

Water-Data Report 2011

253924080174601 Local number G -3887A

Biscayne aquifer
Biscayne Limestone Aquifer

Miami-Dade County, FL

LOCATION.--Lat 25°39'24.7", long 80°17'46.8" referenced to North American Datum of 1983, in SW ¼ NE ¼ NW ¼ sec.13, T.55 S., R.40 E., Miami-Dade County, FL, Hydrologic Unit 03090202, about 17 ft west of the centerline of SW 63rd Avenue, at the intersection of SW 63rd Avenue and SW 123rd Terrace, 1.9 mi east of U.S. Highway 1 and State Road 973 (Pinecrest Parkway).

WATER-QUALITY RECORDS

WELL CHARACTERISTICS.-- Drilled, observation, water-table well, depth 130 ft, diameter 2 in., cased to 80 ft, screened 80 to 85 ft, cased 85 to 130 ft.

DATUM.--Land-surface datum is 10.45 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 2-in. diameter casing, 9.70 ft above National Geodetic Vertical Datum of 1929, Dec. 10, 2009, to present.

PERIOD OF RECORD.--January 2010 to October 2010 (quarterly), January 2011 to current year. See REMARKS.

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

REMARKS.--Well is also used for salinity monitoring, including an annual induction log, starting in April 2010. 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 2010. 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 12.0 mS/m at a depth of 49.4 ft below land surface. The resulting plot of logs collected from 2010 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, 2.88 ft NGVD, Oct. 8, 2010; lowest, 1.06 ft NGVD, June 16, 2011.

CHLORIDE CONCENTRATION: Highest measured chloride concentration, 2,350 mg/L, July 13, 2011; lowest, 2,050 mg/L, Apr. 13, 2010.

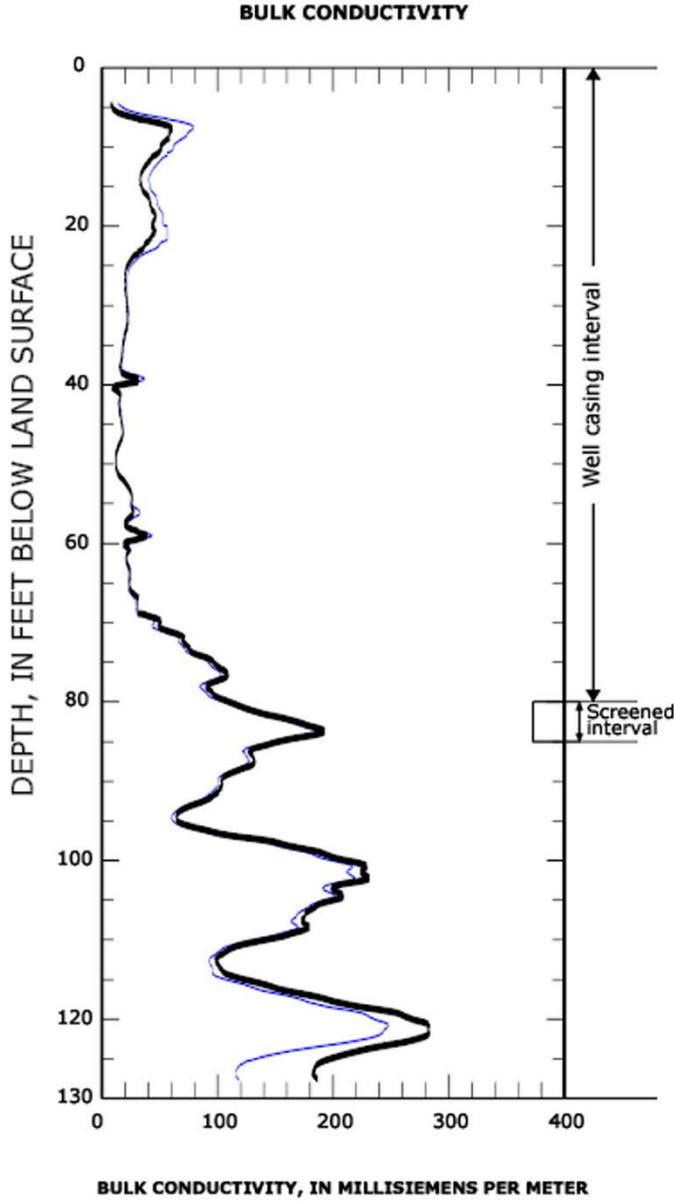
253924080174601 Local number G -3887A—Continued**WATER-QUALITY DATA****WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

[NGVD, National Geodetic Vertical Datum; ft, feet; mg/L, milligrams per liter;
°C, degrees Celsius; $\mu\text{S}/\text{cm}$, microsiemens per centimeter; --, no data]

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 8, 2010	1243	--	2.88	--
January 20, 2011	1450	6,830	1.77	2,200
February 25, 2011	1408	7,060	1.53	2,200
March 24, 2011	1441	7,170	1.30	2,200
April 20, 2011	1456	7,050	1.50	2,250
May 19, 2011	1319	7,070	1.54	2,200
June 16, 2011	1140	7,220	1.06	2,300
July 13, 2011	1225	7,220	1.69	2,350
August 15, 2011	1331	7,150	2.40	2,200
September 14, 2011	1237	7,160	2.46	2,200



WY 2011 Induction log results
Station: USGS 253924080174601
Local name: G -3887A



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

Induction log date	Chloride sample date	Dissolved chloride concentration, in mg/L
Apr. 20, 2011	Apr. 20, 2011	2,250
Apr. 13, 2010	Apr. 13, 2010	2,050