

Water-Data Report 2012

**264332080421101 Local number PB -1820**

Surficial Aquifer System

Palm Beach County, FL

LOCATION.--Lat 26°43'32.4", long 80°42'11.2" referenced to North American Datum of 1983, Palm Beach County, FL, Hydrologic Unit 03090202, between Herbert Hoover Dike and an irrigation ditch just south of Hatcher Rd, 1.8 mi west of the intersection of S.R. 715, Hooker Hwy and Hatcher Rd.

**WATER-QUALITY RECORDS**

WELL CHARACTERISTICS.--Depth 134.3 ft. Upper casing diameter 2; top of first opening 125 ft, bottom of last opening 130 ft.

DATUM.--Land-surface datum is 10.7 ft above National Geodetic Vertical Datum of 1929. Measuring point: From April 6, 2011, to present, measuring point has been top of casing, 11.2 ft above National Geodetic Vertical Datum of 1929.

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

INSTRUMENTATION.--Bimonthly measurement with chalked steel tape or electric tape. Bimonthly 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 15.6 mS/m at a depth of 79.9 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, 11.03 ft NGVD, Aug. 28, 2012; lowest, 9.15 ft NGVD, Aug. 12, 2011.

**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	Elevation	Chloride,
		conductance, water, unfiltered, µS/cm at 25°C (00095)	above NGVD 1929, ft (72020)	water, unfiltered, mg/L (99220)
August 12, 2011	1040	8,990	9.15	1,900

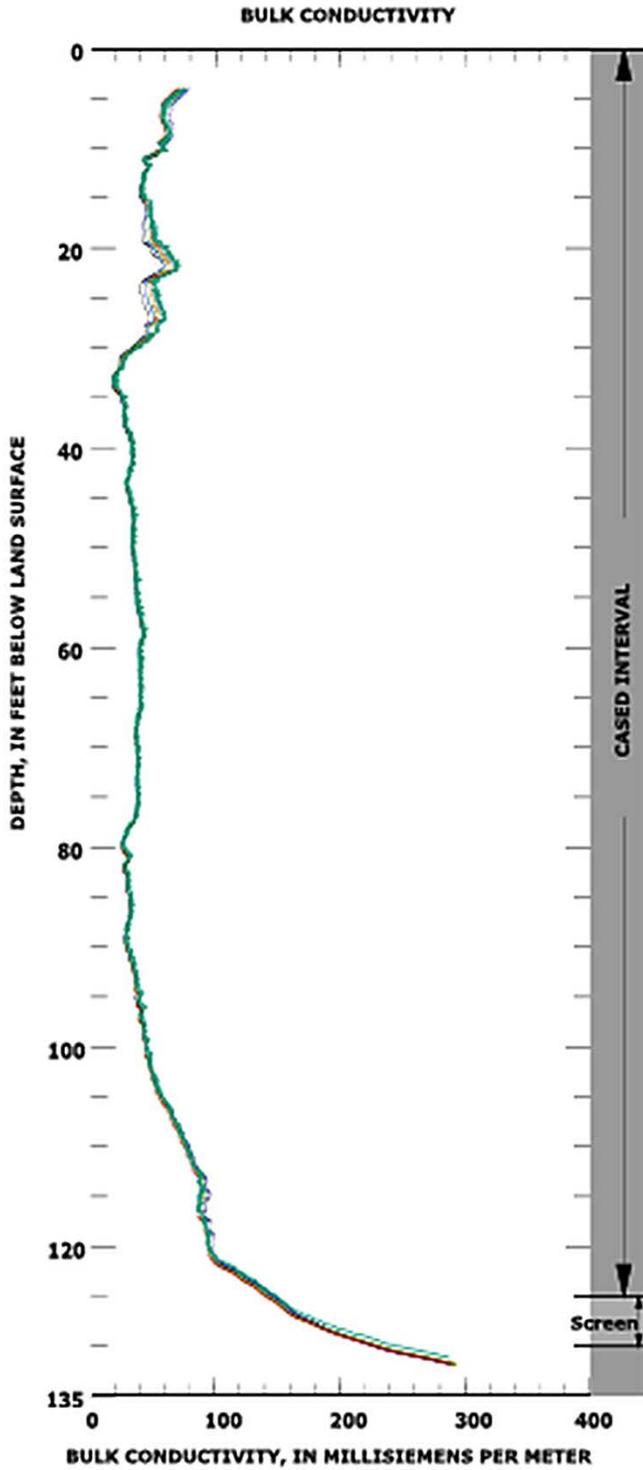
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**WATER-QUALITY DATA****WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**[NGVD, National Geodetic Vertical Datum; ft, feet; mg/L, milligrams per liter;  
°C, degrees Celsius;  $\mu\text{S}/\text{cm}$ , microsiemens per centimeter]

<b>Date</b>	<b>Sample start time</b>	<b>Specific conduc- tance, water, unfiltered, <math>\mu\text{S}/\text{cm}</math> at 25°C (00095)</b>	<b>Elevation above NGVD 1929, ft (72020)</b>	<b>Chloride, water, unfiltered, mg/L (99220)</b>
<b>October 25, 2011</b>	<b>1046</b>	8,640	9.98	1,900
<b>December 14, 2011</b>	<b>0752</b>	8,710	10.75	1,900
<b>February 24, 2012</b>	<b>0804</b>	8,900	9.88	1,900
<b>April 24, 2012</b>	<b>0813</b>	8,660	9.65	1,900
<b>June 20, 2012</b>	<b>1133</b>	8,690	9.23	1,900
<b>August 28, 2012</b>	<b>1610</b>	8,520	11.03	1,900



WY 2012 Induction log results  
 Station: USGS 264332080421101  
 Local name: PB -1820



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

Induction log date	Chloride sample date	Dissolved chloride concentration, in mg/L
Aug. 12, 2011	Aug. 12, 2011	1,900
Oct. 25, 2011	Oct. 25, 2011	1,900
Dec. 14, 2011	Dec. 14, 2011	1,900
Feb. 24, 2012	Feb. 24, 2012	1,900
Apr. 25, 2012	Apr. 24, 2012	1,900
June 20, 2012	June 20, 2012	1,900
Aug. 28, 2012	Aug. 28, 2012	1,900