Water-Data Report 2012

255011080124501 Local number G -3947

Biscayne aquifer
Biscayne Limestone Aquifer

Miami-Dade County, FL

LOCATION.--Lat 25°50'11.3", long 80°12'45.4" referenced to North American Datum of 1983, in SW ¼ NE ¼ NE ¼ sec.14, T.53 S., R.41 E., Miami-Dade County, FL, Hydrologic Unit 03090202, 100 ft south of the intersection of NW 10th Avenue and NW 68th Street, about 0.4 mi west of U.S. Interstate 95, in Miami, FL.

WATER-QUALITY RECORDS

WELL CHARACTERISTICS.--Drilled, observation, water-table well, depth 200 ft, diameter 2 in., cased to 170 ft, screened 170 to 180 ft, cased 180 to 200 ft.

DATUM.--Land-surface datum is 11.97 ft above National Geodetic Vertical Datum of 1929. Measuring point: measuring point has been north side of top of 2-in. PVC casing, 11.43 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--January 2011 to the current year. See REMARKS.

INSTRUMENTATION.--Monthly measurement with chalked steel tape or electric tape. Annual profile with electromagnetic induction logger. See REMARKS.

REMARKS.--Well is also used for salinity monitoring, including an annual induction log. Annual induction logs began in April 2011. Water-level measurements and salinity sampling began in January 2011. Induction logs are used to assess the movement of the fresh-water/salt-water interface in ground water. 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 in 2011 and 2012. 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 112 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 CURRENT YEAR.--
WATER-LEVEL ELEVATION: Highest water level measured, 3.51 ft NGVD, July 20, 2012; lowest, 1.15 ft NGVD, June 8, 2011.
CHLORIDE CONCENTRATION: Highest measured chloride concentration, 30 mg/L, Jan. 18, Apr. 25, 2011; lowest, 23 mg/L, Sept. 27, 2012.

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 255011080124501, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/255011080124501.2012.pdf

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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; 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 24, 2011	**1455**	532	3.12	28
November 23, 2011	**1530**	524	2.31	26
December 23, 2011	**1335**	529	1.76	28
January 23, 2012	**1031**	539	1.49	26
February 27, 2012	**1218**	526	1.83	28
March 16, 2012	**1358**	523	1.98	26
April 25, 2012	**1053**	517	1.92	26
May 17, 2012	**1300**	532	2.36	26
June 27, 2012	**1409**	530	2.03	26
July 20, 2012	**0910**	528	3.51	26
August 23, 2012	**1216**	522	2.13	28
September 27, 2012	**1328**	544	2.74	23

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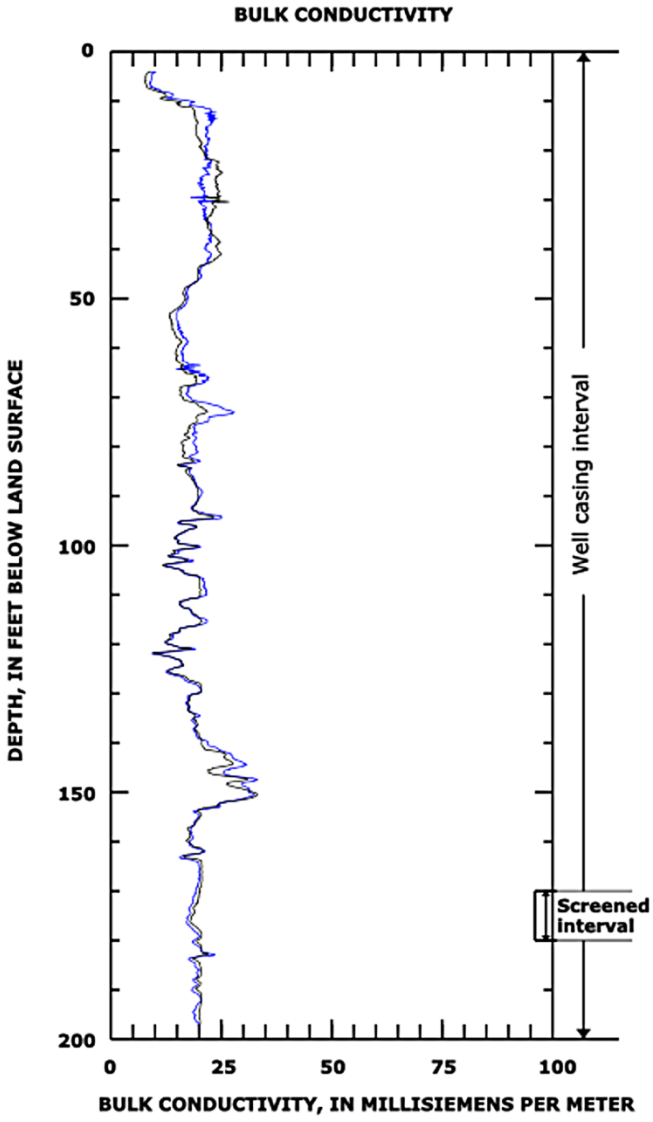

WY 2012 Induction log results

Station: USGS 255011080124501

Local name: G -3947

INDUCTION LOG DATES, ASSOCIATED CHLORIDE SAMPLE DATES

Induction log date	Chloride sample date	Dissolved chloride concentration, in mg/L
Apr. 25, 2012	Apr. 25, 2012	26
Apr. 25, 2011	Apr. 25, 2011	30