

Water-Data Report 2007

254005080171601 Local number G 3609. USGS Observation Well near Pinecrest, FL.

Biscayne aquifer
Biscayne Limestone Aquifer
Miami-Dade County, FL

LOCATION.--Lat 25°40'05.6", long 80°17'16.1" referenced to North American Datum of 1983, in SW ¼ SE ¼ NE ¼ sec.12, T.55 S., R.40 E., Miami-Dade County, FL, Hydrologic Unit 03090202, across the street from Pinecrest Gardens, 76 ft east of SW 59th Avenue and 6 ft south of SW 111th Street.

WATER-QUALITY RECORDS

WELL CHARACTERISTICS.--Depth 85 ft. Upper casing diameter 2 in, top of first opening 80 ft, bottom of last opening 85 ft.

DATUM.--Land-surface datum is 14.8 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 14.75 ft above National Geodetic Vertical Datum of 1929, Sep. 18, 1995, to present. Prior to March 2000, measuring point was estimated to be 15 ft above NGVD from a topographic map. See REMARKS.

PERIOD OF RECORD.--September 1995 to current year. See REMARKS.

INSTRUMENTATION.--Quarterly measurement with electronic tape. Annual profile with induction logger. See REMARKS.

REMARKS.--Well is also used for salinity monitoring, including an annual induction log. Induction logs are used to assess movement of the fresh-water/salt-water interface in ground water. See [RECORDS OF BULK CONDUCTIVITY](#). A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the 2002 water year had been (with the exception of 1998) calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. Salinity monitoring began in September 1995. Water-level measurements began October 1996. Water-level elevation data collected prior to March 14, 2000, have been computed using the measuring point established on March 14, 2000, and are in the files of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.42 ft NGVD, Oct. 20, 1999; lowest, 1.48 ft NGVD, May 20, 2002.

254005080171601 Local number G 3609. USGS Observation Well near Pinecrest, FL.—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Date	Time	Elevation, feet above NGVD (72020)	Specific conductance, wat unf, $\mu\text{S}/\text{cm}$, 25 degC (00095)	Chloride, water, fltrd, mg/L (00940)
Oct 16...	1300	2.59	3,410	1,020
Jan 24...	1250	2.07	3,510	1,040
Jun 14...	1235	2.59	3,900	1,080
Aug 09...	1247	2.24	3,820	1,060

Lithologic log, USGS 254005080171601. Local Number G -3609

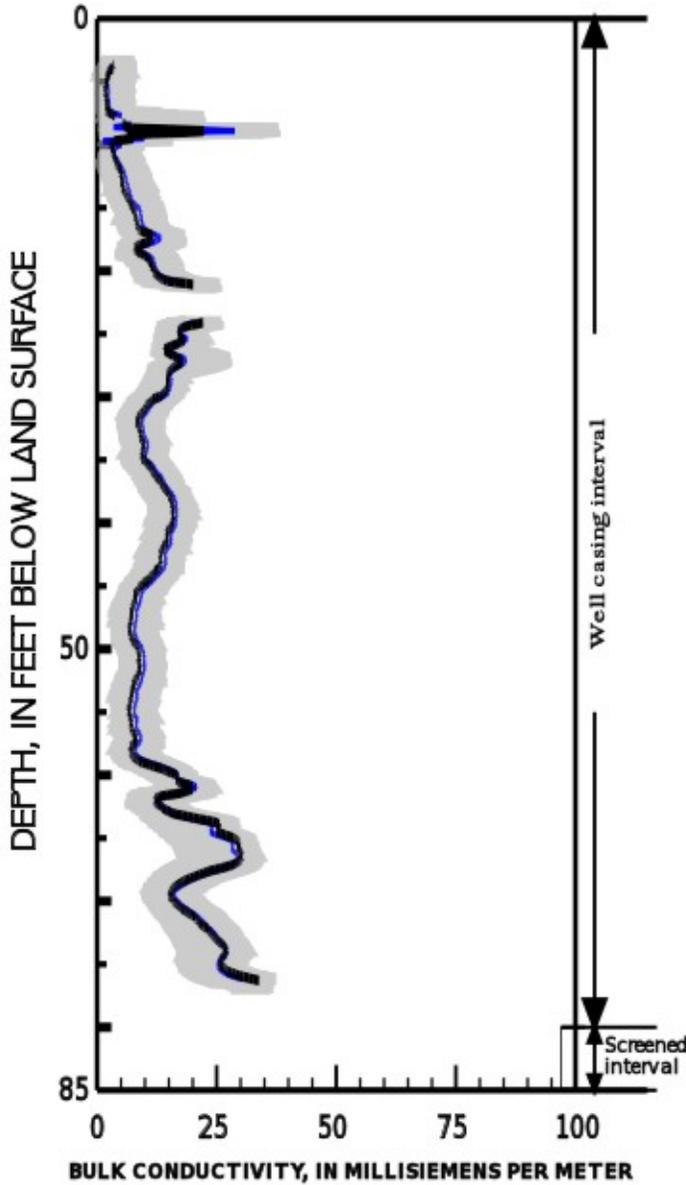
Depth interval feet below land surface	Lithologic description
0 - 25	Oolitic limestone with some micrite
25 - 30	Sandy limestone, sand is medium grained quartz
30 - 40	Quartz sand, medium to fine-grained; fragments of sandy limestone
40 - 50	Sandy limestone, sand is medium-grained quartz; includes marine shells and dissolution features
50 - 55	Sandy limestone, corals, medium-grained, micritic matrix; interbedded with a layer of coarse-grained calcareous sandstone
55 - 85	Sandy limestone, sand is fine-grained quartz in a micritic matrix, some sparite; includes marine shells, dissolution features, and fine-grained phosphate particles



WY 2007 Induction log results
Station: USGS 254005080171601
Local name: G -3609

BULK CONDUCTIVITY

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



Induction log date	Chloride sample date	Dissolved chloride concentration, in mg/L
June 14, 2007	June 14, 2007	1,080
April 24, 2006	April 24, 2006	1,000
April 27, 2005	April 27, 2005	1,000
April 23, 2004	April 23, 2004	920
April 30, 2003	April 30, 2003	880
May 20, 2002	May 20, 2002	980
April 6, 2001	April 6, 2001	1,150
April 13, 2000	April 13, 2000	840
April 9, 1999	April 9, 1999	920
April 1998	April 16, 1998	880
April 23, 1997	April 23, 1997	880
May 24, 1996	- no sample -	--
January 9, 1996	January 16, 1996	660

EXPLANATION

Bulk conductivity, in millisiemens per meter,
 April 24, 2006, June 14, 2007.

Shaded area represents range in bulk conductivity logs
 collected from January 9, 1996, through April 24, 2006.

Delimits the interval for which the well is open
 to the aquifer