

Water-Data Report 2007

254108080170601 Local number G 3608. USGS Observation Well near Kendall, FL.

Biscayne aquifer
Biscayne Limestone Aquifer
Miami-Dade County, FL

LOCATION.--Lat 25°41'03.9", long 80°17'04.6" referenced to North American Datum of 1983, in NW ¼ SW ¼ NW ¼ sec.6, T.55 S., R.41 E., Miami-Dade County, FL, Hydrologic Unit 03090202, 16 ft east of SW 57th Avenue and about 300 ft north of SW 94th Street, across the street from 9320 SW 57th Avenue, west of Snapper Creek. (Corrected)

WATER-QUALITY RECORDS

WELL CHARACTERISTICS.--Depth 100 ft. Upper casing diameter 2 in, top of first opening 95 ft, bottom of last opening 100 ft.

DATUM.--Land-surface datum is 11 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 10.95 ft above National Geodetic Vertical Datum of 1929, Aug. 26, 1995, to present. Prior to March 2000, measuring point was estimated to be 11 ft above NGVD from a topographic map. See REMARKS.

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

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

REMARKS.--Well is also used for quarterly 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 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 measurements began in August 1995. Water-level measurements began in 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. This site was selected to be part of a drought monitoring project beginning in April 2007. Weekly chloride sampling was done from April 2007 to July 2007. Monthly sampling began September 2007.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.48 ft NGVD, Oct. 28, 2004; lowest, 2.21 ft NGVD, July 23, 2002.

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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...	1242	3.23	1,060	225
Jan				
24...	1226	2.90	1,050	195
May				
11...	1143	3.09	--	--
Jun				
01...	1657	2.87	1,080	210
08...	1015	2.86	1,040	210
15...	1155	3.35	1,110	205
22...	1100	3.39	1,070	205
28...	1135	2.88	1,060	210
Jul				
05...	1125	3.08	1,100	210
13...	1135	3.21	1,070	205
23...	1549	2.96	1,080	210
26...	1000	2.77	1,080	210
Aug				
02...	1033	2.94	1,070	205
09...	1133	3.10	1,090	215
16...	1020	3.31	1,100	205
22...	0930	3.22	1,070	205
31...	0950	3.10	1,080	200
Sep				
27...	0950	2.67	1,070	215

Lithologic log, USGS 254108080170601. Local Number G -3608

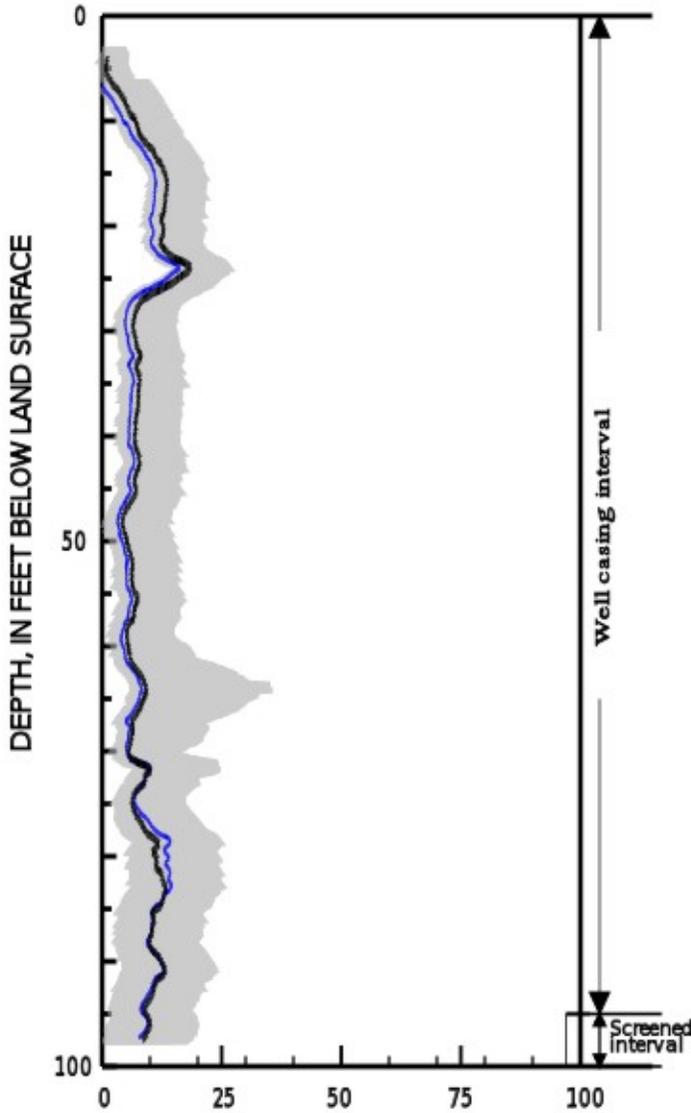
Depth interval feet below land surface	Lithologic description
0 - 20	Sandy limestone with fine-grained quartz sand
20 - 40	Quartz sand, color ranges upward from beige to tan, coarse to fine-grained, poorly sorted; includes sandy limestone fragments and very fine-grained black phosphate
40 - 45	Sand, medium to fine grained , poorly sorted; marine shells; with fragments of quartz sandstone, micritic matrix
45 - 55	Quartz sandstone, fine to very fine-grained, micritic matrix; includes marine shells, dissolution features, and very fine- grained phosphate particles
55 - 60	Quartz sand, medium to very fine-grained, poorly sorted; with beds of quartz sandstone, micritic matrix; includes marine shell fragments, dissolution features, and very fine-grained phosphate
60 - 75	Quartz sand, medium to very fine-grained, poorly sorted; with sandy limestone fragments, marine shell fragments, and very fine-grained phosphate particles
75 - 100	Quartz sandstone, fine to very fine-grained, micritic matrix; includes dissolution features and marine shells with some recrystallization and calcite fill



WY 2007 Induction log results
Station: USGS 254108080170601
Local name: G -3608

BULK CONDUCTIVITY

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



Induction log date	Chloride sample date	Dissolved chloride concentration, in mg/L
June 13, 2007	June 15, 2007	205
April 24, 2006	April 24, 2006	230
April 26, 2005	April 26, 2005	225
April 23, 2004	April 23, 2004	200
April 30, 2003	April 30, 2003	72
May 20, 2002	May 20, 2002	64
April 6, 2001	April 6, 2001	64
April 13, 2000	April 13, 2000	62
April 9, 1999	April 9, 1999	64
April 1998	April 16, 1998	74
April 23, 1997	April 23, 1997	72
May 24, 1996	- no sample -	--
January 9, 1996	January 16, 1996	80

BULK CONDUCTIVITY, IN MILLISIEMENS PER METER

EXPLANATION

Bulk conductivity, in millisiemens per meter, April 24, 2006, June 13, 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