

255733080195601 Local number G -3949 D

Biscayne aquifer
Biscayne Limestone Aquifer

Miami-Dade County, FL

LOCATION.--Lat 25°57'33.6", long 80°09'56.5" referenced to North American Datum of 1983, in SW ¼ SW ¼ SW ¼ sec.33, T.51 S., R.42 E., Miami-Dade County, FL, Hydrologic Unit 03090202, on north side of Carmel Lake Road, about 0.4 mi south of Ives Dairy Road, 1.1 mi west of U.S. Highway 1, in Aventura, FL.

WATER-QUALITY RECORDS

WELL CHARACTERISTICS.-- Drilled, observation, water-table well, depth 325 ft, diameter 2 in, cased to 217 ft, screened 217 to 222 ft, cased 222 to 325 ft.

DATUM.--Land-surface datum is 12.3 ft above National Geodetic Vertical Datum of 1929. Measuring point: measuring point has been north side of top of 2-in. PVC casing, 11.89 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--February 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 February 2011. Induction logs are used to assess the movement of the fresh-water/salt-water interface in ground water. See [RECORDS OF BULK CONDUCTIVITY](#).

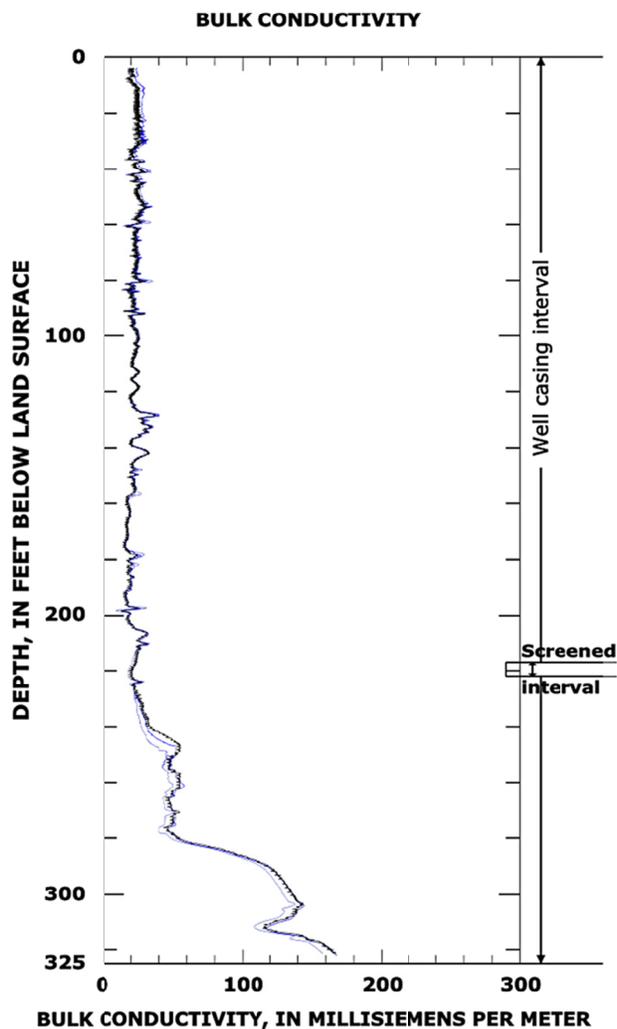
In order to display changes in bulk conductivity between induction logs collected over the period of record, each log has been adjusted to a median conductivity value at a depth that corresponds to a stable lithologic feature which produces a consistent conductivity profile, based on data collected in 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 16 mS/m at a depth of 174.6 ft below land surface. The resulting plot of logs collected from 2011 to the current year is provided in this report.

The electromagnetic induction logs collected in April 2013 are affected by a series of +/- 2.5 mS/m data spikes recurring on a 2.4 second interval. Because the amount of error that may be introduced by these data spikes is within the design limits of the equipment, the USGS has not employed filtering or smoothing methods which could further alter the data collected.

The original and corrected records of bulk conductivity, in millisiemens per meter, are available in files of the U.S. Geological Survey. Station description data for well G -3949 D, USGS Station ID 255733080195601, can be retrieved online via the [National Water Information System web interface](#) (NWISWeb, [\[station page\]](#)) or via the [Groundwater conditions in southern Florida website](#) ([\[station page\]](#).) Discrete water-level measurements ([\[graph\]](#),[\[data table\]](#)), and specific conductance and chloride concentration results from water samples ([\[data table\]](#)), collected at G -3949 D are also available online through NWISWeb.



WY 2013 Induction log results
 Station: USGS 255733080195601
 Local name: G -3949D



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

Induction log date	Chloride sample date	Dissolved chloride concentration in mg/L
Apr. 27, 2011	Apr. 27, 2011	111
Apr. 06, 2012	Apr. 06, 2012	122
Apr. 12, 2013 *	Apr. 12, 2013	119

* The electromagnetic induction logs collected in 2013 are affected by a series of +/- 2.5 mS/m data spikes recurring on a 2.4 second interval. See REMARKS.