



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Rev. 1/16

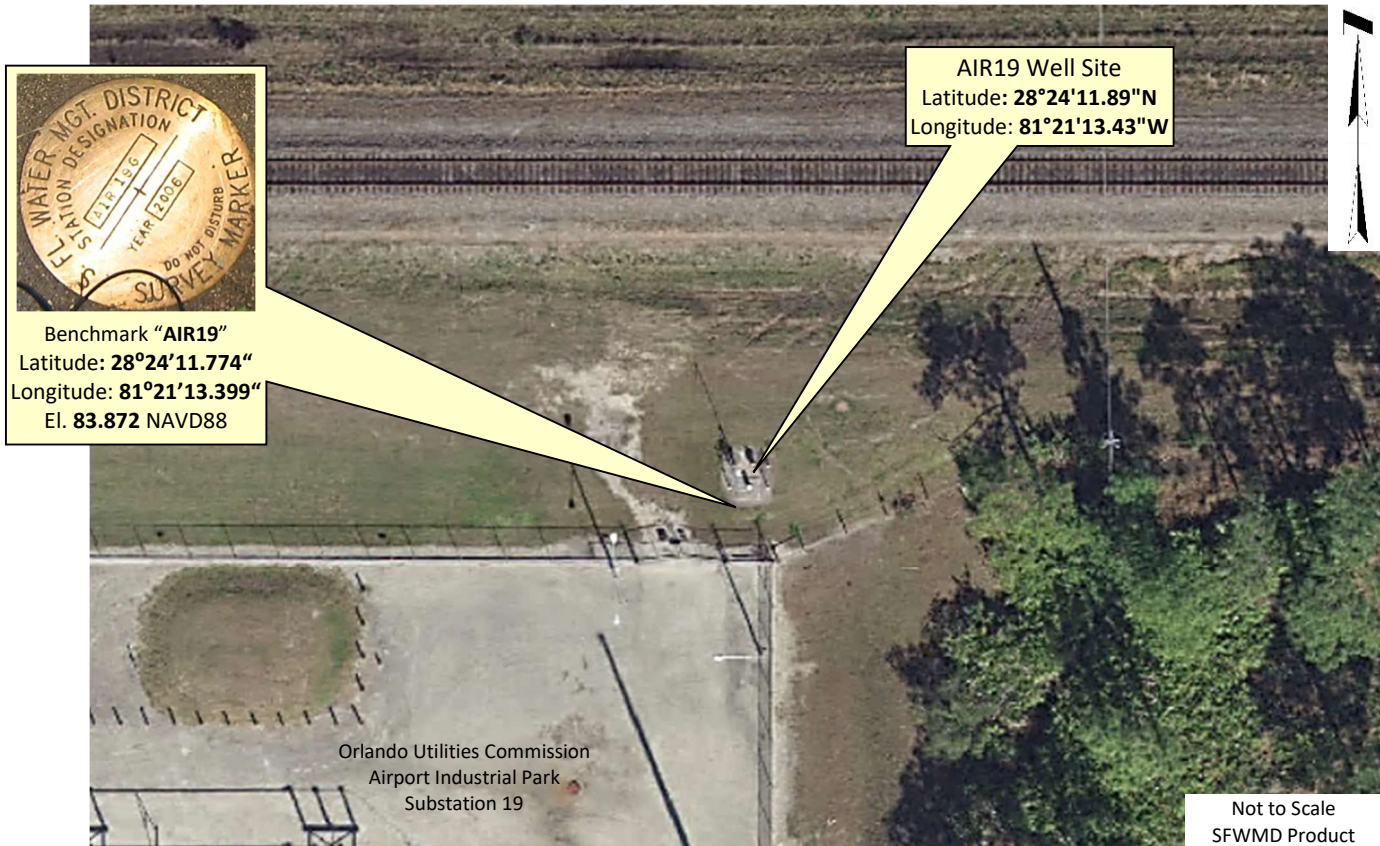
USGS Station Name: Not Applicable		SCADA RTU Station Name: Not Applicable		DB Hydro Station Name: AIR19W1 AIR19W2		DB Hydro Site Name: AIR19		Agency: WMD	
Party Chief: RODRIGUEZ/EBANKS		Field Book: NONE		Page		Date of Field Work: 25-aug-14		Prepared by: H. Ehmke 20-jul-20	
BENCHMARK DATA									
Site Benchmark: AIR19		Site Benchmark El. 83.872 NAVD88		NGS Source Benchmark: N122 (AK1791)		NGS Source Benchmark El.: 90.899 (27.706m) NAVD88 91.834 (27.991m) NGVD29		+0.971 Corpscon 6.0.1 Conversion Factor (NAVD88 to NGVD29)	
+0.935 - Historical Conversion Factor									
SITE SPECIFIC DATA									
W1 Reference Elevations: 88.439 NAVD88 (Survey) 89.41 NGVD29 (Corpscon) 89.374 NGVD29 (Historical)			W2 Reference Elevations: 89.079 NAVD88 (Survey) 90.05 NGVD29 (Corpscon) 90.014 NGVD29 (Historical)			Existing Brass Tag Elevation (Datum): GW1 - GW2 -		Calibration Port Elevation(s) (NAVD88): Not Applicable	
Ground Elevation (NAVD88): Not Taken					Pad Elevation (NAVD88): Not Applicable				

GEOGRAPHIC DATA					
Section 18		Township 24 South		Range 30 East	
Well		Latitude: 28°24'11.89"	Longitude: 81°21'13.43"	Source: Pick Point Google Earth	
		State Plane Coordinates	Northing (Y) =	Easting (X) =	

Notes:
NAVD88 – North American Vertical Datum of 1988
NGS – National Geodetic Survey
NGVD29- National Geodetic Vertical Datum of 1929
Corpscon 6.0.1 - A U.S. Army Corps of Engineers Engineering Research and Development Center Topographic Engineering Center Alexandria, Virginia Windows-based program to convert coordinates and elevations between datum's using vertcon05.txt and vertcon05.05 files supplied by the U.S. Army Corps of Engineers South Atlantic Division, Jacksonville FL.
Historical Conversion Factor – The difference between the NAVD88 value derived from the National Geodetic Survey Source benchmark and the value used at the time of the survey.

PICTURES

Aerial Overall Site

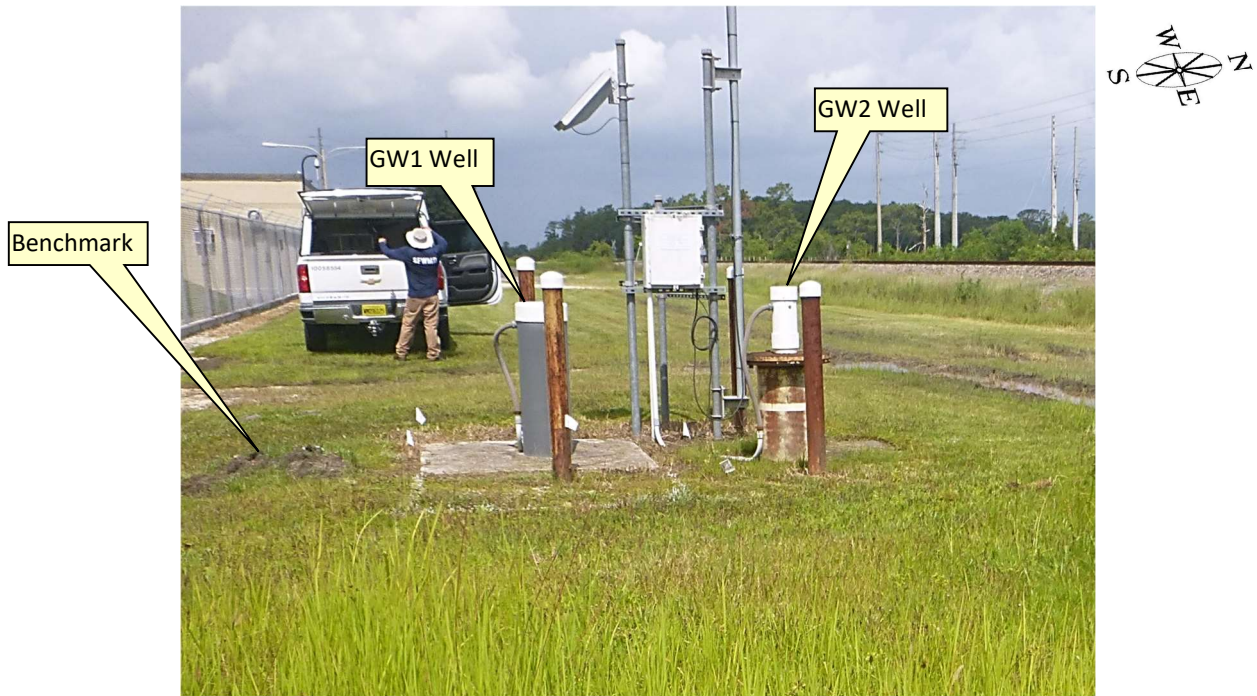




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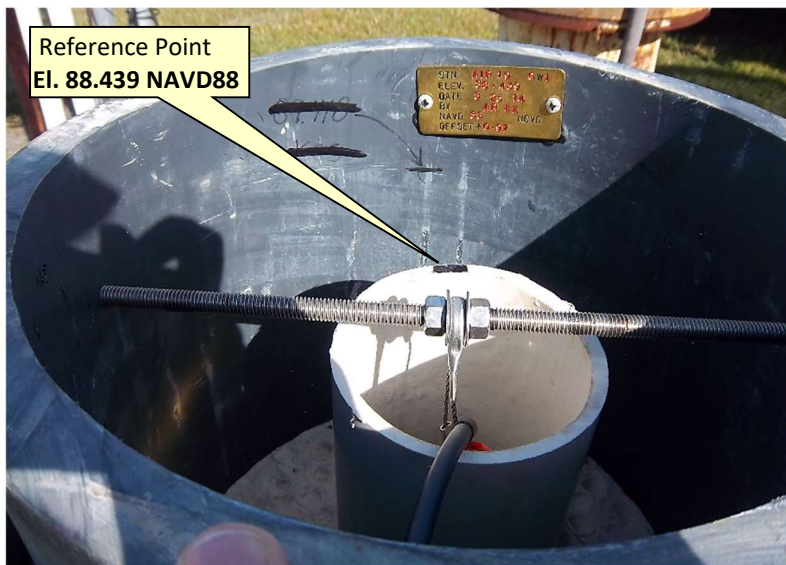
Rev. 1/16

Overall Well Site



Looking Westerly (oblique not to scale) (25-jul-18)

GW1 Well Head



Oblique not to scale (25-aug-14)

Closeup of NAVD88 Brass tag





SOUTH FLORIDA WATER MANAGEMENT DISTRICT

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GW2 Well Head

Reference Point
El. 88.079 NAVD88



Oblique not to scale (25-aug-14)

Closeup of NAVD88 Brass tag



Site Information

8 Site	AIR19
Common Name	GROUNDWATER MONITORING SITE NEAR OUC SUBSTATION 19
Location	SITE IS ON ORLANDO UTILITY COMMISSION PROPERTY AND REQUIRES ADVANCE NOTICE.
Site Notes	null
Contact	BRIAN SEDOCK, ESDA

Station Information for Site AIR19

Station	Description	Latitude	Longitude	Xcoord	Ycoord	County	Basin	Section	Town	Range
AIR19W1	AIR 19 GW SITE (SHALLOW WELL) NR ORLANDO UTILITY COMMISSION SUBSTATION 19	282411.8	812113.6	542434.662	1479493.449	ORA	BOGGY CR	18	24	30
AIR19W2	AIR 19 GW SITE (DEEP WELL) NR ORLANDO UTILITY COMMISSION SUBSTATION 19	282411.8	812113.6	542434.662	1479493.449	ORA	BOGGY CR	18	24	30

* Verify Elevation of GW 1 & GW2 in NAVD 88

* ~~_____~~

Site Name	Sensor
AIR19	GW2

Latitude 28° 24' 11.94"	Longitude 81° 21' 13.49"	Northing 1479504	Easting 542443
Section 18	Township 24	Range 30	County Orange
			Quad Pine Castle

Benchmark Information:

Name AIR19	Existing / Set Existing	NAVD88 83.872	NGVD29 84.802	0.93
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Reference Point Information:

Stamped Elevation (NGVD29) 90.05	Stamped Date 9-27-07	By Firm Woolpert, Inc.
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Note: Reference mark at top of PVC pipe.

Staff Gauge Information:

Water Elevation (NGVD29) NA	Gauge Reading NA	Time of Reading NA	Date of Reading NA
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To Reach Description:

(as described) FL Turnpike to Orlando and exit to US-17, 92 north, take US 17, 92 North, 1.25 miles to Sand Lake RD, take Sand Lake RD east 2.25 miles to CR 527, turn right (south) and take CR-527 south 3.5 miles til it turns into Weatherbee RD and cross the RR tracks, wait for OUC personnel, you will need an escort to the site. Call 407-649-4404.

Sensor Well Area:



Sensor Well:



Tag Close-up:



Bench Mark:



Bench Mark:



$$\begin{array}{r}
 90.05 \\
 - 0.93 \\
 \hline
 89.12 \quad (\text{NAVD88}) \\
 \text{BM OFFSET}
 \end{array}$$

$$\begin{array}{r}
 90.05 \\
 0.971 \\
 \hline
 \checkmark 89.079 \quad (\text{NAVD88}) \\
 \text{CORPSCON}
 \end{array}$$

Site Name	Sensor
AIR19	GW1

Latitude 28° 24' 11.94"	Longitude 81° 21' 13.49"	Northing 1479504	Easting 542443
Section 18	Township 24	Range 30	County Orange
			Quad Pine Castle

Benchmark Information:

Name AIR19	Existing / Set Existing	NAVD88 83.872	NGVD29 84.802	<i>0.928</i>
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Reference Point Information:

Stamped Elevation (NGVD29) 89.41	Stamped Date 9-27-07	By Firm Woolpert, Inc.
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Note: Reference mark is existing line within PVC pipe.

Staff Gauge Information:

Water Elevation (NGVD29) NA	Gauge Reading NA	Time of Reading NA	Date of Reading NA
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To Reach Description:

(as described) FL Turnpike to Orlando and exit to US-17, 92 north, take US 17, 92 North, 1.25 miles to Sand Lake RD, take Sand Lake RD east 2.25 miles to CR 527, turn right (south) and take CR-527 south 3.5 miles til it turns into Weatherbee RD and cross the RR tracks, wait for OUC personnel, you will need an escort to the site. Call 407-649-4404.

Sensor Well Area:



Sensor Well:



Tag Close-up:



Bench Mark:



Bench Mark:



89.41
0.971

✓ 88.439 (NAVD 88)
COAPCON



Survey Data Entry and Retrieval Application (SDERA) Print Output

Control Point Search Results

Derived Data - Denoted By:
**

Designation	AIR19	Record State	ACCEPTED
NGS PID			
Project Name	AIR19 WELL SITE	Date Entered/Updated	06/27/2009
Updated By	ATLAS DATA LOAD	Status	
Party Chief		Type	V
Monument Set By	KEITH & SCHNARS PA	Date Established	01/01/2006
County	ORANGE	Section	18
Township	24	Range	30
Quadrangle	PINE CASTLE	Offset (29 to 88)	
NGS Source BM		CCR Link	
Ctrl Pt Source(s)			

<u>Horizontal</u>	<u>NAD 1927</u>	<u>NAD 1983</u>	<u>Vertical</u>	<u>NGVD 1929</u>	<u>NAVD 1988</u>
Latitude		28 24 11.8	Class		
Longitude		81 21 13.6	Order	3	3
Northing(Y)		1479491.0	Elevation	84.802	83.872
Easting(X)		542432.0	Measurement Unit	Feet	Feet
Class					0.93
Order					
NAD83 Adj Year					

Field Book
1165

Field Book Pages
11-25

Corpson = +0.971

Stamping
AIR 19-G / 2006

How to Reach

Description

FROM INTERSTATE 4 AND STATE ROAD 417 (CENTRAL FLORIDA GREENEWAY) TRAVEL NORTH ALONG STATE ROAD 417 (CENTRAL FLORIDA GREENEWAY) 12.5 MILES +/- TO LANDSTAR BLVD; THEN TRAVEL NORTH ALONG LANDSTAR BLVD. 2.0 MILES TO WERE LANDSTAR BLVD. DEAD ENDS INTO WETHERBEE ROAD; TAKE A LEFT ON WETHERBEE RD. AND HEAD NORTH FOR A DISTANCE OF 0.7 MILES TO A RAIL ROAD CROSSING; ON THE SOUTH SIDE OF THE RAIL ROAD TRACK AND THE EAST SIDE OF WERHERBEE RD. THERE IS A ACCESS ROAD LEADING TO A

Office

Project

23 June 2014

INPUT

Geographic, NAD83
Vertical - NAVD88, U.S. Feet

OUTPUT

Geographic, NAD83
Vertical - NGVD29 (Custom), U.S. Feet

air19

1/1

Latitude: 28 24 11.94
Longitude: 081 21 13.49
Elevation/Z: 0

Latitude: 28.403316667
Longitude: 81.353747222
Elevation/Z: 0.971

0.971
0.93

0.041

Remark:

Site Information

Site	AIR19
Common Name	GROUNDWATER MONITORING SITE NEAR OUC SUBSTATION 19
Location	SITE IS ON ORLANDO UTILITY COMMISSION PROPERTY AND REQUIRES ADVANCE NOTICE.
Site Notes	null
Contact	BRIAN SEDOCK, ESDA

Station Information for Site AIR19

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AIR19W2	AIR 19 GW SITE (DEEP WELL) NR ORLANDO UTILITY COMMISSION SUBSTATION 19	282411.8	812113.6	542434.662	1479493.449	ORA	BOGGY CR	18	24	30

REGISTRATION WORKSHEET - AIR19 Addendum

Site Name: **AIR19** Today's Date: **11/3/2014** Type Recorder: **CR-10**
 Activity: **Addendum** Effective Date: **11/3/2014** Start Date of Data :
 Customer: **Garnett Ritchie** Bus. Area: **SCADA Maintenance** Agency: **SFWMD** Internal Order:
 Project Manager: **Jim Vincent** Bus. Area: **SCADA Maintenance** Agency: **SFWMD** Fund:
 Project Name: **VDUP** Legal Mandate:

Short Common Name / Description:

Proj. Mgr. Notes: Sensors calibrated using NAVD88 datum to convert to NGVD 29 add + 0.971

Site Directions: Take left on Weatherbee Rd. and head north for a distance of 0.7 miles to a rail road crossing; on the south side of the rail road track and the east side of Weatherbee Rd. There is an access Rd leading to a substation; Take the Access Rd. a distance of 1.4 miles to a substation. Mark is located 3.5 feet West of the NE fence corner and 9.1 feet north of north fence line.

Site Address (if any):

Transportation: **4X4 Vehicle** Lock type or combination: **Abloy S** #

Recorder Location/Purpose: **Stand-Alone Recorder (Non-Flow Site)** Structure Type: **Existing Structure**

Array ID Configuration table attached **NO**

SURVEY INFORMATION

B.M. Elevation: **83.872** Date: **8/26/2006** Stamp: **Air 19-G/2006**
 Agency: **SFWMD** Type: **BRASS** Datum: **NAVD 88**

Benchmark Location/ Description: Take left on Weatherbee Rd. and head north for a distance of 0.7 miles to a rail road crossing; on the south side of the rail road track and the east side of Weatherbee Rd. There is an access Rd leading to a substation; Take the Access Rd. a distance of 1

COMMUNICATIONS INFORMATION

Communications System: Loggernet Server: Loggernet IP Address:
 Tower: Communication Type: R.F. Code/Modem Address: R.F. Access Point:
 Phone Number:
 RTU Address: Gateways:

WELL INFORMATION

Sensor	Customer Ref	Ref Elev	Elev Date	Top of Well	Bottom of Well	Ground Elev	Benchmark Elev	Benchmark Datum	Ref Elevation Location
GW1		88.439	8/25/2014				83.872	NAVD 88	Top of well
GW2		89.079	8/25/2014				83.872	NAVD 88	Top of well

Sensor	GW Land Elevation	Depth of Well	Meas Pt Above BM	Type of Well	GW Sensor location										
GW1															
GW2															

ADDITIONAL GPS INFORMATION

Item/Par	Lat	Long	X-Coord	Y-Coord	Sec	Township	Range	Quad	Basin	County	Description
GW1	28 24 11.94	81 21 13.49			18	24	30	Pine Castle		Orange	
GW2	28 24 11.94	81 21 13.49			18	24	30	Pine Castle		Orange	

