



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Surveyor's Report



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LB 4108

SURVEYOR'S REPORT

1. This report is prepared for the benefit of All Webbs Enterprises, Inc.
2. A benchmark was placed at the new well-site which is located on the South side of the C-23 canal, ¼ miles east of County Road 609 at the approximate Latitude of N 27°12'21.3" and Longitude of W 080°28'32.5" as located by a Garmin handheld GPS unit. Said benchmark is described as a Mag-nail and aluminum washer on the Northwest corner of a 6' x 6' concrete pad constructed around the new well and is stamped "GCY, Inc BM 105-15A".
3. The elevation of the above described benchmark is 33.39 feet NGVD 1929. The origin of the elevation is benchmark "F009" (NGS PID AF7687). The NGVD 1929 elevation used for this benchmark came from the computer file "NGVD29.txt" file received from the South Florida Water Management District.

Date of Survey: March 6, 2006

Peter Andersen
Professional Surveyor and Mapper
Florida Certification No. 5199

Job Number: 05-1069-01-01

PICTURES ARE NOT PART OF THE SURVEY REPORT



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

MF40 Well Site



Looking Southeast (District Picture 02-dec-08)

MF40 Benchmark



Looking North (District Picture 10-may-10)



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

MF40 Well Site



Looking East (District Picture 27-may-08)

MF40 Well



Looking South (District Picture 27-may-08)



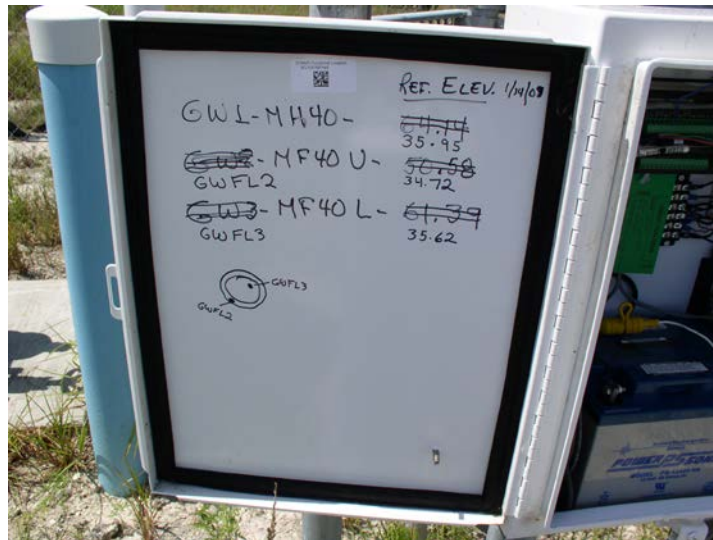
SOUTH FLORIDA WATER MANAGEMENT DISTRICT

MF40 Well Site



Looking South (District Picture 27-may-08)

MF40 Well Site



Written at the Well (District Picture 23-jul-09)

From the "ngvd29.txt" file provided by NGS for the CERP Geodetic Vertical Control Project.
 Line/Part: L26245 SSN+: mark floated, SSN*: mark constrained, SSN#: mark floated & constrained
 Mark ID SSN PID Designation Geopotential Elevation Codes
 1801 3154 AF7687 F009 9.5115 9.7057

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 = JANUARY 12, 2016
AF7687 *****
AF7687 DESIGNATION - F009
AF7687 PID - AF7687
AF7687 STATE/COUNTY- FL/MARTIN
AF7687 COUNTRY - US
AF7687 USGS QUAD - INDIAN TOWN NW (1983)
AF7687
AF7687 *CURRENT SURVEY CONTROL
AF7687
AF7687* NAD 83(2011) POSITION- 27 12 21.31258(N) 080 28 52.82113(W) ADJUSTED
AF7687* NAD 83(2011) ELLIP HT- -17.807 (meters) (06/27/12) ADJUSTED
AF7687* NAD 83(2011) EPOCH - 2010.00
AF7687* NAVD 88 ORTHO HEIGHT - 9.269 (meters) 30.41 (feet) ADJUSTED
AF7687
AF7687 NAD 83(2011) X - 938,712.030 (meters) COMP
AF7687 NAD 83(2011) Y - -5,598,320.373 (meters) COMP
AF7687 NAD 83(2011) Z - 2,898,518.884 (meters) COMP
AF7687 LAPLACE CORR - -1.47 (seconds) DEFLEC12B
AF7687 GEOID HEIGHT - -27.086 (meters) GEOID12B
AF7687 DYNAMIC HEIGHT - 9.255 (meters) 30.36 (feet) COMP
AF7687 MODELED GRAVITY - 979,106.2 (mgal) NAVD 88
AF7687
AF7687 VERT ORDER - FIRST CLASS II
AF7687
AF7687 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
AF7687 Standards:
AF7687 FGDC (95% conf, cm) Standard deviation (cm) CorrNE
AF7687 Horiz Ellip SD_N SD_E SD_h (unitless)
AF7687 -----
AF7687 NETWORK 0.81 1.04 0.35 0.31 0.53 0.08469434
AF7687 -----
AF7687 Click here for local accuracies and other accuracy information.
AF7687
AF7687
AF7687.The horizontal coordinates were established by GPS observations
AF7687.and adjusted by the National Geodetic Survey in June 2012.
AF7687
AF7687.NAD 83(2011) refers to NAD 83 coordinates where the reference
AF7687.frame has been affixed to the stable North American tectonic plate. See
AF7687.NA2011 for more information.
AF7687
AF7687.The horizontal coordinates are valid at the epoch date displayed above
AF7687.which is a decimal equivalence of Year/Month/Day.
AF7687
AF7687.The orthometric height was determined by differential leveling and
AF7687.adjusted by the NATIONAL GEODETIC SURVEY
AF7687.in November 2015.
AF7687
AF7687.Significant digits in the geoid height do not necessarily reflect accuracy.
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AF7687.GEOID12B height accuracy estimate available [here](#).

AF7687

AF7687.The X, Y, and Z were computed from the position and the ellipsoidal ht.

AF7687

AF7687.The Laplace correction was computed from DEFLEC12B derived deflections.

AF7687

AF7687.The ellipsoidal height was determined by GPS observations

AF7687.and is referenced to NAD 83.

AF7687

AF7687.The dynamic height is computed by dividing the NAVD 88

AF7687.geopotential number by the normal gravity value computed on the

AF7687.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45

AF7687.degrees latitude (g = 980.6199 gals.).

AF7687

AF7687.The modeled gravity was interpolated from observed gravity values.

AF7687

AF7687. The following values were computed from the NAD 83(2011) position.

AF7687

AF7687;		North	East	Units	Scale Factor	Converg.
AF7687;SPC FL E	-	318,326.052	251,382.908	MT	0.99997376	+0 14 13.7
AF7687;SPC FL E	-	1,044,374.72	824,745.42	sFT	0.99997376	+0 14 13.7
AF7687;UTM 17	-	3,009,349.422	551,365.376	MT	0.99963257	+0 14 13.7

AF7687

AF7687! - Elev Factor x Scale Factor = Combined Factor

AF7687!SPC FL E - 1.00000280 x 0.99997376 = 0.99997656

AF7687!UTM 17 - 1.00000280 x 0.99963257 = 0.99963537

AF7687

AF7687 SUPERSEDED SURVEY CONTROL

AF7687

AF7687	NAD 83(2007)-	27 12 21.31263(N)	080 28 52.82167(W)	AD(2002.00)	0
AF7687	ELLIP H (02/10/07)	-17.792 (m)		GP(2002.00)	
AF7687	NAD 83(1999)-	27 12 21.31276(N)	080 28 52.82206(W)	AD()	1
AF7687	ELLIP H (06/19/01)	-17.765 (m)		GP()	4 1
AF7687	NAD 83(1990)-	27 12 21.31132(N)	080 28 52.82122(W)	AD()	1
AF7687	ELLIP H (03/30/94)	-17.731 (m)		GP()	3 2
AF7687	NAVD 88 (05/02/02)	9.268 (m)	30.41 (f)	SUPERSEDED	1 2
AF7687	NAVD 88 (03/30/94)	9.2 (m)	GEOID93 model used	GPS OBS	

AF7687

AF7687.Superseded values are not recommended for survey control.

AF7687

AF7687.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.

AF7687.[See file dsdata.txt](#) to determine how the superseded data were derived.

AF7687

AF7687_U.S. NATIONAL GRID SPATIAL ADDRESS: 17RNL5136509349(NAD 83)

AF7687

AF7687_MARKER: F = FLANGE-ENCASED ROD

AF7687_SETTING: 15 = METAL ROD DRIVEN INTO GROUND. SEE TEXT FOR ADDITIONAL

AF7687+WITH SETTING: INFORMATION.

AF7687_STAMPING: F009 1992

AF7687_MARK LOGO: NGS

AF7687_PROJECTION: FLUSH

AF7687_MAGNETIC: N = NO MAGNETIC MATERIAL

AF7687_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

AF7687+STABILITY: SURFACE MOTION

AF7687_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

AF7687+SATELLITE: SATELLITE OBSERVATIONS - January 13, 2015

AF7687_ROD/PIPE-DEPTH: 2.7 meters

AF7687

AF7687 HISTORY - Date Condition Report By

AF7687 HISTORY - 1992 MONUMENTED KEISCH

AF7687 HISTORY - 19930913 GOOD GENGRP
 AF7687 HISTORY - 19950208 GOOD SFLWMD
 AF7687 HISTORY - 20010906 GOOD FOST
 AF7687 HISTORY - 20050815 GOOD GCYI
 AF7687 HISTORY - 20050815 GOOD GCYI
 AF7687 HISTORY - 20060817 GOOD FLDEP
 AF7687 HISTORY - 20100730 GOOD FL-085
 AF7687 HISTORY - 20150113 GOOD FLDEP

AF7687

AF7687 STATION DESCRIPTION

AF7687

AF7687'DESCRIBED BY KEITH AND SCHNARS - LAKELAND 1992

AF7687'THE STATION IS LOCATED ABOUT 14 MI (22.5 KM) WEST OF STUART NEAR THE
 AF7687'MARTIN COUNTY/ST LUCIE COUNTY LINE IN THE EAST RIGHT-OF-WAY OF C.R.
 AF7687'609 IN SECTION 6, TOWNSHIP 38 SOUTH, RANGE 39 EAST, MARTIN COUNTY,
 AF7687'FLORIDA.

AF7687'TO REACH THE STATION FROM THE INTERSECTION OF C.R. 714 AND C.R. 609,
 AF7687'NORTH OF INDIANTOWN, GO NORTH ON C.R. 609 FOR 3.1 MI (5.0 KM) TO
 AF7687'CANAL C-23, THE COUNTY LINE, AND THE STATION ON THE RIGHT. THE
 AF7687'STATION LIES SOUTH OF THE CANAL, 32.7 FT (10.0 M) SOUTH OF THE SOUTH
 AF7687'END OF A CONCRETE HEADWALL, 3.5 FT (1.1 M) EAST OF A METAL GUARDRAIL,
 AF7687'78.4 FT (23.9 M) WEST OF A BARBED WIRE FENCE, AND EAST OF A CARSONITE
 AF7687'WITNESS POST.

AF7687'ACCESS TO THE DATUM POINT--THE STATION IS RECESSED INSIDE A NGS LOGO
 AF7687'CAP MOUNTED ON A 5 INCH DIAMETER PVC PIPE SET IN A CONCRETE COLLAR
 AF7687'SET FLUSH WITH THE GROUND.

AF7687'REFERENCES--

AF7687'FOUND X-CUT IN CONCRETE HEADWALL, MAGNETIC AZIMUTH OF 11 DEGREES AT
 AF7687'35.68 FT (10.88 M) .

AF7687'KEITH AND SCHNARS NAIL AND DISC, SET IN WOOD FENCE CORNER, MAGNETIC
 AF7687'AZIMUTH OF 90 DEGREES AT 78.38 FT (23.89 M) .

AF7687'KEITH AND SCHNARS NAIL AND DISC, SET IN WOOD P.I. POWER POLE, MAGNETIC
 AF7687'AZIMUTH OF 160 DEGREES AT 148.70 FT (45.32 M) .

AF7687'FOUND NAIL AND DISC STAMPED TINKLE PAUGH SURVEYORS, SET IN TOP OF
 AF7687'WOOD GUARDRAIL, MAGNETIC AZIMUTH OF 350 DEGREES AT 9.02 FT (2.75 M) .

AF7687

AF7687 STATION RECOVERY (1993)

AF7687

AF7687'RECOVERY NOTE BY GENESIS GROUP INCORPORATED SE 1993 (JEL)

AF7687'URECOVERED AS DESCRIBED.

AF7687

AF7687 STATION RECOVERY (1995)

AF7687

AF7687'RECOVERY NOTE BY S FL WATER MGMT DIST 1995 (MEH)

AF7687'RECOVERED AS DESCRIBED.

AF7687

AF7687 STATION RECOVERY (2001)

AF7687

AF7687'RECOVERY NOTE BY CHARLEY FOSTER AND ASSOCIATES 2001 (JB)

AF7687'THE MONUMENT WAS RECOVERED AS DESCRIBED.

AF7687'

AF7687

AF7687 STATION RECOVERY (2005)

AF7687

AF7687'RECOVERY NOTE BY G.C.Y., INCORPORATED 2005 (JES)

AF7687'RECOVERED IN GOOD CONDITION.

AF7687

AF7687 STATION RECOVERY (2005)

AF7687

AF7687'RECOVERY NOTE BY G.C.Y., INCORPORATED 2005 (JES)

AF7687'RECOVERED AS DESCRIBED.
AF7687
AF7687 STATION RECOVERY (2006)
AF7687
AF7687'RECOVERY NOTE BY FL DEPT OF ENV PRO 2006 (BPJ)
AF7687'RECOVERED AS DESCRIBED.
AF7687
AF7687 STATION RECOVERY (2010)
AF7687
AF7687'RECOVERY NOTE BY MARTIN COUNTY FLORIDA 2010
AF7687'RECOVERED IN GOOD CONDITION.
AF7687
AF7687 STATION RECOVERY (2015)
AF7687
AF7687'RECOVERY NOTE BY FL DEPT OF ENV PRO 2015 (BPJ)
AF7687'RECOVERED AS DESCRIBED.

*** retrieval complete.
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