

262209080044702 Local number PB 1669. USGS Observation Well in Boca Raton, FL.

Surficial Aquifer System

Palm Beach County, FL

LOCATION.--Lat 26°22'10.1", long 80°04'47.0" referenced to North American Datum of 1983, in NW ¼ SW ¼ SE ¼ sec.17, T.47 S., R.43 E., Palm Beach County, FL, Hydrologic Unit 03090202, 20 ft south and 4 ft east of the junction of NE 5th Avenue and NE 4th Way, 0.1 mi north of NE 20th Street and 0.2 mi west of U.S. Highway 1, in downtown Boca Raton.

WATER-QUALITY RECORDS

WELL CHARACTERISTICS.--Depth 131 ft. Upper casing diameter 2; top of first opening 108 ft, bottom of last opening 131 ft. Drilled, observation, water-table well, diameter 2 in., depth 131 ft, cased to 131 ft, open-end well.

DATUM.--Land-surface datum is 11.64 ft above National Geodetic Vertical Datum of 1929. Measuring point: From Oct. 29, 1993, to present, measuring point has been top of 2-in. steel casing, located inside meter box 0.3 ft below grade, 11.34 ft above National Geodetic Vertical Datum of 1929. Prior to October 1994, top of casing was considered to be 20.00 ft above NGVD. See REMARKS.

PERIOD OF RECORD.--October 1993 to current year. See REMARKS.

INSTRUMENTATION.--Monthly water-level measurement with chalked steel tape or electric tape.

REMARKS.--This well has also been used for monthly salinity monitoring since November 1993. The figures of water levels as elevation, in feet NGVD, prior to October 1994 are in error. Corrected records of water-level elevation, in ft NGVD, are in files of the U.S. Geological Survey. See DATUM. The well was originally open to the aquifer at a depth of 131 ft. The well is obstructed at a depth of 108 ft by sediment heaving into well. Well remains in communication with aquifer.

EXTREMES FOR PERIOD OF RECORD.--

WATER-LEVEL ELEVATION: Highest water level measured, 9.17 ft NGVD, Oct. 1, 2001; lowest, 2.82 ft NGVD, June 06, 2011.

CHLORIDE CONCENTRATION: Highest measured chloride concentration, 66 mg/L, Feb. 25, 2003; lowest, 10 mg/L, Aug. 25, 1998.

WATER-QUALITY DATA

WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

[NGVD, National Geodetic Vertical Datum; ft, feet; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter]

Date	Sample start time	Specific conductance, water, unfiltered, µS/cm at 25°C (00095)	Elevation above NGVD 1929, ft (72020)	Chloride, water, unfiltered, mg/L (99220)
October 21, 2011	1330	462	4.70	40
November 21, 2011	1358	458	5.71	37
December 14, 2011	1006	463	4.86	40
January 25, 2012	1421	446	3.75	38
February 23, 2012	1218	472	3.85	38
March 13, 2012	1245	463	4.26	38
April 5, 2012	1255	460	3.67	40
May 18, 2012	1101	467	5.43	38
June 21, 2012	1345	467	5.52	40
July 19, 2012	1005	469	6.10	40
August 16, 2012	1257	460	5.23	40
September 20, 2012	1350	468	6.27	36