



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Rev. 1/16

USGS Station Name: Not Applicable		SCADA RTU Station Name: Not Applicable		DB Hydro Station Name: BEELINE	DB Hydro Site Name: BEELINE	Agency: WMD
Party Chief: EBANKS	Field Book: None	Page:	Date of Field Work: 25-aug-14		Prepared by: H. Ehmke 20-jul-20	
BENCHMARK DATA						
Site Benchmark: NOT SET	Site Benchmark El. NAVD88	NGS Source Benchmark: V546 022 (AA6449)	NGS Source Benchmark El.: 81.591 (24.869m) NAVD88	+1.083 Corpscon 6.0.1 Conversion Factor (NAVD88 to NGVD29) +1.039 - Historical Conversion Factor		
SITE SPECIFIC DATA						
GW Reference Elevations: 89.216 NAVD88 (Survey) 90.299 NGVD29 (Corpscon) 90.255 NGVD29 (Historical 10-aug-06)		Existing Brass Tag Elevation (Datum): GW 90.255 (8-10-06 EE CC)		Calibration Port Elevation(s) (NAVD88): Not Applicable		
Ground Elevation (NAVD88): Not Taken			Pad Elevation (NAVD88): Not Applicable			
GEOGRAPHIC DATA						
Section 26		Township 23 South			Range 31 East	
Well	Latitude: 28°27'09.35"		Longitude: 81°10'42.10"		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





SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Rev. 1/16

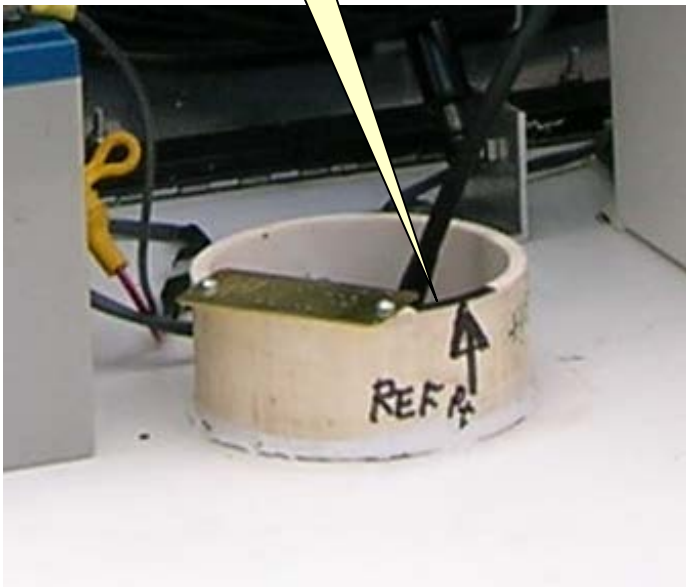
Overall Well Site



Reference Point
El. 89.216 NAVD88
El. 90.255 NGVD29

Looking ? (oblique not to scale) (10-aug-06)

Well Head



(oblique not to scale) (10-aug-06)

Old NGVD29 Brass Tag Close-up (removed)



New NAVD88 Brass Tag Close-up (added 25-aug-14)



Loc. 35 twp 23 Rge 31

flanks channel.

Establish Ref. Elevation for well site
Paceline (Baseline GW)

STA	+	H.I.	-	Elev	Remarks
Bm V546	5.15	87.78		82.63	FWP AS Describ
022	8.50				
TP.			4.15 9.50	83.63	
	4.74 8.91	88.37			
TP.			4.47 9.18	83.90	
	4.72 8.93	88.62			
TP.			4.04 9.61	84.58	
	5.45 8.20	90.03			
TP.			4.03 9.62	86.00	
	5.21 8.44	91.21			
TP.			3.78 9.87	87.43	
	4.59 9.06	92.02			
IBM			5.18 8.47	86.84 ADJ. 0.005	= 86.835

ht. Levels

STA	+	H.I.	-	Elev	Remarks
Bm.	5.68	92.52		86.84	
	7.97				
TP.			5.09 8.56	87.43	
	3.59 10.06	91.02			
TP.			5.04 8.61	85.98	
	3.88 9.77	89.86			
TP.			5.34 8.31	84.52	
	3.93 9.72	88.45			
TP.			4.495 9.155	83.955	
	4.21 9.44	88.165			
TP.			4.54 9.11	83.625	
	4.06 9.59	87.685			
Bm V546 022			5.045 8.60	82.64 (+0.01)	(82.63)

Contd. Fr Pg. 11

Sec 35 Twp 23 Rge 31 Ebanks
Chennell

Establish Ref. elev for Beeline GW well

STA	+	H.I.	-	Elev	Remarks
FBM	4.44	91.275		86.835	
	9.21				
Beeline GW. mark.		1.02		90.255	
		12.63			

Sec. Twp Rge Ebanks
Parson

Reset Ref. elev for wells @ G.305N
@ STA 1 W -

STA	+	H.I.	-	Elev	Remarks
bm G.305N	7.16	20.628		13.468	FWD
	8.485				
G.305N TW		2.125		18.503	(18.43)
		11.525			
G.305N HW		3.21		17.418	(17.02)
		10.44			
bm G.305N	7.16	13.468			
	8.49				



08.10.2006

EXIT 16

TOLL

417

Orlando
Tampa
2 MILES

08.10.2006



08.10.2006



08.10.2006



08.10.2006

ELEV
DATE
BY

BEELINE GW
90-255
8 10 06
EE CC

08.10.2006

08.10.2006



08.10.2006



CC&ND
X 598790-100
Y 1407140.995
Z 05.950
D 10

08.10.2006



South Florida Water Management District Benchmark Database

Report run on: July 27, 2006 1:51 PM

Designation V546023	Latitude: 282704.000	Scaled values only
County: ORANGE	Longitude 811043.000	
USGS Quad NARCOOSSEE NW	Monument By: FL-095	
Project: BEELNE WELL SITE	Year: 1989	
Sec: 35 Twp: 23 Rge: 31	Type: V	
Status:	Stamping: V546-23	
NAD 1927 Coordinates:	Party Chief:	
N =	Field Book	
E =	Page:	
Adjustment:	NGVD 1929	
NAD 1983 Coordinates:	Elevation:	83.93
X =	Order:	
Y =	Class:	
Adjustment:	NAVD 1988	1.043
Order:	Elevation: 82.887	
Class:	Order: 2	
	Class: I	

Description:

THE NGS DATA SHEET
 SEE FILE DSDATA.TXT FOR MORE INFORMATION ABOUT THE DATASHEET.DATABASE = SYBASE
 ,PROGRAM = DATASHEET, VERSION = 7.37
 1 NATIONAL GEODETIC SURVEY, RETRIEVAL DATE = JULY 26, 2006
 AA6450 *****
 AA6450 DESIGNATION - V 546 023
 AA6450 PID - AA6450
 AA6450 STATE/COUNTY- FL/ORANGE
 AA6450 USGS QUAD - NARCOOSSEE NW (1980)
 AA6450
 AA6450 *CURRENT SURVEY CONTROL
 AA6450
 AA6450* NAD 83(1986)- 28 27 04. (N) 081 10 43. (W) SCALED
 AA6450* NAVD 88 - 25.264 (METERS) 82.89 (FEET) ADJUSTED
 AA6450
 AA6450 GEOID HEIGHT- -27.99 (METERS) GEOID03
 AA6450 DYNAMIC HT - 25.227 (METERS) 82.77 (FEET) COMP
 AA6450 MODELED GRAV- 979,189.6 (MGAL) NAVD 88
 AA6450
 AA6450 VERT ORDER - SECOND CLASS I
 AA6450
 AA6450.THE HORIZONTAL COORDINATES WERE SCALED FROM A TOPOGRAPHIC MAP AND HAVE
 AA6450.AN ESTIMATED ACCURACY OF +/- 6 SECONDS.
 AA6450
 AA6450.THE ORTHOMETRIC HEIGHT WAS DETERMINED BY DIFFERENTIAL LEVELING
 AA6450.AND ADJUSTED BY THE NATIONAL GEODETIC SURVEY IN DECEMBER 1995..
 AA6450
 AA6450.THE GEOID HEIGHT WAS DETERMINED BY GEOID03.
 AA6450
 AA6450.THE DYNAMIC HEIGHT IS COMPUTED BY DIVIDING THE NAVD 88
 AA6450.GEOPOTENTIAL NUMBER BY THE NORMAL GRAVITY VALUE COMPUTED ON THE
 AA6450.GEODETIC REFERENCE SYSTEM OF 1980 (GRS 80) ELLIPSOID AT 45
 AA6450.DEGREES LATITUDE (G = 980.6199 GALS.).



South Florida Water Management District Benchmark Database

Report run on: July 27, 2006 1:51 PM

AA6450
AA6450.THE MODELED GRAVITY WAS INTERPOLATED FROM OBSERVED GRAVITY VALUES.
AA6450
AA6450; NORTH EAST UNITS ESTIMATED ACCURACY
AA6450;SPC FL E - 456,210. 182,510. MT (+/- 180 METERS SCALED)
AA6450
AA6450 SUPERSEDED SURVEY CONTROL
AA6450
AA6450.NO SUPERSEDED SURVEY CONTROL IS AVAILABLE FOR THIS STATION.
AA6450
AA6450_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RMM825471(NAD 83)
AA6450_MARKER: DD = SURVEY DISK
AA6450_SETTING: 32 = SET IN A RETAINING WALL OR CONCRETE LEDGE
AA6450_SP_SET: CONCRETE HEADWALL
AA6450_STAMPING: V546-23
AA6450_MARK LOGO: FL-095
AA6450_MAGNETIC: O = OTHER; SEE DESCRIPTION
AA6450_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
AA6450+STABILITY: SURFACE MOTION
AA6450
AA6450 HISTORY - DATE CONDITION REPORT BY
AA6450 HISTORY - 1989 MONUMENTED FL-095
AA6450
AA6450 STATION DESCRIPTION
AA6450
AA6450'DESCRIBED BY ORANGE COUNTY FLORIDA 1989 (PKV)
AA6450'BRASS DISK ON TOP, CENTER OF CONCRETE HEADWALL IN SOUTH RIGHT-OF-WAY
AA6450'OF BEE LINE, 15 FT (4.6 M) SOUTH OF SOUTH EDGE OF PAVEMENT OF
AA6450'EASTBOUND LANES. HEADWALL IS 0.4 MI (0.6 KM) EAST OF V546-22 AND AT
AA6450'MILE MARK 18.6. IN SECTION 35, TOWNSHIP 23 SOUTH, RANGE 31 EAST. SITE
AA6450'SUITABILITY FOR GPS OCCUPATION NOT DETERMINED. (DESCRIPTION
AA6450'SOURCE--THE ORANGE COUNTY ENGINEERING DEPARTMENT.)

*** RETRIEVAL COMPLETE.
ELAPSED TIME = 00:00:00

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.



```

PROGRAM = datasheet95, VERSION = 8.8
1      National Geodetic Survey,   Retrieval Date = NOVEMBER 2011
AA6449 *****
AA6449 DESIGNATION - V 546 022
AA6449 PID - AA6449
AA6449 STATE/COUNTY- FL/ORANGE
AA6449 COUNTRY - US
AA6449 USGS QUAD - NARCOOSSEE NW (1980)
AA6449
AA6449 *CURRENT SURVEY CONTROL
AA6449
AA6449* NAD 83(1986) POSITION- 28 27 04. (N) 081 11 04. (W) SCALED
AA6449* NAVD 88 ORTHO HEIGHT - 24.869 (meters) 81.59 (feet) ADJUSTED
AA6449
AA6449 GEOID HEIGHT - -28.028 (meters) GEOID12B
AA6449 DYNAMIC HEIGHT - 24.833 (meters) 81.47 (feet) COMP
AA6449 MODELED GRAVITY - 979,189.4 (mgal) NAVD 88
AA6449
AA6449 VERT ORDER - SECOND CLASS I
AA6449
AA6449.The horizontal coordinates were scaled from a topographic map and have
AA6449.an estimated accuracy of +/- 6 seconds.
AA6449.
AA6449.The orthometric height was determined by differential leveling and
AA6449.adjusted by the NATIONAL GEODETIC SURVEY
AA6449.in December 1995.
AA6449
AA6449.Significant digits in the geoid height do not necessarily reflect accuracy.
AA6449.GEOID12B height accuracy estimate available here.
AA6449
AA6449.The dynamic height is computed by dividing the NAVD 88
AA6449.geopotential number by the normal gravity value computed on the
AA6449.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AA6449.degrees latitude (g = 980.6199 gals.).
AA6449
AA6449.The modeled gravity was interpolated from observed gravity values.
AA6449
AA6449;
AA6449;SPC FL E - North East Units Estimated Accuracy
AA6449; 456,210. 181,940. MT (+/- 180 meters Scaled)
AA6449
AA6449 SUPERSEDED SURVEY CONTROL
AA6449
AA6449.No superseded survey control is available for this station.
AA6449
AA6449_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RMM819471(NAD 83)
AA6449
AA6449_MARKER: DD = SURVEY DISK
AA6449_SETTING: 32 = SET IN A RETAINING WALL OR CONCRETE LEDGE
AA6449_SP_SET: CONCRETE HEADWALL
AA6449_STAMPING: V546-22
AA6449_MARK LOGO: FL-095
AA6449_MAGNETIC: O = OTHER; SEE DESCRIPTION
AA6449_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
AA6449+STABILITY: SURFACE MOTION
AA6449
AA6449 HISTORY - Date Condition Report By
AA6449 HISTORY - 1989 MONUMENTED FL-095

```


AA6449

AA6449

STATION DESCRIPTION

AA6449

AA6449'DESCRIBED BY ORANGE COUNTY FLORIDA 1989 (PKV)

AA6449'BRASS DISK ON TOP, CENTER OF CONCRETE HEADWALL IN SOUTH RIGHT-OF-WAY

AA6449'OF THE BEE LINE, 12 FT (3.7 M) SOUTH OF SOUTH EDGE OF PAVEMENT OF

AA6449'EASTBOUND LANES. HEADWALL IS 0.6 MI (1.0 KM) EAST OF V546-21 AND AT

AA6449'MILE MARKER 18.2. IN SECTION 35, TOWNSHIP 23 SOUTH, RANGE 31 EAST.

AA6449'SITE SUITABILITY FOR GPS OCCUPATION NOT DETERMINED. (DESCRIPTION

AA6449'SOURCE--THE ORANGE COUNTY ENGINEERING DEPARTMENT.)

*** retrieval complete.

Elapsed Time = 00:00:02

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

```

PROGRAM = datasheet95, VERSION = 8.8
1      National Geodetic Survey,   Retrieval Date = NOVEMBER 22, 2015
AA6450 *****
AA6450 DESIGNATION - V 546 023
AA6450 PID - AA6450
AA6450 STATE/COUNTY- FL/ORANGE
AA6450 COUNTRY - US
AA6450 USGS QUAD - NARCOOSSEE NW (1980)
AA6450
AA6450 *CURRENT SURVEY CONTROL
AA6450
AA6450* NAD 83(1986) POSITION- 28 27 04. (N) 081 10 43. (W) SCALED
AA6450* NAVD 88 ORTHO HEIGHT - 25.264 (meters) 82.89 (feet) ADJUSTED
AA6450
AA6450 GEOID HEIGHT - -28.033 (meters) GEOID12B
AA6450 DYNAMIC HEIGHT - 25.227 (meters) 82.77 (feet) COMP
AA6450 MODELED GRAVITY - 979,189.6 (mgal) NAVD 88
AA6450
AA6450 VERT ORDER - SECOND CLASS I
AA6450
AA6450.The horizontal coordinates were scaled from a topographic map and have
AA6450.an estimated accuracy of +/- 6 seconds.
AA6450.
AA6450.The orthometric height was determined by differential leveling and
AA6450.adjusted by the NATIONAL GEODETIC SURVEY
AA6450.in December 1995.
AA6450
AA6450.Significant digits in the geoid height do not necessarily reflect accuracy.
AA6450.GEOID12B height accuracy estimate available here.
AA6450
AA6450.The dynamic height is computed by dividing the NAVD 88
AA6450.geopotential number by the normal gravity value computed on the
AA6450.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AA6450.degrees latitude (g = 980.6199 gals.).
AA6450
AA6450.The modeled gravity was interpolated from observed gravity values.
AA6450
AA6450;
AA6450;SPC FL E - North East Units Estimated Accuracy
AA6450; 456,210. 182,510. MT (+/- 180 meters Scaled)
AA6450
AA6450 SUPERSEDED SURVEY CONTROL
AA6450
AA6450.No superseded survey control is available for this station.
AA6450
AA6450_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RMM825471(NAD 83)
AA6450
AA6450_MARKER: DD = SURVEY DISK
AA6450_SETTING: 32 = SET IN A RETAINING WALL OR CONCRETE LEDGE
AA6450_SP_SET: CONCRETE HEADWALL
AA6450_STAMPING: V546-23
AA6450_MARK LOGO: FL-095
AA6450_MAGNETIC: O = OTHER; SEE DESCRIPTION
AA6450_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
AA6450+STABILITY: SURFACE MOTION
AA6450
AA6450 HISTORY - Date Condition Report By
AA6450 HISTORY - 1989 MONUMENTED FL-095

```


AA6450

AA6450

STATION DESCRIPTION

AA6450

AA6450'DESCRIBED BY ORANGE COUNTY FLORIDA 1989 (PKV)

AA6450'BRASS DISK ON TOP, CENTER OF CONCRETE HEADWALL IN SOUTH RIGHT-OF-WAY

AA6450'OF BEE LINE, 15 FT (4.6 M) SOUTH OF SOUTH EDGE OF PAVEMENT OF

AA6450'EASTBOUND LANES. HEADWALL IS 0.4 MI (0.6 KM) EAST OF V546-22 AND AT

AA6450'MILE MARK 18.6. IN SECTION 35, TOWNSHIP 23 SOUTH, RANGE 31 EAST. SITE

AA6450'SUITABILITY FOR GPS OCCUPATION NOT DETERMINED. (DESCRIPTION

AA6450'SOURCE--THE ORANGE COUNTY ENGINEERING DEPARTMENT.)

*** retrieval complete.

Elapsed Time = 00:00:02

The NGS Data Sheet

See file [dsdata.txt](#) for more information about the datasheet.

```

PROGRAM = datasheet95, VERSION = 8.8
1      National Geodetic Survey,      Retrieval Date = NOVEMBER 22, 2015
AA6450 *****
AA6450 DESIGNATION - V 546 023
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AA6450 STATE/COUNTY- FL/ORANGE
AA6450 COUNTRY - US
AA6450 USGS QUAD - NARCOOSSEE NW (1980)
AA6450
AA6450 *CURRENT SURVEY CONTROL
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AA6450* NAD 83(1986) POSITION- 28 27 04. (N) 081 10 43. (W) SCALED
AA6450* NAVD 88 ORTHO HEIGHT - 25.264 (meters) 82.89 (feet) ADJUSTED
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AA6450 GEOID HEIGHT - -28.033 (meters) GEOID12B
AA6450 DYNAMIC HEIGHT - 25.227 (meters) 82.77 (feet) COMP
AA6450 MODELED GRAVITY - 979,189.6 (mgal) NAVD 88
AA6450
AA6450 VERT ORDER - SECOND CLASS I
AA6450
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AA6450.an estimated accuracy of +/- 6 seconds.
AA6450.
AA6450.The orthometric height was determined by differential leveling and
AA6450.adjusted by the NATIONAL GEODETIC SURVEY
AA6450.in December 1995.
AA6450
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AA6450.GEOID12B height accuracy estimate available here.
AA6450
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AA6450.geopotential number by the normal gravity value computed on the
AA6450.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
AA6450.degrees latitude (g = 980.6199 gals.).
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AA6450; North East Units Estimated Accuracy
AA6450;SPC FL E - 456,210. 182,510. MT (+/- 180 meters Scaled)
AA6450
AA6450 SUPERSEDED SURVEY CONTROL
AA6450
AA6450.No superseded survey control is available for this station.
AA6450
AA6450_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RMM825471(NAD 83)
AA6450
AA6450_MARKER: DD = SURVEY DISK
AA6450_SETTING: 32 = SET IN A RETAINING WALL OR CONCRETE LEDGE
AA6450_SP_SET: CONCRETE HEADWALL
AA6450_STAMPING: V546-23
AA6450_MARK LOGO: FL-095
AA6450_MAGNETIC: O = OTHER; SEE DESCRIPTION
AA6450_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
AA6450+STABILITY: SURFACE MOTION
AA6450
AA6450 HISTORY - Date Condition Report By
AA6450 HISTORY - 1989 MONUMENTED FL-095

```


AA6450

AA6450

STATION DESCRIPTION

AA6450

AA6450'DESCRIBED BY ORANGE COUNTY FLORIDA 1989 (PKV)

AA6450'BRASS DISK ON TOP, CENTER OF CONCRETE HEADWALL IN SOUTH RIGHT-OF-WAY

AA6450'OF BEE LINE, 15 FT (4.6 M) SOUTH OF SOUTH EDGE OF PAVEMENT OF

AA6450'EASTBOUND LANES. HEADWALL IS 0.4 MI (0.6 KM) EAST OF V546-22 AND AT

AA6450'MILE MARK 18.6. IN SECTION 35, TOWNSHIP 23 SOUTH, RANGE 31 EAST. SITE

AA6450'SUITABILITY FOR GPS OCCUPATION NOT DETERMINED. (DESCRIPTION

AA6450'SOURCE--THE ORANGE COUNTY ENGINEERING DEPARTMENT.)

*** retrieval complete.

Elapsed Time = 00:00:02

REGISTRATION WORKSHEET - BEELNE Addendum

Site Name: **BEELNE** Today's Date: **9/2/2014** Type Recorder: **CR10**
 Activity: **Addendum** Effective Date: Effective Date: Fund: Fund:
 Customer: **Garnett Ritchie** Bus. Area: **SCADA Maintenance** Agency: **SFWMD** Internal Order:
 Project Manager: **Amelia Rodriguez-Alers** Bus. Area: **Survey & Mapping** Agency: **SFWMD** Contract #: Contract #:
 Project Name: **VDUP** Legal Mandate: **1972 Florida Water Resources Act**

Short Common Name / Description: **BEELNE**

Proj. Mgr. Notes: **Addendum Added to Update NAVD88 Surveying Data. To convert to NGVD 29 add + 1.076**

Site Directions: From the FOC, drive north on I-95 for approximately 130 miles to Hwy. 528; exit and turn west on to Hwy. 528. Drive west on Hwy. 528 for approximately 26 miles to the Central Florida Greenway (exit 16.) Drive north on the greenway for approximately 4.25 miles to SR-552 (Curry Ford Rd.) Exit and drive east for approximately 4 miles to Young Pine Rd. then turn south on to Young Pine Rd. Drive for approximately 2.85 miles to a large green building on the north side

Site Address (if any):

Transportation: Lock type or combination: **Abloy S** #

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

Array ID Configuration table attached **NO**

SURVEY INFORMATION

B.M. Elevation: **81.591'** Date: **6/6/1989** Stamp: **BM V546022**
 Agency: **ORG** Type: **BRASS** Datum: **NAVD 88**

Benchmark Location/ Description: **CONCRETE HEADWALL SOUTH SIDE OF BEELINE HIGHWAY**

COMMUNICATIONS INFORMATION

Communications System: **Loggernet** Loggernet Server: **STCLOG1** Loggernet IP Address: **141.232.83.94**
 Tower: **STCLDT** Communication Type: **R.F. (V.H.F. Radio)** R.F. Code/Modem Address: **53** R.F. Access Point: **NO**
 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		89.216	8/25/2014				81.591	NAVD 88	Top of the well

Sensor	GW Sensor Location Offset	Meas Pt Elevation	GW Land Elevation	Depth of Well	Type of Well	Top of Monitored Interval	Base of Monitored Interval	Parameter Transmitted
GW1					Static			

COORDINATE INFORMATION

Item/Parm	Lat	Long	X-Coord	Y-Coord	Sec	Township	Range	Quad	Basin	County	Description
GW1	N28° 27' 09.37	W81° 10' 42.0	598854.555	1497300	26	23	31	3610	Lake Hart	Orange	
RTU	N28° 27' 09.37	W81° 10' 42.0	598854.555	1497300	26	23	31	3610	Lake Hart	Orange	
Rain Gage	N28° 27' 09.22	W81° 10' 41.9	598865.974	1497285	26	23	31	3610	Lake Hart	Orange	

No Survey Field Work available

REGISTRATION WORKSHEET - BEELNE Addendum

Site Name: **BEELNE** Today's Date: **10/22/2014** Type Recorder: **CR10**
 Activity: **Addendum** Effective Date: **10/16/2014** 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: **1972 Florida Water Resources Act** Contract #:

Short Common Name / Description: **BEELNE**

Proj. Mgr. Notes: **Addendum added to calibrate sensor to NAVD88 Surveyed Data. To convert to NGVD 29 add + 1.076**

Site Directions: **From the FOC, drive north on I-95 for approximately 130 miles to Hwy. 528; exit and turn west on to Hwy. 528. Drive west on Hwy. 528 for approximately 26 miles to the Central Florida Greenway (exit 16.) Drive north on the greenway for approximately 4.25 miles to SR-552 (Curry Ford Rd.) Exit and drive east for approximately 4 miles to Young Pine Rd., then turn south on to Young Pine Rd. Drive for approximately 2.85 miles to a large green building on the north side of**

Site Address (if any):

Transportation: Lock type or combination: **Abloy S** #

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

Array ID Configuration table attached **NO**

SURVEY INFORMATION

B.M. Elevation: **81.591'** Date: **6/6/1989** Stamp: **BM V546022**
 Agency: **ORG** Type: **BRASS** Datum: **NAVD 88**

Benchmark Location/ Description: **CONCRETE HEADWALL SOUTH SIDE OF BEELINE HIGHWAY**

COMMUNICATIONS INFORMATION

Communications System: **Loggernet** Loggernet Server: **STCLOG1** Loggernet IP Address: **141.232.83.94**
 Tower: **STCLDT** Communication Type: **R.F. (V.H.F. Radio)** R.F. Code/Modem Address: **53** R.F. Access Point: **NO**
 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		89.216	8/25/2014				81.591	NAVD 88	Top of the well

Sensor	GW Sensor Location Offset	Meas Pt Elevation	GW Land Elevation	Depth of Well	Type of Well	Top of Monitored Interval	Base of Monitored Interval	Parameter Transmitted
GW1					Static			

COORDINATE INFORMATION

Item/Param	Lat	Long	X-Coord	Y-Coord	Sec	Township	Range	Quad	Basin	County	Description
GW1	N28° 27' 09.37"	W81° 10' 42.0"	598854.56	1497300	26	23	31	3610	Lake Hart	Orange	
RTU	N28° 27' 09.37"	W81° 10' 42.0"	598854.56	1497300	26	23	31	3610	Lake Hart	Orange	
Rain Gage	N28° 27' 09.22"	W81° 10' 41.9"	598865.97	1497285	26	23	31	3610	Lake Hart	Orange	

No Survey Field Work available

Site Information

Site	BEELNE
Common Name	BEELNE (REPLACES BEELINE)
Location	EAST OF ORLANDO ON BEELINE HIGHWAY
Site Notes	CR10 SITE
Contact	ROBB STARTZMAN / WAYNE HERMANN

Station Information for Site BEELNE

Station	Description	Latitude	Longitude	Xcoord	Ycoord	County	Basin	Section	Town	Range
BEELINE_G	BEELINE HIGHWAY GROUNDWATER, NEAR ORLANDO	282710.01	811041.222	598931.958	1497364	ORA	L HART	26	23	31
BEELINE_R	BEELINE HIGHWAY RAINFALL, NEAR ORLANDO	282710.01	811041.222	598931.958	1497364	ORA	L HART	26	23	31

* Need site benchmark.

REGISTRATION WORKSHEET - BEELNE Addendum

Site Name: **BEELNE** Today's Date: **9/15/2011** Type Recorder: **CR10**
 Activity: **Addendum** Effective Date: **7/18/2011** Start Date of Data :
 Customer: **Dave Anderson** Bus. Area: **7232** Agency: **SFWMD** Internal Order:
 Project Manager: **Blair Kennedy** Bus. Area: **5720** Agency: **SFWMD** Fund:
 Project Name: **Loggernet Radio Conversion** Legal Mandate: **1972 Florida Water Resources Act**

Short Common Name / Description: **BEELNE**

Proj. Mgr. Notes: This site has had its radio and modem upgraded. No changes to the program have been made. Use the map in the site folder to access the site (do not climb over the fence near SR-528.)

Site Directions: From the FOC, drive north on I-95 for approximately 130 miles to Hwy. 528; exit and turn west on to Hwy. 528. Drive west on Hwy. 528 for approximately 26 miles to the Central Florida Greenway (exit 16.) Drive north on the greenway for approximately 4.25 miles to SR-552 (Curry Ford Rd.) Exit and drive east for approximately .4 miles to Young Pine Rd., then turn south on to Young Pine Rd. Drive for approximately 2.85 miles to a large green building on the north side of the road; sign in so they will know you are on the site.

Site Address (if any):

Transportation: Lock type or combination: **Abloy S** #

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

Array ID Configuration table attached **NO**

SURVEY INFORMATION

B.M. Elevation: **82.63'** Date: **6/6/1989** Stamp: **BM V546022**
 Agency: **ORG** Type: **BRASS** Datum: **NGVD29**

Benchmark Location/ Description: **CONCRETE HEADWALL SOUTH SIDE OF BEELINE HIGHWAY**

COMMUNICATIONS INFORMATION

Communications System: **Loggernet** Loggernet Server: **STCLOG1** Loggernet IP Address: **141.232.83.94**

Tower: **STCLDT** Communication Type: **R.F. (V.H.F. Radio)** R.F. Code/Modem Address: **53** R.F. Access Point: **NO**

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		90.28	8/10/2006	90.26'			82.63'	NGVD 29	Top of the well

Sensor	GW Sensor Location Offset	Meas Pt Elevation	GW Land Elevation	Depth of Well	Type of Well	Top of Monitored Interval	Base of Monitored Interval	Parameter Transmitted
GW1					Static			

COORDINATE INFORMATION

Item/Param	Lat	Long	X-Coord	Y-Coord	Sec	Township	Range	Quad	Basin	County	Description
GW1	N28° 27' 09.37"	W81° 10' 42.0"	598854.555	1497300	26	23	31	3610	Lake Hart	Orange	
RTU	N28° 27' 09.37"	W81° 10' 42.0"	598854.555	1497300	26	23	31	3610	Lake Hart	Orange	
Rain Gage	N28° 27' 09.22"	W81° 10' 41.8"	598865.974	1497285	26	23	31	3610	Lake Hart	Orange	



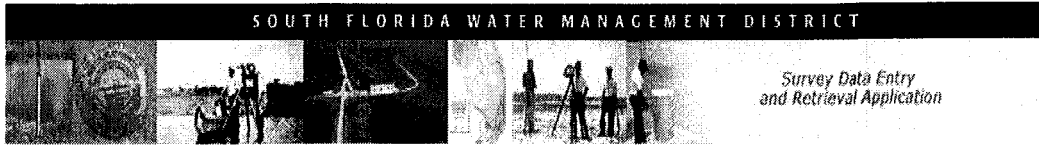
3000
900

feet
meters

Google Earth Pro

2009 Orange County Aerial Photography





Survey Data Entry and Retrieval Application (SDERA) Print Output

Control Point Search Results

Derived Data - Denoted By: **

Designation	V546022	Record State	ACCEPTED
NGS PID	<u>AA6449</u>	Date Entered/Updated	06/27/2009
Project Name	BEELNE WELL SITE	Status	
Updated By	ATLAS DATA LOAD	Type	V
Party Chief		Date Established	01/01/1989
Monument Set By		Section	35
County	ORANGE	Range	31
Township	23	Offset (29 to 88)	
Quadrangle	NARCOOSSEE NW	CCR Link	
NGS Source BM			
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 27 04.0	Class		I
Longitude		81 11 04.0	Order		2
Northing(Y)			Elevation	82.63	81.591
Easting(X)			Measurement Unit	Feet	Feet
Class					
Order					
NAD83 Adj Year					

Field Book

Field Book Pages

Stamping
V546-22

How to Reach

Description

CORPSCON EL. 82.63 NGVD 1929

THE NGS DATA SHEET
SEE FILE DSDATA.TXT FOR MORE INFORMATION ABOUT THE DATASHEET.DATABASE = SYBASE ,PROGRAM =
DATASHEET, VERSION = 7.37

1 NATIONAL GEODETIC SURVEY, RETRIEVAL DATE = AUGUST 10, 2006

AA6449 *****

AA6449 DESIGNATION - V 546 022

AA6449 PID - AA6449

AA6449 STATE/COUNTY- FL/ORANGE

AA6449 USGS QUAD - NARCOOSSEE NW (1980)

AA6449

AA6449 *CURRENT SURVEY CONTROL

AA6449

AA6449* NAD 83(1986)- 28 27 04. (N) 081 11 04. (W) SCALED

AA6449* NAVD 88 - 24.869 (METERS) 81.59 (FEET) ADJUSTED

AA6449

AA6449 GEOID HEIGHT- -27.98 (METERS) GEOID03

AA6449 DYNAMIC HT - 24.833 (METERS) 81.47 (FEET) COMP

AA6449 MODELED GRAV- 979,189.4 (MGAL) NAVD 88

AA6449

AA6449 VERT ORDER - SECOND CLASS I

AA6449
AA6449.THE HORIZONTAL COORDINATES WERE SCALED FROM A TOPOGRAPHIC MAP AND HAVE
AA6449.AN ESTIMATED ACCURACY OF +/- 6 SECONDS.
AA6449
AA6449.THE ORTHOMETRIC HEIGHT WAS DETERMINED BY DIFFERENTIAL LEVELING
AA6449.AND ADJUSTED BY THE NATIONAL GEODETIC SURVEY IN DECEMBER 1995..
AA6449
AA6449.THE GEOID HEIGHT WAS DETERMINED BY GEOID03.
AA6449
AA6449.THE DYNAMIC HEIGHT IS COMPUTED BY DIVIDING THE NAVD 88
AA6449.GEOPOTENTIAL NUMBER BY THE NORMAL GRAVITY VALUE COMPUTED ON THE
AA6449.GEODETIC REFERENCE SYSTEM OF 1980 (GRS 80) ELLIPSOID AT 45
AA6449.DEGREES LATITUDE (G = 980.6199 GALS.).
AA6449
AA6449.THE MODELED GRAVITY WAS INTERPOLATED FROM OBSERVED GRAVITY VALUES.
AA6449
AA6449; NORTH EAST UNITS ESTIMATED ACCURACY
AA6449;SPC FL E - 456,210. 181,940. MT (+/- 180 METERS SCALED)
AA6449
AA6449 SUPERSEDED SURVEY CONTROL
AA6449
AA6449.NO SUPERSEDED SURVEY CONTROL IS AVAILABLE FOR THIS STATION.
AA6449
AA6449_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RMM819471(NAD 83)
AA6449_MARKER: DD = SURVEY DISK
AA6449_SETTING: 32 = SET IN A RETAINING WALL OR CONCRETE LEDGE
AA6449_SP_SET: CONCRETE HEADWALL
AA6449_STAMPING: V546-22
AA6449_MARK LOGO: FL-095
AA6449_MAGNETIC: O = OTHER; SEE DESCRIPTION
AA6449_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
AA6449+STABILITY: SURFACE MOTION
AA6449
AA6449 HISTORY - DATE CONDITION REPORT BY
AA6449 HISTORY - 1989 MONUMENTED FL-095
AA6449
AA6449 STATION DESCRIPTION
AA6449
AA6449 DESCRIBED BY ORANGE COUNTY FLORIDA 1989 (PKV)
AA6449 BRASS DISK ON TOP, CENTER OF CONCRETE HEADWALL IN SOUTH RIGHT-OF-WAY
AA6449 OF THE BEE LINE, 12 FT (3.7 M) SOUTH OF SOUTH EDGE OF PAVEMENT OF
AA6449 EASTBOUND LANES. HEADWALL IS 0.6 MI (1.0 KM) EAST OF V546-21 AND AT
AA6449 MILE MARKER 18.2. IN SECTION 35, TOWNSHIP 23 SOUTH, RANGE 31 EAST.
AA6449 SITE SUITABILITY FOR GPS OCCUPATION NOT DETERMINED. (DESCRIPTION
AA6449 SOURCE--THE ORANGE COUNTY ENGINEERING DEPARTMENT.)

*** RETRIEVAL COMPLETE.
ELAPSED TIME = 00:00:00

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Survey Data Entry and Retrieval Application (SDERA) Print Output

Control Point Search Results

Derived Data - Denoted By: **

Designation	V546023	Record State	ACCEPTED
NGS PID	AA6450	Date Entered/Updated	06/27/2009
Project Name	BEELNE WELL SITE	Status	
Updated By	ATLAS DATA LOAD	Type	V
Party Chief		Date Established	01/01/1989
Monument Set By		Section	35
County	ORANGE	Range	31
Township	23	Offset (29 to 88)	
Quadrangle	NARCOOSSEE NW	CCR Link	
NGS Source BM			
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 27 04.0	Class		1
Longitude		81 10 43.0	Order		2
Northing(Y)			Elevation	83.93	82.887
Easting(X)			Measurement Unit	Feet	Feet
Class					
Order					
NAD83 Adj Year					

Field Book

Field Book Pages

Stamping
V546-23

How to Reach

Description

CORPSCON EL. 83.93 NGVD 1929

THE NGS DATA SHEET

SEE FILE DSDATA.TXT FOR MORE INFORMATION ABOUT THE DATASHEET.DATABASE = SYBASE ,PROGRAM = DATASHEET, VERSION = 7.37

1 NATIONAL GEODETIC SURVEY, RETRIEVAL DATE = JULY 26, 2006

AA6450 *****

AA6450 DESIGNATION - V 546 023

AA6450 PID - AA6450

AA6450 STATE/COUNTY- FL/ORANGE

AA6450 USGS QUAD - NARCOOSSEE NW (1980)

AA6450

AA6450 *CURRENT SURVEY CONTROL

AA6450

AA6450* NAD 83(1986)- 28 27 04. (N) 081 10 43. (W) SCALED

AA6450* NAVD 88 - 25.264 (METERS) 82.89 (FEET) ADJUSTED

AA6450

AA6450 GEOID HEIGHT- -27.99 (METERS) GEOID03

AA6450 DYNAMIC HT - 25.227 (METERS) 82.77 (FEET) COMP

AA6450 MODELED GRAV- 979,189.6 (MGAL) NAVD 88

AA6450

AA6450 VERT ORDER - SECOND CLASS I

AA6450

AA6450.THE HORIZONTAL COORDINATES WERE SCALED FROM A TOPOGRAPHIC MAP AND HAVE
AA6450.AN ESTIMATED ACCURACY OF +/- 6 SECONDS.

AA6450

AA6450.THE ORTHOMETRIC HEIGHT WAS DETERMINED BY DIFFERENTIAL LEVELING
AA6450.AND ADJUSTED BY THE NATIONAL GEODETIC SURVEY IN DECEMBER 1995..

AA6450

AA6450.THE GEOID HEIGHT WAS DETERMINED BY GEOID03.

AA6450

AA6450.THE DYNAMIC HEIGHT IS COMPUTED BY DIVIDING THE NAVD 88
AA6450.GEOPOTENTIAL NUMBER BY THE NORMAL GRAVITY VALUE COMPUTED ON THE
AA6450.GEODETIC REFERENCE SYSTEM OF 1980 (GRS 80) ELLIPSOID AT 45
AA6450.DEGREES LATITUDE (G = 980.6199 GALS.).

AA6450

AA6450.THE MODELED GRAVITY WAS INTERPOLATED FROM OBSERVED GRAVITY VALUES.

AA6450

AA6450; NORTH EAST UNITS ESTIMATED ACCURACY
AA6450;SPC FL E - 456,210. 182,510. MT (+/- 180 METERS SCALED)

AA6450

AA6450 SUPERSEDED SURVEY CONTROL

AA6450

AA6450.NO SUPERSEDED SURVEY CONTROL IS AVAILABLE FOR THIS STATION.

AA6450

AA6450 U.S. NATIONAL GRID SPATIAL ADDRESS: 17RMM825471(NAD 83)

AA6450_MARKER: DD = SURVEY DISK

AA6450_SETTING: 32 = SET IN A RETAINING WALL OR CONCRETE LEDGE

AA6450_SP_SET: CONCRETE HEADWALL

AA6450_STAMPING: V546-23

AA6450_MARK LOGO: FL-095

AA6450_MAGNETIC: O = OTHER; SEE DESCRIPTION

AA6450_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

AA6450+STABILITY: SURFACE MOTION

AA6450

AA6450 HISTORY - DATE CONDITION REPORT BY

AA6450 HISTORY - 1989 MONUMENTED FL-095

AA6450

AA6450 STATION DESCRIPTION

AA6450

AA6450 DESCRIBED BY ORANGE COUNTY FLORIDA 1989 (PKV)

AA6450 BRASS DISK ON TOP, CENTER OF CONCRETE HEADWALL IN SOUTH RIGHT-OF-WAY

AA6450 OF BEE LINE, 15 FT (4.6 M) SOUTH OF SOUTH EDGE OF PAVEMENT OF

AA6450 EASTBOUND LANES. HEADWALL IS 0.4 MI (0.6 KM) EAST OF V546-22 AND AT

AA6450 MILE MARK 18.6. IN SECTION 35, TOWNSHIP 23 SOUTH, RANGE 31 EAST. SITE

AA6450 SUITABILITY FOR GPS OCCUPATION NOT DETERMINED. (DESCRIPTION

AA6450 SOURCE--THE ORANGE COUNTY ENGINEERING DEPARTMENT.)

*** RETRIEVAL COMPLETE.

ELAPSED TIME = 00:00:00

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Office

Project

23 June 2014

INPUT

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

OUTPUT

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

beelne

1/1

Latitude: 28 27 04.0
Longitude: 081 11 04.0
Elevation/Z: 0

Latitude: 28.451111111
Longitude: 81.184444444
Elevation/Z: 1.076

Remark: