

260326080120301 Local number G 2921. USGS Observation Well near Davie, FL.

Biscayne aquifer
Biscayne Limestone Aquifer

Broward County, FL

LOCATION.--Lat 26°03'27.3", long 80°12'02.9" referenced to North American Datum of 1983, in NW ¼ SE ¼ NE ¼ sec.36, T.50 S., R.41 E., Broward County, FL, Hydrologic Unit 03090202, at the northwest corner of the intersection of SW 40th Avenue and 52nd Street, 0.40 mi south of Griffin Road.

WATER-QUALITY RECORDS

WELL CHARACTERISTICS.--Depth 208 ft. Upper casing diameter 2; top of first opening 198 ft, bottom of last opening 208 ft.

DATUM.--Land-surface datum is 4 ft above National Geodetic Vertical Datum of 1929. Measuring point: From Mar. 10, 2001, to present, measuring point has been top of casing, at land-surface datum. . Prior to January 23, 2004, measuring point was estimated to be 5 ft from a topographic map. See REMARKS.

PERIOD OF RECORD.--August 2000 to February 2009 (monthly), May 2009 to current year. See REMARKS.

INSTRUMENTATION.--Annual profile with electromagnetic induction logger. See REMARKS.

REMARKS.--This well is also used for salinity monitoring, using an annual electromagnetic induction log. Electromagnetic induction logging began in August 2000. Water-level measurements were collected October 2003 to April 2010. Quarterly chloride-concentration samples were collected from October 2003 to October 2009. Electromagnetic induction logs are used to assess the movement of the fresh-water/salt-water interface in ground water. See [RECORDS OF BULK CONDUCTIVITY](#). The estimated measuring point published prior to January 23, 2004, was not used to compute water-level elevations. All water-level elevation data, including data collected prior to January 23, 2004, have been computed using the 4.01 ft top of casing measuring point and are available in files of the U.S. Geological Survey. See DATUM.

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 collected 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 current year. The logs published in this report include the noted corrections to date. 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 2008. 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 6.7 mS/m at a depth of 59.5 ft below land surface. The resulting plot of logs collected, from 2000 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.

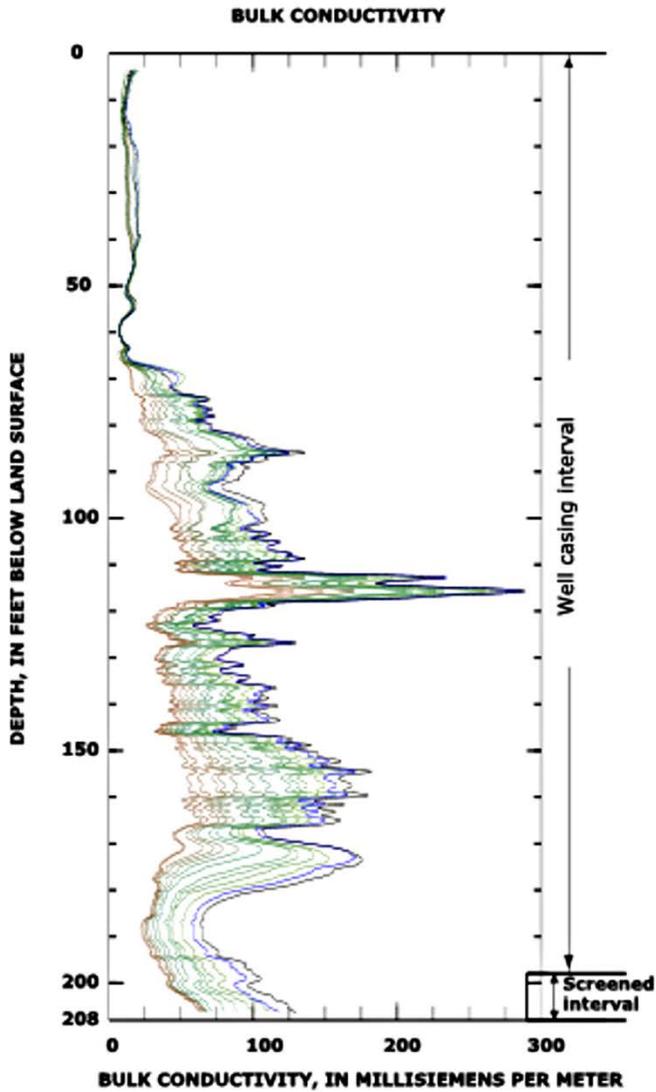
EXTREMES FOR PERIOD OF RECORD.--

WATER-LEVEL ELEVATION: Highest water level measured, 3.73 ft NGVD, Oct. 6, 2008; lowest, 0.82 ft NGVD, Jan. 29, 2009.

CHLORIDE CONCENTRATION: Highest measured chloride concentration, 1,000 mg/L, Oct. 14, 2009; lowest, 500 mg/L, Feb. 13, 2004.



WY 2012 Induction log results
 Station: USGS 260326080120301
 Local name: G -2921



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

Induction log date	Chloride sample date	Dissolved chloride concentration, in mg/L
May 2, 2012	- no sample -	--
Apr. 29, 2011	- no sample -	--
Apr. 29, 2010	- no sample -	--
May 14, 2009	May 14, 2009	930
May 1, 2008	May 1, 2008	820
May 25, 2007	May 25, 2007	760
May 4, 2006	May 4, 2006	660
May 4, 2005	May 4, 2005	580
Apr. 29, 2004	Apr. 29, 2004	520
May 9, 2003	- no sample -	--
May 21, 2002	- no sample -	--
Apr. 16, 2001	- no sample -	--
Aug. 28, 2000	- no sample -	--