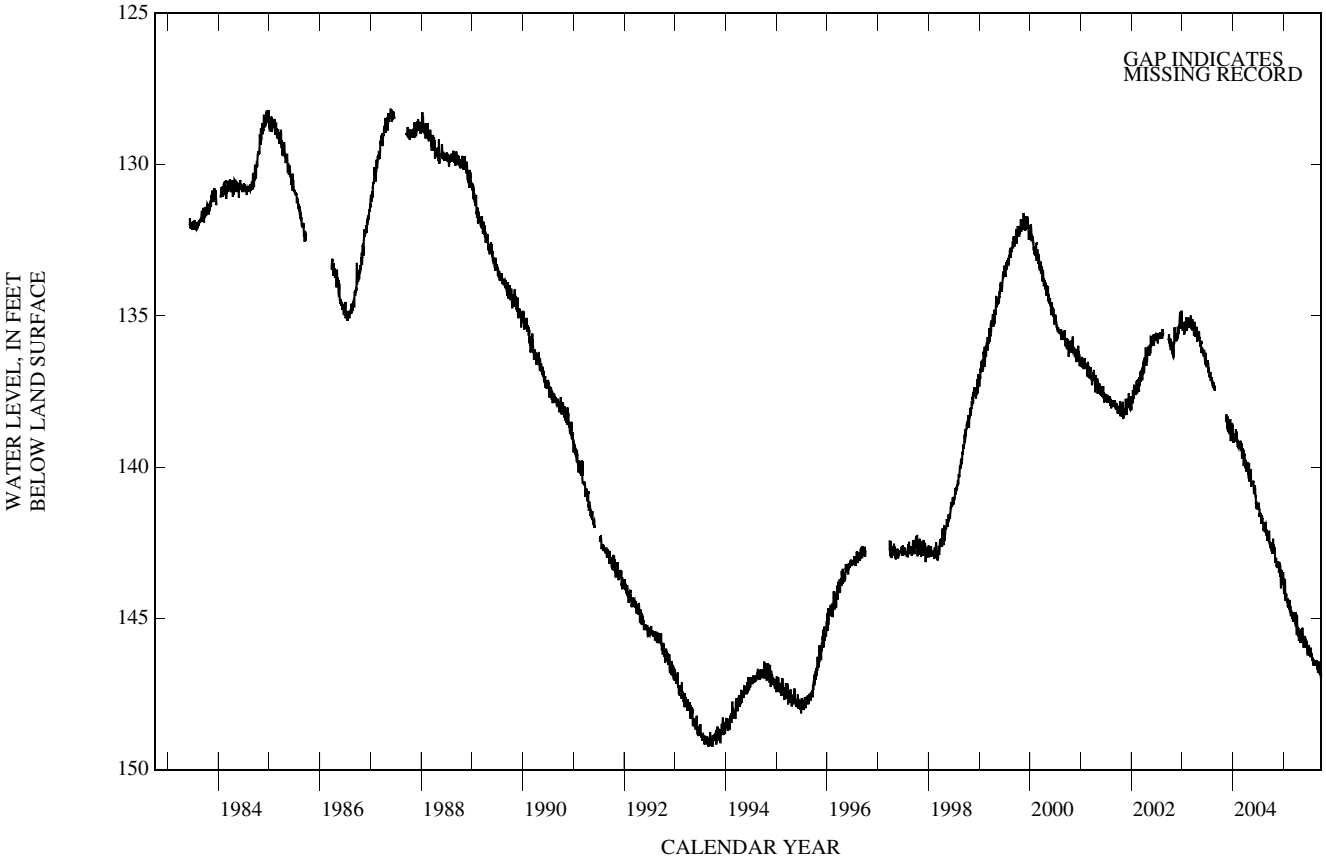
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 128.18 ft below land surface, May 25-28, 31, 1987; lowest, 149.25 ft below land surface, Sept. 28, 1993.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142.61	143.05	143.47	143.86	144.55	144.85	145.24	145.81	145.58	146.19	146.41	146.69
2	142.69	143.06	143.41	143.97	144.59	144.85	145.21	145.80	145.66	145.88	146.41	146.63
3	142.71	143.06	143.32	144.02	144.65	144.90	145.11	145.63	145.69	145.99	146.41	146.59
4	142.73	143.16	143.30	144.20	144.41	144.95	145.11	145.60	145.77	146.19	146.56	146.59
5	142.64	143.05	143.16	144.00	144.39	145.02	145.19	145.66	145.77	146.19	146.42	146.60
6	142.61	143.05	143.18	143.68	144.56	144.82	145.55	145.40	145.61	146.07	146.39	146.80
7	142.61	143.16	143.26	143.82	144.57	144.91	145.17	145.36	145.70	146.07	146.38	146.77
8	142.79	143.15	143.26	143.72	144.58	144.92	144.88	145.37	145.70	146.10	146.36	146.58
9	142.56	143.00	143.26	143.98	144.65	144.88	144.94	145.55	145.86	146.01	146.41	146.44
10	142.59	143.17	143.62	144.02	144.70	145.10	145.26	145.55	145.86	146.01	146.41	146.44
11	142.85	143.25	143.38	143.73	144.59	144.82	145.31	145.67	145.85	146.20	146.41	146.48
12	142.78	143.28	143.70	143.75	144.39	144.82	145.31	145.67	145.81	146.28	146.41	146.60
13	142.86	143.25	144.01	144.09	144.39	145.05	145.30	145.69	145.85	146.14	146.56	146.74
14	142.71	143.31	143.67	144.28	144.50	145.11	145.28	145.80	145.98	146.13	146.53	146.73
15	142.71	143.24	143.70	144.42	144.65	145.08	145.59	145.62	145.89	146.19	146.52	146.75
16	142.55	143.24	143.90	144.39	144.79	144.89	145.52	145.38	145.91	145.97	146.40	146.67
17	142.56	143.26	143.81	144.29	144.79	144.82	145.34	145.31	145.74	146.11	146.41	146.67
18	142.37	143.25	143.84	144.18	144.65	144.97	145.31	145.45	145.76	146.18	146.41	146.82
19	142.62	143.25	143.49	144.31	144.59	145.02	145.41	145.62	145.88	146.18	146.47	146.85
20	142.57	143.29	143.41	144.25	144.62	144.92	145.58	145.56	146.13	146.18	146.55	146.83
21	142.58	143.32	143.67	144.18	144.71	145.01	145.58	145.56	146.19	146.27	146.57	146.81
22	142.58	143.25	143.86	144.43	144.89	145.07	145.74	145.71	146.19	146.19	146.47	146.82
23	142.61	143.28	143.86	144.38	144.93	144.94	145.58	145.64	146.19	146.19	146.41	146.77
24	142.61	143.25	143.64	144.39	144.87	145.09	145.39	145.81	146.19	146.27	146.41	146.80
25	142.82	143.12	143.71	144.39	144.76	145.20	145.41	145.90	146.19	146.27	146.53	146.89
26	142.82	143.15	143.76	144.40	144.76	145.16	145.45	145.97	146.19	146.41	146.55	146.89
27	142.84	143.25	143.86	144.39	144.91	144.95	145.58	145.87	146.19	146.38	146.56	146.89
28	142.66	143.30	143.82	144.39	144.85	144.82	145.60	145.83	146.19	146.29	146.57	147.01
29	142.67	143.49	143.54	144.46	---	144.82	145.62	145.88	146.19	146.31	146.43	146.82
30	142.82	143.39	143.48	144.47	---	144.96	145.65	145.93	146.19	146.33	146.39	146.81
31	142.85	---	143.78	144.56	---	145.28	---	145.78	---	146.42	146.65	---
MAX	142.86	143.49	144.01	144.56	144.93	145.28	145.74	145.97	146.19	146.42	146.65	147.01
MIN	142.37	143.00	143.16	143.68	144.39	144.82	144.88	145.31	145.58	145.88	146.36	146.44

CROOK COUNTY—Continued

444854104534502 56-067-28aab02 Cole #41 Minnelusa—Continued



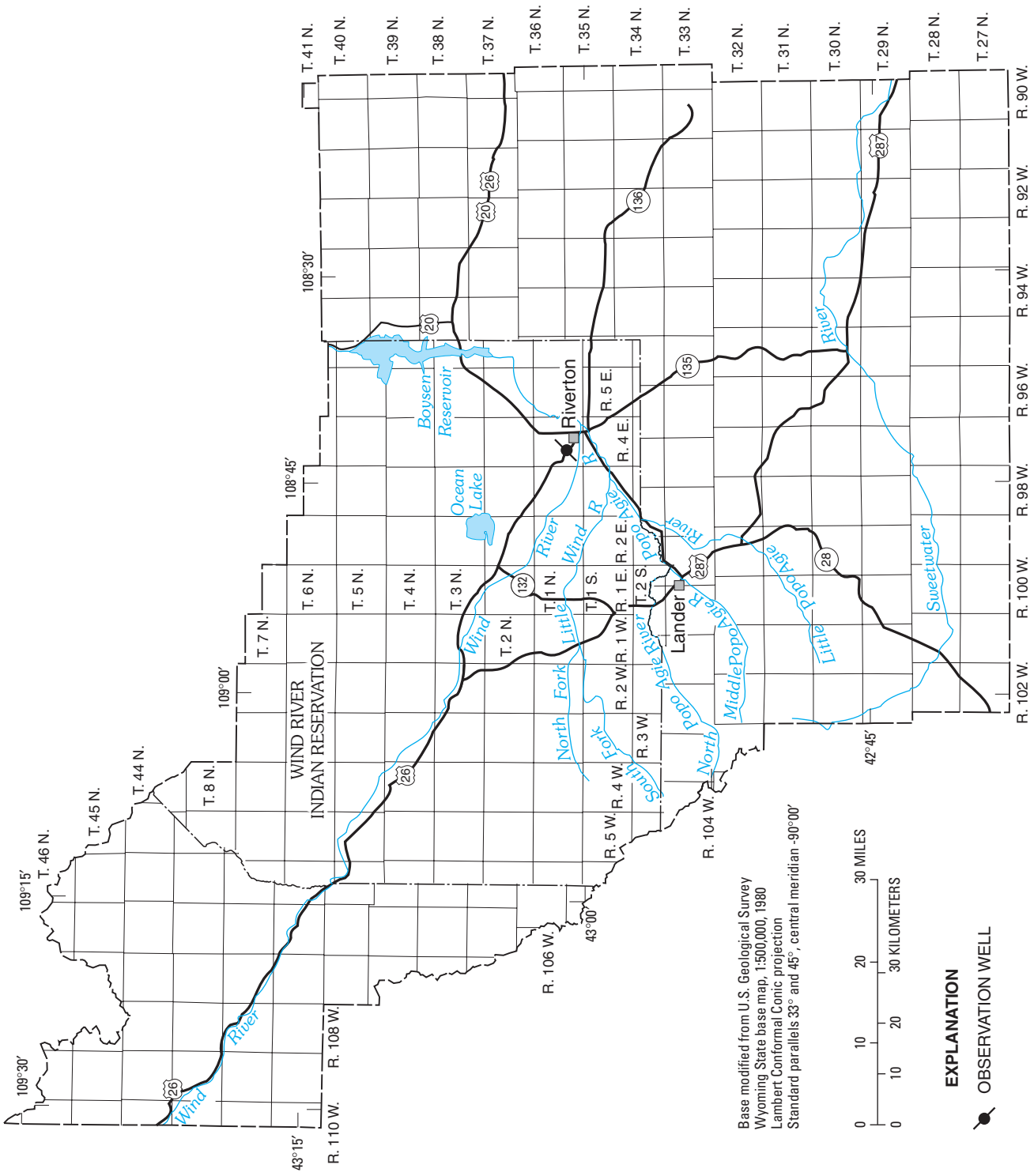


Figure 12. Location of observation well in Fremont County, Wyoming.

FREMONT COUNTY

430205108243201 1N-4E-28acc01 Brentwood

LOCATION.--Lat 43°02'05", long 108°24'32", in SW¼ SW¼ NE¼ sec.28, T.1 N., R.4 E., Hydrologic Unit 10080001.

AQUIFER.--Wind River Formation.

WELL CHARACTERISTICS.--Depth of well, 440 ft below land surface.

DATUM.--Elevation of land surface is 5,050 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.0 ft above land surface.

REMARKS.--Data collected by U.S. Geological Survey.

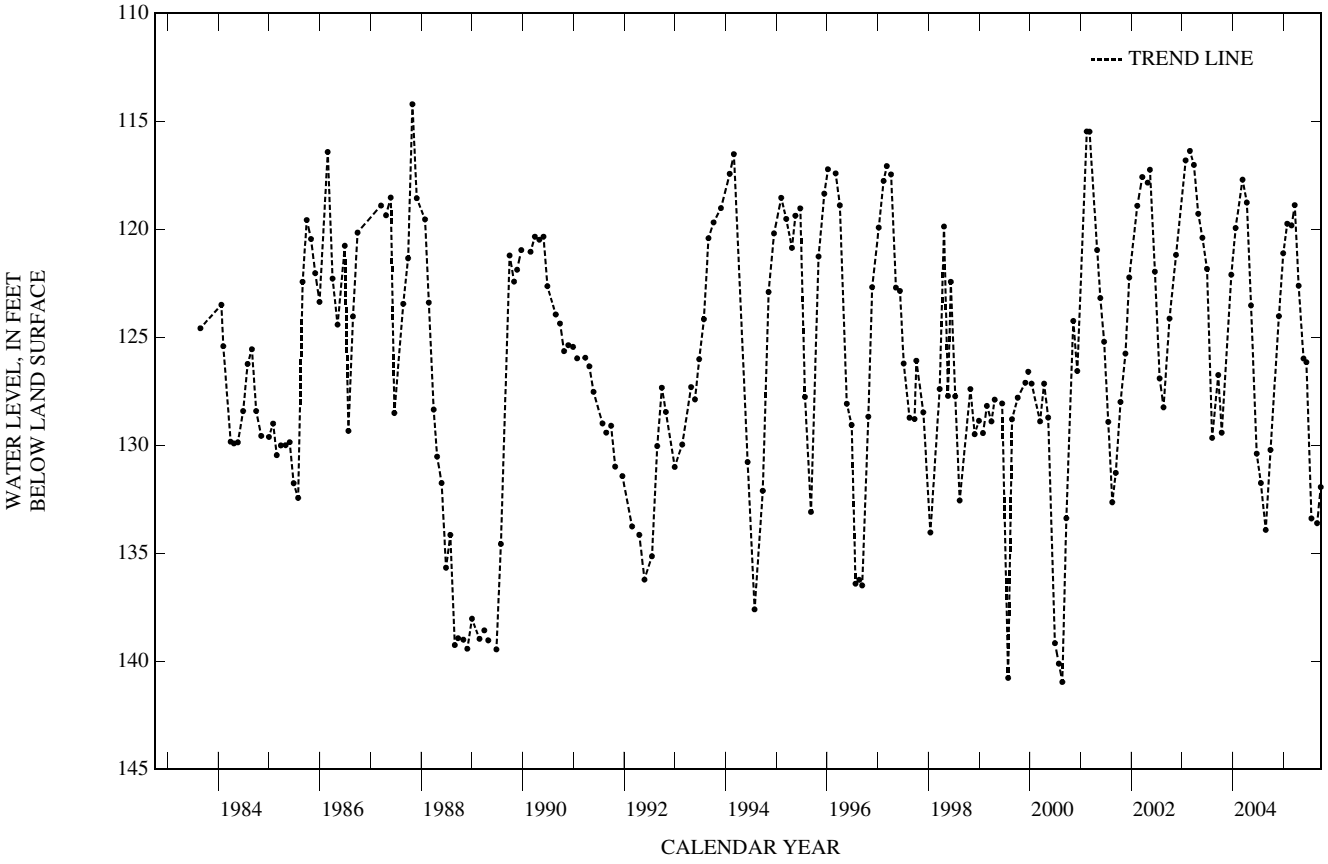
PERIOD OF RECORD.--1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 114.22 ft below land surface, Oct. 30, 1987; lowest, 140.96 ft below land-surface, Aug. 22, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 29	124.03	JAN 28	119.75	MAR 23	118.89	MAY 25	125.99	JUL 21	133.39	SEP 26	131.94
DEC 30	121.12	FEB 28	119.83	APR 20	122.62	JUN 15	126.16	AUG 31	133.61		

WATER YEAR 2005 HIGHEST 118.89 MAR 23, 2005 LOWEST 133.61 AUG 31, 2005



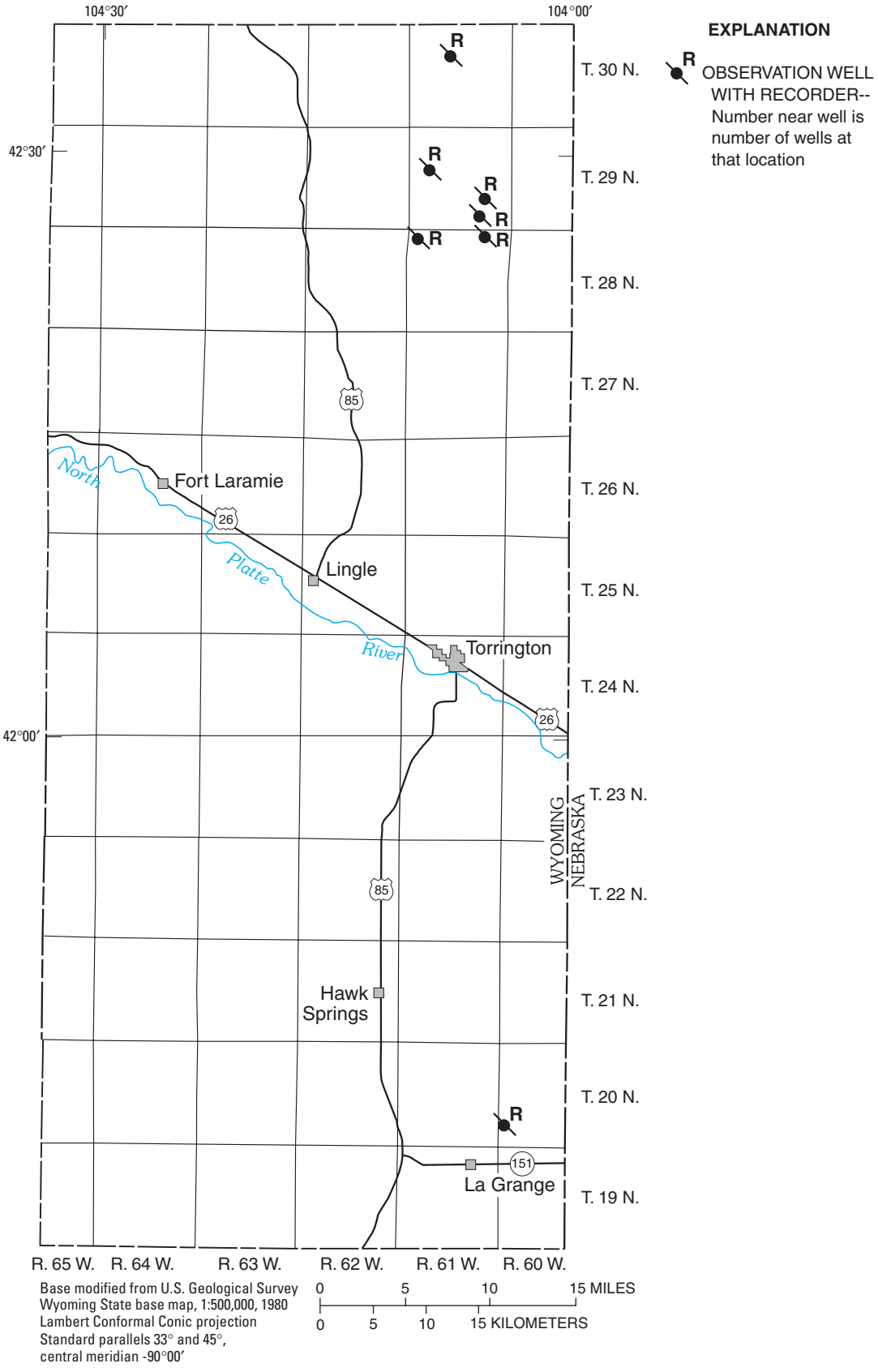


Figure 13. Location of observation wells in Goshen County, Wyoming.

GOSHEN COUNTY

414049104074501 20-060-30bbb01 LaGrange #2

LOCATION.--Lat 41°40'50.5", long 104°07'48.0", in NW¼ NW¼ NW¼ sec.30, T.20 N., R.60 W., Hydrologic Unit 10180012.

AQUIFER.--Brule Formation.

WELL CHARACTERISTICS.--Depth of well, 70 ft below land surface.

DATUM.--Elevation of land surface is 4,530 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.00 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1980 to current year.

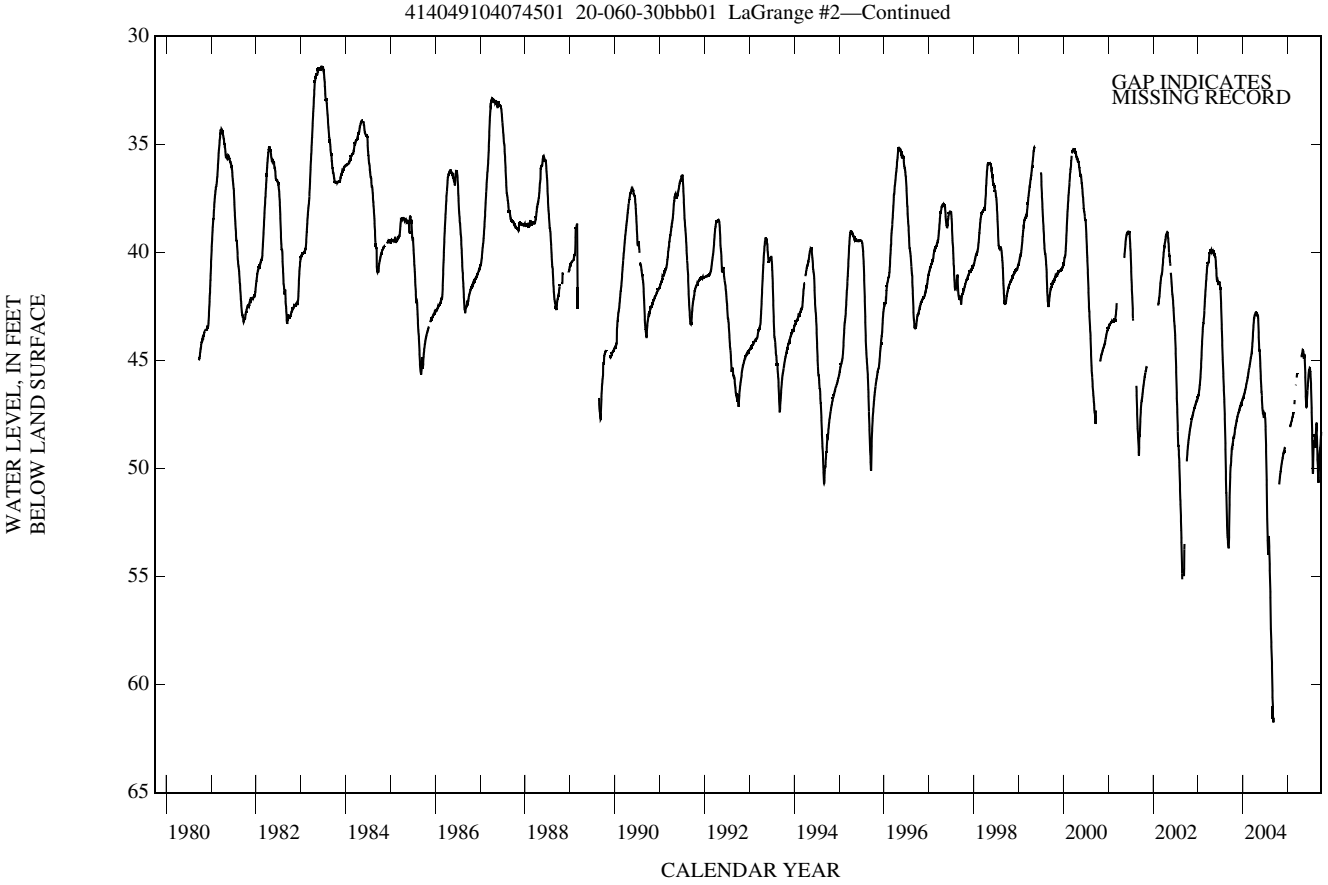
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 31.40 ft below land surface, June 18-21, 1983; lowest, 61.77 ft below land surface, Sept. 4,5, 2004.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	50.23	49.21	---	47.81	---	---	44.56	47.17	45.53	48.74	49.77
2	---	50.15	49.18	---	47.79	---	---	44.51	47.16	45.50	48.74	49.94
3	---	50.14	49.15	---	47.76	---	---	44.52	47.14	45.52	48.76	50.11
4	---	50.10	49.12	---	47.71	---	---	44.54	47.05	45.63	48.91	50.29
5	---	50.04	49.06	---	47.69	---	---	44.58	46.89	45.75	48.80	50.48
6	---	49.99	49.06	---	47.66	---	---	44.57	46.75	45.83	48.64	50.66
7	---	49.96	49.05	---	47.64	46.15	---	44.60	46.63	45.94	48.52	50.62
8	---	49.90	49.02	---	47.63	46.12	---	44.67	46.54	46.07	48.46	50.43
9	---	49.85	49.01	---	47.61	---	---	44.79	46.47	46.25	48.46	50.24
10	---	49.85	---	---	47.59	---	---	44.83	46.39	46.47	48.54	50.11
11	---	49.80	---	---	47.53	---	---	44.92	46.29	46.73	48.77	49.97
12	---	49.76	---	---	47.48	---	---	44.88	46.19	46.94	48.95	49.88
13	---	49.73	---	---	47.48	---	---	44.85	46.14	47.20	49.04	49.79
14	---	49.70	---	---	47.46	45.79	---	44.79	46.03	47.41	48.82	49.66
15	---	49.65	---	---	47.46	45.72	---	44.75	45.94	47.66	48.63	49.52
16	---	49.62	---	---	47.41	45.67	---	44.74	45.83	47.93	48.53	49.38
17	---	49.59	---	---	47.39	45.62	---	44.74	45.75	48.24	48.40	49.28
18	---	49.55	---	---	---	45.61	---	44.82	45.68	48.60	48.27	49.18
19	---	49.52	---	48.09	---	45.57	---	45.00	45.63	48.95	48.15	49.15
20	---	49.50	---	48.04	---	---	---	45.17	45.55	49.26	48.06	49.11
21	---	49.45	---	48.03	---	---	---	45.33	45.48	49.60	47.97	49.05
22	50.74	49.42	---	48.01	---	---	44.85	45.57	45.45	49.96	47.91	48.97
23	50.69	49.40	---	47.99	47.02	---	44.77	45.78	45.42	50.20	47.91	48.87
24	50.64	49.35	---	47.95	46.92	---	44.76	45.99	45.45	50.24	47.95	48.79
25	50.58	49.31	---	47.94	46.83	---	44.76	46.19	45.42	50.12	48.17	48.71
26	50.53	49.30	---	47.92	---	---	44.73	46.45	45.43	49.82	48.55	48.61
27	50.46	49.28	---	47.89	---	---	44.69	46.67	45.39	49.43	48.75	48.51
28	50.40	49.26	---	47.88	---	---	44.65	46.83	45.34	49.15	49.03	48.45
29	50.36	49.26	---	47.86	---	---	44.62	46.97	45.35	48.95	49.33	48.36
30	50.29	49.21	---	47.83	---	---	44.59	47.10	45.42	48.88	49.59	48.30
31	50.25	---	---	47.82	---	---	---	47.16	---	48.80	49.67	---
MAX	---	50.23	---	---	---	---	---	47.16	47.17	50.24	49.67	50.66
MIN	---	49.21	---	---	---	---	---	44.51	45.34	45.50	47.91	48.30

GOSHEN COUNTY—Continued

414049104074501 20-060-30bbb01 LaGrange #2—Continued



GOSHEN COUNTY—Continued

422519104095101 28-061-02ccd01 Prairie Center #6

LOCATION.--Lat 42°25'19", long 104°09'51", in SE¼ SW¼ SW¼ sec. 2, T.28 N., R.61 W., Hydrologic Unit 10180009.

AQUIFER.--Arikaree Formation.

WELL CHARACTERISTICS.--Depth of well, 255 ft below land surface.

DATUM.--Elevation of land surface is 4,795 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.70 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1986 to current year.

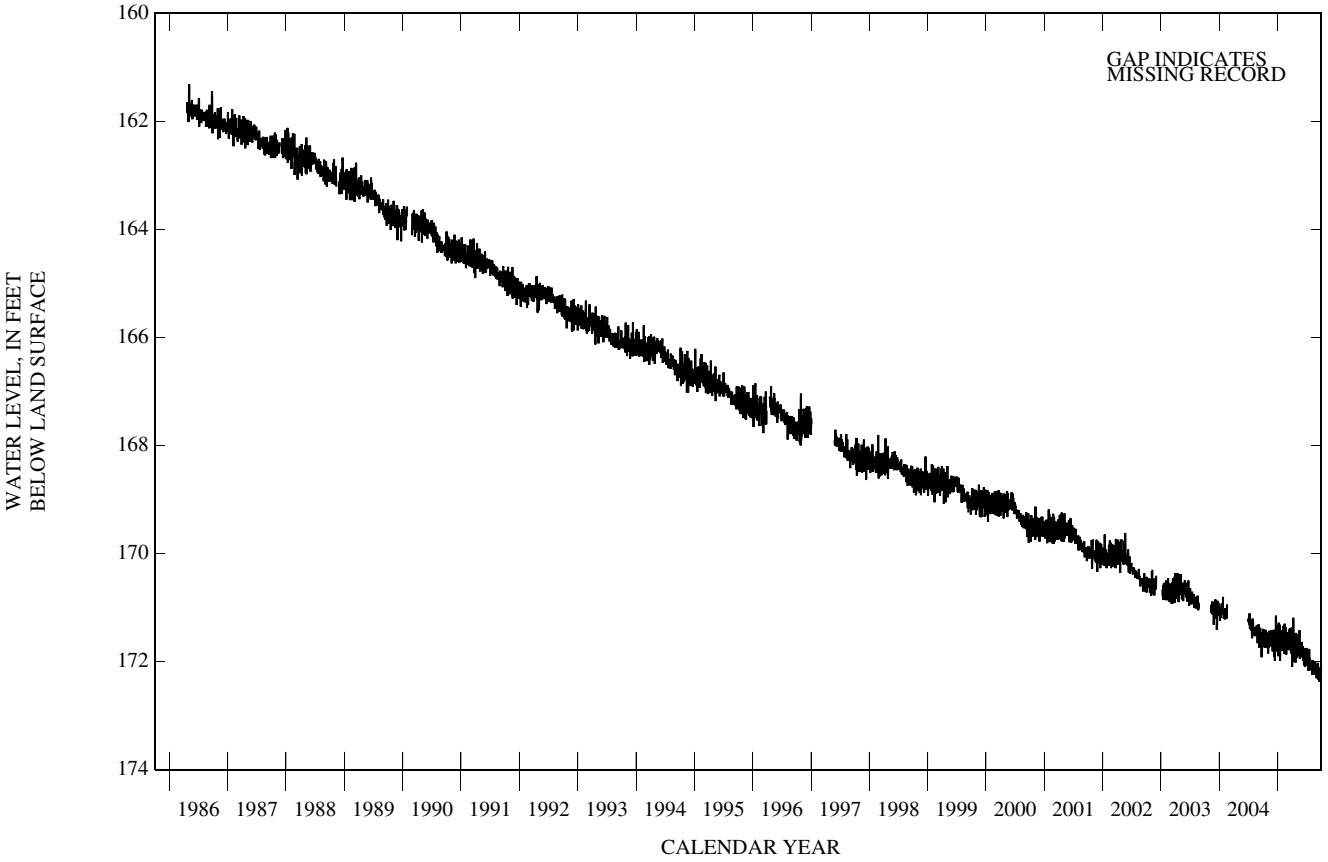
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 161.31 ft below land surface, May 4, 1986; lowest, 172.60 ft below land surface, Sept. 28, 2005.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	171.41	171.85	171.70	171.72	171.73	171.67	171.73	171.93	171.64	171.88	172.00	172.31
2	171.41	171.74	171.62	171.90	171.74	171.68	171.65	171.75	171.73	171.75	172.01	172.24
3	171.69	171.58	171.51	171.76	171.74	171.76	171.47	171.65	171.80	171.77	172.03	172.20
4	171.67	171.74	171.51	171.77	171.42	171.78	171.47	171.65	171.82	172.08	172.25	172.20
5	171.56	171.64	171.41	171.56	171.34	171.74	171.64	171.72	171.93	171.95	172.05	172.24
6	171.56	171.64	171.45	171.28	171.59	171.46	172.01	171.51	171.72	171.90	171.99	172.28
7	171.56	171.73	171.69	171.40	171.67	171.68	171.49	171.51	171.76	171.90	172.01	172.24
8	171.72	171.63	171.62	171.60	171.71	171.66	171.19	171.59	171.89	171.96	171.99	172.12
9	171.49	171.43	171.60	171.65	171.79	171.66	171.36	171.76	171.98	171.90	171.99	172.04
10	171.49	171.50	171.91	171.73	171.85	171.72	171.84	171.76	171.93	171.92	172.09	172.04
11	171.74	171.66	171.50	171.33	171.55	171.46	171.79	171.86	171.90	172.07	172.10	172.24
12	171.58	171.66	171.64	171.33	171.30	171.41	171.80	171.81	171.81	172.17	172.03	172.24
13	171.67	171.71	171.99	171.84	171.37	171.79	171.82	171.82	171.81	171.97	172.09	172.34
14	171.44	171.72	171.51	171.99	171.63	171.78	171.74	171.90	172.07	171.93	172.16	172.28
15	171.46	171.60	171.50	171.91	171.77	171.69	171.91	171.56	171.88	171.97	172.15	172.31
16	171.41	171.60	171.80	171.68	171.85	171.55	171.76	171.45	171.90	171.77	172.09	172.17
17	171.43	171.65	171.64	171.67	171.79	171.38	171.51	171.42	171.75	171.78	172.01	172.18
18	171.53	171.50	171.66	171.50	171.51	171.66	171.51	171.72	171.77	171.99	172.03	172.27
19	171.73	171.42	171.23	171.70	171.36	171.76	171.55	171.95	171.96	171.93	172.15	172.37
20	171.65	171.64	171.15	171.53	171.48	171.66	171.84	171.78	172.10	171.95	172.24	172.32
21	171.65	171.58	171.58	171.42	171.72	171.71	171.85	171.75	172.01	172.14	172.23	172.20
22	171.49	171.47	171.81	171.69	171.87	171.78	172.02	171.79	171.83	172.02	172.12	172.26
23	171.63	171.62	171.66	171.63	171.80	171.54	171.69	171.74	171.83	171.98	172.01	172.11
24	171.68	171.56	171.46	171.62	171.74	171.64	171.47	171.82	171.91	172.00	172.02	172.12
25	171.73	171.51	171.52	171.59	171.64	171.85	171.48	171.84	171.82	171.97	172.16	172.29
26	171.73	171.50	171.70	171.70	171.56	171.80	171.67	171.87	171.83	172.16	172.21	172.32
27	171.70	171.68	171.76	171.57	171.71	171.54	171.82	171.75	171.85	172.05	172.21	172.18
28	171.48	171.64	171.73	171.58	171.70	171.37	171.79	171.68	171.91	172.00	172.21	172.20
29	171.48	171.81	171.34	171.80	---	171.41	171.81	171.75	171.91	171.99	172.09	172.11
30	171.73	171.65	171.34	171.72	---	171.69	171.88	171.83	172.06	172.08	172.05	172.12
31	171.69	---	171.70	171.79	---	172.10	---	171.76	---	172.14	172.29	---
MAX	171.74	171.85	171.99	171.99	171.87	172.10	172.02	171.95	172.10	172.17	172.29	172.37
MIN	171.41	171.42	171.15	171.28	171.30	171.37	171.19	171.42	171.64	171.75	171.99	172.04

GOSHEN COUNTY—Continued

422519104095101 28-061-02ccd01 Prairie Center #6—Continued



GOSHEN COUNTY—Continued

422512104135501 28-061-06aba01 Goshen County #2

LOCATION.--Lat 42°25'12", long 104°13'55", in NE¼ NW¼ NE¼ sec. 6, T.28 N., R.61 W., Hydrologic Unit 10180009.

AQUIFER.--Arikaree Formation.

WELL CHARACTERISTICS.--Depth of well, 220 ft below land surface.

DATUM.--Elevation of land surface is 4,765 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.60 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1979 to current year.

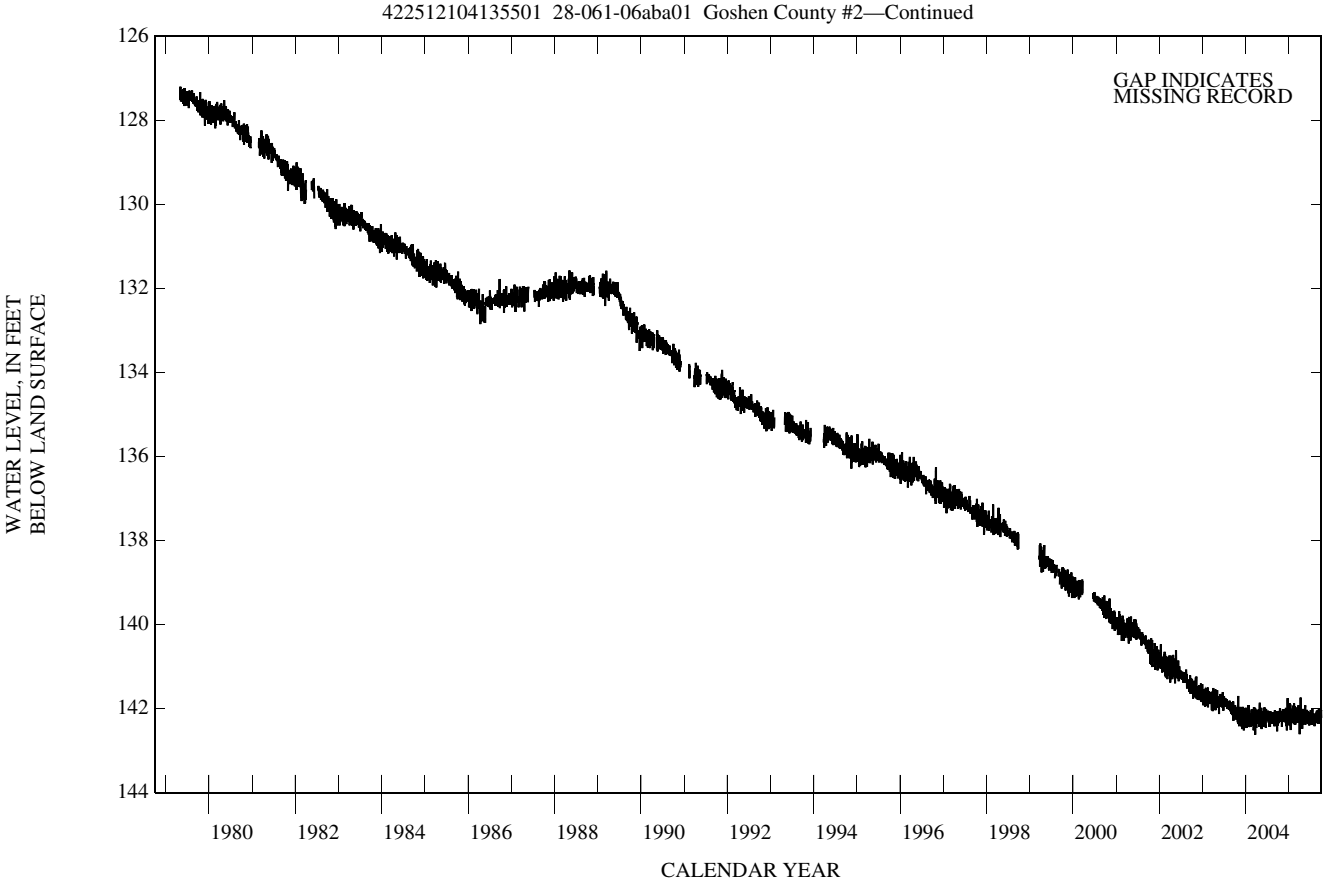
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 127.23 ft below land surface, May 4, 1979; lowest, 142.85 ft below land surface, March 20, 2004.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142.20	142.44	142.30	142.23	142.28	142.20	142.24	142.39	142.03	142.16	142.14	142.28
2	142.33	142.29	142.18	142.40	142.29	142.24	142.19	142.23	142.15	142.04	142.15	142.22
3	142.35	142.17	142.10	142.30	142.30	142.29	142.01	142.15	142.16	142.11	142.20	142.19
4	142.28	142.30	142.11	142.35	142.01	142.32	142.05	142.15	142.19	142.38	142.42	142.22
5	142.18	142.22	141.98	142.12	141.93	142.26	142.19	142.20	142.26	142.20	142.19	142.22
6	142.20	142.22	142.07	141.87	142.22	142.02	142.47	142.01	142.06	142.16	142.14	142.31
7	142.20	142.32	142.20	142.05	142.18	142.21	142.03	142.05	142.12	142.17	142.17	142.20
8	142.32	142.18	142.14	142.13	142.28	142.19	141.74	142.11	142.26	142.24	142.12	142.08
9	142.12	142.02	142.14	142.19	142.35	142.17	141.95	142.19	142.30	142.14	142.14	142.00
10	142.16	142.13	142.42	142.27	142.37	142.32	142.34	142.20	142.26	142.19	142.19	142.04
11	142.31	142.22	142.09	141.90	142.10	142.02	142.26	142.30	142.23	142.32	142.20	142.22
12	142.16	142.22	142.26	141.93	141.88	141.97	142.31	142.26	142.14	142.38	142.13	142.18
13	142.23	142.27	142.52	142.40	142.02	142.34	142.30	142.32	142.16	142.19	142.28	142.31
14	142.05	142.28	142.11	142.51	142.16	142.28	142.23	142.35	142.37	142.16	142.24	142.22
15	142.09	142.18	142.11	142.43	142.33	142.20	142.40	142.06	142.20	142.18	142.24	142.27
16	141.99	142.18	142.33	142.25	142.36	142.09	142.26	141.96	142.22	142.00	142.17	142.12
17	142.05	142.25	142.20	142.24	142.32	141.93	142.04	141.92	142.10	142.04	142.10	142.14
18	142.10	142.08	142.27	142.10	142.08	142.22	142.04	142.24	142.14	142.17	142.14	142.28
19	142.31	142.02	141.81	142.27	141.94	142.24	142.12	142.38	142.31	142.12	142.26	142.36
20	142.18	142.25	141.75	142.11	142.10	142.16	142.33	142.21	142.40	142.18	142.33	142.24
21	142.21	142.14	142.20	142.01	142.28	142.24	142.31	142.18	142.31	142.33	142.28	142.16
22	142.06	142.05	142.32	142.23	142.38	142.28	142.48	142.22	142.16	142.20	142.17	142.24
23	142.23	142.18	142.19	142.18	142.32	142.07	142.19	142.18	142.17	142.16	142.05	142.05
24	142.23	142.12	142.03	142.18	142.28	142.20	142.01	142.24	142.22	142.16	142.10	142.12
25	142.27	142.08	142.15	142.16	142.18	142.34	142.05	142.32	142.14	142.14	142.24	142.24
26	142.30	142.06	142.23	142.25	142.12	142.29	142.19	142.27	142.15	142.35	142.22	142.23
27	142.25	142.21	142.30	142.13	142.28	142.08	142.28	142.17	142.22	142.20	142.23	142.11
28	142.06	142.17	142.27	142.18	142.23	141.92	142.26	142.10	142.20	142.16	142.24	142.22
29	142.09	142.33	141.91	142.34	---	141.99	142.30	142.22	142.20	142.16	142.10	142.04
30	142.27	142.21	141.92	142.26	---	142.23	142.36	142.21	142.33	142.24	142.05	142.06
31	142.24	---	142.29	142.32	---	142.61	---	142.14	---	142.28	142.36	---
MAX	142.35	142.44	142.52	142.51	142.38	142.61	142.48	142.39	142.40	142.38	142.42	142.36
MIN	141.99	142.02	141.75	141.87	141.88	141.92	141.74	141.92	142.03	142.00	142.05	142.00

GOSHEN COUNTY—Continued

422512104135501 28-061-06aba01 Goshen County #2—Continued



GOSHEN COUNTY—Continued

422928104121401 29-061-17aad01 Prairie Center #4

LOCATION.--Lat 42°29'28", long 104°12'14", in SE¼ NE¼ NE¼ Sec. 17, T.29 N., R.61 W., Hydrologic Unit 10180009.

AQUIFER.--Arikaree Formation.

WELL CHARACTERISTICS.--Depth of well, 220 ft below land surface.

DATUM.--Elevation of land surface is 4,790 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.90 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1980 to current year.

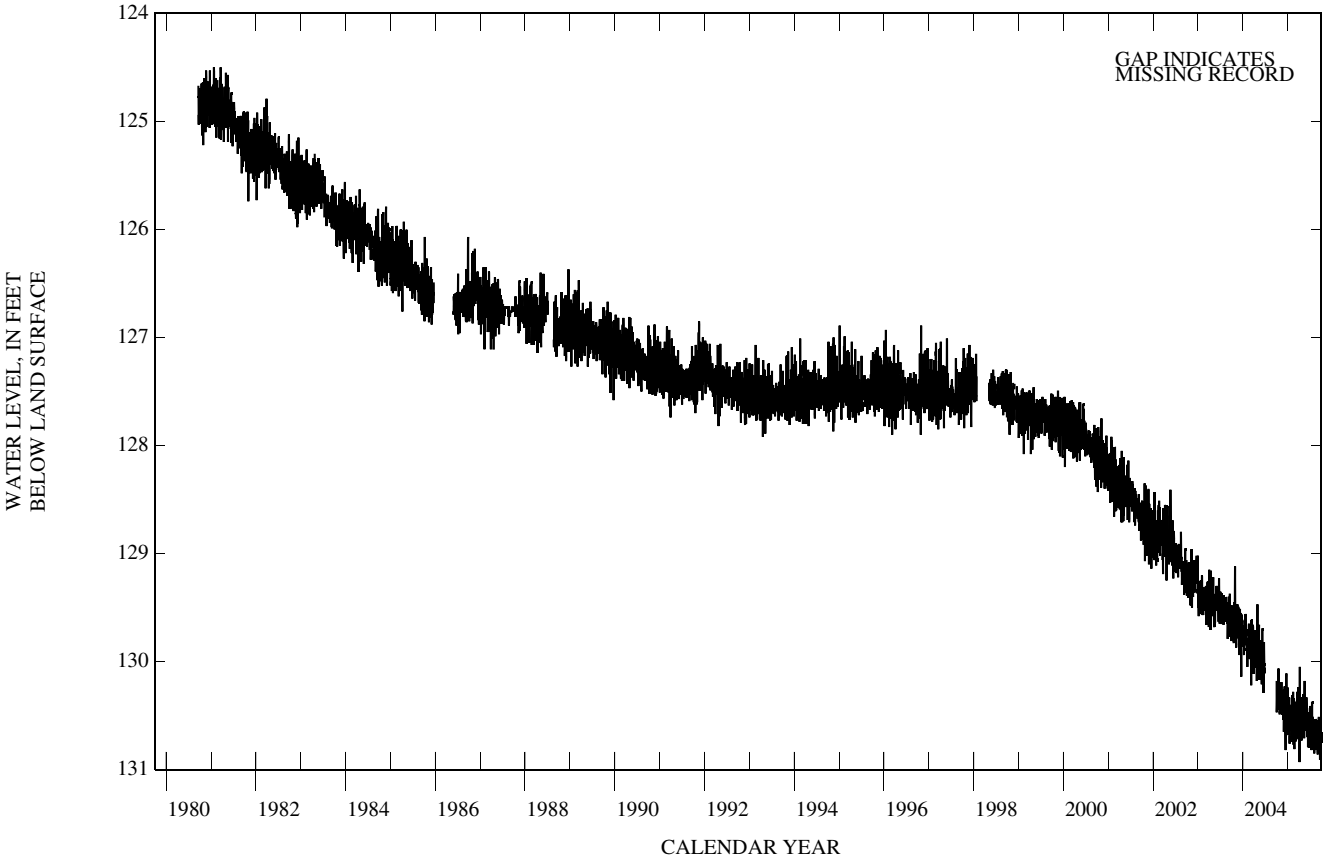
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 124.50 ft below land surface, Jan. 24, Mar. 20, 1981; lowest, 131.11 ft below land surface, Sept. 28, 2005.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130.18	130.41	130.57	130.56	130.73	130.62	130.71	130.66	130.33	130.57	130.60	130.86
2	130.46	130.44	130.50	130.67	130.73	130.62	130.57	130.61	130.38	130.41	130.58	130.79
3	130.47	130.38	130.38	130.67	130.74	130.67	130.37	130.49	130.45	130.44	130.60	130.75
4	130.42	130.41	130.37	130.68	130.42	130.70	130.37	130.48	130.47	130.71	130.85	130.75
5	130.29	130.43	130.23	130.59	130.31	130.74	130.42	130.49	130.57	130.63	130.70	130.76
6	130.29	130.41	130.23	130.34	130.41	130.45	130.93	130.31	130.43	130.57	130.61	130.80
7	130.30	130.42	130.39	130.34	130.51	130.54	130.42	130.31	130.44	130.56	130.61	130.78
8	130.44	130.42	130.44	130.44	130.55	130.61	130.05	130.32	130.57	130.60	130.55	130.63
9	130.25	130.19	130.43	130.45	130.63	130.60	130.14	130.54	130.70	130.52	130.55	130.52
10	130.25	130.22	130.65	130.52	130.74	130.68	130.58	130.53	130.66	130.54	130.66	130.52
11	130.43	130.47	130.46	130.34	130.58	130.44	130.66	130.59	130.62	130.67	130.67	130.70
12	130.28	130.47	130.55	130.34	130.28	130.37	130.66	130.62	130.53	130.82	130.61	130.73
13	130.37	130.49	130.82	130.58	130.31	130.53	130.71	130.62	130.52	130.63	130.71	130.80
14	130.15	130.49	130.46	130.69	130.56	130.63	130.63	130.71	130.79	130.59	130.75	130.82
15	130.15	130.41	130.46	130.76	130.67	130.62	130.68	130.37	130.62	130.60	130.72	130.85
16	130.07	130.41	130.66	130.70	130.77	130.48	130.65	130.24	130.62	130.38	130.66	130.72
17	130.07	130.41	130.53	130.70	130.77	130.28	130.39	130.18	130.47	130.38	130.54	130.69
18	130.10	130.44	130.53	130.52	130.57	130.41	130.34	130.41	130.47	130.61	130.54	130.80
19	130.26	130.34	130.16	130.59	130.34	130.53	130.34	130.64	130.63	130.51	130.66	130.91
20	130.34	130.37	130.11	130.46	130.36	130.56	130.48	130.56	130.80	130.53	130.78	130.88
21	130.34	130.41	130.25	130.40	130.56	130.56	130.58	130.54	130.74	130.71	130.82	130.76
22	130.31	130.27	130.36	130.64	130.76	130.62	130.73	130.57	130.56	130.64	130.70	130.81
23	130.31	130.33	130.42	130.57	130.81	130.53	130.58	130.54	130.55	130.58	130.55	130.64
24	130.39	130.33	130.37	130.54	130.74	130.53	130.34	130.57	130.60	130.60	130.55	130.65
25	130.48	130.27	130.38	130.54	130.62	130.71	130.34	130.59	130.52	130.56	130.68	130.81
26	130.48	130.27	130.50	130.58	130.51	130.71	130.44	130.64	130.51	130.72	130.75	130.88
27	130.45	130.53	130.57	130.51	130.55	130.47	130.57	130.51	130.54	130.68	130.75	130.72
28	130.24	130.53	130.58	130.51	130.65	130.25	130.59	130.40	130.59	130.61	130.76	130.75
29	130.24	130.65	130.32	130.60	---	130.25	130.59	130.44	130.59	130.60	130.62	130.66
30	130.31	130.57	130.24	130.67	---	130.41	130.64	130.55	130.75	130.67	130.55	130.66
31	130.38	---	130.44	130.70	---	130.71	---	130.47	---	130.76	130.83	---
MAX	130.48	130.65	130.82	130.76	130.81	130.74	130.93	130.71	130.80	130.82	130.85	130.91
MIN	130.07	130.19	130.11	130.34	130.28	130.25	130.05	130.18	130.33	130.38	130.54	130.52

GOSHEN COUNTY—Continued

422928104121401 29-061-17aad01 Prairie Center #4—Continued



GOSHEN COUNTY—Continued

422849104090801 29-061-23abb01 Goshen County #1

LOCATION.--Lat 42°28'49", long 104°09'08", in NW$^1/_4$ NW$^1/_4$ NE$^1/_4$ sec. 23, T.29 N., R.61 W., Hydrologic Unit 10180009.

AQUIFER.--Arikaree Formation.

WELL CHARACTERISTICS.--Depth of well, 300 ft below land surface.

DATUM.--Elevation of land surface is 4,870 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.00 ft above land surface.

REMARKS.--Well was slug tested by instantaneous recharge on June 12, 1987 to test connection with aquifer. Water level did not recover properly. Well was redeveloped during March 1991. For an undetermined period prior to June 1987, water-level data might have been affected by poor well-aquifer connection.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1979 to current year.

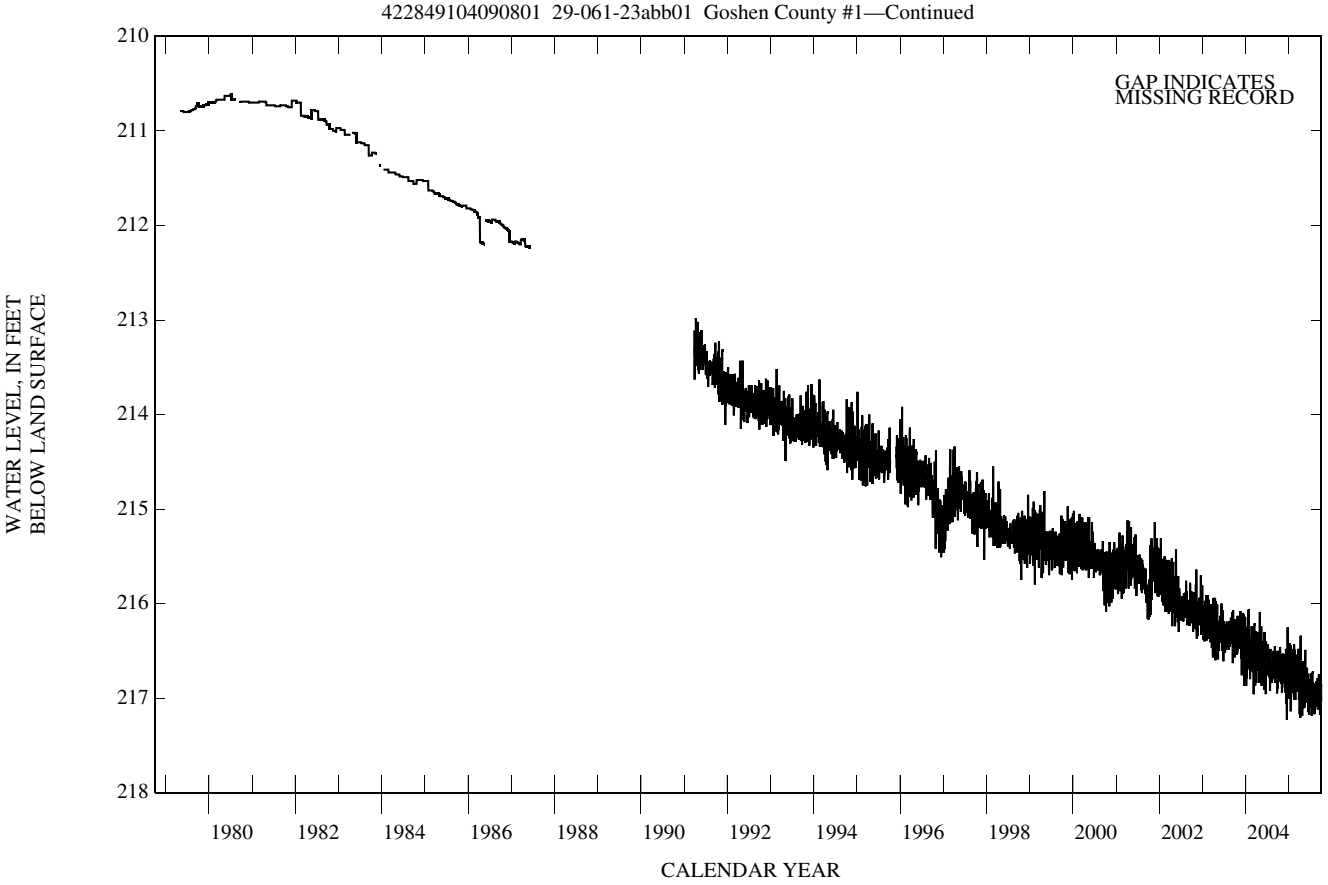
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 198.29 ft below land surface, June 1987, affected by slug test; lowest, 217.43 ft below land surface, March 31, 2005.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	216.57	216.94	216.85	216.78	216.89	216.78	216.99	217.11	216.68	216.91	216.91	217.12
2	216.81	216.92	216.77	217.01	216.92	216.80	216.85	216.95	216.76	216.74	216.89	217.06
3	216.83	216.76	216.65	216.91	216.93	216.88	216.65	216.82	216.79	216.79	216.93	217.02
4	216.78	216.89	216.64	216.94	216.59	216.90	216.63	216.78	216.82	217.09	217.17	217.02
5	216.67	216.78	216.48	216.72	216.48	216.90	216.73	216.82	216.95	216.98	217.03	217.02
6	216.66	216.76	216.51	216.42	216.70	216.64	217.21	216.62	216.74	216.91	216.91	217.09
7	216.65	216.84	216.73	216.51	216.75	216.79	216.72	216.62	216.78	216.90	216.92	217.04
8	216.80	216.74	216.68	216.67	216.81	216.77	216.34	216.66	216.91	216.97	216.84	216.88
9	216.60	216.53	216.66	216.71	216.91	216.79	216.45	216.84	217.03	216.85	216.85	216.75
10	216.60	216.62	217.06	216.84	216.99	216.93	216.86	216.83	216.99	216.88	216.96	216.75
11	216.80	216.80	216.69	216.45	216.73	216.62	216.91	216.95	216.96	217.03	216.96	216.97
12	216.70	216.80	216.81	216.45	216.43	216.54	216.95	216.97	216.84	217.19	216.90	216.97
13	216.78	216.82	217.23	216.86	216.49	216.89	217.00	217.01	216.83	216.99	217.02	217.07
14	216.55	216.83	216.76	217.13	216.69	216.92	216.92	217.10	217.15	216.92	217.03	217.06
15	216.56	216.73	216.75	217.14	216.85	216.82	217.09	216.75	216.97	216.94	217.02	217.11
16	216.46	216.72	216.97	216.98	217.02	216.67	216.97	216.57	216.97	216.73	216.94	216.95
17	216.47	216.76	216.79	216.89	216.97	216.48	216.71	216.49	216.80	216.73	216.82	216.94
18	216.52	216.64	216.82	216.73	216.70	216.72	216.64	216.78	216.83	216.93	216.85	217.07
19	216.72	216.55	216.34	216.85	216.49	216.85	216.68	217.03	217.00	216.83	216.98	217.18
20	216.71	216.74	216.25	216.69	216.61	216.76	216.92	216.93	217.18	216.87	217.08	217.13
21	216.72	216.69	216.61	216.57	216.79	216.82	216.96	216.88	217.11	217.07	217.09	217.01
22	216.54	216.55	216.85	216.84	217.02	216.93	217.19	216.97	216.91	216.99	216.98	217.09
23	216.68	216.69	216.78	216.78	216.97	216.69	216.91	216.90	216.90	216.91	216.82	216.86
24	216.73	216.62	216.60	216.75	216.92	216.78	216.65	216.95	216.96	216.93	216.84	216.91
25	216.83	216.54	216.67	216.73	216.78	217.02	216.66	217.01	216.85	216.87	216.99	217.05
26	216.85	216.54	216.77	216.81	216.69	216.99	216.76	217.05	216.83	217.08	217.03	217.10
27	216.81	216.74	216.86	216.69	216.84	216.72	216.91	216.90	216.88	217.02	217.05	216.95
28	216.61	216.71	216.83	216.71	216.82	216.48	216.90	216.77	216.91	216.93	217.05	217.03
29	216.58	216.94	216.44	216.89	---	216.50	216.93	216.86	216.89	216.92	216.88	216.89
30	216.80	216.80	216.44	216.84	---	216.73	217.03	216.91	217.10	217.00	216.79	216.85
31	216.78	---	216.73	216.94	---	217.17	---	216.81	---	217.07	217.11	---
MAX	216.85	216.94	217.23	217.14	217.02	217.17	217.21	217.11	217.18	217.19	217.17	217.18
MIN	216.46	216.53	216.25	216.42	216.43	216.48	216.34	216.49	216.68	216.73	216.79	216.75

GOSHEN COUNTY—Continued

422849104090801 29-061-23abb01 Goshen County #1—Continued



GOSHEN COUNTY—Continued

422730104094801 29-061-26cbb01 Prairie Center #3

LOCATION.--Lat 42°27"30", long 104°09'48", in NW¼ NW¼ SW¼ sec. 26, T.29 N., R.61 W., Hydrologic Unit 10180009.

AQUIFER.--Arikaree Formation.

WELL CHARACTERISTICS.--Depth of well, 200 ft below land surface.

DATUM.--Elevation of land surface is 4,770 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.50 ft above land surface.

REMARKS.--Considerable seepage of sediment into the well in combination with a falling water level caused the well to go dry in April 2000. Well was redeveloped on June 14, 2001. For an undetermmined period prior to April 2000, water-level data might have been affected by poor well-aquifer connection.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1980 to current year.

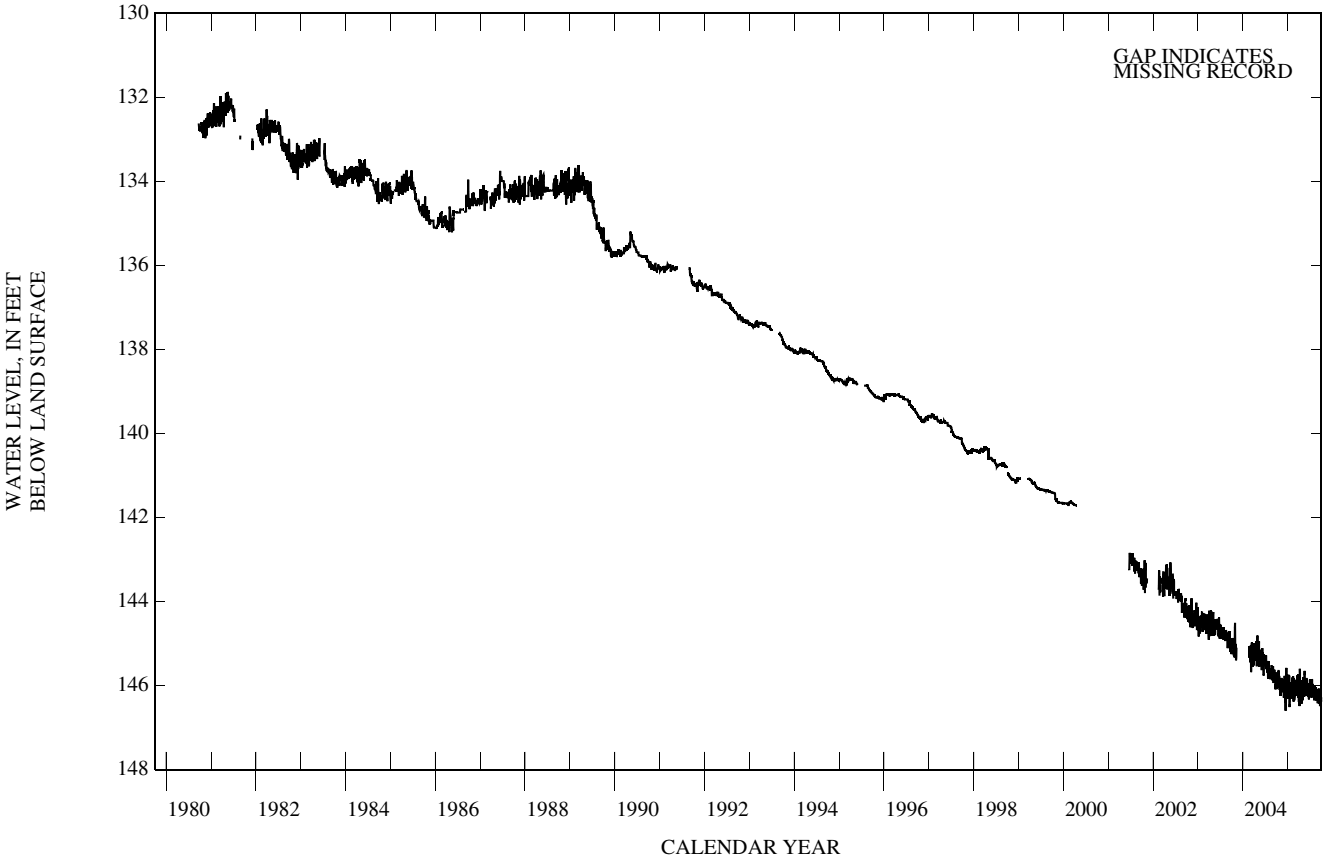
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 131.89 ft below land surface, May 15, 16, 1981; lowest, 146.74 ft below land surface, Sept. 28, 2005.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	145.76	146.19	146.16	146.12	146.25	146.10	146.28	146.35	145.82	146.04	146.09	146.42
2	146.06	146.25	146.09	146.31	146.28	146.10	146.16	146.20	145.87	145.85	146.06	146.38
3	146.06	146.06	145.97	146.27	146.30	146.19	145.91	146.07	145.91	145.89	146.10	146.34
4	146.04	146.22	145.95	146.29	145.94	146.21	145.86	146.04	145.93	146.17	146.35	146.35
5	145.90	146.09	145.77	146.09	145.81	146.25	145.97	146.05	146.02	146.12	146.21	146.35
6	145.89	146.05	145.78	145.76	145.99	145.95	146.49	145.82	145.86	146.05	146.11	146.39
7	145.88	146.13	146.00	145.76	146.09	146.12	146.02	145.80	145.88	146.02	146.12	146.39
8	146.04	146.05	145.97	146.03	146.09	146.09	145.60	145.84	146.00	146.06	146.04	146.23
9	145.84	145.82	145.95	146.02	146.13	146.11	145.70	146.01	146.15	145.98	146.04	146.09
10	145.84	145.87	146.41	146.18	146.31	146.23	146.09	146.01	146.12	145.98	146.15	146.09
11	146.06	146.12	146.02	145.78	146.08	145.94	146.16	146.10	146.08	146.12	146.17	146.25
12	145.90	146.12	146.14	145.78	145.78	145.86	146.16	146.14	145.97	146.29	146.11	146.29
13	146.02	146.15	146.60	146.12	145.80	146.16	146.28	146.17	145.96	146.14	146.23	146.39
14	145.78	146.16	146.15	146.44	146.00	146.23	146.19	146.27	146.27	146.08	146.27	146.40
15	145.78	146.04	146.13	146.51	146.12	146.13	146.34	145.96	146.12	146.08	146.25	146.42
16	145.65	146.03	146.35	146.37	146.38	145.96	146.26	145.75	146.11	145.85	146.18	146.31
17	145.65	146.05	146.19	146.29	146.33	145.76	145.98	145.65	145.95	145.86	146.07	146.29
18	145.71	145.95	146.21	146.11	146.07	145.96	145.88	145.89	145.95	146.07	146.07	146.39
19	145.89	145.87	145.66	146.24	145.83	146.11	145.91	146.12	146.09	145.96	146.18	146.48
20	145.91	146.01	145.58	146.05	145.89	146.01	146.15	146.09	146.29	145.98	146.31	146.49
21	145.91	146.00	145.89	145.92	146.08	146.04	146.21	146.04	146.33	146.15	146.36	146.38
22	145.77	145.86	146.19	146.23	146.35	146.21	146.43	146.15	146.08	146.13	146.30	146.45
23	145.86	145.97	146.14	146.15	146.31	145.96	146.20	146.08	146.06	146.06	146.14	146.26
24	145.95	145.90	145.95	146.10	146.27	146.02	145.91	146.13	146.10	146.07	146.14	146.29
25	146.08	145.87	145.96	146.07	146.14	146.29	145.90	146.18	146.00	146.02	146.17	146.43
26	146.09	145.87	146.10	146.17	146.02	146.27	145.98	146.24	145.97	146.23	146.31	146.49
27	146.10	146.05	146.21	146.02	146.15	146.01	146.15	146.09	146.00	146.19	146.32	146.34
28	145.85	146.03	146.19	146.02	146.17	145.76	146.13	145.95	146.02	146.10	146.33	146.38
29	145.83	146.29	145.77	146.14	---	145.76	146.15	146.03	146.02	146.08	146.19	146.31
30	146.05	146.12	145.76	146.19	---	145.94	146.23	146.07	146.21	146.15	146.09	146.28
31	146.02	---	145.98	146.31	---	146.39	---	145.97	---	146.25	146.39	---
MAX	146.10	146.29	146.60	146.51	146.38	146.39	146.49	146.35	146.33	146.29	146.39	146.49
MIN	145.65	145.82	145.58	145.76	145.78	145.76	145.60	145.65	145.82	145.85	146.04	146.09

GOSHEN COUNTY—Continued

422730104094801 29-061-26cbb01 Prairie Center #3—Continued



GOSHEN COUNTY—Continued

423549104120901 30-061-09bbb01 Prairie Center #5

LOCATION.--Lat 42°35'49", long 104°12'09", in NW¼ NW¼ NW¼ sec. 9, T.30 N., R.61 W., Hydrologic Unit 10180009.

AQUIFER.--Arikaree Formation.

WELL CHARACTERISTICS.--Depth of well, 220 ft below land surface.

DATUM.--Elevation of land surface is 4,850 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.60 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1981 to current year.

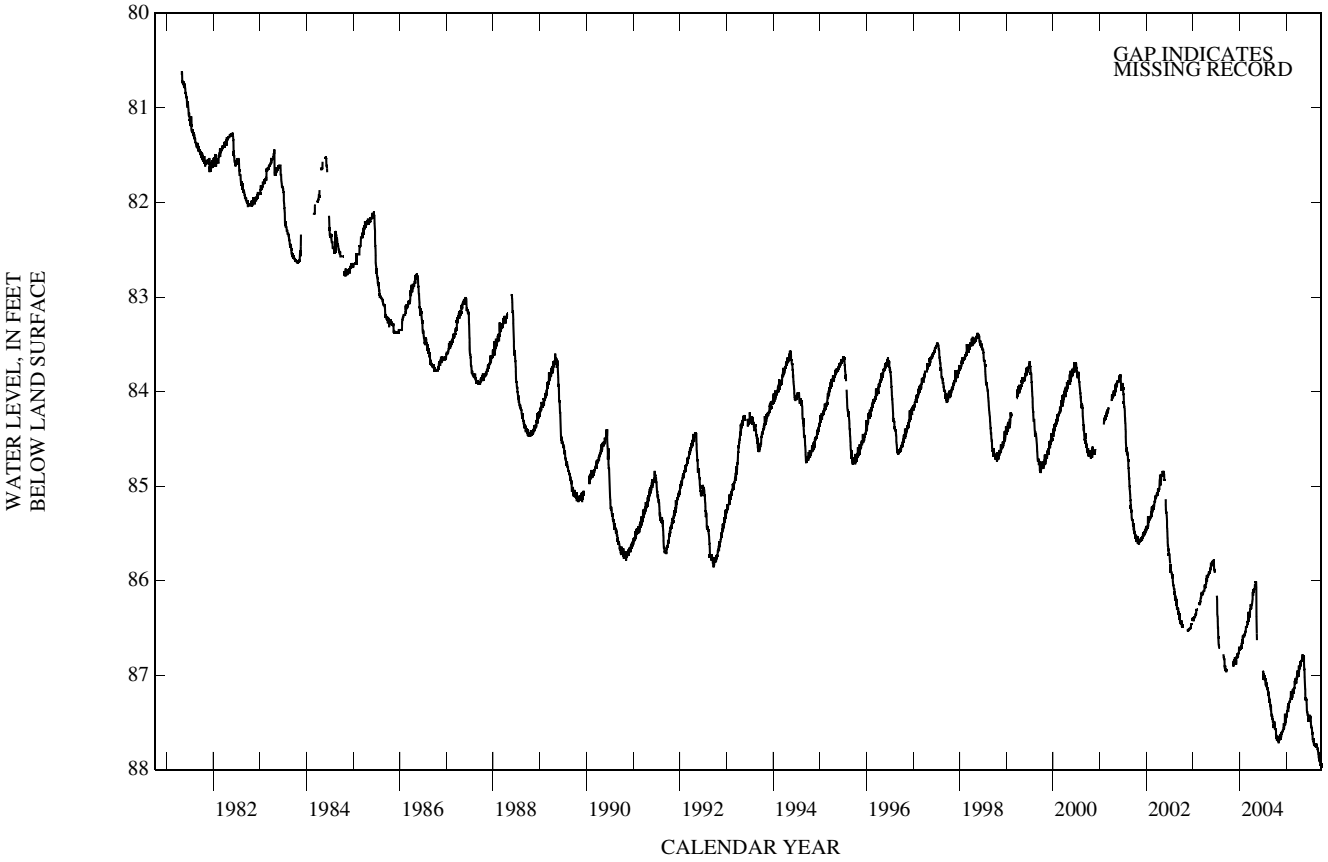
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 80.61 ft below land surface, May 1, 1981; lowest, 88.02 ft below land surface, Sept. 28, 2005.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87.56	87.72	87.60	87.43	87.25	87.14	87.00	86.85	87.24	87.46	87.70	87.78
2	87.57	87.66	87.59	87.43	87.25	87.15	87.00	86.82	87.25	87.42	87.72	87.79
3	87.58	87.65	87.58	87.42	87.25	87.13	86.95	86.81	87.25	87.47	87.73	87.80
4	87.57	87.66	87.58	87.42	87.18	87.14	86.96	86.82	87.26	87.45	87.75	87.80
5	87.57	87.66	87.58	87.38	87.18	87.12	87.00	86.82	87.26	87.43	87.73	87.80
6	87.58	87.66	87.58	87.37	87.24	87.06	86.98	86.78	87.25	87.43	87.74	87.82
7	87.58	87.67	87.57	87.38	87.24	87.07	86.90	86.80	87.28	87.44	87.74	87.83
8	87.57	87.65	87.56	87.38	87.25	87.10	86.90	86.83	87.31	87.45	87.74	87.83
9	87.57	87.64	87.56	87.38	87.25	87.04	86.97	86.84	87.37	87.45	87.74	87.84
10	87.59	87.69	87.55	87.37	87.25	87.07	86.93	86.85	87.39	87.49	87.73	87.86
11	87.63	87.63	87.51	87.33	87.20	87.04	86.92	86.82	87.39	87.50	87.73	87.88
12	87.67	87.66	87.57	87.34	87.17	87.04	86.94	86.84	87.39	87.54	87.72	87.85
13	87.64	87.67	87.56	87.39	87.21	87.08	86.91	86.86	87.39	87.54	87.75	87.90
14	87.64	87.67	87.53	87.39	87.22	87.08	86.92	86.84	87.42	87.54	87.75	87.90
15	87.66	87.64	87.53	87.35	87.24	87.07	86.92	86.80	87.42	87.56	87.75	87.90
16	87.65	87.64	87.52	87.34	87.22	87.05	86.92	86.80	87.42	87.55	87.74	87.89
17	87.68	87.66	87.52	87.34	87.21	87.03	86.89	86.80	87.42	87.56	87.74	87.89
18	87.68	87.62	87.52	87.30	87.16	87.09	86.89	86.87	87.42	87.56	87.74	87.92
19	87.69	87.62	87.41	87.32	87.15	87.05	86.90	86.92	87.46	87.58	87.77	87.91
20	87.67	87.66	87.41	87.32	87.18	87.04	86.91	86.94	87.46	87.61	87.77	87.90
21	87.68	87.61	87.53	87.29	87.20	87.05	86.89	86.94	87.46	87.63	87.76	87.90
22	87.66	87.61	87.51	87.28	87.16	87.02	86.89	87.02	87.48	87.60	87.73	87.94
23	87.67	87.63	87.47	87.28	87.16	87.02	86.86	87.02	87.48	87.61	87.73	87.94
24	87.67	87.61	87.47	87.28	87.16	87.03	86.86	87.06	87.48	87.67	87.74	87.95
25	87.67	87.61	87.49	87.28	87.15	87.02	86.85	87.10	87.48	87.68	87.74	87.95
26	87.70	87.61	87.49	87.28	87.14	87.02	86.85	87.14	87.48	87.69	87.76	87.94
27	87.67	87.59	87.45	87.28	87.15	87.00	86.85	87.15	87.48	87.68	87.76	87.94
28	87.66	87.60	87.46	87.28	87.14	86.95	86.85	87.20	87.46	87.68	87.77	87.98
29	87.67	87.60	87.41	87.27	---	87.00	86.85	87.26	87.46	87.68	87.76	87.94
30	87.66	87.60	87.41	87.26	---	87.01	86.85	87.26	87.48	87.68	87.76	87.94
31	87.68	---	87.45	87.25	---	87.01	---	87.26	---	87.71	87.78	---
MAX	87.70	87.72	87.60	87.43	87.25	87.15	87.00	87.26	87.48	87.71	87.78	87.98
MIN	87.56	87.59	87.41	87.25	87.14	86.95	86.85	86.78	87.24	87.42	87.70	87.78

GOSHEN COUNTY—Continued

423549104120901 30-061-09bbb01 Prairie Center #5—Continued



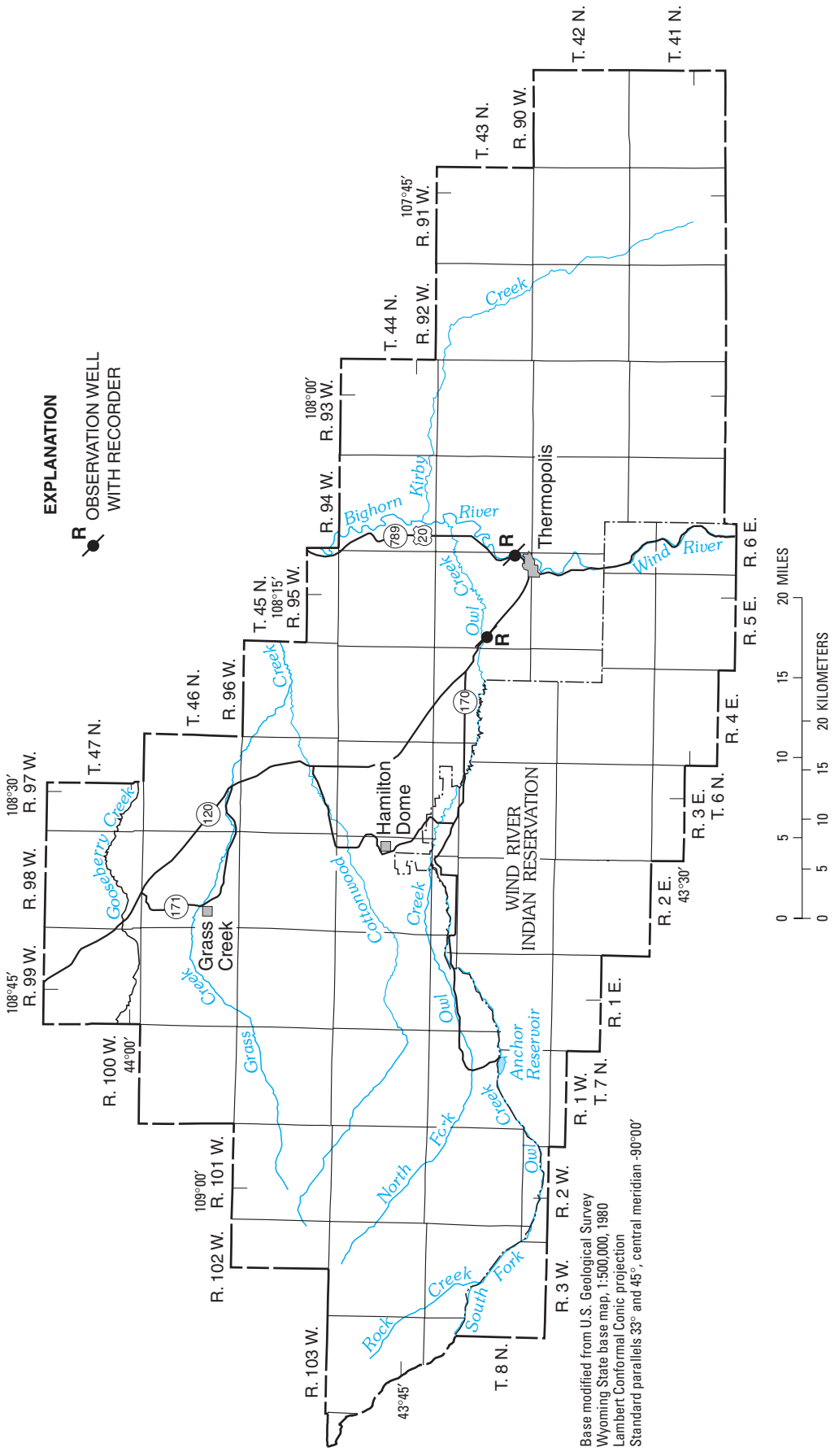


Figure 14. Location of observation wells in Hot Springs County, Wyoming.

HOT SPRINGS COUNTY

434136108183301 43-095-18cab01 Thermopolis GTW-1

LOCATION.--Lat 43°41'36", long 108°18'33", in NW¼ NE¼ SW¼ sec.18, T.43 N., R.95 W., Hydrologic Unit 10080007.

AQUIFER.--Ten Sleep Sandstone.

WELL CHARACTERISTICS.--Depth of well, 354 ft below land surface.

DATUM.--Elevation of land surface is 4,700 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.40 ft above land surface.

REMARKS.--Water in this well is geothermal causing condensation to form making water-level measurements difficult. For this reason the accuracy of the water-level record from this well is approximately plus or minus 2 feet.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1983 to current year.

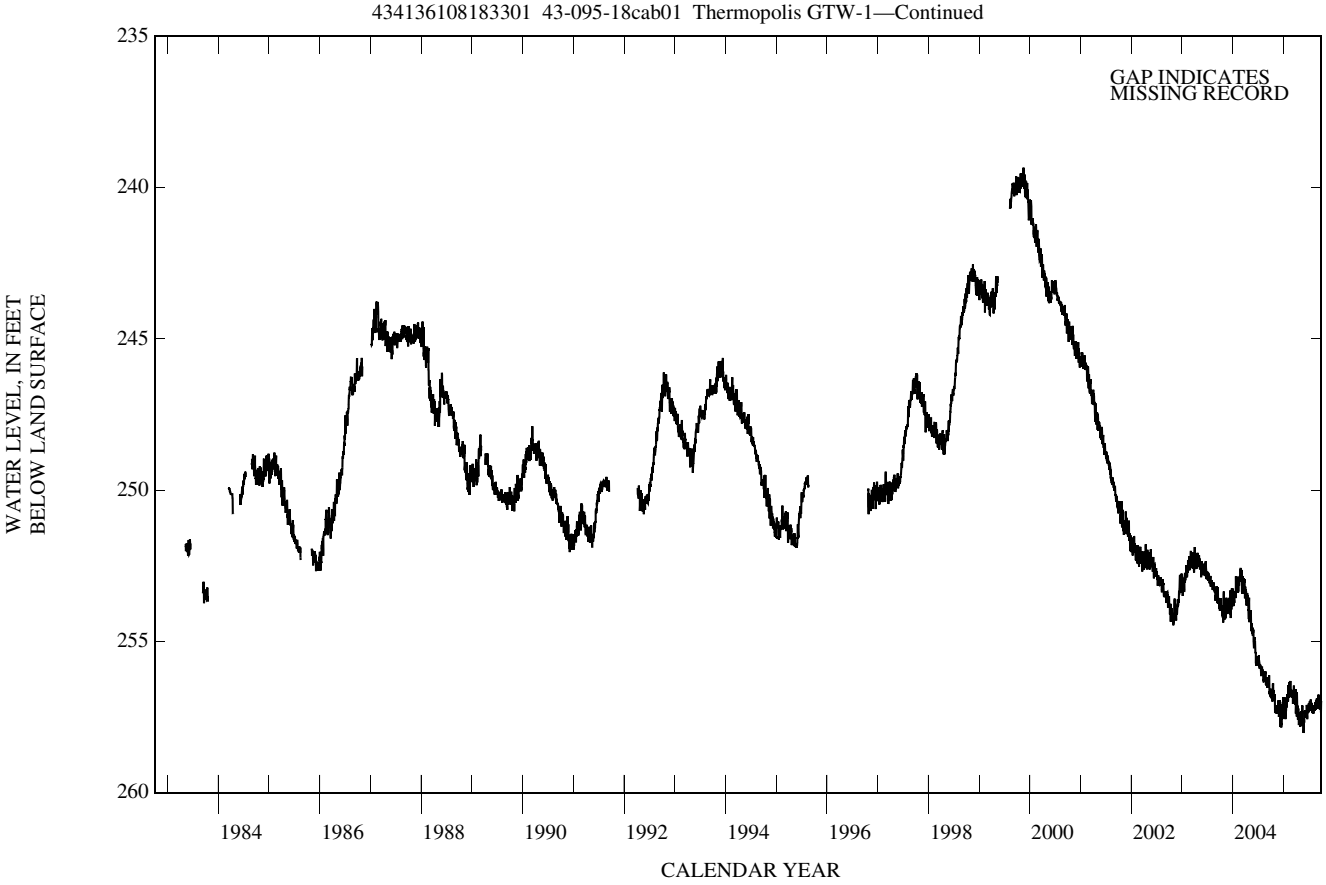
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 239.34 ft below land surface, Nov. 16, 1999; lowest, 258.07 ft below land surface, May 25 and 26, 2005.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	256.76	257.36	257.42	257.26	256.95	256.65	257.20	257.82	257.29	257.18	257.15	257.18
2	256.84	257.27	257.42	257.43	256.99	256.69	257.09	257.72	257.37	257.05	257.15	257.14
3	256.88	257.23	257.30	257.46	256.96	256.71	256.88	257.57	257.39	257.13	257.26	257.11
4	256.84	257.37	257.08	257.55	256.53	256.76	256.85	257.57	257.51	257.31	257.39	257.07
5	256.74	257.29	256.95	257.28	256.45	256.86	257.18	257.51	257.34	257.24	257.26	257.07
6	256.71	257.29	256.98	256.97	256.63	256.67	257.49	257.32	257.29	257.11	257.22	257.20
7	256.72	257.34	257.07	257.00	256.67	256.78	256.96	257.34	257.34	257.13	257.20	257.18
8	256.83	257.19	257.00	256.97	256.69	256.78	256.69	257.46	257.46	257.09	257.14	257.01
9	256.61	257.11	257.09	257.09	256.83	256.81	256.92	257.38	257.51	256.98	257.23	256.82
10	256.63	257.34	257.52	257.20	256.83	257.07	257.24	257.49	257.45	257.04	257.18	256.76
11	256.92	257.33	257.29	256.86	256.51	256.68	257.28	257.55	257.35	257.23	257.23	257.04
12	256.92	257.38	257.57	256.88	256.35	256.64	257.33	257.73	257.34	257.29	257.12	257.09
13	256.99	257.31	257.84	257.17	256.43	256.99	257.13	257.76	257.53	257.10	257.30	257.17
14	256.69	257.38	257.59	257.38	256.43	256.94	257.13	257.80	257.50	257.11	257.21	257.13
15	256.69	257.30	257.59	257.57	256.66	256.80	257.59	257.51	257.44	257.09	257.18	257.12
16	256.47	257.32	257.84	257.43	256.81	256.58	257.45	257.14	257.36	256.92	257.16	257.01
17	256.48	257.37	257.73	257.31	256.81	256.46	257.24	257.12	257.10	257.02	257.01	257.03
18	256.39	257.24	257.73	257.29	256.43	256.69	257.24	257.52	257.14	257.05	257.06	257.21
19	256.67	257.24	257.18	257.31	256.31	256.71	257.48	257.59	257.43	257.02	257.17	257.25
20	256.61	257.35	257.07	257.02	256.41	256.65	257.53	257.54	257.57	257.04	257.26	257.19
21	256.65	257.27	257.38	257.02	256.54	256.83	257.65	257.61	257.50	257.16	257.23	257.18
22	256.68	257.17	257.56	257.19	256.74	256.73	257.77	257.65	257.38	257.09	257.09	257.08
23	256.64	257.22	257.58	257.11	256.83	256.69	257.48	257.65	257.37	257.09	256.96	257.04
24	256.77	257.13	257.44	257.00	256.81	256.99	257.34	257.77	257.36	257.07	256.96	257.11
25	256.89	256.95	257.41	256.99	256.61	257.07	257.41	258.03	257.21	257.07	257.15	257.22
26	256.92	256.99	257.40	256.88	256.61	257.09	257.53	257.92	257.22	257.37	257.14	257.21
27	256.96	257.09	257.48	256.75	256.75	256.83	257.55	257.74	257.27	257.22	257.12	257.12
28	256.74	257.14	257.42	256.76	256.65	256.58	257.56	257.58	257.18	257.13	257.12	257.35
29	256.79	257.50	256.88	256.94	---	256.66	257.60	257.66	257.29	257.20	256.91	257.02
30	256.95	257.38	256.88	256.94	---	256.84	257.68	257.69	257.35	257.25	256.88	256.97
31	256.95	---	257.18	256.95	---	257.39	---	257.44	---	257.25	257.23	---
MAX	256.99	257.50	257.84	257.57	256.99	257.39	257.77	258.03	257.57	257.37	257.39	257.35
MIN	256.39	256.95	256.88	256.75	256.31	256.46	256.69	257.12	257.10	256.92	256.88	256.76

HOT SPRINGS COUNTY—Continued

434136108183301 43-095-18cab01 Thermopolis GTW-1—Continued



HOT SPRINGS COUNTY—Continued

433933108121901 43-095-25cdc01 Thermopolis GTW-3

LOCATION.--Lat 43°39'33", long 108°12'19", in SW¼ SE¼ SW¼ sec.25, T.43 N., R.95 W., Hydrologic Unit 10080007.

AQUIFER.--Phosphoria Formation (formerly identified as Park City Formation).

WELL CHARACTERISTICS.--Depth of well, 228 ft below land surface.

DATUM.--Elevation of land surface is 4,700 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.60 ft above land surface.

REMARKS.--Water in this well is geothermal causing condensation to form making water-level measurements difficult. For this reason the accuracy of the water-level record from this well is approximately plus or minus 2 feet.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1983 to current year.

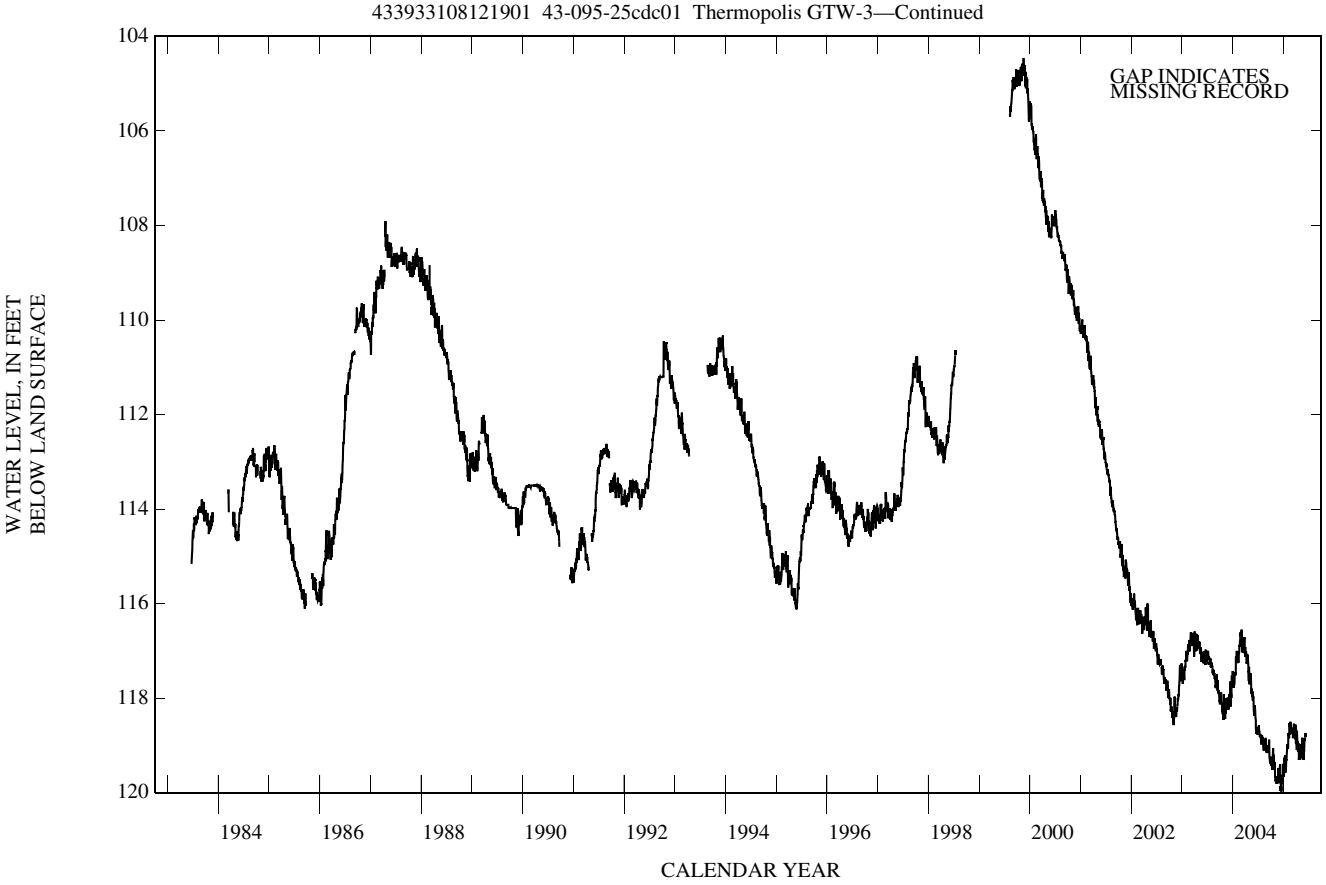
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 104.46 ft below land surface, Nov. 17, 1999; lowest, 120.03 ft below land surface, Dec. 16, 2004.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119.31	119.65	119.78	119.46	119.05	118.64	118.97	119.30	118.89	---	---	---
2	119.39	119.69	119.78	119.54	119.07	118.65	118.90	119.28	118.86	---	---	---
3	119.43	119.68	119.70	119.60	119.04	118.68	118.78	119.19	118.85	---	---	---
4	119.42	119.76	119.55	119.66	118.82	118.70	118.72	119.18	118.89	---	---	---
5	119.37	119.73	119.45	119.55	118.74	118.76	118.90	119.13	118.83	---	---	---
6	119.35	119.74	119.44	119.38	118.76	118.67	119.10	119.00	118.75	---	---	---
7	119.35	119.76	119.44	119.30	118.77	118.71	118.88	118.97	---	---	---	---
8	119.41	119.71	119.40	119.26	118.77	118.75	118.69	118.99	---	---	---	---
9	119.30	119.65	119.47	119.32	118.81	118.74	118.77	118.98	---	---	---	---
10	119.31	119.74	119.73	119.35	118.85	118.85	118.88	119.02	---	---	---	---
11	119.45	119.78	119.65	119.21	118.70	118.70	118.96	119.06	---	---	---	---
12	119.46	119.81	119.82	119.23	118.60	118.68	119.01	119.17	---	---	---	---
13	119.52	119.79	119.96	119.28	118.54	118.80	118.91	119.22	---	---	---	---
14	119.37	119.81	119.88	119.42	118.54	118.81	118.91	119.27	---	---	---	---
15	119.34	119.78	119.88	119.56	118.65	118.74	119.13	119.14	---	---	---	---
16	119.21	119.78	119.98	119.56	118.76	118.59	119.12	118.86	---	---	---	---
17	119.15	119.81	119.97	119.48	118.77	118.54	119.01	118.84	---	---	---	---
18	119.06	119.75	119.96	119.48	118.60	118.59	118.95	118.97	---	---	---	---
19	119.20	119.75	119.66	119.45	118.50	118.59	119.07	119.03	---	---	---	---
20	119.20	119.79	119.62	119.29	118.50	118.57	119.10	119.03	---	---	---	---
21	119.21	119.74	119.67	119.29	118.53	118.65	119.20	119.10	---	---	---	---
22	119.23	119.68	119.75	119.32	118.65	118.65	119.31	119.12	---	---	---	---
23	119.23	119.67	119.81	119.26	118.73	118.62	119.19	119.14	---	---	---	---
24	119.27	119.61	119.72	119.20	118.74	118.75	119.07	119.18	---	---	---	---
25	119.39	119.48	119.68	119.15	118.67	118.83	119.12	119.31	---	---	---	---
26	119.43	119.53	119.65	119.09	118.63	118.87	119.11	119.29	---	---	---	---
27	119.45	119.54	119.69	118.98	118.68	118.74	119.14	119.22	---	---	---	---
28	119.35	119.58	119.64	119.00	118.65	118.58	119.16	119.10	---	---	---	---
29	119.38	119.77	119.39	119.01	---	118.56	119.19	119.13	---	---	---	---
30	119.46	119.76	119.40	119.04	---	118.65	119.22	119.10	---	---	---	---
31	119.46	---	119.42	119.04	---	118.93	---	118.99	---	---	---	---
MAX	119.52	119.81	119.98	119.66	119.07	118.93	119.31	119.31	---	---	---	---
MIN	119.06	119.48	119.39	118.98	118.50	118.54	118.69	118.84	---	---	---	---

HOT SPRINGS COUNTY—Continued

433933108121901 43-095-25cdc01 Thermopolis GTW-3—Continued



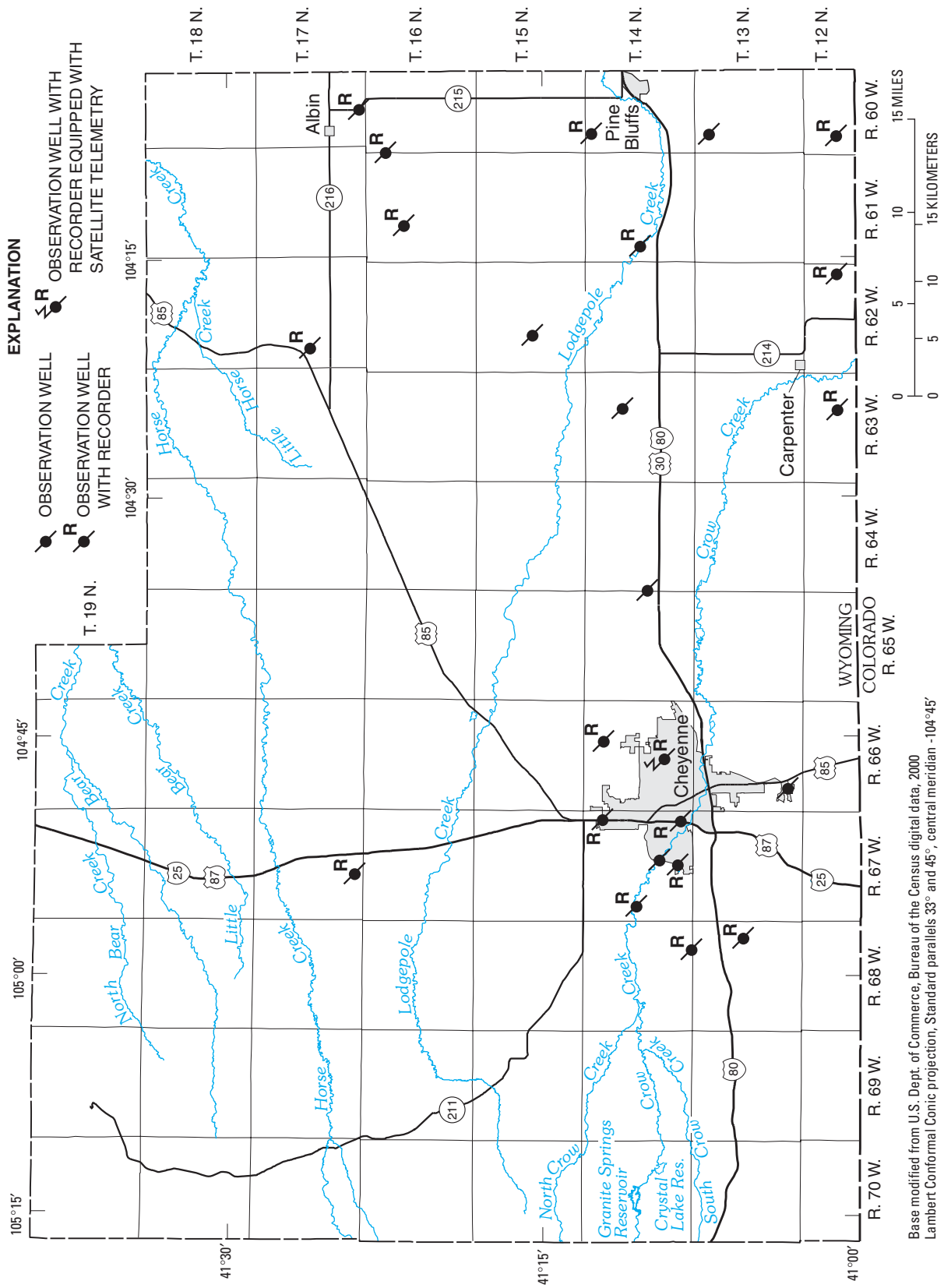


Figure 15. Location of observation wells in Laramie County, Wyoming.

LARAMIE COUNTY

410059104072401 12-060-07ddd01 Laramie County #1

LOCATION.--Lat 41°00'59", long 104°07'24", in SE¼ SE¼ SE¼ sec.7, T.12 N., R.60 W., Hydrologic Unit 10190015.

AQUIFER.--Brule Formation.

WELL CHARACTERISTICS.--Depth of well, 120 ft below land surface.

DATUM.--Elevation of land surface is 5,176 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.70 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1978 to current year.

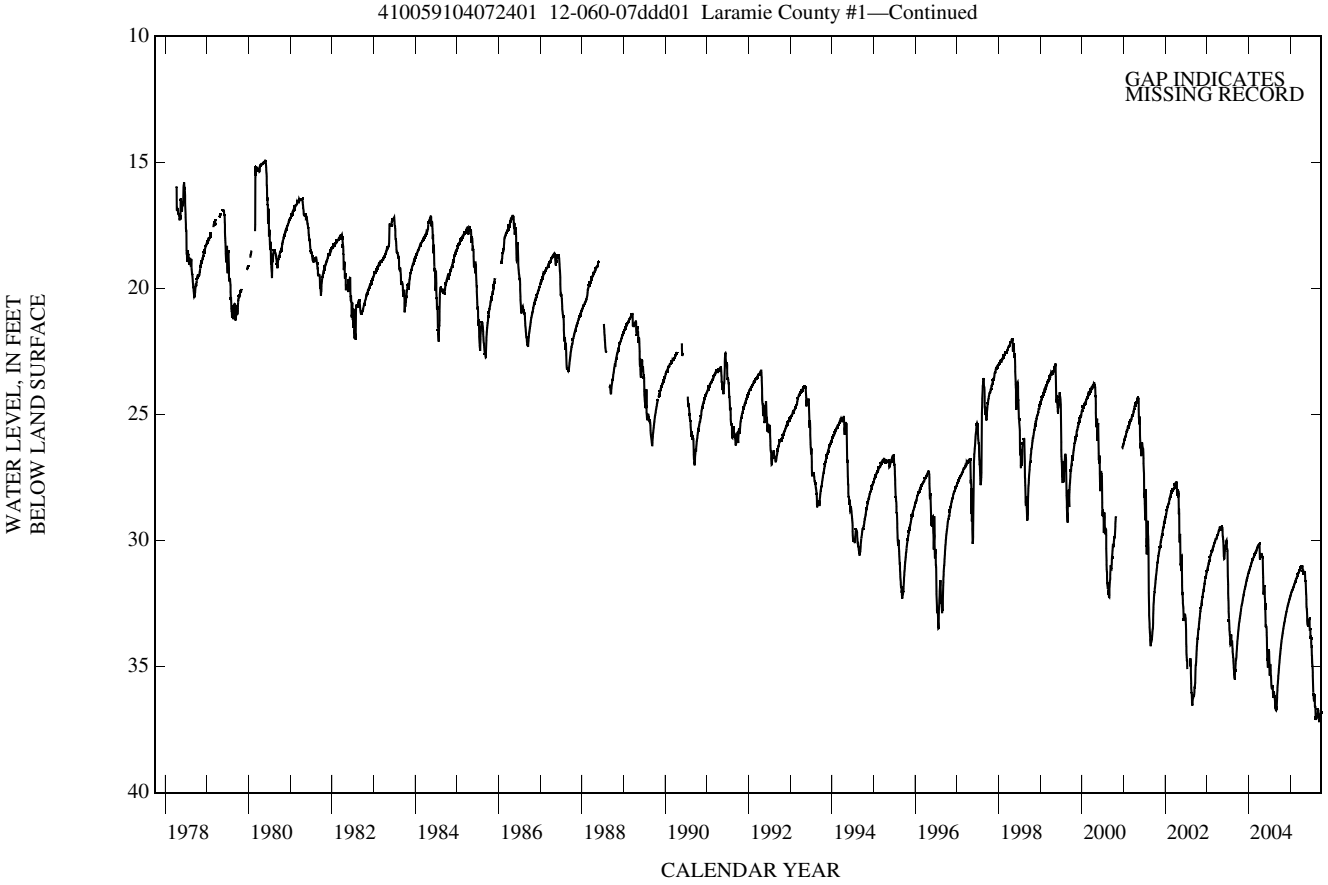
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.90 ft below land surface, May 24, 25, 1980; lowest, 37.20 ft below land surface, Sept. 13-15, 2005.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34.66	33.51	32.78	32.22	31.82	31.45	31.12	31.32	33.34	33.87	36.14	36.71
2	34.61	33.48	32.76	32.21	31.80	31.44	31.11	31.31	33.35	33.87	36.14	36.71
3	34.57	33.45	32.74	32.20	31.79	31.43	31.09	31.29	33.35	33.87	36.18	36.71
4	34.52	33.43	32.72	32.19	31.77	31.42	31.07	31.28	33.35	34.06	36.45	36.73
5	34.47	33.39	32.70	32.16	31.75	31.40	31.05	31.26	33.35	34.21	36.58	36.82
6	34.43	33.37	32.67	32.14	31.74	31.37	31.05	31.24	33.34	34.21	36.60	36.93
7	34.38	33.34	32.65	32.13	31.72	31.37	31.05	31.24	33.31	34.21	36.60	36.98
8	34.34	33.31	32.63	32.11	31.71	31.35	31.04	31.25	33.29	34.26	36.60	36.99
9	34.29	33.29	32.61	32.10	31.70	31.35	31.04	31.25	33.26	34.56	36.60	36.98
10	34.26	33.26	32.60	32.08	31.69	31.33	31.03	31.25	33.24	34.57	36.82	36.98
11	34.20	33.25	32.57	32.06	31.68	31.32	31.03	31.42	33.22	34.61	36.98	37.00
12	34.15	33.22	32.55	32.05	31.65	31.30	31.03	31.60	33.21	34.77	37.08	37.12
13	34.12	33.20	32.54	32.03	31.63	31.30	31.03	31.61	33.19	34.93	37.08	37.19
14	34.07	33.18	32.53	32.02	31.63	31.29	31.02	31.61	33.19	34.96	37.07	37.20
15	34.04	33.15	32.51	32.01	31.62	31.28	31.02	31.61	33.16	34.97	37.07	37.18
16	33.99	33.12	32.50	32.00	31.61	31.27	31.02	31.61	33.13	35.06	37.07	37.14
17	33.96	33.10	32.48	31.99	31.60	31.25	31.02	31.71	33.11	35.22	37.07	37.09
18	33.94	33.07	32.46	31.97	31.58	31.25	31.02	31.90	33.10	35.37	37.07	37.06
19	33.93	33.05	32.44	31.96	31.57	31.24	31.02	32.08	33.10	35.59	37.07	37.03
20	33.89	33.03	32.40	31.95	31.56	31.23	31.15	32.09	33.32	35.84	37.06	37.00
21	33.85	33.00	32.40	31.95	31.54	31.22	31.18	32.15	33.54	36.04	37.05	36.96
22	33.81	32.98	32.38	31.95	31.54	31.21	31.19	32.34	33.54	36.11	37.02	36.93
23	33.78	32.95	32.37	31.93	31.53	31.20	31.19	32.51	33.54	36.11	36.98	36.90
24	33.75	32.93	32.34	31.92	31.51	31.18	31.19	32.63	33.52	36.11	36.93	36.89
25	33.72	32.91	32.33	31.90	31.50	31.17	31.28	32.70	33.52	36.17	36.88	36.88
26	33.69	32.88	32.31	31.89	31.49	31.17	31.32	32.72	33.54	36.26	36.86	36.86
27	33.66	32.86	32.30	31.88	31.48	31.16	31.32	32.75	33.78	36.32	36.83	36.82
28	33.62	32.84	32.29	31.86	31.46	31.14	31.32	32.86	33.82	36.31	36.80	36.82
29	33.58	32.83	32.27	31.85	---	31.13	31.32	33.03	33.82	36.26	36.77	36.81
30	33.56	32.81	32.25	31.84	---	31.12	31.32	33.18	33.82	36.22	36.74	36.80
31	33.53	---	32.24	31.83	---	31.12	---	33.27	---	36.19	36.73	---
MAX	34.66	33.51	32.78	32.22	31.82	31.45	31.32	33.27	33.82	36.32	37.08	37.20
MIN	33.53	32.81	32.24	31.83	31.46	31.12	31.02	31.24	33.10	33.87	36.14	36.71

LARAMIE COUNTY—Continued

410059104072401 12-060-07ddd01 Laramie County #1—Continued



LARAMIE COUNTY—Continued

410100104160301 12-062-13baa01 USGS southeast of Carpenter

LOCATION.--Lat 41°01'00", long 104°16'03", in NE¼ NE¼ NW¼ sec.13, T.12 N., R.62 W., Hydrologic Unit 10190009.

AQUIFER.--Terrace deposits.

WELL CHARACTERISTICS.--Depth of well, 198 ft below land surface datum.

DATUM.--Elevation of land surface is 5,315 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.70 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1975 to current year.

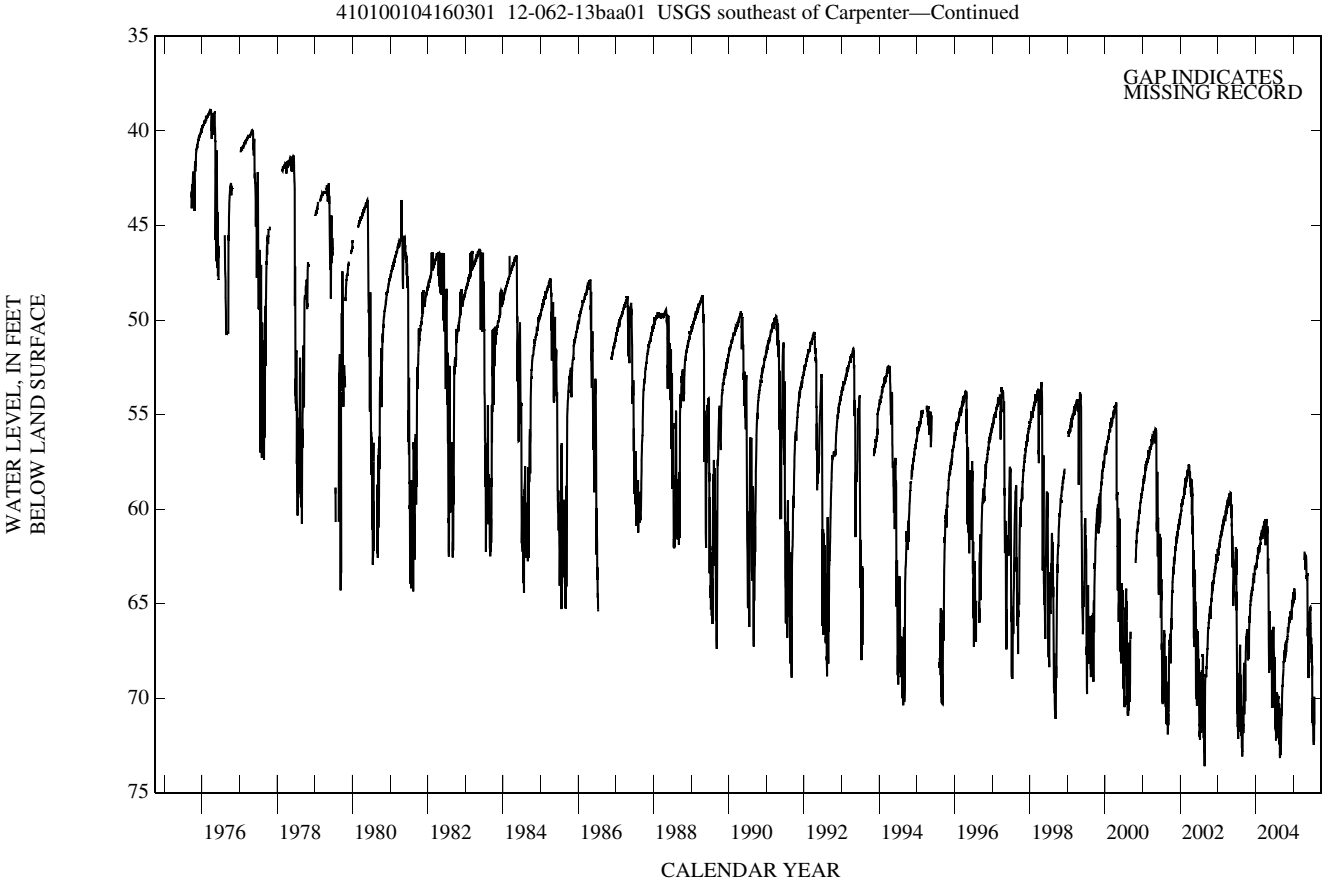
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 38.53 ft below land surface, from hand-measured data, May 19, 1975; lowest, 73.86 ft below land surface, Sept. 2, 2004.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68.04	66.99	65.87	64.81	---	---	---	62.89	66.76	67.83	---	---
2	68.13	67.09	65.77	65.00	---	---	---	62.67	66.62	68.82	---	---
3	68.08	66.86	65.67	64.95	---	---	---	62.49	66.43	68.29	---	---
4	67.93	66.92	65.56	64.88	---	---	---	62.46	66.37	70.17	---	---
5	67.71	66.82	65.40	64.75	---	---	---	62.47	66.07	70.67	---	---
6	67.63	66.72	65.42	64.47	---	---	---	62.65	65.58	70.12	---	---
7	67.60	66.75	65.54	64.47	---	---	---	62.69	65.44	71.19	---	---
8	67.65	66.60	65.48	64.58	---	---	---	62.89	65.94	71.32	---	---
9	67.45	66.34	65.46	64.60	---	---	---	63.27	65.87	70.17	---	---
10	67.66	66.35	65.78	64.61	---	---	---	63.50	65.68	70.65	---	---
11	68.07	66.55	65.50	64.24	---	---	---	63.51	65.52	71.47	---	---
12	67.69	66.50	65.51	64.20	---	---	---	63.66	65.29	70.66	---	---
13	67.73	66.48	65.86	64.57	---	---	---	63.66	65.28	70.55	---	---
14	67.43	66.46	65.48	64.75	---	---	---	63.77	65.39	70.40	---	---
15	67.38	66.34	65.44	64.80	---	---	---	63.78	65.19	69.94	---	---
16	67.22	66.28	65.58	64.67	---	---	---	63.46	65.18	71.21	---	---
17	67.14	66.27	65.41	64.61	---	---	---	63.46	66.06	71.54	---	---
18	67.15	66.17	65.42	64.44	---	---	---	64.40	66.04	72.48	---	---
19	67.68	66.04	64.97	64.46	---	---	---	65.49	66.20	70.64	---	---
20	67.70	66.10	64.80	---	---	---	62.25	66.39	67.01	70.07	---	---
21	67.56	66.07	65.00	---	---	---	62.38	66.73	67.16	72.32	---	---
22	67.24	65.90	65.20	---	---	---	62.70	66.28	67.17	72.24	---	---
23	67.31	65.91	65.20	---	---	---	62.59	66.30	67.18	70.53	---	---
24	67.56	65.88	65.01	---	---	---	62.38	66.43	66.81	69.94	---	---
25	67.36	65.75	65.02	---	---	---	62.38	67.16	67.93	71.41	---	---
26	67.33	65.70	65.06	---	---	---	62.46	67.58	67.51	---	---	---
27	67.21	65.80	65.08	---	---	---	63.20	68.66	67.17	---	---	---
28	66.97	65.71	65.05	---	---	---	63.16	68.07	67.45	---	---	---
29	66.96	66.01	64.68	---	---	---	63.12	68.94	68.14	---	---	---
30	67.06	65.86	64.66	---	---	---	62.99	68.08	67.80	---	---	---
31	66.93	---	64.84	---	---	---	---	67.26	---	---	---	---
MAX	68.13	67.09	65.87	---	---	---	---	68.94	68.14	---	---	---
MIN	66.93	65.70	64.66	---	---	---	---	62.46	65.18	---	---	---

LARAMIE COUNTY—Continued

410100104160301 12-062-13baa01 USGS southeast of Carpenter—Continued



LARAMIE COUNTY—Continued

410111104223102 12-063-15aaa02 USGS southwest of Carpenter

LOCATION.--Lat 41°00'59", long 104°24'32", in NE¼ NE¼ NE¼ sec.15, T.12 N., R.63 W., Hydrologic Unit 10190009.

AQUIFER.--Brule Formation.

WELL CHARACTERISTICS.--Depth of well, 110 ft below land surface.

DATUM.--Elevation of land surface is 5,385 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.50 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1973 to current year.

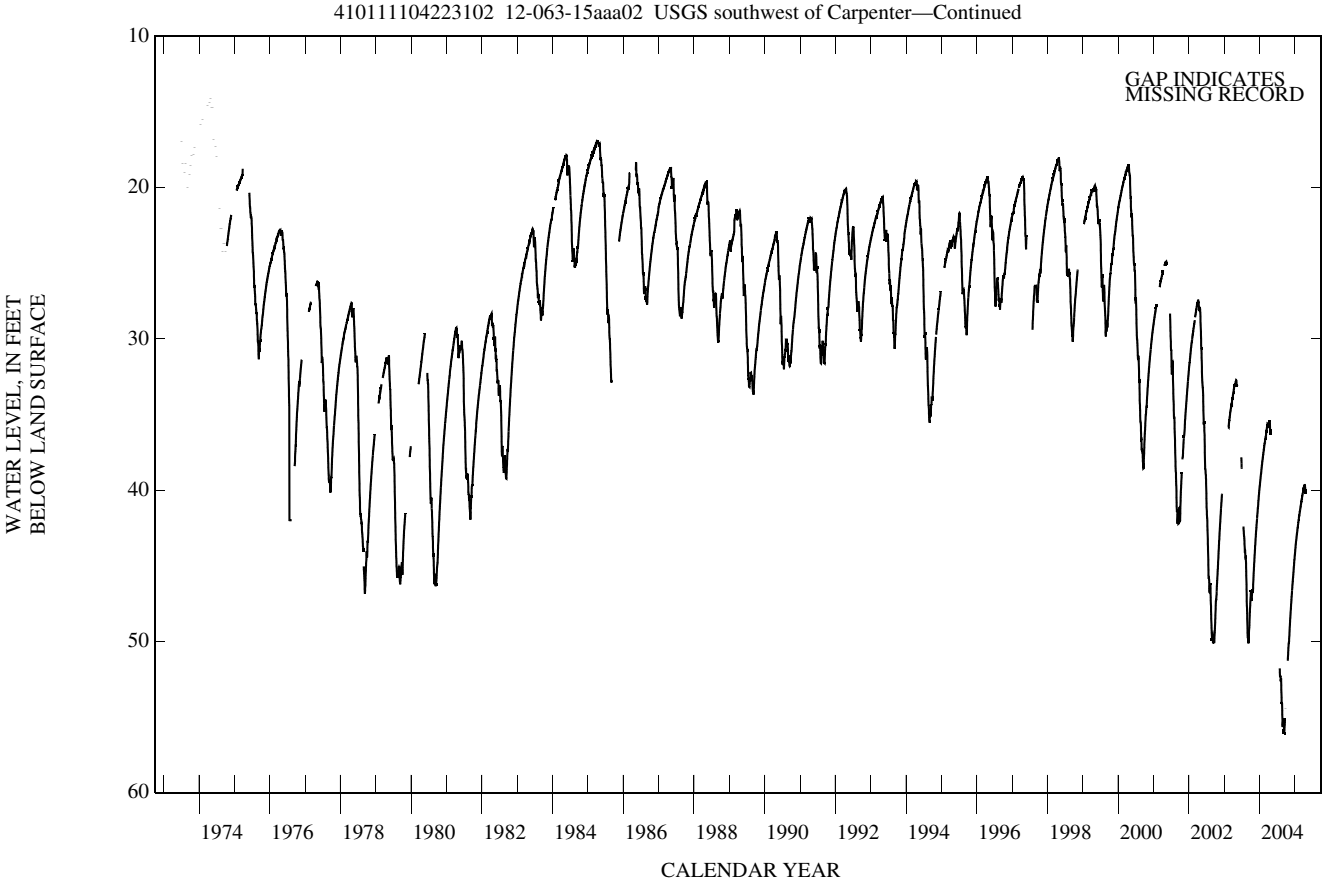
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.12 ft below land surface, May 1, 2, 1974; lowest, 56.20 ft below land surface, Sept. 10, 11, 2004.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	50.01	46.75	44.21	42.34	41.05	39.92	---	---	---	---	---
2	---	49.84	46.64	44.14	42.30	41.01	39.88	---	---	---	---	---
3	---	49.69	46.55	44.04	42.26	40.95	39.83	---	---	---	---	---
4	---	49.58	46.43	43.98	42.16	40.94	39.76	---	---	---	---	---
5	---	49.44	46.33	43.90	42.12	40.89	39.76	---	---	---	---	---
6	---	49.32	46.25	43.81	42.10	40.84	39.77	---	---	---	---	---
7	---	49.22	46.18	43.76	42.00	40.79	39.71	---	---	---	---	---
8	---	49.05	46.07	43.65	41.99	40.78	39.67	---	---	---	---	---
9	---	48.92	46.03	43.61	41.96	40.73	39.66	---	---	---	---	---
10	---	48.85	45.94	43.55	41.92	40.72	39.66	---	---	---	---	---
11	---	48.70	45.84	43.42	41.82	40.62	39.66	---	---	---	---	---
12	---	48.62	45.80	43.41	41.77	40.60	39.66	---	---	---	---	---
13	---	48.48	45.71	43.38	41.75	40.58	39.66	---	---	---	---	---
14	---	48.40	45.60	43.35	41.68	40.55	39.72	---	---	---	---	---
15	---	48.28	45.55	43.28	41.67	40.50	39.82	---	---	---	---	---
16	---	48.19	45.46	43.18	41.63	40.44	39.82	---	---	---	---	---
17	---	48.09	45.39	43.13	41.60	40.39	39.96	---	---	---	---	---
18	---	47.98	45.28	43.05	41.52	40.37	40.24	---	---	---	---	---
19	51.28	47.88	45.18	42.99	41.45	40.34	---	---	---	---	---	---
20	51.14	47.80	45.10	42.93	41.42	40.27	---	---	---	---	---	---
21	51.00	47.66	45.03	42.90	41.40	40.26	---	---	---	---	---	---
22	50.84	47.58	44.97	42.85	41.35	40.23	---	---	---	---	---	---
23	50.71	47.48	44.86	42.81	41.30	40.19	---	---	---	---	---	---
24	50.60	47.39	44.79	42.72	41.27	40.19	---	---	---	---	---	---
25	50.47	47.26	44.67	42.69	41.22	40.14	---	---	---	---	---	---
26	50.38	47.21	44.61	42.63	41.16	40.09	---	---	---	---	---	---
27	50.22	47.06	44.58	42.57	41.12	40.04	---	---	---	---	---	---
28	50.12	47.01	44.50	42.50	41.08	40.01	---	---	---	---	---	---
29	50.11	46.91	44.37	42.48	---	39.96	---	---	---	---	---	---
30	50.10	46.83	44.35	42.44	---	39.97	---	---	---	---	---	---
31	50.04	---	44.24	42.40	---	39.97	---	---	---	---	---	---
MAX	---	50.01	46.75	44.21	42.34	41.05	---	---	---	---	---	---
MIN	---	46.83	44.24	42.40	41.08	39.96	---	---	---	---	---	---

LARAMIE COUNTY—Continued

410111104223102 12-063-15aaa02 USGS southwest of Carpenter—Continued



LARAMIE COUNTY—Continued

410703104071201 13-060-05ccb01 Elmer Glantz

LOCATION.--Lat 41°07'03", long 104°07'12", in NW$^1/_4$ SW$^1/_4$ SW$^1/_4$ sec.5, T.13 N., R.60 W., Hydrologic Unit 10190015.

AQUIFER.--Brule Formation.

WELL CHARACTERISTICS.--Depth of well, 100 ft below land surface.

DATUM.--Elevation of land surface is 5,125 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, at land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

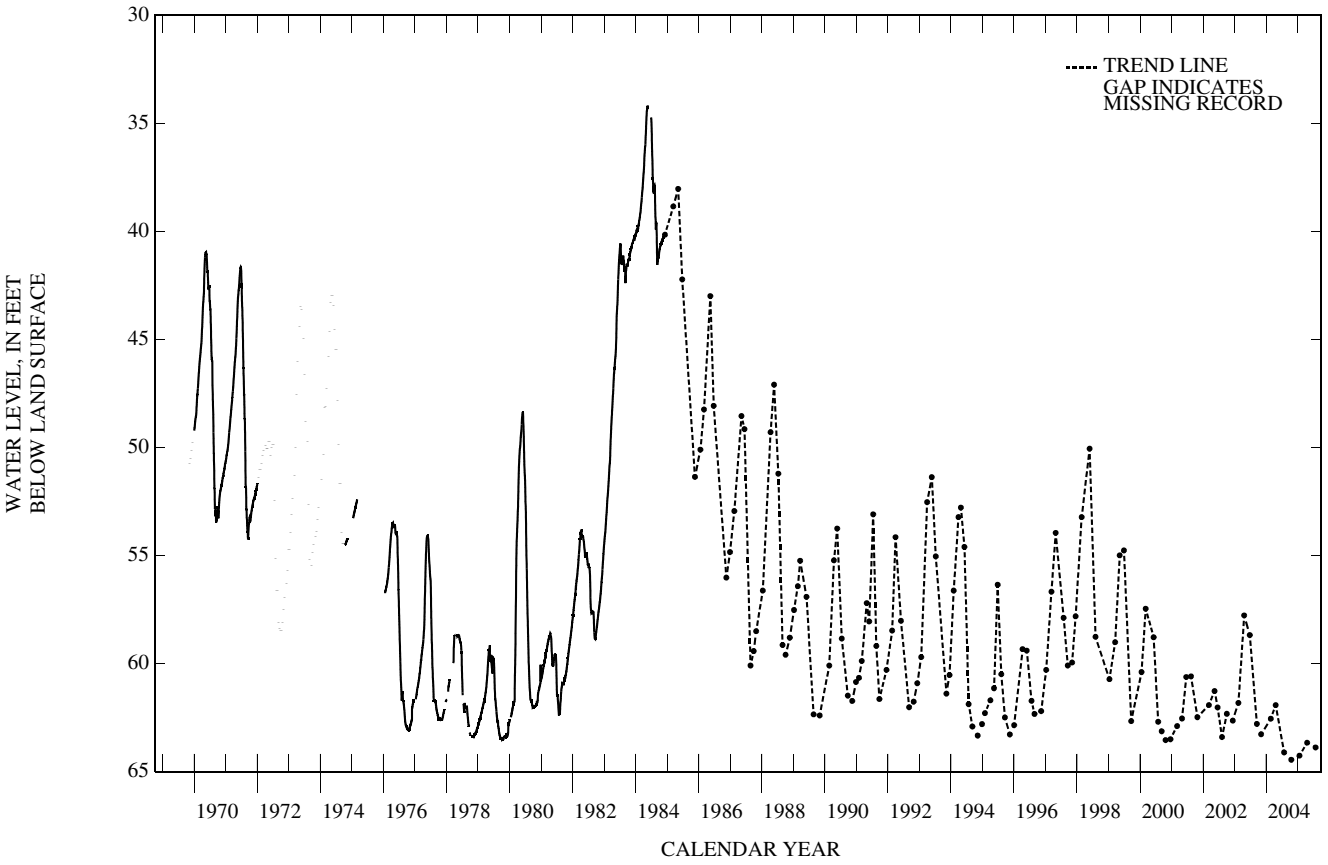
PERIOD OF RECORD.--1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 34.18 ft below land surface, May 20, 1984; lowest, 64.45 ft below land surface, Oct. 18, 2004.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	64.45	JAN 20	64.26	APR 19	63.66	JUL 26	63.88

WATER YEAR 2005 HIGHEST 63.66 APR 19, 2005 LOWEST 64.45 OCT 18, 2004



LARAMIE COUNTY—Continued

410324104481701 13-066-32bbd01 Laramie County #14

LOCATION.--Lat 41°03'24", long 104°48'17", in SE$^1/_4$ NW$^1/_4$ NW$^1/_4$ sec.32, T.13 N., R.66 W., Hydrologic Unit 10190009.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Depth of well, 160 ft below land surface.

DATUM.--Elevation of land surface is 6,180 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.3 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

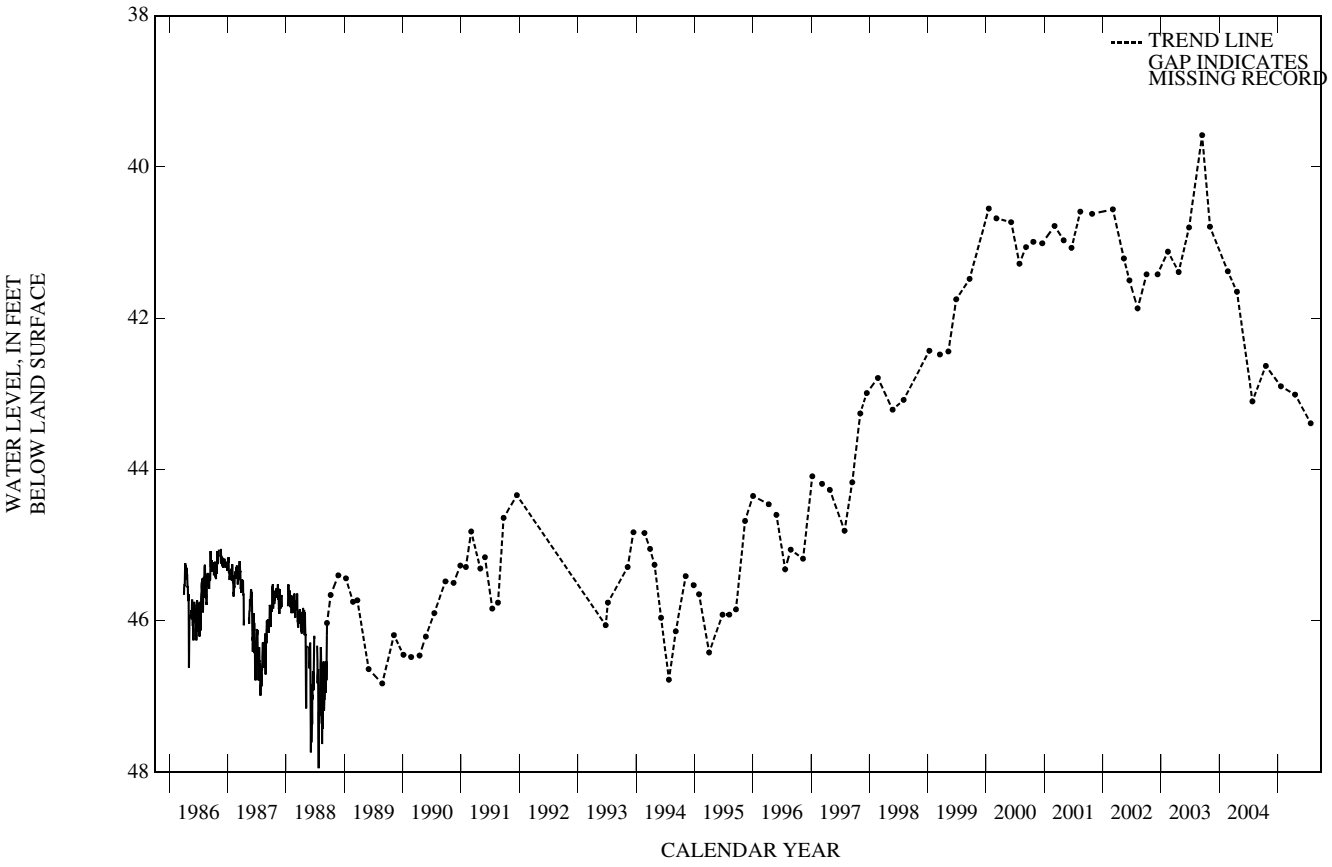
PERIOD OF RECORD.--1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 39.58 ft below land surface, from hand-measured data, Sept. 15, 2003; lowest, 47.95 ft below land surface, July 23, 1988.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	42.63	JAN 20	42.90	APR 19	43.01	JUL 26	43.39

WATER YEAR 2005 HIGHEST 42.63 OCT 18, 2004 LOWEST 43.39 JUL 26, 2005



LARAMIE COUNTY—Continued

410530104574001 13-068-13ccc01 Borie

LOCATION.--Lat 41°05'30", long 104°57'40", in SW¼ SW¼ SW¼ sec.13, T.13 N., R.68 W., Hydrologic Unit 10190009.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Depth of well, unknown.

DATUM.--Elevation of land surface is 6,528 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 0.80 ft above land surface.

PERIOD OF RECORD.--1942 to 1950, 1969 to current year.

REMARKS.--Data collected by U.S. Geological Survey.

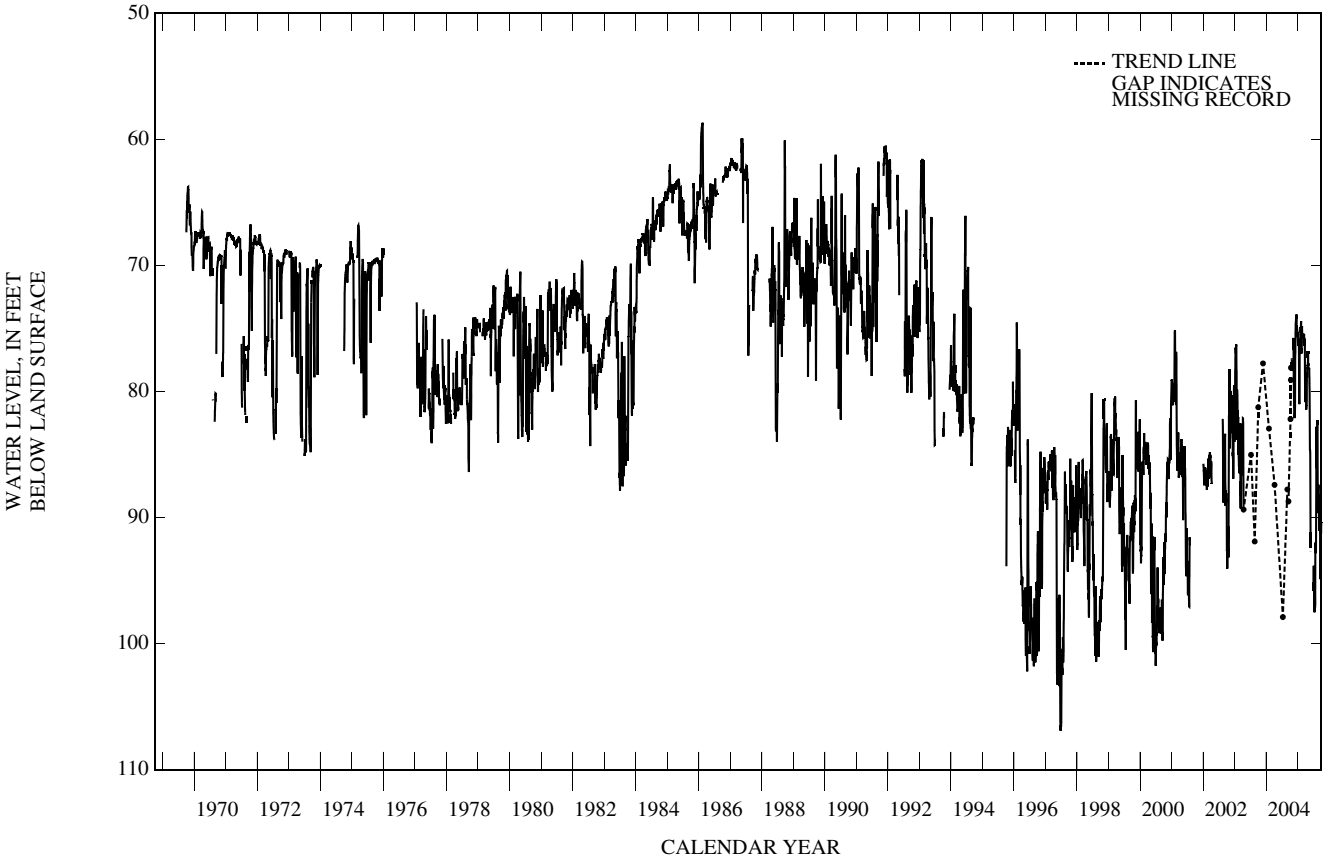
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 36.78 ft below land surface, from hand-measured data, Mar. 23, 1945; lowest, 106.91 ft below land surface, June 23, 1997.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	78.16	75.33	74.97	75.46	78.63	77.98	92.70	95.49	89.09	88.15
2	---	---	77.32	75.99	74.90	75.64	79.02	77.86	---	95.14	88.38	88.39
3	---	---	76.87	76.05	74.86	75.69	80.17	77.80	---	95.82	86.17	88.29
4	---	---	76.46	76.34	74.92	75.75	79.93	77.81	---	93.83	84.14	89.54
5	---	---	75.80	76.36	75.32	75.82	79.25	78.19	---	93.95	82.94	90.85
6	---	---	75.36	76.22	75.00	75.74	79.07	78.27	---	95.43	82.80	91.04
7	---	---	74.94	76.28	74.67	75.59	79.81	78.24	---	95.85	84.20	89.23
8	---	---	74.66	76.00	74.42	75.62	80.95	78.20	---	95.66	84.97	89.14
9	---	---	74.49	76.20	74.70	75.67	81.44	78.16	---	96.44	86.10	89.40
10	---	76.72	74.39	76.36	75.13	75.62	81.10	78.20	---	96.58	84.99	88.64
11	---	76.09	74.22	75.86	76.02	75.42	81.13	78.13	---	96.78	85.26	89.33
12	---	75.75	74.20	76.14	77.00	75.52	80.73	78.13	---	96.92	84.54	89.60
13	79.08	76.46	74.22	76.12	76.66	75.46	80.58	78.18	---	97.52	83.36	89.98
14	78.12	78.32	74.05	78.20	76.53	75.48	79.09	78.66	---	96.32	82.66	90.32
15	77.64	79.15	73.99	79.70	76.14	75.45	78.96	78.93	---	95.57	82.38	90.54
16	---	79.87	73.96	80.50	75.95	75.53	78.73	79.34	---	96.47	82.38	91.25
17	---	80.40	73.89	80.64	75.42	76.26	78.50	79.95	---	96.56	84.39	90.93
18	---	80.76	74.36	81.01	74.89	76.37	78.63	80.62	---	96.36	85.92	90.68
19	---	81.11	74.81	80.76	74.82	76.22	78.88	81.63	---	96.41	87.51	92.92
20	---	81.29	74.76	79.79	75.14	76.22	78.33	82.15	---	97.16	87.95	94.35
21	---	81.42	74.85	78.73	75.40	75.95	78.08	83.91	---	96.82	88.38	94.89
22	77.37	81.97	74.95	77.43	75.53	76.02	78.19	84.66	---	93.90	89.32	94.68
23	77.45	82.11	75.02	77.02	75.42	75.82	78.17	84.61	---	92.75	89.65	93.83
24	77.64	81.99	75.01	76.62	75.54	77.59	77.94	84.83	---	91.99	89.36	92.71
25	77.57	81.90	75.21	76.14	75.58	79.08	77.89	85.86	---	92.43	87.91	91.37
26	---	81.86	75.20	75.80	75.58	79.86	77.99	87.68	---	92.18	87.69	91.08
27	---	81.87	75.38	75.88	75.56	80.84	77.84	88.51	---	92.28	87.49	91.09
28	---	81.81	75.70	76.11	75.44	80.66	77.35	91.17	---	92.59	87.39	90.85
29	---	81.23	75.48	76.05	---	78.90	76.93	92.44	95.76	92.80	87.60	90.42
30	---	79.26	75.29	75.47	---	78.81	76.93	---	95.46	92.83	89.31	90.35
31	---	---	75.34	75.14	---	78.64	---	---	---	91.49	88.66	---
MAX	---	---	78.16	81.01	77.00	80.84	81.44	---	---	97.52	89.65	94.89
MIN	---	---	73.89	75.14	74.42	75.42	76.93	---	---	91.49	82.38	88.15

LARAMIE COUNTY—Continued

410530104574001 13-068-13ccc01 Borie—Continued



LARAMIE COUNTY—Continued

411238104070801 14-060-05bcb01 C.C. Gross

LOCATION.--Lat 41°12'38", long 104°07'08.5", in NW¼ SW¼ NW¼ sec.5, T.14 N., R.60 W., Hydrologic Unit 10190015.

AQUIFER.--Brule Formation.

WELL CHARACTERISTICS.--Depth of well, 100 ft below land surface.

DATUM.--Elevation of land-surface is 5,082 ft above NGVD of 1929, from topographic map. Measuring point: bottom of shelf, 3.35 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1957 to current year.

REMARKS.--The record from this well published for water year 2003 has been revised between the dates 4/21/03 and 6/25/03.

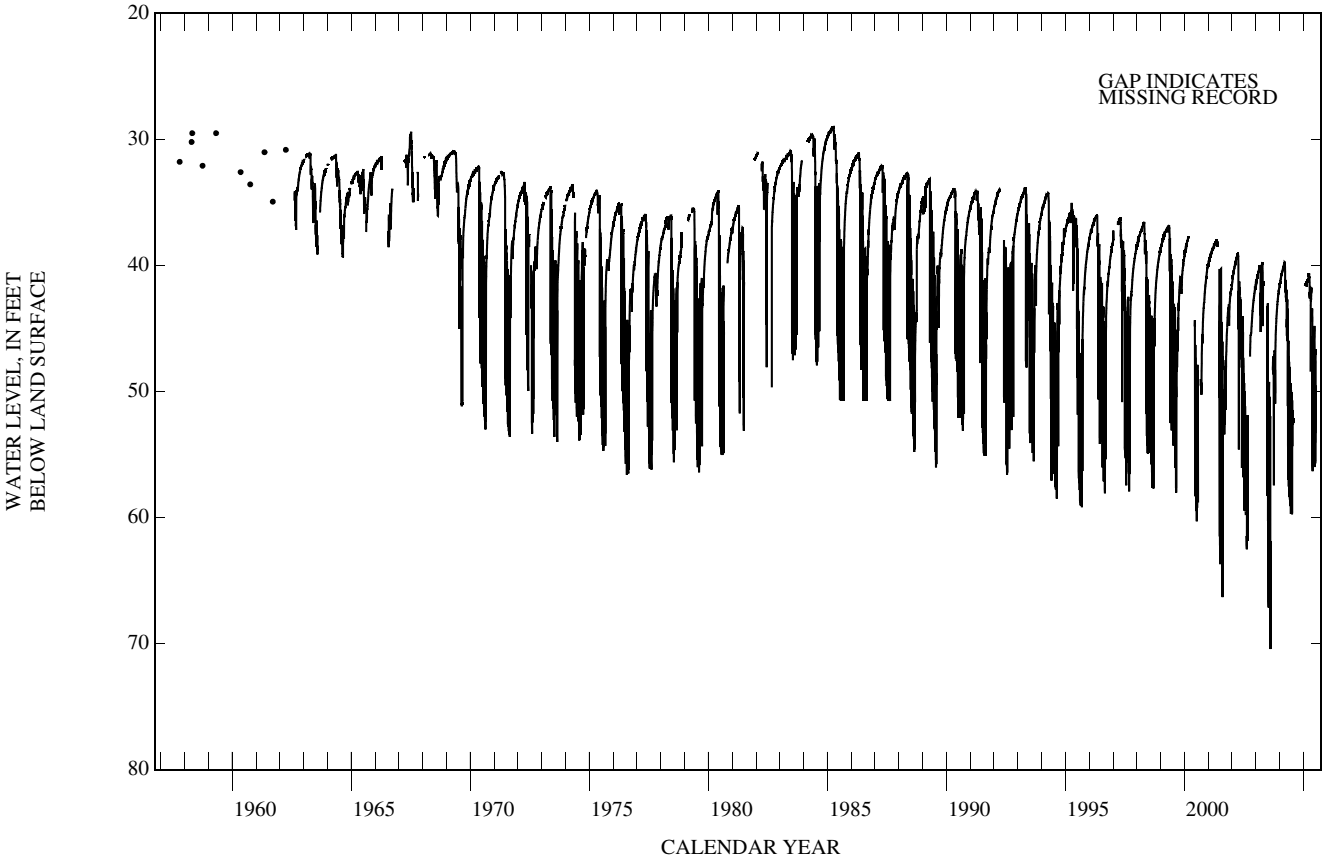
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 28.96 ft below land surface, Apr. 3, 4, 1985; lowest, 74.51 ft below land surface, Aug. 12, 2003.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	41.51	41.20	40.88	41.85	---	55.48	---	---
2	---	---	---	---	41.47	41.20	40.95	41.75	---	48.91	---	---
3	---	---	---	---	41.47	41.20	41.35	41.75	---	48.15	---	---
4	---	---	---	---	41.47	41.25	41.37	42.14	---	47.72	---	---
5	---	---	---	---	41.47	41.31	42.63	42.22	46.94	47.08	---	---
6	---	---	---	---	41.47	41.32	42.10	---	46.38	46.68	---	---
7	---	---	---	---	41.47	41.28	42.28	---	45.94	---	---	---
8	---	---	---	---	41.45	41.26	42.55	---	45.65	---	---	---
9	---	---	---	---	41.41	41.18	42.22	43.40	45.49	---	---	---
10	---	---	---	---	41.41	41.15	42.02	44.47	46.69	---	---	---
11	---	---	---	---	41.43	41.07	41.82	43.96	46.11	---	---	---
12	---	---	---	---	41.47	41.05	41.71	43.43	45.89	---	---	---
13	---	---	---	---	41.52	41.05	41.62	43.95	45.66	---	---	---
14	---	---	---	---	41.57	41.04	---	44.12	45.39	---	---	---
15	---	---	---	---	41.57	41.01	---	51.48	45.14	---	---	---
16	---	---	---	---	41.55	40.96	---	45.67	44.93	---	---	---
17	---	---	---	---	41.49	40.88	---	53.09	44.80	---	---	---
18	---	---	---	---	41.38	40.88	---	55.88	50.90	---	---	---
19	---	---	---	---	41.34	40.88	48.43	56.33	47.76	---	---	---
20	---	---	---	---	41.34	40.84	46.93	47.98	56.00	---	---	---
21	---	---	---	41.63	41.31	40.84	43.16	46.37	55.59	---	---	---
22	---	---	---	41.63	41.30	40.83	42.64	45.92	47.73	---	---	---
23	---	---	---	41.60	41.28	40.75	42.59	---	53.88	---	---	---
24	---	---	---	41.59	41.26	40.75	42.85	---	49.22	---	---	---
25	---	---	---	41.59	41.24	40.75	42.60	---	54.07	---	---	---
26	---	---	---	41.59	41.24	40.75	42.75	---	47.54	---	---	---
27	---	---	---	41.59	41.24	40.69	42.42	---	53.31	---	---	---
28	---	---	---	41.59	41.24	40.63	42.20	---	49.52	---	---	---
29	---	---	---	41.56	---	40.96	42.06	---	55.71	---	---	---
30	---	---	---	41.54	---	40.98	41.92	---	55.47	---	---	---
31	---	---	---	41.53	---	41.02	---	---	---	---	---	---
MAX	---	---	---	---	41.57	41.32	---	---	---	---	---	---
MIN	---	---	---	---	41.24	40.63	---	---	---	---	---	---

LARAMIE COUNTY—Continued

411238104070801 14-060-05bcb01 C.C. Gross—Continued



LARAMIE COUNTY—Continued

411022104141201 14-061-18ddd01 Laramie County #2

LOCATION.--Lat 41°10'22", long 104°14'12", in SE¼ SE¼ SE¼ sec.18, T.14 N., R.61 W., Hydrologic Unit 10190015.

AQUIFER.--Brule Formation.

WELL CHARACTERISTICS.--Depth of well, 90 ft below land surface.

DATUM.--Elevation of land surface is 5,264 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.70 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1977 to current year.

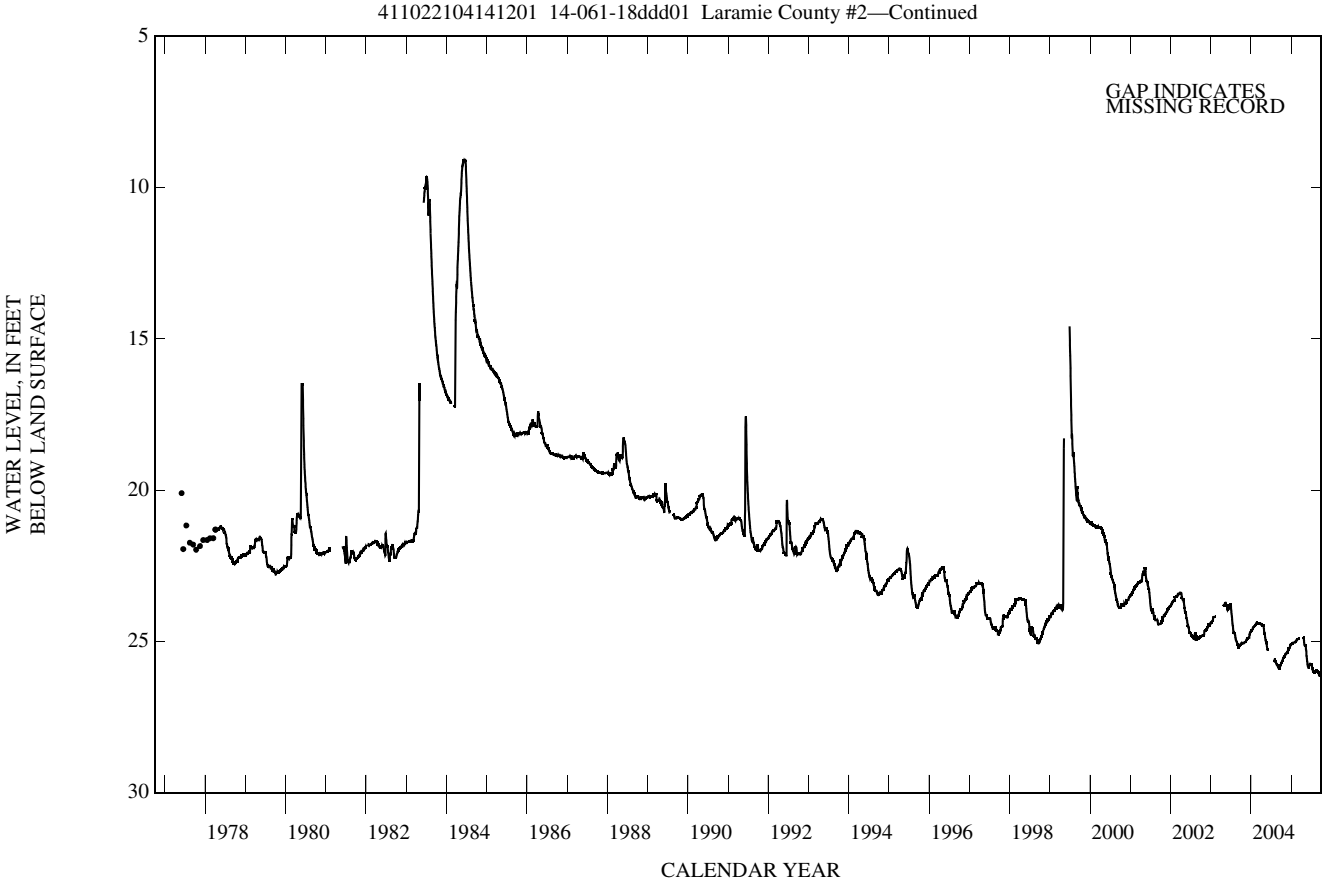
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.08 ft below land surface, June 18, 1984; lowest, 26.13 ft below land surface, Sept. 10-15, 2005.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.72	25.49	25.32	25.09	25.04	24.92	---	25.13	25.83	25.76	26.01	26.03
2	25.72	25.49	25.31	25.09	25.04	24.92	---	25.13	25.85	25.77	26.01	26.03
3	25.72	25.48	25.30	25.09	25.04	24.92	---	25.13	25.85	25.77	26.00	26.03
4	25.71	25.47	25.28	25.09	25.04	24.92	---	25.14	25.87	25.77	26.00	26.02
5	25.70	25.44	25.28	25.09	25.02	24.91	---	25.14	25.87	25.78	26.00	26.02
6	25.69	25.44	25.28	25.09	25.02	---	---	25.14	25.87	25.79	26.00	26.02
7	25.69	25.44	25.28	25.08	25.02	---	---	25.14	25.87	25.79	26.00	26.02
8	25.68	25.43	25.26	25.08	25.02	---	---	25.15	25.87	25.84	25.99	26.09
9	25.67	25.43	25.26	25.08	25.02	---	---	25.15	25.86	25.90	25.99	26.11
10	25.66	25.43	25.26	25.08	25.01	---	---	25.15	25.85	25.90	25.99	26.11
11	25.65	25.41	25.23	25.07	24.99	---	---	25.15	25.84	25.91	25.99	26.13
12	25.64	25.41	25.23	25.07	24.98	---	---	25.17	25.84	25.92	25.99	26.13
13	25.63	25.41	25.22	25.06	24.97	---	---	25.22	25.80	25.94	25.99	26.13
14	25.63	25.41	25.22	25.06	24.97	---	---	25.26	25.76	25.94	25.98	26.13
15	25.61	25.41	25.22	25.06	24.97	---	---	25.27	25.76	25.96	25.98	26.12
16	25.59	25.41	25.22	25.05	24.97	---	---	25.30	25.77	25.96	25.98	26.12
17	25.59	25.40	25.22	25.05	24.97	---	---	25.34	25.75	25.97	25.98	26.12
18	25.57	25.40	25.22	25.04	24.97	---	---	25.47	25.74	25.98	25.98	26.12
19	25.56	25.40	25.16	25.04	24.97	---	---	25.48	25.74	25.98	25.97	26.12
20	25.56	25.40	25.15	25.04	24.97	---	24.88	25.49	25.75	25.98	25.97	26.11
21	25.56	25.39	25.14	25.04	24.94	---	24.88	25.51	25.74	26.00	25.97	26.11
22	25.54	25.38	25.14	25.04	24.94	---	24.89	25.58	25.74	26.00	25.97	26.11
23	25.54	25.37	25.14	25.04	24.94	---	24.89	25.62	25.74	26.00	25.97	26.11
24	25.53	25.37	25.14	25.04	24.94	---	24.91	25.64	25.75	26.00	25.98	26.11
25	25.52	25.35	25.10	25.04	24.93	---	24.94	25.65	25.75	26.01	25.98	26.11
26	25.52	25.35	25.10	25.04	24.93	---	24.98	25.67	25.75	26.01	25.98	26.10
27	25.52	25.35	25.10	25.04	24.93	---	25.04	25.69	25.75	26.02	25.98	26.10
28	25.51	25.35	25.10	25.04	24.93	---	25.05	25.76	25.76	26.02	26.00	26.10
29	25.50	25.35	25.10	25.04	---	---	25.09	25.77	25.76	26.01	26.00	26.10
30	25.50	25.33	25.09	25.04	---	---	25.12	25.80	25.76	26.01	26.00	26.10
31	25.49	---	25.09	25.04	---	---	---	25.81	---	26.01	26.02	---
MAX	25.72	25.49	25.32	25.09	25.04	---	---	25.81	25.87	26.02	26.02	26.13
MIN	25.49	25.33	25.09	25.04	24.93	---	---	25.13	25.74	25.76	25.97	26.02

LARAMIE COUNTY—Continued

411022104141201 14-061-18ddd01 Laramie County #2—Continued



LARAMIE COUNTY—Continued

411114104242501 14-063-15aaa01 Laramie County #3

LOCATION.--Lat 41°11'14", long 104°24'25", in NE$^1/_4$ NE$^1/_4$ NE$^1/_4$ sec.15, T.14 N., R.63 W., Hydrologic Unit 10190015.

AQUIFER.--Arikaree Formation.

WELL CHARACTERISTICS.--Depth of well, 165 ft below land surface.

DATUM.--Elevation of land surface is 5,489 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.3 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

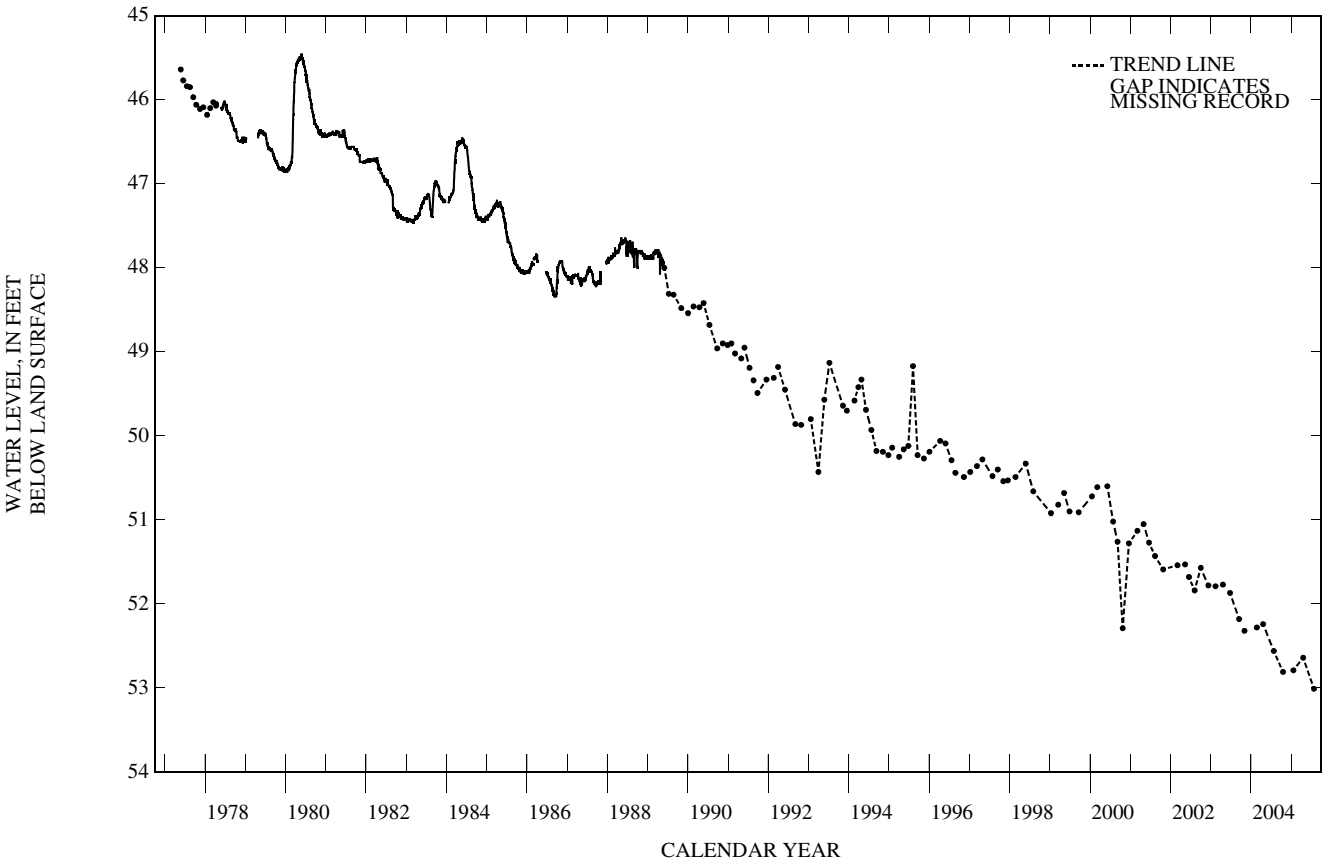
PERIOD OF RECORD.--1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 45.45 ft below land surface, May 24, 1980; lowest, 53.01 ft below land surface, from hand-measured data, July 26, 2005.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	52.81	JAN 20	52.79	APR 19	52.64	JUL 26	53.01

WATER YEAR 2005 HIGHEST 52.64 APR 19, 2005 LOWEST 53.01 JUL 26, 2005



LARAMIE COUNTY—Continued

411005104355001 14-064-19bcc01 Laramie County #9

LOCATION.--Lat 41°10'05", long 104°35'50", in SW$^1/_4$ SW$^1/_4$ NW$^1/_4$ sec.19, T.14 N., R.64 W., Hydrologic Unit 10190015.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Depth of well, 180 ft below land surface.

DATUM.--Elevation of land surface is 5,880 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.5 ft above land surface.

REMARKS.--Well redeveloped on July 14, 2004.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

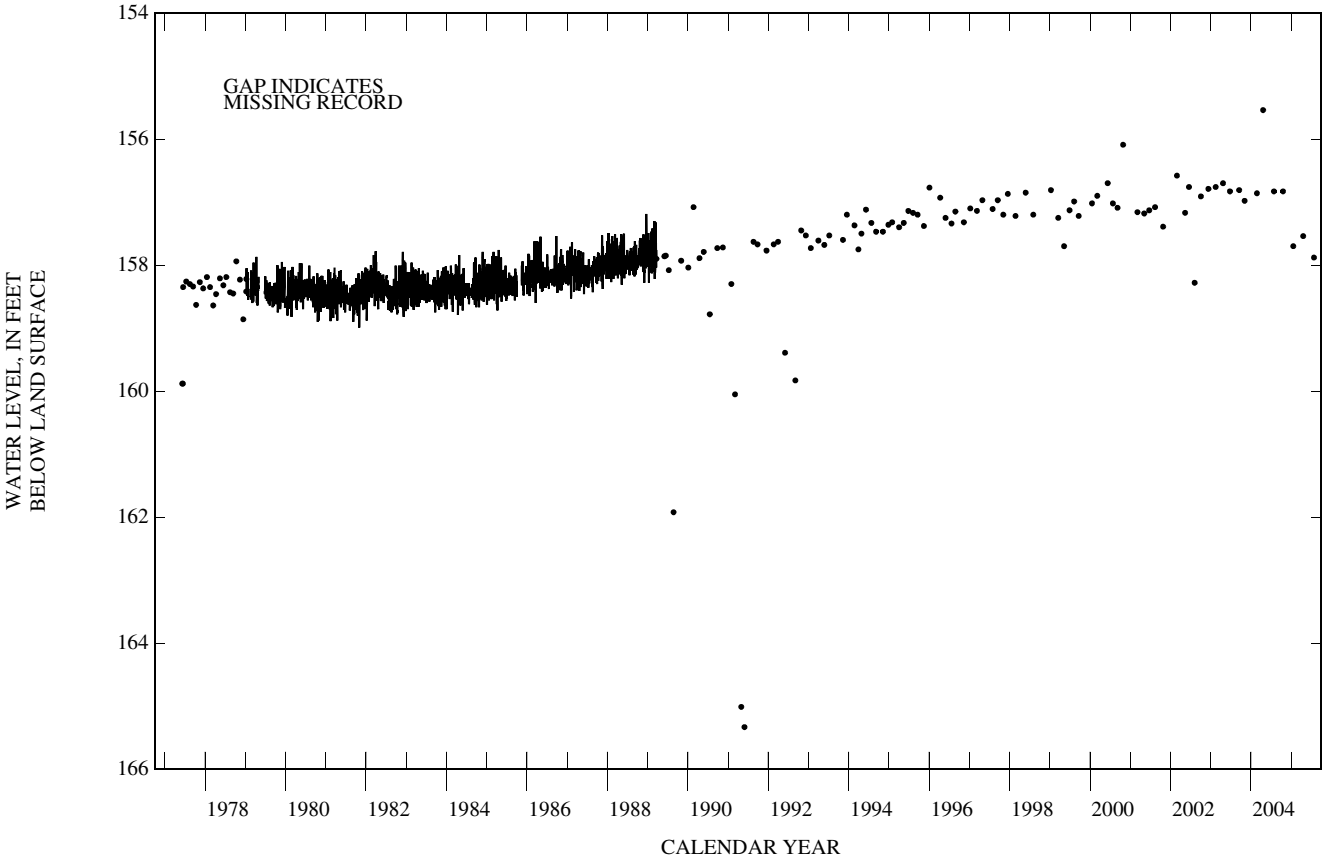
PERIOD OF RECORD.--1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 155.54 ft below land surface, from hand-measured data, April 20, 2004; lowest, 165.33 ft below land surface, from hand-measured data, May 30, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	156.83	JAN 19	157.70	APR 19	157.54	JUL 26	157.88

WATER YEAR 2005 HIGHEST 156.83 OCT 18, 2004 LOWEST 157.88 JUL 26, 2005



LARAMIE COUNTY—Continued

411210104452001 14-066-10aba01 Laramie County #8

LOCATION.--Lat 41°12'10", long 104°45'20", in NE¼ NW¼ NE¼ sec.10, T.14 N., R.66 W., Hydrologic Unit 10190015.

AQUIFER.--Ogalalla Formation.

WELL CHARACTERISTICS.--Depth of well, 190 ft below land surface.

DATUM.--Elevation of land surface is 6,090 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.40 ft above land surface.

REMARKS.--Data from Jan. 21 through Sept. 30, 2005 are in review.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1977 to current year.

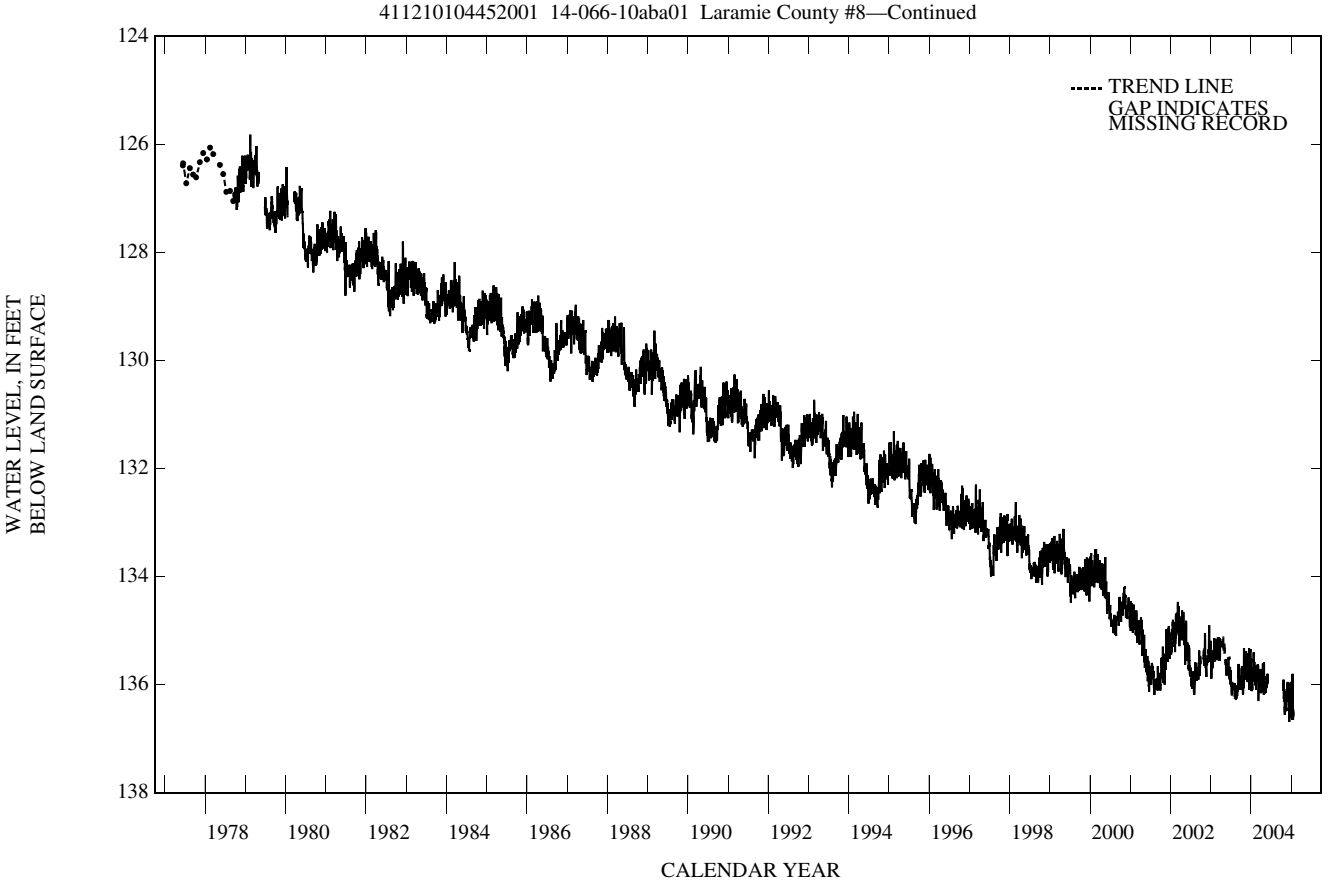
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 125.82 ft below land surface, Feb. 14, 1979; lowest, 136.75 ft below land surface, Dec. 13, 14, 2005.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	136.31	136.31	136.11	---	---	---	---	---	---	---	---
2	---	136.56	136.32	136.34	---	---	---	---	---	---	---	---
3	---	136.41	136.19	136.38	---	---	---	---	---	---	---	---
4	---	136.50	136.13	136.35	---	---	---	---	---	---	---	---
5	---	136.51	135.97	136.28	---	---	---	---	---	---	---	---
6	---	136.48	135.96	135.98	---	---	---	---	---	---	---	---
7	---	136.50	136.08	136.00	---	---	---	---	---	---	---	---
8	---	136.45	136.07	136.09	---	---	---	---	---	---	---	---
9	---	136.25	136.04	136.15	---	---	---	---	---	---	---	---
10	---	136.26	136.38	136.26	---	---	---	---	---	---	---	---
11	---	136.48	136.32	135.86	---	---	---	---	---	---	---	---
12	---	136.43	136.34	135.80	---	---	---	---	---	---	---	---
13	---	136.45	136.69	136.14	---	---	---	---	---	---	---	---
14	---	136.47	136.51	136.36	---	---	---	---	---	---	---	---
15	---	136.47	136.47	136.54	---	---	---	---	---	---	---	---
16	---	136.42	136.62	136.63	---	---	---	---	---	---	---	---
17	---	136.43	136.52	136.63	---	---	---	---	---	---	---	---
18	---	136.37	136.54	136.50	---	---	---	---	---	---	---	---
19	---	136.28	136.17	136.59	---	---	---	---	---	---	---	---
20	136.12	136.31	135.98	136.46	---	---	---	---	---	---	---	---
21	136.09	136.32	136.11	---	---	---	---	---	---	---	---	---
22	135.91	136.15	136.28	---	---	---	---	---	---	---	---	---
23	136.02	136.15	136.31	---	---	---	---	---	---	---	---	---
24	136.26	136.15	136.18	---	---	---	---	---	---	---	---	---
25	136.25	136.06	136.18	---	---	---	---	---	---	---	---	---
26	136.26	135.97	136.27	---	---	---	---	---	---	---	---	---
27	136.32	136.05	136.35	---	---	---	---	---	---	---	---	---
28	136.12	135.95	136.34	---	---	---	---	---	---	---	---	---
29	136.08	136.31	136.03	---	---	---	---	---	---	---	---	---
30	136.25	136.28	135.95	---	---	---	---	---	---	---	---	---
31	136.17	---	136.17	---	---	---	---	---	---	---	---	---
MAX	---	136.56	136.69	---	---	---	---	---	---	---	---	---
MIN	---	135.95	135.95	---	---	---	---	---	---	---	---	---

LARAMIE COUNTY—Continued

411210104452001 14-066-10aba01 Laramie County #8—Continued



LARAMIE COUNTY—Continued

410616104462401 14-066-28adb01 Cheyenne Ogallala Well

LOCATION.--Lat 41°09'16.5" (revised), long 104°46'22.4" (revised), in SW¼ NW¼ NE¼ sec.28, T.14 N., R.66 W., Hydrologic Unit 10190009.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Depth of well, 265 ft below land surface.

DATUM.--Elevation of land surface is 6,041.44 ft above NGVD of 1929, from levels. Measuring point: top of casing, 3.00 ft above land surface.

REMARKS.--U.S. Geological Survey data collection platform with satellite telemetry at well.

COOPERATION.--Data collected by U.S. Geological Survey.

PERIOD OF RECORD.--2000 to current year.

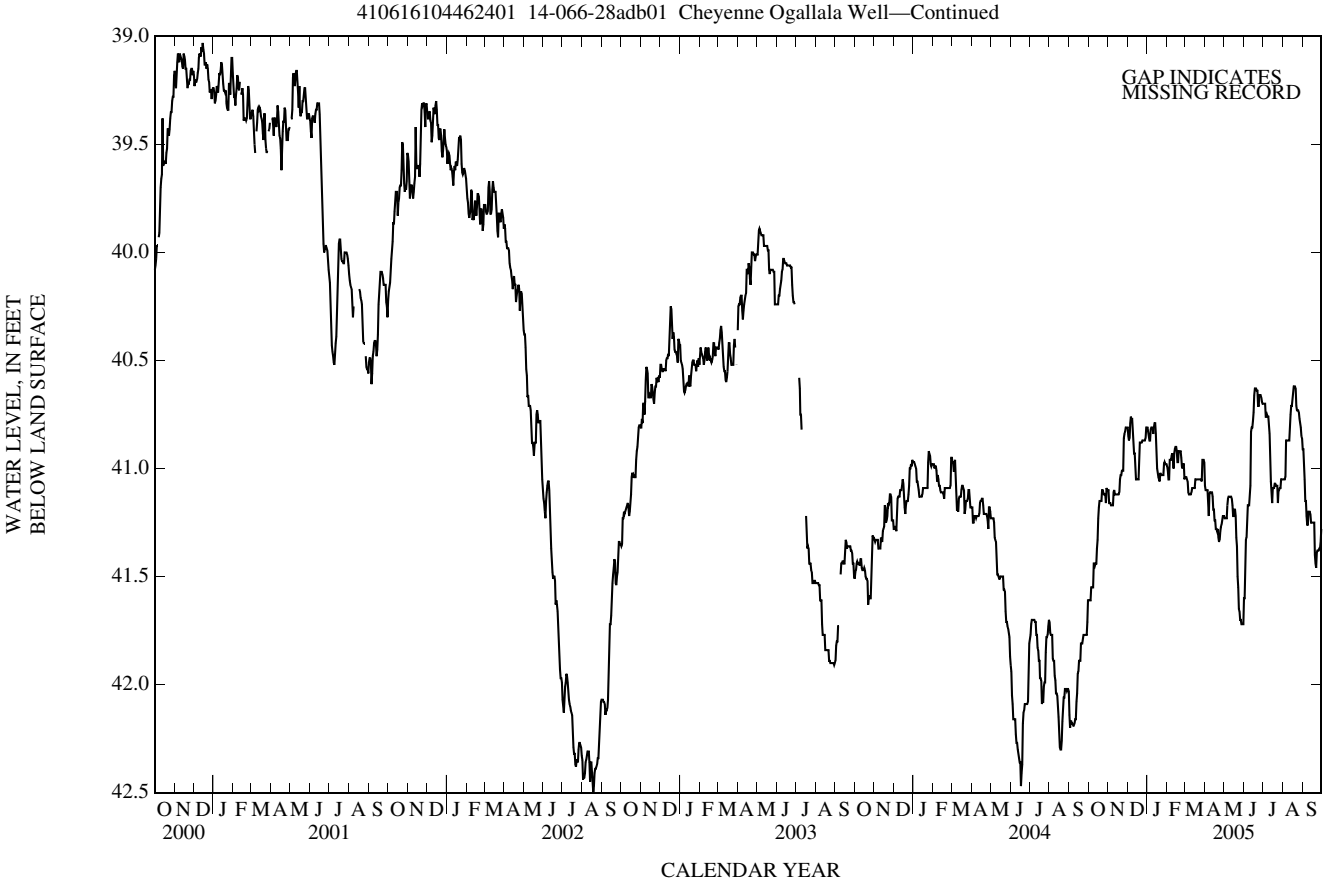
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 39.30 ft below land surface, Dec. 15, 2001; lowest, 42.52 ft below land surface, Aug.19, 2002.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41.61	41.10	40.81	40.81	40.99	41.04	41.08	41.22	41.60	40.70	41.05	40.91
2	41.61	41.16	40.85	40.83	41.01	41.04	41.10	41.23	41.60	40.70	41.05	40.91
3	41.61	41.16	40.87	40.85	41.05	41.04	41.10	41.23	41.48	40.70	41.05	40.99
4	41.61	41.16	40.86	40.87	41.05	41.05	41.10	41.23	41.33	40.70	41.05	41.05
5	41.55	41.17	40.79	40.87	40.96	41.06	41.10	41.23	41.32	40.76	41.04	41.15
6	41.55	41.17	40.76	40.82	40.96	41.11	41.15	41.17	41.23	40.76	40.87	41.15
7	41.55	41.17	40.77	40.81	40.96	41.12	41.22	41.14	41.17	40.75	40.87	41.22
8	41.55	41.17	40.77	40.81	40.94	41.12	41.12	41.13	41.17	40.76	40.87	41.26
9	41.44	41.11	40.82	40.81	40.93	41.12	41.11	41.13	41.17	40.76	40.87	41.26
10	41.44	41.10	40.87	40.84	40.95	41.12	41.11	41.13	41.12	40.80	40.87	41.20
11	41.45	41.12	40.93	40.81	41.00	41.11	41.11	41.13	41.08	40.84	40.87	41.20
12	41.44	41.12	40.93	40.79	40.93	41.09	41.11	41.13	40.83	40.94	40.81	41.20
13	41.44	41.12	41.00	40.79	40.91	41.09	41.13	41.14	40.81	41.06	40.75	41.21
14	41.37	41.12	41.05	40.84	40.90	41.09	41.19	41.17	40.81	41.11	40.71	41.25
15	41.33	41.12	41.05	40.91	40.90	41.09	41.19	41.22	40.78	41.16	40.71	41.25
16	41.23	41.12	41.05	41.00	40.92	41.09	41.24	41.22	40.74	41.09	40.68	41.25
17	41.18	41.12	41.05	41.02	40.97	41.05	41.24	41.19	40.66	41.09	40.65	41.25
18	41.15	41.11	41.05	41.04	40.97	41.05	41.28	41.19	40.63	41.09	40.62	41.25
19	41.15	41.05	40.96	41.05	40.92	41.05	41.28	41.22	40.63	41.07	40.62	41.25
20	41.15	41.03	40.88	41.06	40.92	41.05	41.29	41.32	40.63	41.07	40.62	41.40
21	41.15	41.03	40.88	41.02	40.92	41.05	41.28	41.36	40.64	41.08	40.63	41.44
22	41.10	41.01	40.88	41.03	40.92	41.05	41.32	41.50	40.64	41.08	40.71	41.46
23	41.10	41.01	40.88	41.03	40.95	41.05	41.34	41.55	40.71	41.08	40.73	41.39
24	41.11	41.01	40.87	41.03	40.99	41.05	41.33	41.65	40.71	41.16	40.73	41.38
25	41.12	40.86	40.87	41.03	41.00	41.05	41.29	41.66	40.66	41.10	40.73	41.38
26	41.12	40.84	40.87	41.03	40.98	41.05	41.27	41.70	40.66	41.10	40.74	41.38
27	41.12	40.83	40.87	40.98	40.98	41.06	41.26	41.70	40.66	41.09	40.77	41.37
28	41.16	40.81	40.87	40.97	41.05	40.96	41.24	41.72	40.67	41.09	40.79	41.37
29	41.09	40.81	40.86	40.98	---	40.96	41.22	41.72	40.69	41.05	40.81	41.34
30	41.10	40.81	40.81	40.98	---	40.96	41.22	41.72	40.70	41.05	40.85	41.28
31	41.10	---	40.81	40.98	---	40.97	---	41.72	---	41.05	40.86	---
MAX	41.61	41.17	41.05	41.06	41.05	41.12	41.34	41.72	41.60	41.16	41.05	41.46
MIN	41.09	40.81	40.76	40.79	40.90	40.96	41.08	41.13	40.63	40.70	40.62	40.91

LARAMIE COUNTY—Continued

410616104462401 14-066-28adb01 Cheyenne Ogallala Well—Continued



LARAMIE COUNTY—Continued

411213104501401 14-067-12abb01 Laramie County #10

LOCATION.--Lat 41°12'13.5", long 104°50'14", in NW¼ NW¼ NE¼ sec.12, T.14 N., R.67 W., Hydrologic Unit 10190009.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Depth of well, 220 ft below land surface.

DATUM.--Elevation of land surface is 6,230 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.25 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1984 to current year.

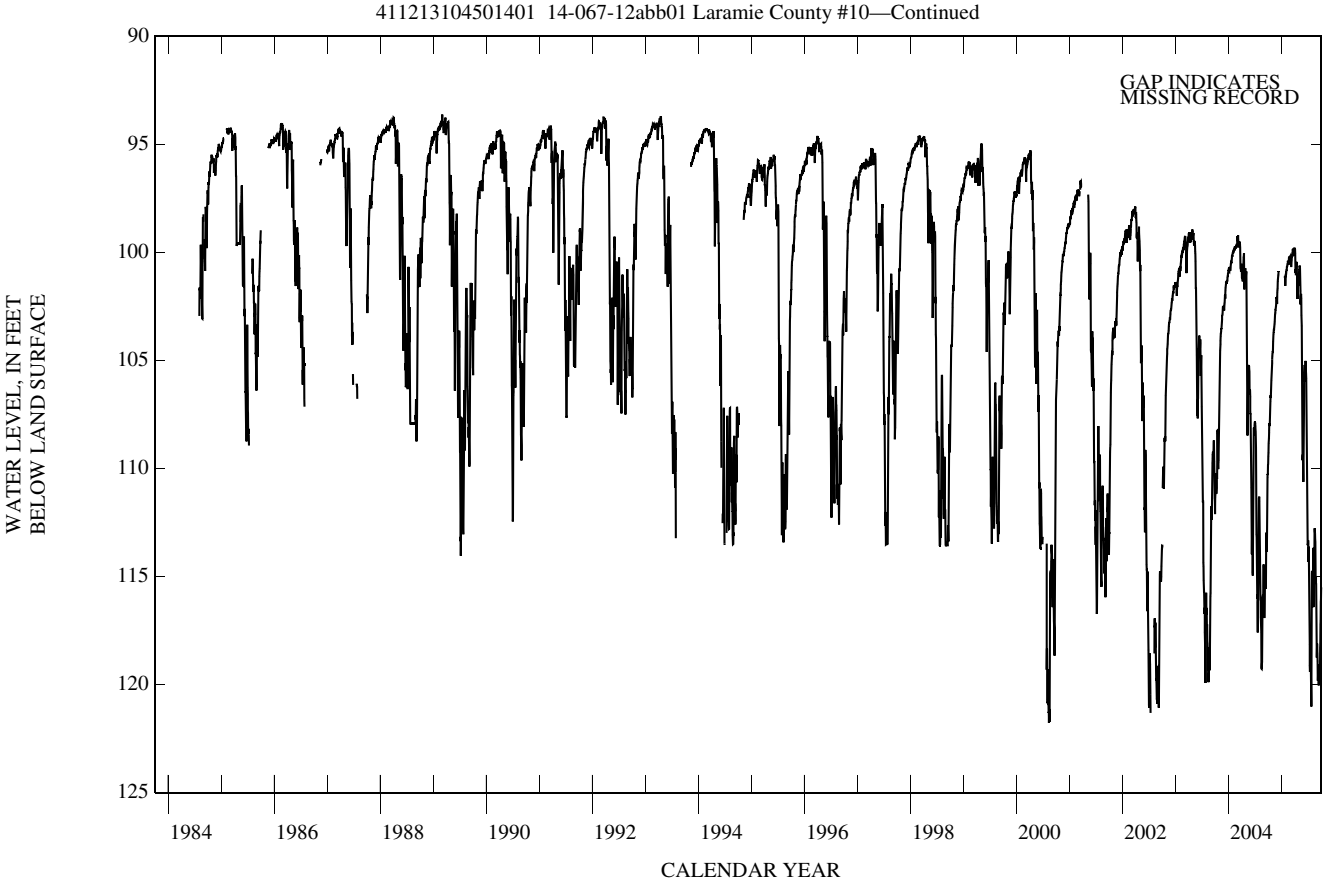
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 93.62 ft below land surface, Mar. 3, 1989; lowest, 121.78 ft below land surface, Aug. 11, 2000.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109.27	104.52	101.87	---	100.86	100.27	99.86	100.82	107.73	113.32	116.38	118.11
2	108.84	104.14	101.74	---	100.83	100.19	99.84	100.82	107.32	113.35	115.96	118.40
3	108.72	103.99	101.67	---	100.82	100.16	100.05	100.66	106.82	113.46	115.30	118.56
4	108.60	103.80	101.35	---	100.81	100.14	100.58	100.61	106.01	114.32	114.52	118.91
5	108.34	103.71	101.25	---	100.68	100.19	100.94	100.65	105.54	113.62	114.00	119.25
6	108.25	103.70	101.17	---	100.66	100.46	100.77	100.73	105.37	113.74	113.67	119.79
7	107.93	103.60	101.08	---	100.63	100.67	100.90	101.23	105.21	114.45	113.77	119.82
8	107.91	103.55	101.03	---	100.58	100.53	101.01	101.48	105.23	115.32	114.53	119.52
9	108.03	103.55	100.89	---	100.55	100.40	101.01	101.79	105.94	116.71	116.16	119.75
10	107.99	103.45	100.87	---	100.53	100.35	100.63	102.41	105.94	117.38	116.41	119.18
11	107.79	103.38	---	---	100.50	100.17	100.50	102.19	105.69	117.87	116.28	119.23
12	107.53	103.31	---	---	100.39	100.09	100.44	102.03	105.34	118.15	115.17	120.04
13	107.27	103.21	---	---	100.41	100.19	100.46	101.95	105.06	119.12	114.42	119.69
14	106.89	103.07	---	---	100.44	100.18	100.93	101.92	105.02	119.40	113.37	119.64
15	106.71	102.88	---	---	100.40	100.11	101.01	102.13	105.07	119.33	112.83	119.06
16	106.60	102.83	---	---	100.57	100.01	101.10	102.91	105.47	118.77	112.76	119.13
17	106.73	102.79	---	---	100.49	99.91	101.55	103.18	105.61	118.77	112.91	119.21
18	106.64	102.67	---	---	100.37	99.89	102.08	103.40	105.83	119.23	113.00	119.12
19	106.50	102.66	---	---	100.25	99.84	102.08	104.37	106.61	119.15	113.31	119.14
20	106.29	102.62	---	---	100.24	100.01	101.84	105.60	107.34	119.37	113.40	119.29
21	105.93	102.55	---	---	100.23	100.16	101.55	106.72	108.91	119.93	114.05	119.36
22	105.77	102.49	---	101.18	100.28	100.05	101.45	107.97	110.16	120.35	115.34	118.30
23	105.62	102.40	---	101.08	100.25	99.86	101.37	108.78	110.80	121.02	115.05	118.09
24	105.46	102.14	---	101.19	100.22	99.80	101.51	109.62	111.36	119.48	115.00	117.21
25	105.31	102.08	---	101.55	100.18	99.83	101.55	109.43	112.07	117.72	115.31	117.05
26	105.13	102.13	---	101.34	100.32	99.81	101.43	109.35	112.65	115.87	115.34	116.51
27	104.95	102.07	---	101.10	100.37	99.81	101.26	109.63	113.05	114.86	115.81	116.17
28	104.79	102.09	---	101.02	100.33	99.87	101.09	110.12	113.55	114.74	116.38	116.07
29	104.69	102.24	---	100.99	---	99.80	100.97	110.62	113.51	114.95	116.94	115.59
30	104.61	102.38	---	101.00	---	99.78	100.90	109.47	113.51	116.18	118.75	115.50
31	104.61	---	---	100.94	---	99.82	---	108.29	---	116.38	118.33	---
MAX	109.27	104.52	---	---	100.86	100.67	102.08	110.62	113.55	121.02	118.75	120.04
MIN	104.61	102.07	---	---	100.18	99.78	99.84	100.61	105.02	113.32	112.76	115.50

LARAMIE COUNTY—Continued

411213104501401 14-067-12abb01 Laramie County #10—Continued



LARAMIE COUNTY—Continued

411034104554001 14-067-18ddc01 Bell #14

LOCATION.--Lat 41°10'34", long 104°55'40", in SW ¼ SE ¼ SE ¼ sec.18, T.14 N., R.67 W., Hydrologic Unit 10190009.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Depth of well, 229 ft below land surface.

DATUM.--Elevation of land surface is 6,248 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.50 ft above land surface.

REMARKS.--Data collected by U.S. Geological Survey.

PERIOD OF RECORD.--1956 to current year.

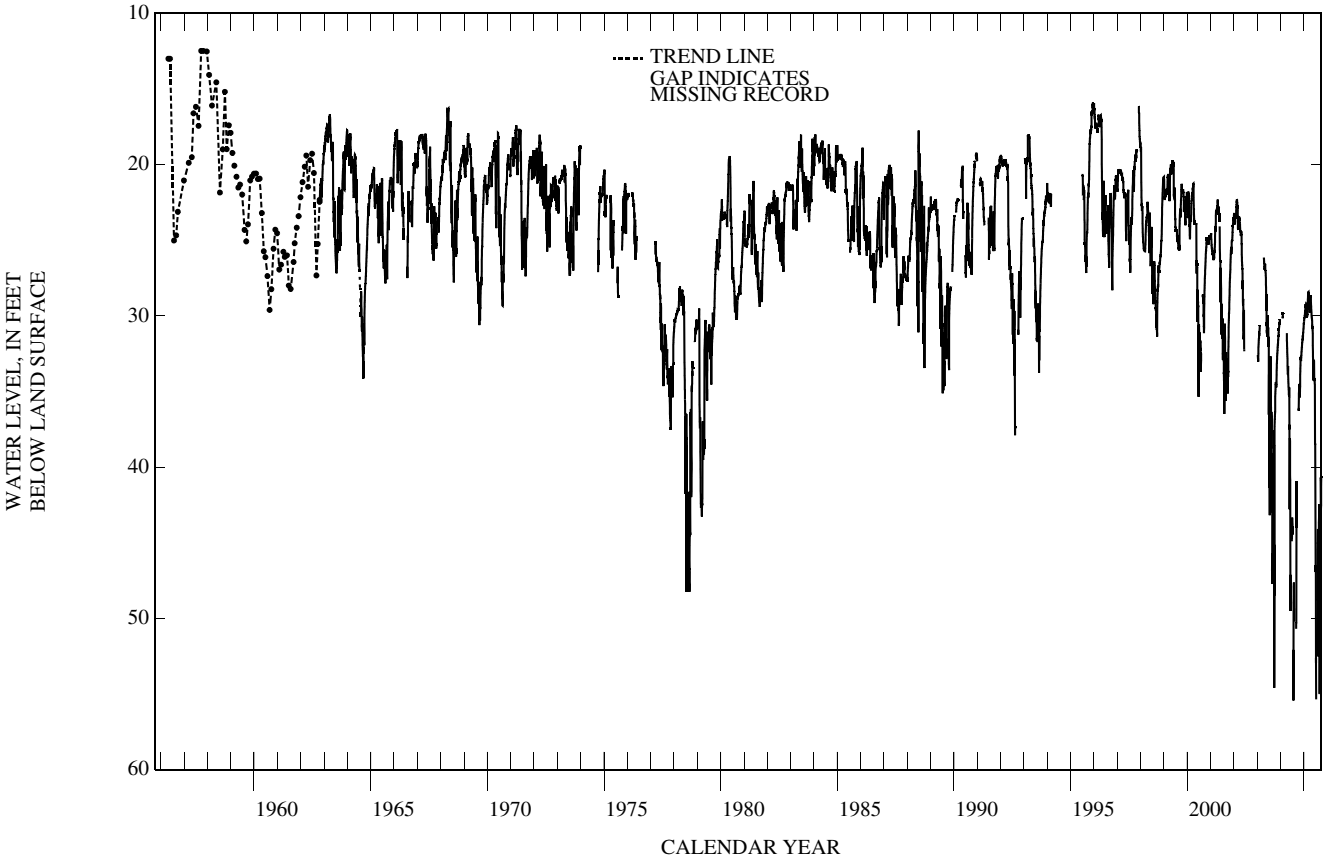
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.48 ft below land surface, from hand measured data, Sept. 26, Oct. 28, 1957; lowest, 66.25 ft below land surface, July 21, 2004.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	34.86	32.03	30.47	29.45	29.11	29.66	29.96	33.74	44.12	48.81	51.30
2	---	34.67	31.91	30.42	29.41	29.04	29.56	30.03	33.38	44.18	48.10	51.16
3	---	34.34	31.89	30.37	29.37	29.00	29.45	30.07	33.14	46.24	47.78	54.99
4	---	33.89	31.81	30.32	29.29	28.91	29.32	30.11	33.03	46.93	45.46	51.72
5	---	33.66	31.77	30.25	29.25	28.80	29.34	30.17	32.94	46.53	45.00	---
6	---	33.47	31.75	30.18	29.27	28.68	29.21	30.16	32.90	46.53	45.04	---
7	---	33.27	31.69	30.16	29.20	28.64	28.99	30.22	32.94	49.89	44.28	---
8	---	33.06	31.63	30.14	29.21	28.63	28.83	30.26	32.98	51.47	44.09	---
9	36.13	32.93	31.64	30.13	29.22	28.55	28.84	30.33	33.01	52.94	52.15	---
10	36.18	32.88	31.59	30.10	29.46	28.55	28.78	30.40	33.39	52.63	51.45	---
11	36.27	32.78	31.50	30.14	29.76	28.43	28.73	30.59	34.14	55.36	52.51	---
12	36.08	32.78	31.56	30.09	30.13	28.41	28.73	30.61	34.25	---	52.03	---
13	35.49	32.74	31.53	30.02	29.92	28.50	28.67	30.77	34.31	---	51.46	---
14	35.28	32.70	31.42	30.00	29.82	28.54	28.65	30.88	34.30	---	49.66	---
15	35.13	32.78	31.43	29.96	29.81	28.60	28.63	30.84	34.27	---	48.09	---
16	34.98	32.95	31.36	29.88	29.70	28.68	28.77	30.79	34.11	---	47.88	---
17	34.78	32.99	31.35	29.87	29.70	28.72	28.72	30.79	34.18	---	47.70	40.70
18	34.73	32.86	31.29	29.81	29.87	28.87	28.72	30.96	34.35	---	47.50	40.71
19	34.65	32.84	31.16	29.79	29.88	28.98	28.77	31.15	34.40	---	47.04	40.86
20	34.59	32.74	31.14	29.70	30.05	29.05	28.91	31.52	34.43	---	46.80	41.18
21	34.54	32.64	31.14	29.67	29.96	29.13	29.02	31.96	34.56	---	49.55	42.03
22	34.50	32.60	31.06	29.64	29.88	29.25	29.23	32.41	34.59	---	48.49	42.45
23	34.66	32.52	30.96	29.63	29.96	29.27	29.30	32.68	36.31	---	44.82	42.56
24	35.03	32.42	30.92	29.56	29.94	29.35	29.34	32.96	38.35	---	43.68	42.71
25	35.25	32.35	30.86	29.45	29.85	29.47	29.43	33.23	38.53	---	43.32	42.74
26	35.33	32.33	30.82	29.22	29.62	29.52	29.56	33.57	38.44	---	45.12	42.51
27	35.40	32.21	30.74	29.31	29.34	29.55	29.63	33.80	38.70	---	44.99	41.60
28	35.33	32.20	30.67	29.43	29.18	29.54	29.70	33.94	39.43	---	43.38	41.18
29	35.25	32.12	30.54	29.46	---	29.58	29.80	34.15	40.17	---	42.45	40.70
30	35.08	32.09	30.52	29.46	---	29.68	29.89	34.27	41.02	48.80	47.46	40.57
31	35.00	---	30.49	29.46	---	29.79	---	33.93	---	48.75	49.24	---
MAX	---	34.86	32.03	30.47	30.13	29.79	29.89	34.27	41.02	---	52.51	---
MIN	---	32.09	30.49	29.22	29.18	28.41	28.63	29.96	32.90	---	42.45	---

LARAMIE COUNTY—Continued

411034104554001 14-067-18ddc01 Bell #14—Continued



LARAMIE COUNTY—Continued

410930104524701 14-067-27bac01 Laramie County #13

LOCATION.--Lat 41°09'30", long 104°52'47", in SW¼ NE¼ NW¼ sec.27, T.14 N., R.67 W., Hydrologic Unit 10190009.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Depth of well, 140 ft below land surface.

DATUM.--Elevation of land surface is 6,180 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.8 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

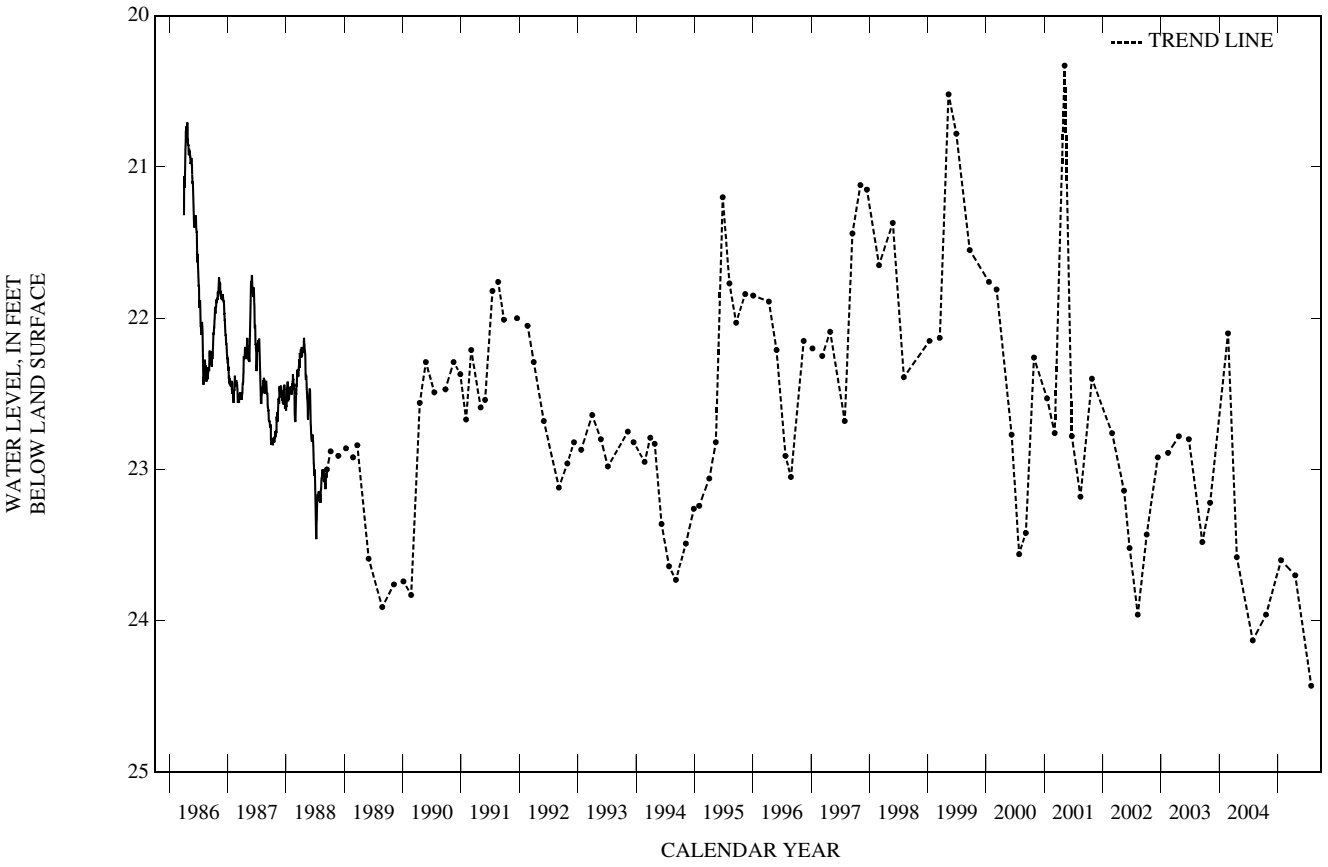
PERIOD OF RECORD.--1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 20.33 ft below land surface, from hand-measured data, May 7, 2001; lowest, 24.43 ft below land surface, July 29, 2005.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19	23.96	JAN 21	23.60	APR 20	23.70	JUL 29	24.43

WATER YEAR 2005 HIGHEST 23.60 JAN 21, 2005 LOWEST 24.43 JUL 29, 2005



LARAMIE COUNTY—Continued

410838104530401 14-067-34bbc01 Laramie County #11

LOCATION.--Lat 41°08'38", long 104°53'04", in SW ¼ NW ¼ NW ¼ sec.34, T.14 N., R.67 W., Hydrologic Unit 10190009.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Depth of well, 162 ft below land surface.

DATUM.--Elevation of land surface is 6,210 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.50 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1986 to current year.

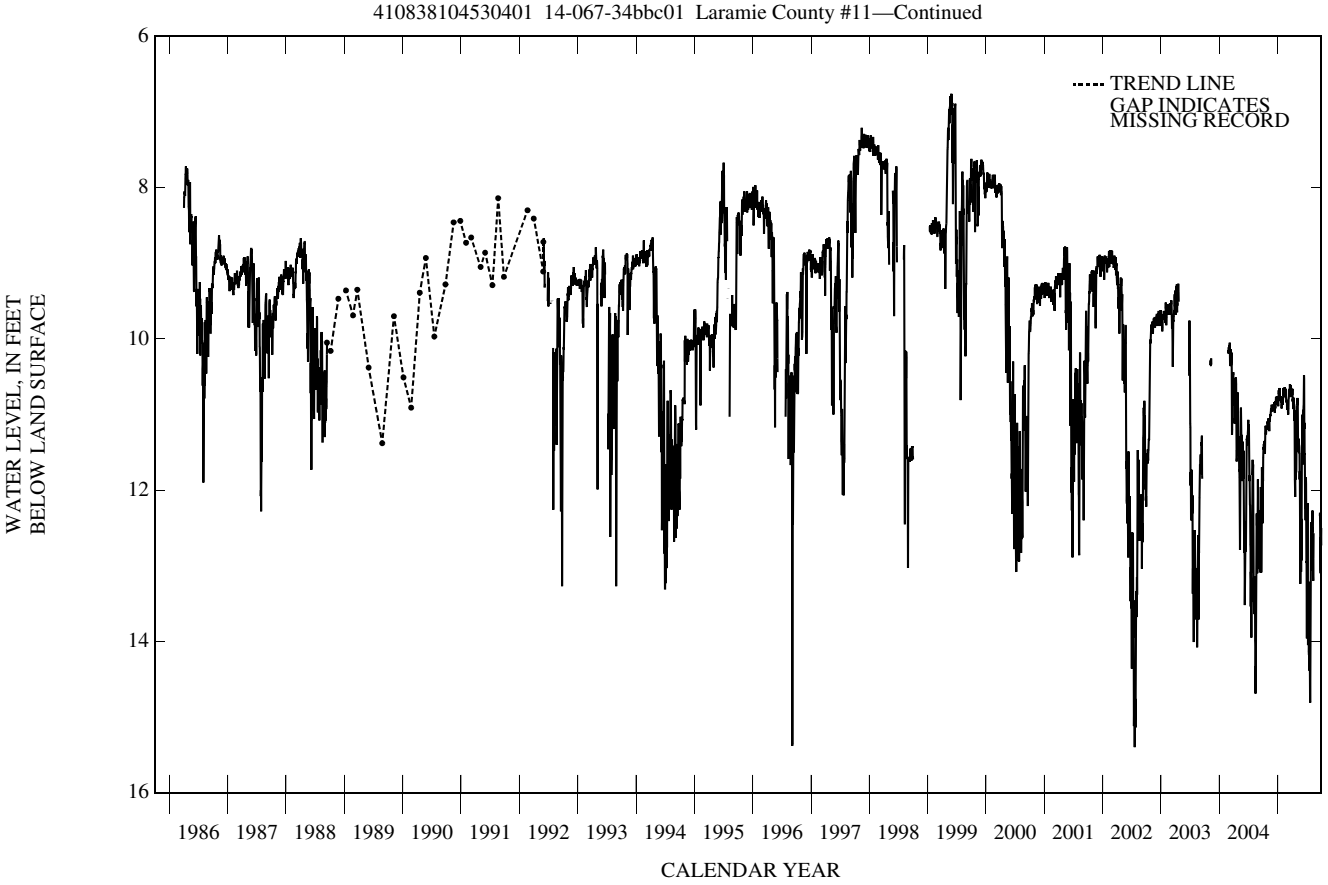
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.76 ft below land surface, May 29, 1999; lowest, 23.74 ft below land surface, July 15, 2005.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.57	11.19	10.90	10.82	10.82	10.89	10.71	10.89	11.43	13.13	12.75	---
2	11.50	11.10	10.90	10.85	10.80	10.86	10.66	10.88	11.40	13.96	12.80	---
3	11.43	11.05	10.90	10.89	10.78	10.87	10.79	10.81	11.42	12.96	12.49	---
4	11.46	11.09	10.90	10.80	10.76	10.89	10.83	10.78	11.06	12.63	12.56	---
5	11.39	11.06	10.87	10.78	10.65	10.97	10.79	10.80	11.00	12.26	12.36	---
6	11.47	11.07	10.91	10.68	10.73	11.00	10.82	10.84	11.66	12.17	12.27	---
7	11.36	11.14	10.90	10.73	10.76	10.98	10.93	11.29	11.12	12.94	12.37	---
8	11.44	11.22	10.85	10.71	10.70	10.92	10.81	11.40	10.94	13.55	12.49	---
9	11.35	11.05	10.85	10.75	10.73	10.79	10.82	11.39	11.29	14.05	12.79	---
10	11.44	11.06	10.95	10.76	10.73	10.77	10.87	11.50	10.99	13.71	13.15	---
11	11.49	11.09	10.84	10.65	10.71	10.68	10.79	11.43	10.90	13.24	13.20	---
12	11.52	11.07	10.94	10.69	10.64	10.67	10.79	11.35	10.88	13.21	12.90	---
13	11.38	11.03	10.98	10.76	10.74	10.75	10.88	11.32	10.61	13.94	12.57	---
14	11.25	11.00	10.83	10.78	10.76	10.73	10.88	11.40	10.48	14.13	---	---
15	11.22	11.02	10.89	10.80	10.77	10.67	11.08	11.41	10.53	14.18	---	---
16	11.15	11.01	10.92	10.81	10.76	10.67	10.95	11.51	11.19	13.96	---	---
17	11.17	10.98	10.86	10.81	10.75	10.60	11.09	11.52	11.11	14.05	---	---
18	11.25	10.96	10.86	10.82	10.72	10.66	11.86	11.86	11.53	13.87	---	---
19	11.25	10.92	10.82	10.80	10.66	10.69	11.95	11.75	11.51	14.39	---	---
20	11.21	10.93	10.77	10.76	10.74	10.74	12.09	12.16	11.77	14.06	---	12.34
21	11.17	10.92	10.83	10.77	10.78	10.77	11.81	12.94	12.24	14.24	---	12.34
22	11.16	10.90	10.83	10.84	10.83	10.69	11.86	13.24	11.99	14.79	---	12.30
23	11.15	10.87	10.84	10.77	10.83	10.61	11.76	13.10	12.24	14.81	---	12.54
24	11.17	10.88	10.76	10.92	10.81	10.65	11.80	12.49	12.40	14.12	---	12.85
25	11.16	10.91	10.78	10.87	10.82	10.69	11.77	12.13	12.25	13.78	---	13.05
26	11.20	10.88	10.80	10.84	10.82	10.69	11.76	12.57	11.83	13.13	---	13.10
27	11.17	10.92	10.86	10.81	10.94	10.68	11.75	13.08	11.92	12.56	---	12.68
28	11.09	10.88	10.84	10.83	10.92	10.66	11.54	12.38	12.71	12.43	---	12.62
29	11.12	10.96	10.78	10.86	---	10.69	11.07	12.93	12.96	12.81	---	12.73
30	11.13	10.90	10.76	10.84	---	10.68	10.90	12.13	12.94	13.06	---	12.50
31	11.14	---	10.81	10.87	---	10.74	---	11.60	---	12.90	---	---
MAX	11.57	11.22	10.98	10.92	10.94	11.00	12.09	13.24	12.96	14.81	---	---
MIN	11.09	10.87	10.76	10.65	10.64	10.60	10.66	10.78	10.48	12.17	---	---

LARAMIE COUNTY—Continued

410838104530401 14-067-34bbc01 Laramie County #11—Continued



LARAMIE COUNTY—Continued

410827104501601 14-067-36acb01 Pioneer Park

LOCATION.--Lat 41°08'29.5" (revised), long 104°50'18" (revised), in NW¼ SW¼ NE¼ sec.36, T.14 N., R.67 W., Hydrologic Unit 10190009.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Depth of well, 24 ft below land surface.

DATUM.--Elevation of land surface is 6,099 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.00 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1989 to current year.

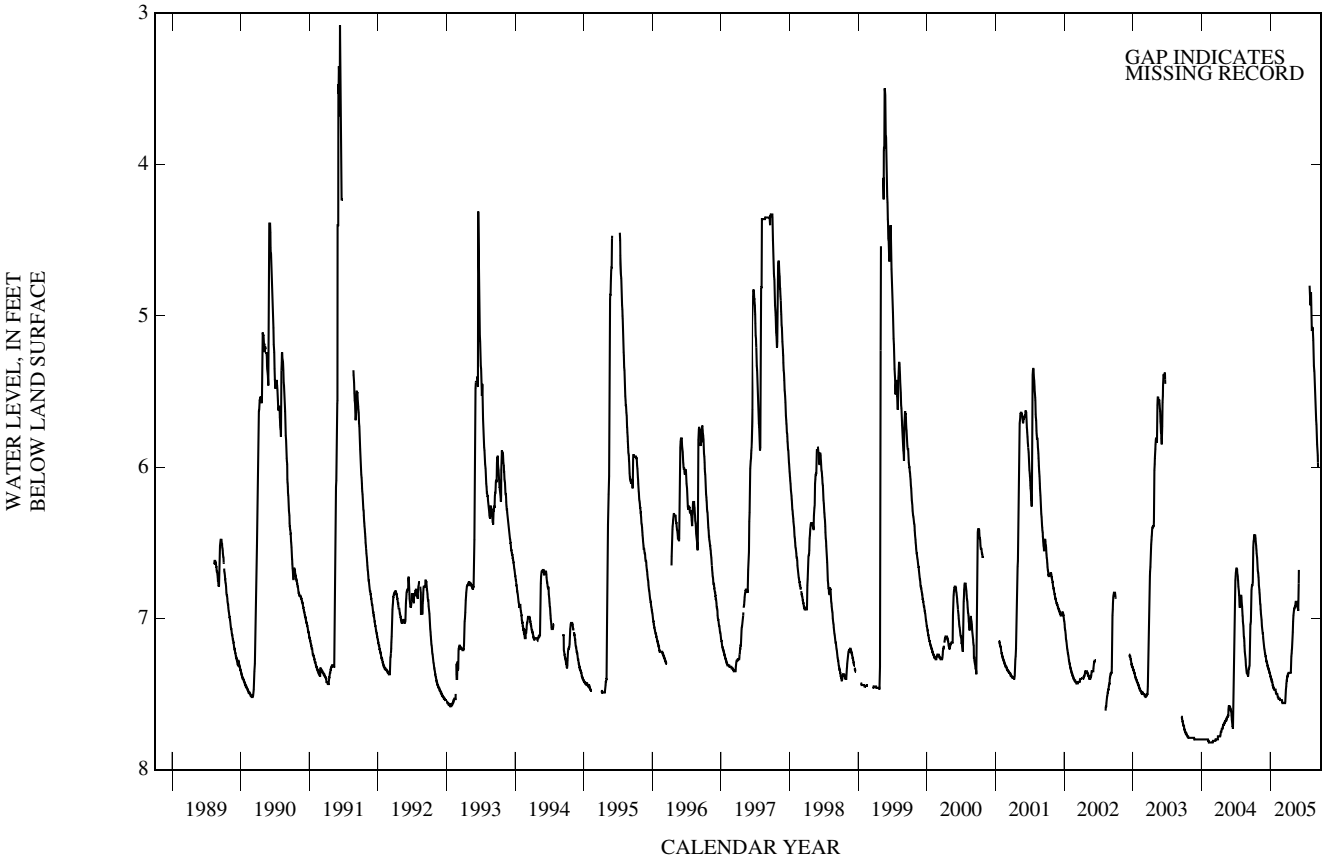
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.08 ft below land surface, June 13, 1991; lowest, 7.82 ft below land surface, Feb. 8-March 2, 2004.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.66	6.75	7.20	7.38	7.49	7.54	7.39	7.09	6.82	---	4.87	5.63
2	6.58	6.78	7.21	7.38	7.49	7.54	7.39	7.06	6.77	---	4.90	5.66
3	6.53	6.79	7.22	7.39	7.50	7.54	7.38	7.02	6.68	---	4.93	5.69
4	6.51	6.81	7.23	7.39	7.50	7.54	7.38	7.00	---	---	4.88	5.72
5	6.49	6.83	7.23	7.39	7.50	7.55	7.37	6.98	---	---	4.85	5.75
6	6.48	6.84	7.24	7.40	7.50	7.55	7.37	6.96	---	---	4.85	5.79
7	6.45	6.86	7.25	7.40	7.50	7.56	7.37	6.95	---	---	4.89	5.82
8	6.45	6.88	7.25	7.41	7.50	7.56	7.36	6.94	---	---	4.95	5.85
9	6.45	6.90	7.26	7.41	7.51	7.56	7.36	6.94	---	---	5.00	5.88
10	6.45	6.91	7.27	7.42	7.52	7.56	7.36	6.93	---	---	5.06	5.90
11	6.45	6.94	7.28	7.42	7.52	7.56	7.36	6.93	---	---	5.10	5.92
12	6.45	6.95	7.28	7.42	7.52	7.56	7.36	6.93	---	---	5.09	5.97
13	6.45	6.97	7.29	7.43	7.52	7.56	7.36	6.92	---	---	5.09	6.00
14	6.46	6.98	7.29	7.44	7.53	7.56	7.36	6.92	---	---	5.08	---
15	6.47	7.00	7.29	7.44	7.53	7.56	7.36	6.91	---	---	5.08	---
16	6.49	7.01	7.30	7.45	7.53	7.56	7.36	6.90	---	---	5.09	---
17	6.50	7.03	7.31	7.45	7.53	7.56	7.36	6.89	---	---	5.12	---
18	6.52	7.05	7.31	7.46	7.53	7.56	7.36	6.89	---	---	5.16	---
19	6.54	7.06	7.32	7.46	7.53	7.56	7.36	6.89	---	---	5.20	---
20	6.55	7.07	7.32	7.46	7.53	7.56	7.36	6.89	---	---	5.25	---
21	6.57	7.09	7.33	7.47	7.53	7.56	7.35	6.89	---	---	5.29	---
22	6.58	7.10	7.33	7.47	7.54	7.55	7.31	6.89	---	---	5.33	---
23	6.60	7.10	7.33	7.47	7.54	7.53	7.28	6.89	---	---	5.36	---
24	6.62	7.11	7.34	7.47	7.54	7.51	7.25	6.90	---	---	5.37	---
25	6.64	7.13	7.34	7.47	7.54	7.49	7.23	6.90	---	---	5.40	---
26	6.66	7.14	7.35	7.47	7.54	7.47	7.21	6.92	---	---	5.43	---
27	6.68	7.16	7.35	7.47	7.54	7.45	7.20	6.92	---	---	5.46	---
28	6.69	7.17	7.36	7.47	7.54	7.43	7.18	6.93	---	---	5.49	---
29	6.70	7.18	7.36	7.47	---	7.42	7.16	6.94	---	---	5.53	---
30	6.72	7.19	7.36	7.48	---	7.41	7.13	6.95	---	4.80	5.56	---
31	6.73	---	7.37	7.49	---	7.41	---	6.88	---	4.85	5.60	---
MAX	6.73	7.19	7.37	7.49	7.54	7.56	7.39	7.09	---	---	5.60	---
MIN	6.45	6.75	7.20	7.38	7.49	7.41	7.13	6.88	---	---	4.85	---

LARAMIE COUNTY—Continued

410827104501601 14-067-36acb01 Pioneer Park—Continued



LARAMIE COUNTY—Continued

410757104582302 14-068-35ddc02 King #3

LOCATION.--Lat 41°07'57", long 104°58'23", in SW¼ SE¼ SE¼ sec.35, T.14 N., R.68 W., Hydrologic Unit 10190009.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Depth of well, 230 ft below land surface.

DATUM.--Elevation of land surface is 6,520 ft above NGVD of 1929, from levels. Measuring point: bottom of recorder shelf, 3.37 ft, above land surface.

REMARKS.--Data collected by U.S. Geological Survey.

PERIOD OF RECORD.--1969 to current year.

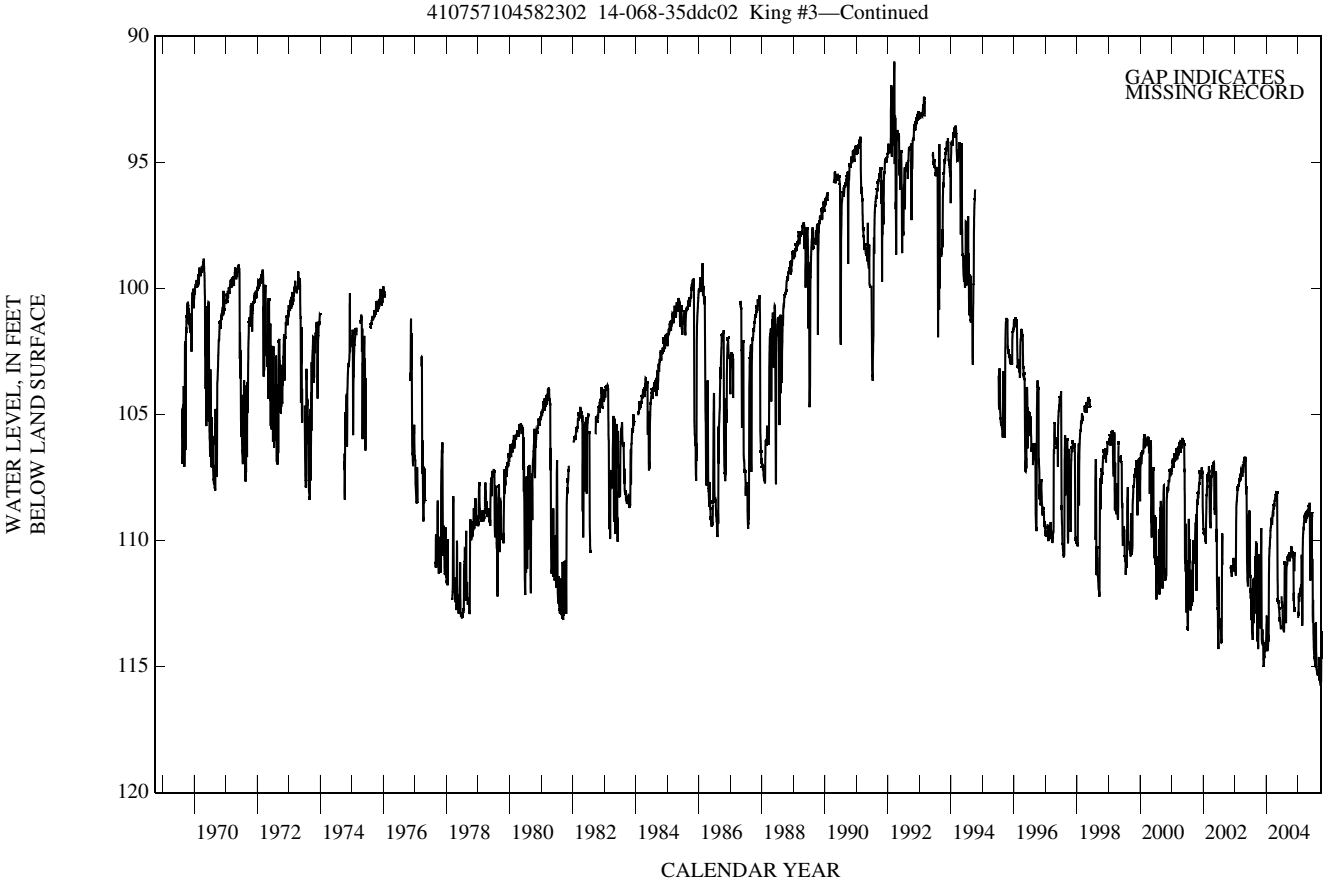
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 91.00 ft below land surface, Mar. 15, 1992; lowest, 115.77 ft below land surface, Sept. 20, 21, 2005.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110.49	110.47	---	---	112.03	109.91	109.26	108.85	109.78	113.67	114.42	114.62
2	110.56	110.65	---	---	112.06	109.84	109.30	108.93	109.41	113.84	114.46	114.68
3	110.63	110.68	---	---	112.10	109.77	109.17	108.91	109.17	113.92	114.50	114.77
4	110.70	110.68	---	113.07	112.07	109.73	109.02	108.86	109.00	114.03	114.73	115.01
5	110.63	110.71	---	113.05	111.88	109.72	109.00	108.83	108.99	114.21	115.00	115.20
6	110.57	110.68	---	112.90	111.86	109.58	109.10	108.71	108.90	114.31	115.09	115.33
7	110.56	110.67	---	112.87	111.77	109.53	109.23	108.61	108.90	114.34	115.11	115.49
8	110.56	110.64	---	112.87	111.75	109.50	108.97	108.58	109.50	114.41	115.12	115.55
9	110.58	110.48	---	112.88	111.75	109.51	108.86	108.61	110.25	114.47	115.12	115.43
10	110.54	110.47	---	112.99	111.85	109.50	108.86	108.61	110.73	114.49	115.17	115.38
11	110.54	110.80	---	112.29	111.95	109.44	108.90	108.61	110.26	114.52	115.21	115.39
12	110.55	111.63	---	112.18	111.63	109.32	108.95	108.63	109.59	114.63	115.25	115.43
13	110.55	112.13	---	112.19	110.90	109.31	109.02	108.67	109.33	114.68	115.28	115.46
14	110.48	112.40	---	112.25	110.61	109.32	109.08	108.76	109.25	114.61	115.31	115.56
15	110.41	112.08	---	112.32	110.57	109.30	109.08	108.79	109.13	114.61	115.31	115.60
16	110.30	112.10	---	112.40	110.69	109.21	109.14	108.62	109.03	114.67	115.31	115.63
17	110.25	112.37	---	112.43	110.72	109.07	109.09	108.50	108.90	114.66	115.25	115.61
18	110.22	112.65	---	112.34	111.64	109.07	108.94	108.50	108.86	114.71	115.21	115.61
19	110.22	112.75	---	112.31	112.47	109.08	108.89	108.57	---	114.70	115.21	115.62
20	110.31	112.75	---	112.25	112.88	109.08	108.89	108.83	---	114.70	115.23	115.72
21	110.36	112.81	---	112.14	113.26	109.04	108.89	109.71	110.73	114.80	115.32	115.72
22	110.30	---	---	112.14	113.38	109.05	108.93	110.41	111.89	114.92	115.35	115.72
23	110.30	---	---	112.17	113.12	109.05	109.07	110.86	112.49	114.99	115.28	115.65
24	110.36	111.22	---	112.12	112.15	109.03	108.92	111.03	112.92	114.99	115.24	115.62
25	110.45	110.87	---	112.06	111.30	109.06	108.82	111.16	113.25	115.00	115.24	115.62
26	110.50	110.68	---	112.04	110.67	109.12	108.80	111.40	112.57	115.00	115.27	115.63
27	110.55	110.57	---	111.93	110.34	109.17	108.79	111.56	112.36	114.47	115.28	115.61
28	110.49	110.47	---	111.91	110.09	108.99	108.75	111.59	112.45	113.73	115.22	115.60
29	110.43	---	---	111.91	---	108.92	108.75	111.59	112.91	113.29	115.21	114.70
30	110.44	---	---	111.95	---	108.91	108.78	111.28	113.33	113.29	115.05	113.63
31	110.47	---	---	111.95	---	108.96	---	110.45	---	113.82	114.68	---
MAX	110.70	---	---	---	113.38	109.91	109.30	111.59	---	115.00	115.35	115.72
MIN	110.22	---	---	---	110.09	108.91	108.75	108.50	---	113.29	114.42	113.63

LARAMIE COUNTY—Continued

410757104582302 14-068-35ddc02 King #3—Continued



LARAMIE COUNTY—Continued

411531104194701 15-062-20aaa01 Laramie County #4

LOCATION.--Lat 41°15'31", long 104°19'47", in NE$^1/_4$ NE$^1/_4$ NE$^1/_4$ sec.20, T.15 N., R.62 W., Hydrologic Unit 10190015.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Depth of well, 165 ft below land surface.

DATUM.--Elevation of land surface is 5,510 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.0 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

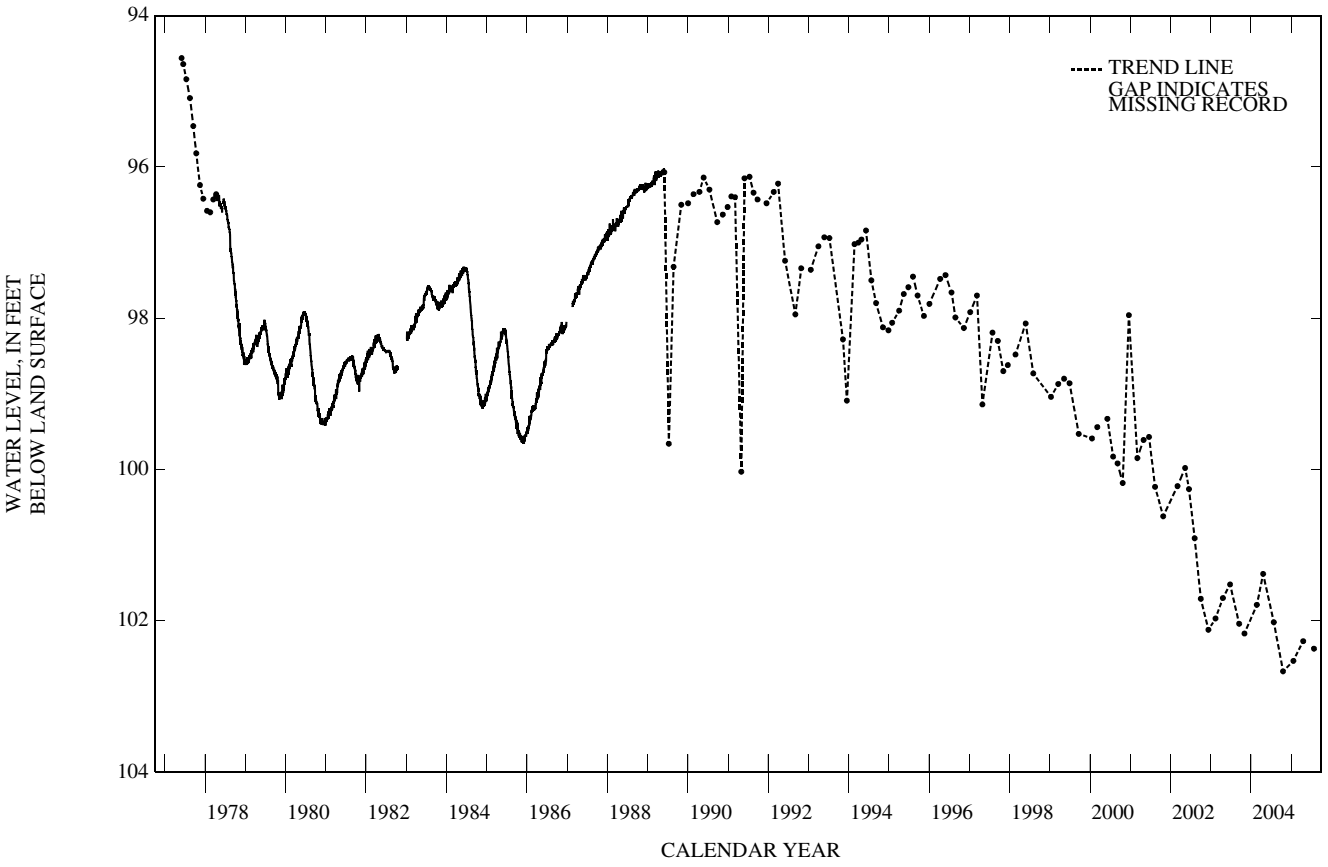
PERIOD OF RECORD.--1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 94.56 ft below land surface, from hand-measured data, June 1, 1977; lowest, 102.67 ft below land surface, from hand-measured data, Oct. 18, 2004.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18	102.67	JAN 20	102.53	APR 19	102.27	JUL 26	102.37

WATER YEAR 2005 HIGHEST 102.27 APR 19, 2005 LOWEST 102.67 OCT 18, 2004



LARAMIE COUNTY—Continued

412227104081402 16-060-07bbb02 USGS southwest of Albin

LOCATION.--Lat 41°23'42.5", long 104°05'29.5", in NW¼ NW¼ NW¼ sec.7, T.16 N., R.60 W., Hydrologic Unit 10190016.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Depth of well, 215 ft below land surface.

DATUM.--Elevation of land surface is 5,310 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.10 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1983 to current year.

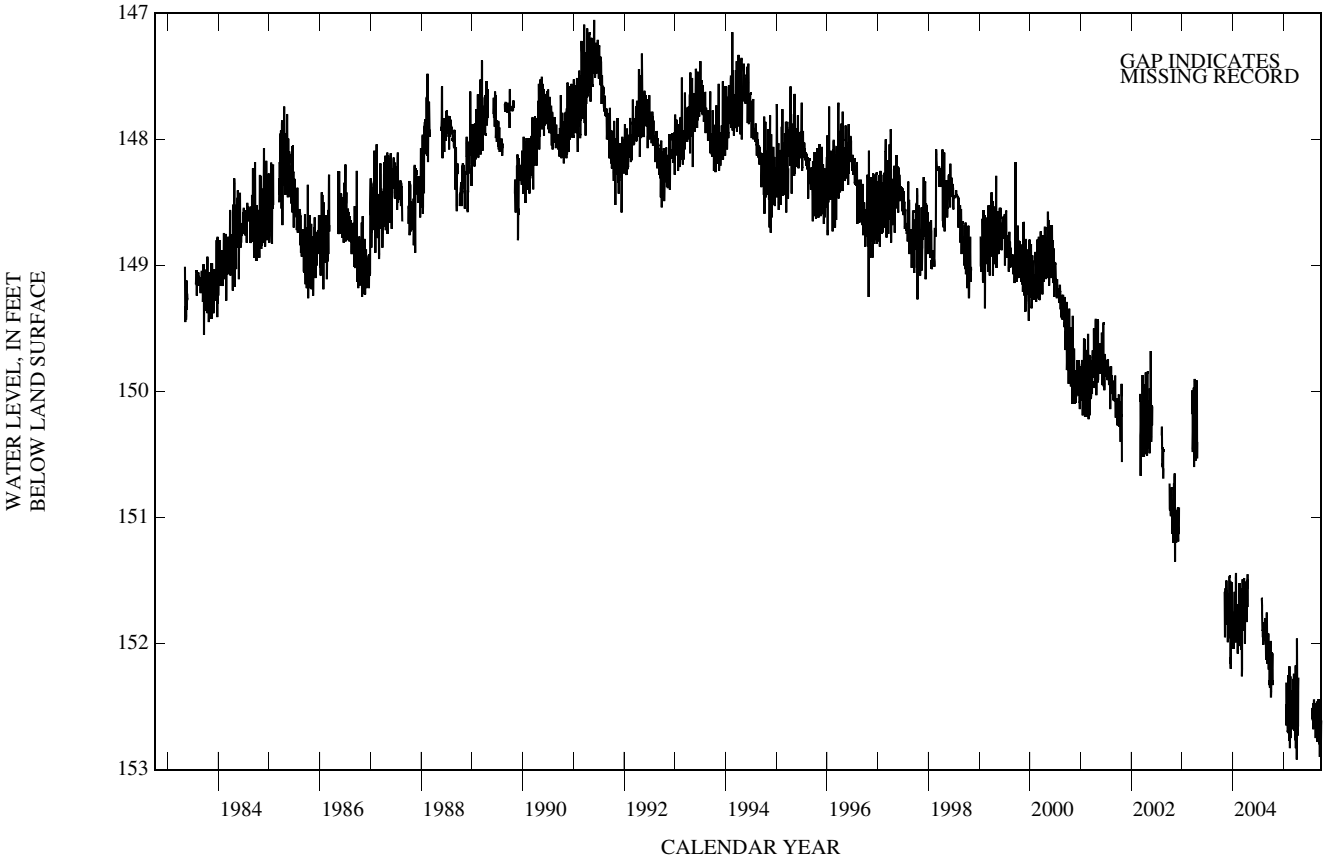
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 147.06 ft below land surface, May 30, 31, 1991; lowest, 153.13 ft below land surface, March 31 and April 1, 2005.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	151.99	---	---	---	152.69	152.56	152.75	---	---	---	152.54	152.78
2	152.42	---	---	---	152.71	152.56	152.55	---	---	---	152.48	152.75
3	152.42	---	---	---	152.70	152.61	152.32	---	---	---	152.48	152.70
4	152.38	---	---	---	152.36	152.62	152.27	---	---	---	152.68	152.69
5	152.20	---	---	---	152.25	152.68	152.33	---	---	---	152.62	152.69
6	152.20	---	---	---	152.31	152.37	152.92	---	---	---	152.51	152.69
7	152.19	---	---	---	152.51	152.50	152.42	---	---	---	152.50	152.75
8	152.31	---	---	---	152.51	152.55	151.96	---	---	---	152.45	152.60
9	152.21	---	---	---	152.64	152.60	152.06	---	---	---	152.45	152.47
10	152.21	---	---	---	152.77	152.60	152.40	---	---	---	152.56	152.44
11	152.30	---	---	---	152.49	152.39	152.66	---	---	---	152.56	152.55
12	152.29	---	---	---	152.18	152.28	152.66	---	---	---	152.53	152.67
13	152.33	---	---	---	152.18	152.51	152.73	---	---	---	152.53	152.74
14	152.15	---	---	---	152.50	152.65	152.62	---	---	---	152.61	152.79
15	152.15	---	---	---	152.56	152.60	152.65	---	---	---	152.61	152.79
16	152.08	---	---	---	152.83	152.44	152.65	---	---	---	152.58	152.69
17	152.08	---	---	---	152.77	152.24	152.37	---	---	---	152.48	152.65
18	---	---	---	---	152.45	152.35	152.27	---	---	---	152.48	152.68
19	---	---	---	---	152.26	152.62	---	---	---	---	152.53	152.79
20	---	---	---	---	152.30	152.51	---	---	---	---	152.63	152.90
21	---	---	---	152.31	152.53	152.51	---	---	---	---	152.75	152.68
22	---	---	---	152.65	152.74	152.69	---	---	---	---	152.60	152.71
23	---	---	---	152.59	152.75	152.41	---	---	---	---	152.49	152.60
24	---	---	---	152.50	152.70	152.41	---	---	---	---	152.49	152.60
25	---	---	---	152.48	152.55	152.76	---	---	---	---	152.55	152.68
26	---	---	---	152.54	152.43	152.76	---	---	---	---	152.68	152.90
27	---	---	---	152.44	152.47	152.48	---	---	---	152.60	152.69	152.76
28	---	---	---	152.44	152.61	152.18	---	---	---	152.51	152.69	152.76
29	---	---	---	152.63	---	152.18	---	---	---	152.51	152.56	152.65
30	---	---	---	152.64	---	152.39	---	---	---	152.54	152.46	152.61
31	---	---	---	152.70	---	152.83	---	---	---	152.61	152.64	---
MAX	---	---	---	---	152.83	152.83	---	---	---	---	152.75	152.90
MIN	---	---	---	---	152.18	152.18	---	---	---	---	152.45	152.44

LARAMIE COUNTY—Continued

412227104081402 16-060-07bbb02 USGS southwest of Albin—Continued



LARAMIE COUNTY—Continued

411136104125301 16-061-17aaa01 Laramie County #5

LOCATION.--Lat 41°21'36.5" (revised), long 104°12'51.5" (revised), in NE$^1/_4$ NE$^1/_4$ NE$^1/_4$ sec.17, T.16 N., R.61 W., Hydrologic Unit 10190016.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Depth of well, 285 ft below land surface.

DATUM.--Elevation of land surface is 5,451 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.30 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1977 to current year.

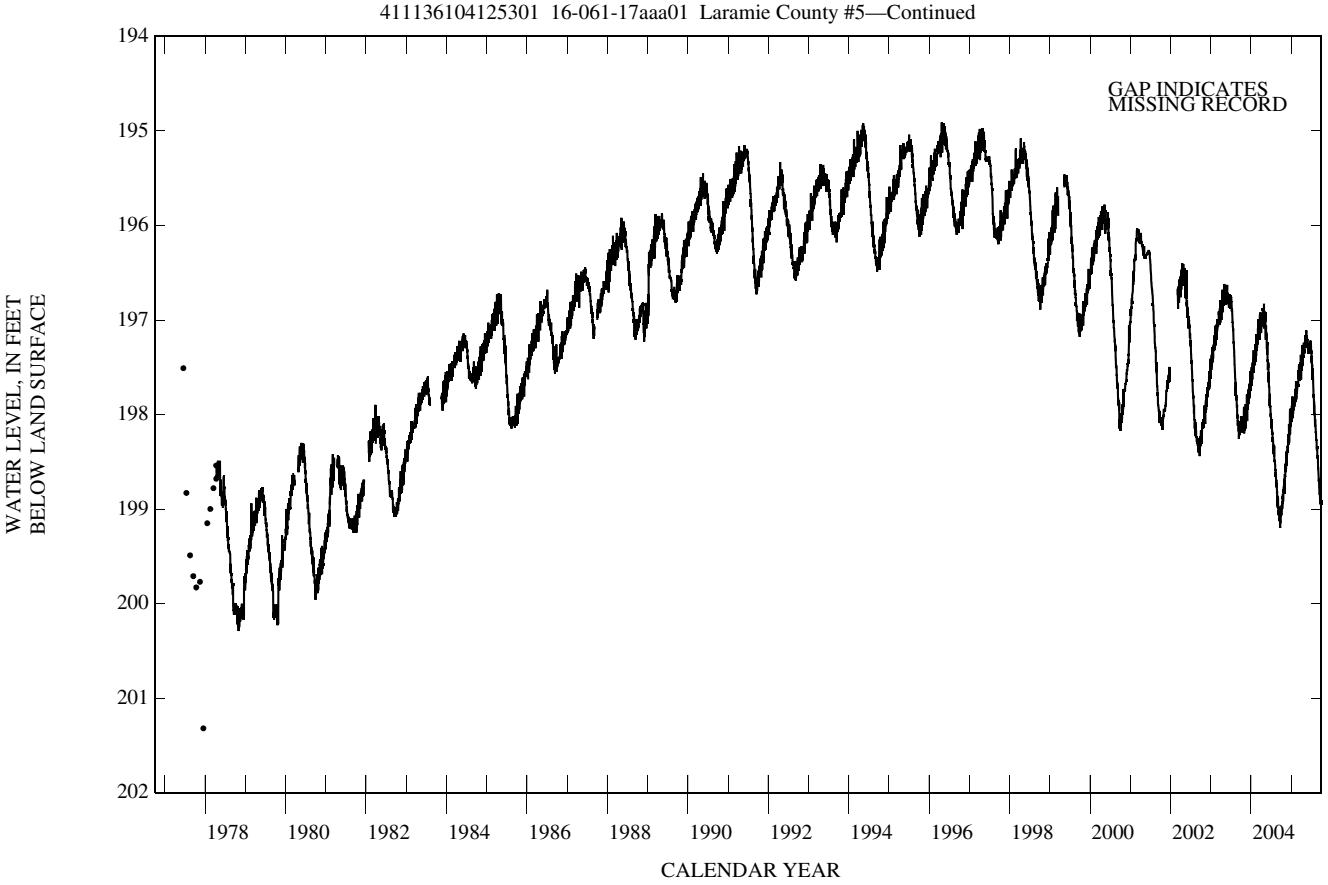
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 194.91 ft below land surface, Apr. 24, 1996; lowest, 201.32 ft below land surface, from hand-measured data, Dec. 16, 1977.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	199.06	198.84	198.40	198.03	197.86	197.67	197.44	197.34	197.25	197.32	198.00	198.57
2	199.06	198.68	198.27	198.08	197.86	197.69	197.45	197.26	197.31	197.32	198.02	198.57
3	199.06	198.63	198.28	198.06	197.86	197.69	197.39	197.25	197.30	197.38	198.06	198.61
4	199.02	198.68	198.26	198.05	197.75	197.69	197.41	197.26	197.30	197.46	198.13	198.61
5	198.96	198.65	198.21	197.98	197.73	197.63	197.49	197.26	197.36	197.38	198.05	198.64
6	198.99	198.65	198.32	197.91	197.87	197.53	197.54	197.16	197.25	197.42	198.07	198.68
7	199.01	198.66	198.28	198.00	197.77	197.59	197.36	197.22	197.28	197.46	198.11	198.71
8	199.01	198.56	198.22	197.98	197.85	197.62	197.27	197.25	197.36	197.50	198.12	198.69
9	198.92	198.52	198.23	198.00	197.85	197.57	197.37	197.20	197.35	197.47	198.13	198.69
10	198.94	198.61	198.27	197.99	197.85	197.59	197.49	197.22	197.33	197.51	198.15	198.69
11	199.00	198.53	198.10	197.81	197.71	197.50	197.45	197.27	197.33	197.62	198.20	198.77
12	198.93	198.55	198.30	197.87	197.65	197.47	197.47	197.24	197.27	197.62	198.18	198.79
13	198.93	198.57	198.28	198.04	197.77	197.64	197.47	197.29	197.30	197.54	198.19	198.83
14	198.86	198.57	198.13	198.02	197.78	197.57	197.43	197.26	197.35	197.56	198.27	198.84
15	198.90	198.49	198.16	198.01	197.84	197.57	197.48	197.15	197.28	197.61	198.28	198.84
16	198.84	198.52	198.21	197.91	197.81	197.52	197.43	197.12	197.29	197.58	198.27	198.84
17	198.87	198.54	198.16	197.99	197.77	197.47	197.36	197.11	197.24	197.63	198.27	198.84
18	198.91	198.41	198.20	197.88	197.67	197.59	197.35	197.26	197.28	197.65	198.30	198.88
19	198.92	198.39	197.96	197.96	197.65	197.56	197.36	197.25	197.35	197.69	198.35	198.93
20	198.85	198.54	197.94	197.91	197.77	197.50	197.39	197.17	197.33	197.75	198.37	198.95
21	198.85	198.43	198.21	197.85	197.78	197.55	197.39	197.17	197.28	197.82	198.37	198.91
22	198.79	198.41	198.14	197.89	197.74	197.53	197.40	197.16	197.22	197.79	198.36	198.91
23	198.83	198.43	198.06	197.89	197.74	197.45	197.27	197.19	197.23	197.82	198.35	198.93
24	198.83	198.38	198.00	197.88	197.72	197.51	197.24	197.21	197.26	197.82	198.35	198.92
25	198.76	198.39	198.12	197.89	197.67	197.53	197.29	197.27	197.22	197.84	198.46	198.92
26	198.82	198.39	198.13	197.90	197.65	197.55	197.34	197.22	197.25	197.99	198.44	198.92
27	198.74	198.34	198.12	197.85	197.71	197.45	197.32	197.21	197.28	197.86	198.44	198.94
28	198.68	198.33	198.09	197.92	197.69	197.37	197.31	197.21	197.25	197.90	198.47	198.94
29	198.73	198.35	197.94	197.90	---	197.42	197.35	197.30	197.28	197.91	198.45	198.92
30	198.73	198.34	197.98	197.88	---	197.55	197.35	197.28	197.36	197.97	198.45	198.92
31	198.70	---	198.06	197.89	---	197.63	---	197.28	---	198.00	198.57	---
MAX	199.06	198.84	198.40	198.08	197.87	197.69	197.54	197.34	197.36	198.00	198.57	198.95
MIN	198.68	198.33	197.94	197.81	197.65	197.37	197.24	197.11	197.22	197.32	198.00	198.57

LARAMIE COUNTY—Continued

411136104125301 16-061-17aaa01 Laramie County #5—Continued



LARAMIE COUNTY—Continued

412343104053101 17-060-33cbb01 USGS south of Albin

LOCATION.--Lat 41°23'42.5" (revised), long 104°05'29.5" (revised), in NW¼ NW¼ SW¼ sec.33, T.17 N., R.60 W., Hydrologic Unit 10190016.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Depth of well, 275 ft below land surface.

DATUM.--Elevation of land surface is 5,280 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.00 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1975 to current year.

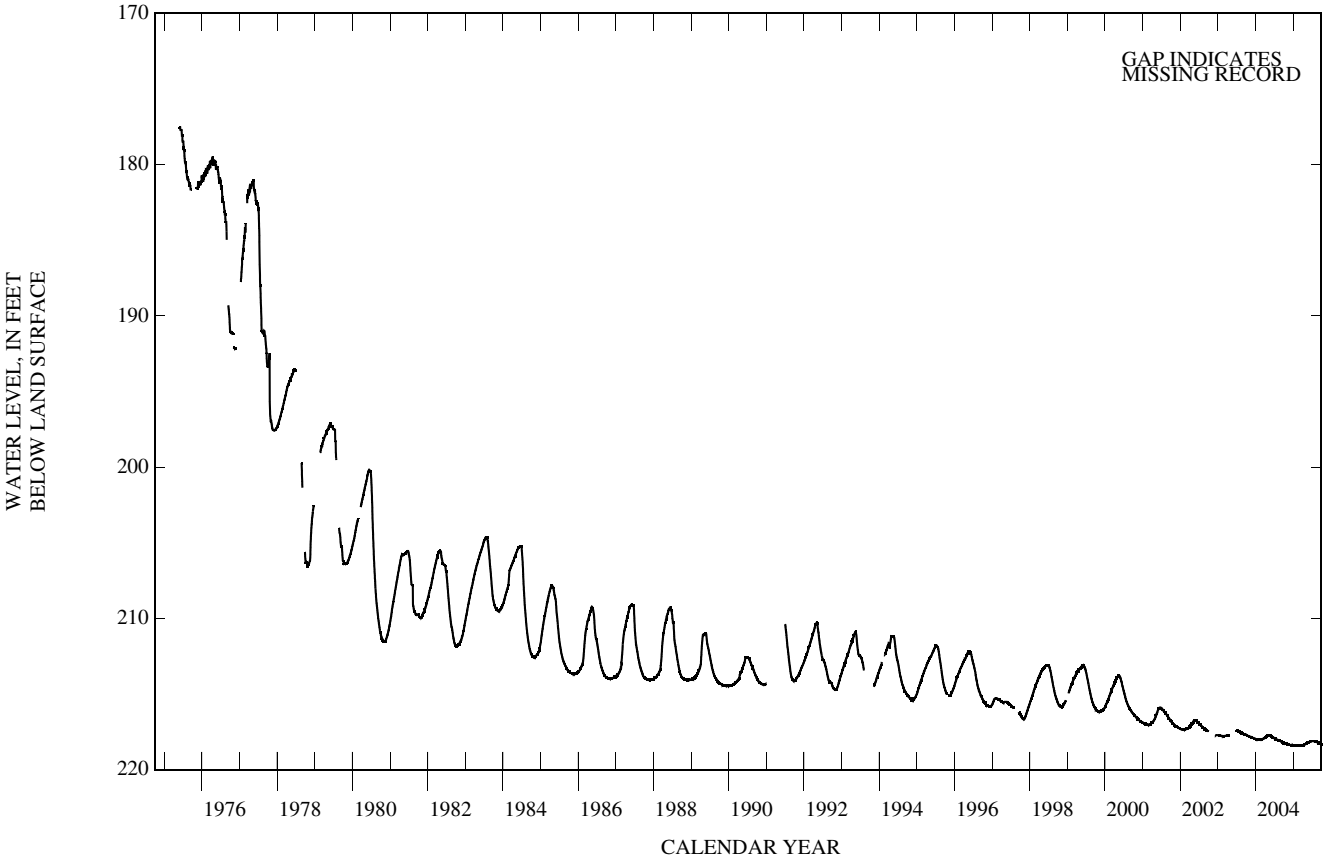
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 177.52 ft below land surface, May 30, 31, 1975; lowest, 218.41 ft below land surface, Feb. 11, 24, 25, March 6, 10, 11, 2005.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	218.23	218.30	218.37	218.39	218.40	218.40	218.40	218.31	218.18	218.12	218.13	218.22
2	218.24	218.31	218.37	218.39	218.40	218.40	218.40	218.31	218.17	218.12	218.13	218.23
3	218.24	218.31	218.37	218.39	218.40	218.40	218.39	218.30	218.17	218.11	218.13	218.23
4	218.24	218.31	218.37	218.40	218.39	218.40	218.39	218.30	218.17	218.11	218.13	218.24
5	218.25	218.32	218.37	218.40	218.39	218.40	218.39	218.29	218.17	218.11	218.14	218.24
6	218.25	218.32	218.37	218.39	218.39	218.40	218.39	218.29	218.17	218.11	218.14	218.24
7	218.25	218.32	218.37	218.39	218.39	218.40	218.39	218.28	218.16	218.11	218.15	218.25
8	218.25	218.32	218.37	218.39	218.39	218.40	218.38	218.28	218.15	218.11	218.15	218.25
9	218.26	218.33	218.37	218.39	218.40	218.40	218.38	218.28	218.15	218.11	218.15	218.25
10	218.26	218.33	218.37	218.39	218.40	218.40	218.38	218.28	218.15	218.11	218.15	218.25
11	218.26	218.32	218.38	218.39	218.40	218.39	218.38	218.28	218.15	218.11	218.15	218.25
12	218.27	218.33	218.38	218.39	218.40	218.39	218.38	218.27	218.15	218.11	218.15	218.25
13	218.27	218.33	218.38	218.39	218.39	218.39	218.38	218.27	218.15	218.11	218.16	218.26
14	218.28	218.33	218.39	218.39	218.39	218.39	218.39	218.26	218.15	218.11	218.16	218.27
15	218.28	218.33	218.39	218.40	218.39	218.39	218.39	218.25	218.14	218.11	218.16	218.27
16	218.28	218.34	218.39	218.40	218.39	218.39	218.39	218.24	218.14	218.11	218.17	218.27
17	218.28	218.34	218.39	218.40	218.40	218.39	218.38	218.23	218.14	218.11	218.17	218.28
18	218.29	218.34	218.39	218.40	218.40	218.39	218.37	218.23	218.14	218.12	218.17	218.28
19	218.29	218.35	218.39	218.40	218.39	218.40	218.37	218.23	218.14	218.12	218.18	218.28
20	218.29	218.35	218.39	218.40	218.39	218.40	218.37	218.22	218.14	218.12	218.18	218.29
21	218.28	218.35	218.39	218.40	218.39	218.40	218.36	218.22	218.13	218.12	218.18	218.29
22	218.28	218.35	218.39	218.40	218.40	218.40	218.36	218.21	218.13	218.12	218.18	218.29
23	218.28	218.35	218.39	218.39	218.40	218.39	218.35	218.20	218.13	218.12	218.19	218.29
24	218.28	218.35	218.39	218.39	218.40	218.39	218.32	218.20	218.13	218.12	218.19	218.29
25	218.28	218.35	218.39	218.39	218.40	218.39	218.31	218.20	218.12	218.13	218.19	218.29
26	218.29	218.35	218.39	218.39	218.40	218.39	218.31	218.20	218.12	218.13	218.20	218.30
27	218.29	218.35	218.39	218.40	218.40	218.39	218.31	218.19	218.12	218.13	218.20	218.31
28	218.29	218.35	218.38	218.40	218.40	218.39	218.31	218.19	218.12	218.13	218.20	218.31
29	218.29	218.36	218.39	218.40	---	218.39	218.31	218.18	218.12	218.13	218.21	218.31
30	218.29	218.37	218.39	218.40	---	218.39	218.31	218.18	218.12	218.13	218.22	218.32
31	218.30	---	218.39	218.40	---	218.39	---	218.18	---	218.13	218.22	---
MAX	218.30	218.37	218.39	218.40	218.40	218.40	218.40	218.31	218.18	218.13	218.22	218.32
MIN	218.23	218.30	218.37	218.39	218.39	218.39	218.31	218.18	218.12	218.11	218.13	218.22

LARAMIE COUNTY—Continued

412343104053101 17-060-33cbb01 USGS south of Albin—Continued



LARAMIE COUNTY—Continued

412605104203001 17-062-17ccc01 Laramie County #6A

LOCATION.--Lat 41°26'04", long 104°20'35" (revised), in SW¼ SW¼ SW¼ sec.17, T.17 N., R.62 W., Hydrologic Unit 10190016.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Depth of well, 360 ft below land surface.

DATUM.--Elevation of land surface is 5,570 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.80 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1982 to current year.

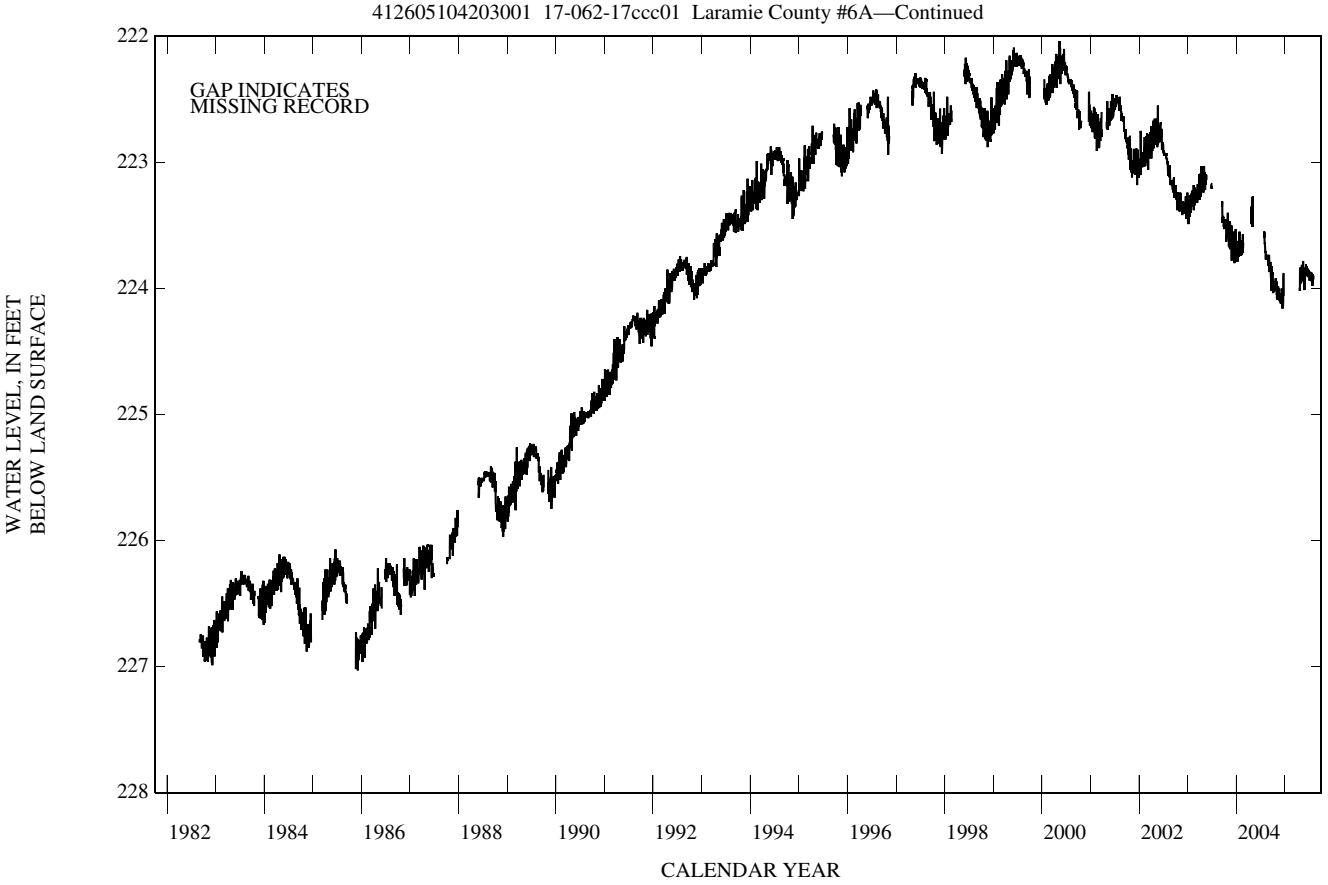
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 222.05 ft below land surface, May 10, 11, 2000; lowest, 227.03 ft below land surface, Dec. 4, 1985.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	223.89	224.08	224.10	---	---	---	---	223.96	223.84	223.88	223.92	---
2	224.03	224.06	224.09	---	---	---	---	223.93	223.84	223.87	223.90	---
3	224.03	224.01	224.09	---	---	---	---	223.91	223.84	223.87	223.90	---
4	223.99	224.09	224.07	---	---	---	---	223.91	223.84	223.94	---	---
5	223.97	224.08	224.05	---	---	---	---	223.90	223.85	223.89	---	---
6	223.97	224.08	224.05	---	---	---	---	223.82	223.82	223.89	---	---
7	223.97	224.08	224.11	---	---	---	---	223.82	223.82	223.89	---	---
8	224.02	224.04	224.09	---	---	---	---	223.83	223.88	223.89	---	---
9	223.95	223.99	224.09	---	---	---	---	223.86	223.88	223.90	---	---
10	223.95	223.99	224.15	---	---	---	---	223.86	223.88	223.90	---	---
11	224.03	224.04	224.00	---	---	---	---	223.86	223.88	223.91	---	---
12	224.00	224.03	224.07	---	---	---	---	223.91	223.87	223.93	---	---
13	224.02	224.05	224.16	---	---	---	---	223.91	223.89	223.91	---	---
14	223.98	224.05	224.05	---	---	---	---	223.91	223.89	223.91	---	---
15	223.98	224.06	224.05	---	---	---	---	223.84	223.88	223.91	---	---
16	223.97	224.06	224.14	---	---	---	---	223.79	223.88	223.87	---	---
17	223.97	224.06	224.12	---	---	---	---	223.79	223.84	223.94	---	---
18	224.00	224.02	224.11	---	---	---	---	223.94	223.85	223.88	---	---
19	224.02	224.00	223.90	---	---	---	---	223.94	223.88	223.88	---	---
20	223.97	224.08	223.88	---	---	---	224.00	223.87	223.90	223.92	---	---
21	223.97	224.10	224.06	---	---	---	224.00	223.87	223.91	223.95	---	---
22	223.92	224.07	---	---	---	---	224.02	223.87	223.86	223.93	---	---
23	224.00	224.07	---	---	---	---	223.88	223.87	223.86	223.94	---	---
24	224.02	224.08	---	---	---	---	223.84	223.87	223.86	223.92	---	---
25	223.97	224.08	---	---	---	---	223.84	224.01	223.86	223.92	---	---
26	223.97	224.08	---	---	---	---	223.86	223.88	223.86	223.98	---	---
27	224.01	224.06	---	---	---	---	223.95	223.86	223.86	223.90	---	---
28	223.95	224.04	---	---	---	---	223.95	223.86	223.86	223.90	---	---
29	223.95	224.12	---	---	---	---	223.95	223.86	223.86	223.90	---	---
30	224.05	224.10	---	---	---	---	223.95	223.86	223.89	223.92	---	---
31	224.04	---	---	---	---	---	---	223.86	---	223.93	---	---
MAX	224.05	224.12	---	---	---	---	---	224.01	223.91	223.98	---	---
MIN	223.89	223.99	---	---	---	---	---	223.79	223.82	223.87	---	---

LARAMIE COUNTY—Continued

412605104203001 17-062-17ccc01 Laramie County #6A—Continued



LARAMIE COUNTY—Continued

412400104533901 17-067-33baa01 MX-North

LOCATION.--Lat 41°24'00", long 104°53'39", in NE¼ NE¼ NW¼ sec.33, T.17 N., R.67 W., Hydrologic Unit 10190009.

AQUIFER.--Ogallala Formation.

WELL CHARACTERISTICS.--Depth of well, 200 ft below land surface.

DATUM.--Elevation of land surface is 6,425 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.40 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1984 to current year.

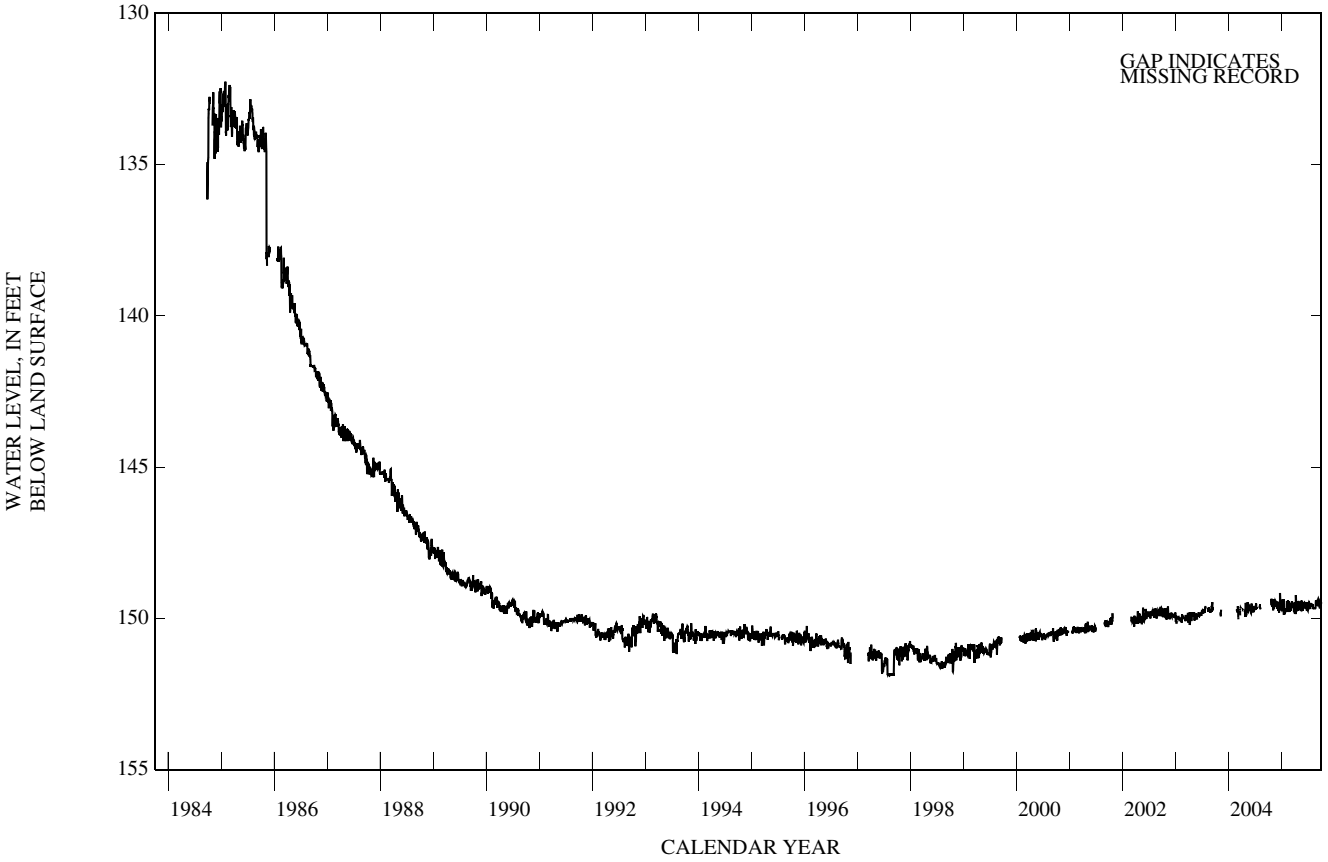
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 132.26 ft below land surface, Jan. 28, 1985; lowest, 151.87 ft below land surface, July 29, Aug 8, 11, 1997.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	149.61	149.61	149.52	149.75	149.60	149.81	149.73	149.49	149.57	149.57	149.52
2	---	149.73	149.57	149.72	149.78	149.60	149.77	149.69	149.49	149.49	149.57	149.52
3	---	149.61	149.51	149.73	149.79	149.70	149.60	149.62	149.49	149.49	149.57	149.48
4	---	149.69	149.48	149.72	149.53	149.72	149.53	149.62	149.50	149.59	149.60	149.49
5	---	149.67	149.48	149.57	149.43	149.75	149.55	149.63	149.50	149.60	149.66	149.53
6	---	149.62	149.48	149.50	149.45	149.53	149.86	149.47	149.49	149.53	149.66	149.57
7	---	149.65	149.48	149.50	149.49	149.57	149.67	149.46	149.50	149.52	149.66	149.57
8	---	149.54	149.48	149.54	149.49	149.58	149.23	149.46	149.55	149.55	149.67	149.45
9	---	149.37	149.49	149.54	149.66	149.65	149.32	149.59	149.62	149.50	149.67	149.37
10	---	149.40	149.76	149.71	149.78	149.66	149.47	149.57	149.67	149.51	149.67	149.35
11	---	149.59	149.57	149.40	149.56	149.50	149.67	149.61	149.61	149.57	149.67	149.37
12	---	149.57	149.63	149.40	149.41	149.43	149.68	149.68	149.49	149.65	149.67	149.47
13	---	149.55	149.81	149.68	149.42	149.48	149.74	149.69	149.49	149.66	149.67	149.53
14	---	149.55	149.70	149.77	149.49	149.63	149.67	149.76	149.67	149.66	149.67	149.53
15	---	149.58	149.66	149.88	149.49	149.63	149.76	149.64	149.65	149.66	149.67	149.57
16	---	149.57	149.74	149.84	149.79	149.64	149.75	149.45	149.61	149.66	149.67	149.52
17	---	149.57	149.67	149.81	149.76	149.53	149.65	149.41	149.49	149.66	149.67	149.48
18	---	149.51	149.68	149.73	149.56	149.53	149.49	149.51	149.50	149.54	149.67	149.53
19	---	149.43	149.41	149.87	149.44	149.53	149.54	149.71	149.57	149.52	149.67	149.58
20	149.57	149.44	149.16	149.76	149.45	149.53	149.63	149.70	149.71	149.52	149.67	149.67
21	149.57	149.46	149.28	149.67	149.49	149.53	149.66	149.68	149.72	149.59	149.66	149.52
22	149.35	149.47	149.41	149.79	149.73	149.66	149.75	149.70	149.72	149.56	149.54	149.54
23	149.46	149.47	149.58	149.78	149.74	149.53	149.65	149.69	149.72	149.54	149.44	149.46
24	149.53	149.47	149.49	149.70	149.74	149.53	149.43	149.67	149.72	149.53	149.44	149.45
25	149.58	149.47	149.51	149.70	149.57	149.77	149.44	149.68	149.72	149.51	149.49	149.48
26	149.61	149.47	149.58	149.70	149.53	149.79	149.51	149.75	149.72	149.57	149.56	149.61
27	149.62	149.47	149.68	149.70	149.54	149.74	149.57	149.69	149.72	149.61	149.54	149.50
28	149.45	149.45	149.67	149.70	149.60	149.50	149.57	149.55	149.72	149.55	149.54	149.50
29	149.41	149.69	149.40	149.73	---	149.50	149.58	149.57	149.73	149.55	149.45	149.50
30	149.58	149.61	149.39	149.71	---	149.50	149.67	149.58	149.67	149.55	149.42	149.47
31	149.50	---	149.43	149.77	---	149.81	---	149.58	---	149.55	149.53	---
MAX	---	149.73	149.81	149.88	149.79	149.81	149.86	149.76	149.73	149.66	149.67	149.67
MIN	---	149.37	149.16	149.40	149.41	149.43	149.23	149.41	149.49	149.49	149.42	149.35

LARAMIE COUNTY—Continued

412400104533901 17-067-33baa01 MX-North—Continued



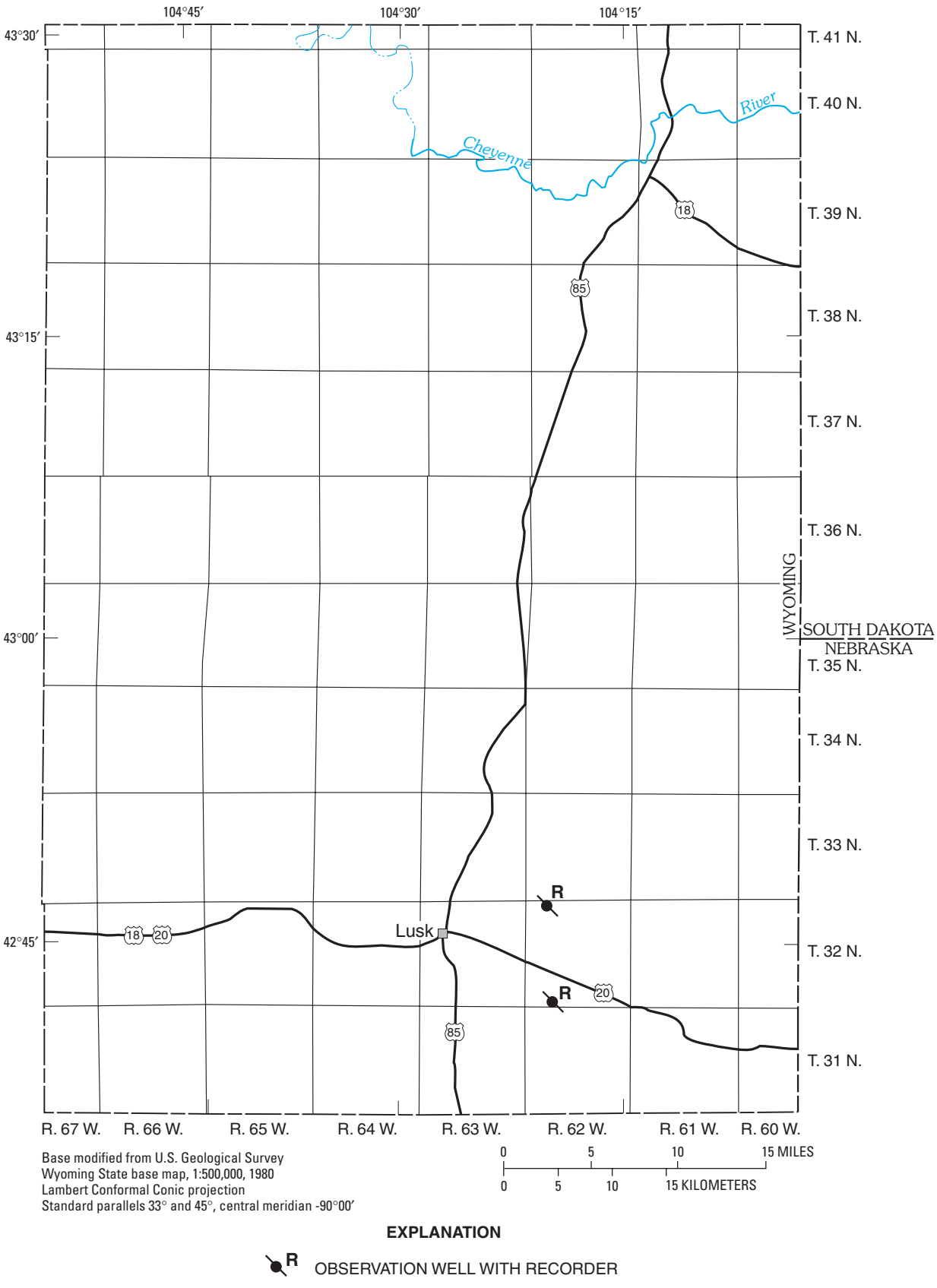


Figure 16. Location of observation wells in Niobrara County, Wyoming.

NIOBRARA COUNTY

424709104194101 32-062-05baa01 Niobrara County #1

LOCATION.--Lat 42°47'09", long 104°19'41", in NE ¼ NE ¼ NW ¼ sec.5, T.32 N., R.62 W., Hydrologic Unit 10150002.

AQUIFER.--Arikaree Formation.

WELL CHARACTERISTICS.--Depth of well, 177 ft below land surface.

DATUM.--Elevation of land surface is 4,970 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.20 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1979 to current year.

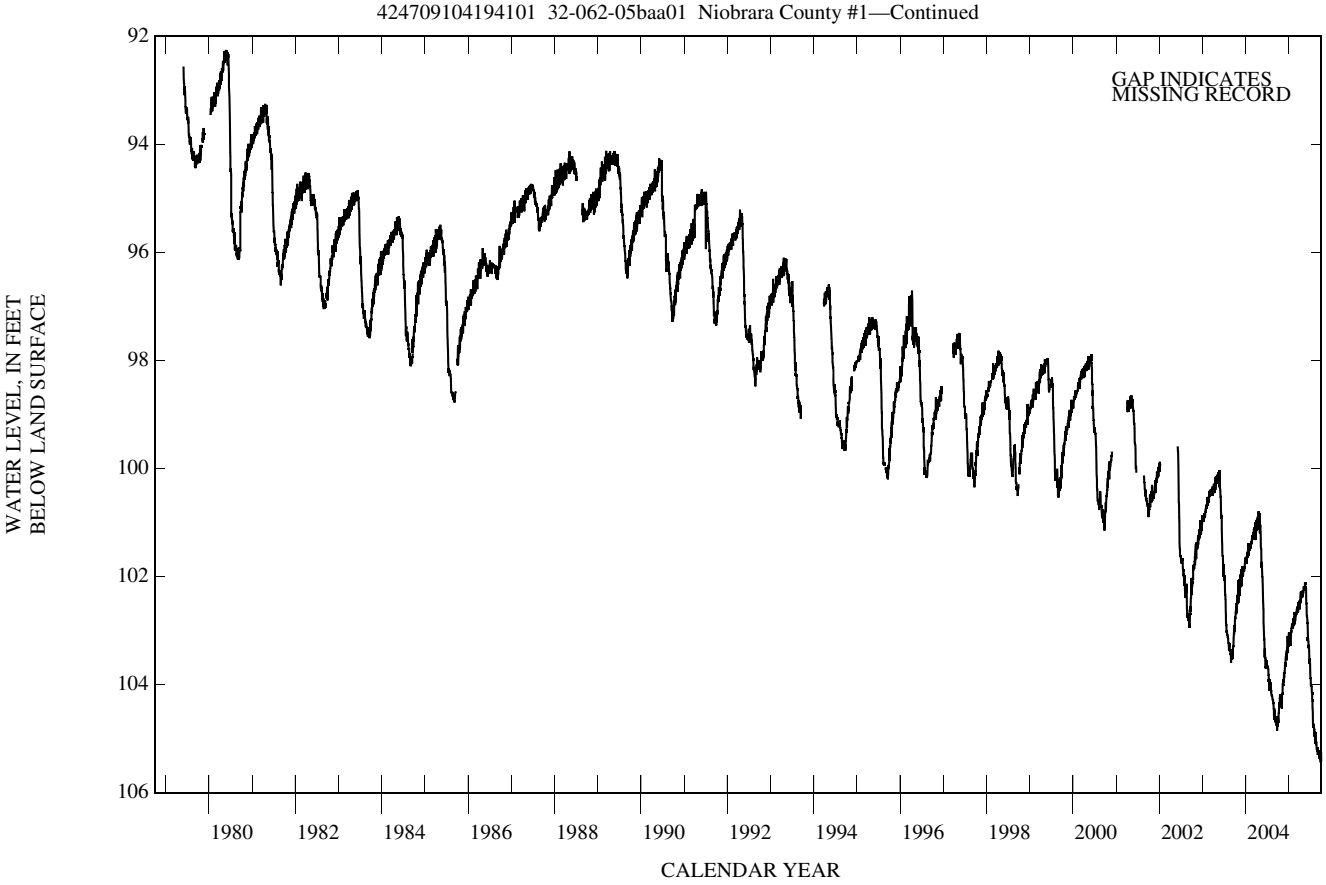
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 92.26 ft below land surface, June 1, 1980; lowest, 105.65 ft below land surface, Sept. 28, 2005.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104.67	104.45	103.61	103.19	102.91	102.67	102.46	102.31	102.74	103.88	104.83	105.25
2	104.70	104.24	103.53	103.28	102.85	102.67	102.45	102.20	102.74	103.88	104.83	105.23
3	104.71	104.17	103.51	103.19	102.86	102.70	102.44	102.20	102.77	103.88	104.83	105.21
4	104.57	104.18	103.51	103.23	102.81	102.71	102.44	102.20	102.80	104.03	104.97	105.25
5	104.52	104.17	103.47	103.20	102.77	102.63	102.50	102.20	102.87	104.02	104.87	105.25
6	104.53	104.17	103.49	103.12	102.91	102.63	102.47	102.20	102.84	104.02	104.90	105.28
7	104.53	104.15	103.53	103.12	102.84	102.61	102.41	102.20	102.90	104.02	104.91	105.22
8	104.45	104.01	103.44	103.17	102.90	102.61	102.30	102.20	103.05	104.02	104.90	105.23
9	104.33	103.97	103.44	103.17	102.92	102.56	102.30	102.19	103.12	104.04	104.90	105.23
10	104.36	104.02	103.51	103.14	102.90	102.67	102.48	102.19	103.16	104.03	105.02	105.23
11	104.43	104.00	103.37	103.08	102.85	102.57	102.36	102.26	103.16	104.06	105.02	105.34
12	104.36	104.00	103.55	103.08	102.74	102.56	102.41	102.19	103.20	104.14	105.02	105.28
13	104.34	104.00	103.52	103.25	102.74	102.67	102.34	102.26	103.21	104.16	105.03	105.37
14	104.25	103.97	103.32	103.25	102.79	102.58	102.35	102.23	103.33	104.16	105.07	105.30
15	104.26	103.92	103.31	103.11	102.89	102.58	102.39	102.12	103.28	104.26	105.07	105.32
16	104.18	103.92	103.42	103.07	102.83	102.58	102.31	102.12	103.28	104.30	105.08	105.24
17	104.24	103.93	103.39	103.06	102.79	102.55	102.31	102.12	103.28	104.30	105.07	105.30
18	104.27	103.78	103.39	102.99	102.71	102.66	102.32	102.26	103.28	104.43	105.07	105.35
19	104.33	103.77	103.12	103.04	102.69	102.59	102.32	102.25	103.34	104.45	105.07	105.38
20	104.23	103.88	103.10	103.02	102.69	102.55	102.38	102.20	103.48	104.50	105.07	105.33
21	104.26	103.81	103.38	102.95	102.82	102.55	102.33	102.20	103.52	104.73	105.19	105.31
22	104.19	103.78	103.38	102.97	102.75	102.53	102.39	102.18	103.54	104.73	105.19	105.38
23	104.28	103.80	103.25	102.96	102.74	102.53	102.28	102.19	103.54	104.73	105.19	105.31
24	104.28	103.75	103.19	102.91	102.71	102.54	102.26	102.22	103.54	104.73	105.19	105.41
25	104.29	103.74	103.19	102.91	102.73	102.50	102.26	102.45	103.60	104.74	105.21	105.44
26	104.34	103.74	103.29	102.94	102.72	102.50	102.30	102.48	103.60	104.80	105.18	105.36
27	104.30	103.65	103.30	102.87	102.72	102.50	102.30	102.50	103.60	104.73	105.20	105.33
28	104.23	103.65	103.28	102.89	102.67	102.45	102.27	102.50	103.77	104.75	105.24	105.42
29	104.30	103.65	103.06	102.97	---	102.45	102.31	102.50	103.80	104.75	105.16	105.25
30	104.34	103.61	103.06	102.93	---	102.54	102.32	102.71	103.88	104.76	105.18	105.26
31	104.32	---	103.30	102.91	---	102.61	---	102.74	---	104.83	105.30	---
MAX	104.71	104.45	103.61	103.28	102.92	102.71	102.50	102.74	103.88	104.83	105.30	105.44
MIN	104.18	103.61	103.06	102.87	102.67	102.45	102.26	102.12	102.74	103.88	104.83	105.21

NIOBRARA COUNTY—Continued

424709104194101 32-062-05baa01 Niobrara County #1—Continued



NIOBRARA COUNTY—Continued

424244104202001 32-062-32bbb01 Node Well

LOCATION.--Lat 42°42'44", long 104°20'20", in NW ¼ NW ¼ NW ¼ sec.32, T.32 N., R.62 W., Hydrologic Unit 10150002.

AQUIFER.--Arikaree Formation.

WELL CHARACTERISTICS.--Depth of well, 485 ft below land surface.

DATUM.--Elevation of land surface is 4,898 ft above NGVD of 1929, from topographic map. Measuring point: bottom of shelf, 3.00 ft above land surface.

REMARKS.--Data from Aug. 22 through Sept. 30, 2005 are in review.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1970 to current year.

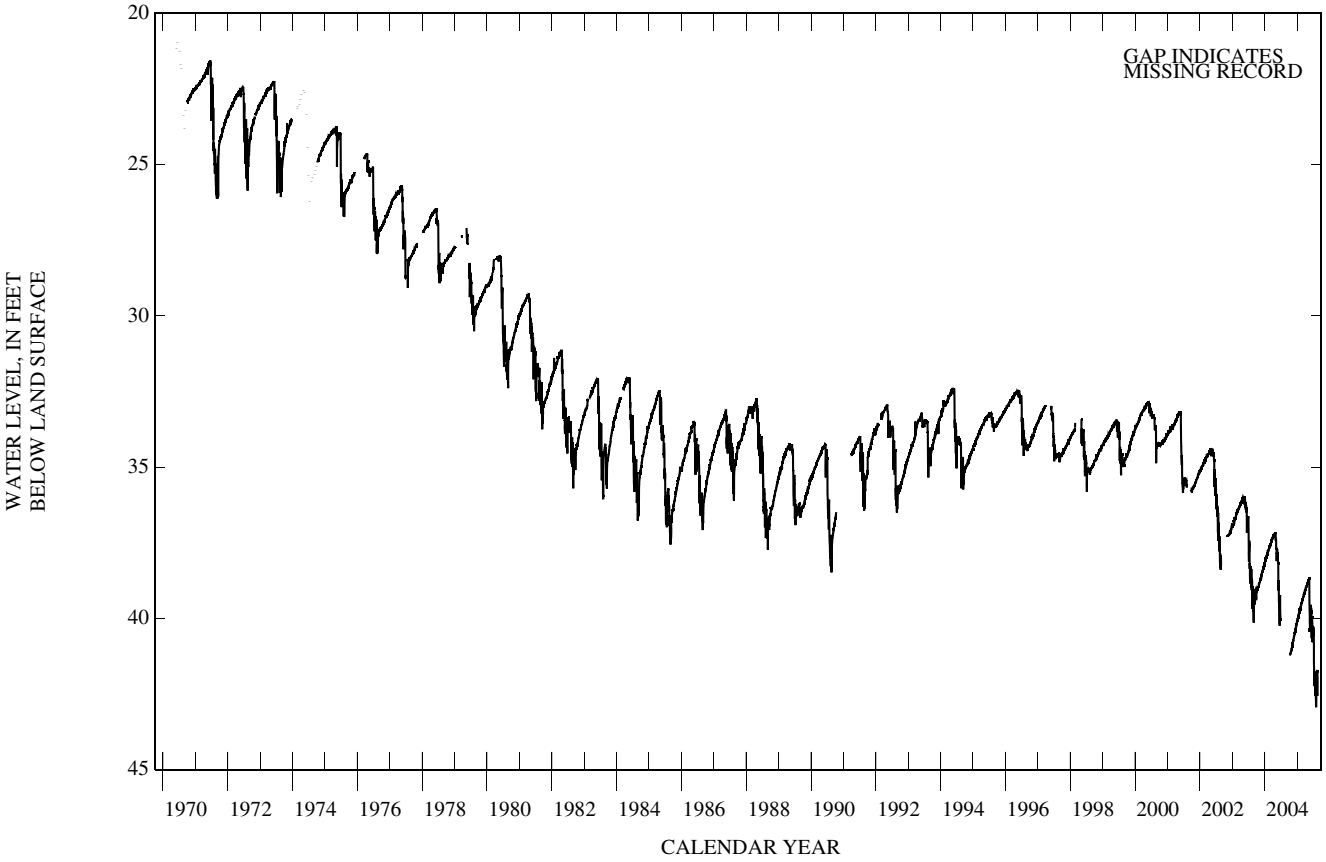
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 20.93 ft below land surface, June 23, 1970; lowest, 43.03 ft below land surface, Aug. 4, 2005.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	41.02	40.56	40.11	39.74	39.41	39.09	38.83	39.62	40.40	42.78	---
2	---	40.98	40.52	40.12	39.70	39.40	39.07	38.81	39.57	40.28	42.86	---
3	---	40.97	40.50	40.09	39.70	39.39	39.05	38.78	39.55	40.31	42.94	---
4	---	40.96	40.50	40.09	39.66	39.39	39.04	38.78	39.58	40.34	42.68	---
5	---	40.94	40.48	40.05	39.64	39.37	39.06	38.76	39.68	40.46	42.41	---
6	---	40.93	40.47	39.99	39.66	39.33	39.06	38.74	39.76	40.52	42.25	---
7	---	40.93	40.46	40.00	39.63	39.34	39.00	38.73	39.69	40.58	42.08	---
8	---	40.90	40.42	40.01	39.63	39.34	38.97	38.72	39.65	40.86	41.95	---
9	---	40.87	40.44	40.00	39.63	39.30	38.99	38.75	39.73	41.42	41.89	---
10	---	40.88	40.45	40.00	39.62	39.32	39.01	38.74	39.79	41.66	41.82	---
11	---	40.84	40.38	39.96	39.59	39.27	38.99	38.73	39.79	41.84	41.81	---
12	41.23	40.84	40.42	39.96	39.56	39.26	38.99	38.73	40.27	42.00	41.74	---
13	41.20	40.83	40.42	39.97	39.57	39.29	38.97	38.73	40.66	42.08	41.74	---
14	41.18	40.82	40.36	39.97	39.56	39.29	38.96	38.73	40.44	42.18	41.75	---
15	41.19	40.79	40.36	39.96	39.58	39.26	38.97	38.69	40.15	42.24	41.74	---
16	41.17	40.78	40.34	39.93	39.56	39.23	38.96	38.67	40.03	42.23	41.72	---
17	41.17	40.78	40.32	39.93	39.55	39.19	38.93	38.67	39.96	42.19	41.71	---
18	41.16	40.73	40.31	39.86	39.51	39.24	38.92	38.69	39.96	41.79	41.71	---
19	41.15	40.73	40.24	39.87	39.48	39.22	38.93	39.19	40.03	41.76	42.00	---
20	41.14	40.73	40.23	39.86	39.49	39.19	38.92	39.49	40.17	42.17	42.43	---
21	41.13	40.70	40.27	39.83	39.49	39.20	38.89	39.65	40.45	42.26	42.56	---
22	41.11	40.67	40.26	39.84	39.48	39.18	38.90	39.90	40.79	42.03	---	---
23	41.11	40.68	40.25	39.82	39.47	39.16	38.87	40.09	40.44	41.95	---	---
24	41.11	40.64	40.20	39.81	39.46	39.16	38.85	40.32	40.37	42.28	---	---
25	41.08	40.61	40.19	39.81	39.44	39.17	38.85	40.41	40.33	42.56	---	---
26	41.07	40.61	40.19	39.79	39.44	39.16	38.86	40.41	40.30	42.06	---	---
27	41.06	40.61	40.17	39.76	39.44	39.11	38.85	40.09	40.26	41.81	---	---
28	41.03	40.60	40.16	39.76	39.42	39.10	38.85	39.97	40.25	41.80	---	---
29	41.01	40.58	40.10	39.76	---	39.11	38.85	39.93	40.41	41.78	---	---
30	41.01	40.56	40.11	39.75	---	39.12	38.83	39.84	40.60	42.26	---	---
31	41.01	---	40.12	39.74	---	39.14	---	39.71	---	42.60	---	---
MAX	---	41.02	40.56	40.12	39.74	39.41	39.09	40.41	40.79	42.60	---	---
MIN	---	40.56	40.10	39.74	39.42	39.10	38.83	38.67	39.55	40.28	---	---

NIOBRARA COUNTY—Continued

424244104202001 32-062-32bbb01 Node Well—Continued



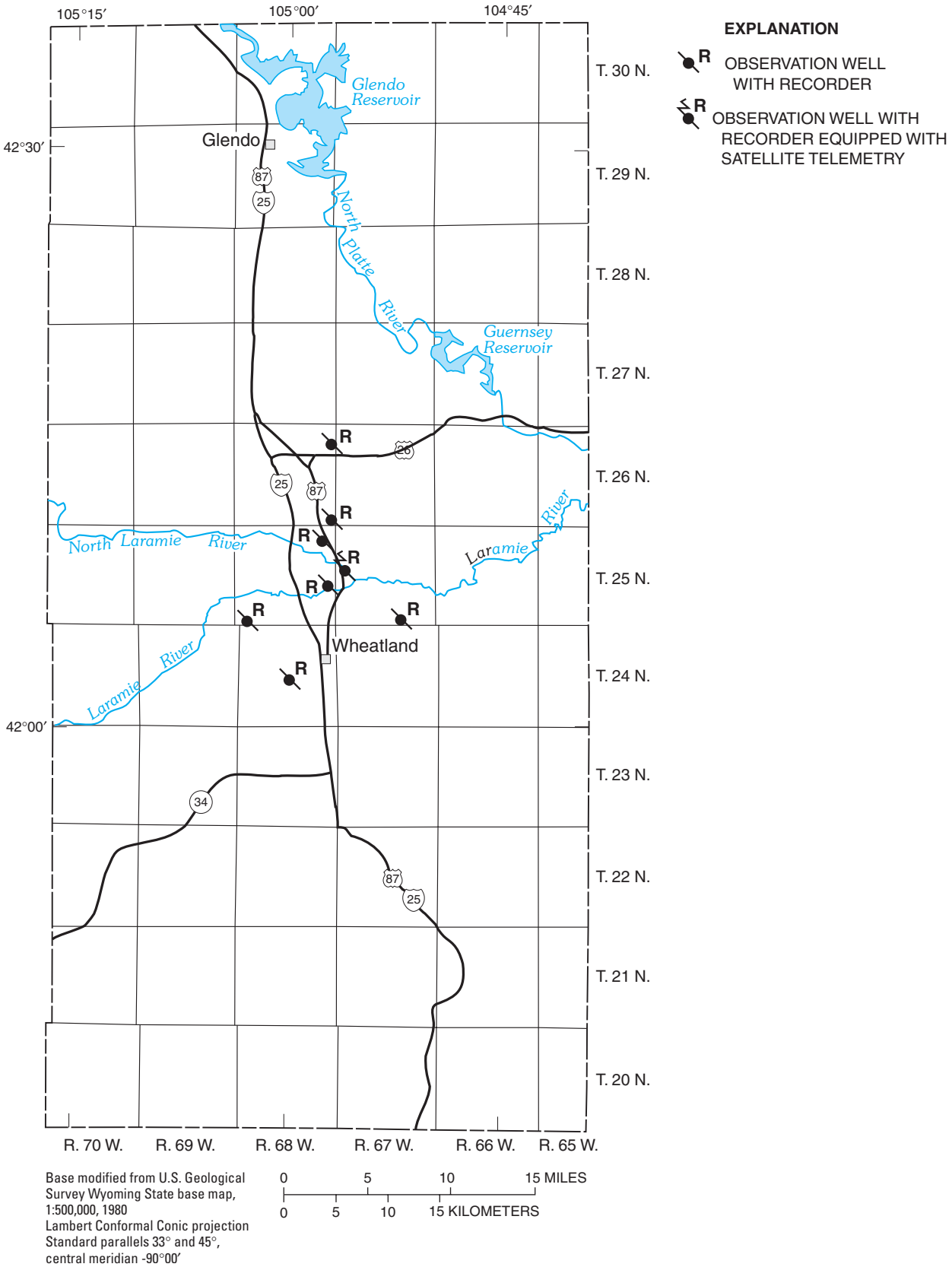


Figure 17. Location of observation wells in Platte County, Wyoming.

PLATTE COUNTY

420246104590302 24-068-22aab02 Platte County #1A

LOCATION.--Lat 42°02'46", long 104°59'03", in NW ¼ NE ¼ NE ¼ sec.22, T.24 N., R.68 W., Hydrologic Unit 10180011.

AQUIFER.--Arikaree Formation.

WELL CHARACTERISTICS.--Depth of well, 200 ft below land surface.

DATUM.--Elevation of land surface is 4,860 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.35 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 70.95 ft below land surface, June 5, 1988; lowest, 103.26 ft below land surface, July 23, 2005.

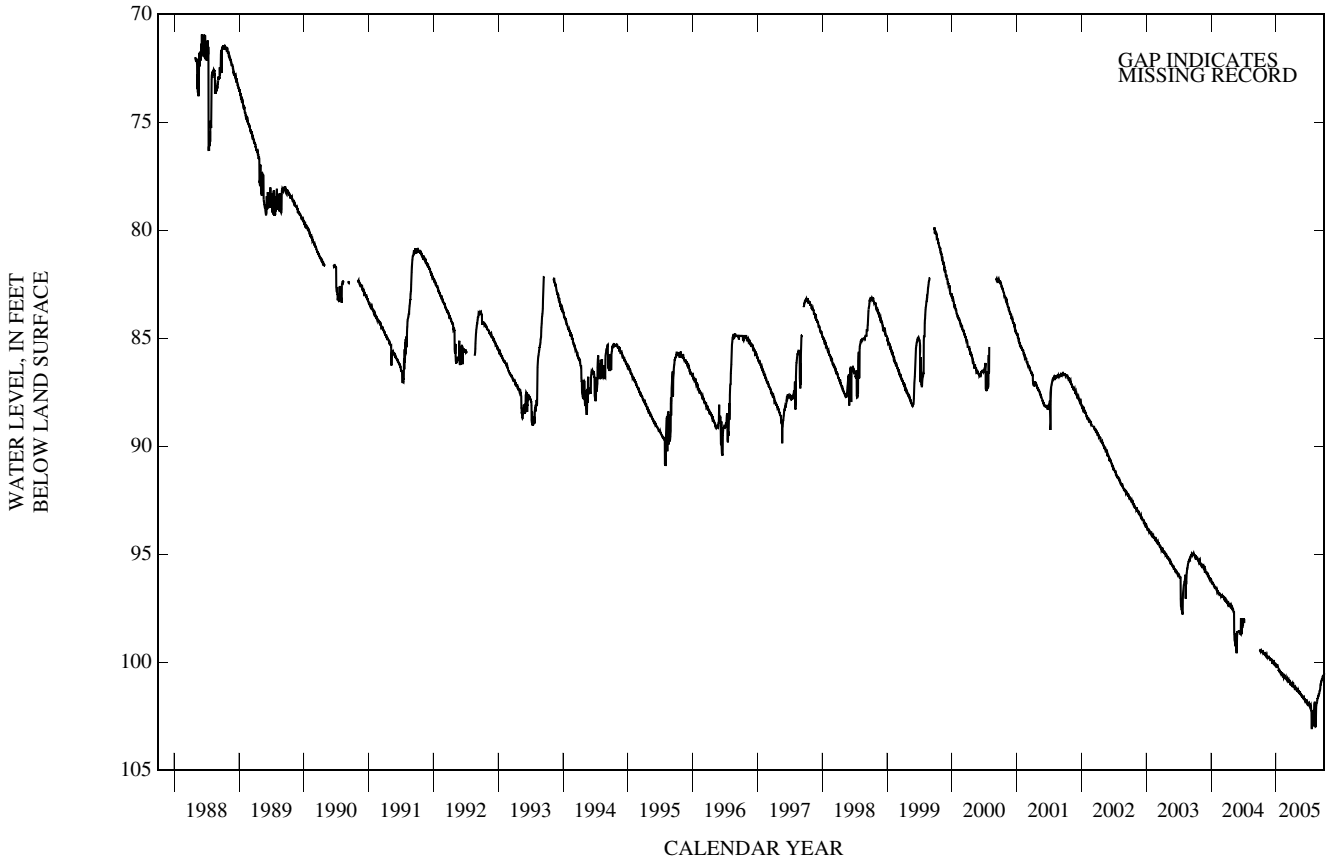
DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99.43	99.71	99.90	100.19	100.51	100.76	100.99	101.34	101.58	101.91	102.86	101.46
2	99.44	99.66	99.85	100.18	100.53	100.79	101.02	101.29	101.64	101.90	102.91	101.43
3	99.46	99.66	99.88	100.21	100.54	100.81	100.99	101.28	101.64	101.98	102.94	101.36
4	99.43	99.64	99.88	100.12	100.49	100.83	101.04	101.33	101.67	101.98	102.16	101.34
5	99.43	99.69	99.87	100.12	100.47	100.80	101.15	101.33	101.67	101.95	101.97	101.32
6	99.46	99.69	99.93	100.19	100.59	100.76	101.10	101.30	101.62	101.94	101.90	101.26
7	99.48	99.72	99.91	100.19	100.55	100.79	100.98	101.33	101.61	101.99	101.86	101.19
8	99.45	99.69	99.87	100.26	100.62	100.82	100.98	101.39	101.69	101.99	101.86	101.07
9	99.44	99.68	99.94	100.20	100.61	100.79	101.11	101.34	101.70	101.98	102.66	101.03
10	99.48	99.78	99.88	100.18	100.64	100.87	101.16	101.37	101.72	102.04	102.87	101.03
11	99.49	99.69	100.08	100.28	100.56	100.79	101.09	101.44	101.72	102.06	102.92	100.98
12	99.48	99.75	100.02	---	100.54	100.78	101.17	101.39	101.72	102.04	102.91	100.91
13	99.47	99.75	e99.92	---	100.63	100.88	101.11	101.47	101.75	101.98	103.00	100.91
14	99.45	99.77	e100.01	100.41	100.62	100.87	101.15	101.45	101.73	102.01	102.45	100.88
15	99.50	99.72	100.01	100.40	100.72	100.87	101.18	101.38	101.74	102.00	102.12	100.85
16	99.45	99.78	100.07	100.37	100.69	100.87	101.17	101.39	101.76	101.98	102.00	100.76
17	99.51	99.81	100.03	100.39	100.67	100.81	101.15	101.39	101.73	102.05	101.95	100.79
18	99.53	99.70	99.90	100.33	100.61	100.94	101.17	101.48	101.79	102.20	101.87	100.78
19	99.55	99.73	99.92	100.42	100.59	100.91	101.23	101.50	101.86	102.23	101.86	100.77
20	99.51	99.83	100.12	100.42	100.71	100.90	101.23	101.45	101.83	102.24	101.83	100.70
21	99.58	99.79	100.08	100.43	100.73	100.95	101.24	101.47	101.82	103.05	101.78	100.68
22	99.55	99.78	100.02	100.40	100.69	100.92	101.24	101.47	101.81	103.05	101.70	100.66
23	99.57	99.82	100.03	100.42	100.73	100.91	101.18	101.49	101.84	102.47	101.66	100.61
24	99.61	99.79	100.12	100.43	100.73	101.06	101.20	101.51	101.87	102.31	101.69	100.67
25	99.57	99.80	100.12	100.45	100.69	100.95	101.25	101.57	101.84	102.30	101.64	100.64
26	99.64	99.83	100.13	100.47	100.74	101.00	101.25	101.53	101.88	102.68	101.59	100.59
27	99.62	99.79	100.13	100.47	100.75	100.95	101.26	101.54	101.88	102.68	101.57	100.58
28	99.55	99.82	100.03	100.51	100.75	100.91	101.29	101.56	101.88	102.71	101.57	100.61
29	99.63	99.89	100.13	100.49	---	101.00	101.32	101.64	101.90	102.76	101.48	100.52
30	99.62	99.86	100.16	100.52	---	101.05	101.33	101.60	101.92	102.82	101.48	100.54
31	99.66	---	100.16	100.50	---	101.08	---	101.58	---	102.88	101.48	---
MAX	99.66	99.89	100.16	---	100.75	101.08	101.33	101.64	101.92	103.05	103.00	101.46
MIN	99.43	99.64	99.85	---	100.47	100.76	100.98	101.28	101.58	101.90	101.48	100.52

e Estimated

PLATTE COUNTY—Continued

420246104590302 24-068-22aab02 Platte County #1A—Continued



PLATTE COUNTY—Continued

420718104553901 25-067-19dda01 Ed Wilhelm

LOCATION.--Lat 42°07'18", long 104°55'39", in NE ¼ SE ¼ SE ¼ sec.19, T.25 N., R.67 W., Hydrologic Unit 10180011.

AQUIFER.--Arikaree Formation.

WELL CHARACTERISTICS.--Depth of well, 760 ft below land surface.

DATUM.--Elevation of land surface is 4,540 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.50 ft above land surface.

REMARKS.--U.S. Geological Survey data collection platform with satellite telemetry at well.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1979 to current year.

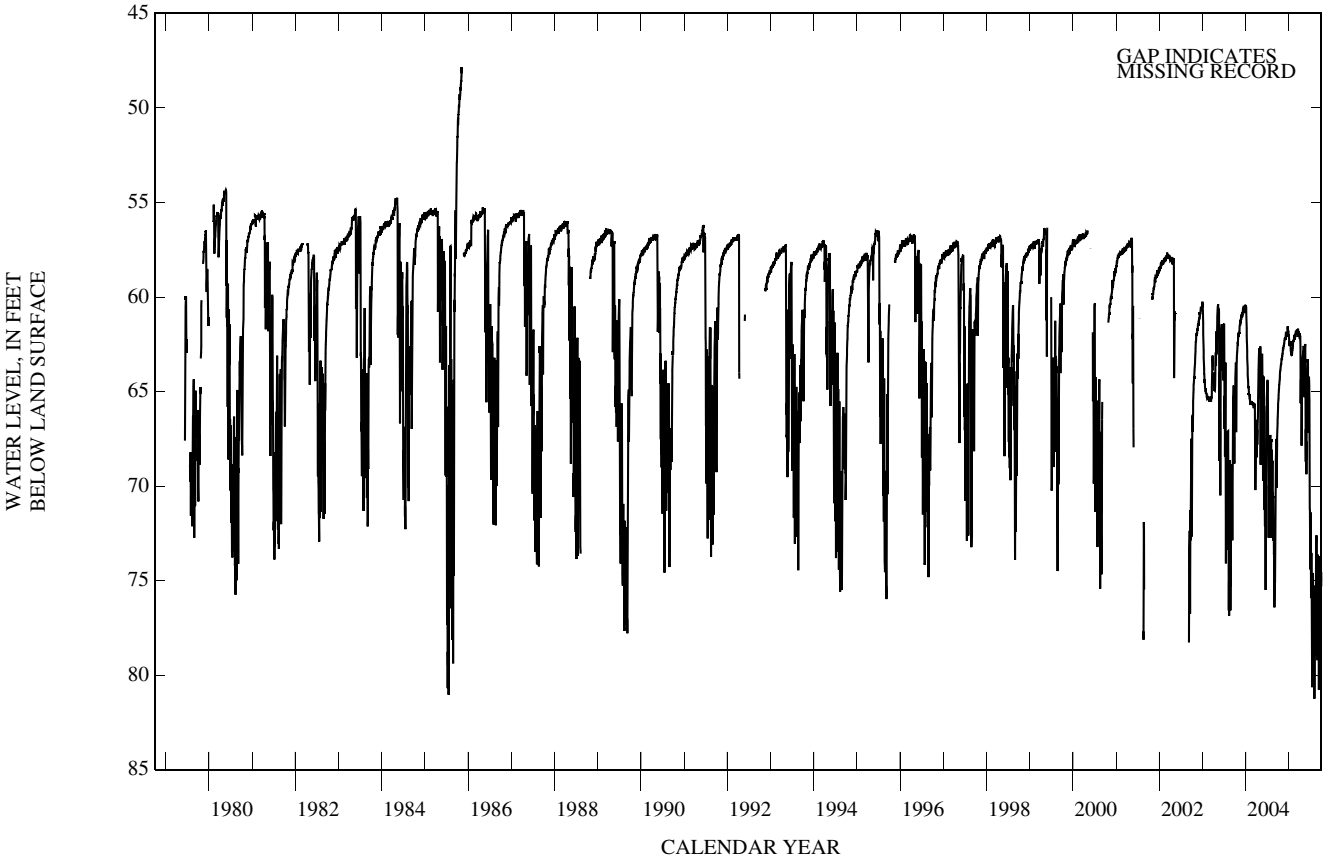
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 47.88 ft below land surface, Nov. 8, 1985; lowest, 82.05 ft below land surface, Aug. 3, 2005.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65.56	63.28	62.17	62.25	62.67	61.90	62.23	62.87	64.10	72.65	77.75	74.61
2	65.44	63.26	62.12	62.36	62.61	61.89	62.17	62.76	63.90	71.57	80.07	73.90
3	65.37	63.14	62.05	62.43	62.58	61.89	62.07	62.63	63.69	71.40	81.25	73.92
4	65.22	63.17	62.00	62.49	62.39	61.89	62.05	62.59	63.58	73.58	78.85	73.83
5	65.09	63.05	61.89	62.60	62.26	61.90	62.08	62.63	63.50	75.93	77.31	73.90
6	64.96	63.01	61.89	62.43	62.29	61.74	62.32	63.60	63.36	74.14	76.68	75.70
7	64.89	63.02	61.93	62.44	62.30	61.81	62.65	65.30	63.36	73.69	76.56	78.54
8	64.86	62.95	61.90	62.51	62.30	61.81	65.62	64.43	63.40	73.53	77.31	79.94
9	64.65	62.77	61.90	62.52	62.30	61.80	65.13	63.68	63.58	73.66	77.59	80.78
10	64.63	62.78	62.08	62.59	62.33	61.80	65.06	63.37	67.19	76.75	78.88	79.29
11	64.59	62.82	61.87	62.40	62.24	61.76	64.35	63.22	66.61	76.90	78.87	77.44
12	64.46	62.79	61.91	62.40	62.07	61.70	65.63	63.02	65.43	79.09	77.00	76.63
13	64.43	62.76	62.11	62.57	62.07	61.79	65.20	62.98	65.05	80.10	75.61	76.07
14	64.23	62.72	61.90	62.71	62.13	61.87	65.03	62.93	64.70	80.64	74.64	75.65
15	64.20	62.64	61.90	62.85	62.15	61.87	65.22	62.70	64.48	80.59	74.02	75.37
16	64.01	62.59	61.97	62.90	62.26	61.79	66.55	62.55	64.35	80.40	73.55	75.37
17	63.93	62.59	61.89	62.89	62.23	61.68	67.86	62.49	64.22	79.46	73.20	75.26
18	63.89	62.50	61.89	62.87	62.12	61.74	66.24	62.99	64.22	76.38	73.01	74.91
19	63.90	62.46	61.65	62.98	61.95	61.85	65.02	65.80	64.37	75.19	72.81	74.16
20	63.80	62.47	61.55	63.00	61.99	61.85	64.52	67.15	64.72	74.60	72.63	73.72
21	63.75	62.41	61.67	62.95	62.06	61.85	64.27	68.72	65.10	74.82	72.61	75.32
22	63.63	62.29	61.81	63.11	62.13	61.96	64.00	67.04	65.47	75.91	74.23	77.62
23	63.62	62.30	61.85	63.09	62.12	61.88	63.59	66.99	67.68	76.13	75.38	78.59
24	63.61	62.25	61.77	63.05	62.08	61.88	63.32	68.60	70.88	76.55	76.23	76.96
25	63.57	62.17	61.79	63.04	61.99	62.06	63.24	68.17	71.18	77.03	78.26	75.97
26	63.55	62.17	61.86	62.96	61.92	62.06	63.17	67.65	71.28	77.67	79.21	75.81
27	63.47	62.20	61.95	62.85	61.93	62.01	63.08	69.38	72.59	76.16	76.00	75.10
28	63.32	62.17	62.01	62.84	61.93	61.92	62.98	67.77	71.76	75.32	74.55	74.96
29	63.28	62.25	62.02	62.83	---	61.92	62.96	66.05	71.69	75.27	73.63	74.55
30	63.29	62.17	62.02	62.75	---	61.97	62.90	65.11	74.41	77.25	73.77	75.31
31	63.25	---	62.12	62.71	---	62.17	---	64.49	---	77.22	75.13	---
MAX	65.56	63.28	62.17	63.11	62.67	62.17	67.86	69.38	74.41	80.64	81.25	80.78
MIN	63.25	62.17	61.55	62.25	61.92	61.68	62.05	62.49	63.36	71.40	72.61	73.72

PLATTE COUNTY—Continued

420718104553901 25-067-19dda01 Ed Wilhelm—Continued



PLATTE COUNTY—Continued

420524104530201 25-067-34ccd01 Platte County #2

LOCATION.--Lat 42°05'24", long 104°53'02", in SE ¼ SW ¼ SW ¼ sec.34, T.25 N., R.67 W., Hydrologic Unit 10180011.

AQUIFER.--Arikaree Formation.

WELL CHARACTERISTICS.--Depth of well, 380 ft below land surface.

DATUM.--Elevation of land surface is 4,620 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.60 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1980 to current year.

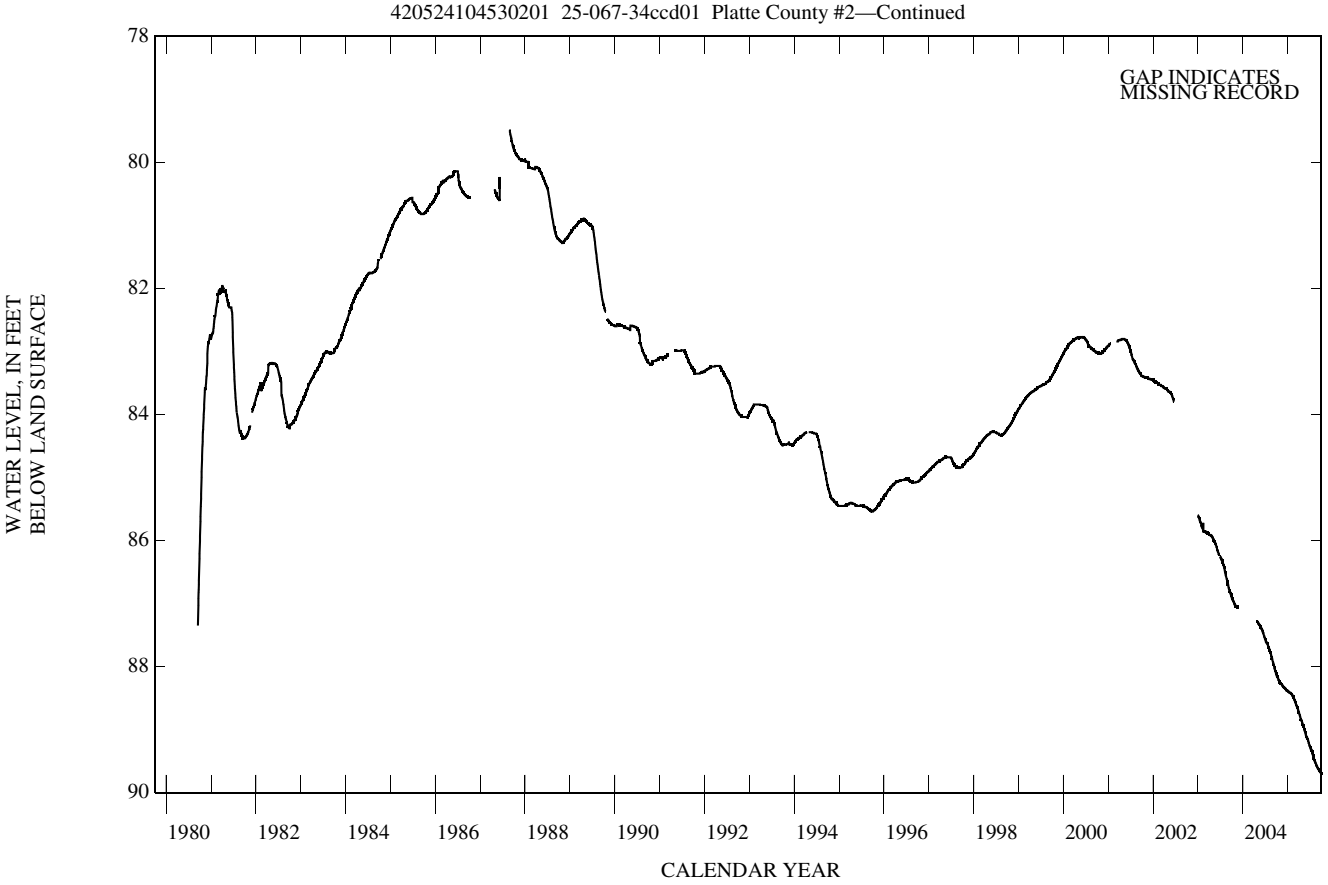
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 79.49 ft below land surface, Aug. 27, 28, 29, 1987; lowest, 89.71 ft below land surface, Sept. 29, 30, 2005.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88.13	88.26	88.33	88.39	88.44	88.55	88.74	88.92	89.11	89.27	89.46	89.61
2	88.14	88.26	88.33	88.39	88.44	88.56	88.74	88.92	89.12	89.28	89.47	89.60
3	88.15	88.27	88.33	88.39	88.45	88.56	88.74	88.93	89.12	89.29	89.48	89.61
4	88.15	88.27	88.34	88.39	88.45	88.57	88.75	88.93	89.13	89.29	89.48	89.62
5	88.15	88.27	88.34	88.39	88.45	88.57	88.76	88.93	89.14	89.30	89.48	89.62
6	88.15	88.28	88.34	88.40	88.46	88.58	88.76	88.94	89.13	89.31	89.49	89.63
7	88.16	88.28	88.34	88.40	88.46	88.59	88.77	88.95	89.13	89.31	89.49	89.63
8	88.16	88.28	88.34	88.40	88.46	88.60	88.78	88.95	89.14	89.31	89.50	89.64
9	88.17	88.29	88.35	88.40	88.46	88.60	88.78	88.95	89.15	89.31	89.51	89.63
10	88.17	88.29	88.35	88.41	88.47	88.61	88.78	88.96	89.15	89.32	89.52	89.63
11	88.17	88.28	88.35	88.41	88.47	88.61	88.79	88.96	89.15	89.32	89.52	89.64
12	88.18	88.28	88.35	88.41	88.48	88.62	88.80	88.97	89.16	89.32	89.52	89.64
13	88.18	88.29	88.35	88.41	88.48	88.62	88.81	88.98	89.16	89.33	89.52	89.65
14	88.20	88.29	88.36	88.41	88.48	88.62	88.82	88.99	89.17	89.34	89.52	89.65
15	88.20	88.29	88.36	88.41	88.48	88.62	88.83	88.99	89.17	89.34	89.53	89.66
16	88.21	88.30	88.36	88.41	88.48	88.64	88.84	89.01	89.18	89.35	89.54	89.65
17	88.21	88.30	88.36	88.41	88.50	88.65	88.84	89.01	89.19	89.35	89.54	89.66
18	88.21	88.30	88.36	88.41	88.50	88.65	88.85	89.02	89.20	89.36	89.55	89.66
19	88.22	88.30	88.37	88.41	88.51	88.66	88.85	89.02	89.21	89.36	89.55	89.67
20	88.22	88.31	88.38	88.41	88.52	88.66	88.85	89.03	89.21	89.38	89.56	89.67
21	88.22	88.31	88.38	88.42	88.52	88.66	88.85	89.04	89.22	89.38	89.56	89.67
22	88.23	88.31	88.38	88.42	88.52	88.67	88.86	89.04	89.22	89.39	89.57	89.68
23	88.23	88.32	88.37	88.42	88.52	88.68	88.86	89.05	89.23	89.40	89.57	89.67
24	88.23	88.32	88.38	88.42	88.53	88.68	88.86	89.06	89.24	89.41	89.58	89.68
25	88.24	88.32	88.38	88.42	88.54	88.68	88.87	89.07	89.25	89.41	89.59	89.68
26	88.24	88.32	88.38	88.42	88.54	88.69	88.87	89.08	89.25	89.42	89.58	89.68
27	88.24	88.32	88.38	88.42	88.54	88.70	88.89	89.08	89.25	89.44	89.59	89.69
28	88.25	88.33	88.38	88.43	88.54	88.71	88.90	89.08	89.26	89.45	89.59	89.69
29	88.25	88.33	88.38	88.43	---	88.71	88.90	89.09	89.27	89.44	89.60	89.70
30	88.25	88.33	88.38	88.43	---	88.72	88.91	89.10	89.27	89.45	89.60	89.70
31	88.26	---	88.39	88.43	---	88.73	---	89.11	---	89.46	89.61	---
MAX	88.26	88.33	88.39	88.43	88.54	88.73	88.91	89.11	89.27	89.46	89.61	89.70
MIN	88.13	88.26	88.33	88.39	88.44	88.55	88.74	88.92	89.11	89.27	89.46	89.60

PLATTE COUNTY—Continued

420524104530201 25-067-34ccd01 Platte County #2—Continued



PLATTE COUNTY—Continued

420859104565001 25-068-12dda01 Platte County #4

LOCATION.--Lat 42°08'59", long 104°56'50", in NE ¼ SE ¼ SE ¼ sec.12, T.25 N., R.68 W., Hydrologic Unit 10180011.

AQUIFER.--Arikaree Formation.

WELL CHARACTERISTICS.--Depth of well, 100 ft below land surface.

DATUM.--Elevation of land surface is 4,510 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.60 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1980 to current year.

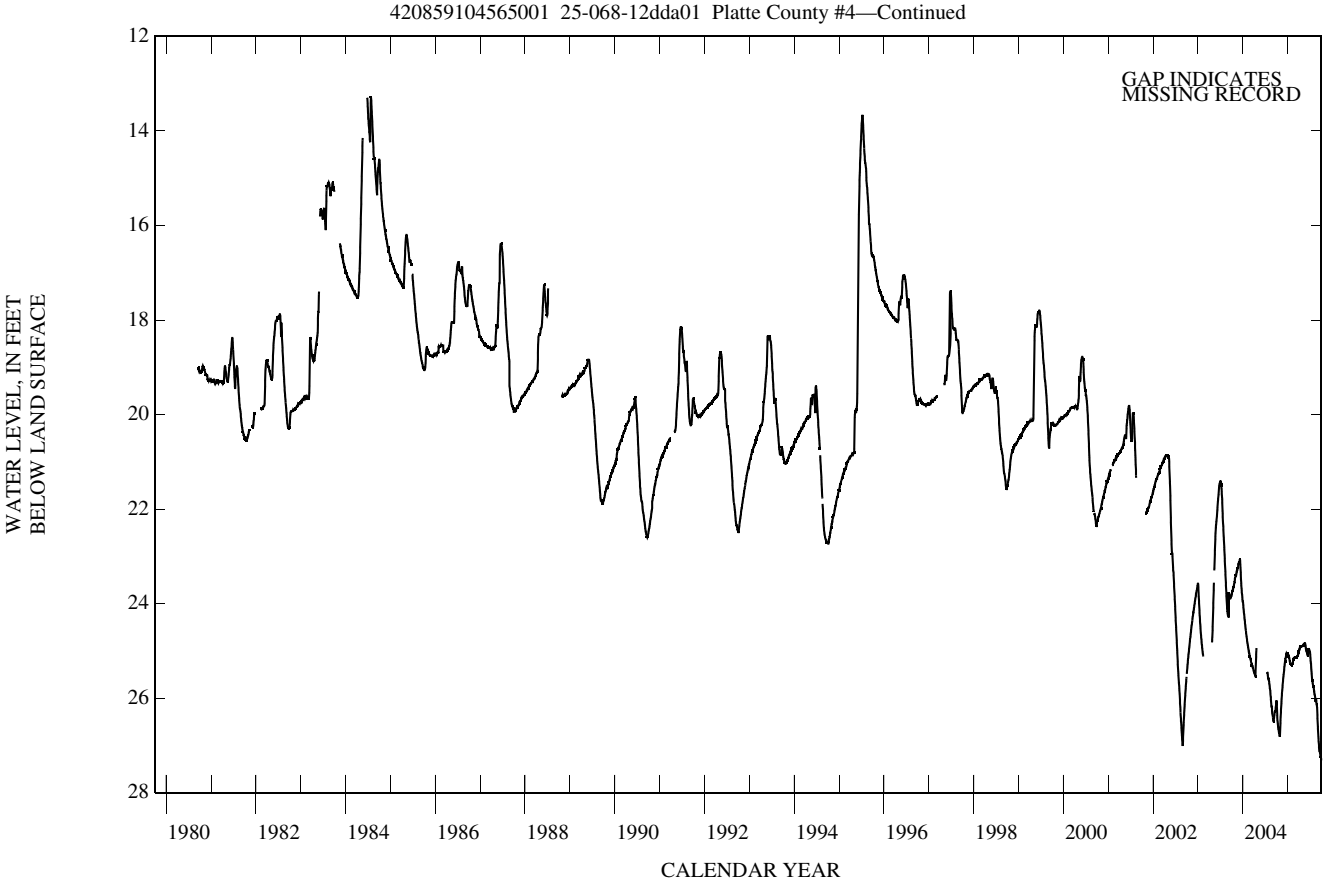
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 13.30 ft below land surface, June 25, July 25, 26, 1984; lowest, 27.34 ft below land surface, Sept, 30, 2005.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.05	26.53	25.41	25.06	25.30	25.15	25.00	24.90	25.01	25.05	25.82	26.54
2	26.06	26.47	25.39	25.08	25.30	25.15	25.00	24.90	25.01	25.08	25.84	26.61
3	26.15	26.40	25.35	25.08	25.30	25.15	24.98	24.89	25.01	25.14	25.85	26.65
4	26.22	26.35	25.34	25.09	25.29	25.15	24.97	24.89	25.01	25.17	25.88	26.71
5	26.30	26.30	25.31	25.11	25.28	25.15	24.97	24.89	25.02	25.20	25.89	26.76
6	26.36	26.25	25.29	25.10	25.27	25.14	24.97	24.88	25.04	25.23	25.91	26.82
7	26.42	26.20	25.27	25.10	25.27	25.15	24.95	24.87	25.05	25.25	25.93	26.86
8	26.47	26.16	25.23	25.12	25.27	25.15	24.93	24.87	25.07	25.27	25.94	26.91
9	26.50	26.11	25.23	25.12	25.26	25.15	24.93	24.88	25.08	25.29	25.95	26.93
10	26.52	26.08	25.21	25.15	25.25	25.16	24.93	24.88	25.09	25.34	25.96	26.96
11	26.54	26.02	25.18	25.15	25.23	25.14	24.93	24.88	25.10	25.40	25.99	27.01
12	26.56	25.98	25.18	25.15	25.21	25.13	24.93	24.88	25.10	25.44	26.03	27.06
13	26.60	25.94	25.17	25.17	25.20	25.15	24.92	24.88	25.09	25.47	26.06	27.09
14	26.62	25.90	25.15	25.18	25.19	25.15	24.92	24.88	25.07	25.49	26.08	27.11
15	26.64	25.87	25.14	25.20	25.19	25.14	24.92	24.87	25.03	25.54	26.07	27.11
16	26.66	25.83	25.13	25.22	25.19	25.13	24.91	24.87	25.01	25.58	26.06	27.12
17	26.67	25.80	25.11	25.22	25.17	25.11	24.91	24.84	24.98	25.61	26.04	27.13
18	26.69	25.77	25.11	25.22	25.17	25.13	24.90	24.84	24.97	25.63	26.03	27.13
19	26.71	25.73	25.07	25.23	25.13	25.12	24.90	24.84	24.97	25.63	26.03	27.14
20	26.72	25.70	25.06	25.24	25.14	25.11	24.91	24.84	24.96	25.64	26.05	27.16
21	26.73	25.67	25.07	25.25	25.14	25.11	24.91	24.84	24.96	25.66	26.08	27.17
22	26.74	25.64	25.07	25.27	25.15	25.11	24.91	24.85	24.96	25.68	26.11	27.20
23	26.75	25.62	25.06	25.27	25.15	25.09	24.91	24.85	24.96	25.70	26.13	27.21
24	26.76	25.58	25.05	25.28	25.15	25.09	24.90	24.88	24.97	25.72	26.13	27.23
25	26.78	25.56	25.05	25.28	25.15	25.07	24.90	24.90	24.98	25.74	26.16	27.25
26	26.80	25.54	25.05	25.29	25.15	25.07	24.90	24.93	24.98	25.76	26.18	27.25
27	26.81	25.51	25.05	25.29	25.15	25.04	24.90	24.94	24.99	25.76	26.20	27.26
28	26.82	25.50	25.05	25.29	25.15	25.03	24.90	24.96	25.01	25.76	26.27	27.28
29	26.77	25.47	25.05	25.29	---	25.03	24.90	24.97	25.02	25.76	26.36	27.30
30	26.69	25.44	25.03	25.30	---	25.03	24.90	24.99	25.04	25.76	26.43	27.32
31	26.60	---	25.05	25.30	---	25.03	---	25.00	---	25.78	26.49	---
MAX	26.82	26.53	25.41	25.30	25.30	25.16	25.00	25.00	25.10	25.78	26.49	27.32
MIN	26.05	25.44	25.03	25.06	25.13	25.03	24.90	24.84	24.96	25.05	25.82	26.54

PLATTE COUNTY—Continued

420859104565001 25-068-12dda01 Platte County #4—Continued



PLATTE COUNTY—Continued

420748104565001 25-068-24aad01 Platte County #3

LOCATION.--Lat 42°07'48", long 104°56'50", in SE ¼ NE ¼ NE ¼ sec.24, T.25 N., R.68 W., Hydrologic Unit 10180011.

AQUIFER.--Arikaree Formation.

WELL CHARACTERISTICS.--Depth of well, 240 ft below land surface.

DATUM.--Elevation of land surface is 4,560 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 0.55 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1980 to current year.

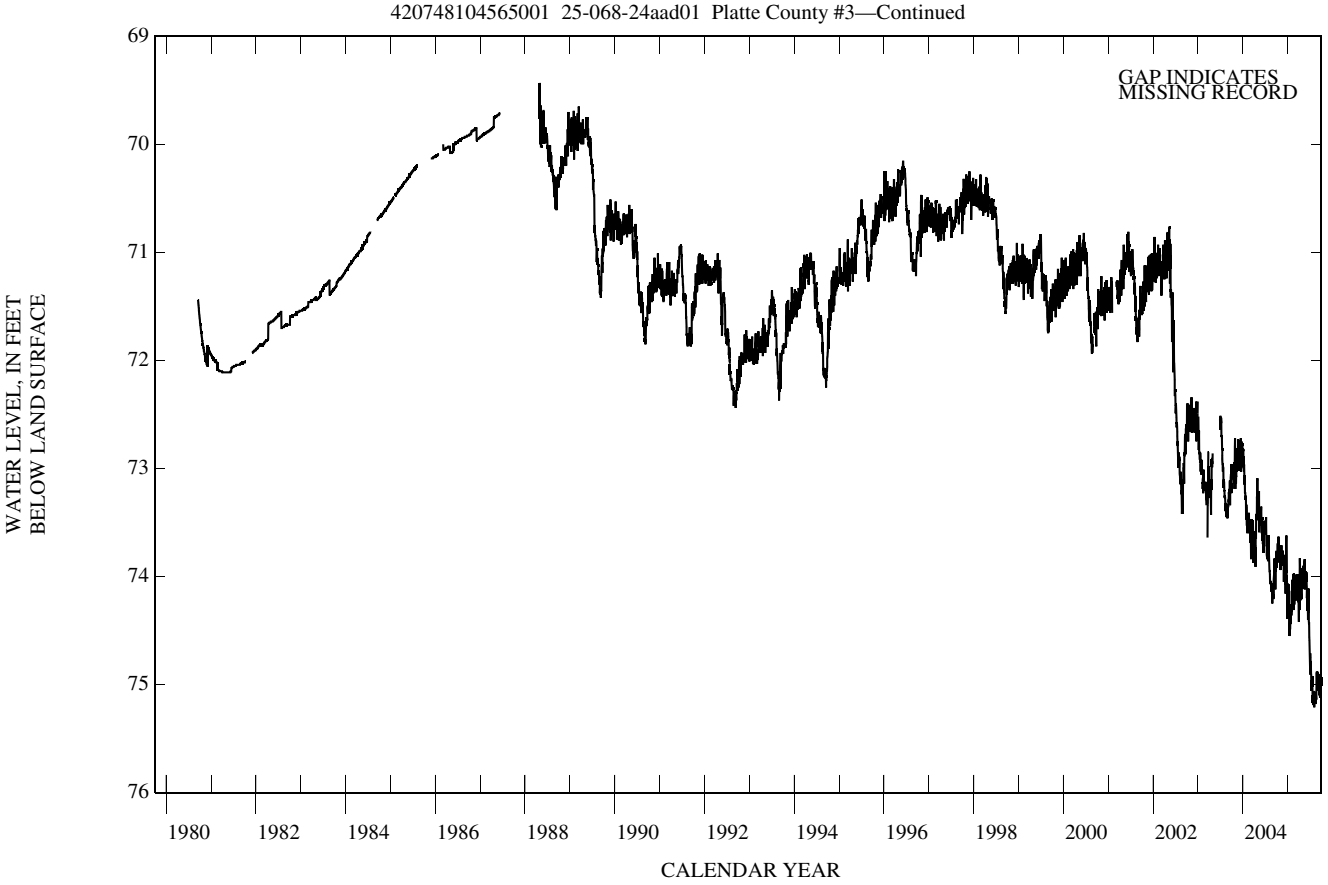
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 69.44 ft below land surface, Apr. 28, 29, 1988; lowest, 75.34 ft below land surface, Aug. 4, 2005.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73.81	73.94	73.91	74.38	74.29	74.17	74.15	74.11	73.96	74.77	75.06	74.99
2	73.91	73.86	73.89	74.38	74.29	74.17	74.12	74.02	74.01	74.71	75.07	74.99
3	73.91	73.76	73.87	74.38	74.29	74.21	74.04	73.96	74.09	74.75	75.10	74.99
4	73.83	73.89	73.85	74.39	74.11	74.22	74.04	73.96	74.11	74.91	75.21	74.99
5	73.78	73.84	73.80	74.31	74.03	74.21	74.13	73.98	74.20	74.81	75.07	74.99
6	73.78	73.84	73.81	74.07	74.16	74.01	74.31	73.90	74.12	74.79	75.07	75.02
7	73.79	73.86	73.93	74.09	74.24	74.16	73.98	73.91	74.16	74.79	75.09	75.00
8	73.86	73.84	73.88	74.28	74.24	74.15	73.83	73.94	74.26	74.88	75.10	74.93
9	73.70	73.71	73.88	74.29	74.27	74.12	73.90	73.99	74.31	74.90	75.10	74.91
10	73.70	73.78	74.07	74.34	74.30	74.15	74.19	73.99	74.31	74.91	75.17	74.91
11	73.87	73.84	73.85	74.14	74.14	74.02	74.14	74.05	74.29	75.00	75.17	75.01
12	73.78	73.84	73.91	74.14	73.98	73.98	74.14	74.04	74.28	75.06	75.11	75.04
13	73.82	73.88	74.16	74.46	74.03	74.22	74.15	74.04	74.28	74.96	75.12	75.10
14	73.69	73.89	73.84	74.55	74.21	74.21	74.11	74.11	74.40	74.96	75.18	75.06
15	73.69	73.84	73.84	74.52	74.22	74.14	74.22	73.91	74.31	75.02	75.17	75.06
16	73.63	73.84	74.05	74.39	74.31	74.09	74.11	73.86	74.33	74.93	75.10	74.99
17	73.64	73.85	73.95	74.39	74.25	74.00	74.00	73.84	74.11	74.93	75.10	75.00
18	73.71	73.78	73.95	74.33	74.10	74.14	74.00	74.05	74.11	75.01	75.10	75.07
19	73.83	73.76	73.69	74.49	73.97	74.20	74.01	74.12	74.23	75.01	75.12	75.12
20	73.76	73.87	73.62	74.40	74.03	74.14	74.16	74.03	74.41	75.04	75.14	75.04
21	73.76	73.88	73.85	74.35	74.20	74.14	74.18	74.02	74.43	75.17	75.07	75.00
22	73.74	73.80	74.12	74.44	74.26	74.20	74.21	74.01	74.43	75.11	74.97	75.01
23	73.80	73.89	74.11	74.38	74.25	74.07	73.98	74.01	74.43	75.11	74.89	74.94
24	73.84	73.86	73.99	74.35	74.21	74.13	73.93	74.05	74.56	75.12	74.89	74.94
25	73.84	73.82	74.05	74.35	74.12	74.23	73.93	74.06	74.59	75.12	74.96	75.05
26	73.84	73.82	74.16	74.33	74.11	74.23	74.04	74.05	74.59	75.19	75.00	75.06
27	73.86	73.90	74.24	74.27	74.16	74.09	74.11	74.01	74.67	75.10	74.99	75.00
28	73.71	73.86	74.28	74.27	74.17	73.99	74.09	73.95	74.74	75.07	74.99	75.00
29	73.72	74.05	74.07	74.36	---	73.99	74.09	73.98	74.78	75.07	74.88	74.94
30	73.85	73.90	74.07	74.33	---	74.16	74.11	74.05	74.85	75.13	74.88	74.94
31	73.85	---	74.27	74.33	---	74.42	---	74.01	---	75.16	75.06	---
MAX	73.91	74.05	74.28	74.55	74.31	74.42	74.31	74.12	74.85	75.19	75.21	75.12
MIN	73.63	73.71	73.62	74.07	73.97	73.98	73.83	73.84	73.96	74.71	74.88	74.91

PLATTE COUNTY—Continued

420748104565001 25-068-24aad01 Platte County #3—Continued



PLATTE COUNTY—Continued

420613105024401 25-068-31aaa01 Platte County #7

LOCATION.--Lat 42°06'13", long 105°02'44", in NE ¼ NE ¼ NE ¼ sec.31, T.25 N., R.68 W., Hydrologic Unit 10180011.

AQUIFER.--Arikaree Formation.

WELL CHARACTERISTICS.--Depth of well, 400 ft below land surface.

DATUM.--Elevation of land surface is 4,633 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.50 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1979 to current year.

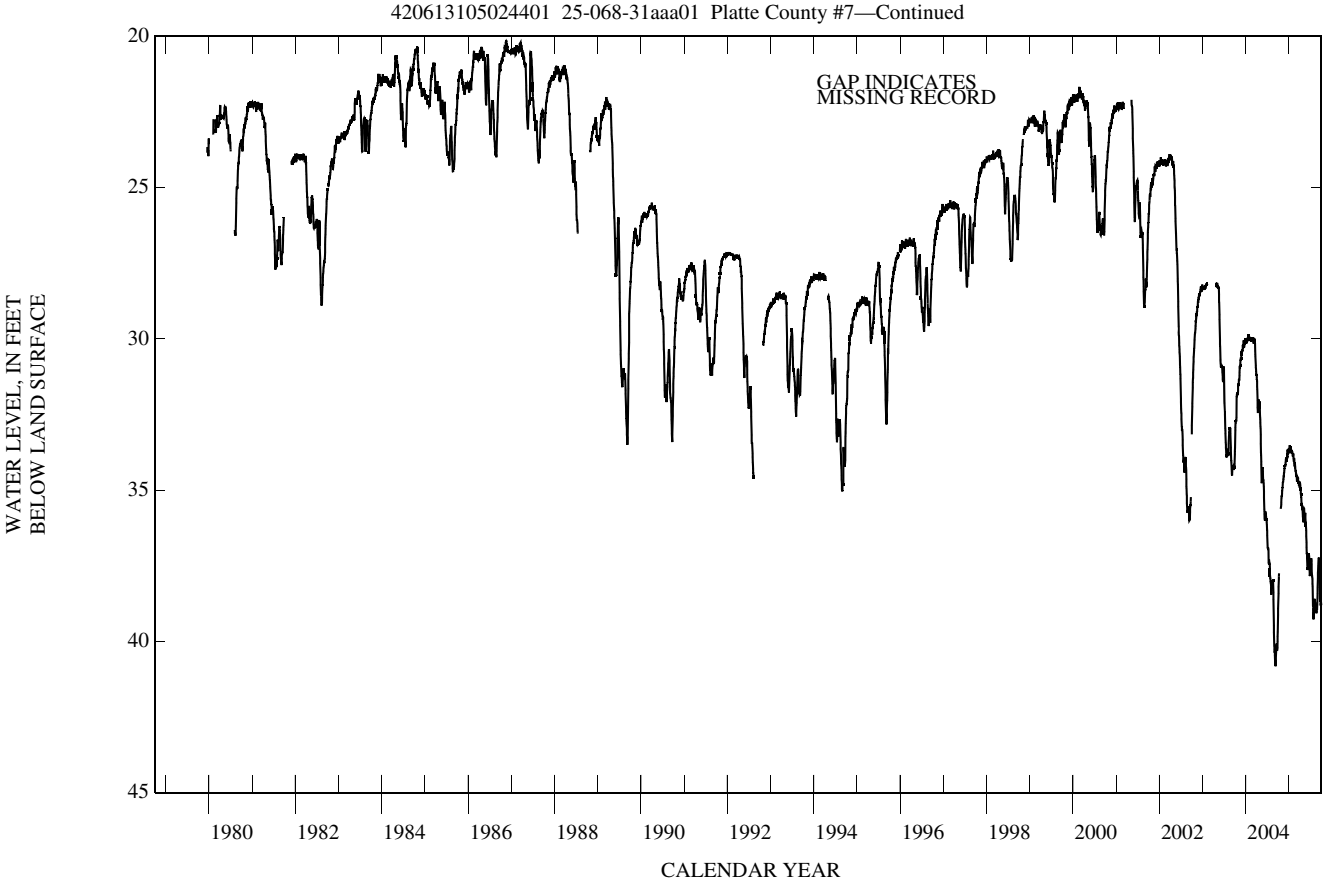
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 20.13 ft below land surface, Nov. 19, 1986; lowest, 40.83 ft below land surface, Sept. 7, 2004.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38.79	35.22	34.17	33.70	33.86	34.46	34.87	36.03	37.14	37.50	38.70	37.92
2	38.60	35.10	34.10	33.76	33.89	34.46	34.83	35.92	37.24	37.37	38.59	37.73
3	38.42	35.03	34.06	33.73	33.90	34.50	34.79	35.83	37.35	37.39	38.59	37.66
4	38.20	35.02	34.04	33.73	33.85	34.54	34.79	35.79	37.48	37.35	38.64	37.50
5	38.04	34.93	33.96	33.66	33.79	34.56	34.84	35.73	37.56	37.37	38.61	37.43
6	37.93	34.91	33.98	33.51	33.90	34.51	35.02	35.63	37.61	37.26	38.63	37.40
7	37.85	34.93	33.97	33.63	33.94	34.59	34.96	35.60	37.61	37.25	38.71	37.30
8	37.75	34.84	33.93	33.60	33.97	34.58	34.90	35.61	37.58	37.31	38.70	37.27
9	---	34.73	33.95	33.64	34.02	34.60	34.96	35.74	37.45	37.34	38.73	37.23
10	---	34.76	34.02	33.70	34.06	34.67	35.10	35.77	37.32	37.45	38.84	37.26
11	---	34.73	33.91	33.58	34.05	34.58	35.16	35.93	37.21	37.65	38.87	37.45
12	---	34.72	34.00	33.58	33.97	34.55	35.16	36.03	37.11	37.73	38.84	37.70
13	---	34.65	34.07	33.72	33.97	34.66	35.26	36.03	37.10	37.81	38.93	37.82
14	---	34.64	33.89	33.74	34.05	34.70	35.24	36.06	37.13	37.84	38.94	38.03
15	---	34.56	33.91	33.78	34.09	34.70	35.40	35.93	37.10	37.87	38.95	38.16
16	---	34.54	33.95	33.75	34.20	34.66	35.43	35.82	37.13	37.90	38.98	38.29
17	---	34.54	33.90	33.73	34.21	34.59	35.47	35.75	37.09	37.94	38.99	38.35
18	---	34.42	33.91	33.66	34.20	34.67	35.47	35.85	37.13	38.10	39.03	38.49
19	---	34.42	33.70	33.74	34.08	34.72	35.54	35.93	37.18	38.17	39.07	38.61
20	---	34.44	33.66	33.70	34.17	34.72	35.58	36.03	37.24	38.35	39.05	38.63
21	---	34.34	33.81	33.67	34.23	34.72	35.59	36.06	37.42	38.73	39.02	38.63
22	35.62	34.28	33.84	33.77	34.33	34.79	35.66	36.16	37.45	38.80	38.95	38.69
23	35.60	34.30	33.79	33.71	34.34	34.72	35.61	36.16	37.66	38.88	38.89	38.66
24	35.57	34.23	33.74	33.73	34.36	34.74	35.62	36.24	37.83	39.03	38.95	38.76
25	35.54	34.19	33.76	33.73	34.36	34.84	35.64	36.34	37.80	39.12	38.96	38.82
26	35.47	34.20	33.75	33.74	34.36	34.85	35.74	36.52	37.81	39.27	38.88	38.79
27	35.40	34.20	33.78	33.74	34.39	34.76	35.87	36.61	37.84	39.17	38.79	38.74
28	35.27	34.16	33.76	33.74	34.46	34.71	35.93	36.73	37.76	39.07	38.64	38.80
29	35.24	34.22	33.63	33.79	---	34.71	35.94	36.89	37.71	39.01	38.42	38.72
30	35.21	34.14	33.62	33.80	---	34.76	36.06	37.08	37.66	38.95	38.23	38.73
31	35.18	---	33.71	33.85	---	34.92	---	37.08	---	38.86	38.10	---
MAX	---	35.22	34.17	33.85	34.46	34.92	36.06	37.08	37.84	39.27	39.07	38.82
MIN	---	34.14	33.62	33.51	33.79	34.46	34.79	35.60	37.09	37.25	38.10	37.23

PLATTE COUNTY—Continued

420613105024401 25-068-31aaa01 Platte County #7—Continued



PLATTE COUNTY—Continued

421443104574601 26-068-12cbd01 E. Rutherford

LOCATION.--Lat 42°14'43", long 104°57'46", in SE ¼ NW ¼ SW ¼ sec.12, T.26 N., R.68 W., Hydrologic Unit 10180011.

AQUIFER.--Arikaree Formation.

WELL CHARACTERISTICS.--Depth of well, 320 ft below land surface.

DATUM.--Elevation of land surface is 4,860 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, at land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1980 to current year.

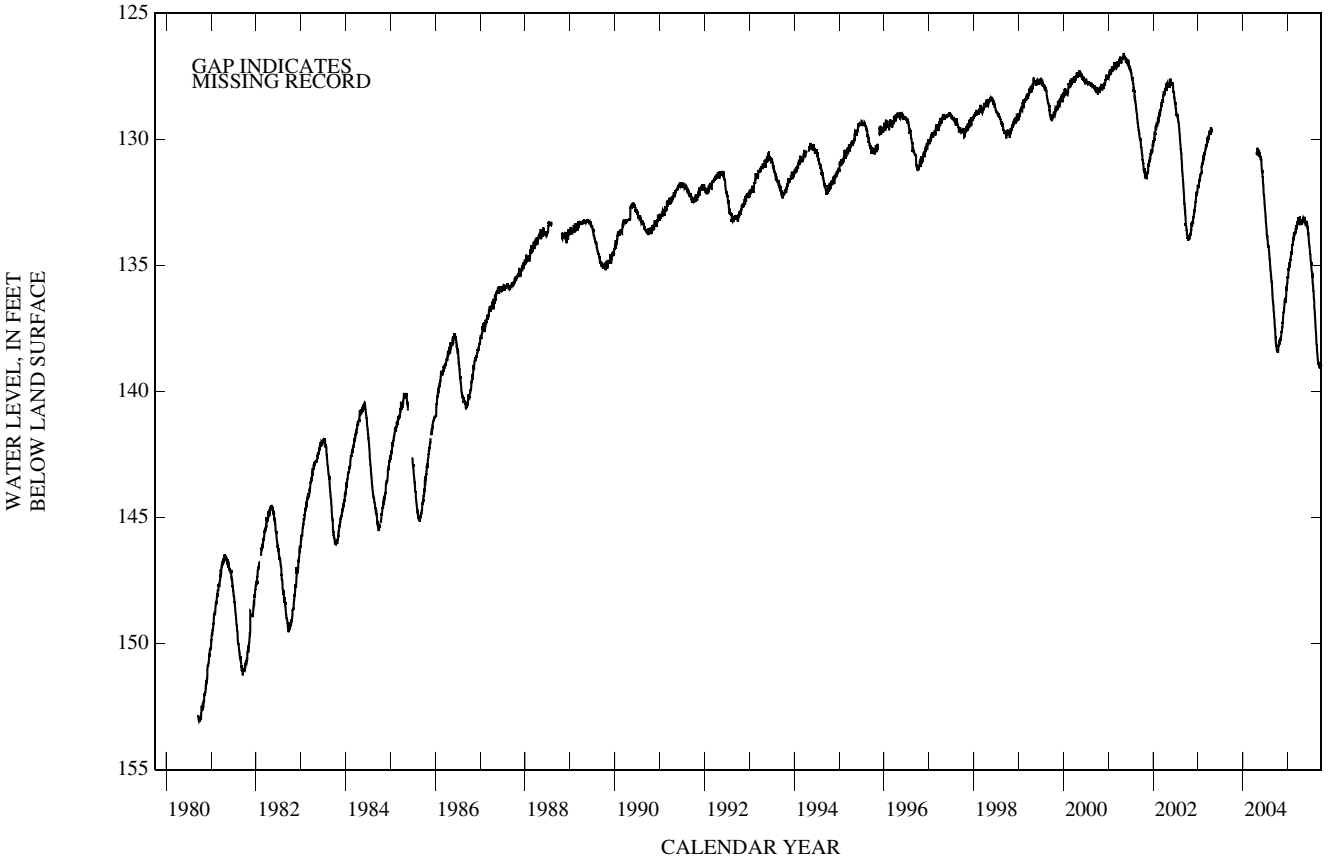
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 127.26 ft below land surface, May 10, 11, 2000; lowest, 153.11 ft below land-surface, Oct. 2, 1980.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138.19	137.99	136.81	135.47	134.47	133.65	133.37	133.32	133.23	134.57	136.33	138.73
2	138.33	137.99	136.69	135.51	134.45	133.66	133.33	133.31	133.26	134.54	136.37	138.76
3	138.35	137.90	136.62	135.48	134.45	133.66	133.22	133.26	133.27	134.58	136.42	138.80
4	138.40	137.93	136.54	135.47	134.27	133.66	133.16	133.24	133.28	134.71	136.58	138.81
5	138.37	137.86	136.42	135.34	134.15	133.67	133.21	133.23	133.33	134.80	136.71	138.83
6	138.37	137.82	136.42	135.14	134.22	133.52	133.41	133.13	133.31	134.82	136.73	138.89
7	138.38	137.84	136.38	135.20	134.14	133.56	133.24	133.10	133.34	134.83	136.79	138.95
8	138.45	137.76	136.32	135.11	134.16	133.56	133.06	133.11	133.40	134.89	136.87	138.91
9	138.37	137.62	136.32	135.12	134.18	133.53	133.09	133.17	133.47	134.94	136.92	138.88
10	138.37	137.65	136.46	135.12	134.18	133.59	133.19	133.17	133.50	134.94	137.08	138.88
11	138.46	137.65	136.29	134.91	134.06	133.45	133.23	133.21	133.53	135.04	137.14	138.92
12	138.41	137.64	136.35	134.91	133.91	133.41	133.24	133.23	133.52	135.16	137.22	138.94
13	138.46	137.59	136.49	134.99	133.91	133.50	133.27	133.23	133.52	135.22	137.31	139.01
14	138.35	137.57	136.28	135.06	133.88	133.52	133.25	133.31	133.65	135.22	137.42	139.01
15	138.32	137.49	136.28	135.09	133.92	133.48	133.32	133.21	133.69	135.27	137.50	139.03
16	138.21	137.46	136.30	135.03	134.01	133.37	133.34	133.12	133.72	135.28	137.59	139.00
17	138.19	137.46	136.24	134.96	133.97	133.26	133.23	133.07	133.71	135.29	137.64	139.00
18	138.16	137.33	136.21	134.88	133.86	133.34	133.20	133.16	133.74	135.44	137.68	139.04
19	138.22	137.30	135.91	134.91	133.70	133.35	133.22	133.25	133.85	135.44	137.80	139.08
20	138.19	137.30	135.84	134.79	133.76	133.31	133.28	133.26	133.98	135.48	137.91	139.10
21	138.17	137.21	135.92	134.74	133.78	133.31	133.29	133.25	134.09	135.60	138.04	139.06
22	138.08	137.10	135.93	134.81	133.83	133.35	133.39	133.30	134.11	135.70	138.11	139.06
23	138.09	137.09	135.91	134.73	133.83	133.23	133.29	133.29	134.12	135.71	138.14	138.99
24	138.09	137.01	135.78	134.66	133.81	133.28	133.20	133.30	134.19	135.79	138.15	138.99
25	138.11	136.92	135.77	134.64	133.73	133.36	133.20	133.32	134.24	135.81	138.25	139.03
26	138.11	136.89	135.73	134.59	133.68	133.38	133.22	133.43	134.24	135.88	138.38	139.05
27	138.08	136.88	135.72	134.50	133.72	133.25	133.27	133.40	134.28	136.01	138.43	138.98
28	137.96	136.83	135.68	134.50	133.67	133.14	133.23	133.35	134.37	136.01	138.48	139.01
29	137.94	136.88	135.48	134.53	---	133.14	133.23	133.37	134.42	136.05	138.52	138.94
30	137.95	136.80	135.43	134.49	---	133.19	133.25	133.35	134.52	136.14	138.52	138.91
31	137.93	---	135.50	134.48	---	133.35	---	133.30	---	136.24	138.65	---
MAX	138.46	137.99	136.81	135.51	134.47	133.67	133.41	133.43	134.52	136.24	138.65	139.10
MIN	137.93	136.80	135.43	134.48	133.67	133.14	133.06	133.07	133.23	134.54	136.33	138.73

PLATTE COUNTY—Continued

421443104574601 26-068-12cbd01 E. Rutherford—Continued



PLATTE COUNTY—Continued

421128104575801 26-068-36bbb01 Platte County #5

LOCATION.--Lat 42°11'28", long 104°57'58", in NW ¼ NW ¼ NW ¼ sec.36, T.26 N., R.68 W., Hydrologic Unit 10180011.

AQUIFER.--Arikaree Formation.

WELL CHARACTERISTICS.--Depth of well, 200 ft below land surface.

DATUM.--Elevation of land surface is 4,670 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.40 ft above land surface.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PEROD OF RECORD.--1981 to current year.

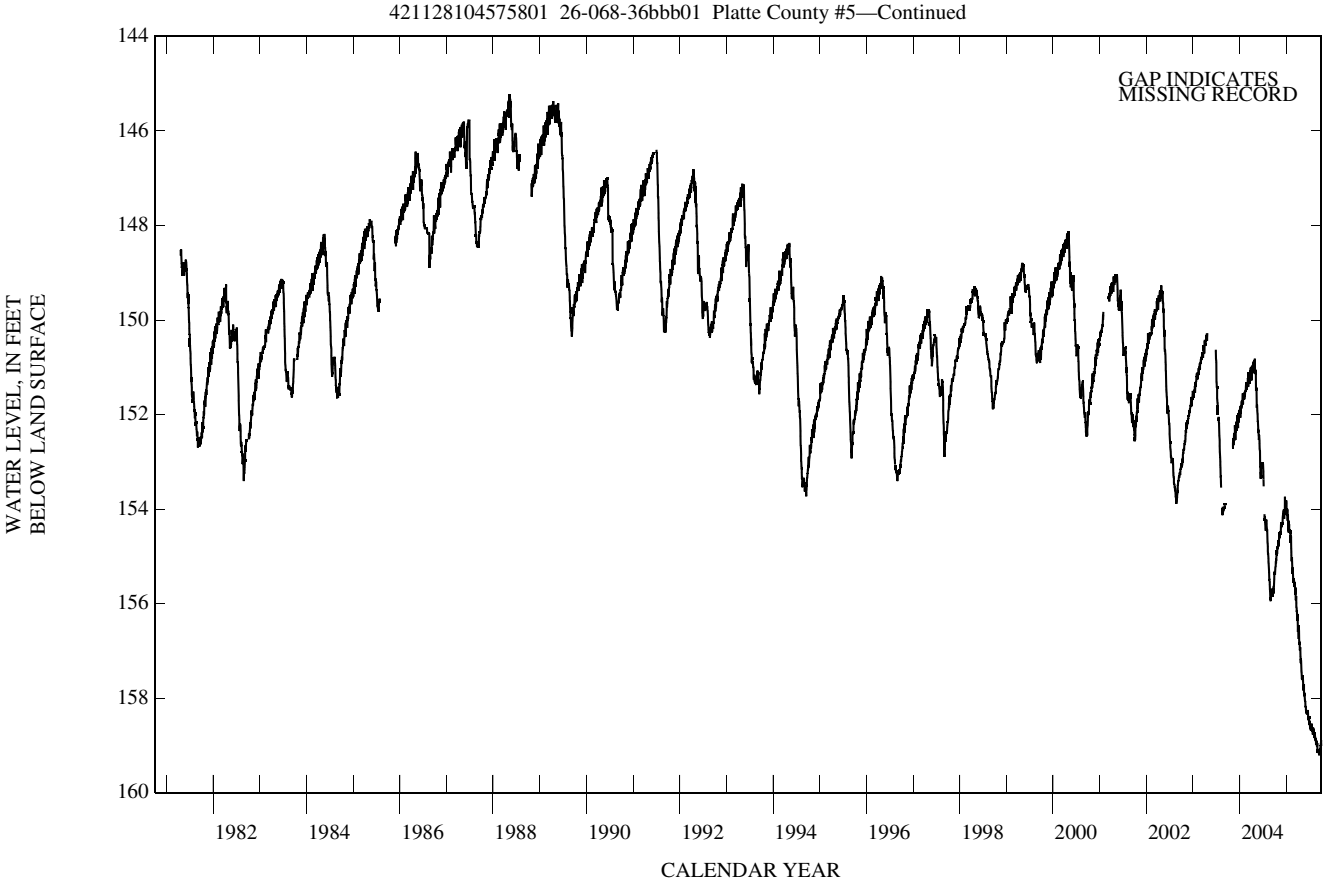
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 145.23 ft below land surface, May 7, 1988; lowest, 159.25 ft below land surface, Sept. 15, 2005.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	155.34	154.79	154.30	154.00	154.52	155.54	156.48	157.60	158.17	158.53	158.65	159.10
2	155.37	154.68	154.18	154.11	154.55	155.54	156.47	157.55	158.24	158.48	158.68	159.10
3	155.37	154.62	154.14	154.13	154.68	155.59	156.49	157.54	158.27	158.54	158.72	159.11
4	155.30	154.64	154.14	154.13	154.68	155.61	156.49	157.54	158.30	158.66	158.84	159.11
5	155.24	154.60	154.11	154.14	154.58	155.65	156.58	157.61	158.32	158.57	158.75	159.11
6	155.23	154.56	154.11	154.01	154.83	155.55	156.75	157.54	158.27	158.57	158.75	159.15
7	155.23	154.61	154.11	154.01	154.91	155.64	156.53	157.56	158.28	158.57	158.79	159.16
8	155.22	154.53	154.05	154.02	154.98	155.65	156.50	157.59	158.32	158.62	158.79	159.11
9	155.12	154.49	154.05	154.14	155.07	155.72	156.58	157.63	158.32	158.60	158.79	159.09
10	155.12	154.51	154.19	154.25	155.11	155.81	156.81	157.63	158.30	158.61	158.82	159.09
11	155.15	154.51	154.01	154.14	155.10	155.69	156.81	157.73	158.29	158.69	158.83	159.15
12	155.07	154.51	154.07	154.14	155.02	155.66	156.83	157.75	158.27	158.67	158.80	159.12
13	155.07	154.51	154.21	154.34	155.05	155.90	156.86	157.77	158.27	158.61	158.88	159.21
14	154.97	154.51	154.03	154.42	155.15	155.91	156.86	157.84	158.35	158.58	158.89	159.17
15	154.97	154.49	154.04	154.41	155.23	155.93	156.99	157.75	158.28	158.59	158.89	159.18
16	154.89	154.49	154.12	154.48	155.37	155.92	156.97	157.75	158.31	158.54	158.89	159.09
17	154.89	154.49	154.06	154.48	155.34	155.84	156.92	157.71	158.28	158.55	158.86	159.10
18	154.88	154.35	154.06	154.25	155.36	155.99	156.92	157.88	158.30	158.61	158.86	159.14
19	154.95	154.35	153.77	154.40	155.24	156.07	156.95	157.96	158.42	158.61	158.94	159.16
20	154.87	154.40	153.74	154.38	155.37	156.08	157.12	157.90	158.47	158.62	158.98	159.12
21	154.87	154.36	153.95	154.32	155.46	156.09	157.16	157.90	158.46	158.71	158.96	159.06
22	154.79	154.31	154.05	154.46	155.54	156.18	157.26	157.95	158.40	158.66	158.94	159.08
23	154.83	154.35	153.97	154.44	155.54	156.14	157.17	157.95	158.40	158.65	158.90	159.00
24	154.83	154.32	153.91	154.45	155.54	156.19	157.19	158.00	158.46	158.66	158.91	159.01
25	154.79	154.30	153.91	154.45	155.49	156.32	157.21	158.05	158.41	158.66	158.98	159.00
26	154.80	154.30	153.95	154.45	155.49	156.36	157.31	158.07	158.41	158.77	159.00	158.97
27	154.77	154.31	153.99	154.45	155.56	156.28	157.42	158.06	158.48	158.65	159.00	158.94
28	154.66	154.31	154.00	154.45	155.54	156.22	157.44	158.07	158.52	158.64	159.02	159.01
29	154.68	154.33	153.88	154.51	---	156.23	157.46	158.16	158.53	158.64	158.95	158.91
30	154.70	154.30	153.82	154.51	---	156.39	157.52	158.20	158.57	158.68	158.95	158.89
31	154.70	---	153.99	154.52	---	156.60	---	158.19	---	158.74	159.16	---
MAX	155.37	154.79	154.30	154.52	155.56	156.60	157.52	158.20	158.57	158.77	159.16	159.21
MIN	154.66	154.30	153.74	154.00	154.52	155.54	156.47	157.54	158.17	158.48	158.65	158.89

PLATTE COUNTY—Continued

421128104575801 26-068-36bbb01 Platte County #5—Continued



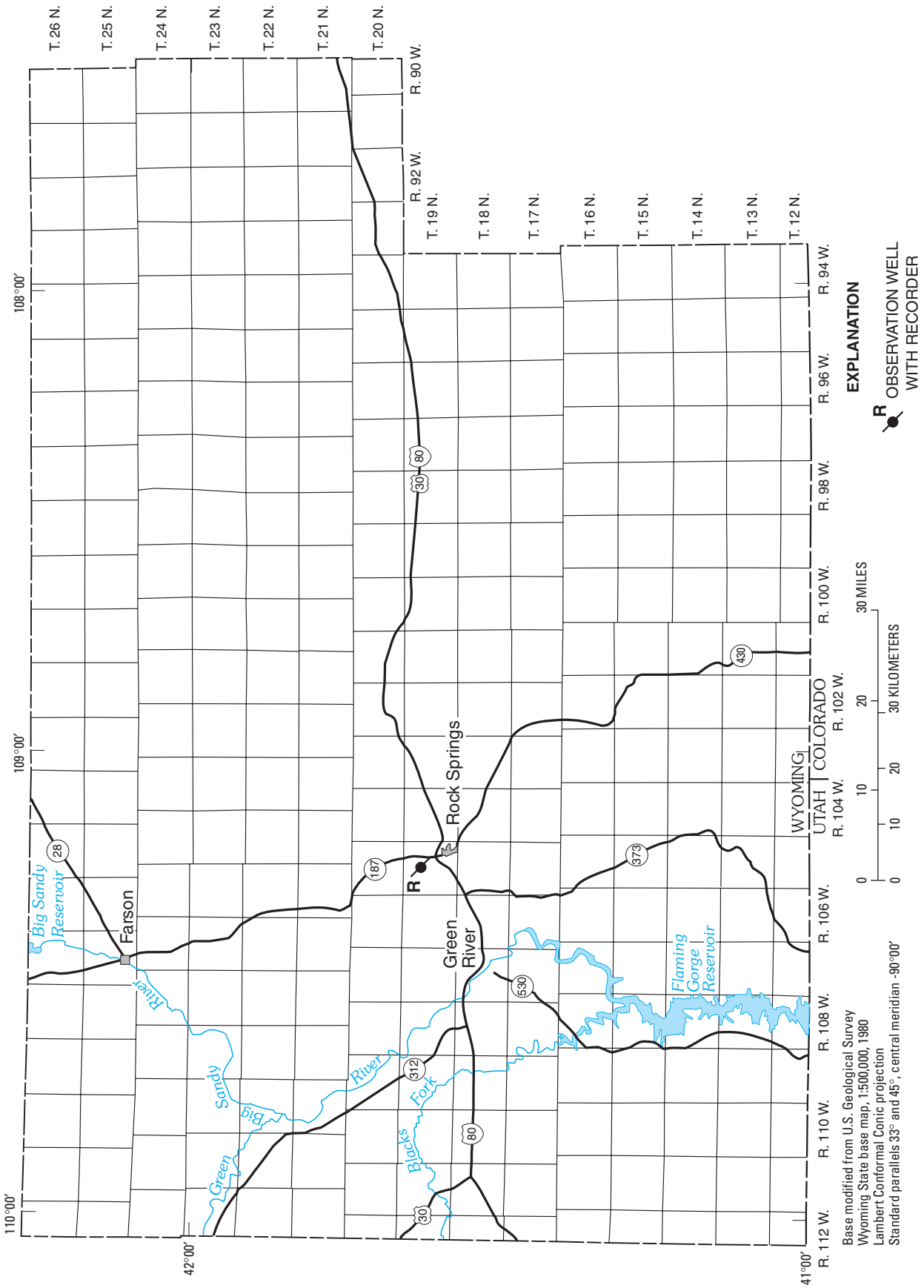


Figure 18. Location of observation well in Sweetwater County, Wyoming.

SWEETWATER COUNTY

413850109150601 19-105-10bbb01 Rock Springs Golf Course

LOCATION.--Lat 41°38'50", long 109°15'06", in NW ¼ NW ¼ NW ¼ sec.10, T.19 N., R.105 W., Hydrologic Unit 14040105.

AQUIFER.--Fort Union Formation.

WELL CHARACTERISTICS.--Depth of well, 240 ft below land surface.

DATUM.--Elevation of land surface is 6,430 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 0.60 ft above land surface.

REMARKS.--Data collected by U.S. Geological Survey.

PERIOD OF RECORD.--1984-1995; 1997 to curent year.

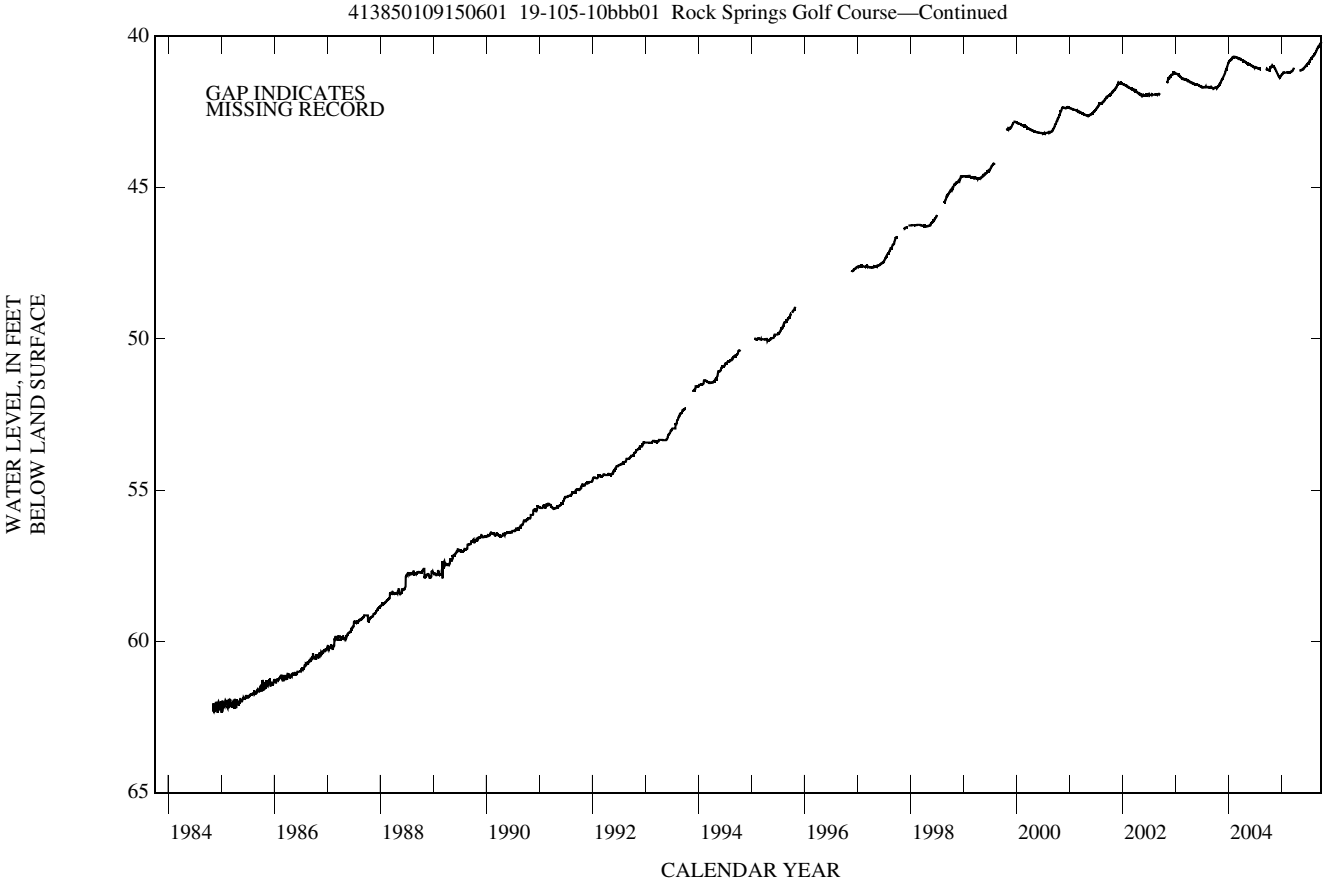
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 40.19 ft below land surface, Sept. 30, 2005; lowest, 62.36 ft below land surface, Dec. 6, 1984, Jan. 3, 1985.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41.11	40.98	41.22	41.27	41.20	41.18	---	---	41.06	40.90	40.67	40.42
2	41.11	40.98	41.23	41.26	41.20	41.18	---	---	41.06	40.89	40.66	40.42
3	41.12	40.99	41.24	41.26	41.20	41.18	---	41.13	41.05	40.88	40.66	40.41
4	41.13	40.99	41.25	41.25	41.20	41.18	---	41.13	41.05	40.88	40.66	40.39
5	41.13	40.99	41.26	41.24	41.20	41.18	---	41.13	41.04	40.87	40.66	40.39
6	41.12	40.99	41.27	41.24	41.20	41.18	---	41.13	41.03	40.86	40.66	40.38
7	41.11	41.00	41.28	41.23	41.19	41.18	---	41.13	41.02	40.85	40.65	40.38
8	41.10	41.00	41.29	41.22	41.19	41.18	---	41.13	41.02	40.85	40.64	40.36
9	41.10	41.01	41.30	41.22	41.19	41.14	---	41.13	41.02	40.84	40.64	40.35
10	41.09	41.02	41.31	41.21	41.19	41.14	---	41.13	41.01	40.83	40.63	40.34
11	41.08	41.03	41.32	41.20	41.19	41.14	---	41.12	41.01	40.82	40.62	40.33
12	41.07	41.03	41.32	41.19	41.19	41.14	---	41.12	41.00	40.82	40.61	40.32
13	41.06	41.04	41.33	41.19	41.19	41.14	---	41.12	41.00	40.81	40.61	40.32
14	41.06	41.05	41.34	41.19	41.19	41.14	---	41.12	41.00	40.80	40.60	40.32
15	41.05	41.06	41.35	41.19	41.19	41.14	---	41.12	40.99	40.79	40.59	40.32
16	41.04	41.07	41.36	41.19	41.19	41.14	---	41.12	40.98	40.78	40.59	40.31
17	41.03	41.08	41.37	41.20	41.19	41.14	---	41.11	40.97	40.78	40.58	40.30
18	41.03	41.09	41.36	41.20	41.19	41.13	---	41.10	40.96	40.77	40.57	40.29
19	41.02	41.10	41.36	41.20	41.19	41.12	---	41.10	40.95	40.76	40.56	40.30
20	41.01	41.11	41.35	41.20	41.19	41.11	---	41.10	40.95	40.75	40.56	40.30
21	41.00	41.12	41.34	41.20	41.19	41.10	---	41.10	40.95	40.75	40.55	40.31
22	40.99	41.13	41.34	41.20	41.19	41.09	---	41.10	40.94	40.74	40.54	40.29
23	40.99	41.14	41.33	41.20	41.18	41.07	---	41.10	40.93	40.74	40.52	40.27
24	40.98	41.15	41.32	41.20	41.19	41.07	---	41.10	40.93	40.73	40.51	40.24
25	40.97	41.16	41.32	41.20	41.19	41.08	---	41.10	40.92	40.73	40.50	40.24
26	40.96	41.17	41.31	41.20	41.19	41.09	---	41.10	40.91	40.72	40.49	40.23
27	40.96	41.18	41.30	41.20	41.19	41.09	---	41.08	40.91	40.72	40.49	40.23
28	40.97	41.19	41.30	41.20	41.19	---	---	41.08	40.91	40.71	40.48	40.23
29	40.97	41.20	41.29	41.20	---	---	---	41.08	40.91	40.71	40.46	40.21
30	40.98	41.21	41.28	41.20	---	---	---	41.06	40.90	40.69	40.44	40.19
31	40.98	---	41.28	41.20	---	---	---	41.06	---	40.68	40.43	---
MAX	41.13	41.21	41.37	41.27	41.20	---	---	---	41.06	40.90	40.67	40.42
MIN	40.96	40.98	41.22	41.19	41.18	---	---	---	40.90	40.68	40.43	40.19

SWEETWATER COUNTY—Continued

413850109150601 19-105-10bbb01 Rock Springs Golf Course—Continued



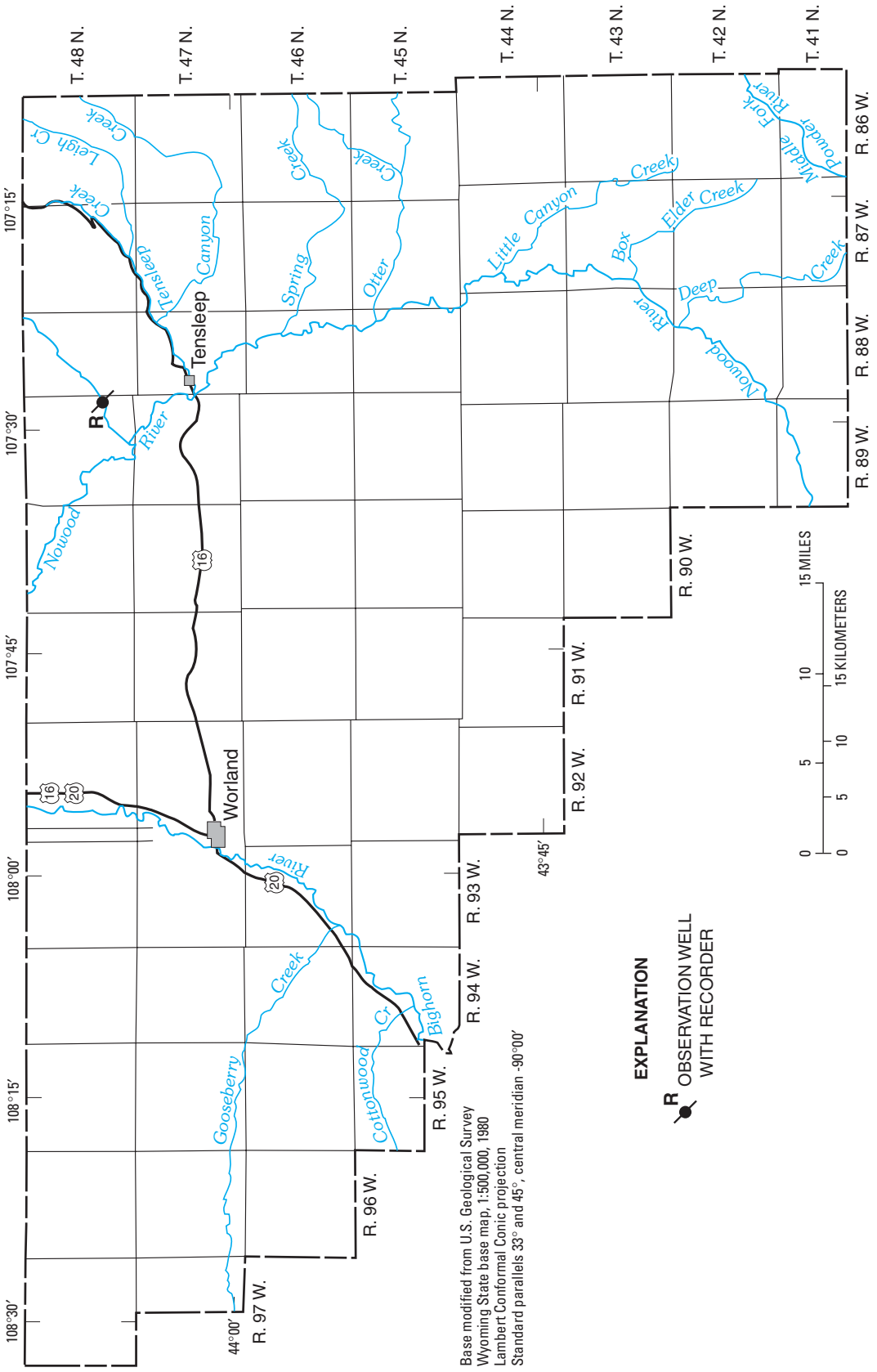


Figure 19. Location of observation well in Washakie County, Wyoming.

WASHAKIE COUNTY

440621107273801 48-089-25ada01 Mills

LOCATION.--Lat 44°06'21", long 107°27'38", in NE ¼ SE ¼ NE ¼ sec.25, T.48 N., R.89 W., Hydrologic Unit 10080008.

AQUIFER.--Flathead Sandstone.

WELL CHARACTERISTICS.--Depth of well, 2,290 ft below land surface.

DATUM.--Elevation of land surface is 4,560 ft above NGVD of 1929, from topographic map.

REMARKS.--Shut-in pressure was measured by pressure transducer and converted to hydraulic head above land surface for illustration purposes. Hydraulic head, in feet above land surface, was calculated by multiplying the shut-in pressure in pounds per square inch by 2.307. Hydraulic head data from May 13, 1992 to Mar. 24, 1995 were not plotted on the hydrograph because the monitoring equipment was out of calibration during this time. The data, and a more detailed explanation of the data, were published in Open-File report 96-648 "Ground-Water Levels in Wyoming, January 1986 through September 1995." Hydraulic head data from Mar. 24, 1995 to Apr. 25, 1996 were not collected. The accuracy of the hydraulic head measurements was considered to be 20 ft. Oct. 1, 2002 to Nov. 11, 2002, 50 ft. Nov. 11 to Apr. 1, and 20 ft. Apr. 1 to Sept. 30, 2004. Data collected by U.S. Geological Survey.

PERIOD OF RECORD.--1988 to current year.

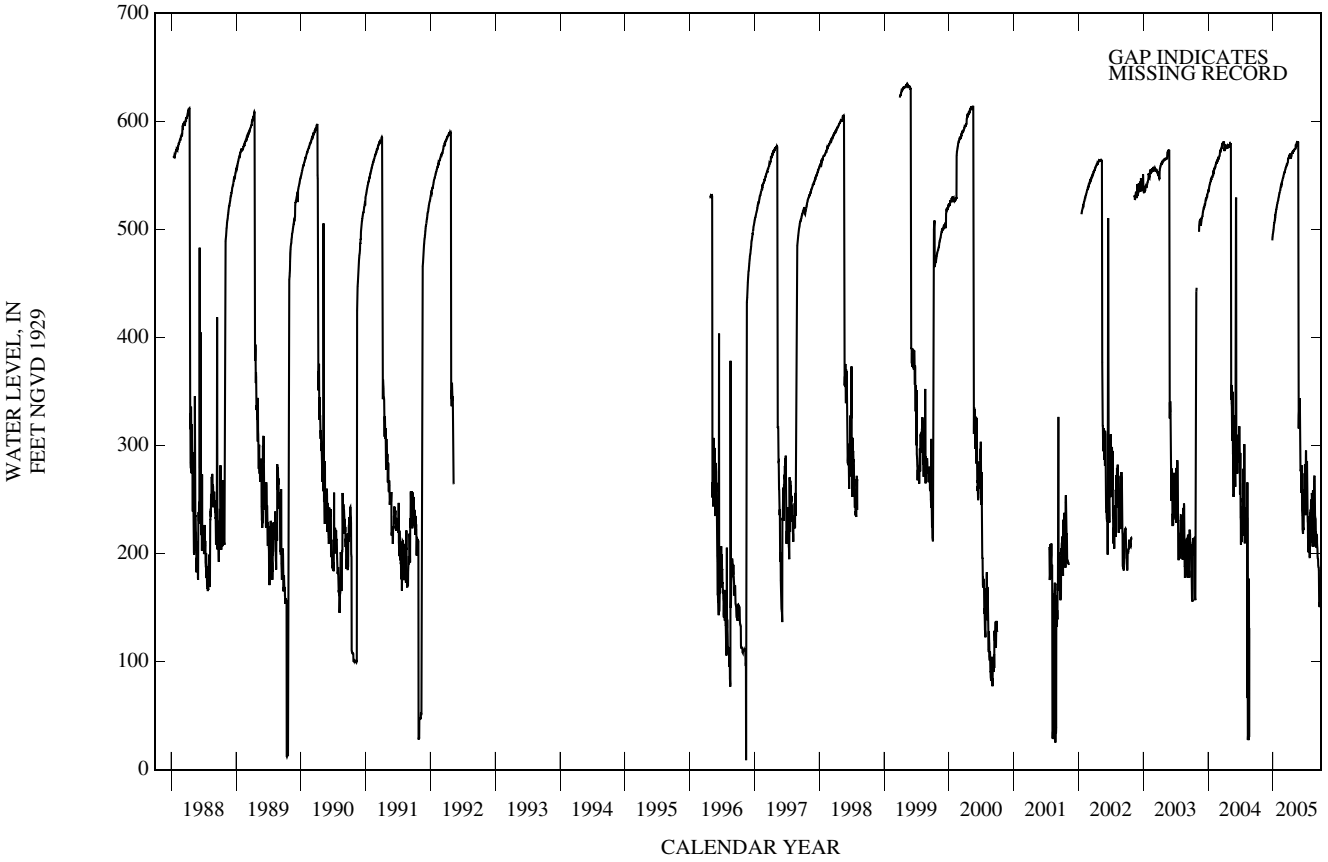
EXTREMES FOR PERIOD OF RECORD.--Highest hydraulic head, 633.67 ft above land surface, May 5, 6, 8, 11, 1999; lowest, 8.78 ft above land surface, Nov. 14, 1996.

HYDRAULIC HEAD, FEET ABOVE LAND SURFACE
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	496.86	528.99	549.56	567.12	573.59	343.65	276.40	240.81	205.68
2	---	---	---	497.79	529.91	550.02	568.04	573.82	336.48	266.46	236.42	215.62
3	---	---	---	499.18	530.61	550.94	568.27	574.51	313.14	235.49	249.82	217.47
4	---	---	---	500.10	531.76	551.64	568.51	574.51	289.11	287.95	245.20	217.23
5	---	---	---	501.72	532.45	551.87	568.74	574.51	277.32	294.42	233.87	216.54
6	---	---	---	503.80	533.38	552.79	569.20	574.98	276.16	295.35	210.76	211.69
7	---	---	---	504.72	534.07	552.79	570.12	574.28	277.78	287.49	210.07	205.91
8	---	---	---	506.11	534.77	553.48	565.50	574.75	272.93	273.39	256.06	204.29
9	---	---	---	506.34	535.46	554.18	566.19	577.75	256.06	241.04	251.67	197.13
10	---	---	---	507.96	536.15	554.64	566.19	577.75	265.76	236.88	242.66	195.97
11	---	---	---	509.34	536.85	555.33	566.43	576.83	281.71	284.72	223.47	195.28
12	---	---	---	511.19	538.00	555.56	566.89	577.06	280.32	284.72	206.37	194.36
13	---	---	---	510.96	538.93	556.03	567.12	578.91	279.17	269.00	254.90	188.81
14	---	---	---	512.35	539.16	556.72	567.12	579.83	240.11	243.12	258.37	187.88
15	---	---	---	513.27	540.31	557.18	567.58	580.06	234.80	229.94	258.14	187.19
16	---	---	---	514.89	541.24	558.11	569.43	579.83	222.78	229.25	256.98	184.19
17	---	---	---	516.05	541.93	558.34	570.82	579.60	221.16	214.46	245.43	174.25
18	---	---	---	516.74	542.39	559.26	571.05	580.29	219.54	212.38	230.41	151.14
19	---	---	---	518.36	542.16	559.96	570.12	580.29	218.16	210.53	206.60	152.06
20	---	---	---	518.82	543.32	559.96	570.82	580.99	222.78	201.06	266.69	151.83
21	---	---	---	520.44	544.01	559.96	570.82	580.99	223.70	231.79	270.62	150.91
22	---	---	---	521.13	544.47	560.65	571.97	580.99	222.55	234.57	271.54	150.45
23	---	---	---	522.05	545.40	560.65	572.43	581.22	221.62	226.02	272.00	153.22
24	---	---	---	522.75	546.09	561.11	572.67	437.70	253.98	210.07	267.15	154.14
25	---	---	---	523.21	547.01	561.80	572.67	347.11	259.53	205.68	252.36	151.37
26	---	---	---	524.60	547.71	564.12	572.67	315.68	255.13	196.67	235.03	152.53
27	---	---	---	524.83	547.94	565.04	572.43	328.16	274.08	196.67	233.64	151.14
28	---	---	489.93	525.29	548.86	565.73	572.67	335.10	269.92	197.13	232.72	150.68
29	---	---	492.24	526.68	---	566.43	573.36	335.56	258.60	234.80	231.10	150.91
30	---	---	493.63	527.37	---	565.96	573.36	322.85	282.40	238.26	217.93	150.68
31	---	---	495.25	528.53	---	566.19	---	339.95	---	235.26	206.37	---
MAX	---	---	---	528.53	548.86	566.43	573.36	581.22	343.65	295.35	272.00	217.47
MIN	---	---	---	496.86	528.99	549.56	565.50	315.68	218.16	196.67	206.37	150.45

WASHAKIE COUNTY—Continued

440621107273801 48-089-25ada01 Mills—Continued



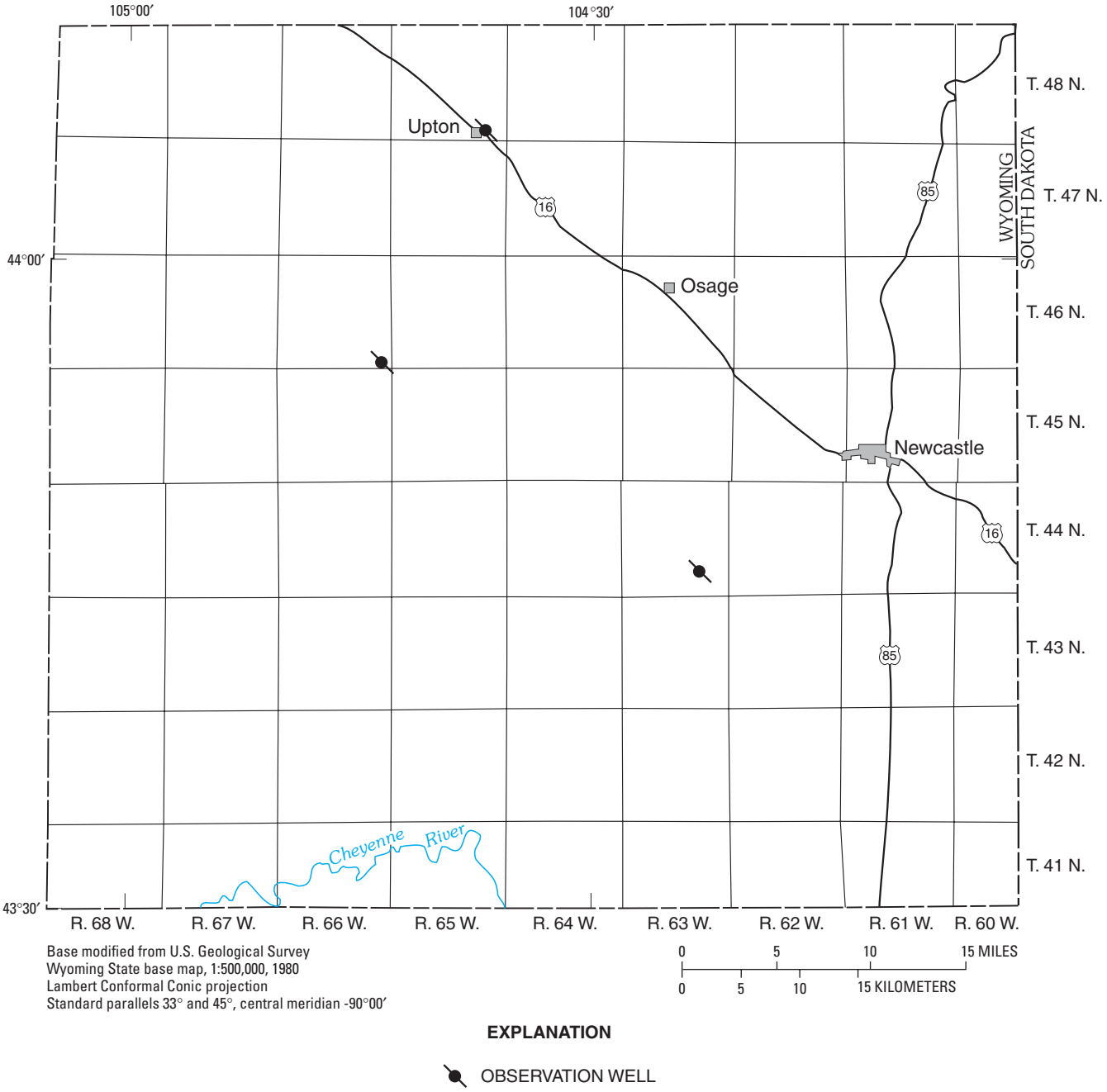


Figure 20. Location of observation wells in Weston County, Wyoming.

WESTON COUNTY

434539104233401 44-063-26cac01 Townsend Well

LOCATION.--Lat 43°45'39", long 104°23'34", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.26, T.44 N., R.63 W., Hydrologic Unit 10120107.

AQUIFER.--Madison (Pahasapa) Limestone.

WELL CHARACTERISTICS.--Depth of well, 6,880 ft below land surface.

DATUM.--Elevation of land surface is 3,990 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 1.5 ft above land surface.

REMARKS.--Data reflects static and pumping water levels.

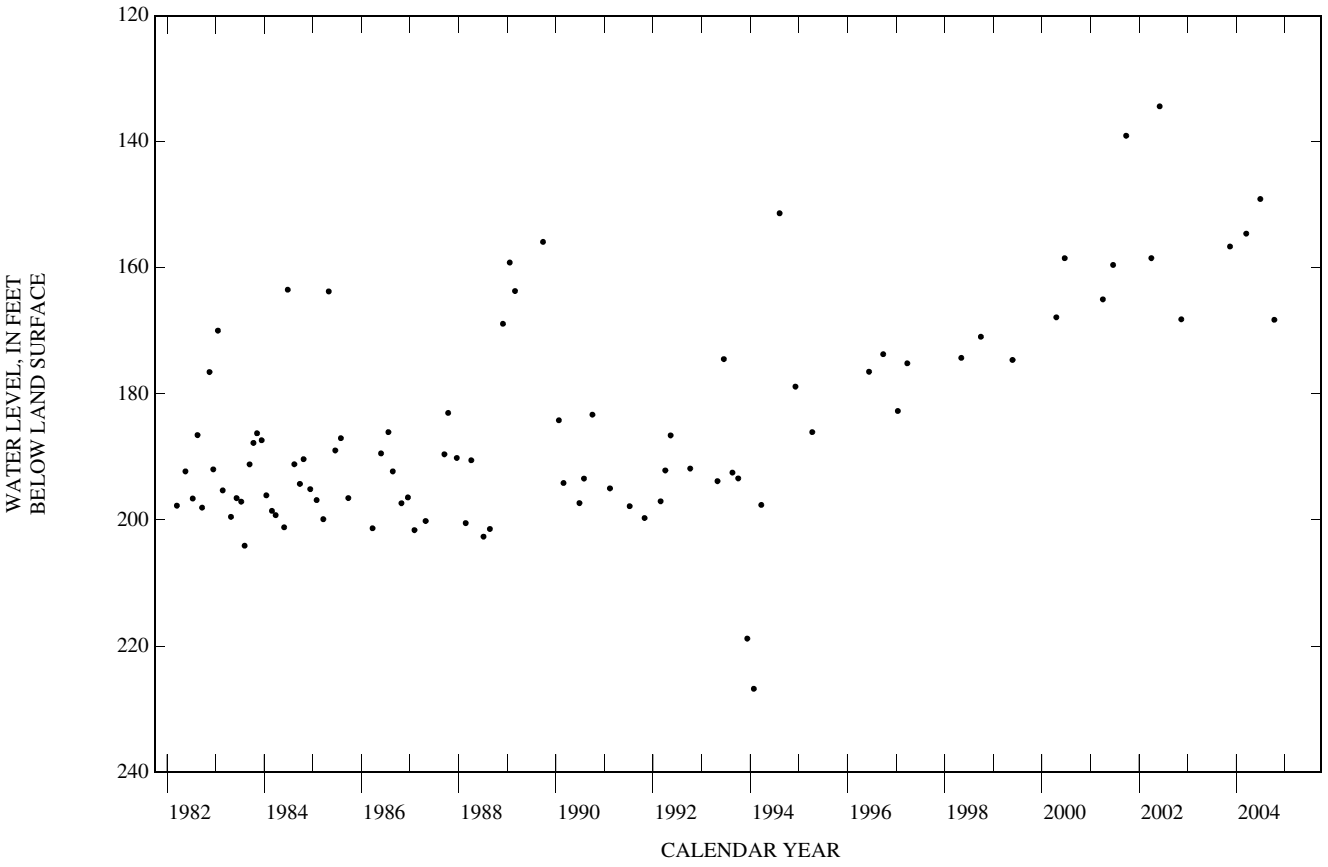
COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 134.37 ft below land surface, from hand-measured data, June 4, 2002; lowest, 226.80 ft below land surface, from hand-measured data, Jan. 27, 1994.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL
OCT 12	168.25



WESTON COUNTY—Continued

435610104433001 46-066-25dbb01 Terra Resources

LOCATION.--Lat 43°56'10", long 104°43'30", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.25, T.46 N., R.66 W., Hydrologic Unit 10120103.

AQUIFER.--Madison (Pahasapa) Limestone.

WELL CHARACTERISTICS.--Depth of well, 8,780 ft below land surface.

DATUM.--Elevation of land surface is 4,200 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, at land surface.

REMARKS.--Data reflects static conditions and pumping of nearby oil field water flood system.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

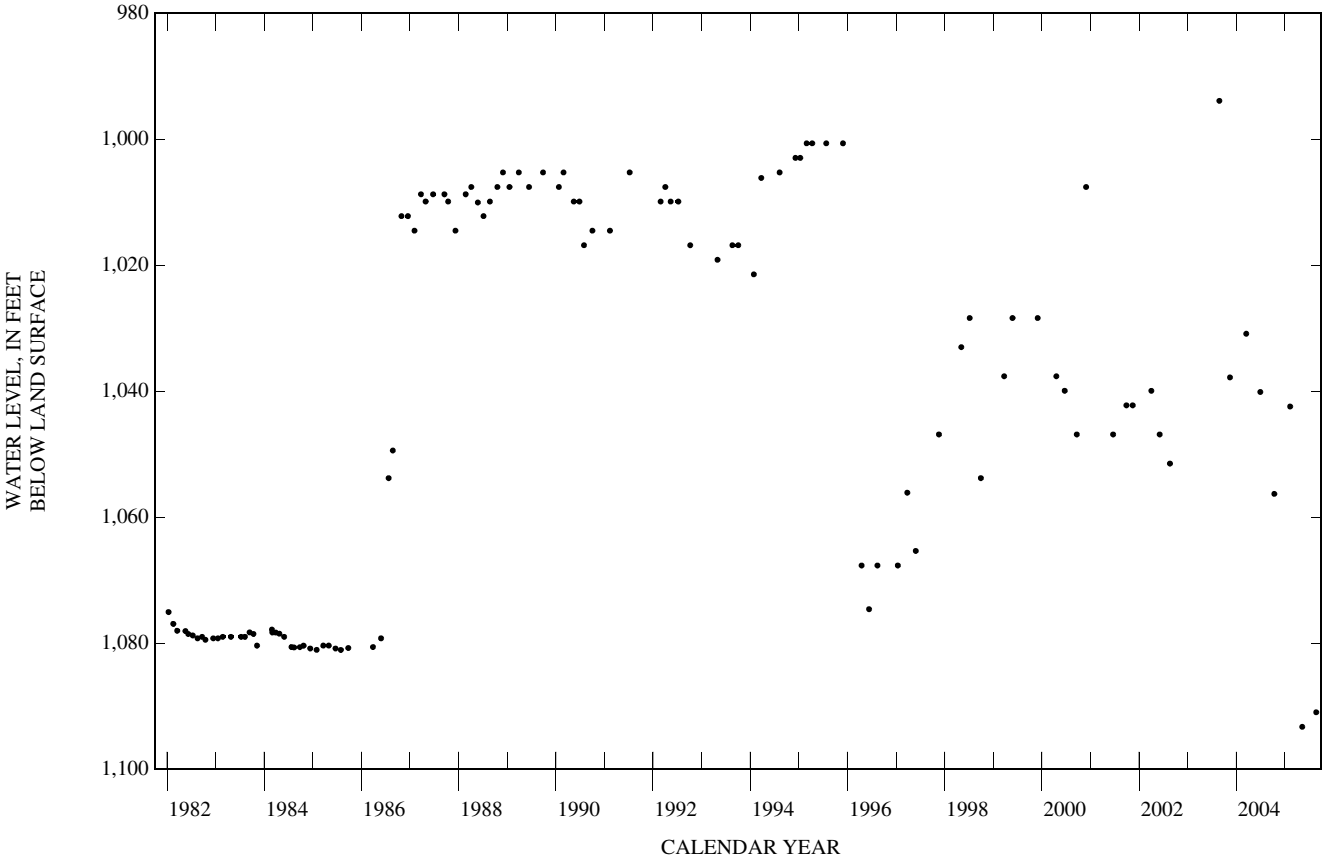
PERIOD OF RECORD.--1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 993.93 ft below land surface, from hand-measured data, Aug.26, 2003; lowest, 1,093.26 ft below land surface, from-hand measured data, May 10, 2005.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	1056.30	FEB 08	1042.44	MAY 10	1093.26	AUG 23	1090.95

WATER YEAR 2005 HIGHEST 1042.44 FEB 08, 2005 LOWEST 1093.26 MAY 10, 2005



WESTON COUNTY—Continued

440530104381001 48-065-35ccb01 Town of Upton #4

LOCATION.--Lat 44°05'30", long 104°38'10", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.35, T.48 N., R.65 W., Hydrologic Unit 10120107.

AQUIFER.--Madison (Pahasapa) Limestone.

WELL CHARACTERISTICS.--Depth of well, 3,190 ft below land surface.

DATUM.--Elevation of land surface is 4,220 ft above NGVD of 1929, from topographic map. Measuring point: top of casing, 0.70 ft above land surface.

REMARKS.--Data reflects static and pumping water levels.

COOPERATION.--Data collected and records provided by the Wyoming State Engineer's Office and reviewed by U.S. Geological Survey.

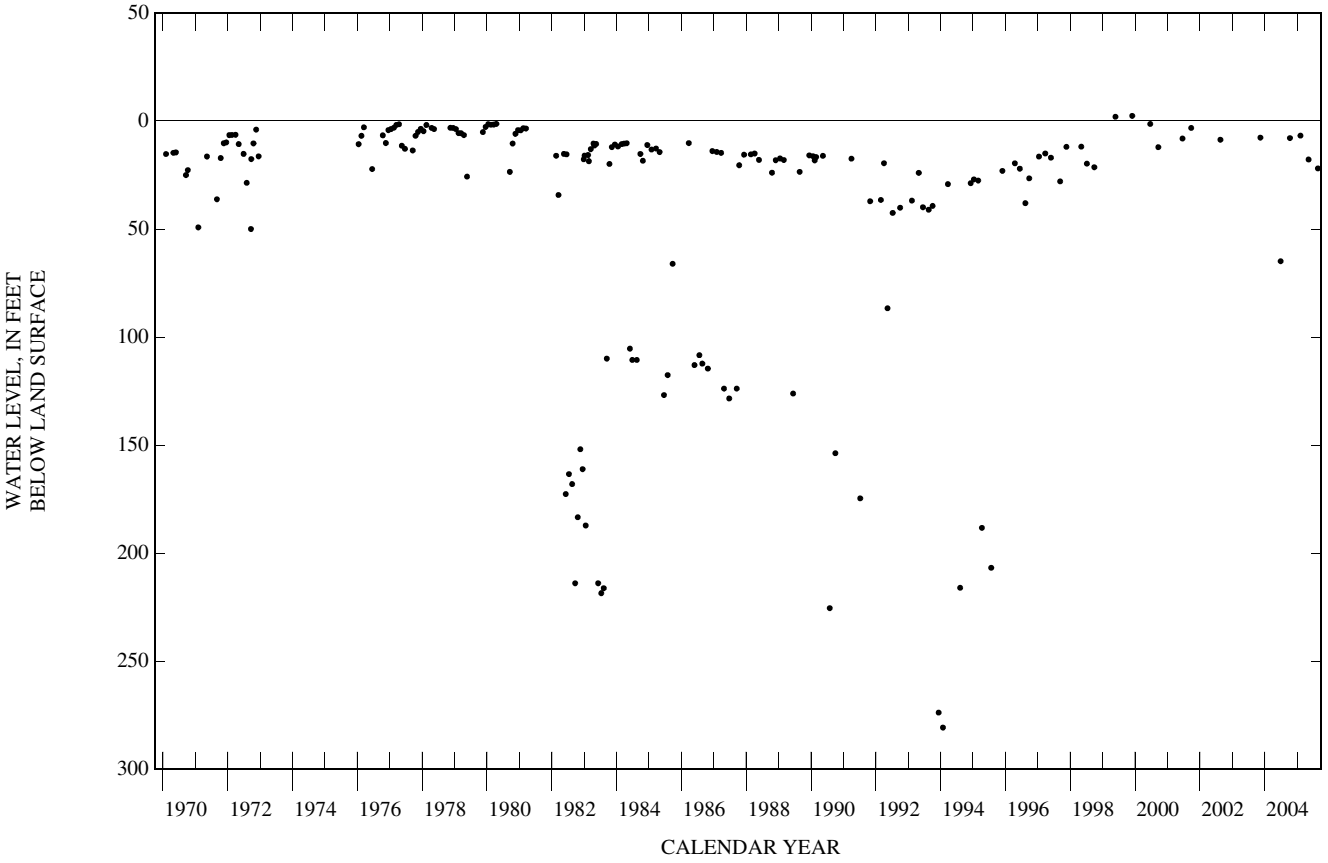
PERIOD OF RECORD.--1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.40 ft above land surface, from hand-measured data, Nov. 30, 1999; lowest, 280.67 ft below land surface, from hand-measured data, Jan. 27, 1994.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12	7.89	FEB 08	6.75	MAY 10	17.78	AUG 23	21.93

WATER YEAR 2005 HIGHEST 6.75 FEB 08, 2005 LOWEST 21.93 AUG 23, 2005



HIGH PLAINS STUDY

GOSHEN COUNTY

STATION NUMBER	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	LOCAL WELL NUMBER	ALTITUDE OF LAND SURFACE (FEET)	WATER-LEVEL DATE	WATER LEVEL IN FEET BELOW LAND SURFACE
413716104203401	413719	1042034	19-062-17bbb01	4935	03-30-05	23.55
413400104382701	413400	1043827	19-065-34dcc01	5520	03-30-05	68.80
415925104310801	415925	1043108	23-064-03dda01	4275	04-07-05	23.99
420303104315401	420303	1043154	24-064-15cac01	4398	04-07-05	38.06
420845104122301	420847	1041225	25-061-17aaa01	4310	04-07-05	53.65
421328104205401	421328	1042107	26-062-18dbd01	4535	04-07-05	62.20
421244104175501	421244	1041754	26-062-22bcd01	4290	04-07-05	45.29
422347104212001	422347	1042120	28-062-18cac01	4470	04-07-05	12.39
423056104212701	423056	1042127	29-062-06cba01	4700	04-04-05	29.14
423057104212701	423057	1042127	29-062-06cba02	4700	04-04-05	29.64

LARAMIE COUNTY

STATION NUMBER	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	LOCAL WELL NUMBER	ALTITUDE OF LAND SURFACE (FEET)	WATER-LEVEL DATE	WATER LEVEL IN FEET BELOW LAND SURFACE
412304104311001	412305	1043109	16-064-02bcb01	5778	03-30-05	232.82
413116104264901	413117	1042649	18-063-17dcd01	5320	03-30-05	138.58
413326104291801	413327	1042920	18-064-01caa01	5307	04-13-05	110.91
412938104460601	412938	1044606	18-066-28ddd01	5827	03-30-05	105.22

NIOBRARA COUNTY

STATION NUMBER	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	LOCAL WELL NUMBER	ALTITUDE OF LAND SURFACE (FEET)	WATER-LEVEL DATE	WATER LEVEL IN FEET BELOW LAND SURFACE
424032104054801	424032	1040548	31-060-08cac01	4773	04-04-05	53.96
423940104031201	423939	1040309	31-060-15dbc01	4730	04-04-05	36.24
424908104085901	424908	1040859	33-061-23dcb01	5155	04-04-05	261.17
424724104293801	424724	1042937	33-064-36cbc01	5200	04-04-05	56.87

PLATTE COUNTY

STATION NUMBER	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	LOCAL WELL NUMBER	ALTITUDE OF LAND SURFACE (FEET)	WATER-LEVEL DATE	WATER LEVEL IN FEET BELOW LAND SURFACE
414755104391101	414754	1043915	21-065-16aaa01	5294	03-30-05	74.24
422355105023401	422356	1050238	28-068-17cbc01	4918	04-04-05	59.34

PESTICIDE AND NUTRIENT SAMPLING PROGRAM
(Water levels are at depth below land surface, in feet)

CAMPBELL COUNTY

Well number	Station number	Geologic unit	Local identifier	Date	Time	Depth of well, feet below LSD (72008)	Depth to water level, feet below LSD (72019)	Altitude of land surface feet (72000)
P5	441638105293701	124WSTC	50-072-27dcd01	04-07-05	0900	14	6.9	4,530
P7a	441728105285101	124WSTC	50-072-26baa02	04-06-05	1400	14.1	7.52	4,530
P8	441744105291601	124WSTC	50-072-23cbc01	04-04-05	1600	22	16.3	4,530
P6	442055105315801	124WSTC	51-072-32ddd01	04-05-05	1745	20	18.8	4,330
		124WSTC	51-072-32ddd01	04-06-05	0730	20	18.8	4,330
P2	444238105285201	125FRUN	55-072-35abc01	04-06-05	0945	85	E60	3,790
P3	445432105440701	125FRUN	57-074-23cbb01	04-05-05	1500	25	E7	3,710
P1	445458105273301	125FRUN	57-072-24dab01	04-05-05	1015	40	10	3,570
P4	445927105540801	125FRUN	58-075-20ddb01	04-05-05	1240	60	E10	3,470

Station number	Date	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	2,4-D water, fltrd, ug/L (39732)
441638105293701	04-07-05	5.3	7.2	1,810	9.5	11.0	<.04	1.86	<.008	<.02	<.04
441728105285101	04-06-05	7.7	7.3	7,200	18.0	13.5	E.04	4.74	.008	E.01	--
441744105291601	04-04-05	.4	4.2	3,860	20.0	13.0	1.29	2.20	.012	<.02	<.04
442055105315801	04-05-05	--	--	--	--	--	--	--	--	--	--
	04-06-05	--	--	--	--	--	.32	.40	.023	<.02	<.04
444238105285201	04-06-05	.2	7.1	2,070	8.5	10.0	.59	<.06	<.008	<.02	<.04
445432105440701	04-05-05	7.7	7.2	5,620	14.0	9.5	1.46	<.06	<.008	<.02	<.04
445458105273301	04-05-05	.1	7.4	2,110	7.5	9.5	.67	<.06	<.008	<.02	<.04
445927105540801	04-05-05	--	7.8	2,090	13.0	10.5	1.32	<.06	<.008	.05	<.04

Station number	Date	2,4-DB water, fltrd 0.7u GF ug/L (38746)	CIAT, water, fltrd, ug/L (04040)	Alachlor, water, fltrd, ug/L (46342)	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldicarb sulfoxide, wat flt 0.7u GF ug/L (49314)	Aldicarb, water, fltrd 0.7u GF ug/L (49312)	Atrazine, water, fltrd, ug/L (39632)	Bromacil, water, fltrd, ug/L (04029)	Clopyralid, water, fltrd 0.7u GF ug/L (49305)	Cyanazine, water, fltrd, ug/L (04041)
441638105293701	04-07-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.16	<.02	<.018
441728105285101	04-06-05	--	<.006	<.005	--	--	--	<.007	--	--	<.018
441744105291601	04-04-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	--	<.018
442055105315801	04-05-05	--	<.006	<.005	--	--	--	<.007	--	--	<.018
	04-06-05	<.02	<.03	--	<.02	<.022	<.04	<.008	<.02	--	--
444238105285201	04-06-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018
445432105440701	04-05-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018
445458105273301	04-05-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018
445927105540801	04-05-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018

GEOLOGIC UNIT (Aquifer):

111ALVM	HOLOCENE ALLUVIUM	111TRRC	TERRACE DEPOSITS
122ARKR	ARIKAREE FORMATION	122MOCN	MIOCENE SERIES
124WSTC	WASATCH FORMATION	125FRUN	FORT UNION FORMATION
211LWIS	LEWIS SHALE	217MWRY	TERRIACE DEPOSIT
217SKCK	SKULL CREEK SHALE	237SPRF	SPEARFISH FORMATION

PESTICIDE AND NUTRIENT SAMPLING PROGRAM—Continued

CAMPBELL COUNTY

Station number	Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazinon, water, fltrd, ug/L (39572)	Dicamba water fltrd 0.7u GF ug/L (38442)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Metsulfuron, water, fltrd, ug/L (61697)	Picloram, water, fltrd 0.7u GF ug/L (49291)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)
CAMPBELL COUNTY											
441638105293701	04-07-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	.03	<.005	.02
441728105285101	04-06-05	<.003	<.005	--	<.006	<.006	--	--	.03	<.005	<.02
441744105291601	04-04-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	<.01	<.005	<.02
442055105315801	04-05-05	<.003	<.005	--	<.006	<.006	--	--	.03	<.005	<.02
	04-06-05	--	--	<.04	--	--	<.03	E6.98	--	--	<.026
444238105285201	04-06-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	<.01	<.005	<.02
445432105440701	04-05-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	<.01	<.005	<.02
445458105273301	04-05-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	<.01	<.005	<.02
445927105540801	04-05-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	<.01	<.005	<.02

Station number	Date	cis-1,3-Dichloropropene water unfltrd ug/L (34704)	trans-1,3-Dichloropropene water unfltrd ug/L (34699)
441638105293701	04-07-05	<1.0	<1.0
441728105285101	04-06-05	<1.0	<1.0
441744105291601	04-04-05	<67	<67
442055105315801	04-05-05	--	--
	04-06-05	<1.0	<1.0
444238105285201	04-06-05	<1.0	<1.0
445432105440701	04-05-05	<1.0	<1.0
445458105273301	04-05-05	<1.0	<1.0
445927105540801	04-05-05	--	--

< -- Less than.
E -- Estimated.

PESTICIDE AND NUTRIENT SAMPLING PROGRAM
(Water levels are at depth below land surface, in feet)

CARBON COUNTY

Well number	Station number	Geologic unit	Local identifier	Date	Time	Depth of well, feet below LSD (72008)	Depth to water level, feet below LSD (72019)	Altitude of land surface feet (72000)
C7	410135107265701	111ALVM	12-089-07acc01	04-27-05	1245	35	23.6	6,480
C8	410208107392801	111ALVM	12-091-05dcb01	04-27-05	1500	13	8.25	6,245
C1	411303106464201	111ALVM	14-083-06bbb01	05-11-05	0900	11	3.3	7,130
C9	412329106440001	111ALVM	16-083-04bad01	05-10-05	1650	95	5.1	6,870
C2	412708106482401	111ALVM	17-084-14aab01	05-11-05	1130	13.6	7.22	6,790
C10	413242106525501	111ALVM	18-084-07dad02	05-10-05	1420	40	E5	6,690
C11	413937106075501	211LWIS	20-078-35cbd01	04-29-05	1245	180	E5	7,190
C3	414130106251801	111ALVM	20-080-20cbb01	04-24-05	1300	16	2.3	7,270
C6	414719107150001	122MOCN	21-087-17cbd01	04-24-05	1530	20	8.9	6,790
		122MOCN	21-087-17cbd01	05-11-05	1330	20	9.5	6,790
C5	414808107133901	122MOCN	21-087-09cdb01	04-27-05	1915	15	8.9	6,770
C4	415349106121401	111ALVM	22-078-08bdb01	04-24-05	1100	15	--	6,570
		111ALVM	22-078-08bdb01	04-29-05	1030	15	--	6,570

Station number	Date	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	2,4-D water, fltrd, ug/L (39732)
410135107265701	04-27-05	6.0	7.1	1,010	10.0	10.0	<.04	2.29	<.008	.04	<.04
410208107392801	04-27-05	.6	7.3	3,920	15.5	8.0	<.04	1.27	.055	.08	<.04
411303106464201	05-11-05	3.4	7.2	613	1.5	6.5	<.04	1.31	<.008	.03	<.04
412329106440001	05-10-05	.1	7.8	730	16.5	9.0	<.04	<.06	<.008	<.02	<.04
412708106482401	05-11-05	.5	7.0	3,480	3.0	8.5	<.04	2.37	<.008	.07	<.04
413242106525501	05-10-05	.1	7.2	2,990	19.0	6.5	<.04	32.2	.580	E.02	E.04
413937106075501	04-29-05	2.0	7.5	610	5.0	6.0	.12	<.06	<.008	<.02	<.04
414130106251801	04-24-05	.1	7.3	1,530	14.0	4.0	.07	.12	E.004	<.02	<.04
414719107150001	04-24-05	.7	7.2	2,300	18.0	10.0	.06	5.29	<.008	<.02	--
	05-11-05	--	7.4	2,300	5.0	7.6	--	--	--	--	<.04
414808107133901	04-27-05	5.0	7.5	1,950	3.0	8.0	<.04	13.7	<.008	<.02	<.04
415349106121401	04-24-05	--	--	--	--	--	--	--	--	--	<.04
	04-29-05	--	--	--	--	--	.05	.53	.015	<.02	--

Station number	Date	2,4-DB water, fltrd 0.7u GF ug/L (38746)	CIAT, water, fltrd, ug/L (04040)	Alachlor, water, fltrd, ug/L (46342)	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldicarb sulfoxide, wat flt 0.7u GF ug/L (49314)	Aldicarb, water, fltrd 0.7u GF ug/L (49312)	Atrazine, water, fltrd, ug/L (39632)	Bromacil, water, fltrd, ug/L (04029)	Clopyralid, water, fltrd 0.7u GF ug/L (49305)	Cyanazine, water, fltrd, ug/L (04041)
410135107265701	04-27-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018
410208107392801	04-27-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018
411303106464201	05-11-05	<.02	E.005	<.005	<.02	<.022	<.04	E.002	<.02	<.02	<.018
412329106440001	05-10-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018
412708106482401	05-11-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	E.47	<.02	<.018
413242106525501	05-10-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018
413937106075501	04-29-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018
414130106251801	04-24-05	<.02	<.006	<.005	--	--	--	<.007	<.02	--	<.018
414719107150001	04-24-05	--	--	--	--	--	--	--	--	--	--
	05-11-05	<.02	E.050	<.005	<.02	<.022	<.04	.030	<.02	<.02	<.018
414808107133901	04-27-05	<.02	E.002	<.005	<.02	<.022	<.04	E.002	<.02	--	<.018
415349106121401	04-24-05	<.02	<.006	<.005	--	--	--	<.013	.61	--	<.018
	04-29-05	--	--	--	--	--	--	--	--	--	--

PESTICIDE AND NUTRIENT SAMPLING PROGRAM—Continued

CARBON COUNTY

Station number	Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazinon, water, fltrd, ug/L (39572)	Dicamba water fltrd 0.7u GF ug/L (38442)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Metsulfuron, water, fltrd, ug/L (61697)	Picloram, water, fltrd 0.7u GF ug/L (49291)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)
410135107265701	04-27-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	.05	<.005	<.02
410208107392801	04-27-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	.03	<.005	.24
411303106464201	05-11-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	M	<.005	<.02
412329106440001	05-10-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	<.01	<.005	<.02
412708106482401	05-11-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	.05	<.005	<.02
413242106525501	05-10-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	<.01	<.005	<.02
413937106075501	04-29-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	<.01	<.005	<.02
414130106251801	04-24-05	<.003	<.005	--	<.006	<.006	<.03	--	<.01	<.005	.02
414719107150001	04-24-05	--	--	--	--	--	--	--	--	--	--
	05-11-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	1.24	E.003	<.02
414808107133901	04-27-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	<.01	<.005	<.02
415349106121401	04-24-05	<.003	<.005	--	<.006	<.006	<.03	--	<.01	<.007	.38
	04-29-05	--	--	--	--	--	--	--	--	--	--

Station number	Date	cis-1,3-Dichloropropene water unfltrd ug/L (34704)	trans-1,3-Dichloropropene water unfltrd ug/L (34699)
410135107265701	04-27-05	<1.0	<1.0
410208107392801	04-27-05	<1.0	<1.0
411303106464201	05-11-05	<1.0	<1.0
412329106440001	05-10-05	<1.0	<1.0
412708106482401	05-11-05	<1.0	<1.0
413242106525501	05-10-05	<1.0	<1.0
413937106075501	04-29-05	<1.0	<1.0
414130106251801	04-24-05	<1.0	<1.0
414719107150001	04-24-05	<1.0	<1.0
	05-11-05	--	--
414808107133901	04-27-05	<1.0	<1.0
415349106121401	04-24-05	--	--
	04-29-05	<1.0	<1.0

< -- Less than.
E -- Estimated.
M -- Presence verified but not quantified.

PESTICIDE AND NUTRIENT SAMPLING PROGRAM
(Water levels are at depth below land surface, in feet)

NIOBRARA COUNTY

Well numberr	Station number	Geologic unit	Local identifier	Date	Time	Depth of well, feet below LSD (72008)	Depth to water level, feet below LSD (72019)	Altitude of land surface feet (72000)
NW9	424132104200001	122ARKR	31-062-05bdc01	09-29-05	1640	160	E20	4,900
NW7	424526104271101	122ARKR	32-063-08cca01	09-28-05	1840	17.3	11.5	5,020
NW10	424601104273201	122ARKR	32-063-07aad01	09-29-05	1845	50	17.9	5,030
NW8	424657104364001	122ARKR	32-065-01bac01	09-29-05	1130	60	E20	5,250
NW11	431413104283601	111TRRC	38-063-30cca01	09-30-05	0930	E27	E15	3,890
NW6	432319104140501	111ALVM	39-061-06bda01	09-28-05	1410	32	10.3	3,665

Station number	Date	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	2,4-D water, fltrd, ug/L (39732)
424132104200001	09-29-05	5.1	7.7	413	26.0	12.0	E.02	4.70	<.008	.06	<.04
424526104271101	09-28-05	.6	7.3	1,220	17.5	13.0	<.04	13.2	.009	.03	<.04
424601104273201	09-29-05	.4	7.3	627	--	11.5	E.04	.29	<.008	.06	<.04
424657104364001	09-29-05	.6	7.3	1,300	21.5	12.0	<.04	48.9	E.004	.04	<.04
431413104283601	09-30-05	4.4	7.3	1,770	19.5	13.0	.09	3.91	<.008	<.02	<.04
432319104140501	09-28-05	2.0	7.2	4,220	14.0	16.0	.12	<.06	.009	<.02	<.04

Station number	Date	2,4-DB water, fltrd 0.7u GF ug/L (38746)	CIAT, water, fltrd, ug/L (04040)	Alachlor, water, fltrd, ug/L (46342)	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldicarb sulfoxide, wat flt 0.7u GF ug/L (49314)	Aldicarb, water, fltrd 0.7u GF ug/L (49312)	Atrazine, water, fltrd, ug/L (39632)	Bromacil, water, fltrd, ug/L (04029)	Clopyralid, water, fltrd 0.7u GF ug/L (49305)	Cyanazine, water, fltrd, ug/L (04041)
424132104200001	09-29-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018
424526104271101	09-28-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018
424601104273201	09-29-05	<.02	E.004	<.005	<.02	<.022	<.04	E.006	<.02	<.02	<.018
424657104364001	09-29-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018
431413104283601	09-30-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018
432319104140501	09-28-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018

Station number	Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazinon, water, fltrd, ug/L (39572)	Dicamba water fltrd 0.7u GF ug/L (38442)	Hexazinone, water, fltrd, ug/L (04025)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Metsulfuron, water, fltrd, ug/L (61697)	Picloram, water, fltrd 0.7u GF ug/L (49291)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)
424132104200001	09-29-05	<.003	<.005	<.04	<.013	<.006	<.006	<.03	<.03	<.01	<.005
424526104271101	09-28-05	<.003	<.005	<.04	<.013	<.006	<.006	<.03	<.03	.01	<.005
424601104273201	09-29-05	<.003	<.005	<.04	<.013	<.006	<.006	<.03	<.03	<.01	<.005
424657104364001	09-29-05	<.003	<.005	<.04	<.013	<.006	<.006	<.03	2.71	<.01	<.005
431413104283601	09-30-05	<.003	<.005	<.04	<.013	<.006	<.006	<.03	<.03	<.01	<.005
432319104140501	09-28-05	<.003	<.005	<.04	<.013	<.006	<.006	<.03	<.03	<.01	<.005

PESTICIDE AND NUTRIENT SAMPLING PROGRAM—Continued

NIOBRARA COUNTY

Station number	Date	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	cis-1,3-Di-chloro-propene water unfltrd ug/L (34704)	trans-1,3-Di-chloro-propene water unfltrd ug/L (34699)
424132104200001	09-29-05	<.02	<1.0	<1.0
424526104271101	09-28-05	<.02	<1.0	<1.0
424601104273201	09-29-05	<.02	<1.0	<1.0
424657104364001	09-29-05	<.02	<1.0	<1.0
431413104283601	09-30-05	<.02	<1.0	<1.0
432319104140501	09-28-05	<.02	<1.0	<1.0

< -- Less than.
E -- Estimated.

PESTICIDE AND NUTRIENT SAMPLING PROGRAM
(Water levels are at depths below land surface, in feet)

SUBLETTE COUNTY

Well number	Station number	Geologic unit	Local identifier	Date	Time	Depth of well, feet below LSD (72008)	Depth to water level, feet below LSD (72019)	Altitude of land surface feet (72000)
S10	423338110083201	124WSTC	30-112-25bbc01	04-25-05	1435	80	7.8	6,890
S8	423758109574201	124WSTC	31-110-28cac01	04-25-05	1545	E60	16.8	6,890
S5	424301109322501	124WSTC	32-107-25aad01	04-26-05	1900	75	E5	7,190
S9	424442109440501	124WSTC	32-108-17ada01	04-26-05	1100	65	9.5	6,970
S4	425056109514301	124WSTC	33-109-09aad01	04-26-05	1330	97	12.6	7,155
S7	425147110041801	124WSTC	33-111-02bac01	04-25-05	0945	105	E10	7,195
S1	425151109512201	111ALVM	33-109-03bbd01	04-25-05	1845	13.3	7.2	7,170
S2	425158109521401	111ALVM	33-109-04baa01	04-26-05	1500	12.5	6.4	7,175
S6	425606109570801	111ALVM	34-110-11bdb01	04-26-05	0900	65	E10	7,310
S3	425633110142401	124WSTC	34-112-05cbd01	04-25-05	1145	90	2.9	7,435

Station number	Date	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	2,4-D water, fltrd, ug/L (39732)
423338110083201	04-25-05	2.5	7.4	810	16.5	7.5	<.04	<.06	<.008	<.02	<.04
423758109574201	04-25-05	--	7.6	1,900	--	--	.15	<.06	<.008	<.02	<.04
424301109322501	04-26-05	7.7	6.9	152	12.0	9.5	<.04	.33	<.008	.06	<.04
424442109440501	04-26-05	.2	7.9	298	11.5	9.0	<.04	<.06	<.008	<.02	<.04
425056109514301	04-26-05	.2	9.7	224	12.0	8.0	<.04	<.06	<.008	E.01	<.04
425147110041801	04-25-05	.1	8.8	455	13.0	6.5	.10	<.06	<.008	<.02	<.04
425151109512201	04-25-05	5.0	6.8	294	19.0	5.0	<.04	1.14	<.008	<.02	<.04
425158109521401	04-26-05	3.9	6.7	331	15.0	5.0	<.04	2.95	<.008	<.02	<.04
425606109570801	04-26-05	.3	7.9	329	6.5	8.0	<.04	<.06	<.008	<.02	<.04
425633110142401	04-25-05	.9	7.7	437	14.0	6.0	<.04	.11	<.008	<.02	<.04

Station number	Date	2,4-DB water, fltrd 0.7u GF ug/L (38746)	CIAT, water, fltrd, ug/L (04040)	Alachlor, water, fltrd, ug/L (46342)	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldicarb sulfoxide, wat flt 0.7u GF ug/L (49314)	Aldicarb, water, fltrd 0.7u GF ug/L (49312)	Atrazine, water, fltrd, ug/L (39632)	Bromacil, water, fltrd, ug/L (04029)	Clopyralid, water, fltrd 0.7u GF ug/L (49305)	Cyanazine, water, fltrd, ug/L (04041)
423338110083201	04-25-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018
423758109574201	04-25-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018
424301109322501	04-26-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018
424442109440501	04-26-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018
425056109514301	04-26-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018
425147110041801	04-25-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018
425151109512201	04-25-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018
425158109521401	04-26-05	<.02	<.006	<.005	<.02	<.022	<.04	<.008	.56	E.11	<.018
425606109570801	04-26-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018
425633110142401	04-25-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018

PESTICIDE AND NUTRIENT SAMPLING PROGRAM—Continued

SUBLETTE COUNTY

Station number	Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazinon, water, fltrd, ug/L (39572)	Dicamba water fltrd 0.7u GF ug/L (38442)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Metsulfuron, water, fltrd, ug/L (61697)	Picloram, water, fltrd 0.7u GF ug/L (49291)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)
423338110083201	04-25-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	<.01	<.005	<.02
423758109574201	04-25-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	<.01	<.005	<.02
424301109322501	04-26-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	<.01	<.005	<.02
424442109440501	04-26-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	<.01	<.005	<.02
425056109514301	04-26-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	<.01	<.005	<.02
425147110041801	04-25-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	<.01	<.005	<.02
425151109512201	04-25-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	.01	<.005	<.02
425158109521401	04-26-05	<.003	<.005	<.04	<.006	<.006	<.03	E.38	<.01	<.009	.11
425606109570801	04-26-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	<.01	<.005	<.02
425633110142401	04-25-05	<.003	<.005	<.04	<.006	<.006	<.03	<.03	<.01	<.005	<.02

Station number	Date	cis-1,3-Dichloropropene water unfltrd ug/L (34704)	trans-1,3-Dichloropropene water unfltrd ug/L (34699)
423338110083201	04-25-05	<1.0	<1.0
423758109574201	04-25-05	<1.0	<1.0
424301109322501	04-26-05	<1.0	<1.0
424442109440501	04-26-05	<1.0	<1.0
425056109514301	04-26-05	<1.0	<1.0
425147110041801	04-25-05	<1.0	<1.0
425151109512201	04-25-05	<1.0	<1.0
425158109521401	04-26-05	<1.0	<1.0
425606109570801	04-26-05	<1.0	<1.0
425633110142401	04-25-05	<1.0	<1.0

< -- Less than.
E -- Estimated.

PESTICIDE AND NUTRIENT SAMPLING PROGRAM
(Water levels are at depth below land surface, in feet)

WESTON COUNTY

Well numberr	Station number	Geologic unit	Local identifier	Date	Time	Depth of well, feet below LSD (72008)	Depth to water level, feet below LSD (72019)	Altitude of land surface feet (72000)
NW2	435104104134201	217MWRY	45-061-30caa01	09-27-05	0730	13.6	6.2	4,220
NW1	435117104121001	217MWRY	45-061-29aca01	09-27-05	0840	18.3	12.1	4,340
NW4	435829104240801	217SKCK	46-063-15aba01	09-27-05	1630	28.5	11.4	4,355
NW5	440550104373201	217MWRY	48-065-35dbc01	09-28-05	0930	18.9	6.2	4,230
NW3	441022104143101	237SPRF	48-062-01dba01	09-27-05	1230	73	47.0	5,490

Station number	Date	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	2,4-D water, fltrd, ug/L (39732)
435104104134201	09-27-05	.4	6.2	28,600	--	19.0	4.62	<.06	E.005	<.02	<.04
435117104121001	09-27-05	--	5.0	3,650	--	--	.39	.14	<.008	<.02	<.04
435829104240801	09-27-05	.4	6.5	14,800	26.0	14.0	5.74	<.06	<.008	<.02	<.04
440550104373201	09-28-05	.5	8.1	3,320	7.0	12.5	1.05	<.06	E.004	.07	<.04
441022104143101	09-27-05	6.0	7.4	510	22.0	8.5	<.04	2.42	<.008	E.01	<.04

Station number	Date	2,4-DB water, fltrd 0.7u GF ug/L (38746)	CIAT, water, fltrd, ug/L (04040)	Alachlor, water, fltrd, ug/L (46342)	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldicarb sulfoxide, wat flt 0.7u GF ug/L (49314)	Aldicarb, water, fltrd 0.7u GF ug/L (49312)	Atrazine, water, fltrd, ug/L (39632)	Bromacil, water, fltrd, ug/L (04029)	Clopyralid, water, fltrd 0.7u GF ug/L (49305)	Cyanazine, water, fltrd, ug/L (04041)
435104104134201	09-27-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	.60	<.02	<.018
435117104121001	09-27-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018
435829104240801	09-27-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018
440550104373201	09-28-05	<.02	<.006	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018
441022104143101	09-27-05	<.02	E.004	<.005	<.02	<.022	<.04	<.007	<.02	<.02	<.018

Station number	Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Diazinon, water, fltrd, ug/L (39572)	Dicamba water fltrd 0.7u GF ug/L (38442)	Hexazinone, water, fltrd, ug/L (04025)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Metsulfuron, water, fltrd, ug/L (61697)	Picloram, water, fltrd 0.7u GF ug/L (49291)	Prometon, water, fltrd, ug/L (04037)	Simazine, water, fltrd, ug/L (04035)
435104104134201	09-27-05	<.003	<.005	<.04	<.013	<.006	<.006	<.03	<.03	<.01	<.010
435117104121001	09-27-05	<.003	<.005	<.04	<.013	<.006	<.006	<.03	<.03	<.01	<.005
435829104240801	09-27-05	<.003	<.005	<.04	<.013	<.006	<.006	<.03	<.03	<.01	<.005
440550104373201	09-28-05	<.003	<.005	<.04	<.013	<.020	<.006	<.03	<.03	<.01	<.010
441022104143101	09-27-05	<.003	<.005	<.04	<.013	<.006	<.006	E.03	<.03	.04	E.006

PESTICIDE AND NUTRIENT SAMPLING PROGRAM—Continued

WESTON COUNTY

Station number	Date	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	cis-1,3-Di-chloro-propene water unfltrd ug/L (34704)	trans-1,3-Di-chloro-propene water unfltrd ug/L (34699)
435104104134201	09-27-05	<.02	<1.0	<1.0
435117104121001	09-27-05	<.02	<1.0	<1.0
435829104240801	09-27-05	<.02	<1.0	<1.0
440550104373201	09-28-05	<.02	<1.0	<1.0
441022104143101	09-27-05	<.02	<1.0	<1.0

< -- Less than.
E -- Estimated.

SUPPLEMENTARY DATA FOR PESTICIDE AND NUTRIENT SAMPLING PROGRAM, DETECTIONS
(Water levels are at depth below land surface, in feet)

CAMPBELL COUNTY

Local identifier	Date	Time	Caffeine, water, fltrd, ug/L (50305)	Imidacloprid water, fltrd, ug/L (61695)
441638105293701	04-07-05	0900	E.009	.032
442055105315801	04-06-05	0730	.023	
444238105285201	04-06-05	0945	E.007	

CARBON COUNTY

Station number	Date	Time	Caffeine, water, fltrd, ug/L (50305)	Dichlorprop, water, fltrd 0.7u GF ug/L (49302)	Diuron, water, fltrd 0.7u GF ug/L (49300)
411303106464201	05-11-05	0900	E.009		
414719107150001	05-11-05	1330	E.015	E.01	.05

SUBLETTE COUNTY

Station number	Date	Time	Caffeine, water, fltrd, ug/L (50305)	Diuron, water, fltrd 0.7u GF ug/L (49300)
423758109574201	04-25-05	1545	E.008	
425158109521401	04-26-05	1500		.07
425606109700801	04-26-05	0900	E.010	

< -- Less than.
E -- Estimated.

SUPPLEMENTARY DATA FOR PESTICIDE AND NUTRIENT SAMPLING PROGRAM

These organic compounds are not pesticides of focus for the Pesticide and Nutrient Sampling Program (tabled on pages 157-167), but are included in the analytical methods employed by the program. With the exception of the compounds listed in bold, no detections of these compounds were found in the counties sample in Water Year 2005. The results of these detections are tabled on page 167.

PARAMETER CODE	COMPOUND NAME	MINIMUM REPORTING LEVEL[1]
45617	1,2-DICHLOROETHENE, WATER, WHOLE, RECOVERABLE, UG/L	1
82660	2,6-DIETHYLANILINE, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.006
49308	3-HYDROXYCARBOFURAN, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)	0.008
49260	ACETOCHLOR, WATER, FILTERED, RECOVERABLE, (UG/L)	0.006
49315	ACIFLUORFEN, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)	0.028
34253	ALPHA BHC (UG/L)	0.005
82673	BENFLURALIN, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.01
38711	BENTAZON, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)	0.01
49311	BROMOXYNIL, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)	0.03
04028	BUTYLATE, WATER, DISSOLVED, RECOVERABLE, UG/L	0.004
49310	CARBARYL, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)	0.02
82680	CARBARYL, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.041
49309	CARBOFURAN, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)	0.016
82674	CARBOFURAN, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.02
61188	CHLORAMBEN, METHYL ESTER, WATER, FILTERED, RECOVERABLE, (UG/L)	0.02
49306	CHLOROTHALONIL, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)	0.04
38933	CHLORPYRIFOS DISSOLVED, UG/L	0.005
49304	DACTHAL, MONO-ACID, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)	0.03
49302	**DICHLORPROP, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)**	**0.03**
62170	DESULFINYLFIPRONIL, WATER, FILTERED, (UG/L)	0.012
62169	DESULFINYLFIRONIL AMIDE, WATER, FILTERED, (UG/L)	0.013
39381	DIELDRIN, DISSOLVED (UG/L)	0.009
49301	DINOSEB, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)	0.04
82677	DISULFOTON, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.02
49300	**DIURON, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)**	**0.01**
82668	EPTC, WATER, FILTERED, LASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.004
82663	ETHALFLURALIN, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.009
82672	ETHOPROP, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.005
49297	FENURON, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)	0.019
62166	FIPRONIL	0.016
62167	FIPRONIL SULFIDE	0.013
62167	FIPRONIL SUFONE	0.024
38811	FLUOMETURON, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)	0.02
04095	FONOFOS, WATER, DISSOLVED, RECOVERABLE, UG/L	0.003
39341	LINDANE, DISSOLVED (UG/L)	0.004
38478	LINURON, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)	0.01
82666	LINURON, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.035
39532	MALATHION, DISSOLVED (UG/L)	0.027
38482	MCPA, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)	0.03
38487	MCPB, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)	0.01
38501	METHIOCARB, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)	0.010
49296	METHOMYL, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)	0.020
82686	METHYL AZINPHOS, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.05
82667	METHYL PARATHION, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.015
82671	MOLINATE, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.003
82684	NAPROPAMIDE, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.007
49294	NEBURON, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)	0.01
49293	NORFLURAZON, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)	0.02
49292	ORYZALIN, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)	0.01
38866	OXAMYL, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)	0.03
34653	P,P' DDE DISSOLVED (UG/L)	0.003
39542	PARATHION, DISSOLVED (UG/L)	0.01
82669	PEBULATE, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.004

PARAMETER CODE	COMPOUND NAME	MINIMUM REPORTING LEVEL[1]
82683	PENDIMETHALIN, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.022
82687	PERMETHRIN, CIS, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.006
82664	PHORATE, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.011
82676	PRONAMIDE, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.004
04024	PROPACHLOR, WATER, DISSOLVED, RECOVERABLE, UG/L	0.025
82679	PROPANIL, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.011
82685	PROPARGITE, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.02
49236	PROPHAM, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)	0.03
82665	TERBACIL, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.034
82675	TERBUFOS, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.02
82681	THIOBENCARB, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.010
82678	TRIALLATE, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.006
49235	TRICLOPYR, WATER, FILTERED, GF, 0.7 U, RECOVERABLE, (UG/L)	0.03
82661	TRIFLURALIN, WATER, FILTERED, GLASS FIBER, 0.7 U, RECOVERABLE, UG/L	0.009
81551	XYLENE, WATER, UNFILTERED, RECOVERABLE, UG/L	2
34506	1,1,1-TRICHLOROETHANE TOTAL (UG/L)	1
34511	1,1,2-TRICHLOROETHANE TOTAL (UG/L)	1
34496	1,1-DICHLOROETHANE TOTAL (UG/L)	1
34501	1,1-DICHLOROETHYLENE TOTAL (UG/L)	1
32103	1,2-DICHLOROETHANE TOTAL (UG/L)	1
34541	1,2-DICHLOROPROPANE TOTAL (UG/L)	1
77103	2-HEXANONE, WATER, WHOLE, TOTAL, (UG/L)	5
81552	ACETONE, WATER, WHOLE, TOTAL, (UG/L)	10
34030	BENZENE, TOTAL (UG/L)	1
32101	BROMODICHLOROMETHANE, WATER, UNFILTERED, RECOVERABLE, (UG/L)	1
32104	BROMOFORM TOTAL (UG/L)	1
77041	CARBON DISULFIDE, WATER, WHOLE, TOTAL, (UG/L)	1
32102	CARBON TETRACHLORIDE, WATER, UNFILTERED, RECOVERABLE, (UG/L)	1
34301	CHLOROBENZENE TOTAL (UG/L)	1
32105	CHLORODIBROMOMETHANE TOTAL (UG/L)	1
34311	CHLOROETHANE TOTAL (UG/L)	2
32106	CHLOROFORM TOTAL (TRICHLOROMETHANE) (UG/L)	1
77093	CIS-1,2-DICHLOROETHENE, WATER, WHOLE, TOTAL, UG/L	1
34546	TRANS-1, 2-DICHLOROETHENE, UNFILTERED, ((UG/L)	1
34541	1, 2-DICHLOROPROPANCE, UNFILTERED, (UG/L)	1
34371	ETHYLBENZENE TOTAL (UG/L)	1
34413	METHYLBROMIDE TOTAL (UG/L)	2
34418	METHYLCHLORIDE, TOTAL (CHLORIMETHANE) (UG/L)	2
34423	METHYLENE CHLORIDE, WATER, UNFILTERED, RECOVERABLE, (UG/L)	5
81595	METHYLETHYLKETONE, WATER, WHOLE, TOTAL, (UG/L)	5
78133	METHYL ISOBUTYL KETONE, WATER, WHOLE, TOTAL, (UG/L)	5
77128	STYRENE, TOTAL (UG/L)	1
34475	TETRACHLOROETHYLENE TOTAL (UG/L)	1
34010	TOLUENE, TOTAL (UG/L)	1
39180	TRICHLOROETHYLENE TOTAL (UG/L)	1
39175	VINYL CHLORIDE, UNFILTERED, (UG/L)	2
04038	2-CHLORDIAMINO-6-ETHYLAMINO-S-TRIAZINE{CEAT}	0.08
50355	2-HYDROX-4-ISOPROPLAMINO-6-ETHYLAMINO-S-TRIAZINE{OIET}	0.032
50470	2,4-D METHYLESTER (UG/L)	0.016
50299	BENDIOCARB (UG/L)	0.02
50300	BENOMYL (UG/L)	0.022
61693	BENSULFURON-METHYL (UG/L)	0.02
50305	**CAFFEINE (UG/L)**	**0.018**
04039	CHLORDIAMINO-S-TRIAZINE	0.040
50306	CHLORIMURON-ETHYL (UG/L)	0.032
04031	CYCLOATE (UG/L)	0.018
04033	DIPHENAMID (UG/L)	0.01
61694	FLUMETSULAM (UG/L)	0.04
50356	IMAZAQUIN (UG/L)	0.04
50407	IMAZETHAPYR (UG/L)	0.04
61695	**IMIDACLOPRID (UG/L)**	**0.02**
50359	METALAXYL (UG/L)	0.01
61692	3(4-CHLOROPHENYL)-1-METHYL UREA (UG/L)	0.04

PARAMETER CODE	COMPOUND NAME	MINIMUM REPORTING LEVEL[1]
50364	NICOSULFURON (UG/L)	0.04
50471	PROPICONAZOLE (UG/L)	0.01
38538	PROPOXUR (UG/L)	0.008
38548	SIDURON	0.02
50337	SULFOMETURON-METHYL (UG/L)	0.038

[1] The minimum reporting level (MRL) is the lowest concentration for which a chemical can be quantified by the analytical method. In practice, the MRL is affected by many variables associated with the sample, sampling, preservation, shipping, and laboratory conditions. Actual MRL values occasionally vary from sample to sample.

Conversion Factors

Multiply	By	To obtain
	Length	
inch (in.)	25.4×10^{-1}	millimeter (mm)
	22.54×10^{-2}	meter(m)
foot (ft)	3.048×10^{-1}	meter (m)
mile (mi)	1.609×10^{0}	kilometer (km)
	Area	
acre	4.047×10^{3}	square meter (m^2)
	4.047×10^{-1}	square hectometer (hm^2)
acre	4.047×10^{-3}	square kilometer (km^2)
square mile (mi^2)	2.590×10^{0}	square kilometer (km^2)
	Volume	
gallon (gal)	3.785×10^{0}	liter (L)
	3.785×10^{-3}	cubic meter (m^3)
	3.785×10^{0}	cubic decimeter (dm^3)
million gallons (Mgal)	3.785×10^{3}	cubic meter (m^3)
	3.785×10^{-3}	cubicc hectometer (hm^3)
cubic foot (ft^3)	2.832×10^{-2}	meter (dm^3)
cubic foot (ft^3)	2.832×10^{1}	cubic decimeter (dm^3)
cubic-foot-per-second day [($ft^3/s/d$)]	2.447×10^{3}	cubic meter (m^3)
	2.447×10^{-3}	cubic hectometer (hm^3)
acre-foot (acre-ft)	1.233×10^{3}	cubic meter (m^3)
	1.233×10^{-3}	cubic hectometer (hm^3)
	1.233×10^{-6}	cubic kilometer (km^3)
	Flow	
cubic foot per second (ft^3/s)	2.832×10^{1}	liter per second (L/s)
	2.832×10^{-2}	cubic meter per second (m^3/s)
	2.832×10^{1}	cubic decimeter per second (dm^3/s)
gallon per minute (gal/min)	6.309×10^{-2}	liter per second (L/s)
	6.309×10^{-5}	cubic meter per second (m^3/s)
	6.309×10^{-2}	cubic decimeter per second (dm^3/s)
million gallons per day (Mgal/d)	4.381×10^{-2}	cubic meter per second (m^3/s)
	4.381×10^{1}	cubic decimeter per second (dm^3/s)
	Mass	
ton, short (2,000 lb)	9.072×10^{-1}	megagram (Mg) or metric ton

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

$°F = (1.8 \times °C) + 32$

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