

Water-Data Report 2012

265519080364901 Local number PB -1815

Surficial Aquifer System

Palm Beach County, FL

LOCATION.--Lat 26°55'18.7", long 80°36'49.1" referenced to North American Datum of 1983, Palm Beach County, FL, Hydrologic Unit 03090202, 1,600 ft north of the L-8 canal, east of the Herbert Hoover Dike along Lake Okeechobee.

WATER-QUALITY RECORDS

WELL CHARACTERISTICS.--Depth 119.72 ft. Upper casing diameter 2; top of first opening 108.4 ft, bottom of last opening 118.4 ft.

DATUM.--Land-surface datum is 14.5 ft above North American Vertical Datum of 1988. Measuring point: From Aug. 17, 2009, to present, measuring point has been top of casing, 14.40 ft above North American Vertical Datum of 1988.

PERIOD OF RECORD.--August 2011 to current year. See REMARKS.

INSTRUMENTATION.--Monthly measurement with chalked steel tape or electric tape. Monthly profile with electromagnetic induction logger. See REMARKS.

REMARKS.--Well is also used for salinity monitoring, including monthly induction logs beginning August 2011. Induction logs are used to assess the movement of the fresh-water/salt-water interface in ground water. See [RECORDS OF BULK CONDUCTIVITY](#).

In order to display changes in bulk conductivity between induction logs collected over the period of record, each log has been adjusted to a median conductivity value at a depth that corresponds to a stable lithologic feature which produces a consistent conductivity profile, based on data collected from 2011 to the current year. These adjustments compensate for small variations in equipment response resulting from variations in environmental conditions and/or probe calibrations. For this station, induction logs are adjusted to a mean response of 25.2 mS/m at a depth of 41.9 ft below land surface. The resulting plot of logs collected from 2011 to the current year is provided in this report. The original and corrected records of bulk conductivity, in millisiemens per meter, are available in files of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--

WATER-LEVEL ELEVATION: Highest water level measured, 10.74 ft NAVD, Sept. 25, 2012; lowest, 7.39 ft NAVD, Sept. 13, 2011.

WATER-QUALITY DATA

WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

[mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter]

Date	Sample start time	Groundwater level above NAVD 1988, feet (62611)	Specific conductance, unfiltered, water, µS/cm at 25°C (00095)	Chloride, water, unfiltered, mg/L (99220)
August 15, 2011	0917	7.89	39,900	13,000
September 13, 2011	0850	7.39	40,000	13,000

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WATER-QUALITY DATA**WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**[mg/L, milligrams per liter; °C, degrees Celsius; μ S/cm, microsiemens per centimeter; --, no data]

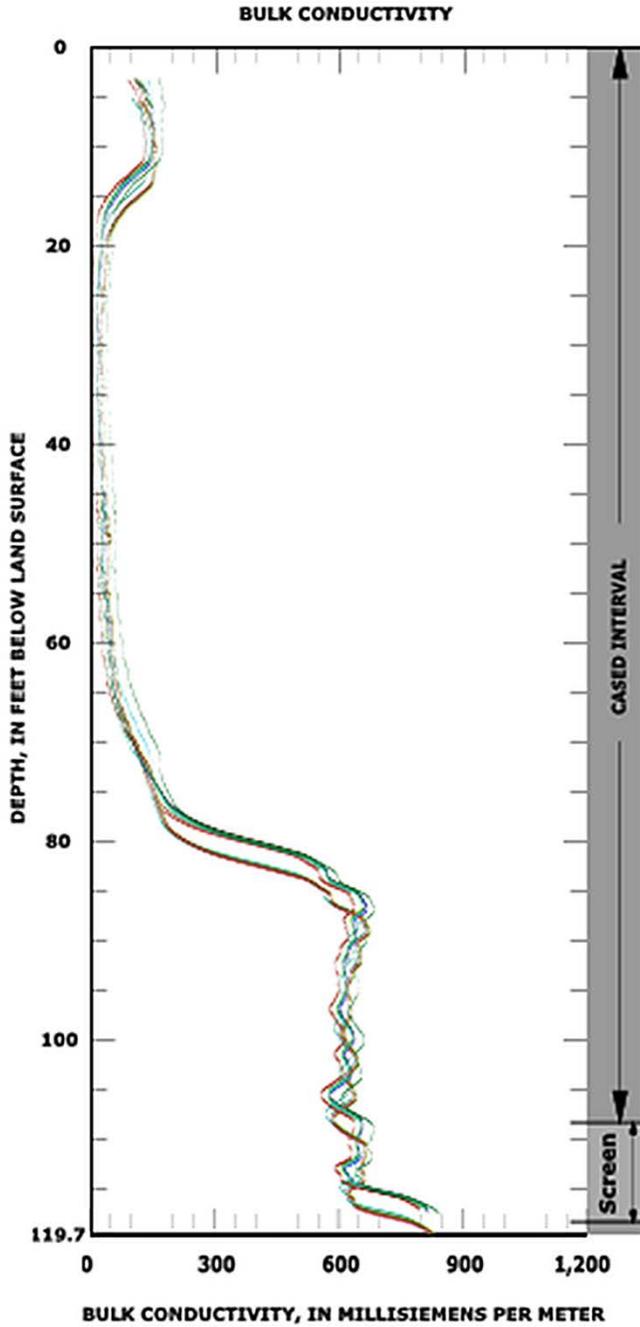
Date	Sample start time	Groundwater level above NAVD 1988, feet (62611)	Specific conduc- tance, water, unfiltered, μS/cm at 25°C (00095)	Chloride, water, unfiltered, mg/L (99220)
October 26, 2011	1130	8.18	38,900	13,000
December 13, 2011	0910	8.80	40,500	13,000
January 24, 2012	0910	8.87	40,000	13,000
February 23, 2012	1156	8.60	39,600	13,000
March 28, 2012	0910	7.93	39,300	13,000
April 25, 2012	1043	7.95	38,500	13,000
May 24, 2012	1253	7.64	39,000	13,000
June 18, 2012	0907	7.41	39,900	13,000
July 17, 2012	1117	8.09	40,600	13,000
August 29, 2012	1106	10.11	39,200	13,000
September 25, 2012	1518	10.74	39,700	13,000



WY 2012 Induction log results

Station: USGS 265519080364901

Local name: PB -1815



INDUCTION LOG DATES,
ASSOCIATED CHLORIDE SAMPLE DATES

Induction log date	Chloride sample date	Dissolved chloride concentration, in mg/L
Aug. 15, 2011	Aug. 15, 2011	13,000
Sept. 13, 2011	Sept. 13, 2011	13,000
Oct. 26, 2011	Oct. 26, 2011	13,000
Nov. 15, 2011	-- no sample --	--
Dec. 13, 2011	Dec. 13, 2011	13,000
Jan. 24, 2012	Jan. 24, 2012	13,000
Feb. 23, 2012	Feb. 23, 2012	13,000
Mar. 28, 2012	Mar. 28, 2012	13,000
Apr. 25, 2012	Apr. 25, 2012	13,000
May 24, 2012	May 24, 2012	13,000
June 18, 2012	June 18, 2012	13,000
July 17, 2012	July 17, 2012	13,000
Aug. 29, 2012	Aug. 29, 2012	13,000
Sept. 25, 2012	Sept. 25, 2012	13,000