

Water-Data Report 2013

**272427080240201 Local number STL 213. USGS Observation Well near Fort Pierce, FL.**

Surficial Aquifer System

St. Lucie County, FL

LOCATION.--Lat 27°24'27.3", long 80°24'01.9" referenced to North American Datum of 1983, in SE ¼ NE ¼ NE ¼ sec.26, T.35 S., R.39 E., St. Lucie County, FL, Hydrologic Unit 03090202, 15 ft east of Gordy Road, 1 mi south of State Road 70. The intersection of Gordy Road and State Road 70 is one block west of the Florida Turnpike.

**GROUNDWATER RECORDS**

WELL CHARACTERISTICS.--Depth 115 ft. Upper casing diameter 6; top of first opening 110 ft, bottom of last opening 115 ft.

DATUM.--Land-surface datum is 17.8 ft above National Geodetic Vertical Datum of 1929. Measuring point: From Aug. 7, 2008, to present, measuring point has been top of base, re-secured, 19.77 ft above National Geodetic Vertical Datum of 1929 (NGVD). From June 16, 2008, to July 26, 2008, measuring point was top of base, 19.77 ft above NGVD. From July 1, 1998, to April 7, 2008, measuring point was top of base, 20.29 ft above NGVD. From 1993 to June 22, 1998, measuring point was top of base, 20.36 ft above NGVD. Prior to 1992, measuring point was top of casing, 20.26 ft above NGVD. Land surface datum 1.45 ft above the North American Vertical Datum of 1988. Prior to June 22, 1998, top of base was 20.36 ft above NGVD. Prior to January 1993, measuring point was top of casing, 20.26 ft above NGVD. See REMARKS.

PERIOD OF RECORD.--May 1988 to October 1989 (intermittent), September 1990 to December 1992 (monthly), January 1993 to current year.

GAGE.--Electronic data logger.

COOPERATION.--South Florida Water Management District.

REMARKS.--The well was damaged April 8, 2008, reconstructed June 16, 2008. The rebuilt station was surveyed to a benchmark that provided an elevation referenced to the North American Vertical Datum of 1988 (NAVD). The NAVD elevation measurement was converted to the NGVD 1929 datum using the VERTCON software of the National Geodetic Survey. While the NGVD 1929 datum thus determined may differ from the historic NGVD 1929 elevation datum (historic NGVD), there are no reference marks available for computing the offset between the two datums at this location. The figures of water levels as elevation, in feet historic NGVD, prior to April 8, 2008 have therefore not been revised. The station was again damaged July 27, 2008, and August 19, 2008, and rebuilt September 10, 2008.

EXTREMES FOR PERIOD OF RECORD.--Highest daily maximum water level, 16.72 ft NGVD, Sept. 27, 2004; lowest water level measured, 8.56 ft NGVD, June 25, 2011.

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**ELEVATION ABOVE NGVD 1929, FEET**  
**WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**  
**DAILY MAXIMUM VALUES**

| Day          | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May   | Jun    | Jul    | Aug    | Sep    |
|--------------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|
| 1            | 13.67  | 13.61  | 12.04  | 11.00  | 10.40  | 10.03  | 9.57   | 10.14 | 10.81  | 12.16  | 13.13  | 13.19  |
| 2            | 13.67  | 13.54  | 11.97  | 10.90  | 10.37  | 10.03  | 9.56   | 10.25 | 10.72  | 12.48  | 13.10  | 13.23  |
| 3            | 13.66  | 13.42  | 11.97  | 10.92  | 10.37  | 9.98   | 9.51   | 10.30 | 10.72  | 12.70  | 13.11  | 13.23  |
| 4            | 13.64  | 13.27  | 11.98  | 10.82  | 10.35  | 9.98   | 9.58   | 10.32 | 10.71  | 12.72  | 13.11  | 13.00  |
| 5            | 13.58  | 13.23  | 11.90  | 10.82  | 10.33  | 10.02  | 9.60   | 10.32 | 10.42  | 12.59  | 13.56  | 12.98  |
| 6            | 13.84  | 13.19  | 11.92  | 10.84  | 10.31  | 9.95   | 9.59   | 10.32 | 10.96  | 12.58  | 14.10  | 12.86  |
| 7            | 14.42  | 13.15  | 11.81  | 10.87  | 10.28  | 9.96   | 9.53   | 10.32 | 11.77  | 12.55  | 14.10  | 12.85  |
| 8            | 14.45  | 13.04  | 11.81  | 10.89  | 10.28  | 9.90   | 9.53   | 10.30 | 11.91  | 12.45  | 13.78  | 12.71  |
| 9            | 14.36  | 12.98  | 11.78  | 10.88  | 10.19  | 9.91   | 9.54   | 10.30 | 11.96  | 12.40  | 13.72  | 12.69  |
| 10           | 14.20  | 12.95  | 11.78  | 10.89  | 10.19  | 9.87   | 9.49   | 10.26 | 11.94  | 12.36  | 13.58  | 12.62  |
| 11           | 14.00  | 12.90  | 11.77  | 10.89  | 10.18  | 9.89   | 9.52   | 10.30 | 11.88  | 12.33  | 13.45  | 13.09  |
| 12           | 13.90  | 12.87  | 11.65  | 10.85  | 10.19  | 9.92   | 9.47   | ---   | 11.84  | 12.28  | 13.27  | 13.22  |
| 13           | 13.77  | 12.85  | 11.69  | 10.83  | 10.17  | 9.81   | 9.59   | ---   | 11.74  | 12.35  | 13.15  | 13.25  |
| 14           | 13.64  | 12.84  | 11.61  | 10.79  | 10.21  | 9.84   | 9.66   | 11.03 | 11.66  | 12.76  | 13.06  | 13.29  |
| 15           | 13.93  | 12.85  | 11.62  | 10.77  | 10.31  | 9.79   | 9.78   | 10.98 | 11.56  | 13.03  | 12.98  | 13.65  |
| 16           | 13.91  | 12.80  | 11.59  | 10.74  | 10.33  | 9.79   | 9.95   | 11.00 | 11.40  | 13.16  | 12.91  | 14.12  |
| 17           | 14.02  | 12.74  | 11.59  | 10.71  | 10.25  | 9.76   | 10.01  | 10.88 | 11.35  | 13.35  | 12.86  | 14.17  |
| 18           | 14.17  | 12.70  | 11.56  | 10.67  | 10.27  | 9.77   | 10.04  | 10.88 | 11.27  | 13.35  | 12.75  | 14.20  |
| 19           | 14.18  | 12.64  | 11.42  | 10.65  | 10.30  | 9.79   | 10.05  | 10.77 | 11.16  | 13.40  | 12.60  | 14.25  |
| 20           | 14.11  | 12.60  | 11.44  | 10.67  | 10.23  | 9.73   | 10.03  | 10.77 | 11.06  | 13.34  | 12.51  | 14.19  |
| 21           | 13.93  | 12.56  | 11.32  | 10.66  | 10.25  | 9.74   | 10.08  | 10.75 | 11.34  | 13.20  | 12.41  | 13.92  |
| 22           | 13.78  | 12.48  | 11.32  | 10.64  | 10.17  | 9.68   | 10.15  | 10.87 | 11.64  | 13.78  | 12.40  | 13.82  |
| 23           | 13.75  | 12.43  | 11.27  | 10.57  | 10.20  | 9.71   | 10.18  | 10.99 | 11.74  | 13.93  | 12.38  | 13.69  |
| 24           | 13.84  | 12.39  | 11.27  | 10.57  | 10.14  | 9.69   | 10.18  | 10.93 | 11.76  | 13.80  | 12.30  | 13.85  |
| 25           | 13.87  | 12.34  | 11.26  | 10.54  | 10.15  | 9.69   | 10.18  | 10.92 | 11.66  | 13.70  | 12.21  | 13.86  |
| 26           | 14.19  | 12.29  | 11.15  | 10.51  | 10.17  | 9.67   | 10.14  | 10.84 | 11.59  | 13.59  | 12.17  | 13.72  |
| 27           | 14.26  | 12.23  | 11.15  | 10.50  | 10.06  | 9.60   | 10.14  | 10.83 | 11.60  | 13.57  | 12.13  | 13.68  |
| 28           | 14.23  | 12.19  | 11.07  | 10.45  | 10.09  | 9.64   | 10.11  | 10.81 | 11.52  | 13.49  | 12.05  | 13.54  |
| 29           | 14.13  | 12.16  | 11.09  | 10.46  | ---    | 9.58   | 10.10  | 10.77 | 11.53  | 13.51  | 12.11  | 13.47  |
| 30           | 13.94  | 12.12  | 10.98  | 10.45  | ---    | 9.59   | 10.11  | 10.83 | 11.94  | 13.46  | 12.92  | 13.33  |
| 31           | 13.77  | ---    | 10.98  | 10.44  | ---    | 9.57   | ---    | 10.81 | ---    | 13.23  | 13.15  | ---    |
| <b>Total</b> | 432.81 | 383.36 | 357.76 | 332.19 | 286.74 | 303.88 | 294.97 | ---   | 343.16 | 403.60 | 401.06 | 403.67 |
| <b>Mean</b>  | 13.96  | 12.78  | 11.54  | 10.72  | 10.24  | 9.80   | 9.83   | ---   | 11.44  | 13.02  | 12.94  | 13.46  |
| <b>Max</b>   | 14.45  | 13.61  | 12.04  | 11.00  | 10.40  | 10.03  | 10.18  | ---   | 11.96  | 13.93  | 14.10  | 14.25  |
| <b>Min</b>   | 13.58  | 12.12  | 10.98  | 10.44  | 10.06  | 9.57   | 9.47   | ---   | 10.42  | 12.16  | 12.05  | 12.62  |

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