

Water-Data Report 2011

255515080103601 Local number G -3948D

Biscayne aquifer
Biscayne Limestone Aquifer

Miami-Dade County, FL

LOCATION.--Lat 25°55'14.9", long 80°10'36.2" referenced to North American Datum of 1983, in NE ¼ NW ¼ SW ¼ sec.17, T.52 S., R.42 E., Miami-Dade County, FL, Hydrologic Unit 03090202, in the median of NE 158th Street, about 100 yards west of the intersection of NE 158th Street and NE 12th Avenue, in North Miami Beach, FL.

WATER-QUALITY RECORDS

WELL CHARACTERISTICS.-- Drilled, observation, water-table well, depth 273 ft, diameter 2 in., cased to 237 ft, screened 237 to 243 ft, cased 243 to 273 ft.

DATUM.--Land-surface datum is 11.87 ft above National Geodetic Vertical Datum of 1929. Measuring point: North side of top of 2-in. PVC casing, 11.63 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--January 2011 to 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. 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 11.3 mS/m at a depth of 119.6 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, 2.76 ft NGVD, Sept. 7, 2011; lowest, 1.39 ft NGVD, June 03, 2011.

CHLORIDE CONCENTRATION: Highest measured chloride concentration, 4,000 mg/L, Apr. 27, June 3, July 6, Aug. 17, Sept. 7, 2011; lowest, 3,800 mg/L, Jan. 4, 2011.

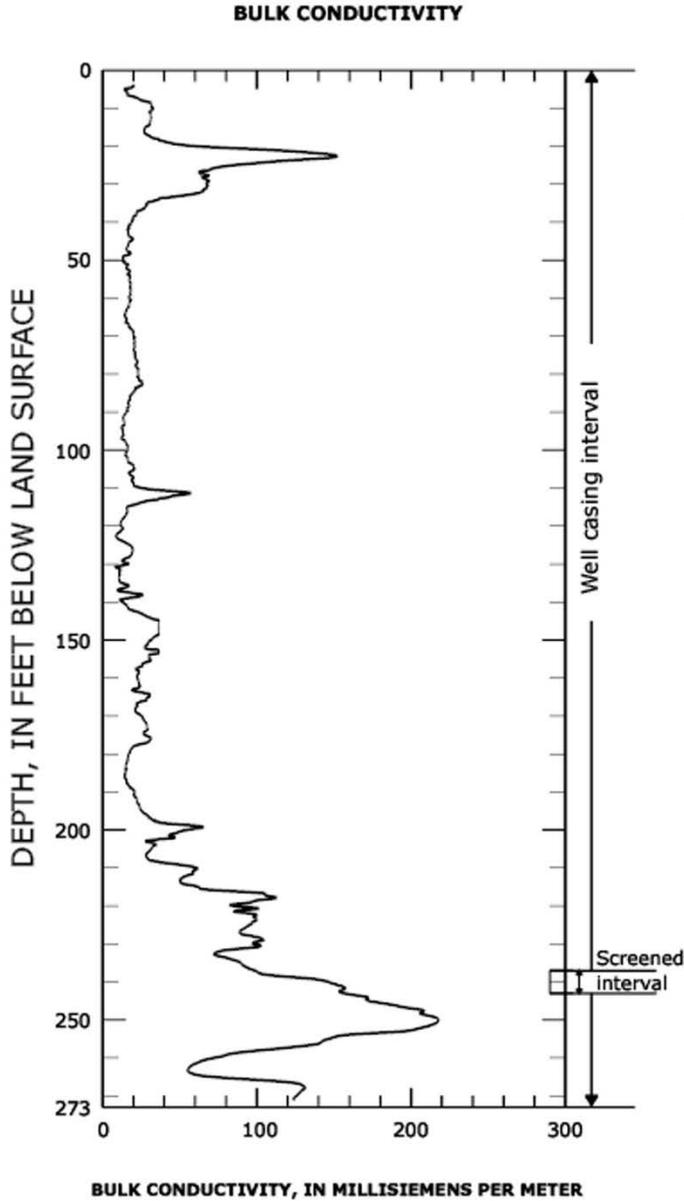
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WATER-QUALITY DATA**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**[NGVD, National Geodetic Vertical Datum; ft, feet; mg/L, milligrams per liter; °C, degrees Celsius; $\mu\text{S}/\text{cm}$, microsiemens per centimeter]

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)
January 4, 2011	1350	11,800	2.10	3,800
February 4, 2011	1308	12,200	2.22	3,900
March 1, 2011	1422	12,100	1.94	3,950
April 27, 2011	1400	12,200	1.79	4,000
May 16, 2011	1618	12,000	1.88	3,950
June 3, 2011	1215	12,000	1.39	4,000
July 6, 2011	1201	12,300	2.01	4,000
August 17, 2011	1523	12,200	2.32	4,000
September 7, 2011	1420	12,130	2.76	4,000



WY 2011 Induction log results
Station: USGS 255515080103601
Local name: G -3948D



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

Induction log date	Chloride sample date	Dissolved chloride concentration, in mg/L
Apr. 27, 2011	Apr. 19, 2010	4,000