

264814080414301 Local number PB -1819

Surficial Aquifer System

Palm Beach County, FL

LOCATION.--Lat 26°48'13.8", long 80°41'42.5" referenced to North American Datum of 1983, Palm Beach County, FL, Hydrologic Unit 03090202, east of the Herbert Hoover Dike at Lake Okeechobee, 900 ft west then north along a roadway starting at State Road 715 at Lakeside Baptist Church.

WATER-QUALITY RECORDS

WELL CHARACTERISTICS.--Depth 135 ft. Upper casing diameter 2; top of first opening 125 ft, bottom of last opening 130 ft.

DATUM.--Land-surface datum is 20.7 ft above National Geodetic Vertical Datum of 1929. Measuring point: From May 5, 2011, to present, measuring point has been top of casing, 20.8 ft above National Geodetic Vertical Datum of 1929

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 groundwater. 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 19.2 mS/m at a depth of 31.2 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, 12.65 ft NGVD, Sept. 25, 2012; lowest, 9.45 ft NGVD, Sept. 13, 2011.

CHLORIDE CONCENTRATION: Highest measured chloride concentration, 5,900 mg/L, Sept. 25, 2012; lowest, 5,700 mg/L, Sept. 13, 2011, many days during water year 2012.

WATER-QUALITY DATA

WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

[NGVD, National Geodetic Vertical Datum; ft, feet; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter]

Date	Sample start time	Specific conductivity, unfiltered, water, µS/cm at 25°C (00095)	Elevation above NGVD 1929, ft (72020)	Chloride, water, unfiltered, mg/L (99220)
August 12, 2011	0823	21,500	10.08	5,800
September 13, 2011	1110	21,500	9.45	5,700

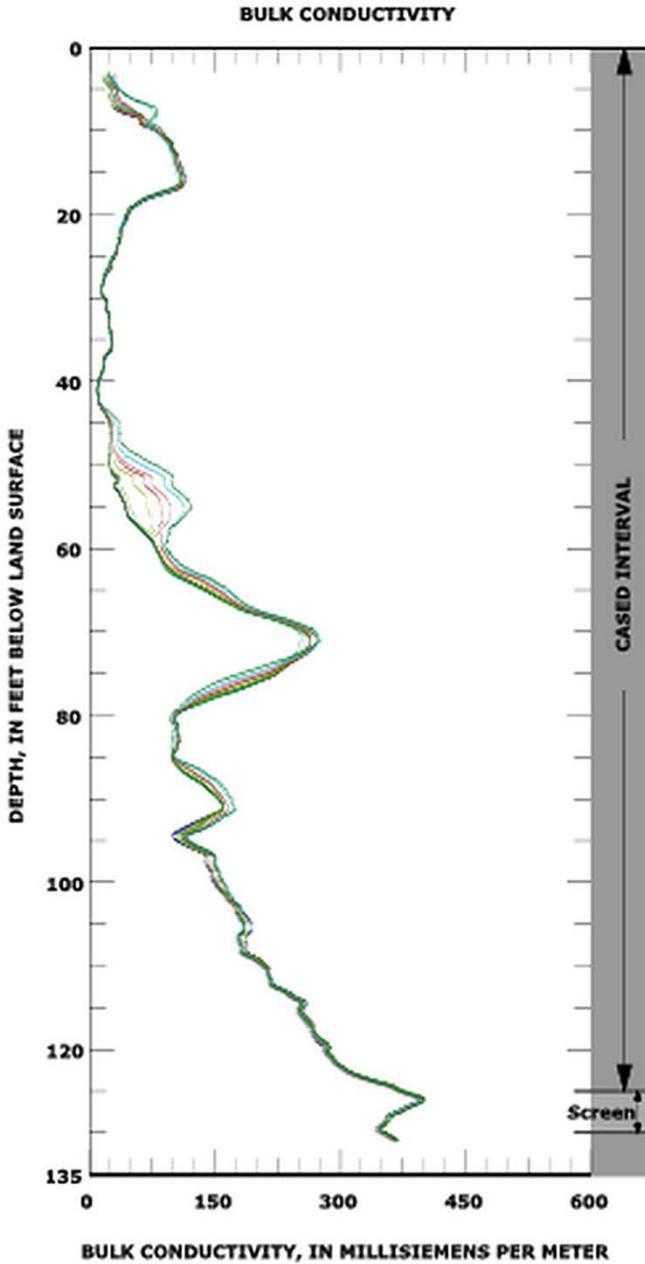
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WATER-QUALITY DATA**WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**[NGVD, National Geodetic Vertical Datum; ft, feet; mg/L, milligrams per liter;
°C, degrees Celsius; $\mu\text{S}/\text{cm}$, microsiemens per centimeter]

Date	Sample start time	Specific conduc- tance, water, unfiltered, $\mu\text{S}/\text{cm}$ at 25°C (00095)	Elevation above NGVD 1929, ft (72020)	Chloride, water, unfiltered, mg/L (99220)
October 25, 2011	1257	20,800	11.04	5,700
December 14, 2011	1042	20,900	11.60	5,700
January 24, 2012	1207	21,600	11.34	5,800
February 28, 2012	0942	21,300	11.15	5,800
March 28, 2012	1223	21,100	10.55	5,800
April 26, 2012	1058	20,900	10.07	5,800
May 24, 2012	0953	21,000	9.87	5,700
June 18, 2012	1422	21,400	10.09	5,800
July 18, 2012	0950	21,700	10.16	5,700
August 29, 2012	0836	20,900	12.00	5,800
September 25, 2012	1259	21,300	12.65	5,900



WY 2012 Induction log results
 Station: USGS 264814080414301
 Local name: PB -1819



**INDUCTION LOG DATES,
 ASSOCIATED CHLORIDE SAMPLE DATES**

Induction log date	Chloride sample date	Dissolved chloride concentration, in mg/L
Aug. 15, 2011	Aug. 12, 2011	5,800
Sept. 13, 2011	Sept. 13, 2011	5,700
Oct. 26, 2011	Oct. 25, 2011	5,700
Nov. 15, 2011	-- no sample --	--
Dec. 13, 2011	Dec. 14, 2011	5,800
Jan. 24, 2012	Jan. 24, 2012	5,800
Feb. 23, 2012	Feb. 28, 2012	5,800
Mar. 28, 2012	Mar. 28, 2012	5,800
Apr. 25, 2012	Apr. 26, 2012	5,800
May 24, 2012	May 24, 2012	5,700
June 18, 2012	June 18, 2012	5,800
July 17, 2012	July 18, 2012	5,700
Aug. 29, 2012	Aug. 29, 2012	5,800
Sept. 25, 2012	Sept. 25, 2012	5,900