

265142080374201 Local number PB -1817

Surficial Aquifer System

Palm Beach County, FL

LOCATION.--Lat 26°51'42.1", long 80°37'42.2" referenced to North American Datum of 1983, Palm Beach County, FL, Hydrologic Unit 03090202, 1,200 ft southeast of U.S. Highway 441, along the north bank of the West Palm Beach Canal (L-10).

WATER-QUALITY RECORDS

WELL CHARACTERISTICS.--Depth 125 ft. Upper casing diameter 2 in; top of first opening 110 ft, bottom of last opening 120 ft.

DATUM.--Land-surface datum is 13.8 ft above National Geodetic Vertical Datum of 1929. Measuring point: From July 1, 2011, to present, measuring point has been top of casing, 13.7 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 24.5 mS/m at a depth of 28.2 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, 11.30 ft NGVD, Aug. 30, 2012; lowest, 8.49 ft NGVD, Aug. 15, 2011.

CHLORIDE CONCENTRATION: Highest measured chloride concentration, 14,000 mg/L, Oct. 26, 2011, June 18, 2012; lowest, 13,000 mg/L, Aug. 15, 2011, many days during the 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, water, unfiltered, µS/cm at 25°C (00095)	Elevation above NGVD 1929, ft (72020)	Chloride, water, unfiltered, mg/L (99220)
August 15, 2011	1321	41,600	8.49	13,000

265142080374201 Local number PB -1817—Continued

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]

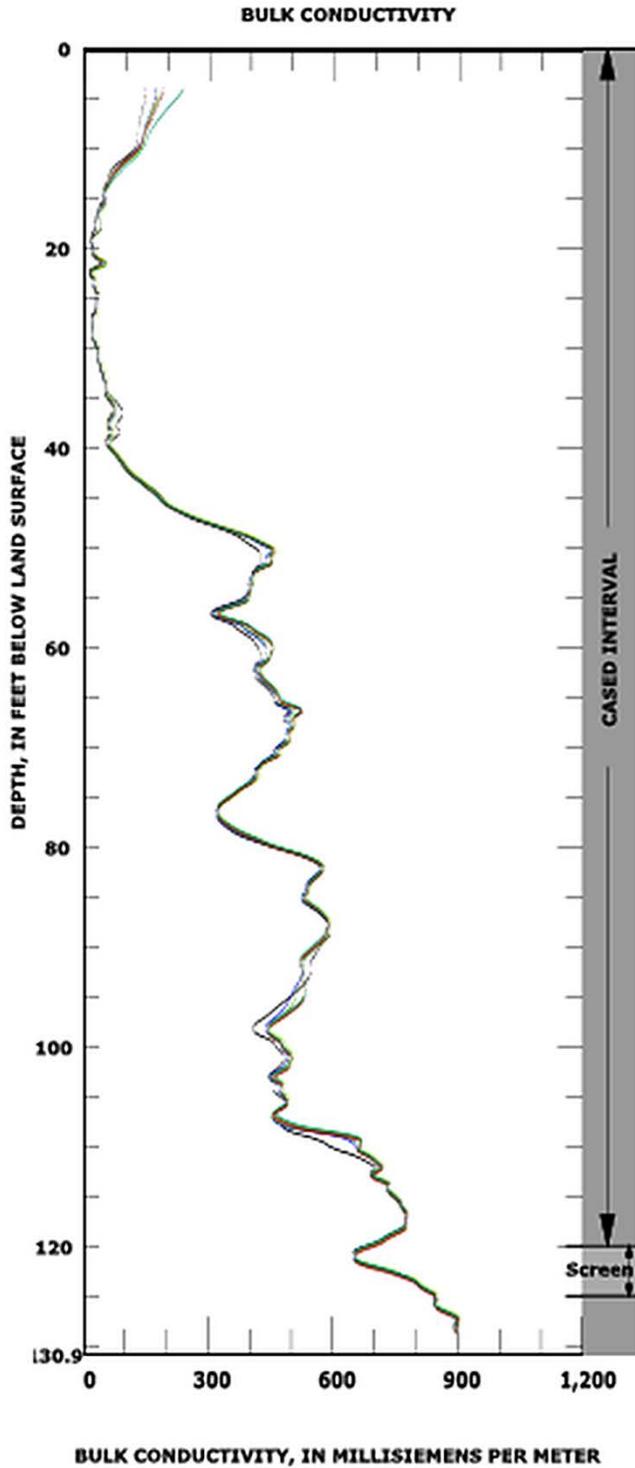
Date	Sample start time	Specific conduc- tance, water, unfiltered, $\mu\text{S}/\text{cm}$ at 25°C (00095)	Elevation above NGVD 1929, ft (72020)	Chloride, water, unfiltered, mg/L (99220)
October 26, 2011	1322	41,000	8.90	14,000
December 13, 2011	1401	41,200	9.36	13,000
February 23, 2012	1417	41,300	9.38	13,000
April 25, 2012	1303	40,400	9.26	13,000
June 18, 2012	1149	41,500	8.90	14,000
August 30, 2012	1236	40,400	11.30	13,000



WY 2012 Induction log results

Station: USGS 265142080374201

Local name: PB -1817



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
Oct. 26, 2011	Oct. 26, 2011	14,000
Dec. 13, 2011	Dec. 13, 2011	13,000
Feb. 23, 2012	Feb. 23, 2012	13,000
Apr. 25, 2012	Apr. 25, 2012	13,000
June 18, 2012	June 18, 2012	14,000
Aug. 30, 2012	Aug. 30, 2012	13,000