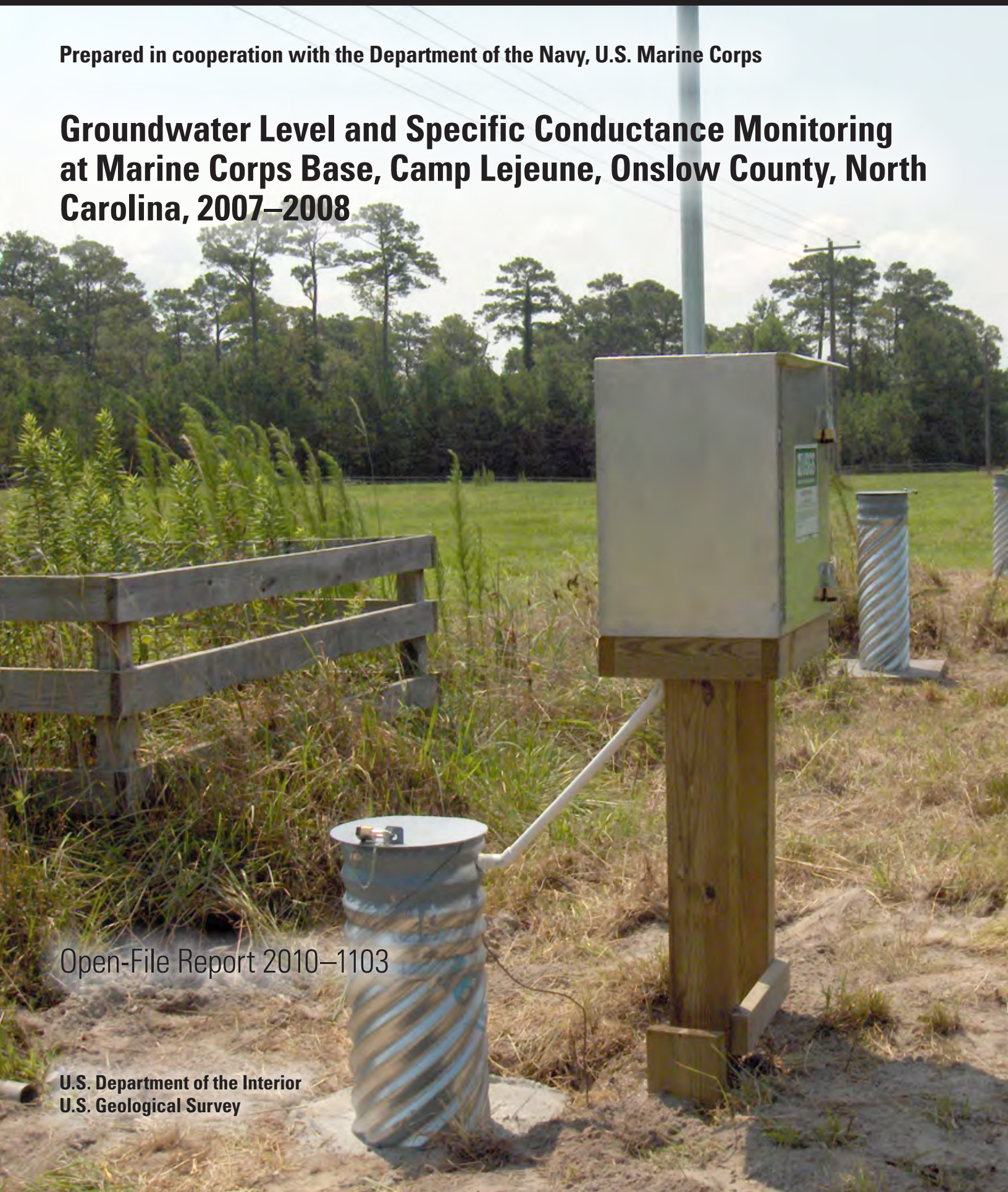


Prepared in cooperation with the Department of the Navy, U.S. Marine Corps

Groundwater Level and Specific Conductance Monitoring at Marine Corps Base, Camp Lejeune, Onslow County, North Carolina, 2007–2008

Open-File Report 2010–1103

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



Cover photograph. Hadnot Point well cluster on the Marine Corps Base, Camp Lejeune, North Carolina.



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By Kristen Bukowski McSwain

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

U.S. Department of the Interior
KEN SALAZAR, Secretary

U.S. Geological Survey
Marcia K. McNutt, Director

U.S. Geological Survey, Reston, Virginia: 2010

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Conversion Factors

Inch/Pound to SI

Multiply	By	To obtain
Length		
inch (in.)	2.54	centimeter (cm)
inch (in.)	25.4	millimeter (mm)
foot (ft)	0.3048	meter (m)
mile (mi)	1.609	kilometer (km)
Volume		
gallon (gal)	3.785	liter (L)
Flow rate		
gallon per day (gal/d)	0.003785	cubic meter per day (m ³ /d)
million gallons per day (Mgal/d)	0.04381	cubic meter per second (m ³ /s)

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

$$^{\circ}\text{F}=(1.8\times^{\circ}\text{C})+32$$

Vertical coordinate information is referenced to the North American Vertical Datum of 1988 (NAVD 88).

Horizontal coordinate information is referenced to the North American Datum of 1983 (NAD 83) unless otherwise noted.

Altitude, as used in this report, refers to distance above the vertical datum.

Specific conductance is given in microsiemens per centimeter at 25 degrees Celsius (μS/cm at 25 °C).

Groundwater Level and Specific Conductance Monitoring at Marine Corps Base, Camp Lejeune, Onslow County, North Carolina, 2007–2008

By Kristen Bukowski McSwain

Abstract

The U.S. Geological Survey, in cooperation with the Marine Corps Base, Camp Lejeune, monitored water-resources conditions in the surficial, Castle Hayne, Peedee, and Black Creek aquifers in Onslow County, North Carolina, from November 2007 through September 2008. To comply with North Carolina Central Coastal Plain Capacity Use Area regulations, large-volume water suppliers in Onslow County must reduce their dependency on the Black Creek aquifer as a water-supply source and have, instead, proposed using the Castle Hayne aquifer as an alternative water-supply source. The Marine Corps Base, Camp Lejeune, uses water obtained from the unregulated surficial and Castle Hayne aquifers for drinking-water supply.

Water-level data were collected and field measurements of physical properties were made at 19 wells at 8 locations spanning the Marine Corps Base, Camp Lejeune. These wells were instrumented with near real-time monitoring equipment to collect hourly measurements of water level. Additionally, specific conductance and water temperature were measured hourly in 16 of the 19 wells. Graphs are presented relating altitude of groundwater level to water temperature and specific conductance measurements collected during the study, and the relative vertical gradients between aquifers are discussed. The period-of-record normal (25th to 75th percentile) monthly mean groundwater levels at two well clusters were compared to median monthly mean groundwater levels at these same well clusters for 2008 to determine groundwater-resources conditions. In 2008, water levels were below normal in the 3 wells at one of the well clusters and were normal in 4 wells at the other cluster.

Introduction

Marine Corps Base, Camp Lejeune (hereafter referred to as Camp Lejeune), is located in Onslow County, south of the City of Jacksonville, in the Coastal Plain Physiographic Province of southeastern North Carolina (fig. 1). The geology of the Coastal Plain is composed of a wedge of eastern-dipping, interbedded limestones, sands, and clays of Quaternary to Cretaceous age (Winner and Coble, 1989; table 1). Since Camp Lejeune opened in the early 1940s, drinking water has been supplied from wells that tap sands and limestones in

the surficial and Castle Hayne aquifers. More than 100 supply wells have been drilled to satisfy increasing demands for water at Camp Lejeune as activities and population on the base have increased (Harned and others, 1989). The growth of Camp Lejeune, coupled with increased use of the base as the only military training center in the Eastern United States where joint amphibious training exercises are conducted with all branches of the armed services, heightens the need to provide a reliable source of drinking water to the base. Because of the proximity of Camp Lejeune to the Atlantic Ocean and saline estuaries, as well as the flat topography of the area, the construction of a surface-water impoundment or intake for water-supply purposes is impractical, leaving groundwater as the only viable water-supply resource.

In 2008, groundwater withdrawals of more than 35 million gallons per day (Mgal/d) were permitted from a combination of the Castle Hayne, Beaufort, Peedee, and Black Creek aquifers in Onslow County (North Carolina Division of Water Resources, 2008). Long-term pumping has caused groundwater levels in the Black Creek and Upper Cape Fear aquifers of Cretaceous age in the Central Coastal Plain of North Carolina to decline at a rate of 2 to 8 feet (ft) per year during the past 25 years (Lautier, 2001). As a direct result of these declines, as well as the increased potential for lateral saltwater intrusion near the coast and upward leakage of brackish water from deeper aquifers, the North Carolina Department of Environment and Natural Resources, Division of Water Resources (DWR) instituted the Central Coastal Plain Capacity Use Area (CCPCUA) rules in 2002 for 15 counties, including Onslow County (North Carolina Division of Water Resources, 2005).

Under the CCPCUA rules declared in 15A NCAC 2E .0501–.0507 (North Carolina Division of Water Resources, 2002), groundwater users pumping more than 100,000 gallons per day (gal/d) from any aquifer of Cretaceous age must reduce withdrawals by 75 percent over a 3-phase, 16-year period that began in August 2002. Although Camp Lejeune is not subject to the reductions imposed by the CCPCUA rules because it does not withdraw water from a Cretaceous aquifer, the base will be affected indirectly as the other large-volume water suppliers in Onslow County—the Onslow Water and Sewer Authority (ONWASA) and the City of Jacksonville—seek to reduce their dependency on the Black Creek aquifer by finding alternative sources of water. Both ONWASA and the City of Jacksonville have begun the transition of changing their water-supply source from the Black Creek

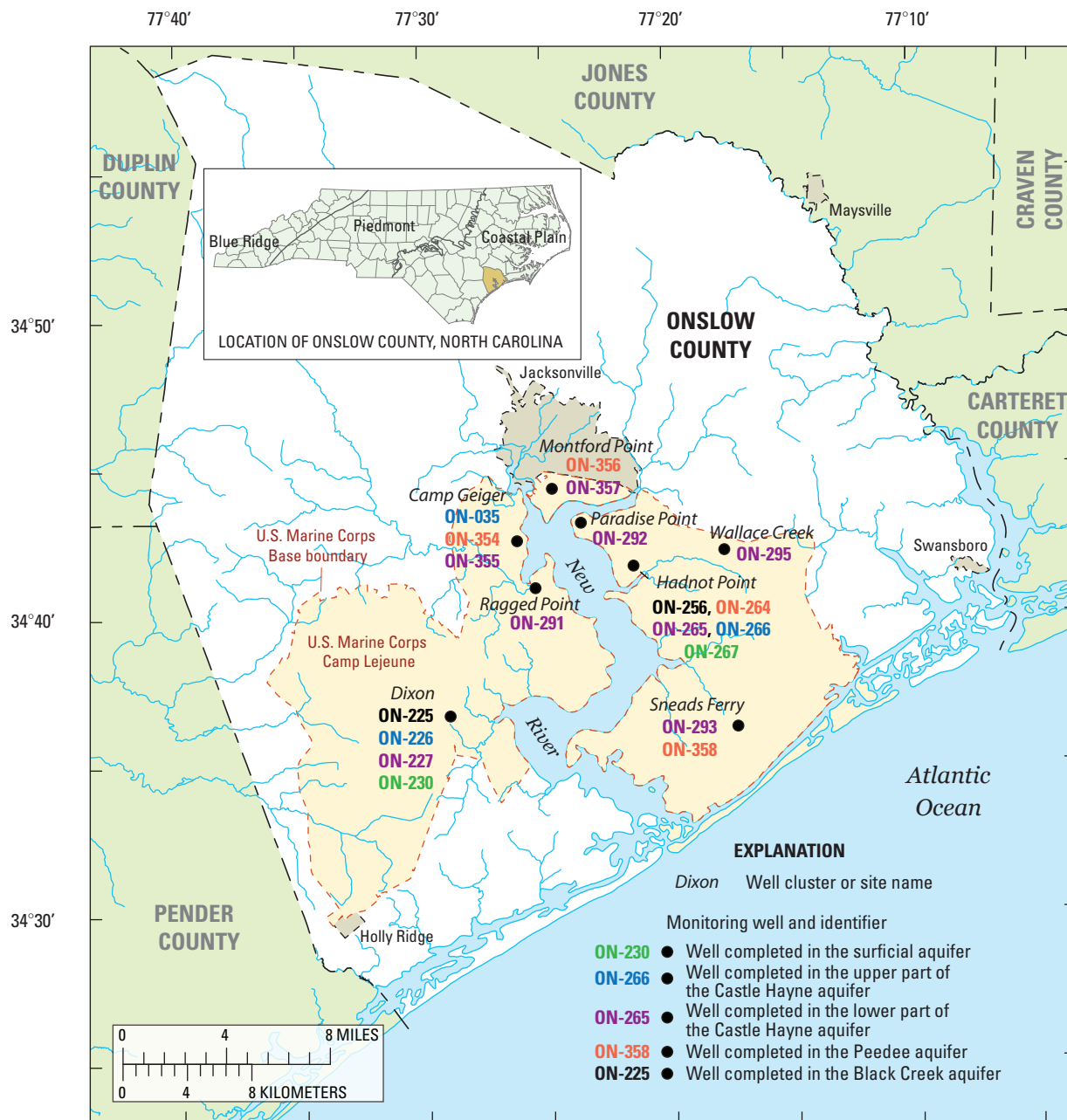


Figure 1. Locations of wells monitored on the Marine Corps Base, Camp Lejeune, in Onslow County, North Carolina, 2008 (modified from Fine, 2008).

aquifer to the Castle Hayne aquifer to comply with the regulations of the CCPCUA, which require the first 25-percent reduction in 2008.

Purpose and Scope

Camp Lejeune requires up-to-date groundwater-resource information to make informed water-resource planning decisions. Because of real-time data-collection capabilities and previous experience with long-term data collection at several wells on the base, the U.S. Geological Survey (USGS) was

asked to reinstate part of the former groundwater-monitoring network. This monitoring network allows Camp Lejeune to monitor the effects of additional regional pumping on the Castle Hayne aquifer. The water-level and water-quality data collected provide a basis for identifying short- and long-term fluctuations in aquifer water levels and specific conductance as a result of the groundwater-withdrawal practices of neighboring large-volume water suppliers. Additionally, groundwater availability and general water-quality information are provided at a basewide scale to support water-management decisions and form a foundation for future groundwater-modeling efforts.

Table 1. Correlation chart of North Carolina Coastal Plain geologic and hydrogeologic units (modified from Lyke and Winner, 1990).

System ¹	Geologic units	Hydrogeologic units
Quaternary	Quaternary deposits	Surficial aquifer
Tertiary	Yorktown Formation ²	Yorktown aquifer ²
	Eastover Formation ²	Pungo River aquifer ²
	Pungo River Formation ²	
	Belgrade Formation	Castle Hayne aquifer
	River Bend Formation	
	Castle Hayne Limestone	
	Beaufort Formation	Beaufort aquifer
Cretaceous	Peedee Formation	Peedee aquifer
	Black Creek Formation	Black Creek aquifer
	Middendorf Formation ²	
	Cape Fear Formation	Cape Fear aquifer
	Unnamed units ²	Lower Cretaceous aquifer ²

¹ System identification of a given hydrogeologic unit is only approximate and reflects the age or ages of the principal geologic unit or units composing each hydrogeologic unit.

² Unit not present in the study area.

A total of 19 wells (fig. 1) that tap the surficial, Castle Hayne, Peedee, and Black Creek aquifers (table 2) are instrumented with near real-time monitoring equipment that upload data to USGS Web sites hourly or every 4 hours. Five new wells were installed on the base in 2007 to complement the locations of 14 existing monitoring wells. All 19 wells were monitored for groundwater level, and 16 of the wells were monitored for specific conductance and water temperature from a single point in each well. The water-resources conditions are presented for these wells for the period November 2007 through September 2008.

Well Numbering System

Groundwater wells monitored by the USGS are given unique identification numbers referenced to geographic location. Each of the 19 wells monitored at Camp Lejeune was assigned a 15-digit site number based on latitude and longitude. The latitude and longitude of the 5 new monitoring wells on the base were determined by using a differential global positioning system (DGPS) receiver; previously installed monitoring wells were assigned latitude and longitude that were determined at the time of their inventory by using topographic maps. The latitude and longitude constitute the first 13 digits, respectively, of the 15-digit site number and are followed by

a 2-digit sequence number used to distinguish among wells clustered closely together.

In addition to the standard USGS well-numbering system, the wells in this study also were assigned a local identifier that consists of a 2-letter North Carolina county code followed by a 3-digit sequence number. For example, wells in Onslow County are identified by the prefix "ON" followed by 3 numbers that are assigned sequentially in order of addition to the database.

Groundwater-Resources Activities, Water Year 2008¹

During water year 2008, groundwater-resources activities conducted as part of the monitoring program at Camp Lejeune included

- Monitoring groundwater levels

Water-level data in 19 wells were collected hourly and transmitted in near real time (table 2). Water-level data were updated hourly or every 4 hours and are available online from the USGS National Water Information System (NWIS) database (U.S. Geological Survey, 2009b).

- Monitoring specific conductance and water temperature

Specific conductance and water temperature data in 16 wells were collected hourly and transmitted in near real time (table 2). These water-quality data were updated hourly or every 4 hours and are available online from the NWIS database (U.S. Geological Survey, 2009c).

- Maintaining Camp Lejeune area hydrologic databases

The USGS continually updated the NWIS database during the study period with continuous groundwater-level and groundwater-quality data. Well-site information was updated in the database as needed.

- Publishing local water-resources conditions

Summaries of local water-resources conditions are published annually. Water-level and water-quality data are published online by the USGS in the annual Water Data Report (U.S. Geological Survey, 2009a) and are available at <http://wdr.water.usgs.gov>. Copies of published water-level and water-quality data for water year 2008 for each monitored well are presented in the appendix.

¹Water year is the period October 1 through September 30 and is defined by the year in which it ends. For example, the 2008 water year is October 1, 2007, through September 30, 2008.

4 Groundwater Level and Specific Conductance Monitoring at Marine Corps Base, Camp Lejeune, 2007–2008

Table 2. Characteristics of wells and type of continuous monitoring at Marine Corps Base, Camp Lejeune, in Onslow County, North Carolina.

[USGS, U.S. Geological Survey; DD°MM'SS", degrees, minutes, seconds; NAD 83, North American Datum of 1983; NAVD 88, North American Vertical Datum of 1988; BLS, below land surface; ON, Onslow County; RS, research station; X, continuous monitor installed; –, continuous monitor not installed]

USGS site ID	Station name	Latitude NAD 83 (DD°MM'SS")	Longitude NAD 83 (DD°MM'SS")	Altitude (feet above NAVD 88)	Well depth (feet BLS)	Period of record prior to 2007		Type of contin- uous monitor	
						Begin	End	Water level	Water quality
Surficial aquifer wells									
343641077290106	ON-230 DIXON RS Y25q6	34°36'41"	77°28'59"	66.12	22	October 1986	February 2005	X	–
344139077211207	ON-267 HADNOT POINT RS X24s7	34°41'36"	77°21'06"	25.15	40	February 1988	September 2005	X	X
Castle Hayne aquifer wells									
Upper part of the Castle Hayne aquifer									
344425077272501	ON-035 (NC-52) CAMP GEIGER	34°44'18"	77°27'27"	18.26	68	December 1966	December 2004	X	X
343641077290101	ON-226 DIXON RS Y25Q1 ^a	34°36'41"	77°29'01"	66.07	80	August 2000	November 2004	X	X
344139077211206	ON-266 HADNOT POINT RS X24s6	34°41'35"	77°21'06"	24.32	130	February 1988	November 2004	X	X
Lower part of the Castle Hayne aquifer									
343641077290103	ON-227 DIXON RS Y25q3	34°36'41"	77°28'58"	66.19	240	May 1986	November 2004	X	X
344139077211205	ON-265 HADNOT POINT RS X24s5	34°41'35"	77°21'06"	24.88	295	February 1988	November 2004	X	X
344037077253901	ON-291 RAGGED POINT	34°40'35"	77°25'39"	25.95	180	June 1988	December 2004	X	X
344304077232901	ON-292 PARADISE POINT	34°43'05"	77°23'31"	14.88	232	June 1988	December 2004	X	X
343609077171301	ON-293 SNEADS FERRY RD	34°36'09"	77°17'11"	43.95	235	June 1988	December 2004	X	X
344203077182001	ON-295 WALLACE CREEK ^a	34°42'03"	77°18'20"	33.13	253	May 1988	October 2004	X	X
344418077272701	ON-355 CAMP GEIGER NC-52-3	34°44'17.7"	77°27'27.4"	19.48	170	–	–	X	X
344417077243302	ON-357 MONTFORD POINT 2	34°44'17"	77°24'32.9"	20.54	240	–	–	X	X
Peedee aquifer wells									
344139077211204	ON-264 HADNOT POINT RS X24s4	34°41'35"	77°21'06"	24.58	527	February 1988	February 2005	X	X
344417077272701	ON-354 CAMP GEIGER NC-52-2	34°44'17.4"	77°27'27.4"	19.72	435	–	–	X	X
344417077243301	ON-356 MONTFORD POINT 1	34°44'16.8"	77°24'33.2"	20.74	341	–	–	X	X
343626077171701	ON-358 SNEADS FERRY 2	34°36'26.0"	77°17'17.0"	43.54	435	–	–	X	X
Black Creek aquifer wells									
343641077290104	ON-225 (NC-188) DIXON RS Y25Q4 ^a	34°36'41"	77°29'01"	67.13	534	August 1986	November 2004	X	–
344139077211202	ON-256 HADNOT POINT RSX24s2	34°41'30"	77°21'03"	20.55	918	February 1988	February 2005	X	–

^a Horizontal coordinate information is referenced to the North American Datum of 1927 (NAD 27)

Groundwater levels were measured with a submersible pressure transducer, and water temperature and specific conductance measurements were collected by using a multi-parameter water-quality probe. The water-quality probes and pressure transducers were connected to a data-collection platform (DCP) that recorded the data. Each DCP is powered by a 12-volt battery, equipped with a solar panel to recharge the battery, housed in a sealed aluminum shelter, and grounded with copper wire for surge and lightning protection. The wiring is protected by conduit and buried 6–12 inches below the ground. The pressure transducers were field checked periodically and corrected, if necessary, to measurements made with a steel or electric tape to ensure accurate reading, consistent with methods described in Freeman and others (2004). The water-quality probes were inspected, cleaned, and calibrated according to USGS guidelines (Wagner and others, 2006).

Groundwater-Resources Conditions, Water Year 2008

Groundwater levels and water quality at Camp Lejeune were measured in 19 wells at 8 sites (fig. 1). Between 2 and 5 distinct zones within the aquifers were monitored in clusters of wells at 5 sites, while a single well was monitored at the remaining 3 sites. Of the 19 wells used to continuously monitor groundwater levels, the surficial aquifer was monitored in 2 wells, the upper part of the Castle Hayne aquifer in 3 wells, the lower part of the Castle Hayne aquifer in 8 wells, the Pee Dee aquifer in 4 wells, and the Black Creek aquifer in 2 wells (fig. 1; table 2). Additionally, continuous water-quality data were collected in all wells with the exception of 1 well in the surficial aquifer and both wells in the Black Creek aquifer. Graphs relating groundwater-level altitude to water temperature and specific conductance measurements collected during water year 2008 for each observation well, grouped by well cluster, are presented in figures 2–9. In each figure, the line graphs are color coded to identify the aquifer tapped by each well. The color coding consistently used in figures 2–9 identifies data for the surficial aquifer in green, the upper part of the Castle Hayne in blue, the lower part of the Castle Hayne in purple, the Pee Dee in orange, and the Black Creek in black. Well identifiers in figure 1 also follow this color scheme.

Vertical Gradients

An accurate calculation of vertical gradients between the different aquifers at the five well-cluster sites is not possible because of well spacing that generally exceeds 20 ft between wells, but it is possible to examine the water-level altitudes and specific conductance levels in each monitoring zone in relative terms.

Under pre-development conditions, clay-rich confining units retard movement in the vertical direction, effectively isolating each of the aquifers but allowing the lateral flow of groundwater from aquifer recharge areas to discharge

areas in the Atlantic Ocean. Development of the aquifers for anthropogenic use can alter this balance, especially in areas where the confining unit is thin or non-existent. Pumping can induce groundwater movement vertically from one aquifer to another and the lateral movement of saltwater inland from the Atlantic Ocean.

At the Dixon well cluster (fig. 2, location shown in fig. 1), water level is monitored in four wells that tap the surficial (ON-230), upper and lower parts of the Castle Hayne (ON-226 and ON-227), and Black Creek (ON-225) aquifers. Water-quality monitors were installed in the two wells completed in the upper and lower parts of the Castle Hayne aquifer. The overall vertical hydraulic gradient was downward from the surficial aquifer to the upper then lower Castle Hayne aquifer and then to the Black Creek aquifer. A seasonal response caused water levels to rise in the spring in all aquifers except the Black Creek.

Specific conductance is a measure of the ability of water to conduct an electric current, which is a useful measure of the relative amounts of chemical ions or salts in solution. Because electrical conductivity is dependent upon temperature, specific conductance measurements are standardized to a temperature of 25 degrees Celsius (°C) to allow direct comparison of values. At the Dixon well cluster, measurements of specific conductance in the water of the upper and lower Castle Hayne aquifers were similar; the water in the lower part of the Castle Hayne aquifer was slightly more conductive. The water temperature in the lower part of the Castle Hayne aquifer was slightly warmer than in the upper Castle Hayne aquifer, which was expected because of increasing temperature with subsurface depth. Seasonal fluctuation was not apparent in either the specific conductance or water temperature in the upper or lower Castle Hayne aquifers. The fluctuations shown in figure 2 were due largely to instrument and measurement variations.

Water level, water temperature, and specific conductance were measured in three wells at the Camp Geiger well cluster tapping the upper and lower parts of the Castle Hayne (ON-035 and ON-355) and Pee Dee (ON-354) aquifers (fig. 3, location shown in fig. 1). A seasonal response occurred in the water level and downward vertical hydraulic gradient is evident between the upper and lower parts of Castle Hayne aquifer. From the Pee Dee to the Castle Hayne aquifer, however, the hydraulic gradient was upward for part of the year. This upward gradient provides the potential for water in the Pee Dee aquifer to migrate vertically upward into the Castle Hayne aquifer. Although specific conductance data from the lower part of the Castle Hayne aquifer were limited because of a malfunctioning temperature sensor, water in the Pee Dee aquifer was considerably more conductive than water in the upper or lower parts of the Castle Hayne aquifer. The water temperature in the lower part was cooler than in the upper part of the Castle Hayne aquifer, which may not have been the case for the entire water year. The water temperature in the Pee Dee aquifer was warmer than in the Castle Hayne by about 1°C, which was expected because of increasing temperature with subsurface depth.

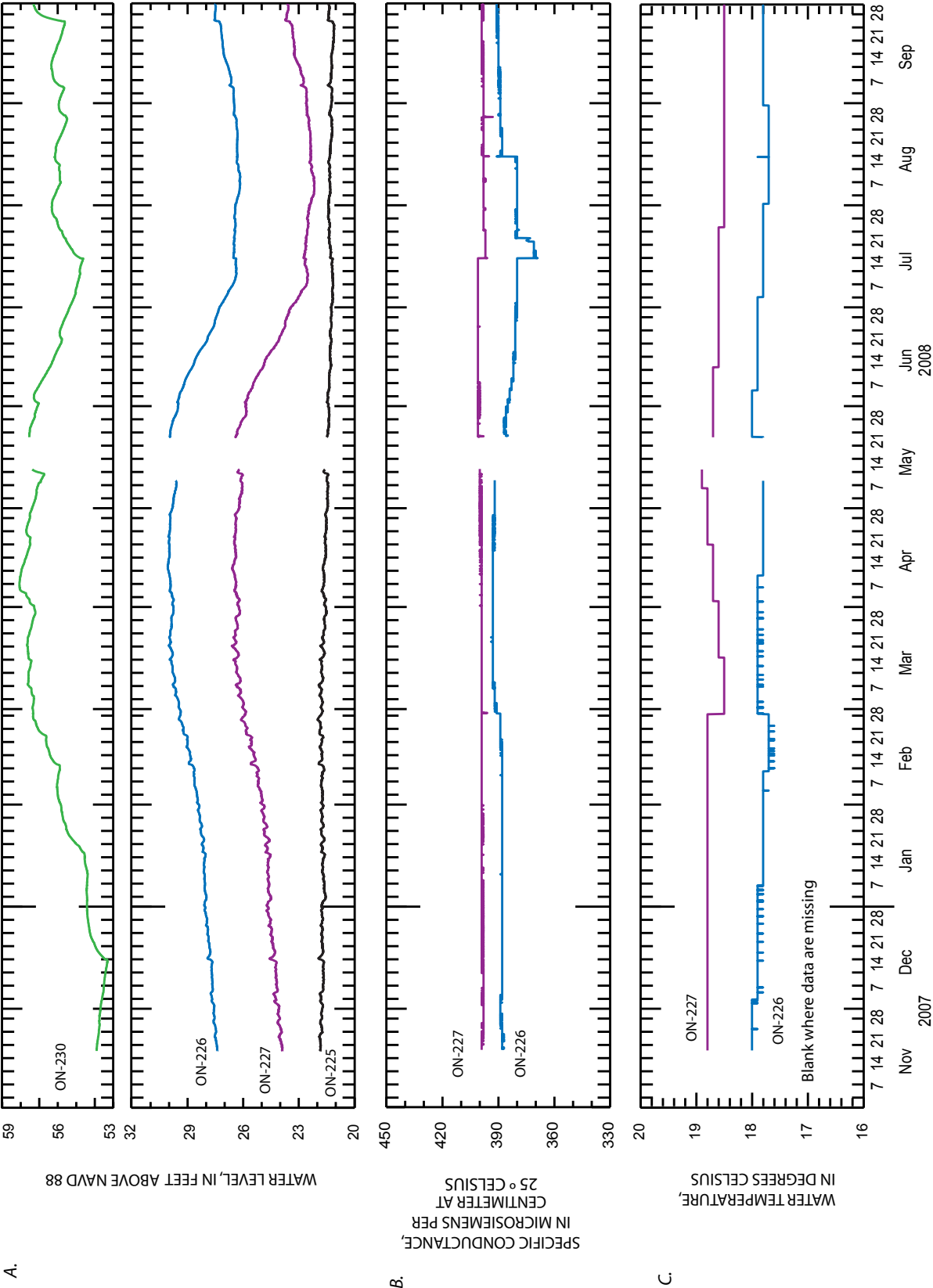


Figure 2. Hourly record of (A) water level, (B) specific conductance, and (C) water temperature in wells ON-230 (surficial aquifer), ON-226 (upper part of the Castle Hayne aquifer), ON-227 (lower part of the Castle Hayne aquifer), and ON-225 (Black Creek aquifer) at the Dixon well cluster, Marine Corps Base, Camp Lejeune, in Onslow County, North Carolina, November 2007 through September 2008.

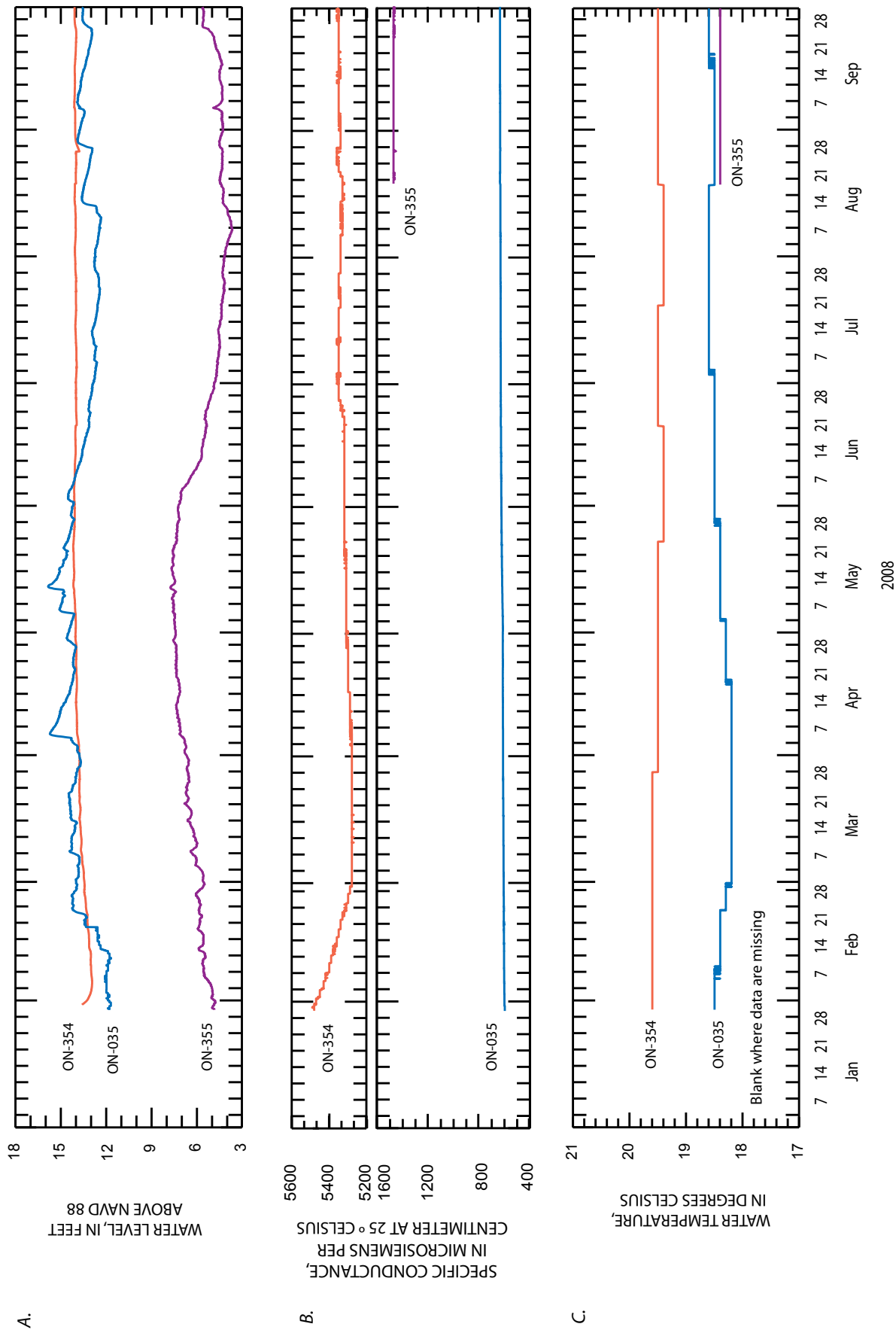


Figure 3. Hourly record of (A) water level, (B) specific conductance, and (C) water temperature in wells ON-035 (upper part of the Castle Hayne aquifer), ON-355 (lower part of the Castle Hayne aquifer), and ON-354 (Peedee aquifer) at the Camp Geiger well cluster, Marine Corps Base, Camp Lejeune, in Onslow County, North Carolina, January through September 2008.

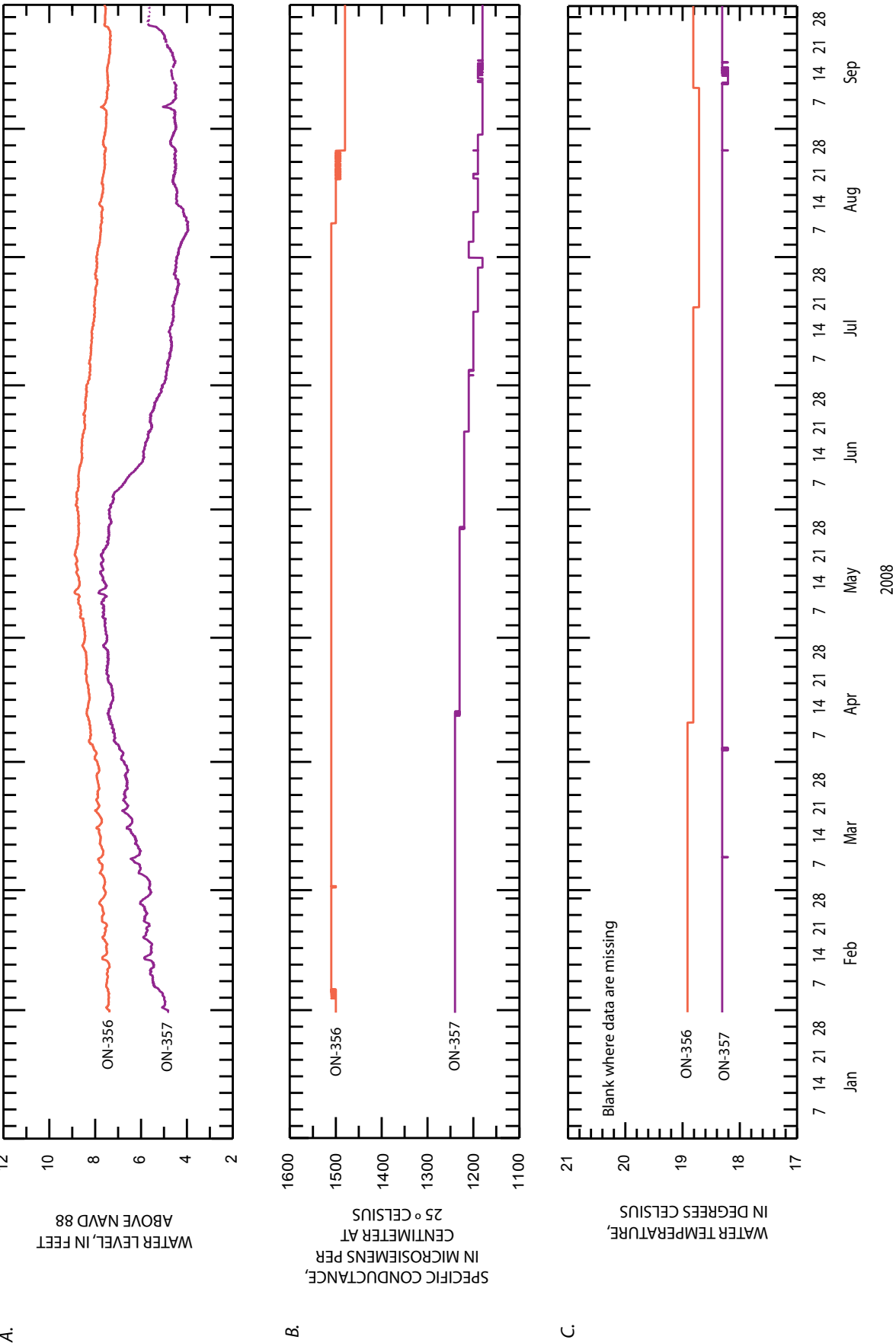


Figure 4. Hourly record of (A) water level, (B) specific conductance, and (C) water temperature in wells ON-357 (lower part of the Castle Hayne aquifer) and ON-356 (Peedee aquifer) at the Montford Point well cluster, Marine Corps Base, Camp Lejeune, in Onslow County, North Carolina, January through September 2008.

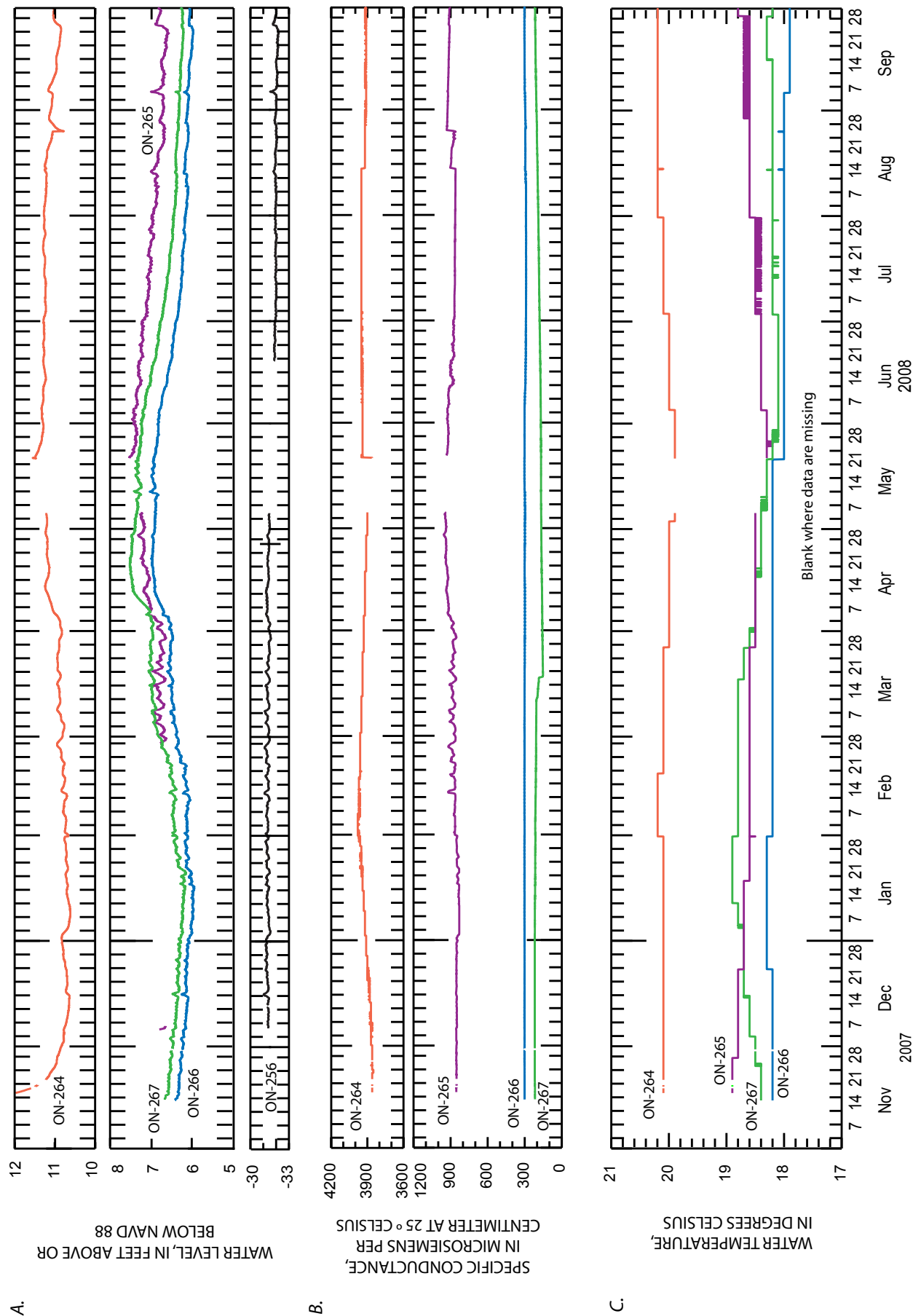


Figure 5. Hourly record of (A) water level, (B) specific conductance, and (C) water temperature in wells ON-267 (surficial aquifer), ON-266 (upper part of the Castle Hayne aquifer), ON-265 (lower part of the Castle Hayne aquifer), ON-264 (Peedee aquifer), and ON-256 (Black Creek aquifer) at the Hadnot Point well cluster, Marine Corps Base, Camp Lejeune, in Onslow County, North Carolina, November 2007 through September 2008.

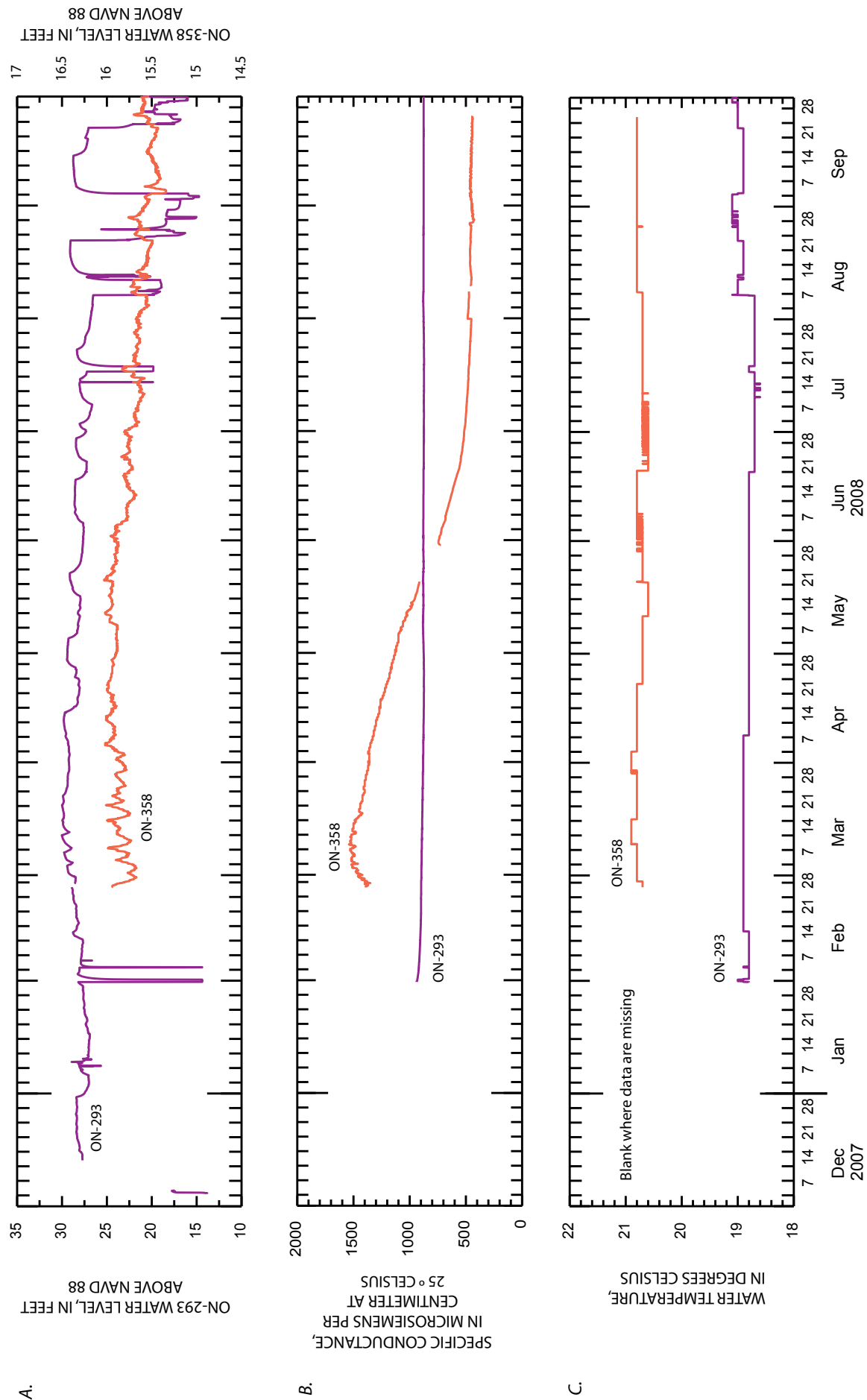


Figure 6. Hourly record of (A) water level, (B) specific conductance, and (C) water temperature in wells ON-293 (lower part of the Castle Hayne aquifer) and ON-358 (Pee Dee aquifer) at the Sneads Ferry Road well cluster, Marine Corps Base, Camp Lejeune, in Onslow County, North Carolina, December 2007 through September 2008.

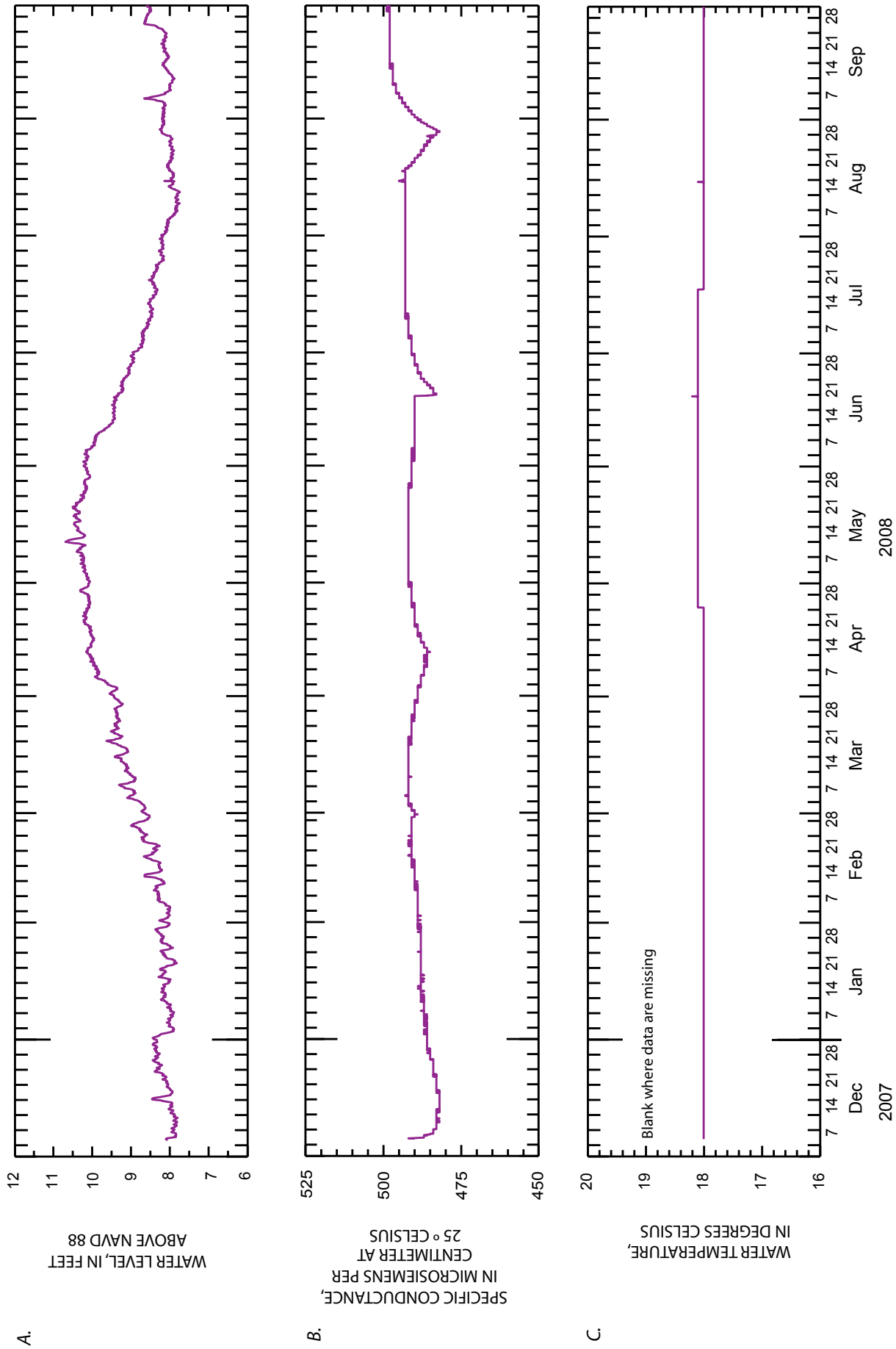


Figure 7. Hourly record of (A) water level, (B) specific conductance, and (C) water temperature in well ON-291 Ragged Point (lower part of the Castle Hayne aquifer), Marine Corps Base, Camp Lejeune, in Onslow County, North Carolina, December 2007 through September 2008.

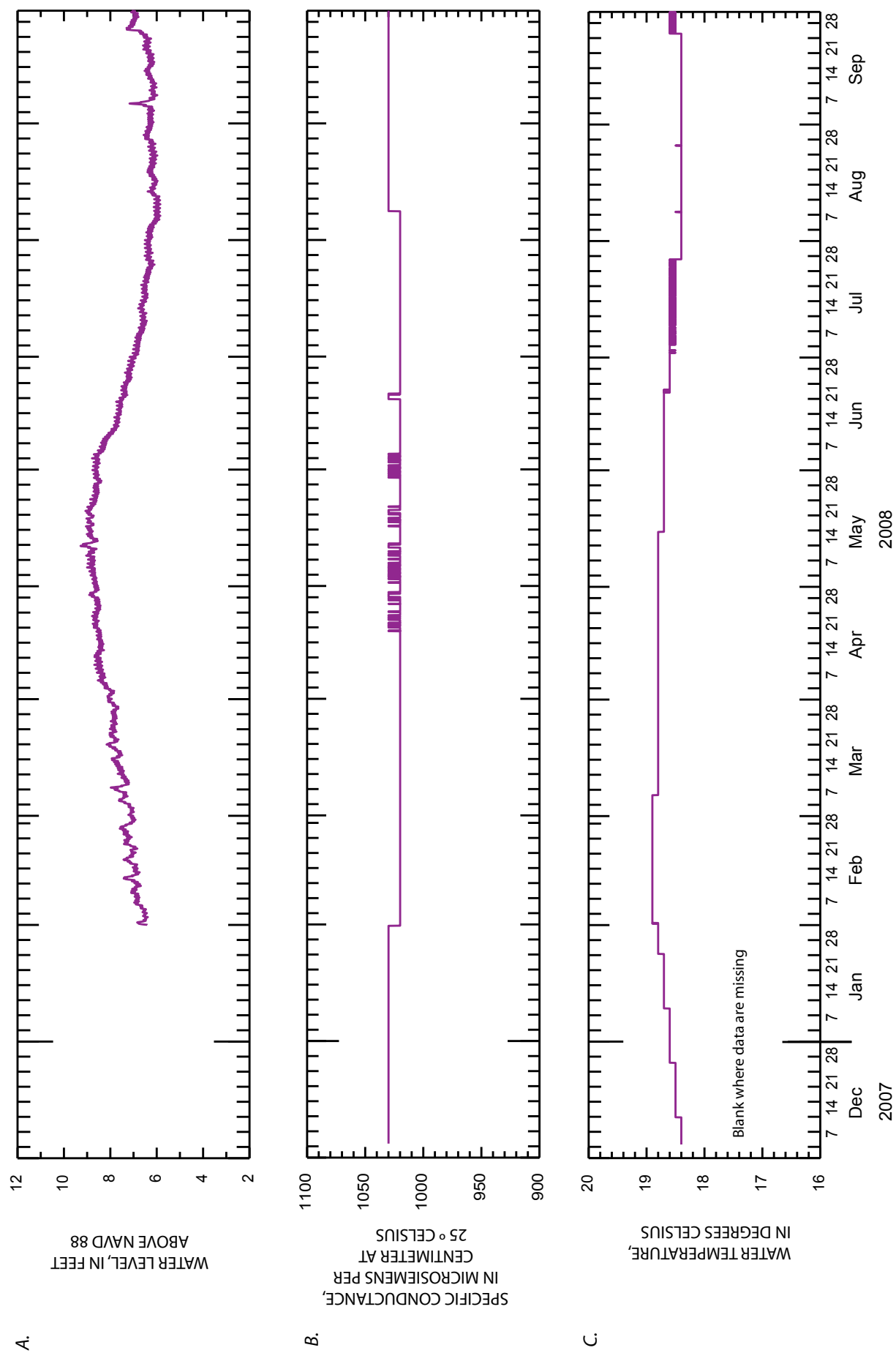


Figure 8. Hourly record of (A) water level, (B) specific conductance, and (C) water temperature in well ON-292 Paradise Point (lower part of the Castle Hayne aquifer), Marine Corps Base, Camp Lejeune, in Onslow County, North Carolina, December 2007 through September 2008.

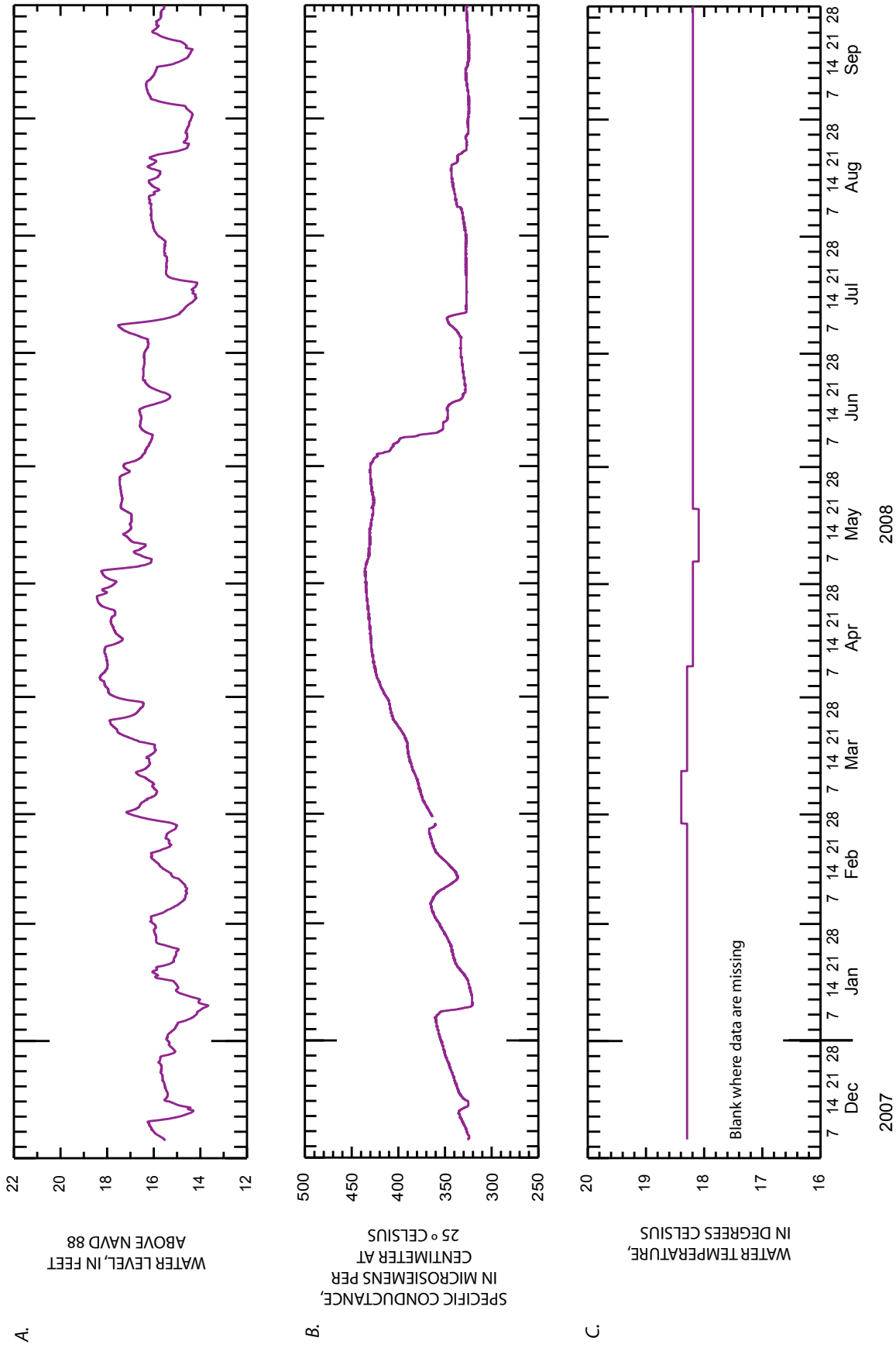


Figure 9. Hourly record of (A) water level, (B) specific conductance, and (C) water temperature in well ON-295 Wallace Creek (lower part of the Castle Hayne aquifer), Marine Corps Base, Camp Lejeune, in Onslow County, North Carolina, December 2007 through September 2008.

Two wells at the Montford Point well cluster that were completed in the lower part of the Castle Hayne (ON-357) and Peedee (ON-356) aquifers were monitored for water level, water temperature, and specific conductance (fig. 4, location shown in fig. 1). A seasonal response occurred in both the lower part of the Castle Hayne and Peedee aquifers, but the response was less in the Peedee well. The vertical hydraulic gradient was upward from the Peedee to the lower part of the Castle Hayne aquifer, with a varied water-level altitude difference of about 1 to 3 ft. Measurements of specific conductance and water temperature were higher in the Peedee aquifer than in the lower part of the Castle Hayne aquifer.

At the Hadnot Point well cluster, five wells were used to monitor water level in the surficial (ON-267), upper and lower parts of the Castle Hayne (ON-266 and ON-265), Peedee (ON-264), and Black Creek (ON-256) aquifers (fig. 5, location shown in fig. 1). Water temperature and specific conductance were monitored in all aquifers with the exception of the Black Creek aquifer. The water-level altitude in the Peedee aquifer exceeded the water level measured in the surficial and Castle Hayne aquifers by 4 to 5 ft, resulting in an upward gradient from the Peedee aquifer into the Castle Hayne aquifer. The water level in the Black Creek aquifer was about 40 ft beneath the other monitored aquifers at Hadnot Point. Specific conductance increased with depth; the surficial aquifer had the lowest measurements, and the Peedee aquifer had the highest measurements. All four wells used to monitor water temperature had seasonal variability, but the temperature fluctuations in the lower part of the Castle Hayne and in the Peedee aquifers were less and out of phase with the temperature fluctuations in the surficial aquifer and the upper part of the Castle Hayne aquifer.

Water level, water temperature, and specific conductance were measured in two wells at the Sneads Ferry Road well cluster in the lower part of the Castle Hayne (ON-293) and in the Peedee (ON-358) aquifers (fig. 6, location shown in fig. 1). The vertical hydraulic gradient was downward from the lower part of the Castle Hayne aquifer to the Peedee aquifer, and both aquifers had seasonal variability. However, an unmonitored, potable water-supply well that taps the Castle Hayne aquifer also is located at the Sneads Ferry Road well cluster, and the pumping of this water-supply well had a noticeable effect on the water level in both monitoring wells. When stressed by pumping, the water-level altitude in the Peedee aquifer increased slightly while the water-level altitude in the lower part of the Castle Hayne aquifer decreased. Although measurements of specific conductance in the lower part of the Castle Hayne aquifer were relatively constant, measurements of specific conductance in the Peedee aquifer declined markedly after installation of the water-quality monitor. By the end of water year 2008, measurements of specific conductance were much lower in the Peedee aquifer than in the lower part of the Castle Hayne aquifer. The water temperature in the lower part of the Castle Hayne and in the Peedee aquifers did not vary seasonally.

At the remaining three well sites used to monitor the lower part of the Castle Hayne aquifer—Ragged Point (ON-291; fig. 7, location shown in fig. 1), Paradise Point (ON-292; fig. 8, location shown in fig. 1), and Wallace Creek (ON-295; fig. 9, location shown in fig. 1)—vertical gradients could not be calculated because only one well was monitored at each site. Seasonal differences in water level occurred at all three wells, and seasonal variation in specific conductance was apparent in well ON-295. Water temperature mostly was constant in all three wells.

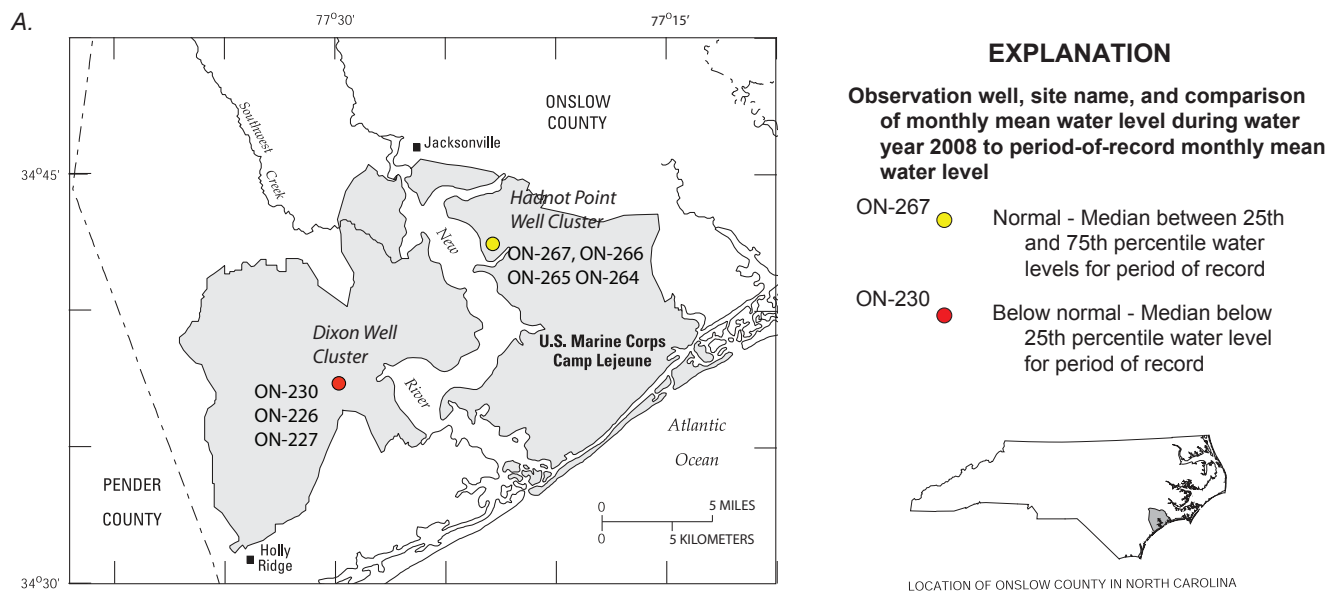
Comparison of Water Levels in Water Year 2008 to Previous Years

Groundwater levels at Camp Lejeune were monitored continuously by the USGS in some wells at the Dixon and Hadnot Point well clusters as part of previous cooperative studies. The groundwater level was monitored at the Dixon well cluster in wells ON-230, ON-228, and ON-227 for 19, 6, and 19 years, respectively, ending in 2005. At the Hadnot Point well cluster, groundwater level was monitored in wells ON-267, ON-266, ON-265, and ON-254 for about 18 years, ending in 2005. No water-level monitoring occurred at the Dixon or Hadnot Point well clusters for 2 years from August 2005 through November 2007.

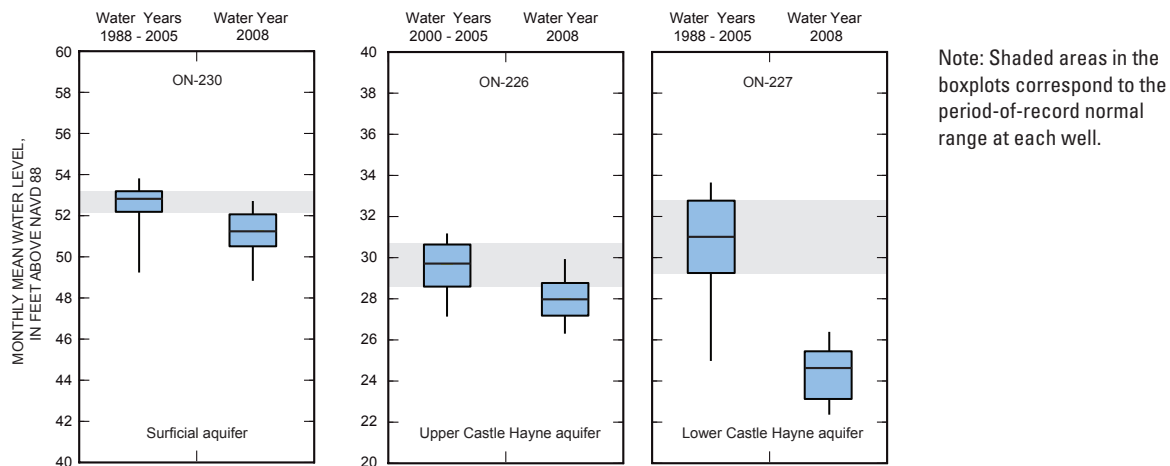
In order to determine if water levels measured in water year 2008 were above normal, normal, or below normal, median monthly mean water levels for water year 2008 were compared with period-of-record monthly mean water levels. The period covering water years 1988–2005 was selected as the period of record for correlation because 6 of the 7 wells with historic water-level record at the Dixon and Hadnot Point well clusters share that data-collection period. Although well ON-226 at the Dixon well cluster has a much shorter period of record for water-level monitoring (water years 2000 through 2005), it is included for comparison purposes.

The comparison of median monthly mean water levels for water year 2008 and period-of-record monthly mean water levels can be displayed graphically by constructing box plots (Ott and Longnecker, 2001). A box plot summarizes the distribution of the data by showing the maximum, median, minimum percentiles. The top, bottom, and middle lines of the box plot correspond to measured water levels in the 75th percentile, 25th percentile, and median (50th percentile), respectively.

Box plots were constructed for water-level data from the Hadnot Point and Dixon well clusters (fig. 10B, C). The period-of-record normal range of water levels is the range between the 25th and 75th percentiles. If the median monthly mean water level for 2008 is between the 25th and 75th percentiles of the period-of-record monthly mean water levels, the water level in the well is considered to be normal for the water year. If the median monthly mean water level for 2008 is below the 25th percentile, the water level in the well is considered to be below normal for the water year. If the median monthly mean water level for 2008 is above the 75th percentile, the water level is considered to be above normal for



B. Dixon Well Cluster



C. Hadnot Point Well Cluster

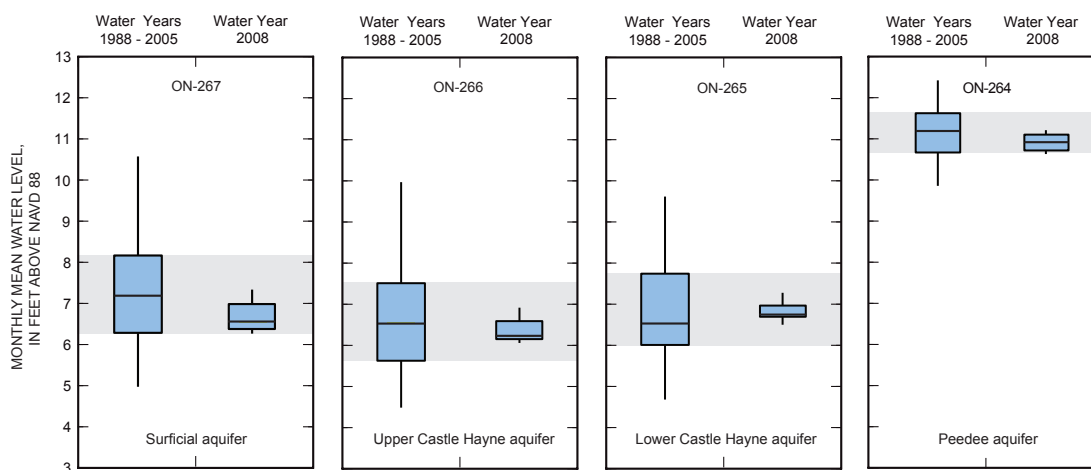


Figure 10. (A) Locations of observation wells where water levels were normal or below normal during water year 2008 and box plots showing period-of-record monthly mean water levels in comparison to water year 2008 monthly mean water levels in wells at the (B) Dixon and (C) Hadnot Point well clusters at Marine Corps Base, Camp Lejeune, in Onslow County, North Carolina.

the water year. To aid in the interpretation of the water-level box plots, shaded areas corresponding to the period-of-record normal range are included. Additionally, the results of the water-level comparisons are represented on a map (fig. 10A).

Dixon Well Cluster

In water year 2008, the wells in the Dixon well cluster were monitored for about 10 months from November 2007 to September 2008. In comparison to the period-of-record monthly mean water levels, the median monthly mean water level for 2008 was below normal in the surficial aquifer and in the upper and lower parts of the Castle Hayne aquifer (fig. 10B). The minimum water level in each aquifer, as represented in each of the box plots, likely is skewed high. Groundwater levels generally are at a minimum in October and November, which are the 2 months during which water levels were not measured at the Dixon well cluster in 2008. Strikingly, the water levels in the lower part of the Castle Hayne aquifer (ON-227) have dropped substantially in comparison with previous record collected during water years 1988–2005.

Hadnot Point Well Cluster

In water year 2008, the wells in the Hadnot Point well cluster were monitored for about 10 months from November 2007 to September 2008. In the surficial aquifer, the upper and lower parts of the Castle Hayne aquifer, and the Peedee aquifer, the median monthly mean water levels for 2008 were normal in comparison to the period-of-record monthly mean water levels (fig. 10C). Similar to the Dixon well cluster, the minimum water levels represented in each of the box plots likely are skewed high at the Hadnot Point well cluster because water levels were not measured during October and November 2008, the 2 months when groundwater levels generally are at a minimum.

Summary

The USGS in cooperation with the Marine Corps Base, Camp Lejeune, monitored water-resources conditions in 19 wells distributed throughout the surficial, Castle Hayne, Peedee, and Black Creek aquifers in Onslow County, North Carolina, from November 2007 through September 2008. Water-level, water temperature, and specific conductance data collected during November 2007 through September 2008 are summarized in this report. Near real-time monitoring equipment was installed in 19 wells at 8 locations to collect hourly measurements of water level. Additionally, specific conductance and water temperature were collected hourly in 16 of the 19 wells.

The groundwater-level altitude, water temperature, and specific conductance data collected during the study are presented graphically. The relative vertical gradients between aquifers were examined at five well-cluster sites where individual wells tap different aquifers. At three of the five well clusters, an upward vertical gradient from the Peedee to the Castle Hayne aquifer was observed. One well cluster was noticeably affected by pumping at a nearby water-supply well. Most of the wells monitored had seasonal fluctuations in water-level.

To determine the overall groundwater-resource conditions, the normal (25th to 75th percentile) monthly mean groundwater levels measured during water years 1988 through 2005 at two well clusters were compared to median monthly mean groundwater levels for water year 2008. Water levels were normal in four wells at the Hadnot Point well cluster and below normal in three wells at the Dixon well cluster.

References

- Fine, J.M., 2008, Hydrogeologic framework of Onslow County, North Carolina, 2008: U.S. Geological Survey Scientific Investigations Map 3055, 1 sheet, only available online at <http://pubs.usgs.gov/sim/3055/>.
- Freeman, L.A., Carpenter, M.C., Rosenberry, D.O., Rousseau, J.P., Unger, R., and McLean, J.S., 2004, National field manual for the collection of hydrologic data—Use of submersible pressure transducers in water-resources investigations: U.S. Geological Survey Techniques of Water-Resources Investigations, book 8, chap. A3 [variously paged].
- Harned, D.A., Lloyd, O.B., and Treece, M.W., Jr., 1989, Assessment of hydrologic and hydrogeologic data at Camp Lejeune Marine Corps Base, North Carolina: U.S. Geological Survey Water-Resources Investigations Report 89-4096, 64 p.
- Lautier, J.C., 2001, Hydrogeologic framework and groundwater conditions in the North Carolina central coastal plain: Division of Water Resources, North Carolina Department of Environment and Natural Resources, April 2001, 38 p.
- Lyke, W.L., and Winner, M.D., Jr., 1990, Hydrogeology of aquifers in Cretaceous and younger rocks in the vicinity of Onslow and southern Jones Counties, North Carolina: U.S. Geological Survey Water-Resources Investigations Report 89-4128, 49 p.
- North Carolina Division of Water Resources, 2002, Central Coastal Plain Capacity Use Area Rules, declared in 15A NCAC 2E .0501–.0507; accessed in March 2009 at http://www.ncwater.org/Permits_and_Registration/Capacity_Use/Central_Coastal_Plain/CCPrulefinal5-17-2001x.pdf.

- North Carolina Division of Water Resources, 2005, Central Coastal Plain Capacity Use Area Fact Sheet: North Carolina Department of Environment and Natural Resources, Division of Water Resources, 2 p., accessed October 15, 2009, at http://www.ncwater.org/Permits_and_Registration/Capacity_Use/Central_Coastal_Plain/ccpcua_fact_sheet_2005.pdf.
- North Carolina Division of Water Resources, 2008, Central Coastal Plain Capacity Use Area Permit; accessed in December 2008 at http://www.ncwater.org/Permits_and_Registration/Capacity_Use/Central_Coastal_Plain/ccpcuadetail.php?permit=CU3080.
- Ott, L., and Longnecker, M., 2001, An introduction to statistical methods and data analysis (5th ed.): Pacific Grove, California, Wadsworth Group, 1152 p.
- U.S. Geological Survey, 2009a, Annual Water Data Reports; accessed in March 2009 at <http://wdr.water.usgs.gov>.
- U.S. Geological Survey, 2009b, Real-time data for North Carolina groundwater; accessed in March 2009 at <http://waterdata.usgs.gov/nc/nwis/current/?type=gw>.
- U.S. Geological Survey, 2009c, Real-time data for North Carolina water quality; accessed in March 2009 at <http://waterdata.usgs.gov/nc/nwis/current/?type=qw>.
- Wagner, R.J., Boulger, R.W., Jr., Oblinger, C.J., and Smith, B.A., 2006, Guidelines and standard procedures for continuous water-quality monitors—Station operation, record computation, and data reporting: U.S. Geological Survey Techniques and Methods 1-D3 [variously paged].
- Winner, M.D., Jr., and Coble, R.W., 1989, Hydrogeologic framework of the North Carolina Coastal Plain aquifer system: U.S. Geological Survey Open-File Report 87-690, 155 p.

Appendix



Water-Data Report 2008

344425077272501 Local number ON-035 (NC-52), at Camp Geiger, NC (Castle Hayne)

Northern Atlantic Coastal Plain aquifer system
Castle Hayne Formation
Onslow County, NC

LOCATION.--Lat 34°44'18", long 77°27'27" referenced to North American Datum of 1983, Onslow County, NC, Hydrologic Unit 03030001, 0.25 mi east of U.S. Highway 17 and 2 mi south of U.S. Highway 258, at USMC Camp Geiger, southwest of Jacksonville, NC. Owner: U.S. Marine Corps.

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Drilled unused supply well, depth 70 ft, diameter 18 in. to 23 ft, open hole from 23 to 70 ft;

DATUM.--Land-surface datum is 18.26 ft above North American Vertical Datum of 1988. Measuring point: Floor of instrument shelter, 2.69 ft above land-surface datum, February 1, 2008 to present.

PERIOD OF RECORD.--January 1963 to June 2005, January 2008 to current year.

GAGE.--Water-level recorder collecting data at 60-minute intervals. Satellite telemetry at site.

REMARKS.--Well is part of U.S. Marine Corps Base, Camp Lejeune, North Carolina, Water Resources Network project.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 1.19 ft below land-surface datum, September 16, 1999; lowest water level recorded, 10.44 ft below land-surface datum, January 3, 1966.

Water-Data Report 2008

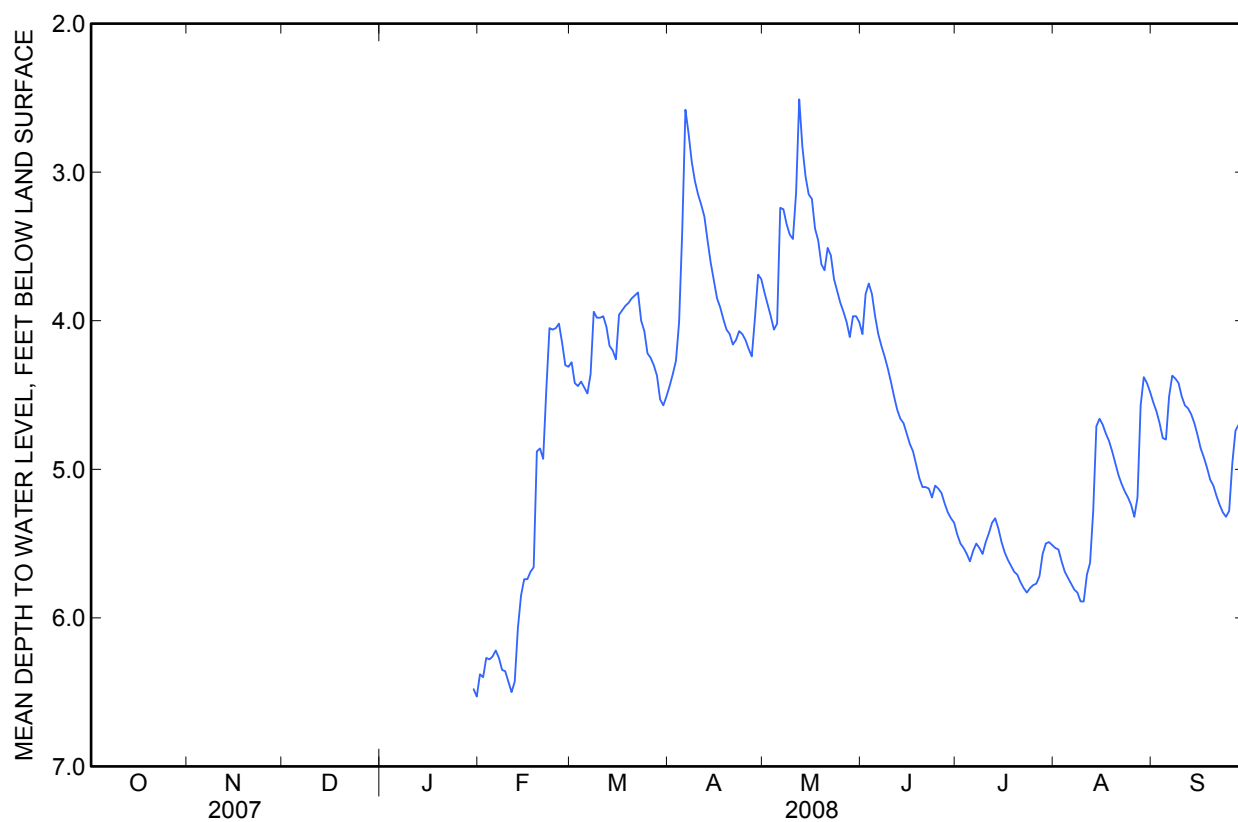
344425077272501 Local number ON-035, at Camp Geiger, NC, NC-52 (Castle Hayne)—Continued

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	---	---	6.38	4.28	4.44	3.81	4.09	5.44	5.53	4.55
2	---	---	---	---	6.40	4.42	4.36	3.89	3.82	5.50	5.54	4.61
3	---	---	---	---	6.27	4.44	4.27	3.97	3.75	5.53	5.62	4.69
4	---	---	---	---	6.28	4.41	4.01	4.06	3.82	5.57	5.69	4.79
5	---	---	---	---	6.26	4.45	3.39	4.02	3.97	5.62	5.73	4.80
6	---	---	---	---	6.22	4.49	2.58	3.24	4.09	5.55	5.77	4.51
7	---	---	---	---	6.27	4.36	2.74	3.25	4.17	5.50	5.81	4.37
8	---	---	---	---	6.35	3.94	2.93	3.35	4.24	5.53	5.83	4.39
9	---	---	---	---	6.36	3.98	3.06	3.42	4.32	5.57	5.89	4.42
10	---	---	---	---	6.43	3.98	3.15	3.45	4.41	5.49	5.89	4.51
11	---	---	---	---	6.50	3.97	3.22	3.14	4.51	5.43	5.71	4.57
12	---	---	---	---	6.43	4.04	3.30	2.51	4.60	5.36	5.63	4.59
13	---	---	---	---	6.07	4.17	3.46	2.83	4.66	5.33	5.28	4.63
14	---	---	---	---	5.85	4.20	3.61	3.03	4.69	5.40	4.71	4.69
15	---	---	---	---	5.74	4.26	3.73	3.15	4.76	5.49	4.66	4.77
16	---	---	---	---	5.74	3.96	3.85	3.18	4.83	5.56	4.70	4.86
17	---	---	---	---	5.69	3.93	3.91	3.38	4.88	5.61	4.76	4.92
18	---	---	---	---	5.66	3.90	3.99	3.46	4.97	5.65	4.81	4.99
19	---	---	---	---	4.88	3.88	4.06	3.62	5.06	5.69	4.88	5.07
20	---	---	---	---	4.86	3.85	4.09	3.66	5.12	5.71	4.96	5.11
21	---	---	---	---	4.93	3.83	4.16	3.51	5.12	5.76	5.04	5.18
22	---	---	---	---	4.46	3.81	4.13	3.56	5.13	5.80	5.10	5.24
23	---	---	---	---	4.05	4.00	4.07	3.72	5.19	5.83	5.15	5.29
24	---	---	---	---	4.06	4.07	4.09	3.80	5.11	5.80	5.19	5.32
25	---	---	---	---	4.05	4.22	4.13	3.88	5.13	5.78	5.24	5.28
26	---	---	---	---	4.02	4.25	4.19	3.94	5.16	5.77	5.32	4.96
27	---	---	---	---	4.15	4.30	4.24	4.01	5.23	5.72	5.19	4.74
28	---	---	---	---	4.30	4.37	3.98	4.11	5.29	5.57	4.57	4.70
29	---	---	---	---	4.31	4.53	3.69	3.97	5.33	5.50	4.38	4.71
30	---	---	---	6.48	---	4.57	3.72	3.97	5.36	5.49	4.42	4.72
31	---	---	---	6.53	---	4.51	---	4.01	---	5.51	4.48	---
Mean	---	---	---	---	5.48	4.17	3.75	3.58	4.69	5.58	5.21	4.80
Max	---	---	---	---	6.50	4.57	4.44	4.11	5.36	5.83	5.89	5.32
Min	---	---	---	---	4.02	3.81	2.58	2.51	3.75	5.33	4.38	4.37

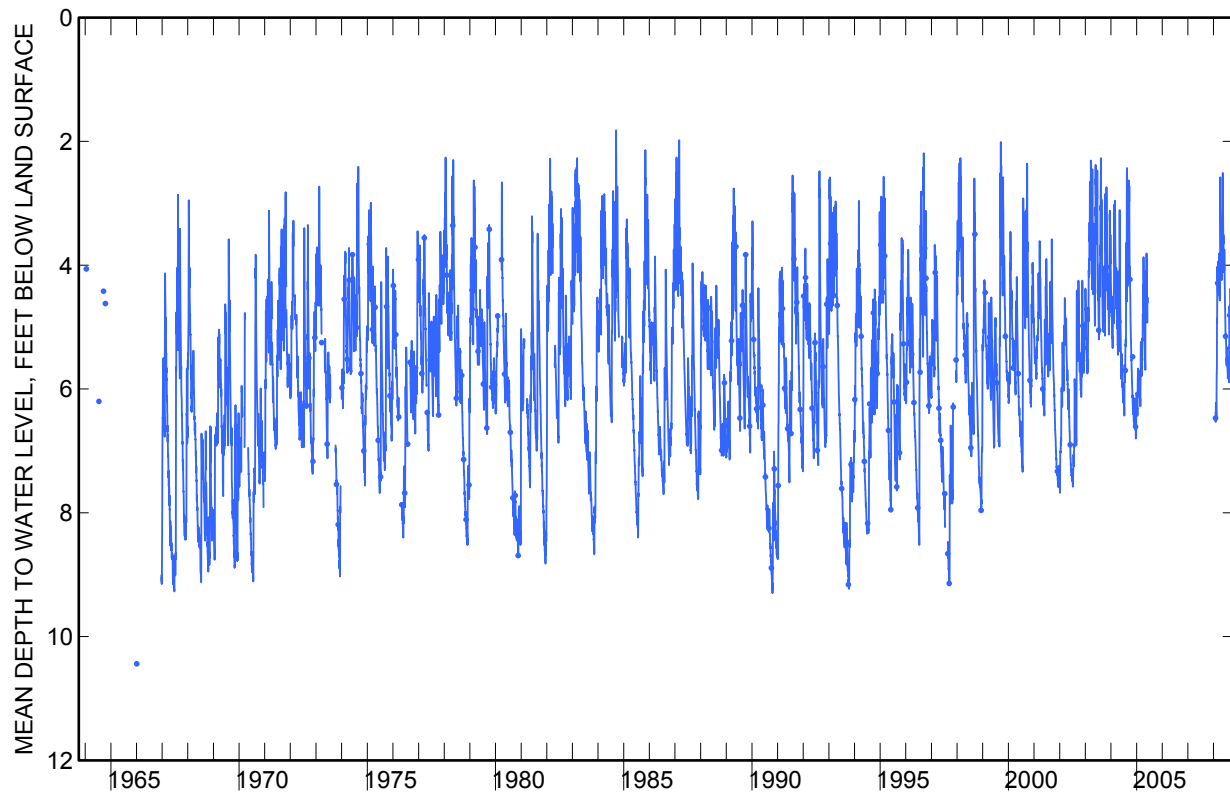
Water-Data Report 2008

344425077272501 Local number ON-035, at Camp Geiger, NC, NC-52 (Castle Hayne)—Continued



Water-Data Report 2008

344425077272501 Local number ON-035, at Camp Geiger, NC, NC-52 (Castle Hayne)—Continued



Water-Data Report 2008

344425077272501 Local number ON-035, at Camp Geiger, NC, NC-52 (Castle Hayne)—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 2008 to September 2008.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 2008 to September 2008.

WATER TEMPERATURE: January 2008 to September 2008.

INSTRUMENTATION.--Water-quality monitor in operation from January 2008 to September 2008.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 629 microsiemens, August 19; minimum recorded, 590 microsiemens, January 29, 30.

WATER TEMPERATURE: Maximum recorded, 18.6°C, on many days during the period; minimum recorded, 18.2°C, on many days during the period.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

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Water-Data Report 2008

344425077272501 Local number ON-035, at Camp Geiger, NC, NC-52 (Castle Hayne)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	18.5	18.5	18.5	18.2	18.2	18.2	18.2	18.2	18.2	18.3	18.3	18.3
2	18.5	18.5	18.5	18.2	18.2	18.2	18.2	18.2	18.2	18.3	18.3	18.3
3	18.5	18.5	18.5	18.2	18.2	18.2	18.2	18.2	18.2	18.4	18.3	18.3
4	18.5	18.5	18.5	18.2	18.2	18.2	18.2	18.2	18.2	18.4	18.3	18.4
5	18.5	18.5	18.5	18.2	18.2	18.2	18.2	18.2	18.2	18.4	18.4	18.4
6	18.5	18.4	18.5	18.2	18.2	18.2	18.2	18.2	18.2	18.4	18.4	18.4
7	18.5	18.4	18.5	18.2	18.2	18.2	18.2	18.2	18.2	18.4	18.4	18.4
8	18.5	18.4	18.5	18.2	18.2	18.2	18.2	18.2	18.2	18.4	18.4	18.4
9	18.5	18.4	18.4	18.2	18.2	18.2	18.2	18.2	18.2	18.4	18.4	18.4
10	18.4	18.4	18.4	18.2	18.2	18.2	18.2	18.2	18.2	18.4	18.4	18.4
11	18.4	18.4	18.4	18.2	18.2	18.2	18.2	18.2	18.2	18.4	18.4	18.4
12	18.4	18.4	18.4	18.2	18.2	18.2	18.2	18.2	18.2	18.4	18.4	18.4
13	18.4	18.4	18.4	18.2	18.2	18.2	18.2	18.2	18.2	18.4	18.4	18.4
14	18.4	18.4	18.4	18.2	18.2	18.2	18.2	18.2	18.2	18.4	18.4	18.4
15	18.4	18.4	18.4	18.2	18.2	18.2	18.2	18.2	18.2	18.4	18.4	18.4
16	18.4	18.4	18.4	18.2	18.2	18.2	18.2	18.2	18.2	18.4	18.4	18.4
17	18.4	18.4	18.4	18.2	18.2	18.2	18.2	18.2	18.2	18.4	18.4	18.4
18	18.4	18.4	18.4	18.2	18.2	18.2	18.3	18.2	18.2	18.4	18.4	18.4
19	18.4	18.4	18.4	18.2	18.2	18.2	18.3	18.2	18.3	18.4	18.4	18.4
20	18.4	18.4	18.4	18.2	18.2	18.2	18.3	18.3	18.3	18.4	18.4	18.4
21	18.4	18.4	18.4	18.2	18.2	18.2	18.3	18.3	18.3	18.4	18.4	18.4
22	18.4	18.4	18.4	18.2	18.2	18.2	18.3	18.3	18.3	18.4	18.4	18.4
23	18.4	18.3	18.3	18.2	18.2	18.2	18.3	18.3	18.3	18.4	18.4	18.4
24	18.3	18.3	18.3	18.2	18.2	18.2	18.3	18.3	18.3	18.4	18.4	18.4
25	18.3	18.3	18.3	18.2	18.2	18.2	18.3	18.3	18.3	18.4	18.4	18.4
26	18.3	18.3	18.3	18.2	18.2	18.2	18.3	18.3	18.3	18.4	18.4	18.4
27	18.3	18.3	18.3	18.2	18.2	18.2	18.3	18.3	18.3	18.5	18.4	18.4
28	18.3	18.2	18.3	18.2	18.2	18.2	18.3	18.3	18.3	18.5	18.4	18.5
29	18.3	18.2	18.3	18.2	18.2	18.2	18.3	18.3	18.3	18.5	18.5	18.5
30	---	---	---	18.2	18.2	18.2	18.3	18.3	18.3	18.5	18.5	18.5
31	---	---	---	18.2	18.2	18.2	---	---	---	18.5	18.5	18.5
Month	18.5	18.2	18.4	18.2	18.2	18.2	18.3	18.2	18.2	18.5	18.3	18.4

Water-Data Report 2008

344425077272501 Local number ON-035, at Camp Geiger, NC, NC-52 (Castle Hayne)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	18.5	18.5	18.5	18.5	18.5	18.5	18.6	18.6	18.6	18.5	18.5	18.5
2	18.5	18.5	18.5	18.5	18.5	18.5	18.6	18.6	18.6	18.5	18.5	18.5
3	18.5	18.5	18.5	18.6	18.5	18.5	18.6	18.6	18.6	18.5	18.5	18.5
4	18.5	18.5	18.5	18.6	18.5	18.6	18.6	18.6	18.6	18.5	18.5	18.5
5	18.5	18.5	18.5	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5
6	18.5	18.5	18.5	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5
7	18.5	18.5	18.5	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5
8	18.5	18.5	18.5	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5
9	18.5	18.5	18.5	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5
10	18.5	18.5	18.5	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5
11	18.5	18.5	18.5	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5
12	18.5	18.5	18.5	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5
13	18.5	18.5	18.5	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5
14	18.5	18.5	18.5	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5
15	18.5	18.5	18.5	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5
16	18.5	18.5	18.5	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5
17	18.5	18.5	18.5	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.6
18	18.5	18.5	18.5	18.6	18.6	18.6	18.6	18.5	18.6	18.6	18.5	18.6
19	18.5	18.5	18.5	18.6	18.6	18.6	18.5	18.5	18.5	18.6	18.5	18.6
20	18.5	18.5	18.5	18.6	18.6	18.6	18.5	18.5	18.5	18.6	18.6	18.6
21	18.5	18.5	18.5	18.6	18.6	18.6	18.5	18.5	18.5	18.6	18.6	18.6
22	18.5	18.5	18.5	18.6	18.6	18.6	18.5	18.5	18.5	18.6	18.6	18.6
23	18.5	18.5	18.5	18.6	18.6	18.6	18.5	18.5	18.5	18.6	18.6	18.6
24	18.5	18.5	18.5	18.6	18.6	18.6	18.5	18.5	18.5	18.6	18.6	18.6
25	18.5	18.5	18.5	18.6	18.6	18.6	18.5	18.5	18.5	18.6	18.6	18.6
26	18.5	18.5	18.5	18.6	18.6	18.6	18.5	18.5	18.5	18.6	18.6	18.6
27	18.5	18.5	18.5	18.6	18.6	18.6	18.5	18.5	18.5	18.6	18.6	18.6
28	18.5	18.5	18.5	18.6	18.6	18.6	18.5	18.5	18.5	18.6	18.6	18.6
29	18.5	18.5	18.5	18.6	18.6	18.6	18.5	18.5	18.5	18.6	18.6	18.6
30	18.5	18.5	18.5	18.6	18.6	18.6	18.5	18.5	18.5	18.6	18.6	18.6
31	---	---	---	18.6	18.6	18.6	18.5	18.5	18.5	---	---	---
Month	18.5	18.5	18.5	18.6	18.5	18.6	18.6	18.5	18.6	18.6	18.5	18.5

Water-Data Report 2008

344425077272501 Local number ON-035, at Camp Geiger, NC, NC-52 (Castle Hayne)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

[illegible]

Water-Data Report 2008

344425077272501 Local number ON-035, at Camp Geiger, NC, NC-52 (Castle Hayne)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	593	593	593	599	599	599	604	604	604	606	605	605
2	594	593	593	600	599	599	604	604	604	606	605	606
3	594	593	594	600	599	600	604	604	604	606	605	606
4	594	594	594	600	600	600	604	604	604	606	606	606
5	595	594	594	600	600	600	604	604	604	607	606	607
6	595	595	595	600	600	600	604	604	604	608	607	607
7	595	595	595	600	600	600	605	604	604	608	608	608
8	596	595	595	600	600	600	605	604	605	609	608	609
9	596	595	596	600	600	600	605	605	605	609	609	609
10	596	596	596	601	600	601	605	605	605	610	609	609
11	596	596	596	601	600	601	605	605	605	610	610	610
12	596	596	596	601	601	601	606	605	605	611	610	611
13	597	596	596	601	601	601	605	605	605	611	611	611
14	597	596	596	601	601	601	606	605	605	612	611	611
15	597	596	597	601	601	601	606	605	606	612	611	612
16	597	597	597	601	601	601	606	605	606	613	612	612
17	598	597	597	602	601	602	606	605	606	613	613	613
18	598	597	597	602	602	602	606	605	606	613	613	613
19	598	597	597	602	602	602	606	605	606	614	613	613
20	598	597	598	602	602	602	606	605	606	614	614	614
21	598	598	598	603	602	602	606	605	606	614	614	614
22	598	597	598	603	603	603	606	605	606	615	614	614
23	598	597	597	603	603	603	606	605	605	615	614	615
24	598	597	598	603	603	603	606	605	606	615	615	615
25	598	598	598	604	603	603	606	605	606	616	615	615
26	599	598	598	604	603	603	606	606	606	616	615	616
27	599	598	599	604	604	604	606	606	606	616	616	616
28	599	599	599	604	604	604	606	605	606	617	616	616
29	599	599	599	604	604	604	606	605	606	617	616	616
30	---	---	---	604	604	604	606	605	606	617	616	617
31	---	---	---	604	604	604	---	---	---	617	616	617
Month	599	593	596	604	599	602	606	604	605	617	605	612

Water-Data Report 2008

344425077272501 Local number ON-035, at Camp Geiger, NC, NC-52 (Castle Hayne)—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	618	617	617	622	622	622	624	624	624	627	627	627
2	618	617	617	622	622	622	624	624	624	627	627	627
3	618	617	618	622	622	622	624	624	624	627	627	627
4	618	618	618	622	622	622	625	624	624	627	627	627
5	618	618	618	622	622	622	625	624	624	628	627	627
6	618	618	618	622	622	622	625	624	625	627	627	627
7	619	618	618	623	622	622	625	625	625	628	627	627
8	619	618	619	623	622	622	625	625	625	628	627	627
9	619	619	619	623	622	623	625	625	625	628	627	627
10	619	619	619	623	622	623	625	625	625	628	627	628
11	620	619	619	623	622	623	625	625	625	628	627	628
12	619	619	619	623	623	623	625	625	625	628	627	628
13	620	619	619	623	622	623	625	625	625	628	628	628
14	620	619	620	623	623	623	625	625	625	628	628	628
15	620	619	620	623	623	623	625	625	625	628	628	628
16	620	620	620	623	623	623	625	625	625	628	628	628
17	620	620	620	623	623	623	625	625	625	628	628	628
18	620	620	620	623	623	623	628	625	626	628	628	628
19	620	620	620	623	623	623	629	628	628	628	628	628
20	622	620	621	623	623	623	628	628	628	628	628	628
21	622	622	622	624	623	623	628	627	627	628	628	628
22	622	621	622	623	623	623	627	627	627	628	628	628
23	621	621	621	624	623	623	627	627	627	628	628	628
24	622	621	621	624	623	623	627	627	627	628	628	628
25	622	621	622	624	623	624	627	627	627	628	628	628
26	622	621	622	624	623	624	627	626	627	628	628	628
27	622	621	622	624	624	624	627	626	626	628	628	628
28	622	621	622	624	624	624	627	627	627	628	628	628
29	622	622	622	624	624	624	627	627	627	628	628	628
30	622	622	622	624	624	624	627	627	627	628	628	628
31	---	---	---	624	624	624	627	627	627	---	---	---
Month	622	617	620	624	622	623	629	624	626	628	627	628



Water-Data Report 2008

343641077290104 Local number ON-225 (NC-181), NCDENR Dixon Research Station Y25Q4 at Camp Lejeune, NC (Black Creek)

Northern Atlantic Coastal Plain aquifer system
Black Creek Aquifer
Onslow County, NC

LOCATION.--Lat 34°36'41", long 77°29'01" referenced to North American Datum of 1927, Onslow County, NC, Hydrologic Unit 03030001, on U.S. Highway 17, 1.5 mi north of Dixon. Owner: NCDENR (North Carolina Department of Environment and Natural Resources).

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Drilled observation well, depth 534 ft, screened interval from 524 ft to 534 ft.

DATUM.--Land-surface datum is 67.13 ft above North American Vertical Datum of 1988. Measuring point: top of casing, 1.01 ft above land-surface datum, November 1, 2007 to present.

PERIOD OF RECORD.--August 1986 to November 1990, June 1995 to September 1997, August 2000 to September 2005, November 2007 to current year.

GAGE.--Water-level recorder collecting data at 60-minute intervals. Satellite telemetry at site.

REMARKS.--Well is part of U.S. Marine Corps Base, Camp LeJeune, North Carolina, Water Resources Network project.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 39.37 ft below land-surface datum, January 22, 1987; lowest water level recorded, 46.27 ft below land-surface datum, August 22, 2002.

Water-Data Report 2008

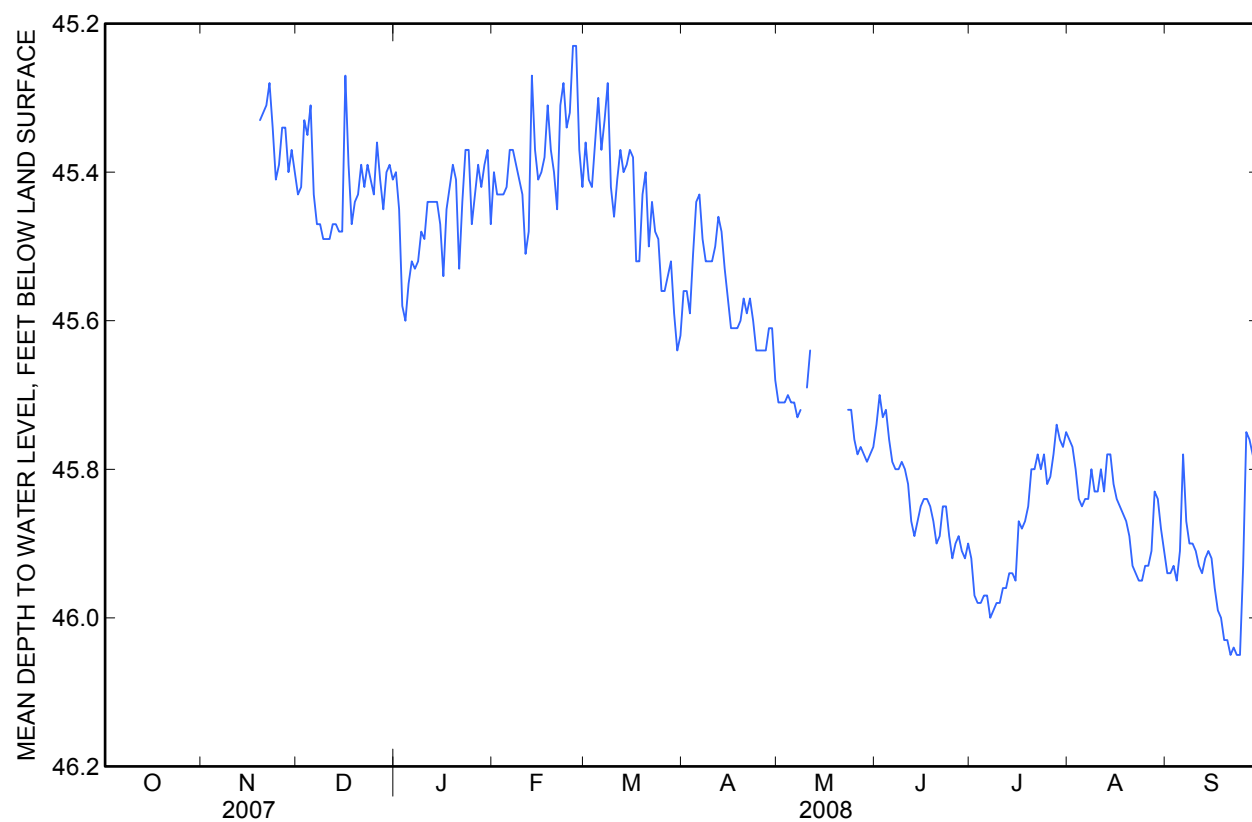
343641077290104 Local number ON-225 (NC-181), NCDENR Dixon Research Station Y25Q4 at Camp Lejeune, NC (Black Creek)—Continued

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	45.43	45.40	45.40	45.36	45.56	45.71	45.74	45.92	45.76	45.94
2	---	---	45.42	45.45	45.43	45.41	45.56	45.71	45.70	45.97	45.77	45.94
3	---	---	45.33	45.58	45.43	45.42	45.59	45.71	45.73	45.98	45.80	45.93
4	---	---	45.35	45.60	45.43	45.36	45.51	45.70	45.72	45.98	45.84	45.95
5	---	---	45.31	45.55	45.42	45.30	45.44	45.71	45.76	45.97	45.85	45.91
6	---	---	45.43	45.52	45.37	45.37	45.43	45.71	45.79	45.97	45.84	45.78
7	---	---	45.47	45.53	45.37	45.33	45.49	45.73	45.80	46.00	45.84	45.87
8	---	---	45.47	45.52	45.39	45.28	45.52	45.72	45.80	45.99	45.80	45.90
9	---	---	45.49	45.48	45.41	45.42	45.52	---	45.79	45.98	45.83	45.90
10	---	---	45.49	45.49	45.43	45.46	45.52	45.69	45.80	45.98	45.83	45.91
11	---	---	45.49	45.44	45.51	45.41	45.50	45.64	45.82	45.96	45.80	45.93
12	---	---	45.47	45.44	45.48	45.37	45.46	---	45.87	45.96	45.83	45.94
13	---	---	45.47	45.44	45.27	45.40	45.48	---	45.89	45.94	45.78	45.92
14	---	---	45.48	45.44	45.37	45.39	45.53	---	45.87	45.94	45.78	45.91
15	---	---	45.48	45.47	45.41	45.37	45.57	---	45.85	45.95	45.82	45.92
16	---	---	45.27	45.54	45.40	45.38	45.61	---	45.84	45.87	45.84	45.96
17	---	---	45.39	45.45	45.38	45.52	45.61	---	45.84	45.88	45.85	45.99
18	---	---	45.47	45.42	45.31	45.52	45.61	---	45.85	45.87	45.86	46.00
19	---	45.33	45.44	45.39	45.37	45.43	45.60	---	45.87	45.85	45.87	46.03
20	---	45.32	45.43	45.41	45.40	45.40	45.57	---	45.90	45.80	45.89	46.03
21	---	45.31	45.39	45.53	45.45	45.50	45.59	---	45.89	45.80	45.93	46.05
22	---	45.28	45.42	45.44	45.31	45.44	45.57	---	45.85	45.78	45.94	46.04
23	---	45.34	45.39	45.37	45.28	45.48	45.60	45.72	45.85	45.80	45.95	46.05
24	---	45.41	45.41	45.37	45.34	45.49	45.64	45.72	45.89	45.78	45.95	46.05
25	---	45.39	45.43	45.47	45.32	45.56	45.64	45.76	45.92	45.82	45.93	45.93
26	---	45.34	45.36	45.43	45.23	45.56	45.64	45.78	45.90	45.81	45.93	45.75
27	---	45.34	45.41	45.39	45.23	45.54	45.64	45.77	45.89	45.78	45.91	45.76
28	---	45.40	45.45	45.42	45.37	45.52	45.61	45.78	45.91	45.74	45.83	45.78
29	---	45.37	45.40	45.39	45.42	45.59	45.61	45.79	45.92	45.76	45.84	45.80
30	---	45.40	45.39	45.37	---	45.64	45.68	45.78	45.90	45.77	45.88	45.79
31	---	---	45.41	45.47	---	45.62	---	45.77	---	45.75	45.91	---
Mean	---	---	45.42	45.46	45.38	45.45	45.56	---	45.84	45.88	45.85	45.92
Max	---	---	45.49	45.60	45.51	45.64	45.68	---	45.92	46.00	45.95	46.05
Min	---	---	45.27	45.37	45.23	45.28	45.43	---	45.70	45.74	45.76	45.75

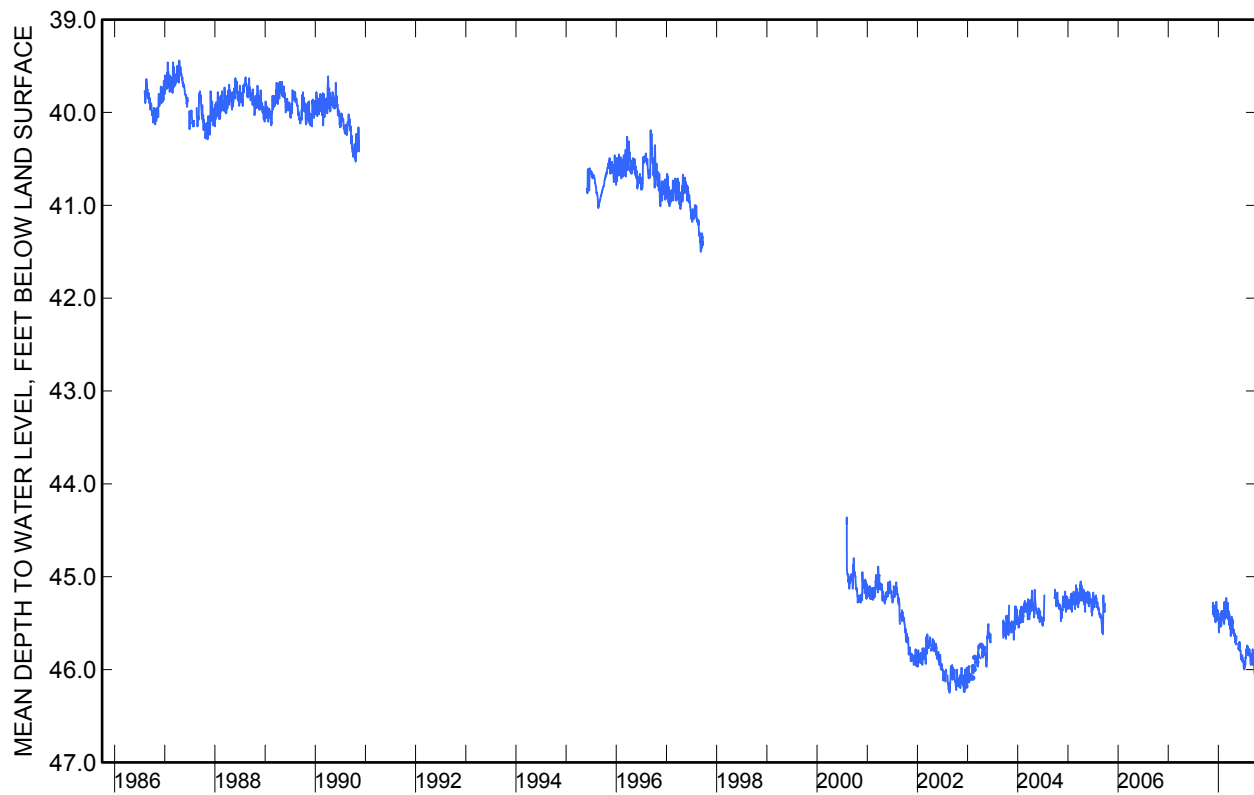
Water-Data Report 2008

343641077290104 Local number ON-225 (NC-181), NCDENR Dixon Research Station Y25Q4 at Camp Lejeune, NC (Black Creek)—Continued



Water-Data Report 2008

343641077290104 Local number ON-225 (NC-181), NCDENR Dixon Research Station Y25Q4 at Camp Lejeune, NC (Black Creek)—Continued





Water-Data Report 2008

343641077290101 Local number ON-226, NCDENR Dixon Research Station Y25Q1, at Camp Lejeune, NC (Castle Hayne)

Northern Atlantic Coastal Plain aquifer system
Castle Hayne Formation
Onslow County, NC

LOCATION.--Lat 34°36'41", long 77°29'01" referenced to North American Datum of 1927, Onslow County, NC, Hydrologic Unit 03030001, on U.S. Highway 17, 1.5 mi north of Dixon. Owner: NCDENR (North Carolina Department of Environment and Natural Resources).

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Drilled observation well, depth 80 ft, screened interval from 58 ft to 80 ft.

DATUM.--Land-surface datum is 66.07 ft above North American Vertical Datum of 1988. Measuring point: top of casing, 1.73 ft above land-surface datum, November 19, 2007 to present.

PERIOD OF RECORD.--August 2000 to July 2004, November 2007 to current year.

GAGE.--Water-level recorder collecting data at 60-minute intervals. Satellite telemetry at site.

REMARKS.--Well is part of U.S. Marine Corps Base, Camp Lejeune, North Carolina, Water Resources Network project.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 34.72 ft below land-surface datum, December 24, 2003, January 5, 2004; lowest water level recorded, 39.93 ft below land-surface datum, August 9, 2008.

Water-Data Report 2008

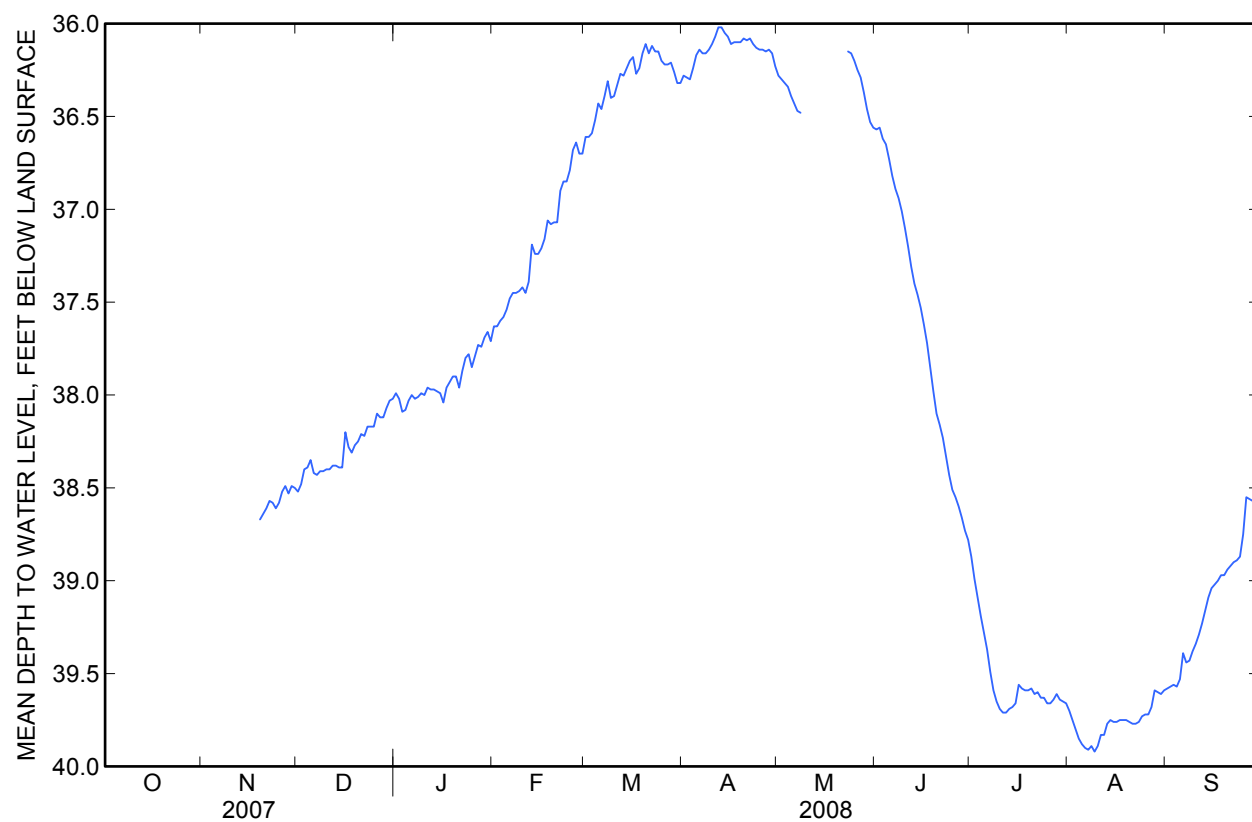
343641077290101 Local number ON-226, NCDENR Dixon Research Station Y25Q1, at Camp Lejeune, NC (Castle Hayne)—Continued

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	38.52	37.99	37.63	36.61	36.28	36.28	36.57	38.87	39.70	39.58
2	---	---	38.48	38.02	37.63	36.61	36.29	36.30	36.56	38.99	39.75	39.57
3	---	---	38.40	38.09	37.60	36.59	36.30	36.32	36.62	39.09	39.80	39.56
4	---	---	38.39	38.08	37.58	36.52	36.24	36.34	36.65	39.19	39.85	39.57
5	---	---	38.35	38.03	37.54	36.43	36.17	36.39	36.73	39.28	39.88	39.53
6	---	---	38.42	38.00	37.48	36.46	36.14	36.43	36.82	39.37	39.90	39.39
7	---	---	38.43	38.02	37.45	36.39	36.16	36.47	36.89	39.49	39.91	39.44
8	---	---	38.41	38.01	37.45	36.31	36.16	36.48	36.94	39.59	39.89	39.43
9	---	---	38.41	37.99	37.44	36.40	36.14	---	37.01	39.65	39.92	39.38
10	---	---	38.40	38.00	37.42	36.39	36.11	---	37.10	39.69	39.89	39.34
11	---	---	38.40	37.96	37.45	36.33	36.07	---	37.20	39.71	39.83	39.29
12	---	---	38.38	37.97	37.39	36.27	36.02	---	37.31	39.71	39.83	39.23
13	---	---	38.38	37.97	37.19	36.28	36.02	---	37.40	39.69	39.77	39.16
14	---	---	38.39	37.98	37.24	36.24	36.05	---	37.46	39.68	39.75	39.09
15	---	---	38.39	37.99	37.24	36.20	36.07	---	37.53	39.66	39.76	39.04
16	---	---	38.20	38.04	37.21	36.18	36.11	---	37.62	39.56	39.76	39.02
17	---	---	38.28	37.96	37.16	36.27	36.10	---	37.72	39.58	39.75	39.00
18	---	---	38.31	37.93	37.06	36.24	36.10	---	37.85	39.59	39.75	38.97
19	---	38.67	38.27	37.90	37.08	36.16	36.10	---	37.98	39.59	39.75	38.97
20	---	38.64	38.25	37.90	37.07	36.11	36.08	---	38.10	39.58	39.76	38.94
21	---	38.61	38.21	37.96	37.07	36.16	36.09	---	38.16	39.61	39.77	38.92
22	---	38.57	38.22	37.87	36.90	36.12	36.08	---	38.23	39.60	39.77	38.90
23	---	38.58	38.17	37.80	36.85	36.15	36.11	36.15	38.33	39.63	39.76	38.89
24	---	38.61	38.17	37.78	36.85	36.15	36.13	36.16	38.43	39.63	39.73	38.87
25	---	38.58	38.17	37.85	36.79	36.20	36.14	36.20	38.51	39.66	39.72	38.75
26	---	38.52	38.10	37.79	36.68	36.22	36.14	36.25	38.55	39.66	39.72	38.55
27	---	38.49	38.12	37.73	36.64	36.22	36.15	36.29	38.60	39.64	39.68	38.56
28	---	38.53	38.12	37.74	36.70	36.21	36.14	36.37	38.66	39.61	39.59	38.57
29	---	38.49	38.07	37.69	36.70	36.26	36.16	36.46	38.73	39.64	39.60	38.59
30	---	38.50	38.03	37.66	---	36.32	36.23	36.53	38.78	39.65	39.61	38.59
31	---	---	38.02	37.71	---	36.32	---	36.56	---	39.66	39.59	---
Mean	---	---	38.29	37.92	37.19	36.30	36.14	---	37.63	39.53	39.77	39.09
Max	---	---	38.52	38.09	37.63	36.61	36.30	---	38.78	39.71	39.92	39.58
Min	---	---	38.02	37.66	36.64	36.11	36.02	---	36.56	38.87	39.59	38.55

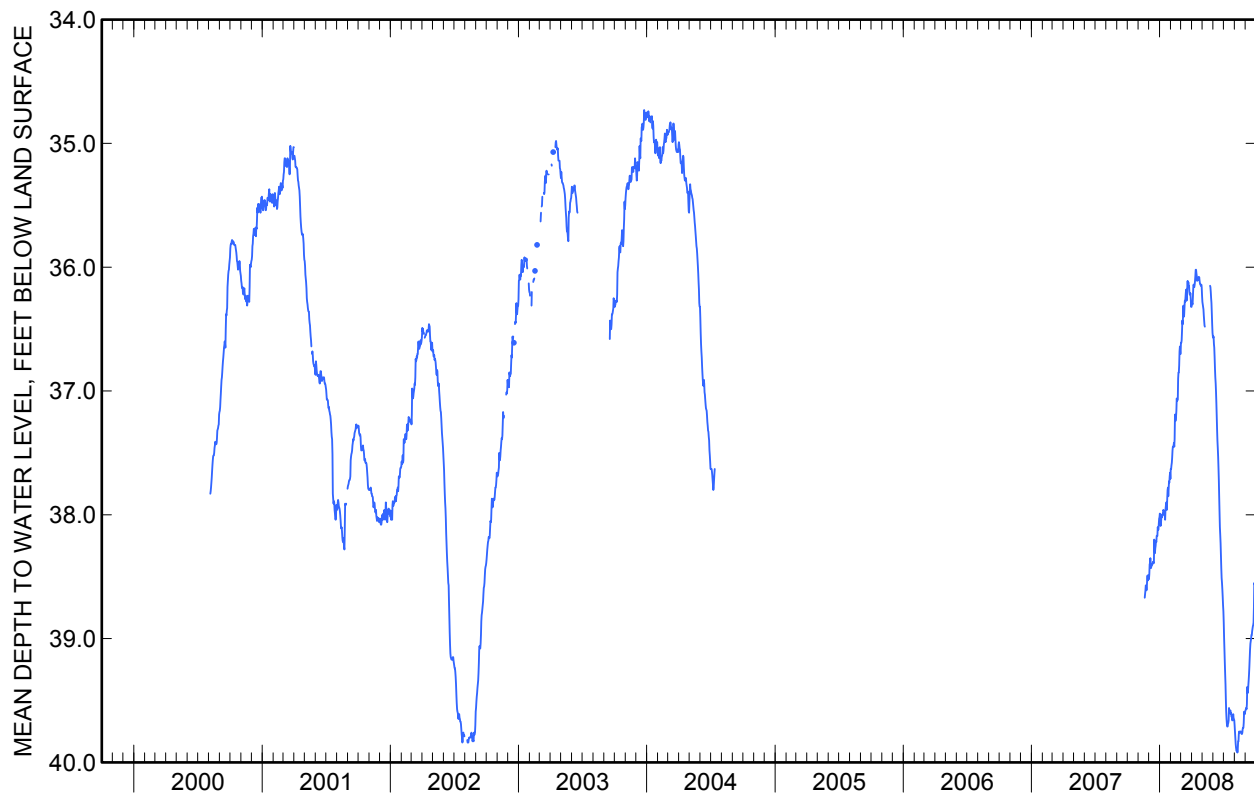
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343641077290101 Local number ON-226, NCDENR Dixon Research Station Y25Q1, at Camp Lejeune, NC (Castle Hayne)—Continued



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343641077290101 Local number ON-226, NCDENR Dixon Research Station Y25Q1, at Camp Lejeune, NC (Castle Hayne)—Continued



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WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 2007 to September 2008.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 2007 to September 2008.

WATER TEMPERATURE: November 2007 to September 2008.

INSTRUMENTATION.--Water-quality monitor in operation from November 2007 to September 2008.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 394 microsiemens, March 21, 22; minimum recorded, 369 microsiemens, July 15.

WATER TEMPERATURE: Maximum recorded, 18.0°C, on many days during the period; minimum recorded, 17.6°C, on several days during the period.

**TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	18.0	18.0	18.0	17.9	17.9	17.9
2	---	---	---	---	---	---	18.0	17.9	18.0	17.9	17.8	17.9
3	---	---	---	---	---	---	18.0	17.9	18.0	17.9	17.9	17.9
4	---	---	---	---	---	---	17.9	17.9	17.9	17.9	17.8	17.9
5	---	---	---	---	---	---	17.9	17.8	17.9	17.9	17.8	17.9
6	---	---	---	---	---	---	17.9	17.9	17.9	17.9	17.8	17.9
7	---	---	---	---	---	---	17.9	17.8	17.9	17.9	17.8	17.8
8	---	---	---	---	---	---	17.9	17.9	17.9	17.8	17.8	17.8
9	---	---	---	---	---	---	17.9	17.9	17.9	17.8	17.8	17.8
10	---	---	---	---	---	---	17.9	17.9	17.9	17.8	17.8	17.8
11	---	---	---	---	---	---	17.9	17.9	17.9	17.8	17.8	17.8
12	---	---	---	---	---	---	17.9	17.9	17.9	17.8	17.8	17.8
13	---	---	---	---	---	---	17.9	17.9	17.9	17.8	17.8	17.8
14	---	---	---	---	---	---	17.9	17.9	17.9	17.8	17.8	17.8
15	---	---	---	---	---	---	17.9	17.8	17.9	17.8	17.8	17.8
16	---	---	---	---	---	---	17.9	17.9	17.9	17.8	17.8	17.8
17	---	---	---	---	---	---	17.9	17.9	17.9	17.8	17.8	17.8
18	---	---	---	---	---	---	17.9	17.8	17.9	17.8	17.8	17.8
19	---	---	---	18.0	18.0	18.0	17.9	17.9	17.9	17.8	17.8	17.8
20	---	---	---	18.0	18.0	18.0	17.9	17.9	17.9	17.8	17.8	17.8
21	---	---	---	18.0	18.0	18.0	17.9	17.8	17.9	17.8	17.8	17.8
22	---	---	---	18.0	18.0	18.0	17.9	17.9	17.9	17.8	17.8	17.8
23	---	---	---	18.0	18.0	18.0	17.9	17.8	17.9	17.8	17.8	17.8
24	---	---	---	18.0	17.9	18.0	17.9	17.9	17.9	17.8	17.8	17.8
25	---	---	---	18.0	18.0	18.0	17.9	17.9	17.9	17.8	17.8	17.8
26	---	---	---	18.0	18.0	18.0	17.9	17.8	17.9	17.8	17.8	17.8
27	---	---	---	18.0	18.0	18.0	17.9	17.9	17.9	17.8	17.8	17.8
28	---	---	---	18.0	18.0	18.0	17.9	17.9	17.9	17.8	17.8	17.8
29	---	---	---	18.0	18.0	18.0	17.9	17.8	17.9	17.8	17.8	17.8
30	---	---	---	18.0	18.0	18.0	17.9	17.9	17.9	17.8	17.8	17.8
31	---	---	---	---	---	---	17.9	17.8	17.9	17.8	17.8	17.8
Month	---	---	---	---	---	---	18.0	17.8	17.9	17.9	17.8	17.8

Water-Data Report 2008

343641077290101 Local number ON-226, NCDENR Dixon Research Station Y25Q1, at Camp Lejeune, NC (Castle Hayne)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
February				March			April			May		
1	17.8	17.8	17.8	17.9	17.8	17.9	17.9	17.9	17.9	17.8	17.8	17.8
2	17.8	17.8	17.8	17.9	17.9	17.9	17.9	17.8	17.9	17.8	17.8	17.8
3	17.8	17.8	17.8	17.9	17.8	17.9	17.9	17.9	17.9	17.8	17.8	17.8
4	17.8	17.8	17.8	17.9	17.9	17.9	17.9	17.9	17.9	17.8	17.8	17.8
5	17.8	17.7	17.8	17.9	17.9	17.9	17.9	17.9	17.9	17.8	17.8	17.8
6	17.8	17.8	17.8	17.9	17.9	17.9	17.9	17.8	17.9	17.8	17.8	17.8
7	17.8	17.8	17.8	17.9	17.8	17.9	17.9	17.9	17.9	17.8	17.8	17.8
8	17.8	17.8	17.8	17.9	17.8	17.9	17.9	17.9	17.9	17.8	17.8	17.8
9	17.8	17.8	17.8	17.9	17.8	17.9	17.9	17.9	17.9	---	---	---
10	17.8	17.8	17.8	17.9	17.9	17.9	17.9	17.8	17.9	---	---	---
11	17.8	17.6	17.7	17.9	17.8	17.9	17.8	17.8	17.8	---	---	---
12	17.7	17.6	17.7	17.9	17.9	17.9	17.8	17.8	17.8	---	---	---
13	17.7	17.7	17.7	17.9	17.9	17.9	17.8	17.8	17.8	---	---	---
14	17.7	17.6	17.7	17.9	17.8	17.9	17.8	17.8	17.8	---	---	---
15	17.7	17.6	17.7	17.9	17.9	17.9	17.8	17.8	17.8	---	---	---
16	17.7	17.6	17.7	17.9	17.8	17.9	17.8	17.8	17.8	---	---	---
17	17.7	17.6	17.7	17.9	17.8	17.9	17.8	17.8	17.8	---	---	---
18	17.7	17.6	17.7	17.9	17.8	17.9	17.8	17.8	17.8	---	---	---
19	17.7	17.7	17.7	17.9	17.9	17.9	17.8	17.8	17.8	---	---	---
20	17.7	17.6	17.7	17.9	17.8	17.9	17.8	17.8	17.8	---	---	---
21	17.7	17.7	17.7	17.9	17.8	17.9	17.8	17.8	17.8	---	---	---
22	17.7	17.7	17.7	17.9	17.9	17.9	17.8	17.8	17.8	---	---	---
23	17.7	17.6	17.7	17.9	17.8	17.9	17.8	17.8	17.8	18.0	18.0	18.0
24	17.7	17.6	17.7	17.9	17.9	17.9	17.8	17.8	17.8	18.0	18.0	18.0
25	17.7	17.7	17.7	17.9	17.8	17.9	17.8	17.8	17.8	18.0	18.0	18.0
26	17.7	17.7	17.7	17.9	17.9	17.9	17.8	17.8	17.8	18.0	18.0	18.0
27	17.7	17.7	17.7	17.9	17.9	17.9	17.8	17.8	17.8	18.0	18.0	18.0
28	17.9	17.7	17.8	17.9	17.8	17.9	17.8	17.8	17.8	18.0	18.0	18.0
29	17.9	17.9	17.9	17.9	17.9	17.9	17.8	17.8	17.8	18.0	18.0	18.0
30	---	---	---	17.9	17.8	17.9	17.8	17.8	17.8	18.0	18.0	18.0
31	---	---	---	17.9	17.9	17.9	---	---	---	18.0	18.0	18.0
Month	17.9	17.6	17.7	17.9	17.8	17.9	17.9	17.8	17.8	---	---	---

Water-Data Report 2008

343641077290101 Local number ON-226, NCDENR Dixon Research Station Y25Q1, at Camp Lejeune, NC (Castle Hayne)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	18.0	18.0	18.0	17.9	17.9	17.9	17.8	17.7	17.7	17.8	17.8	17.8
2	18.0	18.0	18.0	17.9	17.9	17.9	17.7	17.7	17.7	17.8	17.8	17.8
3	18.0	18.0	18.0	17.9	17.9	17.9	17.7	17.7	17.7	17.8	17.8	17.8
4	18.0	18.0	18.0	17.9	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
5	18.0	17.9	18.0	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
6	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
7	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
8	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
9	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
10	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
11	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
12	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
13	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
14	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
15	17.9	17.9	17.9	17.8	17.8	17.8	17.9	17.7	17.7	17.8	17.8	17.8
16	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
17	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
18	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
19	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
20	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
21	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
22	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
23	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
24	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
25	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
26	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
27	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
28	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
29	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
30	17.9	17.9	17.9	17.8	17.8	17.8	17.7	17.7	17.7	17.8	17.8	17.8
31	---	---	---	17.8	17.8	17.8	17.8	17.7	17.8	---	---	---
Month	18.0	17.9	17.9	17.9	17.8	17.8	17.9	17.7	17.7	17.8	17.8	17.8

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**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	389	389	389	388	388	388
2	---	---	---	---	---	---	389	388	389	388	388	388
3	---	---	---	---	---	---	389	388	389	388	388	388
4	---	---	---	---	---	---	389	388	388	388	388	388
5	---	---	---	---	---	---	389	388	388	388	388	388
6	---	---	---	---	---	---	388	388	388	388	388	388
7	---	---	---	---	---	---	388	388	388	388	388	388
8	---	---	---	---	---	---	388	388	388	388	388	388
9	---	---	---	---	---	---	388	388	388	388	388	388
10	---	---	---	---	---	---	388	388	388	389	388	388
11	---	---	---	---	---	---	388	388	388	388	388	388
12	---	---	---	---	---	---	388	388	388	388	388	388
13	---	---	---	---	---	---	388	388	388	388	388	388
14	---	---	---	---	---	---	388	388	388	388	388	388
15	---	---	---	---	---	---	388	388	388	388	388	388
16	---	---	---	---	---	---	388	388	388	388	388	388
17	---	---	---	---	---	---	388	388	388	388	388	388
18	---	---	---	---	---	---	388	388	388	388	388	388
19	---	---	---	388	387	388	388	388	388	388	388	388
20	---	---	---	388	387	388	388	388	388	388	388	388
21	---	---	---	388	387	388	388	388	388	388	388	388
22	---	---	---	388	387	388	388	388	388	388	388	388
23	---	---	---	388	387	388	388	388	388	388	388	388
24	---	---	---	389	388	388	388	388	388	388	388	388
25	---	---	---	389	388	388	388	388	388	388	388	388
26	---	---	---	389	388	389	388	388	388	388	388	388
27	---	---	---	389	388	389	388	388	388	388	388	388
28	---	---	---	389	388	389	388	388	388	388	388	388
29	---	---	---	389	388	389	388	388	388	388	388	388
30	---	---	---	389	389	389	388	388	388	388	388	388
31	---	---	---	---	---	---	388	388	388	388	388	388
Month	---	---	---	---	---	---	389	388	388	389	388	388

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SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	388	388	388	392	391	392	393	393	393	392	392	392
2	388	388	388	392	391	392	393	393	393	392	392	392
3	388	388	388	392	392	392	393	393	393	392	392	392
4	388	388	388	392	392	392	393	393	393	392	392	392
5	388	388	388	392	392	392	393	393	393	392	392	392
6	388	388	388	392	392	392	393	393	393	392	392	392
7	388	388	388	393	392	392	393	393	393	392	392	392
8	388	388	388	393	392	393	393	393	393	392	392	392
9	389	388	388	393	393	393	393	393	393	---	---	---
10	388	388	388	393	393	393	393	393	393	---	---	---
11	388	388	388	393	393	393	393	393	393	---	---	---
12	388	388	388	393	393	393	393	393	393	---	---	---
13	388	388	388	393	393	393	393	393	393	---	---	---
14	388	388	388	393	393	393	393	393	393	---	---	---
15	389	388	388	393	393	393	393	393	393	---	---	---
16	389	388	388	393	393	393	393	393	393	---	---	---
17	389	388	388	393	393	393	393	393	393	---	---	---
18	389	388	389	393	393	393	393	392	393	---	---	---
19	389	388	389	393	393	393	393	392	393	---	---	---
20	389	388	389	393	393	393	393	392	393	---	---	---
21	389	389	389	394	393	393	393	392	393	---	---	---
22	389	389	389	394	393	393	393	392	393	---	---	---
23	389	389	389	393	393	393	393	392	392	387	386	386
24	389	389	389	393	393	393	393	392	393	387	386	387
25	389	389	389	393	393	393	393	392	393	387	386	387
26	389	389	389	393	393	393	393	392	392	387	386	387
27	389	389	389	393	393	393	393	392	392	387	386	386
28	391	389	390	393	393	393	393	392	392	387	386	386
29	392	391	391	393	393	393	392	392	392	386	385	386
30	---	---	---	393	393	393	392	392	392	386	385	386
31	---	---	---	393	393	393	---	---	---	386	385	385
Month	392	388	389	394	391	393	393	392	393	---	---	---

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**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	385	384	385	381	380	380	380	380	380	389	389	389
2	385	384	385	381	380	380	380	380	380	390	389	389
3	384	384	384	380	380	380	380	380	380	390	389	389
4	384	384	384	380	380	380	380	380	380	390	389	389
5	384	383	384	380	380	380	380	380	380	390	389	389
6	384	383	383	380	380	380	380	380	380	390	389	390
7	383	383	383	380	380	380	380	380	380	390	389	390
8	383	382	383	380	380	380	380	380	380	390	389	389
9	383	382	382	380	380	380	380	380	380	390	389	389
10	382	382	382	380	380	380	380	380	380	390	389	390
11	382	382	382	380	380	380	380	380	380	390	389	390
12	382	382	382	380	380	380	381	380	380	390	390	390
13	382	381	382	380	380	380	381	380	380	390	390	390
14	382	381	382	380	380	380	381	380	380	390	390	390
15	382	381	382	380	369	378	391	380	383	390	390	390
16	382	381	381	371	370	370	389	388	389	390	390	390
17	382	381	381	371	370	371	389	388	388	390	390	390
18	381	381	381	371	370	371	388	388	388	390	390	390
19	381	381	381	371	371	371	388	388	388	391	390	390
20	381	381	381	374	371	372	388	388	388	391	390	390
21	381	381	381	381	373	375	389	388	388	391	390	390
22	381	381	381	381	380	380	389	388	388	391	390	390
23	381	381	381	381	380	380	389	388	389	391	390	390
24	381	381	381	380	379	380	389	388	389	391	390	391
25	381	381	381	380	380	380	389	389	389	391	390	391
26	381	380	381	381	380	380	389	389	389	391	390	391
27	381	380	381	381	380	380	389	389	389	391	390	391
28	381	380	381	381	380	380	390	389	389	391	390	391
29	381	380	380	381	380	380	389	389	389	391	390	391
30	381	380	380	381	380	380	389	389	389	391	391	391
31	---	---	---	380	380	380	389	389	389	---	---	---
Month	385	380	382	381	369	378	391	380	385	391	389	390



Water-Data Report 2008

**343641077290103 Local number ON-227, NCDENR Dixon Research Station Y25q3, at Camp Lejeune, NC
(Castle Hayne)**

Northern Atlantic Coastal Plain aquifer system

Castle Hayne Formation

Onslow County, NC

LOCATION.--Lat 34°36'41", long 77°28'58" referenced to North American Datum of 1983, Onslow County, NC, Hydrologic Unit 03030001, on U.S. Highway 17, 1.5 mi north of Dixon. Owner: NCDENR (North Carolina Department of Environment and Natural Resources).

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Drilled observation well, depth 240 ft, diameter 4 in., cased to 150 ft, screened interval from 150 ft to 240 ft.

DATUM.--Land-surface datum is 66.19 ft above North American Vertical Datum of 1988. Measuring point: top of steel casing, 1.71 ft above land-surface datum, November 19, 2007 to present.

PERIOD OF RECORD.--May 1986 to September 2005, November 2007 to current year.

GAGE.--Water-level recorder collecting data at 60-minute intervals. Satellite telemetry at site.

REMARKS.--Well is part of U.S. Marine Corps Base, Camp Lejeune, North Carolina, Water Resources Network project.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 32.13 ft below land-surface datum, March 13, 1993; lowest water level recorded, 44.03 ft below land-surface datum, August 7, 8, 2008.

Water-Data Report 2008

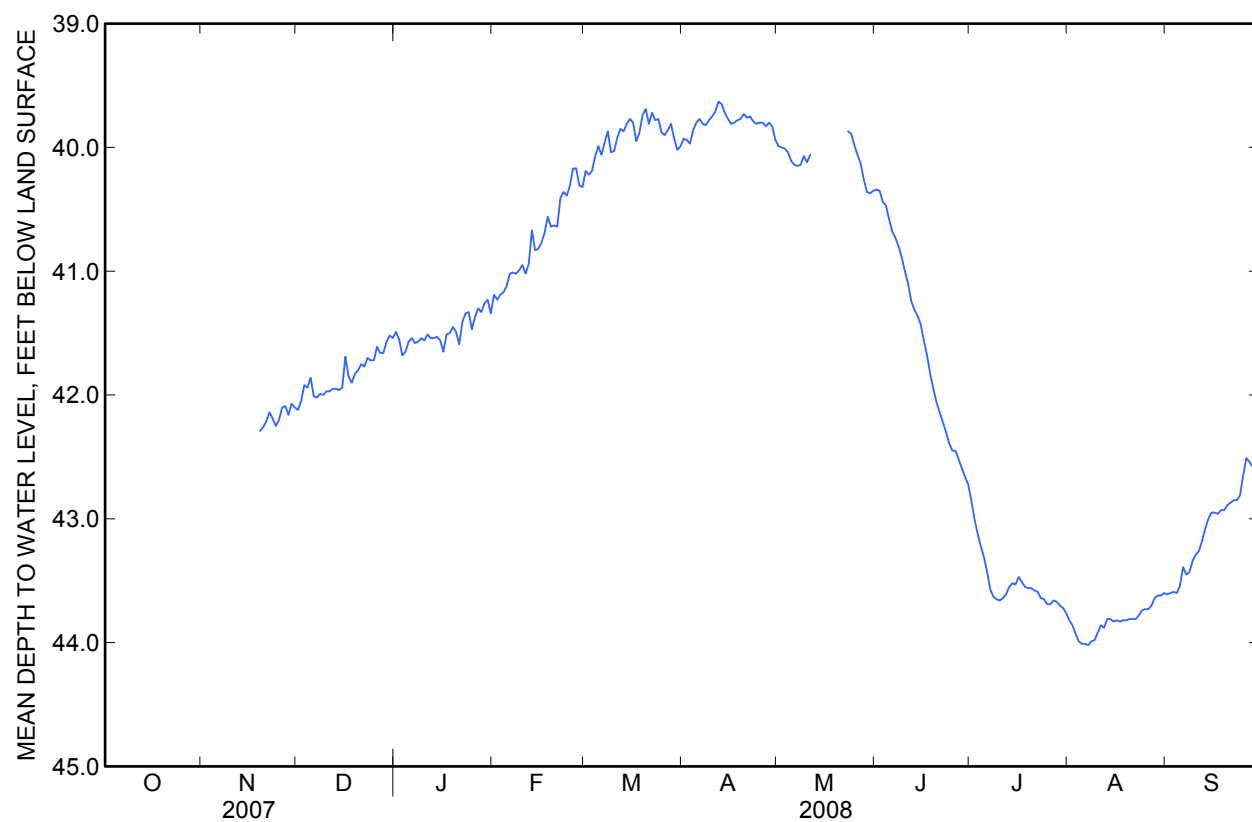
343641077290103 Local number ON-227, NCDENR Dixon Research Station Y25q3, at Camp Lejeune, NC (Castle Hayne)—Continued

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	42.12	41.49	41.19	40.19	39.93	39.99	40.34	42.85	43.82	43.61
2	---	---	42.05	41.55	41.23	40.22	39.94	40.00	40.35	43.00	43.86	43.60
3	---	---	41.92	41.68	41.19	40.19	39.97	40.01	40.44	43.12	43.93	43.59
4	---	---	41.94	41.65	41.17	40.07	39.86	40.04	40.47	43.22	43.99	43.60
5	---	---	41.86	41.57	41.12	39.99	39.80	40.11	40.58	43.31	44.01	43.54
6	---	---	42.01	41.54	41.02	40.06	39.77	40.14	40.68	43.43	44.01	43.39
7	---	---	42.02	41.58	41.01	39.96	39.81	40.15	40.73	43.57	44.02	43.45
8	---	---	41.99	41.57	41.02	39.87	39.82	40.14	40.80	43.63	43.99	43.43
9	---	---	42.00	41.54	40.99	40.04	39.78	40.07	40.89	43.65	43.98	43.34
10	---	---	41.97	41.56	40.95	40.03	39.75	40.12	41.00	43.66	43.92	43.29
11	---	---	41.97	41.51	41.02	39.92	39.71	40.06	41.10	43.64	43.86	43.26
12	---	---	41.95	41.54	40.94	39.85	39.63	---	41.24	43.61	43.88	43.18
13	---	---	41.95	41.54	40.67	39.87	39.65	---	41.31	43.55	43.81	43.08
14	---	---	41.96	41.53	40.83	39.81	39.72	---	41.36	43.52	43.81	43.00
15	---	---	41.94	41.56	40.82	39.77	39.77	---	41.43	43.53	43.83	42.95
16	---	---	41.69	41.65	40.77	39.80	39.81	---	41.56	43.47	43.82	42.95
17	---	---	41.85	41.51	40.69	39.95	39.80	---	41.68	43.51	43.83	42.96
18	---	---	41.90	41.50	40.56	39.88	39.78	---	41.83	43.55	43.82	42.93
19	---	42.29	41.83	41.45	40.64	39.74	39.77	---	41.95	43.56	43.82	42.93
20	---	42.26	41.80	41.49	40.63	39.69	39.73	---	42.06	43.56	43.81	42.89
21	---	42.21	41.75	41.59	40.64	39.81	39.76	---	42.14	43.58	43.81	42.87
22	---	42.14	41.77	41.41	40.41	39.72	39.75	---	42.22	43.59	43.81	42.85
23	---	42.19	41.70	41.34	40.36	39.78	39.79	39.87	42.30	43.64	43.78	42.85
24	---	42.25	41.72	41.33	40.39	39.77	39.81	39.89	42.39	43.65	43.74	42.81
25	---	42.20	41.72	41.47	40.31	39.88	39.80	39.98	42.45	43.69	43.73	42.65
26	---	42.10	41.61	41.37	40.17	39.90	39.80	40.06	42.45	43.69	43.73	42.51
27	---	42.09	41.66	41.30	40.17	39.86	39.83	40.13	42.52	43.66	43.70	42.54
28	---	42.16	41.66	41.33	40.31	39.81	39.80	40.26	42.59	43.67	43.64	42.58
29	---	42.07	41.57	41.26	40.32	39.93	39.83	40.36	42.66	43.70	43.62	42.62
30	---	42.10	41.52	41.23	---	40.02	39.94	40.37	42.72	43.72	43.62	42.61
31	---	---	41.54	41.34	---	39.99	---	40.35	---	43.76	43.60	---
Mean	---	---	41.84	41.48	40.74	39.92	39.80	---	41.54	43.53	43.83	43.06
Max	---	---	42.12	41.68	41.23	40.22	39.97	---	42.72	43.76	44.02	43.61
Min	---	---	41.52	41.23	40.17	39.69	39.63	---	40.34	42.85	43.60	42.51

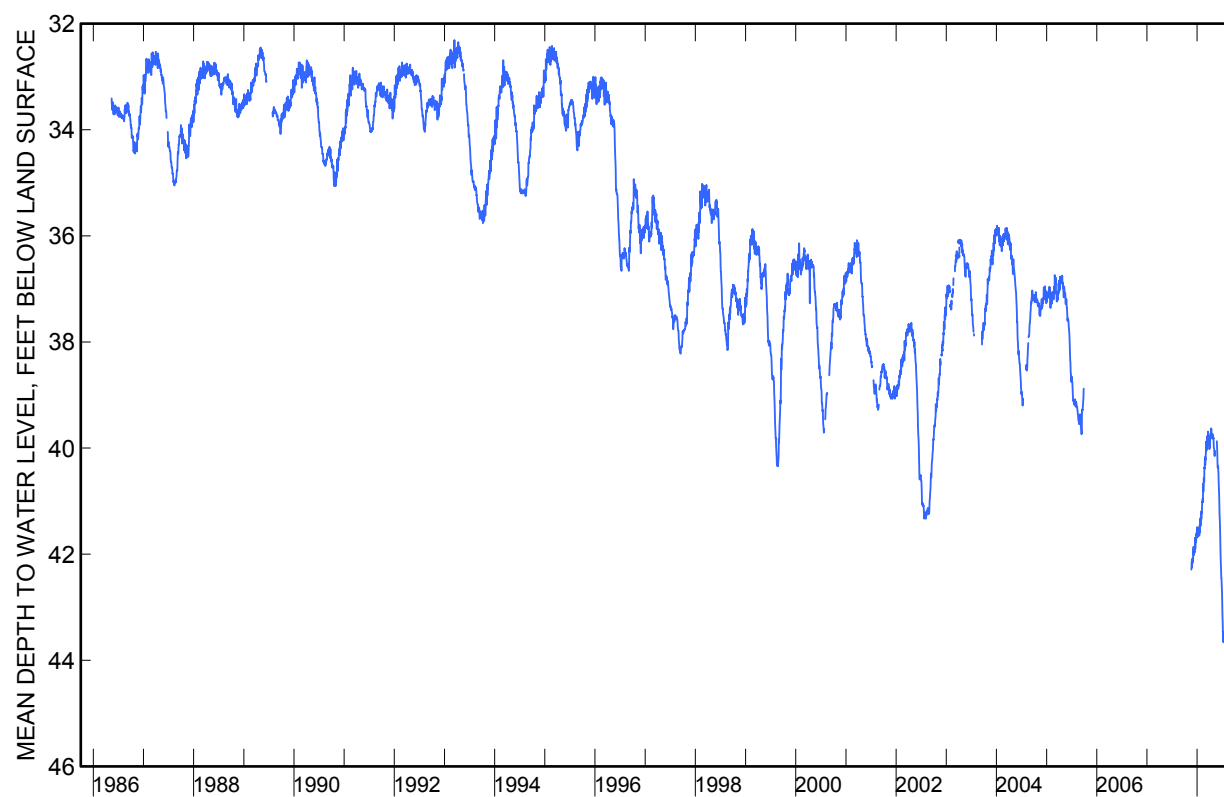
Water-Data Report 2008

343641077290103 Local number ON-227, NCDENR Dixon Research Station Y25q3, at Camp Lejeune, NC (Castle Hayne)—Continued



Water-Data Report 2008

343641077290103 Local number ON-227, NCDENR Dixon Research Station Y25q3, at Camp Lejeune, NC (Castle Hayne)—Continued



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343641077290103 Local number ON-227, NCDENR Dixon Research Station Y25q3, at Camp Lejeune, NC (Castle Hayne)—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 2007 to September 2008.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 2007 to September 2008.

WATER TEMPERATURE: November 2007 to September 2008.

INSTRUMENTATION.--Water-quality monitor in operation from November 2007 to September 2008.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 401 microsiemens, on many days during the period; minimum recorded, 393 microsiemens, August 27.

WATER TEMPERATURE: Maximum recorded, 18.9°C, on several days during the period; minimum recorded, 18.5°C, on many days during the period.

**TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8
2	---	---	---	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8
3	---	---	---	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8
4	---	---	---	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8
5	---	---	---	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8
6	---	---	---	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8
7	---	---	---	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8
8	---	---	---	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8
9	---	---	---	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8
10	---	---	---	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8
11	---	---	---	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8
12	---	---	---	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8
13	---	---	---	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8
14	---	---	---	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8
15	---	---	---	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8
16	---	---	---	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8
17	---	---	---	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8
18	---	---	---	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8
19	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8
20	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8
21	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8
22	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8
23	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8
24	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8
25	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8
26	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8
27	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8
28	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8
29	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8
30	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8
31	---	---	---	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8
Month	---	---	---	---	---	---	18.8	18.8	18.8	18.8	18.8	18.8

Water-Data Report 2008

343641077290103 Local number ON-227, NCDENR Dixon Research Station Y25q3, at Camp Lejeune, NC (Castle Hayne)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	18.8	18.8	18.8	18.5	18.5	18.5	18.6	18.6	18.6	18.8	18.8	18.8
2	18.8	18.8	18.8	18.5	18.5	18.5	18.7	18.6	18.6	18.8	18.8	18.8
3	18.8	18.8	18.8	18.5	18.5	18.5	18.7	18.7	18.7	18.8	18.8	18.8
4	18.8	18.8	18.8	18.5	18.5	18.5	18.7	18.7	18.7	18.8	18.8	18.8
5	18.8	18.8	18.8	18.5	18.5	18.5	18.7	18.7	18.7	18.8	18.8	18.8
6	18.8	18.8	18.8	18.5	18.5	18.5	18.7	18.7	18.7	18.8	18.8	18.8
7	18.8	18.8	18.8	18.5	18.5	18.5	18.7	18.7	18.7	18.9	18.8	18.9
8	18.8	18.8	18.8	18.5	18.5	18.5	18.7	18.7	18.7	18.9	18.9	18.9
9	18.8	18.8	18.8	18.5	18.5	18.5	18.7	18.7	18.7	---	---	---
10	18.8	18.8	18.8	18.5	18.5	18.5	18.7	18.7	18.7	18.9	18.9	18.9
11	18.8	18.8	18.8	18.5	18.5	18.5	18.7	18.7	18.7	18.9	18.9	18.9
12	18.8	18.8	18.8	18.5	18.5	18.5	18.7	18.7	18.7	---	---	---
13	18.8	18.8	18.8	18.5	18.5	18.5	18.7	18.7	18.7	---	---	---
14	18.8	18.8	18.8	18.5	18.5	18.5	18.7	18.7	18.7	---	---	---
15	18.8	18.8	18.8	18.5	18.5	18.5	18.7	18.7	18.7	---	---	---
16	18.8	18.8	18.8	18.6	18.5	18.5	18.7	18.7	18.7	---	---	---
17	18.8	18.8	18.8	18.6	18.6	18.6	18.7	18.7	18.7	---	---	---
18	18.8	18.8	18.8	18.6	18.6	18.6	18.7	18.7	18.7	---	---	---
19	18.8	18.8	18.8	18.6	18.6	18.6	18.8	18.7	18.7	---	---	---
20	18.8	18.8	18.8	18.6	18.6	18.6	18.8	18.8	18.8	---	---	---
21	18.8	18.8	18.8	18.6	18.6	18.6	18.8	18.8	18.8	---	---	---
22	18.8	18.8	18.8	18.6	18.6	18.6	18.8	18.8	18.8	---	---	---
23	18.8	18.8	18.8	18.6	18.6	18.6	18.8	18.8	18.8	18.7	18.7	18.7
24	18.8	18.8	18.8	18.6	18.6	18.6	18.8	18.8	18.8	18.7	18.7	18.7
25	18.8	18.8	18.8	18.6	18.6	18.6	18.8	18.8	18.8	18.7	18.7	18.7
26	18.8	18.8	18.8	18.6	18.6	18.6	18.8	18.8	18.8	18.7	18.7	18.7
27	18.8	18.8	18.8	18.6	18.6	18.6	18.8	18.8	18.8	18.7	18.7	18.7
28	---	---	---	18.6	18.6	18.6	18.8	18.8	18.8	18.7	18.7	18.7
29	18.5	18.5	18.5	18.6	18.6	18.6	18.8	18.8	18.8	18.7	18.7	18.7
30	---	---	---	18.6	18.6	18.6	18.8	18.8	18.8	18.7	18.7	18.7
31	---	---	---	18.6	18.6	18.6	---	---	---	18.7	18.7	18.7
Month	---	---	---	18.6	18.5	18.5	18.8	18.6	18.7	---	---	---

Water-Data Report 2008

343641077290103 Local number ON-227, NCDENR Dixon Research Station Y25q3, at Camp Lejeune, NC (Castle Hayne)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	18.7	18.7	18.7	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
2	18.7	18.7	18.7	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
3	18.7	18.7	18.7	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
4	18.7	18.7	18.7	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
5	18.7	18.7	18.7	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
6	18.7	18.7	18.7	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
7	18.7	18.7	18.7	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
8	18.7	18.7	18.7	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
9	18.7	18.7	18.7	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
10	18.7	18.7	18.7	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
11	18.7	18.7	18.7	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
12	18.7	18.6	18.7	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
13	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
14	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
15	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
16	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
17	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
18	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
19	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
20	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
21	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
22	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
23	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
24	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
25	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
26	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
27	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
28	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
29	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
30	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5
31	---	---	---	18.5	18.5	18.5	18.5	18.5	18.5	---	---	---
Month	18.7	18.6	18.6	18.6	18.5	18.6	18.5	18.5	18.5	18.5	18.5	18.5

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343641077290103 Local number ON-227, NCDENR Dixon Research Station Y25q3, at Camp Lejeune, NC (Castle Hayne)—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	399	398	398	399	398	399
2	---	---	---	---	---	---	399	398	398	399	398	399
3	---	---	---	---	---	---	399	398	398	399	398	399
4	---	---	---	---	---	---	399	398	398	399	398	399
5	---	---	---	---	---	---	399	398	398	399	398	399
6	---	---	---	---	---	---	399	398	398	399	398	399
7	---	---	---	---	---	---	399	398	398	399	398	399
8	---	---	---	---	---	---	398	398	398	399	398	399
9	---	---	---	---	---	---	398	398	398	399	399	399
10	---	---	---	---	---	---	398	398	398	399	399	399
11	---	---	---	---	---	---	399	398	398	399	398	399
12	---	---	---	---	---	---	399	398	398	399	398	399
13	---	---	---	---	---	---	399	398	398	399	399	399
14	---	---	---	---	---	---	399	398	398	399	399	399
15	---	---	---	---	---	---	399	398	398	399	399	399
16	---	---	---	---	---	---	399	398	399	399	398	399
17	---	---	---	---	---	---	399	398	398	399	399	399
18	---	---	---	---	---	---	399	398	399	399	399	399
19	---	---	---	399	398	399	399	398	399	399	398	399
20	---	---	---	399	398	399	399	398	399	399	398	399
21	---	---	---	399	398	399	399	398	399	399	398	399
22	---	---	---	399	398	399	399	398	399	399	398	398
23	---	---	---	399	398	398	399	398	399	399	398	399
24	---	---	---	399	398	398	399	398	399	399	398	399
25	---	---	---	399	398	398	399	398	398	399	398	399
26	---	---	---	399	398	398	399	398	399	399	398	399
27	---	---	---	398	398	398	399	398	399	399	398	399
28	---	---	---	398	398	398	399	398	398	399	398	399
29	---	---	---	398	398	398	399	398	398	399	398	399
30	---	---	---	398	398	398	399	398	399	399	398	399
31	---	---	---	---	---	---	399	398	399	399	398	399
Month	---	---	---	---	---	---	399	398	398	399	398	399

Water-Data Report 2008

343641077290103 Local number ON-227, NCDENR Dixon Research Station Y25q3, at Camp Lejeune, NC (Castle Hayne)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	399	399	399	399	399	399	400	399	399	400	399	400
2	399	399	399	399	399	399	399	399	399	400	399	400
3	399	399	399	399	399	399	399	399	399	400	399	400
4	399	399	399	399	399	399	400	399	399	400	399	400
5	399	399	399	399	399	399	399	399	399	400	399	400
6	399	399	399	399	399	399	399	399	399	400	399	400
7	399	399	399	399	399	399	400	399	399	400	399	400
8	399	399	399	399	399	399	399	399	399	400	399	400
9	399	399	399	399	399	399	399	399	399	---	---	---
10	399	399	399	399	399	399	400	399	399	400	399	400
11	399	399	399	399	399	399	400	399	399	400	399	400
12	399	399	399	399	399	399	400	399	399	---	---	---
13	399	399	399	399	399	399	400	399	399	---	---	---
14	399	399	399	399	399	399	400	399	399	---	---	---
15	399	399	399	399	399	399	400	399	399	---	---	---
16	399	399	399	399	399	399	400	399	399	---	---	---
17	399	399	399	399	399	399	400	399	399	---	---	---
18	399	399	399	399	399	399	400	399	399	---	---	---
19	399	399	399	399	399	399	400	399	399	---	---	---
20	399	399	399	399	399	399	400	399	399	---	---	---
21	399	399	399	399	399	399	400	399	399	---	---	---
22	399	399	399	399	399	399	400	399	399	---	---	---
23	399	399	399	399	399	399	400	399	399	401	401	401
24	399	399	399	399	399	399	400	399	399	401	401	401
25	399	399	399	399	399	399	400	399	400	401	401	401
26	399	399	399	399	399	399	400	399	399	401	400	401
27	399	399	399	399	399	399	400	399	399	401	401	401
28	---	---	---	399	399	399	400	399	400	401	400	401
29	399	399	399	399	399	399	400	399	399	401	400	401
30	---	---	---	399	399	399	400	399	400	401	400	400
31	---	---	---	399	399	399	---	---	---	401	400	400
Month	---	---	---	399	399	399	400	399	399	---	---	---

Water-Data Report 2008

343641077290103 Local number ON-227, NCDENR Dixon Research Station Y25q3, at Camp Lejeune, NC (Castle Hayne)—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	401	400	400	401	401	401	398	398	398	398	398	398
2	401	400	400	401	401	401	398	398	398	398	398	398
3	401	400	400	401	401	401	398	398	398	398	398	398
4	401	400	400	401	401	401	398	398	398	398	398	398
5	401	400	400	401	401	401	398	398	398	399	398	398
6	401	400	400	401	401	401	398	398	398	399	398	398
7	401	400	400	401	401	401	398	397	398	399	398	398
8	401	400	401	401	401	401	398	397	398	399	398	398
9	401	401	401	401	401	401	398	398	398	399	398	398
10	401	401	401	401	401	401	398	398	398	399	398	398
11	401	401	401	401	401	401	398	398	398	399	398	398
12	401	401	401	401	401	401	398	398	398	399	398	398
13	401	401	401	401	401	401	398	398	398	399	398	398
14	401	401	401	401	401	401	398	398	398	399	398	398
15	401	401	401	401	396	400	398	395	398	399	398	398
16	401	401	401	397	397	397	399	398	399	399	398	398
17	401	401	401	397	397	397	399	398	398	399	398	399
18	401	401	401	397	397	397	399	398	398	399	398	399
19	401	401	401	397	397	397	399	398	398	399	398	399
20	401	401	401	397	397	397	398	398	398	399	399	399
21	401	401	401	397	397	397	398	398	398	399	399	399
22	401	401	401	397	397	397	398	398	398	399	399	399
23	401	401	401	397	397	397	399	398	398	399	399	399
24	401	400	401	398	397	398	399	398	398	399	399	399
25	401	400	401	398	398	398	399	398	398	399	398	399
26	401	401	401	398	398	398	399	398	398	399	398	398
27	401	401	401	398	398	398	399	393	398	399	398	398
28	401	401	401	398	398	398	398	398	398	399	398	398
29	401	401	401	398	398	398	398	398	398	399	398	398
30	401	401	401	398	397	397	398	398	398	399	398	399
31	---	---	---	398	398	398	398	398	398	---	---	---
Month	401	400	401	401	396	399	399	393	398	399	398	398



Water-Data Report 2008

343641077290106 Local number ON-230, NCDENR Dixon Research Station well Y25q6 at Camp Lejeune, NC (Surficial)

Surficial aquifer system
Post Miocene (Quaternary + Pliocene) Rocks
Onslow County, NC

LOCATION.--Lat 34°36'41", long 77°28'59" referenced to North American Datum of 1983, Onslow County, NC, Hydrologic Unit 03030001, on U.S. Highway 17, 1.5 mi. north of Dixon. Owner: NCDENR (North Carolina Department of Environment and Natural Resources).

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Drilled observation well, depth 22.0 ft, diameter 4 in., cased to 18.4 ft, screened interval from 18.4 ft to 22.0 ft.

DATUM.--Land-surface datum is 66.12 ft above North American Vertical Datum of 1988. Measuring point: top of well casing, 2.40 ft above land-surface datum, November 1, 2007 to present.

PERIOD OF RECORD.--May 1986 to September 2005, November 2007 to current year.

GAGE.--Water-level recorder collecting data at 60-minute intervals. Satellite telemetry at site.

REMARKS.--Well is part of U.S. Marine Corps Base, Camp Lejeune, North Carolina, Water Resources Network project.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 6.76 ft below land-surface datum, September 16, 1999; lowest water level recorded, 12.80 ft below land-surface datum, December 15, 2007.

Water-Data Report 2008

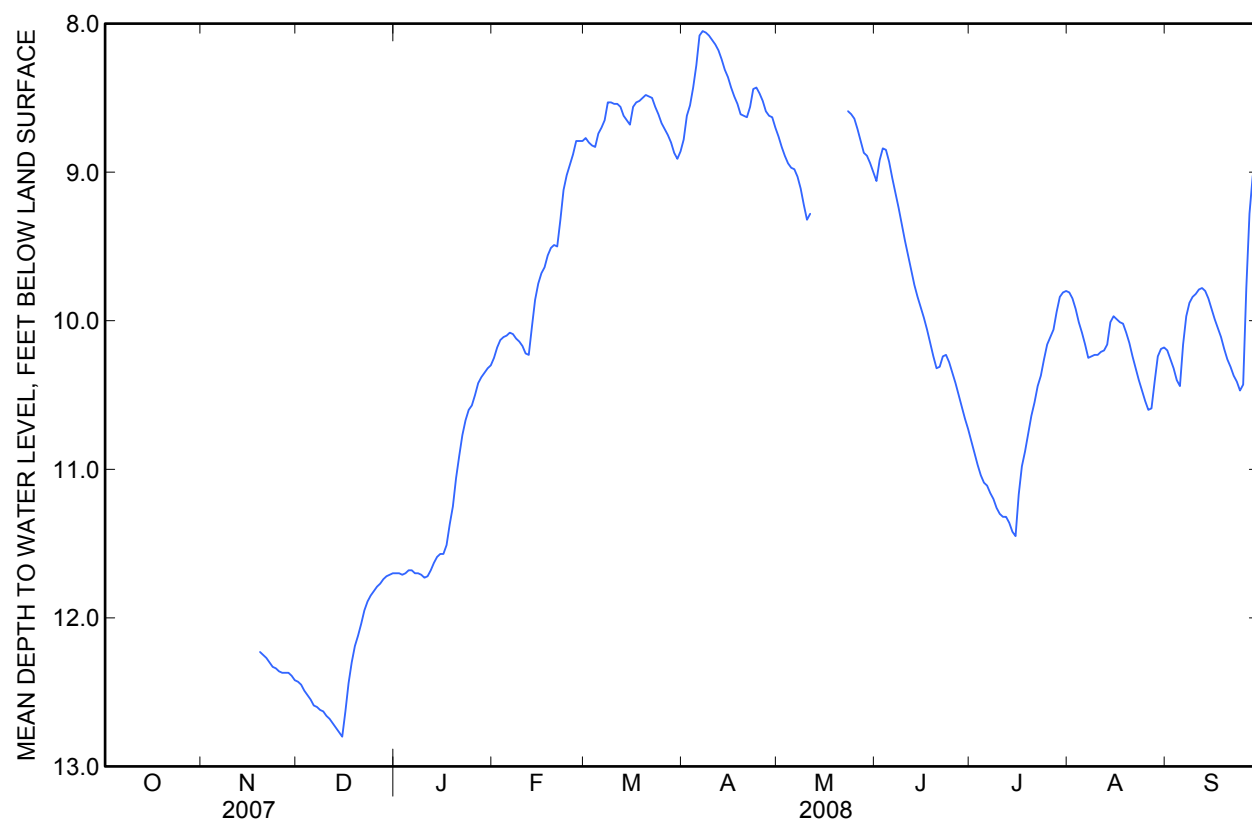
343641077290106 Local number ON-230, NCDENR Dixon Research Station well Y25q6 at Camp Lejeune, NC (Surficial)—Continued

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	12.43	11.70	10.25	8.77	8.78	8.76	9.06	10.81	9.81	10.20
2	---	---	12.45	11.70	10.18	8.80	8.62	8.83	8.92	10.89	9.85	10.26
3	---	---	12.49	11.71	10.13	8.82	8.55	8.89	8.84	10.97	9.92	10.32
4	---	---	12.52	11.70	10.11	8.83	8.43	8.94	8.85	11.04	10.01	10.40
5	---	---	12.55	11.68	10.10	8.74	8.28	8.97	8.93	11.09	10.08	10.44
6	---	---	12.59	11.68	10.08	8.70	8.08	8.98	9.04	11.11	10.16	10.16
7	---	---	12.60	11.70	10.09	8.65	8.05	9.03	9.14	11.16	10.25	9.97
8	---	---	12.62	11.70	10.12	8.53	8.06	9.11	9.24	11.20	10.24	9.88
9	---	---	12.63	11.71	10.14	8.53	8.08	9.22	9.35	11.26	10.23	9.84
10	---	---	12.66	11.73	10.17	8.54	8.11	9.32	9.46	11.30	10.23	9.82
11	---	---	12.68	11.72	10.22	8.54	8.14	9.28	9.56	11.32	10.21	9.79
12	---	---	12.71	11.68	10.23	8.56	8.18	---	9.66	11.32	10.20	9.78
13	---	---	12.74	11.63	10.04	8.62	8.24	---	9.76	11.36	10.16	9.80
14	---	---	12.77	11.59	9.86	8.65	8.31	---	9.84	11.42	10.01	9.85
15	---	---	12.80	11.57	9.75	8.68	8.36	---	9.91	11.45	9.97	9.92
16	---	---	12.63	11.57	9.68	8.56	8.43	---	9.98	11.17	9.99	9.99
17	---	---	12.44	11.51	9.64	8.53	8.49	---	10.06	10.98	10.01	10.05
18	---	---	12.30	11.37	9.56	8.52	8.54	---	10.15	10.88	10.02	10.11
19	---	12.23	12.19	11.25	9.51	8.50	8.61	---	10.24	10.76	10.08	10.19
20	---	12.25	12.12	11.06	9.49	8.48	8.62	---	10.32	10.64	10.15	10.26
21	---	12.27	12.04	10.91	9.50	8.49	8.63	---	10.31	10.55	10.24	10.31
22	---	12.30	11.95	10.77	9.32	8.50	8.56	---	10.24	10.44	10.32	10.37
23	---	12.33	11.89	10.67	9.12	8.56	8.44	8.59	10.23	10.37	10.40	10.41
24	---	12.34	11.85	10.60	9.02	8.61	8.43	8.61	10.28	10.26	10.47	10.47
25	---	12.36	11.82	10.57	8.95	8.67	8.47	8.64	10.35	10.16	10.54	10.43
26	---	12.37	11.79	10.50	8.88	8.71	8.52	8.71	10.42	10.11	10.60	9.78
27	---	12.37	11.77	10.42	8.79	8.75	8.59	8.79	10.50	10.06	10.59	9.28
28	---	12.37	11.74	10.38	8.79	8.80	8.62	8.87	10.58	9.94	10.41	9.03
29	---	12.39	11.72	10.35	8.79	8.87	8.63	8.89	10.66	9.84	10.24	8.91
30	---	12.42	11.71	10.32	---	8.91	8.70	8.94	10.73	9.81	10.19	8.84
31	---	---	11.70	10.30	---	8.86	---	9.00	---	9.80	10.18	---
Mean	---	---	12.29	11.22	9.67	8.65	8.42	---	9.82	10.76	10.19	9.96
Max	---	---	12.80	11.73	10.25	8.91	8.78	---	10.73	11.45	10.60	10.47
Min	---	---	11.70	10.30	8.79	8.48	8.05	---	8.84	9.80	9.81	8.84

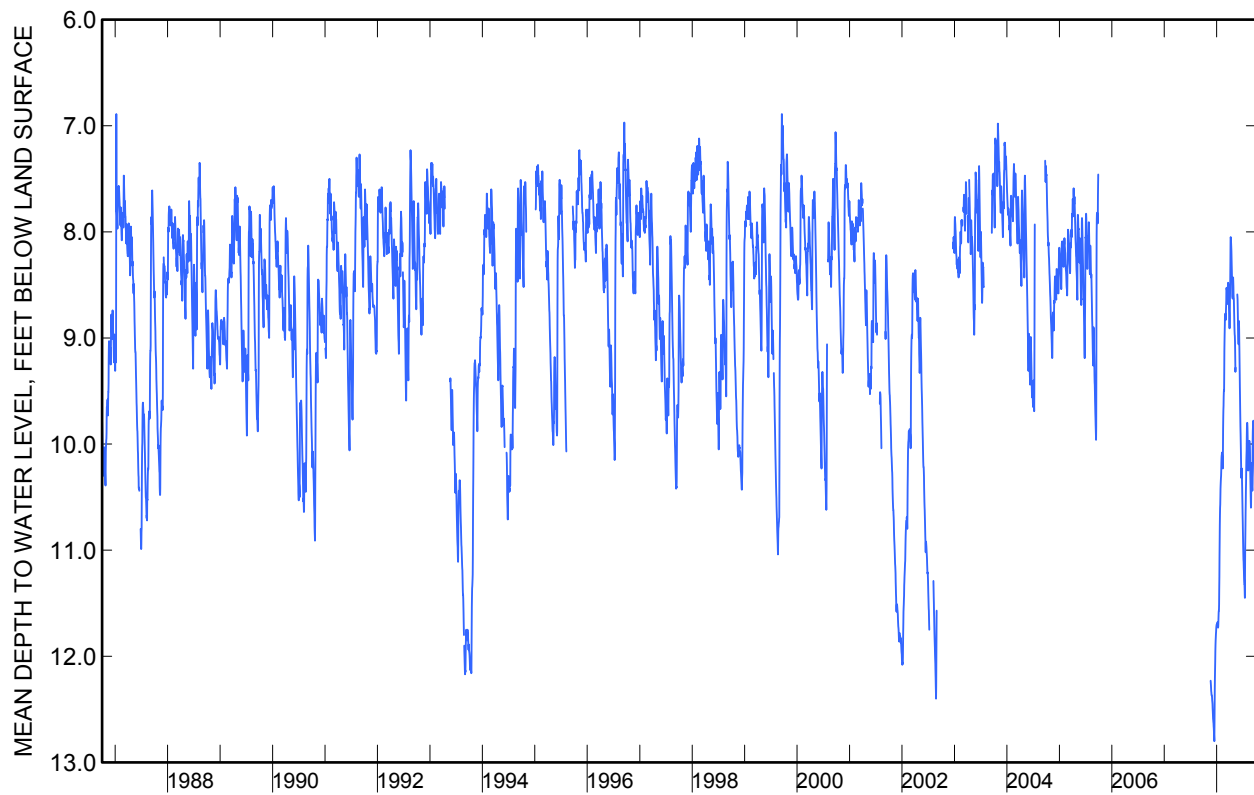
Water-Data Report 2008

343641077290106 Local number ON-230, NCDENR Dixon Research Station well Y25q6 at Camp Lejeune, NC (Surficial)—Continued



Water-Data Report 2008

343641077290106 Local number ON-230, NCDENR Dixon Research Station well Y25q6 at Camp Lejeune, NC (Surficial)—Continued





Water-Data Report 2008

344139077211202 Local number ON-256, NCDENR Hadnot Point Research Station X24s2, at Camp Lejeune, NC (Black Creek)

Northern Atlantic Coastal Plain aquifer system
Black Creek Aquifer
Onslow County, NC

LOCATION.--Lat 34°41'30", long 77°21'03" referenced to North American Datum of 1983, Onslow County, NC, Hydrologic Unit 03030001, 1.6 mi south of intersection of Brewster Boulevard and Stone Street Extension, at Camp Lejeune. Owner: NCDENR (North Carolina Department of Environment and Natural Resources).

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Drilled observation well, depth 918 ft, well cased 2.5 in. to 918 ft in the Black Creek aquifer, screened interval from 908 ft to 918 ft.

DATUM.--Land-surface datum is 20.55 ft above North American Vertical Datum of 1988. Measuring point: top of well casing, 3.26 ft above land-surface datum, since December 7, 2007.

PERIOD OF RECORD.--February 1988 to July 2005, December 2007 to current year.

GAGE.--Water-level recorder collecting data at 60-minute intervals. Satellite telemetry at site.

REMARKS.--Well is part of U.S. Marine Corps Base, Camp Lejeune, North Carolina, Water Resources Network study.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 12.36 ft below land-surface datum, March 10, 1988; lowest water level recorded, 52.76 ft below land-surface datum, September 23, 2008.

Water-Data Report 2008

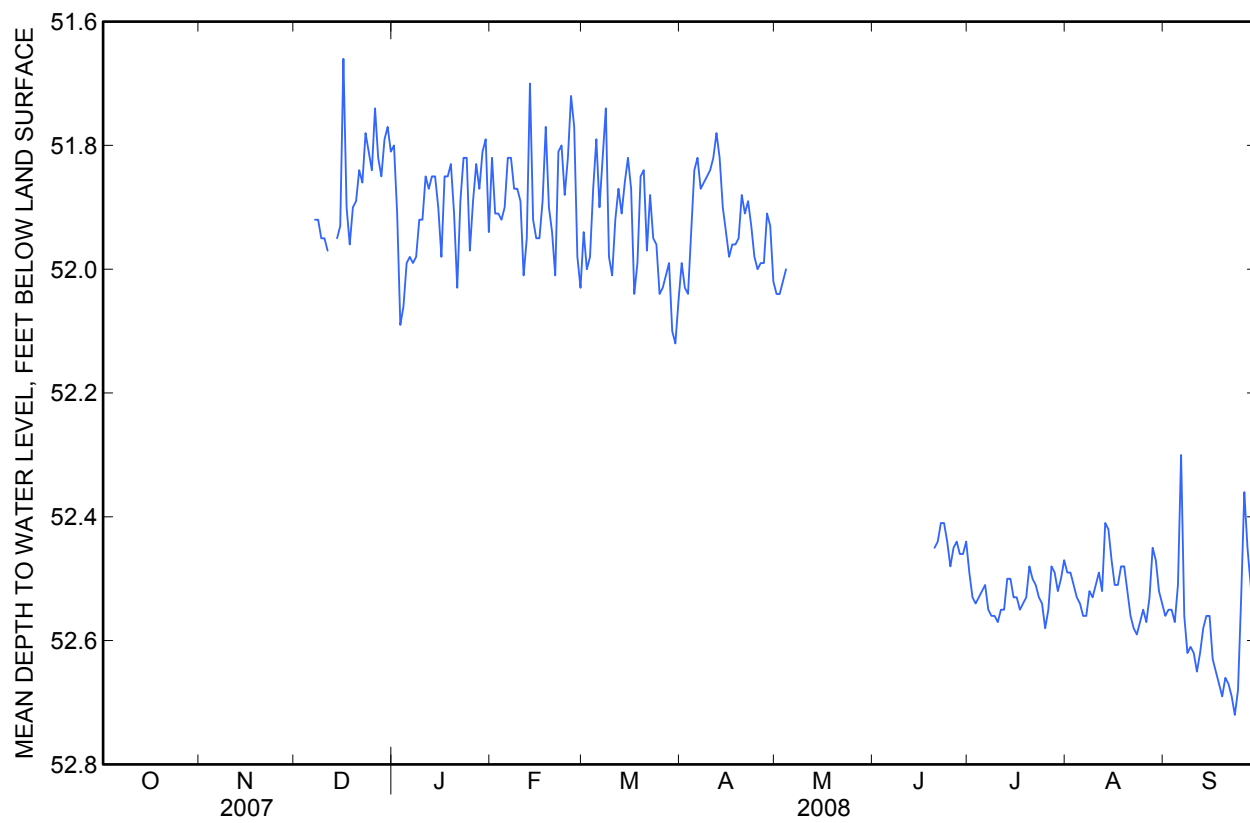
344139077211202 Local number ON-256, NCDENR Hadnot Point Research Station X24s2, at Camp Lejeune, NC (Black Creek)—Continued

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	---	51.80	51.82	51.94	51.99	52.04	---	52.49	52.49	52.56
2	---	---	---	51.91	51.91	52.00	52.03	52.04	---	52.53	52.49	52.55
3	---	---	---	52.09	51.91	51.98	52.04	52.02	---	52.54	52.51	52.55
4	---	---	---	52.06	51.92	51.87	51.94	52.00	---	52.53	52.53	52.57
5	---	---	---	51.99	51.90	51.79	51.84	---	---	52.52	52.54	52.51
6	---	---	---	51.98	51.82	51.90	51.82	---	---	52.51	52.56	52.30
7	---	---	51.92	51.99	51.82	51.82	51.87	---	---	52.55	52.56	52.56
8	---	---	51.92	51.98	51.87	51.74	51.86	---	---	52.56	52.52	52.62
9	---	---	51.95	51.92	51.87	51.98	51.85	---	---	52.56	52.53	52.61
10	---	---	51.95	51.92	51.89	52.01	51.84	---	---	52.57	52.51	52.62
11	---	---	51.97	51.85	52.01	51.92	51.82	---	---	52.55	52.49	52.65
12	---	---	---	51.87	51.95	51.87	51.78	---	---	52.55	52.52	52.62
13	---	---	---	51.85	51.70	51.91	51.82	---	---	52.50	52.41	52.58
14	---	---	51.95	51.85	51.92	51.86	51.90	---	---	52.50	52.42	52.56
15	---	---	51.93	51.90	51.95	51.82	51.94	---	---	52.53	52.47	52.56
16	---	---	51.66	51.98	51.95	51.87	51.98	---	---	52.53	52.51	52.63
17	---	---	51.90	51.85	51.89	52.04	51.96	---	---	52.55	52.51	52.65
18	---	---	51.96	51.85	51.77	51.99	51.96	---	---	52.54	52.48	52.67
19	---	---	51.90	51.83	51.90	51.85	51.95	---	---	52.53	52.48	52.69
20	---	---	51.89	51.91	51.94	51.84	51.88	---	52.45	52.48	52.52	52.66
21	---	---	51.84	52.03	52.01	51.97	51.91	---	52.44	52.50	52.56	52.67
22	---	---	51.86	51.89	51.81	51.88	51.89	---	52.41	52.51	52.58	52.69
23	---	---	51.78	51.82	51.80	51.95	51.93	---	52.41	52.53	52.59	52.72
24	---	---	51.81	51.82	51.88	51.96	51.98	---	52.44	52.54	52.57	52.68
25	---	---	51.84	51.97	51.82	52.04	52.00	---	52.48	52.58	52.55	52.53
26	---	---	51.74	51.89	51.72	52.03	51.99	---	52.45	52.55	52.57	52.36
27	---	---	51.82	51.83	51.77	52.01	51.99	---	52.44	52.48	52.53	52.45
28	---	---	51.85	51.87	51.98	51.99	51.91	---	52.46	52.49	52.45	52.51
29	---	---	51.79	51.81	52.03	52.10	51.93	---	52.46	52.52	52.47	52.57
30	---	---	51.77	51.79	---	52.12	52.02	---	52.44	52.50	52.52	52.55
31	---	---	51.81	51.94	---	52.05	---	---	---	52.47	52.54	---
Mean	---	---	---	51.90	51.88	51.94	51.92	---	---	52.53	52.52	52.58
Max	---	---	---	52.09	52.03	52.12	52.04	---	---	52.58	52.59	52.72
Min	---	---	---	51.79	51.70	51.74	51.78	---	---	52.47	52.41	52.30

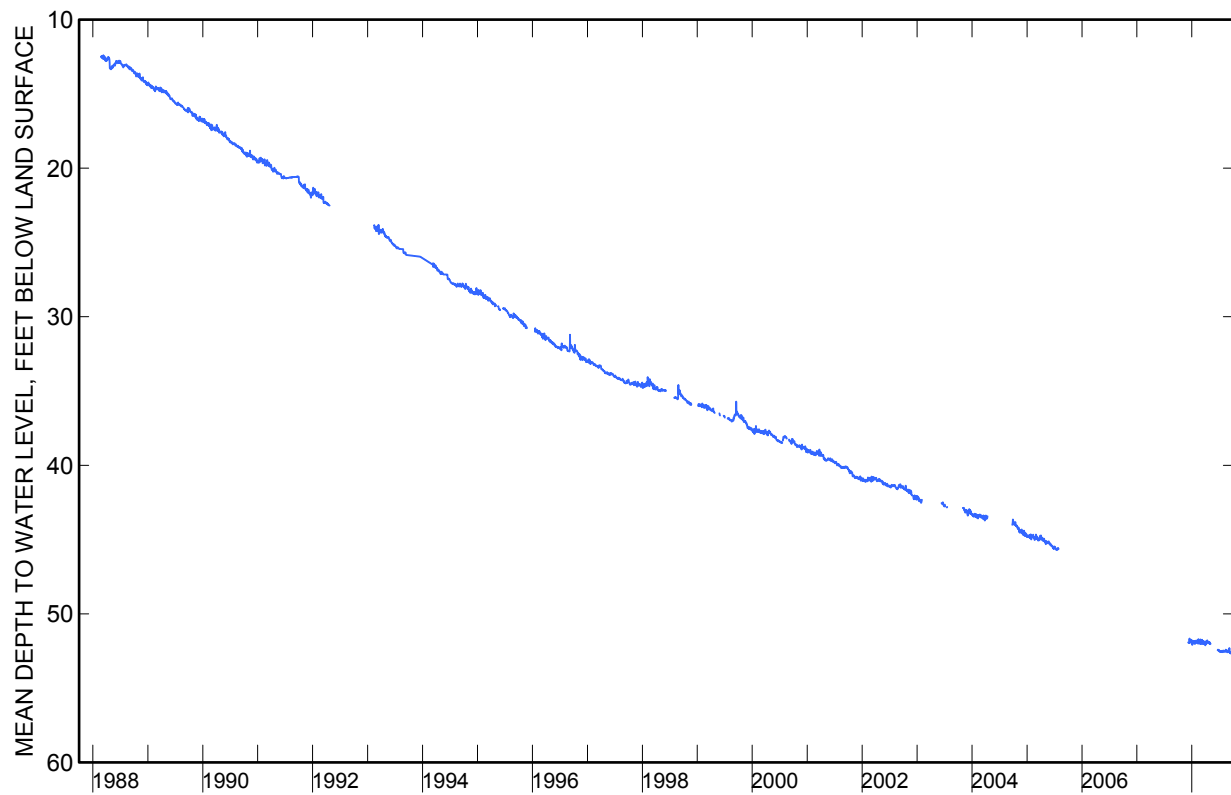
Water-Data Report 2008

344139077211202 Local number ON-256, NCDENR Hadnot Point Research Station X24s2, at Camp Lejeune, NC (Black Creek)—Continued



Water-Data Report 2008

344139077211202 Local number ON-256, NCDENR Hadnot Point Research Station X24s2, at Camp Lejeune, NC (Black Creek)—Continued





Water-Data Report 2008

344139077211204 Local number ON-264, NCDENR Hadnot Point Research Station X24s4, at Camp Lejeune, NC (Peedee)

Northern Atlantic Coastal Plain aquifer system

Peedee Formation

Onslow County, NC

LOCATION.--Lat 34°41'35", long 77°21'06" referenced to North American Datum of 1983, Onslow County, NC, Hydrologic Unit 03030001, 1.6 mi south of intersection of Brewster Boulevard and Stone Street Extension, at Camp Lejeune. Owner: NCDENR (North Carolina Department of Environment and Natural Resources).

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Drilled observation well, depth 527 ft, diameter 4 in., cased to 517 ft, screened interval from 517 ft to 527 ft.

DATUM.--Land-surface datum is 24.58 ft above North American Vertical Datum of 1988. Measuring point: top of well casing, 3.35 ft above land-surface datum, November 16, 2007 to present.

PERIOD OF RECORD.--February 1988 to July 2005, November 2007 to present.

GAGE.--Water-level recorder collecting data at 60-minute intervals. Satellite telemetry at site.

REMARKS.--Well is part of U.S. Marine Corps Base, Camp Lejeune, North Carolina, Water Resources Network project.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 11.96 ft below land-surface datum, May 29, 30, 1990; lowest water level recorded, 14.65 ft below land-surface datum, September 25, 30, 2002.

Water-Data Report 2008

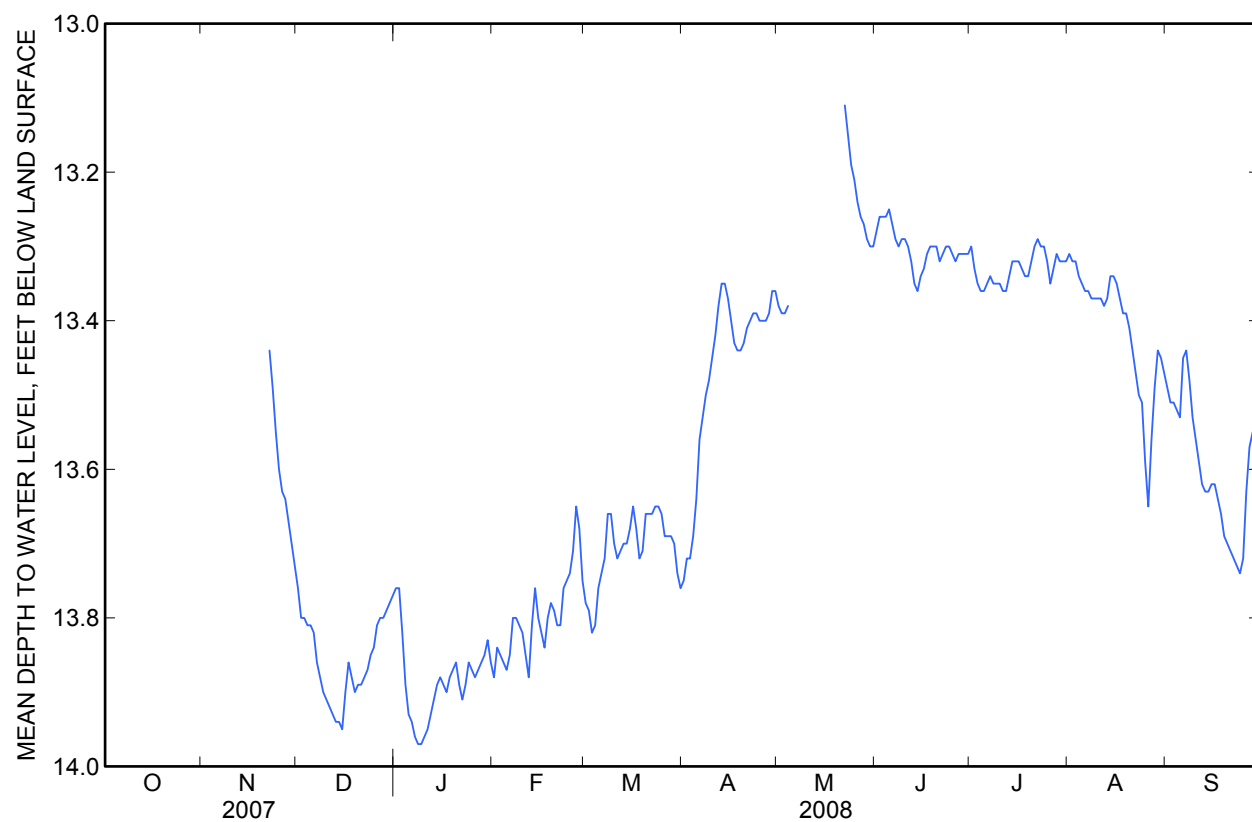
344139077211204 Local number ON-264, NCDENR Hadnot Point Research Station X24s4, at Camp Lejeune, NC (Peedee)—Continued

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	13.76	13.76	13.88	13.78	13.75	13.38	13.28	13.30	13.31	13.49
2	---	---	13.80	13.76	13.84	13.79	13.72	13.39	13.26	13.33	13.32	13.51
3	---	---	13.80	13.82	13.85	13.82	13.72	13.39	13.26	13.35	13.32	13.51
4	---	---	13.81	13.89	13.86	13.81	13.69	13.38	13.26	13.36	13.34	13.52
5	---	---	13.81	13.93	13.87	13.76	13.64	---	13.25	13.36	13.35	13.53
6	---	---	13.82	13.94	13.85	13.74	13.56	---	13.27	13.35	13.36	13.45
7	---	---	13.86	13.96	13.80	13.72	13.53	---	13.29	13.34	13.36	13.44
8	---	---	13.88	13.97	13.80	13.66	13.50	---	13.30	13.35	13.37	13.48
9	---	---	13.90	13.97	13.81	13.66	13.48	---	13.29	13.35	13.37	13.53
10	---	---	13.91	13.96	13.82	13.70	13.45	---	13.29	13.35	13.37	13.56
11	---	---	13.92	13.95	13.85	13.72	13.42	---	13.30	13.36	13.37	13.59
12	---	---	13.93	13.93	13.88	13.71	13.38	---	13.32	13.36	13.38	13.62
13	---	---	13.94	13.91	13.81	13.70	13.35	---	13.35	13.34	13.37	13.63
14	---	---	13.94	13.89	13.76	13.70	13.35	---	13.36	13.32	13.34	13.63
15	---	---	13.95	13.88	13.80	13.68	13.37	---	13.34	13.32	13.34	13.62
16	---	---	13.90	13.89	13.82	13.65	13.40	---	13.33	13.32	13.35	13.62
17	---	---	13.86	13.90	13.84	13.68	13.43	---	13.31	13.33	13.37	13.64
18	---	---	13.88	13.88	13.80	13.72	13.44	---	13.30	13.34	13.39	13.66
19	---	---	13.90	13.87	13.78	13.71	13.44	---	13.30	13.34	13.39	13.69
20	---	---	13.89	13.86	13.79	13.66	13.43	---	13.30	13.32	13.41	13.70
21	---	---	13.89	13.89	13.81	13.66	13.41	---	13.32	13.30	13.44	13.71
22	---	13.44	13.88	13.91	13.81	13.66	13.40	13.11	13.31	13.29	13.47	13.72
23	---	13.49	13.87	13.89	13.76	13.65	13.39	13.15	13.30	13.30	13.50	13.73
24	---	13.55	13.85	13.86	13.75	13.65	13.39	13.19	13.30	13.30	13.51	13.74
25	---	13.60	13.84	13.87	13.74	13.66	13.40	13.21	13.31	13.32	13.59	13.72
26	---	13.63	13.81	13.88	13.71	13.69	13.40	13.24	13.32	13.35	13.65	13.63
27	---	13.64	13.80	13.87	13.65	13.69	13.40	13.26	13.31	13.33	13.56	13.57
28	---	13.67	13.80	13.86	13.68	13.69	13.39	13.27	13.31	13.31	13.49	13.55
29	---	13.70	13.79	13.85	13.75	13.70	13.36	13.29	13.31	13.32	13.44	13.55
30	---	13.73	13.78	13.83	---	13.74	13.36	13.30	13.31	13.32	13.45	13.56
31	---	---	13.77	13.86	---	13.76	---	13.30	---	13.32	13.47	---
Mean	---	---	13.86	13.89	13.80	13.71	13.46	---	13.30	13.33	13.41	13.60
Max	---	---	13.95	13.97	13.88	13.82	13.75	---	13.36	13.36	13.65	13.74
Min	---	---	13.76	13.76	13.65	13.65	13.35	---	13.25	13.29	13.31	13.44

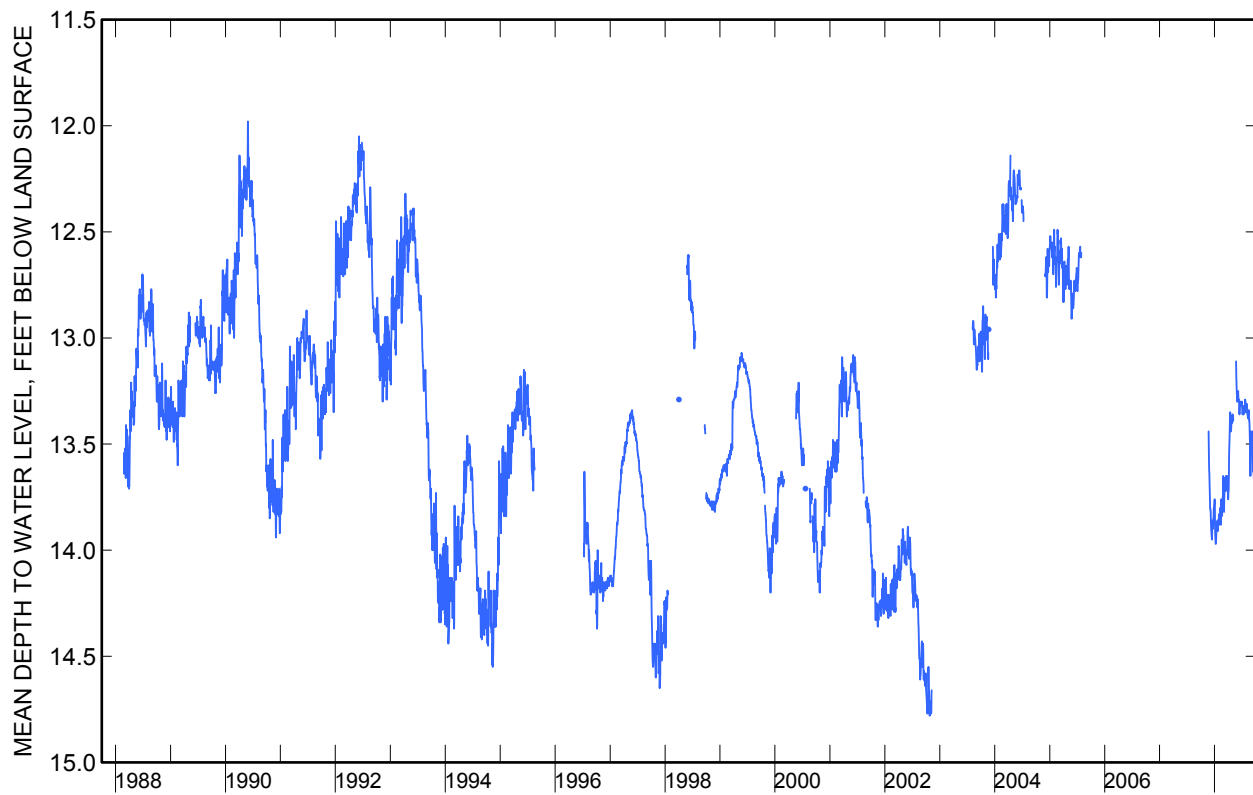
Water-Data Report 2008

344139077211204 Local number ON-264, NCDENR Hadnot Point Research Station X24s4, at Camp Lejeune, NC (Peedee)—Continued



Water-Data Report 2008

344139077211204 Local number ON-264, NCDENR Hadnot Point Research Station X24s4, at Camp Lejeune, NC (Peedee)—Continued



Water-Data Report 2008

344139077211204 Local number ON-264, NCDENR Hadnot Point Research Station X24s4, at Camp Lejeune, NC (Peedee)—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 2007 to September 2008.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 2007 to September 2008.

WATER TEMPERATURE: November 2007 to September 2008.

INSTRUMENTATION.--Water-quality monitor in operation from November 2007 to September 2008.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 3,980 microsiemens, on several days during the period; minimum recorded, 3,850 microsiemens, November 23.

WATER TEMPERATURE: Maximum recorded, 20.2°C, on many days during the period; minimum recorded, 19.9°C, on several days during the period.

**TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1
2	---	---	---	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1
3	---	---	---	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1
4	---	---	---	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1
5	---	---	---	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1
6	---	---	---	---	---	---	---	---	---	20.1	20.1	20.1
7	---	---	---	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1
8	---	---	---	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1
9	---	---	---	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1
10	---	---	---	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1
11	---	---	---	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1
12	---	---	---	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1
13	---	---	---	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1
14	---	---	---	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1
15	---	---	---	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1
16	---	---	---	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1
17	---	---	---	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1
18	---	---	---	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1
19	---	---	---	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1
20	---	---	---	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1
21	---	---	---	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1
22	---	---	---	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1
23	---	---	---	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1
24	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
25	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
26	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
27	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
28	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
29	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
30	---	---	---	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
31	---	---	---	---	---	---	20.1	20.1	20.1	20.2	20.1	20.1
Month	---	---	---	---	---	---	---	---	---	20.2	20.1	20.1

Water-Data Report 2008

344139077211204 Local number ON-264, NCDENR Hadnot Point Research Station X24s4, at Camp Lejeune, NC (Peedee)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	20.2	20.2	20.2	20.1	20.1	20.1	20.0	20.0	20.0	20.0	20.0	20.0
2	20.2	20.2	20.2	20.1	20.1	20.1	20.0	20.0	20.0	20.0	20.0	20.0
3	20.2	20.2	20.2	20.1	20.1	20.1	20.0	20.0	20.0	20.0	19.9	19.9
4	20.2	20.2	20.2	20.1	20.1	20.1	20.0	20.0	20.0	19.9	19.9	19.9
5	20.2	20.2	20.2	20.1	20.1	20.1	20.0	20.0	20.0	---	---	---
6	20.2	20.2	20.2	20.1	20.1	20.1	20.0	20.0	20.0	---	---	---
7	20.2	20.2	20.2	20.1	20.1	20.1	20.0	20.0	20.0	---	---	---
8	20.2	20.2	20.2	20.1	20.1	20.1	20.0	20.0	20.0	---	---	---
9	20.2	20.2	20.2	20.1	20.1	20.1	20.0	20.0	20.0	---	---	---
10	20.2	20.2	20.2	20.1	20.1	20.1	20.0	20.0	20.0	---	---	---
11	20.2	20.2	20.2	20.1	20.1	20.1	20.0	20.0	20.0	---	---	---
12	20.2	20.2	20.2	20.1	20.1	20.1	20.0	20.0	20.0	---	---	---
13	20.2	20.2	20.2	20.1	20.1	20.1	20.0	20.0	20.0	---	---	---
14	20.2	20.2	20.2	20.1	20.1	20.1	20.0	20.0	20.0	---	---	---
15	20.2	20.2	20.2	20.1	20.1	20.1	20.0	20.0	20.0	---	---	---
16	20.2	20.2	20.2	20.1	20.1	20.1	20.0	20.0	20.0	---	---	---
17	20.2	20.2	20.2	20.1	20.1	20.1	20.0	20.0	20.0	---	---	---
18	20.2	20.2	20.2	20.1	20.1	20.1	20.0	20.0	20.0	---	---	---
19	20.2	20.1	20.1	20.1	20.1	20.1	20.0	20.0	20.0	---	---	---
20	20.1	20.1	20.1	20.1	20.1	20.1	20.0	20.0	20.0	---	---	---
21	20.1	20.1	20.1	20.1	20.1	20.1	20.0	20.0	20.0	---	---	---
22	20.1	20.1	20.1	20.1	20.1	20.1	20.0	20.0	20.0	19.9	19.9	19.9
23	20.1	20.1	20.1	20.1	20.1	20.1	20.0	20.0	20.0	19.9	19.9	19.9
24	20.1	20.1	20.1	20.1	20.1	20.1	20.0	20.0	20.0	19.9	19.9	19.9
25	20.1	20.1	20.1	20.1	20.1	20.1	20.0	20.0	20.0	19.9	19.9	19.9
26	20.1	20.1	20.1	20.1	20.1	20.1	20.0	20.0	20.0	19.9	19.9	19.9
27	20.1	20.1	20.1	20.1	20.0	20.0	20.0	20.0	20.0	19.9	19.9	19.9
28	20.1	20.1	20.1	20.0	20.0	20.0	20.0	20.0	20.0	19.9	19.9	19.9
29	20.1	20.1	20.1	20.0	20.0	20.0	20.0	20.0	20.0	19.9	19.9	19.9
30	---	---	---	20.0	20.0	20.0	20.0	20.0	20.0	19.9	19.9	19.9
31	---	---	---	20.0	20.0	20.0	---	---	---	19.9	19.9	19.9
Month	20.2	20.1	20.2	20.1	20.0	20.1	20.0	20.0	20.0	---	---	---

Water-Data Report 2008

344139077211204 Local number ON-264, NCDENR Hadnot Point Research Station X24s4, at Camp Lejeune, NC (Peedee)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	19.9	19.9	19.9	20.0	20.0	20.0	20.2	20.2	20.2	20.2	20.2	20.2
2	19.9	19.9	19.9	20.0	20.0	20.0	20.2	20.2	20.2	20.2	20.2	20.2
3	19.9	19.9	19.9	20.1	20.0	20.1	20.2	20.2	20.2	20.2	20.2	20.2
4	20.0	19.9	19.9	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
5	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
6	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
7	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
8	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
9	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
10	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
11	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
12	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
13	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
14	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.1	20.2	20.2	20.2	20.2
15	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
16	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
17	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
18	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
19	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
20	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
21	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
22	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
23	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
24	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
25	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
26	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
27	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
28	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
29	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
30	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	20.2	20.2
31	---	---	---	20.2	20.1	20.2	20.2	20.2	20.2	---	---	---
Month	20.0	19.9	20.0	20.2	20.0	20.1	20.2	20.1	20.2	20.2	20.2	20.2

Water-Data Report 2008

344139077211204 Local number ON-264, NCDENR Hadnot Point Research Station X24s4, at Camp Lejeune, NC (Peedee)—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	3,870	3,860	3,870	3,910	3,910	3,910
2	---	---	---	---	---	---	3,870	3,870	3,870	3,920	3,910	3,920
3	---	---	---	---	---	---	3,870	3,860	3,870	3,920	3,920	3,920
4	---	---	---	---	---	---	3,870	3,870	3,870	3,920	3,920	3,920
5	---	---	---	---	---	---	3,870	3,860	3,870	3,920	3,920	3,920
6	---	---	---	---	---	---	---	---	---	3,920	3,920	3,920
7	---	---	---	---	---	---	3,880	3,860	3,870	3,920	3,920	3,920
8	---	---	---	---	---	---	3,880	3,870	3,870	3,920	3,920	3,920
9	---	---	---	---	---	---	3,880	3,870	3,870	3,930	3,920	3,920
10	---	---	---	---	---	---	3,880	3,870	3,870	3,930	3,930	3,930
11	---	---	---	---	---	---	3,870	3,870	3,870	3,930	3,930	3,930
12	---	---	---	---	---	---	3,870	3,870	3,870	3,930	3,930	3,930
13	---	---	---	---	---	---	3,880	3,870	3,870	3,930	3,930	3,930
14	---	---	---	---	---	---	3,890	3,880	3,880	3,930	3,930	3,930
15	---	---	---	---	---	---	3,890	3,880	3,880	3,940	3,930	3,930
16	---	---	---	---	---	---	3,890	3,880	3,880	3,940	3,940	3,940
17	---	---	---	---	---	---	3,890	3,880	3,880	3,940	3,940	3,940
18	---	---	---	---	---	---	3,890	3,880	3,880	3,940	3,940	3,940
19	---	---	---	---	---	---	3,890	3,880	3,880	3,950	3,940	3,940
20	---	---	---	---	---	---	3,900	3,880	3,890	3,950	3,940	3,940
21	---	---	---	---	---	---	3,900	3,890	3,900	3,950	3,940	3,940
22	---	---	---	---	---	---	3,900	3,890	3,900	3,960	3,940	3,950
23	---	---	---	---	---	---	3,900	3,890	3,900	3,950	3,950	3,950
24	---	---	---	3,860	3,860	3,860	3,900	3,900	3,900	3,960	3,950	3,950
25	---	---	---	3,870	3,860	3,860	3,900	3,900	3,900	3,960	3,950	3,950
26	---	---	---	---	---	---	3,900	3,900	3,900	3,960	3,950	3,950
27	---	---	---	3,860	3,860	3,860	3,910	3,900	3,910	3,950	3,950	3,950
28	---	---	---	3,860	3,860	3,860	3,910	3,910	3,910	3,960	3,950	3,950
29	---	---	---	3,860	3,860	3,860	3,910	3,910	3,910	3,970	3,960	3,960
30	---	---	---	3,860	3,860	3,860	3,910	3,910	3,910	3,970	3,960	3,960
31	---	---	---	---	---	---	3,910	3,910	3,910	3,980	3,960	3,970
Month	---	---	---	---	---	---	---	---	---	3,980	3,910	3,940

Water-Data Report 2008

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SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	3,980	3,970	3,970	3,960	3,950	3,960	3,930	3,930	3,930	3,900	3,900	3,900
2	3,980	3,970	3,980	3,950	3,950	3,950	3,930	3,930	3,930	3,900	3,900	3,900
3	3,980	3,970	3,980	3,950	3,950	3,950	3,930	3,930	3,930	3,900	3,900	3,900
4	3,980	3,970	3,980	3,950	3,950	3,950	3,930	3,930	3,930	3,900	3,900	3,900
5	3,980	3,970	3,980	3,950	3,950	3,950	3,930	3,920	3,920	---	---	---
6	3,980	3,960	3,980	3,950	3,950	3,950	3,920	3,920	3,920	---	---	---
7	3,980	3,960	3,970	3,950	3,950	3,950	3,920	3,920	3,920	---	---	---
8	3,970	3,960	3,970	3,950	3,950	3,950	3,920	3,920	3,920	---	---	---
9	3,970	3,960	3,970	3,950	3,950	3,950	3,920	3,920	3,920	---	---	---
10	3,970	3,960	3,970	3,950	3,950	3,950	3,920	3,920	3,920	---	---	---
11	3,970	3,960	3,970	3,950	3,950	3,950	3,920	3,920	3,920	---	---	---
12	3,970	3,960	3,970	3,950	3,940	3,950	3,920	3,920	3,920	---	---	---
13	3,970	3,960	3,970	3,940	3,940	3,940	3,920	3,920	3,920	---	---	---
14	3,970	3,960	3,970	3,940	3,940	3,940	3,920	3,920	3,920	---	---	---
15	3,970	3,970	3,970	3,940	3,940	3,940	3,920	3,920	3,920	---	---	---
16	3,970	3,970	3,970	3,940	3,940	3,940	3,920	3,920	3,920	---	---	---
17	3,970	3,960	3,970	3,940	3,940	3,940	3,920	3,920	3,920	---	---	---
18	3,960	3,960	3,960	3,940	3,940	3,940	3,920	3,910	3,910	---	---	---
19	3,960	3,950	3,960	3,940	3,940	3,940	3,910	3,910	3,910	---	---	---
20	3,960	3,960	3,960	3,940	3,940	3,940	3,910	3,910	3,910	---	---	---
21	3,960	3,960	3,960	3,940	3,940	3,940	3,910	3,910	3,910	---	---	---
22	3,960	3,960	3,960	3,940	3,940	3,940	3,910	3,910	3,910	3,950	3,940	3,940
23	3,960	3,960	3,960	3,940	3,940	3,940	3,910	3,910	3,910	3,940	3,940	3,940
24	3,960	3,960	3,960	3,940	3,940	3,940	3,910	3,910	3,910	3,940	3,940	3,940
25	3,960	3,960	3,960	3,940	3,930	3,940	3,910	3,910	3,910	3,940	3,940	3,940
26	3,960	3,960	3,960	3,930	3,930	3,930	3,910	3,910	3,910	3,940	3,940	3,940
27	3,960	3,960	3,960	3,930	3,930	3,930	3,910	3,910	3,910	3,940	3,940	3,940
28	3,960	3,960	3,960	3,930	3,930	3,930	3,910	3,900	3,910	3,940	3,940	3,940
29	3,960	3,960	3,960	3,930	3,930	3,930	3,900	3,900	3,900	3,940	3,940	3,940
30	---	---	---	3,930	3,930	3,930	3,900	3,900	3,900	3,940	3,940	3,940
31	---	---	---	3,930	3,930	3,930	---	---	---	3,940	3,940	3,940
Month	3,980	3,950	3,970	3,960	3,930	3,940	3,930	3,900	3,920	---	---	---

Water-Data Report 2008

344139077211204 Local number ON-264, NCDENR Hadnot Point Research Station X24s4, at Camp Lejeune, NC (Peedee)—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	3,940	3,940	3,940	3,950	3,940	3,950	3,950	3,950	3,950	3,920	3,910	3,910
2	3,940	3,940	3,940	3,950	3,950	3,950	3,950	3,950	3,950	3,920	3,910	3,910
3	3,940	3,940	3,940	3,950	3,940	3,950	3,950	3,950	3,950	3,920	3,910	3,910
4	3,940	3,940	3,940	3,950	3,950	3,950	3,950	3,950	3,950	3,910	3,910	3,910
5	3,940	3,940	3,940	3,950	3,950	3,950	3,950	3,950	3,950	3,910	3,910	3,910
6	3,950	3,940	3,940	3,950	3,950	3,950	3,950	3,950	3,950	3,910	3,910	3,910
7	3,950	3,940	3,940	3,950	3,950	3,950	3,950	3,950	3,950	3,920	3,910	3,910
8	3,940	3,940	3,940	3,950	3,950	3,950	3,950	3,950	3,950	3,920	3,910	3,910
9	3,950	3,940	3,940	3,950	3,950	3,950	3,950	3,950	3,950	3,920	3,910	3,920
10	3,950	3,940	3,940	3,950	3,950	3,950	3,950	3,950	3,950	3,920	3,910	3,920
11	3,950	3,940	3,940	3,950	3,950	3,950	3,950	3,950	3,950	3,920	3,910	3,920
12	3,950	3,940	3,940	3,950	3,950	3,950	3,950	3,950	3,950	3,920	3,910	3,920
13	3,950	3,940	3,940	3,950	3,950	3,950	3,950	3,950	3,950	3,920	3,910	3,920
14	3,950	3,940	3,940	3,950	3,950	3,950	3,950	3,920	3,940	3,920	3,910	3,920
15	3,950	3,940	3,940	3,950	3,950	3,950	3,920	3,920	3,920	3,920	3,910	3,910
16	3,950	3,940	3,950	3,950	3,950	3,950	3,920	3,920	3,920	3,910	3,910	3,910
17	3,950	3,940	3,950	3,950	3,950	3,950	3,920	3,920	3,920	3,920	3,910	3,910
18	3,950	3,940	3,950	3,950	3,950	3,950	3,920	3,920	3,920	3,920	3,910	3,910
19	3,950	3,940	3,950	3,950	3,950	3,950	3,920	3,920	3,920	3,910	3,910	3,910
20	3,950	3,950	3,950	3,950	3,950	3,950	3,920	3,920	3,920	3,920	3,910	3,910
21	3,950	3,940	3,950	3,950	3,950	3,950	3,920	3,920	3,920	3,920	3,910	3,910
22	3,950	3,940	3,950	3,950	3,950	3,950	3,920	3,920	3,920	3,910	3,910	3,910
23	3,950	3,940	3,950	3,950	3,950	3,950	3,920	3,920	3,920	3,920	3,910	3,910
24	3,950	3,940	3,950	3,950	3,950	3,950	3,920	3,920	3,920	3,920	3,910	3,910
25	3,950	3,940	3,950	3,950	3,950	3,950	3,920	3,920	3,920	3,920	3,910	3,910
26	3,950	3,950	3,950	3,950	3,950	3,950	3,920	3,920	3,920	3,920	3,910	3,910
27	3,950	3,950	3,950	3,950	3,950	3,950	3,920	3,910	3,920	3,920	3,910	3,920
28	3,950	3,940	3,950	3,950	3,950	3,950	3,920	3,910	3,920	3,920	3,910	3,920
29	3,950	3,940	3,950	3,950	3,950	3,950	3,920	3,910	3,920	3,920	3,910	3,920
30	3,950	3,950	3,950	3,950	3,950	3,950	3,920	3,910	3,920	3,920	3,910	3,920
31	---	---	---	3,950	3,950	3,950	3,920	3,910	3,920	---	---	---
Month	3,950	3,940	3,940	3,950	3,940	3,950	3,950	3,910	3,930	3,920	3,910	3,910



Water-Data Report 2008

344139077211205 Local number ON-265, NCDENR Hadnot Point Research Station X24s5, at Camp Lejeune, NC (Castle Hayne)

Castle Hayne aquifer
Castle Hayne Formation
Onslow County, NC

LOCATION.--Lat 34°41'35", long 77°21'06" referenced to North American Datum of 1983, Onslow County, NC, Hydrologic Unit 03030001, 1.6 mi south of intersection of Brewster Boulevard and Stone Street Extension, at Camp Lejeune. Owner: NCDENR (North Carolina Department of Environment and Natural Resources).

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Drilled observation well, depth 295 ft, diameter 4 in., well cased to 285 ft, screened interval from 285 ft to 295 ft.

DATUM.--Land-surface datum is 24.88 ft above North American Vertical Datum of 1988. Measuring point: top of well casing, 3.23 ft above land-surface datum, November 16, 2007 to present.

PERIOD OF RECORD.--February 1988 to July 2005, November 2007 to present.

GAGE.--Water-level recorder collecting data at 60-minute intervals. Satellite telemetry at site.

REMARKS.--Well is part of U.S. Marine Corps Base, Camp Lejeune, North Carolina, Water Resources Network project.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 15.06 ft below land-surface datum, March 16, 2004; lowest water level recorded, 20.36 ft below land-surface datum, September 12, 16, 1994.

Water-Data Report 2008

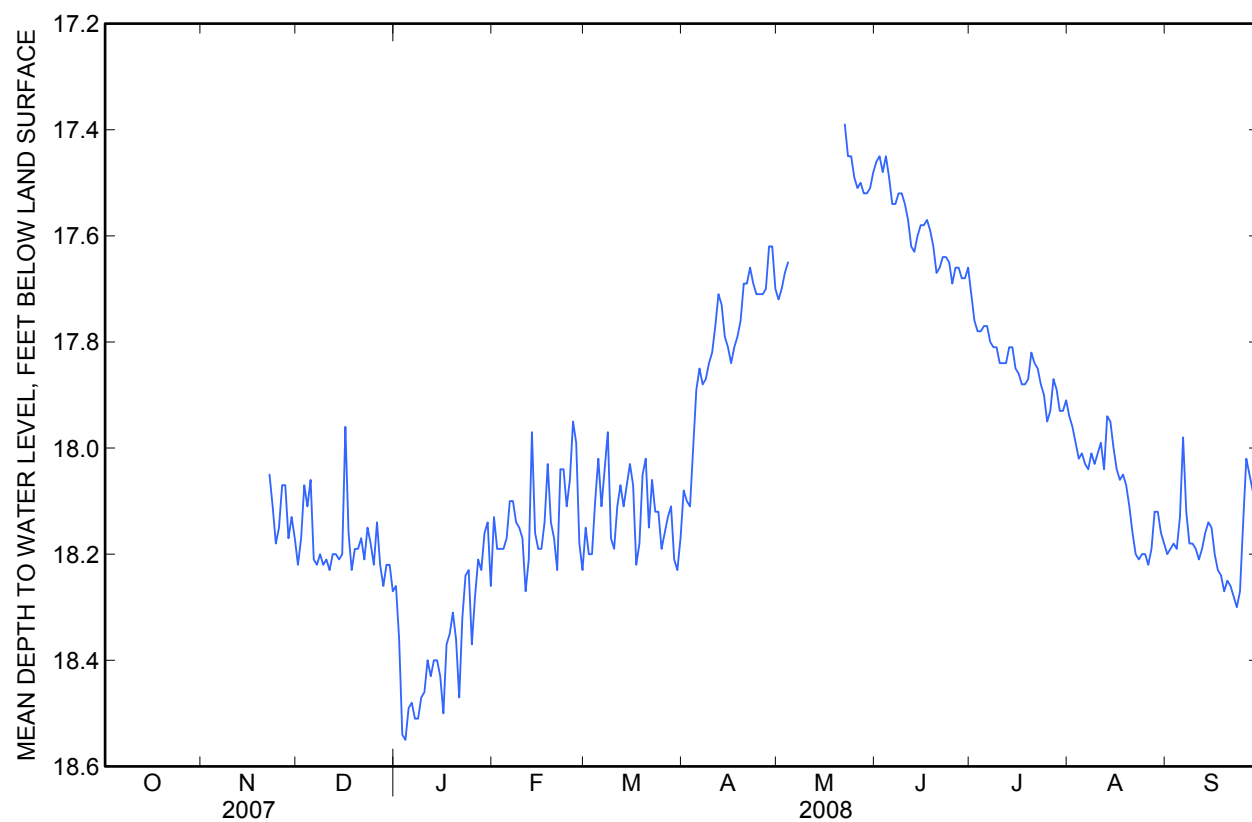
344139077211205 Local number ON-265, NCDENR Hadnot Point Research Station X24s5, at Camp Lejeune, NC (Castle Hayne)—Continued

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	18.22	18.26	18.13	18.15	18.08	17.72	17.46	17.71	17.94	18.20
2	---	---	18.17	18.36	18.19	18.20	18.10	17.70	17.45	17.76	17.96	18.19
3	---	---	18.07	18.54	18.19	18.20	18.11	17.67	17.48	17.78	17.99	18.18
4	---	---	18.11	18.55	18.19	18.10	18.00	17.65	17.45	17.78	18.02	18.19
5	---	---	18.06	18.49	18.17	18.02	17.89	---	17.49	17.77	18.01	18.13
6	---	---	18.21	18.48	18.10	18.11	17.85	---	17.54	17.77	18.03	17.98
7	---	---	18.22	18.51	18.10	18.04	17.88	---	17.54	17.80	18.04	18.12
8	---	---	18.20	18.51	18.14	17.97	17.87	---	17.52	17.81	18.01	18.18
9	---	---	18.22	18.47	18.15	18.17	17.84	---	17.52	17.81	18.03	18.18
10	---	---	18.21	18.46	18.17	18.19	17.82	---	17.54	17.84	18.01	18.19
11	---	---	18.23	18.40	18.27	18.11	17.77	---	17.57	17.84	17.99	18.21
12	---	---	18.20	18.43	18.21	18.07	17.71	---	17.62	17.84	18.04	18.19
13	---	---	18.20	18.40	17.97	18.11	17.73	---	17.63	17.81	17.94	18.16
14	---	---	18.21	18.40	18.16	18.07	17.79	---	17.60	17.81	17.95	18.14
15	---	---	18.20	18.43	18.19	18.03	17.81	---	17.58	17.85	18.00	18.15
16	---	---	17.96	18.50	18.19	18.07	17.84	---	17.58	17.86	18.04	18.20
17	---	---	18.16	18.37	18.14	18.22	17.81	---	17.57	17.88	18.06	18.23
18	---	---	18.23	18.35	18.03	18.18	17.79	---	17.59	17.88	18.05	18.24
19	---	---	18.19	18.31	18.14	18.05	17.76	---	17.62	17.87	18.07	18.27
20	---	---	18.19	18.36	18.17	18.02	17.69	---	17.67	17.82	18.11	18.25
21	---	---	18.17	18.47	18.23	18.15	17.69	---	17.66	17.84	18.16	18.26
22	---	18.05	18.21	18.32	18.04	18.06	17.66	17.39	17.64	17.85	18.20	18.28
23	---	18.11	18.15	18.24	18.04	18.12	17.69	17.45	17.64	17.88	18.21	18.30
24	---	18.18	18.18	18.23	18.11	18.12	17.71	17.45	17.65	17.90	18.20	18.27
25	---	18.15	18.22	18.37	18.06	18.19	17.71	17.49	17.69	17.95	18.20	18.14
26	---	18.07	18.14	18.28	17.95	18.16	17.71	17.51	17.66	17.93	18.22	18.02
27	---	18.07	18.22	18.21	17.99	18.13	17.70	17.50	17.66	17.87	18.19	18.05
28	---	18.17	18.26	18.23	18.18	18.11	17.62	17.52	17.68	17.89	18.12	18.08
29	---	18.13	18.22	18.16	18.23	18.21	17.62	17.52	17.68	17.93	18.12	18.12
30	---	18.17	18.22	18.14	---	18.23	17.70	17.51	17.66	17.93	18.16	18.10
31	---	---	18.27	18.26	---	18.17	---	17.48	---	17.91	18.18	---
Mean	---	---	18.18	18.37	18.13	18.12	17.80	---	17.59	17.84	18.07	18.17
Max	---	---	18.27	18.55	18.27	18.23	18.11	---	17.69	17.95	18.22	18.30
Min	---	---	17.96	18.14	17.95	17.97	17.62	---	17.45	17.71	17.94	17.98

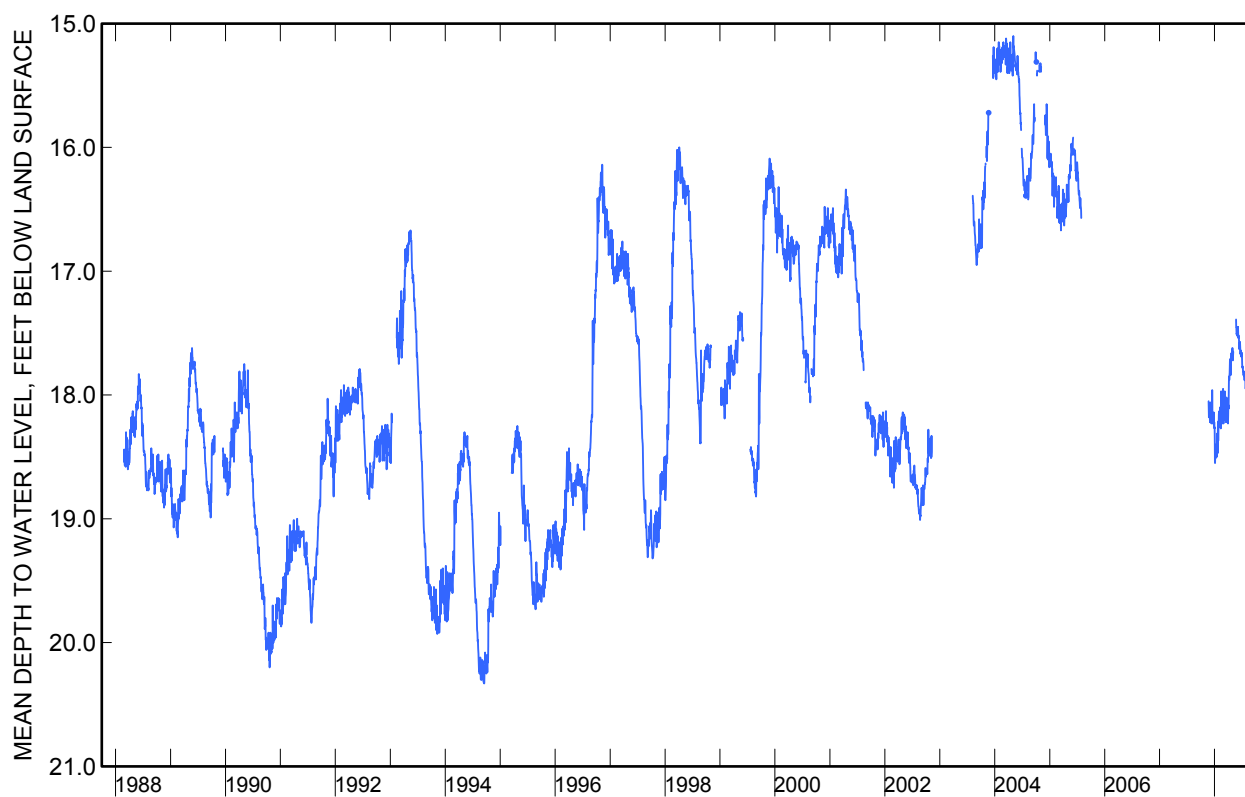
Water-Data Report 2008

344139077211205 Local number ON-265, NCDENR Hadnot Point Research Station X24s5, at Camp Lejeune, NC (Castle Hayne)—Continued



Water-Data Report 2008

344139077211205 Local number ON-265, NCDENR Hadnot Point Research Station X24s5, at Camp Lejeune, NC (Castle Hayne)—Continued



Water-Data Report 2008

344139077211205 Local number ON-265, NCDENR Hadnot Point Research Station X24s5, at Camp Lejeune, NC (Castle Hayne)—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 2007 to September 2008.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 2007 to September 2008.

WATER TEMPERATURE: November 2007 to September 2008.

INSTRUMENTATION.--Water-quality monitor in operation from November 2007 to September 2008.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 956 microsiemens, April 29; minimum recorded, 830 microsiemens, on several days during the period.

WATER TEMPERATURE: Maximum recorded, 18.9°C, on several days during the period; minimum recorded, 18.2°C, May 25, 26.

**TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	18.8	18.8	18.8	18.7	18.7	18.7
2	---	---	---	---	---	---	18.8	18.8	18.8	18.7	18.7	18.7
3	---	---	---	---	---	---	18.8	18.8	18.8	18.7	18.7	18.7
4	---	---	---	---	---	---	18.8	18.8	18.8	18.7	18.7	18.7
5	---	---	---	---	---	---	18.8	18.8	18.8	18.7	18.7	18.7
6	---	---	---	---	---	---	---	---	---	18.7	18.7	18.7
7	---	---	---	---	---	---	18.8	18.8	18.8	18.7	18.7	18.7
8	---	---	---	---	---	---	18.8	18.8	18.8	18.7	18.7	18.7
9	---	---	---	---	---	---	18.8	18.8	18.8	18.7	18.7	18.7
10	---	---	---	---	---	---	18.8	18.8	18.8	18.7	18.7	18.7
11	---	---	---	---	---	---	18.8	18.8	18.8	18.7	18.7	18.7
12	---	---	---	---	---	---	18.8	18.8	18.8	18.7	18.7	18.7
13	---	---	---	---	---	---	18.8	18.8	18.8	18.7	18.7	18.7
14	---	---	---	---	---	---	18.8	18.8	18.8	18.7	18.7	18.7
15	---	---	---	---	---	---	18.8	18.8	18.8	18.7	18.7	18.7
16	---	---	---	---	---	---	18.8	18.8	18.8	18.7	18.7	18.7
17	---	---	---	---	---	---	18.8	18.8	18.8	18.7	18.7	18.7
18	---	---	---	---	---	---	18.8	18.8	18.8	18.7	18.6	18.7
19	---	---	---	---	---	---	18.8	18.8	18.8	18.6	18.6	18.6
20	---	---	---	---	---	---	18.8	18.8	18.8	18.6	18.6	18.6
21	---	---	---	---	---	---	18.8	18.8	18.8	18.6	18.6	18.6
22	---	---	---	---	---	---	18.8	18.8	18.8	18.6	18.6	18.6
23	---	---	---	---	---	---	18.8	18.7	18.8	18.6	18.6	18.6
24	---	---	---	18.9	18.9	18.9	18.7	18.7	18.7	18.6	18.6	18.6
25	---	---	---	18.9	18.9	18.9	18.7	18.7	18.7	18.6	18.6	18.6
26	---	---	---	18.9	18.9	18.9	18.7	18.7	18.7	18.6	18.6	18.6
27	---	---	---	18.9	18.8	18.9	18.7	18.7	18.7	18.6	18.6	18.6
28	---	---	---	18.8	18.8	18.8	18.7	18.7	18.7	18.6	18.6	18.6
29	---	---	---	18.8	18.8	18.8	18.7	18.7	18.7	18.6	18.6	18.6
30	---	---	---	18.8	18.8	18.8	18.7	18.7	18.7	18.6	18.6	18.6
31	---	---	---	---	---	---	18.7	18.7	18.7	18.6	18.5	18.6
Month	---	---	---	---	---	---	---	---	---	18.7	18.5	18.7

Water-Data Report 2008

344139077211205 Local number ON-265, NCDENR Hadnot Point Research Station X24s5, at Camp Lejeune, NC (Castle Hayne)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
February			March			April			May			
1	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
2	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
3	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
4	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5
5	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	---	---	---
6	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	---	---	---
7	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	---	---	---
8	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	---	---	---
9	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	---	---	---
10	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	---	---	---
11	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	---	---	---
12	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	---	---	---
13	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	---	---	---
14	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	---	---	---
15	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	---	---	---
16	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	---	---	---
17	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	---	---	---
18	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	---	---	---
19	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	---	---	---
20	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	---	---	---
21	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	---	---	---
22	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.3	18.3	18.3
23	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.3	18.3	18.3
24	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.3	18.3	18.3
25	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.3	18.2	18.3
26	18.6	18.6	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.3	18.2	18.3
27	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.3	18.3	18.3
28	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5	18.3	18.3	18.3
29	18.6	18.6	18.6	18.5	18.5	18.5	18.5	18.5	18.5	18.3	18.3	18.3
30	---	---	---	18.5	18.5	18.5	18.5	18.5	18.5	18.3	18.3	18.3
31	---	---	---	18.5	18.5	18.5	---	---	---	18.3	18.3	18.3
Month	18.6	18.6	18.6	18.6	18.5	18.6	18.5	18.5	18.5	---	---	---

Water-Data Report 2008

344139077211205 Local number ON-265, NCDENR Hadnot Point Research Station X24s5, at Camp Lejeune, NC (Castle Hayne)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	18.3	18.3	18.3	18.4	18.4	18.4	18.6	18.6	18.6	18.7	18.6	18.6
2	18.3	18.3	18.3	18.4	18.4	18.4	18.6	18.6	18.6	18.7	18.6	18.7
3	18.3	18.3	18.3	18.5	18.4	18.5	18.6	18.6	18.6	18.7	18.6	18.6
4	18.4	18.3	18.3	18.5	18.4	18.5	18.6	18.6	18.6	18.7	18.6	18.6
5	18.4	18.4	18.4	18.5	18.4	18.5	18.6	18.6	18.6	18.7	18.6	18.6
6	18.4	18.4	18.4	18.5	18.4	18.5	18.6	18.6	18.6	18.7	18.6	18.7
7	18.4	18.4	18.4	18.5	18.4	18.5	18.6	18.6	18.6	18.7	18.6	18.6
8	18.4	18.4	18.4	18.5	18.5	18.5	18.6	18.6	18.6	18.7	18.6	18.6
9	18.4	18.4	18.4	18.5	18.4	18.5	18.6	18.6	18.6	18.7	18.6	18.6
10	18.4	18.4	18.4	18.5	18.4	18.5	18.6	18.6	18.6	18.7	18.6	18.7
11	18.4	18.4	18.4	18.5	18.4	18.5	18.6	18.6	18.6	18.7	18.6	18.6
12	18.4	18.4	18.4	18.5	18.4	18.5	18.6	18.6	18.6	18.7	18.6	18.6
13	18.4	18.4	18.4	18.5	18.4	18.5	18.6	18.6	18.6	18.7	18.6	18.6
14	18.4	18.4	18.4	18.5	18.4	18.5	---	---	---	18.7	18.6	18.6
15	18.4	18.4	18.4	18.5	18.4	18.5	18.6	18.6	18.6	18.7	18.6	18.6
16	18.4	18.4	18.4	18.5	18.4	18.5	18.6	18.6	18.6	18.7	18.6	18.6
17	18.4	18.4	18.4	18.5	18.4	18.5	18.6	18.6	18.6	18.7	18.6	18.6
18	18.4	18.4	18.4	18.5	18.4	18.5	18.6	18.6	18.6	18.7	18.6	18.6
19	18.4	18.4	18.4	18.5	18.4	18.5	18.6	18.6	18.6	18.7	18.6	18.6
20	18.4	18.4	18.4	18.5	18.4	18.5	18.6	18.6	18.6	18.7	18.6	18.6
21	18.4	18.4	18.4	18.5	18.4	18.5	18.6	18.6	18.6	18.7	18.6	18.6
22	18.4	18.4	18.4	18.5	18.4	18.5	18.6	18.6	18.6	18.7	18.6	18.6
23	18.4	18.4	18.4	18.5	18.4	18.5	18.6	18.6	18.6	18.7	18.6	18.6
24	18.4	18.4	18.4	18.5	18.4	18.5	18.6	18.6	18.6	18.7	18.6	18.6
25	18.4	18.4	18.4	18.5	18.4	18.5	18.6	18.6	18.6	18.7	18.6	18.6
26	18.4	18.4	18.4	18.5	18.4	18.5	18.6	18.6	18.6	18.7	18.6	18.6
27	18.4	18.4	18.4	18.5	18.4	18.5	18.6	18.6	18.6	18.7	18.6	18.6
28	18.4	18.4	18.4	18.5	18.4	18.5	18.6	18.6	18.6	18.8	18.6	18.7
29	18.4	18.4	18.4	18.5	18.4	18.5	18.7	18.6	18.6	18.8	18.8	18.8
30	18.4	18.4	18.4	18.5	18.4	18.5	18.7	18.6	18.6	18.8	18.8	18.8
31	---	---	---	18.6	18.4	18.5	18.7	18.6	18.6	---	---	---
Month	18.4	18.3	18.4	18.6	18.4	18.5	---	---	---	18.8	18.6	18.6

Water-Data Report 2008

344139077211205 Local number ON-265, NCDENR Hadnot Point Research Station X24s5, at Camp Lejeune, NC (Castle Hayne)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

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Water-Data Report 2008

344139077211205 Local number ON-265, NCDENR Hadnot Point Research Station X24s5, at Camp Lejeune, NC (Castle Hayne)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	873	865	866	876	864	870	895	875	886	938	932	936
2	865	864	864	867	860	863	892	873	884	941	935	938
3	864	863	864	867	860	864	893	873	882	945	937	941
4	864	864	864	896	867	879	904	893	899	947	941	944
5	864	864	864	909	878	896	923	901	914	---	---	---
6	875	864	868	881	873	878	925	916	920	---	---	---
7	875	865	869	907	873	892	918	913	916	---	---	---
8	867	863	865	913	879	903	919	915	917	---	---	---
9	867	863	865	879	863	869	922	918	921	---	---	---
10	865	863	864	873	861	865	925	921	923	---	---	---
11	863	861	861	886	873	879	930	924	928	---	---	---
12	866	861	862	893	880	887	937	930	934	---	---	---
13	919	866	907	883	877	880	936	927	933	---	---	---
14	894	862	868	893	878	887	928	925	927	---	---	---
15	866	863	864	909	886	894	927	919	924	---	---	---
16	867	862	864	909	867	888	923	917	921	---	---	---
17	875	862	869	867	855	859	927	921	925	---	---	---
18	904	873	891	878	855	868	929	924	927	---	---	---
19	873	865	870	902	878	891	932	926	929	---	---	---
20	871	863	866	912	875	895	940	932	937	---	---	---
21	865	859	862	881	869	875	940	936	938	---	---	---
22	900	865	890	896	881	889	945	937	941	---	---	---
23	896	878	890	890	875	880	942	936	938	928	924	926
24	882	870	876	884	876	881	938	933	936	926	923	924
25	890	881	885	876	860	867	937	934	935	924	920	921
26	919	890	908	877	868	873	938	935	936	922	917	920
27	917	876	900	881	875	879	938	935	937	922	919	920
28	876	860	865	885	878	882	953	938	946	921	914	918
29	864	859	860	879	852	864	956	939	948	920	916	918
30	---	---	---	863	852	858	941	935	938	921	915	919
31	---	---	---	876	862	872	---	---	---	925	919	922
Month	919	859	873	913	852	878	956	873	925	---	---	---

Water-Data Report 2008

344139077211205 Local number ON-265, NCDENR Hadnot Point Research Station X24s5, at Camp Lejeune, NC (Castle Hayne)—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	928	921	924	877	869	872	863	862	863	925	924	924
2	930	923	925	870	868	869	863	862	862	924	923	923
3	927	920	923	869	868	869	862	862	862	923	922	922
4	927	924	926	869	869	869	862	862	862	922	921	922
5	926	918	921	869	868	869	862	862	862	921	921	921
6	920	909	915	869	868	869	862	861	862	926	921	923
7	917	912	915	869	869	869	862	861	861	921	921	921
8	919	916	918	869	868	869	861	861	861	921	920	920
9	920	916	918	868	867	868	861	861	861	920	919	919
10	917	911	915	867	866	866	861	861	861	919	918	918
11	913	887	905	866	865	865	861	860	861	918	917	918
12	890	874	882	865	865	865	861	860	860	917	917	917
13	886	871	879	865	865	865	861	860	860	917	916	916
14	903	882	892	866	865	865	---	---	---	916	916	916
15	905	893	900	866	864	865	902	897	900	916	915	916
16	903	888	897	866	865	865	897	895	895	915	914	915
17	906	896	902	866	866	866	895	894	895	914	914	914
18	903	889	896	866	865	866	894	894	894	914	913	913
19	899	880	887	866	865	865	894	892	893	913	912	912
20	880	869	873	865	865	865	892	886	891	912	911	912
21	880	870	874	865	865	865	886	879	883	912	910	911
22	885	876	881	865	865	865	879	874	877	911	910	910
23	890	874	882	865	865	865	879	862	872	910	908	909
24	890	872	880	865	864	864	879	864	873	908	907	908
25	874	870	872	864	864	864	---	---	---	916	908	910
26	882	873	877	864	864	864	931	928	930	916	913	914
27	880	874	877	864	863	864	929	928	928	913	912	913
28	878	872	875	864	863	864	928	927	927	912	910	912
29	878	870	875	864	863	863	927	926	927	911	910	910
30	880	873	877	863	863	863	926	925	926	910	908	909
31	---	---	---	863	863	863	925	925	925	---	---	---
Month	930	869	896	877	863	866	---	---	---	926	907	916



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344139077211206 Local number ON-266, NCDENR Hadnot Point Research Station X24s6, at Camp Lejeune, NC (Castle Hayne)

Castle Hayne aquifer
Castle Hayne Formation
Onslow County, NC

LOCATION.--Lat 34°41'35", long 77°21'06" referenced to North American Datum of 1983, Onslow County, NC, Hydrologic Unit 03030001, 1.6 mi south of intersection of Brewster Boulevard and Stone Street Extension, at Camp Lejeune. Owner: NCDENR (North Carolina Department of Environment and Natural Resources).

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Drilled observation well, depth 130 ft, diameter 6 in., cased to 120 ft, screened interval from 120 ft to 130 ft.

DATUM.--Land-surface datum is 24.32 ft above North American Vertical Datum of 1988. Measuring point: top of steel casing, 1.86 ft above land-surface datum, November 1, 2007 to present.

PERIOD OF RECORD.--February 1988 to July 2005, November 2007 to current year.

GAGE.--Water-level recorder collecting data at 60-minute intervals. Satellite telemetry at site.

REMARKS.--Well is part of U.S. Marine Corps Base, Camp Lejeune, North Carolina, Water Resources Network project.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 14.09 ft below land-surface datum, October 18, 1996; lowest water level recorded, 19.88 ft below land-surface datum, December 26, 1990, January 5, 6, 1991.

Water-Data Report 2008

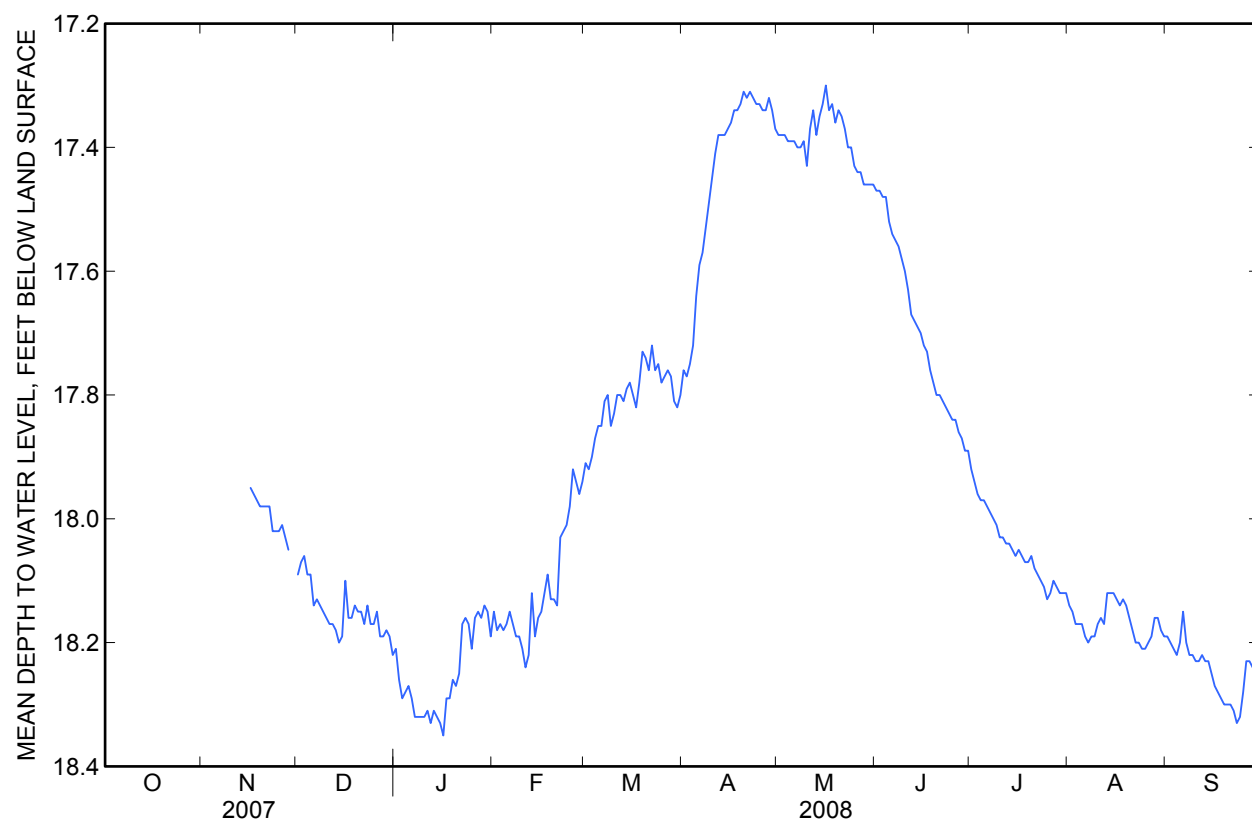
344139077211206 Local number ON-266, NCDENR Hadnot Point Research Station X24s6, at Camp Lejeune, NC (Castle Hayne)—Continued

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	18.09	18.21	18.15	17.91	17.76	17.38	17.47	17.92	18.14	18.19
2	---	---	18.07	18.26	18.18	17.92	17.77	17.38	17.47	17.94	18.15	18.20
3	---	---	18.06	18.29	18.17	17.90	17.75	17.38	17.48	17.96	18.17	18.21
4	---	---	18.09	18.28	18.18	17.87	17.72	17.39	17.48	17.97	18.17	18.22
5	---	---	18.09	18.27	18.17	17.85	17.64	17.39	17.52	17.97	18.17	18.20
6	---	---	18.14	18.29	18.15	17.85	17.59	17.39	17.54	17.98	18.19	18.15
7	---	---	18.13	18.32	18.17	17.81	17.57	17.40	17.55	17.99	18.20	18.20
8	---	---	18.14	18.32	18.19	17.80	17.53	17.40	17.56	18.00	18.19	18.22
9	---	---	18.15	18.32	18.19	17.85	17.49	17.39	17.58	18.01	18.19	18.22
10	---	---	18.16	18.32	18.21	17.83	17.45	17.43	17.60	18.03	18.17	18.23
11	---	---	18.17	18.31	18.24	17.80	17.41	17.37	17.63	18.03	18.16	18.23
12	---	---	18.17	18.33	18.22	17.80	17.38	17.34	17.67	18.04	18.17	18.22
13	---	---	18.18	18.31	18.12	17.81	17.38	17.38	17.68	18.04	18.12	18.23
14	---	---	18.20	18.32	18.19	17.79	17.38	17.35	17.69	18.05	18.12	18.23
15	---	---	18.19	18.33	18.16	17.78	17.37	17.33	17.70	18.06	18.12	18.25
16	---	17.95	18.10	18.35	18.15	17.80	17.36	17.30	17.72	18.05	18.13	18.27
17	---	17.96	18.16	18.29	18.12	17.82	17.34	17.34	17.73	18.06	18.14	18.28
18	---	17.97	18.16	18.29	18.09	17.78	17.34	17.33	17.76	18.07	18.13	18.29
19	---	17.98	18.14	18.26	18.13	17.73	17.33	17.36	17.78	18.07	18.14	18.30
20	---	17.98	18.15	18.27	18.13	17.74	17.31	17.34	17.80	18.06	18.16	18.30
21	---	17.98	18.15	18.25	18.14	17.76	17.32	17.35	17.80	18.08	18.18	18.30
22	---	17.98	18.17	18.17	18.03	17.72	17.31	17.37	17.81	18.09	18.20	18.31
23	---	18.02	18.14	18.16	18.02	17.76	17.32	17.40	17.82	18.10	18.20	18.33
24	---	18.02	18.17	18.17	18.01	17.75	17.33	17.40	17.83	18.11	18.21	18.32
25	---	18.02	18.17	18.21	17.98	17.78	17.33	17.43	17.84	18.13	18.21	18.28
26	---	18.01	18.15	18.16	17.92	17.77	17.34	17.44	17.84	18.12	18.20	18.23
27	---	18.03	18.19	18.15	17.94	17.76	17.34	17.44	17.86	18.10	18.19	18.23
28	---	18.05	18.19	18.16	17.96	17.77	17.32	17.46	17.87	18.11	18.16	18.24
29	---	---	18.18	18.14	17.94	17.81	17.34	17.46	17.89	18.12	18.16	18.25
30	---	---	18.19	18.15	---	17.82	17.37	17.46	17.89	18.12	18.18	18.25
31	---	---	18.22	18.19	---	17.80	---	17.46	---	18.12	18.19	---
Mean	---	---	18.15	18.25	18.11	17.80	17.44	17.39	17.70	18.05	18.17	18.25
Max	---	---	18.22	18.35	18.24	17.92	17.77	17.46	17.89	18.13	18.21	18.33
Min	---	---	18.06	18.14	17.92	17.72	17.31	17.30	17.47	17.92	18.12	18.15

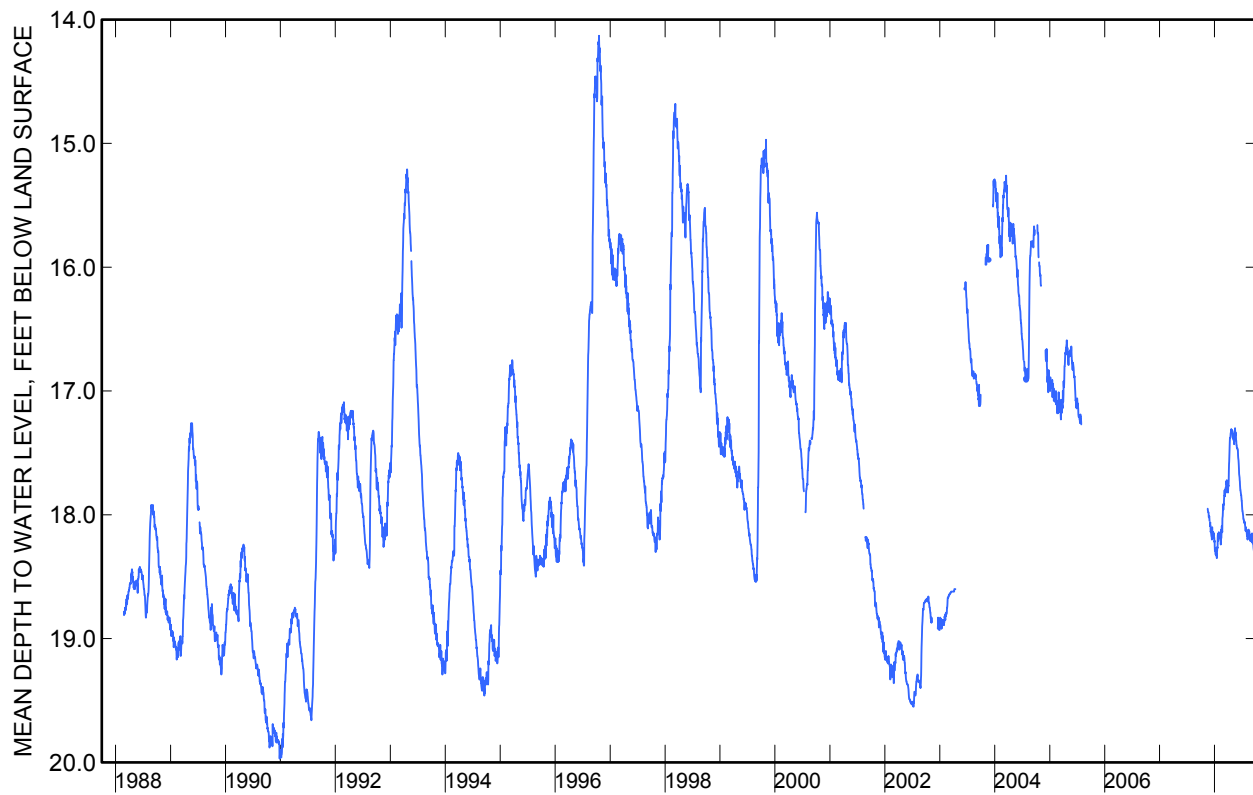
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344139077211206 Local number ON-266, NCDENR Hadnot Point Research Station X24s6, at Camp Lejeune, NC (Castle Hayne)—Continued



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344139077211206 Local number ON-266, NCDENR Hadnot Point Research Station X24s6, at Camp Lejeune, NC (Castle Hayne)—Continued



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344139077211206 Local number ON-266, NCDENR Hadnot Point Research Station X24s6, at Camp Lejeune, NC (Castle Hayne)—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 2007 to September 2008.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 2007 to September 2008.

WATER TEMPERATURE: November 2007 to September 2008.

INSTRUMENTATION.--Water-quality monitor in operation from November 2007 to September 2008.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 314 microsiemens, on many days during the period; minimum recorded, 299 microsiemens, July 11, 15.

WATER TEMPERATURE: Maximum recorded, 18.3°C, on many days during the period; minimum recorded, 17.9°C, on many days during the period.

**TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	18.2	18.2	18.2	18.3	18.3	18.3
2	---	---	---	---	---	---	18.2	18.2	18.2	18.3	18.3	18.3
3	---	---	---	---	---	---	18.2	18.2	18.2	18.3	18.3	18.3
4	---	---	---	---	---	---	18.2	18.2	18.2	18.3	18.3	18.3
5	---	---	---	---	---	---	18.2	18.2	18.2	18.3	18.3	18.3
6	---	---	---	---	---	---	18.2	18.2	18.2	18.3	18.3	18.3
7	---	---	---	---	---	---	18.2	18.2	18.2	18.3	18.3	18.3
8	---	---	---	---	---	---	18.2	18.2	18.2	18.3	18.3	18.3
9	---	---	---	---	---	---	18.2	18.2	18.2	18.3	18.3	18.3
10	---	---	---	---	---	---	18.2	18.2	18.2	18.3	18.3	18.3
11	---	---	---	---	---	---	18.2	18.2	18.2	18.3	18.3	18.3
12	---	---	---	---	---	---	18.2	18.2	18.2	18.3	18.3	18.3
13	---	---	---	---	---	---	18.2	18.2	18.2	18.3	18.3	18.3
14	---	---	---	---	---	---	18.2	18.2	18.2	18.3	18.3	18.3
15	---	---	---	---	---	---	18.2	18.2	18.2	18.3	18.3	18.3
16	---	---	---	18.2	18.2	18.2	18.2	18.2	18.2	18.3	18.3	18.3
17	---	---	---	18.2	18.2	18.2	18.2	18.2	18.2	18.3	18.3	18.3
18	---	---	---	18.2	18.2	18.2	18.2	18.2	18.2	18.3	18.3	18.3
19	---	---	---	18.2	18.2	18.2	18.2	18.2	18.2	18.3	18.3	18.3
20	---	---	---	18.2	18.2	18.2	18.2	18.2	18.2	18.3	18.3	18.3
21	---	---	---	18.2	18.2	18.2	18.2	18.2	18.2	18.3	18.3	18.3
22	---	---	---	18.2	18.2	18.2	18.2	18.2	18.2	18.3	18.3	18.3
23	---	---	---	18.2	18.2	18.2	18.3	18.2	18.2	18.3	18.3	18.3
24	---	---	---	18.2	18.2	18.2	18.3	18.3	18.3	18.3	18.3	18.3
25	---	---	---	18.2	18.2	18.2	18.3	18.3	18.3	18.3	18.3	18.3
26	---	---	---	18.2	18.2	18.2	18.3	18.3	18.3	18.3	18.3	18.3
27	---	---	---	18.2	18.2	18.2	18.3	18.3	18.3	18.3	18.3	18.3
28	---	---	---	18.2	18.2	18.2	18.3	18.3	18.3	18.3	18.3	18.3
29	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
30	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
31	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.2	18.3
Month	---	---	---	---	---	---	18.3	18.2	18.2	18.3	18.2	18.3

Water-Data Report 2008

344139077211206 Local number ON-266, NCDENR Hadnot Point Research Station X24s6, at Camp Lejeune, NC (Castle Hayne)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

[illegible]

Water-Data Report 2008

344139077211206 Local number ON-266, NCDENR Hadnot Point Research Station X24s6, at Camp Lejeune, NC (Castle Hayne)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
2	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
3	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
4	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
5	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
6	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.9	17.9
7	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.9	17.9	17.9
8	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.9	17.9	17.9
9	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.9	17.9	17.9
10	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.9	17.9	17.9
11	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.9	17.9	17.9
12	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.9	17.9	17.9
13	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.9	17.9	17.9
14	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.0	18.0	17.9	17.9	17.9
15	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.9	17.9	17.9
16	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.9	17.9	17.9
17	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.9	17.9	17.9
18	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.9	17.9	17.9
19	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.9	17.9	17.9
20	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.9	17.9	17.9
21	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.9	17.9	17.9
22	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.9	17.9	17.9
23	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.9	17.9	17.9
24	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.9	17.9	17.9
25	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.0	18.0	17.9	17.9	17.9
26	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.9	17.9	17.9
27	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.9	17.9	17.9
28	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.9	17.9	17.9
29	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.9	17.9	17.9
30	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	17.9	17.9	17.9
31	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0	---	---	---
Month	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.0	18.0	18.0	17.9	17.9

Water-Data Report 2008

344139077211206 Local number ON-266, NCDENR Hadnot Point Research Station X24s6, at Camp Lejeune, NC (Castle Hayne)—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	314	313	313	314	313	313
2	---	---	---	---	---	---	314	313	313	314	313	313
3	---	---	---	---	---	---	314	313	313	314	313	313
4	---	---	---	---	---	---	313	313	313	314	313	314
5	---	---	---	---	---	---	314	313	313	314	313	314
6	---	---	---	---	---	---	314	313	314	314	313	314
7	---	---	---	---	---	---	314	313	314	314	313	314
8	---	---	---	---	---	---	314	313	314	314	313	314
9	---	---	---	---	---	---	314	313	314	314	313	314
10	---	---	---	---	---	---	314	313	314	314	313	314
11	---	---	---	---	---	---	314	313	314	314	313	314
12	---	---	---	---	---	---	314	313	314	314	313	314
13	---	---	---	---	---	---	314	313	314	314	313	313
14	---	---	---	---	---	---	314	313	313	314	313	313
15	---	---	---	---	---	---	314	313	314	314	313	314
16	---	---	---	313	312	312	314	313	313	314	313	314
17	---	---	---	313	312	313	314	313	313	314	313	314
18	---	---	---	313	312	313	314	313	313	314	313	314
19	---	---	---	313	312	312	314	313	313	314	313	314
20	---	---	---	313	312	313	314	313	313	314	313	314
21	---	---	---	313	312	313	314	313	313	314	313	314
22	---	---	---	313	312	313	314	313	313	314	313	314
23	---	---	---	313	313	313	314	313	313	314	313	314
24	---	---	---	313	313	313	314	313	313	314	313	314
25	---	---	---	314	313	313	313	313	313	314	313	314
26	---	---	---	314	313	314	314	313	313	314	314	314
27	---	---	---	314	313	314	314	313	313	314	314	314
28	---	---	---	314	313	313	314	313	313	314	314	314
29	---	---	---	---	---	---	314	313	313	314	313	314
30	---	---	---	---	---	---	314	313	313	314	313	314
31	---	---	---	---	---	---	314	313	313	314	312	313
Month	---	---	---	---	---	---	314	313	313	314	312	314

Water-Data Report 2008

344139077211206 Local number ON-266, NCDENR Hadnot Point Research Station X24s6, at Camp Lejeune, NC (Castle Hayne)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	313	312	313	314	313	313	310	310	310	310	309	310
2	313	313	313	314	313	314	310	310	310	310	309	310
3	313	313	313	314	313	314	310	310	310	310	309	309
4	314	313	313	314	313	314	310	310	310	310	309	309
5	314	313	313	314	313	313	310	310	310	310	309	309
6	314	313	314	314	313	313	310	310	310	310	309	309
7	314	313	314	313	313	313	310	310	310	310	309	310
8	314	313	314	313	313	313	310	310	310	310	310	310
9	314	313	314	313	313	313	310	310	310	310	310	310
10	314	314	314	313	313	313	310	310	310	311	310	310
11	314	314	314	313	313	313	310	310	310	314	310	312
12	314	314	314	313	313	313	310	310	310	314	313	313
13	314	314	314	313	313	313	311	310	311	314	313	313
14	314	313	314	313	312	313	311	310	311	314	313	314
15	314	314	314	313	312	312	312	311	311	314	314	314
16	314	314	314	312	312	312	312	311	312	314	314	314
17	314	314	314	312	312	312	312	312	312	314	314	314
18	314	314	314	312	312	312	312	312	312	314	314	314
19	314	313	314	312	312	312	312	312	312	314	314	314
20	314	313	314	312	311	312	312	311	312	314	314	314
21	314	313	314	312	311	311	312	311	311	314	312	313
22	314	313	314	312	311	311	311	311	311	313	312	313
23	314	313	313	311	311	311	311	311	311	313	313	313
24	314	313	313	311	311	311	311	310	311	313	313	313
25	314	313	313	311	311	311	311	310	311	313	313	313
26	314	313	314	311	311	311	311	310	310	313	313	313
27	314	313	314	311	310	311	310	310	310	314	313	313
28	314	313	314	311	310	311	310	310	310	314	313	313
29	314	313	313	311	310	310	310	310	310	313	313	313
30	---	---	---	311	310	310	310	310	310	313	313	313
31	---	---	---	311	310	310	---	---	---	313	313	313
Month	314	312	314	314	310	312	312	310	311	314	309	312

Water-Data Report 2008

344139077211206 Local number ON-266, NCDENR Hadnot Point Research Station X24s6, at Camp Lejeune, NC (Castle Hayne)—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	313	313	313	302	301	301	302	301	301	309	308	308
2	313	312	313	301	300	301	302	301	301	309	308	309
3	313	312	313	301	300	301	301	300	301	310	309	309
4	313	312	313	301	300	301	302	300	301	310	309	309
5	313	311	312	301	300	301	302	301	301	312	309	310
6	312	310	311	301	300	301	301	300	301	313	311	312
7	311	310	310	301	300	301	301	300	301	311	311	311
8	311	309	310	301	300	300	302	301	301	311	311	311
9	310	308	309	301	300	300	305	301	302	312	311	312
10	308	306	308	300	300	300	305	303	304	312	312	312
11	307	305	306	300	299	300	305	304	305	312	312	312
12	306	305	305	300	300	300	304	303	304	313	312	313
13	305	304	305	301	300	300	309	304	308	313	313	313
14	305	305	305	300	300	300	310	306	308	313	313	313
15	305	304	305	301	299	300	307	306	306	313	313	313
16	305	304	304	301	300	300	307	306	306	313	313	313
17	305	303	304	301	300	300	306	306	306	313	313	313
18	304	303	304	301	300	300	306	306	306	314	313	313
19	304	302	303	301	300	301	306	305	306	314	313	313
20	303	302	303	302	300	301	306	306	306	314	313	314
21	303	302	303	301	300	301	307	306	306	314	314	314
22	303	302	303	301	300	300	307	307	307	314	314	314
23	304	302	303	300	300	300	307	307	307	314	314	314
24	303	302	303	301	300	300	307	307	307	314	314	314
25	303	302	302	300	300	300	307	302	306	314	314	314
26	303	302	303	302	300	300	305	302	304	314	314	314
27	303	302	302	302	301	302	305	305	305	314	314	314
28	302	302	302	302	301	301	307	305	306	314	314	314
29	302	302	302	302	301	301	307	306	307	314	314	314
30	302	301	302	302	301	302	308	307	307	314	314	314
31	---	---	---	302	301	302	308	307	308	---	---	---
Month	313	301	306	302	299	301	310	300	305	314	308	312



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344139077211207 Local number ON-267, NCDENR Hadnot Point Research Station X24s7, at Camp Lejeune, NC (Surficial)

Surficial aquifer system
Post Miocene (Quaternary + Pliocene) Rocks
Onslow County, NC

LOCATION.--Lat 34°41'36", long 77°21'06" referenced to North American Datum of 1983, Onslow County, NC, Hydrologic Unit 03030001, 1.6 mi south of intersection of Brewster Boulevard and Stone Street Extension, at Camp Lejeune. Owner: NCDENR (North Carolina Department of Environment and Natural Resources).

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Drilled observation well, depth 40 ft, diameter 4 in., cased to 30 ft, screened interval from 30 ft to 40 ft.

DATUM.--Land-surface datum is 25.15 ft above North American Vertical Datum of 1988. Measuring point: top of well casing, 0.76 ft above land-surface datum, November 1, 1977 to present.

PERIOD OF RECORD.--February 1988 to July 2005, November 2007 to current year.

GAGE.--Water-level recorder collecting data at 60-minute intervals. Satellite telemetry at site.

REMARKS.--Well is part of U.S. Marine Corps Base, Camp Lejeune, North Carolina, Water Resources Network project.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 14.35 ft below land-surface datum, October 18, 1996; lowest water level recorded, 20.26 ft below land-surface datum, January 5, 6, 1991.

Water-Data Report 2008

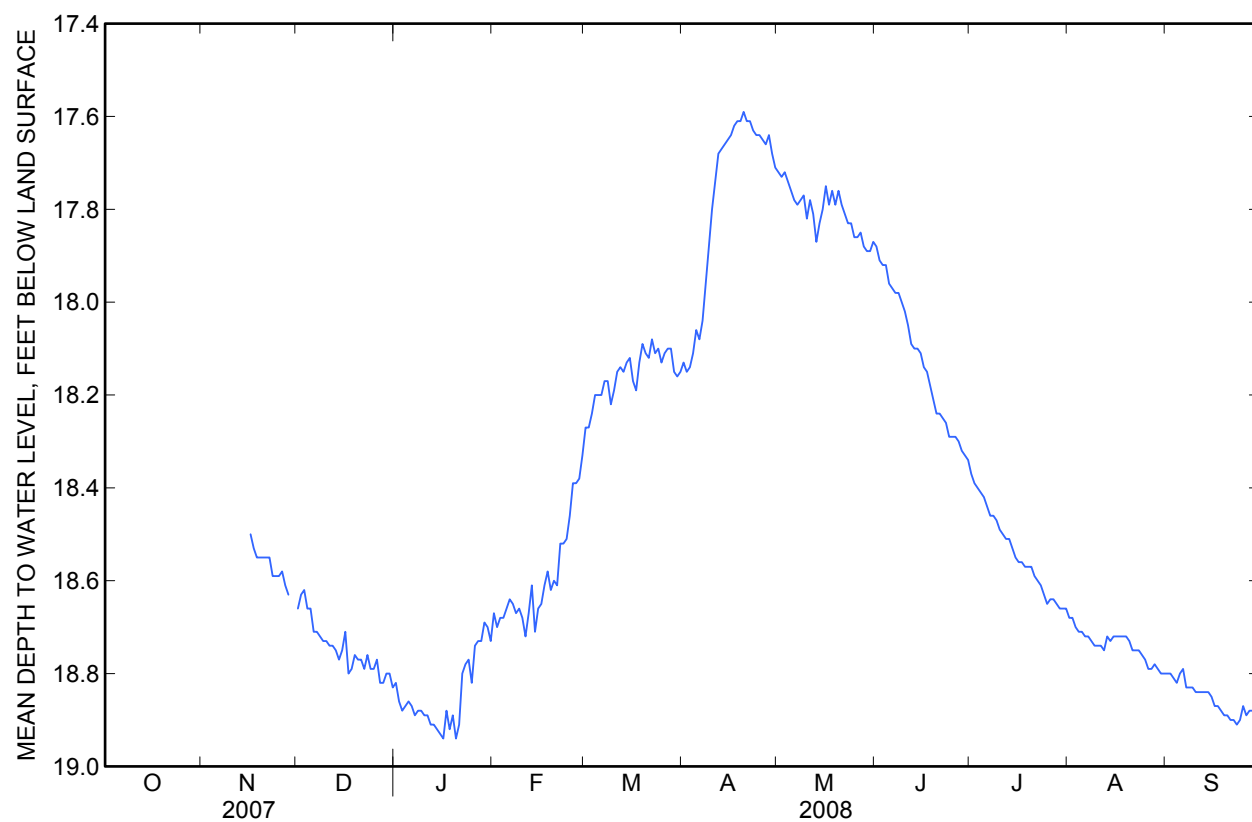
344139077211207 Local number ON-267, NCDENR Hadnot Point Research Station X24s7, at Camp Lejeune, NC (Surficial)—Continued

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	18.66	18.82	18.67	18.27	18.13	17.72	17.88	18.37	18.68	18.80
2	---	---	18.63	18.86	18.70	18.27	18.15	17.73	17.91	18.39	18.68	18.80
3	---	---	18.62	18.88	18.68	18.24	18.14	17.72	17.92	18.40	18.70	18.81
4	---	---	18.66	18.87	18.68	18.20	18.11	17.74	17.92	18.41	18.71	18.82
5	---	---	18.66	18.86	18.66	18.20	18.06	17.76	17.96	18.42	18.71	18.80
6	---	---	18.71	18.87	18.64	18.20	18.08	17.78	17.97	18.44	18.72	18.79
7	---	---	18.71	18.89	18.65	18.17	18.04	17.79	17.98	18.46	18.72	18.83
8	---	---	18.72	18.88	18.67	18.17	17.96	17.78	17.98	18.46	18.73	18.83
9	---	---	18.73	18.88	18.66	18.22	17.88	17.77	18.00	18.47	18.74	18.83
10	---	---	18.73	18.89	18.68	18.19	17.80	17.82	18.02	18.49	18.74	18.84
11	---	---	18.74	18.89	18.72	18.15	17.74	17.78	18.05	18.50	18.74	18.84
12	---	---	18.74	18.91	18.67	18.14	17.68	17.81	18.09	18.51	18.75	18.84
13	---	---	18.75	18.91	18.61	18.15	17.67	17.87	18.10	18.51	18.72	18.84
14	---	---	18.77	18.92	18.71	18.13	17.66	17.83	18.10	18.53	18.73	18.84
15	---	---	18.75	18.93	18.66	18.12	17.65	17.80	18.11	18.55	18.72	18.85
16	---	18.50	18.71	18.94	18.65	18.17	17.64	17.75	18.14	18.56	18.72	18.87
17	---	18.53	18.80	18.88	18.61	18.19	17.62	17.79	18.15	18.56	18.72	18.87
18	---	18.55	18.79	18.92	18.58	18.13	17.61	17.76	18.18	18.57	18.72	18.88
19	---	18.55	18.76	18.89	18.62	18.09	17.61	17.79	18.21	18.57	18.72	18.89
20	---	18.55	18.77	18.94	18.60	18.11	17.59	17.76	18.24	18.57	18.73	18.89
21	---	18.55	18.77	18.91	18.61	18.12	17.61	17.79	18.24	18.59	18.75	18.90
22	---	18.55	18.79	18.80	18.52	18.08	17.61	17.81	18.25	18.60	18.75	18.90
23	---	18.59	18.76	18.78	18.52	18.11	17.63	17.83	18.26	18.61	18.75	18.91
24	---	18.59	18.79	18.77	18.51	18.10	17.64	17.83	18.29	18.63	18.76	18.90
25	---	18.59	18.79	18.82	18.46	18.13	17.64	17.86	18.29	18.65	18.77	18.87
26	---	18.58	18.77	18.74	18.39	18.11	17.65	17.86	18.29	18.64	18.79	18.89
27	---	18.61	18.82	18.73	18.39	18.10	17.66	17.85	18.30	18.64	18.79	18.88
28	---	18.63	18.82	18.73	18.38	18.10	17.64	17.88	18.32	18.65	18.78	18.88
29	---	---	18.80	18.69	18.33	18.15	17.68	17.89	18.33	18.66	18.79	18.89
30	---	---	18.80	18.70	---	18.16	17.71	17.89	18.34	18.66	18.80	18.87
31	---	---	18.83	18.73	---	18.15	---	17.87	---	18.66	18.80	---
Mean	---	---	18.75	18.85	18.59	18.16	17.78	17.80	18.13	18.54	18.74	18.86
Max	---	---	18.83	18.94	18.72	18.27	18.15	17.89	18.34	18.66	18.80	18.91
Min	---	---	18.62	18.69	18.33	18.08	17.59	17.72	17.88	18.37	18.68	18.79

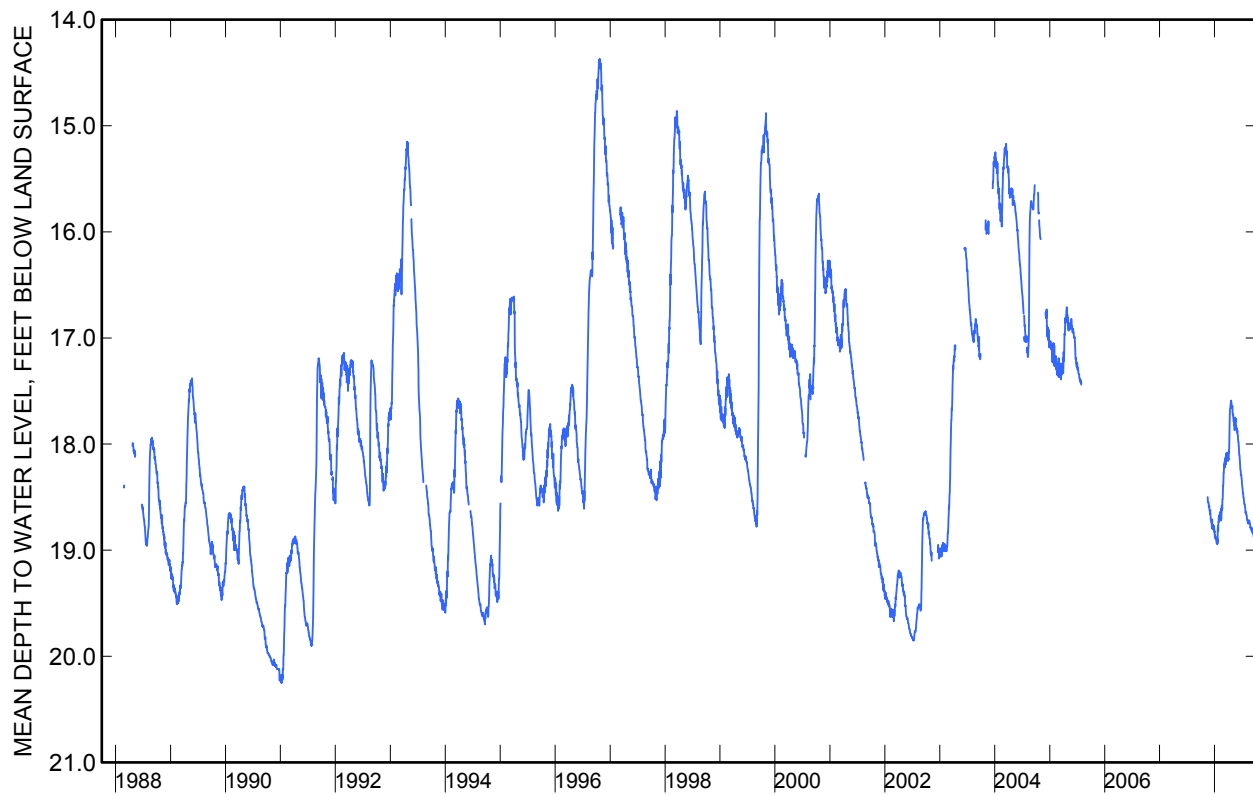
Water-Data Report 2008

344139077211207 Local number ON-267, NCDENR Hadnot Point Research Station X24s7, at Camp Lejeune, NC (Surficial)—Continued



Water-Data Report 2008

344139077211207 Local number ON-267, NCDENR Hadnot Point Research Station X24s7, at Camp Lejeune, NC (Surficial)—Continued



Water-Data Report 2008

344139077211207 Local number ON-267, NCDENR Hadnot Point Research Station X24s7, at Camp Lejeune, NC (Surficial)—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 2007 to September 2008.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 2007 to September 2008.

WATER TEMPERATURE: November 2007 to September 2008.

INSTRUMENTATION.--Water-quality monitor in operation from November 2007 to September 2008.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 219 microsiemens, on many days during the period; minimum recorded, 152 microsiemens, March 18, 19.

WATER TEMPERATURE: Maximum recorded, 18.9°C, on several days during the period; minimum recorded, 18.1°C, on many days during the period.

**TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
October			November			December			January			
1	---	---	---	---	---	---	18.5	18.5	18.5	18.7	18.7	18.7
2	---	---	---	---	---	---	18.5	18.5	18.5	18.7	18.7	18.7
3	---	---	---	---	---	---	18.6	18.5	18.5	18.7	18.7	18.7
4	---	---	---	---	---	---	18.6	18.6	18.6	18.8	18.7	18.7
5	---	---	---	---	---	---	18.6	18.6	18.6	18.8	18.7	18.7
6	---	---	---	---	---	---	18.6	18.6	18.6	18.8	18.8	18.8
7	---	---	---	---	---	---	18.6	18.6	18.6	18.8	18.8	18.8
8	---	---	---	---	---	---	18.6	18.6	18.6	18.8	18.8	18.8
9	---	---	---	---	---	---	18.6	18.6	18.6	18.8	18.8	18.8
10	---	---	---	---	---	---	18.6	18.6	18.6	18.8	18.8	18.8
11	---	---	---	---	---	---	18.6	18.6	18.6	18.8	18.8	18.8
12	---	---	---	---	---	---	18.6	18.6	18.6	18.9	18.8	18.9
13	---	---	---	---	---	---	18.6	18.6	18.6	18.9	18.9	18.9
14	---	---	---	---	---	---	18.6	18.6	18.6	18.9	18.9	18.9
15	---	---	---	---	---	---	18.7	18.6	18.6	18.9	18.9	18.9
16	---	---	---	18.4	18.4	18.4	18.7	18.7	18.7	18.9	18.9	18.9
17	---	---	---	18.4	18.4	18.4	18.7	18.7	18.7	18.9	18.9	18.9
18	---	---	---	18.4	18.4	18.4	18.7	18.7	18.7	18.9	18.9	18.9
19	---	---	---	18.4	18.4	18.4	18.7	18.7	18.7	18.9	18.9	18.9
20	---	---	---	18.4	18.4	18.4	18.7	18.7	18.7	18.9	18.9	18.9
21	---	---	---	18.4	18.4	18.4	18.7	18.7	18.7	18.9	18.9	18.9
22	---	---	---	18.4	18.4	18.4	18.7	18.7	18.7	18.9	18.9	18.9
23	---	---	---	18.4	18.4	18.4	18.7	18.7	18.7	18.9	18.9	18.9
24	---	---	---	18.4	18.4	18.4	18.7	18.7	18.7	18.9	18.9	18.9
25	---	---	---	18.5	18.4	18.4	18.7	18.7	18.7	18.9	18.9	18.9
26	---	---	---	18.5	18.5	18.5	18.7	18.7	18.7	18.9	18.9	18.9
27	---	---	---	18.5	18.5	18.5	18.7	18.7	18.7	18.9	18.9	18.9
28	---	---	---	18.5	18.5	18.5	18.7	18.7	18.7	18.9	18.9	18.9
29	---	---	---	---	---	---	18.7	18.7	18.7	18.9	18.9	18.9
30	---	---	---	---	---	---	18.7	18.7	18.7	18.9	18.9	18.9
31	---	---	---	---	---	---	18.7	18.7	18.7	18.9	18.8	18.9
Month	---	---	---	---	---	---	18.7	18.5	18.6	18.9	18.7	18.8

Water-Data Report 2008

344139077211207 Local number ON-267, NCDENR Hadnot Point Research Station X24s7, at Camp Lejeune, NC (Surficial)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	18.8	18.8	18.8	18.8	18.8	18.8	18.6	18.5	18.5	18.4	18.4	18.4
2	18.8	18.8	18.8	18.8	18.8	18.8	18.5	18.5	18.5	18.4	18.4	18.4
3	18.8	18.8	18.8	18.8	18.8	18.8	18.5	18.5	18.5	18.4	18.4	18.4
4	18.8	18.8	18.8	18.8	18.8	18.8	18.5	18.5	18.5	18.4	18.4	18.4
5	18.8	18.8	18.8	18.8	18.8	18.8	18.5	18.5	18.5	18.4	18.4	18.4
6	18.8	18.8	18.8	18.8	18.8	18.8	18.5	18.5	18.5	18.4	18.3	18.4
7	18.8	18.8	18.8	18.8	18.8	18.8	18.5	18.5	18.5	18.4	18.3	18.4
8	18.8	18.8	18.8	18.8	18.8	18.8	18.5	18.5	18.5	18.4	18.3	18.3
9	18.8	18.8	18.8	18.8	18.8	18.8	18.5	18.5	18.5	18.4	18.3	18.3
10	18.8	18.8	18.8	18.8	18.8	18.8	18.5	18.5	18.5	18.4	18.3	18.3
11	18.8	18.8	18.8	18.8	18.8	18.8	18.5	18.5	18.5	18.3	18.3	18.3
12	18.8	18.8	18.8	18.8	18.8	18.8	18.5	18.5	18.5	18.3	18.3	18.3
13	18.8	18.8	18.8	18.8	18.8	18.8	18.5	18.5	18.5	18.3	18.3	18.3
14	18.8	18.8	18.8	18.8	18.8	18.8	18.5	18.5	18.5	18.3	18.3	18.3
15	18.8	18.8	18.8	18.8	18.8	18.8	18.5	18.5	18.5	18.3	18.3	18.3
16	18.8	18.8	18.8	18.8	18.8	18.8	18.5	18.4	18.5	18.3	18.3	18.3
17	18.8	18.8	18.8	18.8	18.7	18.8	18.5	18.4	18.5	18.3	18.3	18.3
18	18.8	18.8	18.8	18.7	18.7	18.7	18.5	18.4	18.4	18.3	18.3	18.3
19	18.8	18.8	18.8	18.7	18.7	18.7	18.5	18.4	18.4	18.3	18.3	18.3
20	18.8	18.8	18.8	18.7	18.7	18.7	18.4	18.4	18.4	18.3	18.3	18.3
21	18.8	18.8	18.8	18.7	18.7	18.7	18.4	18.4	18.4	---	---	---
22	18.8	18.8	18.8	18.7	18.7	18.7	18.4	18.4	18.4	18.2	18.2	18.2
23	18.8	18.8	18.8	18.7	18.7	18.7	18.4	18.4	18.4	18.2	18.2	18.2
24	18.8	18.8	18.8	18.7	18.7	18.7	18.4	18.4	18.4	18.2	18.2	18.2
25	18.8	18.8	18.8	18.7	18.7	18.7	18.4	18.4	18.4	18.2	18.2	18.2
26	18.8	18.8	18.8	18.7	18.7	18.7	18.4	18.4	18.4	18.2	18.1	18.2
27	18.8	18.8	18.8	18.7	18.6	18.6	18.4	18.4	18.4	18.2	18.1	18.2
28	18.8	18.8	18.8	18.6	18.6	18.6	18.4	18.4	18.4	18.2	18.1	18.1
29	18.8	18.8	18.8	18.6	18.6	18.6	18.4	18.4	18.4	18.2	18.1	18.1
30	---	---	---	18.6	18.6	18.6	18.4	18.4	18.4	18.2	18.1	18.1
31	---	---	---	18.6	18.5	18.6	---	---	---	18.1	18.1	18.1
Month	18.8	18.8	18.8	18.8	18.5	18.7	18.6	18.4	18.5	---	---	---

Water-Data Report 2008

344139077211207 Local number ON-267, NCDENR Hadnot Point Research Station X24s7, at Camp Lejeune, NC (Surficial)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
June			July			August			September			
1	18.1	18.1	18.1	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2
2	18.1	18.1	18.1	18.2	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2
3	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
4	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
5	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
6	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
7	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
8	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
9	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
10	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
11	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
12	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
13	18.1	18.1	18.1	18.2	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.2
14	18.1	18.1	18.1	18.2	18.1	18.2	18.3	18.2	18.2	18.2	18.2	18.2
15	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.3	18.2	18.2
16	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.3	18.3	18.3
17	18.1	18.1	18.1	18.2	18.1	18.2	18.2	18.2	18.2	18.3	18.3	18.3
18	18.1	18.1	18.1	18.2	18.1	18.2	18.2	18.2	18.2	18.3	18.3	18.3
19	18.1	18.1	18.1	18.2	18.1	18.2	18.2	18.2	18.2	18.3	18.3	18.3
20	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.3	18.3	18.3
21	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.3	18.3	18.3
22	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.3	18.3	18.3
23	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.3	18.3	18.3
24	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.3	18.3	18.3
25	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.3	18.3	18.3
26	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.3	18.3	18.3
27	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.3	18.3	18.3
28	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.3	18.2	18.2
29	18.1	18.1	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
30	18.1	18.1	18.1	18.2	18.1	18.2	18.2	18.2	18.2	18.2	18.2	18.2
31	---	---	---	18.2	18.2	18.2	18.2	18.2	18.2	---	---	---
Month	18.1	18.1	18.1	18.2	18.1	18.2	18.3	18.2	18.2	18.3	18.2	18.2

Water-Data Report 2008

344139077211207 Local number ON-267, NCDENR Hadnot Point Research Station X24s7, at Camp Lejeune, NC (Surficial)—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	219	218	218	219	218	218
2	---	---	---	---	---	---	219	218	219	219	218	218
3	---	---	---	---	---	---	219	218	218	218	218	218
4	---	---	---	---	---	---	219	218	218	218	217	218
5	---	---	---	---	---	---	219	218	218	218	217	218
6	---	---	---	---	---	---	219	218	218	218	217	218
7	---	---	---	---	---	---	219	218	219	218	218	218
8	---	---	---	---	---	---	219	218	218	218	218	218
9	---	---	---	---	---	---	219	218	219	218	218	218
10	---	---	---	---	---	---	219	218	218	218	217	217
11	---	---	---	---	---	---	219	218	219	218	217	217
12	---	---	---	---	---	---	219	218	218	218	216	217
13	---	---	---	---	---	---	219	218	219	217	216	216
14	---	---	---	---	---	---	219	218	218	217	216	216
15	---	---	---	---	---	---	219	218	218	216	216	216
16	---	---	---	218	216	217	219	218	218	216	215	216
17	---	---	---	217	216	217	219	218	219	216	215	215
18	---	---	---	218	217	217	219	218	218	216	215	215
19	---	---	---	218	217	218	219	218	219	216	215	215
20	---	---	---	219	218	218	219	218	218	216	215	215
21	---	---	---	219	218	219	219	218	218	215	215	215
22	---	---	---	219	218	219	219	218	219	216	215	215
23	---	---	---	219	218	218	219	218	218	216	215	215
24	---	---	---	219	218	218	219	218	218	215	215	215
25	---	---	---	219	218	218	219	218	218	215	214	215
26	---	---	---	219	218	219	219	218	218	215	214	215
27	---	---	---	219	218	218	219	218	219	215	214	214
28	---	---	---	219	218	219	219	218	219	215	214	214
29	---	---	---	---	---	---	219	218	219	215	213	214
30	---	---	---	---	---	---	219	218	219	214	213	213
31	---	---	---	---	---	---	219	218	219	---	---	---
Month	---	---	---	---	---	---	219	218	218	---	---	---

Water-Data Report 2008

344139077211207 Local number ON-267, NCDENR Hadnot Point Research Station X24s7, at Camp Lejeune, NC (Surficial)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	215	214	214	208	207	208	158	157	157	166	166	166
2	215	214	215	208	207	208	158	157	158	167	166	167
3	215	215	215	208	207	207	158	157	158	167	166	167
4	215	214	215	207	206	207	158	157	158	167	166	167
5	215	214	215	207	206	206	159	158	158	167	167	167
6	215	213	214	207	206	206	159	158	158	168	167	167
7	214	213	213	207	206	206	159	158	158	168	167	167
8	214	213	213	206	206	206	159	158	159	168	167	168
9	213	212	213	207	206	206	160	159	159	168	168	168
10	213	212	212	206	206	206	160	159	159	168	168	168
11	212	211	212	206	200	204	160	159	160	169	168	168
12	212	211	211	200	195	197	161	160	160	169	168	168
13	211	211	211	196	193	195	161	160	161	168	168	168
14	211	210	211	194	192	193	162	161	161	168	168	168
15	211	210	210	192	189	191	162	161	161	168	168	168
16	211	210	210	190	186	188	162	161	162	168	167	168
17	211	210	210	186	185	186	163	162	162	168	167	168
18	210	210	210	185	152	159	163	162	163	168	167	168
19	210	209	210	153	152	152	163	162	163	168	167	168
20	210	209	209	153	153	153	164	163	163	168	168	168
21	209	208	209	154	153	153	164	163	164	168	167	168
22	209	208	208	154	153	154	164	163	164	168	167	168
23	209	208	209	155	154	154	165	164	164	169	168	168
24	209	208	208	155	154	155	165	164	165	169	168	169
25	209	208	208	155	155	155	165	164	165	169	168	168
26	209	208	208	156	155	155	165	165	165	169	168	168
27	209	208	208	156	155	156	166	165	165	169	168	169
28	208	208	208	157	156	156	166	165	165	169	169	169
29	208	208	208	157	156	156	166	165	166	169	169	169
30	---	---	---	157	156	157	166	166	166	170	169	169
31	---	---	---	157	156	157	---	---	---	170	169	170
Month	215	208	211	208	152	180	166	157	162	170	166	168

Water-Data Report 2008

344139077211207 Local number ON-267, NCDENR Hadnot Point Research Station X24s7, at Camp Lejeune, NC (Surficial)—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	170	169	170	180	179	180	191	190	190	206	205	205
2	170	169	170	180	179	180	191	190	191	206	205	206
3	170	170	170	181	180	180	192	191	191	207	206	206
4	171	170	170	181	180	181	192	191	192	207	206	207
5	171	170	170	181	181	181	193	192	192	208	207	207
6	171	170	170	182	181	181	193	192	193	208	207	208
7	171	170	171	182	181	182	194	193	193	209	208	208
8	172	171	171	183	182	182	194	193	194	209	208	209
9	172	171	171	183	182	183	195	194	194	210	209	209
10	172	171	172	183	182	183	195	194	194	210	209	210
11	172	171	172	184	183	183	196	195	195	211	210	210
12	173	172	172	184	183	184	196	195	196	211	210	210
13	173	172	172	184	183	184	197	196	196	211	211	211
14	173	173	173	185	184	184	197	196	196	212	211	212
15	174	173	173	185	184	185	197	196	197	212	211	212
16	174	173	174	185	184	185	198	197	197	212	212	212
17	175	174	174	186	185	185	198	197	198	213	212	212
18	175	174	174	186	185	185	199	198	198	213	212	213
19	175	174	175	186	185	186	199	198	199	213	213	213
20	175	175	175	186	186	186	200	199	199	214	213	213
21	176	175	175	187	186	186	201	200	200	214	213	213
22	176	175	176	187	186	186	201	200	201	215	214	214
23	177	176	176	187	186	187	201	201	201	215	214	214
24	177	176	177	188	187	187	202	201	201	215	214	215
25	178	177	177	188	187	188	203	200	202	215	214	215
26	178	177	177	189	188	188	202	200	201	216	215	215
27	178	177	178	189	188	188	202	201	202	216	215	216
28	179	178	178	189	188	189	203	202	203	216	215	216
29	179	178	179	190	189	189	204	203	203	216	216	216
30	180	179	179	190	189	190	204	203	203	217	216	216
31	---	---	---	191	190	190	205	204	205	---	---	---
Month	180	169	174	191	179	185	205	190	197	217	205	211



Water-Data Report 2008

344037077253901 Local number ON-291, near Ragged Point, at Camp Lejeune, NC (Castle Hayne)

Northern Atlantic Coastal Plain aquifer system
Castle Hayne Formation
Onslow County, NC

LOCATION.--Lat 34°40'35", long 77°25'39" referenced to North American Datum of 1983, Onslow County, NC, Hydrologic Unit 03030001, on Town Point Road, 0.9 mi north of TLZ Eagle road, at Camp Lejeune. Owner: U.S. Geological Survey.

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Drilled observation well, depth 180 ft, diameter 2 in., cased to 170 ft, screened interval from 170 ft to 180 ft.

DATUM.--Land-surface datum is 25.95 ft above North American Vertical Datum of 1988. Measuring point: top of 6-inch steel casing, 2.54 ft above land-surface datum, December 1, 2007 to present.

PERIOD OF RECORD.--July 1988 to October 2005, December 2007 to current year.

GAGE.--Water-level recorder collecting data at 60-minute intervals. Satellite telemetry at site.

REMARKS.--Well is part of U.S. Marine Corps Base, Camp Lejeune, North Carolina, Water Resources Network project.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 14.31 ft below land-surface datum, November 20, 29, 2003; lowest water level recorded, 20.18 ft below land-surface datum, August 21-25, 1998.

Water-Data Report 2008

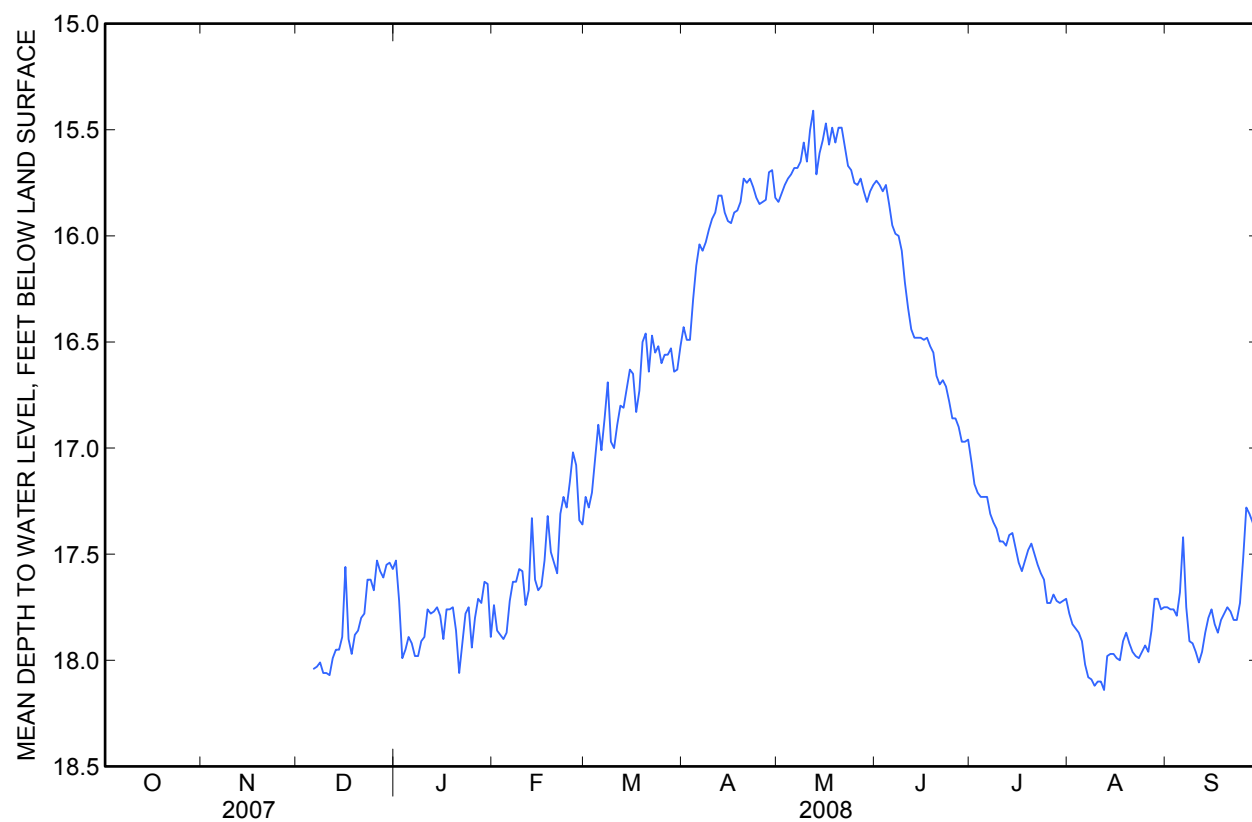
344037077253901 Local number ON-291, near Ragged Point, at Camp Lejeune, NC (Castle Hayne)—Continued

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	---	17.53	17.74	17.23	16.43	15.84	15.74	17.06	17.78	17.75
2	---	---	---	17.72	17.86	17.28	16.49	15.80	15.76	17.17	17.83	17.76
3	---	---	---	17.99	17.88	17.21	16.49	15.76	15.79	17.21	17.85	17.76
4	---	---	---	17.95	17.90	17.05	16.30	15.73	15.76	17.23	17.87	17.79
5	---	---	---	17.89	17.87	16.89	16.14	15.71	15.85	17.23	17.91	17.68
6	---	---	18.04	17.92	17.72	17.01	16.04	15.68	15.95	17.23	18.02	17.42
7	---	---	18.03	17.98	17.63	16.86	16.07	15.68	15.99	17.31	18.08	17.75
8	---	---	18.01	17.98	17.63	16.69	16.03	15.65	16.00	17.35	18.09	17.91
9	---	---	18.06	17.91	17.57	16.97	15.97	15.56	16.07	17.38	18.12	17.92
10	---	---	18.06	17.89	17.58	17.00	15.92	15.65	16.22	17.44	18.10	17.96
11	---	---	18.07	17.76	17.74	16.89	15.89	15.50	16.34	17.44	18.10	18.01
12	---	---	17.99	17.78	17.67	16.80	15.81	15.41	16.44	17.46	18.14	17.96
13	---	---	17.95	17.77	17.33	16.81	15.81	15.71	16.48	17.41	17.98	17.87
14	---	---	17.95	17.75	17.62	16.72	15.89	15.61	16.48	17.40	17.97	17.80
15	---	---	17.89	17.79	17.67	16.63	15.93	15.55	16.48	17.47	17.97	17.76
16	---	---	17.56	17.90	17.65	16.65	15.94	15.47	16.49	17.54	17.99	17.83
17	---	---	17.90	17.76	17.53	16.83	15.89	15.57	16.48	17.58	18.00	17.87
18	---	---	17.97	17.76	17.32	16.73	15.88	15.49	16.52	17.53	17.91	17.81
19	---	---	17.88	17.75	17.49	16.50	15.84	15.56	16.55	17.48	17.87	17.78
20	---	---	17.86	17.86	17.54	16.46	15.73	15.49	16.66	17.45	17.92	17.75
21	---	---	17.80	18.06	17.59	16.64	15.75	15.49	16.70	17.50	17.96	17.77
22	---	---	17.78	17.92	17.31	16.47	15.73	15.58	16.68	17.55	17.98	17.81
23	---	---	17.62	17.78	17.23	16.55	15.77	15.67	16.71	17.59	17.99	17.81
24	---	---	17.62	17.75	17.28	16.52	15.82	15.69	16.78	17.62	17.96	17.73
25	---	---	17.67	17.94	17.16	16.60	15.85	15.75	16.86	17.73	17.93	17.52
26	---	---	17.53	17.80	17.02	16.56	15.84	15.76	16.86	17.73	17.96	17.28
27	---	---	17.58	17.71	17.08	16.56	15.83	15.73	16.90	17.69	17.86	17.31
28	---	---	17.61	17.73	17.34	16.53	15.70	15.79	16.97	17.72	17.71	17.35
29	---	---	17.55	17.63	17.36	16.64	15.69	15.84	16.97	17.73	17.71	17.41
30	---	---	17.54	17.64	---	16.63	15.82	15.79	16.96	17.72	17.76	17.38
31	---	---	17.57	17.89	---	16.52	---	15.76	---	17.71	17.75	---
Mean	---	---	---	17.82	17.53	16.76	15.94	15.65	16.41	17.47	17.94	17.72
Max	---	---	---	18.06	17.90	17.28	16.49	15.84	16.97	17.73	18.14	18.01
Min	---	---	---	17.53	17.02	16.46	15.69	15.41	15.74	17.06	17.71	17.28

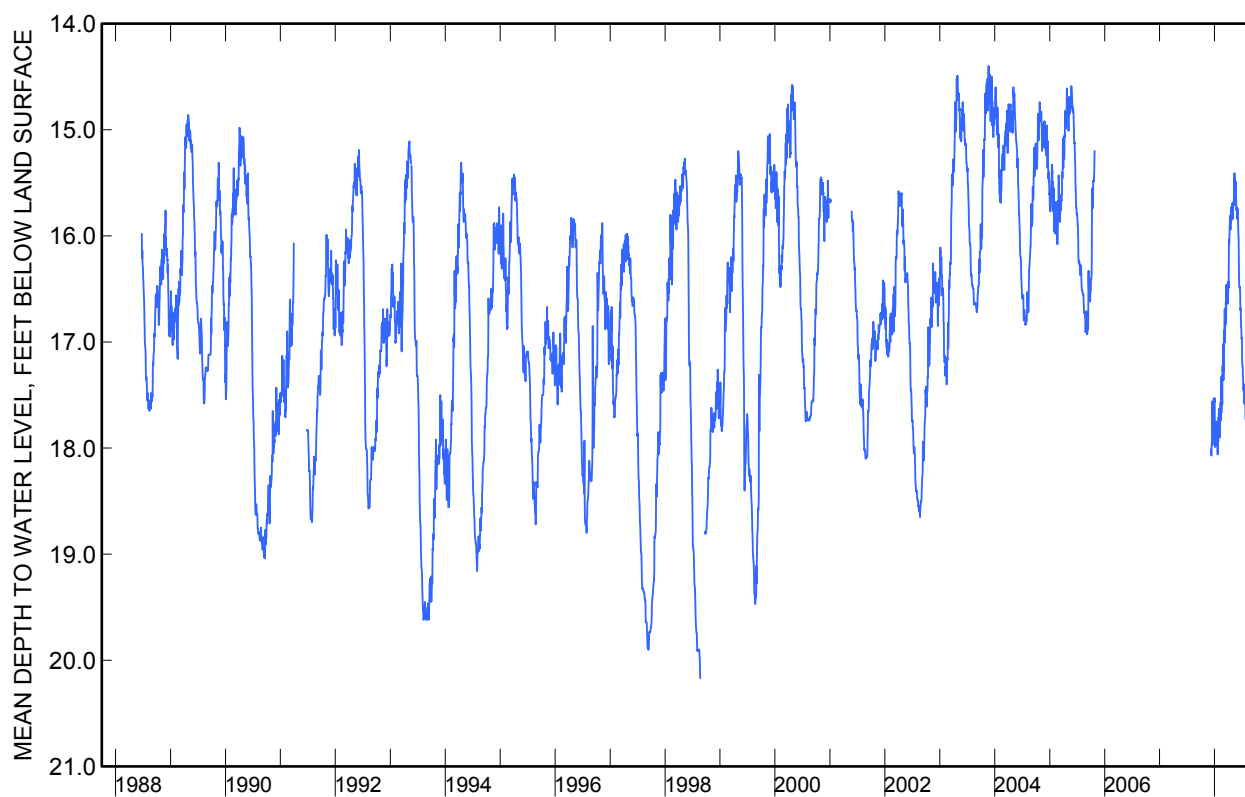
Water-Data Report 2008

344037077253901 Local number ON-291, near Ragged Point, at Camp Lejeune, NC (Castle Hayne)—Continued



Water-Data Report 2008

344037077253901 Local number ON-291, near Ragged Point, at Camp Lejeune, NC (Castle Hayne)—Continued



Water-Data Report 2008

344037077253901 Local number ON-291, near Ragged Point, at Camp Lejeune, NC (Castle Hayne)—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 2007 to September 2008.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 2007 to September 2008.

WATER TEMPERATURE: December 2007 to September 2008.

INSTRUMENTATION.--Water-quality monitor in operation from December 2007 to September 2008.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 499 microsiemens, September 29, 30; minimum recorded, 482 microsiemens, on several days during the period.

WATER TEMPERATURE: Maximum recorded, 18.2°C, June 19; minimum recorded, 18.0°C, on many days during the period.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	---	---	---	18.0	18.0	18.0
2	---	---	---	---	---	---	---	---	---	18.0	18.0	18.0
3	---	---	---	---	---	---	---	---	---	18.0	18.0	18.0
4	---	---	---	---	---	---	---	---	---	18.0	18.0	18.0
5	---	---	---	---	---	---	---	---	---	18.0	18.0	18.0
6	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
7	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
8	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
9	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
10	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
11	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
12	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
13	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
14	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
15	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
16	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
17	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
18	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
19	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
20	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
21	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
22	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
23	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
24	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
25	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
26	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
27	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
28	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
29	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
30	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
31	---	---	---	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0
Month	---	---	---	---	---	---	---	---	---	18.0	18.0	18.0

Water-Data Report 2008

344037077253901 Local number ON-291, near Ragged Point, at Camp Lejeune, NC (Castle Hayne)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1
2	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1
3	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1
4	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1
5	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1
6	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1
7	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1
8	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1
9	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1
10	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1
11	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1
12	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1
13	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1
14	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1
15	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1
16	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1
17	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1
18	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1
19	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1
20	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1
21	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1
22	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1
23	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1
24	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.0	18.0	18.1	18.1	18.1
25	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1	18.1	18.1	18.1
26	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1	18.1	18.1	18.1
27	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1	18.1	18.1	18.1
28	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1	18.1	18.1	18.1
29	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.1	18.1	18.1	18.1	18.1
30	---	---	---	18.0	18.0	18.0	18.1	18.1	18.1	18.1	18.1	18.1
31	---	---	---	18.0	18.0	18.0	---	---	---	18.1	18.1	18.1
Month	18.0	18.0	18.0	18.0	18.0	18.0	18.1	18.0	18.0	18.1	18.1	18.1

Water-Data Report 2008

344037077253901 Local number ON-291, near Ragged Point, at Camp Lejeune, NC (Castle Hayne)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
June			July			August			September			
1	18.1	18.1	18.1	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0
2	18.1	18.1	18.1	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0
3	18.1	18.1	18.1	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0
4	18.1	18.1	18.1	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0
5	18.1	18.1	18.1	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0
6	18.1	18.1	18.1	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0
7	18.1	18.1	18.1	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0
8	18.1	18.1	18.1	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0
9	18.1	18.1	18.1	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0
10	18.1	18.1	18.1	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0
11	18.1	18.1	18.1	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0
12	18.1	18.1	18.1	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0
13	18.1	18.1	18.1	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0
14	18.1	18.1	18.1	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0
15	18.1	18.1	18.1	18.1	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0
16	18.1	18.1	18.1	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0
17	18.1	18.1	18.1	18.1	18.0	18.1	18.0	18.0	18.0	18.0	18.0	18.0
18	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
19	18.2	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
20	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
21	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
22	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
23	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
24	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
25	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
26	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
27	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
28	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
29	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
30	18.1	18.1	18.1	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
31	---	---	---	18.0	18.0	18.0	18.0	18.0	18.0	---	---	---
Month	18.2	18.1	18.1	18.1	18.0	18.1	18.1	18.0	18.0	18.0	18.0	18.0

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344037077253901 Local number ON-291, near Ragged Point, at Camp Lejeune, NC (Castle Hayne)—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	---	---	---	486	486	486
2	---	---	---	---	---	---	---	---	---	487	486	487
3	---	---	---	---	---	---	---	---	---	487	486	486
4	---	---	---	---	---	---	---	---	---	487	486	486
5	---	---	---	---	---	---	---	---	---	487	486	487
6	---	---	---	---	---	---	487	484	486	487	486	487
7	---	---	---	---	---	---	484	484	484	487	486	487
8	---	---	---	---	---	---	484	483	483	488	487	487
9	---	---	---	---	---	---	483	482	483	487	487	487
10	---	---	---	---	---	---	483	482	483	488	487	487
11	---	---	---	---	---	---	483	483	483	488	487	487
12	---	---	---	---	---	---	483	482	483	488	487	488
13	---	---	---	---	---	---	483	482	482	488	487	488
14	---	---	---	---	---	---	482	482	482	489	488	488
15	---	---	---	---	---	---	482	482	482	488	488	488
16	---	---	---	---	---	---	482	482	482	488	487	488
17	---	---	---	---	---	---	483	482	482	488	487	488
18	---	---	---	---	---	---	483	482	483	488	488	488
19	---	---	---	---	---	---	483	483	483	488	488	488
20	---	---	---	---	---	---	483	483	483	488	488	488
21	---	---	---	---	---	---	484	483	483	488	488	488
22	---	---	---	---	---	---	484	483	484	488	488	488
23	---	---	---	---	---	---	484	484	484	488	488	488
24	---	---	---	---	---	---	484	484	484	489	488	488
25	---	---	---	---	---	---	484	484	484	488	488	488
26	---	---	---	---	---	---	485	484	484	488	488	488
27	---	---	---	---	---	---	485	485	485	488	488	488
28	---	---	---	---	---	---	486	485	485	488	488	488
29	---	---	---	---	---	---	486	485	486	489	488	488
30	---	---	---	---	---	---	486	486	486	489	488	488
31	---	---	---	---	---	---	486	486	486	489	488	489
Month	---	---	---	---	---	---	---	---	---	489	486	488

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344037077253901 Local number ON-291, near Ragged Point, at Camp Lejeune, NC (Castle Hayne)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	489	488	489	491	490	490	489	489	489	492	491	492
2	489	488	489	492	491	491	489	489	489	492	492	492
3	489	489	489	492	491	492	489	488	488	492	492	492
4	489	489	489	492	492	492	488	488	488	492	492	492
5	489	489	489	493	492	492	488	488	488	492	492	492
6	489	489	489	492	492	492	488	487	487	492	492	492
7	489	489	489	492	492	492	487	487	487	492	492	492
8	489	489	489	492	492	492	487	486	487	492	492	492
9	490	489	489	492	492	492	487	486	486	492	492	492
10	490	489	490	492	491	492	487	486	487	492	492	492
11	490	489	490	492	492	492	487	486	487	492	492	492
12	490	490	490	492	492	492	486	485	486	492	492	492
13	490	490	490	492	492	492	487	486	486	492	492	492
14	490	490	490	492	492	492	487	487	487	492	492	492
15	491	490	490	492	492	492	488	487	488	492	492	492
16	491	490	491	492	492	492	489	488	488	492	492	492
17	491	490	491	492	492	492	489	488	489	492	492	492
18	492	491	491	492	491	492	489	489	489	492	492	492
19	491	491	491	492	491	492	490	489	489	492	492	492
20	491	491	491	492	491	492	490	490	490	492	492	492
21	492	491	491	492	491	491	490	490	490	492	492	492
22	492	491	491	491	491	491	490	490	490	492	492	492
23	492	491	491	491	491	491	490	490	490	492	492	492
24	491	491	491	491	491	491	491	490	490	492	492	492
25	491	491	491	491	490	491	491	490	491	492	492	492
26	491	491	491	491	490	490	491	491	491	492	491	491
27	491	491	491	491	490	490	491	491	491	492	491	491
28	491	490	491	490	490	490	491	491	491	491	491	491
29	490	489	490	490	490	490	492	491	491	491	491	491
30	---	---	---	490	489	490	492	491	491	491	491	491
31	---	---	---	489	489	489	---	---	---	491	491	491
Month	492	488	490	493	489	491	492	485	489	492	491	492

Water-Data Report 2008

344037077253901 Local number ON-291, near Ragged Point, at Camp Lejeune, NC (Castle Hayne)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	491	491	491	491	491	491	493	493	493	490	489	490
2	491	490	491	491	491	491	493	493	493	491	490	491
3	491	490	491	491	491	491	493	493	493	492	491	492
4	491	490	490	492	491	491	493	493	493	493	492	493
5	491	490	490	492	491	492	493	493	493	494	493	494
6	490	490	490	492	492	492	493	493	493	495	494	494
7	490	490	490	492	492	492	493	493	493	496	495	495
8	490	490	490	492	492	492	493	493	493	496	496	496
9	490	490	490	493	492	492	493	493	493	497	496	496
10	490	490	490	493	492	492	493	493	493	497	496	497
11	490	490	490	493	492	493	493	493	493	497	497	497
12	490	490	490	493	493	493	493	493	493	497	497	497
13	490	490	490	493	493	493	493	493	493	497	497	497
14	490	490	490	493	493	493	493	493	493	498	497	497
15	490	490	490	493	493	493	495	493	494	498	497	498
16	490	490	490	493	493	493	493	493	493	498	498	498
17	490	490	490	493	493	493	493	493	493	498	498	498
18	490	490	490	493	493	493	494	492	493	498	498	498
19	490	483	487	493	493	493	492	491	492	498	498	498
20	484	483	484	493	493	493	491	490	491	498	498	498
21	485	484	484	493	493	493	490	489	490	498	498	498
22	486	485	486	493	493	493	489	488	488	498	498	498
23	487	486	487	493	493	493	488	487	488	498	498	498
24	488	487	488	493	493	493	487	486	487	498	498	498
25	489	488	488	493	493	493	487	485	486	498	498	498
26	489	489	489	493	493	493	486	485	485	498	498	498
27	490	489	489	493	493	493	486	483	484	498	498	498
28	490	490	490	493	493	493	483	482	483	498	498	498
29	490	490	490	493	493	493	485	483	484	499	498	498
30	491	490	490	493	493	493	487	485	486	499	498	498
31	---	---	---	493	493	493	489	487	488	---	---	---
Month	491	483	489	493	491	493	495	482	491	499	489	496



Water-Data Report 2008

344304077232901 Local number ON-292, at Paradise Point, at Camp Lejeune, NC (Castle Hayne)

Castle Hayne aquifer
Castle Hayne Formation
Onslow County, NC

LOCATION.--Lat 34°43'05", long 77°23'31" referenced to North American Datum of 1983, Onslow County, NC, Hydrologic Unit 03030001, 2.74 mi west of Holcomb Boulevard, .34 mi north of Brewster Boulevard at Paradise Point, at Camp Lejeune. Owner: U.S. Geological Survey.

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Drilled observation well, depth 232 ft, diameter 2 in., cased to 222 ft, screened interval from 222 ft to 232 ft.

DATUM.--Land-surface datum is 14.88 ft above North American Vertical Datum of 1988. Measuring point: top of well casing, 2.19 ft above land-surface datum, December 1, 2007 to present.

PERIOD OF RECORD.--June 1988 to July 2005, December 2007 to current year. Prior to October 1997, published as "ON-290, Paradise Point Well".

GAGE.--Water-level recorder collecting data at 60-minute intervals. Satellite telemetry at site.

REMARKS.--Well is part of U.S. Marine Corps Base, Camp Lejeune, North Carolina, Water Resources Network project.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 4.62 ft below land-surface datum, November 28, 2003; lowest water level recorded, 13.80 ft below land-surface datum, August 20, 1998.

Water-Data Report 2008

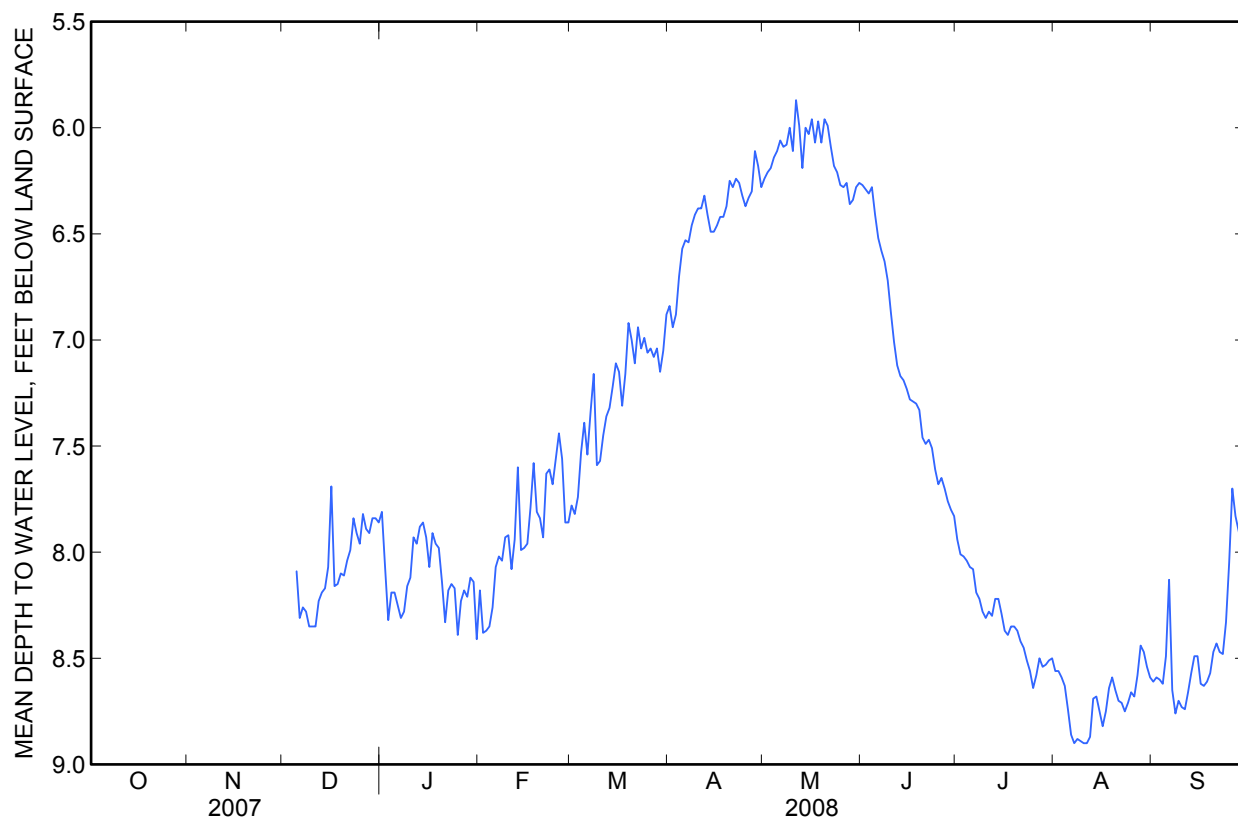
344304077232901 Local number ON-292, at Paradise Point, at Camp Lejeune, NC (Castle Hayne)—Continued

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	---	7.81	8.18	7.78	6.84	6.24	6.27	7.94	8.56	8.61
2	---	---	---	8.07	8.38	7.82	6.94	6.21	6.29	8.01	8.56	8.59
3	---	---	---	8.32	8.37	7.74	6.88	6.19	6.31	8.02	8.59	8.60
4	---	---	---	8.19	8.35	7.53	6.70	6.14	6.28	8.04	8.63	8.62
5	---	---	8.09	8.19	8.26	7.39	6.57	6.11	6.41	8.07	8.74	8.49
6	---	---	8.31	8.25	8.07	7.54	6.53	6.06	6.52	8.08	8.86	8.13
7	---	---	8.26	8.31	8.02	7.34	6.54	6.09	6.58	8.19	8.90	8.65
8	---	---	8.28	8.28	8.04	7.16	6.46	6.08	6.63	8.22	8.88	8.76
9	---	---	8.35	8.16	7.93	7.59	6.41	6.00	6.72	8.28	8.89	8.70
10	---	---	8.35	8.12	7.92	7.57	6.38	6.11	6.87	8.31	8.90	8.73
11	---	---	8.35	7.93	8.08	7.45	6.38	5.87	7.01	8.28	8.90	8.74
12	---	---	8.23	7.96	7.94	7.36	6.32	5.99	7.12	8.30	8.87	8.66
13	---	---	8.19	7.88	7.60	7.32	6.41	6.19	7.17	8.22	8.69	8.57
14	---	---	8.17	7.86	7.99	7.22	6.49	6.00	7.19	8.22	8.68	8.49
15	---	---	8.07	7.93	7.98	7.11	6.49	6.03	7.23	8.29	8.75	8.49
16	---	---	7.69	8.07	7.96	7.15	6.46	5.96	7.28	8.37	8.82	8.62
17	---	---	8.16	7.91	7.79	7.31	6.42	6.07	7.29	8.39	8.75	8.63
18	---	---	8.15	7.96	7.58	7.16	6.42	5.97	7.30	8.35	8.64	8.61
19	---	---	8.10	7.98	7.81	6.92	6.37	6.07	7.33	8.35	8.59	8.57
20	---	---	8.11	8.14	7.84	7.00	6.25	5.96	7.46	8.37	8.65	8.47
21	---	---	8.04	8.33	7.93	7.11	6.28	5.99	7.49	8.42	8.70	8.43
22	---	---	7.99	8.18	7.63	6.94	6.24	6.09	7.47	8.45	8.71	8.47
23	---	---	7.84	8.15	7.61	7.04	6.26	6.18	7.51	8.51	8.75	8.48
24	---	---	7.91	8.17	7.68	6.99	6.32	6.21	7.61	8.56	8.71	8.33
25	---	---	7.96	8.39	7.56	7.06	6.37	6.27	7.68	8.64	8.66	8.05
26	---	---	7.82	8.23	7.44	7.04	6.33	6.28	7.65	8.58	8.68	7.70
27	---	---	7.89	8.18	7.56	7.08	6.30	6.26	7.70	8.50	8.58	7.83
28	---	---	7.91	8.21	7.86	7.04	6.11	6.36	7.76	8.54	8.44	7.90
29	---	---	7.84	8.12	7.86	7.15	6.18	6.34	7.80	8.53	8.47	7.98
30	---	---	7.84	8.14	---	7.05	6.28	6.28	7.83	8.51	8.54	7.90
31	---	---	7.86	8.41	---	6.88	---	6.26	---	8.50	8.59	---
Mean	---	---	---	8.12	7.90	7.25	6.43	6.12	7.13	8.32	8.70	8.43
Max	---	---	---	8.41	8.38	7.82	6.94	6.36	7.83	8.64	8.90	8.76
Min	---	---	---	7.81	7.44	6.88	6.11	5.87	6.27	7.94	8.44	7.70

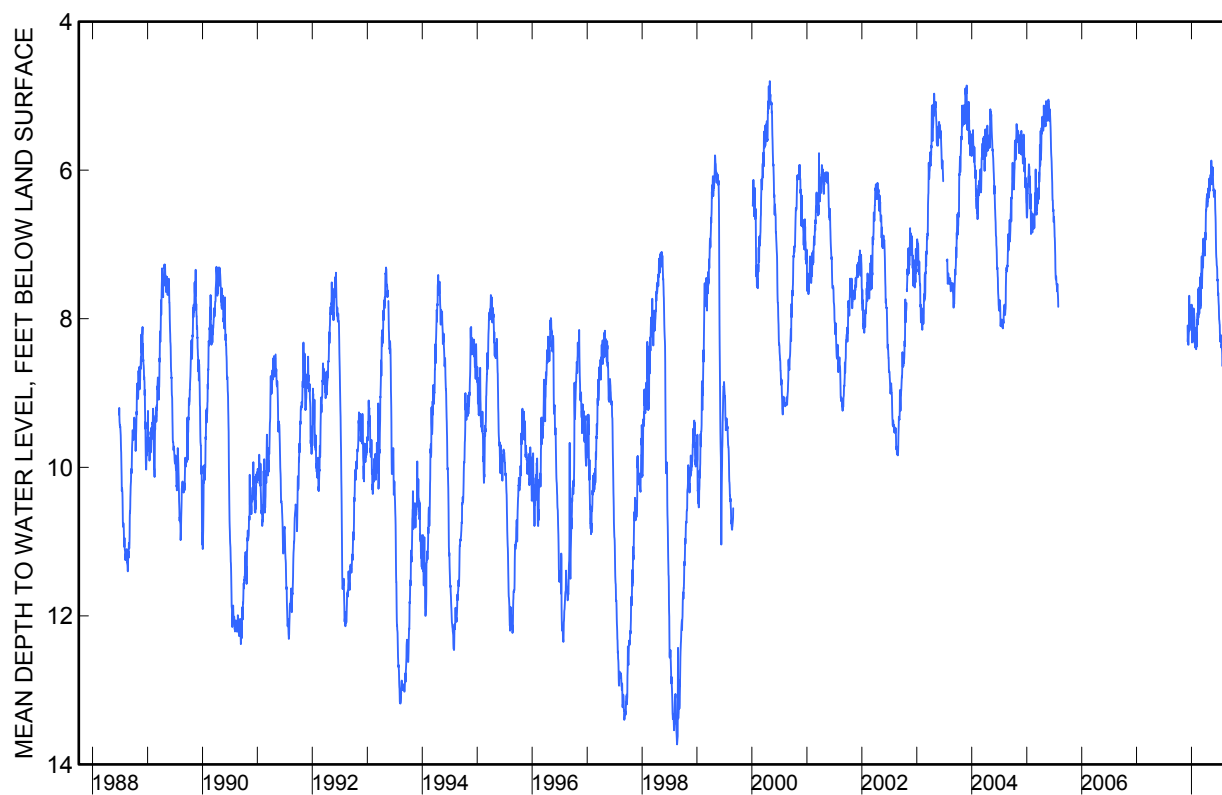
Water-Data Report 2008

344304077232901 Local number ON-292, at Paradise Point, at Camp Lejeune, NC (Castle Hayne)—Continued



Water-Data Report 2008

344304077232901 Local number ON-292, at Paradise Point, at Camp Lejeune, NC (Castle Hayne)—Continued



Water-Data Report 2008

344304077232901 Local number ON-292, at Paradise Point, at Camp Lejeune, NC (Castle Hayne)—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 2007 to September 2008.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 2007 to September 2008.

WATER TEMPERATURE: December 2007 to September 2008.

INSTRUMENTATION.--Water-quality monitor in operation from December 2007 to September 2008.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,030 microsiemens, on many days during the period; minimum recorded, 1,020 microsiemens, on many days during the period.

WATER TEMPERATURE: Maximum recorded, 18.9°C, on many days during the period; minimum recorded, 18.4°C, on many days during the period.

**TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	---	---	---	18.6	18.6	18.6
2	---	---	---	---	---	---	---	---	---	18.6	18.6	18.6
3	---	---	---	---	---	---	---	---	---	18.6	18.6	18.6
4	---	---	---	---	---	---	---	---	---	18.6	18.6	18.6
5	---	---	---	---	---	---	18.4	18.4	18.4	18.6	18.6	18.6
6	---	---	---	---	---	---	18.4	18.4	18.4	18.6	18.6	18.6
7	---	---	---	---	---	---	18.4	18.4	18.4	18.6	18.6	18.6
8	---	---	---	---	---	---	18.4	18.4	18.4	18.6	18.6	18.6
9	---	---	---	---	---	---	18.4	18.4	18.4	18.7	18.6	18.6
10	---	---	---	---	---	---	18.4	18.4	18.4	18.7	18.7	18.7
11	---	---	---	---	---	---	18.5	18.4	18.4	18.7	18.7	18.7
12	---	---	---	---	---	---	18.5	18.5	18.5	18.7	18.7	18.7
13	---	---	---	---	---	---	18.5	18.5	18.5	18.7	18.7	18.7
14	---	---	---	---	---	---	18.5	18.5	18.5	18.7	18.7	18.7
15	---	---	---	---	---	---	18.5	18.5	18.5	18.7	18.7	18.7
16	---	---	---	---	---	---	18.5	18.5	18.5	18.7	18.7	18.7
17	---	---	---	---	---	---	18.5	18.5	18.5	18.7	18.7	18.7
18	---	---	---	---	---	---	18.5	18.5	18.5	18.7	18.7	18.7
19	---	---	---	---	---	---	18.5	18.5	18.5	18.7	18.7	18.7
20	---	---	---	---	---	---	18.5	18.5	18.5	18.7	18.7	18.7
21	---	---	---	---	---	---	18.5	18.5	18.5	18.7	18.7	18.7
22	---	---	---	---	---	---	18.5	18.5	18.5	18.7	18.7	18.7
23	---	---	---	---	---	---	18.5	18.5	18.5	18.7	18.7	18.7
24	---	---	---	---	---	---	18.5	18.5	18.5	18.8	18.7	18.8
25	---	---	---	---	---	---	18.5	18.5	18.5	18.8	18.8	18.8
26	---	---	---	---	---	---	18.6	18.5	18.6	18.8	18.8	18.8
27	---	---	---	---	---	---	18.6	18.6	18.6	18.8	18.8	18.8
28	---	---	---	---	---	---	18.6	18.6	18.6	18.8	18.8	18.8
29	---	---	---	---	---	---	18.6	18.6	18.6	18.8	18.8	18.8
30	---	---	---	---	---	---	18.6	18.6	18.6	18.8	18.8	18.8
31	---	---	---	---	---	---	18.6	18.6	18.6	18.8	18.8	18.8
Month	---	---	---	---	---	---	---	---	---	18.8	18.6	18.7

Water-Data Report 2008

344304077232901 Local number ON-292, at Paradise Point, at Camp Lejeune, NC (Castle Hayne)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	18.7	18.7	18.7	18.6	18.6	18.6	18.4	18.4	18.4	18.4	18.4	18.4
2	18.7	18.7	18.7	18.6	18.5	18.6	18.4	18.4	18.4	18.4	18.4	18.4
3	18.7	18.7	18.7	18.6	18.6	18.6	18.4	18.4	18.4	18.4	18.4	18.4
4	18.7	18.7	18.7	18.6	18.5	18.6	18.4	18.4	18.4	18.4	18.4	18.4
5	18.7	18.7	18.7	18.6	18.5	18.6	18.4	18.4	18.4	18.4	18.4	18.4
6	18.7	18.7	18.7	18.6	18.5	18.6	18.4	18.4	18.4	18.4	18.4	18.4
7	18.7	18.7	18.7	18.6	18.5	18.6	18.4	18.4	18.4	18.4	18.4	18.4
8	18.7	18.7	18.7	18.6	18.5	18.6	18.5	18.4	18.4	18.4	18.4	18.4
9	18.7	18.7	18.7	18.6	18.5	18.6	18.4	18.4	18.4	18.4	18.4	18.4
10	18.7	18.7	18.7	18.6	18.5	18.6	18.4	18.4	18.4	18.4	18.4	18.4
11	18.7	18.7	18.7	18.6	18.5	18.6	18.4	18.4	18.4	18.4	18.4	18.4
12	18.7	18.7	18.7	18.6	18.5	18.6	18.4	18.4	18.4	18.4	18.4	18.4
13	18.7	18.7	18.7	18.6	18.5	18.6	18.4	18.4	18.4	18.4	18.4	18.4
14	18.7	18.7	18.7	18.6	18.5	18.6	18.4	18.4	18.4	18.4	18.4	18.4
15	18.7	18.7	18.7	18.6	18.5	18.6	18.4	18.4	18.4	18.4	18.4	18.4
16	18.7	18.7	18.7	18.6	18.5	18.6	18.4	18.4	18.4	18.4	18.4	18.4
17	18.7	18.7	18.7	18.6	18.5	18.6	18.4	18.4	18.4	18.4	18.4	18.4
18	18.7	18.7	18.7	18.6	18.5	18.6	18.4	18.4	18.4	18.4	18.4	18.4
19	18.7	18.7	18.7	18.6	18.5	18.6	18.4	18.4	18.4	18.4	18.4	18.4
20	18.7	18.7	18.7	18.6	18.5	18.6	18.4	18.4	18.4	18.4	18.4	18.4
21	18.7	18.6	18.7	18.6	18.5	18.6	18.4	18.4	18.4	18.4	18.4	18.4
22	18.7	18.6	18.6	18.6	18.5	18.6	18.4	18.4	18.4	18.4	18.4	18.4
23	18.6	18.6	18.6	18.6	18.5	18.5	18.4	18.4	18.4	18.4	18.4	18.4
24	18.6	18.6	18.6	18.6	18.5	18.5	18.4	18.4	18.4	18.4	18.4	18.4
25	18.6	18.6	18.6	18.6	18.5	18.6	18.4	18.4	18.4	18.6	18.4	18.5
26	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.4	18.4	18.6	18.5	18.5
27	18.6	18.6	18.6	18.6	18.4	18.4	18.4	18.4	18.4	18.6	18.5	18.6
28	18.6	18.6	18.6	18.4	18.4	18.4	18.4	18.4	18.4	18.6	18.5	18.6
29	18.6	18.6	18.6	18.4	18.4	18.4	18.4	18.4	18.4	18.6	18.5	18.6
30	18.6	18.6	18.6	18.4	18.4	18.4	18.4	18.4	18.4	18.6	18.5	18.6
31	---	---	---	18.4	18.4	18.4	18.4	18.4	18.4	---	---	---
Month	18.7	18.6	18.7	18.6	18.4	18.6	18.5	18.4	18.4	18.6	18.4	18.4

Water-Data Report 2008

344304077232901 Local number ON-292, at Paradise Point, at Camp Lejeune, NC (Castle Hayne)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	---	---	---	1,030	1,030	1,030
2	---	---	---	---	---	---	---	---	---	1,030	1,030	1,030
3	---	---	---	---	---	---	---	---	---	1,030	1,030	1,030
4	---	---	---	---	---	---	---	---	---	1,030	1,030	1,030
5	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
6	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
7	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
8	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
9	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
10	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
11	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
12	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
13	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
14	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
15	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
16	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
17	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
18	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
19	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
20	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
21	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
22	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
23	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
24	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
25	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
26	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
27	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
28	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
29	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
30	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,030	1,030
31	---	---	---	---	---	---	1,030	1,030	1,030	1,030	1,020	1,030
Month	---	---	---	---	---	---	---	---	---	1,030	1,020	1,030

Water-Data Report 2008

344304077232901 Local number ON-292, at Paradise Point, at Camp Lejeune, NC (Castle Hayne)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
February			March			April			May			
1	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020
2	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020
3	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020
4	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020
5	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020
6	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020
7	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020
8	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020
9	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020
10	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020
11	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,030
12	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020
13	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020
14	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020
15	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020
16	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020
17	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020
18	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020	1,030	1,020	1,020
19	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020	1,030	1,020	1,020
20	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,030	1,030	1,020	1,030
21	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020	1,030	1,020	1,020
22	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,030	1,030	1,020	1,020
23	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020	1,020	1,020	1,020
24	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020	1,020	1,020	1,020
25	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020
26	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020	1,020	1,020	1,020
27	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020	1,020	1,020	1,020
28	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,030	1,020	1,020	1,020
29	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020	1,030	1,020	1,020
30	---	---	---	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020
31	---	---	---	1,020	1,020	1,020	---	---	---	1,030	1,020	1,020
Month	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020	1,030	1,020	1,020

Water-Data Report 2008

344304077232901 Local number ON-292, at Paradise Point, at Camp Lejeune, NC (Castle Hayne)—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	1,030	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030
2	1,030	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030
3	1,030	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030
4	1,030	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030
5	1,030	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030
6	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030
7	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030
8	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,020	1,030	1,030	1,030
9	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030	1,030	1,030	1,030
10	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030	1,030	1,030	1,030
11	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030	1,030	1,030	1,030
12	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030	1,030	1,030	1,030
13	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030	1,030	1,030	1,030
14	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030	1,030	1,030	1,030
15	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030	1,030	1,030	1,030
16	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030	1,030	1,030	1,030
17	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030	1,030	1,030	1,030
18	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030	1,030	1,030	1,030
19	1,030	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030	1,030	1,030	1,030
20	1,030	1,020	1,030	1,020	1,020	1,020	1,030	1,030	1,030	1,030	1,030	1,030
21	1,030	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030	1,030	1,030	1,030
22	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030	1,030	1,030	1,030
23	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030	1,030	1,030	1,030
24	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030	1,030	1,030	1,030
25	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030	1,030	1,030	1,030
26	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030	1,030	1,030	1,030
27	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030	1,030	1,030	1,030
28	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030	1,030	1,030	1,030
29	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030	1,030	1,030	1,030
30	1,020	1,020	1,020	1,020	1,020	1,020	1,030	1,030	1,030	1,030	1,030	1,030
31	---	---	---	1,020	1,020	1,020	1,030	1,030	1,030	---	---	---
Month	1,030	1,020	1,020	1,020	1,020	1,020	1,030	1,020	1,030	1,030	1,030	1,030



Water-Data Report 2008

343609077171301 Local number ON-293, Sneads Ferry Road, at Camp Lejeune, NC (Castle Hayne)

Northern Atlantic Coastal Plain aquifer system
Castle Hayne Formation
Onslow County, NC

LOCATION.--Lat 34°36'09", long 77°17'11" referenced to North American Datum of 1983, Onslow County, NC, Hydrologic Unit 03030001, approximately 5.1 mi south on Sneads Ferry Road, at Camp Lejeune, NC. Owner: U.S. Geological Survey.

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Drilled observation well, depth 235 ft, diameter 2 in., cased to 225 ft, screened interval from 225 ft to 235 ft.

DATUM.--Land-surface datum is 43.95 ft above North American Vertical Datum of 1988. Measuring point: top of casing, 2.75 ft above land-surface datum, November 1, 2007 to present.

PERIOD OF RECORD.--July 1988 to July 2005, December 2007 to current year.

GAGE.--Water-level recorder collecting data at 60-minute intervals. Satellite telemetry at site.

REMARKS.--Well is part of U.S. Marine Corps Base, Camp Lejeune, North Carolina, Water Resources Network project. Water levels affected by local pumping.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 7.46 ft below land-surface datum, September 23, 24, 2000; lowest water level recorded, 30.13 ft below land-surface datum, December 4, 2007.

Water-Data Report 2008

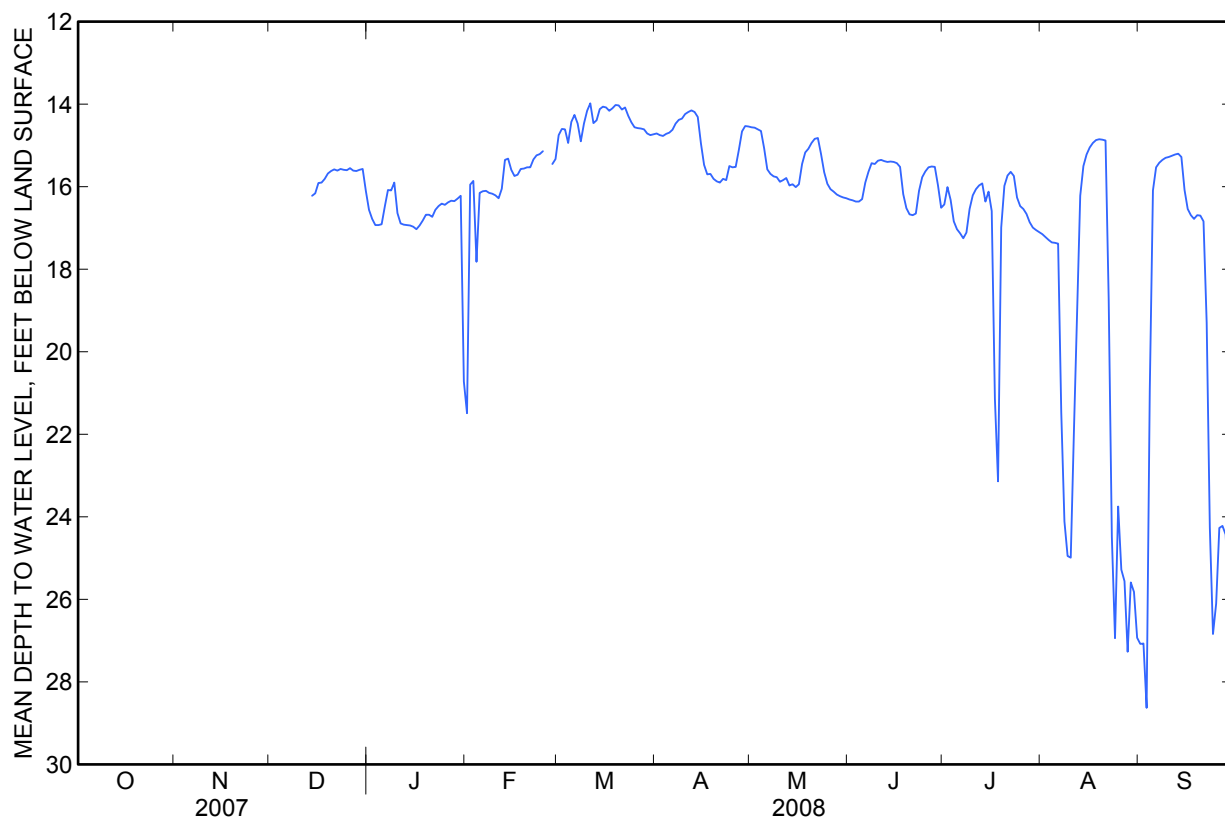
343609077171301 Local number ON-293, Sneads Ferry Road, at Camp Lejeune, NC (Castle Hayne)—Continued

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	---	16.56	21.49	14.75	14.71	14.56	16.31	16.43	17.15	27.08
2	---	---	---	16.78	15.95	14.60	14.75	14.57	16.33	16.01	17.22	27.07
3	---	---	---	16.93	15.86	14.61	14.77	14.61	16.36	16.32	17.29	28.63
4	---	---	---	16.93	17.82	14.94	14.72	14.65	16.36	16.84	17.35	20.92
5	---	---	---	16.91	16.15	14.43	14.69	15.07	16.30	17.03	17.36	16.09
6	---	---	---	16.48	16.11	14.26	14.62	15.58	15.90	17.13	17.38	15.53
7	---	---	---	16.08	16.10	14.47	14.47	15.69	15.64	17.25	21.47	15.42
8	---	---	---	16.09	16.15	14.90	14.38	15.75	15.43	17.11	24.11	15.35
9	---	---	---	15.90	16.17	14.47	14.35	15.77	15.45	16.54	24.95	15.30
10	---	---	---	16.64	16.21	14.16	14.24	15.88	15.37	16.21	24.99	15.28
11	---	---	---	16.89	16.28	13.98	14.19	15.84	15.35	16.06	21.94	15.25
12	---	---	---	16.92	16.05	14.46	14.15	15.79	15.38	15.97	19.07	15.22
13	---	---	---	16.93	15.35	14.39	14.19	15.97	15.40	15.92	16.22	15.20
14	---	---	16.22	16.94	15.32	14.12	14.31	15.94	15.39	16.36	15.50	15.28
15	---	---	16.16	16.97	15.59	14.06	14.95	16.01	15.40	16.12	15.22	16.08
16	---	---	15.91	17.03	15.74	14.08	15.47	15.94	15.43	16.59	15.05	16.54
17	---	---	15.90	16.94	15.71	14.16	15.70	15.45	15.52	21.14	14.94	16.69
18	---	---	15.81	16.82	15.57	14.10	15.69	15.17	16.18	23.14	14.87	16.78
19	---	---	15.68	16.68	15.56	14.02	15.81	15.08	16.52	16.99	14.85	16.69
20	---	---	15.62	16.68	15.53	14.03	15.87	14.94	16.67	15.98	14.86	16.70
21	---	---	15.58	16.73	15.53	14.13	15.90	14.84	16.69	15.73	14.88	16.84
22	---	---	15.61	16.56	15.34	14.08	15.81	14.82	16.65	15.64	18.71	19.30
23	---	---	15.57	16.47	15.24	14.28	15.84	15.21	16.10	15.74	24.48	24.26
24	---	---	15.59	16.41	15.21	14.44	15.50	15.65	15.77	16.26	26.94	26.84
25	---	---	15.60	16.44	15.14	14.56	15.53	15.93	15.63	16.47	23.75	26.10
26	---	---	15.55	16.38	---	14.58	15.52	16.06	15.53	16.54	25.28	24.27
27	---	---	15.61	16.34	---	14.59	15.11	16.12	15.51	16.66	25.56	24.22
28	---	---	15.62	16.35	15.45	14.61	14.66	16.19	15.52	16.86	27.27	24.43
29	---	---	15.59	16.29	15.33	14.71	14.53	16.23	15.97	16.99	25.59	26.03
30	---	---	15.57	16.22	---	14.75	14.54	16.26	16.51	17.05	25.82	27.07
31	---	---	16.10	20.72	---	14.73	---	16.28	---	17.10	26.93	---
Mean	---	---	---	16.74	---	14.40	14.97	15.54	15.89	16.84	20.23	19.88
Max	---	---	---	20.72	---	14.94	15.90	16.28	16.69	23.14	27.27	28.63
Min	---	---	---	15.90	---	13.98	14.15	14.56	15.35	15.64	14.85	15.20

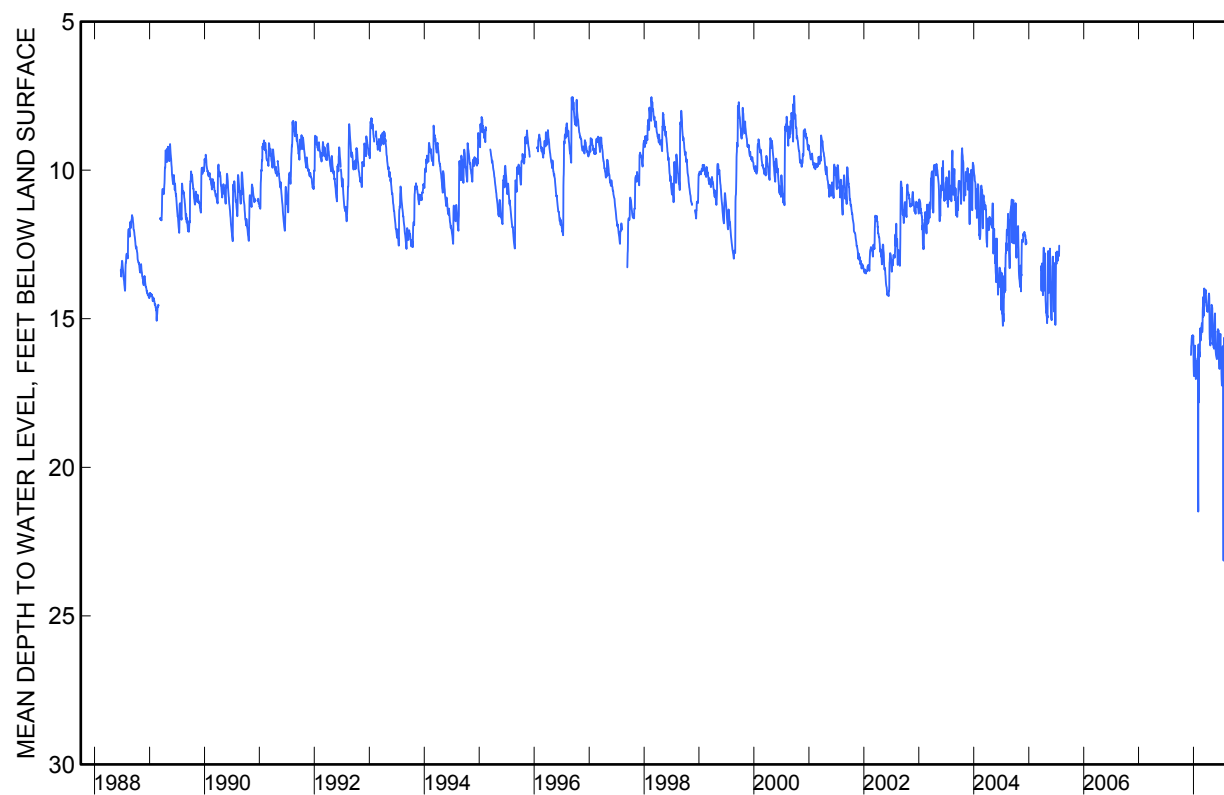
Water-Data Report 2008

343609077171301 Local number ON-293, Sneads Ferry Road, at Camp Lejeune, NC (Castle Hayne)—Continued



Water-Data Report 2008

343609077171301 Local number ON-293, Sneads Ferry Road, at Camp Lejeune, NC (Castle Hayne)—Continued



Water-Data Report 2008

343609077171301 Local number ON-293, Sneads Ferry Road, at Camp Lejeune, NC (Castle Hayne)—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 2008 to September 2008.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 2008 to September 2008.

WATER TEMPERATURE: January 2008 to September 2008.

INSTRUMENTATION.--Water-quality monitor in operation from January 2008 to September 2008.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 940 microsiemens, January 31, 2008; minimum recorded, 872 microsiemens, on several days during the period.

WATER TEMPERATURE: Maximum recorded, 19.1°C, on several days during the period; minimum recorded, 18.6°C, July 10, 12, 13, 14.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

[illegible]

Water-Data Report 2008

343609077171301 Local number ON-293, Sneads Ferry Road, at Camp Lejeune, NC (Castle Hayne)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	19.0	18.8	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8
2	18.8	18.8	18.8	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8
3	18.8	18.8	18.8	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8
4	18.9	18.8	18.8	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8
5	18.8	18.8	18.8	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8
6	18.8	18.8	18.8	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8
7	18.8	18.8	18.8	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8
8	18.8	18.8	18.8	18.9	18.9	18.9	18.9	18.8	18.9	18.8	18.8	18.8
9	18.8	18.8	18.8	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
10	18.8	18.8	18.8	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
11	18.8	18.8	18.8	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
12	18.8	18.8	18.8	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
13	18.8	18.8	18.8	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
14	18.9	18.8	18.8	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
15	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
16	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
17	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
18	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
19	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
20	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	---	---	---
21	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
22	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
23	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
24	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
25	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
26	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
27	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
28	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
29	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
30	---	---	---	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
31	---	---	---	18.9	18.9	18.9	---	---	---	18.8	18.8	18.8
Month	19.0	18.8	18.9	18.9	18.9	18.9	18.9	18.8	18.8	---	---	---

Water-Data Report 2008

343609077171301 Local number ON-293, Sneads Ferry Road, at Camp Lejeune, NC (Castle Hayne)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7	19.1	19.1	19.1
2	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7	19.1	19.1	19.1
3	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7	19.1	19.1	19.1
4	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7	19.1	18.9	19.0
5	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7	18.9	18.9	18.9
6	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7	18.9	18.9	18.9
7	18.8	18.8	18.8	18.7	18.7	18.7	19.1	18.7	18.8	18.9	18.9	18.9
8	18.8	18.8	18.8	18.7	18.7	18.7	19.0	19.0	19.0	18.9	18.9	18.9
9	18.8	18.8	18.8	18.7	18.7	18.7	19.0	19.0	19.0	18.9	18.9	18.9
10	18.8	18.8	18.8	18.7	18.6	18.7	19.0	19.0	19.0	18.9	18.9	18.9
11	18.8	18.8	18.8	18.7	18.7	18.7	19.0	18.9	19.0	18.9	18.9	18.9
12	18.8	18.8	18.8	18.7	18.6	18.7	19.0	18.9	18.9	18.9	18.9	18.9
13	18.8	18.8	18.8	18.7	18.6	18.7	19.0	18.9	18.9	18.9	18.9	18.9
14	18.8	18.8	18.8	18.7	18.6	18.7	18.9	18.9	18.9	18.9	18.9	18.9
15	18.8	18.8	18.8	18.7	18.7	18.7	18.9	18.9	18.9	18.9	18.9	18.9
16	18.8	18.8	18.8	18.7	18.7	18.7	18.9	18.9	18.9	18.9	18.9	18.9
17	18.8	18.8	18.8	18.8	18.7	18.8	18.9	18.9	18.9	18.9	18.9	18.9
18	18.8	18.8	18.8	18.8	18.8	18.8	18.9	18.9	18.9	18.9	18.9	18.9
19	18.8	18.7	18.8	18.8	18.7	18.7	18.9	18.9	18.9	18.9	18.9	18.9
20	18.7	18.7	18.7	18.7	18.7	18.7	18.9	18.9	18.9	18.9	18.9	18.9
21	18.7	18.7	18.7	18.7	18.7	18.7	18.9	18.9	18.9	18.9	18.9	18.9
22	18.7	18.7	18.7	18.7	18.7	18.7	19.0	18.9	18.9	19.0	18.9	18.9
23	18.7	18.7	18.7	18.7	18.7	18.7	19.0	19.0	19.0	19.0	19.0	19.0
24	18.7	18.7	18.7	18.7	18.7	18.7	19.0	19.0	19.0	19.0	19.0	19.0
25	18.7	18.7	18.7	18.7	18.7	18.7	19.0	19.0	19.0	19.0	19.0	19.0
26	18.7	18.7	18.7	18.7	18.7	18.7	19.1	19.0	19.0	19.0	19.0	19.0
27	18.7	18.7	18.7	18.7	18.7	18.7	19.1	19.0	19.0	19.0	19.0	19.0
28	18.7	18.7	18.7	18.7	18.7	18.7	19.1	19.0	19.1	19.0	19.0	19.0
29	18.7	18.7	18.7	18.7	18.7	18.7	19.1	19.0	19.1	19.1	19.0	19.0
30	18.7	18.7	18.7	18.7	18.7	18.7	19.1	19.0	19.1	19.1	19.0	19.1
31	---	---	---	18.7	18.7	18.7	19.1	19.1	19.1	---	---	---
Month	18.8	18.7	18.8	18.8	18.6	18.7	19.1	18.7	18.9	19.1	18.9	19.0

Groundwater Level and Specific Conductance Monitoring at Marine Corps Base, Camp Lejeune, 2007–2008

Water-Data Report 2008

343609077171301 Local number ON-293, Sneads Ferry Road, at Camp Lejeune, NC (Castle Hayne)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

[illegible]

Water-Data Report 2008

343609077171301 Local number ON-293, Sneads Ferry Road, at Camp Lejeune, NC (Castle Hayne)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	933	928	930	896	896	896	881	881	881	876	876	876
2	928	923	925	896	895	896	881	879	880	877	876	877
3	923	920	922	896	894	896	880	879	879	878	877	877
4	920	918	919	895	894	894	879	879	879	879	878	878
5	918	916	917	894	894	894	879	879	879	880	879	880
6	916	914	915	894	894	894	879	878	879	881	880	880
7	914	912	913	894	893	894	879	877	877	882	881	881
8	912	911	911	893	892	892	878	877	877	882	882	882
9	911	909	910	892	892	892	877	877	877	883	880	882
10	909	908	908	892	891	892	877	877	877	881	880	880
11	908	907	907	892	891	891	877	876	877	881	880	880
12	907	905	906	891	890	890	876	875	876	880	879	879
13	905	904	905	890	889	890	875	875	875	879	877	878
14	904	903	904	889	889	889	875	875	875	878	877	878
15	903	902	902	889	889	889	875	874	875	878	878	878
16	902	901	901	889	888	889	874	874	874	879	878	878
17	901	900	900	888	888	888	874	874	874	879	878	879
18	900	899	900	888	887	887	874	874	874	879	879	879
19	900	899	899	887	887	887	874	874	874	880	879	879
20	899	899	899	887	886	887	874	873	873	---	---	---
21	899	899	899	886	885	886	874	873	873	881	880	881
22	899	899	899	886	885	885	874	874	874	880	879	880
23	899	898	899	885	885	885	874	874	874	879	878	878
24	899	898	898	885	884	885	874	873	873	878	876	876
25	898	898	898	885	883	883	873	873	873	877	876	876
26	898	898	898	883	883	883	874	873	873	877	876	877
27	898	898	898	883	883	883	875	874	874	878	877	877
28	898	896	897	883	882	883	875	874	874	879	878	878
29	897	896	896	883	881	882	875	874	874	879	878	879
30	---	---	---	881	881	881	876	875	875	879	878	879
31	---	---	---	881	881	881	---	---	---	878	878	878
Month	933	896	906	896	881	889	881	873	876	---	---	---

Water-Data Report 2008

343609077171301 Local number ON-293, Sneads Ferry Road, at Camp Lejeune, NC (Castle Hayne)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	879	878	878	874	873	874	877	876	877	876	876	876
2	879	878	879	874	873	874	878	877	877	876	876	876
3	879	879	879	874	874	874	878	878	878	876	876	876
4	879	879	879	874	873	873	879	878	879	876	876	876
5	879	879	879	873	873	873	880	879	879	876	876	876
6	879	878	879	874	873	873	880	880	880	876	876	876
7	878	878	878	874	874	874	880	878	879	876	876	876
8	878	878	878	874	873	874	878	877	877	876	876	876
9	878	878	878	874	873	874	877	877	877	876	876	876
10	878	878	878	874	873	874	877	877	877	876	876	876
11	878	878	878	874	872	873	877	877	877	876	876	876
12	878	878	878	873	872	873	877	877	877	876	875	876
13	878	877	878	873	872	873	877	877	877	876	876	876
14	877	877	877	873	873	873	877	877	877	876	876	876
15	877	877	877	873	873	873	877	877	877	876	876	876
16	877	877	877	873	873	873	877	877	877	876	876	876
17	877	877	877	874	873	873	877	877	877	876	875	876
18	877	877	877	874	873	873	877	877	877	876	876	876
19	877	877	877	873	872	872	877	877	877	876	875	876
20	877	875	876	872	872	872	877	877	877	876	875	876
21	876	875	875	873	872	873	877	877	877	876	875	876
22	876	875	875	873	873	873	877	877	877	876	875	876
23	875	875	875	874	873	873	878	877	877	876	876	876
24	875	875	875	874	873	874	878	877	877	876	876	876
25	875	875	875	874	873	873	878	877	877	876	876	876
26	875	875	875	874	873	874	878	876	877	876	876	876
27	875	873	874	875	874	874	876	876	876	876	876	876
28	874	873	873	875	874	875	876	876	876	876	876	876
29	874	873	874	876	875	876	876	876	876	876	876	876
30	874	873	873	877	876	876	876	876	876	876	876	876
31	---	---	---	877	876	877	876	876	876	---	---	---
Month	879	873	877	877	872	874	880	876	877	876	875	876



Water-Data Report 2008

344203077182001 Local number ON-295, near Wallace Creek, at Camp Lejeune, NC (Castle Hayne)

Castle Hayne aquifer
Castle Hayne Formation
Onslow County, NC

LOCATION.--Lat 34°42'03", long 77°18'20" referenced to North American Datum of 1927, Onslow County, NC, Hydrologic Unit 03030001, .81 mi south of North Carolina Highway 24, 3.87 mi east of Holcomb Boulevard and 1.39 mi southeast of Piney Green, at Camp Lejeune. Owner: U.S. Geological Survey.

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Drilled observation well, depth 253 ft, diameter 2 in., cased to 243 ft, screened interval from 243 ft to 253 ft.

DATUM.--Land-surface datum is 33.13 ft above North American Vertical Datum of 1988. Measuring point: top of well casing, 1.96 ft above land-surface datum, December 1, 2007 to present.

PERIOD OF RECORD.--May 1988 to September 2005, December 2007 to current year.

GAGE.--Water-level recorder collecting data at 60-minute intervals. Satellite telemetry at site.

REMARKS.--Well is part of U.S. Marine Corps Base, Camp Lejeune, North Carolina, Water Resources Network project.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 9.07 ft below land-surface datum, September 12, 1996; lowest water level recorded, 20.29 ft below land-surface datum, October 6, 7, 1993.

Water-Data Report 2008

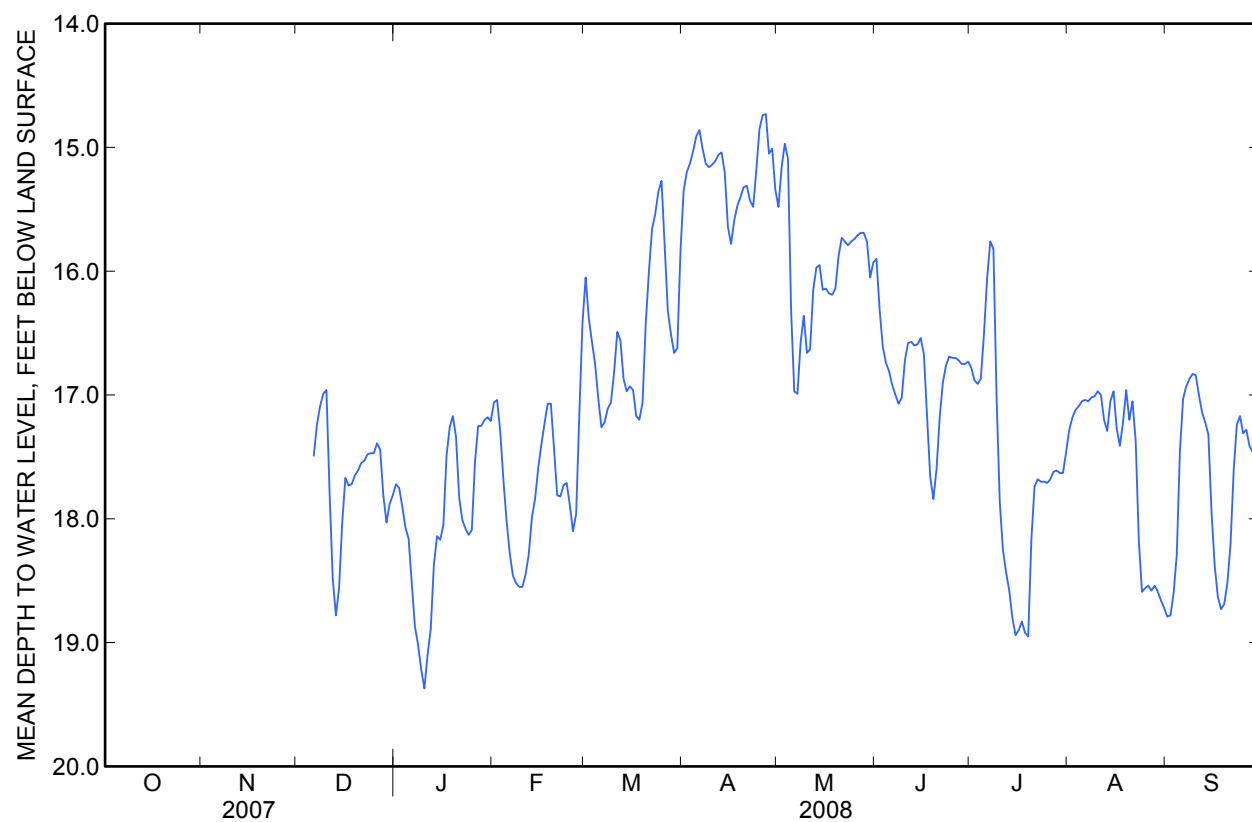
344203077182001 Local number ON-295, near Wallace Creek, at Camp Lejeune, NC (Castle Hayne)—Continued

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	---	17.72	17.06	16.05	15.35	15.48	15.90	16.78	17.28	18.79
2	---	---	---	17.75	17.04	16.38	15.20	15.16	16.31	16.88	17.18	18.78
3	---	---	---	17.90	17.30	16.57	15.13	14.97	16.61	16.91	17.12	18.60
4	---	---	---	18.07	17.69	16.75	15.03	15.09	16.74	16.87	17.09	18.29
5	---	---	---	18.16	18.02	17.03	14.91	16.32	16.81	16.51	17.05	17.45
6	---	---	17.49	18.52	18.28	17.26	14.86	16.97	16.92	16.06	17.04	17.03
7	---	---	17.24	18.87	18.46	17.22	15.01	16.99	17.00	15.76	17.05	16.93
8	---	---	17.09	19.02	18.52	17.11	15.13	16.58	17.07	15.82	17.02	16.87
9	---	---	16.99	19.22	18.55	17.06	15.16	16.36	17.02	17.02	17.01	16.83
10	---	---	16.96	19.37	18.55	16.82	15.14	16.66	16.72	17.86	16.97	16.84
11	---	---	17.79	19.10	18.45	16.49	15.11	16.63	16.58	18.25	17.00	17.00
12	---	---	18.48	18.89	18.29	16.56	15.06	16.15	16.57	18.43	17.20	17.14
13	---	---	18.78	18.37	17.99	16.87	15.04	15.97	16.60	18.58	17.29	17.22
14	---	---	18.56	18.14	17.84	16.97	15.20	15.95	16.59	18.80	17.05	17.32
15	---	---	18.03	18.17	17.59	16.93	15.64	16.15	16.54	18.94	16.97	17.95
16	---	---	17.67	18.05	17.40	16.96	15.78	16.14	16.67	18.90	17.27	18.38
17	---	---	17.73	17.49	17.23	17.17	15.59	16.18	17.17	18.83	17.41	18.63
18	---	---	17.72	17.26	17.07	17.20	15.47	16.19	17.66	18.92	17.22	18.73
19	---	---	17.65	17.17	17.07	17.06	15.40	16.14	17.84	18.95	16.96	18.69
20	---	---	17.61	17.34	17.43	16.43	15.32	15.88	17.60	18.17	17.20	18.52
21	---	---	17.55	17.83	17.81	16.01	15.31	15.73	17.18	17.74	17.05	18.21
22	---	---	17.53	18.01	17.82	15.66	15.43	15.76	16.90	17.68	17.37	17.61
23	---	---	17.48	18.08	17.73	15.54	15.48	15.79	16.76	17.70	18.18	17.24
24	---	---	17.47	18.13	17.71	15.36	15.18	15.76	16.69	17.70	18.59	17.17
25	---	---	17.47	18.09	17.89	15.27	14.85	15.74	16.70	17.71	18.56	17.31
26	---	---	17.39	17.54	18.10	15.79	14.74	15.71	16.70	17.68	18.54	17.28
27	---	---	17.44	17.25	17.96	16.32	14.73	15.69	16.72	17.62	18.58	17.41
28	---	---	17.81	17.25	17.16	16.51	15.05	15.69	16.75	17.61	18.54	17.46
29	---	---	18.03	17.20	16.42	16.66	15.01	15.76	16.75	17.63	18.59	17.49
30	---	---	17.88	17.18	---	16.62	15.34	16.05	16.73	17.63	18.66	17.59
31	---	---	17.81	17.21	---	15.84	---	15.93	---	17.46	18.72	---
Mean	---	---	---	18.01	17.74	16.53	15.19	15.99	16.83	17.66	17.54	17.69
Max	---	---	---	19.37	18.55	17.26	15.78	16.99	17.84	18.95	18.72	18.79
Min	---	---	---	17.17	16.42	15.27	14.73	14.97	15.90	15.76	16.96	16.83

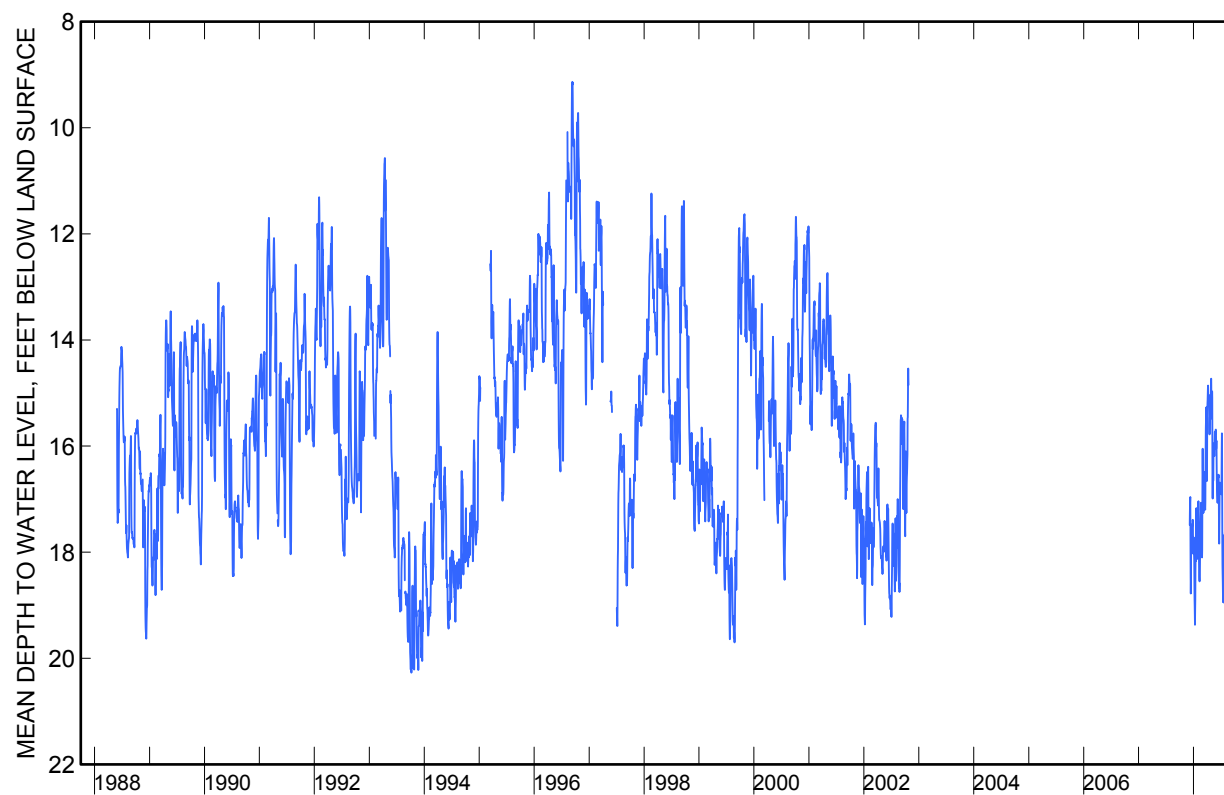
Water-Data Report 2008

344203077182001 Local number ON-295, near Wallace Creek, at Camp Lejeune, NC (Castle Hayne)—Continued



Water-Data Report 2008

344203077182001 Local number ON-295, near Wallace Creek, at Camp Lejeune, NC (Castle Hayne)—Continued



Water-Data Report 2008

344203077182001 Local number ON-295, near Wallace Creek, at Camp Lejeune, NC (Castle Hayne)—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 2007 to September 2008.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 2007 to September 2008.

WATER TEMPERATURE: December 2007 to September 2008.

INSTRUMENTATION.--Water-quality monitor in operation from December 2007 to September 2008.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 436 microsiemens, May 1, 2, 3, 4; minimum recorded, 320 microsiemens, January 1.

WATER TEMPERATURE: Maximum recorded, 18.4°C, on several days during the period; minimum recorded, 18.1°C, on several days during the period.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	---	---	---	18.3	18.3	18.3
2	---	---	---	---	---	---	---	---	---	18.3	18.3	18.3
3	---	---	---	---	---	---	---	---	---	18.3	18.3	18.3
4	---	---	---	---	---	---	---	---	---	18.3	18.3	18.3
5	---	---	---	---	---	---	---	---	---	18.3	18.3	18.3
6	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
7	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
8	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
9	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
10	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
11	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
12	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
13	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
14	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
15	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
16	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
17	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
18	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
19	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
20	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
21	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
22	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
23	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
24	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
25	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
26	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
27	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
28	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
29	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
30	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
31	---	---	---	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3
Month	---	---	---	---	---	---	---	---	---	18.3	18.3	18.3

Water-Data Report 2008

344203077182001 Local number ON-295, near Wallace Creek, at Camp Lejeune, NC (Castle Hayne)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	18.3	18.3	18.3	18.4	18.4	18.4	18.3	18.3	18.3	18.2	18.2	18.2
2	18.3	18.3	18.3	18.4	18.4	18.4	18.3	18.3	18.3	18.2	18.2	18.2
3	18.3	18.3	18.3	18.4	18.4	18.4	18.3	18.3	18.3	18.2	18.2	18.2
4	18.3	18.3	18.3	18.4	18.4	18.4	18.3	18.3	18.3	18.2	18.2	18.2
5	18.3	18.3	18.3	18.4	18.4	18.4	18.3	18.3	18.3	18.2	18.2	18.2
6	18.3	18.3	18.3	18.4	18.4	18.4	18.3	18.3	18.3	18.2	18.1	18.2
7	18.3	18.3	18.3	18.4	18.4	18.4	18.3	18.3	18.3	18.1	18.1	18.1
8	18.3	18.3	18.3	18.4	18.4	18.4	18.3	18.3	18.3	18.1	18.1	18.1
9	18.3	18.3	18.3	18.4	18.4	18.4	18.3	18.2	18.2	18.1	18.1	18.1
10	18.3	18.3	18.3	18.4	18.4	18.4	18.2	18.2	18.2	18.1	18.1	18.1
11	18.3	18.3	18.3	18.4	18.4	18.4	18.2	18.2	18.2	18.1	18.1	18.1
12	18.3	18.3	18.3	18.4	18.3	18.3	18.2	18.2	18.2	18.1	18.1	18.1
13	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.2	18.2	18.1	18.1	18.1
14	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.2	18.2	18.1	18.1	18.1
15	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.2	18.2	18.1	18.1	18.1
16	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.2	18.2	18.1	18.1	18.1
17	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.2	18.2	18.1	18.1	18.1
18	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.2	18.2	18.1	18.1	18.1
19	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.2	18.2	18.1	18.1	18.1
20	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.2	18.2	18.2	18.1	18.1
21	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.2	18.2	18.2	18.2	18.2
22	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.2	18.2	18.2	18.2	18.2
23	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.2	18.2	18.2	18.2	18.2
24	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.2	18.2	18.2	18.2	18.2
25	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.2	18.2	18.2	18.2	18.2
26	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.2	18.2	18.2	18.2	18.2
27	---	---	---	18.3	18.3	18.3	18.2	18.2	18.2	18.2	18.2	18.2
28	18.4	18.4	18.4	18.3	18.3	18.3	18.2	18.2	18.2	18.2	18.2	18.2
29	18.4	18.4	18.4	18.3	18.3	18.3	18.2	18.2	18.2	18.2	18.2	18.2
30	---	---	---	18.3	18.3	18.3	18.2	18.2	18.2	18.2	18.2	18.2
31	---	---	---	18.3	18.3	18.3	---	---	---	18.2	18.2	18.2
Month	---	---	---	18.4	18.3	18.3	18.3	18.2	18.2	18.2	18.1	18.2

Water-Data Report 2008

344203077182001 Local number ON-295, near Wallace Creek, at Camp Lejeune, NC (Castle Hayne)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
3	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
4	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
5	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
6	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
7	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
8	18.2	18.2	18.2	18.2	18.2	18.2	---	---	---	18.2	18.2	18.2
9	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
10	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
11	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
12	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
13	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
14	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
15	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
16	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
17	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
18	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
19	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
20	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
21	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
22	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
23	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
24	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
25	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
26	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
27	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
28	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
29	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
30	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
31	---	---	---	18.2	18.2	18.2	18.2	18.2	18.2	---	---	---
Month	18.2	18.2	18.2	18.2	18.2	18.2	---	---	---	18.2	18.2	18.2

Water-Data Report 2008

344203077182001 Local number ON-295, near Wallace Creek, at Camp Lejeune, NC (Castle Hayne)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	---	---	---	356	354	355
2	---	---	---	---	---	---	---	---	---	357	356	356
3	---	---	---	---	---	---	---	---	---	358	357	357
4	---	---	---	---	---	---	---	---	---	359	358	358
5	---	---	---	---	---	---	---	---	---	360	359	359
6	---	---	---	---	---	---	325	324	324	361	359	360
7	---	---	---	---	---	---	327	325	326	361	357	359
8	---	---	---	---	---	---	328	327	328	357	342	353
9	---	---	---	---	---	---	331	328	329	342	322	330
10	---	---	---	---	---	---	332	330	331	322	320	321
11	---	---	---	---	---	---	334	332	333	321	321	321
12	---	---	---	---	---	---	336	334	335	322	321	321
13	---	---	---	---	---	---	335	330	333	323	321	322
14	---	---	---	---	---	---	330	325	327	324	322	323
15	---	---	---	---	---	---	326	325	325	325	323	324
16	---	---	---	---	---	---	332	326	330	326	325	325
17	---	---	---	---	---	---	335	332	333	329	326	327
18	---	---	---	---	---	---	336	334	335	332	328	330
19	---	---	---	---	---	---	338	336	337	335	331	333
20	---	---	---	---	---	---	339	337	338	338	334	336
21	---	---	---	---	---	---	341	339	340	340	338	339
22	---	---	---	---	---	---	342	340	341	341	339	340
23	---	---	---	---	---	---	343	342	343	342	341	341
24	---	---	---	---	---	---	345	343	344	343	342	342
25	---	---	---	---	---	---	346	345	346	344	343	343
26	---	---	---	---	---	---	348	346	347	346	343	344
27	---	---	---	---	---	---	350	348	349	347	345	346
28	---	---	---	---	---	---	351	349	350	350	347	349
29	---	---	---	---	---	---	352	350	351	352	350	351
30	---	---	---	---	---	---	353	352	352	355	352	353
31	---	---	---	---	---	---	355	353	354	356	354	355
Month	---	---	---	---	---	---	---	---	---	361	320	341

Water-Data Report 2008

344203077182001 Local number ON-295, near Wallace Creek, at Camp Lejeune, NC (Castle Hayne)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	359	356	358	368	365	367	416	413	414	436	434	435
2	362	359	360	370	368	369	418	415	416	436	435	435
3	363	362	362	372	370	371	419	417	419	436	435	436
4	365	363	364	374	372	373	421	419	420	436	435	436
5	365	364	365	376	374	375	423	421	422	435	434	435
6	366	364	365	377	375	376	424	423	423	435	433	434
7	364	362	363	378	376	377	425	424	424	433	432	432
8	362	358	360	379	378	378	426	424	425	432	431	431
9	358	353	356	380	378	379	427	425	426	432	431	431
10	353	346	349	382	379	381	427	426	427	432	431	431
11	346	340	343	383	382	382	428	427	427	431	430	431
12	340	336	338	385	383	384	429	427	428	431	430	431
13	338	336	337	386	385	386	429	428	429	431	430	431
14	340	338	339	388	386	387	429	429	429	431	430	431
15	344	340	342	389	387	388	430	429	429	431	430	430
16	348	344	346	390	388	389	430	429	430	430	429	429
17	352	348	350	390	389	390	431	429	430	429	428	429
18	357	352	355	391	390	390	431	430	430	428	427	428
19	360	357	358	391	390	390	431	430	431	428	427	427
20	362	360	361	393	391	392	431	431	431	429	427	427
21	363	362	363	395	392	393	432	431	431	428	426	427
22	364	363	364	397	394	396	432	431	432	427	426	426
23	366	364	365	400	397	398	433	432	432	427	426	427
24	367	365	366	403	400	401	433	432	433	428	427	428
25	367	367	367	406	402	404	433	433	433	429	427	428
26	367	360	363	407	405	406	434	433	433	429	428	429
27	---	---	---	408	407	407	434	434	434	430	429	429
28	---	---	---	409	408	408	435	434	434	430	429	430
29	---	---	---	410	409	409	435	434	435	430	430	430
30	---	---	---	411	409	410	435	434	435	431	430	430
31	---	---	---	413	411	412	---	---	---	430	430	430
Month	---	---	---	413	365	389	435	413	428	436	426	430

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344203077182001 Local number ON-295, near Wallace Creek, at Camp Lejeune, NC (Castle Hayne)—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	430	428	429	333	333	333	328	327	328	325	324	325
2	428	426	427	334	333	333	329	328	329	325	324	324
3	426	422	424	333	333	333	330	328	329	325	324	324
4	423	409	416	333	332	333	330	329	330	325	324	324
5	409	407	408	335	332	334	331	330	330	325	324	324
6	407	403	406	338	335	337	332	331	331	325	324	325
7	403	399	400	343	338	340	333	331	332	325	325	325
8	399	380	392	347	343	345	337	332	335	326	325	326
9	380	357	368	348	346	347	338	337	338	327	326	326
10	357	352	354	348	339	345	339	338	338	327	326	327
11	352	352	352	339	327	331	339	339	339	328	327	327
12	352	348	351	328	327	327	340	339	340	328	327	328
13	348	347	347	328	327	327	342	340	341	328	327	328
14	347	347	347	327	327	327	342	341	342	328	326	327
15	348	347	347	327	327	327	343	342	342	326	325	326
16	348	346	347	327	326	327	343	342	343	325	324	325
17	346	340	344	327	326	327	343	343	343	325	324	324
18	340	332	335	327	327	327	344	343	343	325	324	325
19	332	330	331	327	327	327	343	340	343	325	324	324
20	331	328	329	327	327	327	340	336	337	325	324	324
21	329	328	328	328	327	327	337	336	337	325	324	325
22	329	328	329	328	327	327	337	331	334	325	324	325
23	329	329	329	328	327	327	332	327	329	326	324	325
24	330	329	330	328	327	328	327	326	327	326	325	326
25	331	330	330	328	327	328	327	326	327	326	326	326
26	331	330	331	328	327	328	328	327	327	327	326	326
27	332	331	331	328	327	328	328	325	327	327	326	326
28	332	331	332	328	327	328	326	325	325	327	326	327
29	333	332	332	328	327	328	326	325	325	327	326	327
30	333	333	333	328	327	327	326	325	325	327	326	327
31	---	---	---	328	327	327	326	325	325	---	---	---
Month	430	328	359	348	326	331	344	325	334	328	324	326



Water-Data Report 2008

344417077272701 Local number ON-354 (NC-52.2), at Camp Geiger, NC (Peedee)

Northern Atlantic Coastal Plain aquifer system
Peedee Formation
Onslow County, NC

LOCATION.--Lat 34°44'17.4", long 77°27'27.4" referenced to North American Datum of 1983, Onslow County, NC, Hydrologic Unit 03030001, 0.25 mi east of U.S. Highway 17 at U.S. Marine Corps Camp Geiger. Owner: U.S. Marine Corps.

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Drilled observation well, depth 435 ft, diameter 4 in., cased to 410 ft, screened interval from 410 to 430 ft.

DATUM.--Land-surface datum is 19.72 ft above North American Vertical Datum of 1988. Measuring point: top of PVC well casing, 2.17 ft above land-surface datum, January 29, 2008 to present.

PERIOD OF RECORD.--January 2008 to September 2008.

GAGE.--Water-level recorder collecting data at 60-minute intervals. Satellite telemetry at site.

REMARKS.--Well is part of U.S. Marine Corps Base, Camp Lejeune, North Carolina, Water Resources Network project.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 5.54 ft below land-surface datum, May 21, 22, 2008; lowest water level recorded, 6.79 ft below land-surface datum, February 5, 2008.

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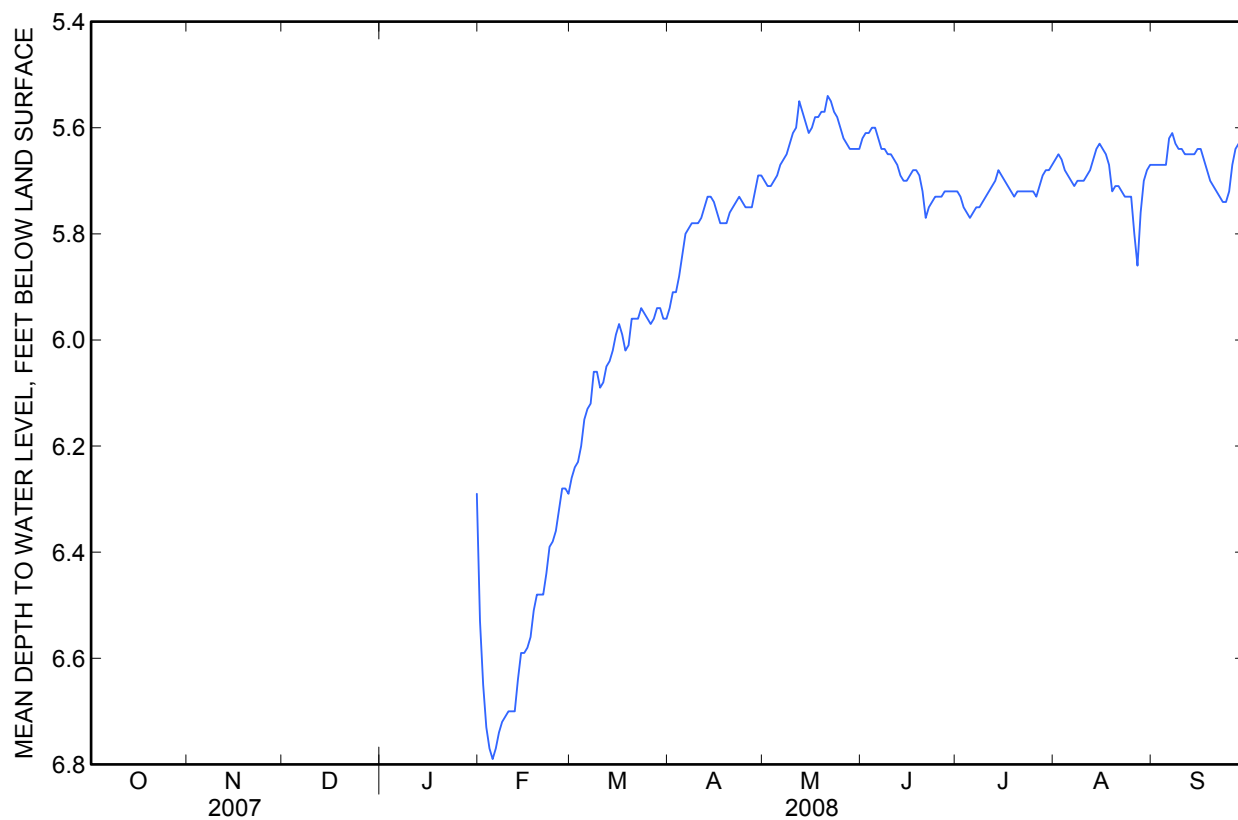
344417077272701 Local number ON-354, at Camp Geiger, NC (Peedee), NC-52.2—Continued

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	---	---	6.53	6.26	5.94	5.70	5.62	5.72	5.66	5.67
2	---	---	---	---	6.65	6.24	5.91	5.71	5.61	5.73	5.65	5.67
3	---	---	---	---	6.73	6.23	5.91	5.71	5.61	5.75	5.66	5.67
4	---	---	---	---	6.77	6.20	5.88	5.70	5.60	5.76	5.68	5.67
5	---	---	---	---	6.79	6.15	5.84	5.69	5.60	5.77	5.69	5.67
6	---	---	---	---	6.77	6.13	5.80	5.67	5.62	5.76	5.70	5.62
7	---	---	---	---	6.74	6.12	5.79	5.66	5.64	5.75	5.71	5.61
8	---	---	---	---	6.72	6.06	5.78	5.65	5.64	5.75	5.70	5.63
9	---	---	---	---	6.71	6.06	5.78	5.63	5.65	5.74	5.70	5.64
10	---	---	---	---	6.70	6.09	5.78	5.61	5.65	5.73	5.70	5.64
11	---	---	---	---	6.70	6.08	5.77	5.60	5.66	5.72	5.69	5.65
12	---	---	---	---	6.70	6.05	5.75	5.55	5.67	5.71	5.68	5.65
13	---	---	---	---	6.64	6.04	5.73	5.57	5.69	5.70	5.66	5.65
14	---	---	---	---	6.59	6.02	5.73	5.59	5.70	5.68	5.64	5.65
15	---	---	---	---	6.59	5.99	5.74	5.61	5.70	5.69	5.63	5.64
16	---	---	---	---	6.58	5.97	5.76	5.60	5.69	5.70	5.64	5.64
17	---	---	---	---	6.56	5.99	5.78	5.58	5.68	5.71	5.65	5.66
18	---	---	---	---	6.51	6.02	5.78	5.58	5.68	5.72	5.67	5.68
19	---	---	---	---	6.48	6.01	5.78	5.57	5.69	5.73	5.72	5.70
20	---	---	---	---	6.48	5.96	5.76	5.57	5.72	5.72	5.71	5.71
21	---	---	---	---	6.48	5.96	5.75	5.54	5.77	5.72	5.71	5.72
22	---	---	---	---	6.44	5.96	5.74	5.55	5.75	5.72	5.72	5.73
23	---	---	---	---	6.39	5.94	5.73	5.57	5.74	5.72	5.73	5.74
24	---	---	---	---	6.38	5.95	5.74	5.58	5.73	5.72	5.73	5.74
25	---	---	---	---	6.36	5.96	5.75	5.60	5.73	5.72	5.73	5.72
26	---	---	---	---	6.32	5.97	5.75	5.62	5.73	5.73	5.80	5.67
27	---	---	---	---	6.28	5.96	5.75	5.63	5.72	5.71	5.86	5.64
28	---	---	---	---	6.28	5.94	5.72	5.64	5.72	5.69	5.76	5.63
29	---	---	---	---	6.29	5.94	5.69	5.64	5.72	5.68	5.70	5.63
30	---	---	---	---	---	5.96	5.69	5.64	5.72	5.68	5.68	5.63
31	---	---	---	6.29	---	5.96	---	5.64	---	5.67	5.67	---
Mean	---	---	---	---	6.56	6.04	5.78	5.62	5.68	5.72	5.70	5.67
Max	---	---	---	---	6.79	6.26	5.94	5.71	5.77	5.77	5.86	5.74
Min	---	---	---	---	6.28	5.94	5.69	5.54	5.60	5.67	5.63	5.61

Water-Data Report 2008

344417077272701 Local number ON-354, at Camp Geiger, NC (Pee Dee), NC-52.2—Continued



Water-Data Report 2008

344417077272701 Local number ON-354, at Camp Geiger, NC (Peedee), NC-52.2—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 2008 to September 2008.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 2008 to September 2008.

WATER TEMPERATURE: January 2008 to September 2008.

INSTRUMENTATION.--Water-quality monitor in operation from January 2008 to September 2008.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 5,490 microsiemens, Jan. 30; minimum recorded, 5,270 microsiemens, March 10, 12, 14, 15, 17.

WATER TEMPERATURE: Maximum recorded, 19.6°C, on many days during the period; minimum recorded, 19.4°C, on many days during the period.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

[illegible]

Water-Data Report 2008

344417077272701 Local number ON-354, at Camp Geiger, NC (Pee Dee), NC-52.2—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5
2	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5
3	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5
4	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5
5	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5
6	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5
7	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5
8	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5
9	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5
10	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5
11	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5
12	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5
13	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5
14	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5
15	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5
16	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5
17	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5
18	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5
19	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5
20	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5
21	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5
22	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5
23	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.4	19.4
24	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.4	19.4	19.4
25	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.4	19.4	19.4
26	19.6	19.6	19.6	19.6	19.6	19.6	19.5	19.5	19.5	19.4	19.4	19.4
27	19.6	19.6	19.6	19.6	19.5	19.6	19.5	19.5	19.5	19.4	19.4	19.4
28	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5	19.4	19.4	19.4
29	19.6	19.6	19.6	19.5	19.5	19.5	19.5	19.5	19.5	19.4	19.4	19.4
30	---	---	---	19.5	19.5	19.5	19.5	19.5	19.5	19.4	19.4	19.4
31	---	---	---	19.5	19.5	19.5	---	---	---	19.4	19.4	19.4
Month	19.6	19.6	19.6	19.6	19.5	19.6	19.5	19.5	19.5	19.5	19.4	19.5

Water-Data Report 2008

344417077272701 Local number ON-354, at Camp Geiger, NC (Peedee), NC-52.2—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	19.4	19.4	19.4	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5
2	19.4	19.4	19.4	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5
3	19.4	19.4	19.4	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5
4	19.4	19.4	19.4	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5
5	19.4	19.4	19.4	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5
6	19.4	19.4	19.4	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5
7	19.4	19.4	19.4	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5
8	19.4	19.4	19.4	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5
9	19.4	19.4	19.4	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5
10	19.4	19.4	19.4	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5
11	19.4	19.4	19.4	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5
12	19.4	19.4	19.4	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5
13	19.4	19.4	19.4	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5
14	19.4	19.4	19.4	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5
15	19.4	19.4	19.4	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5
16	19.4	19.4	19.4	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5
17	19.4	19.4	19.4	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5
18	19.4	19.4	19.4	19.5	19.5	19.5	---	---	---	19.5	19.5	19.5
19	19.4	19.4	19.4	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5
20	---	---	---	19.5	19.4	19.4	19.5	19.5	19.5	19.5	19.5	19.5
21	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5	19.5	19.5	19.5
22	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5	19.5	19.5	19.5
23	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5	19.5	19.5	19.5
24	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5	19.5	19.5	19.5
25	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5	19.5	19.5	19.5
26	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5	19.5	19.5	19.5
27	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5	19.5	19.5	19.5
28	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5	19.5	19.5	19.5
29	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5	19.5	19.5	19.5
30	19.5	19.5	19.5	19.4	19.4	19.4	19.5	19.5	19.5	19.5	19.5	19.5
31	---	---	---	19.4	19.4	19.4	19.5	19.5	19.5	---	---	---
Month	---	---	---	19.5	19.4	19.5	---	---	---	19.5	19.5	19.5

Water-Data Report 2008

344417077272701 Local number ON-354, at Camp Geiger, NC (Peedee), NC-52.2—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

[illegible]

Water-Data Report 2008

344417077272701 Local number ON-354, at Camp Geiger, NC (Peedee), NC-52.2—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	5,470	5,460	5,470	5,280	5,280	5,280	5,280	5,280	5,280	5,310	5,300	5,310
2	5,460	5,450	5,450	5,280	5,280	5,280	5,280	5,280	5,280	5,310	5,310	5,310
3	5,450	5,440	5,450	5,280	5,280	5,280	5,290	5,280	5,280	5,310	5,310	5,310
4	5,440	5,430	5,430	5,280	5,280	5,280	5,290	5,280	5,280	5,310	5,310	5,310
5	5,430	5,430	5,430	5,280	5,280	5,280	5,290	5,280	5,280	5,310	5,310	5,310
6	5,430	5,410	5,420	5,280	5,280	5,280	5,290	5,280	5,280	5,310	5,310	5,310
7	5,420	5,410	5,420	5,280	5,280	5,280	5,290	5,280	5,290	5,310	5,310	5,310
8	5,410	5,400	5,400	5,280	5,280	5,280	5,290	5,280	5,290	5,310	5,310	5,310
9	5,400	5,400	5,400	5,280	5,280	5,280	5,290	5,280	5,290	5,310	5,310	5,310
10	5,400	5,390	5,390	5,280	5,270	5,280	5,290	5,290	5,290	5,310	5,310	5,310
11	5,390	5,390	5,390	5,280	5,280	5,280	5,290	5,280	5,290	5,310	5,310	5,310
12	5,390	5,370	5,380	5,280	5,270	5,280	5,290	5,280	5,290	5,310	5,310	5,310
13	5,380	5,370	5,380	5,280	5,280	5,280	5,290	5,290	5,290	5,310	5,310	5,310
14	5,380	5,360	5,370	5,280	5,270	5,280	5,290	5,290	5,290	5,310	5,310	5,310
15	5,370	5,360	5,360	5,280	5,270	5,280	5,290	5,290	5,290	5,310	5,310	5,310
16	5,360	5,350	5,360	5,280	5,280	5,280	5,300	5,290	5,290	5,310	5,310	5,310
17	5,350	5,350	5,350	5,280	5,270	5,280	5,300	5,300	5,300	5,320	5,310	5,310
18	5,350	5,340	5,350	5,280	5,280	5,280	5,300	5,300	5,300	5,320	5,310	5,310
19	5,340	5,340	5,340	5,280	5,280	5,280	5,300	5,300	5,300	5,320	5,310	5,310
20	5,340	5,340	5,340	5,280	5,280	5,280	5,300	5,300	5,300	5,320	5,310	5,310
21	5,340	5,320	5,330	5,280	5,280	5,280	5,300	5,300	5,300	5,320	5,310	5,320
22	5,330	5,320	5,330	5,280	5,280	5,280	5,300	5,300	5,300	5,320	5,320	5,320
23	5,320	5,310	5,310	5,280	5,280	5,280	5,300	5,300	5,300	5,320	5,310	5,320
24	5,320	5,310	5,310	5,280	5,280	5,280	5,300	5,300	5,300	5,320	5,320	5,320
25	5,310	5,300	5,300	5,280	5,280	5,280	5,300	5,300	5,300	5,320	5,320	5,320
26	5,300	5,300	5,300	5,280	5,280	5,280	5,300	5,300	5,300	5,320	5,320	5,320
27	5,300	5,290	5,290	5,280	5,280	5,280	5,310	5,300	5,300	5,320	5,320	5,320
28	5,290	5,290	5,290	5,280	5,280	5,280	5,310	5,300	5,300	5,320	5,320	5,320
29	5,290	5,280	5,280	5,280	5,280	5,280	5,310	5,300	5,310	5,320	5,320	5,320
30	---	---	---	5,280	5,280	5,280	5,310	5,300	5,310	5,320	5,320	5,320
31	---	---	---	5,280	5,280	5,280	---	---	---	5,320	5,320	5,320
Month	5,470	5,280	5,370	5,280	5,270	5,280	5,310	5,280	5,290	5,320	5,300	5,310

Water-Data Report 2008

344417077272701 Local number ON-354, at Camp Geiger, NC (Peedee), NC-52.2—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	5,320	5,320	5,320	5,360	5,350	5,350	5,340	5,340	5,340	5,350	5,340	5,340
2	5,320	5,320	5,320	5,360	5,340	5,350	5,340	5,340	5,340	5,350	5,340	5,340
3	5,320	5,320	5,320	5,360	5,340	5,350	5,340	5,340	5,340	5,350	5,340	5,340
4	5,320	5,320	5,320	5,350	5,350	5,350	5,340	5,340	5,340	5,350	5,340	5,350
5	5,320	5,320	5,320	5,350	5,350	5,350	5,340	5,340	5,340	5,350	5,340	5,350
6	5,320	5,320	5,320	5,350	5,350	5,350	5,340	5,330	5,330	5,350	5,350	5,350
7	5,320	5,320	5,320	5,350	5,350	5,350	5,330	5,330	5,330	5,350	5,350	5,350
8	5,320	5,320	5,320	5,350	5,350	5,350	5,340	5,330	5,330	5,350	5,350	5,350
9	5,320	5,320	5,320	5,350	5,350	5,350	5,340	5,330	5,330	5,350	5,350	5,350
10	5,320	5,320	5,320	5,360	5,350	5,350	5,340	5,330	5,330	5,350	5,350	5,350
11	5,320	5,320	5,320	5,360	5,340	5,350	5,340	5,330	5,340	5,350	5,350	5,350
12	5,320	5,320	5,320	5,360	5,340	5,350	5,340	5,330	5,340	5,360	5,350	5,350
13	5,320	5,320	5,320	5,350	5,350	5,350	5,340	5,330	5,340	5,360	5,340	5,350
14	5,320	5,320	5,320	5,350	5,350	5,350	5,340	5,330	5,340	5,360	5,340	5,340
15	5,320	5,320	5,320	5,350	5,350	5,350	5,330	5,320	5,330	5,360	5,340	5,340
16	5,320	5,320	5,320	5,350	5,350	5,350	5,330	5,320	5,330	5,350	5,340	5,350
17	5,330	5,320	5,320	5,350	5,350	5,350	5,330	5,330	5,330	5,350	5,340	5,350
18	5,320	5,320	5,320	5,350	5,350	5,350	5,330	5,320	5,330	5,350	5,340	5,350
19	5,330	5,320	5,320	5,350	5,340	5,350	5,330	5,320	5,330	5,350	5,350	5,350
20	5,320	5,320	5,320	5,340	5,340	5,340	5,340	5,330	5,330	5,350	5,340	5,350
21	5,320	5,310	5,320	5,340	5,340	5,340	5,350	5,340	5,340	5,350	5,350	5,350
22	5,320	5,320	5,320	5,350	5,340	5,340	5,350	5,350	5,350	5,350	5,350	5,350
23	5,330	5,320	5,330	5,350	5,340	5,350	5,360	5,350	5,350	5,350	5,350	5,350
24	5,340	5,320	5,330	5,350	5,340	5,350	5,360	5,350	5,360	5,350	5,350	5,350
25	5,340	5,330	5,340	5,350	5,350	5,350	5,360	5,350	5,360	5,350	5,350	5,350
26	5,350	5,340	5,340	5,350	5,350	5,350	5,360	5,340	5,360	5,350	5,350	5,350
27	5,350	5,340	5,350	5,350	5,350	5,350	5,360	5,340	5,360	5,360	5,350	5,350
28	5,350	5,350	5,350	5,350	5,340	5,340	5,340	5,340	5,340	5,360	5,350	5,350
29	5,350	5,350	5,350	5,340	5,340	5,340	5,340	5,340	5,340	5,360	5,350	5,350
30	5,350	5,350	5,350	5,340	5,340	5,340	5,340	5,340	5,340	5,360	5,350	5,350
31	---	---	---	5,340	5,340	5,340	5,340	5,340	5,340	---	---	---
Month	5,350	5,310	5,330	5,360	5,340	5,350	5,360	5,320	5,340	5,360	5,340	5,350



Water-Data Report 2008

344418077272701 Local number ON-355 (NC-52.3), at Camp Geiger, NC, (Peedee)

Northern Atlantic Coastal Plain aquifer system
Castle Hayne Formation
Onslow County, NC

LOCATION.--Lat 34°44'17.7", long 77°27'27.4" referenced to North American Datum of 1983, Onslow County, NC, Hydrologic Unit 03030001, 0.25 mi east of U.S. Highway 17 and 2 mi south of U.S. Highway 258 at USMC Camp Geiger, southwest of Jacksonville. Owner: U.S. Marine Corps.

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Drilled observation well, depth 170 ft, diameter 4 in., cased to 145 ft, screened interval from 145 to 165 ft.

DATUM.--Land-surface datum is 19.48 ft above North American Vertical Datum of 1988. Measuring point: Top of PVC well casing, 2.32 ft above land-surface datum, February 1, 2008 to present.

PERIOD OF RECORD.--January 2008 to September 2008.

GAGE.--Water-level recorder collecting data at 60-minute intervals. Satellite telemetry at site.

REMARKS.--Well is part of U.S. Marine Corps Base, Camp Lejeune, North Carolina, Water Resources Network project.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 11.73 ft below land-surface datum, May 11, 2008; lowest water level recorded, 15.83 ft below land-surface datum, August 7, 2008.

Water-Data Report 2008

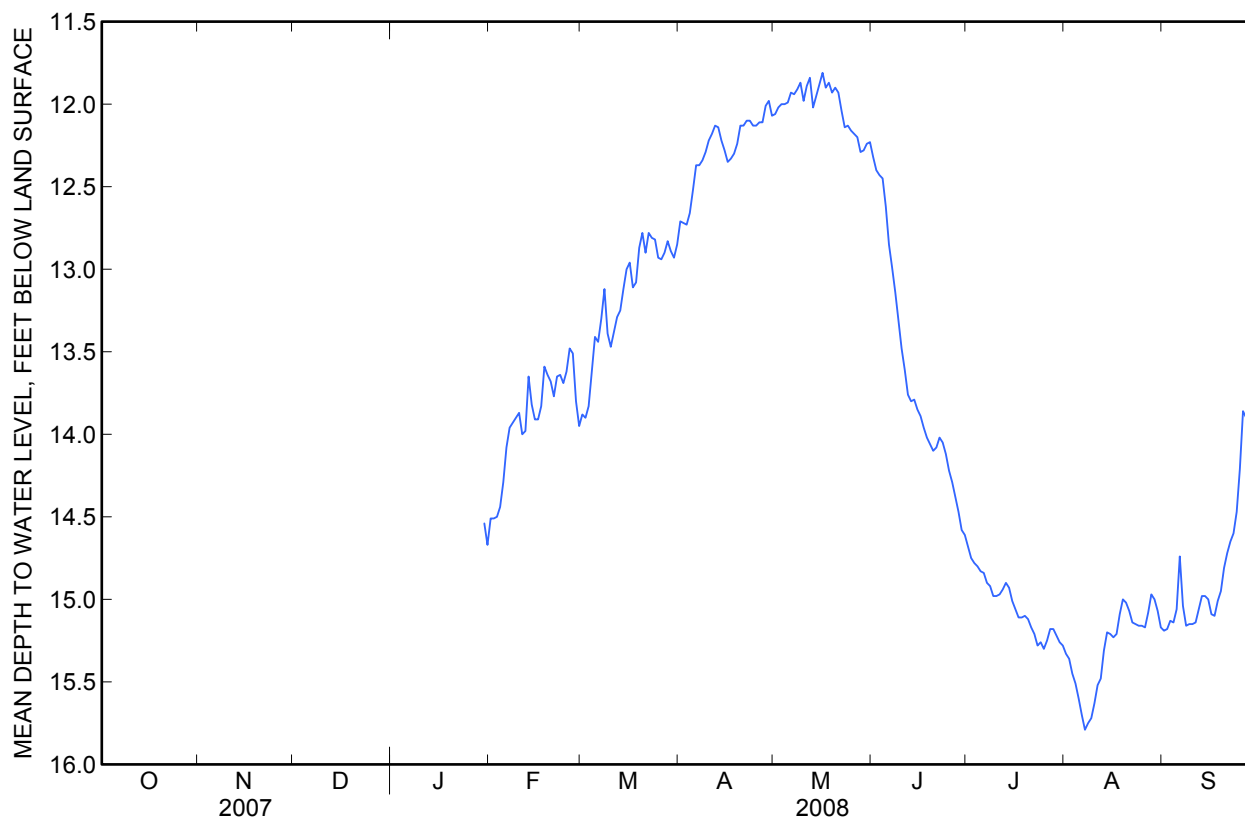
344418077272701 Local number ON-355 at Camp Geiger, NC, NC-52.3 (Peedee),—Continued

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	---	---	14.51	13.88	12.71	12.06	12.32	14.68	15.33	15.19
2	---	---	---	---	14.51	13.90	12.72	12.02	12.40	14.75	15.36	15.18
3	---	---	---	---	14.50	13.83	12.73	12.00	12.43	14.78	15.45	15.13
4	---	---	---	---	14.44	13.62	12.66	12.00	12.45	14.80	15.51	15.14
5	---	---	---	---	14.29	13.41	12.52	11.99	12.62	14.83	15.60	15.06
6	---	---	---	---	14.08	13.44	12.37	11.93	12.85	14.84	15.70	14.74
7	---	---	---	---	13.96	13.30	12.37	11.94	12.99	14.90	15.79	15.04
8	---	---	---	---	13.93	13.12	12.34	11.91	13.14	14.92	15.75	15.16
9	---	---	---	---	13.90	13.39	12.29	11.87	13.31	14.98	15.72	15.15
10	---	---	---	---	13.87	13.47	12.22	11.98	13.48	14.98	15.63	15.15
11	---	---	---	---	14.00	13.38	12.18	11.89	13.61	14.97	15.52	15.14
12	---	---	---	---	13.98	13.29	12.13	11.84	13.76	14.94	15.48	15.06
13	---	---	---	---	13.65	13.25	12.14	12.02	13.80	14.90	15.31	14.98
14	---	---	---	---	13.82	13.12	12.22	11.95	13.79	14.93	15.20	14.98
15	---	---	---	---	13.91	13.00	12.28	11.88	13.85	15.01	15.21	15.00
16	---	---	---	---	13.91	12.96	12.35	11.81	13.89	15.06	15.23	15.09
17	---	---	---	---	13.83	13.11	12.33	11.90	13.96	15.11	15.21	15.10
18	---	---	---	---	13.59	13.08	12.30	11.87	14.02	15.11	15.09	15.01
19	---	---	---	---	13.64	12.87	12.24	11.93	14.06	15.10	15.00	14.95
20	---	---	---	---	13.68	12.78	12.13	11.90	14.10	15.12	15.02	14.81
21	---	---	---	---	13.77	12.90	12.13	11.93	14.08	15.17	15.07	14.72
22	---	---	---	---	13.65	12.78	12.10	12.04	14.02	15.21	15.14	14.65
23	---	---	---	---	13.64	12.81	12.10	12.14	14.05	15.28	15.15	14.60
24	---	---	---	---	13.69	12.82	12.13	12.13	14.12	15.26	15.16	14.47
25	---	---	---	---	13.62	12.93	12.13	12.16	14.22	15.30	15.16	14.21
26	---	---	---	---	13.48	12.94	12.11	12.18	14.29	15.25	15.17	13.86
27	---	---	---	---	13.51	12.90	12.11	12.20	14.38	15.18	15.08	13.90
28	---	---	---	---	13.80	12.83	12.01	12.29	14.47	15.18	14.97	13.90
29	---	---	---	---	13.95	12.89	11.98	12.28	14.58	15.22	15.00	13.93
30	---	---	---	14.54	---	12.93	12.07	12.24	14.61	15.26	15.07	13.88
31	---	---	---	14.67	---	12.85	---	12.23	---	15.28	15.17	---
Mean	---	---	---	---	13.90	13.15	12.27	12.02	13.65	15.04	15.30	14.77
Max	---	---	---	---	14.51	13.90	12.73	12.29	14.61	15.30	15.79	15.19
Min	---	---	---	---	13.48	12.78	11.98	11.81	12.32	14.68	14.97	13.86

Water-Data Report 2008

344418077272701 Local number ON-355 at Camp Geiger, NC, NC-52.3 (Peedee),—Continued



Water-Data Report 2008

344418077272701 Local number ON-355 at Camp Geiger, NC, NC-52.3 (Peedee),—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 2008 to September 2008.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: August 2008 to September 2008.

WATER TEMPERATURE: August 2008 to September 2008.

INSTRUMENTATION.--Water-quality monitor in operation from January 2008 to September 2008. Missing data from January to August 18, 2008 due to equipment problems.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1470 microsiemens, on many days during the period; minimum recorded, 1450 microsiemens, August

WATER TEMPERATURE: Maximum recorded, 18.4°C, on many days during the period; minimum recorded, 18.4°C, on many days during the period.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

[illegible]

Water-Data Report 2008

344418077272701 Local number ON-355 at Camp Geiger, NC, NC-52.3 (Peedee),—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

[illegible]

Water-Data Report 2008

344418077272701 Local number ON-355 at Camp Geiger, NC, NC-52.3 (Pee Dee),—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	---	---	---	---	---	---	---	---	---	18.4	18.4	18.4
2	---	---	---	---	---	---	---	---	---	18.4	18.4	18.4
3	---	---	---	---	---	---	---	---	---	18.4	18.4	18.4
4	---	---	---	---	---	---	---	---	---	18.4	18.4	18.4
5	---	---	---	---	---	---	---	---	---	18.4	18.4	18.4
6	---	---	---	---	---	---	---	---	---	18.4	18.4	18.4
7	---	---	---	---	---	---	---	---	---	18.4	18.4	18.4
8	---	---	---	---	---	---	---	---	---	18.4	18.4	18.4
9	---	---	---	---	---	---	---	---	---	18.4	18.4	18.4
10	---	---	---	---	---	---	---	---	---	18.4	18.4	18.4
11	---	---	---	---	---	---	---	---	---	18.4	18.4	18.4
12	---	---	---	---	---	---	---	---	---	18.4	18.4	18.4
13	---	---	---	---	---	---	---	---	---	18.4	18.4	18.4
14	---	---	---	---	---	---	---	---	---	18.4	18.4	18.4
15	---	---	---	---	---	---	---	---	---	18.4	18.4	18.4
16	---	---	---	---	---	---	---	---	---	18.4	18.4	18.4
17	---	---	---	---	---	---	---	---	---	18.4	18.4	18.4
18	---	---	---	---	---	---	---	---	---	18.4	18.4	18.4
19	---	---	---	---	---	---	18.4	18.4	18.4	18.4	18.4	18.4
20	---	---	---	---	---	---	18.4	18.4	18.4	18.4	18.4	18.4
21	---	---	---	---	---	---	18.4	18.4	18.4	18.4	18.4	18.4
22	---	---	---	---	---	---	18.4	18.4	18.4	18.4	18.4	18.4
23	---	---	---	---	---	---	18.4	18.4	18.4	18.4	18.4	18.4
24	---	---	---	---	---	---	18.4	18.4	18.4	18.4	18.4	18.4
25	---	---	---	---	---	---	18.4	18.4	18.4	18.4	18.4	18.4
26	---	---	---	---	---	---	18.4	18.4	18.4	18.4	18.4	18.4
27	---	---	---	---	---	---	18.4	18.4	18.4	18.4	18.4	18.4
28	---	---	---	---	---	---	18.4	18.4	18.4	18.4	18.4	18.4
29	---	---	---	---	---	---	18.4	18.4	18.4	18.4	18.4	18.4
30	---	---	---	---	---	---	18.4	18.4	18.4	18.4	18.4	18.4
31	---	---	---	---	---	---	18.4	18.4	18.4	---	---	---
Month	---	---	---	---	---	---	---	---	---	18.4	18.4	18.4

Groundwater Level and Specific Conductance Monitoring at Marine Corps Base, Camp Lejeune, 2007–2008

Water-Data Report 2008

344418077272701 Local number ON-355 at Camp Geiger, NC, NC-52.3 (Peedee),—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

[illegible]

Water-Data Report 2008

344418077272701 Local number ON-355 at Camp Geiger, NC, NC-52.3 (Peedee),—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

[illegible]

Water-Data Report 2008

344418077272701 Local number ON-355 at Camp Geiger, NC, NC-52.3 (Peedee),—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	---	---	---	---	---	---	---	---	---	1,470	1,470	1,470
2	---	---	---	---	---	---	---	---	---	1,470	1,470	1,470
3	---	---	---	---	---	---	---	---	---	1,470	1,470	1,470
4	---	---	---	---	---	---	---	---	---	1,470	1,470	1,470
5	---	---	---	---	---	---	---	---	---	1,470	1,470	1,470
6	---	---	---	---	---	---	---	---	---	1,470	1,470	1,470
7	---	---	---	---	---	---	---	---	---	1,470	1,470	1,470
8	---	---	---	---	---	---	---	---	---	1,470	1,470	1,470
9	---	---	---	---	---	---	---	---	---	1,470	1,470	1,470
10	---	---	---	---	---	---	---	---	---	1,470	1,470	1,470
11	---	---	---	---	---	---	---	---	---	1,470	1,470	1,470
12	---	---	---	---	---	---	---	---	---	1,470	1,470	1,470
13	---	---	---	---	---	---	---	---	---	1,470	1,470	1,470
14	---	---	---	---	---	---	---	---	---	1,470	1,470	1,470
15	---	---	---	---	---	---	---	---	---	1,470	1,470	1,470
16	---	---	---	---	---	---	---	---	---	1,470	1,470	1,470
17	---	---	---	---	---	---	---	---	---	1,470	1,470	1,470
18	---	---	---	---	---	---	---	---	---	1,470	1,470	1,470
19	---	---	---	---	---	---	1,470	1,460	1,470	1,470	1,470	1,470
20	---	---	---	---	---	---	1,470	1,460	1,470	1,470	1,470	1,470
21	---	---	---	---	---	---	1,470	1,460	1,470	1,470	1,470	1,470
22	---	---	---	---	---	---	1,470	1,470	1,470	1,470	1,470	1,470
23	---	---	---	---	---	---	1,470	1,470	1,470	1,470	1,460	1,470
24	---	---	---	---	---	---	1,470	1,470	1,470	1,470	1,460	1,470
25	---	---	---	---	---	---	1,470	1,470	1,470	1,470	1,460	1,470
26	---	---	---	---	---	---	1,470	1,450	1,470	1,470	1,460	1,470
27	---	---	---	---	---	---	1,470	1,470	1,470	1,470	1,460	1,470
28	---	---	---	---	---	---	1,470	1,470	1,470	1,470	1,460	1,470
29	---	---	---	---	---	---	1,470	1,470	1,470	1,470	1,460	1,470
30	---	---	---	---	---	---	1,470	1,470	1,470	1,470	1,460	1,470
31	---	---	---	---	---	---	1,470	1,470	1,470	---	---	---
Month	---	---	---	---	---	---	---	---	---	1,470	1,460	1,470



Water-Data Report 2008

344417077243301 Local number ON-356, Montford Point at Jacksonville, NC (Peedee)

Northern Atlantic Coastal Plain aquifer system
Peedee Formation
Onslow County, NC

LOCATION.--Lat 34°44'16.8", long 77°24'33.2" referenced to North American Datum of 1983, Onslow County, NC, Hydrologic Unit 03030001, approximately 0.43 mi southeast of U.S. Highway 17, and 0.11 mi west of Montford Landing Road at Jacksonville.

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Drilled observation well, depth 341 ft, diameter 4 in., cased to 316 ft, screened interval from 316 ft to 336 ft.

DATUM.--Land-surface datum is 20.74 ft above North American Vertical Datum of 1988. Measuring point: top of PVC well casing, 2.34 ft above land-surface datum, January 30, 2008, to present.

PERIOD OF RECORD.--February 2008 to September 2008.

GAGE.--Water-level recorder collecting data at 60-minute intervals. Satellite telemetry at site.

REMARKS.--Well is part of U.S. Marine Corps Base, Camp Lejeune, North Carolina, Water Resources Network project.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 11.84 ft below land-surface datum, May 11, 2008; lowest water level recorded, 13.43 ft below land-surface datum, September 23, 2008.

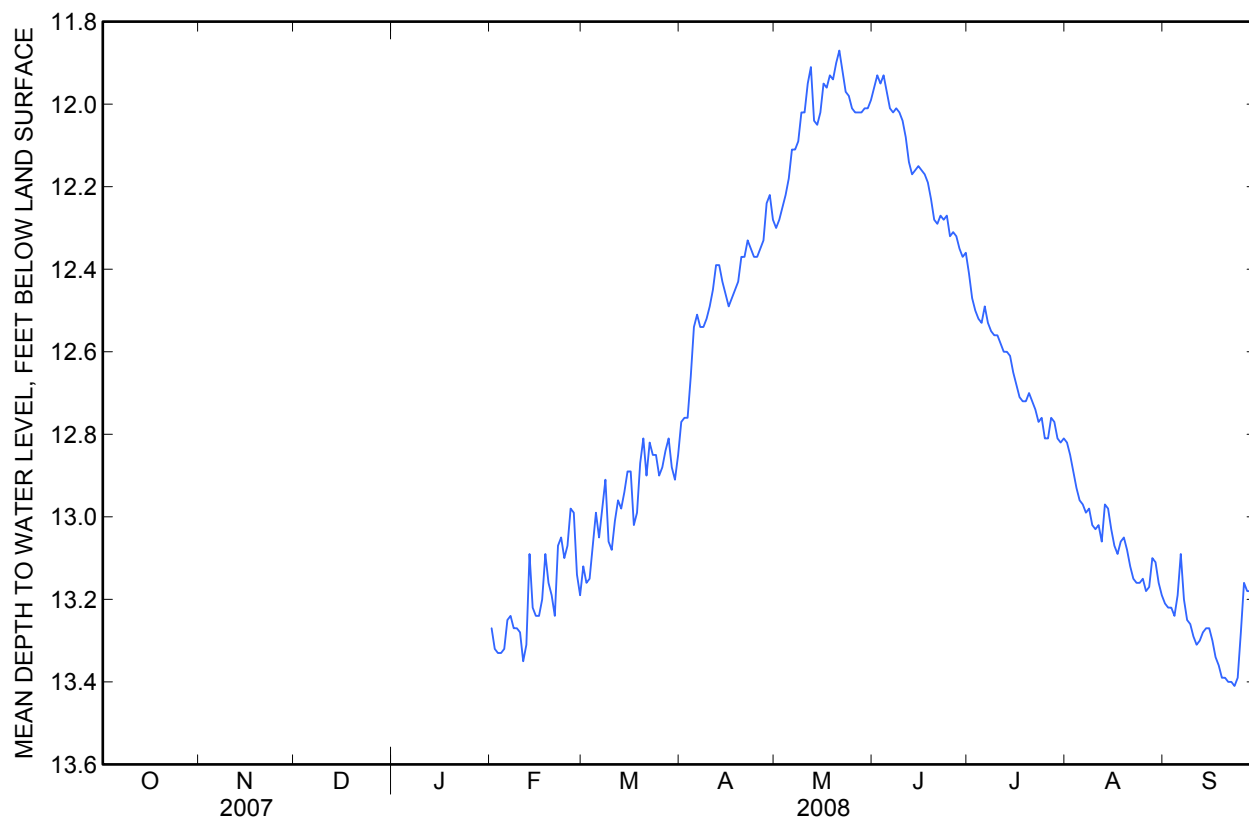
Water-Data Report 2008

344417077243301 Local number ON-356, Montford Point at Jacksonville, NC (Peedee)—Continued

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	---	---	13.27	13.12	12.77	12.30	11.96	12.41	12.82	13.21
2	---	---	---	---	13.32	13.16	12.76	12.28	11.93	12.47	12.85	13.22
3	---	---	---	---	13.33	13.15	12.76	12.25	11.95	12.50	12.89	13.22
4	---	---	---	---	13.33	13.07	12.66	12.22	11.93	12.52	12.93	13.24
5	---	---	---	---	13.32	12.99	12.54	12.18	11.97	12.53	12.96	13.19
6	---	---	---	---	13.25	13.05	12.51	12.11	12.01	12.49	12.97	13.09
7	---	---	---	---	13.24	12.98	12.54	12.11	12.02	12.53	12.99	13.20
8	---	---	---	---	13.27	12.91	12.54	12.09	12.01	12.55	12.98	13.25
9	---	---	---	---	13.27	13.06	12.52	12.02	12.02	12.56	13.02	13.26
10	---	---	---	---	13.28	13.08	12.49	12.02	12.04	12.56	13.03	13.29
11	---	---	---	---	13.35	13.01	12.45	11.95	12.08	12.58	13.02	13.31
12	---	---	---	---	13.31	12.96	12.39	11.91	12.14	12.60	13.06	13.30
13	---	---	---	---	13.09	12.98	12.39	12.04	12.17	12.60	12.97	13.28
14	---	---	---	---	13.22	12.94	12.43	12.05	12.16	12.61	12.98	13.27
15	---	---	---	---	13.24	12.89	12.46	12.02	12.15	12.65	13.03	13.27
16	---	---	---	---	13.24	12.89	12.49	11.95	12.16	12.68	13.07	13.30
17	---	---	---	---	13.20	13.02	12.47	11.96	12.17	12.71	13.09	13.34
18	---	---	---	---	13.09	12.99	12.45	11.93	12.19	12.72	13.06	13.36
19	---	---	---	---	13.16	12.87	12.43	11.94	12.23	12.72	13.05	13.39
20	---	---	---	---	13.19	12.81	12.37	11.90	12.28	12.70	13.08	13.39
21	---	---	---	---	13.24	12.90	12.37	11.87	12.29	12.72	13.12	13.40
22	---	---	---	---	13.07	12.82	12.33	11.92	12.27	12.74	13.15	13.40
23	---	---	---	---	13.05	12.85	12.35	11.97	12.28	12.77	13.16	13.41
24	---	---	---	---	13.10	12.85	12.37	11.98	12.27	12.76	13.16	13.39
25	---	---	---	---	13.07	12.90	12.37	12.01	12.32	12.81	13.15	13.28
26	---	---	---	---	12.98	12.88	12.35	12.02	12.31	12.81	13.18	13.16
27	---	---	---	---	12.99	12.84	12.33	12.02	12.32	12.76	13.17	13.18
28	---	---	---	---	13.14	12.81	12.24	12.02	12.35	12.77	13.10	13.18
29	---	---	---	---	13.19	12.88	12.22	12.01	12.37	12.81	13.11	13.20
30	---	---	---	---	---	12.91	12.28	12.01	12.36	12.82	13.16	13.18
31	---	---	---	---	---	12.85	---	11.99	---	12.81	13.19	---
Mean	---	---	---	---	13.20	12.95	12.45	12.03	12.16	12.65	13.05	13.27
Max	---	---	---	---	13.35	13.16	12.77	12.30	12.37	12.82	13.19	13.41
Min	---	---	---	---	12.98	12.81	12.22	11.87	11.93	12.41	12.82	13.09

Water-Data Report 2008

344417077243301 Local number ON-356, Montford Point at Jacksonville, NC (Peedee)—Continued

Water-Data Report 2008

344417077243301 Local number ON-356, Montford Point at Jacksonville, NC (Peedee)—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 2008 to September 2008.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 2008 to September 2008.

WATER TEMPERATURE: January 2008 to September 2008.

INSTRUMENTATION.--Water-quality monitor in operation from January 2008 to September 2008.

REMARKS.--Well is part of U.S. Marine Corps Base, Camp Lejeune, North Carolina, Water Resources Network project.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,510 microsiemens, on many days during the period; minimum recorded, 1,480 microsiemens, on many days during the period.

WATER TEMPERATURE: Maximum recorded, 18.9°C, on many days during the period; minimum recorded, 18.7°C, on many days during the period.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

[illegible]

Water-Data Report 2008

344417077243301 Local number ON-356, Montford Point at Jacksonville, NC (Peedee)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8
2	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8
3	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8
4	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8
5	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8
6	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8
7	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8
8	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8
9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8
10	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.9	18.8	18.8	18.8
11	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
12	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
13	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
14	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
15	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
16	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
17	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
18	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
19	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
20	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
21	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
22	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
23	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
24	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
25	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
26	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
27	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
28	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
29	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
30	---	---	---	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8	18.8
31	---	---	---	18.9	18.9	18.9	---	---	---	18.8	18.8	18.8
Month	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.8	18.8	18.8	18.8	18.8

Water-Data Report 2008

344417077243301 Local number ON-356, Montford Point at Jacksonville, NC (Peedee)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
June			July			August			September			
1	18.8	18.8	18.8	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7
2	18.8	18.8	18.8	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7
3	18.8	18.8	18.8	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7
4	18.8	18.8	18.8	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7
5	18.8	18.8	18.8	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7
6	18.8	18.8	18.8	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7
7	18.8	18.8	18.8	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7
8	18.8	18.8	18.8	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7
9	18.8	18.8	18.8	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7
10	18.8	18.8	18.8	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7
11	18.8	18.8	18.8	18.8	18.8	18.8	18.7	18.7	18.7	18.8	18.7	18.8
12	18.8	18.8	18.8	18.8	18.8	18.8	18.7	18.7	18.7	18.8	18.8	18.8
13	18.8	18.8	18.8	18.8	18.8	18.8	18.7	18.7	18.7	18.8	18.8	18.8
14	18.8	18.8	18.8	18.8	18.8	18.8	18.7	18.7	18.7	18.8	18.8	18.8
15	18.8	18.8	18.8	18.8	18.8	18.8	18.7	18.7	18.7	18.8	18.8	18.8
16	18.8	18.8	18.8	18.8	18.8	18.8	18.7	18.7	18.7	18.8	18.8	18.8
17	18.8	18.8	18.8	18.8	18.8	18.8	18.7	18.7	18.7	18.8	18.8	18.8
18	18.8	18.8	18.8	18.8	18.8	18.8	18.7	18.7	18.7	18.8	18.8	18.8
19	18.8	18.8	18.8	18.8	18.8	18.8	18.7	18.7	18.7	18.8	18.8	18.8
20	18.8	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.8	18.8	18.8
21	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7	18.8	18.8	18.8
22	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7	18.8	18.8	18.8
23	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7	18.8	18.8	18.8
24	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7	18.8	18.8	18.8
25	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7	18.8	18.8	18.8
26	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7	18.8	18.8	18.8
27	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7	18.8	18.8	18.8
28	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7	18.8	18.8	18.8
29	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7	18.8	18.8	18.8
30	18.8	18.8	18.8	18.7	18.7	18.7	18.7	18.7	18.7	18.8	18.8	18.8
31	---	---	---	18.7	18.7	18.7	18.7	18.7	18.7	---	---	---
Month	18.8	18.8	18.8	18.8	18.7	18.8	18.7	18.7	18.7	18.8	18.7	18.8

Water-Data Report 2008

344417077243301 Local number ON-356, Montford Point at Jacksonville, NC (Peedee)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

[illegible]

Water-Data Report 2008

344417077243301 Local number ON-356, Montford Point at Jacksonville, NC (Peedee)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,480	1,480	1,480
2	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,480	1,480	1,480
3	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,480	1,480	1,480
4	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,480	1,480	1,480
5	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,480	1,480	1,480
6	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,480	1,480	1,480
7	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,480	1,480	1,480
8	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,480	1,480	1,480
9	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,500	1,500	1,480	1,480	1,480
10	1,510	1,510	1,510	1,510	1,510	1,510	1,500	1,500	1,500	1,480	1,480	1,480
11	1,510	1,510	1,510	1,510	1,510	1,510	1,500	1,500	1,500	1,480	1,480	1,480
12	1,510	1,510	1,510	1,510	1,510	1,510	1,500	1,500	1,500	1,480	1,480	1,480
13	1,510	1,510	1,510	1,510	1,510	1,510	1,500	1,500	1,500	1,480	1,480	1,480
14	1,510	1,510	1,510	1,510	1,510	1,510	1,500	1,500	1,500	1,480	1,480	1,480
15	1,510	1,510	1,510	1,510	1,510	1,510	1,500	1,500	1,500	1,480	1,480	1,480
16	1,510	1,510	1,510	1,510	1,510	1,510	1,500	1,500	1,500	1,480	1,480	1,480
17	1,510	1,510	1,510	1,510	1,510	1,510	1,500	1,500	1,500	1,480	1,480	1,480
18	1,510	1,510	1,510	1,510	1,510	1,510	1,500	1,500	1,500	1,480	1,480	1,480
19	1,510	1,510	1,510	1,510	1,510	1,510	1,500	1,490	1,500	1,480	1,480	1,480
20	1,510	1,510	1,510	1,510	1,510	1,510	1,500	1,490	1,500	1,480	1,480	1,480
21	1,510	1,510	1,510	1,510	1,510	1,510	1,500	1,490	1,500	1,480	1,480	1,480
22	1,510	1,510	1,510	1,510	1,510	1,510	1,500	1,490	1,500	1,480	1,480	1,480
23	1,510	1,510	1,510	1,510	1,510	1,510	1,500	1,490	1,500	1,480	1,480	1,480
24	1,510	1,510	1,510	1,510	1,510	1,510	1,500	1,490	1,500	1,480	1,480	1,480
25	1,510	1,510	1,510	1,510	1,510	1,510	1,500	1,490	1,500	1,480	1,480	1,480
26	1,510	1,510	1,510	1,510	1,510	1,510	1,500	1,480	1,490	1,480	1,480	1,480
27	1,510	1,510	1,510	1,510	1,510	1,510	1,480	1,480	1,480	1,480	1,480	1,480
28	1,510	1,510	1,510	1,510	1,510	1,510	1,480	1,480	1,480	1,480	1,480	1,480
29	1,510	1,510	1,510	1,510	1,510	1,510	1,480	1,480	1,480	1,480	1,480	1,480
30	1,510	1,510	1,510	1,510	1,510	1,510	1,480	1,480	1,480	1,480	1,480	1,480
31	---	---	---	1,510	1,510	1,510	1,480	1,480	1,480	---	---	---
Month	1,510	1,510	1,510	1,510	1,510	1,510	1,510	1,480	1,500	1,480	1,480	1,480



Water-Data Report 2008

344417077243302 Local number ON-357, Montford Point 2 at Jacksonville, NC (Lower Castle Hayne)

Northern Atlantic Coastal Plain aquifer system
Castle Hayne Formation
Onslow County, NC

LOCATION.--Lat 34°44'17.0", long 77°24'32.9" referenced to North American Datum of 1983, Onslow County, NC, Hydrologic Unit 03030001, approximately 0.43 miles southeast of U.S. Highway 17, and 0.11 mile west of Montford Landing Road, at Jacksonville, NC.

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., cased to 200 ft, screened interval from 200 to 230 ft.

DATUM.--Land-surface datum is 20.54 ft above North American Vertical Datum of 1988. Measuring point: top of PVC well casing, 2.53 ft above land-surface datum, February 1, 2008, to present.

PERIOD OF RECORD.--February 2008 to September 2008.

GAGE.--Water-level recorder collecting data at 60-minute intervals. Satellite telemetry at site.

REMARKS.--Well is part of U.S. Marine Corps Base, Camp Lejeune, North Carolina, Water Resources Network project.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 12.69 ft below land-surface datum, May 11, 2008; lowest water level recorded, 16.61 ft below land-surface datum, August 7, 2008.

Water-Data Report 2008

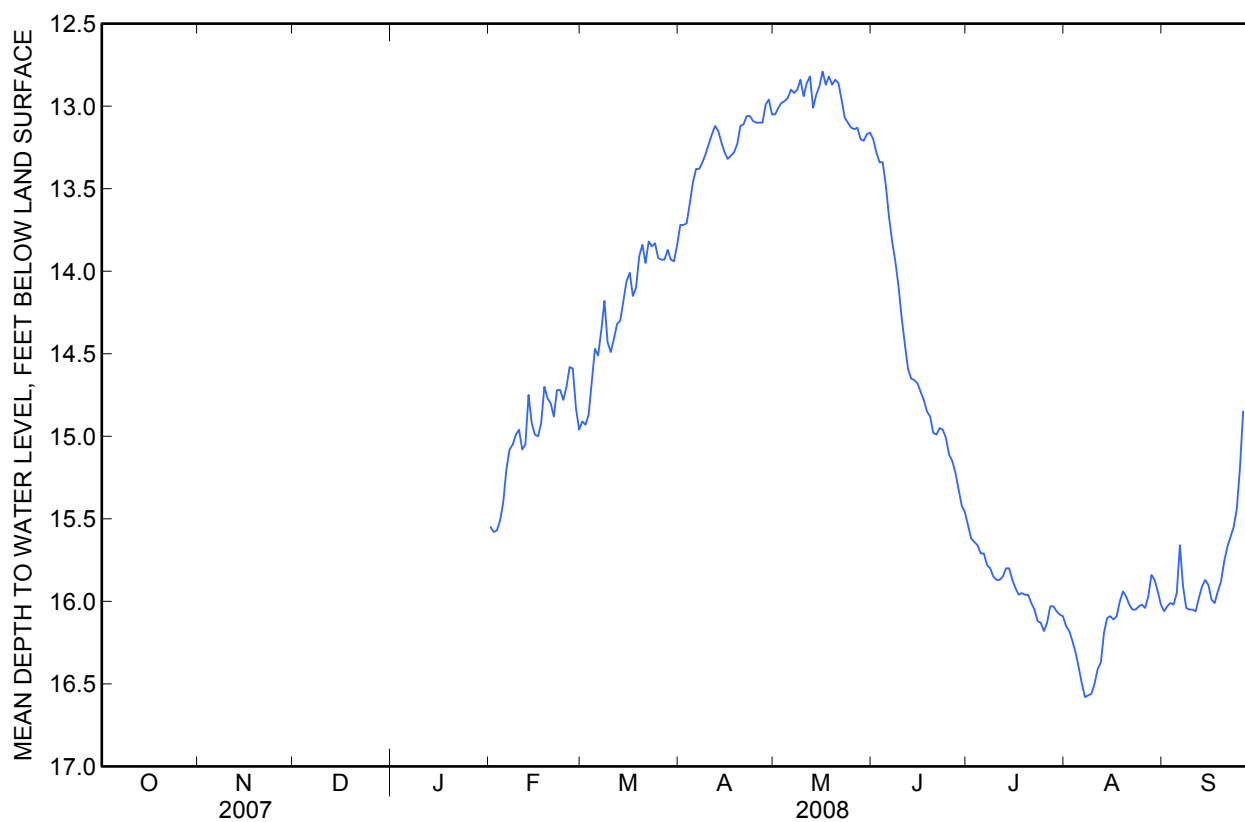
344417077243302 Local number ON-357, Montford Point 2 at Jacksonville, NC (Lower Castle Hayne)—Continued

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	---	---	15.55	14.91	13.72	13.05	13.20	15.54	16.15	16.06
2	---	---	---	---	15.58	14.93	13.72	13.01	13.28	15.62	16.18	16.03
3	---	---	---	---	15.57	14.87	13.71	12.98	13.34	15.64	16.24	16.01
4	---	---	---	---	15.51	14.67	13.59	12.97	13.34	15.66	16.31	16.02
5	---	---	---	---	15.40	14.47	13.46	12.95	13.48	15.71	16.40	15.95
6	---	---	---	---	15.20	14.51	13.38	12.90	13.67	15.71	16.50	15.66
7	---	---	---	---	15.08	14.36	13.38	12.92	13.82	15.78	16.58	15.91
8	---	---	---	---	15.05	14.18	13.34	12.90	13.94	15.80	16.57	16.04
9	---	---	---	---	14.99	14.43	13.29	12.84	14.09	15.85	16.56	16.05
10	---	---	---	---	14.96	14.49	13.23	12.94	14.28	15.87	16.50	16.05
11	---	---	---	---	15.08	14.41	13.17	12.86	14.44	15.87	16.41	16.06
12	---	---	---	---	15.05	14.32	13.12	12.82	14.59	15.85	16.37	15.98
13	---	---	---	---	14.75	14.30	13.15	13.01	14.65	15.80	16.19	15.91
14	---	---	---	---	14.92	14.18	13.22	12.93	14.66	15.80	16.10	15.87
15	---	---	---	---	14.99	14.06	13.28	12.88	14.68	15.87	16.09	15.90
16	---	---	---	---	15.00	14.01	13.32	12.79	14.73	15.92	16.11	15.99
17	---	---	---	---	14.92	14.15	13.30	12.87	14.78	15.96	16.09	16.01
18	---	---	---	---	14.70	14.10	13.28	12.82	14.85	15.95	16.00	15.94
19	---	---	---	---	14.77	13.91	13.23	12.87	14.88	15.96	15.94	15.88
20	---	---	---	---	14.80	13.84	13.12	12.84	14.98	15.96	15.97	15.76
21	---	---	---	---	14.88	13.95	13.11	12.86	14.99	16.01	16.02	15.67
22	---	---	---	---	14.72	13.82	13.06	12.96	14.95	16.05	16.05	15.61
23	---	---	---	---	14.72	13.85	13.06	13.07	14.96	16.12	16.05	15.55
24	---	---	---	---	14.78	13.83	13.09	13.10	15.01	16.13	16.03	15.44
25	---	---	---	---	14.70	13.92	13.10	13.13	15.11	16.18	16.02	15.19
26	---	---	---	---	14.58	13.93	13.10	13.14	15.15	16.13	16.04	14.85
27	---	---	---	---	14.59	13.93	13.10	13.13	15.22	16.03	15.97	---
28	---	---	---	---	14.83	13.87	12.99	13.20	15.32	16.03	15.84	---
29	---	---	---	---	14.96	13.93	12.96	13.21	15.42	16.06	15.87	---
30	---	---	---	---	---	13.94	13.05	13.17	15.46	16.08	15.94	---
31	---	---	---	---	---	13.84	---	13.16	---	16.09	16.02	---
Mean	---	---	---	---	14.99	14.19	13.25	12.98	14.51	15.90	16.16	---
Max	---	---	---	---	15.58	14.93	13.72	13.21	15.46	16.18	16.58	---
Min	---	---	---	---	14.58	13.82	12.96	12.79	13.20	15.54	15.84	---

Water-Data Report 2008

344417077243302 Local number ON-357, Montford Point 2 at Jacksonville, NC (Lower Castle Hayne)—Continued



Water-Data Report 2008

344417077243302 Local number ON-357, Montford Point 2 at Jacksonville, NC (Lower Castle Hayne)—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 2008 to September 2008.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 2008 to September 2008.

WATER TEMPERATURE: January 2008 to September 2008.

INSTRUMENTATION.--Water-quality monitor in operation from January 2008 to September 2008.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,240 microsiemens, on many days during the period; minimum recorded, 1,180 microsiemens, on many days during the period.

WATER TEMPERATURE: Maximum recorded, 18.3°C, on many days during the period; minimum recorded, 18.2°C, on several days during the period.

**TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

Water-Data Report 2008

344417077243302 Local number ON-357, Montford Point 2 at Jacksonville, NC (Lower Castle Hayne)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
2	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.3	18.3	18.3	18.3
4	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.3	18.3	18.3	18.3
5	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
6	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
7	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
8	18.3	18.3	18.3	18.3	18.2	18.3	18.3	18.3	18.3	18.3	18.3	18.3
9	18.3	18.3	18.3	18.3	18.2	18.3	18.3	18.3	18.3	18.3	18.3	18.3
10	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
11	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
12	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
13	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
14	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
15	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
16	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
17	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
18	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
19	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
20	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
21	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
22	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
23	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
24	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
25	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
26	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
27	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
28	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
29	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
30	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
31	---	---	---	18.3	18.3	18.3	---	---	---	18.3	18.3	18.3
Month	18.3	18.3	18.3	18.3	18.2	18.3	18.3	18.2	18.3	18.3	18.3	18.3

Water-Data Report 2008

344417077243302 Local number ON-357, Montford Point 2 at Jacksonville, NC (Lower Castle Hayne)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
2	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
4	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
5	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
6	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
7	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
8	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
9	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
10	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
11	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
12	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.2
13	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.2	18.2
14	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.2
15	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.3
16	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.3
17	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.3
18	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
19	18.3	18.3	18.3	18.3	18.3	18.3	---	---	---	18.3	18.3	18.3
20	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
21	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
22	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
23	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
24	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
25	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
26	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
27	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.2	18.3	18.3	18.3	18.3
28	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
29	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
30	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
31	---	---	---	18.3	18.3	18.3	18.3	18.3	18.3	---	---	---
Month	18.3	18.3	18.3	18.3	18.3	18.3	---	---	---	18.3	18.2	18.3

Water-Data Report 2008

344417077243302 Local number ON-357, Montford Point 2 at Jacksonville, NC (Lower Castle Hayne)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

[illegible]

Water-Data Report 2008

34441707243302 Local number ON-357, Montford Point 2 at Jacksonville, NC (Lower Castle Hayne)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
February			March			April			May			
1	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230
2	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230
3	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230
4	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230
5	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230
6	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230
7	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230
8	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230
9	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230
10	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230
11	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230
12	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,240	1,230	1,230	1,230
13	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230	1,230	1,230
14	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230	1,230	1,230	1,230
15	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230	1,230	1,230	1,230
16	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230	1,230	1,230	1,230
17	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230	1,230	1,230	1,230
18	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230	1,230	1,230	1,230
19	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230	1,230	1,230	1,230
20	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230	1,230	1,230	1,230
21	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230	1,230	1,230	1,230
22	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230	1,230	1,230	1,230
23	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230	1,230	1,230	1,230
24	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230	1,230	1,230	1,230
25	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230	1,230	1,230	1,230
26	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230	1,230	1,230	1,230
27	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230	1,230	1,220	1,220
28	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230	1,220	1,220	1,220
29	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230	1,220	1,220	1,220
30	---	---	---	1,240	1,240	1,240	1,230	1,230	1,230	1,220	1,220	1,220
31	---	---	---	1,240	1,240	1,240	---	---	---	1,220	1,220	1,220
Month	1,240	1,240	1,240	1,240	1,240	1,240	1,240	1,230	1,230	1,230	1,220	1,230

Water-Data Report 2008

344417077243302 Local number ON-357, Montford Point 2 at Jacksonville, NC (Lower Castle Hayne)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	1,220	1,220	1,220	1,210	1,210	1,210	1,210	1,210	1,210	1,180	1,180	1,180
2	1,220	1,220	1,220	1,210	1,210	1,210	1,210	1,210	1,210	1,180	1,180	1,180
3	1,220	1,220	1,220	1,210	1,200	1,210	1,210	1,210	1,210	1,180	1,180	1,180
4	1,220	1,220	1,220	1,210	1,200	1,210	1,210	1,200	1,210	1,180	1,180	1,180
5	1,220	1,220	1,220	1,200	1,200	1,200	1,200	1,200	1,200	1,180	1,180	1,180
6	1,220	1,220	1,220	1,200	1,200	1,200	1,200	1,200	1,200	1,180	1,180	1,180
7	1,220	1,220	1,220	1,200	1,200	1,200	1,200	1,200	1,200	1,180	1,180	1,180
8	1,220	1,220	1,220	1,200	1,200	1,200	1,200	1,200	1,200	1,180	1,180	1,180
9	1,220	1,220	1,220	1,200	1,200	1,200	1,200	1,200	1,200	1,180	1,180	1,180
10	1,220	1,220	1,220	1,200	1,200	1,200	1,200	1,200	1,200	1,180	1,180	1,180
11	1,220	1,220	1,220	1,200	1,200	1,200	1,200	1,190	1,200	1,180	1,180	1,180
12	1,220	1,220	1,220	1,200	1,200	1,200	1,190	1,190	1,190	1,190	1,180	1,180
13	1,220	1,220	1,220	1,200	1,200	1,200	1,190	1,190	1,190	1,190	1,180	1,190
14	1,220	1,220	1,220	1,200	1,200	1,200	1,190	1,190	1,190	1,190	1,180	1,190
15	1,220	1,220	1,220	1,200	1,200	1,200	1,190	1,190	1,190	1,190	1,180	1,190
16	1,220	1,220	1,220	1,200	1,200	1,200	1,190	1,190	1,190	1,190	1,180	1,180
17	1,220	1,220	1,220	1,200	1,200	1,200	1,190	1,190	1,190	1,190	1,180	1,180
18	1,220	1,220	1,220	1,200	1,190	1,200	1,190	1,190	1,190	1,180	1,180	1,180
19	1,220	1,210	1,220	1,190	1,190	1,190	---	---	---	1,180	1,180	1,180
20	1,210	1,210	1,210	1,190	1,190	1,190	1,200	1,190	1,200	1,180	1,180	1,180
21	1,210	1,210	1,210	1,190	1,190	1,190	1,200	1,190	1,190	1,180	1,180	1,180
22	1,210	1,210	1,210	1,190	1,190	1,190	1,190	1,190	1,190	1,180	1,180	1,180
23	1,210	1,210	1,210	1,190	1,190	1,190	1,190	1,190	1,190	1,180	1,180	1,180
24	1,210	1,210	1,210	1,190	1,190	1,190	1,190	1,190	1,190	1,180	1,180	1,180
25	1,210	1,210	1,210	1,190	1,190	1,190	1,190	1,190	1,190	1,180	1,180	1,180
26	1,210	1,210	1,210	1,190	1,190	1,190	1,200	1,190	1,190	1,180	1,180	1,180
27	1,210	1,210	1,210	1,190	1,190	1,190	1,190	1,190	1,190	1,180	1,180	1,180
28	1,210	1,210	1,210	1,190	1,190	1,190	1,190	1,190	1,190	1,180	1,180	1,180
29	1,210	1,210	1,210	1,190	1,180	1,180	1,190	1,190	1,190	1,180	1,180	1,180
30	1,210	1,210	1,210	1,180	1,180	1,180	1,190	1,180	1,190	1,180	1,180	1,180
31	---	---	---	1,210	1,180	1,180	1,180	1,180	1,180	---	---	---
Month	1,220	1,210	1,220	1,210	1,180	1,200	---	---	---	1,190	1,180	1,180



Water-Data Report 2008

343626077171701 Local number ON-358, Sneads Ferry Road, at Camp Lejeune, NC (Peedee)

Northern Atlantic Coastal Plain aquifer system
Peedee Formation
Onslow County, NC

LOCATION.--Lat 34°36'26", long 77°17'17" referenced to North American Datum of 1983, Onslow County, NC, Hydrologic Unit 03030001, approximately 4.8 mi south of Camp Lejeune, on Sneads Ferry Road. Owner: U.S. Geological Survey.

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Drilled observation well, depth 435 ft, diameter 4 in., cased to 435 ft, screened interval from 415 ft to 435 ft.

DATUM.--Land-surface datum is 43.54 ft above North American Vertical Datum of 1988. Measuring point: floor of instrument, 2.73 ft above land-surface datum, February 26, 2008, to present.

PERIOD OF RECORD.--February 2008 to September 2008.

GAGE.--Water level recorder collecting data at 60-minute intervals. Satellite telemetry at site.

REMARKS.--Well is part of U.S. Marine Corps Base, Camp Lejeune, North Carolina, Water Resources Network project.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 27.51 ft below land-surface datum, May 20, 21, 2008; lowest water level recorded, 28.20 ft below land surface datum, September 4, 5, 2008.

Water-Data Report 2008

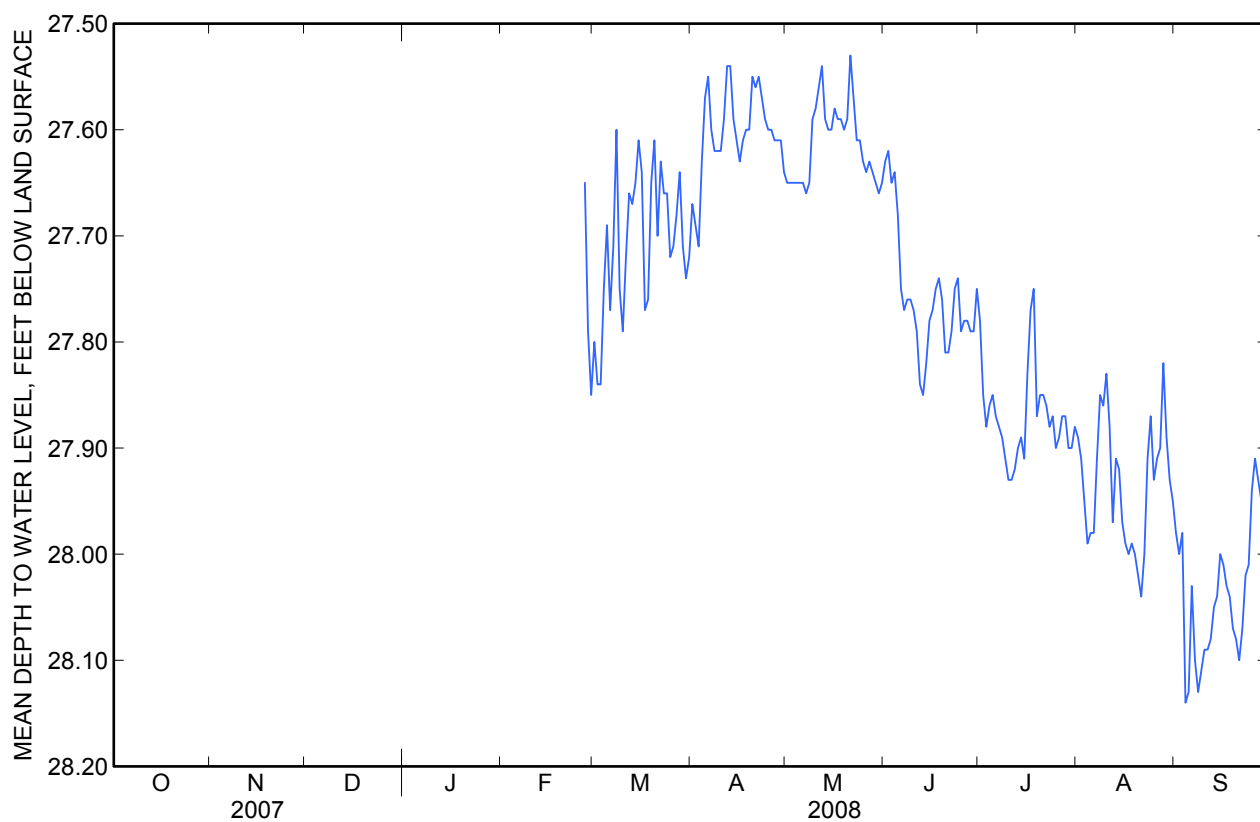
343626077171701 Local number ON-358, Sneads Ferry Road, at Camp Lejeune, NC (Pee Dee)—Continued

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	---	---	---	27.80	27.67	27.65	27.63	27.78	27.89	27.98
2	---	---	---	---	---	27.84	27.69	27.65	27.62	27.85	27.91	28.00
3	---	---	---	---	---	27.84	27.71	27.65	27.65	27.88	27.95	27.98
4	---	---	---	---	---	27.75	27.63	27.65	27.64	27.86	27.99	28.14
5	---	---	---	---	---	27.69	27.57	27.65	27.68	27.85	27.98	28.13
6	---	---	---	---	---	27.77	27.55	27.65	27.75	27.87	27.98	28.03
7	---	---	---	---	---	27.71	27.60	27.66	27.77	27.88	27.91	28.10
8	---	---	---	---	---	27.60	27.62	27.65	27.76	27.89	27.85	28.13
9	---	---	---	---	---	27.75	27.62	27.59	27.76	27.91	27.86	28.11
10	---	---	---	---	---	27.79	27.62	27.58	27.77	27.93	27.83	28.09
11	---	---	---	---	---	27.72	27.59	27.56	27.79	27.93	27.88	28.09
12	---	---	---	---	---	27.66	27.54	27.54	27.84	27.92	27.97	28.08
13	---	---	---	---	---	27.67	27.54	27.59	27.85	27.90	27.91	28.05
14	---	---	---	---	---	27.65	27.59	27.60	27.82	27.89	27.92	28.04
15	---	---	---	---	---	27.61	27.61	27.60	27.78	27.91	27.97	28.00
16	---	---	---	---	---	27.64	27.63	27.58	27.77	27.83	27.99	28.01
17	---	---	---	---	---	27.77	27.61	27.59	27.75	27.77	28.00	28.03
18	---	---	---	---	---	27.76	27.60	27.59	27.74	27.75	27.99	28.04
19	---	---	---	---	---	27.65	27.60	27.60	27.76	27.87	28.00	28.07
20	---	---	---	---	---	27.61	27.55	27.59	27.81	27.85	28.02	28.08
21	---	---	---	---	---	27.70	27.56	27.53	27.81	27.85	28.04	28.10
22	---	---	---	---	---	27.63	27.55	27.57	27.79	27.86	28.00	28.07
23	---	---	---	---	---	27.66	27.57	27.61	27.75	27.88	27.91	28.02
24	---	---	---	---	---	27.66	27.59	27.61	27.74	27.87	27.87	28.01
25	---	---	---	---	---	27.72	27.60	27.63	27.79	27.90	27.93	27.94
26	---	---	---	---	---	27.71	27.60	27.64	27.78	27.89	27.91	27.91
27	---	---	---	---	27.65	27.68	27.61	27.63	27.78	27.87	27.90	27.93
28	---	---	---	---	27.79	27.64	27.61	27.64	27.79	27.87	27.82	27.95
29	---	---	---	---	27.85	27.71	27.61	27.65	27.79	27.90	27.89	27.96
30	---	---	---	---	---	27.74	27.64	27.66	27.75	27.90	27.93	27.95
31	---	---	---	---	---	27.72	---	27.65	---	27.88	27.95	---
Mean	---	---	---	---	---	27.70	27.60	27.61	27.76	27.87	27.93	28.03
Max	---	---	---	---	---	27.84	27.71	27.66	27.85	27.93	28.04	28.14
Min	---	---	---	---	---	27.60	27.54	27.53	27.62	27.75	27.82	27.91

Water-Data Report 2008

343626077171701 Local number ON-358, Sneads Ferry Road, at Camp Lejeune, NC (Peedee)—Continued



Groundwater Level and Specific Conductance Monitoring at Marine Corps Base, Camp Lejeune, 2007–2008

Water-Data Report 2008

343626077171701 Local number ON-358, Sneads Ferry Road, at Camp Lejeune, NC (Peedee)—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 2008 to September 2008.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: February 2008 to September 2008.

WATER TEMPERATURE: February 2008 to September 2008.

INSTRUMENTATION.--Water-quality monitor in operation at site from February 2008 to September 2008.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,540 microsiemens, March 9; minimum recorded, 426 microsiemens, August 28.

WATER TEMPERATURE: Maximum recorded, 20.9°C, on several days during the period; minimum recorded, 20.6°C, on many days during the period.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

[illegible]

Water-Data Report 2008

343626077171701 Local number ON-358, Sneads Ferry Road, at Camp Lejeune, NC (Pee Dee)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	---	---	---	20.8	20.8	20.8	20.9	20.9	20.9	20.7	20.7	20.7
2	---	---	---	20.8	20.8	20.8	20.9	20.9	20.9	20.7	20.7	20.7
3	---	---	---	20.8	20.8	20.8	20.9	20.9	20.9	20.7	20.7	20.7
4	---	---	---	20.8	20.8	20.8	20.9	20.8	20.8	20.7	20.7	20.7
5	---	---	---	20.8	20.8	20.8	20.8	20.8	20.8	20.7	20.7	20.7
6	---	---	---	20.8	20.8	20.8	20.8	20.8	20.8	20.7	20.7	20.7
7	---	---	---	20.8	20.8	20.8	20.8	20.8	20.8	20.7	20.7	20.7
8	---	---	---	20.8	20.8	20.8	20.8	20.8	20.8	20.7	20.7	20.7
9	---	---	---	20.9	20.8	20.8	20.8	20.8	20.8	20.7	20.7	20.7
10	---	---	---	20.9	20.9	20.9	20.8	20.8	20.8	20.7	20.7	20.7
11	---	---	---	20.9	20.9	20.9	20.8	20.8	20.8	20.7	20.6	20.6
12	---	---	---	20.9	20.9	20.9	20.8	20.8	20.8	20.6	20.6	20.6
13	---	---	---	20.9	20.9	20.9	20.8	20.8	20.8	20.6	20.6	20.6
14	---	---	---	20.9	20.9	20.9	20.8	20.8	20.8	20.6	20.6	20.6
15	---	---	---	20.9	20.9	20.9	20.8	20.8	20.8	20.6	20.6	20.6
16	---	---	---	20.9	20.8	20.8	20.8	20.8	20.8	20.6	20.6	20.6
17	---	---	---	20.8	20.8	20.8	20.8	20.8	20.8	20.6	20.6	20.6
18	---	---	---	20.8	20.8	20.8	20.8	20.8	20.8	20.6	20.6	20.6
19	---	---	---	20.8	20.8	20.8	20.8	20.8	20.8	20.6	20.6	20.6
20	---	---	---	20.8	20.8	20.8	20.8	20.8	20.8	---	---	---
21	---	---	---	20.8	20.8	20.8	20.8	20.8	20.8	20.7	20.7	20.7
22	---	---	---	20.8	20.8	20.8	20.8	20.7	20.8	20.7	20.7	20.7
23	---	---	---	20.8	20.8	20.8	20.7	20.7	20.7	20.7	20.7	20.7
24	---	---	---	20.8	20.8	20.8	20.7	20.7	20.7	20.7	20.7	20.7
25	---	---	---	20.8	20.8	20.8	20.7	20.7	20.7	20.7	20.7	20.7
26	---	---	---	20.8	20.8	20.8	20.7	20.7	20.7	20.7	20.7	20.7
27	20.7	20.7	20.7	20.8	20.8	20.8	20.7	20.7	20.7	20.7	20.7	20.7
28	20.8	20.7	20.8	20.8	20.8	20.8	20.7	20.7	20.7	20.7	20.7	20.7
29	20.8	20.8	20.8	20.9	20.8	20.9	20.7	20.7	20.7	20.8	20.7	20.7
30	---	---	---	20.9	20.9	20.9	20.7	20.7	20.7	20.8	20.7	20.7
31	---	---	---	20.9	20.9	20.9	---	---	---	20.8	20.7	20.7
Month	---	---	---	20.9	20.8	20.8	20.9	20.7	20.8	---	---	---

Water-Data Report 2008

343626077171701 Local number ON-358, Sneads Ferry Road, at Camp Lejeune, NC (Pee Dee)—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	20.8	20.7	20.7	20.7	20.6	20.6	20.7	20.7	20.7	20.8	20.8	20.8
2	20.8	20.7	20.7	20.7	20.6	20.7	20.7	20.7	20.7	20.8	20.8	20.8
3	20.8	20.7	20.7	20.7	20.6	20.7	20.7	20.7	20.7	20.8	20.8	20.8
4	20.8	20.7	20.8	20.7	20.6	20.7	20.7	20.7	20.7	20.8	20.8	20.8
5	20.8	20.7	20.8	20.7	20.6	20.7	20.7	20.7	20.7	20.8	20.8	20.8
6	20.8	20.7	20.8	20.7	20.6	20.7	20.7	20.7	20.7	20.8	20.8	20.8
7	20.8	20.7	20.8	20.7	20.6	20.7	20.7	20.7	20.7	20.8	20.8	20.8
8	20.8	20.7	20.8	20.7	20.6	20.7	20.8	20.7	20.8	20.8	20.8	20.8
9	20.8	20.8	20.8	20.7	20.6	20.7	20.8	20.8	20.8	20.8	20.8	20.8
10	20.8	20.8	20.8	20.7	20.7	20.7	20.8	20.8	20.8	20.8	20.8	20.8
11	20.8	20.8	20.8	20.7	20.6	20.7	20.8	20.8	20.8	20.8	20.8	20.8
12	20.8	20.8	20.8	20.7	20.7	20.7	20.8	20.8	20.8	20.8	20.8	20.8
13	20.8	20.8	20.8	20.7	20.7	20.7	20.8	20.8	20.8	20.8	20.8	20.8
14	20.8	20.8	20.8	20.7	20.7	20.7	20.8	20.8	20.8	20.8	20.8	20.8
15	20.8	20.8	20.8	20.7	20.7	20.7	20.8	20.8	20.8	20.8	20.8	20.8
16	20.8	20.8	20.8	20.7	20.7	20.7	20.8	20.8	20.8	20.8	20.8	20.8
17	20.8	20.8	20.8	20.7	20.7	20.7	20.8	20.8	20.8	20.8	20.8	20.8
18	20.8	20.8	20.8	20.7	20.7	20.7	20.8	20.8	20.8	20.8	20.8	20.8
19	20.8	20.8	20.8	20.7	20.7	20.7	20.8	20.8	20.8	20.8	20.8	20.8
20	20.8	20.6	20.7	20.7	20.7	20.7	20.8	20.8	20.8	20.8	20.8	20.8
21	20.6	20.6	20.6	20.7	20.7	20.7	20.8	20.8	20.8	20.8	20.8	20.8
22	20.7	20.6	20.6	20.7	20.7	20.7	20.8	20.8	20.8	20.8	20.8	20.8
23	20.7	20.6	20.6	20.7	20.7	20.7	20.8	20.8	20.8	20.8	20.8	20.8
24	20.7	20.6	20.6	20.7	20.7	20.7	20.8	20.8	20.8	20.8	20.8	20.8
25	20.7	20.6	20.6	20.7	20.7	20.7	20.8	20.8	20.8	---	---	---
26	20.7	20.6	20.6	20.7	20.7	20.7	20.8	20.7	20.8	---	---	---
27	20.7	20.6	20.6	20.7	20.7	20.7	20.8	20.8	20.8	---	---	---
28	20.7	20.6	20.6	20.7	20.7	20.7	20.8	20.8	20.8	---	---	---
29	20.7	20.6	20.6	20.7	20.7	20.7	20.8	20.8	20.8	---	---	---
30	20.7	20.6	20.6	20.7	20.7	20.7	20.8	20.8	20.8	---	---	---
31	---	---	---	20.7	20.7	20.7	20.8	20.8	20.8	---	---	---
Month	20.8	20.6	20.7	20.7	20.6	20.7	20.8	20.7	20.8	---	---	---

Water-Data Report 2008

343626077171701 Local number ON-358, Sneads Ferry Road, at Camp Lejeune, NC (Pee Dee)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

[illegible]

Water-Data Report 2008

343626077171701 Local number ON-358, Sneads Ferry Road, at Camp Lejeune, NC (Pee Dee)—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
February				March			April			May		
1	---	---	---	1,480	1,430	1,460	1,370	1,360	1,360	1,130	1,120	1,130
2	---	---	---	1,510	1,460	1,470	1,360	1,360	1,360	1,120	1,110	1,120
3	---	---	---	1,520	1,460	1,510	1,370	1,360	1,360	1,110	1,100	1,110
4	---	---	---	1,520	1,460	1,500	1,360	1,350	1,360	1,100	1,100	1,100
5	---	---	---	1,520	1,510	1,520	1,350	1,350	1,350	1,100	1,100	1,100
6	---	---	---	1,510	1,490	1,500	1,350	1,340	1,340	1,100	1,080	1,090
7	---	---	---	1,530	1,510	1,520	1,340	1,330	1,330	1,080	1,070	1,080
8	---	---	---	1,530	1,480	1,500	1,330	1,320	1,320	1,080	1,060	1,060
9	---	---	---	1,540	1,490	1,520	1,320	1,310	1,320	1,060	1,040	1,060
10	---	---	---	1,530	1,520	1,520	1,310	1,300	1,310	1,040	1,030	1,040
11	---	---	---	1,530	1,520	1,520	1,300	1,300	1,300	1,030	1,020	1,030
12	---	---	---	1,520	1,480	1,490	1,300	1,290	1,300	1,030	998	1,020
13	---	---	---	1,510	1,500	1,510	1,290	1,280	1,280	998	980	988
14	---	---	---	1,500	1,500	1,500	1,280	1,270	1,270	987	973	980
15	---	---	---	1,500	1,480	1,490	1,270	1,260	1,270	974	954	961
16	---	---	---	1,490	1,450	1,470	1,270	1,260	1,260	954	946	950
17	---	---	---	1,450	1,420	1,440	1,260	1,250	1,260	946	932	938
18	---	---	---	1,450	1,430	1,450	1,260	1,240	1,250	932	925	929
19	---	---	---	1,450	1,440	1,440	1,240	1,230	1,230	925	917	922
20	---	---	---	1,440	1,430	1,440	1,230	1,220	1,220	---	---	---
21	---	---	---	1,430	1,420	1,420	1,220	1,210	1,210	---	---	---
22	---	---	---	1,420	1,410	1,420	1,210	1,200	1,200	---	---	---
23	---	---	---	1,410	1,400	1,400	1,200	1,180	1,190	---	---	---
24	---	---	---	1,410	1,400	1,410	1,180	1,180	1,180	---	---	---
25	---	---	---	1,410	1,400	1,400	1,180	1,170	1,170	---	---	---
26	---	---	---	1,400	1,400	1,400	1,170	1,160	1,170	---	---	---
27	1,400	1,350	1,380	1,400	1,390	1,390	1,170	1,160	1,160	---	---	---
28	1,430	1,380	1,410	1,390	1,380	1,390	1,160	1,150	1,150	---	---	---
29	1,460	1,410	1,440	1,380	1,370	1,380	1,150	1,140	1,140	---	---	---
30	---	---	---	1,370	1,370	1,370	1,140	1,130	1,130	---	---	---
31	---	---	---	1,370	1,360	1,360	---	---	---	744	741	744
Month	---	---	---	1,540	1,360	1,460	1,370	1,130	1,260	---	---	---

Water-Data Report 2008

343626077171701 Local number ON-358, Sneads Ferry Road, at Camp Lejeune, NC (Peedee)—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	741	734	737	515	509	512	484	482	484	451	444	448
2	735	721	727	509	505	507	482	478	480	457	447	452
3	721	717	718	505	503	504	479	476	478	466	454	459
4	717	703	711	503	501	502	476	475	476	467	450	457
5	703	691	698	501	498	499	476	474	475	466	453	460
6	691	682	685	498	496	497	474	472	473	465	457	461
7	683	677	681	496	495	496	473	472	473	467	457	461
8	677	669	674	495	492	493	---	---	---	464	452	458
9	669	659	664	492	490	491	---	---	---	462	452	457
10	659	652	655	490	487	488	455	453	454	464	451	458
11	652	641	646	487	485	485	453	451	452	463	449	455
12	641	633	637	485	482	483	454	450	452	457	447	452
13	633	624	629	482	481	481	457	453	455	458	448	452
14	624	616	619	481	479	480	460	457	459	456	447	451
15	616	607	612	479	477	478	463	460	461	459	447	452
16	607	598	602	479	476	478	463	461	462	458	445	451
17	598	588	593	477	475	476	462	461	461	454	447	449
18	588	579	583	476	473	475	463	461	462	456	446	449
19	579	567	573	473	470	471	464	462	463	452	443	447
20	567	558	562	470	469	470	462	460	461	447	442	444
21	558	551	555	469	467	468	460	458	459	448	442	445
22	551	545	548	468	465	466	459	457	458	449	442	444
23	547	543	545	465	464	464	459	458	458	450	441	444
24	545	536	540	464	462	463	458	455	457	445	440	442
25	536	531	533	462	460	461	455	453	454	---	---	---
26	532	527	530	460	458	459	466	451	458	---	---	---
27	527	523	526	458	457	457	466	428	442	---	---	---
28	523	518	521	457	455	456	443	426	435	---	---	---
29	519	516	518	456	453	454	446	434	440	---	---	---
30	518	515	516	454	453	453	450	439	444	---	---	---
31	---	---	---	485	451	457	451	441	446	---	---	---
Month	741	515	611	515	451	478	---	---	---	---	---	---

For additional information:

USGS North Carolina Water Science Center
3916 Sunset Ridge Road
Raleigh, North Carolina 27607
(919) 571-4000
<http://nc.water.usgs.gov>

