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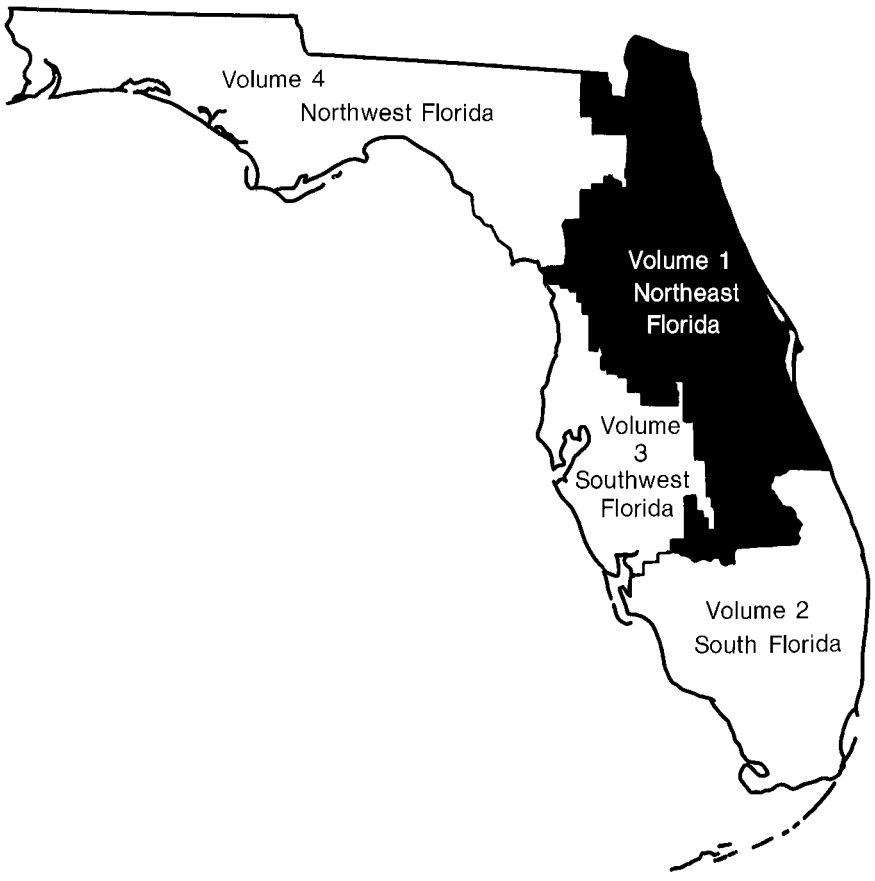
U.S. Geological Survey

Water Resources Data Florida Water Year 2001

Volume 1B. Northeast Florida Ground Water

Water-Data Report FL-01-1B



Prepared in cooperation with the State of Florida
and with other agencies or cooperators

UNITED STATES DEPARTMENT OF THE INTERIOR

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2002

PREFACE

This volume of the annual hydrologic data report of Florida is one of a series of annual reports that document 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 quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Florida are contained in four volumes:

Volume 1. Northeast Florida

Volume 2. South Florida

Volume 3. Southwest Florida

Volume 4. Northwest Florida

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13. ABSTRACT *(Maximum 200 words)*

Water resources data for the 2001 water year in Florida consist of continuous or daily discharge for 404 streams, periodic discharge for 17 streams, continuous or daily stage for 105 streams, periodic stage for 1 stream, peak stage and discharge for 41 streams; continuous or daily elevations for 11 lakes, periodic elevations for 28 lakes; continuous ground-water levels for 424 wells, periodic ground-water levels for 1,326 wells; quality-of-water data for 79 surface-water sites and 114 wells.

The data for northeast Florida include continuous or daily discharge for 150 streams, periodic discharge for 3 streams, continuous or daily stage for 22 streams, periodic stage for 0 streams; peak stage and discharge for 0 streams; continuous or daily elevations for 10 lakes, periodic elevations for 20 lakes; continuous ground water levels for 55 wells, periodic ground-water levels for 619 wells; quality-of-water data for 40 surface-water sites and 57 wells.

These data represent the National Water Data System records collected by the U.S. Geological Survey and cooperating local, State and Federal agencies in Florida.

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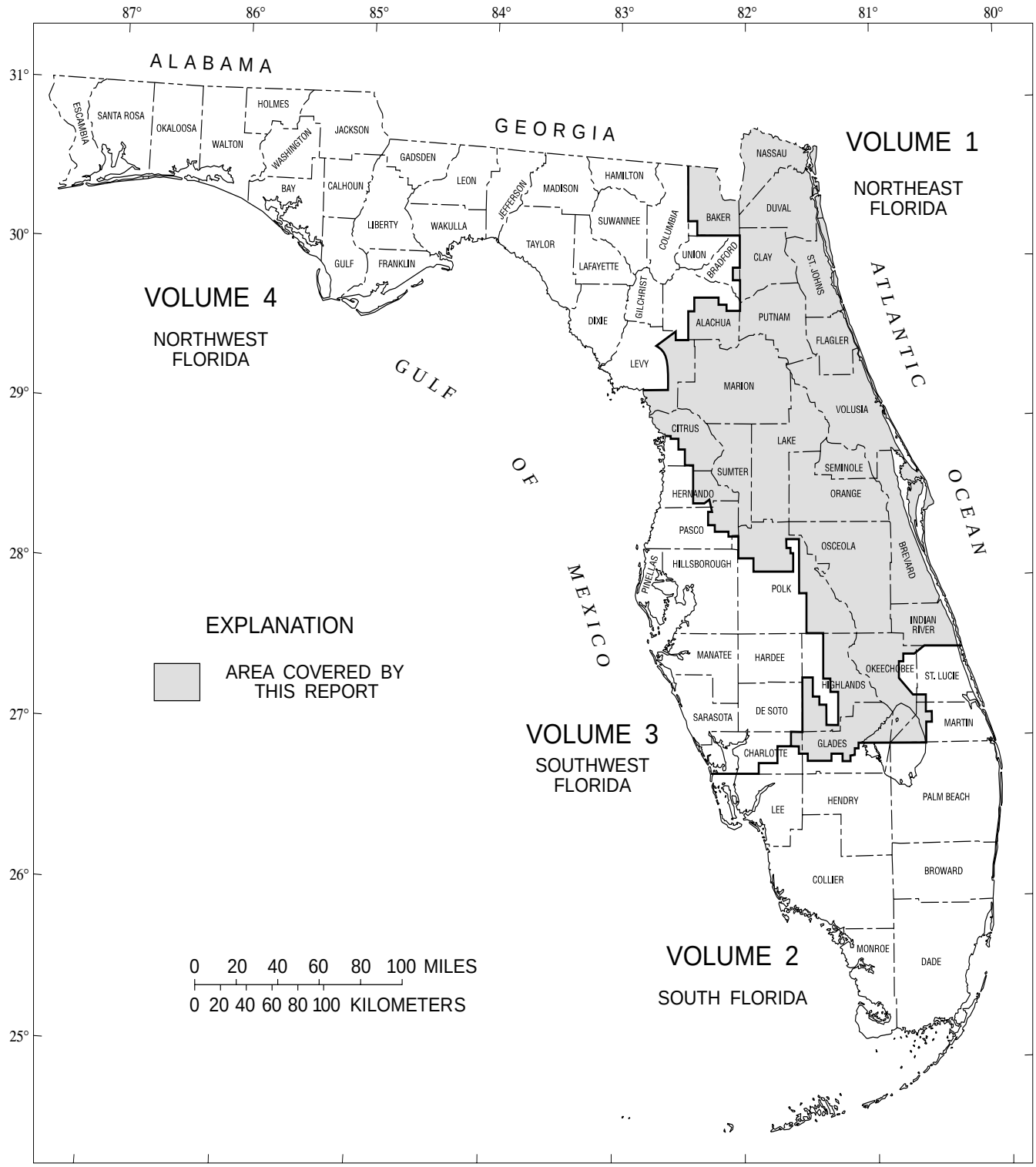

Figure 1.--Geographic area covered by this report.

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INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State agencies, obtains a large amount of data pertaining to the water resources of Florida each water year. 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 Geological Survey, the data are published annually in this report series entitled "Water Resources Data - Florida."

This report series includes records of stage, discharge, and water quality of streams, stage, contents, water quality of lakes and reservoirs, and water levels and water quality of ground-water wells. Volume 1B contains records for continuous ground-water elevations at 55 wells; periodic ground-water elevations at 146 wells; miscellaneous ground-water elevations at 473 wells; and water-quality at 57 ground-water sites. The area encompassed in this report is shown in figure 1. The data presented here represent part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Florida.

This series of annual reports for Florida began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1975 water year, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface and ground water, and ground-water levels.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Florida were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from Distribution Branch, Text Products Section, U.S. Geological Survey, Books and Open-File Reports, Federal Center, Building 41, Box 25425, Denver, CO 80225.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have 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 FL-01-1B." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the District Office at the address given on the back of the title page or by telephone (407)865-7575.

COOPERATION

The U.S. Geological Survey and agencies of the State of Florida have had cooperative agreements for the collection of water-resource records since 1930. Organizations that assisted in collecting the data in this report through cooperative agreement with the Survey are:

U.S. Army Corps of Engineers, Jacksonville District
Florida Game and Fresh Water Fish Commission
St. Johns River Water Management District
South Florida Water Management District
Southern Division Naval Facilities Engineering Command, Charleston, SC
Southwest Florida Water Management District
City of Cocoa
City of Daytona Beach
City of Jacksonville
Jacksonville Electric Authority
Lake County Water Authority
Reedy Creek Improvement District

Organizations that provided data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

RAINFALL: Rainfall during the 2001 water year was below normal. Based on rainfall data at six NOAA stations, the rainfall for the 12-month period, from October 2000 through September 2001, ranged from 11.32 in. above normal at Winter Haven to 6.95 in. below normal at Ocala. The following summary lists departure from the 30-year (1961-1990) normal for each of the stations.

Departure from the 30-year normal rainfall (1961-1990)

	October-December		January-March		April-June		July-September		Water Year	
	Total		Total		Total		Total		Total	
Station	Rainfall	Departure	Rainfall	Departure	Rainfall	Departure	Rainfall	Departure	Rainfall	Departure
Jacksonville AP	3.15	-4.66	7.07	-3.85	8.77	-3.24	27.92	7.34	46.91	-4.41
Ocala	2.32	-4.79	11.15	.73	8.76	-5.36	22.41	2.47	44.64	-6.95
Daytona Beach	2.87	-6.69	11.24	2.48	7.31	-4.36	29.23	11.33	50.65	2.76
Orlando	4.01	-2.86	4.60	-3.93	15.58	-2.91	31.57	11.53	55.76	7.65
Winter Haven	4.73	-1.60	*6.63	-1.75	11.17	-1.36	36.62	16.03	59.15	11.32
Vero Beach	6.73	-4.49	6.14	-2.10	9.32	-3.92	*26.48	6.10	46.80	-4.41

*-Partial data - appended to average and/or total values computed with 1-9 daily values missing (March, Winter Haven), (September, Vero Beach).

GROUND-WATER LEVELS: Figure 2 shows the locations of 18 selected ground-water wells which provide a general summary of hydrologic conditions in the the Upper Floridan aquifer in north-central Florida. Mean water levels and the range of water levels for the current water year and for the period of record are listed in table 1.

The average length of record for all 18 selected wells in this summary is 40 years (table 1). The longest period of record among the18 wells is 69 years, which was collected on the Sharpes Ferry well in Marion County (table 1 and fig. 2, map no. 8) starting in 1933. The record on four other wells begins as early as the late 1930's and early 1940's. The shortest period of record in this summary is for the Humphreys Mining well in Nassau County (table 1 and fig. 2, map no. 18), which includes 17 years of record starting in 1985.

Seasonal Patterns: Water levels in the 18 wells presented in this report historically had a range of about 4.5 ft each year. The largest range of water levels (7.9 ft) during the period of record was in well OR-47 in Orange County (table 1 and fig. 2, map no. 5); the smallest range (1.5 ft) was in well RD-77-G in Putnam County (table 1 and fig. 2, map no. 13). The ranges in water levels in the 18 wells during the current water year averaged 5.1 ft and were within 4.6 ft of the long-term average.

Historically, throughout most of the area covered by this report, seasonal water-level maximums are observed in the months of September and October each year and seasonal minimums are observed in the months of May and June. Water levels in wells in the northeast counties covered here (table 1 and fig. 2, map nos. 12-18) tend toward seasonal maximums in the months of December through April and seasonal minimums in the later months of summer and early fall (July through October).

Annual Patterns: Over the period of record, the typical altitude of water levels for all 18 selected wells averages about 48.6 ft above mean sea level (msl) and ranges from a high of about 127 ft msl for the Lake Alfred Deep well in Polk County (table 1 and fig. 2, map no. 1), and to a low of about 15 ft msl for the USGS Flagler-14 well in Flagler County (table 1 and fig. 2, map no. 12). Generally, water levels in wells in the Upper Floridan aquifer are highest in an area encompassing the northern part of Polk County, the southern part of Lake and Sumter Counties, and the western part of Orange County; levels are lowest in Flagler and Putnam Counties, and northern Lake County.

Average water levels for the current year were lower than averages for the period of record at all of the 18 wells shown . Annual water levels for all 18 wells averaged 44.1 ft msl for the current year, which is lower than the average for the period of record.

Generally, water levels in the 18 selected ground-water wells showed a decrease from 2000 levels. Of the 18 wells presented, water levels in 14 were below the previous water-year mean. The departure from the 30-year average rainfall in 2001 for the six rainfall stations presented in the table above averaged 5.1 inches below normal, and ranged from 5.13 inches above the long term (30-year) average at Winter Haven to 18.38 inches below the long-term (30-year) average at Ocala. The change in average departure for these six rainfall stations from 2000 to 2001 was 2.5 inches (from an average deficit of 7.6 inches in 2000 to an average deficit of 5.1 inches in 2001 from the 30-year average).

Table 1: Summary of water levels at selected wells for the period of record and water-year 2001. [ft, feet; msl, mean sea level]

Map No.	Well Number and Name	Period of Record			Water-Year 2001			
		Beginning Year	Mean Water Level (ft msl)	Mean Annual Range (ft)	Mean Water Level (ft msl)	Range (ft)	Change From Previous Year (ft)	Departure from Period of Record Mean (ft)
Continuous water- level monitoring								
1.	281008081441801 Lake Alfred Deep Well near Lake Alfred (Polk)	1959	127.0	5.4	124.2	7.3	-1.5	-2.8
2.	281714081093001 Lake Joel Well near Ashton (Osceola)	1973	43.5	5.1	40.3	5.9	- .9	-3.2
3.	282127082022501 Cumpressco Ranch Well near Tarrytown (Sumter)	1959	90.6	6.4	86.8	12.1	+1.2	-3.8
4.	283249081053201 Bithlo-1 Well at Bithlo (Orange)	1960	36.0	4.8	32.4	5.5	-1.0	-3.6
5.	283253081283401 OR-47 Well at Orlo Vista (Orange)	1947	61.6	7.9	50.9	4.9	-4.1	-10.7
6.	284842081533001 College Street Well at Leesburg (Lake)	1973	64.2	5.7	60.8	7.2	-2.4	-3.4
7.	285102082204001 DOT-41 Observation Well at Inverness (Citrus)	1961	30.0	4.0	23.2	3.8	-1.9	-6.8
8.	291115081592501 Sharpes Ferry Well, Marion 5 near Ocala (Marion)	1933	47.9	3.3	42.6	2.8	-1.9	-5.3
Periodic water- level monitoring								
9.	271150081054401 GL-155 Well near Brighton (Glades)	1971	47.0	4.2	45.1	5.4	+.1	-1.9
10.	273127080481401 OK-1 Well at Fort Drum (Okeechobee)	1977	43.8	4.1	41.4	5.1	- .9	-2.4
11.	274607080493001 IR-189 Well near Yeehaw Junction (Indian River)	1976	41.8	4.4	39.2	6.2	-1.3	-2.6
12.	292750081152001 USGS Flagler 14 at Bunnell (Flagler)	1936	14.9	2.5	12.0	4.2	-.1	-2.9
13.	292948081503001 Well RD-77-G near Orange Springs (Putnam)	1982	19.5	1.5	19.4	1.7	+.4	-.1
14.	300656081463401 Local Number C-94 USGS Test Well near Orange Park (Clay)	1974	35.0	5.5	29.0	6.9	+.1	-6.0
15.	300758081230501 Local Number SJ-5. G. Oesterreicher Well near Palm Valley (St. Johns)	1944	37.3	4.9	28.2	6.2	-.4	-9.1
16.	301535082162001 Local Number B-11 USGS Well at Sanderson (Baker)	1963	54.4	3.8	48.6	1.6	-.8	-5.8
17.	302304081383202 Local Number D-122A City of Jacksonville Panama Park Well at Jax (Duval)	1940	41.0	3.8	32.4	2.7	-.6	-8.6
18.	304410081592101 Local Number N-120 Humphreys Mining No. 2 well near Boulogne (Nassau)	1985	40.5	3.7	37.1	2.0	-.4	-3.4

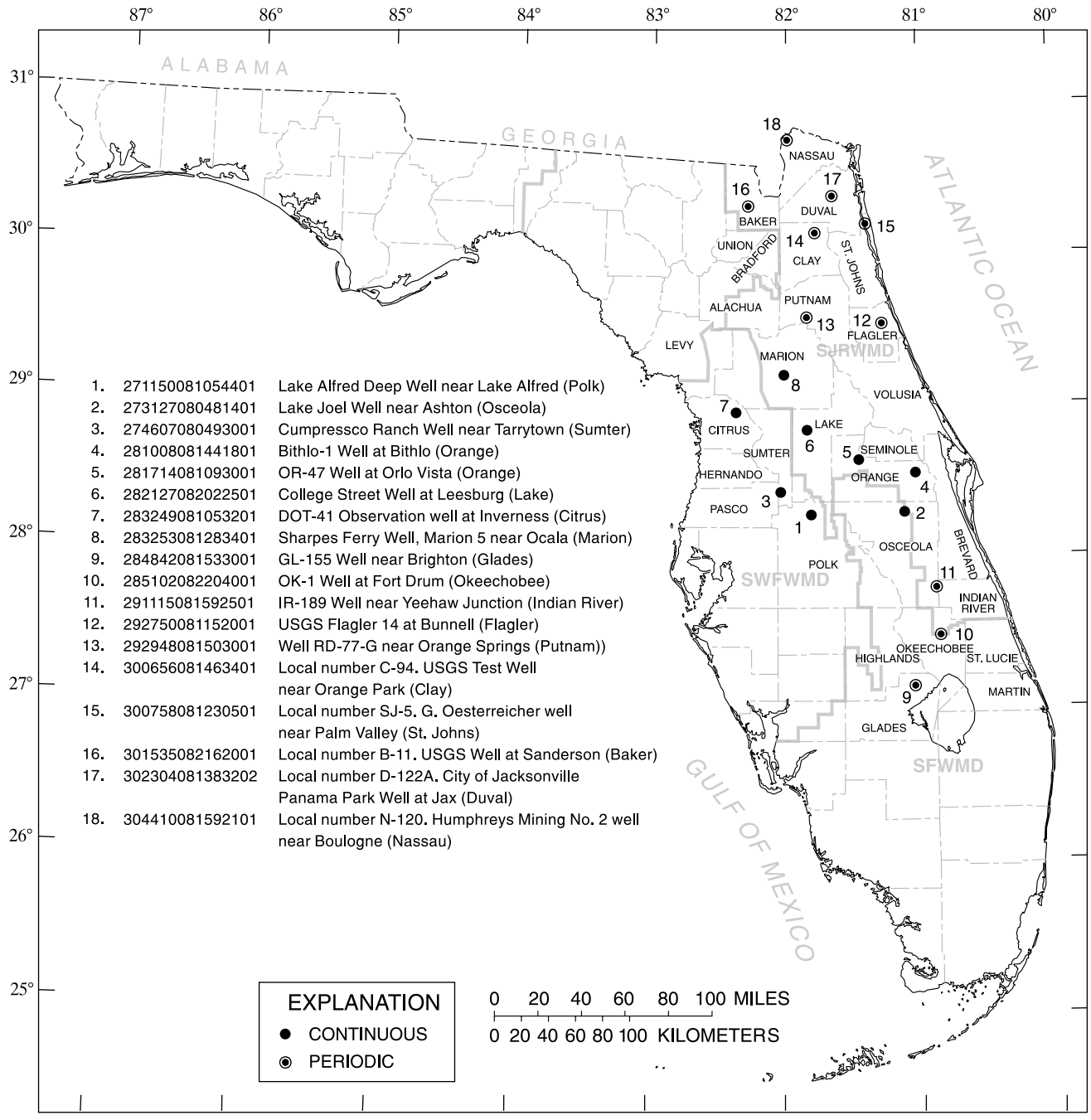

Figure 2.--Location of wells for long-term hydrographs.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the streamflow representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activities. At 10 of these sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the affects of acid deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program can be found at http://water.usgs.gov/hbn/.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations were operated in the Mississippi, Columbia, Colorado, and Rio Grande. From 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia so that a network of 5 stations could be implemented on the Yukon River. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals. Additional information about the NASQAN Program can be found at at http://water.usgs.gov/nasqan/.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 225 precipitation chemistry monitoring sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN Program, as well as all data from the individual sites, can be found at http://bqs.usgs.gov/acidrain/.

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey 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; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 59 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 will be 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 decision making by water-resources managers 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 can be found at http://water.usgs.gov/nawqa/nawqa_home.html.

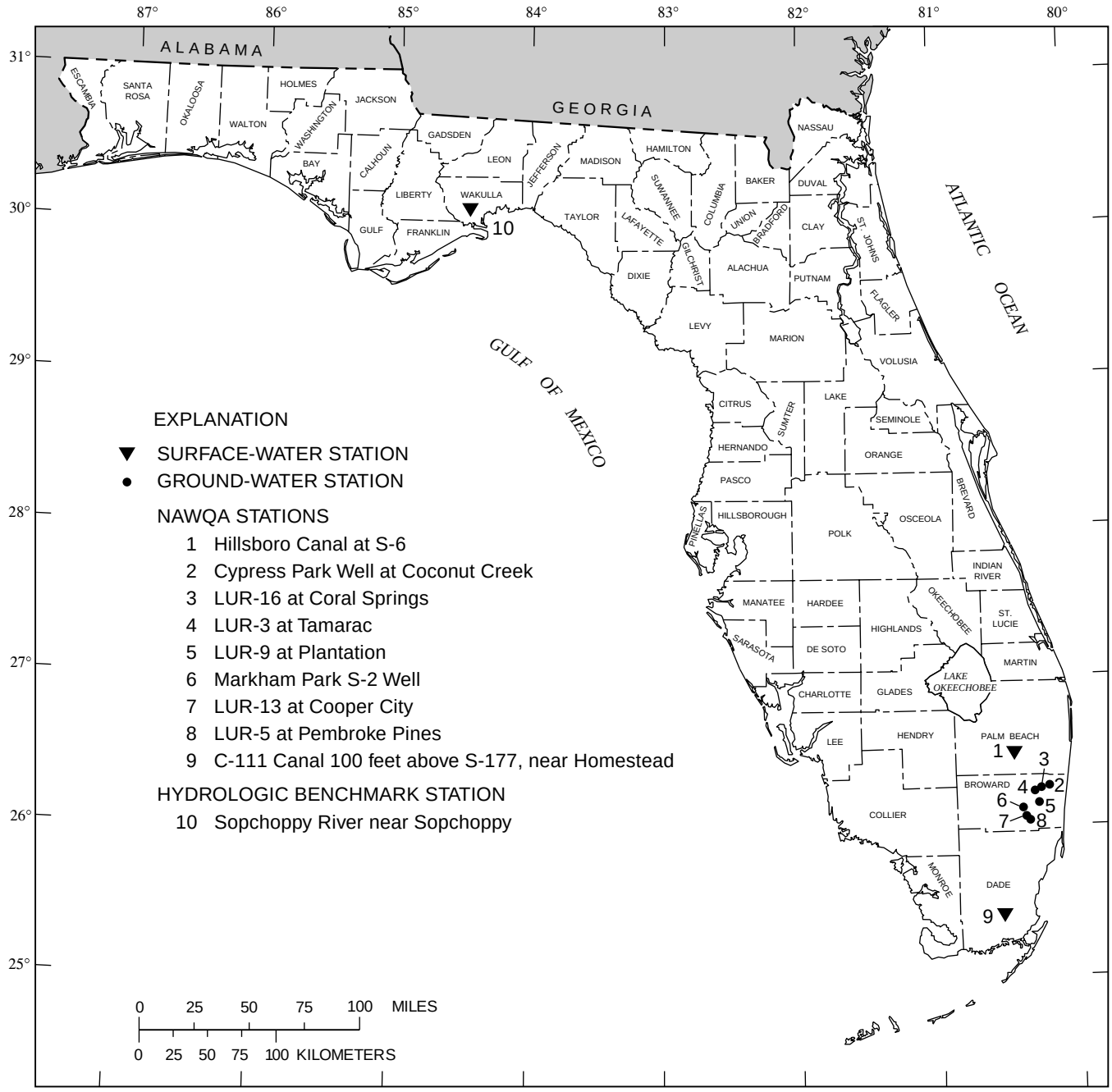

Figure 3.--NAWQA stations in the State of Florida.

Latitude-Longitude System

The identification numbers for wells are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure 4.)

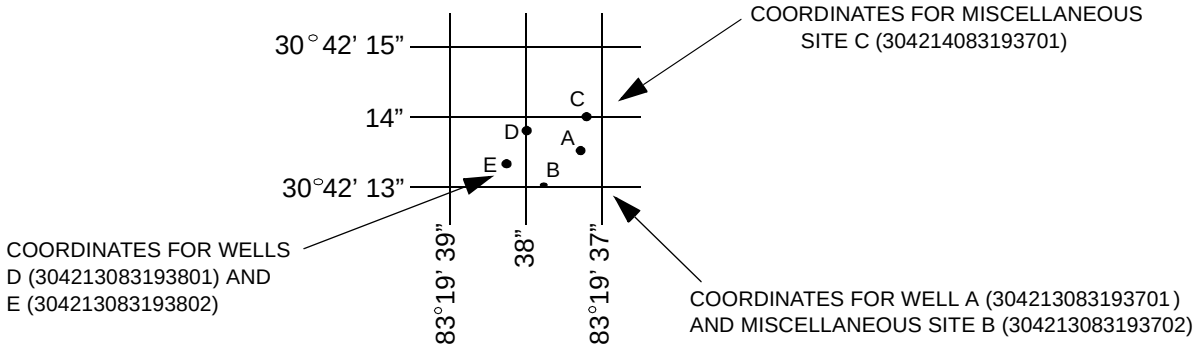

Figure 4.--System for numbering wells and miscellaneous sites.
(latitude and longitude)

A second well-numbering system used in Florida utilizes 7 l/2-minute quadrangles within the State. The quadrangles are numbered from west to east, and lettered from south to north, omitting the letters "I" and "O." The designation for each quadrangle is determined by the method "Read Right, Up." Wells are numbered serially within each quadrangle. This local well number is shown immediately after the primary well number.

Well records furnished by the State of Florida also include the well number that is based on an indexing system used by the State Water Control Board.

Records of Ground-Water Levels

Ground-water level data from a national network of observation wells are given in this report. The records include data from wells equipped with water-level recorders and data from wells where water levels are measured periodically.

Data Collection and Computation

Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the table. The secondary identification number is the local well number, an alphanumeric number, derived from the township-range location of the well.

Water-level records are obtained from direct measurements with a steel tape, pressure gage, or an electronic water-stage recorder. The water-level measurements in this report are given in feet above National Geodetic Vertical Datum of 1929 or in some tables as feet below 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 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 fifth day and the end of each month (EOM).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 to water of several hundred feet, the error of 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 to a tenth of a foot or a larger unit.

Data Presentation

Each well record consists of two parts, the station description and the data table of water levels observed during the water year. The description of the well is presented first through use of descriptive headings preceding the tabular data. The following comments clarify information presented under the various headings.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); a landline location designation; the hydrologic-unit number; the distance and direction from a geographic point of reference; and the owner's name.

AQUIFER.--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and/or screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other 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 periodic or continuous record.

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so on), 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 (or below) National Geodetic Vertical Datum of 1929 (NGVD of 1929); it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It should identify wells that also are water-quality observation wells, and may be used to acknowledge the assistance of local (non-Survey) observers.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the Geological Survey, may be noted.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels of the period of published record, with reference to National Geodetic Vertical Datum of 1929 and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet above National Geodetic Datum of 1929 and all taped measurements of water level are listed. For wells equipped with recorders, only abbreviated tables are published; generally, maximums are listed for every fifth day and at the end of the month (EOM). The highest water level of the calendar and water year for complete record is shown on a line below the abbreviated table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level.

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that, for most sampling sites, they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes slowly; therefore, for most general purposes, one annual sampling, or only a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate concentration. In the special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some counties but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years. Most methods for collecting and analyzing water samples are described in the "U.S. Geological Survey TWRI publications referred to in the "On-site Measurements and Sample Collection" and the "Laboratory Measurements" sections in this data report. In addition, the TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure 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.

Data Presentation

The records of ground-water quality are published in a section titled QUALITY OF GROUND WATER immediately following the ground-water-level records for each county. Data for quality of ground water are listed alphabetically by County, and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The REMARK codes listed for surface-water-quality records are also applicable to ground-water-quality records.

Remark Codes

The following remark codes may appear with the water-quality data in this section:

PRINT OUTPUT	REMARK
E	Estimated value.
>	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.
ND	Material specifically analyzed for but not detected.
K	Results based on colony count outside the acceptance range (non-ideal colony count).
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted).
D	Biological organism count equal to or greater than 15 percent (dominant).
V	Analyte was detected in both the environmental sample and the associated blanks
&	Biological organism estimated as dominant.

Rounding Clarification

Values for some constituents analyzed by routine methods are tabulated with extraneous trailing zeros that are not significant digits. Extraneous zeros result because data obtained from low-level methods that have better (lower) detection limits are stored under the same parameter code as data obtained by routine analytical methods. Precision varies for different analytical methods used to determine the same constituent. The presence of trailing zeroes after the decimal in values printed in this report does not necessarily indicate that the method used for the determination is as precise as the level implied by the rightmost zero.

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 at:

http://water.usgs.gov

Some water-quality and ground-water data also are available through the WWW. In addition, data can be provided in various machine readable formats on magnetic tape or 3-1/2 inch floppy disk. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division Offices (See address on the back of the title page).

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, 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 on the inside of the back cover.

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.

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.

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 to 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 weight percent of the hydrogen substituted chlorine.

Artificial substrate is a device that is purposely 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 taken. 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 the 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")

Bacteria are microscopic unicellular organisims, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while 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.

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 peaks per year will be published.

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.

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

Bedload discharge (tons per day) is 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" and "Sediment")

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

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 which are autotrophic (plants). This is also called the Autotrophic Index.

Blue-green algae (*Cyanophyta*) are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample. (See also "Phytoplankton")

Bottom material (See "Bed material")

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 are generally reported as cells or units per milliliter (mL) or liter (L).

Cells volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are frequently used 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 on 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:

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

pi is the ratio of the circumference to the diameter of a circle; pi = 3.14159…
From cell volume, total algal biomass expressed as biovolume ($\mu m^3/mL$) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes over all species.

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

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 warm-blooded animals. Clostridial spores are being used experimentally as an indicator of past fecal contamination and 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 waters 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. (See also "Aquifer")

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 downstream from a gaging station that physically influences 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-feet" sometimes is used synonymously with "cubic feet 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 are numerically 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 concentration of suspended sediment passing a stream cross section during a 24-hour day. (See also "Daily mean suspended-sediment concentration," "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 periodic sample or 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 are usually 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 UTM coordinates. (See also "Gage datum," "Land-surface datum," "National Geodetic Vertical Datum of 1929," and "North American Vertical Datum of 1988")

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample. (See also "Phytoplankton")

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 sediments or other constituents suspended or dissolved in the water) that passes a cross section in a stream channel, canal, pipeline, etc., 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 chemical constituents, 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 0.4926 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")

Enterococcus bacteria are commonly found in the feces of humans and other warm-blooded 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 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 are generally considered pollution sensitive, the index usually decreases with pollution.

Escherichia coli (E. coli) are bacteria present in the intestine and feces of warm-blooded 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. 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 qualitatively identified 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 (<).

Euglenoids (*Euglenophyta*) are a group of algae that are usually 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 semi-volatile and extractable by ethyl acetate from air-dried streambed sediments. 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 sediments.

Fecal coliform bacteria are present in the intestine or feces of warm-blooded animals. They are often 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 intestine of warm-blooded 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")

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 not exceeded. For example, the 90th percentile of river flow is greater than or equal to 90 percent of all recorded flow rates.

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 larger than the maximum depth of water. Because the gage datum itself is not an actual physical object, the datum usually is 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 is often 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. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

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.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample. (See also "Phytoplankton")

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 is commonly 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.co-ops.nos.noaa.gov/tideglos.html*

Hilsenhoff's Biotic Index (HBI) is an indicator of organic pollution which 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 benchmark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a benchmark station may be used to separate effects of natural from human-induced changes in other basins that have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped benchmark basin.

Hydrologic index stations referred to in this report are four 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.), 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 uniformly distributed on it. (See also "Annual runoff")

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

Laboratory Reporting Level (LRL) is generally 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 non-detection 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 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 based on the most current quality-control data and may, therefore, change. [Note: In several previous NWQL documents (Connor and others, 1998; NWQL Technical Memorandum 98.07, 1998), the LRL was called the non-detection value or NDV—a term that is no longer used.)

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

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 web site: http://www.co-ops.nos.noaa.gov/tideglos.html*

Macrophytes are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that are usually 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.

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 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.

Methylene blue active substances (MBAS) are apparent detergents. 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 mg/L 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 (Timme, 1995).

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 of 1929) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It was formerly 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.

Nephelometric turbidity unit (NTU) is the measurement for reporting turbidity that is based on use of a standard suspension of Formazin. Turbidity measured in NTU uses nephelometric methods that depend on passing specific light of a specific wavelength through the sample.

North American Vertical Datum of 1988 (NAVD 1988) is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the U.S. This datum was established in 1991 by minimum-constraint adjustment of the Canadian**,** Mexican, and U.S. 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 sediments. May be reported as dissolved organic carbon (DOC), particulate organic carbon (POC), or total organic carbon (TOC).

Organic mass or volatile mass of the 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 utilizes 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

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. 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 to 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 determined by using a clinometer to estimate left and right bank shading. The values are added together and divided by 180 to determine percent shading relative to a horizontal surface.

Periodic-record station is a site where stage, discharge, sediment, chemical, physical, or other hydrologic measurements 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. While 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 are termed "acidic," and solutions with a pH greater than 7 are termed "basic." Solutions with a pH of 7 are neutral. The presence and concentration of many dissolved chemical constituents found in water are, in part, influenced by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms are also influenced, in part, by the hydrogen-ion activity of water.

Phytoplankton is the plant part of the plankton. They are usually 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 are commonly 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.

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. 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 in unenriched waters. 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. 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 an element 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.

Recoverable from bed (bottom) material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion 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 non-exceedance 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 non-exceedances of the $7Q_{10}$ occur less than 10 years after the previous non-exceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous non-exceedance. 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")

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 used to denote location along a river.

Runoff is the quantity of water that is discharged ("runs off") from a drainage basin in 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")

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. See conversion of units page (inside back cover) for identification of the datum used in this report.

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 influenced by environmental and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

Seven-day 10-year low flow (7Q10) is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-run average. The recurrence interval of the 7Q10 is 10 years; the chance that the annual 7-day minimum flow will be less than the 7Q10 is 10 percent in any given year. (See also "Recurrence interval" and "Annual 7-day minimum")

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.

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/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 waters, to evaluate mixing of different waters, 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 (<2mm, sand or finer). Below are the class categories expressed as percent covered by fine sediment:

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

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 ft) of the bed material such as that material which is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is operationally defined as the 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 suspended water-sediment sample that is retained on a 0.45-micrometer membrane filter 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 the 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 sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. Determinations of "suspended, recoverable" constituents are made either by directly analyzing the suspended material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent. (See also "Suspended")

Suspended sediment is the sediment maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid. (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 ft 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/day) 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, 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, based on determinations of (1) dissolved and (2) total concentrations of the constituent. (See also "Suspended")

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.

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 richness is the total number of distinct species or groups and usually decreases with pollution. (See also "Percent Shading")

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical 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:	Arthropoda
Class:	Insecta
Order:	Ephemeroptera
Family:	Ephemeridae
Genus:	*Hexagenia*
Species:	*Hexagenia limbata*

Temperature preferences:

Cold – preferred water temperature for the species is less than 20 °C or spawning temperature preference less than 16 °C and native distribution is considered to be predominantly north of 45° N. latitude.

Warm – preferred water temperatures for the species is greater than 20 °C or spawning temperature preference greater than 16 °C and native distribution is considered to be predominantly south of 45° N. latitude.

Cool – intermediate between cold and warm water temperature preferences.

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 tons 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 warm-blooded 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 mL 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 "Sediment," "Suspended sediment," "Suspended-Sediment Concentration," "Bedload," and "Bedload discharge")

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")

Trophic group:

Filter feeder – diet composed of suspended plant and/or animal material.

Herbivore – diet composed predominantly of plant material.

Invertivore – diet composed predominantly of invertebrates.

Omnivore – diet composed of at least 25-percent plant and 25-percent animal material.

Piscivore – diet composed predominantly of fish.

Turbidity is the reduction in the transparency of a solution due to the presence of suspended and some dissolved substances. The measurement technique records the collective optical properties of the solution that cause light to be scattered and attenuated rather than transmitted in straight lines; the higher the intensity of scattered or attenuated light, the higher the value of the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU). Depending on the method used, the turbidity units as NTU can be defined as the intensity of light of a specified wavelength scattered or attenuated by suspended particles or absorbed at a method specified angle, usually 90 degrees, from the path of the incident light. Currently approved methods for the measurement of turbidity in the USGS include those that conform to EPA Method 180.1, ASTM D1889-00, and ISO 7027. Measurements of turbidity by these different methods and different instruments are unlikely to yield equivalent values. Consequently, the method of measurement and type of instrument used to derive turbidity records should be included in the "REMARKS" column of the Annual Data Report.

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 pathlength of UV light through a sample.

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 are often 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 (U.S. Environmental Protection Agency, 1996).

Water table is the level in the saturated zone at which the pressure is equal to the atmospheric pressure.

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

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, 2001, is called the "2001 water year."

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 are often 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")

TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS OF THE U.S. GEOLOGICAL SURVEY

The U.S.G.S. publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, section A of book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S.G.S., Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be made in the form of a check or money order payable to the "U.S. Geological Survey." Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and mention the "U.S. Geological Survey Techniques of Water-Resources Investigations."

Book 1. Collection of Water Data by Direct Measurement

Section D. Water Quality

1-D1. *Water temperature—influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J.F. Ficke, and G. F. Smoot: USGS–TWRI book 1, chap. D1. 1975. 65 p.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W. Wood: USGS–TWRI book 1, chap. D2. 1976. 24 p.

Book 2. Collection of Environmental Data

Section D. Surface Geophysical Methods

2-D1. *Application of surface geophysics to ground-water investigations,* by A.A. R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS–TWRI book 2, chap. D1. 1974. 116 p.

2-D2. *Application of seismic-refraction techniques to hydrologic studies,* by F.P. Haeni: USGS–TWRI book 2, chap. D2. 1988. 86 p.

Section E. Subsurface Geophysical Methods

2-E1. *Application of borehole geophysics to water-resources investigations,* by W.S. Keys and L.M. MacCary: USGS–TWRI book 2, chap. E1. 1971. 126 p.

2-E2. *Borehole geophysics applied to ground-water investigations,* by W.S. Keys: USGS–TWRI book 2, chap. E2. 1990. 150 p.

Section F. Drilling and Sampling Methods

2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells,* by Eugene Shuter and W.E. Teasdale: USGS–TWRI book 2, chap. F1. 1989. 97 p.

Book 3. Applications of Hydraulics

Section A. Surface-Water Techniques

3-A1. *General field and office procedures for indirect discharge measurements,* by M.A. Benson and Tate Dalrymple: USGS–TWRI book 3, chap. A1. 1967. 30 p.

3-A2. *Measurement of peak discharge by the slope-area method,* by Tate Dalrymple and M.A. Benson: USGS–TWRI book 3, chap. A2. 1967. 12 p.

3-A3. *Measurement of peak discharge at culverts by indirect methods,* by G.L. Bodhaine: USGS–TWRI book 3, chap. A3. 1968. 60 p.

3-A4. *Measurement of peak discharge at width contractions by indirect methods,* by H.F. Matthai: USGS-TWRI book 3, chap. A4. 1967. 44 p.

3-A5. *Measurement of peak discharge at dams by indirect methods,* by Harry Hulsing: USGS–TWRI book 3. chap. A5. 1967. 29 p.

3-A6. *General procedure for gaging streams,* by R.W. Carter and Jacob Davidian: USGS–TWRI book 3, chap. A6. 1968. 13 p.

3-A7. *Stage measurement at gaging stations,* by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A7. 1968. 28 p.

3-A8. *Discharge measurements at gaging stations,* by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A8. 1969. 65 p.

3-A9. *Measurement of time of travel in streams by dye tracing,* by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS–TWRI book 3, chap. A9. 1989. 27 p.

3-Al0. *Discharge ratings at gaging stations,* by E.J. Kennedy: USGS–TWRI book 3, chap. A10. 1984. 59 p.

3-A11. *Measurement of discharge by the moving-boat method,* by G.F. Smoot and C.E. Novak: USGS–TWRI book 3, chap. A11. 1969. 22 p.

3-A12. *Fluorometric procedures for dye tracing,* Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS–TWRI book 3, chap. A12. 1986. 34 p.

3-A13. *Computation of continuous records of streamflow,* by E.J. Kennedy: USGS–TWRI book 3, chap. A13. 1983. 53 p.

3-A14. *Use of flumes in measuring discharge,* by F.A. Kilpatrick and V.R. Schneider: USGS–TWRI book 3, chap. A14. 1983. 46 p.

3-A15. *Computation of water-surface profiles in open channels,* by Jacob Davidian: USGS–TWRI book 3, chap. A15. 1984. 48 p.

3-A16. *Measurement of discharge using tracers,* by F.A. Kilpatrick and E.D. Cobb: USGS–TWRI book 3, chap. A16. 1985. 52 p.

3-A17. *Acoustic velocity meter systems,* by Antonius Laenen: USGS–TWRI book 3, chap. A17. 1985. 38 p.

3-A18. *Determination of stream reaeration coefficients by use of tracers,* by F.A. Kilpatrick, R.E. Rathbun, Nobuhiro Yotsukura, G.W. Parker, and L.L. DeLong: USGS–TWRI book 3, chap. A18. 1989. 52 p.

3-A19. *Levels at streamflow gaging stations,* by E.J. Kennedy: USGS–TWRI book 3, chap. A19. 1990. 31 p.

3-A20. *Simulation of soluble waste transport and buildup in surface waters using tracers,* by F.A. Kilpatrick: USGS–TWRI book 3, chap. A20. 1993. 38 p.

3-A21 *Stream-gaging cableways,* by C. Russell Wagner: USGS–TWRI book 3, chap. A21. 1995. 56 p.

Section B. Ground-Water Techniques

3-B1. *Aquifer-test design, observation, and data analysis,* by R.W. Stallman: USGS–TWRI book 3, chap. B1. 1971. 26 p.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction,* by G.D. Bennett: USGS–TWRI book 3, chap. B2. 1976. 172 p.

3-B3. *Type curves for selected problems of flow to wells in confined aquifers,* by J.E. Reed: USGS–TWRI book 3, chap. B3. 1980. 106 p.

3-B4. *Regression modeling of ground-water flow,* by R.L. Cooley and R.L. Naff: USGS–TWRI book 3, chap. B4. 1990. 232 p.

3-B4. *Supplement 1. Regression modeling of ground-water flow --Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems,* by R.L. Cooley: USGS–TWRI book 3, chap. B4. 1993. 8 p.

3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction,* by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS–TWRI book 3, chap. B5. 1987. 15 p.

3-B6. *The principle of superposition and its application in ground-water hydraulics,* by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS–TWRI book 3, chap. B6. 1987. 28 p.

3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow,* by E.J. Wexler: USGS–TWRI book 3, chap. B7. 1992. 190 p.

3-B8. *System and boundary conceptualization in ground-water flow simulation,* by T.E. Reilly: USGS–TWRI book 3, chap. B8. 2001. 29 p.

Section C. Sedimentation and Erosion Techniques

3-C1. *Fluvial sediment concepts,* by H.P. Guy: USGS–TWRI book 3, chap. C1. 1970. 55 p.

3-C2. *Field methods for measurement of fluvial sediment,* by T.K. Edwards and G.D. Glysson: USGS–TWRI book 3, chap. C2. 1999. 89 p.

3-C3. *Computation of fluvial-sediment discharge,* by George Porterfield: USGS–TWRI book 3, chap. C3. 1972. 66 p.

Book 4. Hydrologic Analysis and Interpretation

Section A. Statistical Analysis

4-A1. *Some statistical tools in hydrology,* by H.C. Riggs: USGS–TWRI book 4, chap. A1. 1968. 39 p.

4-A2. *Frequency curves,* by H.C. Riggs: USGS–TWRI book 4, chap. A2. 1968. 15 p.

Section B. Surface Water

4-B1. *Low-flow investigations,* by H.C. Riggs: USGS–TWRI book 4, chap. B1. 1972. 18 p.

4-B2. *Storage analyses for water supply,* by H.C. Riggs and C.H. Hardison: USGS–TWRI book 4, chap. B2. 1973. 20 p.

4-B3. *Regional analyses of streamflow characteristics,* by H.C. Riggs: USGS–TWRI book 4, chap. B3. 1973. 15 p.

Section D. Interrelated Phases of the Hydrologic Cycle

4-D1. *Computation of rate and volume of stream depletion by wells,* by C.T. Jenkins: USGS–TWRI book 4, chap. D1. 1970. 17 p.

Book 5. Laboratory Analysis

Section A. Water Analysis

5-A1. *Methods for determination of inorganic substances in water and fluvial sediments,* by M.J. Fishman and L.C. Friedman, editors: USGS–TWRI book 5, chap. A1. 1989. 545 p.

5-A2. *Determination of minor elements in water by emission spectroscopy,* by P.R. Barnett and E.C. Mallory, Jr.: USGS–TWRI book 5, chap. A2. 1971. 31 p.

5-A3. *Methods for the determination of organic substances in water and fluvial sediments,* edited by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS–TWRI book 5, chap. A3. 1987. 80 p.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples,* by L.J. Britton and P.E. Greeson, editors: USGS–TWRI book 5, chap. A4. 1989. 363 p.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments,* by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS–TWRI book 5, chap. A5. 1977. 95 p.

5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments,* by L.C. Friedman and D.E. Erdmann: USGS–TWRI book 5, chap. A6. 1982. 181 p.

Section C. Sediment Analysis

5-C1. *Laboratory theory and methods for sediment analysis,* by H.P. Guy: USGS–TWRI book 5, chap. C1. 1969. 58 p.

Book 6. Modeling Techniques

Section A. Ground Water

6-A1. *A modular three-dimensional finite-difference ground-water flow model,* by M.G. McDonald and A.W. Harbaugh: USGS–TWRI book 6, chap. A1. 1988. 586 p.

6-A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model,* by S.A. Leake and D.E. Prudic: USGS–TWRI book 6, chap. A2. 1991. 68 p.

6-A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual,* by L.J. Torak: USGS–TWRI book 6, chap. A3. 1993. 136 p.

6-A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions,* by R.L. Cooley: USGS–TWRI book 6, chap. A4. 1992. 108 p.

6-A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details,* by L.J. Torak: USGS–TWRI book 6, chap. A5, 1993. 243 p.

6-A6. A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction, by Eric D. Swain and Eliezer J. Wexler: USGS–TWRI book 6, chap. A5,1996. 125 p.

Book 7. Automated Data Processing and Computations

Section C. Computer Programs

7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments,* by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS–TWRI book 7, chap. C1. 1976. 116 p.

7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water,* by L.F. Konikow and J.D. Bredehoeft: USGS–TWRI book 7, chap. C2. 1978. 90 p.

7-C3. *A model for simulation of flow in singular and interconnected channels,* by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS–TWRI book 7, chap. C3. 1981. 110 p.

Book 8. Instrumentation

Section A. Instruments for Measurement of Water Level

8-A1. *Methods of measuring water levels in deep wells,* by M.S. Garber and F.C. Koopman: USGS–TWRI book 8, chap. A1. 1968. 23 p.

8-A2. *Installation and service manual for U.S. Geological Survey manometers,* by J.D. Craig: USGS–TWRI book 8, chap. A2. 1983. 57 p.

Section B. Instruments for Measurement of Discharge

8-B2. *Calibration and maintenance of vertical-axis type current meters,* by G.F. Smoot and C.E. Novak: USGS–TWRI book 8, chap. B2. 1968. 15 p.

Book 9. Handbooks for Water-Resources Investigations

Section A. National Field Manual for the Collection of Water-Quality Data

9-A1. *National Field Manual for the Collection of Water-Quality Data: Preparations for Water Sampling,* by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A1. 1998. 47 p.

9-A2. *National Field Manual for the Collection of Water-Quality Data: Selection of Equipment for Water Sampling,* edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A2. 1998. 94 p.

9-A3. *National Field Manual for the Collection of Water-Quality Data: Cleaning of Equipment for Water Sampling,* edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A3. 1998. 75 p.

9-A4. *National Field Manual for the Collection of Water-Quality Data: Collection of Water Samples,* edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A4. 1999. 156 p.

9-A5. *National Field Manual for the Collection of Water-Quality Data: Processing of Water Samples,* edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A5. 1999, 149 p.

9-A6. *National Field Manual for the Collection of Water-Quality Data: Field Measurements,* edited by F.D. Wilde and D.B. Radtke: USGS–TWRI book 9, chap. A6. 1998. Variously paginated.

9-A7. *National Field Manual for the Collection of Water-Quality Data: Biological Indicators,* edited by D.N. Myers and F.D. Wilde: USGS–TWRI book 9, chap. A7. 1997 and 1999. Variously paginated.

9-A8. *National Field Manual for the Collection of Water-Quality Data: Bottom-material samples,* by D.B. Radtke: USGS–TWRI book 9, chap. A8. 1998. 48 p.

9-A9. *National Field Manual for the Collection of Water-Quality Data: Safety in Field Activities,* by S.L. Lane and R.G. Fay: USGS–TWRI book 9, chap. A9. 1998. 60 p.

WELL DESCRIPTIONS AND GROUND-WATER DATA

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

ALACHUA COUNTY

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
292838082073701	05-17-01	1100	A-0725 LK LOCHLOOSA AT LOCHLOOSA,FL	51.68
	09-25-01	1030		53.66
292951082174001	05-17-01	0950	THOMAS 66STA WELL NR MICANOPY	50.45
	09-26-01	1340		50.71
293252082292301	05-16-01	0850	ALTO STRAUGHN-ARCHER WELL	38.22
	09-26-01	1120		38.80
293253082055701	05-15-01	1030	DRISCOLL WELL NR LOCHLOOSA	66.90
	09-25-01	1050		68.85
293539082112601	05-15-01	1235	A-005 OWENS-ILLINOIS NO.1	66.25
	09-25-01	1210		68.56
293556082043401	05-15-01	1150	A-0071 HAWTHORNE TOWER DEEP	72.90
	09-25-01	1145		74.89
293620082362001	05-16-01	0950	USGS WELL NR NEWBERRY,FL	36.60
	09-26-01	1100		36.95
293644082244201	05-16-01	0730	A-0016 RUN MONITOR WELL NO1 AT KANAPAHA	40.51
	09-26-01	1210		41.34
293728082282401	09-26-01	1157	93722801 10S18E14 PARKER RD BAPTIST CHURCH	37.35
293943082085901	05-17-01	1147	A-0708 ALACHUA COUNTY F-5 NR ORANGE HEIGHTS,FL	72.05
	09-20-01	1400		73.87
294011082260401	05-15-01	1535	A-0713 ALACHUA CO VISA 3 AT GAINESVILLE,FL	40.30
	09-21-01	1515		40.86
294028082245301	05-23-01	1050	A-0712 VISA 2 NR GAINESVILLE,FL	40.31
	09-21-01	1540		40.89
294105082171501	05-15-01	1415	A-063 ALACHUA FAIRGROUNDS CF IN GAINESVILLE,FL	38.72
	09-25-01	1310		40.48
294339082184501	05-17-01	1340	A-0706 ALACHUA COUNTY F-3 IN GAINESVILLE, FL	33.40
	09-21-01	1430		36.04
294407082262801	05-17-01	0730	DEP SAN FELASCO HAMMOCK NR GAINESVILLE,FL	53.26
	09-26-01	0950		62.38
294530082232001	05-15-01	1540	DEERHAVEN POWER PLT WELL NR GAINESVILLE	30.68
	09-26-01	0805		37.72
294629082181301	05-17-01	1000	A-0704 ALACHUA CO F-1 WELL IN GAINESVILLE,FL	53.54
	09-21-01	1450		53.95
294640082064501	05-16-01	1410	ROD REESE NR KEYSTONE HEIGHTS	71.96
	09-25-01	1400		73.38
294839082230701	05-16-01	1310	CELLON WELL NR LA CROSSE	40.30
	09-25-01	1515		39.95
294928082355301	05-16-01	1100	94923502 08S17E03 CITY HIGH SPRINGS	31.40
	09-26-01	0730		32.49
295130082243001	05-16-01	0930	SRWMD DOF - LACROSSE TOWER NR GAINESVILLE,FL	42.91
	09-17-01	1000		39.99

KEY TO SITE LOCATIONS ON FIGURE 5
BAKER COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number
1	301535082162001	34
2	302251082194901	34
3	302620082173501	35

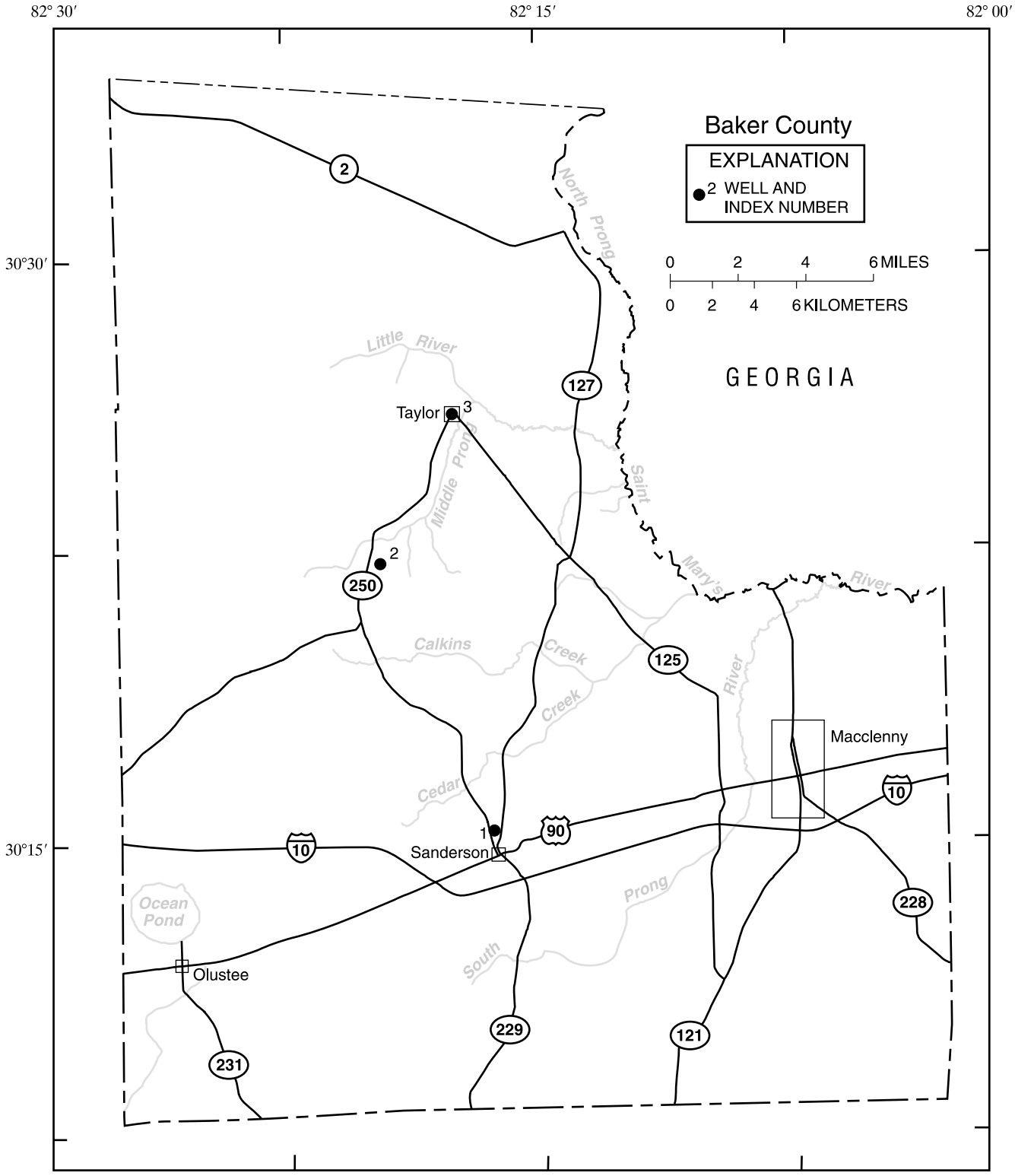

Figure 5.--Location of wells in Baker County.

BAKER COUNTY

WELL NUMBER.--301535082162001. Local Number B-11. USGS Well at Sanderson, FL.

LOCATION.--Lat 30°15'35", long 82°16'20", in SW¼NW¼SW¼ sec.1, T.3 S., R.20 E., Hydrologic Unit 03070204, 0.4 mi northwest of Sanderson Public School, and 0.7 mi north of U.S. Highway 90 in Sanderson. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 6 in., depth 825 ft, cased to 282 ft.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Land-surface datum is 157.68 ft above sea level. Measuring point: Top of 6 in. coupling, 2.30 ft above land-surface datum.

PERIOD OF RECORD.--August 1963 to September 1983 (bimonthly); October 1983 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 64.05 ft above sea level, Mar. 1, 1965; lowest measured, 47.57 ft above sea level, June 21, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	48.48	JAN 25	48.66	APR 23	49.08	JUN 21	47.57	SEP 24	48.63		
NOV 27	48.59	FEB 26	48.95	MAY 14	48.50	JUL 23	48.17	25	48.73		
DEC 18	48.42	MAR 26	49.18	21	48.72	AUG 27	48.39				

WATER YEAR 2001 LOWEST 47.57 JUN 21, 2001 HIGHEST 49.18 MAR 26, 2001

WELL NUMBER.--302251082194901. ONF Number 6. USGS Well near Taylor, FL.

LOCATION.--Lat 30°22'51", long 82°19'49", in NE¼SE¼NW¼ sec.29, T.1 S., R.20 E., Hydrologic Unit 03070204, 500 ft south of U.S. Forest Road 232, in Osceola National Forest, 700 ft east of intersection of U.S. Forest Road 232 and State Highway 250, and 5 mi south of Taylor. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 338 ft, cased to 320 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Land-surface datum is 127.77 ft above sea level (levels by L.L. Lee and Associates). Measuring point: Top edge of shelter floor, 2.70 ft above land-surface datum.

PERIOD OF RECORD.--August 1976 to September 1983; October 1983 to September 1987, December 2000 to September 2001 (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 59.73 ft above sea level, Apr. 26, 1984; lowest measured, 45.64 ft above sea level, June 21, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 18	46.36	FEB 26	46.51	APR 23	47.80	MAY 21	48.38	JUL 23	46.23	SEP 24	46.55
JAN 25	46.62	MAR 26	47.29	MAY 14	46.66	JUN 21	45.64	AUG 27	46.43	25	46.62

WATER YEAR 2001 LOWEST 45.64 JUN 21, 2001 HIGHEST 48.38 MAY 21, 2001

BAKER COUNTY--Continued

WELL NUMBER.--302620082173501. Local Number B-9. USGS Well at Taylor, FL.

LOCATION.--Lat 30°26'20", long 82°17'35", in NW¼SE¼NE¼ sec.3, T.1 S., R.20 E., Hydrologic Unit 03070204, 50 ft northeast of intersection of State Highways 125 and 250, and 200 ft northeast of General Store in Taylor. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 6 in., depth 905 ft, cased to 417 ft.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Land-surface datum is 116.30 ft above sea level. Measuring point: Top of 6 in. coupling, 2.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1963 to September 1983 (bimonthly); October 1983 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 62.50 ft above sea level, Jan. 1, 1973; lowest measured, 44.70 ft above sea level, Aug. 28, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	45.73	JAN 25	46.28	APR 23	47.11	JUN 21	45.34	SEP 24	46.13		
NOV 27	45.77	FEB 26	46.62	MAY 14	46.23	JUL 23	45.81	25	46.20		
DEC 18	45.98	MAR 26	47.04	21	46.63	AUG 27	46.08				

WATER YEAR 2001 LOWEST 45.34 JUN 21, 2001 HIGHEST 47.11 APR 23, 2001

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

BAKER COUNTY

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
301022082103301	05-14-01	1340	B-17 (BA0019)MANNING WELL NR MANNING,FL	50.73
	09-24-01	0925		51.19
301245082233001	05-11-01	1230	SRWMD B-6 US FOREST SERV-OLUSTEE TWR	49.49
	09-12-01	1105		49.39
301423082261101	05-14-01	1125	B-15	52.24
	09-24-01	1030		52.96
301618082110901	05-14-01	1113	BA0054	48.59
	09-25-01	0835		48.92
301635082234001	05-14-01	1240	SRWMD B-0004	48.65
	09-12-01	1250		48.49
301702082271401	05-14-01	1210	SRWMD B-0003	48.77
	09-12-01	1220		48.65
302115082232201	05-14-01	1305	SRWMD B-2	46.74
	09-12-01	1320		46.47
302251082194901	09-24-01	0824	B-25 ONF NO.6 FLORIDAN WELL NEAR TAYLOR,FL.	46.66
	09-25-01	0755		46.62
303235082203501	05-14-01	1242	BA-0057 EDDY FIRETOWER FLORIDAN	44.97
	09-25-01	0710		44.89

KEY TO SITE LOCATIONS ON FIGURE 6
BREVARD COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number
1	275508080510701	40
2	275955080434601	40
3	281937080442001	41
4	282945080473901	41

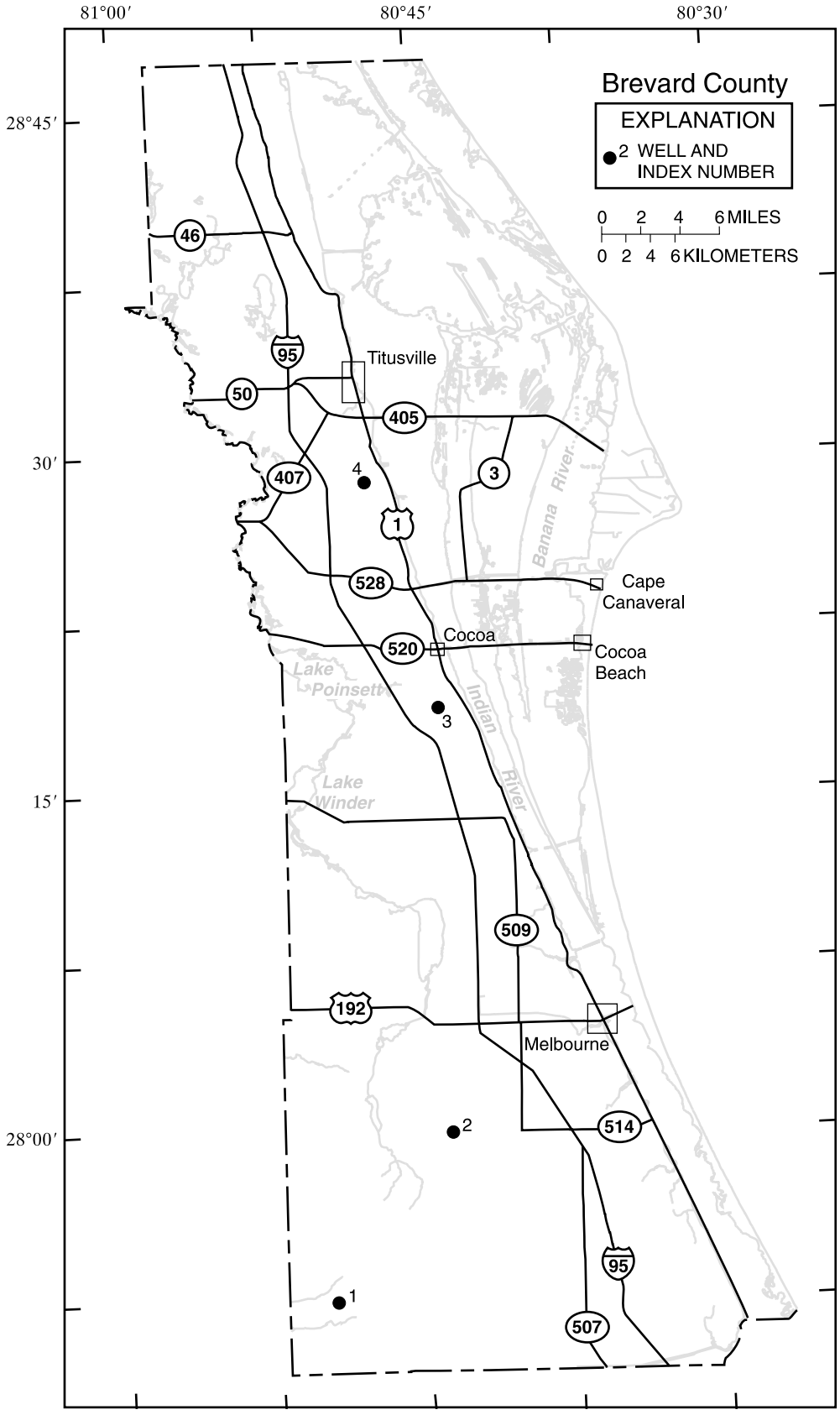

Figure 6.--Location of wells in Brevard County.

BREVARD COUNTY

WELL NUMBER.--275508080510701. Ten-Mile Ranch Well near Kenansville, FL.

LOCATION.--Lat 27°55'08", long 80°51'07", in SW¼SW¼NW¼ sec.32, T.29 S., R.35 E., Hydrologic Unit 03080101, 2,500 ft west of private road, 10 mi east of U.S. Highway 441, and 8 mi east of Kenansville. Owner: Deseret Ranches of Florida, Inc.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, irrigation, artesian well, diameter 3 in., depth 272 ft, casing length unknown.

INSTRUMENTATION.--Bimonthly measurement with pressure gage.

DATUM.--Elevation of land-surface datum is 28.07 ft above sea level. Measuring point: Top of concrete slab, 0.51 ft above land-surface datum.

PERIOD OF RECORD.--June 1956 (annually); 1957 (semiannually); May 1973 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 46.07 ft above sea level, July 11, 1957; lowest measured, 36.30 ft above sea level, May 30, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 15	39.66	JAN 11	37.53	MAR 08	37.63	MAY 08	38.40	JUL 03	39.80	AUG 29	41.83

WATER YEAR 2001 LOWEST 37.53 JAN 11, 2001 HIGHEST 41.83 AUG 29, 2001

WELL NUMBER.--275955080434601. Platt Well near Melbourne, FL.

LOCATION.--Lat 27°59'55", long 80°43'46", in NE¼NE¼NW¼ sec.4, T.29 S., R.36 E., Hydrologic Unit 03080203, on south side of extension of State Highway 514, 3.5 mi west of State Highway 509, and 9.5 mi southwest of Melbourne. Owner: Marion Platt.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geological Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, irrigation, artesian well, diameter 4 in., depth 447 ft, cased to 125 ft.

INSTRUMENTATION.--Monthly measurement with pressure gage.

DATUM.--Elevation of land-surface datum is 21.78 ft above sea level. Measuring point: Top of 4 in. tee, 1.25 ft above land-surface datum.

COOPERATION.--Since Oct. 1, 1985 data provided by St. Johns River Water Management District and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--August 1934, July 1942, November 1946 (annually); May 1947 to December 1949 (semiannually); January 1950 to November 1975 (bimonthly); December 1977 to September 1983 (bimonthly); October 1983 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 52.53 ft above sea level, Aug. 14, 1934; lowest measured, 33.53 ft above sea level, June 26, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27	40.13	JAN 26	35.48	APR 20	35.98	JUN 22	36.98	SEP 21	40.88		
NOV 29	36.13	FEB 20	35.98	MAY 15	35.43	JUL 23	38.88	25	39.33		
DEC 19	35.73	MAR 23	36.48	22	35.88	AUG 28	39.18				

WATER YEAR 2001 LOWEST 35.43 MAY 15, 2001 HIGHEST 40.88 SEP 21, 2001

BREVARD COUNTY--Continued

WELL NUMBER.--281937080442001. BR-1558 at Rockledge, FL.

LOCATION.--Lat 28°19'37", long 80°44'20", in NE¼SE¼NE¼ sec.8, T.25 S., R.36 E., Hydrologic Unit 03080101, 0.2 mi north of Eyster Blvd., 0.2 mi east of Fiske Blvd., and 2.0 mi south of State Highway 520. Owner: St. Johns River Water Management District.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 10 in., depth 180 ft, cased to 140 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape or manometer.

DATUM.--Land-surface datum is 24.12 ft above sea level. Measuring point: Top of 2 in reducer, 2.31 ft above land-surface datum.

PERIOD OF RECORD.--May 2000 to September 2000 (semiannually); December 2000 to September 2001 (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.42 ft above sea level, Sept. 24, 2001; lowest measured, 22.78 ft above sea level, May 16, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 18	24.05	FEB 21	23.45	APR 24	23.18	MAY 22	22.93	JUL 23	25.93	SEP 24	27.42
JAN 23	23.54	MAR 23	23.46	MAY 14	23.49	JUN 21	23.93	AUG 27	26.43		

WATER YEAR 2001 LOWEST 22.93 MAY 22, 2001 HIGHEST 27.42 SEP 24, 2001

WELL NUMBER.--282945080473901. BR-586 Well at Airport near Titusville, FL.

LOCATION.--Lat 28°29'45", long 80°47'39", in Delespine Grant, T.23 S., R.35 E., Hydrologic Unit 03080101, 1.0 mi west of U.S. Highway 1, 0.2 mi north of Kings Highway, and 9.0 mi south of Titusville. Owner: St. Johns River Water Management District.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 135 ft, casing length unknown.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Land-surface datum is 30.67 ft above sea level. Measuring point: Top of casing, 0.46 ft above land-surface datum.

PERIOD OF RECORD.--May 1998 to September 2000 (semiannually); December 2000 to September 2001 (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.63 ft above sea level, Sept. 24, 2001; lowest measured, 12.41 ft above sea level, May 14, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 18	14.07	FEB 21	13.53	APR 23	13.18	MAY 22	13.10	JUL 23	15.69	SEP 24	16.63
JAN 23	13.50	MAR 23	13.42	MAY 14	12.41	JUN 21	13.84	AUG 27	16.40		

WATER YEAR 2001 LOWEST 12.41 MAY 14, 2001 HIGHEST 16.63 SEP 24, 2001

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

BREVARD COUNTY

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
275003080330201	05-15-01	1150	BR-1559 FLEMING GRANT NR FELLSMERE,FL	34.99
	09-25-01	0855		39.09
275138080491801	05-15-01	0825	TUCKER T-6 REPLACEMENT WELL NR KENANSVILLE,FL	37.59
	09-26-01	1323		42.49
275210080272202	05-15-01	1356	DR0625 SEB. INLET TW SHALLOW	30.43
	09-25-01	1131		34.33
275422080374001	05-15-01	1113	BREVARD GROVES DIESEL BR0288 NR FELLEMERE,FL	35.58
	09-25-01	0838		39.94
275425080283101	05-15-01	1344	754028002	30.67
	09-25-01	1121		34.37
275435080311001	05-15-01	1227	754031001 29S38E34 343 04383 GRANT 82	29.77
	09-25-01	0944		33.77
275629080504901	05-14-01	1340	756050001 29S35E20 243 22042 KENANSVILLE NE TP	37.37
	09-26-01	1126		42.37
275948080393501	05-15-01	1037	759039005 29S37E06 322 37578 FELLSMERE NW TP	33.93
	09-25-01	0758		37.65
280008080342601	05-15-01	1300	800034072 28S37E36 424 08182 MELBOURNE EAST TP	27.24
	09-25-01	1026		33.20
280256080325601	05-15-01	1421	802032002 28S38E17 432 1645 MELBOURNE EAST 49	26.70
	09-25-01	1055		29.50
280532080514501	05-15-01	0737	805051003 27S35E31 331 30139 DEER PARK SE TP	35.92
	09-24-01	1615		40.72
280534080465101	05-15-01	0610	805046002 27S35E36 331 37472 DEER PARK SE TP	35.43
	09-24-01	1551		39.73
280648080422801	05-14-01	1611	DAN PLATT SARNO RD REPLACEMENT WELL	32.95
	09-24-01	1504		36.65
281109080373701	05-15-01	1503	811037014 26S37E33 122 18134 EAU GALLIE 09	24.79
	09-25-01	1253		28.29
281210080473001	05-14-01	1520	DUDA RANCH L-2 (812047001)	33.70
	09-24-01	1400		37.60
281447080392601	05-15-01	1515	814039076 26S36E06 444 37577 EAU GALLIE 79	24.54
	09-25-01	1307		28.14

BREVARD COUNTY--Continued

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
281905080375001	05-16-01	0732	819037196 25S37E16 212 27337 COCOA 04	19.55
	09-25-01	1425		23.15
282204080514301	05-14-01	1256	822051001 24S35E30 342 00767 LAKE POINSETT	27.08
	09-24-01	1213		30.78
282301080460601	05-14-01	1336	BR-1557 COCOA HIGH SCHOOL AT COCOA,FL	20.19
	09-24-01	1240		24.56
282423080353601	05-16-01	0701	824035001 24S37E11 444 15764 CAPE CANAVERAL TP	17.66
	09-25-01	1455		21.08
282524080422301	05-15-01	0740	MERRITT ISLAND INJECTION WELL	14.90
	09-25-01	1545		18.00
282921080404701	05-16-01	1055	BR0608 NASA UFA NR GATE 2	8.81
283627080512001	05-14-01	1017	BR-0001 USGS TEST WELL	12.92
	09-24-01	1046		16.56
283644080574903	05-30-01	1000	BR-1526 SEMINOLE RANCH	15.09
	09-24-01	1012		18.96
283732080510001	05-14-01	1045	BR0585 ASTRONAUT H.S.CF	9.30
	09-24-01	1100		12.70
283835080424501	05-16-01	0915	838042002 21S36E27 MERRITT ISLE WILDLIFE	6.04

KEY TO SITE LOCATIONS ON FIGURE 7
CITRUS COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number
1	284330082215401	46
2	284508082174601	46
3	285102082204001	47
4	285121082245401	47
5	285414082284201	48
6	285608082233401	48

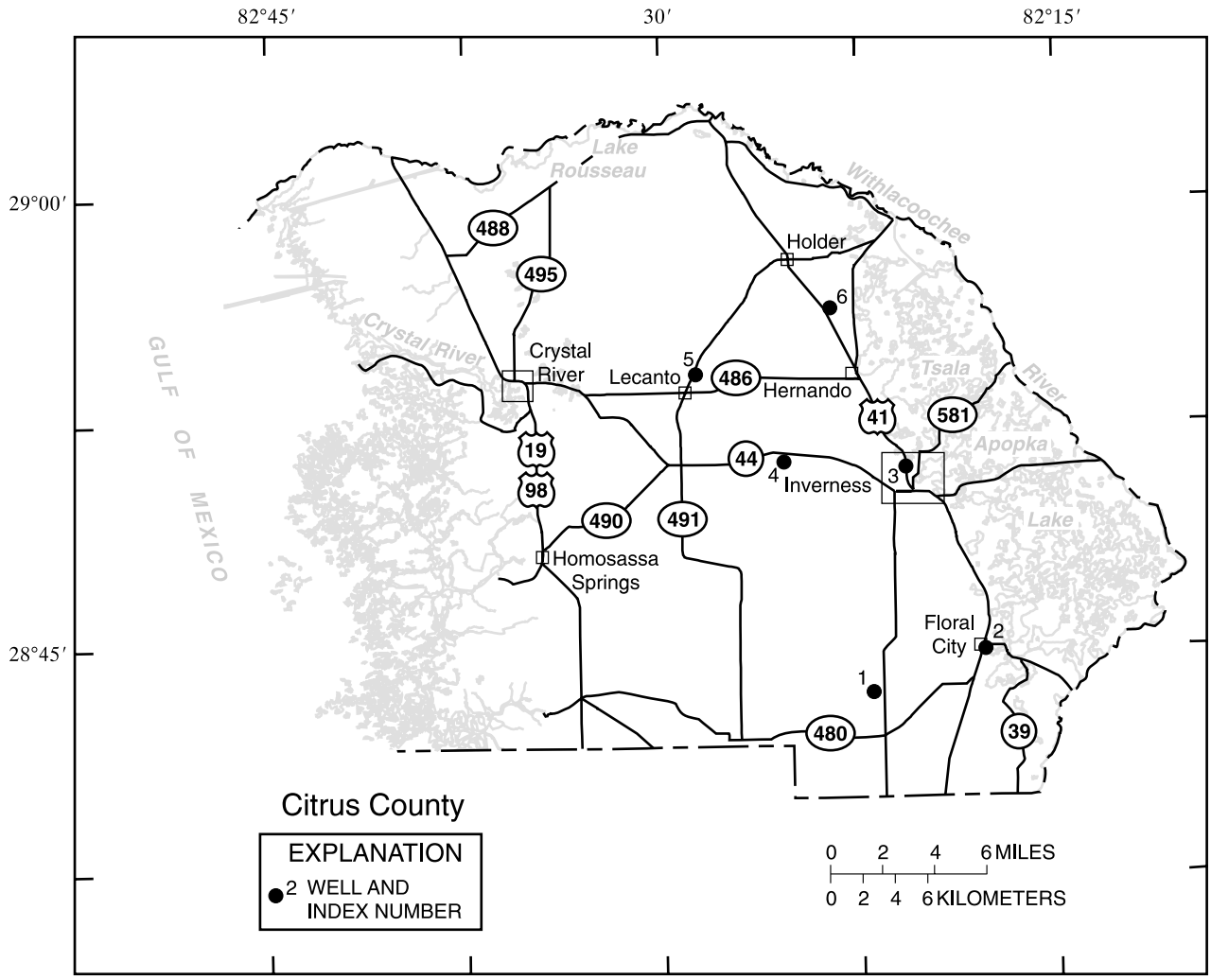

Figure 7.--Location of wells in Citrus County.

CITRUS COUNTY

WELL NUMBER.--284330082215401. Romp 109 Well near Floral City, FL.

LOCATION.--Lat 28°43'30", long 82°21'54", in SW¼SE¼SW¼ sec.24, T.20 S., R.19 E., Hydrologic Unit 03100208, 0.5 mi west of State Highway 581, 4.5 mi southwest of Floral City. Owner: Southwest Florida Water Management District.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation well, diameter 6 in., depth 260 ft, cased to 189 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 157.13 ft above sea level. Measuring point: Top of 6 in. flange, 2.67 ft above land-surface datum.

PERIOD OF RECORD.--May 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 23.20 ft above sea level, April 19, 1998; lowest water level measured, 12.32 ft above sea level, July 13, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.16	14.99	14.65	14.19	13.65	13.13	13.12	12.78	---	---	---	13.96
10	15.16	14.92	14.52	14.11	13.48	13.12	13.11	12.72	---	---	---	14.10
15	15.13	14.89	14.44	14.02	13.45	13.13	13.09	12.75	---	---	---	14.34
20	15.11	14.84	14.42	13.95	13.39	13.12	13.06	12.68	---	---	---	14.54
25	15.08	14.77	14.36	13.86	13.18	13.14	12.96	---	---	---	---	15.18
EOM	15.03	14.70	14.26	13.72	13.17	13.12	12.86	---	---	---	13.96	15.64
MAX	15.17	15.02	14.70	14.24	13.69	13.16	13.13	12.86	---	---	13.96	15.64

CAL YR 2000 MAX 15.17
WTR YR 2001 MAX 15.64

WELL NUMBER.--284508082174601. Ferris Packing Company Well at Floral City, FL.

LOCATION.--Lat 28°45'08", long 82°17'46", in NE¼NE¼NW¼ sec.15, T.20 S., R.20 E., Hydrologic Unit 03l00208, on east side of U.S. Highway 41, in rear of packing house, 0.2 mi north of State Highway 48 in Floral City. Owner: Ferris Packing Company.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, artesian well, diameter 8 in., depth 400 ft, cased to 200 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 70.43 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--March and May l96l, January l964 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 40.32 ft above sea level, Aug. 23, 1965; lowest measured, 25.17 ft above sea level, July 13, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	30.17	JAN 17	27.23	MAY 03	26.56	JUL 13	25.17	SEP 26	29.62		
NOV 20	29.59	MAR 20	26.91	15	26.16	SEP 05	26.67				

WATER YEAR 2001 LOWEST 25.17 JUL 13, 2001 HIGHEST 30.17 OCT 03, 2000

CITRUS COUNTY--Continued

WELL NUMBER.--285102082204001. DOT-41 Observation Well at Inverness, FL.

LOCATION.--Lat 28°51'02", long 82°20'40", in SW¼SW¼NE¼ sec.7, T.19 S., R.20 E., Hydrologic Unit 03100208, on east side of U.S. Highway 41, 0.4 mi north of intersection of U.S. Highway 41 and State Highway 581 in Inverness. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 18 in., depth 450 ft, cased to 290 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 41.56 ft above sea level. Measuring point: Top of recorder shelf, 2.07 ft above land-surface datum.

PERIOD OF RECORD.--March 1961 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 37.80 ft above sea level, Oct. 14, 1982; lowest, 21.70 ft above sea level, June 4, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.41	24.93	24.30	23.78	23.07	22.60	22.65	22.28	21.72	21.87	22.52	23.17
10	25.28	24.82	24.24	23.53	22.99	22.53	22.72	22.14	22.03	21.83	22.79	23.17
15	25.28	24.61	24.11	23.48	22.92	22.48	22.68	22.10	22.08	21.78	23.07	23.52
20	25.16	24.52	23.99	23.42	22.79	22.54	22.47	22.02	22.01	21.72	23.20	23.94
25	25.11	24.56	23.89	23.22	22.71	22.51	22.47	21.88	21.98	21.94	23.26	24.39
EOM	24.96	24.39	23.73	23.18	22.70	22.65	22.31	21.77	21.98	22.29	23.24	24.69
MAX	25.46	24.95	24.38	23.78	23.15	22.69	22.72	22.34	22.10	22.29	23.27	24.69

CAL YR 2000 MAX 26.08
WTR YR 2001 MAX 25.46

WELL NUMBER.--285121082245401. ROMP 113 Replacement Well near Inverness, FL.

LOCATION.--Lat 28°51'21", long 82°24'54", in NE¼NW¼NW¼ sec.9, T.19 S., R.19 E., Hydrologic Unit 03100208, on south side of State Highway 44, 5.5 mi west of Inverness. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation well, diameter 6 in., depth 150 ft, cased to 51 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 132.57 ft above sea level. Measuring point: Top of flange, 3.69 ft above land-surface datum.

PERIOD OF RECORD.--October 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 10.80 ft above sea level, Apr. 19, 1998; lowest, 4.72 ft above sea level, June 22,23, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.46	6.25	---	---	---	---	5.31	4.81	4.80	4.91	5.63	5.94
10	6.43	6.24	---	---	---	---	5.26	4.77	4.85	5.00	5.78	6.01
15	6.31	---	---	---	---	---	5.22	4.79	4.84	5.26	5.79	6.07
20	6.32	---	---	---	---	---	5.10	4.76	4.73	5.32	5.90	6.41
25	6.27	---	---	---	---	---	4.98	4.78	4.81	5.49	5.95	6.69
EOM	6.26	---	---	---	---	5.29	4.89	4.80	4.83	5.59	5.88	6.92
MAX	6.55	6.30	---	---	---	5.29	5.33	4.89	4.88	5.62	5.95	6.92

CAL YR 2000 MAX 6.55
WTR YR 2001 MAX 6.92

CITRUS COUNTY--Continued

WELL NUMBER.--285414082284201. North Lecanto Well near Lecanto, FL.

LOCATION.--Lat 28°54'14", long 82°28'42", in SW¼NE¼NW¼ sec.22, T.18 S., R.18 E., Hydrologic Unit 03100207, 40 ft east of State Highway 491, and 3.8 mi north of Lecanto. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 335 ft, cased to 288 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 68.87 ft above sea level. Measuring point: Top of recorder shelf, 3.07 ft above land-surface datum.

PERIOD OF RECORD.--November 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.10 ft above sea level, Oct. 15, 1982; lowest, 2.94 ft above sea level, May 3-5, 9, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.32	4.12	3.69	---	3.29	3.54	3.59	2.94	3.21	3.45	4.23	4.17
10	4.08	4.26	3.80	---	3.30	3.38	3.55	3.03	3.26	3.55	4.23	4.28
15	4.12	4.23	3.88	3.38	3.13	3.42	3.50	3.05	3.22	3.84	4.23	4.40
20	4.20	4.04	3.79	3.45	3.06	3.47	3.21	3.06	3.01	3.85	4.33	4.80
25	3.98	3.99	3.47	3.21	3.16	3.56	3.22	3.19	3.28	4.16	4.24	4.95
EOM	4.15	3.98	3.52	3.34	3.18	3.64	3.02	3.19	3.24	4.02	4.13	4.90
MAX	4.34	4.26	3.99	3.46	3.35	3.64	3.65	3.23	3.36	4.16	4.33	4.99

CAL YR 2000 MAX 4.68
WTR YR 2001 MAX 4.99

WELL NUMBER.--285608082233401. Camp Mining Well (CE-64) near Holder, FL.

LOCATION.--Lat 28°56'08", long 82°23'34", in SW¼NW¼SE¼ sec.10, T.18 S., R.19 E., Hydrologic Unit 03100208, in a field about 0.5 mi east of U.S. Highway 41, at a point 2.5 mi south of County Road 491 in Holder. Owner: G.L. Robinson.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 14 in., depth 91 ft, casing length unknown.

INSTRUMENTATION.--Bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 65.92 ft above sea level. Measuring point: Top of casing, 1.14 ft above land-surface datum.

PERIOD OF RECORD.--March 1961, December 1961 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.01 ft above sea level, Nov. 20, 1964; lowest measured, 12.04 ft above sea level, Apr. 13, 1982.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	16.54	JAN 17	15.37	MAY 11	13.84	JUL 13	14.01	SEP 25	15.23		
NOV 15	16.34	MAR 20	15.27	16	13.84	SEP 05	15.29				

WATER YEAR 2001 LOWEST 13.84 MAY 11, 2001 MAY 16, 2001 HIGHEST 16.54 OCT 03, 2000

CITRUS COUNTY

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
284101082184301	05-16-01	1050	84121801 21S20E04 OAK FOREST SUBMERSIBLE	26.08
284330082215401	05-15-01	1316	ROMP 109 NEAR FLORAL CITY, FL	12.70
	09-26-01	0825		15.15
284439082131401	05-16-01	0940	84421301 TRAILS END FISH CAMP WELL NR FLORAL CITY	35.83
	09-26-01	1045		41.28
284519082150701	05-16-01	0855	84521501 20S21E07 HOMER N FISHER	35.87
	09-26-01	1025		39.84
284609082163001	05-16-01	0853	DUVAL ISLAND WELL NR FLORAL CITY, FL	34.05
	09-26-01	1005		38.01
284752082202501	05-15-01	1234	84722001 19S20E31 HIGHLANDS VFD NR INVERNESS	13.63
	09-25-01	1155		16.10
284805082225701	05-15-01	1159	84822201 19S19E26 WSF-HOLDER MINE REC AREA	9.00
	09-26-01	0745		11.52
284844082282801	05-15-01	0921	84822801 19S18E22 WSF-PERRYMAN TRACT	4.88
	09-25-01	1021		7.17
284958082190401	05-15-01	1604	84921901 19S20E16 CITRUS 8 U S GEOL SURVEY	28.78
	09-26-01	1150		32.07
285026082174101	05-15-01	1624	85021701 19S20E15 CITRUS 9 U S GEOL SURVEY	32.61
	09-26-01	1200		35.08
285037082213801	05-15-01	1103	85022101 19S19E12 INVERNESS VILLAGE EASTW	14.57
	09-25-01	1225		16.88
285056082163001	05-15-01	1631	85021601 19S20E11 CITRUS 10 U S GEOL SURVEY	33.76
	09-26-01	1211		36.66
285102082204001	05-15-01	1754	851220343 DOT HY41 OBSER WELL AT INVERNESS, FL.	22.17
	09-25-01	1245		24.43
285105082135802	05-15-01	1703	USGS WELL 0.7MI.W OF WITH.R. ON SR 44.47FT N RD	33.41
	09-26-01	1222		37.81
285121082245401	05-15-01	1028	ROMP 113 REPLACEMENT NR INVERNESS,FL	4.71
	09-25-01	1055		6.66
285248082183201	05-15-01	1735	85221801 18S20E33 ELMER HEATH	33.56
	09-26-01	1130		36.51
285414082284201	05-14-01	1317	85422801NORTH LECANTO DEEP WELL NR LECANTO, FL.	3.09
	09-25-01	0940		4.92
285514082275402	05-14-01	1355	85522704 18S18E14 BEVERLY HILLS WELL 6-T	3.05
	09-25-01	0925		4.96
285612082294201	05-14-01	1257	85622901 18S18E04 PINE RIDGE NO 3	3.08
	09-25-01	0910		4.95
285720082201301	05-14-01	1753	85722001ROMP DEEP WELL 116 NEAR TSALA APOPKA, FL	30.55
	09-25-01	1415		33.85

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

CITRUS COUNTY--Continued

STATION NUMBER	DATE	TIME		STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
285812082360901	05-14-01	1551	85823601	17S17E29 CE 7 U S GEOL SURVEY	7.16
	09-25-01	1551			12.55
285833082233301	05-14-01	1725	85822301	17S19E34 CE 16	8.66
	09-25-01	1350			12.34
285930082283702	05-14-01	1158	85922803	17S18E22 CITRUS SPRINGS RECORDER	4.98
	09-25-01	0840			7.32
285951082350901	05-14-01	1533	85923501	17S17E15 CE 6 U S GEOL SURVEY	15.45
	09-25-01	1635			20.16
290023082393601	05-14-01	1630	90023901	17S16E11 CE 89 U S GEOL SURVEY	8.10
	09-25-01	1614			12.42
290107082400501	05-14-01	1604	90124001	17S16E11 CE 88 U S GEOL SURVEY	1.55
	09-25-01	1605			3.88
290132082324201	05-14-01	1446	90123202	17S17E01 EMORY COWART HOUSE WELL	11.93
	09-25-01	1520			13.84
290216082292001	05-14-01	1432	90222901	16S18E33 CE 77 U S GEOL SURVEY	9.62
	09-25-01	1500			12.35

KEY TO SITE LOCATIONS ON FIGURE 8
CLAY COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number
1	295733081365505	54
2	300656081463401	54
3	300834081421301	55
4	301018081415101	55

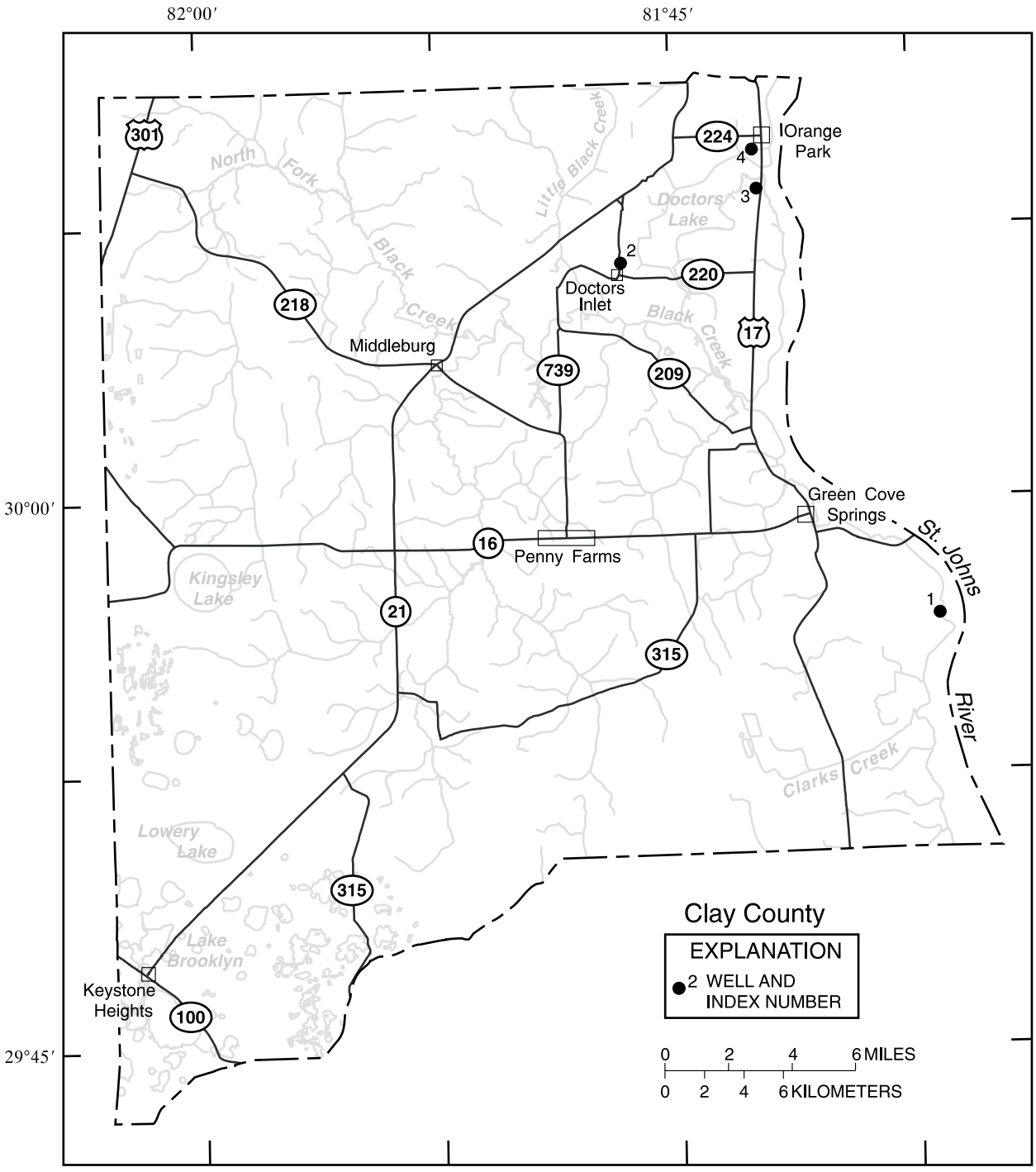

Figure 8.--Location of wells in Clay County.

CLAY COUNTY

WELL NUMBER.--295733081365505. Local Number C-0579. Bayard Point Well near Green Cove Springs, FL.

LOCATION.--Lat 29°57'33", long 81°36'55", in land grant 47, T.6 S., R.27 E., Hydrologic Unit 03080103, 60 ft north of dirt road, 1.6 mi southeast of State Highway 16, and 4.4 mi southeast of Green Cove Springs. Owner: St. Johns River Water Management District.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 656 ft, cased to 320 ft.

INSTRUMENTATION.--Bimonthly measurement with pressure gage.

DATUM.--Land-surface datum is 9.64 ft above sea level. Measuring point: Top of 6 in. gate valve, 1.55 ft above land-surface datum.

PERIOD OF RECORD.--May 2000 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.29 ft above sea level, Sept. 27, 2001; lowest measured, 17.89 ft, above sea level, Apr. 25, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), PERIOD MAY 2000 TO SEPTEMBER 2000

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 15	20.89	AUG 09	22.19	SEP 14	27.89						

WATER YEAR 2001 LOWEST 20.89 MAY 15, 2000 HIGHEST 27.89 SEP 14, 2000

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06	23.69	APR 25	17.89	JUN 20	24.99	SEP 27	29.29				
DEC 06	27.89	MAY 16	21.59	AUG 14	27.69						

WATER YEAR 2001 LOWEST 17.89 APR 25, 2001 HIGHEST 29.29 SEP 27, 2001

WELL NUMBER.--300656081463401. Local Number C-94. USGS Test Well near Orange Park, FL.

LOCATION.--Lat 30°06'56", long 81°46'34", in SW¼SE¼SW¼ sec.26, T.4 S., R.25 E., Hydrologic Unit 03080103, at St. Johns River Community College, 150 ft east of State Highway 224, 1.5 mi south of intersection of State Highways 224 and 21, and 5.0 mi southwest of Orange Park. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 8 in., depth 1,197 ft, cased to 391 ft.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Land-surface datum is 46.22 ft above sea level. Measuring point: Top of 2.5 in. coupling, 1.29 ft above land-surface datum.

PERIOD OF RECORD.--February 1974 to April 1979 (quarterly); July 1979 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 41.59 ft above sea level, Feb. 28, 1983; lowest measured, 24.43 ft above sea level, May 21, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	30.16	JAN 25	30.97	APR 23	26.55	JUN 21	27.15	SEP 24	31.36		
NOV 27	30.67	FEB 24	30.51	MAY 15	26.01	JUL 23	28.23				
DEC 18	30.59	MAR 26	31.03	21	24.43	AUG 27	29.22				

WATER YEAR 2001 LOWEST 24.43 MAY 21, 2001 HIGHEST 31.36 SEP 24, 2001

CLAY COUNTY--Continued

WELL NUMBER.--300834081421301. Local Number C-7. Hanson Well near Orange Park, FL.

LOCATION.--Lat 30°08'34", long 81°42'13", in land grant 44, T.4 S., R.26 E., Hydrologic Unit 03080103, 350 ft north of Creighton Road, 500 ft west of U.S. Highway 17, and 1.5 mi south of Orange Park. Owner: Mr. Peacock.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 3 in., depth 550 ft, casing length unknown.

INSTRUMENTATION.--Monthly measurement with pressure gage.

DATUM.--Land-surface datum is 3.88 ft above sea level. Measuring point: Top of 3 in. cross, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--May 1978 to September 1980 (semiannually); May 1981 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.08 ft above sea level, Mar. 24, 1983; lowest measured, 15.88 ft above sea level, July 25, 1996.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	22.88	DEC 18	24.38	FEB 26	23.88	APR 23	17.88	JUN 21	21.88	AUG 27	22.38
NOV 27	24.88	JAN 25	23.38	MAR 26	26.38	MAY 21	16.88	JUL 23	16.88	SEP 24	24.88

WATER YEAR 2001 LOWEST 16.88 MAY 21, 2001 JUL 23, 2001 HIGHEST 26.38 MAR 26, 2001

WELL NUMBER.--301018081415101. Local Number C-4. Hellmuth Well at Orange Park, FL.

LOCATION.--Lat 30°10'18", long 81°41'51", in land grant 41, T.4 S., R.26 E., Hydrologic Unit 03080103, 250 ft west of 1454 River Road, 0.25 mi east of U.S. Highway 17, and 0.7 mi northeast of Orange Park. Owner: Mr. Hellmuth.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 6 in., depth 530 ft, cased to 350 ft.

INSTRUMENTATION.--Bimonthly measurement with pressure gage.

DATUM.--Land-surface datum is 11.78 ft above sea level. Measuring point: Top of 4 in. elbow, 2.00 ft above land-surface datum.

PERIOD OF RECORD.--November 1958, June 1971, May 1973 to September 1991 (semiannually) incomplete; April 1992 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.68 ft above sea level, Nov. 7, 1958; lowest measured, 20.28 ft above sea level, June 27, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	24.78	DEC 18	25.78	FEB 26	26.28	APR 23	22.78	JUN 21	23.78	AUG 27	25.28

WATER YEAR 2001 LOWEST 22.78 APR 23, 2001 HIGHEST 26.28 FEB 26, 2001

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

CLAY COUNTY

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
294307082020903	09-25-01	1110	C-0009 COUNTYLINE NR MELROSE,FL	79.81
294728082010901	05-16-01	1235	C-0442	75.32
	09-25-01	1135		75.76
294807082020903	05-16-01	1225	9482028 WELL AT KEYSTONE HEIGHTS,FL	75.92
	09-25-01	1150		76.72
294911081572601	05-16-01	1205	C-0453 GOLD HEAD	73.86
	09-25-01	1210		74.41
295016081433501	05-16-01	1315	C-0123 SUNGARDEN TWR OCALA,FL	63.31
	09-27-01	0925		65.44
295238081553701	05-16-01	1150	C-1011 AT CAMP BLANDING NO.1 NR JACKSONVILLE,FL	71.08
	09-25-01	1235		71.92
295835081515001	05-15-01	0830	C-17	65.21
	09-25-01	1300		66.42
295851081555301	05-15-01	0845	C-0128 PENNY FARMS TWR	64.83
	09-27-01	0840		66.01
300048081414301	05-16-01	1410	C-30	23.57
	09-27-01	1000		29.97
300318082015401	05-16-01	1020	C-1017 TRAINING SITE AT CAMP BLANDING NR JAX,FL	51.93
	09-26-01	1150		51.55
300450081482801	05-16-01	1425	C-18 MUIR WELL NEAR DOCTORS INLET,FL	38.10
	09-27-01	0805		41.80
300649081485901	05-15-01	0805	C-5 JOHN HUNTLEY WELL NEAR MIDDLEBURG,FL	31.72
	09-25-01	1025		36.22
300850081552001	05-17-01	0740	C-29	52.80
	09-24-01	1150		53.80
300926081561603	05-17-01	0750	C-0583 YELLOW WATER CR NR HUGH,FL	48.84
	09-24-01	1200		49.69

KEY TO SITE LOCATIONS ON FIGURE 9
DUVAL COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number	Index number	Site number	Page number
1	300622081284701	60	21	302015081384501	81
2	300820081354001	61	22	302022081393501	82
3	301157081374301	62	23	302052081323201	83
4	301422081541201	63	24	302130081411802	83
4	301422081541202	63	25	302159081235601	84
4	301422081541203	64	26	302227081435001	85
5	301522081331302	64	27	302236081401501	86
6	301537081441901	65	28	302301081295001	87
7	301551081415701	66	28	302301081295002	87
8	301604081361501	67	29	302304081383202	88
9	301639081330802	68	28	302307081293801	88
10	301648081431801	69	30	302339081254702	89
11	301710081323601	70	31	302416081522601	90
11	301710081323602	70	31	302416081522602	90
11	301710081323603	71	32	302502081330701	91
12	301725081584501	71	32	302503081332001	92
13	301740081361001	72	32	302505081331001	93
14	301743081304701	73	32	302511081331201	94
13	301743081362301	74	32	302519081331501	95
13	301744081363301	75	33	302538081392501	96
13	301752081360501	76	34	302550081331501	96
15	301844081403801	77	35	302557081253101	97
16	301846081350901	77	36	302608081354901	98
17	301852081234201	78	36	302608081354902	98
18	301957081342301	78	36	302608081354903	99
19	302007081353201	79	37	302724081244801	100
20	302013081353801	80	38	302801081375101	101

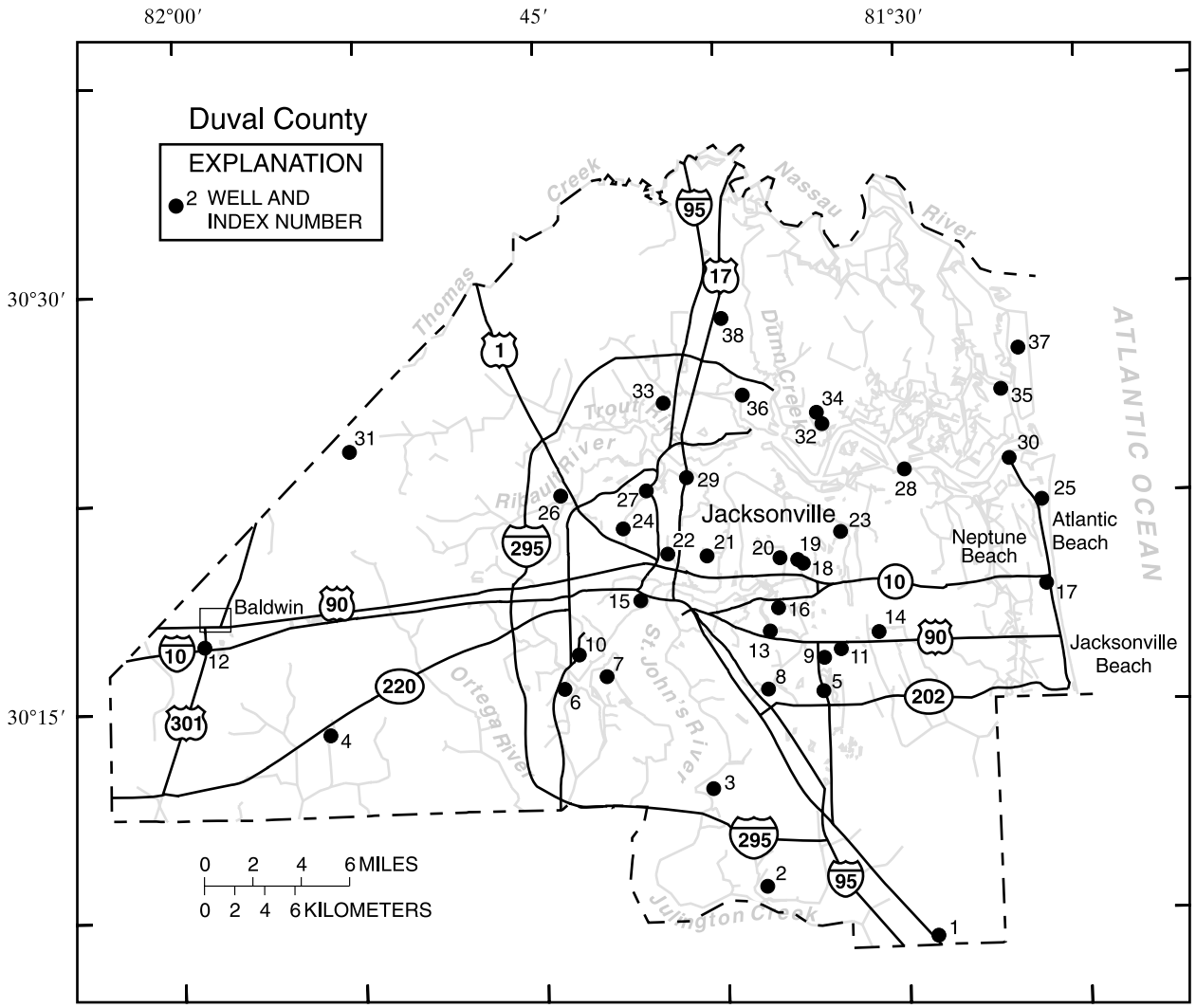

Figure 9.--Location of wells in Duval County.

DUVAL COUNTY

WELL NUMBER.--300622081284701. Local Number D-909. Dee Dot Ranch Well at Jacksonville, FL.

LOCATION.--Lat 30°06'22", long 81°28'47", in land grant 48, T.4 S., R.28 E., Hydrologic Unit 03080103, 300 ft northeast of U.S. Highway 1, 0.10 mi north of Duval-St. Johns County line in Jacksonville. Owner: Dee Dot Ranch.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 4 in., depth 500 ft, casing length unknown.

WATER LEVEL RECORDS

INSTRUMENTATION.--Quarterly measurement with pressure gage.

DATUM.--Land-surface datum is 20 ft above sea level, from topographic map. Measuring point: Top of 4 in. cross pipe, 1.5 ft above land-surface datum.

PERIOD OF RECORD.--May 1976 to September 1983 (semiannually); October 1990 to current year (quarterly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.10 ft above land-surface datum, Jan. 27, 1995; lowest measured, 9.90 ft above land-surface datum, July 25, 2000.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976-78, 1990 to current year (quarterly).

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	-13.70	JAN 25	-13.30	APR 24	-11.30	JUL 25	-11.90

WATER YEAR 2001 HIGHEST -13.70 OCT 25, 2000 LOWEST -11.30 APR 24, 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
OCT 25...	1145	772	--	24.0	--	--	--	--	--	--	--	--	19.0
JAN 25...	1230	770	--	23.0	--	--	--	--	--	--	--	--	18.0
APR 24...	1400	773	7.6	24.0	<5	373	91.0	34.0	15.0	2.40	132	250	19.0
JUL 25...	1240	770	--	23.5	--	--	--	--	--	--	--	--	19.0

DATE	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)
OCT 25...	--	--	--	--
JAN 25...	--	--	--	--
APR 24...	.9	22.0	541	4800
JUL 25...	--	--	--	--

Note.--Negative figures indicate water level above land surface.

DUVAL COUNTY--Continued

WELL NUMBER.--300820081354001. Local Number D-296. Hood Landing Well at Mandarin, FL.

LOCATION.--Lat 30°08'20", long 81°35'40", in land grant 43, T.4 S., R.27 E., Hydrologic Unit 03080103, 50 ft east of Hood Landing Road, 150 ft south of Julington Creek Road. Owner: Mrs. Peoples.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, private, domestic, artesian well, diameter 3 in., depth 487 ft, casing length unknown.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962, 1970, 1972-79, 1983 to current year (quarterly), incomplete.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT													
25...	1230	652	--	22.0	--	--	--	--	--	--	--	--	17.0
JAN													
25...	1120	672	--	22.0	--	--	--	--	--	--	--	--	17.0
APR													
24...	1315	697	7.7	23.7	<5	331	64.0	40.0	15.0	2.80	113	220	18.0
JUL													
24...	1100	676	--	23.0	--	--	--	--	--	--	--	--	18.0

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
OCT				
25...	--	--	--	--
JAN				
25...	--	--	--	--
APR				
24...	.7	19.0	474	5200
JUL				
24...	--	--	--	--

DUVAL COUNTY--Continued

WELL NUMBER.--301157081374301. Local Number D-538. City of Jacksonville Well at Jacksonville, FL.

LOCATION.--Lat 30°11'57", long 81°37'43", in land grant 40, T.3 S., R.27 E., Hydrologic Unit 03080103, located in Beauclerc Gardens pumping station, 3054 Shady Drive, 50 ft south of station entrance, in the Beauclerc Gardens area of Jacksonville. Owner: City of Jacksonville.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 12 in., depth 1,000 ft, cased to 484 ft.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973-78, 1983 to current year (quarterly).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
OCT 25...	1300	930	28.0	68.0

DUVAL COUNTY--Continued

WELL NUMBER.--301422081541201. Local Number DS-226. USGS Observation Well at Jacksonville, FL.

LOCATION.--Lat 30°14'22", long 81°54'12", in SW¼SE¼NE¼ sec.16, T.3 S., R.24 E., Hydrologic Unit 03080103, 250 ft south of State Highway 228 (Normandy Boulevard), 0.8 mi west of main gate NAS Cecil Field in Jacksonville. Owner: U.S. Geological Survey.

AQUIFER.--Hawthorn Formation of the Miocene Age, Geologic Unit 122 HTRN.

WELL CHARACTERISTICS.--Drilled, unused, nonartesian well, diameter 2 in., depth 210 ft, cased to 210 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Land-surface datum is 80 ft above sea level, from topographic map. Measuring point: Top of 2 in. PVC casing, at land-surface datum.

PERIOD OF RECORD.--January 1976, May 1977, February 1979 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.72 ft below land-surface datum, Aug. 29, 1995; lowest measured, 12.15 ft below land-surface datum, Nov. 29, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	5.01	DEC 18	6.33	FEB 26	7.28	APR 23	6.77	JUN 21	5.99	AUG 27	4.54

WATER YEAR 2001 HIGHEST 4.54 AUG 27, 2001 LOWEST 7.28 FEB 26, 2001

WELL NUMBER.--301422081541202. Local Number DS-227. USGS Observation Well at Jacksonville, FL.

LOCATION.--Lat 30°14'22", long 81°54'12", in SW¼SE¼NE¼ sec.16, T.3 S., R.24 E., Hydrologic Unit 03080103, 200 ft south of State Highway 228 (Normandy Boulevard), 0.8 mi west of main gate NAS Cecil Field in Jacksonville. Owner: City of Jacksonville.

AQUIFER.--Hawthorn Formation of the Miocene Age, Geologic Unit 122 HTRN.

WELL CHARACTERISTICS.--Drilled, unused, nonartesian well, diameter 2 in., depth 401 ft, cased to 396 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Land-surface datum is 80 ft above sea level, from topographic map. Measuring point: Top of 2 in. PVC casing, 1.5 ft above land-surface datum.

PERIOD OF RECORD.--January 1976, March to May 1977, February 1979 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.70 ft below land-surface datum, May 21, 1984; lowest measured, 37.93 ft below land-surface datum, June 27, 2000.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	35.64	DEC 18	35.29	FEB 26	34.97	APR 23	35.79	JUN 21	36.99	AUG 27	36.18

WATER YEAR 2001 HIGHEST 34.97 FEB 26, 2001 LOWEST 36.99 JUN 21, 2001

DUVAL COUNTY--Continued

WELL NUMBER.--301422081541203. Local Number DS-238. USGS Observation Well at Jacksonville, FL.

LOCATION.--Lat 30°14'22", long 81°54'12", in SW¼SE¼NE¼ sec.16, T.3 S., R.24 E., Hydrologic Unit 03080103, 220 ft south of State Highway 228 (Normandy Boulevard), 0.8 mi west of main gate NAS Cecil Field in Jacksonville. Owner: U.S. Geological Survey.

AQUIFER.--Limestone aquifer of the Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, unused, nonartesian well, diameter 2 in., depth 101 ft, cased to 82 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Land-surface datum is 80 ft above sea level, from topographic map. Measuring point: Top of 2 in. casing, at land-surface datum.

PERIOD OF RECORD.--March 1976 to May 1977, February 1979 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.57 ft below land-surface datum, Feb. 23, 1998; lowest measured, 9.72 ft below land-surface datum, Nov. 29, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	4.22	DEC 18	5.48	FEB 26	6.42	APR 23	5.95	JUN 21	5.16	AUG 27	3.72

WATER YEAR 2001 HIGHEST 3.72 AUG 27, 2001 LOWEST 6.42 FEB 26, 2001

WELL NUMBER.--301522081331303. Local Number D-4610 (Replacement for D-291). Humphrey's Mining Company Well at Jacksonville, FL.

LOCATION.--Lat 30°15'22", long 81°33'13", in NW¼NE¼SW¼ sec.12, T.3 S., R.27 E., Hydrologic Unit 03080103, 200 ft east of State Highway 115 (Southside Boulevard), and 2.2 mi south of U.S. Highway 90 (Beach Boulevard) in Jacksonville. Owner: St. Johns River Water Management District.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 6 in., depth 1,218 ft, cased to 1,009 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Land-surface datum is 53.06 ft above sea level. Measuring point: Top of 6 in. casing, 3.22 ft above land-surface datum.

REMARKS.--Well orginally Local Number D-291 (301522081331301) prior to September 1999, before the well was backplugged. Well drilled to 1,246 ft in 1957, backplugged to 1,218 ft in 1999.

PERIOD OF RECORD.--October 1999 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.32 ft above sea level, Jan. 25, 2000; lowest measured, 27.74 ft above sea level, June 27, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	31.99	DEC 18	31.99	FEB 26	31.67	APR 25	29.03	JUN 20	29.59	AUG 27	31.06
NOV 21	31.52	JAN 25	32.32	MAR 26	32.19	MAY 21	27.91	JUL 23	30.66	SEP 24	33.60

WATER YEAR 2001 LOWEST 27.91 MAY 21, 2001 HIGHEST 33.60 SEP 24, 2001

DUVAL COUNTY--Continued

WELL NUMBER.--301537081441901. Local Number D-75. City of Jacksonville Confederate Point Well at Jacksonville, FL.

LOCATION.--Lat 30°15'37", long 81°44'19", in land grant 42, T.3 S., R.26 E., Hydrologic Unit 03080103, at water plant lot, 200 ft north of west end of Swamp Fox Road, in Jacksonville. Owner: City of Jacksonville.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation, artesian well, diameter 12 in., depth 1,302 ft, cased to 970 ft.

WATER LEVEL RECORDS

INSTRUMENTATION.--Monthly measurement with pressure gage.

DATUM.--Land-surface datum is 15.3 ft above sea level, from topographic map. Measuring point: Top of concrete slab, 0.5 ft above land-surface datum.

PERIOD OF RECORD.--October 1986 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.50 ft above land-surface datum, Mar. 23, 1998; lowest measured, 15.50 ft above land-surface datum, July 21, 2000.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1986 to current year.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	-18.30	DEC 18	-20.00	FEB 26	-18.00	APR 24	-19.10	JUN 21	-17.50	AUG 26	-18.00
NOV 27	-18.50	JAN 30	-19.40	MAR 26	-20.50	MAY 21	-17.50	JUL 25	-17.30	SEP 24	-18.20

WATER YEAR 2001 HIGHEST -20.50 MAR 26, 2001 LOWEST -17.30 JUL 25, 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
OCT													
24...	1045	365	--	25.0	--	--	--	--	--	--	--	--	7.2
JAN													
30...	1015	368	--	25.0	--	--	--	--	--	--	--	--	7.0
APR													
24...	1130	364	7.8	25.4	<5	168	41.0	15.0	6.7	1.80	108	63.0	7.1
JUL													
25...	1130	362	--	25.0	--	--	--	--	--	--	--	--	7.1

DATE	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)
OCT				
24...	--	--	--	--
JAN				
30...	--	--	--	--
APR				
24...	.4	16.0	229	3200
JUL				
25...	--	--	--	--

Note.--Negative figures indicate water level above land surface.

DUVAL COUNTY--Continued

WELL NUMBER.--301551081415701. Local Number D-129. K.A. Merrill Well at Jacksonville, FL.

LOCATION.--Lat 30°15'51", long 81°41'57", in land grant 42, T.3 S., R.26 E., Hydrologic Unit 03080103, 44 ft north of Merrill driveway, and 45 ft east of Ortega Boulevard in Jacksonville. Owner: K.A. Merrill.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 4 in., depth 600 ft, cased to 470 ft.

INSTRUMENTATION.--Monthly measurement with pressure gage.

DATUM.--Land-surface datum is 8.63 ft above sea level. Measuring point: 0.5 in. corporation cock, 1.20 ft above land-surface datum.

PERIOD OF RECORD.--July 1940 to April 1942, January to April 1944, August 1945 to September 1978 (semiannually); February 1979 to July 1980 (bimonthly); August 1980 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 50.93 ft above sea level, July 9, 1940; lowest measured, 17.33 ft above sea level, May 22, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	21.83	DEC 18	23.83	FEB 26	25.83	APR 23	19.83	JUN 21	22.33	AUG 27	22.83
NOV 27	23.83	JAN 25	25.83	MAR 26	26.83	MAY 21	17.83	JUL 24	26.93	SEP 24	26.33

WATER YEAR 2001 LOWEST 17.83 MAY 21, 2001 HIGHEST 26.93 JUL 24, 2001

DUVAL COUNTY--Continued

WELL NUMBER.--301604081361501. Local Number D-450. City of Jacksonville Santa Monica Well at Jacksonville, FL.

LOCATION.--Lat 30°16'08", long 81°36'28", in land grant 56, T.3 S., R.27 E., Hydrologic Unit 03080103, at water treatment plant, 75 ft east of the end of J-Ray Circle, 1 block east of Interstate Highway 95. Owner: City of Jacksonville.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation, artesian well, diameter 12 to 8 in., depth 1,304 ft, cased to 1,100 ft.

WATER LEVEL RECORDS

INSTRUMENTATION.--Monthly measurement with pressure gage.

DATUM.--Land-surface datum is 22 ft above sea level, from topographic map. Measuring point: Top of concrete slab, 0.5 ft above land-surface datum.

PERIOD OF RECORD.--October 1986 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.10 ft above land-surface datum, Mar. 24, 1998; lowest measured, 8.10 ft above land-surface datum, July 26, 2000, June 20, 2001.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1986 to current year.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	-12.40	DEC 18	-10.90	FEB 26	-11.30	APR 24	-9.70	JUN 20	-8.70	AUG 27	-10.40
NOV 21	-11.20	JAN 25	-11.60	MAR 22	-11.80	MAY 21	-8.10	JUL 25	-10.10	SEP 25	-12.30

WATER YEAR 2001 HIGHEST -12.40 OCT 24, 2000 LOWEST -8.10 MAY 21, 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
OCT													
24...	1315	675	--	24.0	--	--	--	--	--	--	--	--	35.0
JAN													
25...	1340	682	--	25.0	--	--	--	--	--	--	--	--	36.0
APR													
24...	1600	698	7.0	25.2	<5	312	74.0	30.0	20.0	2.00	144	150	44.0
JUL													
25...	0915	658	--	24.0	--	--	--	--	--	--	--	--	32.0

DATE	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)
OCT				
24...	--	--	--	--
JAN				
25...	--	--	--	--
APR				
24...	.7	23.0	467	3500
JUL				
25...	--	--	--	--

Note.--Negative figures indicate water level above land surface.

DUVAL COUNTY--Continued

WELL NUMBER.--301639081330802. Local Number D-1155. City of Jacksonville Southside Estates Well at Jacksonville, FL.

LOCATION.--Lat 30°16'39", long 81°33'08", in SW¼NE¼NW¼, sec. 1, T.3 S., R.27 E., Hydrologic Unit 03080103, 40 ft south of Anders Boulevard, 0.35 mi east of State Highway 115 (Southside Boulevard), and 0.60 mi south of U.S. Highway 90 (Beach Boulevard). Owner: City of Jacksonville.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation, artesian well, diameter 10 in., depth 1,170 ft, cased to 1,080 ft.

WATER LEVEL RECORDS

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Land-surface datum is 50 ft above sea level, from topographic map. Measuring point: Top of 2 in. casing, 1.76 ft above land-surface datum.

PERIOD OF RECORD.--October 1986 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.24 ft below land-surface datum, Apr. 21, 1993; lowest measured, 23.47 ft below land-surface datum, June 27, 2000.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1986 to current year.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	19.36	DEC 18	19.44	MAR 26	19.13	MAY 22	23.45	JUL 30	20.83	SEP 24	17.86
NOV 21	18.98	FEB 26	20.63	MAY 02	21.75	JUN 20	21.71	AUG 27	20.00		

WATER YEAR 2001 HIGHEST 17.86 SEP 24, 2001 LOWEST 23.45 MAY 22, 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
OCT													
31...	1100	1050	--	27.0	--	--	--	--	--	--	--	--	140
MAY													
02...	1115	1110	7.5	26.5	<5	453	110	42.0	46.0	2.50	138	190	150
JUL													
30...	1030	1010	--	27.5	--	--	--	--	--	--	--	--	130

DATE	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)
OCT				
31...	--	--	--	--
MAY				
02...	.7	23.0	663	5000
JUL				
30...	--	--	--	--

DUVAL COUNTY--Continued

WELL NUMBER.--301648081431801. Local Number D-103. City of Jacksonville Well at Jacksonville, FL.

LOCATION.--Lat 30°16'48", long 81°43'18", in land grant 59, T.2 S., R.26 E., Hydrologic Unit 03080103, located in Lakeshore pumping station at intersection of Hamilton and Appleton Streets, 0.1 mi south of intersection of State Highway 128 (San Juan Avenue) and U.S. Highway 17 (Roosevelt Boulevard) in Lakeshore area of Jacksonville. Owner: City of Jacksonville.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 12 in., depth 1,332 ft, casing length unknown.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968-76, 1983 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT													
23...	1215	475	--	27.0	--	--	--	--	--	--	--	--	9.2
JAN													
25...	1045	470	--	27.0	--	--	--	--	--	--	--	--	9.5
APR													
24...	1200	470	7.8	27.5	<5	222	51.0	22.0	8.5	2.00	117	110	9.0
JUL													
24...	1015	472	--	27.5	--	--	--	--	--	--	--	--	9.2

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
OCT				
23...	--	--	--	--
JAN				
25...	--	--	--	--
APR				
24...	.6	18.0	300	3900
JUL				
24...	--	--	--	--

DUVAL COUNTY--Continued

WELL NUMBER.--301710081323601. Local Number DS-520. St. Johns River Water Management District Observation Well at Jacksonville, FL.

LOCATION.--Lat 30°17'10", long 81°32'36", in NE¼NE¼SE¼ sec.36, T.2 S., R.27 E., Hydrologic Unit 03080103, 200 ft south of U.S. Highway 90 (Beach Boulevard), and 0.9 mi east of State Highway 115 (Southside Boulevard), next to U.S. Forest Service Southside Lookout Tower. Owner: St. Johns River Water Management District.

AQUIFER.--Nonartesian sand aquifer of the Tertiary System, Geologic Unit 122 NRSD.

WELL CHARACTERISTICS.--Drilled, unused, observation well, diameter 2 in., depth 60 ft, cased to 40 ft.

INSTRUMENTATION.--Water-stage recorder--60 minute interval.

DATUM.--Land-surface datum is 54.65 ft above sea level. Measuring point: Top of 2 in. casing at shelter floor, 2.67 ft above land-surface datum.

PERIOD OF RECORD.--February 1989 to June 1991 (bimonthly); June 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 46.76 ft above sea level, Sept. 16, 2001; lowest water level measured, 38.31 ft above sea level, Aug. 3, 1989.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	44.14	43.18	42.60	42.21	42.03	41.86	42.57	41.88	41.35	41.92	42.43	44.42
10	43.95	43.05	42.53	42.15	42.04	41.87	42.50	41.79	41.29	41.89	42.72	44.40
15	43.78	42.90	42.40	42.08	42.01	41.86	42.32	41.68	41.56	41.86	43.13	46.74
20	43.59	42.79	42.37	42.02	41.97	42.20	42.16	41.58	41.74	41.93	43.65	45.96
25	43.48	42.67	42.29	42.01	41.94	42.48	42.04	41.47	41.82	42.24	43.72	45.44
EOM	43.31	42.68	42.25	41.98	41.87	42.57	41.98	41.41	41.89	42.30	43.37	45.13
MAX	44.28	43.28	42.64	42.25	42.04	42.57	42.57	41.97	41.89	42.30	43.74	46.76

CAL YR 2000 MAX 45.50
WTR YR 2001 MAX 46.76

WELL NUMBER.--301710081323602. Local Number DS-521. St. Johns River Water Management District Observation Well at Jacksonville, FL.

LOCATION.--Lat 30°17'10", long 81°32'36", in NE¼NE¼SE¼ sec.36, T.2 S., R.27 E., Hydrologic Unit 03080103, 200 ft south of U.S. Highway 90 (Beach Boulevard), and 0.9 mi east of State Highway 115 (Southside Boulevard), next to U.S. Forest Service Southside Lookout Tower. Owner: St. Johns River Water Management District.

AQUIFER.--Limestone aquifer of the Miocene Age, Geologic Unit 122 LMSN.

WELL CHARACTERISTICS.--Drilled, unused, nonartesian well, diameter 4 in., depth 120 ft, cased to 100 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 55.10 ft above sea level. Measuring point: Top of 4 in. casing at shelter floor, 2.22 ft above land-surface datum.

PERIOD OF RECORD.--March 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 44.40 ft above sea level, Aug. 6-13, 1991; lowest, 35.19 ft above sea level, Sept. 7, 1999.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	39.56	38.81	38.42	37.90	38.46	38.27	38.75	37.58	36.58	37.22	38.08	39.32
10	39.39	38.67	38.39	38.02	38.52	38.24	38.51	37.47	36.72	36.93	38.26	39.49
15	39.19	38.64	38.42	38.11	38.47	38.31	38.12	37.25	37.13	36.95	38.59	40.52
20	39.00	38.56	38.30	38.26	38.31	38.71	37.90	36.71	37.27	37.15	38.90	40.40
25	39.03	38.41	37.98	38.18	38.25	38.95	37.75	36.45	37.38	37.71	38.84	40.17
EOM	38.97	38.65	38.22	38.21	38.15	39.00	37.77	36.70	37.42	37.56	38.46	40.13
MAX	39.62	38.96	38.64	38.26	38.52	39.00	39.00	37.77	37.42	37.72	38.91	40.57

CAL YR 2000 MAX 39.62
WTR YR 2001 MAX 40.57

WELL NUMBER.--301710081323603. Local Number D-3824. St. Johns River Water Management District Observation Well at Jacksonville, FL.

LOCATION.--Lat 30°17'10", long 81°32'36", in NE¼NE¼SE¼ sec.36, T.2 S., R.27 E., Hydrologic Unit 03080103, 200 ft south of U.S. Highway 90 (Beach Boulevard), and 0.9 mi east of State Highway 115 (Southside Boulevard), next to U.S. Forest Service Southside Lookout Tower. Owner: St. Johns River Water Management District.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation well, diameter 6 in., depth 740 ft, cased to 490 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 54.97 ft above sea level. Measuring point: Top of 6 in. casing at shelter floor, 2.37 ft above land-surface datum.

PERIOD OF RECORD.--March 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 35.68 ft above sea level, Jan. 19, 1995; lowest, 12.77 ft above sea level, May 29, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.65	21.76	23.20	24.55	25.20	22.48	22.76	17.96	15.45	18.87	21.32	21.99
10	23.13	21.68	22.98	23.70	24.26	22.55	21.07	17.96	17.90	17.27	21.18	23.01
15	22.33	22.17	23.08	23.90	23.99	22.66	19.19	17.24	19.51	18.06	20.98	25.34
20	21.88	22.12	23.19	23.90	22.68	24.05	18.12	14.79	19.34	18.12	21.46	25.50
25	22.75	22.50	24.04	24.26	22.68	23.32	17.56	13.37	19.68	20.00	20.35	24.95
EOM	22.60	22.94	24.60	23.99	21.54	24.18	18.20	16.20	19.97	19.60	18.69	25.12
MAX	24.10	23.45	24.60	24.55	25.20	24.20	24.05	18.22	19.97	20.19	22.07	25.59

CAL YR 2000 MAX 27.76
WTR YR 2001 MAX 25.59

WELL NUMBER.--301725081584501. Local Number D-254. Seaboard Coastline Well at Baldwin, FL.

LOCATION.--Lat 30°17'25", long 81°58'45", in NE¼SW¼SW¼ sec.26, T.2 S., R.23 E., Hydrologic Unit 03080103, 0.4 mi north of Interstate Highway 10, and 0.5 mi east of U.S. Highway 301, on property of Seaboard Railroad in Baldwin. Owner: Seaboard Coastline Railroad.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, industrial, artesian well, diameter 8 in., depth 750 ft, cased to 433 ft.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Land-surface datum is 85 ft above sea level, from topographic map. Measuring point: 1.25 in. tap in pump base, 1.80 ft above land-surface datum.

PERIOD OF RECORD.--January 1961 to May 1962, May 1964 to September 1978 (annually); February 1979 to March 1983 (bimonthly); May 1983 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.25 ft below land-surface datum, Jan. 11, 1961; lowest measured, 37.38 ft below land-surface datum, Sept. 26, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	34.41	JAN 25	34.15	APR 23	33.99	JUN 21	35.11	SEP 24	33.73		
NOV 27	34.20	FEB 26	33.90	MAY 14	34.51	JUL 23	35.89				
DEC 18	34.18	MAR 25	33.52	21	34.23	AUG 27	34.20				

WATER YEAR 2001 HIGHEST 33.52 MAR 25, 2001 LOWEST 35.89 JUL 23, 2001

DUVAL COUNTY--Continued

WELL NUMBER.--301740081361001. Local Number D-275. City of Jacksonville Well at Jacksonville, FL.

LOCATION.--Lat 30°17'40", long 81°36'10", in land grant 52, T.2 S., R.27 E., Hydrologic Unit 03080103, located 300 ft west and 0.15 mi north of intersection of U.S. Highway 90 (Beach Boulevard) and University Boulevard in Jacksonville. Owner: City of Jacksonville.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 18 in., depth 1,234 ft, cased to 515 ft.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973-80, 1983 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
OCT													
23...	1400	768	--	26.0	--	--	--	--	--	--	--	--	170
NOV													
27...	1210	757	--	25.0	--	--	--	--	--	--	--	--	180
DEC													
28...	1045	780	--	23.0	--	--	--	--	--	--	--	--	180
JAN													
25...	1510	780	--	22.0	--	--	--	--	--	--	--	--	190
FEB													
26...	0940	782	--	22.0	--	--	--	--	--	--	--	--	190
MAR													
26...	0845	1000	--	22.0	--	--	--	--	--	--	--	--	170
APR													
24...	1520	911	8.2	29.9	<5	287	54.0	36.0	63.0	2.20	71	98.0	170
JUN													
21...	0915	1200	--	28.0	--	--	--	--	--	--	--	--	200
JUL													
25...	0850	1190	--	28.2	--	--	--	--	--	--	--	--	200
AUG													
28...	1250	1150	--	29.5	--	--	--	--	--	--	--	--	190
SEP													
25...	1110	1110	--	27.0	--	--	--	--	--	--	--	--	180

DATE	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)
OCT				
23...	--	--	--	--
NOV				
27...	--	--	--	--
DEC				
28...	--	--	--	--
JAN				
25...	--	--	--	--
FEB				
26...	--	--	--	--
MAR				
26...	--	--	--	--
APR				
24...	.5	15.0	520	3400
JUN				
21...	--	--	--	--
JUL				
25...	--	--	--	--
AUG				
28...	--	--	--	--
SEP				
25...	--	--	--	--

DUVAL COUNTY--Continued

WELL NUMBER.--301743081304701. Local Number D-224. City of Jacksonville Well at Jacksonville, FL.

LOCATION.--Lat 30°17'43", long 81°30'47", in SW¼SW¼SE¼ sec. 29, T.2 S., R.28 E., Hydrologic Unit 03080103, located at Sandalwood High School at intersection of Saints and John Prom Roads, 0.15 mi west of Oakridge Pumping Station in Jacksonville. Owner: City of Jacksonville.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 12 in., depth 1,179 ft, cased to 423 ft.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973-78, 1983 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
OCT				
25...	1000	1010	26.0	140
JAN				
25...	1400	922	26.0	120
JUL				
23...	1400	930	27.0	110

WELL NUMBER.--301743081362301. Local Number D-225. City of Jacksonville Well at Jacksonville, FL.

LOCATION.--Lat 30°17'43", long 81°36'23", in land grant 52, T.2 S., R.27 E., Hydrologic Unit 03080103, located in pumphouse at Love Grove Water Plant at the end of Wilman Way, 600 ft north of Beach Boulevard, 0.4 mi east of intersection of Wilman Way and Spring Glen Road in Jacksonville. Owner: City of Jacksonville.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 18 in., depth 1,277 ft, cased to 547 ft.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973-75, 1978-80, 1982 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
NOV				
27...	1240	1080	26.0	180
MAR				
26...	1110	946	21.0	120
JUN				
21...	0940	986	27.5	140
JUL				
23...	1315	1160	29.0	190
AUG				
28...	1310	1080	29.5	170
SEP				
25...	1130	988	27.0	130

DUVAL COUNTY--Continued

WELL NUMBER.--301744081363301. Local Number D-2193. City of Jacksonville Well at Jacksonville, FL.

LOCATION.--Lat 30°17'44", long 81°36'33", in land grant sec. 52, T.2 S., R.27 E., Hydrologic Unit 03080103, located in pumphouse 85 ft south of Wilman Way, 165 ft northeast of intersection of Beach Boulevard and Spring Glen Road in Jacksonville. Owner: City of Jacksonville.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 18 in., depth 1,304 ft, cased to 550 ft.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979, 1982 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT													
24...	1335	946	--	24.0	--	--	--	--	--	--	--	--	130
NOV													
27...	1230	1080	--	23.0	--	--	--	--	--	--	--	--	180
DEC													
28...	1120	1080	--	23.0	--	--	--	--	--	--	--	--	170
JAN													
30...	1045	1060	--	21.0	--	--	--	--	--	--	--	--	160
FEB													
26...	0930	1050	--	21.0	--	--	--	--	--	--	--	--	150
MAR													
26...	1100	983	--	22.0	--	--	--	--	--	--	--	--	110
APR													
25...	1320	884	7.9	24.0	<5	341	84.0	31.0	41.0	2.10	144	140	110
MAY													
22...	0915	957	--	26.0	--	--	--	--	--	--	--	--	100
JUN													
21...	0930	932	--	28.0	--	--	--	--	--	--	--	--	94.0
JUL													
23...	1300	928	--	29.0	--	--	--	--	--	--	--	--	94.0
AUG													
28...	1300	936	--	29.5	--	--	--	--	--	--	--	--	93.0
SEP													
25...	1120	987	--	28.0	--	--	--	--	--	--	--	--	99.0

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
OCT				
24...	--	--	--	--
NOV				
27...	--	--	--	--
DEC				
28...	--	--	--	--
JAN				
30...	--	--	--	--
FEB				
26...	--	--	--	--
MAR				
26...	--	--	--	--
APR				
25...	.7	24.0	533	3200
MAY				
22...	--	--	--	--
JUN				
21...	--	--	--	--
JUL				
23...	--	--	--	--
AUG				
28...	--	--	--	--
SEP				
25...	--	--	--	--

DUVAL COUNTY--Continued

WELL NUMBER.--301752081360501. Local Number D-649. City of Jacksonville Well at Jacksonville, FL.

LOCATION.--Lat 30°17'52", long 81°36'05", in land grant 52, T.2 S., R.27 E., Hydrologic Unit 03080103, located 50 ft east and 150 ft north of Hart Bridge on-ramp on University Boulevard, and 0.40 mi north of intersection of Beach and University Boulevards in Jacksonville. Owner: City of Jacksonville.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 18 in., depth 1,005 ft, cased to 534 ft.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974, 1975, 1979, 1982 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
OCT				
23...	1300	610	26.0	37.0
NOV				
27...	1200	420	25.0	39.0
JAN				
30...	1300	365	22.0	45.0
MAR				
26...	0900	596	22.0	35.0
JUN				
21...	0920	676	27.0	34.0
JUL				
25...	0900	667	26.5	31.0
AUG				
28...	1240	665	29.0	34.0
SEP				
25...	1140	657	26.5	30.0

DUVAL COUNTY--Continued

WELL NUMBER.--301844081403801. Local Number D-18. Riverside Avenue and Lomax Street at Jacksonville, FL.

LOCATION.--Lat 30°18'44", long 81°40'38", in land grant 56, T.2 S., R.26 E., Hydrologic Unit 03080103, 70 ft north of Lomax Street and 350 ft east of Riverside Avenue in Jacksonville. Owner: Unknown.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 8 in., depth and casing length unknown.

INSTRUMENTATION.--Monthly measurement with pressure gage.

DATUM.--Land-surface datum is 4.48 ft above sea level. Measuring point: Top of 8 in. tee, 1.90 ft above land-surface datum.

PERIOD OF RECORD.--November 1938, July 1940 to May 1941, May 1946 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 47.68 ft above sea level, Nov. 26, 1968; lowest measured, 21.38 ft above sea level, June 22, 1998, May 21, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	25.38	DEC 18	27.38	FEB 26	27.38	APR 23	23.38	JUL 24	25.38	SEP 24	27.88
NOV 27	28.38	JAN 25	27.38	MAR 26	28.38	MAY 21	21.38	AUG 27	24.38		

WATER YEAR 2001 LOWEST 21.38 MAY 21, 2001 HIGHEST 28.38 NOV 27, 2000 MAR 26, 2001

WELL NUMBER.--301846081350901. Local Number D-3544. Healthpoint Medical Center Well at Jacksonville, FL.

LOCATION.--Lat 30°18'46", long 81°35'09", in land grant 50, T.2 S., R.27 E., Hydrologic Unit 03080103, 15 ft south of Atlantic Boulevard, and 0.8 mi east of intersection of Atlantic Boulevard and University Boulevard. Owner: Healthpoint Medical Center.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 2 in., depth 651 ft, cased to 535 ft.

INSTRUMENTATION.--Monthly measurement with pressure gage.

DATUM.--Land-surface datum is 12.93 ft above sea level. Measuring point: Top of reducer bushing, 1.8 ft above land-surface datum.

PERIOD OF RECORD.--July 1985, July 1997 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.53 ft above sea level, Feb. 23, 1998; lowest measured, 21.53 ft above sea level, June 26, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	26.53	DEC 18	26.13	FEB 26	26.43	APR 24	23.53	JUN 21	23.13	AUG 28	24.03
NOV 27	26.23	JAN 29	26.83	MAR 22	27.23	MAY 22	22.43	JUL 23	23.63	SEP 24	25.53

WATER YEAR 2001 LOWEST 22.43 MAY 22, 2001 HIGHEST 27.23 MAR 22, 2001

DUVAL COUNTY--Continued

WELL NUMBER.--301852081234201. Local Number D-160. City of Neptune Beach Well at Neptune Beach, FL.

LOCATION.--Lat 30°18'52", long 81°23'42", in NW¼SW¼SE¼ sec.21, T.2 S., R.29 E., Hydrologic Unit 03080201, 20 ft south of Florida Avenue, 400 ft east of Third Street in Neptune Beach. Owner: City of Neptune Beach.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 4 in., depth 585 ft, cased to 340 ft.

INSTRUMENTATION.--Monthly measurement with pressure gage.

DATUM.--Land-surface datum is 12.05 ft above sea level. Measuring point: Top of 8 in. gate valve flange cover, 2.49 ft below land-surface datum.

PERIOD OF RECORD.--June 1934, October 1939, September 1940 to February 1942, January 1944 to April 1980 (bimonthly); May 1980 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 53.75 ft above sea level, June 15, 1934; lowest measured, 17.76 ft above sea level, June 27, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	25.56	DEC 18	26.86	FEB 26	26.06	APR 23	21.06	JUN 21	23.26	AUG 27	23.76
NOV 29	26.36	JAN 24	26.56	MAR 26	26.66	MAY 23	19.06	JUL 24	23.56	SEP 28	28.46

WATER YEAR 2001 LOWEST 19.06 MAY 23, 2001 HIGHEST 28.46 SEP 28, 2001

WELL NUMBER.--301957081342301. Local Number D-313. Jacksonville Suburban Utilities Well at Jacksonville, FL.

LOCATION.--Lat 30°19'57", long 81°34'23", in land grant 52, T.2 S., R.26 E., Hydrologic Unit 03080103, located at Alderman Park pumping station on Carlotta Road North, 1 block east of intersection of Townsend Boulevard and Carlotta Road North, in Alderman Park area of Jacksonville. Owner: United Water of Florida.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 8 in., depth 1,150 ft, cased to 576 ft.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT													
27...	1000	1010	--	27.0	--	--	--	--	--	--	--	--	150
JAN													
31...	1000	998	--	26.0	--	--	--	--	--	--	--	--	150
APR													
26...	1630	998	7.6	27.0	<5	365	89.0	34.0	54.0	1.90	144	130	150
JUL													
27...	1230	1000	--	28.5	--	--	--	--	--	--	--	--	150

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
OCT				
27...	--	--	--	--
JAN				
31...	--	--	--	--
APR				
26...	.6	25.0	576	2500
JUL				
27...	--	--	--	--

DUVAL COUNTY--Continued

WELL NUMBER.--302007081353201. Local Number D-479. City of Jacksonville Well at Jacksonville, FL.

LOCATION.--Lat 30°20'07", long 81°35'32", in land grant 52, T.2 S., R.27 E., Hydrologic Unit 03080103, located at Arlington Lions Club, at intersection of Commerce Avenue and Sprinkle Drive in Jacksonville. Owner: City of Jacksonville.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 18 in., depth 1,350 ft, cased to 606 ft.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974-79, 1983 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT													
23...	1340	950	--	28.0	--	--	--	--	--	--	--	--	140
JAN													
25...	1445	940	--	27.0	--	--	--	--	--	--	--	--	130
APR													
23...	1115	975	7.6	28.5	<5	380	93.0	35.0	44.0	1.90	143	130	140
JUL													
27...	1300	996	--	29.0	--	--	--	--	--	--	--	--	150

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
OCT				
23...	--	--	--	--
JAN				
25...	--	--	--	--
APR				
23...	.6	26.0	590	2700
JUL				
27...	--	--	--	--

DUVAL COUNTY--Continued

WELL NUMBER.--302013081353801. Local Number D-673. City of Jacksonville Well at Jacksonville, FL.

LOCATION.--Lat 30°20'13", long 81°35'38", in land grant 52, T.2 S., R.27 E., Hydrologic Unit 03080103, located inside pumphouse at 1595 Maitland Street, 0.25 mi north of intersection of Arlington Road and Maitland Street, in Arlington area of Jacksonville. Owner: City of Jacksonville.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 18 in., depth 814 ft, cased to 578 ft.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975, 1977-80, 1983 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT													
23...	1320	1070	--	28.0	--	--	--	--	--	--	--	--	170
NOV													
27...	1115	1030	--	28.0	--	--	--	--	--	--	--	--	170
DEC													
28...	1030	1060	--	27.5	--	--	--	--	--	--	--	--	170
JAN													
25...	1430	1080	--	27.0	--	--	--	--	--	--	--	--	170
FEB													
26...	1040	1070	--	27.5	--	--	--	--	--	--	--	--	160
MAR													
26...	0920	1060	--	26.5	--	--	--	--	--	--	--	--	160
APR													
23...	1215	1060	7.6	28.5	<5	410	100	38.0	50.0	2.10	141	130	160
MAY													
22...	0945	1070	--	28.0	--	--	--	--	--	--	--	--	170
SEP													
25...	1015	1090	--	27.5	--	--	--	--	--	--	--	--	170

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
OCT				
23...	--	--	--	--
NOV				
27...	--	--	--	--
DEC				
28...	--	--	--	--
JAN				
25...	--	--	--	--
FEB				
26...	--	--	--	--
MAR				
26...	--	--	--	--
APR				
23...	.6	26.0	647	2900
MAY				
22...	--	--	--	--
SEP				
25...	--	--	--	--

DUVAL COUNTY--Continued

WELL NUMBER.--302015081384501. Local Number D-335. City of Jacksonville Well at Jacksonville, FL.

LOCATION.--Lat 30°20'15", long 81°38'45", in land grant 37, T.2 S., R.26 E., Hydrologic Unit 03080103, located at rear of Robert Kennedy Community Center, 1133 Ionia Street, near intersection of 2nd and Clark Streets, in Springfield area of Jacksonville. Owner: City of Jacksonville.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter 12 in., depth 1,286 ft, cased to 531 ft.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966, 1969-79, 1984 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT													
23...	0940	538	--	28.0	--	--	--	--	--	--	--	--	15.0
JAN													
25...	1030	506	--	28.0	--	--	--	--	--	--	--	--	15.0
APR													
23...	1030	502	7.7	28.5	<5	234	58.0	21.0	13.0	1.50	150	85.0	15.0
JUL													
24...	0930	541	--	28.0	--	--	--	--	--	--	--	--	15.0

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
OCT				
23...	--	--	--	--
JAN				
25...	--	--	--	--
APR				
23...	.7	25.0	332	1900
JUL				
24...	--	--	--	--

DUVAL COUNTY--Continued

WELL NUMBER.--302022081393501. Local Number D-176. City of Jacksonville Well at Jacksonville, FL.

LOCATION.--Lat 30°20'22", long 81°39'35", in land grant 37, T.2 S., R.26 E., Hydrologic Unit 03080103, at pumphouse next to Hogan Creek Bridge, 50 ft west of intersection of Pearl and 3rd Streets. Owner: City of Jacksonville.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation, artesian well, diameter 10 in., depth 1,280 ft, cased to 800 ft.

WATER LEVEL RECORDS

INSTRUMENTATION.--Monthly measurement with pressure gage.

DATUM.--Land-surface datum is 3 ft above sea level, from topographic map. Measuring point: Top of concrete slab, 0.5 ft above land-surface datum.

PERIOD OF RECORD.--October 1986 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.70 ft above land-surface datum, Mar. 23, 1998; lowest measured, 17.00 ft above land-surface datum, July 25, 2000.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1986 to current year.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	-20.00	DEC 18	-24.40	FEB 26	-24.60	APR 24	-22.70	JUN 20	-21.50	AUG 27	-19.90
NOV 21	-20.50	JAN 30	-22.50	MAR 22	-23.90	MAY 22	-21.80	JUL 25	-21.10	SEP 24	-21.30

WATER YEAR 2001 HIGHEST -24.60 FEB 26, 2001 LOWEST -19.90 AUG 27, 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
OCT													
24...	1015	628	--	25.0	--	--	--	--	--	--	--	--	12.0
JAN													
30...	0945	624	--	25.0	--	--	--	--	--	--	--	--	12.0
APR													
24...	1030	621	7.7	25.7	<5	300	74.0	27.0	11.0	1.90	135	170	13.0
JUL													
25...	0940	622	--	26.0	--	--	--	--	--	--	--	--	12.0

DATE	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)
OCT				
24...	--	--	--	--
JAN				
30...	--	--	--	--
APR				
24...	.7	21.0	419	3800
JUL				
25...	--	--	--	--

Note.--Negative figures indicate water level above land surface.

DUVAL COUNTY--Continued

WELL NUMBER.--302052081323201. Local Number D-3060. Arlington East Sewage Treatment Plant Well at Jacksonville, FL.

LOCATION.--Lat 30°20'52", long 81°32'32", in SE¼SW¼NW¼ sec. 7, T.2 S., R.28 E., Hydrologic Unit 03080103, 80 ft north of North Plant Road and 900 ft east of Millcove Road. Owner: St. Johns River Water Management District.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 2,112 ft, cased to 2,050 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape or pressure gage.

DATUM.--Land-surface datum is 28.44 ft above sea level. Measuring point: Top of 6 in. well flange, 3.55 ft, above land-surface datum.

PERIOD OF RECORD.--February 1983 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 36.39 ft above sea level, Apr. 30, 1986; lowest measured, 15.35 ft above sea level, June 27, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	19.11	DEC 18	19.14	FEB 26	19.26	APR 26	17.60	JUN 21	17.14	AUG 27	19.40
NOV 27	19.38	JAN 29	19.13	MAR 26	19.41	MAY 22	16.96	JUL 23	18.81	SEP 25	20.90

WATER YEAR 2001 LOWEST 16.96 MAY 22, 2001 HIGHEST 20.90 SEP 25, 2001

WELL NUMBER.--302130081411802. Local Number D-46A. City of Jacksonville Well at Jacksonville, FL.

LOCATION.--Lat 30°21'30", long 81°41'18", in land grant 35, T.2 S., R.26 E., Hydrologic Unit 03080103, located at intersection of Fairfax and 25th Streets, in Moncrief Park area of Jacksonville. Owner: City of Jacksonville.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 10 in., depth 1,234 ft, cased to 530 ft.

REMARKS.--Well originally drilled to 1,064 ft in 1939, later drilled to 1,234 ft in 1963.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1941, 1964, 1969-81, 1986 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
OCT 23...	0915	552	--	28.0	--	--	--	--	--	--	--	--	13.0
JAN 24...	0800	550	--	20.0	--	--	--	--	--	--	--	--	13.0
APR 23...	0830	551	7.6	26.5	<5	261	67.0	22.0	12.0	1.60	138	130	13.0
JUL 25...	1000	550	--	27.0	--	--	--	--	--	--	--	--	13.0

DATE	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)
OCT 23...	--	--	--	--
JAN 24...	--	--	--	--
APR 23...	.7	23.0	359	2400
JUL 25...	--	--	--	--

DUVAL COUNTY--Continued

WELL NUMBER.--302159081235601. Local Number D-2386. Hanna Park Test Well at Jacksonville, FL.

LOCATION.--Lat 30°21'59", long 81°23'56", in land grant 37, T.2 S., R.29 E., Hydrologic Unit 03080201, 25 ft north of beach front parking lot #8, 0.8 mi east from intersection of Mayport and Wonderwood Road, and 2.6 mi southeast of City of Mayport. Owner: St. Johns River Water Management District.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 2,026 ft, cased to 1,892 ft.

INSTRUMENTATION.--Monthly measurement with pressure gage.

DATUM.--Land-surface datum is 18.94 ft above sea level. Measuring point: Top of flange, 1.16 ft above land-surface datum.

PERIOD OF RECORD.--April 1986 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 45.50 ft above sea level, Feb. 21, 1995; lowest measured, 26.60 ft above sea level, May 30, 1990.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	37.90	DEC 18	38.10	FEB 26	37.70	APR 23	36.30	JUN 21	36.30	AUG 27	38.70
NOV 29	37.60	JAN 24	37.70	MAR 26	37.50	MAY 29	35.70	JUL 24	37.90	SEP 28	40.10

WATER YEAR 2001 LOWEST 35.70 MAY 29, 2001 HIGHEST 40.10 SEP 28, 2001

DUVAL COUNTY--Continued

WELL NUMBER.--302227081435001. Local Number D-592. City of Jacksonville Lincoln Estates Well at Jacksonville, FL.

LOCATION.--Lat 30°22'27", long 81°43'50", in land grant 39, T.1 S., R.26 E., Hydrologic Unit 03080103, at water treatment plant, on south side of Kinlock Drive South, 0.3 mile west of U.S. Highway 1. Owner: City of Jacksonville.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation, artesian well, diameter 16 to 10 in., depth 1,326 ft, cased to 1,150 ft.

WATER LEVEL RECORDS

INSTRUMENTATION.--Monthly measurement with pressure gage.

DATUM.--Land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top of concrete slab, 0.5 ft above land-surface datum.

PERIOD OF RECORD.--October 1986 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.90 ft above land-surface datum, Mar. 23, 1998; lowest measured, 22.70 ft above land-surface datum, July 25, 2000.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1986 to current year.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	-25.20	DEC 18	-25.40	FEB 23	-25.90	APR 24	-24.80	JUN 20	-23.90	AUG 28	-24.90
NOV 21	-24.80	JAN 25	-25.70	MAR 22	-26.20	MAY 21	-23.60	JUL 25	-24.60	SEP 24	-26.10

WATER YEAR 2001 HIGHEST -26.20 MAR 22, 2001 LOWEST -23.60 MAY 21, 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
OCT 24...	0845	614	--	25.0	--	--	--	--	--	--	--	--	11.0
JAN 25...	0815	610	--	25.0	--	--	--	--	--	--	--	--	11.0
APR 24...	0945	611	7.7	25.5	<5	296	76.0	25.0	11.0	1.70	131	160	12.0
JUL 25...	1020	610	--	25.5	--	--	--	--	--	--	--	--	11.0

DATE	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)
OCT 24...	--	--	--	--
JAN 25...	--	--	--	--
APR 24...	.7	22.0	410	2800
JUL 25...	--	--	--	--

Note.--Negative figures indicate water level above land surface.

DUVAL COUNTY--Continued

WELL NUMBER.--302236081401501. Local Number D-336. City of Jacksonville Well at Jacksonville, FL.

LOCATION.--Lat 30°22'36", long 81°40'15", in land grant 50, T.1 S., R.26 E., Hydrologic Unit 03080103, located at 1025 Kenmore Street, 0.4 mi west of Norwood Avenue, and 0.4 mi southeast of intersection of Norwood Avenue and Interstate Highway 95 in Jacksonville. Owner: City of Jacksonville.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter unknown, depth 1,303 ft, cased to 520 ft.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975, 1978 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT													
23...	1120	486	--	26.0	--	--	--	--	--	--	--	--	13.0
JAN													
24...	0845	486	--	27.0	--	--	--	--	--	--	--	--	13.0
APR													
25...	1115	482	7.8	27.0	<5	217	55.0	19.0	12.0	1.40	146	81.0	13.0
JUL													
25...	1040	482	--	28.0	--	--	--	--	--	--	--	--	13.0

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
OCT				
23...	--	--	--	--
JAN				
24...	--	--	--	--
APR				
25...	.6	24.0	303	1300
JUL				
25...	--	--	--	--

DUVAL COUNTY--Continued

WELL NUMBER.--302301081295001. Local Number DS-522. Fort Caroline National Memorial Park Well at Jacksonville, FL.

LOCATION.--Lat 30°23'01", long 81°29'38", in land grant 43, T.1 S., R.28 E., Hydrologic Unit 03080103, 75 ft west of Fort Caroline Road, and 200 ft southwest of Fort Caroline Park entrance. Owner: St. Johns River Water Management District.

AQUIFER.--Non-artesian sand aquifer of the Tertiary System, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, unused, nonartesian well, diameter 4 in., depth 34 ft, cased to 24 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 16.58 ft above sea level. Measuring point: Shelter floor, 1.22 ft above land-surface datum.

PERIOD OF RECORD.--December 1985 to current year. Prior to October 1989, published as D-3537 U.S. Park Service Well at Jacksonville.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 13.99 ft above sea level, July 25, 1991; lowest, 6.07 ft above sea level, Aug. 22, 1988.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	9.71	8.91	8.65	8.55	8.38	8.26	8.57	7.94	7.76	8.39	8.55	8.79
10	9.49	8.81	8.60	8.47	8.37	8.22	8.44	7.89	7.73	8.28	8.52	8.82
15	9.32	8.73	8.58	8.43	8.35	8.20	8.28	7.85	8.31	8.18	8.40	10.62
20	9.16	8.68	8.53	8.39	8.31	8.55	8.15	7.77	8.44	8.14	8.69	10.64
25	9.09	8.69	8.50	8.38	8.28	8.71	8.09	7.68	8.47	8.33	8.67	10.47
EOM	9.00	8.74	8.59	8.34	8.27	8.68	8.01	7.82	8.45	8.34	8.38	10.31
MAX	9.73	8.98	8.70	8.59	8.38	8.71	8.68	8.00	8.47	8.45	8.72	10.79

CAL YR 2000 MAX 9.73
WTR YR 2001 MAX 10.79

WELL NUMBER.--302301081295002. Local Number DS-523. Fort Caroline National Memorial Park Well at Jacksonville, FL.

LOCATION.--Lat 30°23'01", long 81°29'50", in land grant 43, T.1S., R.28 E., Hydrologic Unit 03080103, 75 ft west of Fort Caroline Road, and 200 ft southwest of Fort Caroline Park entrance. Owner: St. Johns River Water Management District.

AQUIFER.--Hawthorne sand and gravel aquifer of Miocene Series, Geologic Unit 122 HTRN.

WELL CHARACTERISTICS.--Drilled, observation, unused, nonartesian well, diameter 4 in., depth 204 ft, cased to 190 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 16.84 ft above sea level. Measuring point: Shelter floor, 1.30 ft above land-surface datum.

PERIOD OF RECORD.--December 1985 to current year. Prior to October 1989, published as D-3538 U.S. Park Service Well at Jacksonville, FL.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 10.58 ft above sea level, Oct. 15, 1995; lowest, 5.89 ft above sea level, June 29, 1989.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.50	7.09	6.82	6.57	6.50	6.34	6.53	6.20	6.06	6.49	6.60	6.76
10	7.37	6.99	6.79	6.51	6.44	6.41	6.44	6.24	6.08	6.30	6.52	6.76
15	7.29	6.95	6.76	6.56	6.42	6.39	6.33	6.20	6.44	6.33	6.47	7.90
20	7.18	6.92	6.62	6.52	6.37	6.63	6.26	6.13	6.46	6.39	6.66	8.12
25	7.26	6.93	6.59	6.49	6.37	6.64	6.26	6.03	6.50	6.51	6.57	8.12
EOM	7.16	6.85	6.66	6.43	6.33	6.66	6.21	6.20	6.54	6.51	6.45	8.03
MAX	7.53	7.15	6.83	6.61	6.50	6.67	6.62	6.24	6.54	6.51	6.66	8.13

CAL YR 2000 MAX 7.53
WTR YR 2001 MAX 8.13

WELL NUMBER.--302304081383202. Local Number D-122A. City of Jacksonville Panama Park Well at Jacksonville, FL.

LOCATION.--Lat 30°23'04", long 81°38'32", in land grant 50, T.1 S., R.27 E., Hydrologic Unit 03080103, between Eastland and Russell Streets, 20 ft north of 63rd Street, and 0.4 mi east of U.S. Highway 17 in Jacksonville. Owner: City of Jacksonville.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 8 in., depth 905 ft, cased to 571 ft.

INSTRUMENTATION.--Monthly measurement with pressure gage.

DATUM.--Land-surface datum is 13.07 ft above sea level. Measuring point: Top of flange at land-surface datum.

REMARKS.--Well originally drilled to 700 ft in 1914, later drilled to 905 ft in 1925.

PERIOD OF RECORD.--August 1930, June 1938, November 1940 to April 1942, January 1944 to June 1944, August 1945 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 61.87 ft above sea level, Aug. 21, 1930; lowest measured, 29.27 ft above sea level, Apr. 24, 1975.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	32.47	JAN 24	33.07	APR 25	31.77	JUN 20	31.27	SEP 24	33.77		
NOV 21	32.17	FEB 23	33.07	MAY 16	31.37	JUL 23	32.07				
DEC 18	32.67	MAR 22	33.57	21	31.07	AUG 27	32.57				

WATER YEAR 2001 LOWEST 31.07 MAY 21, 2001 HIGHEST 33.77 SEP 24, 2001

WELL NUMBER.--302307081293801. Local Number D-424. U.S. Park Service Well at Jacksonville, FL.

LOCATION.--Lat 30°23'07", long 81°29'38", in NW¼SE¼SE¼ sec.28, T.1 S., R.28 E., Hydrologic Unit 03080103, 106 ft southeast of Fort Caroline Road, and 0.2 mi northeast of Fort Caroline National Park entrance in Jacksonville. Owner: U.S. Park Service.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, artesian well, diameter 6 in., depth 700 ft, cased to 426 ft.

INSTRUMENTATION.--Bimonthly measurement with pressure gage.

DATUM.--Land-surface datum is 11.25 ft above sea level. Measuring point: Top of flange on 6 in. tee, 3.60 ft above land-surface datum.

PERIOD OF RECORD.--December 1966, May 1968 to September 1978 (semiannually); January 1979 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 43.55 ft above sea level, Dec. 19, 1966; lowest measured, 22.05 ft above sea level, June 8, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 16	27.15	DEC 06	27.75	MAR 08	27.35	JUN 11	25.55	AUG 07	27.95	SEP 10	28.35

WATER YEAR 2001 LOWEST 25.55 JUN 11, 2001 HIGHEST 28.35 SEP 10, 2001

DUVAL COUNTY--Continued

WELL NUMBER.--302339081254702. Local Number D-464A. City of Jacksonville Well at Jacksonville, FL.

LOCATION.--Lat 30°23'39", long 81°25'47", in land grant 38, T.1 S., R.29 E., Hydrologic Unit 03080103, in Julia Street pumping station, 1 block east of State Highway A1A and Ocean Street, 0.2 mi south of Mayport Ferry landing in Mayport. Owner: City of Jacksonville.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 10 in., depth 1,000 ft, cased to 427 ft.

WATER LEVEL RECORDS

INSTRUMENTATION.--Semiannual measurement with pressure gage.

DATUM.--Land-surface datum is 6.78 ft above sea level. Measuring point: Top of 15 in. flange 3.90 ft above land-surface datum.

PERIOD OF RECORD.--May 1977 to current year (semiannually).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 40.08 ft above sea level, Sept. 15, 1982; lowest measured, 24.28 ft above sea level, May 19, 1989.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974 to current year.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 17	25.68	SEP 28	35.58

WATER YEAR 2001 LOWEST 25.68 MAY 17, 2001 HIGHEST 35.58 SEP 28, 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT													
25...	0930	575	--	24.0	--	--	--	--	--	--	--	--	14.0
JAN													
24...	1240	578	--	23.0	--	--	--	--	--	--	--	--	14.0
APR													
23...	1330	570	7.7	27.0	<5	272	62.0	28.0	11.0	1.60	131	140	14.0
JUL													
23...	1320	572	--	25.5	--	--	--	--	--	--	--	--	14.0

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
OCT				
25...	--	--	--	--
JAN				
24...	--	--	--	--
APR				
23...	.7	24.0	399	1600
JUL				
23...	--	--	--	--

WELL NUMBER.--302416081522601. Local Number D-348. Monticello Drug Company Well at Jacksonville, FL.

LOCATION.--Lat 30°24'16", long 81°52'26", in NW¼NW¼NE¼ sec.23, T.1 S., R.24 E., Hydrologic Unit 03080103, 1.5 mi west of west end of Garden Street, off a private dirt road in Jacksonville. Owner: Monticello Drug Company.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, temporary water supply, artesian well, diameter 6 in., depth 708 ft, cased to 416 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 86.78 ft above sea level. Measuring point: Shelter floor at top of 11 in. flange, 1.50 ft above land-surface datum.

PERIOD OF RECORD.--March 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 46.32 ft above sea level, Mar. 20, 21, 1998; lowest, 35.07 ft above sea level, July 22, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	37.37	37.64	37.64	37.90	38.22	38.27	38.32	37.04	35.53	36.33	37.01	37.39
10	37.32	37.61	37.71	37.59	38.22	38.23	38.25	36.83	35.60	36.43	37.11	37.64
15	37.52	37.41	37.62	37.80	38.27	38.39	38.02	36.79	35.94	36.41	37.26	38.30
20	37.42	37.39	37.75	38.03	38.16	38.57	37.60	36.44	36.09	36.42	37.29	38.32
25	37.50	37.70	37.47	37.94	38.13	38.45	37.41	35.91	36.21	36.63	37.27	38.49
EOM	37.57	37.60	37.82	38.16	38.21	38.60	37.12	35.63	36.27	36.75	37.08	38.56
MAX	37.61	37.70	38.14	38.16	38.31	38.60	38.60	37.18	36.27	36.75	37.29	38.58

CAL YR 2000 MAX 40.15
WTR YR 2001 MAX 38.60

WELL NUMBER.--302416081522602. Local Number D-349. Monticello Drug Co. Well at Jacksonville, FL.

LOCATION.--Lat 30°24'16", long 81°52'26", in NW¼NW¼NE¼ sec.23, T.1 S., R.24 E., Hydrologic Unit 03080103, 1.5 mi west of west end of Garden Street, off a private dirt road in Jacksonville. Owner: Monticello Drug Company.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian oil test well, diameter 10 in., depth 1,986 ft, cased to 444 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 85.66 ft above sea level. Measuring point: Top of 10 in. casing, 3.50 ft above land-surface datum.

REMARKS.--Well originally drilled to 2,230 ft in 1969.

PERIOD OF RECORD.--March 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 56.30 ft above sea level, Mar. 10, 1971; lowest, 37.69 ft above sea level, July 24,25, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	40.24	40.32	40.25	40.44	40.70	40.67	40.79	39.46	38.03	38.76	39.41	39.95
10	40.16	40.25	40.32	40.16	40.67	40.63	40.71	39.34	38.12	38.86	39.60	40.26
15	40.33	40.09	40.20	40.36	40.72	40.78	40.49	39.27	38.42	38.76	39.72	40.99
20	40.17	40.06	40.28	40.53	40.58	41.00	40.08	38.90	38.60	38.76	39.79	41.09
25	40.26	40.34	40.08	40.43	40.55	40.92	39.92	38.37	38.72	39.08	39.70	41.24
EOM	40.26	40.22	40.35	40.60	40.61	41.09	39.62	38.19	38.77	39.18	39.53	41.29
MAX	40.33	40.34	40.67	40.63	40.76	41.09	41.07	39.71	38.77	39.21	39.79	41.31

CAL YR 2000 MAX 42.56
WTR YR 2001 MAX 41.31

DUVAL COUNTY--Continued

WELL NUMBER.--302502081330701. Local Number D-228. Jacksonville Electric Authority Well at Jacksonville, FL.

LOCATION.--Lat 30°25'02", long 81°33'30", in NW¼NW¼SE¼ sec. 13, T.1 S., R.27 E., Hydrologic Unit 03080103, located at Jacksonville Electric Authority Northside Generating Station at 4377 Heckscher Drive, 6.8 mi east of intersection of U.S. Highway 17 and Heckscher Drive in Jacksonville. Owner: Jacksonville Electric Authority.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, industrial, artesian well, diameter 16 in., depth 850 ft, casing length unknown.

WATER LEVEL RECORDS

INSTRUMENTATION.--Quarterly measurement with pressure gage.

DATUM.--Land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top of 16 in. flange, 1.0 ft, above land-surface datum.

REMARKS.--No water level data collected at times when well is in use.

PERIOD OF RECORD.--October 1979 to current year (quarterly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.40 ft above land-surface datum, Mar. 9, 1983; lowest measured, 18.40 ft above land-surface datum, July 27, 2000.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974, 1976, 1979 to current year.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	-21.50	JAN 24	-21.60	APR 26	-18.80	JUL 26	-20.00
WATER YEAR 2001		HIGHEST	-21.60	JAN 24, 2001		LOWEST	-18.80 APR 26, 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
OCT				
26...	1045	430	24.0	30.0
JAN				
24...	1115	524	21.0	31.0
APR				
26...	1120	483	22.5	30.0
JUL				
26...	1130	444	26.0	31.0

Note.--Negative figures indicate water level above land surface.

DUVAL COUNTY--Continued

WELL NUMBER.--302503081332001. Local Number D-1149. Jacksonville Electric Authority Well at Jacksonville, FL.

LOCATION.--Lat 30°25'03", long 81°33'20", in NE¼NE¼SW¼ sec. 13, T.1 S., R.27 E., Hydrologic Unit 03080103, located at Jacksonville Electric Authority Northside Generating Station at 4377 Heckscher Drive, 6.8 mi east of intersection of U.S. Highway 17 and Heckscher Drive in Jacksonville. Owner: Jacksonville Electric Authority.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, industrial, artesian well, diameter 16 in., depth 1,104 ft, cased to 520 ft.

WATER LEVEL RECORDS

INSTRUMENTATION.--Quarterly measurement with pressure gage.

DATUM.--Land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top of concrete slab, 1.15 ft, above land-surface datum.

REMARKS.--No water level data collected at times when well is in use.

PERIOD OF RECORD.--January 1980 to current year (quarterly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 38.35 ft above land-surface datum, Jan. 28, 1999; lowest measured, 17.00 ft above land-surface datum, July 24, 1981.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 26	-37.95	JUL 26	-36.55

WATER YEAR 2001	HIGHEST	-37.95	APR 26, 2001	LOWEST	-36.55	JUL 26, 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
APR 26...	1115	525	26.5	19.0
JUL 26...	1040	518	27.0	20.0

Note.--Negative figures indicate water level above land surface.

DUVAL COUNTY--Continued

WELL NUMBER.--302505081331001. Local Number D-1150. Jacksonville Electric Authority Well at Jacksonville, FL.

LOCATION.--Lat 30°25'05", long 81°33'10", in NW¼NW¼SE¼ sec. 13, T.1 S., R.27 E., Hydrologic Unit 03080103, located at Jacksonville Electric Authority Northside Generating Station at 4377 Heckscher Drive, 6.8 mi east of intersection of U.S. Highway 17 and Heckscher Drive in Jacksonville. Owner: Jacksonville Electric Authority.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, industrial, artesian well, diameter 16 in., depth 1,104 ft, cased to 520 ft.

WATER LEVEL RECORDS

INSTRUMENTATION.--Quarterly measurement with pressure gage.

DATUM.--Land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top of 16 in. flange, 0.70 ft, above land-surface datum.

REMARKS.--No water level data collected at times when well is in use.

PERIOD OF RECORD.--January 1981 to current year (quarterly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 41.95 ft above land-surface datum, July 20, 1995; lowest measured, 18.60 ft above land-surface datum, July 24, 1981.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976, 1979 to current year.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 24	-37.10	APR 26	-39.60	JUL 26	-38.50

WATER YEAR 2001 HIGHEST -39.60 APR 26, 2001 LOWEST -38.50 JUL 26, 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
OCT				
26...	1040	527	26.0	21.0
JAN				
24...	1100	583	25.0	36.0
APR				
26...	1100	597	25.5	38.0
JUL				
26...	1045	516	28.0	20.0

Note.--Negative figures indicate water level above land surface.

DUVAL COUNTY--Continued

WELL NUMBER.--302511081331201. Local Number D-1151. Jacksonville Electric Authority Well at Jacksonville, FL.

LOCATION.--Lat 30°25'11", long 81°33'12", in SW¼SW¼NE¼ sec. 13, T.1 S., R.27 E., Hydrologic Unit 03080103, located at Jacksonville Electric Authority Northside Generating Station at 4377 Heckscher Drive, 6.8 mi east of intersection of U.S. Highway 17 and Heckscher Drive, in Jacksonville. Owner: Jacksonville Electric Authority.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, industrial, artesian well, diameter 16 in., depth 1,104 ft, cased to 520 ft.

WATER LEVEL RECORDS

INSTRUMENTATION.--Quarterly measurement with pressure gage.

DATUM.--Land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top of 16 in. flange, 1.2 ft, above land-surface datum.

REMARKS.--No water level data collected at times when well is in use.

PERIOD OF RECORD.--September 1976, July 1979, October 1980 to current year (quarterly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 38.00 ft above land-surface datum, July 26, 2001; lowest measured, 19.40 ft above land-surface datum, Oct. 31, 1990.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976, 1979 to current year.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 24	-33.20	APR 26	-33.40	JUL 26	-38.00

WATER YEAR 2001 HIGHEST -38.00 JUL 26, 2001 LOWEST -33.20 JAN 24, 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
OCT 26...	1035	526	25.5	21.0
JAN 24...	1045	526	25.0	21.0
APR 26...	1045	525	25.0	20.0
JUL 26...	1025	526	28.0	21.0

Note.--Negative figures indicate water level above land surface.

DUVAL COUNTY--Continued

WELL NUMBER.--302519081331501. Local Number D-1152. Jacksonville Electric Authority Well at Jacksonville, FL.

LOCATION.--Lat 30°25'19", long 81°33'15", in NE¼SE¼NW¼ sec. 13, T.1 S., R.27 E., Hydrologic Unit 03080103, located at Jacksonville Electric Authority Northside Generating Station at 4377 Heckscher Drive, 6.8 mi east of intersection of U.S. Highway 17 and Heckscher Drive in Jacksonville. Owner: Jacksonville Electric Authority.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, industrial, artesian well, diameter 16 in., depth 1,104 ft, cased to 520 ft.

WATER LEVEL RECORDS

INSTRUMENTATION.--Quarterly measurement with pressure gage.

DATUM.--Land-surface datum is 10 ft above sea level, from topographic map. Measuring point: Top of concrete slab, at land-surface datum.

REMARKS.--No water level data collected at times when well is in use.

PERIOD OF RECORD.--October 1980 to current year (quarterly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 37.00 ft above land-surface datum, July 22, 1997; lowest measured, 16.30 ft above land-surface datum, July 24, 1981.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1980 to current year.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL
JUL 26	-36.20

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
OCT 26...	1025	531	25.0	22.0
JUL 26...	1015	518	30.2	21.0

Note.--Negative figures indicate water level above land surface.

DUVAL COUNTY--Continued

WELL NUMBER.--302538081392501. Local Number D-329. City of Jacksonville Well at Jacksonville, FL.

LOCATION.--Lat 30°25'38", long 81°39'25", in land grant 49, T.1 S., R.26 E., Hydrologic Unit 03080103, located in Highlands pumping station at end of Beckner Drive, 2 blocks south of intersection of Monaco Drive and Dunn Avenue in Jacksonville. Owner: City of Jacksonville.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 20 in., depth 1,209 ft, cased to 545 ft.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967, 1972-78, 1983 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM COBALT UNITS) (00080)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
OCT													
25...	1040	523	--	26.0	--	--	--	--	--	--	--	--	19.0
JAN													
25...	1000	523	--	22.0	--	--	--	--	--	--	--	--	19.0
APR													
25...	1015	522	7.6	26.5	<5	238	57.0	23.0	15.0	1.50	160	79.0	19.0
JUL													
25...	1100	521	--	27.0	--	--	--	--	--	--	--	--	19.0

DATE	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)
APR				
25...	.6	29.0	329	550

WELL NUMBER.--302550081331501. Local Number D-3840. St. Johns River Power Park replacement Well at Jacksonville, FL.

LOCATION.--Lat 30°25'50", long 81°33'15", in SE¼NE¼SW¼ sec.12, T.1 S., R.27 E., Hydrologic Unit 03080103, 1,800 ft southeast of the intersection of New Berlin and Faye Roads in Jacksonville. Owner: St. Johns River Power Park.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, industrial, artesian well, diameter 6 in., depth 750 ft, cased to 470 ft.

INSTRUMENTATION.--Water-stage recorder with pressure transducer.

DATUM.--Land-surface datum is 13.67 ft above sea level. Measuring point: Top of 6 in. pipe flange, 1.12 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells. Record is equivalent to that for D-2399 (302559081331501), available October 1984 to April 1990.

PERIOD OF RECORD.--April 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 37.29 ft above sea level, Feb. 4, 1995; lowest, 15.69 ft above sea level, June 12, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.39	23.19	26.79	23.79	25.69	29.09	24.69	21.99	17.19	23.49	18.99	24.24
10	24.09	22.89	21.39	22.59	25.89	26.89	24.24	22.29	22.29	23.49	25.89	24.54
15	25.54	22.59	24.69	25.59	25.69	25.29	24.39	16.29	15.99	24.09	25.29	26.39
20	24.79	22.89	23.19	25.59	25.99	27.29	16.44	24.54	22.74	23.19	24.69	26.19
25	25.54	27.99	24.09	24.69	25.69	25.59	22.59	21.24	23.34	23.49	23.34	19.29
EOM	25.29	24.69	24.99	25.49	27.69	25.29	23.49	17.19	23.49	24.99	23.79	26.19
MAX	28.29	27.99	26.79	25.89	27.69	29.59	25.99	24.54	23.49	25.19	26.19	26.49

CAL YR 2000 MAX 29.79
WTR YR 2001 MAX 29.59

DUVAL COUNTY--Continued

WELL NUMBER.--302557081253101. Local Number D-913. Jerri Betz Well at Fort George Island, Jacksonville, FL.

LOCATION.--Lat 30°25'57", long 81°25'31", in land grant 37, T.1 S., R.29 E., Hydrologic Unit 03080103, located at former site of Betz residence, at State Park on Fort George Island, off dirt road, 0.30 mi north of Ft. George Road. Owner: Florida Park Service.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 4 in., depth 556 ft, cased to 435 ft.

WATER LEVEL RECORDS

INSTRUMENTATION.--Quarterly measurement with pressure gage.

DATUM.--Land-surface datum is 20 ft above sea level, from topographic map. Measuring point: Top of water spigot handle, 1.4 ft above land-surface datum.

PERIOD OF RECORD.--January 1982, October 1990 to current year (quarterly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.00 ft above land-surface datum, Jan. 25,1995; lowest measured, 11.90 ft above land-surface datum, July 26, 2000.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976, 1987, 1990 to current year.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	-15.30	JAN 26	-15.00	APR 26	-13.50	JUL 26	-13.80

WATER YEAR 2001 HIGHEST -15.30 OCT 26, 2000 LOWEST -13.50 APR 26, 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT													
26...	1200	1420	--	23.0	--	--	--	--	--	--	--	--	390
JAN													
26...	1000	1650	--	19.0	--	--	--	--	--	--	--	--	390
APR													
26...	1220	1770	7.8	20.5	5	430	79.0	56.0	170	3.50	100	150	390
JUL													
26...	0915	1660	--	23.5	--	--	--	--	--	--	--	--	390

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
OCT				
26...	--	--	--	--
JAN				
26...	--	--	--	--
APR				
26...	.5	11.0	1030	1700
JUL				
26...	--	--	--	--

Note.--Negative figures indicate water level above land surface.

DUVAL COUNTY--Continued

WELL NUMBER.--302608081354901. Local Number D-262. St. Regis Paper Company Well at Jacksonville, FL.

LOCATION.--Lat 30°26'10", long 81°35'48", in land grant 46, T.1 S., R.27 E., Hydrologic Unit 03080103, 75 ft south of dirt road, 0.4 mi east of Eastport Road in Jacksonville. Owner: Smurfit-Stone Container Corporation.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, industrial, artesian well, diameter 4 in., depth 1,237 ft, cased to 1,163 ft.

INSTRUMENTATION.--Monthly measurement with pressure gage.

DATUM.--Land-surface datum is 16.32 ft above sea level. Measuring point: Top of well flange, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--June 1951 to April 1981 (bimonthly); May 1981 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 53.32 ft above sea level, June 12, 1951; lowest measured, 30.42 ft above sea level, July 24, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	33.12	DEC 18	32.82	FEB 23	33.32	APR 25	31.82	JUN 20	31.52	AUG 27	33.02
NOV 21	32.62	JAN 24	33.32	MAR 22	33.82	MAY 21	31.22	JUL 23	32.62	SEP 24	33.82

WATER YEAR 2001 LOWEST 31.22 MAY 21, 2001 HIGHEST 33.82 MAR 22, 2001 SEP 24, 2001

WELL NUMBER.--302608081354902. Local Number D-263. St. Regis Paper Company Well at Jacksonville, FL.

LOCATION.--Lat 30°26'08", long 81°35'49", in land grant 46, T.1 S., R.27 E., Hydrologic Unit 03080103, 75 ft south of dirt road, 0.4 mi east of Eastport Road in Jacksonville. Owner: Smurfit-Stone Container Corporation.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 4 in., depth 1,025 ft, cased to 850 ft.

INSTRUMENTATION.--Monthly measurement with pressure gage.

DATUM.--Land-surface datum is 15.96 ft above sea level. Measuring point: Top of spigot handle, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1951 to April 1979 (semiannually); January 1980 to September 1985 (bimonthly), October 1985 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 52.16 ft above sea level, Feb. 4, 1954; lowest measured, 31.16 ft above sea level, July 24, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	33.96	DEC 18	33.86	FEB 23	34.36	APR 25	33.06	JUN 20	32.46	AUG 27	33.76
NOV 21	33.46	JAN 24	34.26	MAR 22	34.96	MAY 21	31.96	JUL 23	33.36	SEP 24	35.16

WATER YEAR 2001 LOWEST 31.96 MAY 21, 2001 HIGHEST 35.16 SEP 24, 2001

DUVAL COUNTY--Continued

WELL NUMBER.--302608081354903. Local Number D-264. St. Regis Paper Company Well at Jacksonville, FL.

LOCATION.--Lat 30°26'10", long 81°35'49", in land grant 46, T.1 S., R.27 E., Hydrologic Unit 03080103, 75 ft south of dirt road, 0.4 mi east of Eastport Road in Jacksonville. Owner: Smurfit-Stone Container Corporation.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, industrial, artesian well, diameter 4 in., depth 654 ft, cased to 574 ft.

INSTRUMENTATION.--Monthly measurement with pressure gage.

DATUM.--Land-surface datum is 15.87 ft above sea level. Measuring point: Top of well flange, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1951 to September 1978 (semiannually); February 1979 to September 1985 (bimonthly), October 1985 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 51.87 ft above sea level, Jan. 9, 1952; lowest measured, 29.37 ft above sea level, June 26, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	32.57	JAN 24	32.87	APR 25	31.67	JUN 20	31.17	SEP 24	33.77		
NOV 21	32.27	FEB 23	33.07	MAY 16	31.17	JUL 23	32.07				
DEC 18	32.47	MAR 22	33.47	21	30.77	AUG 27	32.47				

WATER YEAR 2001 LOWEST 30.77 MAY 21, 2001 HIGHEST 33.77 SEP 24, 2001

DUVAL COUNTY--Continued

WELL NUMBER.--302724081244801. Local Number D-395. Florida Park Service Well at Jacksonville, FL.

LOCATION.--Lat 30°27'24", long 81°24'48", in land grant 42, T.1 S., R.29 E., Hydrologic Unit 03070205, well located at Little Talbot Island State Park, 2.2 mi north of Ft. George Inlet on State Highway A1A. Owner: Florida Park Service.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter unknown, depth and casing length unknown.

WATER LEVEL RECORDS

INSTRUMENTATION.--Quarterly measurement with pressure gage.

DATUM.--Land-surface datum is 7.57 ft above sea level. Measuring point: Top of 4 in. tee, 2.50 ft above land-surface datum.

PERIOD OF RECORD.--Water years 1966, 1969, 1972-76 (annually); 1977-89 (semiannually); 1991 to current year (quarterly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 44.17 ft above sea level, May 10, 1966; lowest measured, 28.47 ft above sea level, July 26, 2000.

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974-79, 1985 to current year (quarterly).

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	31.47	JAN 29	31.17	APR 26	29.97	MAY 14	31.07	JUL 27	29.57	SEP 25	33.27

WATER YEAR 2001 LOWEST 29.57 JUL 27, 2001 HIGHEST 33.27 SEP 25, 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT													
26...	1240	491	--	24.0	--	--	--	--	--	--	--	--	19.0
JAN													
29...	0930	493	--	23.0	--	--	--	--	--	--	--	--	19.0
APR													
26...	1330	490	7.7	23.0	<5	218	49.0	23.0	16.0	1.80	154	68.0	19.0
JUL													
27...	1015	488	--	26.0	--	--	--	--	--	--	--	--	19.0

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
OCT				
26...	--	--	--	--
JAN				
29...	--	--	--	--
APR				
26...	.7	28.0	306	410
JUL				
27...	--	--	--	--

DUVAL COUNTY--Continued

WELL NUMBER.--302801081375101. Local Number D-145. Duval County School Board Observation Well at Oceanway, FL.

LOCATION.--Lat 30°28'01", long 81°37'51", in land grant 37, T.1 N., R.27 E., Hydrologic Unit 03080103, at Oceanway School on Oceanway Avenue, and 600 ft east of U.S. Highway 17 in Oceanway. Owner: Duval County School Board.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 2 in., depth unknown, cased to 538 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape or pressure gage.

DATUM.--Land-surface datum is 34.79 ft above sea level. Measuring point: Top of 1 in. plug, 1.65 ft above land-surface datum.

PERIOD OF RECORD.--July 1940 to September 1978 (semiannually); February 1979 to March 1981 (bimonthly); May 1981 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 58.99 ft above sea level, June 3, 1947; lowest measured, 30.74 ft above sea level, July 24, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	33.46	DEC 18	33.56	FEB 23	33.85	APR 25	32.46	JUN 20	31.79	AUG 27	33.23
NOV 21	33.24	JAN 24	33.96	MAR 22	34.42	MAY 21	31.49	JUL 23	32.58	SEP 24	34.59

WATER YEAR 2001 LOWEST 31.49 MAY 21, 2001 HIGHEST 34.59 SEP 24, 2001

DUVAL COUNTY

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
300824081305401	05-14-01	1115	D-0169 POWEL AT BAYARD, FL	32.57
	09-26-01	1150		36.67
300926081343002	05-16-01	1720	D-1313 GREENLAND PINES AT GREENLAND,FL	25.99
	09-24-01	1310		32.30
301157081465201	05-14-01	1440	D-1292 INDIAN TRAILS AT JACKSONVILLE,FL	32.81
	09-24-01	1100		35.50
301333081324101	05-17-01	0935	D-2847 GOLF COURSE AT DEERWOOD, FL	16.71
	09-28-01	1155		26.96
301339081531203	09-24-01	1010	D-0326 J-0391	42.93
301434082021401	05-16-01	1440	D-0085 J-0149 OIL TEST SITE,E.FIVETONE RD,JAX FL	49.41
	09-24-01	0930		49.81
301617081421601	05-16-01	1500	D-0115 J-0179	21.90
	09-24-01	1340		27.35
301710081323603	05-14-01	1220	D-0547 SOUTHSIDE TOWER (USGS D-3824)	17.44
	09-25-01	1215		24.84
301749081384602	05-16-01	1320	D-1782 J-1819	25.55
	09-25-01	1330		36.25
302330081463001	05-16-01	1520	D-0420 J-0487 WING-LEE FARM; JAX, FL.	34.42
	09-24-01	1345		35.42
302339081254702	05-17-01	1040	D-464A J-0531 1459 JULIA ST; MAYPORT, FL.	25.68
	09-28-01	0830		35.58
302416081522601	05-16-01	0920	D-0348 J-0413	36.74
	09-24-01	0900		38.38
302502081321001	05-16-01	1100	D-0270 J-0335 5186 HECKSHER DR, JAX, FL.	28.25
	09-24-01	1200		32.35
302521081455601	09-24-01	0930	D-1309 DINSMORE ELEM SCHOOL NR DINSMORE,FL	35.50
302538081253101	09-25-01	1445	D-164 J-228 GOLF COURSE @ FT. GEORGE ISLAND, FL.	37.71
303209081371801	05-16-01	1015	TISONIA FIRETOWER NR JACKSONVILLE,FL	29.75
	09-24-01	1120		31.93
303216081433301	05-16-01	1550	D-0401 J-0468 DUVAL COUNTY PRISON FARM; JAX, FL.	30.97
	09-24-01	1400		35.17

KEY TO SITE LOCATIONS ON FIGURE 10
FLAGLER COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number
1	291625081092001	104
2	291658081110401	104
3	292604081062401	105
4	292750081152001	105

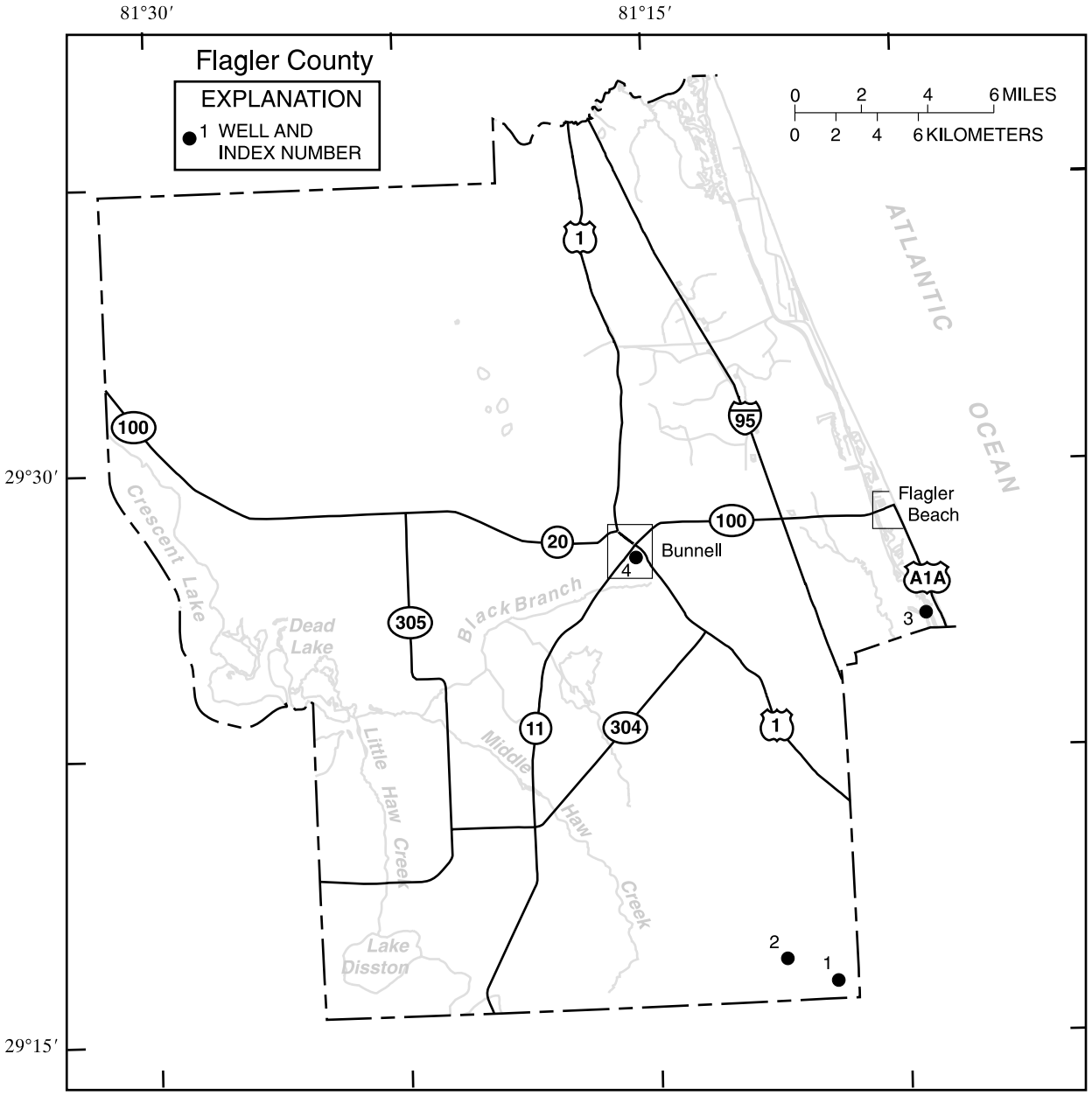

Figure 10.--Location of wells in Flagler County.

FLAGLER COUNTY

WELL NUMBER.--291625081092001. F-0286 Ormond Beach Flagler 2 at Ormond Beach, FL.

LOCATION.--Lat 29°16'25", long 81°09'19", in SE¼SW¼SE¼ sec.22, T.14 S., R.31 E., Hydrologic Unit 03080201, on southside of Airport Road, 1.7 mi west of Timber Creek Road, 1.4 mi north of State Highway 40, 0.8 mi west of I-95. Owner: City of Ormond Beach.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 270 ft, cased to 90 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 28.34 ft above sea level. Measuring point: Top of threaded flange, at land-surface datum.

PERIOD OF RECORD.--May 1995 to September 2000 (semiannually); December 2000 to September 2001 (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.18 ft above sea level, Sept. 20, 1999; lowest measured, 5.42 ft above sea level, May 12, 1997.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 19	12.21	FEB 21	10.55	APR 23	8.96	MAY 22	7.28	JUL 23	9.44	SEP 24	11.63
JAN 23	12.01	MAR 23	12.63	MAY 14	10.33	JUN 21	8.70	AUG 27	10.35		

WATER YEAR 2001 LOWEST 7.28 MAY 22, 2001 HIGHEST 12.63 MAR 23, 2001

WELL NUMBER.--291658081110401. F-0285 Ormond Beach Flagler 1 at Ormond Beach, FL.

LOCATION.--Lat 29°16'58", long 81°11'04", in SE¼SE¼SE¼ sec.17, T.14 S., R.31 E., Hydrologic Unit 03080201, approximately 2 mi north of State Highway 40, in the Hull Cypress Swamp, 8.6 mi east of Highway 11. Owner: City of Ormond Beach.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 247 ft, cased to 180 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 29.64 ft above sea level. Measuring point: Top of threaded flange, 1.24 ft above land-surface datum.

PERIOD OF RECORD.--May 2000 to September 2000 (semiannually); December 2000 to September 2001 (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.43 ft above sea level, Sept. 24, 2001; lowest measured, 12.68 ft above sea level, May 22, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 19	14.31	FEB 21	13.64	APR 23	13.46	MAY 22	12.68	JUL 23	14.97	SEP 24	16.43
JAN 23	13.77	MAR 23	14.44	MAY 14	13.33	JUN 21	13.66	AUG 27	15.67		

WATER YEAR 2001 LOWEST 12.68 MAY 22, 2001 HIGHEST 16.43 SEP 24, 2001

FLAGLER COUNTY--Continued

WELL NUMBER.--292604081062401. F-0174 SJRWMD Shallow Well.

LOCATION.--Lat 29°26'04", long 81°06'24", in SE¼SE¼NE¼ sec.30, T.12 S., R.32 E., Hydrologic Unit 03080201, behind small hill, on the west side of A1A, 3 mi south of Highway 100. Owner: St. Johns River Water Management District.

AQUIFER.--Nonartesian sand and shell of the Surficial Aquifer System, Geologic Unit 112 SDGV.

WELL CHARACTERISTICS.--Drilled, observation, nonartesian well, diameter 2 in., depth 118 ft, cased to 110 ft.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 16.64 ft above sea level. Measuring point: File marks on top of PVC casing, 1.23 ft above land-surface datum.

PERIOD OF RECORD.--May 1978 to September 2000 (semiannually); December 2000 to September 2001 (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.64 ft above sea level, Oct. 2, 1978; lowest measured, 1.72 ft above sea level, April 24, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 19	4.07	FEB 21	3.62	APR 24	1.72	MAY 22	2.80	JUL 23	5.35	SEP 24	6.13
JAN 23	4.58	MAR 23	3.79	MAY 14	2.96	JUN 21	2.87	AUG 27	5.21		

WATER YEAR 2001 LOWEST 1.72 APR 24, 2001 HIGHEST 6.13 SEP 24, 2001

WELL NUMBER.--292750081152001. USGS Well Flagler 14 at Bunnell, FL.

LOCATION.--Lat 29°27'50", long 81°15'20", in NE¼ sec.15, T.12 S., R.30 E., Hydrologic Unit 03080201, 200 ft south of intersection of West Court and South Railroad Streets, and 600 ft southwest of intersection of State Highway 11 and U.S. Highway 1 at Bunnell. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 to 4 in., depth 417 ft, casing length unknown.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 21.00 ft above sea level. Measuring point: Top of 6 in. coupling at land-surface datum.

COOPERATION.--Since Oct. 1, 1985 data provided by St. Johns River Water Management District and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--March 1936 to December 1962 (monthly); February 1963 to September 1985 (bimonthly); October 1985 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.30 ft above sea level, Sept. 9, 1947; lowest measured, 9.10 ft above sea level, June 26, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	13.08	JAN 25	11.35	APR 23	10.76	JUN 20	10.89	SEP 21	14.33		
NOV 27	12.30	FEB 22	11.32	MAY 14	10.65	JUL 24	12.01	24	14.46		
DEC 18	11.91	MAR 22	11.93	21	10.23	AUG 27	12.94				

WATER YEAR 2001 LOWEST 10.23 MAY 21, 2001 HIGHEST 14.46 SEP 24, 2001

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

FLAGLER COUNTY

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
291818081190401	05-14-01	1100	RELAY TOWER DEEP WELL (F0251)	13.31
	09-24-01	1345		17.42
291913081224201	05-14-01	1130	F-0257 STRAWN WELL NR DEANVILLE,FL	12.69
	09-25-01	0745		22.02
291955081200901	05-14-01	1222	91912003 13S29E36	8.20
	09-24-01	1355		12.59
292302081155901	05-14-01	1245	SR304 WELL AT SWEETWATER BRANCH	11.37
	09-24-01	1515		15.40
292603081082502	05-14-01	1400	F-176 BULLOW RUINS	5.18
	09-24-01	0910		8.50
292647081182001	05-15-01	0745	92611803 12S30E19	5.72
	09-25-01	0855		9.99
292757081222801	05-15-01	0845	F-0353 WESTSIDE BAPTIST NR BIMINI,FL	4.74
	09-25-01	0830		11.91
293313081132402	05-16-01	0815	SJ F158 11S31E18 ITTPALMCOASTSTJOEGRADE LW-11	10.51
	09-25-01	1150		13.98
293344081232401	05-15-01	0930	F-0294(REP.F-204)TIGER ISLAND DEEP	11.57
	09-25-01	0925		15.56
293529081191701	05-15-01	1400	SJ F165 10S30E31 PALMCOASTITT-LW-20 WESTBOUNDR	11.60
293754081121901	05-16-01	0850	SJ F200 10S31E WASHINGTONOAKSPARKWEATHERSTA	11.35
	09-25-01	1225		14.81

KEY TO SITE LOCATIONS ON FIGURE 11
GLADES COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number
1	265529081185201	110
2	271150081054401	110

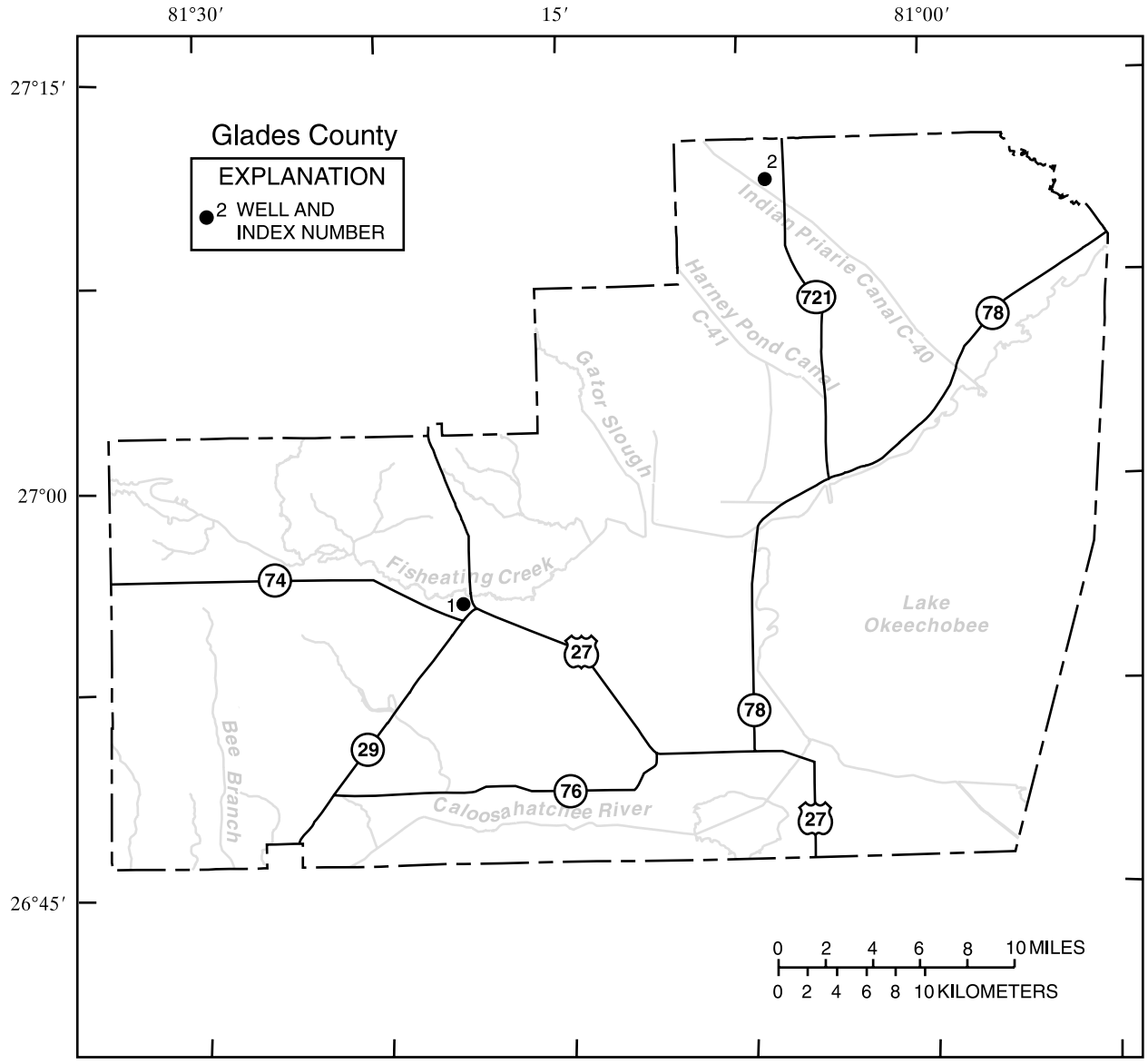

Figure 11.--Location of wells in Glades County.

GLADES COUNTY

WELL NUMBER.--265529081185201. GL-267 Well near Palmdale, FL.

LOCATION.--Lat 26°55'29", long 81°18'52", in NE¼SW¼NW¼ sec.10, T.41 S., R.30 E., Hydrologic Unit 03090103, 100 ft north of Palmdale Fire Tower, 500 ft northwest of intersection of U.S. Highway 27 and State Highway 29, and 2.0 mi south of Palmdale. Owner: Florida Division of Forestry.

AQUIFER.--Hawthorn Limestone aquifer of the Miocene Series, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 4 in., depth 600 ft, cased to 450 ft.

INSTRUMENTATION.--Bimonthly measurement with pressure gage, chalked or electric tape.

DATUM.--Elevation of land-surface datum is 42.15 ft above sea level. Prior to Oct. 1, 1978, land-surface datum was considered to be 41 ft, from topographic map. Oct. 1, 1978 to Mar. 25, 1980 at datum 0.60 ft lower. Measuring point: Top of 3/4 in. tee, 0.89 ft above land-surface datum.

PERIOD OF RECORD.--December 1971 to May 1976 (annually); July 1976 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 47.25 ft above sea level, Sept. 7, 1976; lowest measured, 36.11 ft above sea level, May 15, 1995.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	41.36	JAN 30	39.19	MAY 14	36.75	AUG 01	41.78	SEP 24	40.27		
DEC 04	39.54	APR 04	38.09	30	38.44	SEP 20	42.40				

WATER YEAR 2001 LOWEST 36.75 MAY 14, 2001 HIGHEST 42.40 SEP 20, 2001

WELL NUMBER.--271150081054401. GL-155 Well near Brighton, FL.

LOCATION.--Lat 27°11'50", long 81°05'44", in NE¼SE¼SW¼ sec.2, T.38 S., R.32 E., Hydrologic Unit 03090103, in front of Lykes Ranch headquarters, 300 ft west of State Highway 721, and 1.9 mi south of State Highway 70 in Brighton. Owner: Lykes Ranch.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 6 in., depth 600 ft, casing length unknown.

INSTRUMENTATION.--Bimonthly measurement with pressure gage.

DATUM.--Elevation of land-surface datum is 29.35 ft above sea level. Measuring point: Top of 4 in. casing, 1.80 ft above land-surface datum.

PERIOD OF RECORD.--December 1971 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 53.15 ft above sea level, Apr. 1, 1983; lowest measured, 38.15 ft above sea level, May 11, 1976.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	47.15	JAN 30	43.05	MAY 14	43.65	JUL 31	47.25	SEP 24	48.45		
DEC 04	43.45	APR 03	43.65	29	43.05	SEP 19	46.65				

WATER YEAR 2001 LOWEST 43.05 JAN 30, 2001 MAY 29, 2001 HIGHEST 48.45 SEP 24, 2001

GLADES COUNTY

STATION NUMBER	DATE	TIME	STATION NAME			ELEV-ATION ABOVE SEA LEVEL (FEET)
265452081165401	05-14-01	1355	65411601	41S30E12 CLEMONS	PALMDALE	47.30
	09-24-01	1523				49.80

KEY TO SITE LOCATIONS ON FIGURE 12
HERNANDO COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number
1	283537082151501	114
2	283840082154801	114

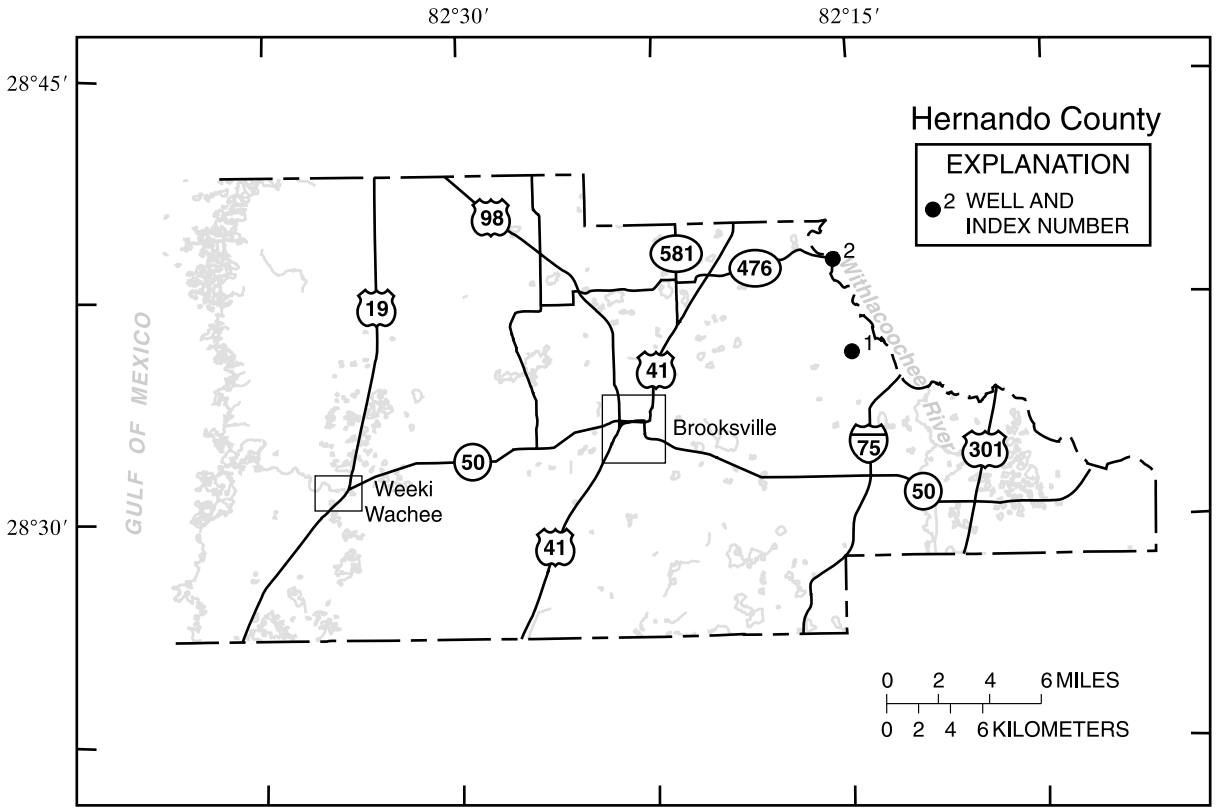

Figure 12.--Location of wells in Hernando County.

HERNANDO COUNTY

WELL NUMBER.--283537082151501. ROMP 103 Well near Brooksville, FL.

LOCATION.--Lat 28°35'37", long 82°15'15", in NE¼NE¼NE¼ sec.12, T.22 S., R.20 E., Hydrologic Unit 03100208, on south side of Croom Road, 2.6 mi east of Tucker Hill Fire Tower, and 6.3 mi northeast of Brooksville. Owner: Southwest Florida Water Management District.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation well, diameter 8 in., depth 198 ft, cased to 111 ft.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 92.80 ft above sea level. Measuring point: Top of recorder shelf, 3.42 ft above land-surface datum.

PERIOD OF RECORD.--April 1977 to September 1992; October 1992 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 48.95 ft above sea level, Oct. 14, 1982; lowest, 33.80 ft above sea level, June 21, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	37.22	JAN 25	35.53	APR 24	34.60	JUN 21	33.80	SEP 24	38.69		
NOV 29	36.56	FEB 23	35.20	MAY 16	34.28	JUL 24	34.06				
DEC 19	36.22	MAR 27	34.82	24	34.22	AUG 28	35.94				

WATER YEAR 2001 LOWEST 33.80 JUN 21, 2001 HIGHEST 38.69 SEP 24, 2001

WELL NUMBER.--283840082154801. Barnhart Well (CE-25) at Nobleton, FL.

LOCATION.--Lat 28°38'40", long 82°15'48", in NW¼NW¼SW¼ sec.24, T.21 S., R.20 E., Hydrologic Unit 03100208, on Sentinel Street, 200 ft east of Edgewater Avenue in Nobleton. Owner: C.C. Chandler.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit l20 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 6 in., depth 140 ft, casing length unknown.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 59.30 ft above sea level. Measuring point: Hole in sanitary seal, 0.33 ft above land-surface datum.

PERIOD OF RECORD.--March 1961 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 47.33 ft above sea level, Aug. 23, 1965; lowest measured, 33.44 ft above sea level, June 6, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	37.18	DEC 28	35.52	APR 10	34.46	JUN 06	33.44	SEP 19	38.41		
NOV 15	36.27	FEB 27	34.68	MAY 16	33.81	JUL 30	34.57	24	39.43		

WATER YEAR 2001 LOWEST 33.44 JUN 06, 2001 HIGHEST 39.43 SEP 24, 2001

HERNANDO COUNTY

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
282620082193801	05-16-01	1546	82621901	67.80
	09-24-01	1335		70.42
282839082190801	05-16-01	1453	82821901 RUSSELL BLACKETT LAKE NEFF	61.72
	09-24-01	1234		70.03
282851082035301	05-16-01	1750	82820301 23S22E13 E H BOYETTE	76.81
	09-24-01	0940		84.51
283001082064702	05-16-01	1719	83020602 23S22E09 WSF-RICHLOAM FIRE TOWER	66.38
	09-24-01	0955		75.35
283036082105501	05-16-01	1634	83021001 23S21E02 830210133 RIDGE MANOR NO 1	45.58
	09-24-01	1115		54.47
283508082215101	05-16-01	1357	83522101 22S19E12 CLARENCE SMITH	31.45
	09-24-01	1148		34.78
283510082133701	05-16-01	1225	CROOM RR SIDING WELL NR CROOM,FL	35.96
	09-24-01	1042		41.48
283613082184301	05-16-01	1327	83621801 22S20E04 DELMAS C NIX	30.14
	09-24-01	1128		33.85
283806082214801	05-15-01	1355	83822101 21S19E25 EDEN CHRISTIAN SCHOOL	26.28
	09-24-01	1530		28.05
283957082181001	05-16-01	1140	83921801 21S20E16 W A BLIZZARD	27.85
	09-24-01	1445		30.64

KEY TO SITE LOCATIONS ON FIGURE 13
HIGHLANDS COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number
1	270157081203101	118
2	272504081120101	118

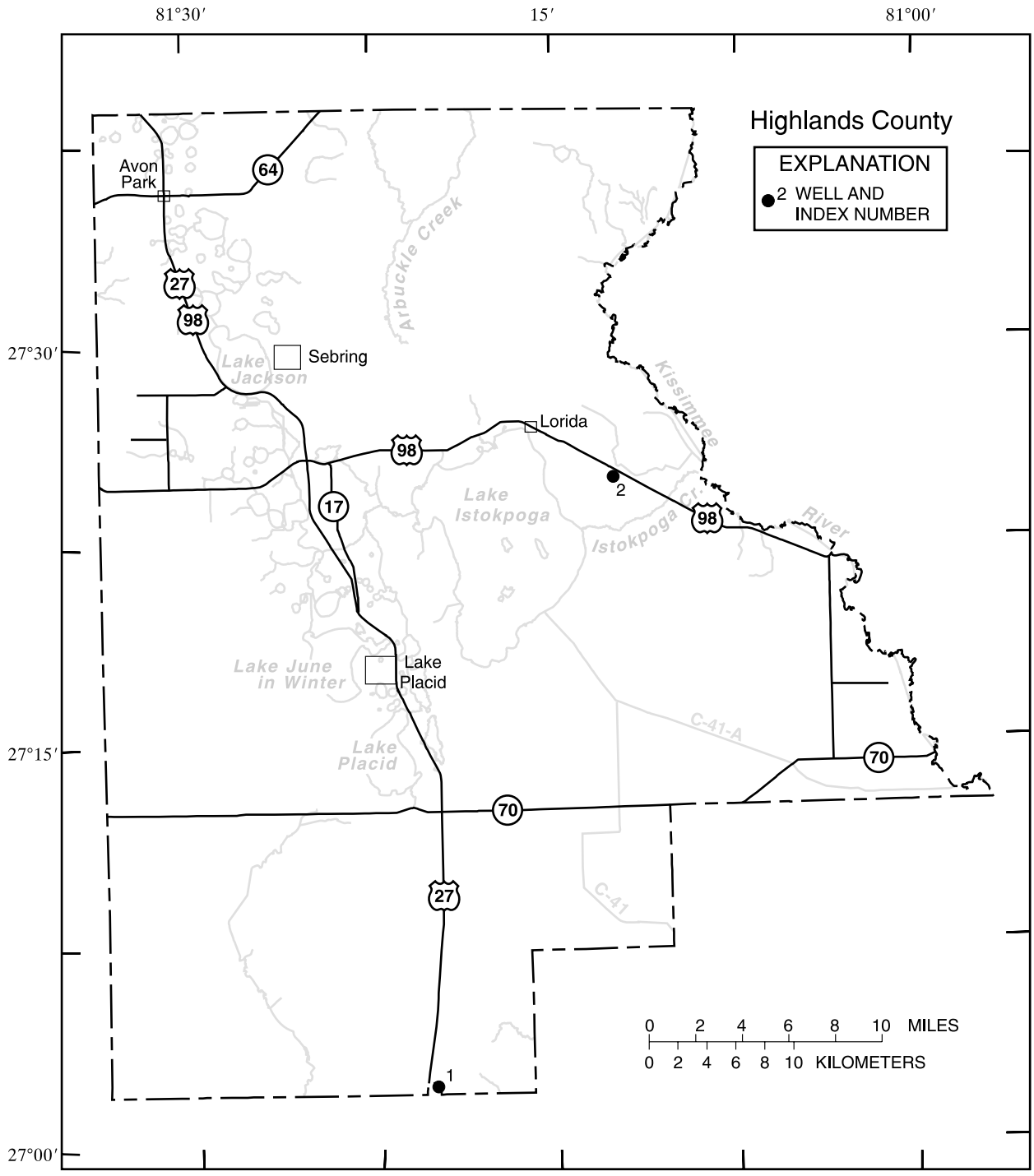

Figure 13.--Location of wells in Highlands County.

HIGHLANDS COUNTY

WELL NUMBER.--270157081203101. H-15A Well near Palmdale, FL.

LOCATION.--Lat 27°02'02", long 81°20'33", in SE¼SE¼SW¼ sec.32, T.39 S., R.30 E., Hydrologic Unit 03090103, on east side of U.S. Highway 27, 200 ft north of Glades-Highlands County line, 2.4 mi southeast of Venus, and 6.7 mi northwest of Palmdale. Owner: U.S. Geological Survey.

AQUIFER.--Nonartesian sand aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, nonartesian well, diameter 6 in., depth 23 ft, cased to 19 ft, gravel-packed screen from 19 to 23 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 58.52 ft above sea level. Measuring point: Top of recorder shelf, 3.68 ft above land-surface datum.

PERIOD OF RECORD.--December 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 60.37 ft above sea level, Sept. 27, 1997; lowest, 53.49 ft above sea level, June 27, 1956.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	58.06	56.76	56.22	55.86	55.75	55.52	56.34	55.42	56.72	57.74	58.90	59.03
10	57.70	56.65	56.13	55.81	55.70	55.44	56.22	55.31	56.77	59.43	58.33	58.70
15	57.48	56.55	56.08	55.80	55.64	55.40	56.00	55.15	56.47	59.43	58.00	59.59
20	57.24	56.46	55.98	55.81	55.58	55.44	55.80	55.12	56.22	58.77	59.62	58.42
25	57.06	56.36	55.92	55.84	55.52	55.38	55.62	56.41	57.05	59.06	58.72	57.91
EOM	56.90	56.28	55.88	55.75	55.49	56.18	55.50	56.26	56.81	58.61	58.50	58.93
MAX	58.09	56.89	56.28	55.88	55.75	56.18	56.39	56.41	57.12	59.57	59.62	60.17

CAL YR 2000 MAX 59.66
WTR YR 2001 MAX 60.17

WELL NUMBER.--272504081120101. H-11A Well near Lake Placid, FL.

LOCATION.--Lat 27°25'04", long 81°12'01", in NE¼NE¼SW¼ sec.23, T.35 S., R.31 E., Hydrologic Unit 03090101, on north side of U.S. Highway 98, 0.4 mi east of State Highway 621, 2.6 mi northwest of the Istokpoga Canal, and 9.0 mi east of Lake Placid. Owner: U.S. Geological Survey.

AQUIFER.--Nonartesian sand aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, nonartesian well, diameter 6 in., depth 16 ft, cased to 13 ft, gravel-packed screen from 13 to 16 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 49.02 ft above sea level. Measuring point: Top of recorder shelf, 2.10 ft above land-surface datum.

PERIOD OF RECORD.--February 1956 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 49.04 ft above sea level, Sept. 10, 1960; lowest, 43.26 ft above sea level, June 18, 1975.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	46.50	45.00	44.30	44.08	43.78	43.50	44.79	44.02	43.95	46.04	47.78	46.31
10	46.19	44.87	44.22	43.98	43.69	43.56	44.76	43.90	44.80	46.56	47.25	48.04
15	45.90	44.72	44.16	43.93	43.56	43.45	44.61	43.78	44.73	46.68	46.89	48.46
20	45.65	44.60	44.08	43.90	43.50	43.38	44.41	43.65	45.22	47.00	46.58	47.75
25	45.42	44.50	44.01	43.87	43.46	43.33	44.27	43.60	46.22	47.47	46.97	47.43
EOM	45.17	44.40	44.13	43.80	43.44	44.53	44.11	43.51	46.15	46.84	46.46	48.05
MAX	46.58	45.13	44.38	44.13	43.79	44.53	44.80	44.10	46.24	47.50	47.78	48.49

CAL YR 2000 MAX 46.96
WTR YR 2001 MAX 48.49

HIGHLANDS COUNTY

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
270556081204701	05-15-01	1425	HIF-26 J H HENDRIE DAIRY	42.84
	09-20-01	1501		49.70
270627081313101	09-20-01	1447	HIF-23 GRAHAM CO DAIRY	50.96
271134081234301	05-16-01	0910	HIF-5 CHARLES STIDHAM	42.12
	09-17-01	0837		51.78
271306081284801	05-15-01	1408	HIF-8 BOX RANCH	38.46
	09-20-01	1437		49.93
271330081113401	05-16-01	1158	HIF-37 SUN-RAY FARMS	41.75
	09-17-01	1146		47.82
271456081074701	05-16-01	1255	HIF-6 LYKES BROW 4IN FLOW	42.20
	09-17-01	1245		46.46
271726081163901	09-17-01	1120	HIF-14 P G PHYPERS	50.20
272512081122901	05-16-01	1113	HIF-13 PHILLIP METZGER	43.01
	09-17-01	1059		47.96
272906081142001	05-16-01	1038	729114-- 34S31E28 YUCAN RANCH NR LORIDA	42.27
	09-17-01	1019		46.74
272915081190201	05-16-01	1012	HIF-32 GUILFORD TOMLINSON	45.62
	09-17-01	0935		52.93
273138081154201	05-15-01	1349	73111501	45.94
	09-20-01	1417		51.39
273603081270501	05-14-01	1130	73612701 33S29E19 DRESSLERS DIARY	77.43
	09-24-01	1131		85.66

KEY TO SITE LOCATIONS ON FIGURE 14
INDIAN RIVER COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number
1	273923080471801	122
2	274607080493001	122
3	274916080520701	123

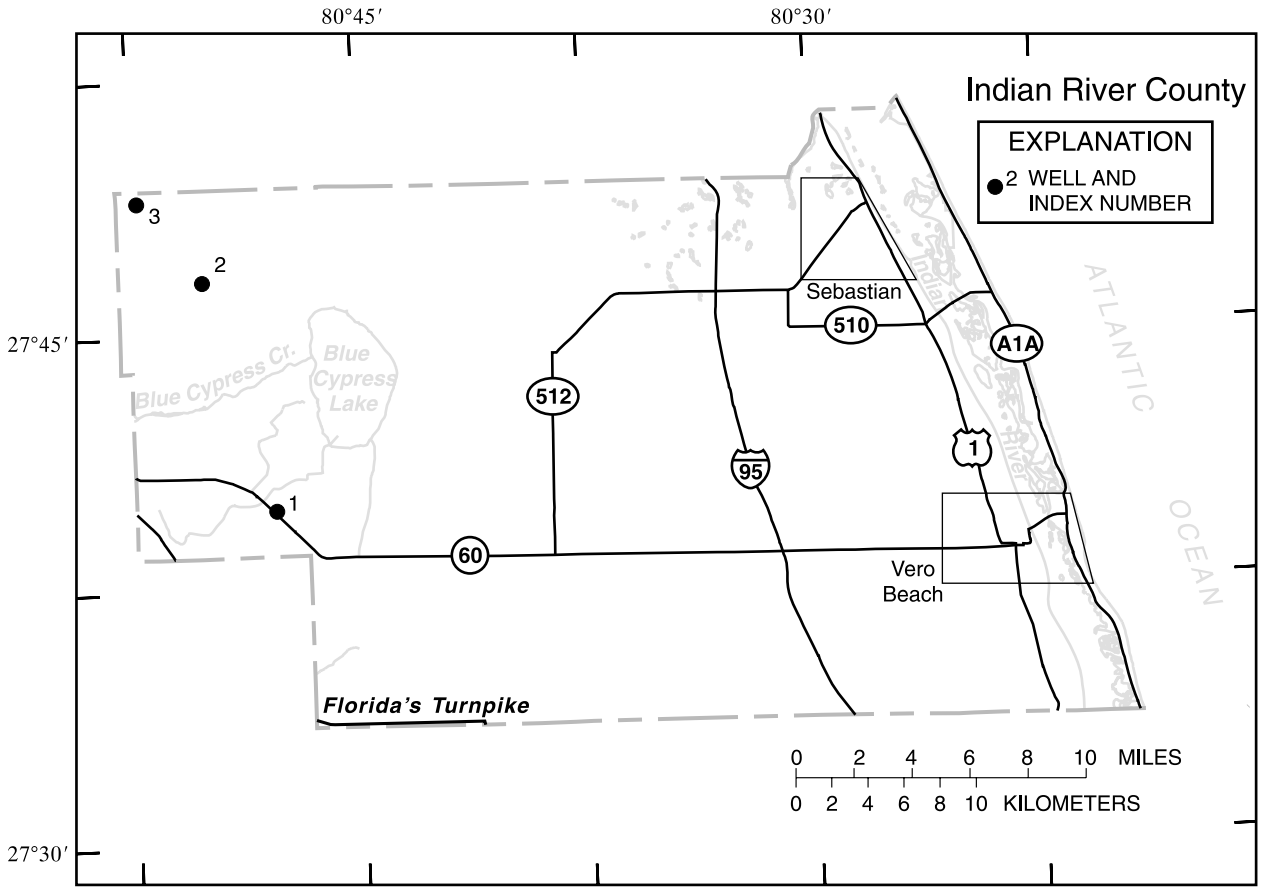

Figure 14.--Location of wells in Indian River County.

INDIAN RIVER COUNTY

WELL NUMBER.--273923080471801. IR-25 Well near Yeehaw Junction, FL.

LOCATION.--Lat 27°39'23", long 80°47'18", in NW¼NE¼NW ¼ sec.36, T.32 S., R.35 E., Hydrologic Unit 03080101, on north side of State Highway 60, 1.3 mi east of Blue Cypress Road, and 7.9 mi east of U.S. Highway 441 in Yeehaw Junction. Owner: U.S. Geological Survey.

AQUIFER.--Nonartesian sand of the Surficial Aquifer System, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, nonartesian well, diameter 6 in., depth 19 ft, cased to 13 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 30.01 ft above sea level. Measuring point: Top of shelf, 2.30 ft above land-surface datum.

PERIOD OF RECORD.--October 1950 to September 1996, October 1996 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 31.99 ft above sea level, Sept. 4, 1979; lowest, 25.17 ft above sea level, May 31, 1967.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	28.40	DEC 18	26.76	FEB 23	26.11	APR 23	26.31	JUN 21	28.05	AUG 28	29.50
NOV 27	27.18	JAN 25	26.46	MAR 23	25.77	MAY 23	26.06	JUL 23	29.80	SEP 25	29.20

WATER YEAR 2001 LOWEST 25.77 MAR 23, 2001 HIGHEST 29.80 JUL 23, 2001

WELL NUMBER.--274607080493001. IR-189 Well near Yeehaw Junction, FL.

LOCATION.--Lat 27°46'07", long 80°49'30", in SE¼NE¼SW¼ sec.22, T.31 S., R.35 E., Hydrologic Unit 03080101, on north side of private road at Rollins Ranch, 10 mi north of Yeehaw Junction. Owner: Rollins Ranch.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, stock, artesian well, diameter 4 in., depth 630 ft, casing length unknown.

INSTRUMENTATION.--Monthly measurement with pressure gage.

DATUM.--Elevation of land-surface datum is 33.66 ft above sea level. Prior to April 1983, land-surface datum was 33.16 ft. Measuring point: Top of 4 in. tee, 1.63 ft above land-surface datum.

PERIOD OF RECORD.--195l, 1957, 1970 (annually); January 1976 to October 1983 (bimonthly); November 1983 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 48.16 ft above sea level, Nov. 13, 1951, July 10, 1957; lowest measured, 36.67 ft above sea level, May 6, 1981.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	41.31	JAN 25	37.44	APR 23	37.21	JUN 21	38.36	SEP 25	43.29		
NOV 27	39.35	FEB 23	37.14	MAY 16	37.69	JUL 23	41.69				
DEC 18	38.99	MAR 23	37.25	23	37.07	AUG 27	42.39				

WATER YEAR 2001 LOWEST 37.07 MAY 23, 2001 HIGHEST 43.29 SEP 25, 2001

WELL NUMBER.--274916080520701. IR-366 at Mace Ranch, FL.

LOCATION.--Lat 27°49'16", long 80°52'07", in NW¼NE¼NE¼ sec.6, T.31 S., R.35 E., Hydrologic Unit 03080101, 300 ft south of Fellsmere Grade Road, 1.75 mi east of County Line, and 8.1 mi southeast of Kenansville. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 260 ft, cased to 120 ft.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 50.35 ft above sea level. Measuring point: Top of casing, 1.66 ft above land-surface datum.

PERIOD OF RECORD.--May 1985 to September 1998, May 2000 to September 2000 (semiannually); December 2000 to September 2001 (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 51.43 ft above sea level, May 13, 1997; lowest measured, 44.54 ft above sea level, September 18, 1985.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 20	46.79	FEB 23	46.23	APR 23	46.60	MAY 23	46.47	JUL 23	50.86	SEP 25	50.52
JAN 25	46.48	MAR 23	45.82	MAY 15	46.59	JUN 21	49.69	AUG 28	50.27		

WATER YEAR 2001 LOWEST 45.82 MAR 23, 2001 HIGHEST 50.86 JUL 23, 2001

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

INDIAN RIVER COUNTY

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
273435080255101	05-16-01	0903	73402501 USDA SOUTH WELL 43RD AVE SW OF OSLO	27.65
	09-26-01	0901		34.25
273515080344303	05-15-01	1555	IR-0954 SJWCD	36.93
	09-26-01	1003		42.73
273536080240201	05-17-01	0950	73502403 REVERSE OSMOSIS MONITOR W OF OSLO	31.74
	09-26-01	0843		36.54
273805080223802	05-15-01	1445	IR-1008 VERO BEACH POWER PLANT IN VERO BEACH,FL	27.67
	09-27-01	0901		34.97
273847080254703	05-16-01	1540	IR-1006 DODGER STADIUM EAST IN DODGERTOWN,FL	28.77
	09-26-01	1622		34.77
274047080513701	05-15-01	1250	IR-0365 USGS AT YEEHAW,FL	47.00
	09-26-01	1422		51.33
274055080281301	05-16-01	1515	74002801 IR 210 WALTER POOL LINDSEY RD GIFFORD	29.39
	09-26-01	1549		35.39
274126080304803	05-16-01	1415	IR-0963 CORRIGAN RANCH WELL	32.34
	09-26-01	1526		38.24
274350080364501	05-16-01	1200	74303601 JACK BERRY GROVE BLK 11 S OF FELLSMERE	36.11
	09-26-01	1150		40.91

KEY TO SITE LOCATIONS ON FIGURE 15
LAKE COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number
1	282245081492601	128
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2	282717081553101	129
3	283204081544901	129
3	283204081544902	130
4	283314081455501	130
5	283608081403001	131
6	284445081462101	131
7	284842081533001	132
8	290950081315501	132

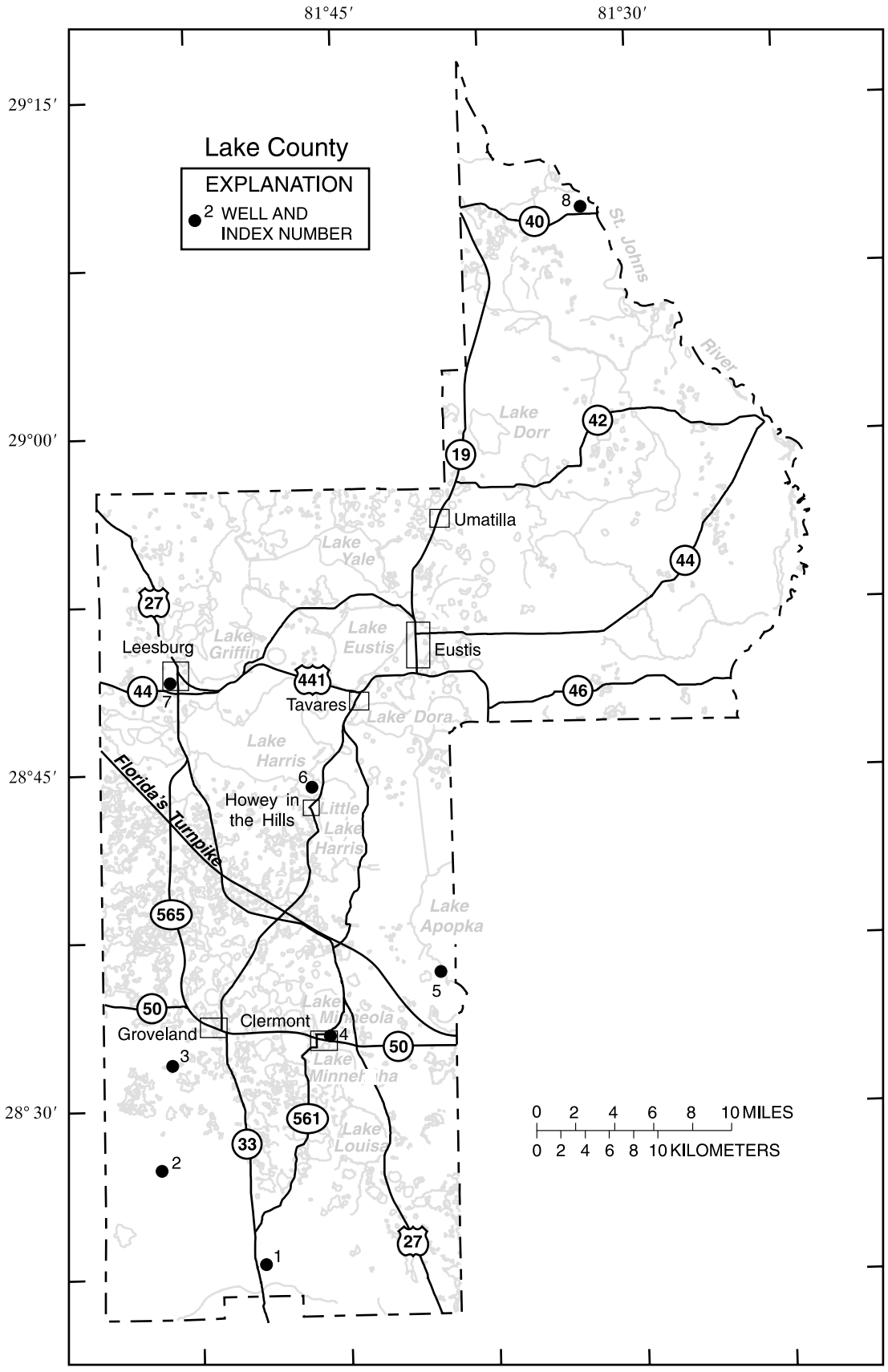

Figure 15.--Location of wells in Lake County.

LAKE COUNTY

WELL NUMBER.--282245081492601. Eva Deep Well at Eva, FL.

LOCATION.--Lat 28°22'45", long 81°49'26", in NE¼SE¼SE¼ sec.20, T.24 S., R.25 E., Hydrologic Unit 03100208, on east side of State Highway 33, 1,000 ft north of State Highway 474 at Eva. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 192 ft, cased to 100 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape or electric tape.

DATUM.--Elevation of land-surface datum is 113.47 ft above sea level. Measuring point: Top of 6 in. nipple, 3.40 ft above land-surface datum.

PERIOD OF RECORD.--January 1959 to December 1962; January 1963 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 112.72 ft above sea level, Sept. 10, 1960; lowest measured, 105.06 ft above sea level, June 20, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	106.80	JAN 24	105.30	MAR 26	106.16	MAY 15	105.53	JUN 20	105.06	AUG 27	109.66
DEC 19	105.69	FEB 22	105.41	APR 23	106.57	23	105.40	JUL 23	107.41	SEP 24	110.60

WATER YEAR 2001 LOWEST 105.06 JUN 20, 2001 HIGHEST 110.60 SEP 24, 2001

WELL NUMBER.--282245081492602. Eva Shallow Well at Eva, FL.

LOCATION.--Lat 28°22'45", long 81°49'26", in NE¼SE¼SE¼ sec.20, T.24 S., R.25 E., Hydrologic Unit 03100208, on east side of State Highway 33, 1,000 ft north of State Highway 474 at Eva. Owner: U.S. Geological Survey.

AQUIFER.--Nonartesian sand aquifer of the Tertiary Quaternary Age, Geologic Unit 111 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, nonartesian well, diameter 6 in., depth 23 ft, cased to 18 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape or electric tape.

DATUM.--Elevation of land-surface datum is 113.44 ft above sea level. Measuring point: Hole in 6 in. cap, 3.62 ft above land-surface datum.

PERIOD OF RECORD.--January 1959 to June 1962; July 1962 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 114.44 ft above sea level, Sept. 10, 1960; lowest measured, 105.12 ft above sea level, June 20, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	107.68	FEB 22	105.62	MAY 15	106.03	AUG 27	111.71				
DEC 18	105.98	APR 23	107.13	JUN 20	105.12	SEP 24	112.42				

WATER YEAR 2001 LOWEST 105.12 JUN 20, 2001 HIGHEST 112.42 SEP 24, 2001

LAKE COUNTY--Continued

WELL NUMBER.--282717081553101. ROMP 101 Well near Bay Lake, FL.

LOCATION.--Lat 28°27'17", long 81°55'31", in NE¼NE¼SE¼ sec.29, T.23 S., R.24 E., Hydrologic Unit 03100208, 75 ft south of State Highway 565, 800 ft west of former Seaboard Coastline Railroad crossing, and 2.3 mi southwest of intersection of Bay Lake Road and State Highway 565 at Bay Lake. Owner: Southwest Florida Water Management District.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation well, diameter 8 in., depth 404 ft, cased to 118 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 101.35 ft above sea level. Measuring point: Top of casing, 2.58 ft above land-surface datum.

PERIOD OF RECORD.--July 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 100.30 ft above sea level, Sept. 11, 1988; lowest, 92.26 ft above sea level, June 22, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	94.90	93.65	93.15	92.61	93.09	93.00	94.54	93.26	93.50	93.13	94.88	94.38
10	94.65	93.47	93.06	92.52	93.11	93.09	94.34	93.00	93.60	93.66	95.47	95.33
15	94.40	93.30	93.01	92.64	93.07	93.05	94.08	92.90	93.35	93.69	95.35	97.85
20	94.15	93.20	92.75	92.61	92.94	93.51	93.76	92.71	93.37	93.50	95.29	98.08
25	93.99	93.21	92.85	92.60	92.84	93.85	93.59	92.52	93.38	93.52	94.96	98.23
EOM	93.77	93.22	92.50	92.69	92.91	94.55	93.33	92.55	93.28	93.53	94.62	98.25
MAX	95.13	93.73	93.22	92.72	93.13	94.55	94.60	93.35	93.65	93.72	95.47	98.25

CAL YR 2000 MAX 96.03
WTR YR 2001 MAX 98.25

WELL NUMBER.--283204081544901. Mascotte Deep Well near Mascotte, FL.

LOCATION.--Lat 28°32'04", long 81°54'49", in SW¼NW¼NE¼ sec.33, T.22 S., R.24 E., Hydrologic Unit 03l00208, on east side of State Highway 565, 75 ft east of Midway Baptist Church, and 3.6 mi south of State Highway 50 in Mascotte. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 160 ft, cased to 63 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 103.51 ft above sea level. Measuring point: Top of recorder shelf, 2.35 ft above land-surface datum.

PERIOD OF RECORD.--January 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 102.66 ft above sea level, Sept. 10, 1988; lowest, 93.94 ft above sea level, June 21, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	96.95	95.66	95.30	94.62	94.79	94.54	96.00	94.90	94.86	94.13	96.16	96.92
10	96.70	95.56	95.16	94.59	94.79	94.53	95.91	94.68	94.89	94.29	97.48	98.63
15	96.46	95.43	95.13	94.69	94.72	94.47	95.67	94.50	94.67	94.54	97.36	101.40
20	96.17	95.32	94.71	94.63	94.62	94.91	95.44	94.26	94.45	94.85	97.52	101.10
25	96.06	95.24	94.96	94.58	94.49	95.17	95.11	94.16	94.36	95.42	97.58	101.10
EOM	95.82	95.40	94.52	94.58	94.46	95.79	95.07	94.16	94.25	95.58	97.20	101.00
MAX	97.11	95.79	95.39	94.79	94.80	95.79	96.00	95.04	94.92	95.58	97.68	101.40

CAL YR 2000 MAX 97.39
WTR YR 2001 MAX 101.40

LAKE COUNTY--Continued

WELL NUMBER.--283204081544902. Mascotte Shallow Well near Mascotte, FL.

LOCATION.--Lat 28°32'04", long 81°54'49", in SW¼NW¼NE¼ sec.33, T.22 S., R.24 E., Hydrologic Unit 03100208, on east side of State Highway 565, 75 ft east of Midway Baptist Church, and 3.6 mi south of State Highway 50 in Mascotte. Owner: U.S. Geological Survey.

AQUIFER.--Nonartesian sand of the Surficial Aquifer System, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, nonartesian well, diameter 6 in., depth 30 ft, cased to l6 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 103.51 ft above sea level. Measuring point: Top of recorder shelf, 2.49 ft above land-surface datum.

PERIOD OF RECORD.--January 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 103.51 ft above sea level, estimated, Sept. 11, 1960; lowest, 94.89 ft above sea level, June 23, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	97.76	96.57	96.14	95.62	95.55	95.36	96.87	95.89	95.64	95.04	96.80	97.64
10	97.53	96.40	95.99	95.54	95.57	95.41	96.81	95.70	95.78	95.15	98.19	99.46
15	97.30	96.25	95.92	95.48	95.55	95.32	96.58	95.52	95.62	95.33	98.07	103.30
20	97.12	96.13	95.87	95.42	95.46	95.68	96.39	95.33	95.40	95.62	98.24	101.67
25	96.92	96.03	95.79	95.37	95.33	95.98	96.24	95.16	95.30	96.07	98.30	101.67
EOM	96.74	96.18	95.71	95.37	95.28	96.51	96.06	95.07	95.18	96.35	97.87	101.55
MAX	97.98	96.70	96.18	95.69	95.57	96.51	96.88	96.03	95.79	96.35	98.41	103.30

CAL YR 2000 MAX 98.45
WTR YR 2001 MAX 103.30

WELL NUMBER.--283314081455501. City Well Replacement at Clermont, FL.

LOCATION.--Lat 28°33'14", long 81°45'55", in NE¼SE¼SW¼ sec.24, T.22 S., R.25 E., Hydrologic Unit 03080102, on Lake Avenue, 0.2 mi north of State Highway 50 in Clermont. Owner: City of Clermont.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit l20 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic well, diameter 8 in., depth 525 ft, casing length unknown.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 150 ft above sea level. Measuring point: Top of casing, 1.08 ft above land-surface datum.

PERIOD OF RECORD.--May 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 86.04 ft above sea level, Mar. 27, 1998; lowest, 74.65 ft, June 14, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	77.53	76.75	76.48	76.08	76.00	75.67	75.76	75.32	74.85	74.68	75.76	76.26
10	77.32	76.59	76.41	75.97	75.95	75.59	75.89	75.06	74.82	74.79	76.04	76.71
15	77.28	76.56	76.34	75.99	75.84	75.53	75.68	75.03	74.77	74.77	76.29	77.28
20	77.10	76.48	76.25	75.94	75.78	75.76	75.44	74.80	74.81	74.96	76.46	77.79
25	77.10	76.51	76.19	75.93	75.64	75.70	75.36	74.75	74.86	75.20	76.44	78.18
EOM	76.83	76.53	76.11	75.96	75.68	75.85	75.26	74.76	74.80	75.41	76.34	78.41
MAX	77.60	76.79	76.53	76.10	76.01	75.85	75.90	75.36	74.94	75.43	76.46	78.41

CAL YR 2000 MAX 81.33
WTR YR 2001 MAX 78.41

WELL NUMBER.--283608081403001. L-0658 City of Montverde, FL.

LOCATION.--Lat 28°36'08", long 81°40'30", in SE¼SE¼NW¼ sec.2, T.22 S., R.26 E., Hydrologic Unit 03080102, in pump house about 50 ft north of 8th Street in Montverde. Owner: City of Montverde.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, artesian well, diameter 12 in., depth 291 ft, cased to 164 ft.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 77.50 ft above sea level. Measuring point: Top of 12 inch casing, 1.43 ft above land-surface datum.

PERIOD OF RECORD.--May 1997 to September 2000 (semiannually); December 2000 to September 2001 (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 75.86 ft above sea level, May 11, 1998; lowest, 67.51 ft above sea level, May 23, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 18	69.05	FEB 22	68.41	APR 23	68.01	MAY 23	67.51	JUL 23	68.28	SEP 24	70.74
JAN 24	68.68	MAR 26	68.52	MAY 15	67.76	JUN 20	67.53	AUG 27	68.93		

WATER YEAR 2001 LOWEST 67.51 MAY 23, 2001 HIGHEST 70.74 SEP 24, 2001

WELL NUMBER.--284445081462101. Lake Yale Groves Well near Tavares, FL.

LOCATION.--Lat 28°44'45", long 81°46'21", in SE¼SW¼ sec.13, T.20 S., R.25 E., Hydrologic Unit 03080102, on north side of Little Lake Harris, 0.2 mi west of State Highway 19, and 3.8 mi south of Tavares. Owner: Lake County Water Authority.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, irrigation, artesian well, diameter 8 in., depth 200 ft, cased to 112 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape or manometer.

DATUM.--Elevation of land-surface datum is 64.75 ft above sea level. Measuring point: Top of tee, 2.10 ft above land-surface datum.

COOPERATION.--Since Oct. 1, 1985 data provided by St. Johns River Water Management District and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--May 1963 (annually); October 1963 to September 1985 (bimonthly); October 1985 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 70.45 ft above sea level, Mar. 13, 1970; lowest measured, 60.54 ft above sea level, May 23, 2001.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	62.40	JAN 25	62.10	APR 23	61.40	JUN 21	60.90	SEP 20	64.34		
NOV 28	62.39	FEB 22	61.84	MAY 18	60.79	JUL 24	62.12	25	64.87		
DEC 19	62.26	MAR 22	62.27	23	60.54	AUG 28	62.54				

WATER YEAR 2001 LOWEST 60.54 MAY 23, 2001 HIGHEST 64.87 SEP 25, 2001

LAKE COUNTY--Continued

WELL NUMBER.--284842081533001. College Street Well at Leesburg, FL.

LOCATION.--Lat 28°48'42", long 81°53'30", in SW¼NE¼NE¼ sec.27, T.19 S., R.24 E., Hydrologic Unit 03080l02, on west side of College Street, near water tank, 350 ft north of West Main Street in Leesburg. Owner: City of Leesburg.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 12 in., depth 245 ft, cased to 90 ft.

INSTRUMENTATION.--Water-stage recorder--15-minute interval.

DATUM.--Elevation of land-surface datum is 93.10 ft above sea level. Measuring point: Edge of flange, 1.2 ft above land-surface datum.

PERIOD OF RECORD.--September 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 70.38 ft above sea level, Mar. 2, 1998; lowest, 57.29 ft above sea level, May 16, 1981.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	62.75	60.35	60.91	60.46	60.45	60.33	60.77	60.24	59.25	59.58	61.11	61.65
10	62.28	61.05	60.57	60.49	60.35	60.50	61.29	59.14	59.18	59.92	61.95	62.63
15	61.90	60.51	60.97	60.37	59.61	60.33	60.70	59.76	59.16	59.88	61.97	64.45
20	61.51	60.97	60.87	60.44	60.16	60.88	60.25	58.70	59.03	59.93	62.09	65.14
25	60.78	60.75	60.72	60.19	59.65	60.63	60.28	58.94	59.61	60.44	61.98	65.80
EOM	60.96	61.04	60.52	60.42	59.92	61.41	60.06	58.64	59.82	60.89	61.74	65.70
MAX	63.07	61.15	61.29	60.70	60.45	61.41	61.43	60.24	59.82	60.89	62.34	65.81

CAL YR 2000 MAX 65.61
WTR YR 2001 MAX 65.81

WELL NUMBER.--290950081315501. Astor Park Well at Astor Park, FL.

LOCATION.--Lat 29°09'50", long 81°31'55", in land grant 37, T.15 S., R.28 E., Hydrologic Unit 03080101, at residence, 200 ft north of State Highway 40, and 1.0 mi west of St. Johns River at Astor Park. Owner: A.G. Edwards.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 254 ft, casing length unknown.

INSTRUMENTATION.--Water-stage recorder-60-minute interval.

DATUM.--Elevation of land-surface datum is 17.78 ft above sea level. Measuring point: Top of recorder shelf, 2.40 ft above land-surface datum.

PERIOD OF RECORD.--February 1936 to December 1949 (monthly); January 1950 to September 1985 (bimonthly); October 1985 to September 1997 (monthly); October 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.15 ft above sea level, October 1945; lowest daily maximum, 9.18 ft above sea level, Jan. 3, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.14	11.55	11.10	9.23	10.51	10.27	11.28	10.32	9.90	10.93	12.18	12.27
10	11.97	11.43	10.91	9.72	10.47	10.11	10.99	10.24	10.08	11.04	12.31	12.58
15	11.92	11.28	10.94	10.41	10.44	10.47	10.75	10.24	10.17	11.19	12.27	13.59
20	11.72	11.25	10.67	10.53	10.46	10.98	10.45	10.02	10.40	11.55	12.28	13.83
25	11.81	10.88	10.40	10.24	10.39	11.28	10.40	9.98	10.64	11.84	12.27	13.74
EOM	11.65	11.00	10.48	10.37	10.38	11.48	10.26	9.94	10.92	12.00	12.07	13.94
MAX	12.17	11.55	11.10	10.57	10.51	11.48	11.48	10.32	10.92	12.03	12.31	13.94

CAL YR 2000 MAX 12.17
WTR YR 2001 MAX 13.94

LAKE COUNTY

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
281837081544101	05-24-01	1016	ROMP 88 DEEP NR ROCKRIDGE,FL	98.78
	09-26-01	0830		105.67
282241081443901	05-15-01	1255	L-0051 SAND MINE RD DP WELL NR CLERMONT	111.82
	09-24-01	1348		116.68
282318081544003	05-24-01	1118	GREEN SWAMP AQUIFER TEST LK751W	100.00
	09-26-01	0940		103.68
282717081553101	05-15-01	1444	82715502ROMP DEEP WELL 101 NEAR BAY LAKE, FL.	92.88
	09-24-01	1429		98.07
282729081443301	05-15-01	1345	LK LOUISA STATE PARK (SJRWMD L-0053) NR CLERMONT	89.46
	09-25-01	0838		92.85
283019081455701	05-15-01	1405	LCFD DIST.9 STATION 1	82.12
	09-25-01	0815		87.01
283128081404701	05-15-01	1137	JOHNS LAKE WELL NR CLERMONT (SJ L-0052)	73.05
	09-24-01	1311		75.43
283204081544901	05-15-01	1500	832154334 MASCOTTE DEEP WELL NR MASCOTTE, FL.	93.91
	09-24-01	1449		100.92
283232081394101	05-15-01	1110	83213902 EDGEWATER BEACH DEEP	71.97
	09-24-01	1201		74.60
283355081411701	05-15-01	1055	L-0199 TURNPIKE	67.81
	09-24-01	1219		69.60
283530081514501	05-18-01	1055	DR PHILLIPS & SONS DP	79.78
	09-25-01	1000		87.08
283530081514501	05-18-01	1055	DR PHILLIPS & SONS DP	79.78
	09-25-01	1000		87.08
284122081534401	05-18-01	1030	L-0095 GROVELAND TOWER DEEP	76.71
	09-25-01	1030		83.06
284232081533001	05-18-01	1010	842153142 20S24E34	73.17
	09-25-01	1047		81.10
284233081442801	05-15-01	1008	WEST ASTATULA WELL NR ASTATULA,FL	62.74
	09-25-01	1254		66.39

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

LAKE COUNTY--Continued

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
284528081530201	05-18-01	0940	CHURCH OF GOD OF PROPHECY	62.43
	09-25-01	1120		67.24
284725081361901	05-15-01	0915	WOLF SINK OBSERVATION WELL NR SORRENTO	41.78
	09-27-01	0820		48.34
284728081322201	05-15-01	0835	FLORIDA CENTRAL ADADEMY AT MT PLYMOUTH	41.28
	09-27-01	0738		46.56
284757081320701	05-14-01	1930	L KNOWLES DEEP	40.62
284929081294901	05-17-01	1650	ABANDONED FREEFLOW SR46A NR SORRENTO	36.97
	09-26-01	1535		38.75
285028081253301	05-17-01	1315	SEMINOLE STATE FORREST L-0037	18.06
285230081242201	05-16-01	0910	LOWER WEKIWA 2IN FREE NO.2 SOUTH	21.52
	09-26-01	1445		26.21
285257081434201	05-17-01	0920	852143121 18S26E32 J EICHEL BERGER	51.42
	09-25-01	1421		55.01
285357081472801	05-17-01	1035	SJR DEEP NR CABBAGE HAMMOCK L-0620	51.47
	09-25-01	1352		55.01
285454081241201	05-16-01	0849	LOWER WEKIWA R. 2IN FREE FLOW	24.26
285504081405901	05-17-01	1200	855140-- 18S26E14 AUSTIN GROVES	45.94
	09-25-01	1438		50.34
285539081262901	05-16-01	0809	PINE LAKES WELL ON SR 44	31.41
	09-27-01	0900		37.07
285551081293601	05-17-01	1700	B.ROGERS DEEP, GOURD LAKE	34.86
285602081344301	05-17-01	1630	T.LUCE 4IN UFA INTM ARTESIAN NR PAISLEY,FL	41.04
285810081234101	05-16-01	1055	LOWER WEKIVA R 4"FREEFLO	22.25
	09-26-01	1325		26.93
285827081331401	05-16-01	1230	PAUL SHOKLEY AT PAISLEY	36.76
	09-27-01	0946		41.44

LAKE COUNTY--Continued

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
290000081380001	05-17-01	1216	PITTMAN WORK CENTER ABANDONED NR ALTOONA,FL	40.57
	09-27-01	1023		45.13
290052081271201	05-16-01	1120	CENTRAL BAPTIST YOUTH CAMP	40.31
	09-27-01	0930		45.60
290208081250201	05-16-01	1200	ST FRANCIS WELL NR CROWS BLUFF	11.32
290228081382301	05-18-01	0930	LCFD DISTRICT 4 STATION 6 NR ALTOONA,FL	38.94
290244081302601	05-16-01	1420	OCALA NF4" NR ALEX.SPGS.CR BOAT LANDING	13.88
	09-27-01	1100		18.23
290420081311701	05-16-01	1447	AMOCO WATER WELL #1A	23.45
	09-27-01	1144		27.94
290451081344401	05-16-01	1330	L-0066 OBS WELL ALEXANDER SP NR ASTOR	14.57
	09-27-01	1046		16.85
290633081375201	05-17-01	1250	90613701 16S27E18 CAMP OCALA	36.05
	09-27-01	1420		40.97
290646081314001	05-17-01	1450	L-0441 USFS WELL NR ASTOR,FL	15.49
	09-27-01	1314		19.40
290900081342002	05-17-01	1355	909134 15S27E-- ASTOR PARK	29.40
	09-27-01	1230		35.61
290910081360001	05-18-01	1730	CAMP MCQUARRIE ABANDONED DP AT CROOKED LAKE	40.44
	09-27-01	1337		45.37
291002081330601	05-17-01	1410	L-0455 ASTOR 150 CF	11.13
	09-27-01	1250		15.85
291448081381601	05-17-01	1330	JUNIPER HUNT CLUB SUPPLY	-.05
	09-27-01	1359		2.52

Note.--Negative figures indicate water level below sea level.

KEY TO SITE LOCATIONS ON FIGURE 16
LEVY COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number
1	290112082371101	138
2	290200082432301	138
3	290202082403901	139
4	290230082412501	139
5	290743082341501	140
6	291910082341101	140
7	292430082283001	141

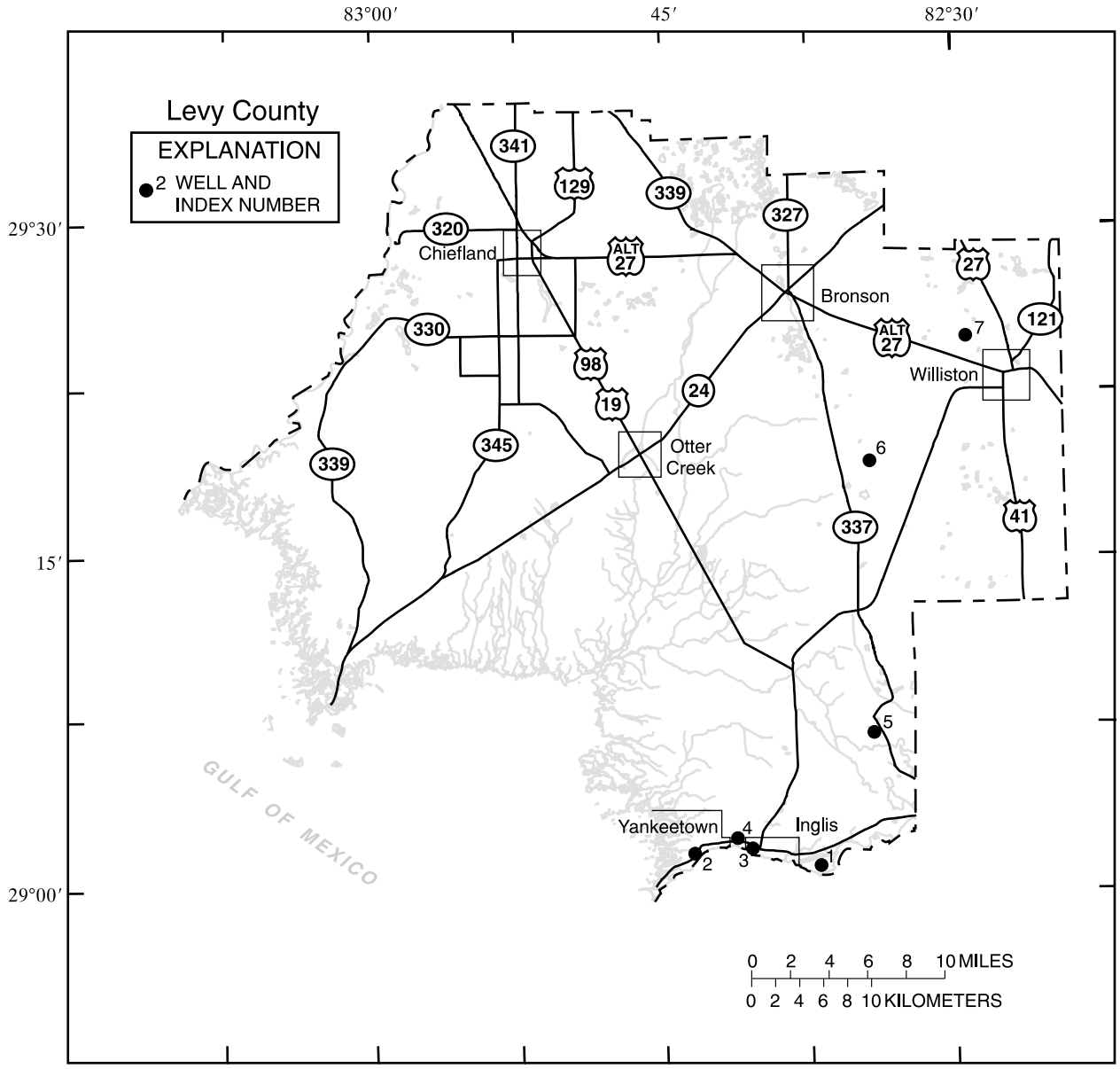

Figure 16.--Location of wells in Levy County.

WELL NUMBER.--290112082371101. CE-5 Well near Inglis, FL.

LOCATION.--Lat 29°01'12", long 82°37'11", in NE¼NE¼NE¼ sec.7, T.17 S., R.17 E., Hydrologic Unit 03100208, on island 700 ft southwest of Inglis lock, and 3.2 mi southeast of Inglis. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth l25 ft, cased to 84 ft.

INSTRUMENTATION.--Water-stage recorder--15-minute interval.

DATUM.--Elevation of land-surface datum is 25.39 ft above sea level. Measuring point: Top of casing, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--May 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 9.41 ft above sea level, Sept. 6, 1968; lowest, 6.96 ft below sea level, Sept. 16, 1966.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.16	5.06	4.49	4.74	4.45	4.93	5.13	4.74	5.04	5.15	6.27	6.12
10	4.51	6.02	5.50	4.08	4.67	5.06	5.10	5.19	4.75	5.07	5.85	5.85
15	5.50	5.08	5.30	4.33	4.29	5.06	4.87	4.44	4.33	4.62	6.47	5.32
20	5.21	4.85	4.18	4.84	4.55	4.82	4.82	4.91	4.76	5.56	6.70	6.33
25	5.22	5.90	4.20	4.45	4.67	4.87	5.08	5.27	4.70	5.32	5.95	6.17
EOM	5.45	5.03	3.85	4.41	4.72	4.95	4.34	4.64	4.56	5.34	6.14	5.41
MAX	5.78	6.02	5.69	5.12	4.93	5.31	5.35	5.29	5.29	6.48	6.74	6.49

CAL YR 2000 MAX 6.23
WTR YR 2001 MAX 6.74

WELL NUMBER.--290200082432301. ROMP 124 Well near Yankeetown, FL.

LOCATION.--Lat 29°02'00", long 82°43'23", in NW¼NE¼NE¼ sec.6, T.17 S., R.16 E., Hydrologic Unit 03110101, 120 ft south of Bonita Club Road, and 1.2 mi west of Yankeetown. Owner: Southwest Florida Water Management District.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 250 ft, cased to 200 ft.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 4.21 ft above sea level. Measuring point: Top of recorder shelf, 3.74 ft above land-surface datum.

PERIOD OF RECORD.--March 1978 to September 1992; October 1992 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 6.11 ft above sea level, Aug. 31, 1985; lowest water level measured, 1.51 ft above sea level, Jan. 24, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	2.54	JAN 24	1.51	APR 23	2.53	JUN 20	1.63	SEP 27	3.07		
NOV 28	2.32	FEB 22	2.41	MAY 15	2.03	JUL 23	3.72				
DEC 18	2.07	MAR 26	2.91	23	2.32	AUG 27	3.03				

WATER YEAR 2001 LOWEST 1.51 JAN 24, 2001 HIGHEST 3.72 JUL 23, 2001

LEVY COUNTY--Continued

WELL NUMBER.--290202082403901. Florida Power Corporation (CE-62) Well at Inglis, FL.

LOCATION.--Lat 29°02'02", long 82°40'39", in SW¼NW¼NE¼ sec.3, T.17 S., R.16 E., Hydrologic Unit 03100208, 100 ft south of State Highway 40 at abandoned power plant, 0.6 mi west of U.S. Highway 19 in Inglis. Owner: Florida Power Corporation.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 4 in., depth 155 ft, casing length unknown.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 12.67 ft above sea level. Measuring point: Top of 4 in. coupling, 1.8 ft above land-surface datum.

PERIOD OF RECORD.--March 1961, October 1963 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.55 ft above sea level, Sept. 15, 1964; lowest measured, 1.34 ft above sea level, Mar. 14, 1968.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 21	3.22	JAN 11	2.50	MAR 12	2.92	MAY 11	2.75	JUL 12	3.79	AUG 30	5.03

WATER YEAR 2001 LOWEST 2.50 JAN 11, 2001 HIGHEST 5.03 AUG 30, 2001

WELL NUMBER.--290230082412501. ROMP 125 Well at Crackertown, FL.

LOCATION.--Lat 29°02'30", long 82°41'25", in SE¼SW¼SE¼ sec.33, T.16 S., R.16 E., Hydrologic Unit 03110101, 40 ft southwest of intersection of State Highway 40A and Schoolcraft Road at Crackertown. Owner: Southwest Florida Water Management District.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, unused, artesian well, diameter 6 in., depth 280 ft, cased to 270 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 8.64 ft above sea level. Measuring point: Top of flange, 3.50 ft above land-surface datum.

PERIOD OF RECORD.--August 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 8.29 ft above sea level, Sept. 9, 1988; lowest, .57 ft above sea level, June 9,10, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.44	3.10	2.39	2.11	2.77	2.77	3.95	2.41	1.42	2.28	5.75	3.80
10	4.00	3.19	2.58	2.03	2.97	2.69	3.75	2.28	1.30	2.32	5.32	3.77
15	3.97	2.88	2.54	2.03	2.79	2.82	3.47	2.02	1.15	3.25	4.97	4.50
20	3.68	2.68	2.36	2.12	2.65	3.64	3.03	1.90	.96	3.40	4.76	4.83
25	3.40	2.79	2.10	1.86	2.64	3.88	2.94	1.79	1.16	5.00	4.50	4.65
EOM	3.30	2.66	2.02	1.97	2.61	4.03	2.58	1.54	1.29	5.23	4.08	4.35
MAX	4.70	3.26	2.60	2.24	2.97	4.03	4.02	2.55	1.57	5.37	5.75	4.86

CAL YR 2000 MAX 5.46
WTR YR 2001 MAX 5.75

LEVY COUNTY--Continued

WELL NUMBER.--290743082341501. Tidewater Number 1 Well near Dunnellon, FL.

LOCATION.--Lat 29°07'43", long 82°34'15", in NE¼SE¼NE¼ sec.34, T.15 S., R.17 E., Hydrologic Unit 03110101, on south side of State Highway 336 in Tidewater, 9.8 mi northwest of Dunnellon. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation well, diameter 12 in., depth 784 ft, cased to 298 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 70.07 ft above sea level. Measuring point: Top of recorder shelf, 3.82 ft above land-surface datum.

PERIOD OF RECORD.--October 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 61.81 ft above sea level, Sept. 26, 1982; lowest, 49.76 ft above sea level, June 19,20, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	52.97	52.39	51.82	51.56	51.54	51.07	51.93	51.29	50.06	50.11	51.74	51.78
10	52.83	52.24	51.76	51.22	51.55	51.11	51.96	51.02	50.04	50.29	51.89	52.03
15	52.84	51.97	51.68	51.20	51.50	51.54	51.85	50.85	49.87	50.46	51.92	52.63
20	52.65	51.86	51.61	51.12	51.31	51.96	51.55	50.68	49.76	50.62	51.83	52.88
25	52.62	52.04	51.55	50.92	51.15	51.92	51.57	50.43	49.86	50.94	51.72	53.09
EOM	52.41	51.90	51.36	51.01	51.16	52.08	51.35	50.24	49.97	51.42	51.68	53.20
MAX	53.06	52.40	51.90	51.56	51.56	52.09	52.07	51.41	50.27	51.44	51.94	53.27

CAL YR 2000 MAX 54.06
WTR YR 2001 MAX 53.27

WELL NUMBER.--291910082341101. Bullock-Huber Well near Williston, FL.

LOCATION.--Lat 29°19'10", long 82°34'11", in NW¼NW¼NW¼ sec.36, T.13 S., R.17 E., Hydrologic Unit 03110101, in a field, 1.0 mi south of a county road, 2.9 mi west of State Highway 121, and 10 mi southwest of Williston. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 91 ft, cased to 68 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape.

DATUM.--Land-surface datum is 91.40 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--February 1974 to September 1977 (bimonthly); October 1977 to September 1979 (semiannually); October 1979 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 54.53 ft above sea level, Mar. 13, 1998; lowest measured, 38.49 ft above sea level, July 2, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	41.28	JAN 16	40.11	MAY 02	39.31	JUL 02	38.49	SEP 27	43.32		
NOV 15	41.22	MAR 19	38.99	15	39.23	AUG 28	41.26				

WATER YEAR 2001 LOWEST 38.49 JUL 02, 2001 HIGHEST 43.32 SEP 27, 2001

LEVY COUNTY--Continued

WELL NUMBER.--292430082283001. Devils Den Sink CE-8 near Williston, FL.

LOCATION.--Lat 29°24'26", long 82°28'36", in NW¼SE¼SE¼ sec.26, T.12 S., R.18 E., Hydrologic Unit 03080102, 1,000 ft west of county road, 1.3 mi north of Alternate U.S. Highway 27, at a point 1.0 mi west of U.S. Highway 41 in Williston. Owner: Hugh Barton.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Natural sinkhole, depth 32 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape.

DATUM.--Land-surface datum is 71.55 ft above sea level. Measuring point: Painted mark on east side of sink at land-surface datum.

PERIOD OF RECORD.--November 1935 to December 1949, and March 1966 to September 1967 (monthly); November 1967 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 60.40 ft above sea level, October 1948; lowest measured, 39.73 ft above sea level, July 2, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	42.66	JAN 16	41.56	MAY 02	40.41	JUL 02	39.73	SEP 27	42.17		
NOV 15	42.57	MAR 19	40.76	15	40.35	AUG 28	41.35				

WATER YEAR 2001 LOWEST 39.73 JUL 02, 2001 HIGHEST 42.66 OCT 04, 2000

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

LEVY COUNTY

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
290230082412501	05-15-01	1615	90224102ROMP DEEP WELL 125 AT CRACKERTOWN, FL.	2.01
	09-27-01	0940		4.50
290503082323101	05-15-01	1720	90523201 16S17E13 SCE 108 T & J RANCH	68.85
	09-27-01	0740		71.28
290605082372601	05-15-01	1555	90623701 16S17E07 GEOTHE ROAD	26.27
	09-27-01	1010		27.77
290743082341501	05-15-01	1440	TIDEWATER WELL 1 NEAR DUNNELLON, FL	50.78
	09-27-01	1045		53.14
291004082382901	05-15-01	1500	91023801 15S16E24 910238433 DIXIE LIME PR	23.43
	09-27-01	1025		25.98
291712082351801	05-15-01	1430	SOUTH OF BONSON-RO	47.29
	09-27-01	1115		46.82
292143082282201	05-15-01	1255	92122801 13S18E11 WILLISTON AIRPORT	40.11
	09-27-01	1310		42.72
292310082373701	05-15-01	1330	ERCELL SMITH	49.55
	09-27-01	1205		53.52
292615082272601	05-15-01	1240	ROMP 134 NEAR WILLISTON, FL	40.20
	09-27-01	1405		41.98

KEY TO SITE LOCATIONS ON FIGURE 17
MARION COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number
1	285920081490501	146
2	290106082191001	146
3	290133082140901	147
4	290215082152401	147
5	290306082232802	148
6	290312082250801	148
7	290514082270701	149
8	290815082025701	149
9	291059082190801	150
10	291100082010003	150
11	291110082060001	151
12	291115081592501	151
13	291115082102901	152
14	291849081411401	152
15	292200081510001	153
16	292546081513301	153

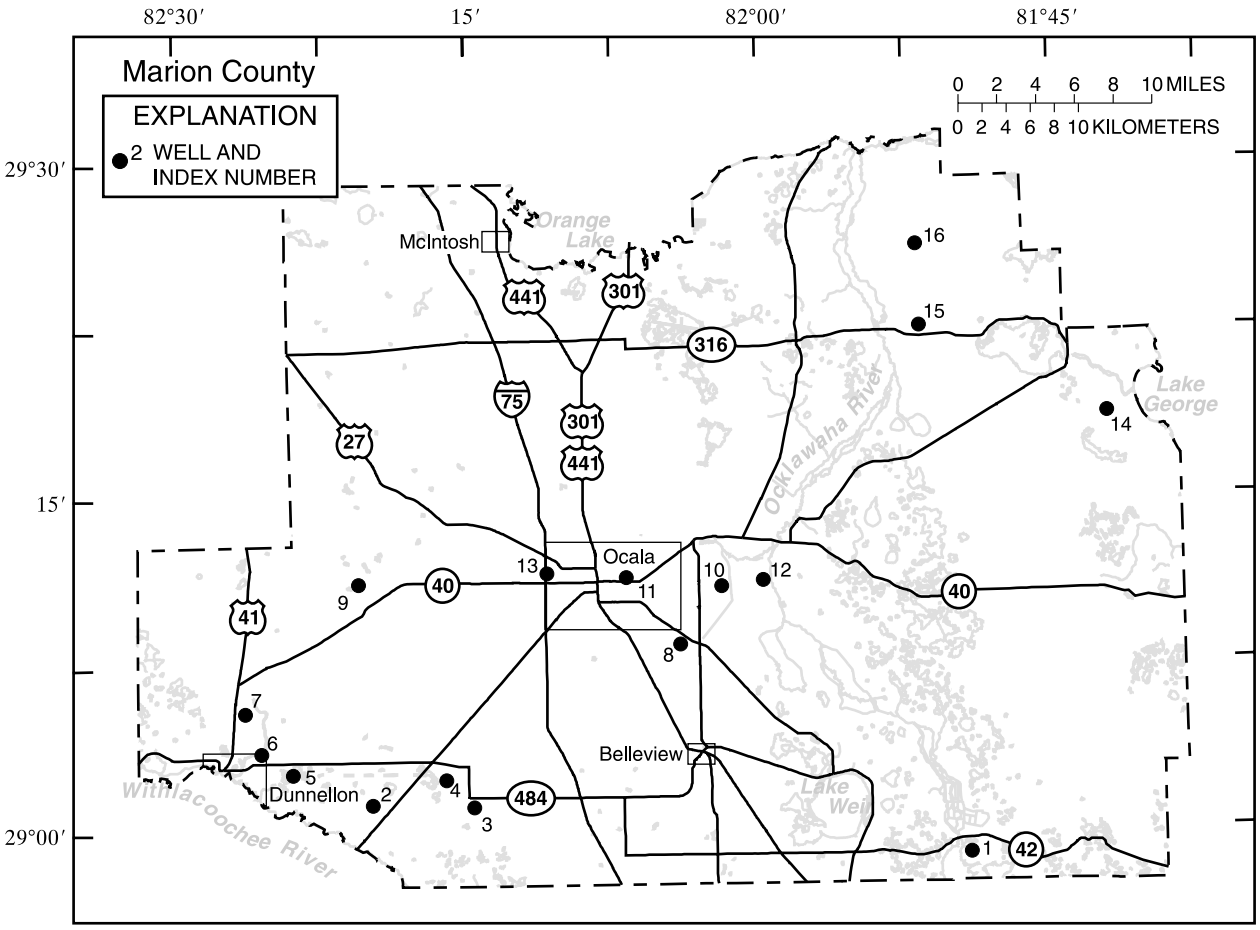

Figure 17.--Location of wells in Marion County.

WELL NUMBER.--285920081490501. USGS Well Mar-48 near Ocklawaha, FL. (Formerly Mar-48 Replacement Well near Ocklawaha, FL.)

LOCATION.--Lat 28°59'20", long 81°49'05", in SE¼SW¼ sec.20, T.17 S., R.25 E., Hydrologic Unit 03080102, at fish camp south of State Highway 42, on east side of Ocklawaha River at Starkes Ferry, and 7 mi southeast of Ocklawaha.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 6 in., depth 152 ft, casing length unknown.

INSTRUMENTATION.--Bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 61.08 ft above sea level. Measuring point: Top of PVC elbow at vent, 2.22 ft above land-surface datum.

REMARKS.--Record is equivalent to that for Mar 48 Replacement (285930081500501), available October 1980 to September 1983.

PERIOD OF RECORD.--March 1936 to December 1949 (monthly); January 1950 to September 1980, October 1983 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 61.28 ft above sea level, October 1945; lowest measured, 47.41 ft above sea level, June 12, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20	48.94	FEB 15	47.78	JUN 12	47.41	SEP 20	50.52				
DEC 28	48.27	APR 18	48.06	JUL 31	47.67						

WATER YEAR 2001 LOWEST 47.41 JUN 12, 2001 HIGHEST 50.52 SEP 20, 2001

WELL NUMBER.--290106082191001. CE-23 Well near Dunnellon, FL.

LOCATION.--Lat 29°01'06", long 82°19'10", in NE¼NE¼NE¼ sec.17, T.17 S., R.20 E., Hydrologic Unit 03100208, north of State Highway 200, 2.8 mi northeast of Withlacoochee River, and 16.3 mi southwest of Ocala. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit l20 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 45 ft, cased to 19 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 62.64 ft above sea level. Measuring point: Top of casing, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--June 1966 to September 1977; October 1977 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 50.94 ft above sea level, Mar. 11, 1998; lowest measured, 36.37 ft above sea level, March 20, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 15	37.63	MAR 20	36.37	MAY 14	36.71	AUG 31	40.45				
JAN 11	36.76	MAY 11	36.75	JUL 13	37.15	SEP 24	41.56				

WATER YEAR 2001 LOWEST 36.37 MAR 20, 2001 HIGHEST 41.56 SEP 24, 2001

MARION COUNTY--Continued

WELL NUMBER.--290133082140901. ROMP 119 Well near Ocala, FL.

LOCATION.--Lat 29°01'33", long 82°14'09", in NW¼NW¼SW¼ sec.8, T.17 S., R.21 E., Hydrologic Unit 03080102, on south side of State Highway 484, 4.5 mi west from intersection with Interstate Highway 75, and 12 mi southwest of Ocala. Owner: Southwest Florida Water Management District.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation well, diameter 8 in., depth 502 ft, cased to 106 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 71.85 ft above sea level. Measuring point: Top of flange, 3.90 ft above land-surface datum.

PERIOD OF RECORD.--December 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 52.20 ft above sea level, Mar. 28, 30, 31, 1998; lowest, 39.90 ft above sea level, June 25,26, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	41.26	40.92	40.61	40.41	40.21	40.02	40.79	40.69	40.09	40.06	40.67	41.46
10	41.25	40.83	40.57	40.37	40.18	40.00	40.84	40.60	40.03	40.08	40.94	41.49
15	41.22	40.76	40.53	40.33	40.15	40.00	40.86	40.52	39.96	40.13	41.14	41.71
20	41.15	40.70	40.50	40.30	40.11	40.16	40.83	40.43	39.92	40.18	41.30	42.37
25	41.09	40.67	40.47	40.26	40.08	40.49	40.80	40.30	39.90	40.29	41.39	42.81
EOM	40.99	40.64	40.43	40.22	40.05	40.69	40.74	40.18	40.03	40.48	---	43.19
MAX	41.27	40.98	40.63	40.42	40.22	40.69	40.86	40.74	40.17	40.48	41.42	43.19

CAL YR 2000 MAX 42.93
WTR YR 2001 MAX 43.19

WELL NUMBER.--290215082152401. CE-74 Well near Ocala, FL.

LOCATION.--Lat 29°02'15", long 82°15'24", in NE¼SW¼SE¼ sec.1, T.17 S., R.20 E., Hydrologic Unit 03100208, 0.25 mi west of State Highway 484, 2.9 mi southeast of State Highway 200, and 13 mi southwest of Ocala. Owner: U.S. Army Corps of Engineers.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 2 in., depth 51 ft, casing length unknown.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 76.97 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--July 1964 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 51.63 ft above sea level, Mar. 11, 1998; lowest measured, 38.82 ft above sea level, March 19, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	40.14	JAN 16	39.21	MAY 02	39.55	JUL 02	38.88	SEP 24	41.44		
NOV 15	39.69	MAR 19	38.82	14	39.52	AUG 28	40.43				

WATER YEAR 2001 LOWEST 38.82 JUL 02, 2001 HIGHEST 41.44 SEP 24, 2001

MARION COUNTY--Continued

WELL NUMBER.--290306082232802. Fire Tower (CE-73) Well at Dunnellon, FL.

LOCATION.--Lat 29°03'06", long 82°23'28", in SE¼NW¼SE¼ sec.34, T.16 S., R.19 E., Hydrologic Unit 03100208, on south side of State Highway 484, across from Dunnellon Fire Tower, and 4.4 mi east of U.S. Highway 41 in Dunnellon. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 36 ft, cased to 26 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 65.18 ft above sea level. Measuring point: Hole in cap, 2.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1964 to May 1966 (monthly), July 1966 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 61.99 ft above sea level, Mar. 11, 1998; lowest measured, 47.91 ft above sea level, July 15, 1975.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 15	50.07	MAR 20	48.83	MAY 14	49.67	SEP 05	52.85				
JAN 11	49.14	MAY 11	49.73	JUL 12	48.40	24	54.66				

WATER YEAR 2001 LOWEST 48.40 JUL 12, 2001 HIGHEST 54.66 SEP 24, 2001

WELL NUMBER.--290312082250801. CE-14 Well near Dunnellon, FL.

LOCATION.--Lat 29°03'12", long 82°25'08", in NW¼NW¼NW¼ sec.32, T.16 S., R.19 E., Hydrologic Unit 03100208, on north side of State Highway 484, 8.3 mi west of State Highway 200, and 2.7 mi east of Dunnellon. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 190 ft, cased to 112 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 60.24 ft above sea level. Measuring point: Top of casing, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--June 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 50.90 ft above sea level, Mar. 1, 1998; lowest, 34.18 ft above sea level, July 11, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	37.32	36.81	36.10	35.41	34.91	34.51	35.20	35.18	34.43	34.24	35.38	39.03
10	37.29	36.68	35.99	35.29	34.83	34.45	35.31	35.03	34.45	34.19	37.40	39.03
15	37.34	36.52	35.88	35.23	34.76	34.41	35.36	34.92	34.29	34.20	38.47	39.39
20	37.23	36.39	35.78	35.16	34.69	34.53	35.25	34.79	34.30	34.26	38.83	40.99
25	37.07	36.32	35.67	34.99	34.61	34.75	35.20	34.59	34.27	34.46	38.94	41.42
EOM	36.93	36.20	35.52	34.95	34.57	35.05	35.23	34.50	34.27	34.78	38.92	41.55
MAX	37.37	36.86	36.18	35.50	34.95	35.05	35.37	35.23	34.52	34.78	38.94	41.55

CAL YR 2000 MAX 39.13
WTR YR 2001 MAX 41.55

MARION COUNTY--Continued

WELL NUMBER.--290514082270701. Rainbow Springs Well near Dunnellon, FL.

LOCATION.--Lat 29°05'14", long 82°27'07", in SW¼NW¼SW¼ sec.13, T.16 S., R.18 E., Hydrologic Unit 03100208, on east side of U.S. Highway 41, 2.8 mi north of Dunnellon. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 442 ft, cased to 125 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 113.13 ft above sea level. Measuring point: Top of casing, 3.00 ft above land-surface datum.

REMARKS.--Well records used to determine flow of Rainbow Springs.

PERIOD OF RECORD.--October 1964 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily mean water level, 36.12 ft above sea level, Oct. 22, 1964; lowest, 29.68 ft above sea level, June 11, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.30	30.30	30.25	30.18	30.08	30.02	30.20	30.09	29.90	29.86	30.24	30.66
10	30.29	30.31	30.22	30.14	30.07	29.99	30.17	30.07	29.90	29.81	30.35	30.69
15	30.31	30.29	30.21	30.07	30.06	30.04	30.16	30.03	29.85	29.91	30.47	30.84
20	30.29	30.27	30.22	30.07	30.01	30.14	30.14	29.98	29.83	29.96	30.54	30.95
25	30.30	30.31	30.18	30.05	29.98	30.11	30.12	29.93	29.86	30.04	30.53	31.15
EOM	30.29	30.29	30.19	30.06	29.98	30.23	30.09	29.90	29.90	30.09	30.56	31.18
MAX	30.32	30.33	30.28	30.19	30.11	30.23	30.21	30.10	29.96	30.10	30.56	31.21

CAL YR 2000 MAX 30.36
WTR YR 2001 MAX 31.21

WELL NUMBER.--290815082025701. USGS Well CE-40 replacement near Ocala, FL.

LOCATION.--Lat 29°08'15", long 82°02'57", in SE¼SE¼SW¼ sec.31, T.15 S., R.23 E., Hydrologic Unit 03100208, on south side of State Highway 464, 6.5 mi northwest of Candler, and 4.3 mi southeast of Ocala. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 3 in., depth 105 ft, cased to 47 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Land-surface datum is 91.45 ft above sea level. Measuring point: Top edge of casing, 2.80 ft above land-surface datum.

REMARKS.--Record is equivalent to that for CE-40 (290810082025001), available March 1966 to September 1982.

PERIOD OF RECORD.--March 1986 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 49.39 ft above sea level, Mar. 13, 1998; lowest measured, 39.63 ft above sea level, July 2, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06	40.70	JAN 22	39.83	MAY 02	40.10	AUG 28	40.85				
NOV 16	40.29	MAR 19	39.72	JUL 02	39.63						

WATER YEAR 2001 LOWEST 39.63 JUL 02, 2001 HIGHEST 40.85 AUG 28, 2001

MARION COUNTY--Continued

WELL NUMBER.--291059082190801. Romp 120 near Cotton Plant, FL.

LOCATION.--Lat 29°10'59", long 82°19'08", in NE¼SE¼SE¼ sec.17, T.15 S., R.20 E., Hydrologic Unit 03080102, on south side of State Highway 328, 0.4 mi from intersection with State Highway 40 in Cotton Plant. Owner: Southwest Florida Water Management District.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation well, diameter 8 in, depth 403 ft, cased to 110 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Land-surface datum is 76.04 ft above sea level. Measuring point: Top of flange, 3.22 ft above land-surface datum.

PERIOD OF RECORD.--October 1981 to August 1992; September 1992 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 52.16 ft above sea level, Mar. 24, 1998; lowest, 39.16 ft above sea level, June 20, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	40.45	JAN 24	39.50	APR 23	40.04	JUN 20	39.16	SEP 25	41.99		
NOV 28	39.97	FEB 22	39.34	MAY 14	39.66	JUL 23	39.24				
DEC 18	39.82	MAR 26	39.86	23	39.57	AUG 27	40.82				

WATER YEAR 2001 LOWEST 39.16 JUN 20, 2001 HIGHEST 41.99 SEP 25, 2001

WELL NUMBER.--291100082010003. Local Number CE-76. USGS Observation Well CE-76 near Ocala, FL.

LOCATION.--Lat 29°11'00", long 82°01'00", in NE¼NW¼SW¼ sec.16, T.15 S., R.23 E., Hydrologic Unit 03080102, on south side of Sharpes Ferry Road, 6.5 mi east of Ocala. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 153 ft, cased to 124 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Land-surface datum is 64.51 ft above sea level. Measuring point: Top edge of casing, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--January 1968 to September 1977; October 1977 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 46.78 ft above sea level, Apr. 19, 1970; lowest measured, 39.22 ft above sea level, July 2, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06	40.31	JAN 22	39.50	MAY 02	39.56	AUG 28	40.19				
NOV 16	39.92	MAR 19	39.59	JUL 02	39.22						

WATER YEAR 2001 LOWEST 39.22 JUL 02, 2001 HIGHEST 40.31 OCT 06, 2000

MARION COUNTY--Continued

WELL NUMBER.--291110082060001. USGS Well CE-44 at Ocala, FL.

LOCATION.--Lat 29°11'10", long 82°06'00", in SW¼SW¼NW¼ sec.15, T.15 S., R.22 E., Hydrologic Unit 03080102, on south side of State Highway 40, 120 ft east of Florida Highway Patrol Station at Ocala, and 3.0 mi west of Silver Springs. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 91 ft, cased to 34.2 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Land-surface datum is 102.73 ft above sea level. Measuring point: Top of casing, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--April 1966 to September 1977; October 1977 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 46.94 ft above sea level, Mar. 13, 1998; lowest measured, 38.71 ft above sea level, July 2, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 15	39.34	MAR 19	38.82	MAY 16	39.03	AUG 28	39.55				
JAN 16	38.91	MAY 02	39.14	JUL 02	38.71	SEP 25	41.03				

WATER YEAR 2001 LOWEST 38.71 JUL 02, 2001 HIGHEST 41.03 SEP 25, 2001

WELL NUMBER.--291115081592501. Sharpes Ferry Well, Marion 5 near Ocala, FL.

LOCATION.--Lat 29°11'15", long 81°59'25", in NE¼SE¼ sec.15, T.15 S., R.23 E., Hydrologic Unit 03080102, on north side of Sharpes Ferry Road, 0.1 mi east of Ocklawaha River, and 7.6 mi east of Ocala. Owner: Florida Department of Transportation.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 135 ft, cased to 135 ft.

INSTRUMENTATION.--Water-stage recorder with data-collection platform--30 minute interval.

DATUM.--Land-surface datum is 39.83 ft above sea level. Measuring point: Top of reducer, 2.55 ft above land-surface datum.

REMARKS.--Well records used to determine flow of Silver Springs.

PERIOD OF RECORD.--January 1933 to July 1947 (weekly); August 1947 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily mean water level, 55.42 ft above sea level, Oct. 14, 1960; lowest, 41.82 ft above sea level, June 27, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	43.56	43.33	42.94	---	42.49	42.33	42.65	42.54	41.91	41.89	42.41	42.76
10	43.46	43.22	42.96	---	42.40	42.20	42.75	42.39	41.94	41.95	42.58	42.88
15	43.53	43.09	---	---	42.42	42.33	42.78	42.35	41.85	41.92	42.71	43.30
20	43.41	43.12	---	---	42.29	42.52	42.55	42.21	41.86	41.93	42.72	43.88
25	43.43	43.09	---	---	42.27	42.51	42.66	42.07	41.91	42.02	42.75	44.39
EOM	43.31	43.00	---	42.59	42.32	42.74	42.54	42.00	41.93	42.23	42.77	44.60
MAX	43.60	43.33	43.02	42.62	42.59	42.75	42.78	42.61	42.05	42.25	42.79	44.63

CAL YR 2000 MAX 45.71
WTR YR 2001 MAX 44.63

MARION COUNTY--Continued

WELL NUMBER.--291115082102901. USGS Well CE-31 replacement at Ocala, FL.

LOCATION.--Lat 29°11'15", long 82°10'29", in SE¼SW¼NE¼ sec.14, T.15 S., R.21 E., Hydrologic Unit 03080102, 0.25 mi west of Alternate U.S. Highway 27, and 0.1 mi north of State Highway 40, about 2 mi west of Ocala. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 55 ft, cased to 27 feet.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Land-surface datum is 72.66 ft above sea level. Measuring point: Top of casing, 2.4 ft above land-surface datum.

REMARKS.--Record is equivalent to that for CE-31 (291120082102501), available November 1935 to May 1983.

PERIOD OF RECORD.--April 1986 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 49.88 ft above sea level, Mar. 13, 1998; lowest measured, 39.40 ft above sea level, July 2, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	40.54	JAN 22	39.57	MAY 02	39.92	AUG 28	40.41				
NOV 15	40.10	MAR 19	39.62	JUL 02	39.40						

WATER YEAR 2001 LOWEST 39.40 JUL 02, 2001 HIGHEST 40.54 OCT 04, 2000

WELL NUMBER.--291849081411401. Lake George Well near Salt Springs, FL.

LOCATION.--Lat 29°18'49", long 81°41'14", in SE¼ sec.42, Joseph M. Hernandez Grant, T.13 S., R.26 E., Hydrologic Unit 03080101, on a sand trail, on the east side of State Highway 19, 3.8 mi southeast of Salt Springs. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in, depth 298 ft, cased to 267.50 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Land-surface datum is 18.92 ft above sea level. Measuring point: Top of 4 in. coupling, 2.00 ft above land-surface datum.

COOPERATION.--Since Oct. 1, 1985 records provided by St. Johns River Water Management District and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--January 1983 to September 1985 (bimonthly); October 1985 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.70 ft above sea level, Nov. 28, 1995; lowest measured, 12.99 ft above sea level, June 27, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	14.98	JAN 29	14.04	APR 25	13.45	JUN 21	13.24	SEP 24	17.09		
NOV 28	14.61	FEB 26	13.84	MAY 16	13.24	JUL 24	13.82	25	16.94		
DEC 19	14.44	MAR 26	13.79	23	13.31	AUG 27	14.36				

WATER YEAR 2001 LOWEST 13.24 MAY 16, 2001 JUN 21, 2001 HIGHEST 17.09 SEP 24, 2001

MARION COUNTY--Continued

WELL NUMBER.--292200081510001. USGS Well CE-84 near Salt Springs, FL.

LOCATION.--Lat 29°22'00", long 81°51'00", in NW¼NW¼NE¼ sec.13, T.13 S., R.24 E., Hydrologic Unit 03080101, on north side of State Highway 316, 2.5 mi east of Ocklawaha River at Eureka, 7.5 mi west of Salt Springs, and 8.0 mi east of Fort McCoy. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 90 ft, cased to 53 ft.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Land-surface datum is 91.72 ft above sea level. Measuring point: Top of casing, 3.00 ft above land-surface datum.

COOPERATION.--Since Oct. 1, 1985 records provided by St. Johns River Water Management District and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--July 1970 to September 1977; October 1977 to September 1985 (bimonthly); October 1985 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 30.92 ft above sea level, Nov. 28, 1979; lowest measured, 21.31 ft above sea level, Sept. 16, 1992.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	23.08	JAN 26	23.71	APR 23	23.24	JUN 20	22.82	SEP 21	22.87		
NOV 29	23.51	FEB 23	23.56	MAY 16	22.79	JUL 23	22.62	28	22.84		
DEC 18	23.69	MAR 26	23.38	21	23.10	AUG 27	22.57				

WATER YEAR 2001 LOWEST 22.57 AUG 27, 2001 HIGHEST 23.71 JAN 26, 2001

WELL NUMBER.--292546081513301. USGS Well CE-67 near Salt Springs, FL.

LOCATION.--Lat 29°25'46", long 81°51'33", in NE¼SE¼SE¼ sec.23, T.12 S., R.24 E., Hydrologic Unit 03080102, on northwest corner of Forest Roads 75 and 97 in the Ocala National Forest, 7.8 mi northeast of Fort McCoy, and 9.2 mi northwest of Salt Springs. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 340 ft, cased to 307 ft.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Land-surface datum is 137.84 ft above sea level. Measuring point: Hole in cap, 2.20 ft above land-surface datum.

COOPERATION.--Since Oct. 1, 1985 records provided by St. Johns River Water Management District and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--September 1964 to November 1967 (monthly); January 1968 to September 1985 (bimonthly); October 1985 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.60 ft above sea level, Oct. 29, 1965; lowest measured, 17.33 ft above sea level, Sept. 21, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	20.35	JAN 26	20.03	APR 23	19.62	JUN 20	19.27	SEP 21	17.33		
NOV 29	20.69	FEB 23	19.72	MAY 16	19.16	JUL 23	19.33	28	17.79		
DEC 18	20.64	MAR 26	19.62	21	19.54	AUG 27	19.41				

WATER YEAR 2001 LOWEST 17.33 SEP 21, 2001 HIGHEST 20.69 NOV 29, 2000

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

MARION COUNTY

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
285900082072001	05-14-01	1230	USGS OBSER WELL CE36 AT PEDRO, FL.	41.85
	09-24-01	1245		44.01
285908081470101	05-15-01	1100	M-0046 NFS DP AT BIG BASS LK CMPGRD,STARKES FERRY	47.33
285930081430901	05-14-01	1015	SR 42 W OF ALTOONA	45.39
	09-24-01	1010		49.18
285933082192501	05-14-01	1420	85921901 17S20E20 CE 24 U S GEOL SURVEY	34.76
	09-24-01	1435		38.54
285940081522001	05-17-01	1735	KEY SCALES,JR DEEP NR WEIRSDALE	49.38
285953081590101	09-24-01	1045	M-0467 LAKE WEIR MIDDLE SCHOOL NR LADY LAKE,FL	50.81
290130082082001	05-14-01	1300	90120801 USGS OB WELL CE35 NR PEDRO FL	41.79
	09-24-01	1305		43.55
290220081485001	05-15-01	1210	OCALA NATL FORREST DOE LAKE 4-H CAMP NR ALTOONA	48.84
290227082250801	05-14-01	1545	90222501 16S19E31 CE 75 U S GEOL SURVEY	49.74
	09-24-01	1612		54.70
290300081452001	05-15-01	1030	OCALA NATIONAL FORREST BIG SCRUB CAMP	41.30
290306082032101	09-24-01	1215	M-0465 BELLEVIEW ELEM SCHOOL AT BELLEVIEW,FL	49.65
290312082190601	05-14-01	1500	90321901 16S20E33 CE 22 U S GEOL SURVEY	41.90
	09-24-01	1510		45.22
290312082250801	05-14-01	1530	90322501USGS OBSER WELL CE 14 NEAR DUNNELLON, FL	34.93
	09-24-01	1540		41.30
290327081562001	05-16-01	0755	M-0445 TIGER DEN NR OKLAWAHA,FL	44.60
	09-28-01	0800		47.70
290447082250901	05-14-01	1600	90422501 16S19E20 CE 13 U S GEOL SURVEY	31.42
	09-24-01	1550		34.79
290514082270701	05-14-01	1658	90522701RAINBOW SPRINGS NEAR DUNNELLON, FL.	30.05
	09-24-01	1640		31.12

MARION COUNTY--Continued

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
290526081493701	05-15-01	1340	DEEP 9049 SE196 TER MARION ONF	43.35
290614082274801	05-14-01	1720	90622701 16S18E11 SCE 170 RAINBOWS END GOLF CRS	31.56
	09-26-01	1440		32.81
290628081425301	05-16-01	1000	LOOKOUT TOWER BOMBING RANGE DEEP, ASTOR PARK	41.81
	09-25-01	1200		45.15
290739082245701	05-14-01	1740	90722401 15S19E32 CE 12 U S GEOL SURVEY	32.83
	09-24-01	1700		34.21
290752082271101	05-15-01	1750	90722701 15S18E35 SCE 116 RAINBOW ACRES	32.72
	09-26-01	1405		34.12
290805081540801	05-15-01	1425	TOMAHAWK LAKE DEEP NR LYNNE	45.75
290822082310101	05-15-01	1720	90823101 15S18E32 LAKE BONABLE	39.89
	09-26-01	1335		42.14
290910082315001	05-15-01	1740	90923101 15S18E30 SCE 138 LITTLE LAKE BONABLE	38.87
	09-26-01	1300		41.61
290913082245601	05-15-01	1815	90922401 15S19E29 SCE 118 LAKE TROPICANA	34.02
	09-26-01	1230		35.67
290953082031301	05-16-01	0715	CE79 (M0038) OB WELL NR SILVER SPRINGS, FL	41.85
	09-28-01	0700		41.83
291035081461201	05-15-01	1600	CENTRAL FIRETOWER	36.95
291056082263201	05-15-01	1845	91022601 15S18E13 HERSHEL KYPER ROMEO	35.11
	09-26-01	1210		37.13
291100081502001	05-15-01	1530	SCE-123 MILL DAM LAKES	41.82
291117081540501	05-16-01	1540	REDWATER LAKE DEEP WELL NR LYNNE (SJ M-0044)	43.91
291117081540501	09-25-01	1045	REDWATER LAKE DEEP WELL NR LYNNE (SJ M-0044)	46.70
291140082052701	05-16-01	1730	91120501 USGS OB WELL CE80 AT OCALA FL	39.98
	09-25-01	0945		41.98
291513081515601	05-18-01	1130	M-0306 LAKE EATON HANDPUMP NR LAKE KERR	35.89
291600081550001	05-16-01	1520	91615501 USGS OB WELL CE55 NR SALT SPRINGS, FL	40.76
	09-25-01	1320		42.80

MARION COUNTY--Continued

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
291620081415001	05-18-01	1430	M-0130 HOPKINS PRAIRIE DEEP	14.37
291625082085901	05-16-01	1645	M-0419 MARION CTY SHERRIF NR OCALA,FL	39.67
	09-25-01	1505		41.57
291728081390501	05-16-01	1135	PONDEROSA CLUB FREEFLOW	12.55
	09-25-01	1240		15.27
291751081414301	05-16-01	1450	OCALA NF 4IN SHALLOW WELL(M-0413)	14.81
	09-28-01	0905		19.75
292056081440901	05-16-01	1445	SALT SPRINGS CIVIC ASSOC WELL NR SALT SPRINGS,FL	3.89
292101082233601	05-15-01	1220	92122301 13S19E15 HOMESTEADER NURSERY	41.53
	09-26-01	1125		43.18
292146082182501	05-15-01	1205	92121801 13S20E09 SR 316 WELL SRWMD	44.00
	09-26-01	1050		43.58
292204082022801	05-16-01	1620	FT MCCOY DEEP	45.42
292240081483101	05-18-01	1230	M-0153 GRASSY POND DEEP NR LAKE DELANEY	19.24
292310081582201	09-25-01	1415	M-0463 FT MCCOY ELEMENTARY SCHOOL NR FT MCCOY,FL	50.57
292548081471201	05-18-01	1300	M-0161 LAKE DELANCY CMPGRD HANDPUMP DP NR SALT SPG	17.88
292554082034501	05-15-01	0735	M-0443 CITRA RANCH NR CITRA,FL	50.10
	09-28-01	1130		52.57
292656082125001	05-15-01	0840	M-0351 SPORTSMAN COVE	46.23
	09-26-01	0830		46.11
292718082202601	05-15-01	0955	92722001 12S20E18 MAHAFFEY WELL	48.87
	09-26-01	0955		48.57
292816082234501	05-15-01	1015	92822301 12S19E03 SMITH BROTHERS WACAHOOTA	49.22
	09-26-01	0930		49.09
292817081483602	05-15-01	1425	OCALA NF 6IN DP WELL(M-0410)NR SALT SPRINGS,FL	18.86
	09-28-01	1020		20.00
292957081573002	05-15-01	0755	M-0441 G&M CATTLE RANCH NR ORANGE SPRINGS,FL	50.62
	09-28-01	1105		52.55

KEY TO SITE LOCATIONS ON FIGURE 18
NASSAU COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number
1	303435081271401	160
2	303518081275002	161
3	303823081273304	161
4	304005081380201	162
5	304213081270801	162
6	304410081592101	163

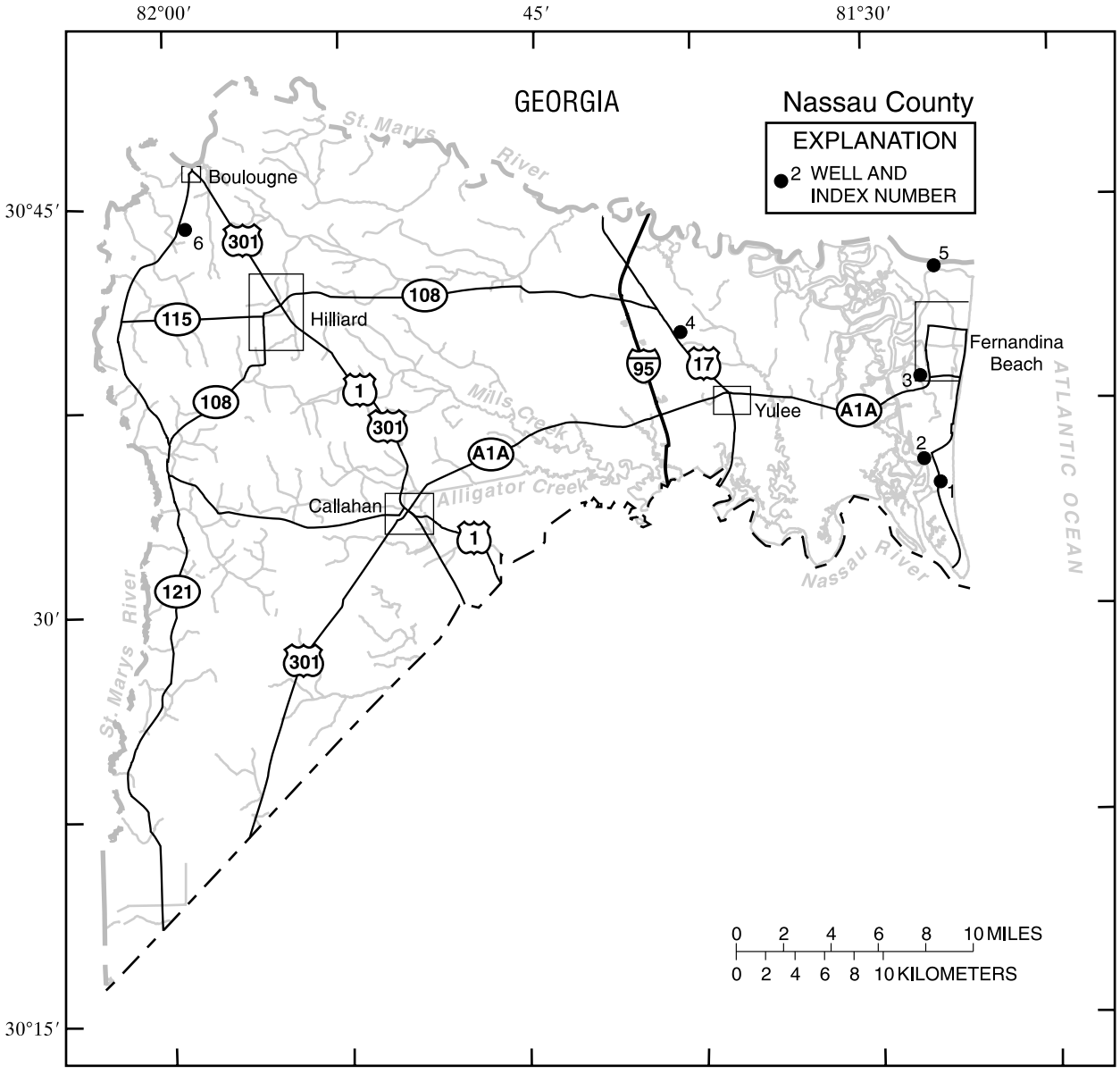

Figure 18.--Location of wells in Nassau County.

NASSAU COUNTY

WELL NUMBER.--303435081271401. Local Number N-46. Amelia Island Corporation Well at Amelia City, FL.

LOCATION.--Lat 30°34'35", long 81°27'14", in SE¼SW¼SW¼ sec.14, T.2 N., R.28 E., Hydrologic Unit 03070205 at Amelia Island waterworks, 200 ft east of water storage tanks, and 1.1 mi south of intersection of State Highways A1A and 105A at Amelia City. Owner: Amelia Island Corporation.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, commercial, artesian well, diameter 12 in., depth 1,016 ft, cased to 492 ft.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975-78, 1983-89 (varied frequencies); 1996 to current year (quarterly).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT													
30...	1100	598	7.7	23.0	<5	265	58.0	29.0	18.0	2.00	149	120	23.0
JAN													
26...	0845	597	7.7	22.0	<5	264	56.0	30.0	18.0	1.90	149	120	22.0
APR													
26...	1420	596	7.7	23.0	<5	269	58.0	30.0	18.0	1.90	148	120	22.0
JUL													
27...	1100	597	7.6	25.0	<5	271	57.0	31.0	18.0	2.00	148	120	22.0

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
OCT				
30...	.6	31.0	399	540
JAN				
26...	.7	30.0	386	540
APR				
26...	.6	30.0	397	550
JUL				
27...	.6	30.0	407	540

NASSAU COUNTY--Continued

WELL NUMBER.--303518081275002. Local Number N-130 Well at Amelia City, FL.

LOCATION.--Lat 30°35'18", long 81°27'50", in land grant 12, T.2 N., R.28 E., Hydrologic Unit 03070205, at McCranie residence on Forrest Drive, 0.4 mi west of State Highway A1A at Amelia City. Owner: Michael McCranie.

AQUIFER.--Floridan aquifer system of Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 4 in., depth 600 ft, cased to 515 ft.

INSTRUMENTATION.--Monthly measurment with pressure gage.

DATUM.--Land-surface datum is 14.76 ft above sea level. Measuring point: Top of reducer bushing, 1.0 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells. Record is equivalent to that for N-3 (303518081275001), available March 1939 to January 2000.

PERIOD OF RECORD.--March 2000 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.36 ft above sea level, Feb. 26, 2001; lowest measured, 16.15 ft above sea level, May 22, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	17.04	DEC 18	19.45	FEB 26	24.36	MAY 14	17.11	JUL 23	17.36	SEP 25	21.86
NOV 27	19.40	JAN 29	20.18	MAR 26	20.30	JUN 21	16.94	AUG 27	17.57		

WATER YEAR 2001 LOWEST 16.94 JUN 21, 2001 HIGHEST 24.36 FEB 26, 2001

WELL NUMBER.--303823081273304. Local Number N-62. ITT Rayonier No. 8 Well at Fernandina Beach, FL.

LOCATION.--Lat 30°38'23", long 81°27'33", in land grant 30, T.3 N., R.28 E., Hydrologic Unit 03070205, 30 ft west of State Highway A1A, and 200 ft north of intersection of State Highways A1A and 108, in Fernandina Beach. Owner: St. Johns River Water Management District.

AQUIFER.--Floridan aquifer system of Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 12 in., depth 1,020 ft, cased to 565 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 17.60 ft above sea level. Measuring point: Top of recorder shelf, 3.36 ft above land-surface datum.

REMARKS.--Well originally drilled to 2,130 ft in 1945, later reconstructed to 1,020 ft in 1991.

PERIOD OF RECORD.--November 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 13.23 ft above sea level, Feb. 25,26, 2001; lowest, 30.01 ft below sea level, June 25, 1999.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	-16.35	-22.32	-18.54	-18.98	-17.81	-11.63	-16.08	-19.33	-19.17	-18.91	-11.67	-12.08
10	-18.65	-21.47	-20.09	-18.75	-17.19	-16.48	-17.15	-18.51	-18.06	-19.57	-13.78	-8.97
15	-20.21	-21.82	-17.75	-18.13	-14.36	-16.82	-16.28	-18.50	-7.31	-17.86	-15.40	-13.55
20	-21.46	-20.57	-18.41	-17.56	3.19	-15.52	-17.85	-19.17	-17.09	-17.93	-14.56	-10.41
25	-21.29	-20.52	-17.24	-18.02	13.23	-16.83	-17.24	-19.76	-15.88	-15.83	-16.41	-11.13
EOM	-21.60	-21.15	-17.27	-17.71	1.53	-15.61	-15.78	-19.37	-17.30	-12.25	-15.70	-9.95
MAX	-11.08	-20.52	-11.03	-17.13	13.23	-1.12	-15.41	-15.60	-7.31	-12.25	-10.05	-8.97

CAL YR 2000 MAX -3.57
WTR YR 2001 MAX 13.23

Note.--Negative figures indicate water level below sea level.

NASSAU COUNTY--Continued

WELL NUMBER.--304005081380201. Local Number N-121. Becker Oil Test Supply Well near Yulee, FL.

LOCATION.--Lat 30°40'05", long 81°38'02", in land grant 50, T.3 N., R.27 E., Hydrologic Unit 03070205, 0.2 mi east of Yulee Fire Tower, 0.42 mi southeast of intersection of U.S. Highway 17 and Parker Road, and 3.0 mi northwest of Yulee. Owner: ITT Rayonier Incorporated.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 4 in., depth 645 ft, cased to 460 ft.

INSTRUMENTATION.--Monthly measurement with pressure gage.

DATUM.--Land-surface datum is 21.87 ft above sea level. Measuring point: Top of reducing fitting, 1.45 ft above land-surface datum.

REMARKS.--Record is equivalent to that for N-53 (304002081381201), available February 1940 to June 1994.

PERIOD OF RECORD.--May 1984, August 1985, August 1994 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.82 ft above sea level, Apr. 27, 1998; lowest measured, 23.23 ft above sea level, July 24, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	25.03	JAN 29	26.26	APR 23	25.92	JUN 21	25.33	SEP 25	27.02		
NOV 27	25.53	FEB 26	27.26	MAY 14	26.32	JUL 23	25.66				
DEC 18	25.70	MAR 26	27.00	23	25.52	AUG 27	26.20				

WATER YEAR 2001 LOWEST 25.03 OCT 23, 2000 HIGHEST 27.26 FEB 26, 2001

WELL NUMBER.--304213081270801. Local Number N-19. Fort Clinch State Park Well at Fernandina Beach, FL.

LOCATION.--Lat 30°42'13", long 81°27'08", in NE¼SE¼NW¼ sec.12, T.3 N., R.28 E., Hydrologic Unit 03070204, at picnic area in Fort Clinch State Park at Fernandina Beach. Owner: Florida Department of Environmental Protection.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 5 in., depth 710 ft, casing length unknown.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Land-surface datum is 8.41 ft above sea level. Measuring point: Top of 5 in. casing, 1.00 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells.

PERIOD OF RECORD.--May 1974, December 1974 to December 1975 (monthly); May 1977 to September 1978 (semiannually); April 1979 to September 1981 (bimonthly); May 1982 to September 1985 (semiannually); October 1985 to November 1985 (bimonthly); December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 9.33 ft above sea level, Apr. 27, 1998, Feb. 27, 28, Mar. 1, 2001; lowest water level measured, 30.30 ft below sea level, Sept. 25, 1978.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	-16.38	-21.21	-20.00	-17.80	-16.51	-4.83	-14.68	-12.67	-12.62	-11.35	-13.05	-10.58
10	-17.44	-18.88	-18.36	-19.13	-15.80	-11.92	-14.84	-13.14	-13.21	-11.49	-12.93	-9.98
15	-19.85	-21.98	-16.15	-15.45	-2.62	-13.53	-14.93	-13.01	-11.48	-11.88	-13.13	-10.57
20	-20.24	-20.90	-16.48	-16.21	8.55	-14.25	-15.51	-11.87	-10.69	-11.53	-12.74	-9.12
25	-19.54	-21.06	-14.22	-16.52	---	-14.03	-14.06	-12.51	-9.68	-13.14	-13.24	-8.68
EOM	-20.90	-21.42	-14.75	-16.65	9.33	-13.91	-11.16	-12.63	-10.84	-12.32	-11.98	-7.61
MAX	-5.40	-18.41	-12.52	-13.91	9.33	9.33	-10.75	-11.16	-9.68	-10.88	-11.98	-7.54

CAL YR 2000 MAX 8.85
WTR YR 2001 MAX 9.33

Note.--Negative figures indicate water level below sea level.

NASSAU COUNTY--Continued

WELL NUMBER.--304410081592101. Local Number N-120. Humphreys Mining No. 2 Well near Boulogne, FL.

LOCATION.--Lat 30°44'22", long 81°59'18", in NE¼NW¼NW¼ sec.26, T.4 N., R. 23 E., Hydrologic Unit 03070204, 200 ft west of State Highway 121, and 2.2 mi southwest of intersection of U.S. Highway 1 and State Highway 121 in Boulogne. Owner: Mrs. Greenwood.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 18 to 12 in., depth 923 ft, cased to 525 ft.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Land-surface datum is 96.12 ft above sea level. Measuring point: Top of metal base at land-surface datum.

PERIOD OF RECORD.--March 1985 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 46.00 ft above sea level, Mar. 26, 1986; lowest measured, 35.12 ft above sea level, July 24, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	36.50	JAN 29	37.39	APR 23	37.84	JUN 21	36.13	SEP 25	37.45		
NOV 27	36.85	FEB 26	37.77	MAY 14	37.22	JUL 23	36.67				
DEC 18	36.96	MAR 26	38.10	23	36.90	AUG 27	36.97				

WATER YEAR 2001 LOWEST 36.13 JUN 21, 2001 HIGHEST 38.10 MAR 26, 2001

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

NASSAU COUNTY

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
302409081551603	05-14-01	0745	N-0237 CAREY STATE FORREST	35.75
	09-25-01	0825		37.13
303357081295601	05-14-01	1050	N-119 CHARLES ALLEN WELL N-100 SUB	26.17
	09-25-01	1145		29.87
303541081495001	09-25-01	0850	N-0220 NASSAU COUNTY FAIRGROUNDS	38.65
303658081422601	05-14-01	0920	N-50	30.49
	09-25-01	1025		34.19
303823081273304	05-14-01	1140	N-62 ITT RAYONIER NO.8 AT FERNANDINA BEACH,FL	-19.32
	09-25-01	1200		-11.95
303939081312601	05-14-01	1030	N-20	1.44
	09-25-01	1125		4.07
304213081270801	09-25-01	1325	N-19 FT CLINCH STATE PARK FERNANDINA BCH,FL	-9.46
304658081571201	05-14-01	0850	N-0221	36.79
	09-25-01	0930		37.51

Note.--Negative figures indicate water level below sea level.

KEY TO SITE LOCATIONS ON FIGURE 19
OKEECHOBEE COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number
1	273127080481401	168

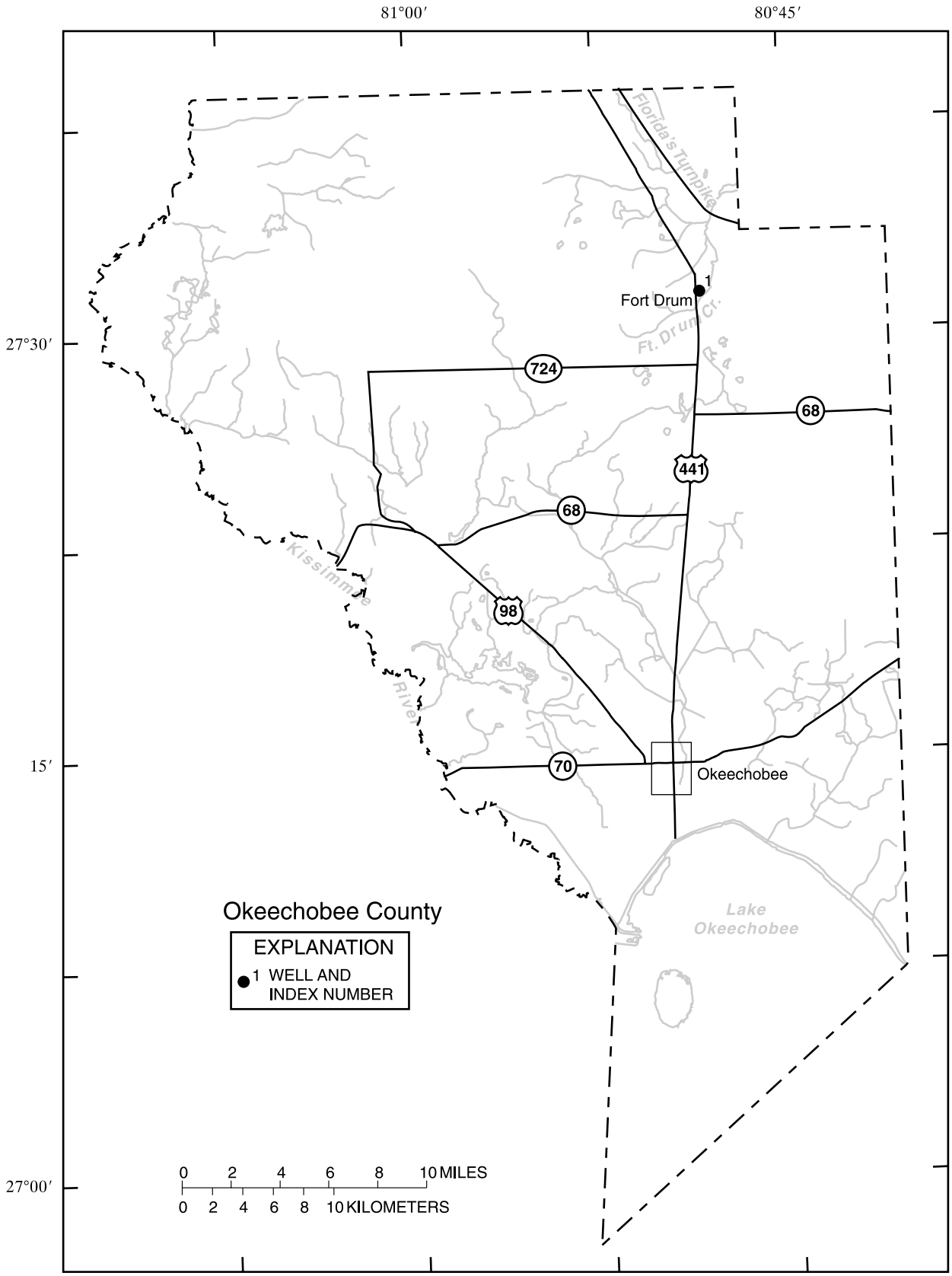

Figure 19.--Location of wells in Okeechobee County.

OKEECHOBEE COUNTY

WELL NUMBER.--273127080481401. OK-1 Well at Fort Drum, FL.

LOCATION.--Lat 27°31'27", long 80°48'14", in SE¼SW¼SW¼ sec.11, T.34 S., R.35 E., Hydrologic Unit 03080101, 200 ft south of dirt road, 0.2 mi east of U.S. Highway 441 at Fort Drum, and 13.4 mi south of State Road 60. Owner: Charles Pierce.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in., depth 960 ft, casing length unknown.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Land-surface datum is 55.67 ft above sea level. Measuring point: Top of casing, 0.3 ft above land-surface datum. Prior to Oct. 1, 1990 miscellaneous readings published at datum 0.53 higher.

PERIOD OF RECORD.--May 1976, May 1977 to September 1985 (semiannually); October 1985 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 50.66 ft above sea level, Sept. 18, 1985; lowest measured, 38.91 ft above sea level, May 8, 1976, Apr. 27, 1999.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	43.06	JAN 25	40.04	APR 23	39.96	JUN 21	41.59	SEP 25	44.75		
NOV 27	41.05	FEB 23	39.68	MAY 15	40.43	JUL 23	43.37				
DEC 18	40.70	MAR 23	39.89	23	39.86	AUG 27	44.41				

WATER YEAR 2001 LOWEST 39.68 FEB 23, 2001 HIGHEST 44.75 SEP 25, 2001

OKEECHOBEE COUNTY

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
271340080504001	05-17-01	0845	OKF-31	46.47
	09-18-01	0812		50.72
271438080571901	05-17-01	0817	714057--	42.60
271514080511601	05-17-01	0930	OKF-23 NR LIVESTOCK MARKET	40.88
	09-18-01	0859		43.91
272010080550801	05-17-01	1012	DIXIE RANCH (OKF-17)	43.01
	09-18-01	0950		46.95
272158080470901	05-15-01	1317	JONES WELL S DARK HAMMOCK RD (OKF-7)	42.14
	09-20-01	1330		45.99
272354080524201	05-15-01	1015	MACARTHUR TRAILER PASTURE 12IN UFA NR BASINGER,FL	37.30
	09-25-01	1049		41.80
272704081053501	09-20-01	1402	727105--	47.64
272726081003901	05-15-01	1334	727100-- 35S33E02 BASS WELL N OF BASSINGER	42.23
	09-20-01	1354		46.48
273007081114601	05-16-01	1101	OKF-42 EXP WELL S65C	42.26
	09-17-01	1045		46.52
273028080542101	05-17-01	1230	WILLAWAY CATTLE CO 12IN UFA NR FORT DRUM,FL	42.89
	09-25-01	1245		47.42
273217081012601	05-15-01	1328	PEAVINE TRAIL W (OKF-34)	42.19
	09-20-01	1346		46.39

KEY TO SITE LOCATIONS ON FIGURE 20
ORANGE COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number
1	282051081183401	172
2	282202081384601	172
2	282202081384602	173
3	282210081352601	173
4	282341081040101	174
5	282348080564701	175
6	282406081093602	175
7	282434081283102	176
8	282510081054501	177
8	282510081054502	178
8	282510081054503	178
9	282528081340901	179
10	282530081065601	180
10	282530081065602	181
10	282530081065603	182
11	282531081054301	183
12	282531081095701	184
13	282532081075601	185
14	282533081082202	186
14	282533081082204	187
14	282533081082205	188
14	282533081082206	189
15	282623081153801	189
16	282738081341401	190
17	282739081054501	190
18	282835081305201	191
19	282838080572402	192
20	282847081013701	193
20	282847081013702	194
21	283003081283801	195
21	283003081283901	196
22	283249081053201	197
22	283249081053202	197
22	283249081053203	198
23	283253081283401	198
24	283333081233501	199
24	283333081233502	199
25	283813081292601	200
26	284634081262001	201
26	284634081262002	201
26	284634081262003	202
26	284634081262004	202

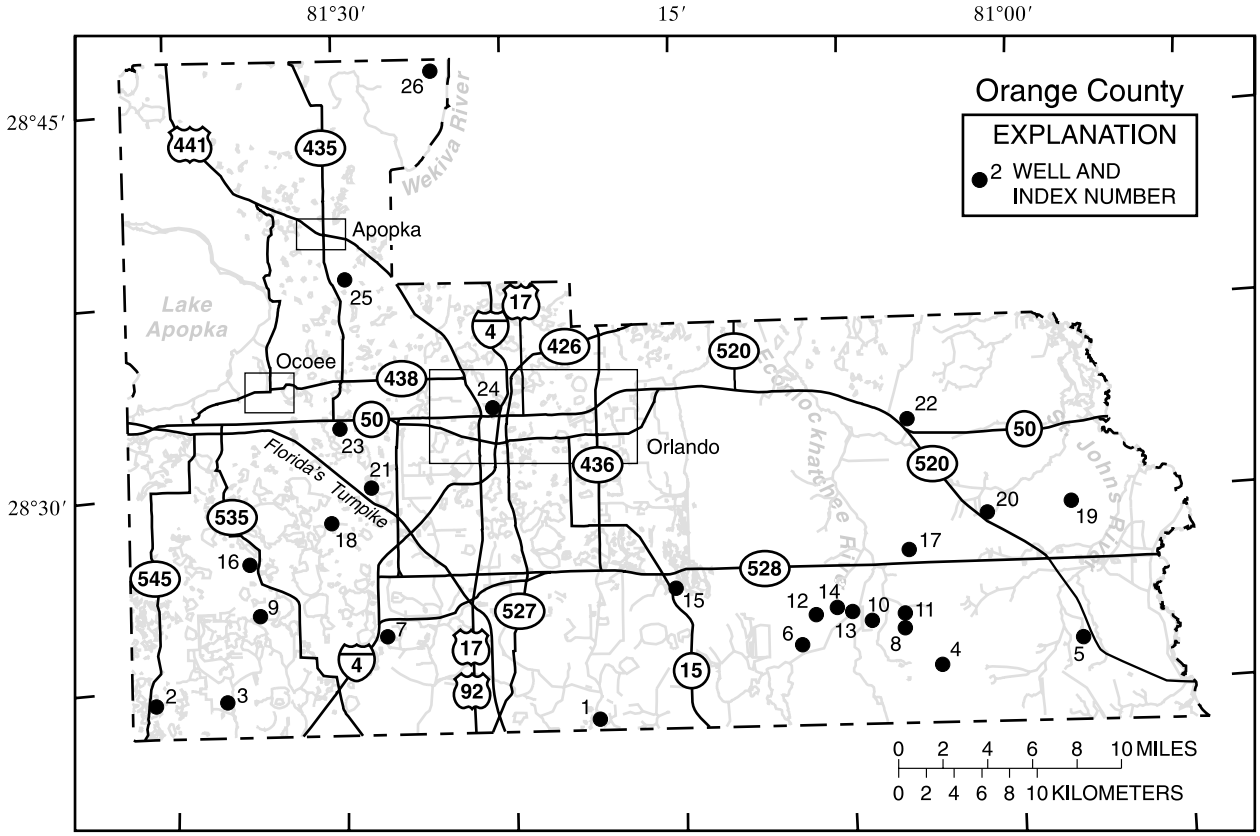

Figure 20.--Location of wells in Orange County.

WELL NUMBER.--282051081183401. Boggy Creek Road Well at county line near Taft, FL.

LOCATION.--Lat 28°20'51", long 81°18'34", in SW¼SW¼SW¼ sec.34, T.24 S., R.30 E., Hydrologic Unit 03090101, 40 ft east of Boggy Creek Road (County Road 527A) and 30 ft north of intersection of County Roads 527A and 530. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation well, diameter 4 in., depth 400 ft, cased to 199 ft.

INSTRUMENTATION.--Water-stage recorder and data-collection platform--60-minute interval, prior to January 18, 2001, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 74.70 ft above sea level. Measuring point: Top of casing, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--June 1961 to May 1974 (miscellaneous measurements); May 1977 to September 1991(semiannually); October 1991 to December 2001 (monthly); January 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 53.92 ft above sea level, Dec. 12, 1963, lowest measured, 34.92 ft above sea level, May 22, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	44.06	DEC 01	42.87
NOV 27	42.67	18	42.77

WATER YEAR 2001 LOWEST 41.36 MAY 31, 2001 HIGHEST 47.40 SEP 24, 2001

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	43.14	42.45	43.19	41.93	41.87	43.71	45.93	45.46
10	---	---	---	---	43.00	42.59	43.02	42.01	42.71	44.03	45.94	46.16
15	---	---	---	---	42.88	42.55	42.64	41.70	42.73	44.45	46.05	47.20
20	---	---	---	42.62	42.59	42.65	41.95	41.20	42.91	45.00	45.94	47.48
25	---	---	---	42.68	42.52	42.70	41.47	40.75	43.71	45.63	45.82	47.50
EOM	---	---	---	42.92	42.35	43.01	41.50	41.51	43.76	45.56	45.46	47.61
MAX	---	---	---	---	43.18	43.01	43.22	42.02	43.87	45.68	46.05	47.66

WELL NUMBER.--282202081384601. Lake Oliver Deep Well near Vineland, FL.

LOCATION.--Lat 28°22'02", long 81°38'46", in NE¼NW¼SE¼ sec.30, T.24 S., R.27 E., Hydrologic Unit 03090101, on west side of State Highway 545, 1.4 mi north of U.S. Highway 192, and 15.0 mi west of Vineland. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 318 ft, cased to 103 ft.

INSTRUMENTATION.--Water-stage recorder and data-collection platform--30-minute interval.

DATUM.--Elevation of land-surface datum is 117.12 ft above sea level. Measuring point: Top of 6 in. nipple, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--February 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 112.73 ft above sea level, Sept. 13, 1960; lowest, 103.48 ft above sea level, May 19, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	106.04	105.23	104.85	104.44	104.51	104.09	104.81	104.12	103.92	105.19	106.80	106.97
10	105.94	104.91	104.87	104.49	104.35	104.07	104.64	103.92	103.95	105.70	106.91	107.59
15	105.70	105.03	104.86	104.58	104.22	103.96	104.51	103.76	104.04	106.01	106.91	108.51
20	105.54	104.96	104.52	104.53	104.17	104.14	104.22	103.59	104.88	106.15	107.09	108.55
25	105.28	104.94	104.78	104.44	104.10	104.09	104.16	103.56	105.22	106.27	107.13	108.57
EOM	105.15	104.99	104.35	104.44	104.10	104.70	104.05	103.74	105.21	106.12	106.83	108.50
MAX	106.12	105.27	104.93	104.66	104.51	104.70	104.82	104.12	105.22	106.31	107.23	108.71

CAL YR 2000 MAX 108.33
WTR YR 2001 MAX 108.71

WELL NUMBER.--28220208l384602. Lake Oliver Shallow Well near Vineland, FL.

LOCATION.--Lat 28°22'02", long 81°38'46", in NE¼NW¼SE¼ sec.30, T.24 S., R.27 E., Hydrologic Unit 03090101, on west side of State Highway 545, 1.4 mi north of U.S. Highway 192, and 15.0 mi west of Vineland. Owner: U.S. Geological Survey.

AQUIFER.--Nonartesian sand aquifer of the Tertiary Quaternary Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, nonartesian well, diameter 4 in., depth 38 ft, revised, well deepened June 1982.

INSTRUMENTATION.--Water-stage recorder and data-collection platform--30-minute interval.

DATUM.--Elevation of land-surface datum is 117.06 ft above sea level. Measuring point: Top of 4 in. coupling, 2.48 ft above land-surface datum.

PERIOD OF RECORD.--April 1959 to December 1969; January 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 115.54 ft above sea level, Sept. 10, 1960; lowest, 106.16 ft, above sea level, June 14, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	108.48	107.87	107.49	107.22	106.93	106.67	107.24	106.55	106.25	107.49	108.61	108.92
10	108.42	107.78	107.45	107.18	106.89	106.62	107.15	106.48	106.23	107.81	108.94	109.48
15	108.29	107.70	107.40	107.15	106.84	106.57	107.00	106.40	106.38	108.01	108.95	110.73
20	108.16	107.62	107.37	107.10	106.79	106.59	106.88	106.32	107.17	108.08	109.10	110.76
25	108.06	107.55	107.32	107.04	106.73	106.54	106.73	106.24	107.42	108.25	109.16	110.58
EOM	107.95	107.53	107.27	106.97	106.71	107.13	106.63	106.23	107.45	108.29	109.03	110.50
MAX	108.48	107.93	107.52	107.26	106.96	107.13	107.25	106.61	107.45	108.29	109.16	110.84

CAL YR 2000 MAX 110.66
WTR YR 2001 MAX 110.84

WELL NUMBER.--282210081352601. Disney Shallow Well at Tree Farm near Vineland, FL.

LOCATION.--Lat 28°22'10" long 81°35'26", in SW¼SW¼NW¼ sec.26, T.24 S., R.27 E., Hydrologic Unit 03090101, at Walt Disney World tree farm, 2.5 mi south of State Highway 405, and 5.6 mi southwest of Vineland. Owner: U.S. Geological Survey.

AQUIFER.--Nonartesian sand aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, nonartesian well, diameter 6 in., depth 18 ft, cased to 18 ft.

INSTRUMENTATION.--Water-stage recorder--30-minute interval.

DATUM.--Elevation of land-surface datum is 99.44 ft above sea level. Prior to Oct. 1, 1977, land-surface datum was considered to be 99 ft, from topographic map. Measuring point: Top of casing, 2.90 ft above land-surface datum.

PERIOD OF RECORD.--March 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 99.91 ft above sea level, Nov. 3, 1987; well observed dry many days in December 1995.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	97.70	95.61	95.08	94.84	94.60	94.51	95.65	94.72	95.11	95.51	98.56	97.94
10	97.34	95.49	94.95	94.86	94.54	94.56	95.51	94.67	95.07	97.20	98.72	98.84
15	97.16	95.35	95.07	94.83	94.47	94.46	95.30	94.52	95.21	97.49	98.14	99.34
20	96.36	95.22	95.05	94.77	94.40	94.59	95.08	94.48	95.61	97.69	98.36	98.23
25	95.94	95.09	94.92	94.72	94.34	94.64	94.90	94.46	95.68	97.70	98.18	98.23
EOM	95.77	95.21	94.89	94.63	94.33	95.68	94.75	94.82	95.55	98.12	98.14	97.83
MAX	97.92	95.74	95.20	94.87	94.63	95.68	95.71	94.82	95.68	98.12	98.83	99.62

CAL YR 2000 MAX 98.26
WTR YR 2001 MAX 99.62

ORANGE COUNTY--Continued

WELL NUMBER.--282341081040101. Cocoa-A Well near Bithlo, FL.

LOCATION.--Lat 28°23'41", long 81°04'01", in SE¼SW¼SE¼ sec.13, T.24 S., R.32 E., Hydrologic Unit 03080101, in Cocoa well field, 100 ft west of Cocoa Water Plant Road, 7 mi west of State Highway 520, and 11.3 mi south of Bithlo. Owner: City of Cocoa.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 10 in., depth 516 ft, cased to 301 ft.

WATER LEVEL RECORDS

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 75.06 ft above sea level. Measuring point: Top of recorder shelf, 2.71 ft above land-surface datum.

PERIOD OF RECORD.--March 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 43.59 ft above sea level, Sept. 30, Oct. 17, 1960; lowest, 29.01 ft above sea level, June 10, 2000.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-72, 1992 to current year.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	34.64	33.96	32.67	---	32.10	31.61	32.27	---	---	---	35.06	35.01
10	34.69	33.59	32.50	---	32.06	31.74	32.44	---	32.16	---	35.19	35.24
15	34.75	33.15	32.35	---	31.97	31.61	32.16	31.77	32.42	---	35.29	36.07
20	34.41	32.87	32.35	---	31.76	31.76	31.56	31.36	32.56	34.19	35.39	36.12
25	34.34	32.82	32.60	---	31.68	31.71	31.36	31.18	32.73	34.56	35.39	36.25
EOM	34.08	32.66	33.88	32.08	31.75	32.04	31.27	31.29	32.79	34.61	35.12	36.57
MAX	34.77	34.06	33.88	35.05	32.15	32.04	32.44	31.83	32.79	34.63	35.43	36.57

CAL YR 2000 MAX 36.15
WTR YR 2001 MAX 36.57

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3 (00419)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
APR 24...	0825	1200	7.2	24.0	343	110	16.0	100	3.00	276	272	71.0	170

DATE	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)
APR 24...	.3	25.0	717	1900

WELL NUMBER.--282348080564701. Palmetto Well near Bithlo, FL.

LOCATION.--Lat 28°23'48", long 80°56'47", in NE¼SE¼SE¼ sec.18, T.24 S., R.34 E., Hydrologic Unit 03080101, 50 ft west of State Road 520, 5 mi southeast of BeeLine Expressway. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, artesian well, diameter 3 in., depth 381 ft, cased to 245 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Land-surface datum is 40.62 ft above sea level. Measuring point: Top of casing, 4.27 ft above land-surface datum.

PERIOD OF RECORD.--October 1960 to September 1991 (semiannually); October 1991 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.32 ft above sea level, Oct. 25, 1960; lowest measured, 29.44 ft above sea level, June 27, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	33.76	JAN 03	30.97	APR 02	31.21	JUN 01	30.50	AUG 27	34.64	SEP 24	35.56
NOV 28	32.15	26	31.30	20	31.02	21	31.91	SEP 17	35.14		
30	31.97	FEB 23	31.17	MAY 15	30.94	JUL 10	32.72				
DEC 20	31.69	MAR 23	31.15	24	30.48	24	33.90				

WATER YEAR 2001 LOWEST 30.48 MAY 24, 2001 HIGHEST 35.56 SEP 24, 2001

WELL NUMBER.--282406081093602. Cocoa R near Bithlo, FL.

LOCATION.--Lat 28°24'06" long 81°09'36", in SW¼SW¼NW¼ sec.18, T.24 S., R.32 E., Hydrologic Unit 03090101, in Cocoa Well field, 50 ft west of private road, 2.5 mi southwest of Magnolia Ranch headquarters and 1.8 mi south of Wewahootee Road. Owner: City of Cocoa.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 1205 ft, cased to 1098 ft.

INSTRUMENTATION.--Quarterly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 68.20 ft above sea level. Measuring point: Top of threaded coupling, 2.42 ft above land-surface datum.

PERIOD OF RECORD.--September 1993 to February 1999 (monthly); March 1999 to August 2000 (bimonthly); November 2000 to current year (quarterly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.40 ft above sea level, Feb. 25, 1998; lowest measured, 29.90 ft above sea level, May 23, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 14	32.80	JAN 31	31.62	JUL 24	34.28	SEP 10	34.74

WATER YEAR 2001 LOWEST 31.62 JAN 31, 2001 HIGHEST 34.74 SEP 10, 2001

ORANGE COUNTY--Continued

WELL NUMBER.--282434081283102. Sea World Drive Replacement Well near Vineland, FL.

LOCATION.--Lat 28°24'34", long 81°28'31", in NE¼SE¼SE¼ sec.11, T.24 S., R.28 E., Hydrologic Unit 03090101, on west side of Interstate Highway 4, 2.0 mi northeast of Vineland. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation well, diameter 4 in., depth 239 ft, cased to 158 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 103.16 ft above sea level. Measuring point: Top of coupling, 4.00 ft above land-surface datum.

REMARKS.--Record is equivalent to that for Sea World Drive Well (282434081283101), available October 1980 to September 1989.

PERIOD OF RECORD.--October 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 67.83 ft above sea level, Mar. 2, 3, 1998; lowest water level measured, 49.57 ft above sea level, May 27, 2000, may have been lower during period of missing record, May-June 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	57.04	53.63	53.96	54.98	56.46	54.75	55.82	53.75	---	54.98	58.96	---
10	55.92	53.35	54.07	54.73	56.08	54.95	55.26	53.29	---	55.84	58.97	---
15	55.50	52.74	55.00	54.96	55.56	54.61	54.58	52.45	---	56.75	59.19	---
20	55.05	52.91	55.51	55.60	55.01	55.19	53.66	---	---	57.76	58.55	---
25	54.39	53.45	55.27	55.86	54.67	54.91	52.81	---	56.11	58.25	58.29	61.37
EOM	54.02	53.98	55.42	55.72	54.33	55.82	---	---	55.87	58.10	56.49	61.21
MAX	57.04	54.02	55.54	55.99	56.59	55.82	56.14	53.75	56.11	58.43	59.78	61.37

CAL YR 2000 MAX 61.16
WTR YR 2001 MAX 61.37

ORANGE COUNTY--Continued

WELL NUMBER.--282510081054501. Cocoa-1 Well near Bithlo, FL.

LOCATION.--Lat 28°25'10", long 81°05'45", in SE¼NE¼NE¼ sec.10, T.24 S., R.32 E., Hydrologic Unit 03080101, in Cocoa well field, 300 ft southwest of intersection of private road (abandoned FEC Railroad grade owned by Magnolia Ranch) and Wewahootee Road, and 9.1 mi south of Bithlo. Owner: City of Cocoa.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 20 in., depth 710 ft, cased to 316 ft.

WATER LEVEL RECORDS

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 70.33 ft above sea level. Measuring point: Top of casing, 2.30 ft above land-surface datum. Prior to Aug. 31, 1988 at elevation 0.30 ft lower.

PERIOD OF RECORD.--1966, 1967, 1969 (annually); January 1971 to April 1999 (monthly); May 1999 to September 2000 (bimonthly); November 2000 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.90 ft above sea level, Sept. 21, 1994; lowest measured, 29.49 ft above sea level, May 15, 2000.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964, 1967, 1968, 1989 to current year.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13	33.08	JAN 26	31.76	APR 23	30.11	MAY 24	30.83	SEP 24	36.88		
DEC 20	32.22	MAR 23	31.54	MAY 15	31.33	JUN 21	33.61				

WATER YEAR 2001 LOWEST 30.11 APR 23, 2001 HIGHEST 36.88 SEP 24, 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3 (00419)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
APR 23...	0840	1480	7.8	24.7	418	140	16.0	130	3.50	290	243	110	220

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
APR 23...	.2	23.0	897	1800

ORANGE COUNTY--Continued

WELL NUMBER.--282510081054502. Cocoa-M Well near Bithlo, FL.

LOCATION.--Lat 28°25'10", long 81°05'45", in SE¼NE¼NE¼ sec.10, T.24 S., R. 32 E., Hydrologic Unit 03080101, in Cocoa well field, 300 ft southwest of intersection of private road and Wewahootee Road, and 9.1 mi south of Bithlo. Owner: U.S. Geological Survey.

AQUIFER.--Nonartesian sand of the Surficial Aquifer System, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, nonartesian well, diameter 6 in., depth 10 ft, cased to 10 ft.

INSTRUMENTATION.--Quarterly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 70.81 ft, above sea level. Measuring point: Bolt hole in cap, 3.15 ft above land-surface datum.

PERIOD OF RECORD.--February 1969 to January 1977; February 1977 to April 1999 (monthly); May 1999 to August 2000 (bimonthly); November 2000 to current year (quarterly).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 69.94 ft above sea level, Nov. 4, 1969; well observed dry August 1981, July 1982, August, October 1984, April 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

	DATE	WATER LEVEL	DATE	WATER LEVEL			
	NOV 13	63.65	JAN 30	62.45			
WATER YEAR 2001	LOWEST	62.45	JAN 30, 2001	HIGHEST	63.65	NOV 13, 2000	

WELL NUMBER.--282510081054503. Cocoa 1-T Well near Bithlo, FL.

LOCATION.--Lat 28°25'10", long 81°05'45", in SE¼NE¼NE¼ sec.10, T.24 S., R.32 E., Hydrologic Unit 03080101, in Cocoa well field, 300 ft southwest of intersection of private road and Wewahootee Road, and 9.1 mi south of Bithlo. Owner: City of Cocoa.

AQUIFER.--Hawthorn sand and gravel of the Intermediate Aquifer System, Geologic Unit 122 HTRNS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 12 in., depth 200 ft, cased to 85 ft.

INSTRUMENTATION.--Quarterly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 71.19 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells.

PERIOD OF RECORD.--September 1969 to March 1970; January 1971 to April 1999 (monthly); May 1999 to August 2000 (bimonthly); October 2000 to current year (quarterly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 65.54 ft above sea level, Oct. 1, 1982; lowest measured, 44.55 ft above sea level, June 7, 1971.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL		
	NOV 13	60.25	JAN 30	57.73	JUL 24	52.30		
WATER YEAR 2001	LOWEST	52.30	JUL 24, 2001	HIGHEST	60.25	NOV 13, 2000		

ORANGE COUNTY--Continued

WELL NUMBER.--282528081340901. Bay Lake Deep Well near Windermere, FL.

LOCATION.--Lat 28°25'28", long 81°34'09", in SW¼NE¼SW¼ sec.1, T.24 S., R.27 E., Hydrologic Unit 03090101, on north shore of Bay Lake, 0.8 mi northeast of Magic Kingdom Theme Park, and 5.3 mi southwest of Windermere. Owner: Reedy Creek Improvement District.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in., depth 223 ft, cased to 104 ft.

INSTRUMENTATION.--Water-stage recorder and data-collection platform--15-minute interval.

DATUM.--Elevation of land-surface datum is 97.10 ft above sea level. Measuring point: Top of casing, 4.00 ft above land-surface datum.

PERIOD OF RECORD.--March 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 96.91 ft above sea level, Oct. 31, 1966; lowest, 77.37 ft above sea level, June 10, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	82.62	79.83	80.97	80.35	82.77	81.11	81.95	80.87	80.57	80.43	83.37	---
10	82.04	79.70	80.65	80.77	82.21	81.13	81.88	80.58	80.91	81.29	83.50	84.54
15	81.43	79.89	80.92	81.73	81.70	---	81.28	79.79	80.28	81.94	84.02	86.05
20	80.38	80.04	81.01	81.97	81.13	81.71	80.33	78.92	80.90	82.15	---	86.36
25	80.14	80.33	81.02	82.28	80.90	81.31	80.37	78.99	81.26	82.56	83.73	86.28
EOM	80.24	81.14	80.62	82.44	81.14	81.98	80.30	80.11	80.71	82.47	83.09	86.37
MAX	82.75	81.14	81.18	82.72	82.87	81.98	82.20	80.87	81.26	82.63	84.05	86.44

CAL YR 2000 MAX 85.74
WTR YR 2001 MAX 86.44

ORANGE COUNTY--Continued

WELL NUMBER.--282530081065601. OR614 Well near Bithlo, FL.

LOCATION.--Lat 28°25'30", long 81°06'56", in NW¼SW¼SE¼ sec.4, T.24 S., R.32 E., Hydrologic Unit 03080101, in Cocoa well field, 200 ft north of Wewahootee Road, and 8.1 mi east of State Highway 15, and 7.0 mi south of Bithlo. Owner: City of Cocoa.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 1,250 ft, cased to 1,170 ft.

WATER LEVEL RECORDS

INSTRUMENTATION.--Quarterly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 66.40 ft above sea level. Measuring point: Top of casing, 1.95 ft above land-surface datum. Prior to Dec. 23, 1997, measuring point 0.40 ft above land-surface datum.

PERIOD OF RECORD.--March 1995 to April 1999 (monthly); May 1999 to August 2000 (bimonthly); November 2000 to current year (quarterly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.96 ft above sea level, Feb. 25, 1998; lowest measured, 29.74 ft above sea level, May 23, 2000.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1996 to current year.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 14	32.56	JAN 30	31.41	APR 23	30.60	JUL 25	33.81	SEP 10	34.48

WATER YEAR 2001 LOWEST 30.60 APR 23, 2001 HIGHEST 34.48 SEP 10, 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
NOV													
14...	1140	--	--	--	--	--	--	--	--	--	--	370	--
JAN													
30...	1220	--	--	--	--	--	--	--	--	--	--	370	--
APR													
23...	1226	2270	7.4	28.0	674	180	51.0	210	7.60	155	430	370	.2
JUL													
25...	0905	2250	--	24.8	--	--	--	--	--	--	--	370	--

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
NOV			
14...	--	--	--
JAN			
30...	--	--	--
APR			
23...	16.0	1480	12600
JUL			
25...	--	--	--

WELL NUMBER.--282530081065602. OR615 Well near Bithlo, FL.

LOCATION.--Lat 28°25'30", long 81°06'56", in NW¼SW¼SE¼ sec.4, T.24 S., R.32 E., Hydrologic Unit 03080101, in Cocoa well field, 200 ft north of Wewahootee Road, and 8.1 mi east of State Highway 15, and 7.0 mi south of Bithlo. Owner: City of Cocoa.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 1,050 ft, cased to 900 ft.

INSTRUMENTATION.--Quarterly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 66.44 ft above sea level. Measuring point: Top of casing, 1.75 ft above land-surface datum. Prior to Dec. 17, 1997, measuring point 0.20 ft above land-surface datum.

PERIOD OF RECORD.--March 1996 to March 1999 (monthly); April 1999 to August 2000 (bimonthly); November 2000 to current year (quarterly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 38.57 ft above sea level, Feb. 25, 1998; lowest measured, 29.79 ft above sea level, April 23, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 14	31.81	JAN 30	30.84	APR 23	29.79	JUL 25	33.19	SEP 10	33.89

WATER YEAR 2001 LOWEST 29.79 APR 23, 2001 HIGHEST 33.89 SEP 10, 2001

ORANGE COUNTY--Continued

WELL NUMBER.--282530081065603. Cocoa-S Well near Bithlo, FL.

LOCATION.--Lat 28°25'30", long 81°06'56", in NW¼SW¼SE¼ sec.4, T.24 S., R.32 E., Hydrologic Unit 03080101, in Cocoa well field, 200 ft north of Wewahootee Road, and 8.1 mi east of State Highway 15, and 7.0 mi south of Bithlo. Owner: City of Cocoa.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 1,500 ft, cased to 1,428 ft.

WATER LEVEL RECORDS

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 66.58 ft above sea level. Measuring point: Top of casing, 1.40 ft above land-surface datum.

PERIOD OF RECORD.--March 1996 to April 1999 (monthly); May 1999 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.23 ft above sea level, Feb. 25, 1998; lowest measured, 20.37 ft above sea level, April 23, 2001.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1996 to current year.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 14	22.41	JAN 30	21.15	APR 23	20.37	JUL 25	23.55	SEP 10	24.28

WATER YEAR 2001 LOWEST 20.37 APR 23, 2001 HIGHEST 24.28 SEP 10, 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3 (00419)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
NOV													
14...	0930	--	--	--	--	--	--	--	--	--	--	--	6700
JAN													
30...	1000	--	--	--	--	--	--	--	--	--	--	--	6700
APR													
23...	0844	21900	7.5	28.5	3030	480	440	3800	140	107	115	1700	6700
JUL													
25...	0800	E20000	--	24.3	--	--	--	--	--	--	--	--	6700

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
NOV				
14...	--	--	--	--
JAN				
30...	--	--	--	--
APR				
23...	.3	12.0	14200	14000
JUL				
25...	--	--	--	--

ORANGE COUNTY--Continued

WELL NUMBER.--282531081054301. Cocoa-O Well near Bithlo, FL.

LOCATION.--Lat 28°25'31", long 81°05'43", in NW¼SW¼SW¼ sec.2, T.24 S., R.32 E., Hydrologic Unit 03080101, in Cocoa well field, 225 ft east of private road (abandoned FEC Railroad grade owned by Magnolia Ranch), 0.3 mi north of Wewahootee Road, 1.6 mi south of State Highway 528, and 8.6 mi south of Bithlo. Owner: U.S. Geological Survey.

AQUIFER.--Hawthorn sand and gravel of the Intermediate Aquifer System, Geologic Unit 122 HTRNS.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 90 ft, cased to 70 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 68.60 ft above sea level. Measuring point: Top of 4 in. casing, 3.00 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby well.

PERIOD OF RECORD.--February 1970 to April 1999 (monthly); May 1999 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 67.77 ft above sea level, Oct. 1, 1982; lowest measured, 8.25 ft above sea level, April 23, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 14	60.53	JAN 31	56.18	APR 23	8.25	MAY 08	8.43	JUL 24	17.22

WATER YEAR 2001 LOWEST 8.25 APR 23, 2001 HIGHEST 60.53 NOV 14, 2000

ORANGE COUNTY--Continued

WELL NUMBER.--282531081095701. Cocoa-D Well near Narcoossee, FL.

LOCATION.--Lat 28°25'31", long 81°09'57", in NE¼SW¼SE¼ sec.1, T.24 S., R.31 E., Hydrologic Unit 03080101, in Cocoa well field, on south side of Wewahootee Road, 5.1 mi west of State Highway 15, 2.5 mi west of Magnolia Ranch headquarters, and 9.7 mi northeast of Narcoossee. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 300 ft, cased to 226 ft.

WATER LEVEL RECORDS

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 75.91 ft above sea level. Measuring point: Top of shelf, 3.63 ft above land-surface datum.

PERIOD OF RECORD.--July 1961 to October 1965 (bimonthly); November 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 45.04 ft above sea level, Dec. 12, 1963; lowest daily maximum water level, 25.97 ft above sea level, June 6, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.27	30.77	30.50	---	29.64	30.98	30.33	30.26	29.28	30.88	33.90	32.04
10	33.47	29.49	29.39	---	29.86	29.14	31.23	29.03	30.93	32.98	32.74	33.25
15	32.14	30.98	30.30	---	30.02	28.81	28.31	29.15	31.42	32.77	34.10	34.78
20	30.96	29.59	29.06	---	29.31	30.78	27.85	27.80	30.37	33.51	32.20	35.38
25	31.54	29.76	---	---	30.30	28.73	27.40	28.13	31.54	33.31	32.73	36.56
EOM	31.05	29.21	---	30.34	30.71	30.70	29.18	28.44	30.43	33.38	31.40	35.49
MAX	33.57	31.72	30.64	30.80	30.71	31.30	31.23	30.60	31.98	33.51	34.42	36.56

CAL YR 2000 MAX 36.36
WTR YR 2001 MAX 36.56

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1961, 1968, 1980, 1992 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3 (00419)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
APR 24...	1240	626	7.5	23.4	289	110	3.30	20.0	.70	352	348	.2	1.6

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
APR 24...	.2	31.0	391	470

ORANGE COUNTY--Continued

WELL NUMBER.--282532081075601. Cocoa-B Well near Bithlo, FL.

LOCATION.--Lat 28°25'32", long 81°07'56", in SW¼NE¼SE¼ sec.5, T.24 S., R.32 E., Hydrologic Unit 03080101, in Cocoa well field, 6 ft south of Wewahootee Road, 7.1 mi east of State Highway 15, and 10.1 mi south of Bithlo. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 515 ft, cased to 235 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 62.15 ft above sea level. Measuring point: Top of casing, 3.70 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells.

PERIOD OF RECORD.--January 1965 (annually); October 1965 to July 1968; August 1968 to April 1999 (monthly); May 1999 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 42.37 ft above sea level, June 23, 1966; lowest water level measured, 21.42 ft above sea level, Aug. 5, 1981.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13	30.26	JAN 30	30.71	APR 23	27.69	JUL 24	32.58

WATER YEAR 2001 LOWEST 27.69 APR 23, 2001 HIGHEST 32.58 JUL 24, 2001

ORANGE COUNTY--Continued

WELL NUMBER.--28253308l082202. Cocoa-C (Zone 1) Well near Bithlo, FL.

LOCATION.--Lat 28°25'33", long 81°08'22", in SW¼NE¼SW¼ sec.5, T.24 S., R.32 E., Hydrologic Unit 03080101, in Cocoa well field, 10 ft north of Wewahootee Road, 6.6 mi east of State Highway 15, and 10 mi south of Bithlo. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 1.25 in., depth 1,357 ft, cased to 1,351 ft.

WATER LEVEL RECORDS

INSTRUMENTATION.--Quarterly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 63.71 ft above sea level. Measuring point: Top of male quick connect coupling, 2.85 ft above land-surface datum.

PERIOD OF RECORD.--December 1965 (annually); February 1966 to April 1999 (monthly); May 1999 to August 2000 (bimonthly); November 2000 to current year (quarterly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 43.81 ft above sea level, Dec. 6, 1965; lowest measured, 25.67 ft above sea level, April 25, 2001.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13	28.27	JAN 30	26.60	APR 25	25.67	JUL 24	29.74	SEP 10	29.66

WATER YEAR 2001 LOWEST 25.67 APR 25, 2001 HIGHEST 29.66 SEP 10, 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	PH WATER WHOLE FIELD (STAND-ARD UNITS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SODIUM, DIS-SOLVED (MG/L AS NA)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
NOV 13...	1230	--	--	--	--	--	--	--	--	--	--	3100	--
JAN 30...	0938	--	--	--	--	--	--	--	--	--	--	3500	--
APR 25...	0829	7.8	12200	23.4	2000	400	250	56.0	1900	107	91	3300	.2
JUL 24...	1110	--	11800	24.1	--	--	--	--	--	--	--	3400	--
SEP 10...	0925	7.8	11900	24.0	2200	434	273	72.0	1930	111	105	3330	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
NOV 13...	--	--	--	--
JAN 30...	--	--	--	--
APR 25...	11.0	1300	7850	11000
JUL 24...	--	--	--	--
SEP 10...	13.0	1310	8170	11400

ORANGE COUNTY--Continued

WELL NUMBER.--282533081082204. Cocoa-C (Zone 3) Well near Bithlo, FL.

LOCATION.--Lat 28°25'33", long 81°08'22", in SW¼NE¼SW¼ sec.5, T.24 S., R.32 E., Hydrologic Unit 03080101, in Cocoa well field, 10 ft north of Wewahootee Road, 6.6 mi east of State Highway l5, and l0 mi south of Bithlo. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 1.25 in., depth 1,224 ft, cased to 1,218 ft.

WATER LEVEL RECORDS

INSTRUMENTAION.--Quarterly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 63.77 ft above sea level. Measuring point: Top of male quick connect coupling 2.81 ft above land-surface datum.

PERIOD OF RECORD.--February 1966 to April 1999 (monthly); May 1999 to August 2000 (bimonthly); November 2000 to current year (quarterly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.27 ft above sea level, Feb. 2, 1970; lowest measured, 32.23 ft above sea level, April 28, 1999.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13	34.33	JAN 30	33.21	APR 25	32.49	JUL 24	35.64	SEP 10	36.30

WATER YEAR 2001 LOWEST 32.49 APR 25, 2001 HIGHEST 36.30 SEP 10, 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	PH WATER WHOLE FIELD (STAND-ARD UNITS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SODIUM, DIS-SOLVED (MG/L AS NA)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
NOV 13...	1230	--	--	--	--	--	--	--	--	--	--	80.0	--
JAN 30...	0936	--	--	--	--	--	--	--	--	--	--	79.0	--
APR 25...	0847	8.1	887	23.8	330	100	16.0	2.30	50.0	201	188	79.0	.2
JUL 24...	1325	--	897	23.9	--	--	--	--	--	--	--	81.0	--
SEP 10...	0930	8.0	900	24.5	360	112	17.0	2.40	47.0	203	211	81.0	.2

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
NOV 13...	--	--	--	--
JAN 30...	--	--	--	--
APR 25...	19.0	130	575	9900
JUL 24...	--	--	--	--
SEP 10...	20.0	140	576	9910

ORANGE COUNTY--Continued

WELL NUMBER.--282533081082205. Cocoa-C (Zone 4) Well near Bithlo, FL.

LOCATION.--Lat 28°25'33", long 81°08'22", in SW¼NE¼SW¼ sec.5, T.24 S., R.32 E., Hydrologic Unit 03080101, in Cocoa well field, l0 ft north of Wewahootee Road, 6.6 mi east of State Highway 15, and 10.0 mi south of Bithlo. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 1.25 in., depth 1,050 ft, cased to 1,044 ft.

WATER LEVEL RECORDS

INSTRUMENTATION.--Quarterly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 63.74 ft above sea level. Measuring point: Top of male quick connect coupling, 2.82 ft above land-surface datum.

PERIOD OF RECORD.--February 1966 to April 1999 (monthly); May 1999 to August 2000 (bimonthly); November 2000 to current year (quarterly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.27 ft above sea level, Oct. 31, 1969; lowest measured, 30.95 ft above sea level, July 30, 1998.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13	34.27	JAN 30	33.16	APR 25	32.42	JUL 24	35.57	SEP 10	36.29

WATER YEAR 2001 LOWEST 32.42 APR 25, 2001 HIGHEST 36.29 SEP 10, 2001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	PH WATER WHOLE FIELD (STAND-ARD UNITS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SODIUM, DIS-SOLVED (MG/L AS NA)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
NOV 13...	1230	--	--	--	--	--	--	--	--	--	--	37.0	--
JAN 30...	0937	--	--	--	--	--	--	--	--	--	--	36.0	--
APR 25...	0853	8.2	605	24.0	260	75.0	6.70	1.30	20.0	231	241	37.0	.3
JUL 24...	1450	--	613	24.0	--	--	--	--	--	--	--	37.0	--
SEP 11...	0940	8.1	610	24.0	270	79.0	7.30	1.40	20.0	231	233	36.0	.3

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
NOV 13...	--	--	--	--
JAN 30...	--	--	--	--
APR 25...	21.0	31.0	395	41000
JUL 24...	--	--	--	--
SEP 11...	22.0	35.0	404	41200

WELL NUMBER.--282533081082206. Cocoa-C (Zone 5) Well near Bithlo, FL.

LOCATION.--Lat 28°25'33", long 81°08'22", in SW¼NE¼SW¼ sec.5, T.24 S., R.32 E., Hydrologic Unit 03080101, in Cocoa well field, 10 ft north of Wewahootee Road, 6.6 mi east of State Highway 15, and 10 mi south of Bithlo. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in., depth 1,004 ft, cased to 248 ft.

INSTRUMENTATION.--Quarterly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 63.72 ft above sea level. Measuring point: Top of male quick coupling, 2.82 ft above land-surface datum.

REMARKS.--Water level affected by pumping of nearby wells.

PERIOD OF RECORD.--February 1966 to April 1999 (monthly); May 1999 to August 2000 (bimonthly); November 2000 to current year (quarterly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.18 ft above sea level, Dec. 4, 1969; lowest measured, 26.52 ft above sea level, April 28, 1999.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13	29.96	JAN 30	30.59	APR 25	28.81	JUL 24	32.45	SEP 11	33.31

WATER YEAR 2001 LOWEST 28.81 APR 25, 2001 HIGHEST 33.31 SEP 11, 2001

WELL NUMBER.--282623081153801. Cocoa-P Well near Taft, FL.

LOCATION.--Lat 28°26'23", long 81°15'38", in NW¼NW¼SW¼ sec.31, T.23 S., R.31 E., Hydrologic Unit 03080101, on east side of State Highway 15, 0.7 mi south of State Highway 528, and 7.2 mi east of Taft. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 439 ft, cased to 245 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 94.12 ft above sea level. Measuring point: Top of casing, 0.80 ft below land-surface datum. Prior to April 5, 1999, elevation of land-surface datum was 91.48 ft above sea level. Measuring point: Top of recorder shelf, 4.03 ft above land-surface datum.

PERIOD OF RECORD.--April 1961 to January 1971 (bimonthly); March 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 54.02 ft above sea level, present datum, Apr. 14, 1961; lowest daily maximum water level, 34.45 ft above sea level, June 10, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	41.43	39.25	39.04	38.87	39.72	38.60	39.59	38.62	38.36	39.52	42.57	41.71
10	40.93	38.81	38.71	38.54	39.45	38.61	39.48	37.89	39.51	40.03	42.40	43.66
15	40.56	38.88	39.13	38.69	39.27	38.76	38.34	37.85	39.17	40.45	42.52	46.20
20	39.93	38.50	39.13	38.95	38.89	39.61	37.55	36.68	39.94	41.95	42.39	45.45
25	39.81	38.59	38.99	39.14	38.63	39.10	37.60	36.79	40.88	42.71	42.00	45.44
EOM	39.49	39.15	39.11	39.29	38.78	39.98	37.54	37.75	40.25	41.65	41.30	45.06
MAX	41.44	39.48	39.34	39.40	39.86	39.98	40.09	38.62	40.88	42.83	42.70	46.40

CAL YR 2000 MAX 41.44
WTR YR 2001 MAX 46.40

ORANGE COUNTY--Continued

WELL NUMBER.--282738081341401. Lake Sawyer Well near Windermere, FL.

LOCATION.--Lat 28°27'38", long 81°34'14", in SW¼NE¼NW¼ sec.25, T.23 S., R.27 E., Hydrologic Unit 03090101, on Overstreet Road, 0.6 mi west of State Highway 535, and 3.2 mi southwest of Windermere. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation well, diameter 4 in., depth 178 ft, cased to 103 ft.

INSTRUMENTATION.--Water-stage recorder and data-collection platform--60-minute interval.

DATUM.--Elevation of land-surface datum is 116.04 ft above sea level. Measuring point: Top of shelter floor, 2.88 ft above land-surface datum.

PERIOD OF RECORD.--October 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 87.98 ft above sea level, Mar. 20, 21, 1998; lowest, 70.36 ft above sea level, June 22, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	78.01	74.08	---	---	77.14	75.88	76.76	75.55	75.33	74.79	77.96	77.58
10	75.84	74.14	---	---	76.90	75.33	76.20	75.16	74.98	75.90	78.11	78.86
15	76.47	74.91	---	---	76.49	76.12	75.83	---	74.47	76.36	78.32	80.29
20	75.58	---	---	76.58	75.75	76.45	74.96	72.30	75.41	76.85	78.41	80.54
25	73.69	---	---	76.17	75.61	75.57	74.64	72.16	76.05	77.21	77.42	80.57
EOM	75.66	---	---	76.87	75.37	76.65	74.98	74.82	74.73	76.93	76.47	80.54
MAX	78.05	75.30	---	76.87	77.35	76.65	76.86	75.55	76.05	77.21	78.57	80.57

CAL YR 2000 MAX 81.47
WTR YR 2001 MAX 80.57

WELL NUMBER.--282739081054501. Cocoa-F Well near Bithlo, FL.

LOCATION.--Lat 28°27'39", long 81°05'45", in SE¼SE¼NE¼ sec.27, T.23 S., R.32 E., Hydrologic Unit 03080101, in Cocoa well field, 150 ft west of Dallas Boulevard, 0.7 mi north of Beeline Expressway (State Highway 528), and 6.3 mi south of Bithlo. Owner: Cape Orlando Corporation.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 375 ft, cased to 200 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 67.29 ft above sea level. Measuring point: Top of 6 in. coupling, 0.80 ft above land-surface datum.

PERIOD OF RECORD.--1960-70 (annually); October 1970 to April 1999 (monthly); May 1999 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.92 ft above sea level, June 24, 1960; lowest measured, 29.99 ft above sea level, Apr. 28, 1999.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13	32.42	JAN 03	30.89	APR 02	31.23	MAY 25	30.34	JUL 24	32.59		
30	31.85	30	31.30	24	30.52	JUL 10	32.63	SEP 17	35.16		

WATER YEAR 2001 LOWEST 30.34 MAY 25, 2001 HIGHEST 35.16 SEP 17, 2001

ORANGE COUNTY--Continued

WELL NUMBER.--282835081305201. Palm Lake Drive Well near Windermere, FL.

LOCATION.--Lat 28°28'39", long 81°30'26", in SE¼NW¼NW¼ sec.22, T.23 S., R.28 E., Hydrologic Unit 03090101, 2.0 mi southwest of Windermere, and 2.3 mi north of Doctor Phillips. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation well, diameter 4 in., depth 235 ft, cased to 161 ft.

INSTRUMENTATION.--Water-stage recorder--15-minute interval.

DATUM.--Elevation of land-surface datum is 157.10 ft above sea level. Measuring point: Top of coupling, 2.56 ft above land-surface datum.

PERIOD OF RECORD.--October 1980 to June 1981 (bimonthly); July 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 76.43 ft above sea level, Mar. 1, 1998; lowest, 57.07 ft above sea level, June 15, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	65.00	61.35	---	---	64.75	63.17	---	---	---	---	66.28	65.02
10	63.50	60.91	---	---	64.63	63.21	---	61.90	---	63.77	66.26	66.98
15	63.06	61.15	---	---	64.25	63.54	---	61.17	---	64.20	66.24	69.04
20	62.24	61.71	---	63.60	63.77	64.53	---	---	---	65.08	66.11	68.59
25	58.21	61.32	---	63.60	62.21	63.92	---	---	---	65.87	65.08	67.84
EOM	61.64	62.83	---	64.24	62.73	64.72	---	---	---	64.72	63.73	67.82
MAX	65.04	63.13	62.74	64.24	64.90	64.72	64.90	62.46	---	65.87	66.68	69.53

CAL YR 2000 MAX 69.27
WTR YR 2001 MAX 69.53

ORANGE COUNTY--Continued

WELL NUMBER.--282838080572402. OR0713 Tosohatchee Turkey Camp Surficial Well near Bithlo, FL.

LOCATION.--Lat 28°28'38", long 80°57'24", in SW¼SE¼SE¼ sec.18, T.23 S., R.34 E., Hydrologic Unit 03080101, located in Tosohatchee State Reserve, 300 ft south of Fish Hole Road. Owner: U.S. Geological Survey.

AQUIFER.--Nonartesian sand of the Surficial Aquifer System, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, unused, observation well, diameter 4 in., depth 17 ft, cased to 8 ft.

INSTRUMENTATION.--Water-stage recorder with pressure transducer--60-minute interval.

DATUM.--Elevation of land-surface datum is 22 ft above sea level. Measuring point: Top of casing, 1.46 ft above land-surface datum.

PERIOD OF RECORD.--June 2000 to August 2001 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 21.67 ft above sea level, July 14, 2001; lowest, 17.18 ft above sea level, June 22, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	17.42	19.44	20.78	20.34
10	---	---	---	---	---	---	---	---	17.33	19.61	19.98	21.25
15	---	---	---	---	---	---	---	---	17.30	19.13	20.19	20.16
20	---	---	---	---	---	---	---	---	17.22	20.03	19.57	---
25	---	---	---	---	---	---	---	---	18.99	20.96	19.44	---
EOM	---	---	---	---	---	---	---	---	19.42	20.47	20.22	---
MAX	---	---	---	---	---	---	---	---	19.57	21.19	21.08	21.33

WTR YR 2000 MAX 21.33

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	19.12	18.74	18.51	18.30	17.99	18.90	19.62	19.22	20.63	---	---
10	---	19.02	18.62	18.43	18.21	17.87	18.65	19.37	19.04	21.19	---	---
15	---	18.90	18.80	18.40	18.16	17.82	18.46	18.97	19.01	21.51	---	---
20	---	18.79	18.60	18.42	18.08	17.92	18.27	18.66	19.39	---	19.94	---
25	19.48	18.70	18.53	18.47	18.02	17.81	18.14	19.84	19.09	---	---	---
EOM	19.28	18.97	18.68	18.30	17.98	19.30	18.06	19.33	20.07	---	---	---
MAX	19.48	19.24	18.91	18.65	18.30	19.30	19.24	19.91	20.31	21.67	20.35	---

CAL YR 2000 MAX 21.33
WTR YR 2001 MAX 21.67

ORANGE COUNTY--Continued

WELL NUMBER.--282847081013701. Cocoa-H Well near Bithlo, FL.

LOCATION.--Lat 28°28'47", long 81°01'37", in SW¼NW¼NW¼ sec.21, T.23 S., R.33 E., Hydrologic Unit 03080101, on west side of State Highway 520, 5.4 mi south of intersection with State Highway 50, and 7.3 mi southeast of Bithlo. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 495 ft, cased to 252 ft.

WATER LEVEL RECORDS

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 60.00 ft above sea level. Measuring point: Top of casing, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--August 1968 to June 1977; July 1977 to April 1999 (monthly); May 1999 to September 2000 (bimonthly); November 2000 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 39.01 ft above sea level, Feb. 25, 1970; lowest measured, 29.48 ft above sea level, May 13, 1981, Apr. 28, 1999.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13	31.95	JAN 26	30.57	APR 20	30.22	JUN 01	30.19	AUG 27	33.82	SEP 17	34.55
30	31.37	FEB 23	30.39	25	30.27	21	31.17	SEP 11	34.08	24	34.77
DEC 20	30.88	MAR 23	30.40	MAY 15	30.37	JUL 10	32.11				
JAN 03	30.38	APR 02	30.65	24	29.84	24	33.10				

WATER YEAR 2001 LOWEST 29.84 MAY 24, 2001 HIGHEST 34.77 SEP 24, 2001

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1961, 1970-72, 1991 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3 (00419)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
APR 25...	1240	853	7.5	24.1	285	67.0	28.0	59.0	2.40	196	203	68.0	100

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
APR 25...	.7	27.0	504	2400

ORANGE COUNTY--Continued

WELL NUMBER.--282847081013702. Cocoa-K Well near Bithlo, FL.

LOCATION.--Lat 28°28'47", long 81°01'37", in SW¼NW¼NW¼ sec.21, T.23 S., R.33 E., Hydrologic Unit 03080101, on west side of State Highway 520, 5.4 mi south of intersection with State Highway 50, and 7.3 mi southeast of Bithlo. Owner: U.S. Geological Survey.

AQUIFER.--Nonartesian sand of the Surficial Aquifer System, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, nonartesian well, diameter 6 in., depth 8 ft, cased to 8 ft.

INSTRUMENTATION.--Quarterly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 60.00 ft above sea level. Measuring point: Top of casing, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--August 1968 to February 1977; March 1977 to April 1999 (monthly); May 1999 to August 2000 (bimonthly); November 2000 to September 2001 (quarterly).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 59.81 ft above sea level, Oct. 3,4, 1969; lowest, 54.16 ft above sea level, May 20, 1996.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 13	56.23	JAN 03	55.71	APR 02	55.77	JUN 01	55.75	JUL 24	59.09		
30	56.03	30	55.39	25	54.63	JUL 10	57.76	SEP 17	59.13		

WATER YEAR 2001 LOWEST 54.63 APR 25, 2001 HIGHEST 59.13 SEP 17, 2001

ORANGE COUNTY--Continued

WELL NUMBER.--283003081283801. Surficial Well near Turkey Lake near Orlando, FL.

LOCATION.--Lat 28°30'03", long 81°28'38", in SE¼SE¼NE¼ sec.11, T.23 S., R.28 E., Hydrologic Unit 03090101, located in Turkey Lake Park, off a paved bike trail, at the end of Karen Lee Road. Owner: U.S. Geological Survey.

AQUIFER.--Nonartesian sand of the Surficial Aquifer System, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, nonartesian, observation well, diameter 8 in., depth 54 ft, cased to 44 ft.

INSTRUMENTATION.--Water-stage recorder with pressure transducer--60-minute interval.

DATUM.--Elevation of land-surface datum is 125.00 ft above sea level. Measuring point: Top of shelf, 0.10 ft above land-surface datum.

PERIOD OF RECORD.--May 2000 to September 2001 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 97.61 ft above sea level, May 20, 2000; lowest, 94.54 ft above sea level, June 16,17,21, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	97.29	96.76	96.44	96.32
10	---	---	---	---	---	---	---	---	97.17	96.69	96.40	96.29
15	---	---	---	---	---	---	---	---	97.08	96.64	96.41	96.28
20	---	---	---	---	---	---	---	97.61	96.98	96.57	96.40	96.25
25	---	---	---	---	---	---	---	97.52	96.90	96.51	96.38	96.24
EOM	---	---	---	---	---	---	---	97.39	96.83	96.44	96.35	96.22
MAX	---	---	---	---	---	---	---	97.61	97.37	96.94	96.44	96.33

WTR YR 2000 MAX 97.61

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	96.19	95.99	95.73	95.53	95.32	95.00	94.81	94.69	94.56	94.62	95.04	95.64
10	96.16	95.95	95.69	95.49	95.18	94.97	94.81	94.68	94.56	94.63	95.14	95.69
15	96.14	95.90	95.65	95.46	95.13	94.93	94.80	94.66	94.60	94.67	95.25	95.80
20	96.10	95.85	95.62	95.43	95.08	94.91	94.78	94.64	94.53	94.76	95.36	96.22
25	96.07	95.82	95.58	95.39	95.05	94.86	94.75	94.75	94.60	94.87	95.46	96.63
EOM	96.02	95.77	95.55	95.37	95.03	94.83	94.72	94.58	94.65	95.01	95.56	96.88
MAX	96.22	96.02	95.76	95.54	95.36	95.02	94.84	94.75	94.65	95.01	95.56	96.88

CAL YR 2000 MAX 97.61
WTR YR 2001 MAX 96.88

ORANGE COUNTY--Continued

WELL NUMBER.--283003081283901. 83012801 23S28E11 near Orlando, FL.

LOCATION.--Lat 28°30'03", long 81°28'39", in SW¼SE¼NE¼ sec.11, T.23 S., R.28 E., Hydrologic Unit 03090101, located in Turkey Lake Park, off a paved bike trail, at the end of Karen Lee Road. Owner: City of Orlando.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, observation well, diameter 6 in., depth 30 ft, casing length unknown.

INSTRUMENTATION.--Water-stage recorder with pressure transducer--60-minute interval.

DATUM.--Elevation of land-surface datum is 125.00 ft above sea level. Measuring point: Top of shelf, 2.53 ft above land-surface datum.

PERIOD OF RECORD.--June 2000 to September 2001 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 62.89 ft above sea level, Sept. 16, 2001; lowest, 56.02 ft above sea level, June 19,20, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	58.25	57.31	57.13	57.08
10	---	---	---	---	---	---	---	---	57.98	57.27	57.12	57.07
15	---	---	---	---	---	---	---	---	57.73	57.24	57.10	57.07
20	---	---	---	---	---	---	---	---	57.55	57.19	57.13	57.07
25	---	---	---	---	---	---	---	---	57.40	57.16	57.11	57.07
EOM	---	---	---	---	---	---	---	---	57.34	57.14	57.09	57.07
MAX	---	---	---	---	---	---	---	---	58.42	57.33	57.14	57.08

WTR YR 2000 MAX 58.42

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	57.07	56.96	56.79	56.71	56.65	56.62	56.58	56.47	56.11	56.04	56.35	57.06
10	57.07	56.93	56.77	56.69	56.66	56.61	56.57	56.45	56.10	56.03	56.46	57.20
15	57.06	56.89	56.75	56.68	56.66	56.59	56.57	56.43	56.05	56.03	56.69	62.85
20	57.04	56.86	56.74	56.67	56.65	56.58	56.55	56.37	56.02	56.07	56.95	62.52
25	57.02	56.84	56.72	56.67	56.64	56.58	56.52	56.23	56.03	56.18	57.07	62.18
EOM	56.99	56.81	56.71	56.65	56.63	56.57	56.49	56.14	56.04	56.24	57.06	62.06
MAX	57.07	56.98	56.80	56.71	56.66	56.63	56.58	56.48	56.13	56.24	57.07	62.89

CAL YR 2000 MAX 58.42
WTR YR 2001 MAX 62.89

ORANGE COUNTY--Continued

WELL NUMBER.--283249081053201. Bithlo-1 Well at Bithlo, FL.

LOCATION.--Lat 28°32'49", long 81°05'32", in NE¼NW¼SW¼ sec.26, T.22 S., R.32 E., Hydrologic Unit 03080101, on north side of State Highway 50, 0.8 mi west of intersection of State Highway 520, and 1.0 mi east of Bithlo. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 492 ft, cased to 151 ft.

INSTRUMENTATION.-Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 63.58 ft above sea level. Measuring point: Top of recorder shelf, 3.10 ft above land-surface datum.

PERIOD OF RECORD.--October 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 42.98 ft above sea level, Oct. 31, 1960; lowest, 28.70 ft above sea level, June 10, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	33.90	33.12	32.08	31.29	31.66	31.08	31.71	31.11	30.94	32.54	34.32	34.28
10	33.89	32.83	31.93	30.90	31.58	31.20	31.86	31.14	31.40	32.83	34.46	34.67
15	33.88	32.46	31.82	31.14	31.52	31.10	31.57	31.10	31.63	33.13	34.59	35.55
20	33.64	32.23	31.79	31.37	31.34	31.30	30.95	30.74	31.86	33.56	34.68	35.61
25	33.46	32.16	31.65	31.40	31.23	31.32	30.81	30.50	32.18	33.88	34.63	35.72
EOM	33.23	32.07	31.56	31.60	31.28	31.53	30.68	30.75	32.55	33.92	34.36	35.98
MAX	34.01	33.21	32.11	31.60	31.68	31.53	31.86	31.15	32.55	33.95	34.71	35.98

CAL YR 2000 MAX 35.53
WTR YR 2001 MAX 35.98

WELL NUMBER.--283249081053202. Bithlo-2 Well at Bithlo, FL.

LOCATION.--Lat 28°32'49", long 81°05'32", in NE¼NW¼SW¼ sec.26, T.22 S., R.32 E., Hydrologic Unit 03080101, on north side of State Highway 50, 0.8 mi west of intersection with State Highway 520, and 1.0 mi east of Bithlo. Owner: U.S. Geological Survey.

AQUIFER.--Hawthorn limestone of the Intermediate Aquifer System, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 75 ft, cased to 65 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 63.49 ft above sea level. Measuring point: Top of casing, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--October 1960 to August 2000 (monthly); October 2000 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 61.60 ft above sea level, Jan. 26, 1971; lowest measured, 43.31 ft above sea level, June 27, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	45.13	DEC 20	44.78	APR 02	44.04	APR 25	43.37	JUN 21	44.06	AUG 27	47.59
NOV 30	44.69	FEB 23	44.15	20	43.54	MAY 25	43.38	JUL 10	45.21	SEP 17	48.23

WATER YEAR 2001 LOWEST 43.37 APR 25, 2001 HIGHEST 48.23 SEP 17, 2001

ORANGE COUNTY--Continued

WELL NUMBER.--283249081053203. Bithlo-3 Well at Bithlo, FL.

LOCATION.--Lat 28°32'49", long 81°05'32", in NE¼NW¼SW¼ sec.26, T.22 S., R.32 E., Hydrologic Unit 03080101, on north side of State Highway 50, 0.8 mi west of intersection with State Highway 520, and 1.0 mi east of Bithlo. Owner: U.S. Geological Survey.

AQUIFER.--Nonartesian sand of the Surficial Aquifer System, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, nonartesian well, diameter 6 in., depth 15 ft, cased to 12 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 63.14 ft above sea level. Measuring point: Top of casing, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1960 to August 2000 (monthly); October 2000 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 64.21 ft above sea level, Aug. 28, 1964; lowest measured, 56.25 ft above sea level, April 25, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	57.40	JAN 03	56.86	APR 02	57.37	MAY 25	56.53	AUG 27	62.22		
NOV 30	56.95	25	57.13	20	56.43	JUN 21	58.02	SEP 17	63.05		
DEC 20	56.51	FEB 23	56.46	25	56.25	JUL 10	61.22				

WATER YEAR 2001 LOWEST 56.25 APR 25, 2001 HIGHEST 63.05 SEP 17, 2001

WELL NUMBER.--283253081283401. OR-47 Well at Orlo Vista, FL.

LOCATION.--Lat 28°32'53", long 81°28'34", in SE¼NE¼NE¼ sec.26, T.22 S., R.28 E., Hydrologic Unit 03080101, on west side of Hiawassee Road, 0.6 mi north of Old Winter Garden Road, and 0.15 mi south of State Highway 50 in Orlo Vista. Owner: Orange County.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 350 ft, cased to 328 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 81.71 ft above sea level. Measuring point: Top of casing, 0.71 ft below land-surface datum.

PERIOD OF RECORD.--July 1930 to May 1933; August 1943 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 80.78 ft above sea level, Mar. 20, 1960; lowest, 48.32 ft above sea level, May 24, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	53.19	51.26	51.01	50.75	51.30	50.51	51.42	50.18	50.17	51.08	---	---
10	52.99	50.95	50.76	50.61	51.11	50.43	51.36	49.72	50.55	51.36	---	---
15	52.52	50.85	51.04	50.59	50.77	---	50.61	49.44	50.52	51.55	---	---
20	52.01	50.76	50.98	50.73	50.59	50.92	50.10	48.66	51.37	52.23	---	---
25	51.85	50.71	50.81	50.77	50.31	50.69	49.81	48.56	51.67	---	---	---
EOM	51.51	51.18	50.91	50.95	50.49	51.61	49.71	49.28	51.38	---	---	---
MAX	53.19	51.44	51.16	50.95	51.34	51.61	51.69	50.22	51.69	52.73	---	---

CAL YR 2000 MAX 58.99
WTR YR 2001 MAX 53.19

WELL NUMBER.--283333081233501. Lake Adair 9 Deep Well at Orlando, FL.

LOCATION.--Lat 28°33'33", long 81°23'35", in NW¼NW¼SW¼ sec.23, T.22 S., R.29 E., Hydrologic Unit 03080101, 25 ft northeast of intersection of Westmoreland Drive and Lake Adair Boulevard in Orlando. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 20 in., depth 1,281 ft, cased to 601 ft.

INSTRUMENTATION.--Monthly measurement with electric tape.

DATUM.--Elevation of land-surface datum is 80.40 ft above sea level. Measuring point: Top of casing, 4.00 ft above land-surface datum.

PERIOD OF RECORD.--January 196l (annually); November 1962 to August 1973; September 1973 to September 1983 (bimonthly); October 1983 to January 1984 (monthly); January 1984 to June 1988; July 1988 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 60.23 ft above sea level, Aug. 9, 1966; lowest water level measured, 38.03 ft above sea level, May 22, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	41.22	DEC 20	41.04	FEB 23	40.74	APR 20	39.66	JUN 21	42.07	AUG 27	43.41
NOV 28	41.07	JAN 26	41.19	MAR 23	41.78	MAY 24	38.19	JUL 24	45.28		

WATER YEAR 2001 LOWEST 38.19 MAY 24, 2001 HIGHEST 45.28 JUL 24, 2001

WELL NUMBER.--283333081233502. Lake Adair 10 Shallow Well at Orlando, FL.

LOCATION.--Lat 28°33'33", long 81°23'35", in NW¼NW¼SW¼ sec.23, T.22 S., R.29 E., Hydrologic Unit 03080101, 25 ft northeast of intersection of Westmoreland Drive and Lake Adair Boulevard in Orlando. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, artesian, observation well, diameter 4 in., depth 400 ft, cased to 105 ft.

INSTRUMENTATION.--Monthly measurement with electric tape.

DATUM.--Elevation of land-surface datum is 80.40 ft above sea level. Measuring point: Top of casing, 3.62 ft above land-surface datum.

PERIOD OF RECORD.--November 1962 to November 1972; May 1973 to September 1983 (bimonthly); October 1983 to January 1984 (monthly); January 1984 to June 1988; July 1988 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 68.92 ft above sea level, June 28, 1974; lowest measured, 38.44 ft above sea level, May 22, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	41.59	DEC 20	41.45	FEB 23	41.06	APR 20	40.05	JUN 21	43.12	AUG 27	44.22
NOV 28	41.44	JAN 26	41.59	MAR 23	42.27	MAY 24	38.52	JUL 24	46.21		

WATER YEAR 2001 LOWEST 38.52 MAY 24, 2001 HIGHEST 46.21 JUL 24, 2001

ORANGE COUNTY--Continued

WELL NUMBER.--283813081292601. Surficial Well at W. Regional at Apopka, FL.

LOCATION.--Lat 28°38'13", long 81°29'26", in SE¼NW¼NW¼ sec.26, T.21 S., R.28 E., Hydrologic Unit 03080101, 20 ft south of dirt road, 0.8 mi east of Lakeville Road, and 2.9 mi southeast of Apopka. Owner: City of Orlando Utilities.

AQUIFER.--Nonartesian sand of the Surficial Aquifer System, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, nonartesian, observation well, diameter 4 in., depth 60 ft, casing length unknown.

INSTRUMENTATION.--Water-stage recorder with pressure transducer--60-minute interval.

DATUM.--Land-surface datum is 127.41 ft above sea level. Measuring point: Top of shelf, 2.10 ft above land-surface datum.

PERIOD OF RECORD.--May 2000 to July 2001 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 106.23 ft above sea level, May 23, 2000; lowest, 103.66 ft above sea level, May 31, June 1,2, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	105.84	105.38	105.12	---
10	---	---	---	---	---	---	---	---	105.68	105.29	105.04	---
15	---	---	---	---	---	---	---	---	105.58	105.28	105.01	105.11
20	---	---	---	---	---	---	---	---	105.45	105.19	105.01	105.36
25	---	---	---	---	---	---	---	106.19	105.44	105.16	---	105.50
EOM	---	---	---	---	---	---	---	105.99	105.45	105.07	---	105.62
MAX	---	---	---	---	---	---	---	106.23	105.95	105.44	105.15	105.62

WTR YR 2000 MAX 106.2

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	105.69	105.43	104.96	104.70	104.42	104.08	---	---	103.73	104.30	---	---
10	105.72	105.32	104.94	104.61	104.36	103.96	---	---	103.82	---	---	---
15	105.76	105.21	104.90	104.59	104.31	103.90	---	---	103.98	---	---	---
20	105.73	105.13	104.91	104.59	104.21	103.92	---	103.80	104.09	---	---	---
25	105.65	105.05	104.81	104.51	104.14	---	---	103.75	104.20	---	---	---
EOM	105.52	105.02	104.76	104.47	104.12	---	---	103.66	104.30	---	---	---
MAX	105.76	105.50	105.00	104.74	104.46	104.11	---	103.84	104.30	104.32	---	---

CAL YR 2000 MAX 106.23
WTR YR 2001 MAX 105.76

WELL NUMBER.--284634081262001. OR650 Well near Mt. Plymouth, FL.

LOCATION.--Lat 28°46'34", long 81°26'20", in SE¼NW¼SW¼ sec.5, T.20 S., R.29 E., Hydrologic Unit 03080101, at Rock Springs Run State Reserve ranger station, south of Spear Rd., 2.8 mi from park entrance south of SR46 and 5 mi east of Mt. Plymouth. Owner: St. Johns River Water Management District.

AQUIFER.--Nonartesian sand of the Surficial Aquifer System, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, unused, observation, diameter 4 in., depth 15 ft, cased to 5 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 34.03 ft above sea level. Measuring point: floor of shelter, 2.11 ft above land-surface datum.

PERIOD OF RECORD.--November 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 33.86 ft above sea level, Dec. 27, 1997; lowest, 28.03 ft above sea level, June 27, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	33.02	30.78	31.05	30.48	30.32	29.83	31.41	29.88	28.78	28.37	---	---
10	32.00	30.62	30.72	30.45	30.12	29.69	30.95	29.64	28.89	28.32	---	---
15	31.72	30.44	30.82	30.37	30.04	29.67	30.59	29.43	28.72	29.09	---	---
20	31.47	30.31	30.59	30.30	29.93	31.33	30.25	29.22	28.62	30.63	---	---
25	31.27	30.21	30.48	30.21	29.84	30.99	30.05	29.03	28.53	31.55	---	32.02
EOM	31.01	31.14	30.62	30.20	29.79	32.00	30.13	28.94	28.45	30.88	---	32.02
MAX	33.45	31.25	31.54	30.63	30.32	32.00	32.00	30.07	28.90	31.83	31.41	32.26

CAL YR 2000 MAX 33.82
WTR YR 2001 MAX 33.45

WELL NUMBER.--284634081262002. OR651 Well near Mt. Plymouth, FL.

LOCATION.--Lat 28°46'34", long 81°26'20", in SE¼NW¼SW¼ sec.5, T.20 S., R.29 E., Hydrologic Unit 03080101, at Rock Springs Run State Reserve ranger station, south of Spear Rd., 2.8 mi from park entrance south of SR46 and 5 mi east of Mt. Plymouth. Owner: St. Johns River Water Management District.

AQUIFER.--Hawthorn Formation of Miocene Age, Geologic Unit 122 HTRN.

WELL CHARACTERISTICS.--Drilled, unused, observation, diameter 4 in., depth 73 ft, cased to 63 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 33.84 ft above sea level. Measuring point: floor of shelter, 2.26 ft above land-surface datum.

PERIOD OF RECORD.--November 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 33.55 ft above sea level, Mar. 20, 1998; lowest, 27.30 ft above sea level, June 21,22, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.17	30.35	30.31	29.98	29.92	29.35	30.46	29.03	27.84	27.65	---	---
10	31.74	30.21	30.12	29.91	29.75	29.23	30.11	28.79	28.01	27.75	---	---
15	31.45	30.05	30.19	29.91	29.65	29.21	29.77	28.55	27.84	28.11	---	---
20	31.15	29.95	30.07	29.87	29.49	30.03	29.40	28.29	27.78	29.23	---	---
25	30.77	29.86	29.95	29.80	29.39	30.05	29.20	28.05	27.87	30.24	---	32.06
EOM	30.54	30.47	30.09	29.79	29.35	30.66	29.17	27.94	27.79	29.93	---	32.07
MAX	32.19	30.50	30.45	30.07	29.92	30.66	30.69	29.14	28.01	30.25	30.04	32.22

CAL YR 2000 MAX 32.35
WTR YR 2001 MAX 32.22

ORANGE COUNTY--Continued

WELL NUMBER.--284634081262003. OR652 Well near Mt. Plymouth, FL.

LOCATION.--Lat 28°46'34", long 81°26'20", in SE¼NW¼SW¼ sec.5, T.20 S., R.29 E., Hydrologic Unit 03080101, at Rock Springs Run State Reserve ranger station, south of Spear Rd., 2.8 mi from park entrance south of SR46 and 5 mi east of Mt. Plymouth. Owner: St. Johns River Water Management District.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation, diameter 10 in., depth 506 ft, cased to 450 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 33.69 ft above sea level. Measuring point: floor of shelter, 2.59 ft above land-surface datum.

PERIOD OF RECORD.--November 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 33.45 ft above sea level, Mar. 21, 1998; lowest, 24.48 ft above sea level, June 10, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	27.90	26.69	26.45	26.12	26.65	25.95	26.52	25.76	25.29	26.00	---	---
10	27.65	26.53	26.30	25.92	26.56	26.05	26.38	25.45	25.71	26.25	---	---
15	27.51	26.34	26.41	26.21	26.45	26.12	25.98	25.38	25.58	26.53	---	---
20	27.17	26.31	26.32	26.46	26.23	26.35	25.61	24.90	25.88	27.03	---	---
25	27.05	26.36	26.22	26.35	26.03	26.31	25.62	24.72	26.20	27.53	---	30.16
EOM	26.82	26.56	26.29	26.43	26.10	26.60	25.51	25.01	26.22	27.43	---	30.27
MAX	27.92	26.80	26.57	26.52	26.67	26.60	26.65	25.76	26.61	27.60	27.72	30.30

CAL YR 2000 MAX 29.87
WTR YR 2001 MAX 30.30

WELL NUMBER.--284634081262004. OR662 Well near Mt. Plymouth, FL.

LOCATION.--Lat 28°46'34", long 81°26'20", in SE¼NW¼SW¼ sec.5, T.20 S., R.29 E., Hydrologic Unit 03080101, at Rock Springs Run State Reserve ranger station, south of Spear Rd., 2.8 mi from park entrance south of SR46 and 5 mi east of Mt. Plymouth. Owner: St. Johns River Water Management District.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation, diameter 6 in., depth 180 ft, cased to 150 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 34.07 ft above sea level. Measuring point: floor of shelter, 2.36 ft above land-surface datum.

PERIOD OF RECORD.--November 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 33.33 ft above sea level, Mar. 21, 1998; lowest 24.54 ft above sea level, June 11, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	27.72	26.56	26.45	---	26.63	25.92	26.49	25.75	25.29	26.04	---	---
10	27.53	26.40	26.31	---	26.55	26.02	26.37	25.45	25.71	26.29	---	---
15	27.35	26.20	26.42	---	26.43	26.09	25.98	25.39	25.58	26.55	---	---
20	27.00	26.18	26.33	26.40	26.22	26.31	25.59	24.91	25.90	27.01	---	30.04
25	26.89	26.22	26.19	26.30	26.02	26.28	25.60	24.73	26.21	27.52	---	30.10
EOM	26.67	26.42	26.28	26.42	26.08	26.56	25.50	25.01	26.24	27.43	---	30.21
MAX	27.76	26.65	26.55	26.47	26.65	26.56	26.59	25.75	26.24	27.59	27.69	30.24

CAL YR 2000 MAX 29.88
WTR YR 2001 MAX 30.24

ORANGE COUNTY

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
282051081183402	12-01-00	1319	BOGGY CREEK RD SURFICIAL WELL NR TAFT,FL	70.52
	04-02-01	1600		70.91
	05-31-01	1203		69.95
	07-11-01	1130		71.79
	09-12-01	1624		73.30
282141081241701	05-15-01	1350	82112401 24S29E34 TELY	38.75
	09-24-01	1130		48.49
282241081112801	12-01-00	1352	82211103 24S31E23 MOSS PARK	37.41
	01-03-01	1145		36.48
	03-23-01	1230		36.61
	05-08-01	1200		36.56
	05-15-01	1227		35.40
	07-11-01	1157		38.73
	09-12-01	1553		40.78
	09-24-01	1045		41.88
282241081112802	12-01-00	1355	82211104 24S31E23 MOSS PARK SHALLOW	57.74
	01-03-01	1150		57.44
	03-23-01	1200		56.89
	05-08-01	1200		56.62
	05-15-01	1229		56.24
	07-11-01	1157		57.48
	09-12-01	1548		60.06
	09-24-01	1045		61.34
282249081365601	12-05-00	1200	RIBS 2 SHALLOW WELL 16 NR VINELAND	96.46
	04-03-01	1237		95.60
	05-31-01	1451		95.17
	07-11-01	1328		95.79
	09-12-01	1342		99.17
282330081371101	12-05-00	1134	RIBS II SHAL WELL 15	104.25
	04-03-01	1300		97.62
	05-31-01	1441		99.37
	07-11-01	1320		102.70
	09-12-01	1350		103.16
282331081370801	12-05-00	1137	82313702 27416 E USGS WELL HARTZOG RD	101.87
	04-03-01	1300		97.19
	05-16-01	1010		95.92
	05-31-01	1435		97.94
	07-11-01	1320		101.09
	09-12-01	1400		102.00
	09-24-01	1330		102.91
282339081010001	05-15-01	1130	OR-0669 COCOA 13T NR BITHLO,FL	31.78
	09-24-01	0945		36.17
282348080564301	11-30-00	1354	OR0715 PALMETTO SURFICIAL WELL NR BITHLO,FL	33.79
	01-03-01	1255		33.43
	04-02-01	1355		33.67
	06-01-01	1231		31.99
	07-10-01	1154		32.79
	09-17-01	1410		36.53

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

ORANGE COUNTY---Continued

STATION NUMBER	DATE	TIME	STATION NAME	ELEVATION ABOVE SEA LEVEL (FEET)
282352081224401	12-01-00	1407	SURF WELL AT S. ORANGE PK IN ORLANDO,FL	75.48
	04-02-01	1645		76.01
	05-31-01	1119		75.75
	07-11-01	1114		76.91
	09-13-01	1200		79.07
282354081313001	05-16-01	1213	82313104 24S28E17 RCID OBSER. WELL NO. 1	73.21
	09-24-01	1250		82.51
282631081323301	12-05-00	1100	SURF WELL AT TIBET-BUTLER NR WINDERMERE,FL	98.51
	05-31-01	1356		96.84
	07-11-01	1257		98.46
	09-12-01	1233		99.98
282718081215101	05-15-01	1327	PINECASTLE POST OFFICE AT PINECASTLE	40.33
	09-24-01	1205		48.43
282739081054502	11-30-00	1256	OR0714 COCOA-F SURFICIAL WELL NR BITHLO,FL	61.11
	01-03-01	1215		61.65
	04-02-01	1236		60.24
	05-25-01	1532		59.74
	07-10-01	1112		62.79
	09-17-01	1302		66.15
282739081054503	11-30-00	1250	COCOA F SURF WELL 2 NR NARCOOSSEE,FL	61.10
	01-03-01	1220		61.59
	04-02-01	1240		60.24
	05-25-01	1536		59.73
	07-10-01	1113		62.76
	09-17-01	1308		66.14
282838080572401	11-30-00	1200	82805701 23S34E18	30.05
	01-23-01	1042		29.20
	03-13-01	1200		28.80
282838080572401	05-17-01	1105	82805701 23S34E18	29.10
	07-10-01	0830		30.75
	09-17-01	1155		33.20
282838080572403	11-30-00	1006	OR0726 NW ORLANDO,FL	18.90
	01-23-01	1040		18.51
	03-13-01	1200		18.71
	05-17-01	1056		18.72
	07-10-01	0850		20.88
	09-17-01	1150		21.14
282848080544501	01-23-01	1145	82805402 23S34E15	27.85
	03-15-01	1232		27.30
	05-15-01	0858		27.80
	05-17-01	1012		27.60
	07-10-01	0935		29.20
	09-21-01	0951		31.60

ORANGE COUNTY---Continued

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
282856080544101	01-23-01	1145	TOSOHATCHEE DUCK POND SURFICIAL NR CHRISTMAS,FL	13.38
	03-15-01	1230		11.95
	05-17-01	1015		13.07
	07-10-01	0930		13.27
	09-21-01	0950		13.45
282910081181301	12-01-00	1225	OCU CONWAY NO.3 NR CONWAY,FL	41.00
	01-05-01	1050		42.14
	04-03-01	1142		43.34
	05-25-01	1122		39.50
	07-13-01	0910		43.42
	09-19-01	1142		49.50
282912081181201	12-01-00	1222	OR0722 IN PINE CASTLE,FL	89.19
	01-05-01	1050		89.02
	04-03-01	1250		90.05
	05-25-01	1126		88.68
	07-13-01	0906		91.61
	09-19-01	1145		92.96
282923081282801	05-16-01	1252	82912802	54.88
	09-25-01	0930		63.30
282936081340201	05-16-01	1152	82913405 23S27E12 ROSS WELL ON LK BUTLER	73.16
	09-24-01	1442		78.81
283007081122705	05-15-01	0730	OR-0678 UFA EASTERN WWTP NR UNION PARK,FL	33.25
	09-26-01	0905		39.24
283033081290301	11-30-00	1200	SURF WELL AT TURKEY LAKE NR DOCTOR PHILLIPS,FL	98.22
	01-03-01	1030		97.85
	03-16-01	1330		97.07
	05-17-01	1257		96.70
	07-11-01	1002		97.11
	09-13-01	0959		98.74
283144081254201	05-16-01	0844	83112504 LK MANN DRAIN WELL O-174,ORLANDO	43.42
	09-25-01	0813		51.37
283157081180401	05-16-01	1430	OR-0563 ENGLEWOOD S/D DRAIN WELL NR MAITLAND,FL	40.45
	09-26-01	1005		48.62
283210081180401	12-01-00	1112	ENGLEWOOD PARK SURFICIAL WELL IN ORLANDO,FL	89.33
	01-05-01	0945		89.07
	03-23-01	1120		89.57
	05-25-01	1040		88.83
	07-13-01	0935		90.54
	09-19-01	1025		91.95
283228081213501	12-01-00	1140	LANGFORD PARK SURFICIAL WELL AT ORLANDO,FL	70.51
	01-05-01	1015		70.13
	03-23-01	1145		70.58
	05-30-01	1605		70.09
	07-13-01	0953		71.35
	09-10-01	1531		72.46

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

ORANGE COUNTY---Continued

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
283251081283501	12-05-00	1403	OR0716 ORANGE-47 SURFICIAL WELL AT ORLO VISTA,FL	44.25
	01-03-01	1020		43.80
	03-23-01	1100		43.41
	05-30-01	1520		43.22
	07-11-01	1022		44.04
	09-12-01	1126		46.97
283307081300801	05-16-01	0905	83313001 22S28E22 W-5110 LK SHERWOOD D WL	52.09
	09-25-01	0740		58.95
283340081222803	05-14-01	1450	LAKE IVANHOE UPPER FLORIDAN WELL AT ORLANDO,FL	39.43
	09-25-01	1000		46.50
283345081225701	11-29-00	1712	IVANHOE PARK SURFICIAL WELL AT ORLANDO,FL	72.51
	01-03-01	1005		72.22
	04-03-01	1130		73.17
	05-21-01	1600		72.53
	07-13-01	0838		72.30
	09-10-01	1410		73.45
283517081121501	11-30-00	0951	CFRP WEST SURFICIAL WELL NR UNION PARK,FL	67.32
	01-03-01	1440		66.91
	04-03-01	1420		68.00
	07-10-01	1245		68.18
	09-13-01	1058		68.50
283555081245101	11-29-00	1613	FAIRVIEW PARK SURFICIAL WELL AT ORLANDO,FL	86.08
	01-03-01	0945		86.53
	04-03-01	1100		87.08
	05-21-01	1510		86.15
	07-13-01	0821		86.68
	09-10-01	1337		88.88
283818081291202	11-29-00	1427	OUC WEST REGIONAL MW UF-1 NR CLARCONA	44.95
	03-22-01	1311		44.32
	05-21-01	1430		42.05
	07-10-01	1400		44.12
	09-13-01	0900		47.40
284230081345301	11-29-00	1255	OR0106 UPPER FL NR APOPKA,FL	48.26
	01-03-01	0915		46.16
	03-22-01	1200		47.86
	05-14-01	1315		46.67
	05-21-01	1153		47.17
	07-11-01	1055		47.46
	09-10-01	1204		49.23
	09-25-01	0700		50.65
284230081345302	11-29-00	1252	OR0107 PLYMOUTH TOWER SURFICIAL WELL NR PLYMOUTH	118.58
	01-03-01	0915		118.24
	03-22-01	1235		117.39
	05-21-01	1150		117.10
	07-11-01	1052		117.79
	09-10-01	1207		120.10
284238081275803	05-14-01	1245	OR-0548	18.81
	09-25-01	1057		20.69

ORANGE COUNTY---Continued

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
284528081301101	11-29-00	1111	84513005 20S28E10	27.97
	01-03-01	0835		27.91
	03-22-01	1130		27.95
	05-21-01	1050		27.86
	07-11-01	1002		27.82
	09-10-01	1050		27.77
284529081301001	11-29-00	1108	ROCK SPRINGS DEEP	31.70
	03-22-01	1130		31.47
	05-21-01	1053		30.77
	07-11-01	1005		31.20
	09-10-01	1052		32.05
284604081330301	11-29-00	1132	OR0717 HAAS RD SURFICIAL WELL NR SORRENTO,FL	84.03
	01-03-01	0845		83.85
	03-22-01	1147		89.33
	05-21-01	1118		89.15
	07-11-01	1021		89.09
	09-10-01	1107		89.00

ORANGE COUNTY

282344081054201 -- 82310501 COCOA 11 NR BITHLO, FL

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
APR									
23...	1120	1680	7.4	25.5	440	130	27.0	160	4.90
SEP									
11...	0820	1640	7.3	25.0	457	135	28.0	150	5.00

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
APR								
23...	202	172	170	300	.2	19.0	999	4000
SEP								
11...	198	209	180	300	.2	20.0	1040	3810

282356081091901 -- COCOA 22 16IN WELL

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
APR									
24...	0813	683	7.4	25.1	269	91.0	10.0	30.0	1.80

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
APR								
24...	224	253	58.0	45.0	.2	20.0	425	750

282405081053002 -- 82410506 COCOA 4A1 NR BITHLO, FL

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
APR										
24...	0804	25.71	1740	7.3	25.3	441	130	26.0	170	4.80
SEP										
11...	1005	29.73	670	7.4	25.5	439	129	27.0	160	5.00

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
APR								
24...	202	207	180	310	.2	18.0	1060	8400
SEP								
11...	201	184	180	300	.2	20.0	1010	5030

ORANGE COUNTY--Continued

282416081054101 -- 82410502 COCOA 4 NR BITHLO,FL

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
APR									
23...	1020	1380	7.5	25.5	393	120	21.0	120	3.60
SEP									
10...	1345	890	7.5	24.5	321	105	--	--	--

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
APR								
23...	199	201	150	230	.2	19.0	837	6200
SEP								
10...	221	227	99.0	--	.2	21.0	548	--

282424081093601 -- COCOA 20

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
APR									
24...	1117	950	7.4	25.1	401	130	18.0	48.0	2.10

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
APR								
24...	204	217	160	75.0	.2	20.0	618	1500

282451081054501 -- 82410503 COCOA 5

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
APR									
23...	0855	961	7.8	24.8	356	120	13.0	69.0	2.00

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
APR								
23...	269	255	57.0	110	.3	23.0	596	2300

ORANGE COUNTY--Continued

282529081073201 -- 82510702 COCOA 7A NR BITHLO, FL

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
APR 23...	1255	1010	7.3	24.0	364	130	9.10	61.0	2.00

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
APR 23...	295	280	64.0	100	.2	23.0	621	1500

282530081054201 -- 82510503 COCOA 7

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
SEP 10...	1035	1270	7.3	24.0	406	144	11.0	110	2.40

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
SEP 10...	290	294	76.0	180	.2	26.0	768	1280

282530081091701 -- 82510902 COCOA 16 NR BITHLO, FL

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
APR 24...	0855	1060	7.5	24.5	316	98.0	17.0	81.0	2.60

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
APR 24...	185	205	110	140	.2	18.0	641	1400

ORANGE COUNTY--Continued

282530081094001 -- 82510903 COCOA 17 NR BITHLO, FL

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
APR										
24...	0917	--	643	7.5	24.5	240	74.0	13.0	33.0	1.70
SEP										
10...	1250	29.73	1660	7.4	25.5	264	82.0	14.0	34.0	1.80

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
APR								
24...	176	188	70.0	52.0	.2	18.0	411	1100
SEP								
10...	175	205	72.0	58.0	.2	20.0	419	1130

282531081075602 -- COCOA 13R

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
APR									
23...	1055	988	7.3	24.1	342	120	10.0	70.0	2.00

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
APR								
23...	259	249	77.0	110	.1	24.0	625	860

282531081082201 -- 82510801 COCOA 14 NR BITHLO, FL

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
APR									
23...	1132	1260	7.3	25.0	397	130	17.0	96.0	2.90
SEP									
10...	1105	820	7.2	27.5	324	106	14.0	--	2.50

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
APR								
23...	215	237	150	180	.1	20.0	784	2300
SEP								
10...	166	166	140	--	.2	--	509	--

ORANGE COUNTY--Continued

282548081054201 -- 82510504 COCOA 3 NR BITHLO, FL

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
APR									
25...	0845	709	7.7	23.4	296	110	5.00	33.0	1.00

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
APR								
25...	309	269	11.0	37.0	.2	24.0	422	970

282556081094001 -- COCOA 18

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
APR									
24...	0947	995	7.4	24.6	351	110	18.0	65.0	2.50

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
APR								
24...	183	213	150	120	.2	19.0	641	1800

282612081054201 -- 82610502 COCOA 2 NR BITHLO, FL

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
APR									
25...	0753	667	7.5	23.6	294	110	4.40	29.0	.90
SEP									
11...	1030	860	7.3	24.0	339	123	7.00	50.0	1.30

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
APR								
25...	306	260	4.9	28.0	.2	25.0	399	960
SEP								
11...	289	310	34.0	78.0	.2	24.0	527	2210

ORANGE COUNTY--Continued

282624081090401 -- COCOA 19 NR BITHLO

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
APR									
24...	1010	856	7.4	24.7	342	110	16.0	44.0	2.10

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
APR								
24...	202	221	130	71.0	.2	20.0	547	1400

282650081054201 -- 82610504 COCOA 9 NR BITHLO, FL

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
APR										
23...	0900	--	1290	7.3	23.9	384	130	14.0	110	2.70
SEP										
10...	0942	33.82	1260	7.3	24.0	389	132	14.0	120	2.80

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
APR								
23...	259	269	110	190	.3	22.0	780	1600
SEP								
10...	260	269	100	180	.3	23.0	791	1450

282847081013701 -- 82810101USGS OBSER W. COCOA H NR BITHLO, FL.

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
APR										
25...	1240	--	853	7.5	24.1	285	67.0	28.0	59.0	2.40
SEP										
11...	1107	34.08	860	7.5	24.0	308	71.0	31.0	57.0	2.50

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3)	ANC WATER UNFLTRD IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
APR								
25...	196	203	68.0	100	.7	27.0	504	2400
SEP								
11...	192	201	81.0	110	.6	26.0	520	2410

KEY TO SITE LOCATIONS ON FIGURE 21
OSCEOLA COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number
1	274856080594401	216
2	274944080573302	216
3	274947080584001	217
4	275222081030701	217
5	280036080563801	218
6	280619080542601	218
7	280829080574001	219
8	281354080563301	219
9	281714081093001	220
10	281722080543001	220

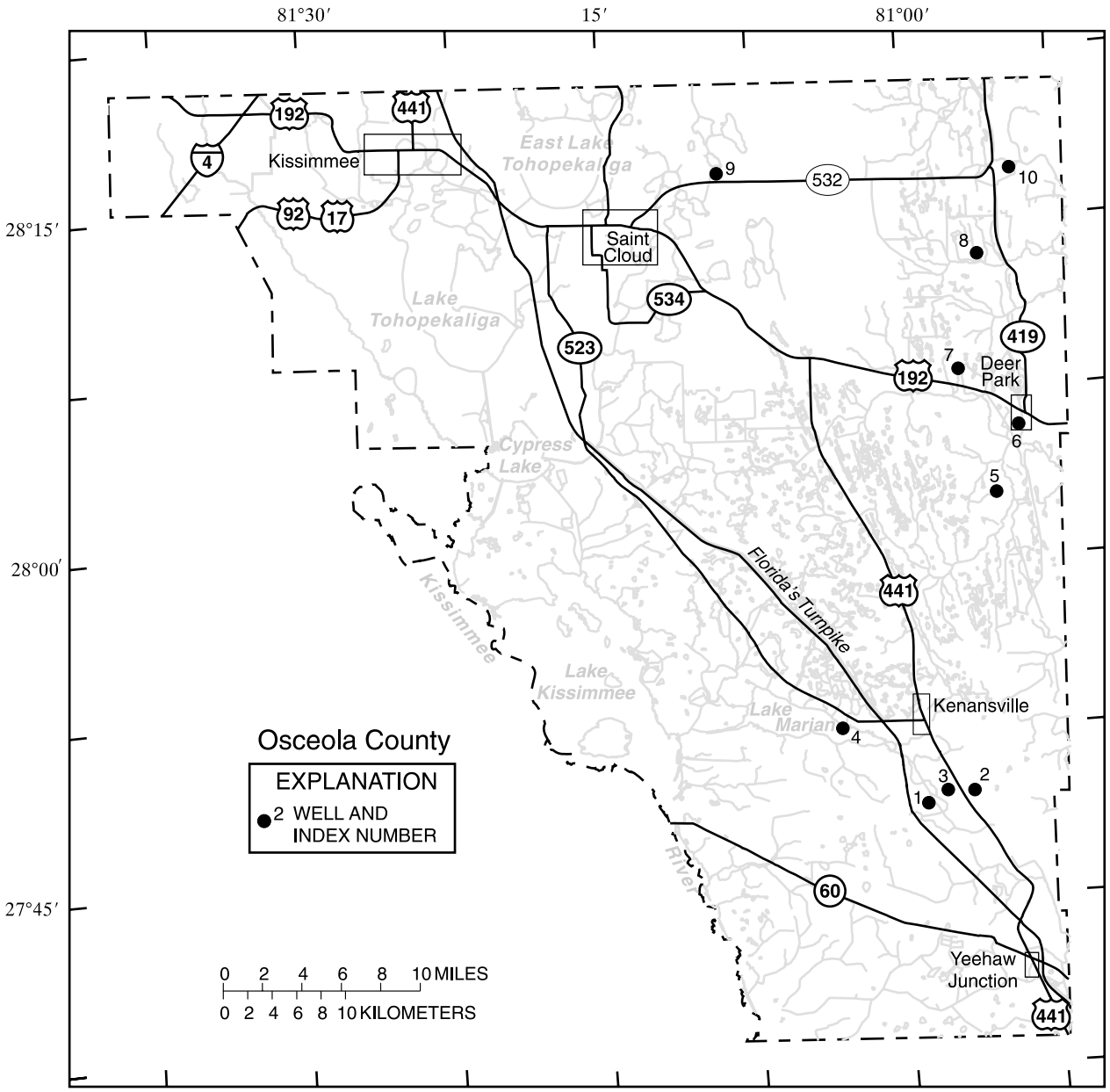

Figure 21.--Location of wells in Osceola County.

OSCEOLA COUNTY

WELL NUMBER.-274856080594401. Hayman Deep Well near Kenansville, FL.

LOCATION.--Lat 27°48'56", long 80°59'44", in NW¼SW¼NE¼ sec.2, T. 31S., R.33 E., Hydrologic Unit 03090101, on Hayman 7-11 Ranch, 3.1 mi south of Kenansville on U.S. Highway 441 off ranch road, approximately 2 mi from intersection of U.S. Highway 441 and one-fourth mile west of ranch road. Kenansville. Owner: W. Paul Hayman.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, artesian well, diameter 10 in., depth 800 ft, cased to 251 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Land-surface datum is 71.74 ft above sea level. Measuring point: Hole in pump base, 0.66 ft above land-surface datum.

PERIOD OF RECORD.--October 1978 to September 1980 (miscellaneous); October 1980 to September 1991 (semiannually); October 1991 to June 2001 (monthly), discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 47.27 ft above sea level, Jan. 23, 1995; lowest measured, 37.91 ft above sea level, May 14, 1981.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL
JUN 21	40.50

WELL NUMBER.-274944080573302. OS0231 Campbell Ranch near Kenansville, FL.

LOCATION.--Lat 27°49'44", long 80°57'33", in NW¼SE¼SE¼ sec.31, T.30 S., R.34 E., Hydrologic Unit 03090101, on Campbell Ranch, 3.8 mi south of Kenansville on U.S. Highway 441 on ranch, approximately 0.1 mi east of U.S. Highway 441 near Kenansville. Owner: St. Johns River Water Management District.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, artesian well, diameter 6 in., depth 420 ft, cased to 360 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Land-surface datum is 73.58 ft above sea level. Measuring point: Mark on top of casing, 3.36 ft above land-surface datum.

PERIOD OF RECORD.--May 2000 to September 2000 (semiannually); May 2001 to September 2001 (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 44.72 ft above sea level, Sept. 25, 2001; lowest measured, 38.94 ft above sea level, May 22, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 15	40.34	JUL 23	43.17	AUG 27	43.64	SEP 25	44.72

WATER YEAR 2001 LOWEST 40.34 MAY 15, 2001 HIGHEST 44.72 SEP 25, 2001

OSCEOLA COUNTY--Continued

WELL NUMBER.--274947080584001. Hayman Well near Kenansville, FL.

LOCATION.--Lat 27°49'47", long 80°58'40", in SE¼SE¼NW¼ sec.36, T.30 S., R.33 E., Hydrologic Unit 03080101, in pasture of 7-11 Ranch, 0.4 mi west of U.S. Highway 441, and 3.1 mi south of Kenansville. Owner: W. Paul Hayman.

AQUIFER.--Nonartesian sand aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, nonartesian well, diameter 3 in., depth 90 ft, casing length unknown.

INSTRUMENTATION.--Bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 74.25 ft above sea level. Measuring point: Hole in threaded cap, 2.48 ft above land-surface datum.

PERIOD OF RECORD.--January 1974 to current year (bimonthly), incomplete.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 71.78 ft above sea level, Sept. 22, 1981; lowest measured, 64.74 ft above sea level, June 13, 1985.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 16	66.74	JAN 12	66.38	MAR 09	66.10	MAY 08	67.54	JUL 03	69.53	SEP 05	69.77

WATER YEAR 2001 LOWEST 66.10 MAR 09, 2001 HIGHEST 69.77 SEP 05, 2001

WELL NUMBER.--275222081030701. OS-243 Well at Lake Marian near Kenansville, FL.

LOCATION.--Lat 27°52'22", long 81°03'07", in SE¼NE¼NE¼ sec.18, T.30 S., R.33 E., Hydrologic Unit 03090101, at boat ramp in Osceola County Park, on east side of Lake Marian, and 3.0 mi west of Kenansville. Owner: U.S. Geological Survey.

AQUIFER.--Hawthorn limestone aquifer of the Miocene Series, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 320 ft, cased to 243 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 63.21 ft above sea level. Prior to Oct. 1, 1977, datum was considered to be 63.95 ft, Oct. 1, 1977, to Sept. 30, 1978, to be 65.05 ft, and Oct. 1, 1979 to Sept. 30, 1990, to be 62.61 ft above sea level. Measuring point: Top of casing, 0.69 ft above land-surface datum.

PERIOD OF RECORD.--April 1974 to September 1992 (bimonthly); October 1992 to September 1994 (monthly); October 1994 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 57.83 ft above sea level, Sept. 13, 1995; lowest measured, 48.43 ft above sea level, present datum, May 8, 1976.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03	52.00	JAN 12	50.45	MAR 07	50.05	JUL 03	50.98				
15	51.73	FEB 27	50.11	MAY 08	50.22	SEP 05	53.34				

WATER YEAR 2001 LOWEST 50.05 MAR 07, 2001 HIGHEST 53.34 SEP 05, 2001

OSCEOLA COUNTY--Continued

WELL NUMBER.--280036080563801. OS-019 Bull Creek Loop Road Well near Deer Park, FL.

LOCATION.--Lat 28°00'36", long 80°56'38", in NE¼NE¼NW¼ sec.32, T.28 S., R.34 E., Hydrologic Unit 03090101, in Bull Creek Wildlife Management Area, 12.4 mi south of U.S. 192 and 7.3 mi west of Deer Park. Owner: St. Johns River Water Management District.

AQUIFER.-Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 4 in., depth 400 ft, cased to 240 ft.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 62.0 ft above sea level. Measuring point: Top of casing, 3.19 ft above land-surface datum.

PERIOD OF RECORD.--May 2000 to September 2000 (semiannually); December 2000 to September 2001 (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.62 ft above sea level, Sept. 24, 2001; lowest measured, 37.15 ft above sea level, May 17, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 19	38.70	FEB 23	37.83	APR 24	37.74	MAY 24	37.54	JUL 25	41.08	SEP 24	42.62
JAN 26	38.03	MAR 23	37.90	MAY 16	38.17	JUN 22	39.19	AUG 28	41.77		

WATER YEAR 2001 LOWEST 37.54 MAY 24, 2001 HIGHEST 42.62 SEP 24, 2001

WELL NUMBER.--280619080542601. OS-179 Well at Deer Park, FL.

LOCATION.--Lat 28°06'19", long 80°54'26", in NW¼NE¼SW¼ sec.27, T.27 S., R.34 E., Hydrologic Unit 03080101, on south side of U.S. Highway 192, 0.8 mi northwest of Deer Park, and 11 mi east of Holopaw. Owner: U.S. Geological Survey.

AQUIFER.--Nonartesian sand of the surficial aquifer system, Geologic Unit 112 SDGV.

WELL CHARACTERISTICS.--Drilled, observation, nonartesian well, diameter 6 in., depth 17.6 ft, cased to 17.6 ft, gravel packed 12.6 to 17.6 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 48.84 ft above sea level. Measuring point: Top of casing, 3.20 ft above land-surface datum.

PERIOD OF RECORD.--April 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 49.11 ft above sea level, July 15, 1978; lowest, 42.24 ft above sea level, June 30, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	47.41	45.59	44.79	44.23	43.82	43.39	44.63	44.93	---	44.56	48.06	46.24
10	46.76	45.44	44.68	44.14	43.73	43.30	44.39	44.71	44.66	44.79	47.67	47.29
15	46.25	45.29	44.61	44.07	43.66	43.24	44.13	44.43	45.35	45.87	48.17	47.87
20	46.01	45.14	44.51	44.01	43.58	43.17	---	44.12	45.31	47.23	47.61	47.13
25	45.98	45.00	44.41	43.96	43.51	43.10	---	---	45.11	47.34	47.44	47.00
EOM	45.76	44.91	44.31	43.87	43.46	44.25	---	---	44.86	47.07	46.60	47.29
MAX	47.62	45.73	44.88	44.29	43.85	44.25	44.67	44.93	45.44	47.97	48.28	48.16

CAL YR 2000 MAX 47.62
WTR YR 2001 MAX 48.28

WELL NUMBER.--280829080574001. TH-6 near Holopaw, FL.

LOCATION.--Lat 28°08'29", long 80°57'40", in SW¼NW¼NW¼ sec.18, T.27 S., R.34 E., Hydrologic Unit 03090101, in pasture of Deseret Ranch, 3.6 mi west of State Highway 419 and 5.7 mi northwest of Deer Park. Owner: U.S. Geological Survey.

AQUIFER.-Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 4 in., depth 425 ft, cased to 220 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 59.46 ft above sea level. Measuring point: Top of 4 inch male adaptor 0.9 ft above land-surface datum.

PERIOD OF RECORD.--January 1980 to September 2000 (semiannually); December 2000 to September 2001 (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 44.63 ft above sea level, Sept. 15, 1995; lowest measured, 36.62 ft above sea level, May 14, 1981.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 19	38.68	FEB 26	37.85	APR 24	37.75	MAY 24	37.47	JUL 24	41.01	SEP 24	42.54
JAN 26	38.04	MAR 26	37.87	MAY 16	38.15	JUN 22	39.07	AUG 28	41.70		

WATER YEAR 2001 LOWEST 37.47 MAY 24, 2001 HIGHEST 42.54 SEP 24, 2001

WELL NUMBER.--281354080563301. TH-4 near Deer Park, FL.

LOCATION.--Lat 28°13'54", long 80°56'33", in NE¼NW¼SW¼ sec.8, T.26 S., R.34 E., Hydrologic Unit 03090101, in pasture of Deseret Ranch, 1.6 mi west of State Highway 419 and 11.5 mi northwest of Deer Park, FL. Owner: Deseret Ranch.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 4 in., depth 373 ft, cased to 173 ft.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 53.35 ft above sea level. Measuring point: Top of 4 in. casing 0.25 ft above land-surface datum.

PERIOD OF RECORD.--January 1980 to September 2000 (semiannually); December 2000 to September 2001 (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.70 ft above sea level, Sept. 15, 1995; lowest measured, 34.55 ft above sea level, May 19, 1981.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 19	37.02	FEB 26	36.14	APR 24	35.95	MAY 24	35.64	JUL 25	39.15	SEP 24	40.75
JAN 26	36.32	MAR 26	36.16	MAY 16	36.31	JUN 22	37.18	AUG 27	39.91		

WATER YEAR 2001 LOWEST 35.64 MAY 24, 2001 HIGHEST 40.75 SEP 24, 2001

OSCEOLA COUNTY--Continued

WELL NUMBER.--281714081093001. Lake Joel Well near Ashton, FL.

LOCATION.--Lat 28°17'14", long 81°09'30", in SW¼NW¼NW¼ sec.30, T.25 S., R.32 E., Hydrologic Unit 03090101, on southwest shore of Lake Joel, 0.8 mi north of State Highway 532, and 5.0 mi northeast of Ashton. Owner: Deseret Ranch.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 8 in., depth 750 ft, cased to 394 ft.

INSTRUMENTATION.--Water-stage recorder---60-minute interval.

DATUM.--Elevation of land-surface datum is 64.78 ft above sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD.--November 1969, May 1973 to November 1975 (bimonthly); December 1975 to current year. Prior to October 1977, published as (OS 213), Gulf American Co.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 47.68 ft above sea level, Nov. 20, 1969; lowest daily maximum water level, 36.30 ft above sea level, June 3, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	42.02	40.99	39.89	38.80	39.37	38.79	39.42	38.89	38.88	40.62	42.38	42.25
10	42.04	40.55	39.76	38.60	39.26	38.91	39.58	39.04	39.27	41.02	42.55	42.66
15	42.08	40.17	39.59	38.84	39.08	38.90	39.30	38.94	39.57	41.27	42.68	43.46
20	41.70	39.96	39.62	39.09	38.91	38.93	38.72	38.54	39.79	41.61	42.74	43.69
25	41.42	39.90	39.39	39.21	38.94	38.94	38.46	38.15	40.15	41.93	42.77	43.82
EOM	41.17	39.95	39.39	39.33	38.86	39.13	38.35	38.62	40.58	42.08	42.54	44.07
MAX	42.15	41.05	39.95	39.34	39.37	39.13	39.63	39.04	40.58	42.10	42.77	44.09

CAL YR 2000 MAX 43.70
WTR YR 2001 MAX 44.09

WELL NUMBER.--281722080543001. OS-171 Well near Deer Park, FL.

LOCATION.--Lat 28°17'22", long 80°54'30", in SE¼SW¼SW¼ sec.22, T.25 S., R.34 E., Hydrologic Unit 03080101, on ranch road, 0.9 mi east of State Highway 532, 3.6 mi south of K-6 Ranch Headquarters, and 13.5 mi north of Deer Park. Owner: U.S. Geological Survey.

AQUIFER.--Nonartesian sand of the surficial aquifer system, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, nonartesian well, diameter 6 in., depth 19 ft, cased to 12.7 ft, gravel packed, 11 to 19 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 31.60 ft above sea level. Measuring point: Top of casing, 3.32 ft above land-surface datum.

PERIOD OF RECORD.--October 1950 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 33.56 ft above sea level, Sept. 23, 1960; lowest, 26.32 ft above sea level, July 28, 1981.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	31.83	29.65	28.76	28.68	28.67	28.83	30.91	29.00	28.56	29.77	31.78	29.77
10	30.55	29.39	28.63	28.72	28.55	28.32	30.68	28.34	29.76	31.53	31.80	31.54
15	---	29.16	29.29	28.67	28.47	28.32	30.19	28.24	29.42	31.63	31.30	32.03
20	---	28.91	29.04	28.98	28.32	28.49	29.30	27.87	28.78	31.45	31.20	31.25
25	30.51	28.77	28.87	28.99	28.79	28.10	28.85	28.77	29.01	31.40	30.88	31.43
EOM	30.07	29.03	28.82	28.76	28.71	31.10	28.55	28.33	29.51	31.12	30.33	31.41
MAX	32.62	29.97	29.45	29.23	28.86	31.10	31.11	29.15	29.82	31.63	33.02	32.14

CAL YR 2000 MAX 32.62
WTR YR 2001 MAX 33.02

OSCEOLA COUNTY

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
274149080534801	05-15-01	0716	OSF-60A TEST WELL	37.30
	09-25-01	0709		41.66
274307080582401	05-15-01	0724	OSF-42	40.84
	09-25-01	0723		45.24
274807081115501	05-15-01	0815	OSF-52 S-65 WELL NR KENANSVILLE	41.25
	09-25-01	0823		45.69
275347081022601	05-15-01	0656	OSF-62 TEST WELL	39.85
	09-25-01	0649		44.27
275609081132001	05-15-01	0923	JOE OVERSTREET WELL (OS-319)	43.87
	09-25-01	0931		48.28
275852081030501	05-14-01	1303	TH-10 WILLIAMS RD	39.31
	09-26-01	1037		43.62
280141081112701	05-15-01	0640	OSF-66 TEST WELL	43.85
	09-25-01	0633		48.75
280418081160401	05-16-01	0949	OSF-64 TEST	47.05
	09-25-01	0958		51.60
280823081210301	05-14-01	1002	OSF-53 S-61 WELL NR ALCOMA	46.77
	09-26-01	0748		51.79
280826081031801	05-16-01	1033	HOLOPAW TEST NO 1	38.33
	09-24-01	1057		42.88
280905081270101	05-14-01	0947	REEDY CREEK OVERLOOK WELL	57.13
	09-26-01	0732		63.30
281006081162601	05-15-01	1012	CANOE CREEK CAMPGROUND WELL	43.68
	09-25-01	1029		50.31
281023081075401	05-14-01	1230	OSF-68 TEST WELL	38.84
	09-26-01	1001		42.84
281105080541401	05-16-01	0817	811054-- 26S34E34 RODEO FIELD DEER PARK NW	35.82
	09-24-01	0819		39.31
281429081290501	05-14-01	0938	OS-254 MERCANTILE LANE WELL	58.21
	09-26-01	0715		64.39
281443081140501	05-15-01	1054	ASHTON FORESTRY TOWER WELL (OS-250) AT ASHTON,FL	40.63
	09-24-01	1123		46.66
281456081171701	05-14-01	1136	ST.CLOUD POWER PLANT WELL	40.79
	09-26-01	0920		43.29

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

OSCEOLA COUNTY--Continued

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
281506081194601	05-14-01	1054	OSF-70 TEST WELL	42.78
	09-26-01	0832		48.39
281536081324801	05-14-01	0922	FLORIDA POWER WELL(SRK01)	71.74
	09-25-01	0657		76.40
281559081260701	05-14-01	1026	SHINGLE CREEK WELL	52.42
	09-26-01	0812		58.88
281630080591001	05-15-01	1155	TH-3 LAKE POINSETT SW	34.75
	09-25-01	1140		39.66
281630081024401	05-15-01	1148	TH-9 NOVA RD 532 WEST	36.58
	09-25-01	1125		40.97
281632080515001	05-16-01	0700	DSR-38 LAKE POINSETT NR ROCKLEDGE,FL	32.70
	09-24-01	0707		42.00
281714081093001	05-15-01	1115	81710901LAKE JOEL W. NR. ASHTON, FL.	38.92
	09-25-01	1106		43.78
281937081245901	05-14-01	0838	81912401 25S29E09 OS U.L	38.11
	09-26-01	0628		46.61

KEY TO SITE LOCATIONS ON FIGURE 22
PASCO COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number
1	281654082065901	226
2	282259082104101	226

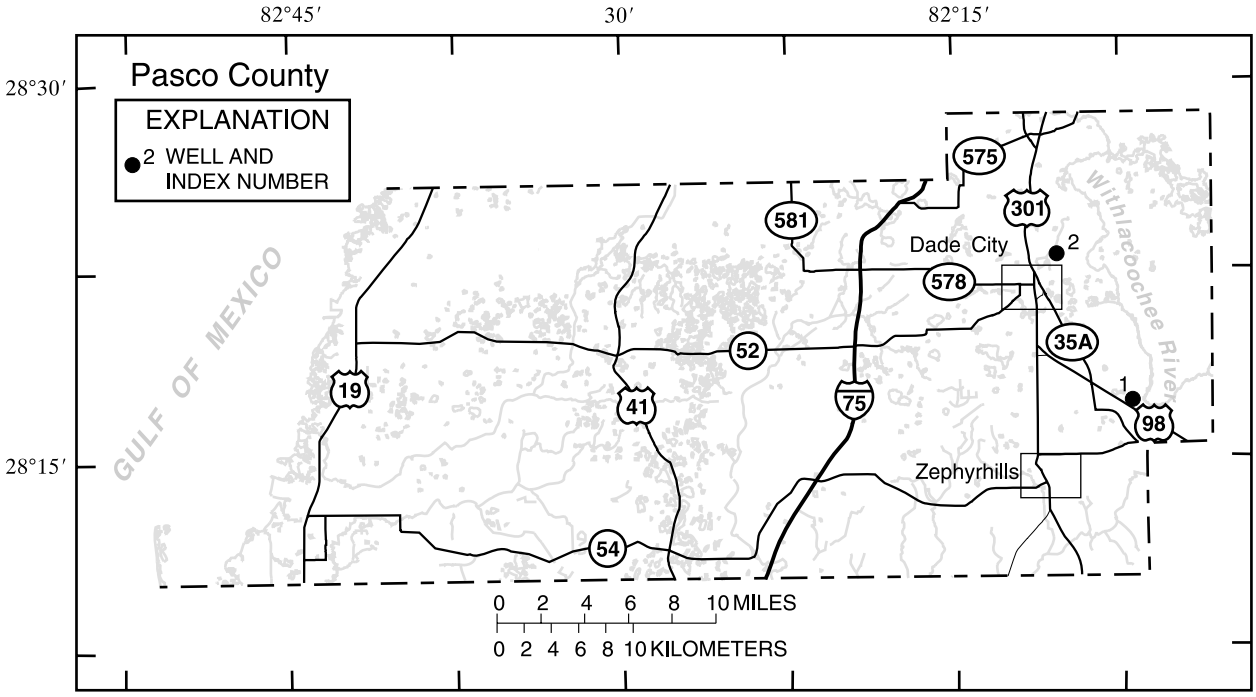

Figure 22.--Location of wells in Pasco County.

PASCO COUNTY

WELL NUMBER.--281654082065901. U.S. Highway 98 Well near Dade City, FL.

LOCATION.--Lat 28°16'54", long 82°06'59", in SW¼SE¼NW¼ sec.28, T.25 S., R.22 E., Hydrologic Unit 03100208, on north side of U.S. Highway 98, 2.9 mi north of intersection of State Highway 54, and 7.8 mi southeast of Dade City. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation well, diameter 3 in., depth 200 ft, cased to 41 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 83.77 ft above sea level. Measuring point: Top of casing, 3.10 ft above land-surface datum.

PERIOD OF RECORD.--May 1976, January 1977 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 80.68 ft above sea level, Oct. 11, 1995; lowest measured, 68.72 ft above sea level, June 4, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	72.53	DEC 27	70.38	APR 09	70.62	JUN 04	68.72	SEP 24	79.28		
NOV 08	71.33	FEB 26	69.53	MAY 14	69.35	JUL 31	71.41				

WATER YEAR 2001 LOWEST 68.72 JUN 04, 2001 HIGHEST 79.28 SEP 24, 2001

WELL NUMBER.--282259082104101. Lykes Pasco Well near Dade City, FL.

LOCATION.--Lat 28°22'59", long 82°10'41", in NW¼NW¼SE¼ sec.23, T.24 S., R.21 E., Hydrologic Unit 03100208, 0.5 mi east of confluence of Pasco Packing Company and Evans Packing Company canals, and 2 mi northeast of Dade City. Owner: Lykes Pasco Packing Co.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 4 in., depth 36 ft, casing length unknown.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 73.81 ft above sea level. Measuring point: Top edge of flange on casing, 4.13 ft above land-surface datum.

PERIOD OF RECORD.--April 1973 to September 1992; October 1992 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 75.19 ft above sea level, Mar. 23, 1998; lowest measured, 57.38 ft above sea level, June 21, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	60.95	DEC 19	59.92	FEB 23	58.94	APR 24	58.36	JUN 21	57.38	AUG 28	61.30
NOV 29	60.29	JAN 25	59.10	MAR 27	58.56	MAY 24	57.93	JUL 24	57.49		

WATER YEAR 2001 LOWEST 57.38 JUN 21, 2001 HIGHEST 61.30 AUG 28, 2001

PASCO COUNTY

STATION NUMBER	DATE	TIME		STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
282121082071101	05-14-01	1150	82120702	24S22E32 CUMMER OFFICE WELL	63.73
	09-24-01	1124			72.94
282154082142401	05-14-01	1055	82121401	24S21E30 HAYCRAFT WELL	56.47
	09-24-01	1027			62.47
282221082103001	05-14-01	1130	82221001	24S21E26 COLLURA WELL NO. 1	56.59
	09-24-01	1107			63.14
282428082134501	05-14-01	1035	82421301	24S21E08 LEE WELL	55.06
	09-24-01	1005			61.60
282430082112101	05-14-01	1012	82421102	24S21E10 SELF WELL	54.59
	09-24-01	0947			61.21
282717082142001	05-14-01	0949	82721401	23S21E30 ROSSINI WELL WEST OF TRILBY	47.35
	09-24-01	0918			52.84
282816082123701	05-14-01	0935	82821201	23S21E21 TOMKOW HAY BARN WELL	44.08
	09-24-01	0902			49.93

KEY TO SITE LOCATIONS ON FIGURE 23
POLK COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number
1	274812081190301	230
2	274815081130301	230
3	274846081262001	231
4	280503081552801	231
5	280531081431601	232
6	280556081532601	232
7	280715081543501	233
7	280719081543301	233
8	281008081441801	234
8	281008081441802	234
9	281057081495002	235
10	281312082011601	235

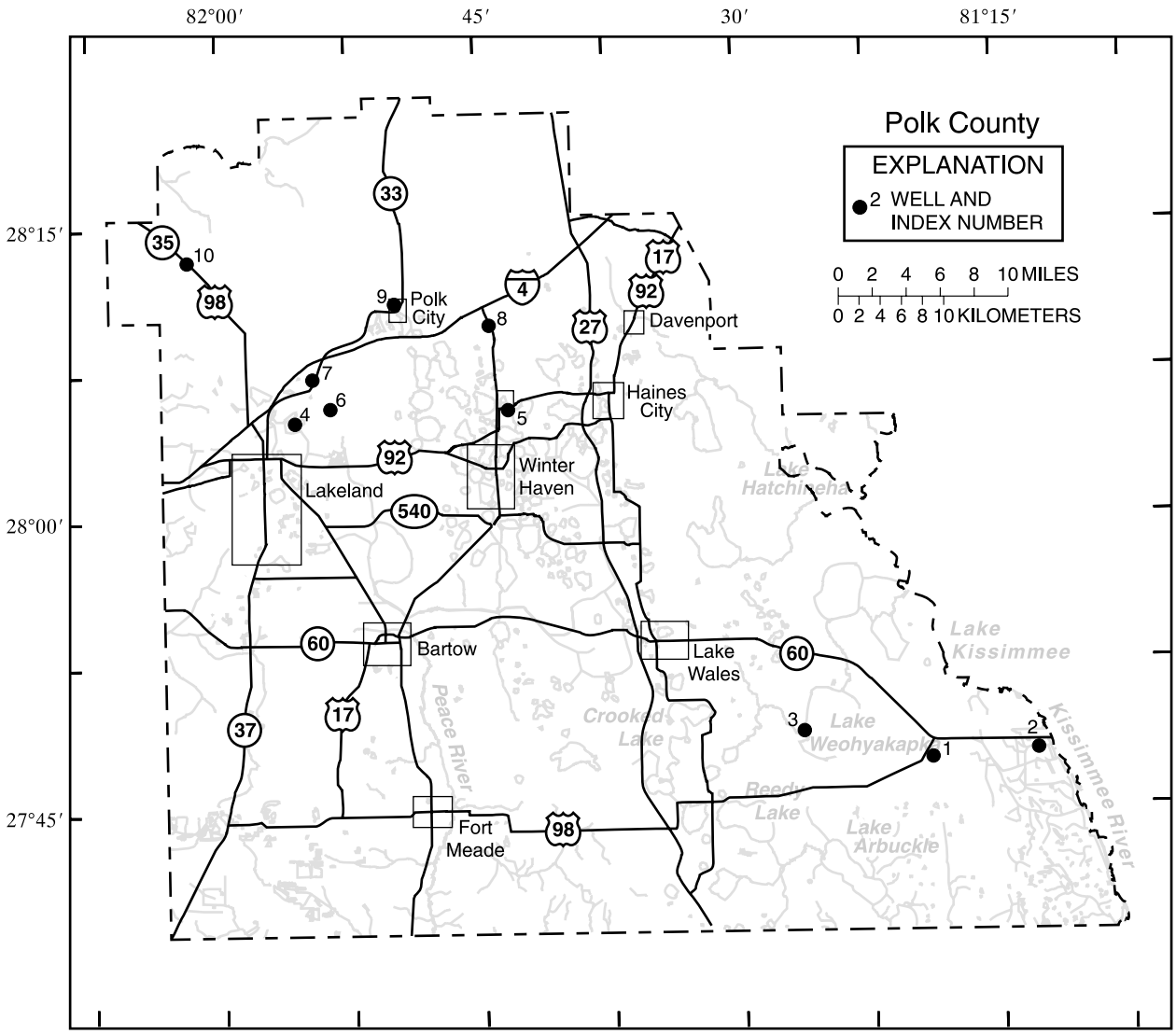

Figure 23.--Location of wells in Polk County.

POLK COUNTY

WELL NUMBER.--274812081190301. P-49 Well near Frostproof, FL.

LOCATION.--Lat 27°48'12", long 81°19'03", in SE¼NE¼NE¼ sec.9, T.31 S., R.30 E., Hydrologic Unit 03090101, on south side of State Highway 630, 0.2 mi west of State Highway 60, and 12.0 mi east of Frostproof. Owner: U.S. Geological Survey.

AQUIFER.--Nonartesian sand aquifer of the Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, nonartesian well, diameter 6 in., depth 17 ft, cased to 14 ft, gravel-packed from 14 to 17 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 104.93 ft above sea level. Measuring point: Top of recorder shelf, 3.38 ft above land-surface datum.

PERIOD OF RECORD.--April 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 105.38 ft above sea level, June 18, 1982; lowest, 98.61 ft above sea level, June 5, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	102.56	101.02	100.36	100.00	99.62	99.18	100.01	99.14	98.61	99.96	100.82	99.59
10	102.17	100.89	100.27	99.93	99.54	99.11	99.90	99.06	99.75	99.77	100.74	100.73
15	101.87	100.75	100.34	99.87	99.47	99.05	99.70	98.94	99.82	99.77	100.43	102.44
20	101.63	100.63	100.22	99.80	99.38	98.97	99.52	98.83	99.71	100.29	100.17	102.05
25	101.42	100.53	100.15	99.75	99.31	98.91	99.37	98.74	100.01	100.63	99.97	101.75
EOM	101.20	100.46	100.07	99.68	99.26	99.83	99.25	98.66	100.18	100.55	99.74	102.38
MAX	102.71	101.16	100.43	100.06	99.66	99.83	100.01	99.22	100.18	100.63	100.84	102.44

CAL YR 2000 MAX 104.33
WTR YR 2001 MAX 102.71

WELL NUMBER.--274815081130301. River Ranch Well near Indian Lake Estates, FL.

LOCATION.--Lat 27°48'15", long 81°13'03", in NW¼NW¼NW¼ sec.10, T.31 S., R.31 E., Hydrologic Unit 03090101, 92 ft south of State Highway 60, 1.0 mi west of Kissimmee River Bridge, and 6.5 mi east of Indian Lake Estates. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 300 ft, cased to 185 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 55.17 ft above sea level. Prior to Oct. 1, 1977, datum was considered to be 55.64 ft, and Oct. 1, 1977, to Sept. 30, 1978, at 55.34 ft above sea level. Measuring point: Top of casing, 0.37 ft below land-surface datum, elevation of 54.803 ft above mean sea level.

PERIOD OF RECORD.--May 1974 to September 1984 (bimonthly); October 1984 to September 1986 (monthly); October 1986 to September 1995 (bimonthly); October 1996 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 49.23 ft above sea level, Mar. 10, 1998; lowest measured, 41.02 ft above sea level, June 22, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	45.59	JAN 31	42.47	MAY 15	42.63	JUN 20	43.23	SEP 25	46.52		
DEC 04	43.41	APR 05	42.36	31	42.35	AUG 03	45.38				

WATER YEAR 2001 LOWEST 42.35 MAY 31, 2001 HIGHEST 46.52 SEP 25, 2001

WELL NUMBER.--274846081262001. Lake Weohyakapka Well near Frostproof, FL.

LOCATION.--Lat 27°48'46", long 81°26'20", in NE¼NW¼SE¼ sec.5, T.31 S., R.29 E., Hydrologic Unit 03090101, on southwest shore of Lake Weohyakapka, at county boat ramp, and 8.0 mi east of Frostproof. Owner: Polk County.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter 3 in., depth 199 ft, cased to 153 ft.

INSTRUMENTATION.--Bimonthly measurement with pressure gage.

DATUM.--Elevation of land-surface datum is 65.15 ft above sea level. Prior to Oct. 1, 1977, datum was considered to be 65 ft, from topographic map, and Oct. 1, 1977, to Sept. 30, 1978, at 65.30 ft above sea level. Measuring point: Spigot on discharge line, 1.85 ft above land-surface datum.

PERIOD OF RECORD.--February 1958, December 1959, June 1969 to September 1984 (bimonthly); October 1984 to September 1986 (monthly); October 1986 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 88.35 ft above sea level, present datum, Dec. 15, 1959; lowest measured, 72.27 ft above sea level, May 20, 1981.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	79.30	JAN 30	78.90	MAY 15	75.80	AUG 03	80.10				
DEC 04	79.40	APR 05	78.50	31	75.42	SEP 25	83.10				

WATER YEAR 2001 LOWEST 75.42 MAY 31, 2001 HIGHEST 83.10 SEP 25, 2001

WELL NUMBER.--280503081552801. Fish Lake Deep Well near Lakeland, FL.

LOCATION.--Lat 28°05'03", long 81°55'28", in SE¼SE¼SE¼ sec.32, T.27 S., R.24 E., Hydrologic Unit 03l00l0l, 50 ft east of Lake Park Drive, 1.4 mi south of Old Combee Road, and 3.5 mi northeast of Lakeland. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 311 ft, cased to 265 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 136.83 ft above sea level. Measuring point: Top of casing, .90 ft above land-surface datum.

PERIOD OF RECORD.--December 1955 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 120.97 ft above sea level, Aug. 8, 1960; lowest measured, 103.60 ft above sea level, May 10, 1976.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	109.84	DEC 26	106.32	APR 09	106.49	JUN 04	103.91	SEP 26	113.53		
NOV 07	106.57	FEB 26	105.53	MAY 16	103.96	AUG 01	108.11				

WATER YEAR 2001 LOWEST 103.91 JUN 04, 2001 HIGHEST 113.53 SEP 26, 2001

POLK COUNTY--Continued

WELL NUMBER.--280531081431601. Lake Alfred Deep Well at Lake Alfred, FL.

LOCATION.--Lat 28°05'31", long 81°43'16", in SE¼SW¼NW¼ sec.33, T.27 S., R.26 E., Hydrologic Unit 03100101, on northeast corner at intersection of Glencruiten Avenue and Haines Boulevard at Lake Alfred. Owner: City of Lake Alfred.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, public supply, artesian well, diameter l2 in., depth 555 ft, cased to 282 ft.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 171.04 ft, above sea level. Measuring point: Top of recorder shelter floor, 3.46 ft above land-surface datum. Prior to May 1988, at elevation 3.12 ft lower.

PERIOD OF RECORD.--May 1973 to February 1976 (quarterly), incomplete; March 1976 to September 1992; October 1992 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 126.51 ft above sea level, July 10, 1974; lowest daily maximum water level, 109.13 ft above sea level, May 15, 1981.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	117.16	JAN 26	117.48	APR 20	114.67	JUN 21	115.50	SEP 24	122.36		
NOV 28	118.45	FEB 23	115.18	MAY 14	114.38	JUL 24	119.20				
DEC 20	116.70	MAR 23	116.87	24	113.59	AUG 27	117.70				

WATER YEAR 2001 LOWEST 113.59 MAY 24, 2001 HIGHEST 122.36 SEP 24, 2001

WELL NUMBER.--280556081532601. Tennorock Road Well near Lakeland, FL.

LOCATION.--Lat 28°05'56", long 81°53'26", in SE¼SE¼SE¼ sec.27, T.27 S., R.24 E., Hydrologic Unit 03100101, on south side of Tennorock Road, 0.9 mi east of Alternate State Highway 33, and 5.4 mi northeast of Lakeland. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 3 in., depth 72 ft, cased to 45 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 132.01 ft above sea level. Measuring point: Top of casing, 2.30 ft above land-surface datum.

PERIOD OF RECORD.--February 1956 to February 1960 (monthly), incomplete; June 1960 to May 1961 and January 1963 to September 1977 (about thrice yearly); October 1977 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 124.71 ft above sea level, Feb 3,1998; lowest measured, 96.15 ft above sea level, May 7, 1968.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	116.46	DEC 26	113.86	APR 09	113.65	JUN 04	111.85	SEP 26	119.94		
NOV 06	114.28	FEB 26	112.75	MAY 16	111.93	AUG 01	114.59				

WATER YEAR 2001 LOWEST 111.85 JUN 04, 2001 HIGHEST 119.94 SEP 26, 2001

WELL NUMBER.--280715081543501. Combee Road Deep Well near Lakeland, FL.

LOCATION.--Lat 28°07'07", long 81°54'30", in SW¼NE¼SE¼ sec.21, T.27 S., R.24 E., Hydrologic Unit 03100101, at the intersection of State Highway 33 and Combee Road, 1.5 mi southwest of Interstate Highway 4, and 7.3mi northeast of Lakeland. Owner: U.S. Geological Survey.

AQUIFER.--Hawthorn Formation of Miocene Age, Geologic Unit 122 HTRN.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 3 in., depth 55 ft, cased to 31 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 136.20 ft above sea level. Measuring point: Top of casing, 0.86 ft above land-surface datum. Aug. 10, 1999 to May 7, 2000, measuring point 0.18 ft above land-surface datum. June 30, 1991 to Aug. 9, 1999, measuring point 3.41 ft above land-surface datum. Prior to June 30, 1991, measuring point 2.80 ft above land-surface datum.

PERIOD OF RECORD.--January 1956 to September 1977 (thrice yearly); October 1977 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 136.92 ft above sea level, July 7, 1959; lowest measured, 118.56 ft above sea level, Nov. 6, 1964.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	131.33	DEC 26	129.64	APR 09	130.67	JUN 04	129.52	SEP 26	134.35		
NOV 06	130.31	FEB 26	129.21	MAY 16	129.86	AUG 01	131.00				

WATER YEAR 2001 LOWEST 129.21 FEB 26, 2001 HIGHEST 134.35 SEP 26, 2001

WELL NUMBER.--280719081543301. Combee Road Shallow Well near Lakeland, FL.

LOCATION.--Lat 28°07'06", long 81°54'31", in SW¼NE¼SE¼ sec.21, T.27 S., R.24 E., Hydrologic Unit 03100101, at the intersection of State Highway 33 and Combee Road, 1.5 mi southwest of Interstate Highway 4, and 7.3 mi northeast of Lakeland. Owner: U.S. Geological Survey.

AQUIFER.--Nonartesian sand aquifer of Pleistocene Age, Geologic Unit 112 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, nonartesian well, diameter 1.25 in., depth 9 ft, cased to 8 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 136.45 ft above sea level. Measuring point: Top of casing, 3.63 ft above land-surface datum. June 30, 1991 to Oct. 5, 1999, measuring point 1.06 ft above land-surface datum. Prior to June 30, 1991, measuring point 3.00 ft above land-surface datum.

PERIOD OF RECORD.--August 1955 to September 1977 (thrice yearly); October 1977 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 136.97 ft above sea level, Oct. 10, 1995; well observed dry, Nov. 16, 1964.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	131.85	DEC 26	129.78	APR 09	132.18	JUN 04	130.38	SEP 26	135.68		
NOV 06	130.53	FEB 26	129.18	MAY 16	130.69	AUG 01	132.46				

WATER YEAR 2001 LOWEST 129.18 FEB 26, 2001 HIGHEST 135.68 SEP 26, 2001

POLK COUNTY--Continued

WELL NUMBER.--281008081441801. Lake Alfred Deep Well near Lake Alfred, FL.

LOCATION.--Lat 28°10'08", long 81°44'18", in SW¼NW¼NW¼ sec.5, T.27 S., R.26 E., Hydrologic Unit 03100208, on west side of Pit Road, l00 ft north of intersection with State Highway 557, 1.2 mi south of Interstate Highway 4, and 5.0 mi north of Lake Alfred. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 425 ft, cased to 102 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 137.38 ft above sea level. Measuring point: Top of casing, 2.25 ft above land-surface datum.

PERIOD OF RECORD.--July 1959 to November 1960 (monthly); December 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 131.18 ft above sea level, Mar. 21, 1998; lowest, 119.85 ft above sea level, May 3, 1974.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	126.10	123.71	124.24	122.01	123.45	122.65	124.79	123.27	123.00	124.07	126.71	125.79
10	125.85	123.45	123.95	122.42	123.05	122.84	124.41	122.93	123.19	124.47	127.05	126.96
15	125.18	123.56	123.94	123.32	122.77	122.95	123.82	122.52	122.64	125.11	127.13	128.04
20	124.36	123.72	123.83	123.49	122.37	123.16	123.07	122.08	123.12	125.48	126.96	128.37
25	124.29	123.74	123.36	123.47	122.26	123.17	122.86	122.07	123.71	125.64	126.45	128.28
EOM	124.09	124.40	123.21	123.32	121.99	123.89	123.07	122.57	123.92	125.81	125.52	128.40
MAX	126.37	124.40	124.45	123.55	123.49	123.89	124.85	123.41	123.92	125.85	127.15	128.41

CAL YR 2000 MAX 128.14
WTR YR 2001 MAX 128.41

WELL NUMBER.--281008081441802. Lake Alfred Shallow Well near Lake Alfred, FL.

LOCATION.--Lat 28°10'08", long 81°44'18", in SW¼NW¼NW¼ sec.5, T.27 S., R.26 E., Hydrologic Unit 03100208, on west side of Pit Road, 100 ft north of intersection with State Highway 557, 1.2 mi south of Interstate Highway 4, and 5.0 mi north of Lake Alfred. Owner: U.S. Geological Survey.

AQUIFER.--Nonartesian sand aquifer of the Tertiary Quaternary Age, Geologic Unit 111 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, nonartesian well, diameter 2 in., depth and casing length unknown.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 137.25 ft above sea level. Measuring point: Top of casing, 0.20 ft below land-surface datum.

PERIOD OF RECORD.--October 1960 to September 1977 (monthly); October 1977 to September 1983 (bimonthly); October 1983 to September 1997, April 1998 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 137.02 ft above sea level, Aug. 23, 1999; well observed dry on numerous visits.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	132.65	FEB 23	131.60	MAY 14	131.24	AUG 27	134.41				
DEC 20	132.15	APR 20	131.38	JUN 21	130.91	SEP 24	135.85				

WATER YEAR 2001 LOWEST 130.91 JUN 21, 2001 HIGHEST 135.85 SEP 24, 2001

POLK COUNTY--Continued

WELL NUMBER.--281057081495002. ROMP 76A Well near Polk City, FL.

LOCATION.--Lat 28°10'57", long 81°49'50", in NW¼SW¼NE¼ sec.32, T.26 S., R.25 E., Hydrologic Unit 03100208, in pasture at end of Pine Avenue, 0.3 mi north of State Highway 33 in Polk City. Owner: Southwest Florida Water Management District.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation well, diameter 6 in., depth 315 ft, cased to 264 ft.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 136.79 ft above sea level. Measuring point: Top of casing, 3.40 ft above land-surface datum.

PERIOD OF RECORD.--November 1978 to September 1992; October 1992 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 132.84 ft above sea level, Mar. 23, 1998; lowest measured, 119.37 ft above sea level, May 16,1981.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	124.59	JAN 26	123.69	APR 20	123.44	JUN 21	123.67	SEP 26	129.82		
NOV 28	124.83	FEB 23	122.69	MAY 16	122.29	JUL 24	125.92				
DEC 20	123.95	MAR 23	124.06	24	122.58	AUG 27	126.97				

WATER YEAR 2001 LOWEST 122.29 MAY 16, 2001 HIGHEST 129.82 SEP 26, 2001

WELL NUMBER.--281312082011601. ROMP 87 Well near Lakeland, FL.

LOCATION.--Lat 28°13'12", long 82°01'25", in SE¼NE¼SE¼ sec.17, T.26 S., R.23 E., Hydrologic Unit 03l00208, 2.35 mi northwest of intersection of U.S. Highway 98 and Rock Ridge Road, and l4.5 mi northwest of Lakeland. Owner: Southwest Florida Water Management District.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation well, diameter 6 in., depth 380 ft, cased to 300 ft.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 107.52 ft above sea level. Measuring point: Top of casing, 3.73 ft above land-surface datum.

PERIOD OF RECORD.--January 1981 to September 1992; October 1992 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 105.78 ft above sea level, Dec. 29, 1997; lowest measured, 94.88 ft above sea level, June 27, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26	98.26	JAN 25	96.27	APR 24	96.93	JUN 21	95.04	SEP 24	104.06		
NOV 29	97.14	FEB 23	95.82	MAY 14	95.89	JUL 24	99.31				
DEC 19	96.86	MAR 27	96.21	24	95.28	AUG 28	102.52				

WATER YEAR 2001 LOWEST 95.04 JUN 21, 2001 HIGHEST 104.06 SEP 24, 2001

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

POLK COUNTY

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
273903081185201	05-15-01	0948	73911801 33S30E06 USAF AVON PARK #1	65.97
	09-25-01	0818		73.59
273929081080601	05-15-01	0748	POF-20 S-65A WELL NR S CO LINE	41.58
	09-25-01	0750		46.00
274552081115201	05-15-01	1150	RIVER RANCH REPLACEMENT WELL	39.81
274746081202201	05-15-01	1120	747120-- 31S30E08 INDIAN LK ESTATES GOLF COURS	57.03
	09-25-01	1020		62.41
275137081252501	05-15-01	1041	751125-- 30S29E21 E. LK. WALES UTILITY	73.98
	09-25-01	0921		80.88
275622081252301	05-15-01	1251	756125 29S29E28 L. ROSALIE NW	53.52
	09-25-01	1225		59.41
275634081211801	05-15-01	1310	756121-- 29S30E19 KISS STPK NR LK KISSIMMEE	52.64
	09-25-01	1201		57.19
280153081274101	05-16-01	1145	801127-- 28S29E19 LK HATCHI NR HAINES CITY	63.79
	09-25-01	1318		68.99
280558081314801	05-15-01	1430	805131-- 27S28E29 KIMBELL WELL NR LK MARION	67.43
	09-25-01	1347		72.36
281058081495002	05-16-01	0855	USGS 1.75" DRILL PIPE INNER MONITOR AT POLK CITY	122.02
	09-26-01	0856		129.74
281058081495003	05-16-01	0858	USGS 4" ANNULAR MONITOR AT POLK CITY	121.11
	09-26-01	0900		128.87
281058081495004	05-16-01	0849	USGS CORE HOLE 2 AT POLK CITY	119.70
	09-26-01	0849		125.21
281202081391701	05-16-01	1033	PO-1 THORNHILL DEEP NR DAVENPORT	118.90
	09-26-01	1055		124.58
281317081491301	05-16-01	0912	813149423 26S25E16	121.14
	09-26-01	0913		127.70
281440081431701	05-16-01	0951	814143232 26S26E04	121.69
	09-26-01	0955		127.48
281532081345001	05-16-01	1015	815134134 26S27E02 LOUGHMAN DP WELL NR LOUGHMAN	86.12
	09-26-01	1032		91.43
281532081493001	05-16-01	0928	815149233 25S25E32	119.85
	09-26-01	0930		125.86

KEY TO SITE LOCATIONS ON FIGURE 24
PUTNAM COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number
1	292824081443301	240
2	292948081503001	240
3	293633081594601	241
4	294243081555901	241

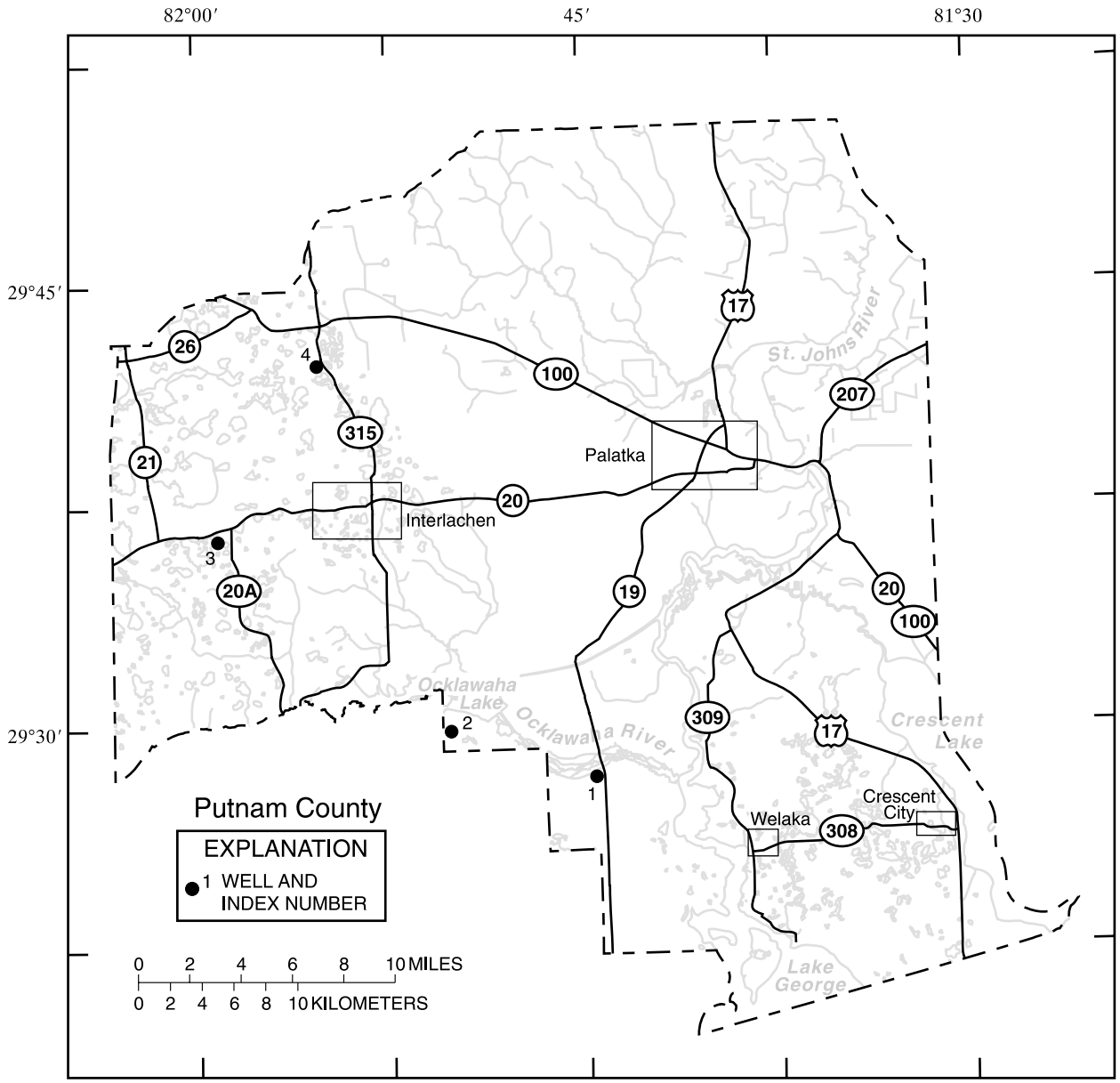

Figure 24.--Location of wells in Putnam County.

PUTNAM COUNTY

WELL NUMBER.--292824081443301. Local Number P-0472 Well. Johnson's Field Well near Welaka, FL.

LOCATION.--Lat 29°28'24", long 81°44'33", in land grant 37, T.12 S., R.25 E., Hydrologic Unit 03080102, 140 ft north of Forest Road 77 in the Ocala National Forest, 0.2 mi west of State Highway 19, and 13.5 mi south of intersection of State Highways 19 and 20 in Palatka. Owner: St. Johns River Water Management District.

AQUIFER.--Floridan aquifer system of the Tertiary system, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation, artesian well, diameter 4 in., depth 240 ft, cased to 96 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Land-surface datum is 13.51 ft above sea level. Measuring point: Top of 4 in. casing, 0.49 ft above land-surface datum.

PERIOD OF RECORD.--May 1982 to September 2000 (semiannually); December 2000 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.67 ft above sea level, Sept. 13, 1983; lowest measured, 2.72 ft above sea level, May 16, 1989.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 18	7.30	FEB 26	6.69	APR 23	6.41	MAY 23	6.40	JUL 24	6.81	SEP 24	8.72
JAN 29	6.80	MAR 26	6.78	MAY 14	6.52	JUN 21	6.33	AUG 27	6.96		

WATER YEAR 2001 LOWEST 6.33 JUN 21, 2001 HIGHEST 8.72 SEP 24, 2001

WELL NUMBER.--292948081503001. Well RD-77-G near Orange Springs, FL.

LOCATION.--Lat 29°29'48", long 81°50'30", in NW¼SW¼NW¼ sec. 31, T.11 S., R.25 E., Hydrologic Unit 03080102, in northeast corner of intersection of roads 77 and 77-G in Ocala National Forest, 7.3 mi west of State Highway 19, and about 6.0 mi east of Orange Springs. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary system, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 4 in., depth 241 ft, cased to 215 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Land-surface datum is 100.81 ft above sea level. Measuring point: Top of 4 in. casing, 2.50 ft above land-surface datum.

COOPERATION.--Since October 1, 1985 records provided by St. Johns River Water Management District and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--September 1982 to September 1985 (bimonthly), October 1985 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.28 ft above sea level, May 8, 1998; lowest measured, 16.84 ft above sea level, Mar. 25, 1992.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	20.27	DEC 18	20.20	FEB 23	18.95	APR 23	19.15	JUN 20	18.83	AUG 27	18.94
NOV 29	20.54	JAN 26	19.26	MAR 26	19.15	MAY 22	18.91	JUL 23	18.84	SEP 21	19.73

WATER YEAR 2001 LOWEST 18.83 JUN 20, 2001 HIGHEST 20.54 NOV 29, 2000

PUTNAM COUNTY--Continued

WELL NUMBER.--293633081594601. Local Number P-0464 Well. Cowpen Lake Drainage Well near Johnson, FL.

LOCATION.--Lat 29°36'33", long 81°59'46", in SE¼SE¼NE¼, sec. 21 T.10 S., R.25 E., Hydrologic Unit 03080102, 30 ft south of State Highway 20, 1.9 mi east of intersection of State Highway 20 and 21, and 2.1 mi northwest of Johnson. Owner: Florida Department of Transportation.

AQUIFER.--Floridan aquifer system of the Tertiary system, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, lake overflow, artesian well, diameter 10 in., depth 250 ft, cased to 193 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Land-surface datum is 91.33 ft above sea level. Measuring point: High point of re-bar cover, 2.00 ft above land-surface datum.

PERIOD OF RECORD.--September 1995 to September 2000 (semiannually); December 2000 to September 2001 (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 83.65 ft above sea level, May 8, 1998; lowest measured, 74.57 ft above sea level, June 21, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 18	76.81	FEB 26	75.98	APR 23	75.56	MAY 23	74.76	JUL 24	74.74	SEP 24	76.05
JAN 29	76.16	MAR 26	76.26	MAY 14	75.08	JUN 21	74.57	AUG 27	75.20		

WATER YEAR 2001 LOWEST 74.57 JUN 21, 2001 HIGHEST 76.81 DEC 18, 2000

WELL NUMBER.--294243081555901. Local Number P-0822 Well. Florida Rock Well near Grandin, FL.

LOCATION.--Lat 29°42'43", long 81°55'59", in SW¼SE¼NE¼, sec. 18 T.9 S., R.24 E., Hydrologic Unit 03080102, 15 ft east of Woods Road, 1.0 mi southeast of Florida Rock sand mine entrance on State Highway 100, and 1.4 mi southwest of Grandin. Owner: Florida Rock.

AQUIFER.--Floridan aquifer system of the Tertiary system, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation, artesian well, diameter 4 in., depth 254 ft, cased to 144 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Land-surface datum is 104.23 ft above sea level. Measuring point: Shelter floor, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--May 1996 to September 2000 (semiannually); December 2000 to September 2001 (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 87.03 ft above sea level, May 8, 1998; lowest measured, 77.04 ft above sea level, Aug. 27, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 18	79.71	FEB 26	78.65	APR 23	78.38	MAY 23	78.01	JUL 24	77.37	SEP 24	77.65
JAN 29	78.87	MAR 26	78.55	MAY 14	77.97	JUN 21	77.71	AUG 27	77.04		

WATER YEAR 2001 LOWEST 77.04 AUG 27, 2001 HIGHEST 79.71 DEC 18, 2000

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

PUTNAM COUNTY

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
292124081345202	05-15-01	0955	P-0736 MIDDLE RD UPPER DEEP	6.10
	09-26-01	1225		8.86
292218081333101	05-15-01	0920	P-0410 POTMAP WELL NR GEORGETOWN,FL	22.03
	09-26-01	1115		25.91
292239081282401	09-26-01	1340	P-0255	12.99
292239081313702	05-15-01	1035	P-0696	23.73
292254081382101	05-15-01	0750	SJ P421 13S27E39 DRAYTONISLAND EASTSHORELANDIN	9.35
	09-27-01	1005		12.34
292435081441301	05-14-01	1345	NR FRONTIER D H NR SALT SPGS	8.96
	09-24-01	1050		11.58
292555081305003	05-15-01	1235	P-2037 REPLACEMENT WELL AT LAKE STELLA	19.50
	09-26-01	1420		24.16
292628081385501	05-15-01	0845	SJ P396 12S26E23 WELAKAFISHHATCHERYFRUITLAND	10.72
	09-26-01	0945		12.44
292824081341501	05-15-01	1305	P-0246 COL. SAULS	28.02
	09-26-01	1450		32.02
292859081375701	05-15-01	1340	P-408 HWAY 308B	14.39
	09-26-01	0920		18.50
293113081370301	05-15-01	1405	SJ P382 11S27E19 MAINROAD OFFSISCORDPOMONAPARK	25.57
	09-26-01	0840		28.26
293206081351701	05-15-01	1440	P-0817	22.43
	09-26-01	0805		25.78
293300081523901	05-14-01	1245	933152 11S24E11 CE 60 U S A CORPS ENG.	58.56
	09-24-01	0945		59.97
293554081342601	05-15-01	1525	SAN MATEO TOWERSITE DEEP	12.44
	09-25-01	1420		16.83
293733081474801	05-14-01	1200	HOLLISTER WORKCTR CF (P-510)	46.66
	09-24-01	0850		48.92
293755081412903	05-14-01	1425	P-0891 EH MILLER SCHOOL	23.94
	09-24-01	1130		27.62
293933081342801	05-16-01	0805	93913411 10S27E04 P-172 CRACKER SWAMP	11.09
	09-25-01	1335		18.31
293951081413901	05-14-01	1455	P-0123 DHQ DEEP WELL	24.02
	09-24-01	1155		28.35
294255081323501	05-16-01	0840	P-0076 A.J.ROBERTS	13.38
	09-25-01	1300		19.04
294553081344301	05-16-01	0710	94513401 08S27E-- RIVERDALE NO 61	19.88
	09-24-01	1235		25.68

KEY TO SITE LOCATIONS ON FIGURE 25
ST. JOHNS COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number
1	295357081294301	246
2	295713081203401	246
3	300717081381001	247
4	300758081230501	247
5	301132081225801	248

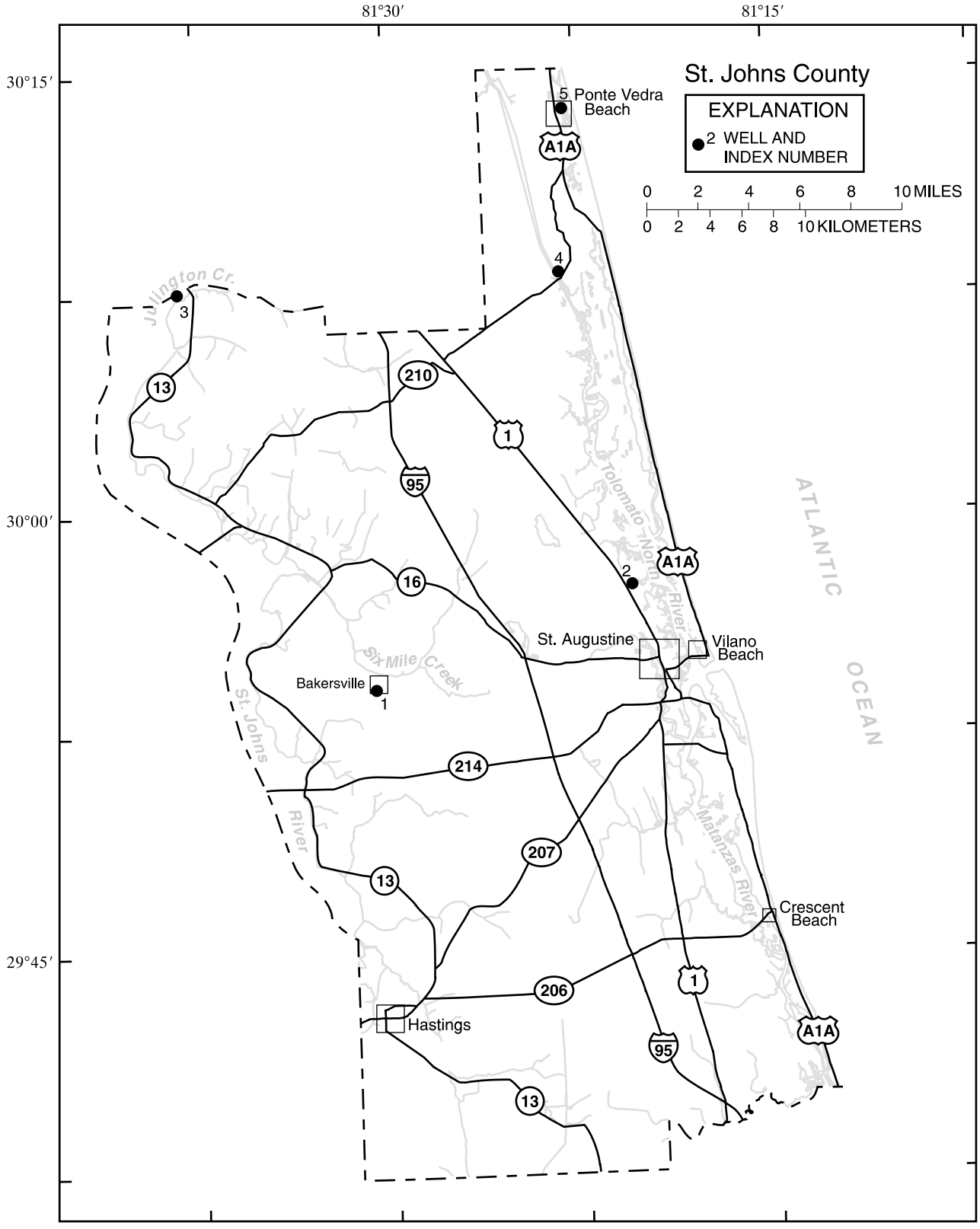

Figure 25.--Location of wells in St. Johns County.

ST. JOHNS COUNTY

WELL NUMBER.--295357081294301. Local Number SJ-77. Engel Well near Molasses Junction, FL.

LOCATION.--Lat 29°53'57", long 81°29'43", in NE¼NE¼NE¼ sec. 17, T.7 S., R.28 E., Hydrologic Unit 03080103, in ditch on the west side of Alternate State Road 13, and 0.4 mi south of State Road 208. Owner: Mr. Engel.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 4 in., depth and casing length unknown.

INSTRUMENTATION.--Bimonthly measurement with pressure gage.

DATUM.--Land-surface datum is 20.62 ft above sea level. Measuring point: Top of 4 in. tee at land-surface datum.

REMARKS.--Water level seasonally affected by pumping of nearby wells.

PERIOD OF RECORD.--May 1977 to May 1986 (semiannually); July 1986 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 40.82 ft above sea level, Feb. 6, 1997; lowest measured, 21.97 ft above sea level, Apr. 8, 1991.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06	29.62	MAR 05	25.62	JUL 05	27.62		

WATER YEAR 2001 LOWEST 25.62 MAR 05, 2001 HIGHEST 29.62 NOV 06, 2000

WELL NUMBER.--295713081203401. Local Number SJ-89. Airport Well near St. Augustine, FL.

LOCATION.--Lat 29°57'13", long 81°20'34", in land grant 50, T.6 S., R.29 E., Hydrologic Unit 03080201, at St. Augustine Airport on U.S. Highway 1, 2.5 mi north of St. Augustine. Owner: St. Augustine Airport Authority.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 4 in., depth 350 ft, cased to 190 ft.

INSTRUMENTATION.--Monthly measurement with pressure gage.

DATUM.--Land-surface datum is 9.48 ft above sea level. Measuring point: File marks on south side of 9 in flange at land-surface datum.

PERIOD OF RECORD.--May 1978 to September 1980 (semiannually); May 1981 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.98 ft above sea level, Dec. 21, 1994; lowest measured, 23.28 ft above sea level, May 23, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	25.88	DEC 18	27.18	FEB 26	26.38	APR 23	23.78	JUN 21	25.38	AUG 27	26.88
NOV 29	26.68	JAN 24	26.78	MAR 26	26.68	MAY 23	23.28	JUL 24	27.08	SEP 27	29.38

WATER YEAR 2001 LOWEST 23.28 MAY 23, 2001 HIGHEST 29.38 SEP 27, 2001

ST. JOHNS COUNTY--Continued

WELL NUMBER.--300717081381001. Local Number SJ-15. S.L. Chavez Well near Mandarin, FL.

LOCATION.--Lat 30°07'17", long 81°38'10", in NE¼SW¼SW¼ sec. 30, T.4 S., R.27 E., Hydrologic Unit 03080103, 300 ft north of Fruit Cove Road, 0.6 mi west of the intersection of State Road 13 and Fruit Cove Road, and 3.7 mi south of old Mandarin Post Office. Owner: S.L. Chavez.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 3 to 2 in., depth 580 ft, cased to 300 ft.

INSTRUMENTATION.--Monthly measurement with pressure gage.

DATUM.--Land-surface datum is 8.12 ft above sea level. Measuring point: Top of 3 in. tee, 1.20 ft above land-surface datum.

PERIOD OF RECORD.--1974, 1977 to 1980 (semiannually); May 1981 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 41.02 ft above sea level May 12, 1980; lowest measured, 17.32 ft above sea level, May 21, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	25.22	JAN 24	26.32	APR 24	19.92	MAY 29	17.82	JUN 18	23.32	JUL 24	24.02
NOV 29	26.22	FEB 23	24.42	MAY 14	19.02	JUN 04	19.32	25	24.32	AUG 28	23.12
DEC 19	25.82	MAR 22	26.32	21	17.32	11	21.32	JUL 16	22.72	SEP 27	28.02

WATER YEAR 2001 LOWEST 17.32 MAY 21, 2001 HIGHEST 28.02 SEP 27, 2001

WELL NUMBER.--300758081230501. Local Number SJ-5. G. Oesterreicher Well near Palm Valley, FL.

LOCATION.--Lat 30°07'58", long 81°23'05", in land grant 54, T.4 S., R.29 E., Hydrologic Unit 03080201, 100 ft east of the Intracoastal Waterway, 250 ft northwest of State Highways 210 and 210A, and 2.8 mi south of Palm Valley. Owner: Eddie Ervin.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 6 in., depth 350 ft, cased to 180 ft.

INSTRUMENTATION.--Monthly measurement with pressure gage.

DATUM.--Land-surface datum is 4.53 ft above sea level. Measuring point: Top of 4 in. gate valve, 2.18 ft above land-surface datum.

PERIOD OF RECORD.--1934, 1940, 1944 to 1946 (annually); 1947 to 1963 (bimonthly); 1964 to 1980 (annually); May 1981 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 50.73 ft above sea level, Nov. 9, 1948; lowest measured, 22.71 ft above sea level, June 27, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	29.71	DEC 19	29.41	FEB 23	29.81	APR 24	26.01	JUN 21	26.51		
NOV 29	29.51	JAN 24	29.61	MAR 22	29.91	MAY 23	23.71	JUL 24	27.31		

WATER YEAR 2001 LOWEST 23.71 MAY 23, 2001 HIGHEST 29.91 MAR 22, 2001

ST. JOHNS COUNTY--Continued

WELL NUMBER.--301132081225801. Local Number SJ-150. Ponte Vedra Test Well near Ponte Vedra, FL.

LOCATION.--Lat 30°11'28", long 81°23'01", in land grant 70, T.4 S., R.29 E., Hydrologic Unit 03080201, 290 ft west of State Highway 210 behind St. Johns County Courthouse Annex and Library, 1500 ft southwest of junction of State Highways 201 and A1A, and 1.6 mi southwest of Ponte Vedra Post Office. Owner: St. Johns River Water Management District.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 2,035 ft, cased to 1,980 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Land-surface datum is 6.34 ft above sea level. Measuring point: Tap-base in flange cover, 6.51 ft above land-surface datum.

PERIOD OF RECORD.--April 1986 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.63 ft above sea level, Mar. 29, 1993; lowest measured, 7.76 ft below sea level, June 27, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	-3.68	DEC 19	-4.60	FEB 23	-4.35	APR 24	-5.76	JUN 21	-6.02	AUG 28	-3.68
NOV 29	-4.37	JAN 24	-4.84	MAR 22	-4.49	MAY 23	-6.55	JUL 24	-4.56	SEP 27	-2.50

WATER YEAR 2001 LOWEST -6.55 MAY 23, 2001 HIGHEST -2.50 SEP 27, 2001

Note.--Negative figures indicate water level below sea level.

ST JOHNS COUNTY

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
293729081221201	05-16-01	0925	SJ-104 MEADOWBRICK WELL	11.29
	09-26-01	1210		16.02
294128081291301	09-26-01	1150	SJ-263 D.REID	14.88
294213081194401	05-16-01	0900	SJ-0602 DOT I95 SOUTH	12.75
	09-26-01	1225		16.20
294519081184502	05-16-01	0845	SJ-516 DUPONT CTR FIRE TOWER NR YELVINGTON,FL	12.26
	09-26-01	1239		15.52
294701081263301	05-15-01	1055	SJ-317 SIKES WELL NR ELKTON,FL	1.31
	09-26-01	1010		22.47
295000081212702	09-26-01	1310	SJ0824 TREATY PARK WELL AT ST AUGUSTINE,FL	24.60
295039081325401	05-15-01	1040	SJ-133 WILSON	23.00
	09-26-01	0922		25.70
295132081164801	09-26-01	1355	SJ-92 ST.JOHNS CO.PARKS-REC OFFICE	19.41
295427081293101	05-15-01	1025	SJ-0027 BAKERSVILLE TOWER	23.83
	09-26-01	0900		31.38
295903081334301	05-14-01	0950	SJ-119 (SUB FOR SJ-11)	20.93
	09-26-01	1000		30.23
300203081202701	05-16-01	0740	SJ-0548 GUANA PARK FLORIDAN	23.00
	09-26-01	1425		25.20
300340081383901	09-26-01	1050	SJ0508 GREENBRIER RD MIDDLE SCH NR SWITZERLAND,FL	31.00
300341081395401	05-14-01	1030	SJ-12	25.97
	09-26-01	1020		31.67
300507081272701	05-14-01	0910	SJ-163 SJRWMD DURBIN OBSERVATION WELL	33.18
	09-26-01	1130		37.73
301037081243901	05-17-01	1050	SJ-10	19.69
	09-27-01	1000		28.49
301212081252401	05-17-01	1020	SJ-63 DEE DOT RANCH AT BULL PEN	34.88
	09-27-01	0940		38.88
301408081253101	05-17-01	0950	SJ-60 DEE DOT RANCH AT CRACKER LODGE	13.54
	09-27-01	0915		22.84

KEY TO SITE LOCATIONS ON FIGURE 26
SEMINOLE COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number
1	284147081220201	252
2	284271081023001	252

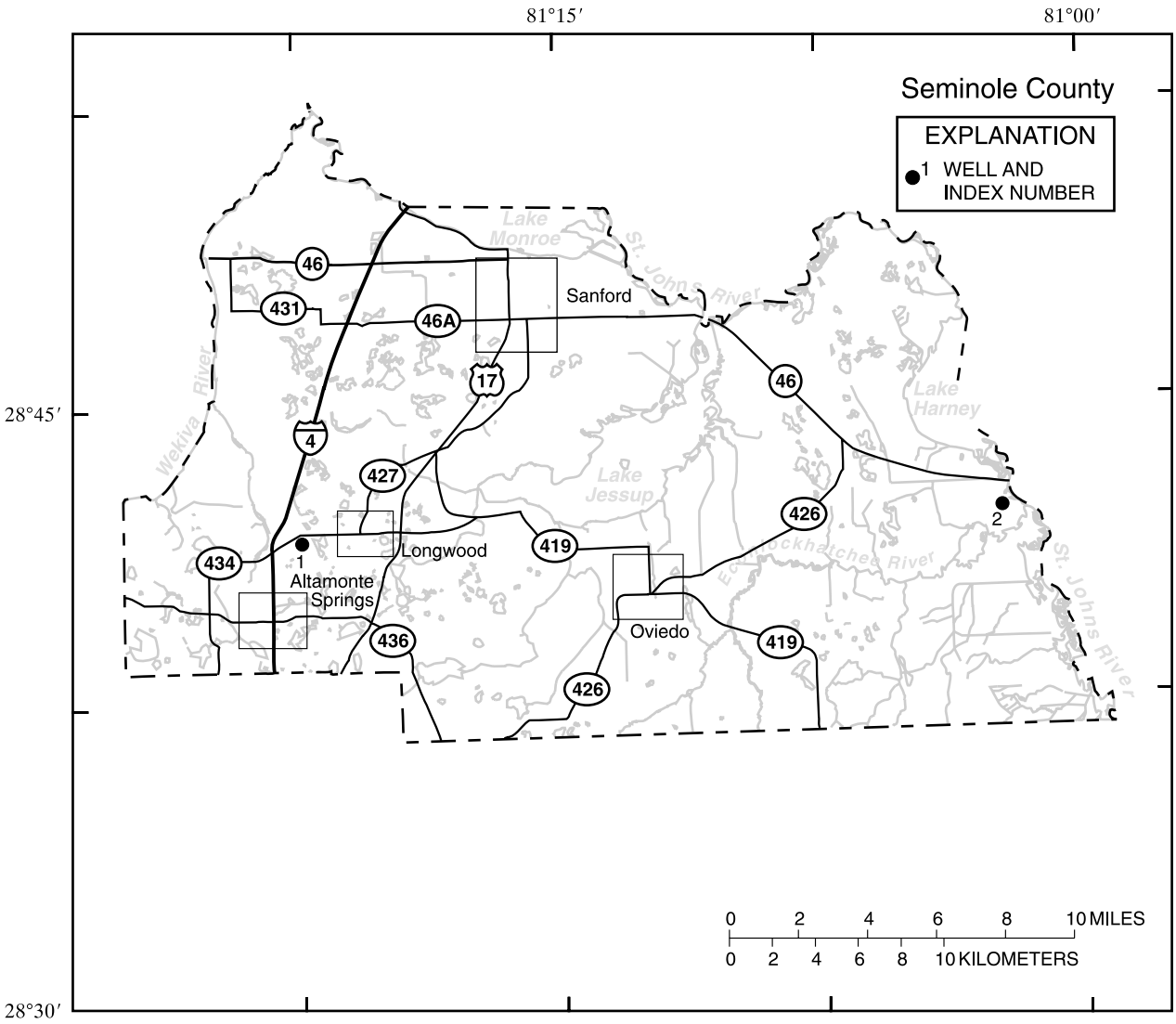

Figure 26.--Location of wells in Seminole County.

SEMINOLE COUNTY

WELL NUMBER.--284147081220201. Seminole 125 Well at Longwood, FL.

LOCATION.--Lat 28°41'47", long 81°22'02", in NW¼NE¼ sec.1, T.21 S., R.29 E., Hydrologic Unit 03080101, 500 ft south of State Highway 434, at a point 1.3 mi west of State Highway 427 in Longwood. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 146 ft, cased to 63 ft.

INSTRUMENTATION.--Water-stage recorder--15-minute interval.

DATUM.--Elevation of land-surface datum is 85.69 ft above sea level. Measuring point: Top of recorder shelf, 1.26 ft above land-surface datum.

PERIOD OF RECORD.--October 1951 to September 1952 (monthly); November 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 55.80 ft above sea level, Sept. 30, 1960; lowest, 30.11 ft above sea level, May 27, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	39.13	33.59	33.99	36.81	37.40	35.82	37.06	36.50	36.36	36.24	39.29	39.79
10	38.36	36.21	36.34	36.63	37.21	36.99	36.92	32.56	36.55	37.45	39.33	40.92
15	34.81	36.20	37.16	36.88	36.90	36.45	35.62	35.49	36.68	37.56	39.24	42.26
20	34.25	36.10	37.10	37.06	36.68	34.44	35.85	31.09	37.04	38.52	39.39	42.28
25	37.04	36.49	36.89	36.87	33.46	36.62	35.23	34.59	37.40	39.24	38.99	42.65
EOM	33.96	37.03	37.17	37.23	36.62	37.55	35.87	35.21	37.45	38.56	36.04	42.34
MAX	39.13	37.12	37.19	37.41	37.57	37.55	37.56	36.51	37.65	39.30	39.60	42.71

CAL YR 2000 MAX 40.21
WTR YR 2001 MAX 42.71

WELL NUMBER.--284217081023001. Kilbee Number 3 Test Well near Geneva, FL.

LOCATION.--Lat 28°42'17", long 81°02'30", in SE¼NE¼SW¼ sec.32, T.20 S., R.33 E., Hydrologic Unit 03080101, near mouth of Econlockhatchee River, 0.5 mi west of St. Johns River, 0.7 mi south of State Road 46, and 5.0 mi southeast of Geneva. Owner: St. Johns River Water Management District.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 154 ft, cased to 58 ft.

INSTRUMENTATION.--Monthly measurements with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 11.76 ft above sea level. Measuring point: Top of casing, 1.33 ft above land-surface datum.

PERIOD OF RECORD.--May 1982 to September 1995 (semiannually); January 1996 to September 1997 (monthly); May 1998 to September 2000 (semiannually); December 2000 to September 2001 (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.88 ft above sea level, Oct. 11, 1982; lowest, 5.85 ft above sea level, May 15, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 19	6.80	FEB 21	6.32	APR 23	6.29	MAY 22	6.10	JUL 24	8.55	SEP 28	11.22
JAN 23	6.52	MAR 23	6.90	MAY 15	6.35	JUN 21	6.51	AUG 27	9.33		

WATER YEAR 2001 LOWEST 6.10 MAY 22, 2001 HIGHEST 11.22 SEP 28, 2001

SEMINOLE COUNTY

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
283933081123103	05-15-01	0939	S-1193 AT OVIEDO WTP	30.68
	09-24-01	0940		31.89
284052081212601	05-15-01	0855	S-1014 CHARLOTTE STREET	38.05
	09-25-01	1030		45.01
284133081105701	05-15-01	1432	FLORIDA AVE WELL NR OVIEDO	18.59
	09-24-01	0920		23.09
284247081070801	05-15-01	1000	GENEVA WELL S-0001 NR GENEVA,FL	15.98
	09-24-01	1015		19.82
284412081071102	05-15-01	1100	OLD GENEVA FIRE STATION S-1253	13.57
	09-24-01	1205		17.97
284533081204801	05-15-01	1300	84512005 20S30E08	28.63
	09-25-01	1230		34.40
284715081051802	05-15-01	1135	S-0086 OSCEOLA LANDFILL	7.07
	09-24-01	1305		11.56
284923081234802	05-15-01	1227	S-1230 YANKEE LAKE	16.87
	09-24-01	1425		20.87

KEY TO SITE LOCATIONS ON FIGURE 27
SUMTER COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number
1	282127082022501	256
2	282741081585701	256
3	283638082025702	257
4	284619082035101	257
5	285121082112201	258
6	285207082014501	258

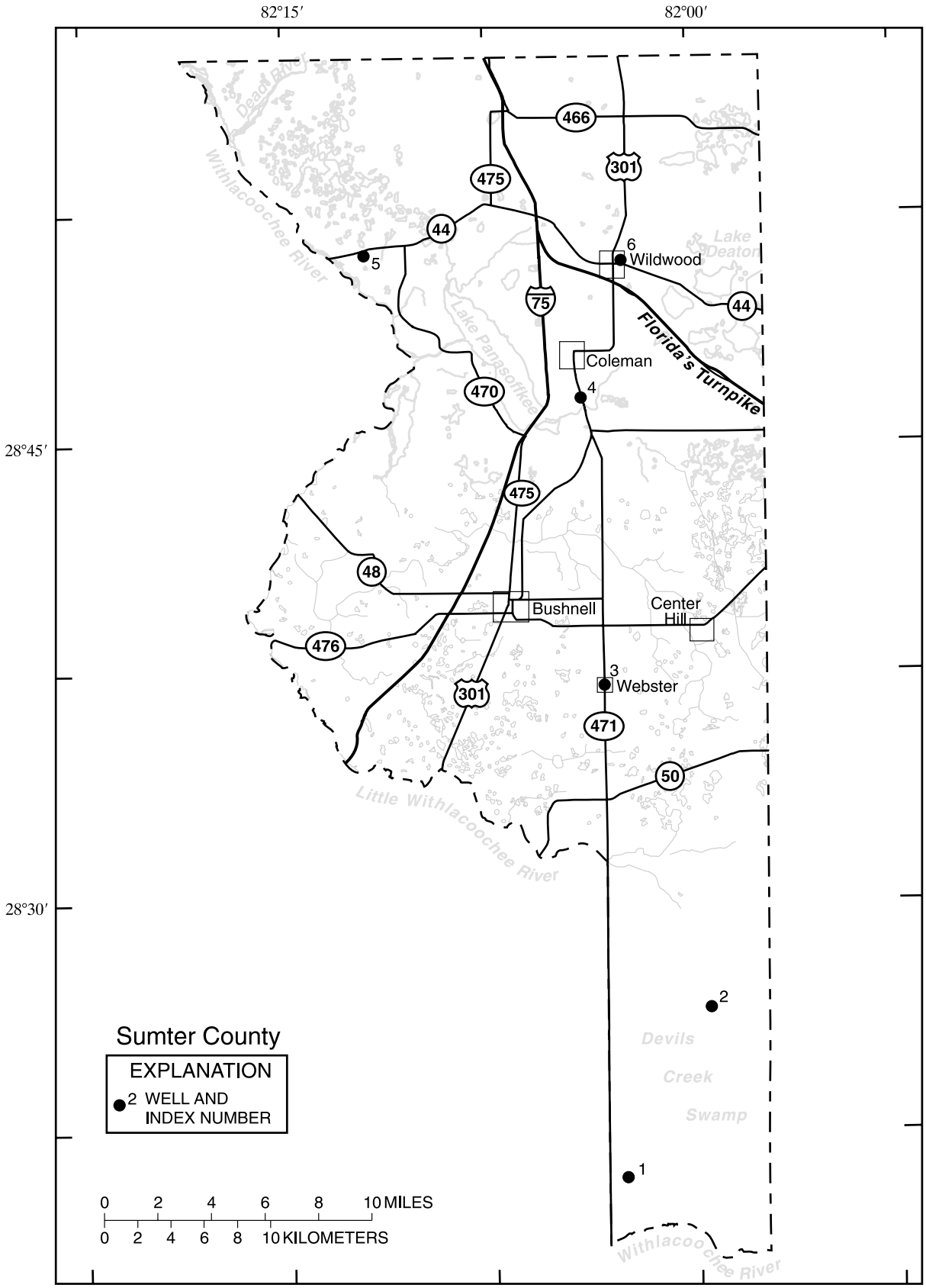

Figure 27.--Location of wells in Sumter County.

SUMTER COUNTY

WELL NUMBER.--282127082022501. Cumpressco Ranch Well near Tarrytown, FL.

LOCATION.--Lat 28°21'27", long 82°02'25", in SE¼NE¼NE¼ sec.31, T.24 S., R.23 E., Hydrologic Unit 03100208, in pasture, 600 ft south of Main Line Road, 1.6 mi east of State Highway 471, and 13.6 mi south of Tarrytown. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit l20 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 143 ft, cased to 20 ft.

INSTRUMENTATION.--Water-stage recorder--60-minute interval.

DATUM.--Elevation of land-surface datum is 97.40 ft above sea level. Measuring point: Top of recorder shelf, 3.01 ft above land-surface datum.

PERIOD OF RECORD.--March 1959 to September 2001 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 94.99 ft above sea level, Dec. 13, 1997; lowest, 82.42 ft above sea level, June 28-30, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	90.22	86.92	85.66	85.16	85.48	85.63	88.40	85.35	83.21	84.26	91.69	89.30
10	89.38	86.59	85.57	85.04	85.77	85.59	88.06	84.91	83.03	84.59	92.30	93.67
15	88.76	86.27	85.46	84.94	85.90	85.50	87.38	84.53	82.85	85.13	91.25	94.79
20	88.14	86.04	85.41	84.88	85.85	86.23	86.69	84.16	82.69	85.89	91.59	93.37
25	87.67	85.86	85.31	84.79	85.80	86.69	86.22	83.81	82.89	86.34	90.61	93.45
EOM	87.23	85.73	85.23	84.81	85.76	88.59	85.71	83.45	83.70	87.11	89.92	93.13
MAX	90.85	87.16	85.73	85.17	85.91	88.59	88.66	85.65	83.70	87.16	92.30	94.79

CAL YR 2000 MAX 90.97
WTR YR 2001 MAX 94.79

WELL NUMBER.--282741081585701. Withlacoochee State Forest Green Swamp Well near Bay Lake, FL.

LOCATION.--Lat 28°27'41", long 81°58'57", in NE¼NE¼NW¼ sec.26, T.23 S., R.23 E., Hydrologic Unit 03100208, in Withlacoochee State Forest, at southwest corner of Center and South Loop Roads, 4.8 mi east of State Highway 471, and 4.8 mi west of Bay Lake. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 3 in., depth 175 ft, cased to 99 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 96.94 ft above sea level. Measuring point: Top of casing, 1.60 ft above land-surface datum. Prior to June 1991, 3.00 ft above land-surface datum.

COOPERATION.--Data provided by Southwest Florida Water Management District from October 1983 to September 1985.

PERIOD OF RECORD.--July 1959, September 1964 to September 1984 (bimonthly); October 1984 to September 1985 (monthly); October 1986 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 96.50 ft above sea level, July 8, 1974; lowest measured, 89.29 ft above sea level, May 4, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	92.88	FEB 12	91.66	MAY 14	90.75	JUL 30	92.27	SEP 24	95.65		
DEC 18	91.36	APR 10	92.39	JUN 04	91.85	SEP 19	95.23				

WATER YEAR 2001 LOWEST 90.75 MAY 14, 2001 HIGHEST 95.65 SEP 24, 2001

SUMTER COUNTY--Continued

WELL NUMBER.--283638082025702. Webster City Well 2 at Webster, FL.

LOCATION.--Lat 28°36'38", long 82°02'57", in SW¼SE¼SW¼ sec.31, T.21 S., R.23 E., Hydrologic Unit 03100208, 100 ft west of town water tank at east end of Main Street in Webster. Owner: City of Webster.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 8 in., depth 341 ft, cased to 174 ft.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 91.85 ft above sea level. Measuring point: Mark on top of 14 in casing protector, 2.94 ft above land-surface datum.

PERIOD OF RECORD.--April to September 1978; October 1979 to September 1992; October 1992 to current year (monthly). Prior to October 1992 published as Webster City Recorder Well at Webster, FL.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 88.50 ft above sea level, Mar. 23, 1998; lowest daily maximum water level, 74.45 ft above sea level, July 20, 1981.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	78.85	JAN 24	76.45	APR 23	76.52	JUN 20	74.88	SEP 24	83.24		
NOV 28	77.77	FEB 22	75.90	MAY 14	75.77	JUL 23	75.77				
DEC 18	77.23	MAR 26	75.79	23	75.44	AUG 27	78.24				

WATER YEAR 2001 LOWEST 74.88 JUN 20, 2001 HIGHEST 83.24 SEP 24, 2001

WELL NUMBER.--284619082035101. ROMP 111 Well at Tompkins Park near Coleman, FL.

LOCATION.--Lat 28°46'19", long 82°03'51", in NW¼SE¼SW¼ sec.1, T.20 S., R.22 E., Hydrologic Unit 03100208, in G.B. Tompkins Park on U.S. Highway 301, 500 ft north of Shady Brook, and 2.0 mi south of Coleman. Owner: Southwest Florida Water Management District.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, observation well, diameter 8 in., depth 192 ft, cased to 62 ft.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 59.34 ft above sea level. Measuring point: Top of 8 in. coupling, 1.62 ft above land-surface datum.

PERIOD OF RECORD.--October 1975 to September 1992; October 1992 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 53.09 ft above sea level, Mar. 31, 1987; lowest, 44.23 ft above sea level, July 30, 1992.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	48.06	JAN 24	47.62	APR 23	48.29	JUN 20	47.26	SEP 26	51.45		
NOV 28	47.74	FEB 22	47.69	MAY 15	47.76	JUL 23	48.69				
DEC 18	47.78	MAR 26	48.70	23	47.49	AUG 27	49.31				

WATER YEAR 2001 LOWEST 47.26 JUN 20, 2001 HIGHEST 51.45 SEP 26, 2001

SUMTER COUNTY--Continued

WELL NUMBER.--285121082112201. Sumter 13 Well near Wildwood, FL.

LOCATION.--Lat 28°51'21", long 82°11'22", in NW¼NE¼NE¼ sec.10, T.19 S., R.21 E., Hydrologic Unit 03100208, on south side of State Highway 44, 2.0 mi east of Withlacoochee River, and 9.1 mi west of Wildwood. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 3l ft, cased to 26 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 50.80 ft above sea level. Measuring point: Top of 6 in. coupling, 2.50 ft above land-surface datum.

PERIOD OF RECORD.--December 1964 to July 1973 (bimonthly); August 1973 to September 1992; October 1992 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 47.16 ft above sea level, Oct. 6, 1982; lowest water level measured, 37.02 ft above sea level, January 24, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	37.82	JAN 24	37.02	APR 23	39.01	JUN 20	37.31	SEP 25	41.73		
NOV 28	37.16	FEB 22	37.18	MAY 15	37.98	JUL 23	39.61				
DEC 18	37.06	MAR 26	38.29	23	37.72	AUG 27	38.93				

WATER YEAR 2001 LOWEST 37.02 JAN 24, 2001 HIGHEST 41.73 SEP 25, 2001

WELL NUMBER.--28520708201450l. Masters Avenue City Well at Wildwood, FL.

LOCATION.--Lat 28°52'07", long 82°01'45", in SE¼SE¼NW¼ sec.5, T.19 S., R.23 E., Hydrologic Unit 03100208, 100 ft east of Masters Avenue, and 600 ft north of Cleveland Avenue in Wildwood. Owner: City of Wildwood.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geological Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 12 in., depth 82 ft, cased to 62 ft.

INSTRUMENTATION.--Bimonthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 82.58 ft above sea level. Measuring point: Bottom edge of 2 in. vent pipe, 1.48 ft above land-surface datum.

PERIOD OF RECORD.--March 1961 to January 1978 (bimonthly); February 1978 to October 1979; November 1979 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 57.86 ft above sea level, Sept. 15, 1964; lowest measured, 43.54 ft above sea level, February 13, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	44.65	FEB 13	43.54	MAY 15	44.47	JUL 30	44.38	SEP 26	47.67		
DEC 18	43.87	APR 10	45.82	JUN 04	43.66	SEP 17	46.32				

WATER YEAR 2001 LOWEST 43.54 FEB 13, 2001 HIGHEST 47.67 SEP 26, 2001

SUMTER COUNTY

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
281951082012001	05-14-01	1018	81920101GREEN SWAMP L11MD NR DADE CITY, FL	83.75
	09-24-01	1108		91.91
281951082012002	05-14-01	1016	81920102GREEN SWAMP L11MM NR DADE CITY, FL	83.11
	09-24-01	1110		92.16
281951082012003	09-24-01	1105	81920103 GREEN SWAMP L11MS NR DADE CITY, FL	92.04
282740082012101	05-14-01	1110	82720101GREEN SWAMP L12BD NR BAY LAKE, FL	84.48
	09-24-01	1020		92.20
282740082012102	05-14-01	1115	82720102GREEN SWAMP L12BS NR BAY LAKE, FL	84.54
	09-24-01	1022		92.12
283432081592401	05-14-01	0922	83415901 22S23E15 JC 51 HUGH ILEY	83.48
	09-24-01	0925		90.04
283539082000301	05-14-01	1228	83520001 25S23E10 JC 67 FLA ROCK IND NO 2	79.32
	09-24-01	1425		90.13
283637082081501	05-14-01	1250	83620801 21S22E32 SCL RR USED 155	59.83
	09-25-01	0810		66.96
283638082025702	09-24-01	1415	83620204 TOWN OF WEBSTER, FL.	83.24
283829082123701	05-14-01	1310	83821202 21S21E21 JC 47 N R DOKE	38.41
	09-25-01	0835		43.56
283904082001601	05-15-01	0745	83920001 21S23E22 JC 65 U S GEOL SURVEY	73.50
283952082022001	05-15-01	0805	83920201 21S23E18 JC 42 PARROT RANCH	67.82
	09-25-01	0727		77.27
283953082051401	05-15-01	0845	83920501 21S22E14 JC 36	66.73
	09-25-01	1032		76.30
284105081594301	09-25-01	0656	STUART RANCH REPLACEMENT NR CENTER HILL	88.75
284115082062601	05-15-01	0955	84120601 21S22E04 JC 27A	54.04
	09-25-01	0945		62.35
284126082034501	05-15-01	0825	84120305 21S22E01 JC 45 PARROT RANCH	71.19

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

SUMTER COUNTY-Continued

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
284146082061401	05-15-01	1004	84120604 21S22E03 JC 32	54.17
	09-25-01	0953		60.85
284147082052801	09-25-01	1009	84120506 21S22E03 JC 34	66.46
284212082071701	05-15-01	0920	84220702 20S22E32 JC 63 U S GEOL SURVEY	51.56
	09-25-01	0932		55.76
284317082142601	05-14-01	1345	84321401 20S21E30 TRAILER PARK NW OF WAHOO	37.62
	09-25-01	0900		40.43
284435082011701	05-15-01	1020	BRENTWOOD WELL NR SUMTERVILLE,FL	53.01
	09-25-01	1120		59.57
284449082055201	05-15-01	1110	84420502 20S22E15 WOODWARD RESIDENCE	38.89
	09-26-01	0735		41.80
284703082001701	05-15-01	1055	LOWES BURNED HOUSE WELL NR ADAMSVILLE, FL	53.68
	09-26-01	0707		57.99
284809082080701	05-15-01	1126	84820801 19S22E30 HOWARD KENT	37.51
284955081595801	05-15-01	1304	BYRD TRAILER WELL NR ORANGE HOME,FL	66.08
	09-26-01	0840		68.62
285112082124001	05-15-01	1143	85121201 19S21E09 JC 60 U S GEOL SURVEY	33.61
	09-25-01	1158		36.47
285150082044001	05-15-01	1213	85120401 19S22E02 JC 58 U S GEOL SURVEY	43.69
	09-26-01	0917		46.29
285420081571901	05-15-01	1425	SMITH WELL NO.2 NR CHERRY LAKE,FL	46.54
	09-26-01	1020		50.25
285422082001901	05-15-01	1347	HATCHER WELL AT LAKE MIONA NR OXFORD,FL	41.66
	09-26-01	0955		45.00
285536082044001	05-15-01	1230	85520401 18S22E14 G N SMITH	42.95
	09-26-01	0938		45.54

KEY TO SITE LOCATIONS ON FIGURE 28
VOLUSIA COUNTY, GROUND-WATER LEVELS

Index number	Site number	Page number
1	285513081202801	264
2	285745081054001	264
3	285934081041801	265
4	290138081203202	265
5	290230081123401	266
6	290456081044401	266
7	290806081013901	267
8	291508081302801	267
9	291523081095001	268
10	291905081251001	268

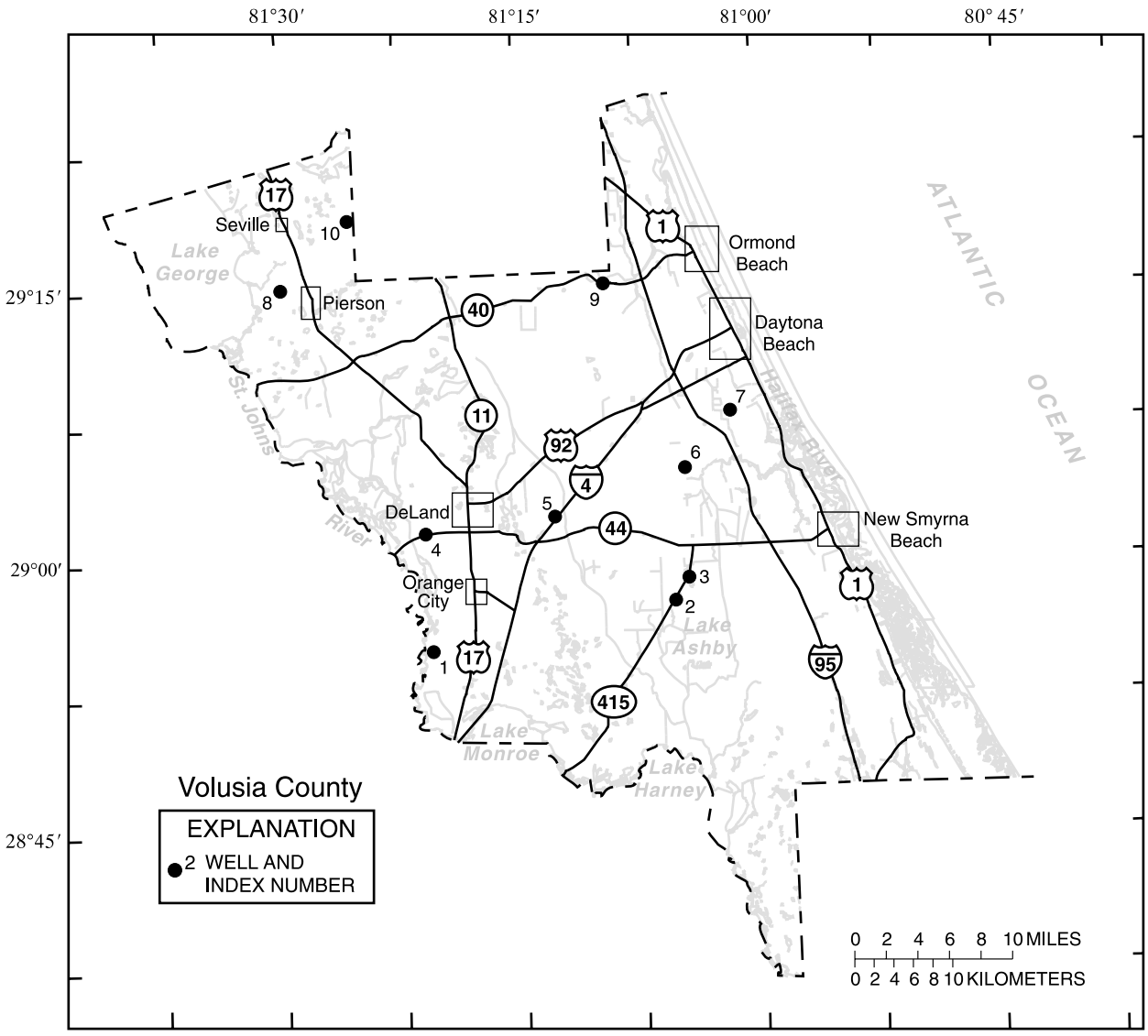

Figure 28.--Location of wells in Volusia County.

VOLUSIA COUNTY

WELL NUMBER.--285513081202801. V-1091 South Blue Spring Well near Orange City, FL.

LOCATION.--Lat 28°55'13", long 81°20'28", in SE¼SE¼SW¼ sec.17, T.18 S., R.30 E., Hydrologic Unit 03080101, on dirt trail 210 ft north of Detroit Terrace Road, 0.45 mi west of railroad tracks, 1.75 mi south of Blue Springs Road, and 2.0 mi west of Orange City. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 200 ft, cased to 110 ft.

INSTRUMENTATION.--Bimonthly measurement with pressure gage.

DATUM.--Elevation of land-surface datum is 10.83 ft above sea level. Measuring point: File mark on PVC reducer above gage valve housing, 13.20 ft above sea level.

PERIOD OF RECORD.--September 2000 to September 2001 (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.68 ft above sea level, Sept. 26, 2001; lowest measured, 14.80 ft above sea level, March 12, May 18, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 29	15.60	MAR 12	14.80	MAY 18	14.80	AUG 27	17.20				
JAN 16	15.10	MAY 15	14.88	JUL 16	15.60	SEP 26	18.68				

WATER YEAR 2001 LOWEST 14.80 MAR 12, 2001 MAY 18, 2001 HIGHEST 18.68 SEP 26, 2001

WELL NUMBER.--285745081054001. USGS Well at Alamana, FL.

LOCATION.--Lat 28°57'05", long 81°05'40", in SW¼SW¼SE¼ sec.2, T.18 S., R.32 E., Hydrologic Unit 03080101, on west side of Lake Ashby Road, 0.2 mi southeast of the intersection with State Highway 415, and 0.8 mi north of Alamana. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 121 ft, cased to 113 ft.

INSTRUMENTATION.--Monthly measurements with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 35.90 ft above sea level. Measuring point: Top of shelter floor, 2.99 ft above land-surface datum.

PERIOD OF RECORD.--May 1936 to September 1950 (monthly); October 1950 to September 1999; October 1999 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 32.10 ft above sea level, September 1945; lowest, 24.31 ft above sea level, July 3, 1998.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	28.04	DEC 18	26.94	FEB 21	25.82	APR 23	27.46	JUN 21	27.06	AUG 27	29.46
NOV 29	27.23	JAN 23	26.52	MAR 23	28.27	MAY 22	25.52	JUL 23	28.78	SEP 25	30.10

WATER YEAR 2001 LOWEST 25.52 MAY 22, 2001 HIGHEST 30.10 SEP 25, 2001

VOLUSIA COUNTY--Continued

WELL NUMBER.--285934081041801. USGS Test Well Number 10 near Samsula, FL.

LOCATION.--Lat 28°59'34", long 81°04'18", in SE¼NW¼SW¼ sec.26, T.17 S., R.32 E., Hydrologic Unit 03080101, 45 ft east of State Highway 415 and 1.3 mi south of State Highway 44. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, diameter 3 in., depth 442.5 ft, cased to 105 ft.

INSTRUMENTATION.--Monthly measurements with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 34.53 ft above sea level. Measuring point: Top of casing, 1.50 ft above land-surface datum.

PERIOD OF RECORD.--May 1976 to September 2000 (semiannually); December 2000 to September 2001 (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.28 ft above sea level, September 25, 2001; lowest measured, 22.12 ft above sea level, May 17, 1990.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 21	25.47	FEB 21	24.29	APR 23	25.20	MAY 22	24.07	AUG 27	28.23		
JAN 25	24.83	MAR 23	26.61	MAY 16	24.53	JUN 21	27.14	SEP 25	29.28		

WATER YEAR 2001 LOWEST 24.07 MAY 22, 2001 HIGHEST 29.28 SEP 25, 2001

WELL NUMBER.--290138081203202. V-115 USGS Test Well J-2 west of DeLand, FL.

LOCATION.--Lat 29°01'38", long 81°20'32", in NE¼NE¼NE¼ sec.13, T.17 S., R. 29 E., Hydrologic Unit 03080101, 100 ft south of State Highway 44, 1.1 mi west of the intersection of State Highway 44 and State Highway 15A. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 4 in., depth 500 ft, cased to 252 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 41.65 ft above sea level. Measuring point: Top of casing 3.00 ft above land-surface datum.

PERIOD OF RECORD.-- January 1967 to November 1968 (quarterly); May 1969 to September 2000 (semiannually); December 2000 to September 2001 (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.61 ft above sea level, Nov. 4, Sept. 3, 1969; lowest measured, 5.61 ft above sea level, Jan. 25, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 21	6.36	FEB 22	7.05	APR 23	6.82	MAY 22	6.85	JUL 23	8.28	SEP 25	12.20
JAN 25	5.61	MAR 26	6.92	MAY 15	7.15	JUN 22	5.91	AUG 27	10.04		

WATER YEAR 2001 LOWEST 5.61 JAN 25, 2001 HIGHEST 12.20 SEP 25, 2001

VOLUSIA COUNTY--Continued

WELL NUMBER.--290230081123401. V-118 USGS Test Well Number 5, east of Deland, FL.

LOCATION.--Lat 29°02'30", long 81°12'34", in NE¼NE¼NE¼ sec.8, T.17 S., R.31 E., Hydrologic Unit 03080101, 2.1 mi northeast of State Highway 44, 100 ft west of Interstate 4. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 3 in., depth 241 ft, cased to 72 ft.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 37.03 ft above sea level. Measuring point: Top of casing, 3.0 ft above land-surface datum.

PERIOD OF RECORD.-- May 1976 to November 1997 (semiannually); January 1998 to December 1998 (bimonthly); May 1999 to September 2000 (semiannually); December 2000 to September 2001 (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 36.46 ft above sea level, Sept. 11, 1984; lowest measured, 28.41 ft above sea level, Sept. 20, 1977.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 21	30.83	FEB 22	30.72	APR 24	32.78	MAY 23	31.58	JUL 23	33.52	SEP 24	35.35
JAN 23	30.43	MAR 26	32.54	MAY 16	32.13	JUN 21	31.70	AUG 27	34.24		

WATER YEAR 2001 LOWEST 30.43 JAN 23, 2001 HIGHEST 35.35 SEP 24, 2001

WELL NUMBER.--290456081044401. V-123 USGS Test Well near Allandale, FL.

LOCATION.--Lat 29°04'56", long 81°04'44", in NW¼NE¼SE¼ sec.27, T.16 S., R.32 E., Hydrologic Unit 03080101, located on Guava Road, 579 ft north of intersection of Guava Road and Taylor Road, approximately, .6 mi west of State Highway 415. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 3 in., depth 261 ft, cased to 90 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 25.9 ft above sea level. Measuring point: Top of casing, 2.87 ft above land-surface datum.

REMARKS.--Well was destroyed sometime between Febuary 21, 2001 and March 23, 2001.

PERIOD OF RECORD.-- May 1976 to September 2000 (semiannually); December 2000 to February 2001 (monthly) discontinued.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.86 ft above sea level, Sept. 11, 1995; lowest measured, 15.19 ft above sea level, May 17, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 21	15.91	JAN 23	15.80	FEB 21	15.51

WATER YEAR 2001 LOWEST 15.51 FEB 21, 2001 HIGHEST 15.91 DEC 21, 2000

VOLUSIA COUNTY--Continued

WELL NUMBER.--290806081013901. V-162 City Observation Well Number 2 at Port Orange, FL.

LOCATION.--Lat 29°08'06", long 81°01'39", in NE¼NE¼NE¼ sec.7, T.6 S., R.33 E., Hydrologic Unit 03080101, .25 mi north of water plant entrance off of Clyde Morris Blvd., northwest of intersection Herbert Street and Clyde Morris Blvd. Owner: City of Port Orange.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 3 in., depth 223.5 ft, cased to 103 ft.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 30.00 ft above sea level. Measuring point: Top of coupling at land-surface datum.

PERIOD OF RECORD.-- May 1981 to September 2000 (semiannually); December 2000 to September 2001 (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.61 ft above sea level, Sept. 25, 2001; lowest measured, 4.86 ft below land-surface datum, May 15, 1985.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 21	4.05	FEB 21	4.15	APR 23	3.50	MAY 22	.57	JUL 23	4.15	SEP 25	8.61
JAN 25	3.14	MAR 23	6.40	MAY 16	.28	JUN 21	2.85	AUG 27	4.74		

WATER YEAR 2001 LOWEST .28 MAY 16, 2001 HIGHEST 8.61 SEP 25, 2001

WELL NUMBER.--291508081302801. V-065 SJRWMD Well 2-M west of Pierson, FL.

LOCATION.--Lat 29°15'08", long 81°30'28", in SW¼SW¼NE¼ sec.30, T.14 S., R. 28 E., Hydrologic Unit 03080101, 20 ft east of Old Bubbly Trail, 1.75 mi north of Shell Harbor Road, 2.0 mi west of Pierson. Owner: St. Johns River Water Management District.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 4 in., depth 180 ft, casing length unknown.

INSTRUMENTATION.--Monthly measurement with chalked or electric tape.

DATUM.--Elevation of land-surface datum is 10.85 ft above sea level. Measuring point: Top of casing 2.35 ft above land-surface datum.

PERIOD OF RECORD.-- February 1979 to September 2000 (semiannually); December 2000 to September 2001 (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.26 ft above sea level, Sept. 27, 1979; lowest measured, 2.58 ft above sea level, Dec. 21, 2000.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 21	2.58	FEB 22	11.17	APR 23	10.28	MAY 22	10.63	JUL 23	12.72	SEP 25	14.65
JAN 25	9.38	MAR 26	12.34	MAY 15	9.55	JUN 22	11.92	AUG 27	12.24		

WATER YEAR 2001 LOWEST 2.58 DEC 21, 2000 HIGHEST 14.65 SEP 25, 2001

VOLUSIA COUNTY--Continued

WELL NUMBER.--291523081095001. V-130 USGS Well Number 1 near Ormond Beach, FL.

LOCATION.--Lat 29°15'23", long 81°09'50", in NE¼NW¼SW¼ sec.27, T.14 S., R. 31 E., Hydrologic Unit 03080101, 20 ft north of State Highway 40 and 3 mi west of I-95. Owner: U.S. Geological Survey.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 3 in., depth 242 ft, cased to 82 ft.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 22.49 ft above sea level. Measuring point: Casing at land-surface datum.

PERIOD OF RECORD.-- May 1976 to September 2000 (semiannually); December 2000 to September 2001 (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.61 ft above sea level, May 17, 1994; lowest measured, 11.72 ft above sea level, May 22, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 21	13.54	FEB 21	12.57	APR 23	13.26	MAY 22	11.72	JUL 23	14.23	SEP 24	16.63
JAN 23	13.34	MAR 23	14.59	MAY 15	12.55	JUN 21	13.06	AUG 27	14.82		

WATER YEAR 2001 LOWEST 11.72 MAY 22, 2001 HIGHEST 16.63 SEP 24, 2001

WELL NUMBER.--291905081251001. R. Nolan Well near Seville, FL.

LOCATION.--Lat 29°19'05", long 81°25'10", in SE¼SE¼ sec.36, T.13 S., R.28 E., Hydrologic Unit 03080103, 25 ft south of State Highway 305, 100 ft west of Volusia-Flagler County line, and 4.8 mi east of U.S. Highway 17 in Seville. Owner: Robert Nolan.

AQUIFER.--Floridan aquifer system of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, stock, artesian well, diameter 6 in., depth 138 ft, casing length unknown.

INSTRUMENTATION.--Monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 23.30 ft above sea level. Measuring point: Top of casing, 1.21 ft above land-surface datum.

COOPERATION.--Since Oct. 1, 1985 data provided by St. Johns River Water Management District and reviewed by U.S. Geological Survey.

PERIOD OF RECORD.--December 1935 to April 1950 (monthly); July 1950 to September 1985 (bimonthly); October 1985 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 22.90 ft above sea level, Sept. 1, Oct. 1, 1947; lowest measured, 14.51 ft above sea level, May 15, 2001.

ELEVATION (IN FEET ABOVE SEA LEVEL), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	18.86	JAN 25	15.80	APR 24	16.67	JUL 20	18.13	SEP 24	20.70		
NOV 28	17.81	FEB 22	16.71	MAY 18	14.51	AUG 24	19.50				
DEC 18	17.41	MAR 22	18.18	JUN 21	17.80	SEP 21	20.80				

WATER YEAR 2001 LOWEST 14.51 MAY 18, 2001 HIGHEST 20.80 SEP 21, 2001

VOLUSIA COUNTY

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
284840081115701	05-16-01	0825	V-0818 OSTEEN RANCH	13.80
	09-26-01	0850		17.97
284859080501002	05-16-01	0955	V-0840 MIGOR SHILOH RD NR OAK HILL,FL	.16
	09-26-01	1015		3.68
285143080521401	05-16-01	0920	85105202 LOOMIS NURSERY WELL W OF OAK HILL	5.84
	09-26-01	1000		9.18
285221081095002	05-16-01	0800	85210902 USGS TEST WELL G-2, N. OF OSTEEN, FL	18.63
	09-26-01	0810		23.89
285419081041001	05-16-01	0845	V-0198 LAKE ASHBY TWR DEEP	9.89
	09-26-01	0920		18.07
285442081181401	05-15-01	1610	V-0196 ORANGE CITY TWR DEEP	13.56
	09-26-01	1440		17.09
285524081132403	05-18-01	1215	V-0772 GALAXY MIDDLE SCHOOL	7.02
	09-27-01	0820		11.85
285813081142402	05-16-01	1340	V-0777 LAKE HELEN UPPER	13.12
	09-27-01	0850		17.70
285921080541001	05-16-01	1020	85905402 MOORE WELL RIVERSIDE DR EDGEWATER	3.55
	09-26-01	1040		7.03
290103080551902	05-16-01	1035	V-0508 NEW SMYRNA BEACH	.11
	09-26-01	1050		4.37
290225081040301	05-16-01	1145	90210402 17S32E11 USGS TEST WELL 9,N.SAMSULA	18.04
	09-25-01	1450		23.26
290541081132902	05-16-01	1235	90511304 USGS 04 DP TEST W. NR. DELAND,FL.6"CSG	34.63
	09-26-01	1250		37.87
290550081162601	05-15-01	1350	90511601 LAWRENCE WELL, LAKE DAUGHARTY	34.67
	09-25-01	1255		38.55
290614081183301	05-15-01	1415	V-0742	29.15
	09-25-01	1230		34.81
290737081220301	05-15-01	1500	90712201 HAGSTROM IRRIG WELL, W OF DELEON SPGS	7.38
	09-25-01	1205		10.63

MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 2000 TO SEPTEMBER 2001

VOLUSIA COUNTY---Continued

STATION NUMBER	DATE	TIME	STATION NAME	ELEV-ATION ABOVE SEA LEVEL (FEET)
290828081215103	05-15-01	1450	1030 WELL AT DELEON SPRINGS,FL	15.77
	09-25-01	1155		20.25
290834081073802	05-16-01	1300	V-0188	12.07
	09-26-01	1230		17.54
291031080590103	09-26-01	1140	V-0200 DAYTONA BEACH SHORES 4INUFA DAYTONA BCH,FL	1.44
291040081143701	05-15-01	1300	V-0700 ORMOND BEACH DAN FORD	30.61
	09-26-01	1325		33.98
291150081282501	05-15-01	1130	91112806 15S28E14 HARPERS WELL E OF MURPHY RD	22.10
	09-24-01	1310		28.54
291258081313701	05-15-01	1050	91213103 4" SUPPLY WELL,SE L.GEORGE,NR EMPORIA	4.46
	09-25-01	1015		7.79
291448081274905	05-15-01	1010	V-0531 PIERSON UPPER	17.80
	09-24-01	1140		26.80
291835081324201	05-18-01	1005	91813201 USED 426 PINE ISLAND, W.OF SEVILLE	4.33
	09-24-01	1040		7.17
292038081315302	05-15-01	0840	V-0567	26.55
	09-24-01	1010		32.31

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