



# SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Rev. 1/16

Site Name: <b>G3350 Well Site</b>		Date of Field Work: <b>10-aug-16</b>	
Party Chief: <b>Giammarco</b>	Field Book: <b>Misc 6Z</b>	Page <b>31</b>	
Site Benchmark: <b>G3350</b>	Benchmark Elevation (NAVD88) <b>2.06</b>	Corpscon 6.0.1 Conversion Factor (NAVD88 to NGVD29) <b>1.545</b>	
Reference Elevation(s) (NAVD88): <b>2.41</b>	Existing Tag Elevation (Datum): <b>None</b> Written at site: Site: <b>G3350 GW1 Ref. Elev. 3.94'</b>	Calibration Port Elevation(s) (NAVD88): <b>Not Applicable</b>	
Ground Elevation (NAVD88): <b>Not taken</b>		Pad Elevation (NAVD88): <b>Not Applicable</b>	
Latitude: ° ' "		Longitude: ° ' "	

Notes: All elevations on this report are based on benchmark "C110S." The values for this benchmark were GPS derived based on an OPUS solution.

**NAVD88** – North American Vertical Datum of 1988

**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.

**OPUS** – Online Positioning Users Service from the National Geodetic Survey (NGS)

## PICTURES

Overall Site



Looking East Southeast (Not to scale) [29-dec-06 archive picture]



Inside Cover



Reference Point  
El. 2.06 NAVD88

Inside Well Cover



SEC 25 TWP 58 RNG 38

GROUND WATER WELL  
G3350

SET BENCH

FILE NAME G3350

PT #

ELEV

ADJ  
ELEV

1

1.86

16

2.058

31

1.857

Bm	+	HI	-	ELEV
G3350				2.06
	5.41	7.47		2.058

G3350 WELL			5.06	2.41
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G3350 BM	5.13	7.54	5.48	2.06
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5.48

ERROR = 0.003

BS DIST 75 37.2

FS DIST 75 27.71

NAVD 88

TRIMBLE D.I.V.

ZEISS N.2

25' ROD

BAR CODED ROD

GARMIN G.P.S.

A. GRAMMARCO

R. HUDSON

B.M. C1105 FD. CONC. MON. WITH S.F.W.M.D. ALUMN. DISK STAMPED  
C1105 2014

B.M. G3350 SET A POURED IN PLACE CONC. MON AND 1/4" INCH GALV.  
PIPE WITH A S.F.W.M.D. ALUMN. DISK STAMPED  
G3350 MON IS 16.5' WEST OF WELL G3350 2016  
N 25° 21' 15.1"  
W. 080° 29' 35.3"

B.M. C1105

V CUT IN P.V.C PIPE W/BLACK MARKER





# SOUTH FLORIDA WATER MANAGEMENT DISTRICT

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DESIGNATION: <b>G3350</b>		PROJECT: <b>G3350 Well</b>	
ESTABLISHED BY: <b>SOUTH FLORIDA WATER MANAGEMENT DISTRICT</b>		SURVEYOR: <b>Giammarco</b>	
RECOVERED BY:		DATE: <b>10-aug-16</b>	
GEOGRAPHIC POSITION			
SECTION <b>25</b>	TOWNSHIP <b>58 SOUTH</b>	RANGE <b>38 EAST</b>	
COUNTY <b>Miami-Dade</b>	NAME OF QUADRANGLE: <b>Glades</b>		
	GEOGRAPHIC INDEX OF QUAD: <b>1104</b>		
HORIZONTAL DATUM: 1927 (1983) Other _____ (circle one) ZONE (E) or W			
VERTICAL DATUM: MSL 1929 (1988) Other _____ (circle one)			
VERTICAL ACCURACY: 1 2 (3)			
STATE PLANE COORDINATE	X= <b>371296.4</b>	Y= <b>823546.4</b>	NAVD 88 EL. <b>2.060</b> NGVD 29 EL.
CORPSCON 6.0.1 CONVERSION FACTOR (NAVD88 TO NGVD29): <b>1.545</b>			
LATITUDE: <b>25° 21' 15.1"</b>		LONGITUDE: <b>80° 29' 35.3"</b>	
RECOVERY DATA			
Stamping: <b>G 3350</b>			
<p>To Reach: From the intersection of United States Highway 1 (U.S. 1) and South Florida Water Management District's (SFWMD's) Canal 111, go Westerly and Northwesterly along the North road paralleling the canal, 3.3 miles to SFWMD's Canal 110; turn right on to the West road and go 1.7 miles to Structure 199 on the right; continue North on the West side of the canal for 2.9 miles and station location on the left (west side of the road).</p> <p>Station is a poured in place concrete monument with a 1-1/4-inch galvanized pipe and a SFWMD aluminum disk stamped "G3350." Station is 16.5 feet west of the well.</p>			
NGS SOURCE BENCHMARK: N/A			
SOURCE BENCHMARK: SFWMD "C110S" <b>***The source benchmarks vertical and horizontal position were established by static sessions processed with NGS OPUS Projects.***</b>			
FIELD BOOK: <b>Misc 6Z PAGE 31</b>			
PICTURES			
Overall Site			
	G-3550 Well El. 2.41 NAVD88		
	Benchmark: G3550 El. 2.06 NAVD88		
Looking Easterly (Not to Scale)			



# SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Rev. 1/16

## SKETCH (Field Book Misc 6Z page 31)

31 Misc FB 6Z 011016					Misc FB 6Z 011016 31				
SEC	25	TWP	58	R14	38				
Ground Water Well G3350									
SET BENCH									
File Name G3350									
HTP				ELEV	ADJ				
1				1.86	ELEV				
16				2.058					
31				1.857					
B.M.	+	HI	-	ELEV					
G3350	5.41	7.47		2.06	2.058				
G3350				5.06	2.41				
Well	5.13	7.54							
G3350				5.48	2.06				
B.M.									
ERROR ~ 0.003									
BS DIST 75 37.2									
FS DIST 75 27.71									
					NAVD 88 TRIMBLE D.I.N. ZEPHYRUS 25' ROD 39A CONCRETE ROD GARMIN GPS A. GIAMMARCO R. HUDSON B.M. G1105 FD. CONC. MON. WITH S.F.W.M.D. ALUMIN. DISK STAMPED G1105 2014 B.M. G3350 SET A Poured in Place CONC. MON AND 1/4" NICK GALV PIPE WITH A S.F.W.M.D. ALUMIN. DISK STAMPED G3350. MON IS 16.5' WEST OF WELL G3350 2016 N 25° 21' 15.1" W. 080° 29' 35.8" B.M. G1105 V-CUT IN P.V.C. PIPE w/BLACK MARKER				



**SOUTH FLORIDA WATER MANAGEMENT DISTRICT**

<b>COUNTY</b> Miami-Dade	<b>PROJECT</b> C110	<b>DESIGNATION</b> C110S
<b>SECTION</b> 35	<b>TOWNSHIP</b> 58 SOUTH	<b>RANGE</b> 38 EAST
<b>NAME OF QUADRANGLE</b> Glades		
<b>Established by</b> SFWMD		<b>Recovered by</b> N/A
<b>DATE (Established)</b> 9/22/14		<b>FIELD BOOK</b> C110 FB 86B <b>PAGE</b> 1
<b>HORIZONTAL DATUM:</b> 1927 <u>1983</u> ADJ <u>2011</u> Other ___ (circle one) <b>ZONE</b> <u>E</u> or W		
<b>STATE PLANE COORDINATES</b>	<b>N</b> 363749.12 ft	<b>E</b> 823624.85 ft
<b>LATITUDE:</b> N 25° 20' 00.338"	<b>LONGITUDE:</b> W 80° 29' 34.756"	
<b>VERTICAL DATUM:</b> MSL 1929 <u>1988</u> Other _____ (circle one)	<b>***EL. 1.86 ft***</b>	
<b>VERTICAL DATUM:</b> MSL 1929 1988 Other _____ (circle one)	<b>EL. ft</b>	
<b>CONTROL ACCURACY:</b> HORIZONTAL 1 2 <u>3</u> <b>SUB-METER</b> (circle one) VERTICAL 1 2 <u>3</u>		
<b>DESCRIPTION</b>		
<p>To Reach:            From the intersection of S Dixie Hwy and E Palm Dr. in Florida City go south on S Dixie Hwy 10.78 miles to an off ramp north of a bridge across C111. Proceed west along the dirt road on the north side of C111 for 3.24 miles to the west side of C110. Proceed north along the west side of C110 for 1.91 miles (0.2 miles north of old S-199) to the mark on the right.</p> <p>Benchmark is a 2" SFWMD aluminum disk set in a 1 ¼" iron pipe with a poured in place concrete collar.</p> <p>Disk is stamped "BM C110S 2014"</p> <p>Benchmark is 9'± east of the centerline of the dirt road, 6'± west of the top of bank, and recessed 0.60'.</p> <p><b>***Benchmark vertical and horizontal position were established by static sessions processed using NGS OPUS Projects.***</b></p> <p>NGS Benchmarks Used: W600, X600, C601, D601</p> <p>Notable Land marks:            Mark is 0.2 miles north of the old S-199 (now abandoned)</p>		
<b>SKETCH</b>		





SOUTH FLORIDA WATER MANAGEMENT DISTRICT



PICTURE



Project Information		Coordinate System	
Name:		Name:	Default
Size:		Datum:	WGS 1984
Modified:	2/15/2012 8:48:57 AM (UTC:-7)	Zone:	Default
Time zone:	Mountain Standard Time	Geoid:	
Reference number:		Vertical datum:	
Description:			

## Level Report

**Imported file:** [G3350.DAT](#)  
**Instrument:** DiNi  
**Standard error per kilometer of double leveling:** 0.00230 ft  
**Standard error per turn/station setup:** 0.00000 ft  
**Creation option:** Delta elevations  
**Description usage:** Feature codes

### Run - 1 Raw Observations

**Raw Misclosure:** -0.00400 ft  
 **$\Sigma$  BS Distances:** 7537.300 ft  
 **$\Sigma$  FS Distances:** 7527.780 ft  
**Run Length:** 15065.080 ft  
**Reduction:** Adjusted Values

Create	Point ID	BS	IS	FS	$\Delta$ Elevation	Raw Elevation	Correction	Adj. Elevation	Type	Distance	Description
<input checked="" type="checkbox"/>	1	<input checked="" type="checkbox"/> 5.99800 ft			0.00000 ft	1.860 ft	0.00000 ft	1.860 ft	Benchmark	262.730 ft	C110S 3
<input type="checkbox"/>	2			<input checked="" type="checkbox"/> 5.27700 ft	0.72100 ft	2.581 ft	0.00014 ft	2.581 ft	Computed	260.700 ft	3
	2	<input checked="" type="checkbox"/> 5.66700 ft								263.060 ft	3
<input type="checkbox"/>	3			<input checked="" type="checkbox"/> 6.15700 ft	-0.49000 ft	2.091 ft	0.00029 ft	2.091 ft	Computed	264.530 ft	3
	3	<input checked="" type="checkbox"/> 4.98000 ft								259.510 ft	3
<input type="checkbox"/>	4			<input checked="" type="checkbox"/> 2.97500 ft	2.00500 ft	4.096 ft	0.00043 ft	4.096 ft	Computed	262.400 ft	3
	4	<input checked="" type="checkbox"/> 5.66700 ft								261.880 ft	3
<input type="checkbox"/>	5			<input checked="" type="checkbox"/> 4.85300 ft	0.81400 ft	4.910 ft	0.00057 ft	4.911 ft	Computed	259.940 ft	3
	5	<input checked="" type="checkbox"/> 5.65000 ft								260.920 ft	3
<input type="checkbox"/>	6					3.911 ft	0.00071 ft	3.912 ft	Computed		3

			<input checked="" type="checkbox"/> 6.64900 ft	-0.99900 ft						259.910 ft	
	6	<input checked="" type="checkbox"/> 3.83400 ft								258.890 ft	3
<input type="checkbox"/>	7		<input checked="" type="checkbox"/> 2.37900 ft	1.45500 ft	5.366 ft	0.00085 ft	5.367 ft	Computed		261.420 ft	3
	7	<input checked="" type="checkbox"/> 3.96600 ft								261.250 ft	3
<input type="checkbox"/>	8		<input checked="" type="checkbox"/> 6.68300 ft	-2.71700 ft	2.649 ft	0.00099 ft	2.650 ft	Computed		262.730 ft	3
	8	<input checked="" type="checkbox"/> 5.36900 ft								261.710 ft	3
<input type="checkbox"/>	9		<input checked="" type="checkbox"/> 5.96600 ft	-0.59700 ft	2.052 ft	0.00113 ft	2.053 ft	Computed		260.860 ft	3
	9	<input checked="" type="checkbox"/> 6.12400 ft								261.910 ft	3
<input type="checkbox"/>	10		<input checked="" type="checkbox"/> 5.41800 ft	0.70600 ft	2.758 ft	0.00128 ft	2.759 ft	Computed		270.180 ft	3
	10	<input checked="" type="checkbox"/> 5.05600 ft								262.600 ft	3
<input type="checkbox"/>	11		<input checked="" type="checkbox"/> 4.81900 ft	0.23700 ft	2.995 ft	0.00142 ft	2.996 ft	Computed		262.110 ft	3
	11	<input checked="" type="checkbox"/> 5.19800 ft								260.040 ft	3
<input type="checkbox"/>	12		<input checked="" type="checkbox"/> 5.70700 ft	-0.50900 ft	2.486 ft	0.00156 ft	2.488 ft	Computed		256.950 ft	3
	12	<input checked="" type="checkbox"/> 5.61400 ft								263.980 ft	3
<input type="checkbox"/>	13		<input checked="" type="checkbox"/> 5.39300 ft	0.22100 ft	2.707 ft	0.00170 ft	2.709 ft	Computed		259.780 ft	3
	13	<input checked="" type="checkbox"/> 4.64300 ft								256.890 ft	3
<input type="checkbox"/>	14		<input checked="" type="checkbox"/> 4.79200 ft	-0.14900 ft	2.558 ft	0.00184 ft	2.560 ft	Computed		262.700 ft	3
	14	<input checked="" type="checkbox"/> 5.16800 ft								256.950 ft	3
<input type="checkbox"/>	15		<input checked="" type="checkbox"/> 5.02700 ft	0.14100 ft	2.699 ft	0.00198 ft	2.701 ft	Computed		255.870 ft	3
	15	<input checked="" type="checkbox"/> 5.17000 ft								113.320 ft	3
<input type="checkbox"/>	16		<input checked="" type="checkbox"/> 5.81100 ft	-0.64100 ft	2.058 ft	0.00200 ft	2.060 ft	Computed		108.300 ft	G3350 3
	16	<input checked="" type="checkbox"/> 5.86000 ft								108.460 ft	G3350 3
<input type="checkbox"/>	17		<input checked="" type="checkbox"/> 5.21900 ft	0.64100 ft	2.699 ft	0.00203 ft	2.701 ft	Computed		113.220 ft	3
	17	<input checked="" type="checkbox"/> 5.06900 ft								257.180 ft	3
<input type="checkbox"/>	18			-0.16400 ft	2.535 ft	0.00216 ft	2.537 ft	Computed		256.660 ft	3



			✓ 5.23300 ft								
	18	✓ 4.86000 ft								262.890 ft	3
<input type="checkbox"/>	19		✓ 4.70800 ft	0.15200 ft	2.687 ft	0.00230 ft	2.689 ft	Computed		256.230 ft	3
	19	✓ 5.34000 ft								259.450 ft	3
<input type="checkbox"/>	20		✓ 5.54000 ft	-0.20000 ft	2.487 ft	0.00244 ft	2.489 ft	Computed		264.240 ft	3
	20	✓ 5.74800 ft								257.450 ft	3
<input type="checkbox"/>	21		✓ 5.23700 ft	0.51100 ft	2.998 ft	0.00258 ft	3.001 ft	Computed		259.510 ft	3
	21	✓ 4.88600 ft								261.840 ft	3
<input type="checkbox"/>	22		✓ 5.12600 ft	-0.24000 ft	2.758 ft	0.00272 ft	2.761 ft	Computed		262.400 ft	3
	22	✓ 5.44300 ft								269.980 ft	3
<input type="checkbox"/>	23		✓ 6.15000 ft	-0.70700 ft	2.051 ft	0.00287 ft	2.054 ft	Computed		261.840 ft	3
	23	✓ 5.89900 ft								260.960 ft	3
<input type="checkbox"/>	24		✓ 5.30600 ft	0.59300 ft	2.644 ft	0.00301 ft	2.647 ft	Computed		260.860 ft	3
	24	✓ 6.68300 ft								263.190 ft	3
<input type="checkbox"/>	25		✓ 3.96900 ft	2.71400 ft	5.358 ft	0.00315 ft	5.361 ft	Computed		260.470 ft	3
	25	✓ 2.25100 ft								261.120 ft	3
<input type="checkbox"/>	26		✓ 3.70700 ft	-1.45600 ft	3.902 ft	0.00329 ft	3.905 ft	Computed		259.020 ft	3
	26	✓ 6.69900 ft								261.150 ft	3
<input type="checkbox"/>	27		✓ 5.69700 ft	1.00200 ft	4.904 ft	0.00343 ft	4.907 ft	Computed		260.040 ft	3
	27	✓ 4.99800 ft								259.940 ft	3
<input type="checkbox"/>	28		✓ 5.81200 ft	-0.81400 ft	4.090 ft	0.00357 ft	4.094 ft	Computed		261.250 ft	3
	28	✓ 2.99500 ft								261.380 ft	3
<input type="checkbox"/>	29		✓ 4.99800 ft	-2.00300 ft	2.087 ft	0.00371 ft	2.091 ft	Computed		259.580 ft	3
	29	✓ 6.18500 ft								264.400 ft	3
<input type="checkbox"/>	30			0.49000 ft	2.577 ft	0.00386 ft	2.581 ft	Computed		262.270 ft	3

			<input checked="" type="checkbox"/> 5.69500 ft								
	30	<input checked="" type="checkbox"/> 5.29200 ft								262.270 ft	3
<input checked="" type="checkbox"/>	31		<input checked="" type="checkbox"/> 6.01300 ft	-0.72100 ft	1.856 ft	0.00400 ft	1.860 ft 	Benchmark		261.810 ft	C110S 3

**Run - 1 (N2) Reduced Observations**

Observation	Status	Raw Δ Elevation	Correction	Final Δ Elevation	Setups	Length	Σ BS Readings	Σ FS Readings	Std. Error
<a href="#">1-31 (E2)</a>	Enabled	-0.00400 ft	0.00400 ft	0.00000 ft	30	15065.080 ft	156.31200 ft	156.31600 ft	0.07255 ft

**Run - 1 (N2) Reduced Coordinates**

Point ID	Status	Elevation
<a href="#">1</a>	Enabled	1.86000 ft
<a href="#">31</a>	Enabled	1.86000 ft

Date: 8/11/2016 8:25:26 AM	Project:	Trimble Business Center
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