261304080072501 Local number G 2896. USGS Observation Well near Pompano Beach, FL.

Biscayne aquifer
Biscayne Limestone Aquifer

Broward County, FL

LOCATION.--Lat 26°13'05.6", long 80°07'24.7" referenced to North American Datum of 1983, in SE ¼ NE ¼ SE ¼ sec.2, T.49 S., R.42 E., Broward County, FL, Hydrologic Unit 03090202, at southwest corner of intersection of Cypress Road South and SW 9th Street, 56.5 ft southwest of the fire hydrant.

WATER-QUALITY RECORDS

WELL CHARACTERISTICS.--Depth 100.5 ft. Upper casing diameter 2; top of first opening 90.5 ft, bottom of last opening 100.5 ft.

DATUM.--Land-surface datum is 6.80 ft above National Geodetic Vertical Datum of 1929. Measuring point: From Oct. 15, 1997, to present, measuring point has been top of casing, 6.79 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--April 2000 to current year. See REMARKS.

INSTRUMENTATION.--Quarterly measurement with chalked steel tape or electric tape. See REMARKS.

REMARKS.--This well is also monitored for salinity. Quarterly water-level measurements and salinity monitoring began in October 2000. Electromagnetic induction logs were collected from April 2000 to May 2011. Electromagnetic induction logs are used to assess the movement of the fresh-water/salt-water interface in ground water. See RECORDS OF BULK CONDUCTIVITY.

In WY2008, the instrument used to calibrate the induction probe was re-examined, and found to have been constructed to a different specification than originally communicated by the manufacturer. As a consequence of this calibration problem, logs of bulk conductivity published from 2002 to 2008 are considered to be in error. The 0.7686 multiplier correction to conductivity data collected prior to WY2002, as referenced in previous data publications, is not required. Instead, a 1.33 multiplier correction is required for bulk conductivity data collected from 2002 to 2007. A 1.0 multiplier has been applied to the remainder of the data, to the 2011 water year. The logs published in the annual reports include the noted corrections. However, the depths of any hydrologic or lithologic features previously shown in the published logs are not affected.

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 2000 to 2007. 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 median response of 9.0 mS/m at a depth of 36 ft below land surface. The resulting plots of logs collected from 2000 to 2011 years were provided in annual data reports. 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, 3.60 ft NGVD, Oct. 24, 2001; lowest, 1.27 ft NGVD, Jan. 29, 2009.
CHLORIDE CONCENTRATION: Highest measured chloride concentration, 3,200 mg/L, July 6, 2011; lowest, 260 mg/L, Feb. 6, 2006.

Suggested citation: U.S. Geological Survey, 2013, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 261304080072501, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/261304080072501.2012.pdf

261304080072501 Local number G 2896. USGS Observation Well near Pompano Beach, FL.—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; µS/cm, microsiemens per centimeter]

Date	Sample start time	Specific conduc-tance, water, unfiltered, µS/cm at 25°C (00095)	Elevation above NGVD 1929, ft (72020)	Chloride, water, unfiltered, mg/L (99220)
October 27, 2011	**1418**	8,140	2.26	2,450
January 20, 2012	**1627**	6,970	1.36	2,100
April 20, 2012	**1030**	9,220	1.88	2,900
July 9, 2012	**1140**	6,610	2.01	2,050