



Water-Data Report 2011

282533081082204 Local number Cocoa-C (Zone 3) Well near Bithlo, FL.

Floridan aquifer system
Floridan Aquifer System

Orange County, FL

LOCATION.--Lat 28°25'33", long 81°08'22" referenced to North American Datum of 1927, in SW ¼ NE ¼ SW ¼ sec.5, T.24 S., R.32 E., Orange County, FL, Hydrologic Unit 03080101, in Cocoa well field, 10 ft north of Wewahootee Road, 6.6 mi east of State Highway 15, and 10 mi south of Bithlo. Owner: U.S. Geological Survey.

GROUNDWATER RECORDS

WELL CHARACTERISTICS.--Depth 1,224 ft. Upper casing diameter 1.25 in; top of first opening 1,218 ft, bottom of last opening 1,224 ft. Drilled, observation, artesian well, cased to 1,218 ft.

DATUM.--Land-surface datum is 63.77 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of male quick connect coupling, 2.79 ft above land-surface datum, May 5, 2009, to present. Top of male quick coupling 2.81 ft above land-surface datum, July 8, 1994 to May 4, 2009.

PERIOD OF RECORD.--February 1966 to April 1999 (monthly); May 1999 to August 2000 (bimonthly); November 2000 to current year (quarterly).

GAGE.--Quarterly measurement with steel or electric tape.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.27 ft above NGVD of 1929, Feb. 2, 1970; lowest measured, 32.23 ft above NGVD of 1929, April 28, 1999.

**WATER SURFACE ELEVATION IN FEET NGVD 1929
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

[Measurement method: S, steel tape; T, electric tape. Water-level status: --, static; S, nearby site that taps the same aquifer was being pumped.]

Date	Water level	Measure-ment method	Water-level status	Date	Water level	Measure-ment method	Water-level status
Oct 1	36.88	S	--	May 10	33.95	T	--
Jan 13	34.30	S	--	11	33.75	T	S
Apr 13	35.46	S	--	Aug 2	34.92	S	--

Water year 2011 lowest: 33.95, May 10, 2011, highest: 36.88, Oct 1, 2010

282533081082204 Local number Cocoa-C (Zone 3) Well near Bithlo, FL.—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 1 of 2

[CaCO₃, calcium carbonate; SiO₂, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter]

Date	Sample start time	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, µS/cm at 25 °C (00095)	Temperature, water, °C (00010)	Dissolved solids dried at 180 °C, water, filtered, mg/L (70300)		Hardness, water, mg/L as CaCO ₃ (00900)	Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)
05-11-2011	1345	8.2	870	23.1	588	363	112	17.4	2.40	49.1	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 2 of 2

[CaCO₃, calcium carbonate; SiO₂, silicon dioxide; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter]

Date	Sample start time	Alkalinity, water, filtered, inflection-point, incremental titration method, field, mg/L as CaCO ₃ (39086)	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Silica, water, filtered, mg/L as SiO ₂ (00955)	Sulfate, water, filtered, mg/L (00945)	Strontium, water, filtered, µg/L (01080)
05-11-2011	1345	210	86.5	.17	19.7	142	10,300