

264532080545901 Local number HE -1145

Surficial Aquifer System

Hendry County, FL

LOCATION.--Lat 26°45'31.9", long 80°54'58.9" referenced to North American Datum of 1983, Hendry County, FL, Hydrologic Unit 03090202, south of the Herbert Hoover Dike at Lake Okeechobee, 1,700 ft north of U.S. Highway 27 and 730 ft southeast of the Industrial Canal locks.

WATER-QUALITY RECORDS

WELL CHARACTERISTICS.--Depth 161.35 ft. Upper casing diameter 2; top of first opening 145 ft, bottom of last opening 150 ft.

DATUM.--Land-surface datum is 16.3 ft above National Geodetic Vertical Datum of 1929. Measuring point: From April 15, 2011, to present, measuring point has been top of casing, 16.3 ft above National Geodetic Vertical Datum of 1929

PERIOD OF RECORD.--August 2011 to current year. See REMARKS.

INSTRUMENTATION.--Bimonthly measurement with chalked steel tape or electric tape. Bimonthly profile with electromagnetic induction logger. See REMARKS.

REMARKS.--Well is also used for salinity monitoring, including monthly induction logs beginning August 2011. Induction logs are used to assess the movement of the fresh-water/salt-water interface in groundwater. 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 from 2011 to the current year. 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 63.1 mS/m at a depth of 31.8 ft below land surface. The resulting plot of logs collected from 2011 to the current year is provided in this report. The original and corrected records of bulk conductivity, in millisiemens per meter, are available in files of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--

WATER-LEVEL ELEVATION: Highest water level measured, 13.05 ft NGVD, Aug. 30, 2012; lowest, 10.60 ft NGVD, Aug. 9, 2011.

CHLORIDE CONCENTRATION: Highest measured chloride concentration, 980 mg/L, Dec. 15, 2011; lowest, 940 mg/L, Oct. 19, 2011, Feb. 24, Apr. 24, 2012.

WATER-QUALITY DATA

WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

[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 conductivity, water, unfiltered, µS/cm at 25°C (00095)	Elevation above NGVD 1929, ft (72020)	Chloride, water, unfiltered, mg/L (99220)
August 9, 2011	1128	4,730	10.60	960

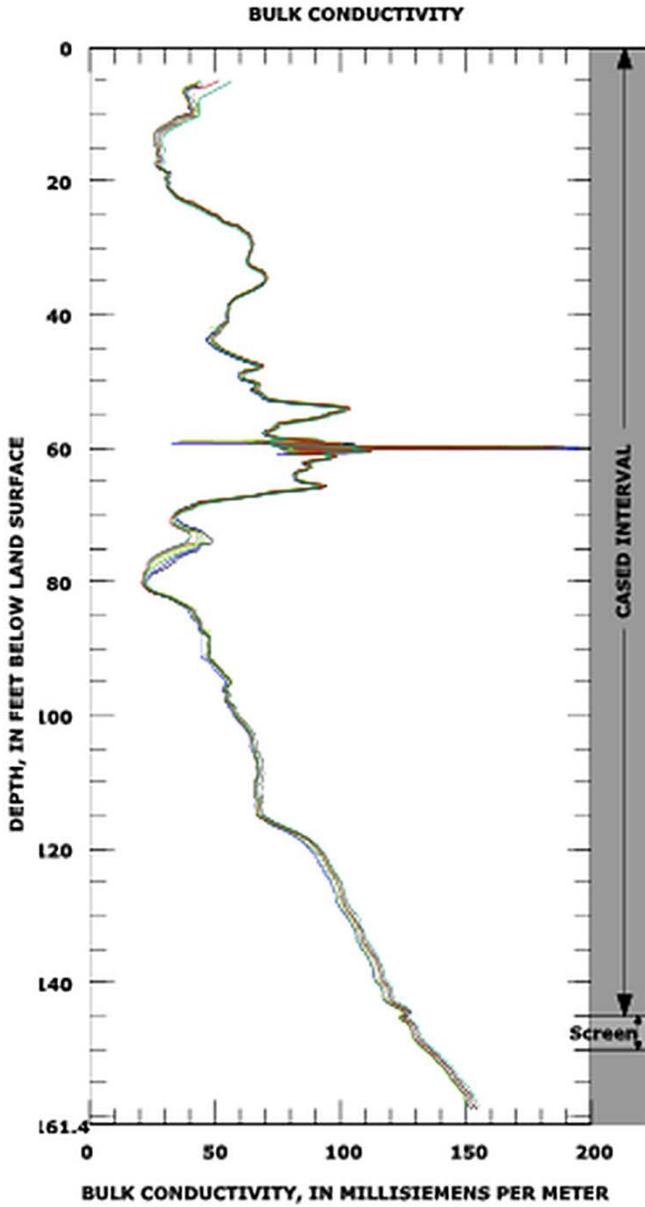
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WATER-QUALITY DATA**WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**[NGVD, National Geodetic Vertical Datum; ft, feet; mg/L, milligrams per liter;
°C, degrees Celsius; $\mu\text{S}/\text{cm}$, microsiemens per centimeter]

Date	Sample start time	Specific conduc- tance, water, unfiltered, $\mu\text{S}/\text{cm}$ at 25°C (00095)	Elevation above NGVD 1929, ft (72020)	Chloride, water, unfiltered, mg/L (99220)
October 19, 2011	1120	4,580	11.47	940
December 15, 2011	0921	4,570	12.40	980
February 24, 2012	1258	4,680	11.67	940
April 24, 2012	1610	4,640	10.84	940
June 19, 2012	0905	4,610	11.16	960
August 30, 2012	0929	4,490	13.05	960



WY 2012 Induction log results
 Station: USGS 264532080545901
 Local name: HE -1145



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

Induction log date	Chloride sample date	Dissolved chloride concentration, in mg/L
Aug. 9, 2011	Aug. 9, 2011	960
Oct. 19, 2011	Oct. 26, 2011	940
Dec. 15, 2011	Dec. 13, 2011	980
Feb. 24, 2012	Feb. 23, 2012	940
Apr. 24, 2012	Apr. 25, 2012	940
June 19, 2012	June 18, 2012	960
Aug. 30, 2012	Aug. 30, 2012	960